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Appendix

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Site Plan

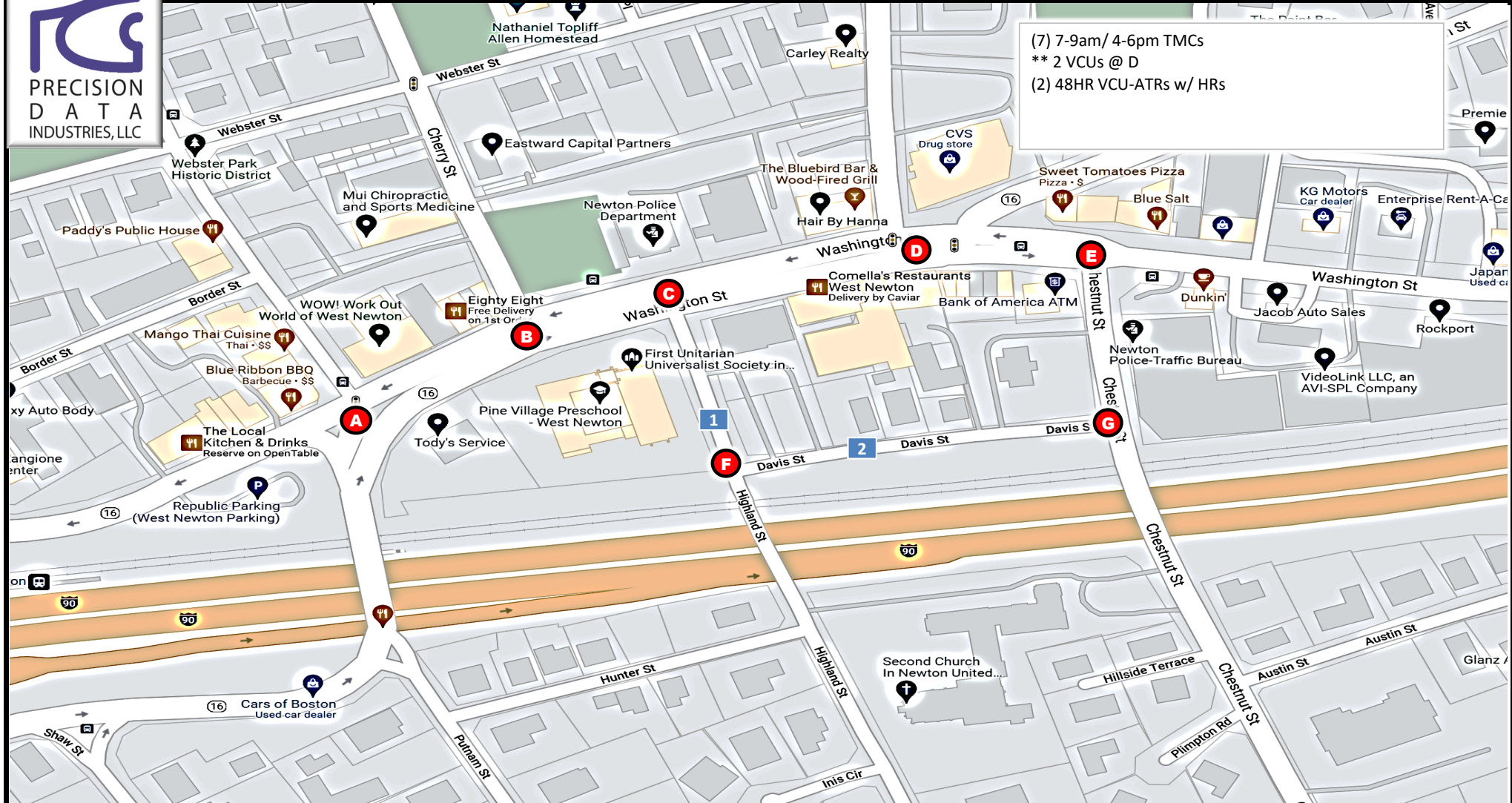
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February 2022 Traffic Count Data



Location Map: 228414 Newton, MA

Precision Data Industries, LLC 157 Washington Street, Suite 2, Hudson, MA 01749 ph: 508-875-0100 email: datarequests@pdillc.com



Client: VHB	Engineer: M. Duranleau	Site Code:	Date: Wed 2/9 thru Thurs 2/10/2022	PDI Job # 228414	City, State: Newton, MA
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Highland Street
 south of Santander Bank Driveway
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

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PDI File #: 228414 ATR 1



Count Date: **Wednesday, February 9, 2022**
 Direction: **NB**

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	3	0	0	0	3
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0
12:45 AM	0	0	1	0	0	0	1
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	1	0	1
3:15 AM	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	1	0	0	0	1
4:30 AM	0	0	0	0	0	0	0
4:45 AM	0	0	1	0	0	0	1
5:00 AM	0	0	1	0	0	0	1
5:15 AM	0	0	2	0	0	0	2
5:30 AM	0	0	2	0	0	0	2
5:45 AM	0	0	1	0	0	0	1
6:00 AM	0	0	5	0	0	0	5
6:15 AM	0	0	7	0	0	0	7
6:30 AM	0	0	6	0	0	0	6
6:45 AM	0	0	8	0	1	0	9
7:00 AM	0	0	10	0	1	0	11
7:15 AM	0	0	9	0	1	0	10
7:30 AM	0	0	32	0	0	0	32
7:45 AM	0	0	37	0	0	0	37
8:00 AM	0	0	32	0	2	0	34
8:15 AM	0	0	37	0	0	0	37
8:30 AM	0	0	46	0	0	0	46
8:45 AM	0	0	48	0	0	0	48
9:00 AM	0	0	44	0	1	0	45
9:15 AM	0	0	25	0	0	0	25
9:30 AM	0	0	19	0	0	0	19
9:45 AM	0	0	20	0	0	0	20
10:00 AM	0	0	16	0	0	0	16
10:15 AM	0	0	12	0	1	0	13
10:30 AM	0	0	17	0	1	0	18
10:45 AM	0	0	16	0	0	0	16
11:00 AM	0	0	20	0	0	0	20
11:15 AM	0	0	30	0	0	0	30
11:30 AM	0	0	25	0	1	0	26
11:45 AM	0	0	29	0	0	0	29

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	32	0	1	0	33
12:15 PM	0	0	29	0	0	0	29
12:30 PM	0	0	30	0	0	0	30
12:45 PM	0	0	29	0	0	0	29
1:00 PM	0	0	28	0	0	0	28
1:15 PM	0	0	20	1	1	0	22
1:30 PM	0	0	26	0	1	0	27
1:45 PM	0	0	30	0	0	0	30
2:00 PM	0	0	26	0	0	0	26
2:15 PM	0	0	32	0	0	0	32
2:30 PM	0	0	38	0	0	0	38
2:45 PM	0	0	40	0	0	0	40
3:00 PM	0	0	42	0	0	0	42
3:15 PM	0	0	46	0	0	0	46
3:30 PM	0	0	45	1	0	0	46
3:45 PM	0	0	51	0	1	0	52
4:00 PM	0	0	57	1	0	0	58
4:15 PM	0	0	55	0	0	0	55
4:30 PM	0	0	48	1	0	0	49
4:45 PM	0	0	56	0	0	0	56
5:00 PM	0	0	50	0	0	0	50
5:15 PM	0	0	65	0	0	0	65
5:30 PM	0	0	50	0	1	0	51
5:45 PM	0	0	43	0	0	0	43
6:00 PM	0	0	53	0	0	0	53
6:15 PM	0	0	52	0	2	0	54
6:30 PM	0	0	45	0	0	0	45
6:45 PM	0	0	23	0	0	0	23
7:00 PM	0	0	29	0	0	0	29
7:15 PM	0	0	28	0	0	0	28
7:30 PM	0	0	21	0	0	0	21
7:45 PM	0	0	21	0	0	0	21
8:00 PM	0	0	22	0	0	0	22
8:15 PM	0	0	16	0	0	0	16
8:30 PM	0	0	12	0	0	0	12
8:45 PM	0	0	11	0	0	0	11
9:00 PM	0	0	16	0	0	0	16
9:15 PM	0	0	18	0	0	0	18
9:30 PM	0	0	14	0	0	0	14
9:45 PM	0	0	2	0	1	0	3
10:00 PM	0	0	2	0	0	0	2
10:15 PM	0	0	8	0	0	0	8
10:30 PM	0	0	5	0	0	0	5
10:45 PM	0	0	1	0	0	0	1
11:00 PM	0	0	3	0	0	0	3
11:15 PM	0	0	3	0	0	0	3
11:30 PM	0	0	3	0	0	0	3
11:45 PM	0	0	2	0	1	0	3

AM Total 0 0 562 0 10 0 572
Percentage 0.00% 0.00% 98.25% 0.00% 1.75% 0.00%

AM Peak 12:00 AM 12:00 AM 8:15 AM 12:00 AM 6:30 AM 12:00 AM 8:15 AM
Volume 0 0 175 0 3 0 176

PM Total 0 0 1378 4 9 0 1391
Percentage 0.00% 0.00% 99.07% 0.29% 0.65% 0.00%

PM Peak 12:00 PM 12:00 PM 4:45 PM 3:15 PM 5:30 PM 12:00 PM 4:45 PM
Volume 0 0 221 2 3 0 222

Day Total 0 0 1940 4 19 0 1963
Percentage 0.00% 0.00% 98.83% 0.20% 0.97% 0.00%

Highland Street
 south of Santander Bank Driveway
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

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PDI File #: 228414 ATR 1



PRECISION
 DATA
 INDUSTRIES, LLC
 157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Count Date: Thursday, February 10, 2022
 Direction: NB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	2	0	0	0	2
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	1	0	0	0	1
2:15 AM	0	0	1	0	0	0	1
2:30 AM	0	0	1	0	0	0	1
2:45 AM	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0
3:30 AM	0	0	1	0	0	0	1
3:45 AM	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	1	0	1
5:00 AM	0	0	1	0	1	0	2
5:15 AM	0	0	2	0	0	0	2
5:30 AM	0	0	1	0	0	0	1
5:45 AM	0	0	3	0	0	0	3
6:00 AM	1	0	2	0	0	0	3
6:15 AM	0	0	5	0	0	0	5
6:30 AM	0	0	5	0	0	0	5
6:45 AM	0	0	4	0	1	0	5
7:00 AM	0	0	11	0	0	0	11
7:15 AM	1	0	45	0	0	0	46
7:30 AM	0	0	87	0	2	1	90
7:45 AM	0	0	84	0	1	1	86
8:00 AM	0	0	67	0	0	0	67
8:15 AM	0	0	86	0	2	0	88
8:30 AM	0	0	86	0	3	0	89
8:45 AM	0	0	98	0	0	0	98
9:00 AM	0	0	87	0	0	0	87
9:15 AM	0	0	53	0	0	0	53
9:30 AM	0	0	48	0	4	0	52
9:45 AM	0	0	47	0	2	0	49
10:00 AM	0	1	56	0	2	0	59
10:15 AM	0	0	49	0	1	0	50
10:30 AM	0	0	40	0	1	0	41
10:45 AM	0	0	47	0	1	0	48
11:00 AM	0	0	45	0	1	0	46
11:15 AM	0	0	49	0	1	0	50
11:30 AM	0	0	45	0	1	0	46
11:45 AM	0	0	47	0	2	0	49

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	73	0	0	0	73
12:15 PM	0	0	54	0	0	0	54
12:30 PM	0	0	48	0	0	0	48
12:45 PM	0	0	51	0	2	0	53
1:00 PM	0	0	60	0	0	0	60
1:15 PM	0	0	58	0	1	0	59
1:30 PM	0	0	47	1	3	0	51
1:45 PM	0	0	75	0	3	0	78
2:00 PM	0	0	43	0	0	0	43
2:15 PM	0	0	66	0	1	0	67
2:30 PM	0	0	58	0	3	0	61
2:45 PM	0	0	64	0	3	0	67
3:00 PM	0	0	87	0	2	0	89
3:15 PM	0	0	70	0	1	0	71
3:30 PM	0	0	84	1	1	0	86
3:45 PM	0	0	97	0	0	0	97
4:00 PM	0	0	94	0	1	0	95
4:15 PM	0	0	89	2	2	0	93
4:30 PM	0	0	87	1	0	0	88
4:45 PM	0	0	89	0	0	0	89
5:00 PM	0	0	66	0	0	0	66
5:15 PM	0	0	77	0	0	0	77
5:30 PM	0	0	71	0	1	0	72
5:45 PM	0	0	55	0	1	0	56
6:00 PM	0	0	52	0	0	0	52
6:15 PM	0	0	60	0	0	0	60
6:30 PM	0	0	51	0	0	0	51
6:45 PM	0	0	47	0	1	0	48
7:00 PM	0	0	26	0	0	0	26
7:15 PM	0	0	32	0	1	0	33
7:30 PM	0	0	25	0	0	0	25
7:45 PM	0	0	15	0	0	0	15
8:00 PM	0	0	21	0	0	0	21
8:15 PM	0	0	22	0	0	0	22
8:30 PM	0	0	22	0	0	0	22
8:45 PM	0	0	12	0	0	0	12
9:00 PM	0	0	20	0	0	0	20
9:15 PM	0	0	13	0	0	0	13
9:30 PM	0	0	6	0	0	0	6
9:45 PM	0	0	16	0	0	0	16
10:00 PM	0	0	10	0	0	0	10
10:15 PM	0	0	4	0	1	0	5
10:30 PM	0	0	6	0	0	0	6
10:45 PM	0	0	3	0	0	0	3
11:00 PM	0	0	6	0	0	0	6
11:15 PM	0	0	3	0	0	0	3
11:30 PM	0	0	3	0	0	0	3
11:45 PM	0	0	3	0	0	0	3

AM Total 2 1 1206 0 27 2 1238
 Percentage 0.16% 0.08% 97.42% 0.00% 2.18% 0.16%

AM Peak 5:15 AM 9:15 AM 8:15 AM 12:00 AM 9:30 AM 7:00 AM 8:15 AM
 Volume 1 1 357 0 9 2 362

PM Total 0 0 2141 5 28 0 2174
 Percentage 0.00% 0.00% 98.48% 0.23% 1.29% 0.00%

PM Peak 12:00 PM 12:00 PM 3:45 PM 3:30 PM 2:15 PM 12:00 PM 3:45 PM
 Volume 0 0 367 3 9 0 373

Day Total 2 1 3347 5 55 2 3412
 Percentage 0.06% 0.03% 98.09% 0.15% 1.61% 0.06%

Highland Street
 south of Santander Bank Driveway
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

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PDI File #: 228414 ATR 1



Count Date: **Wednesday, February 9, 2022**
 Direction: **SB**

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	1	0	0	0	1
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	1	0	1
12:45 AM	0	0	2	0	0	0	2
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	2	0	0	0	2
1:45 AM	0	0	4	0	1	0	5
2:00 AM	0	0	5	0	0	0	5
2:15 AM	0	0	3	0	0	0	3
2:30 AM	0	0	1	0	0	0	1
2:45 AM	0	0	1	0	0	0	1
3:00 AM	0	0	2	0	0	0	2
3:15 AM	0	0	1	0	0	0	1
3:30 AM	0	0	1	0	0	0	1
3:45 AM	0	0	1	0	1	0	2
4:00 AM	0	0	1	0	0	0	1
4:15 AM	0	0	1	0	0	0	1
4:30 AM	0	0	1	0	1	0	2
4:45 AM	0	0	3	0	0	0	3
5:00 AM	0	0	1	0	0	0	1
5:15 AM	0	0	1	0	0	0	1
5:30 AM	0	0	3	0	0	0	3
5:45 AM	0	0	8	0	0	0	8
6:00 AM	0	0	5	0	0	0	5
6:15 AM	0	0	14	0	0	0	14
6:30 AM	0	0	25	1	1	0	27
6:45 AM	0	0	38	0	0	0	38
7:00 AM	0	0	30	0	1	0	31
7:15 AM	0	0	38	0	0	0	38
7:30 AM	0	0	47	0	1	0	48
7:45 AM	0	0	77	0	1	0	78
8:00 AM	0	0	80	0	0	0	80
8:15 AM	0	0	77	0	1	0	78
8:30 AM	0	0	78	0	0	0	78
8:45 AM	0	0	95	0	5	0	100
9:00 AM	0	0	56	0	0	0	56
9:15 AM	0	0	32	1	3	0	36
9:30 AM	0	0	36	1	1	0	38
9:45 AM	0	0	38	0	0	0	38
10:00 AM	0	0	38	0	2	0	40
10:15 AM	0	0	41	0	1	1	43
10:30 AM	0	0	44	0	0	0	44
10:45 AM	0	0	37	0	0	0	37
11:00 AM	0	0	36	0	1	0	37
11:15 AM	0	0	30	0	1	0	31
11:30 AM	0	0	31	0	2	0	33
11:45 AM	0	0	49	0	0	0	49

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	37	0	0	0	37
12:15 PM	0	0	47	0	2	0	49
12:30 PM	0	0	45	0	0	0	45
12:45 PM	0	0	47	0	2	0	49
1:00 PM	0	0	40	0	2	0	42
1:15 PM	0	0	47	1	2	0	50
1:30 PM	0	0	44	0	1	0	45
1:45 PM	0	0	47	1	0	0	48
2:00 PM	0	0	45	0	0	0	45
2:15 PM	0	0	44	0	1	0	45
2:30 PM	0	0	55	0	0	0	55
2:45 PM	0	0	50	0	1	0	51
3:00 PM	0	0	44	0	1	0	45
3:15 PM	0	0	58	0	0	0	58
3:30 PM	0	0	59	0	0	0	59
3:45 PM	0	0	64	1	1	0	66
4:00 PM	0	0	66	0	0	0	66
4:15 PM	0	0	63	0	0	0	63
4:30 PM	0	0	58	1	1	0	60
4:45 PM	0	0	55	0	0	0	55
5:00 PM	0	0	65	0	0	0	65
5:15 PM	1	0	55	0	1	0	57
5:30 PM	0	0	60	0	0	0	60
5:45 PM	0	0	71	0	1	0	72
6:00 PM	0	0	66	0	0	0	66
6:15 PM	0	0	37	0	0	0	37
6:30 PM	0	0	37	0	0	0	37
6:45 PM	1	0	51	0	0	0	52
7:00 PM	0	0	32	0	0	0	32
7:15 PM	0	0	28	0	0	0	28
7:30 PM	0	0	33	0	0	0	33
7:45 PM	0	0	31	0	0	0	31
8:00 PM	0	0	15	0	0	0	15
8:15 PM	0	0	24	0	0	0	24
8:30 PM	0	0	17	0	1	0	18
8:45 PM	0	0	13	0	1	0	14
9:00 PM	0	0	18	0	0	0	18
9:15 PM	0	0	14	0	0	0	14
9:30 PM	0	0	13	0	0	0	13
9:45 PM	0	0	8	0	0	0	8
10:00 PM	0	0	10	0	0	0	10
10:15 PM	0	0	5	0	0	0	5
10:30 PM	0	0	8	0	0	0	8
10:45 PM	0	0	3	0	0	0	3
11:00 PM	0	0	3	0	0	0	3
11:15 PM	0	0	5	0	0	0	5
11:30 PM	0	0	4	0	0	0	4
11:45 PM	0	0	6	0	0	0	6

AM Total 0 0 1115 3 25 1 1144
Percentage 0.00% 0.00% 97.47% 0.26% 2.19% 0.09%

AM Peak 12:00 AM 12:00 AM 8:00 AM 8:45 AM 8:45 AM 9:30 AM 8:00 AM
Volume 0 0 330 2 9 1 336

PM Total 2 0 1747 4 18 0 1771
Percentage 0.11% 0.00% 98.64% 0.23% 1.02% 0.00%

PM Peak 4:30 PM 12:00 PM 3:30 PM 1:00 PM 12:45 PM 12:00 PM 3:45 PM
Volume 1 0 252 2 7 0 255

Day Total 2 0 2862 7 43 1 2915
Percentage 0.07% 0.00% 98.18% 0.24% 1.48% 0.03%

Highland Street
 south of Santander Bank Driveway
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

404 pages- see electronic file on website

PDI File #: 228414 ATR 1



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Count Date: Thursday, February 10, 2022
 Direction: SB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	1	0	0	0	1
12:30 AM	0	0	2	0	0	0	2
12:45 AM	0	0	1	0	0	0	1
1:00 AM	0	0	2	0	0	0	2
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	1	0	0	0	1
1:45 AM	0	0	1	0	0	0	1
2:00 AM	0	0	1	0	1	1	3
2:15 AM	0	0	1	0	0	0	1
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	3	0	0	0	3
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	1	0	0	0	1
3:30 AM	0	0	2	0	0	0	2
3:45 AM	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	3	0	1	0	4
4:30 AM	0	0	0	0	0	0	0
4:45 AM	0	0	4	0	2	0	6
5:00 AM	0	0	4	0	0	0	4
5:15 AM	0	0	2	1	0	0	3
5:30 AM	0	0	5	0	0	0	5
5:45 AM	0	0	7	0	0	0	7
6:00 AM	0	0	4	0	0	0	4
6:15 AM	0	0	13	0	0	0	13
6:30 AM	0	0	22	0	0	0	22
6:45 AM	0	0	26	0	0	0	26
7:00 AM	0	0	33	0	1	0	34
7:15 AM	0	0	48	0	1	1	50
7:30 AM	0	0	57	0	1	0	58
7:45 AM	0	0	75	0	1	0	76
8:00 AM	0	0	70	0	1	0	71
8:15 AM	0	0	77	0	0	0	77
8:30 AM	0	0	87	0	1	0	88
8:45 AM	0	0	83	0	1	0	84
9:00 AM	0	0	53	0	0	0	53
9:15 AM	0	0	36	1	3	0	40
9:30 AM	0	0	36	0	1	0	37
9:45 AM	0	0	50	0	0	0	50
10:00 AM	0	0	39	0	2	0	41
10:15 AM	0	0	36	0	2	0	38
10:30 AM	0	0	27	0	3	0	30
10:45 AM	0	0	44	0	0	0	44
11:00 AM	0	0	32	0	1	0	33
11:15 AM	0	0	51	0	1	0	52
11:30 AM	0	0	38	0	2	0	40
11:45 AM	0	0	48	0	0	0	48

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	46	0	0	0	46
12:15 PM	0	0	42	0	4	0	46
12:30 PM	0	0	59	0	0	0	59
12:45 PM	0	0	46	0	0	0	46
1:00 PM	0	0	33	0	1	0	34
1:15 PM	0	0	55	1	0	0	56
1:30 PM	0	0	34	0	0	1	35
1:45 PM	0	0	38	0	2	0	40
2:00 PM	0	0	32	0	1	1	34
2:15 PM	0	0	54	0	0	0	54
2:30 PM	0	0	49	1	0	0	50
2:45 PM	0	0	48	0	0	0	48
3:00 PM	0	0	52	0	0	0	52
3:15 PM	0	0	57	0	0	0	57
3:30 PM	0	0	65	0	0	0	65
3:45 PM	0	0	52	0	0	0	52
4:00 PM	0	0	63	0	1	0	64
4:15 PM	0	1	58	1	0	0	60
4:30 PM	0	0	56	1	0	0	57
4:45 PM	0	0	44	0	2	0	46
5:00 PM	1	0	57	0	0	0	58
5:15 PM	0	0	51	0	0	0	51
5:30 PM	0	0	55	0	2	0	57
5:45 PM	0	0	53	0	0	0	53
6:00 PM	0	0	48	0	0	0	48
6:15 PM	0	0	55	0	0	0	55
6:30 PM	0	0	48	0	0	0	48
6:45 PM	0	0	52	0	1	0	53
7:00 PM	0	0	44	0	1	0	45
7:15 PM	0	0	35	0	1	0	36
7:30 PM	0	0	21	0	0	0	21
7:45 PM	0	0	20	0	0	0	20
8:00 PM	0	0	21	0	0	0	21
8:15 PM	1	0	19	0	0	0	20
8:30 PM	0	0	21	0	0	0	21
8:45 PM	0	0	23	0	0	0	23
9:00 PM	0	0	18	0	0	0	18
9:15 PM	0	0	15	0	0	0	15
9:30 PM	0	0	14	0	0	0	14
9:45 PM	0	0	23	0	0	0	23
10:00 PM	0	0	8	0	1	0	9
10:15 PM	0	0	5	0	0	0	5
10:30 PM	0	0	4	0	1	0	5
10:45 PM	0	0	7	0	0	0	7
11:00 PM	0	0	6	0	0	0	6
11:15 PM	0	0	5	0	0	0	5
11:30 PM	0	0	5	0	0	0	5
11:45 PM	0	0	1	0	0	0	1

AM Total	0	0	1126	2	26	2	1156
Percentage	0.00%	0.00%	97.40%	0.17%	2.25%	0.17%	
AM Peak	12:00 AM	12:00 AM	8:00 AM	4:30 AM	9:45 AM	1:15 AM	8:00 AM
Volume	0	0	317	1	7	1	320

PM Total	2	1	1717	4	18	2	1744
Percentage	0.11%	0.06%	98.45%	0.23%	1.03%	0.11%	
PM Peak	4:15 PM	3:30 PM	3:30 PM	3:45 PM	12:15 PM	1:15 PM	3:30 PM
Volume	1	1	238	2	5	2	241

Day Total	2	1	2843	6	44	4	2900
Percentage	0.07%	0.03%	98.03%	0.21%	1.52%	0.14%	

Highland Street
 south of Santander Bank Driveway
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

404 pages- see electronic file on website

PDI File # 228414 ATR 1



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118
Weekly Report

Direction: NB

Day Date	Wednesday 02/09/22		Thursday 02/10/22												Week Ave			
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM		
12:00	3	33	0	73	0	0	0	0	0	0	0	0	0	0	2	53		
12:15	0	29	0	54	0	0	0	0	0	0	0	0	0	0	0	42		
12:30	0	30	2	48	0	0	0	0	0	0	0	0	0	0	1	39		
12:45	1	29	0	53	0	0	0	0	0	0	0	0	0	0	1	41		
1:00	0	28	0	60	0	0	0	0	0	0	0	0	0	0	0	44		
1:15	0	22	0	59	0	0	0	0	0	0	0	0	0	0	0	41		
1:30	0	27	0	51	0	0	0	0	0	0	0	0	0	0	0	39		
1:45	0	30	0	78	0	0	0	0	0	0	0	0	0	0	0	54		
2:00	0	26	1	43	0	0	0	0	0	0	0	0	0	0	1	35		
2:15	0	32	1	67	0	0	0	0	0	0	0	0	0	0	1	50		
2:30	0	38	1	61	0	0	0	0	0	0	0	0	0	0	1	50		
2:45	0	40	0	67	0	0	0	0	0	0	0	0	0	0	0	54		
3:00	1	42	0	89	0	0	0	0	0	0	0	0	0	0	1	66		
3:15	0	46	0	71	0	0	0	0	0	0	0	0	0	0	0	59		
3:30	0	46	1	86	0	0	0	0	0	0	0	0	0	0	1	66		
3:45	0	52	0	97	0	0	0	0	0	0	0	0	0	0	0	75		
4:00	0	58	0	95	0	0	0	0	0	0	0	0	0	0	0	77		
4:15	1	55	0	93	0	0	0	0	0	0	0	0	0	0	1	74		
4:30	0	49	0	88	0	0	0	0	0	0	0	0	0	0	0	69		
4:45	1	56	1	89	0	0	0	0	0	0	0	0	0	0	1	73		
5:00	1	50	2	66	0	0	0	0	0	0	0	0	0	0	2	58		
5:15	2	65	2	77	0	0	0	0	0	0	0	0	0	0	2	71		
5:30	2	51	1	72	0	0	0	0	0	0	0	0	0	0	2	62		
5:45	1	43	3	56	0	0	0	0	0	0	0	0	0	0	2	50		
6:00	5	53	3	52	0	0	0	0	0	0	0	0	0	0	4	53		
6:15	7	54	5	60	0	0	0	0	0	0	0	0	0	0	6	57		
6:30	6	45	5	51	0	0	0	0	0	0	0	0	0	0	6	48		
6:45	9	23	5	48	0	0	0	0	0	0	0	0	0	0	7	36		
7:00	11	29	11	26	0	0	0	0	0	0	0	0	0	0	11	28		
7:15	10	28	46	33	0	0	0	0	0	0	0	0	0	0	28	31		
7:30	32	21	90	25	0	0	0	0	0	0	0	0	0	0	61	23		
7:45	37	21	86	15	0	0	0	0	0	0	0	0	0	0	62	18		
8:00	34	22	67	21	0	0	0	0	0	0	0	0	0	0	51	22		
8:15	37	16	88	22	0	0	0	0	0	0	0	0	0	0	63	19		
8:30	46	12	89	22	0	0	0	0	0	0	0	0	0	0	68	17		
8:45	48	11	98	12	0	0	0	0	0	0	0	0	0	0	73	12		
9:00	45	16	87	20	0	0	0	0	0	0	0	0	0	0	66	18		
9:15	25	18	53	13	0	0	0	0	0	0	0	0	0	0	39	16		
9:30	19	14	52	6	0	0	0	0	0	0	0	0	0	0	36	10		
9:45	20	3	49	16	0	0	0	0	0	0	0	0	0	0	35	10		
10:00	16	2	59	10	0	0	0	0	0	0	0	0	0	0	38	6		
10:15	13	8	50	5	0	0	0	0	0	0	0	0	0	0	32	7		
10:30	18	5	41	6	0	0	0	0	0	0	0	0	0	0	30	6		
10:45	16	1	48	3	0	0	0	0	0	0	0	0	0	0	32	2		
11:00	20	3	46	6	0	0	0	0	0	0	0	0	0	0	33	5		
11:15	30	3	50	3	0	0	0	0	0	0	0	0	0	0	40	3		
11:30	26	3	46	3	0	0	0	0	0	0	0	0	0	0	36	3		
11:45	29	3	49	3	0	0	0	0	0	0	0	0	0	0	39	3		
Total	572	1391	1238	2174	0	0	0	0	0	0	0	0	0	0	905	1783		
Day Total	1963		3412		0		0		0		0		0		2688			
Peak HR	8:15 AM	4:45 PM	8:15 AM	3:45 PM													8:15 AM	3:45 PM
Volume	176	222	362	373													269	294

Highland Street
 south of Santander Bank Driveway
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

404 pages- see electronic file on website

PDI File # 228414 ATR 1



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118
Weekly Report

Direction: SB

Day Date	Wednesday 02/09/22		Thursday 02/10/22												Week Ave			
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM		
12:00	1	37	0	46	0	0	0	0	0	0	0	0	0	0	1	42		
12:15	0	49	1	46	0	0	0	0	0	0	0	0	0	0	1	48		
12:30	1	45	2	59	0	0	0	0	0	0	0	0	0	0	2	52		
12:45	2	49	1	46	0	0	0	0	0	0	0	0	0	0	2	48		
1:00	0	42	2	34	0	0	0	0	0	0	0	0	0	0	1	38		
1:15	0	50	0	56	0	0	0	0	0	0	0	0	0	0	0	53		
1:30	2	45	1	35	0	0	0	0	0	0	0	0	0	0	2	40		
1:45	5	48	1	40	0	0	0	0	0	0	0	0	0	0	3	44		
2:00	5	45	3	34	0	0	0	0	0	0	0	0	0	0	4	40		
2:15	3	45	1	54	0	0	0	0	0	0	0	0	0	0	2	50		
2:30	1	55	0	50	0	0	0	0	0	0	0	0	0	0	1	53		
2:45	1	51	3	48	0	0	0	0	0	0	0	0	0	0	2	50		
3:00	2	45	0	52	0	0	0	0	0	0	0	0	0	0	1	49		
3:15	1	58	1	57	0	0	0	0	0	0	0	0	0	0	1	58		
3:30	1	59	2	65	0	0	0	0	0	0	0	0	0	0	2	62		
3:45	2	66	0	52	0	0	0	0	0	0	0	0	0	0	1	59		
4:00	1	66	0	64	0	0	0	0	0	0	0	0	0	0	1	65		
4:15	1	63	4	60	0	0	0	0	0	0	0	0	0	0	3	62		
4:30	2	60	0	57	0	0	0	0	0	0	0	0	0	0	1	59		
4:45	3	55	6	46	0	0	0	0	0	0	0	0	0	0	5	51		
5:00	1	65	4	58	0	0	0	0	0	0	0	0	0	0	3	62		
5:15	1	57	3	51	0	0	0	0	0	0	0	0	0	0	2	54		
5:30	3	60	5	57	0	0	0	0	0	0	0	0	0	0	4	59		
5:45	8	72	7	53	0	0	0	0	0	0	0	0	0	0	8	63		
6:00	5	66	4	48	0	0	0	0	0	0	0	0	0	0	5	57		
6:15	14	37	13	55	0	0	0	0	0	0	0	0	0	0	14	46		
6:30	27	37	22	48	0	0	0	0	0	0	0	0	0	0	25	43		
6:45	38	52	26	53	0	0	0	0	0	0	0	0	0	0	32	53		
7:00	31	32	34	45	0	0	0	0	0	0	0	0	0	0	33	39		
7:15	38	28	50	36	0	0	0	0	0	0	0	0	0	0	44	32		
7:30	48	33	58	21	0	0	0	0	0	0	0	0	0	0	53	27		
7:45	78	31	76	20	0	0	0	0	0	0	0	0	0	0	77	26		
8:00	80	15	71	21	0	0	0	0	0	0	0	0	0	0	76	18		
8:15	78	24	77	20	0	0	0	0	0	0	0	0	0	0	78	22		
8:30	78	18	88	21	0	0	0	0	0	0	0	0	0	0	83	20		
8:45	100	14	84	23	0	0	0	0	0	0	0	0	0	0	92	19		
9:00	56	18	53	18	0	0	0	0	0	0	0	0	0	0	55	18		
9:15	36	14	40	15	0	0	0	0	0	0	0	0	0	0	38	15		
9:30	38	13	37	14	0	0	0	0	0	0	0	0	0	0	38	14		
9:45	38	8	50	23	0	0	0	0	0	0	0	0	0	0	44	16		
10:00	40	10	41	9	0	0	0	0	0	0	0	0	0	0	41	10		
10:15	43	5	38	5	0	0	0	0	0	0	0	0	0	0	41	5		
10:30	44	8	30	5	0	0	0	0	0	0	0	0	0	0	37	7		
10:45	37	3	44	7	0	0	0	0	0	0	0	0	0	0	41	5		
11:00	37	3	33	6	0	0	0	0	0	0	0	0	0	0	35	5		
11:15	31	5	52	5	0	0	0	0	0	0	0	0	0	0	42	5		
11:30	33	4	40	5	0	0	0	0	0	0	0	0	0	0	37	5		
11:45	49	6	48	1	0	0	0	0	0	0	0	0	0	0	49	4		
Total	1144	1771	1156	1744	0	0	0	0	0	0	0	0	0	0	1150	1758		
Day Total	2915		2900		0		0		0		0		0		2908			
Peak HR	8:00 AM	3:45 PM	8:00 AM	3:30 PM													8:00 AM	3:30 PM
Volume	336	255	320	241													328	248

Davis Street
east of Santander Bank Driveway
City, State: Newton, MA
Client: VHB/M. Duranleau
Site Code: TBD

404 pages- see electronic file on website

PDI File #: 228414 ATR 2



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Count Date: **Wednesday, February 9, 2022**
Direction: **EB**

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0	1	0	1
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	1	0	1
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0
3:45 AM	0	0	1	0	0	0	1
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	1	0	1
4:45 AM	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0
5:45 AM	0	0	1	0	0	0	1
6:00 AM	0	0	1	0	0	0	1
6:15 AM	0	0	1	0	0	0	1
6:30 AM	0	0	1	0	0	0	1
6:45 AM	0	0	2	0	0	0	2
7:00 AM	0	0	3	0	0	0	3
7:15 AM	0	0	8	0	0	0	8
7:30 AM	0	0	17	0	0	0	17
7:45 AM	0	0	18	0	0	0	18
8:00 AM	0	0	17	0	0	0	17
8:15 AM	0	0	21	0	0	0	21
8:30 AM	0	0	34	0	0	0	34
8:45 AM	0	0	43	0	1	0	44
9:00 AM	0	0	23	0	0	0	23
9:15 AM	0	0	5	0	0	0	5
9:30 AM	0	0	7	0	0	0	7
9:45 AM	0	0	10	0	0	0	10
10:00 AM	0	0	14	0	0	0	14
10:15 AM	0	0	13	0	0	0	13
10:30 AM	0	0	7	0	0	0	7
10:45 AM	0	0	11	0	0	0	11
11:00 AM	0	0	6	0	0	0	6
11:15 AM	0	0	6	0	0	0	6
11:30 AM	0	0	11	0	2	0	13
11:45 AM	0	0	16	0	0	0	16

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	11	0	0	0	11
12:15 PM	0	0	11	0	0	0	11
12:30 PM	0	0	13	0	0	0	13
12:45 PM	0	0	13	0	0	0	13
1:00 PM	0	0	13	0	1	0	14
1:15 PM	0	0	14	0	0	0	14
1:30 PM	0	0	7	0	0	0	7
1:45 PM	0	0	16	0	0	0	16
2:00 PM	0	0	9	0	0	0	9
2:15 PM	0	0	7	0	0	0	7
2:30 PM	0	0	11	0	0	0	11
2:45 PM	0	0	10	0	0	0	10
3:00 PM	0	0	4	0	2	0	6
3:15 PM	0	0	9	0	1	0	10
3:30 PM	1	0	11	0	0	0	12
3:45 PM	0	0	16	0	0	0	16
4:00 PM	0	0	16	0	0	0	16
4:15 PM	0	0	15	0	0	0	15
4:30 PM	0	0	17	0	0	0	17
4:45 PM	0	0	19	0	0	0	19
5:00 PM	0	0	10	0	0	0	10
5:15 PM	0	0	10	0	0	0	10
5:30 PM	0	0	15	0	0	0	15
5:45 PM	0	0	13	0	0	0	13
6:00 PM	0	0	13	0	0	0	13
6:15 PM	0	0	12	0	0	0	12
6:30 PM	0	0	5	0	0	0	5
6:45 PM	0	0	12	0	0	0	12
7:00 PM	0	0	10	0	0	0	10
7:15 PM	0	0	4	0	0	0	4
7:30 PM	0	0	10	0	0	0	10
7:45 PM	0	0	10	0	0	0	10
8:00 PM	0	0	1	0	0	0	1
8:15 PM	0	0	4	0	0	0	4
8:30 PM	0	0	2	0	0	0	2
8:45 PM	0	0	3	0	0	0	3
9:00 PM	0	0	5	0	0	0	5
9:15 PM	0	0	4	0	0	0	4
9:30 PM	0	0	1	0	0	0	1
9:45 PM	0	0	1	0	0	0	1
10:00 PM	0	0	1	0	0	0	1
10:15 PM	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0
10:45 PM	0	0	1	0	0	0	1
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0

AM Total 0 0 297 0 6 0 303
Percentage 0.00% 0.00% 98.02% 0.00% 1.98% 0.00%

AM Peak 12:00 AM 12:00 AM 8:15 AM 12:00 AM 10:45 AM 12:00 AM 8:15 AM
Volume 0 0 121 0 2 0 122

PM Total 1 0 389 0 4 0 394
Percentage 0.25% 0.00% 98.73% 0.00% 1.02% 0.00%

PM Peak 2:45 PM 12:00 PM 4:00 PM 12:00 PM 2:30 PM 12:00 PM 4:00 PM
Volume 1 0 67 0 3 0 67

Day Total 1 0 686 0 10 0 697
Percentage 0.14% 0.00% 98.42% 0.00% 1.43% 0.00%

Davis Street
 east of Santander Bank Driveway
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

404 pages- see electronic file on website

PDI File #: 228414 ATR 2



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Count Date: Thursday, February 10, 2022
 Direction: EB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	1	0	0	0	1
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	1	0	1
4:30 AM	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	2	0	2
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	1	0	0	0	1
5:30 AM	0	0	0	0	0	0	0
5:45 AM	0	0	1	0	0	0	1
6:00 AM	0	0	1	0	0	0	1
6:15 AM	0	0	1	0	0	0	1
6:30 AM	0	0	2	0	0	0	2
6:45 AM	0	0	7	0	0	0	7
7:00 AM	0	0	4	0	0	0	4
7:15 AM	0	0	10	0	1	0	11
7:30 AM	0	0	37	0	0	0	37
7:45 AM	0	0	52	0	0	0	52
8:00 AM	0	0	36	0	1	0	37
8:15 AM	0	0	35	0	0	0	35
8:30 AM	0	0	51	0	0	0	51
8:45 AM	0	0	51	0	1	0	52
9:00 AM	0	0	34	0	0	0	34
9:15 AM	0	0	12	0	1	0	13
9:30 AM	0	0	17	0	2	0	19
9:45 AM	0	0	22	0	0	0	22
10:00 AM	0	0	15	0	0	0	15
10:15 AM	0	0	12	0	1	0	13
10:30 AM	0	0	12	0	0	0	12
10:45 AM	0	0	11	0	0	0	11
11:00 AM	0	0	13	0	1	0	14
11:15 AM	0	0	7	0	0	0	7
11:30 AM	0	0	16	0	1	0	17
11:45 AM	0	0	23	0	0	0	23

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	22	0	0	0	22
12:15 PM	0	0	13	0	2	0	15
12:30 PM	0	0	13	0	0	0	13
12:45 PM	0	0	12	0	0	0	12
1:00 PM	0	0	24	0	1	0	25
1:15 PM	0	0	19	0	0	0	19
1:30 PM	0	0	17	0	0	0	17
1:45 PM	0	0	15	0	1	0	16
2:00 PM	0	0	16	0	1	1	18
2:15 PM	0	0	19	0	0	0	19
2:30 PM	0	0	11	0	0	0	11
2:45 PM	0	0	20	0	0	0	20
3:00 PM	0	0	11	0	0	0	11
3:15 PM	0	0	24	0	0	0	24
3:30 PM	0	0	29	0	0	0	29
3:45 PM	0	0	24	0	2	0	26
4:00 PM	0	0	18	0	2	0	20
4:15 PM	1	0	25	0	0	0	26
4:30 PM	0	0	15	0	0	0	15
4:45 PM	0	0	23	0	0	0	23
5:00 PM	0	0	14	0	1	0	15
5:15 PM	0	0	8	0	0	0	8
5:30 PM	0	0	21	0	0	0	21
5:45 PM	0	0	15	0	0	0	15
6:00 PM	0	0	15	0	0	0	15
6:15 PM	0	0	8	0	0	0	8
6:30 PM	0	0	11	0	0	0	11
6:45 PM	0	0	20	0	0	0	20
7:00 PM	0	0	13	0	0	0	13
7:15 PM	0	0	8	0	0	0	8
7:30 PM	0	0	8	0	0	0	8
7:45 PM	0	0	4	0	0	0	4
8:00 PM	0	0	4	0	0	0	4
8:15 PM	0	0	3	0	0	0	3
8:30 PM	0	0	6	0	0	0	6
8:45 PM	0	0	4	0	0	0	4
9:00 PM	0	0	2	0	0	0	2
9:15 PM	0	0	2	0	0	0	2
9:30 PM	0	0	7	0	0	0	7
9:45 PM	0	0	1	0	0	0	1
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	2	0	0	0	2
10:30 PM	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0
11:30 PM	0	0	2	0	0	0	2
11:45 PM	0	0	0	0	0	0	0

AM Total 0 0 484 0 12 0 496
 Percentage 0.00% 0.00% 97.58% 0.00% 2.42% 0.00%

AM Peak 12:00 AM 12:00 AM 7:45 AM 12:00 AM 8:45 AM 12:00 AM 7:45 AM
 Volume 0 0 174 0 4 0 175

PM Total 1 0 548 0 10 1 560
 Percentage 0.18% 0.00% 97.86% 0.00% 1.79% 0.18%

PM Peak 3:30 PM 12:00 PM 3:30 PM 12:00 PM 3:15 PM 1:15 PM 3:30 PM
 Volume 1 0 96 0 4 1 101

Day Total 1 0 1032 0 22 1 1056
 Percentage 0.09% 0.00% 97.73% 0.00% 2.08% 0.09%

Davis Street
 east of Santander Bank Driveway
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

404 pages- see electronic file on website

PDI File #: 228414 ATR 2



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Count Date: Wednesday, February 9, 2022
 Direction: WB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	1	0	0	0	1
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0
3:00 AM	0	0	1	0	0	0	1
3:15 AM	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0
5:30 AM	0	0	1	0	0	0	1
5:45 AM	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0
6:30 AM	0	0	2	0	0	0	2
6:45 AM	0	0	0	0	1	0	1
7:00 AM	0	0	2	0	0	0	2
7:15 AM	0	0	1	0	0	0	1
7:30 AM	0	0	5	0	0	0	5
7:45 AM	0	0	8	0	0	0	8
8:00 AM	0	0	6	0	0	0	6
8:15 AM	0	0	12	0	0	0	12
8:30 AM	0	0	9	0	0	0	9
8:45 AM	0	0	10	0	0	0	10
9:00 AM	0	0	17	0	1	0	18
9:15 AM	0	0	6	0	0	0	6
9:30 AM	0	0	4	0	0	0	4
9:45 AM	0	0	4	0	0	0	4
10:00 AM	0	0	5	0	0	0	5
10:15 AM	0	0	1	0	0	0	1
10:30 AM	0	0	3	0	0	0	3
10:45 AM	0	0	3	0	0	0	3
11:00 AM	0	0	5	0	0	0	5
11:15 AM	0	0	11	0	0	0	11
11:30 AM	0	0	5	0	1	0	6
11:45 AM	0	0	10	0	0	0	10

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	11	0	0	0	11
12:15 PM	0	0	8	0	0	0	8
12:30 PM	1	0	5	0	0	0	6
12:45 PM	0	0	8	0	0	0	8
1:00 PM	0	0	4	0	0	0	4
1:15 PM	0	0	6	0	0	0	6
1:30 PM	0	0	5	0	0	0	5
1:45 PM	0	0	10	0	0	0	10
2:00 PM	0	0	12	0	0	0	12
2:15 PM	0	0	7	0	0	0	7
2:30 PM	0	0	10	0	0	0	10
2:45 PM	0	0	5	0	0	0	5
3:00 PM	0	0	15	0	0	0	15
3:15 PM	0	0	9	0	0	0	9
3:30 PM	0	0	7	0	0	0	7
3:45 PM	0	0	16	0	0	0	16
4:00 PM	0	0	23	0	0	0	23
4:15 PM	0	0	15	0	0	0	15
4:30 PM	0	0	10	0	0	0	10
4:45 PM	0	0	16	0	0	0	16
5:00 PM	0	0	20	0	0	0	20
5:15 PM	0	0	18	0	0	0	18
5:30 PM	0	0	11	0	0	0	11
5:45 PM	0	0	7	0	0	0	7
6:00 PM	0	0	13	0	0	0	13
6:15 PM	0	0	18	0	0	0	18
6:30 PM	0	0	10	0	0	0	10
6:45 PM	0	0	9	0	0	0	9
7:00 PM	1	0	3	0	0	0	4
7:15 PM	0	0	5	0	0	0	5
7:30 PM	0	0	3	0	0	0	3
7:45 PM	0	0	2	0	0	0	2
8:00 PM	0	0	4	0	0	0	4
8:15 PM	0	0	3	0	0	0	3
8:30 PM	0	0	2	0	0	0	2
8:45 PM	0	0	2	0	0	0	2
9:00 PM	0	0	5	0	0	0	5
9:15 PM	0	0	9	0	0	0	9
9:30 PM	0	0	1	0	0	0	1
9:45 PM	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	3	0	0	0	3
10:30 PM	0	0	1	0	0	0	1
10:45 PM	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	2	0	0	0	2
11:30 PM	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0

AM Total 0 0 132 0 3 0 135
 Percentage 0.00% 0.00% 97.78% 0.00% 2.22% 0.00%

AM Peak 12:00 AM 12:00 AM 8:15 AM 12:00 AM 6:00 AM 12:00 AM 8:15 AM
 Volume 0 0 48 0 1 0 49

PM Total 2 0 353 0 0 0 355
 Percentage 0.56% 0.00% 99.44% 0.00% 0.00% 0.00%

PM Peak 12:00 PM 12:00 PM 4:45 PM 12:00 PM 12:00 PM 12:00 PM 4:45 PM
 Volume 1 0 65 0 0 0 65

Day Total 2 0 485 0 3 0 490
 Percentage 0.41% 0.00% 98.98% 0.00% 0.61% 0.00%

Davis Street
 east of Santander Bank Driveway
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

404 pages- see electronic file on website

PDI File #: 228414 ATR 2



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Count Date: Thursday, February 10, 2022
 Direction: WB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	1	0	0	0	1
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	1	0	0	0	1
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0
5:00 AM	0	0	1	0	1	0	2
5:15 AM	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0
6:00 AM	0	0	1	0	0	0	1
6:15 AM	0	0	0	0	0	0	0
6:30 AM	0	0	1	0	0	0	1
6:45 AM	0	0	3	0	0	0	3
7:00 AM	0	0	2	0	0	0	2
7:15 AM	0	0	7	0	0	0	7
7:30 AM	0	0	28	1	0	0	29
7:45 AM	0	0	36	1	1	0	38
8:00 AM	0	0	35	0	3	1	39
8:15 AM	0	0	38	0	0	0	38
8:30 AM	0	0	42	0	1	0	43
8:45 AM	0	0	58	0	1	0	59
9:00 AM	0	0	25	0	0	0	25
9:15 AM	0	0	26	0	2	0	28
9:30 AM	0	0	16	0	1	0	17
9:45 AM	0	0	14	1	1	0	16
10:00 AM	0	0	21	0	2	0	23
10:15 AM	0	0	17	0	0	0	17
10:30 AM	0	0	27	0	0	0	27
10:45 AM	0	0	21	0	0	0	21
11:00 AM	0	0	22	0	0	0	22
11:15 AM	0	0	20	0	0	0	20
11:30 AM	0	0	30	0	1	0	31
11:45 AM	0	0	17	0	0	0	17

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	36	0	0	0	36
12:15 PM	0	0	34	0	0	0	34
12:30 PM	0	0	23	0	1	0	24
12:45 PM	0	0	23	0	2	0	25
1:00 PM	0	0	22	0	0	0	22
1:15 PM	0	0	32	0	0	0	32
1:30 PM	0	0	25	0	1	0	26
1:45 PM	0	0	27	0	1	0	28
2:00 PM	0	0	20	0	2	0	22
2:15 PM	0	0	35	0	0	0	35
2:30 PM	0	0	35	1	0	0	36
2:45 PM	0	0	39	0	0	0	39
3:00 PM	0	0	27	0	1	0	28
3:15 PM	0	0	44	0	0	0	44
3:30 PM	0	0	36	0	1	0	37
3:45 PM	0	0	57	0	1	0	58
4:00 PM	0	0	34	0	1	0	35
4:15 PM	0	0	48	0	0	0	48
4:30 PM	0	0	37	0	0	0	37
4:45 PM	0	0	40	0	2	0	42
5:00 PM	0	0	39	0	1	0	40
5:15 PM	0	0	55	0	0	0	55
5:30 PM	0	0	45	0	2	0	47
5:45 PM	0	0	37	0	1	0	38
6:00 PM	0	0	37	0	0	0	37
6:15 PM	0	0	39	0	0	0	39
6:30 PM	0	0	19	0	0	0	19
6:45 PM	0	0	15	0	0	0	15
7:00 PM	0	0	8	0	0	0	8
7:15 PM	0	0	7	0	0	0	7
7:30 PM	0	0	7	0	0	0	7
7:45 PM	0	0	4	0	0	0	4
8:00 PM	0	0	4	0	0	0	4
8:15 PM	0	0	6	0	0	0	6
8:30 PM	0	0	5	0	0	0	5
8:45 PM	0	0	3	0	0	0	3
9:00 PM	0	0	8	0	0	0	8
9:15 PM	0	0	6	0	0	0	6
9:30 PM	0	0	1	0	0	0	1
9:45 PM	0	0	2	0	0	0	2
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	1	0	0	0	1
10:30 PM	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0
11:00 PM	0	0	1	0	0	0	1
11:15 PM	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0
11:45 PM	0	0	1	0	0	0	1

AM Total 0 0 510 3 14 1 528
 Percentage 0.00% 0.00% 96.59% 0.57% 2.65% 0.19%

AM Peak 12:00 AM 12:00 AM 8:00 AM 7:00 AM 9:15 AM 7:15 AM 8:00 AM
 Volume 0 0 173 2 6 1 179

PM Total 0 0 1024 1 17 0 1042
 Percentage 0.00% 0.00% 98.27% 0.10% 1.63% 0.00%

PM Peak 12:00 PM 12:00 PM 4:45 PM 1:45 PM 4:45 PM 12:00 PM 4:45 PM
 Volume 0 0 179 1 5 0 184

Day Total 0 0 1534 4 31 1 1570
 Percentage 0.00% 0.00% 97.71% 0.25% 1.97% 0.06%

Davis Street
 east of Santander Bank Driveway
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

404 pages- see electronic file on website

PDI File # 228414 ATR 2



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118
Weekly Report

Direction: EB

Day Date	Wednesday 02/09/22		Thursday 02/10/22												Week Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	1	11	0	22	0	0	0	0	0	0	0	0	0	0	1	17
12:15	0	11	0	15	0	0	0	0	0	0	0	0	0	0	0	13
12:30	0	13	0	13	0	0	0	0	0	0	0	0	0	0	0	13
12:45	0	13	0	12	0	0	0	0	0	0	0	0	0	0	0	13
1:00	0	14	0	25	0	0	0	0	0	0	0	0	0	0	0	20
1:15	0	14	0	19	0	0	0	0	0	0	0	0	0	0	0	17
1:30	0	7	0	17	0	0	0	0	0	0	0	0	0	0	0	12
1:45	1	16	0	16	0	0	0	0	0	0	0	0	0	0	1	16
2:00	0	9	0	18	0	0	0	0	0	0	0	0	0	0	0	14
2:15	0	7	1	19	0	0	0	0	0	0	0	0	0	0	1	13
2:30	0	11	0	11	0	0	0	0	0	0	0	0	0	0	0	11
2:45	0	10	0	20	0	0	0	0	0	0	0	0	0	0	0	15
3:00	0	6	0	11	0	0	0	0	0	0	0	0	0	0	0	9
3:15	0	10	0	24	0	0	0	0	0	0	0	0	0	0	0	17
3:30	0	12	0	29	0	0	0	0	0	0	0	0	0	0	0	21
3:45	1	16	0	26	0	0	0	0	0	0	0	0	0	0	1	21
4:00	0	16	0	20	0	0	0	0	0	0	0	0	0	0	0	18
4:15	0	15	1	26	0	0	0	0	0	0	0	0	0	0	1	21
4:30	1	17	0	15	0	0	0	0	0	0	0	0	0	0	1	16
4:45	0	19	2	23	0	0	0	0	0	0	0	0	0	0	1	21
5:00	0	10	0	15	0	0	0	0	0	0	0	0	0	0	0	13
5:15	0	10	1	8	0	0	0	0	0	0	0	0	0	0	1	9
5:30	0	15	0	21	0	0	0	0	0	0	0	0	0	0	0	18
5:45	1	13	1	15	0	0	0	0	0	0	0	0	0	0	1	14
6:00	1	13	1	15	0	0	0	0	0	0	0	0	0	0	1	14
6:15	1	12	1	8	0	0	0	0	0	0	0	0	0	0	1	10
6:30	1	5	2	11	0	0	0	0	0	0	0	0	0	0	2	8
6:45	2	12	7	20	0	0	0	0	0	0	0	0	0	0	5	16
7:00	3	10	4	13	0	0	0	0	0	0	0	0	0	0	4	12
7:15	8	4	11	8	0	0	0	0	0	0	0	0	0	0	10	6
7:30	17	10	37	8	0	0	0	0	0	0	0	0	0	0	27	9
7:45	18	10	52	4	0	0	0	0	0	0	0	0	0	0	35	7
8:00	17	1	37	4	0	0	0	0	0	0	0	0	0	0	27	3
8:15	21	4	35	3	0	0	0	0	0	0	0	0	0	0	28	4
8:30	34	2	51	6	0	0	0	0	0	0	0	0	0	0	43	4
8:45	44	3	52	4	0	0	0	0	0	0	0	0	0	0	48	4
9:00	23	5	34	2	0	0	0	0	0	0	0	0	0	0	29	4
9:15	5	4	13	2	0	0	0	0	0	0	0	0	0	0	9	3
9:30	7	1	19	7	0	0	0	0	0	0	0	0	0	0	13	4
9:45	10	1	22	1	0	0	0	0	0	0	0	0	0	0	16	1
10:00	14	1	15	0	0	0	0	0	0	0	0	0	0	0	15	1
10:15	13	0	13	2	0	0	0	0	0	0	0	0	0	0	13	1
10:30	7	0	12	0	0	0	0	0	0	0	0	0	0	0	10	0
10:45	11	1	11	0	0	0	0	0	0	0	0	0	0	0	11	1
11:00	6	0	14	0	0	0	0	0	0	0	0	0	0	0	10	0
11:15	6	0	7	0	0	0	0	0	0	0	0	0	0	0	7	0
11:30	13	0	17	2	0	0	0	0	0	0	0	0	0	0	15	1
11:45	16	0	23	0	0	0	0	0	0	0	0	0	0	0	20	0
Total	303	394	496	560	0	0	0	0	0	0	0	0	0	0	400	477
Day Total	697		1056		0		0		0		0		0		877	
Peak HR	8:15 AM	4:00 PM	7:45 AM	3:30 PM											8:15 AM	3:30 PM
Volume	122	67	175	101											147	80

Davis Street
east of Santander Bank Driveway
City, State: Newton, MA
Client: VHB/M. Duranleau
Site Code: TBD

404 pages- see electronic file on website

PDI File # 228414 ATR 2



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118
Weekly Report

Direction: WB

Day Date	Wednesday 02/09/22		Thursday 02/10/22												Week Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	1	11	0	36	0	0	0	0	0	0	0	0	0	0	1	24
12:15	0	8	0	34	0	0	0	0	0	0	0	0	0	0	0	21
12:30	0	6	1	24	0	0	0	0	0	0	0	0	0	0	1	15
12:45	0	8	0	25	0	0	0	0	0	0	0	0	0	0	0	17
1:00	0	4	0	22	0	0	0	0	0	0	0	0	0	0	0	13
1:15	0	6	0	32	0	0	0	0	0	0	0	0	0	0	0	19
1:30	0	5	0	26	0	0	0	0	0	0	0	0	0	0	0	16
1:45	0	10	0	28	0	0	0	0	0	0	0	0	0	0	0	19
2:00	0	12	0	22	0	0	0	0	0	0	0	0	0	0	0	17
2:15	0	7	1	35	0	0	0	0	0	0	0	0	0	0	1	21
2:30	0	10	0	36	0	0	0	0	0	0	0	0	0	0	0	23
2:45	0	5	0	39	0	0	0	0	0	0	0	0	0	0	0	22
3:00	1	15	0	28	0	0	0	0	0	0	0	0	0	0	1	22
3:15	0	9	0	44	0	0	0	0	0	0	0	0	0	0	0	27
3:30	0	7	0	37	0	0	0	0	0	0	0	0	0	0	0	22
3:45	0	16	0	58	0	0	0	0	0	0	0	0	0	0	0	37
4:00	0	23	0	35	0	0	0	0	0	0	0	0	0	0	0	29
4:15	0	15	0	48	0	0	0	0	0	0	0	0	0	0	0	32
4:30	0	10	0	37	0	0	0	0	0	0	0	0	0	0	0	24
4:45	0	16	0	42	0	0	0	0	0	0	0	0	0	0	0	29
5:00	0	20	2	40	0	0	0	0	0	0	0	0	0	0	1	30
5:15	0	18	0	55	0	0	0	0	0	0	0	0	0	0	0	37
5:30	1	11	0	47	0	0	0	0	0	0	0	0	0	0	1	29
5:45	0	7	0	38	0	0	0	0	0	0	0	0	0	0	0	23
6:00	0	13	1	37	0	0	0	0	0	0	0	0	0	0	1	25
6:15	0	18	0	39	0	0	0	0	0	0	0	0	0	0	0	29
6:30	2	10	1	19	0	0	0	0	0	0	0	0	0	0	2	15
6:45	1	9	3	15	0	0	0	0	0	0	0	0	0	0	2	12
7:00	2	4	2	8	0	0	0	0	0	0	0	0	0	0	2	6
7:15	1	5	7	7	0	0	0	0	0	0	0	0	0	0	4	6
7:30	5	3	29	7	0	0	0	0	0	0	0	0	0	0	17	5
7:45	8	2	38	4	0	0	0	0	0	0	0	0	0	0	23	3
8:00	6	4	39	4	0	0	0	0	0	0	0	0	0	0	23	4
8:15	12	3	38	6	0	0	0	0	0	0	0	0	0	0	25	5
8:30	9	2	43	5	0	0	0	0	0	0	0	0	0	0	26	4
8:45	10	2	59	3	0	0	0	0	0	0	0	0	0	0	35	3
9:00	18	5	25	8	0	0	0	0	0	0	0	0	0	0	22	7
9:15	6	9	28	6	0	0	0	0	0	0	0	0	0	0	17	8
9:30	4	1	17	1	0	0	0	0	0	0	0	0	0	0	11	1
9:45	4	0	16	2	0	0	0	0	0	0	0	0	0	0	10	1
10:00	5	0	23	0	0	0	0	0	0	0	0	0	0	0	14	0
10:15	1	3	17	1	0	0	0	0	0	0	0	0	0	0	9	2
10:30	3	1	27	0	0	0	0	0	0	0	0	0	0	0	15	1
10:45	3	0	21	0	0	0	0	0	0	0	0	0	0	0	12	0
11:00	5	0	22	1	0	0	0	0	0	0	0	0	0	0	14	1
11:15	11	2	20	0	0	0	0	0	0	0	0	0	0	0	16	1
11:30	6	0	31	0	0	0	0	0	0	0	0	0	0	0	19	0
11:45	10	0	17	1	0	0	0	0	0	0	0	0	0	0	14	1
Total	135	355	528	1042	0	0	0	0	0	0	0	0	0	0	332	699
Day Total	490		1570		0		0		0		0		0		1030	
Peak HR	8:15 AM	4:45 PM	8:00 AM	4:45 PM											8:00 AM	4:45 PM
Volume	49	65	179	184											108	125

PDI File #: 228414 A

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington Street (Route 16) W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 7:00 AM

End Time: 9:00 AM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

Table with columns for Street (Elm Street, Washington Street (Route 16)), direction (from North, from East, from South, from West), and traffic volume (Right, Thru, Left, U-Turn, Total). Rows include time intervals (7:00 AM to 8:45 AM), Grand Total, and Exiting Leg Total for Cars and Heavy Vehicles.

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

Table showing peak hour analysis for 7:30 AM, 7:45 AM, and 8:00 AM. Columns include Street, direction, traffic volume, and PHF (Peak Hour Factor). Rows include Total Volume, % Approach Total, and Exiting Leg Total for Cars and Heavy Vehicles.

PDI File #: 228414 A

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington Street (Route 16) W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 7:00 AM

End Time: 9:00 AM

Class:

Cars

404 pages- see electronic file on website



	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	40	0	0	0	40	7	69	0	0	76	92	9	2	0	103	0	0	0	0	0	219
7:15 AM	58	0	0	0	58	5	96	0	0	101	124	19	3	0	146	0	0	0	0	0	305
7:30 AM	73	0	0	0	73	7	108	0	0	115	157	26	5	0	188	0	0	0	0	0	376
7:45 AM	87	0	0	0	87	7	133	0	0	140	143	27	5	0	175	0	0	0	0	0	402
Total	258	0	0	0	258	26	406	0	0	432	516	81	15	0	612	0	0	0	0	0	1302
8:00 AM	69	0	0	0	69	9	106	0	0	115	145	22	2	0	169	0	0	0	0	0	353
8:15 AM	66	0	0	0	66	14	97	0	0	111	134	26	7	0	167	0	0	0	0	0	344
8:30 AM	61	0	0	0	61	11	89	0	0	100	129	34	11	0	174	0	0	0	0	0	335
8:45 AM	57	0	0	0	57	17	99	0	0	116	149	24	8	0	181	0	0	0	0	0	354
Total	253	0	0	0	253	51	391	0	0	442	557	106	28	0	691	0	0	0	0	0	1386
Grand Total	511	0	0	0	511	77	797	0	0	874	1073	187	43	0	1303	0	0	0	0	0	2688
Approach %	100.0	0.0	0.0	0.0		8.8	91.2	0.0	0.0		82.3	14.4	3.3	0.0		0.0	0.0	0.0	0.0		
Total %	19.0	0.0	0.0	0.0	19.0	2.9	29.7	0.0	0.0	32.5	39.9	7.0	1.6	0.0	48.5	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	264					1073					0					1351					2688

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

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:30 AM	73	0	0	0	73	7	108	0	0	115	157	26	5	0	188	0	0	0	0	0	376
7:45 AM	87	0	0	0	87	7	133	0	0	140	143	27	5	0	175	0	0	0	0	0	402
8:00 AM	69	0	0	0	69	9	106	0	0	115	145	22	2	0	169	0	0	0	0	0	353
8:15 AM	66	0	0	0	66	14	97	0	0	111	134	26	7	0	167	0	0	0	0	0	344
Total Volume	295	0	0	0	295	37	444	0	0	481	579	101	19	0	699	0	0	0	0	0	1475
% Approach Total	100.0	0.0	0.0	0.0		7.7	92.3	0.0	0.0		82.8	14.4	2.7	0.0		0.0	0.0	0.0	0.0		
PHF	0.848	0.000	0.000	0.000	0.848	0.661	0.835	0.000	0.000	0.859	0.922	0.935	0.679	0.000	0.930	0.000	0.000	0.000	0.000	0.000	0.917
Entering Leg	295	0	0	0	295	37	444	0	0	481	579	101	19	0	699	0	0	0	0	0	1475
Exiting Leg	138					579					0					758					1475
Total	433					1060					699					758					2950

PDI File #: 228414 A

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington Street (Route 16) W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 7:00 AM

End Time: 9:00 AM

Class:

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Table with columns for Street (Elm Street, Washington Street (Route 16)), Direction (from North, from East, from South, from West), and Movement (Right, Thru, Left, U-Turn, Total). Rows include time intervals (7:00 AM to 8:45 AM), Grand Total, Approach %, and Exiting Leg Total for Buses, Single-Unit Trucks, and Articulated Trucks.

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

Table with columns for Street (Elm Street, Washington Street (Route 16)), Direction (from North, from East, from South, from West), and Movement (Right, Thru, Left, U-Turn, Total). Rows include time intervals (7:00 AM to 7:45 AM), Total Volume, % Approach Total, PHF, and Exiting Leg Total for Buses, Single-Unit Trucks, and Articulated Trucks.

PDI File #: 228414 A

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington Street (Route 16) W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 7:00 AM

End Time: 9:00 AM

Class:

404 pages- see electronic file on website



Buses

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street					Total	
	from North					from East					from South					from West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total		
7:00 AM	1	0	0	0	1	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	3	
7:15 AM	2	0	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4	
7:30 AM	1	0	0	0	1	1	3	0	0	4	2	0	0	0	2	0	0	0	0	0	7	
7:45 AM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2	
Total	5	0	0	0	5	2	4	0	0	6	3	2	0	0	5	0	0	0	0	0	16	
8:00 AM	0	0	0	0	0	1	2	0	0	3	0	1	0	0	1	0	0	0	0	0	4	
8:15 AM	1	0	0	0	1	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	3	
8:30 AM	2	0	0	0	2	0	1	0	0	1	2	0	0	0	2	0	0	0	0	0	5	
8:45 AM	1	0	0	0	1	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	3	
Total	4	0	0	0	4	2	3	0	0	5	3	3	0	0	6	0	0	0	0	0	15	
Grand Total	9	0	0	0	9	4	7	0	0	11	6	5	0	0	11	0	0	0	0	0	31	
Approach %	100.0	0.0	0.0	0.0		36.4	63.6	0.0	0.0		54.5	45.5	0.0	0.0		0.0	0.0	0.0	0.0			
Total %	29.0	0.0	0.0	0.0	29.0	12.9	22.6	0.0	0.0	35.5	19.4	16.1	0.0	0.0	35.5	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total						9					6					0					16	31

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

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street					Total	
	from North					from East					from South					from West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total		
7:15 AM	2	0	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4	
7:30 AM	1	0	0	0	1	1	3	0	0	4	2	0	0	0	2	0	0	0	0	0	7	
7:45 AM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2	
8:00 AM	0	0	0	0	0	1	2	0	0	3	0	1	0	0	1	0	0	0	0	0	4	
Total Volume	4	0	0	0	4	2	6	0	0	8	2	3	0	0	5	0	0	0	0	0	17	
% Approach Total	100.0	0.0	0.0	0.0		25.0	75.0	0.0	0.0		40.0	60.0	0.0	0.0		0.0	0.0	0.0	0.0			
PHF	0.500	0.000	0.000	0.000	0.500	0.500	0.500	0.000	0.000	0.500	0.250	0.375	0.000	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.607	
Entering Leg	4	0	0	0	4	2	6	0	0	8	2	3	0	0	5	0	0	0	0	0	17	
Exiting Leg						5					2					0					10	17
Total						9					10					5					10	34

PDI File #: 228414 A

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington Street (Route 16) W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 7:00 AM

End Time: 9:00 AM

Class:

404 pages- see electronic file on website



Single-Unit Trucks

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	4	0	0	0	4	0	2	0	0	2	5	1	0	0	6	0	0	0	0	0	12
7:15 AM	0	0	0	0	0	0	5	0	0	5	5	0	0	0	5	0	0	0	0	0	10
7:30 AM	2	0	0	0	2	0	2	0	0	2	4	0	0	0	4	0	0	0	0	0	8
7:45 AM	3	0	0	0	3	0	2	0	0	2	3	1	1	0	5	0	0	0	0	0	10
Total	9	0	0	0	9	0	11	0	0	11	17	2	1	0	20	0	0	0	0	0	40
8:00 AM	1	0	0	0	1	0	4	0	0	4	2	2	1	0	5	0	0	0	0	0	10
8:15 AM	3	0	0	0	3	0	2	0	0	2	3	4	0	0	7	0	0	0	0	0	12
8:30 AM	4	0	0	0	4	1	2	0	0	3	4	0	0	0	4	0	0	0	0	0	11
8:45 AM	1	0	0	0	1	0	4	0	0	4	2	1	0	0	3	0	0	0	0	0	8
Total	9	0	0	0	9	1	12	0	0	13	11	7	1	0	19	0	0	0	0	0	41
Grand Total	18	0	0	0	18	1	23	0	0	24	28	9	2	0	39	0	0	0	0	0	81
Approach %	100.0	0.0	0.0	0.0		4.2	95.8	0.0	0.0		71.8	23.1	5.1	0.0		0.0	0.0	0.0	0.0		
Total %	22.2	0.0	0.0	0.0	22.2	1.2	28.4	0.0	0.0	29.6	34.6	11.1	2.5	0.0	48.1	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	10					28					0					43					81

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

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:45 AM	3	0	0	0	3	0	2	0	0	2	3	1	1	0	5	0	0	0	0	0	10
8:00 AM	1	0	0	0	1	0	4	0	0	4	2	2	1	0	5	0	0	0	0	0	10
8:15 AM	3	0	0	0	3	0	2	0	0	2	3	4	0	0	7	0	0	0	0	0	12
8:30 AM	4	0	0	0	4	1	2	0	0	3	4	0	0	0	4	0	0	0	0	0	11
Total Volume	11	0	0	0	11	1	10	0	0	11	12	7	2	0	21	0	0	0	0	0	43
% Approach Total	100.0	0.0	0.0	0.0		9.1	90.9	0.0	0.0		57.1	33.3	9.5	0.0		0.0	0.0	0.0	0.0		
PHF	0.688	0.000	0.000	0.000	0.688	0.250	0.625	0.000	0.000	0.688	0.750	0.438	0.500	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.896
Entering Leg	11	0	0	0	11	1	10	0	0	11	12	7	2	0	21	0	0	0	0	0	43
Exiting Leg	8					12					0					23					43
Total	19					23					21					23					86

PDI File #: 228414 A

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington Street (Route 16) W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 7:00 AM

End Time: 9:00 AM

Class:

404 pages- see electronic file on website



Articulated Trucks

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	4
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	2
Total	0	0	0	0	0	0	1	0	0	1	2	1	0	0	3	0	0	0	0	0	4
Grand Total	0	0	0	0	0	0	5	0	0	5	2	1	0	0	3	0	0	0	0	0	8
Approach %	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		66.7	33.3	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	62.5	0.0	0.0	62.5	25.0	12.5	0.0	0.0	37.5	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	1					2					0					5					8

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

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	4
% Approach Total	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
Entering Leg	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	4
Exiting Leg	0					0					0					4					4
Total	0					4					0					4					8

PDI File #: 228414 A

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington Street (Route 16) W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 7:00 AM

End Time: 9:00 AM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

Table with columns for street names (Elm Street, Washington Street (Route 16)), approach directions (from North, from East, from South, from West), and movement types (Right, Thru, Left, U-Turn, CW-SB, CW-NB, CW-WB, CW-EB, Total). Rows include time intervals (7:00 AM to 8:45 AM), Grand Total, Approach %, Total %, and Exiting Leg Total.

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

Table similar to the first one, but for a specific peak hour (7:30 AM). It includes columns for street names, approach directions, movement types, and rows for time intervals (7:30 AM to 8:15 AM), Total Volume, PHF, and Entering/Exiting Leg Total.

PDI File #: 228414 A

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington Street (Route 16) W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 7:00 AM

End Time: 9:00 AM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

Table with columns for street directions (Elm Street, Washington Street (Route 16) from East/South/West) and pedestrian counts for various times (7:00 AM to 8:45 AM) and totals. Includes Grand Total and Approach %.

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

Table showing peak hour analysis for 8:00 AM, 8:15 AM, 8:30 AM, and 8:45 AM. Columns include street directions and pedestrian counts. Includes Total Volume, % Approach Total, PHF, and Entering/Exiting Leg data.

PDI File #: 228414 A

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington Street (Route 16) W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 4:00 PM

End Time: 6:00 PM

Class:

404 pages- see electronic file on website



Cars and Heavy Vehicles (Combined)

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	46	0	0	0	46	7	116	0	0	123	140	35	8	0	183	0	0	0	0	0	352
4:15 PM	53	0	0	0	53	16	143	0	0	159	153	31	9	0	193	0	0	0	0	0	405
4:30 PM	44	0	0	0	44	8	110	0	0	118	153	31	11	0	195	0	0	0	0	0	357
4:45 PM	45	0	0	0	45	12	137	0	0	149	127	40	8	0	175	0	0	0	0	0	369
Total	188	0	0	0	188	43	506	0	0	549	573	137	36	0	746	0	0	0	0	0	1483
5:00 PM	66	0	0	0	66	10	122	0	0	132	155	26	4	0	185	0	0	0	0	0	383
5:15 PM	50	0	0	0	50	14	153	0	0	167	161	31	11	0	203	0	0	0	0	0	420
5:30 PM	58	0	0	0	58	17	119	0	0	136	169	43	10	0	222	0	0	0	0	0	416
5:45 PM	53	0	0	0	53	19	132	0	0	151	187	39	8	0	234	0	0	0	0	0	438
Total	227	0	0	0	227	60	526	0	0	586	672	139	33	0	844	0	0	0	0	0	1657
Grand Total	415	0	0	0	415	103	1032	0	0	1135	1245	276	69	0	1590	0	0	0	0	0	3140
Approach %	100.0	0.0	0.0	0.0		9.1	90.9	0.0	0.0		78.3	17.4	4.3	0.0		0.0	0.0	0.0	0.0		
Total %	13.2	0.0	0.0	0.0	13.2	3.3	32.9	0.0	0.0	36.1	39.6	8.8	2.2	0.0	50.6	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	379					1245					0					1516					3140
Cars	404	0	0	0	404	95	1015	0	0	1110	1225	267	68	0	1560	0	0	0	0	0	3074
% Cars	97.3	0.0	0.0	0.0	97.3	92.2	98.4	0.0	0.0	97.8	98.4	96.7	98.6	0.0	98.1	0.0	0.0	0.0	0.0	0.0	97.9
Exiting Leg Total	362					1225					0					1487					3074
Heavy Vehicles	11	0	0	0	11	8	17	0	0	25	20	9	1	0	30	0	0	0	0	0	66
% Heavy Vehicles	2.7	0.0	0.0	0.0	2.7	7.8	1.6	0.0	0.0	2.2	1.6	3.3	1.4	0.0	1.9	0.0	0.0	0.0	0.0	0.0	2.1
Exiting Leg Total	17					20					0					29					66

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

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
5:00 PM	66	0	0	0	66	10	122	0	0	132	155	26	4	0	185	0	0	0	0	0	383
5:15 PM	50	0	0	0	50	14	153	0	0	167	161	31	11	0	203	0	0	0	0	0	420
5:30 PM	58	0	0	0	58	17	119	0	0	136	169	43	10	0	222	0	0	0	0	0	416
5:45 PM	53	0	0	0	53	19	132	0	0	151	187	39	8	0	234	0	0	0	0	0	438
Total Volume	227	0	0	0	227	60	526	0	0	586	672	139	33	0	844	0	0	0	0	0	1657
% Approach Total	100.0	0.0	0.0	0.0		10.2	89.8	0.0	0.0		79.6	16.5	3.9	0.0		0.0	0.0	0.0	0.0		
PHF	0.860	0.000	0.000	0.000	0.860	0.789	0.859	0.000	0.000	0.877	0.898	0.808	0.750	0.000	0.902	0.000	0.000	0.000	0.000	0.000	0.946
Cars	222	0	0	0	222	56	520	0	0	576	665	135	33	0	833	0	0	0	0	0	1631
Cars %	97.8	0.0	0.0	0.0	97.8	93.3	98.9	0.0	0.0	98.3	99.0	97.1	100.0	0.0	98.7	0.0	0.0	0.0	0.0	0.0	98.4
Heavy Vehicles	5	0	0	0	5	4	6	0	0	10	7	4	0	0	11	0	0	0	0	0	26
Heavy Vehicles %	2.2	0.0	0.0	0.0	2.2	6.7	1.1	0.0	0.0	1.7	1.0	2.9	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	1.6
Cars Enter Leg	222	0	0	0	222	56	520	0	0	576	665	135	33	0	833	0	0	0	0	0	1631
Heavy Enter Leg	5	0	0	0	5	4	6	0	0	10	7	4	0	0	11	0	0	0	0	0	26
Total Entering Leg	227	0	0	0	227	60	526	0	0	586	672	139	33	0	844	0	0	0	0	0	1657
Cars Exiting Leg	191					665					0					775					1631
Heavy Exiting Leg	8					7					0					11					26
Total Exiting Leg	199					672					0					786					1657

PDI File #: 228414 A

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington Street (Route 16) W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 4:00 PM

End Time: 6:00 PM

Class:

Cars

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2

Hudson, MA 01749

Office: 508-875-0100 Fax: 508-875-0118

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street					Total	
	from North					from East					from South					from West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total		
4:00 PM	45	0	0	0	45	5	114	0	0	119	137	33	8	0	178	0	0	0	0	0	342	
4:15 PM	52	0	0	0	52	16	140	0	0	156	148	29	9	0	186	0	0	0	0	0	394	
4:30 PM	41	0	0	0	41	6	108	0	0	114	149	30	10	0	189	0	0	0	0	0	344	
4:45 PM	44	0	0	0	44	12	133	0	0	145	126	40	8	0	174	0	0	0	0	0	363	
Total	182	0	0	0	182	39	495	0	0	534	560	132	35	0	727	0	0	0	0	0	1443	
5:00 PM	66	0	0	0	66	9	120	0	0	129	153	26	4	0	183	0	0	0	0	0	378	
5:15 PM	48	0	0	0	48	13	152	0	0	165	160	31	11	0	202	0	0	0	0	0	415	
5:30 PM	56	0	0	0	56	17	118	0	0	135	166	41	10	0	217	0	0	0	0	0	408	
5:45 PM	52	0	0	0	52	17	130	0	0	147	186	37	8	0	231	0	0	0	0	0	430	
Total	222	0	0	0	222	56	520	0	0	576	665	135	33	0	833	0	0	0	0	0	1631	
Grand Total	404	0	0	0	404	95	1015	0	0	1110	1225	267	68	0	1560	0	0	0	0	0	3074	
Approach %	100.0	0.0	0.0	0.0		8.6	91.4	0.0	0.0		78.5	17.1	4.4	0.0		0.0	0.0	0.0	0.0			
Total %	13.1	0.0	0.0	0.0	13.1	3.1	33.0	0.0	0.0	36.1	39.9	8.7	2.2	0.0	50.7	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total						362					1225					0					1487	3074

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

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street					Total	
	from North					from East					from South					from West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total		
5:00 PM	66	0	0	0	66	9	120	0	0	129	153	26	4	0	183	0	0	0	0	0	378	
5:15 PM	48	0	0	0	48	13	152	0	0	165	160	31	11	0	202	0	0	0	0	0	415	
5:30 PM	56	0	0	0	56	17	118	0	0	135	166	41	10	0	217	0	0	0	0	0	408	
5:45 PM	52	0	0	0	52	17	130	0	0	147	186	37	8	0	231	0	0	0	0	0	430	
Total Volume	222	0	0	0	222	56	520	0	0	576	665	135	33	0	833	0	0	0	0	0	1631	
% Approach Total	100.0	0.0	0.0	0.0		9.7	90.3	0.0	0.0		79.8	16.2	4.0	0.0		0.0	0.0	0.0	0.0			
PHF	0.841	0.000	0.000	0.000	0.841	0.824	0.855	0.000	0.000	0.873	0.894	0.823	0.750	0.000	0.902	0.000	0.000	0.000	0.000	0.000	0.948	
Entering Leg	222	0	0	0	222	56	520	0	0	576	665	135	33	0	833	0	0	0	0	0	1631	
Exiting Leg						191					665					0					775	1631
Total						413					1241					833					775	3262

PDI File #: 228414 A

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington Street (Route 16) W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 4:00 PM

End Time: 6:00 PM

Class:

404 pages- see electronic file on website



Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	1	0	0	0	1	2	2	0	0	4	3	2	0	0	5	0	0	0	0	0	10
4:15 PM	1	0	0	0	1	0	3	0	0	3	5	2	0	0	7	0	0	0	0	0	11
4:30 PM	3	0	0	0	3	2	2	0	0	4	4	1	1	0	6	0	0	0	0	0	13
4:45 PM	1	0	0	0	1	0	4	0	0	4	1	0	0	0	1	0	0	0	0	0	6
Total	6	0	0	0	6	4	11	0	0	15	13	5	1	0	19	0	0	0	0	0	40
5:00 PM	0	0	0	0	0	1	2	0	0	3	2	0	0	0	2	0	0	0	0	0	5
5:15 PM	2	0	0	0	2	1	1	0	0	2	1	0	0	0	1	0	0	0	0	0	5
5:30 PM	2	0	0	0	2	0	1	0	0	1	3	2	0	0	5	0	0	0	0	0	8
5:45 PM	1	0	0	0	1	2	2	0	0	4	1	2	0	0	3	0	0	0	0	0	8
Total	5	0	0	0	5	4	6	0	0	10	7	4	0	0	11	0	0	0	0	0	26
Grand Total	11	0	0	0	11	8	17	0	0	25	20	9	1	0	30	0	0	0	0	0	66
Approach %	100.0	0.0	0.0	0.0		32.0	68.0	0.0	0.0		66.7	30.0	3.3	0.0		0.0	0.0	0.0	0.0		
Total %	16.7	0.0	0.0	0.0	16.7	12.1	25.8	0.0	0.0	37.9	30.3	13.6	1.5	0.0	45.5	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	17					20					0					29					66
Buses	6	0	0	0	6	5	3	0	0	8	8	3	0	0	11	0	0	0	0	0	25
% Buses	54.5	0.0	0.0	0.0	54.5	62.5	17.6	0.0	0.0	32.0	40.0	33.3	0.0	0.0	36.7	0.0	0.0	0.0	0.0	0.0	37.9
Exiting Leg Total	8					8					0					9					25
Single-Unit Trucks	5	0	0	0	5	2	13	0	0	15	11	5	1	0	17	0	0	0	0	0	37
% Single-Unit	45.5	0.0	0.0	0.0	45.5	25.0	76.5	0.0	0.0	60.0	55.0	55.6	100.0	0.0	56.7	0.0	0.0	0.0	0.0	0.0	56.1
Exiting Leg Total	7					11					0					19					37
Articulated Trucks	0	0	0	0	0	1	1	0	0	2	1	1	0	0	2	0	0	0	0	0	4
% Articulated	0.0	0.0	0.0	0.0	0.0	12.5	5.9	0.0	0.0	8.0	5.0	11.1	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0	6.1
Exiting Leg Total	2					1					0					1					4

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

4:00 PM	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	1	0	0	0	1	2	2	0	0	4	3	2	0	0	5	0	0	0	0	0	10
4:15 PM	1	0	0	0	1	0	3	0	0	3	5	2	0	0	7	0	0	0	0	0	11
4:30 PM	3	0	0	0	3	2	2	0	0	4	4	1	1	0	6	0	0	0	0	0	13
4:45 PM	1	0	0	0	1	0	4	0	0	4	1	0	0	0	1	0	0	0	0	0	6
Total Volume	6	0	0	0	6	4	11	0	0	15	13	5	1	0	19	0	0	0	0	0	40
% Approach Total	100.0	0.0	0.0	0.0		26.7	73.3	0.0	0.0		68.4	26.3	5.3	0.0		0.0	0.0	0.0	0.0		
PHF	0.500	0.000	0.000	0.000	0.500	0.500	0.688	0.000	0.000	0.938	0.650	0.625	0.250	0.000	0.679	0.000	0.000	0.000	0.000	0.000	0.769
Buses	4	0	0	0	4	2	2	0	0	4	7	2	0	0	9	0	0	0	0	0	17
Buses %	66.7	0.0	0.0	0.0	66.7	50.0	18.2	0.0	0.0	26.7	53.8	40.0	0.0	0.0	47.4	0.0	0.0	0.0	0.0	0.0	42.5
Single-Unit Trucks	2	0	0	0	2	1	8	0	0	9	6	2	1	0	9	0	0	0	0	0	20
Single-Unit %	33.3	0.0	0.0	0.0	33.3	25.0	72.7	0.0	0.0	60.0	46.2	40.0	100.0	0.0	47.4	0.0	0.0	0.0	0.0	0.0	50.0
Articulated Trucks	0	0	0	0	0	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0	3
Articulated %	0.0	0.0	0.0	0.0	0.0	25.0	9.1	0.0	0.0	13.3	0.0	20.0	0.0	0.0	5.3	0.0	0.0	0.0	0.0	0.0	7.5
Buses	4	0	0	0	4	2	2	0	0	4	7	2	0	0	9	0	0	0	0	0	17
Single-Unit Trucks	2	0	0	0	2	1	8	0	0	9	6	2	1	0	9	0	0	0	0	0	20
Articulated Trucks	0	0	0	0	0	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0	3
Total Entering Leg	6	0	0	0	6	4	11	0	0	15	13	5	1	0	19	0	0	0	0	0	40
Buses	4					7					0					6					17
Single-Unit Trucks	3					6					0					11					20
Articulated Trucks	2					0					0					1					3
Total Exiting Leg	9					13					0					18					40

PDI File #: 228414 A

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington Street (Route 16) W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 4:00 PM

End Time: 6:00 PM

Class:

404 pages- see electronic file on website



Buses

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0	3
4:15 PM	1	0	0	0	1	0	1	0	0	1	5	0	0	0	5	0	0	0	0	0	7
4:30 PM	3	0	0	0	3	1	0	0	0	1	2	1	0	0	3	0	0	0	0	0	7
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	4	0	0	0	4	2	2	0	0	4	7	2	0	0	9	0	0	0	0	0	17
5:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	2	0	0	0	2	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	2	0	0	0	2	3	1	0	0	4	1	1	0	0	2	0	0	0	0	0	8
Grand Total	6	0	0	0	6	5	3	0	0	8	8	3	0	0	11	0	0	0	0	0	25
Approach %	100.0	0.0	0.0	0.0		62.5	37.5	0.0	0.0		72.7	27.3	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	24.0	0.0	0.0	0.0	24.0	20.0	12.0	0.0	0.0	32.0	32.0	12.0	0.0	0.0	44.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	8					8					0					9					25

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

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0	3
4:15 PM	1	0	0	0	1	0	1	0	0	1	5	0	0	0	5	0	0	0	0	0	7
4:30 PM	3	0	0	0	3	1	0	0	0	1	2	1	0	0	3	0	0	0	0	0	7
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	4	0	0	0	4	2	2	0	0	4	7	2	0	0	9	0	0	0	0	0	17
% Approach Total	100.0	0.0	0.0	0.0		50.0	50.0	0.0	0.0		77.8	22.2	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.333	0.000	0.000	0.000	0.333	0.500	0.500	0.000	0.000	0.500	0.350	0.500	0.000	0.000	0.450	0.000	0.000	0.000	0.000	0.000	0.607
Entering Leg	4	0	0	0	4	2	2	0	0	4	7	2	0	0	9	0	0	0	0	0	17
Exiting Leg	4					7					0					6					17
Total	8					11					9					6					34

PDI File #: 228414 A

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington Street (Route 16) W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 4:00 PM

End Time: 6:00 PM

Class:

404 pages- see electronic file on website



Single-Unit Trucks

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street					Total	
	from North					from East					from South					from West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total		
4:00 PM	1	0	0	0	1	0	1	0	0	1	3	0	0	0	3	0	0	0	0	0	5	
4:15 PM	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	0	0	0	0	0	4	
4:30 PM	0	0	0	0	0	1	2	0	0	3	2	0	1	0	3	0	0	0	0	0	6	
4:45 PM	1	0	0	0	1	0	3	0	0	3	1	0	0	0	1	0	0	0	0	0	5	
Total	2	0	0	0	2	1	8	0	0	9	6	2	1	0	9	0	0	0	0	0	20	
5:00 PM	0	0	0	0	0	0	2	0	0	2	2	0	0	0	2	0	0	0	0	0	4	
5:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	
5:30 PM	2	0	0	0	2	0	1	0	0	1	2	1	0	0	3	0	0	0	0	0	6	
5:45 PM	1	0	0	0	1	1	1	0	0	2	1	2	0	0	3	0	0	0	0	0	6	
Total	3	0	0	0	3	1	5	0	0	6	5	3	0	0	8	0	0	0	0	0	17	
Grand Total	5	0	0	0	5	2	13	0	0	15	11	5	1	0	17	0	0	0	0	0	37	
Approach %	100.0	0.0	0.0	0.0		13.3	86.7	0.0	0.0		64.7	29.4	5.9	0.0		0.0	0.0	0.0	0.0			
Total %	13.5	0.0	0.0	0.0	13.5	5.4	35.1	0.0	0.0	40.5	29.7	13.5	2.7	0.0	45.9	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total						7					11					0					19	37

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

4:00 PM	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street					Total	
	from North					from East					from South					from West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total		
4:00 PM	1	0	0	0	1	0	1	0	0	1	3	0	0	0	3	0	0	0	0	0	5	
4:15 PM	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	0	0	0	0	0	4	
4:30 PM	0	0	0	0	0	1	2	0	0	3	2	0	1	0	3	0	0	0	0	0	6	
4:45 PM	1	0	0	0	1	0	3	0	0	3	1	0	0	0	1	0	0	0	0	0	5	
Total Volume	2	0	0	0	2	1	8	0	0	9	6	2	1	0	9	0	0	0	0	0	20	
% Approach Total	100.0	0.0	0.0	0.0		11.1	88.9	0.0	0.0		66.7	22.2	11.1	0.0		0.0	0.0	0.0	0.0			
PHF	0.500	0.000	0.000	0.000	0.500	0.250	0.667	0.000	0.000	0.750	0.500	0.250	0.250	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.833	
Entering Leg	2	0	0	0	2	1	8	0	0	9	6	2	1	0	9	0	0	0	0	0	20	
Exiting Leg						3					6					0					11	20
Total						5					15					9					11	40

PDI File #: 228414 A

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington Street (Route 16) W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 4:00 PM

End Time: 6:00 PM

Class:

404 pages- see electronic file on website



Articulated Trucks

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street					Total	
	from North					from East					from South					from West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total		
4:00 PM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	
Total	0	0	0	0	0	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0	3	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	
Grand Total	0	0	0	0	0	1	1	0	0	2	1	1	0	0	2	0	0	0	0	0	4	
Approach %	0.0	0.0	0.0	0.0		50.0	50.0	0.0	0.0		50.0	50.0	0.0	0.0		0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	25.0	25.0	0.0	0.0	50.0	25.0	25.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total						2					1					0					1	4

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

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0	3
% Approach Total	0.0	0.0	0.0	0.0		50.0	50.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.500	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.375
Entering Leg	0	0	0	0	0	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0	3
Exiting Leg						2					0					1					3
Total						2					2					1					6

PDI File #: 228414 A

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington Street (Route 16) W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 4:00 PM

End Time: 6:00 PM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

Table with columns for street names (Elm Street, Washington Street (Route 16)), direction (from North, from East, from South, from West), and movement types (Right, Thru, Left, U-Turn, CW-SB, CW-NB, CW-WB, CW-EB, Total). Rows include time intervals (4:00 PM to 5:45 PM), Grand Total, Approach %, Total %, and Exiting Leg Total.

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

Table for Peak Hour Analysis (5:00 PM) with columns for street names, direction, movement types, and Total. Rows include time intervals (5:00 PM to 5:45 PM), Total Volume, % Approach Total, PHF, Entering Leg, Exiting Leg, and Total.

PDI File #: 228414 A

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington Street (Route 16) W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 4:00 PM

End Time: 6:00 PM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

Table with columns for Elm Street, Washington Street (Route 16) from East, Washington Street (Route 16) from South, and Washington Street from West. Rows include time intervals (4:00 PM to 5:45 PM) and Grand Total. Includes sub-columns for Right, Thru, Left, U-Turn, CW-EB, CW-WB, and Total.

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

Table for Peak Hour Analysis at 5:00 PM. Columns and sub-columns are identical to the main table. Rows include 5:00 PM, 5:15 PM, 5:30 PM, 5:45 PM, Total Volume, % Approach Total, PHF, Entering Leg, Exiting Leg, and Total.

PDI File #: 228414 B

Location: N: Cherry Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 7:00 AM

End Time: 9:00 AM

Class:

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

Table with columns for Cherry Street, Washington Street (Route 16) from North, East, and West, and Total. Rows include time intervals (7:00 AM to 8:45 AM), Grand Total, Approach %, and Exiting Leg Total for Cars and Heavy Vehicles.

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

Table showing peak hour analysis starting at 7:30 AM. Columns include Cherry Street, Washington Street (Route 16) from North, East, and West, and Total. Rows include time intervals (7:30 AM to 8:15 AM), Total Volume, % Approach Total, PHF, and Exiting Leg Total for Cars and Heavy Vehicles.

PDI File #: **228414 B**
 Location: **N: Cherry Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

404 pages- see electronic file on website



Cars

	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:00 AM	21	50	0	71	9	58	0	67	71	17	0	88	226
7:15 AM	16	63	0	79	18	85	0	103	92	30	0	122	304
7:30 AM	28	83	0	111	35	91	0	126	119	37	1	157	394
7:45 AM	22	81	0	103	41	118	0	159	108	43	0	151	413
Total	87	277	0	364	103	352	0	455	390	127	1	518	1337
8:00 AM	19	65	0	84	39	97	0	136	120	16	0	136	356
8:15 AM	15	104	0	119	40	105	0	145	115	22	0	137	401
8:30 AM	8	95	0	103	54	97	0	151	101	29	0	130	384
8:45 AM	16	113	0	129	42	100	0	142	119	28	1	148	419
Total	58	377	0	435	175	399	0	574	455	95	1	551	1560
Grand Total	145	654	0	799	278	751	0	1029	845	222	2	1069	2897
Approach %	18.1	81.9	0.0		27.0	73.0	0.0		79.0	20.8	0.2		
Total %	5.0	22.6	0.0	27.6	9.6	25.9	0.0	35.5	29.2	7.7	0.1	36.9	
Exiting Leg Total				500				1499				898	2897

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

	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:30 AM	28	83	0	111	35	91	0	126	119	37	1	157	394
7:45 AM	22	81	0	103	41	118	0	159	108	43	0	151	413
8:00 AM	19	65	0	84	39	97	0	136	120	16	0	136	356
8:15 AM	15	104	0	119	40	105	0	145	115	22	0	137	401
Total Volume	84	333	0	417	155	411	0	566	462	118	1	581	1564
% Approach Total	20.1	79.9	0.0		27.4	72.6	0.0		79.5	20.3	0.2		
PHF	0.750	0.800	0.000	0.876	0.945	0.871	0.000	0.890	0.963	0.686	0.250	0.925	0.947
Entering Leg	84	333	0	417	155	411	0	566	462	118	1	581	1564
Exiting Leg				273				795				496	1564
Total				690				1361				1077	3128

PDI File #: 228414 B

Location: N: Cherry Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 7:00 AM

End Time: 9:00 AM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

Table with columns for Cherry Street, Washington Street (Route 16) from North, East, and West, and various vehicle types (Buses, Single-Unit Trucks, Articulated Trucks) with counts and percentages.

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

Table showing peak hour analysis for 7:15 AM, 7:30 AM, 7:45 AM, and 8:00 AM, including PHF (Peak Hour Factor) and vehicle type breakdowns.

PDI File #: **228414 B**
 Location: **N: Cherry Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Buses

	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	1	0	1	1	0	0	1	2
7:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	4	0	4	2	0	0	2	6
7:45 AM	0	0	0	0	1	1	0	2	0	0	0	0	2
Total	0	1	0	1	1	6	0	7	3	0	0	3	11
8:00 AM	2	0	0	2	0	1	0	1	0	0	0	0	3
8:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
8:30 AM	0	1	0	1	0	1	0	1	1	0	0	1	3
8:45 AM	0	0	0	0	0	1	0	1	1	0	0	1	2
Total	2	1	0	3	0	3	0	3	3	0	0	3	9
Grand Total	2	2	0	4	1	9	0	10	6	0	0	6	20
Approach %	50.0	50.0	0.0		10.0	90.0	0.0		100.0	0.0	0.0		
Total %	10.0	10.0	0.0	20.0	5.0	45.0	0.0	50.0	30.0	0.0	0.0	30.0	
Exiting Leg Total				1				8				11	20

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

7:15 AM	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	4	0	4	2	0	0	2	6
7:45 AM	0	0	0	0	1	1	0	2	0	0	0	0	2
8:00 AM	2	0	0	2	0	1	0	1	0	0	0	0	3
Total Volume	2	1	0	3	1	6	0	7	2	0	0	2	12
% Approach Total	66.7	33.3	0.0		14.3	85.7	0.0		100.0	0.0	0.0		
PHF	0.250	0.250	0.000	0.375	0.250	0.375	0.000	0.438	0.250	0.000	0.000	0.250	0.500
Entering Leg	2	1	0	3	1	6	0	7	2	0	0	2	12
Exiting Leg				1				3				8	12
Total				4				10				10	24

PDI File #: **228414 B**
 Location: **N: Cherry Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

404 pages- see electronic file on website



PRECISION
 D A T A
 INDUSTRIES, LLC
 157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:00 AM	1	1	0	2	0	1	0	1	5	0	0	5	8
7:15 AM	1	2	0	3	0	3	0	3	4	0	0	4	10
7:30 AM	0	0	0	0	0	2	0	2	2	1	0	3	5
7:45 AM	0	2	0	2	0	2	0	2	3	0	0	3	7
Total	2	5	0	7	0	8	0	8	14	1	0	15	30
8:00 AM	0	4	0	4	0	4	0	4	1	0	0	1	9
8:15 AM	0	2	0	2	2	2	0	4	4	0	0	4	10
8:30 AM	0	2	0	2	0	3	0	3	3	1	0	4	9
8:45 AM	1	0	0	1	2	3	0	5	2	0	0	2	8
Total	1	8	0	9	4	12	0	16	10	1	0	11	36
Grand Total	3	13	0	16	4	20	0	24	24	2	0	26	66
Approach %	18.8	81.3	0.0		16.7	83.3	0.0		92.3	7.7	0.0		
Total %	4.5	19.7	0.0	24.2	6.1	30.3	0.0	36.4	36.4	3.0	0.0	39.4	
Exiting Leg Total				6				37				23	66

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

8:00 AM	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
8:00 AM	0	4	0	4	0	4	0	4	1	0	0	1	9
8:15 AM	0	2	0	2	2	2	0	4	4	0	0	4	10
8:30 AM	0	2	0	2	0	3	0	3	3	1	0	4	9
8:45 AM	1	0	0	1	2	3	0	5	2	0	0	2	8
Total Volume	1	8	0	9	4	12	0	16	10	1	0	11	36
% Approach Total	11.1	88.9	0.0		25.0	75.0	0.0		90.9	9.1	0.0		
PHF	0.250	0.500	0.000	0.563	0.500	0.750	0.000	0.800	0.625	0.250	0.000	0.688	0.900
Entering Leg	1	8	0	9	4	12	0	16	10	1	0	11	36
Exiting Leg				5				18				13	36
Total				14				34				24	72

PDI File #: **228414 B**
 Location: **N: Cherry Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

404 pages- see electronic file on website



Articulated Trucks

	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	1	2	0	3	0	0	0	0	3
7:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
7:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	1	4	0	5	1	0	0	1	6
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
8:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	1	0	1	2	0	0	2	3
Grand Total	0	0	0	0	1	5	0	6	3	0	0	3	9
Approach %	0.0	0.0	0.0		16.7	83.3	0.0		100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	11.1	55.6	0.0	66.7	33.3	0.0	0.0	33.3	
Exiting Leg Total				1				3				5	9

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

7:00 AM	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	1	2	0	3	0	0	0	0	3
7:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
7:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	1
Total Volume	0	0	0	0	1	4	0	5	1	0	0	1	6
% Approach Total	0.0	0.0	0.0		20.0	80.0	0.0		100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.250	0.500	0.000	0.417	0.250	0.000	0.000	0.250	0.500
Entering Leg	0	0	0	0	1	4	0	5	1	0	0	1	6
Exiting Leg				1				1				4	6
Total				1				6				5	12

PDI File #: 228414 B
 Location: N: Cherry Street
 Location: E: Washington St (Rt 16) W: Washington St (Rt 16)
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Count Date: Thursday, February 10, 2022
 Start Time: 7:00 AM
 End Time: 9:00 AM

Class: Bicycles (on Roadway and Crosswalks)

	Cherry Street						Washington Street (Route 16)						Washington Street (Route 16)						Total
	from North						from East						from West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0		
Exiting Leg Total	0						1						0						1

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

7:15 AM	Cherry Street						Washington Street (Route 16)						Washington Street (Route 16)						Total
	from North						from East						from West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.250	
Entering Leg	0						0						1						1
Exiting Leg	0						1						0						1
Total	0						1						1						2

PDI File #: 228414 B
 Location: N: Cherry Street
 Location: E: Washington St (Rt 16) W: Washington St (Rt 16)
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Count Date: Thursday, February 10, 2022
 Start Time: 7:00 AM
 End Time: 9:00 AM

Class: Pedestrians

	Cherry Street						Washington Street (Route 16)						Washington Street (Route 16)						Total
	from North						from East						from West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	2	3
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	2	3	4
8:00 AM	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	4
8:15 AM	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	1	2	3	7
8:30 AM	0	0	0	2	2	4	0	0	0	0	0	0	0	0	0	1	3	4	8
8:45 AM	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	0	0	6	9	15	0	0	0	0	0	0	0	0	0	2	5	7	22
Grand Total	0	0	0	6	10	16	0	0	0	0	0	0	0	0	0	3	7	10	26
Approach %	0	0	0	37.5	62.5		0	0	0	0	0	0	0	0	0	30	70		
Total %	0	0	0	23.077	38.462	61.538	0	0	0	0	0	0	0	0	0	11.538	26.923	38.462	
Exiting Leg Total	16						0						10						26

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

8:00 AM	Cherry Street						Washington Street (Route 16)						Washington Street (Route 16)						Total
	from North						from East						from West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
8:00 AM	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	4
8:15 AM	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	1	2	3	7
8:30 AM	0	0	0	2	2	4	0	0	0	0	0	0	0	0	0	1	3	4	8
8:45 AM	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Total Volume	0	0	0	6	9	15	0	0	0	0	0	0	0	0	0	2	5	7	22
% Approach Total	0.0	0.0	0.0	40.0	60.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.6	71.4		
PHF	0.000	0.000	0.000	0.500	0.563	0.938	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.417	0.438	0.688
Entering Leg	0	0	0	6	9	15	0	0	0	0	0	0	0	0	0	2	5	7	22
Exiting Leg	15						0						7						22
Total	30						0						14						44

PDI File #: 228414 B

Location: N: Cherry Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 4:00 PM

End Time: 6:00 PM

Class:

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

Table with columns for Cherry Street, Washington Street (Route 16), and Washington Street (Route 16). Rows include time intervals (4:00 PM to 5:45 PM), totals, Grand Total, Approach %, Total %, and Exiting Leg Total for Cars and Heavy Vehicles.

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

Table for Peak Hour Analysis from 5:00 PM. Columns include Cherry Street, Washington Street (Route 16), and Washington Street (Route 16). Rows include time intervals (5:00 PM to 5:45 PM), Total Volume, % Approach Total, PHF, and Exiting Leg totals for Cars and Heavy Vehicles.

PDI File #: **228414 B**
 Location: **N: Cherry Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**

404 pages- see electronic file on website



Class:

Cars

	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
4:00 PM	17	54	0	71	56	110	0	166	91	42	0	133	370
4:15 PM	31	57	0	88	63	119	0	182	120	35	0	155	425
4:30 PM	21	51	0	72	47	89	0	136	106	39	1	146	354
4:45 PM	18	48	0	66	53	124	0	177	106	25	0	131	374
Total	87	210	0	297	219	442	0	661	423	141	1	565	1523
5:00 PM	26	67	0	93	56	110	0	166	110	31	0	141	400
5:15 PM	25	63	0	88	69	134	0	203	122	43	0	165	456
5:30 PM	21	85	0	106	55	114	0	169	129	32	0	161	436
5:45 PM	28	64	0	92	50	123	0	173	152	42	0	194	459
Total	100	279	0	379	230	481	0	711	513	148	0	661	1751
Grand Total	187	489	0	676	449	923	0	1372	936	289	1	1226	3274
Approach %	27.7	72.3	0.0		32.7	67.3	0.0		76.3	23.6	0.1		
Total %	5.7	14.9	0.0	20.6	13.7	28.2	0.0	41.9	28.6	8.8	0.0	37.4	
Exiting Leg Total				738				1425				1111	3274

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

	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
5:00 PM	26	67	0	93	56	110	0	166	110	31	0	141	400
5:15 PM	25	63	0	88	69	134	0	203	122	43	0	165	456
5:30 PM	21	85	0	106	55	114	0	169	129	32	0	161	436
5:45 PM	28	64	0	92	50	123	0	173	152	42	0	194	459
Total Volume	100	279	0	379	230	481	0	711	513	148	0	661	1751
% Approach Total	26.4	73.6	0.0		32.3	67.7	0.0		77.6	22.4	0.0		
PHF	0.893	0.821	0.000	0.894	0.833	0.897	0.000	0.876	0.844	0.860	0.000	0.852	0.954
Entering Leg	100	279	0	379	230	481	0	711	513	148	0	661	1751
Exiting Leg				378				792				581	1751
Total				757				1503				1242	3502

PDI File #: 228414 B

Location: N: Cherry Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 4:00 PM

End Time: 6:00 PM

Class:

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

Table with columns for Cherry Street, Washington Street (Route 16) from North, East, and West, and Washington Street (Route 16) from West. Rows include time intervals (4:00 PM to 5:45 PM), totals, Grand Total, Approach %, Total %, and Exiting Leg Total for Buses, Single-Unit Trucks, and Articulated Trucks.

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

Table showing peak hour analysis for 4:00 PM. Columns include Cherry Street, Washington Street (Route 16) from North, East, and West, and Washington Street (Route 16) from West. Rows include time intervals (4:00 PM to 4:45 PM), Total Volume, % Approach Total, PHF, and vehicle counts for Buses, Single-Unit Trucks, and Articulated Trucks.

PDI File #: **228414 B**
 Location: **N: Cherry Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Buses

	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	2	0	2	5	0	0	5	7
4:30 PM	0	0	0	0	0	1	0	1	1	0	0	1	2
4:45 PM	0	0	0	0	0	1	0	1	1	0	0	1	2
Total	0	0	0	0	0	5	0	5	7	0	0	7	12
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	1	1	0	0	1	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	2
Total	0	0	0	0	0	3	0	3	1	0	0	1	4
Grand Total	0	0	0	0	0	8	0	8	8	0	0	8	16
Approach %	0.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	50.0	0.0	50.0	50.0	0.0	0.0	50.0	
Exiting Leg Total				0				8				8	16

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

4:00 PM	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	2	0	2	5	0	0	5	7
4:30 PM	0	0	0	0	0	1	0	1	1	0	0	1	2
4:45 PM	0	0	0	0	0	1	0	1	1	0	0	1	2
Total Volume	0	0	0	0	0	5	0	5	7	0	0	7	12
% Approach Total	0.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.625	0.350	0.000	0.000	0.350	0.429
Entering Leg	0	0	0	0	0	5	0	5	7	0	0	7	12
Exiting Leg				0				7				5	12
Total				0				12				12	24

PDI File #: **228414 B**
 Location: **N: Cherry Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	1	0	1	3	1	0	4	5
4:15 PM	0	0	0	0	2	1	0	3	0	0	0	0	3
4:30 PM	0	0	0	0	0	2	0	2	1	1	0	2	4
4:45 PM	0	1	0	1	0	1	0	1	0	1	0	1	3
Total	0	1	0	1	2	5	0	7	4	3	0	7	15
5:00 PM	0	0	0	0	1	5	0	6	1	0	0	1	7
5:15 PM	0	0	0	0	0	1	0	1	1	0	0	1	2
5:30 PM	0	2	0	2	0	1	0	1	2	0	0	2	5
5:45 PM	1	0	0	1	2	1	0	3	1	0	0	1	5
Total	1	2	0	3	3	8	0	11	5	0	0	5	19
Grand Total	1	3	0	4	5	13	0	18	9	3	0	12	34
Approach %	25.0	75.0	0.0		27.8	72.2	0.0		75.0	25.0	0.0		
Total %	2.9	8.8	0.0	11.8	14.7	38.2	0.0	52.9	26.5	8.8	0.0	35.3	
Exiting Leg Total				8				12				14	34

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

5:00 PM	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
5:00 PM	0	0	0	0	1	5	0	6	1	0	0	1	7
5:15 PM	0	0	0	0	0	1	0	1	1	0	0	1	2
5:30 PM	0	2	0	2	0	1	0	1	2	0	0	2	5
5:45 PM	1	0	0	1	2	1	0	3	1	0	0	1	5
Total Volume	1	2	0	3	3	8	0	11	5	0	0	5	19
% Approach Total	33.3	66.7	0.0		27.3	72.7	0.0		100.0	0.0	0.0		
PHF	0.250	0.250	0.000	0.375	0.375	0.400	0.000	0.458	0.625	0.000	0.000	0.625	0.679
Entering Leg	1	2	0	3	3	8	0	11	5	0	0	5	19
Exiting Leg				3				7				9	19
Total				6				18				14	38

PDI File #: **228414 B**
 Location: **N: Cherry Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:

404 pages- see electronic file on website



PRECISION
 D A T A
 INDUSTRIES, LLC
 157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total	
	from North				from East				from West					
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total		
4:00 PM	1	0	0	1	0	0	0	0	0	1	0	0	1	2
4:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1
Total	1	2	0	3	0	1	0	1	1	0	0	1	1	5
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Grand Total	1	2	0	3	0	1	0	1	2	0	0	2	2	6
Approach %	33.3	66.7	0.0		0.0	100.0	0.0		100.0	0.0	0.0			
Total %	16.7	33.3	0.0	50.0	0.0	16.7	0.0	16.7	33.3	0.0	0.0	33.3		
Exiting Leg Total				0				4				2		6

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

4:00 PM	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total	
	from North				from East				from West					
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total		
4:00 PM	1	0	0	1	0	0	0	0	0	1	0	0	1	2
4:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1
Total Volume	1	2	0	3	0	1	0	1	1	0	0	1	1	5
% Approach Total	33.3	66.7	0.0		0.0	100.0	0.0		100.0	0.0	0.0			
PHF	0.250	0.500	0.000	0.750	0.000	0.250	0.000	0.250	0.250	0.000	0.000	0.250		0.625
Entering Leg	1	2	0	3	0	1	0	1	1	0	0	1		5
Exiting Leg				0				3				2		5
Total				3				4				3		10

PDI File #: 228414 B
 Location: N: Cherry Street
 Location: E: Washington St (Rt 16) W: Washington St (Rt 16)
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Count Date: Thursday, February 10, 2022
 Start Time: 4:00 PM
 End Time: 6:00 PM

Class: Bicycles (on Roadway and Crosswalks)

	Cherry Street							Washington Street (Route 16)						Washington Street (Route 16)						Total
	from North							from East						from West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total		Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	0	0	0	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	3	3		0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	3	3		0	0	0	0	0	0	0	0	0	0	0	0	3
Approach %	0.0	0.0	0.0	0.0	100.0	100.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total %	0.0	0.0	0.0	0.0	100.0	100.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exiting Leg Total	3							0						0						3

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

4:00 PM	Cherry Street							Washington Street (Route 16)						Washington Street (Route 16)						Total
	from North							from East						from West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total		Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	0	0	0	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	3	3		0	0	0	0	0	0	0	0	0	0	0	0	3
% Approach Total	0.0	0.0	0.0	0.0	100.0	100.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PHF	0.000	0.000	0.000	0.000	0.750	0.750		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750
Entering Leg	0	0	0	0	3	3		0	0	0	0	0	0	0	0	0	0	0	0	3
Exiting Leg	3							0						0						3
Total	6							0						0						6

PDI File #: 228414 B
 Location: N: Cherry Street
 Location: E: Washington St (Rt 16) W: Washington St (Rt 16)
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Count Date: Thursday, February 10, 2022
 Start Time: 4:00 PM
 End Time: 6:00 PM

Class: Pedestrians

	Cherry Street						Washington Street (Route 16)						Washington Street (Route 16)						Total	
	from North						from East						from West							
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
4:00 PM	0	0	0	3	1	4	0	0	0	0	0	0	0	0	0	0	0	1	1	5
4:15 PM	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
4:30 PM	0	0	0	1	7	8	0	0	0	0	0	0	0	0	0	2	0	2	10	
4:45 PM	0	0	0	3	3	6	0	0	0	0	0	0	0	0	0	0	1	1	7	
Total	0	0	0	7	15	22	0	0	0	0	0	0	0	0	0	2	2	4	26	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	
5:15 PM	0	0	0	1	4	5	0	0	0	0	0	0	0	0	0	3	3	6	11	
5:30 PM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	1	1	3	
5:45 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	
Total	0	0	0	1	7	8	0	0	0	0	0	0	0	0	0	4	4	8	16	
Grand Total	0	0	0	8	22	30	0	0	0	0	0	0	0	0	0	6	6	12	42	
Approach %	0	0	0	26.667	73.333		0	0	0	0	0	0	0	0	0	50	50			
Total %	0	0	0	19.048	52.381	71.429	0	0	0	0	0	0	0	0	0	14.286	14.286	28.571		
Exiting Leg Total	30						0						12						42	

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

	Cherry Street						Washington Street (Route 16)						Washington Street (Route 16)						Total
	from North						from East						from West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:30 PM	0	0	0	1	7	8	0	0	0	0	0	0	0	0	0	2	0	2	10
4:45 PM	0	0	0	3	3	6	0	0	0	0	0	0	0	0	0	0	1	1	7
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
5:15 PM	0	0	0	1	4	5	0	0	0	0	0	0	0	0	0	3	3	6	11
Total Volume	0	0	0	5	14	19	0	0	0	0	0	0	0	0	0	6	4	10	29
% Approach Total	0.0	0.0	0.0	26.3	73.7		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	40.0		
PHF	0.000	0.000	0.000	0.417	0.500	0.594	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.333	0.417	0.659
Entering Leg	0	0	0	5	14	19	0	0	0	0	0	0	0	0	0	6	4	10	29
Exiting Leg	19						0						10						29
Total	38						0						20						58

PDI File #: **228414 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

404 pages- see electronic file on website



PRECISION
 D A T A
 INDUSTRIES, LLC
 157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	60	8	0	68	2	10	0	12	27	99	0	126	206
7:15 AM	93	9	0	102	24	16	0	40	40	123	0	163	305
7:30 AM	94	18	0	112	51	35	0	86	40	161	0	201	399
7:45 AM	126	29	0	155	47	42	0	89	46	157	0	203	447
Total	373	64	0	437	124	103	0	227	153	540	0	693	1357
8:00 AM	101	31	0	132	31	37	0	68	40	151	0	191	391
8:15 AM	114	17	0	131	46	39	0	85	60	163	0	223	439
8:30 AM	99	25	0	124	39	52	0	91	63	140	0	203	418
8:45 AM	99	20	0	119	47	49	0	96	62	176	0	238	453
Total	413	93	0	506	163	177	0	340	225	630	0	855	1701
Grand Total	786	157	0	943	287	280	0	567	378	1170	0	1548	3058
Approach %	83.4	16.6	0.0		50.6	49.4	0.0		24.4	75.6	0.0		
Total %	25.7	5.1	0.0	30.8	9.4	9.2	0.0	18.5	12.4	38.3	0.0	50.6	
Exiting Leg Total				1457				535				1066	3058
Cars	749	155	0	904	282	275	0	557	367	1132	0	1499	2960
% Cars	95.3	98.7	0.0	95.9	98.3	98.2	0.0	98.2	97.1	96.8	0.0	96.8	96.8
Exiting Leg Total				1414				522				1024	2960
Heavy Vehicles	37	2	0	39	5	5	0	10	11	38	0	49	98
% Heavy Vehicles	4.7	1.3	0.0	4.1	1.7	1.8	0.0	1.8	2.9	3.2	0.0	3.2	3.2
Exiting Leg Total				43				13				42	98

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

8:00 AM	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
8:00 AM	101	31	0	132	31	37	0	68	40	151	0	191	391
8:15 AM	114	17	0	131	46	39	0	85	60	163	0	223	439
8:30 AM	99	25	0	124	39	52	0	91	63	140	0	203	418
8:45 AM	99	20	0	119	47	49	0	96	62	176	0	238	453
Total Volume	413	93	0	506	163	177	0	340	225	630	0	855	1701
% Approach Total	81.6	18.4	0.0		47.9	52.1	0.0		26.3	73.7	0.0		
PHF	0.906	0.750	0.000	0.958	0.867	0.851	0.000	0.885	0.893	0.895	0.000	0.898	0.939
Cars	396	92	0	488	162	173	0	335	218	613	0	831	1654
Cars %	95.9	98.9	0.0	96.4	99.4	97.7	0.0	98.5	96.9	97.3	0.0	97.2	97.2
Heavy Vehicles	17	1	0	18	1	4	0	5	7	17	0	24	47
Heavy Vehicles %	4.1	1.1	0.0	3.6	0.6	2.3	0.0	1.5	3.1	2.7	0.0	2.8	2.8
Cars Enter Leg	396	92	0	488	162	173	0	335	218	613	0	831	1654
Heavy Enter Leg	17	1	0	18	1	4	0	5	7	17	0	24	47
Total Entering Leg	413	93	0	506	163	177	0	340	225	630	0	855	1701
Cars Exiting Leg				775				310				569	1654
Heavy Exiting Leg				18				8				21	47
Total Exiting Leg				793				318				590	1701

PDI File #: **228414 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

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Cars

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	57	8	0	65	2	10	0	12	26	93	0	119	196
7:15 AM	86	9	0	95	24	16	0	40	38	117	0	155	290
7:30 AM	88	17	0	105	48	35	0	83	40	156	0	196	384
7:45 AM	122	29	0	151	46	41	0	87	45	153	0	198	436
Total	353	63	0	416	120	102	0	222	149	519	0	668	1306
8:00 AM	96	31	0	127	31	37	0	68	37	148	0	185	380
8:15 AM	111	17	0	128	46	37	0	83	58	158	0	216	427
8:30 AM	95	25	0	120	38	51	0	89	61	135	0	196	405
8:45 AM	94	19	0	113	47	48	0	95	62	172	0	234	442
Total	396	92	0	488	162	173	0	335	218	613	0	831	1654
Grand Total	749	155	0	904	282	275	0	557	367	1132	0	1499	2960
Approach %	82.9	17.1	0.0		50.6	49.4	0.0		24.5	75.5	0.0		
Total %	25.3	5.2	0.0	30.5	9.5	9.3	0.0	18.8	12.4	38.2	0.0	50.6	
Exiting Leg Total				1414				522				1024	2960

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

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
8:00 AM	96	31	0	127	31	37	0	68	37	148	0	185	380
8:15 AM	111	17	0	128	46	37	0	83	58	158	0	216	427
8:30 AM	95	25	0	120	38	51	0	89	61	135	0	196	405
8:45 AM	94	19	0	113	47	48	0	95	62	172	0	234	442
Total Volume	396	92	0	488	162	173	0	335	218	613	0	831	1654
% Approach Total	81.1	18.9	0.0		48.4	51.6	0.0		26.2	73.8	0.0		
PHF	0.892	0.742	0.000	0.953	0.862	0.848	0.000	0.882	0.879	0.891	0.000	0.888	0.936
Entering Leg	396	92	0	488	162	173	0	335	218	613	0	831	1654
Exiting Leg				775				310				569	1654
Total				1263				645				1400	3308

PDI File #: **228414 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

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Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	3	0	0	3	0	0	0	0	1	6	0	7	10
7:15 AM	7	0	0	7	0	0	0	0	2	6	0	8	15
7:30 AM	6	1	0	7	3	0	0	3	0	5	0	5	15
7:45 AM	4	0	0	4	1	1	0	2	1	4	0	5	11
Total	20	1	0	21	4	1	0	5	4	21	0	25	51
8:00 AM	5	0	0	5	0	0	0	0	3	3	0	6	11
8:15 AM	3	0	0	3	0	2	0	2	2	5	0	7	12
8:30 AM	4	0	0	4	1	1	0	2	2	5	0	7	13
8:45 AM	5	1	0	6	0	1	0	1	0	4	0	4	11
Total	17	1	0	18	1	4	0	5	7	17	0	24	47
Grand Total	37	2	0	39	5	5	0	10	11	38	0	49	98
Approach %	94.9	5.1	0.0		50.0	50.0	0.0		22.4	77.6	0.0		
Total %	37.8	2.0	0.0	39.8	5.1	5.1	0.0	10.2	11.2	38.8	0.0	50.0	
Exiting Leg Total				43				13				42	98
Buses	9	0	0	9	0	0	0	0	0	8	0	8	17
% Buses	24.3	0.0	0.0	23.1	0.0	0.0	0.0	0.0	0.0	21.1	0.0	16.3	17.3
Exiting Leg Total				8				0				9	17
Single-Unit Trucks	23	2	0	25	3	5	0	8	10	27	0	37	70
% Single-Unit	62.2	100.0	0.0	64.1	60.0	100.0	0.0	80.0	90.9	71.1	0.0	75.5	71.4
Exiting Leg Total				30				12				28	70
Articulated Trucks	5	0	0	5	2	0	0	2	1	3	0	4	11
% Articulated	13.5	0.0	0.0	12.8	40.0	0.0	0.0	20.0	9.1	7.9	0.0	8.2	11.2
Exiting Leg Total				5				1				5	11

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

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:15 AM	7	0	0	7	0	0	0	0	2	6	0	8	15
7:30 AM	6	1	0	7	3	0	0	3	0	5	0	5	15
7:45 AM	4	0	0	4	1	1	0	2	1	4	0	5	11
8:00 AM	5	0	0	5	0	0	0	0	3	3	0	6	11
Total Volume	22	1	0	23	4	1	0	5	6	18	0	24	52
% Approach Total	95.7	4.3	0.0		80.0	20.0	0.0		25.0	75.0	0.0		
PHF	0.786	0.250	0.000	0.821	0.333	0.250	0.000	0.417	0.500	0.750	0.000	0.750	0.867
Buses	6	0	0	6	0	0	0	0	0	3	0	3	9
Buses %	27.3	0.0	0.0	26.1	0.0	0.0	0.0	0.0	0.0	16.7	0.0	12.5	17.3
Single-Unit Trucks	13	1	0	14	2	1	0	3	5	14	0	19	36
Single-Unit %	59.1	100.0	0.0	60.9	50.0	100.0	0.0	60.0	83.3	77.8	0.0	79.2	69.2
Articulated Trucks	3	0	0	3	2	0	0	2	1	1	0	2	7
Articulated %	13.6	0.0	0.0	13.0	50.0	0.0	0.0	40.0	16.7	5.6	0.0	8.3	13.5
Buses	6	0	0	6	0	0	0	0	0	3	0	3	9
Single-Unit Trucks	13	1	0	14	2	1	0	3	5	14	0	19	36
Articulated Trucks	3	0	0	3	2	0	0	2	1	1	0	2	7
Total Entering Leg	22	1	0	23	4	1	0	5	6	18	0	24	52
Buses				3				0				6	9
Single-Unit Trucks				16				6				14	36
Articulated Trucks				3				1				3	7
Total Exiting Leg				22				7				23	52

PDI File #: **228414 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

404 pages- see electronic file on website



PRECISION
 D A T A
 INDUSTRIES, LLC
 157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Buses

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
7:30 AM	4	0	0	4	0	0	0	0	0	2	0	2	6
7:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	6	0	0	6	0	0	0	0	0	4	0	4	10
8:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
8:30 AM	1	0	0	1	0	0	0	0	0	2	0	2	3
8:45 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total	3	0	0	3	0	0	0	0	0	4	0	4	7
Grand Total	9	0	0	9	0	0	0	0	0	8	0	8	17
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
Total %	52.9	0.0	0.0	52.9	0.0	0.0	0.0	0.0	0.0	47.1	0.0	47.1	
Exiting Leg Total				8				0				9	17

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

7:00 AM	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
7:30 AM	4	0	0	4	0	0	0	0	0	2	0	2	6
7:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Volume	6	0	0	6	0	0	0	0	0	4	0	4	10
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.375	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.417
Entering Leg	6	0	0	6	0	0	0	0	0	4	0	4	10
Exiting Leg				4				0				6	10
Total				10				0				10	20

PDI File #: **228414 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

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PRECISION
 D A T A
 INDUSTRIES, LLC
 157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total	
	from East				from South				from West					
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total		
7:00 AM	1	0	0	1	0	0	0	0	0	1	5	0	6	7
7:15 AM	5	0	0	5	0	0	0	0	0	1	5	0	6	11
7:30 AM	2	1	0	3	2	0	0	2	2	0	2	0	2	7
7:45 AM	2	0	0	2	0	1	0	1	1	1	4	0	5	8
Total	10	1	0	11	2	1	0	3	3	16	0	19	33	
8:00 AM	4	0	0	4	0	0	0	0	0	3	3	0	6	10
8:15 AM	2	0	0	2	0	2	0	2	2	4	0	6	10	
8:30 AM	3	0	0	3	1	1	0	2	2	3	0	5	10	
8:45 AM	4	1	0	5	0	1	0	1	0	1	0	1	7	
Total	13	1	0	14	1	4	0	5	7	11	0	18	37	
Grand Total	23	2	0	25	3	5	0	8	10	27	0	37	70	
Approach %	92.0	8.0	0.0		37.5	62.5	0.0		27.0	73.0	0.0			
Total %	32.9	2.9	0.0	35.7	4.3	7.1	0.0	11.4	14.3	38.6	0.0	52.9		
Exiting Leg Total				30				12				28	70	

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

7:45 AM	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:45 AM	2	0	0	2	0	1	0	1	1	4	0	5	8
8:00 AM	4	0	0	4	0	0	0	0	3	3	0	6	10
8:15 AM	2	0	0	2	0	2	0	2	2	4	0	6	10
8:30 AM	3	0	0	3	1	1	0	2	2	3	0	5	10
Total Volume	11	0	0	11	1	4	0	5	8	14	0	22	38
% Approach Total	100.0	0.0	0.0		20.0	80.0	0.0		36.4	63.6	0.0		
PHF	0.688	0.000	0.000	0.688	0.250	0.500	0.000	0.625	0.667	0.875	0.000	0.917	0.950
Entering Leg	11	0	0	11	1	4	0	5	8	14	0	22	38
Exiting Leg				15				8				15	38
Total				26				13				37	76

PDI File #: **228414 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

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PRECISION
 D A T A
 INDUSTRIES, LLC
 157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
7:15 AM	2	0	0	2	0	0	0	0	1	0	0	1	3
7:30 AM	0	0	0	0	1	0	0	1	0	1	0	1	2
7:45 AM	1	0	0	1	1	0	0	1	0	0	0	0	2
Total	4	0	0	4	2	0	0	2	1	1	0	2	8
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	1	0	0	1	0	0	0	0	0	2	0	2	3
Grand Total	5	0	0	5	2	0	0	2	1	3	0	4	11
Approach %	100.0	0.0	0.0		100.0	0.0	0.0		25.0	75.0	0.0		
Total %	45.5	0.0	0.0	45.5	18.2	0.0	0.0	18.2	9.1	27.3	0.0	36.4	
Exiting Leg Total				5				1				5	11

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

7:00 AM	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
7:15 AM	2	0	0	2	0	0	0	0	1	0	0	1	3
7:30 AM	0	0	0	0	1	0	0	1	0	1	0	1	2
7:45 AM	1	0	0	1	1	0	0	1	0	0	0	0	2
Total Volume	4	0	0	4	2	0	0	2	1	1	0	2	8
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		50.0	50.0	0.0		
PHF	0.500	0.000	0.000	0.500	0.500	0.000	0.000	0.500	0.250	0.250	0.000	0.500	0.667
Entering Leg	4	0	0	4	2	0	0	2	1	1	0	2	8
Exiting Leg				3				1				4	8
Total				7				3				6	16

PDI File #: 228414 C
 Location: S: Highland Street
 Location: E: Washington St (Rt 16) W: Washington St (Rt 16)
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

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157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Count Date: Thursday, February 10, 2022
 Start Time: 7:00 AM
 End Time: 9:00 AM

Class: Bicycles (on Roadway and Crosswalks)

	Washington Street (Route 16)						Highland Street						Washington Street (Route 16)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
Grand Total	0	0	0	0	0	0	1	0	0	0	0	1	0	2	0	0	0	2	3
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	66.7	66.7
Total %	0.0	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	33.3	0.0	66.7	0.0	0.0	0.0	66.7	
Exiting Leg Total	3						0						0						3

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

7:15 AM	Washington Street (Route 16)						Highland Street						Washington Street (Route 16)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
7:15 AM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
Total Volume	0	0	0	0	0	0	1	0	0	0	0	1	0	2	0	0	0	2	3
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0	0.0	0.0	
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.250	0.375
Entering Leg	0						1						0						3
Exiting Leg	3						0						0						3
Total	3						1						2						6

PDI File #: 228414 C
 Location: S: Highland Street
 Location: E: Washington St (Rt 16) W: Washington St (Rt 16)
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Count Date: Thursday, February 10, 2022
 Start Time: 7:00 AM
 End Time: 9:00 AM

Class: Pedestrians

	Washington Street (Route 16)						Highland Street						Washington Street (Route 16)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	0	0	2
7:30 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	0	0	0	5	1	6	0	0	0	0	1	1	0	0	0	0	0	0	7
8:00 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	2	2	4	0	0	0	0	1	1	0	0	0	0	0	0	5
8:30 AM	0	0	0	2	2	4	0	0	0	1	2	3	0	0	0	0	0	0	7
8:45 AM	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	2
Total	0	0	0	6	4	10	0	0	0	2	3	5	0	0	0	0	0	0	15
Grand Total	0	0	0	11	5	16	0	0	0	2	4	6	0	0	0	0	0	0	22
Approach %	0	0	0	68.75	31.25		0	0	0	33.333	66.667		0	0	0	0	0	0	
Total %	0	0	0	50	22.727	72.727	0	0	0	9.0909	18.182	27.273	0	0	0	0	0	0	
Exiting Leg Total	16						6						0						22

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

7:45 AM	Washington Street (Route 16)						Highland Street						Washington Street (Route 16)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
7:45 AM	0	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
8:00 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	2	2	4	0	0	0	0	1	1	0	0	0	0	0	0	5
8:30 AM	0	0	0	2	2	4	0	0	0	1	2	3	0	0	0	0	0	0	7
Total Volume	0	0	0	9	4	13	0	0	0	1	3	4	0	0	0	0	0	0	17
% Approach Total	0.0	0.0	0.0	69.2	30.8		0.0	0.0	0.0	25.0	75.0		0.0	0.0	0.0	0.0	0.0	0.0	
PHF	0.000	0.000	0.000	0.563	0.500	0.813	0.000	0.000	0.000	0.250	0.375	0.333	0.000	0.000	0.000	0.000	0.000	0.000	0.607
Entering Leg	0	0	0	9	4	13	0	0	0	1	3	4	0	0	0	0	0	0	17
Exiting Leg	13						4						0						17
Total	26						8						0						34

PDI File #: **228414 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:

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Cars and Heavy Vehicles (Combined)

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	111	27	0	138	32	66	0	98	37	111	0	148	384
4:15 PM	130	27	0	157	35	59	0	94	32	149	0	181	432
4:30 PM	98	22	0	120	37	51	0	88	31	129	0	160	368
4:45 PM	135	20	0	155	35	50	0	85	31	131	0	162	402
Total	474	96	0	570	139	226	0	365	131	520	0	651	1586
5:00 PM	120	19	0	139	18	53	0	71	36	142	0	178	388
5:15 PM	147	14	0	161	10	64	0	74	37	147	0	184	419
5:30 PM	111	12	0	123	18	58	0	76	43	165	0	208	407
5:45 PM	133	21	0	154	4	50	0	54	33	187	0	220	428
Total	511	66	0	577	50	225	0	275	149	641	0	790	1642
Grand Total	985	162	0	1147	189	451	0	640	280	1161	0	1441	3228
Approach %	85.9	14.1	0.0		29.5	70.5	0.0		19.4	80.6	0.0		
Total %	30.5	5.0	0.0	35.5	5.9	14.0	0.0	19.8	8.7	36.0	0.0	44.6	
Exiting Leg Total				1350				442				1436	3228
Cars	964	159	0	1123	185	446	0	631	276	1140	0	1416	3170
% Cars	97.9	98.1	0.0	97.9	97.9	98.9	0.0	98.6	98.6	98.2	0.0	98.3	98.2
Exiting Leg Total				1325				435				1410	3170
Heavy Vehicles	21	3	0	24	4	5	0	9	4	21	0	25	58
% Heavy Vehicles	2.1	1.9	0.0	2.1	2.1	1.1	0.0	1.4	1.4	1.8	0.0	1.7	1.8
Exiting Leg Total				25				7				26	58

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

5:00 PM	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
5:00 PM	120	19	0	139	18	53	0	71	36	142	0	178	388
5:15 PM	147	14	0	161	10	64	0	74	37	147	0	184	419
5:30 PM	111	12	0	123	18	58	0	76	43	165	0	208	407
5:45 PM	133	21	0	154	4	50	0	54	33	187	0	220	428
Total Volume	511	66	0	577	50	225	0	275	149	641	0	790	1642
% Approach Total	88.6	11.4	0.0		18.2	81.8	0.0		18.9	81.1	0.0		
PHF	0.869	0.786	0.000	0.896	0.694	0.879	0.000	0.905	0.866	0.857	0.000	0.898	0.959
Cars	502	66	0	568	49	223	0	272	147	634	0	781	1621
Cars %	98.2	100.0	0.0	98.4	98.0	99.1	0.0	98.9	98.7	98.9	0.0	98.9	98.7
Heavy Vehicles	9	0	0	9	1	2	0	3	2	7	0	9	21
Heavy Vehicles %	1.8	0.0	0.0	1.6	2.0	0.9	0.0	1.1	1.3	1.1	0.0	1.1	1.3
Cars Enter Leg	502	66	0	568	49	223	0	272	147	634	0	781	1621
Heavy Enter Leg	9	0	0	9	1	2	0	3	2	7	0	9	21
Total Entering Leg	511	66	0	577	50	225	0	275	149	641	0	790	1642
Cars Exiting Leg				683				213				725	1621
Heavy Exiting Leg				8				2				11	21
Total Exiting Leg				691				215				736	1642

PDI File #: **228414 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**

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Class: **Cars**

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	108	27	0	135	32	65	0	97	36	108	0	144	376
4:15 PM	129	26	0	155	33	57	0	90	32	143	0	175	420
4:30 PM	95	21	0	116	36	51	0	87	31	125	0	156	359
4:45 PM	130	19	0	149	35	50	0	85	30	130	0	160	394
Total	462	93	0	555	136	223	0	359	129	506	0	635	1549
5:00 PM	116	19	0	135	18	53	0	71	36	141	0	177	383
5:15 PM	145	14	0	159	10	64	0	74	37	145	0	182	415
5:30 PM	111	12	0	123	17	58	0	75	41	162	0	203	401
5:45 PM	130	21	0	151	4	48	0	52	33	186	0	219	422
Total	502	66	0	568	49	223	0	272	147	634	0	781	1621
Grand Total	964	159	0	1123	185	446	0	631	276	1140	0	1416	3170
Approach %	85.8	14.2	0.0		29.3	70.7	0.0		19.5	80.5	0.0		
Total %	30.4	5.0	0.0	35.4	5.8	14.1	0.0	19.9	8.7	36.0	0.0	44.7	
Exiting Leg Total				1325				435				1410	3170

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

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
5:00 PM	116	19	0	135	18	53	0	71	36	141	0	177	383
5:15 PM	145	14	0	159	10	64	0	74	37	145	0	182	415
5:30 PM	111	12	0	123	17	58	0	75	41	162	0	203	401
5:45 PM	130	21	0	151	4	48	0	52	33	186	0	219	422
Total Volume	502	66	0	568	49	223	0	272	147	634	0	781	1621
% Approach Total	88.4	11.6	0.0		18.0	82.0	0.0		18.8	81.2	0.0		
PHF	0.866	0.786	0.000	0.893	0.681	0.871	0.000	0.907	0.896	0.852	0.000	0.892	0.960
Entering Leg	502	66	0	568	49	223	0	272	147	634	0	781	1621
Exiting Leg				683				213				725	1621
Total				1251				485				1506	3242

PDI File #: **228414 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:

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Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	3	0	0	3	0	1	0	1	1	3	0	4	8
4:15 PM	1	1	0	2	2	2	0	4	0	6	0	6	12
4:30 PM	3	1	0	4	1	0	0	1	0	4	0	4	9
4:45 PM	5	1	0	6	0	0	0	0	1	1	0	2	8
Total	12	3	0	15	3	3	0	6	2	14	0	16	37
5:00 PM	4	0	0	4	0	0	0	0	0	1	0	1	5
5:15 PM	2	0	0	2	0	0	0	0	0	2	0	2	4
5:30 PM	0	0	0	0	1	0	0	1	2	3	0	5	6
5:45 PM	3	0	0	3	0	2	0	2	0	1	0	1	6
Total	9	0	0	9	1	2	0	3	2	7	0	9	21
Grand Total	21	3	0	24	4	5	0	9	4	21	0	25	58
Approach %	87.5	12.5	0.0		44.4	55.6	0.0		16.0	84.0	0.0		
Total %	36.2	5.2	0.0	41.4	6.9	8.6	0.0	15.5	6.9	36.2	0.0	43.1	
Exiting Leg Total				25				7				26	58
Buses	9	2	0	11	3	0	0	3	0	8	0	8	22
% Buses	42.9	66.7	0.0	45.8	75.0	0.0	0.0	33.3	0.0	38.1	0.0	32.0	37.9
Exiting Leg Total				11				2				9	22
Single-Unit Trucks	11	1	0	12	1	4	0	5	4	9	0	13	30
% Single-Unit	52.4	33.3	0.0	50.0	25.0	80.0	0.0	55.6	100.0	42.9	0.0	52.0	51.7
Exiting Leg Total				10				5				15	30
Articulated Trucks	1	0	0	1	0	1	0	1	0	4	0	4	6
% Articulated	4.8	0.0	0.0	4.2	0.0	20.0	0.0	11.1	0.0	19.0	0.0	16.0	10.3
Exiting Leg Total				4				0				2	6

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

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	3	0	0	3	0	1	0	1	1	3	0	4	8
4:15 PM	1	1	0	2	2	2	0	4	0	6	0	6	12
4:30 PM	3	1	0	4	1	0	0	1	0	4	0	4	9
4:45 PM	5	1	0	6	0	0	0	0	1	1	0	2	8
Total Volume	12	3	0	15	3	3	0	6	2	14	0	16	37
% Approach Total	80.0	20.0	0.0		50.0	50.0	0.0		12.5	87.5	0.0		
PHF	0.600	0.750	0.000	0.625	0.375	0.375	0.000	0.375	0.500	0.583	0.000	0.667	0.771
Buses	5	2	0	7	3	0	0	3	0	7	0	7	17
Buses %	41.7	66.7	0.0	46.7	100.0	0.0	0.0	50.0	0.0	50.0	0.0	43.8	45.9
Single-Unit Trucks	6	1	0	7	0	2	0	2	2	4	0	6	15
Single-Unit %	50.0	33.3	0.0	46.7	0.0	66.7	0.0	33.3	100.0	28.6	0.0	37.5	40.5
Articulated Trucks	1	0	0	1	0	1	0	1	0	3	0	3	5
Articulated %	8.3	0.0	0.0	6.7	0.0	33.3	0.0	16.7	0.0	21.4	0.0	18.8	13.5
Buses	5	2	0	7	3	0	0	3	0	7	0	7	17
Single-Unit Trucks	6	1	0	7	0	2	0	2	2	4	0	6	15
Articulated Trucks	1	0	0	1	0	1	0	1	0	3	0	3	5
Total Entering Leg	12	3	0	15	3	3	0	6	2	14	0	16	37
Buses				10				2				5	17
Single-Unit Trucks				4				3				8	15
Articulated Trucks				3				0				2	5
Total Exiting Leg				17				5				15	37

PDI File #: **228414 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:

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PRECISION
 D A T A
 INDUSTRIES, LLC
 157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Buses

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
4:15 PM	1	1	0	2	2	0	0	2	0	5	0	5	9
4:30 PM	1	1	0	2	1	0	0	1	0	1	0	1	4
4:45 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total	5	2	0	7	3	0	0	3	0	7	0	7	17
5:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
5:15 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
Total	4	0	0	4	0	0	0	0	0	1	0	1	5
Grand Total	9	2	0	11	3	0	0	3	0	8	0	8	22
Approach %	81.8	18.2	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
Total %	40.9	9.1	0.0	50.0	13.6	0.0	0.0	13.6	0.0	36.4	0.0	36.4	
Exiting Leg Total				11				2				9	22

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

4:00 PM	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
4:15 PM	1	1	0	2	2	0	0	2	0	5	0	5	9
4:30 PM	1	1	0	2	1	0	0	1	0	1	0	1	4
4:45 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total Volume	5	2	0	7	3	0	0	3	0	7	0	7	17
% Approach Total	71.4	28.6	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.625	0.500	0.000	0.875	0.375	0.000	0.000	0.375	0.000	0.350	0.000	0.350	0.472
Entering Leg	5	2	0	7	3	0	0	3	0	7	0	7	17
Exiting Leg				10				2				5	17
Total				17				5				12	34

PDI File #: **228414 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**

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 INDUSTRIES, LLC
 157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**

Class:

Single-Unit Trucks

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	1	0	0	1	0	1	0	1	1	2	0	3	5
4:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	1
4:30 PM	2	0	0	2	0	0	0	0	0	2	0	2	4
4:45 PM	3	1	0	4	0	0	0	0	1	0	0	1	5
Total	6	1	0	7	0	2	0	2	2	4	0	6	15
5:00 PM	3	0	0	3	0	0	0	0	0	1	0	1	4
5:15 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
5:30 PM	0	0	0	0	1	0	0	1	2	2	0	4	5
5:45 PM	1	0	0	1	0	2	0	2	0	1	0	1	4
Total	5	0	0	5	1	2	0	3	2	5	0	7	15
Grand Total	11	1	0	12	1	4	0	5	4	9	0	13	30
Approach %	91.7	8.3	0.0		20.0	80.0	0.0		30.8	69.2	0.0		
Total %	36.7	3.3	0.0	40.0	3.3	13.3	0.0	16.7	13.3	30.0	0.0	43.3	
Exiting Leg Total				10				5				15	30

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

4:45 PM	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:45 PM	3	1	0	4	0	0	0	0	1	0	0	1	5
5:00 PM	3	0	0	3	0	0	0	0	0	1	0	1	4
5:15 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
5:30 PM	0	0	0	0	1	0	0	1	2	2	0	4	5
Total Volume	7	1	0	8	1	0	0	1	3	4	0	7	16
% Approach Total	87.5	12.5	0.0		100.0	0.0	0.0		42.9	57.1	0.0		
PHF	0.583	0.250	0.000	0.500	0.250	0.000	0.000	0.250	0.375	0.500	0.000	0.438	0.800
Entering Leg	7	1	0	8	1	0	0	1	3	4	0	7	16
Exiting Leg				5				4				7	16
Total				13				5				14	32

PDI File #: **228414 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:

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PRECISION
 D A T A
 INDUSTRIES, LLC
 157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total	
	from East				from South				from West					
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:15 PM	0	0	0	0	0	1	0	1	0	0	1	0	1	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	1	0	1	0	1	0	0	3	0	3	5
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Grand Total	1	0	0	1	0	1	0	1	0	4	0	4	6	
Approach %	100.0	0.0	0.0		0.0	100.0	0.0		0.0	100.0	0.0			
Total %	16.7	0.0	0.0	16.7	0.0	16.7	0.0	16.7	0.0	66.7	0.0	66.7		
Exiting Leg Total				4				0					2	6

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

4:00 PM	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total	
	from East				from South				from West					
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:15 PM	0	0	0	0	0	1	0	1	0	0	1	0	1	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	1
Total Volume	1	0	0	1	0	1	0	1	0	0	3	0	3	5
% Approach Total	100.0	0.0	0.0		0.0	100.0	0.0		0.0	100.0	0.0			
PHF	0.250	0.000	0.000	0.250	0.000	0.250	0.000	0.250	0.000	0.750	0.000	0.750		0.625
Entering Leg	1	0	0	1	0	1	0	1	0	3	0	3		5
Exiting Leg				3				0					2	5
Total				4				1					5	10

PDI File #: 228414 C
 Location: S: Highland Street
 Location: E: Washington St (Rt 16) W: Washington St (Rt 16)
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Count Date: Thursday, February 10, 2022
 Start Time: 4:00 PM
 End Time: 6:00 PM

Class: Bicycles (on Roadway and Crosswalks)

	Washington Street (Route 16)							Highland Street							Washington Street (Route 16)							Total	
	from East							from South							from West								
	Thru	Left	U-Turn	CW-SB	CW-NB	Total		Right	Left	U-Turn	CW-WB	CW-EB	Total		Right	Thru	U-Turn	CW-NB	CW-SB	Total			
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Approach %	0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Total %	0.0	100.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Exiting Leg Total	0							1							0							1	

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

4:15 PM	Washington Street (Route 16)							Highland Street							Washington Street (Route 16)							Total	
	from East							from South							from West								
	Thru	Left	U-Turn	CW-SB	CW-NB	Total		Right	Left	U-Turn	CW-WB	CW-EB	Total		Right	Thru	U-Turn	CW-NB	CW-SB	Total			
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Approach Total	0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.250	0.000	0.000	0.000	0.250		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250			
Entering Leg	0	1	0	0	0	1		0	0	0	0	0	0	0	0	0	0	0	0	0		1	
Exiting Leg	0							1							0							1	
Total	1							1							0							2	

PDI File #: 228414 C
 Location: S: Highland Street
 Location: E: Washington St (Rt 16) W: Washington St (Rt 16)
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Count Date: Thursday, February 10, 2022
 Start Time: 4:00 PM
 End Time: 6:00 PM

Class: Pedestrians

	Washington Street (Route 16)							Highland Street						Washington Street (Route 16)						Total	
	from East							from South						from West							
	Thru	Left	U-Turn	CW-SB	CW-NB	Total		Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total		
4:00 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	1	1	1	0	0	0	1	0	1	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	2	2	4	4	0	0	0	1	0	1	0	0	0	0	0	0	0	5
5:00 PM	0	0	0	0	1	1	1	0	0	0	0	4	4	0	0	0	0	0	0	0	5
5:15 PM	0	0	0	2	0	2	2	0	0	0	4	5	9	0	0	0	0	0	0	0	11
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	2	0	2	4	4
5:45 PM	0	0	0	0	2	2	2	0	0	0	1	0	1	0	0	0	0	0	0	0	3
Total	0	0	0	2	3	5	5	0	0	0	5	11	16	0	0	0	2	0	2	23	23
Grand Total	0	0	0	4	5	9	9	0	0	0	6	11	17	0	0	0	2	0	2	28	28
Approach %	0	0	0	44.444	55.556			0	0	0	35.294	64.706		0	0	0	100	0			
Total %	0	0	0	14.286	17.857	32.143	32.143	0	0	0	21.429	39.286	60.714	0	0	0	7.1429	0	7.1429		
Exiting Leg Total	9							17						2						28	

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

	Washington Street (Route 16)							Highland Street						Washington Street (Route 16)						Total	
	from East							from South						from West							
	Thru	Left	U-Turn	CW-SB	CW-NB	Total		Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total		
5:00 PM	0	0	0	0	1	1	1	0	0	0	0	4	4	0	0	0	0	0	0	0	5
5:15 PM	0	0	0	2	0	2	2	0	0	0	4	5	9	0	0	0	0	0	0	0	11
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	2	0	2	4	4
5:45 PM	0	0	0	0	2	2	2	0	0	0	1	0	1	0	0	0	0	0	0	0	3
Total Volume	0	0	0	2	3	5	5	0	0	0	5	11	16	0	0	0	2	0	2	23	23
% Approach Total	0.0	0.0	0.0	40.0	60.0			0.0	0.0	0.0	31.3	68.8		0.0	0.0	0.0	100.0	0.0			
PHF	0.000	0.000	0.000	0.250	0.375	0.625	0.625	0.000	0.000	0.000	0.313	0.550	0.444	0.000	0.000	0.000	0.250	0.000	0.250	0.523	0.523
Entering Leg	0	0	0	2	3	5	5	0	0	0	5	11	16	0	0	0	2	0	2	23	23
Exiting Leg	5							16						2						23	
Total	10							32						4						46	

PDI File #: 228414 D

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 7:00 AM

End Time: 9:00 AM

Class:

404 pages - see electronic file on website



Cars and Heavy Vehicles (Combined)

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
7:00 AM	26	0	0	0	26	6	19	0	0	25	0	11	22	0	33	52	54	0	0	106	190
7:15 AM	21	0	0	0	21	4	52	0	0	56	0	12	33	0	45	79	67	2	0	148	270
7:30 AM	37	0	0	0	37	11	43	0	0	54	0	13	31	0	44	131	77	2	0	210	345
7:45 AM	56	0	0	0	56	18	61	0	0	79	0	27	43	0	70	124	81	2	0	207	412
Total	140	0	0	0	140	39	175	0	0	214	0	63	129	0	192	386	279	6	0	671	1217
8:00 AM	44	0	0	0	44	13	55	0	0	68	0	18	38	0	56	106	75	2	0	183	351
8:15 AM	29	0	0	0	29	6	53	0	0	59	0	23	43	0	66	117	82	1	0	200	354
8:30 AM	42	0	0	0	42	3	43	0	0	46	0	19	41	0	60	107	66	1	0	174	322
8:45 AM	36	0	0	0	36	6	39	0	0	45	0	19	45	0	64	143	80	0	0	223	368
Total	151	0	0	0	151	28	190	0	0	218	0	79	167	0	246	473	303	4	0	780	1395
Grand Total	291	0	0	0	291	67	365	0	0	432	0	142	296	0	438	859	582	10	0	1451	2612
Approach %	100.0	0.0	0.0	0.0		15.5	84.5	0.0	0.0		0.0	32.4	67.6	0.0		59.2	40.1	0.7	0.0		
Total %	11.1	0.0	0.0	0.0	11.1	2.6	14.0	0.0	0.0	16.5	0.0	5.4	11.3	0.0	16.8	32.9	22.3	0.4	0.0	55.6	
Exiting Leg Total	219					582					859					952					2612
Cars	284	0	0	0	284	65	347	0	0	412	0	139	282	0	421	834	565	10	0	1409	2526
% Cars	97.6	0.0	0.0	0.0	97.6	97.0	95.1	0.0	0.0	95.4	0.0	97.9	95.3	0.0	96.1	97.1	97.1	100.0	0.0	97.1	96.7
Exiting Leg Total	214					565					834					913					2526
Heavy Vehicles	7	0	0	0	7	2	18	0	0	20	0	3	14	0	17	25	17	0	0	42	86
% Heavy Vehicles	2.4	0.0	0.0	0.0	2.4	3.0	4.9	0.0	0.0	4.6	0.0	2.1	4.7	0.0	3.9	2.9	2.9	0.0	0.0	2.9	3.3
Exiting Leg Total	5					17					25					39					86

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

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
7:30 AM	37	0	0	0	37	11	43	0	0	54	0	13	31	0	44	131	77	2	0	210	345
7:45 AM	56	0	0	0	56	18	61	0	0	79	0	27	43	0	70	124	81	2	0	207	412
8:00 AM	44	0	0	0	44	13	55	0	0	68	0	18	38	0	56	106	75	2	0	183	351
8:15 AM	29	0	0	0	29	6	53	0	0	59	0	23	43	0	66	117	82	1	0	200	354
Total Volume	166	0	0	0	166	48	212	0	0	260	0	81	155	0	236	478	315	7	0	800	1462
% Approach Total	100.0	0.0	0.0	0.0		18.5	81.5	0.0	0.0		0.0	34.3	65.7	0.0		59.8	39.4	0.9	0.0		
PHF	0.741	0.000	0.000	0.000	0.741	0.667	0.869	0.000	0.000	0.823	0.000	0.750	0.901	0.000	0.843	0.912	0.960	0.875	0.000	0.952	0.887
Cars	162	0	0	0	162	47	200	0	0	247	0	78	151	0	229	465	308	7	0	780	1418
Cars %	97.6	0.0	0.0	0.0	97.6	97.9	94.3	0.0	0.0	95.0	0.0	96.3	97.4	0.0	97.0	97.3	97.8	100.0	0.0	97.5	97.0
Heavy Vehicles	4	0	0	0	4	1	12	0	0	13	0	3	4	0	7	13	7	0	0	20	44
Heavy Vehicles %	2.4	0.0	0.0	0.0	2.4	2.1	5.7	0.0	0.0	5.0	0.0	3.7	2.6	0.0	3.0	2.7	2.2	0.0	0.0	2.5	3.0
Cars Enter Leg	162	0	0	0	162	47	200	0	0	247	0	78	151	0	229	465	308	7	0	780	1418
Heavy Enter Leg	4	0	0	0	4	1	12	0	0	13	0	3	4	0	7	13	7	0	0	20	44
Total Entering Leg	166	0	0	0	166	48	212	0	0	260	0	81	155	0	236	478	315	7	0	800	1462
Cars Exiting Leg	132					308					465					513					1418
Heavy Exiting Leg	4					13					20					44					
Total Exiting Leg	136					315					478					533					1462

PDI File #: **228414 D**
 Location: **N: Waltham Street NE: Watertown Street (Route 16)**
 Location: **E: Washington Street W: Washington Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class: **Cars**

404 pages- see electronic file on website



	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
7:00 AM	25	0	0	0	25	6	18	0	0	24	0	11	21	0	32	50	50	0	0	100	181
7:15 AM	20	0	0	0	20	4	50	0	0	54	0	12	29	0	41	76	65	2	0	143	258
7:30 AM	34	0	0	0	34	11	39	0	0	50	0	13	30	0	43	128	73	2	0	203	330
7:45 AM	56	0	0	0	56	18	58	0	0	76	0	27	42	0	69	123	79	2	0	204	405
Total	135	0	0	0	135	39	165	0	0	204	0	63	122	0	185	377	267	6	0	650	1174
8:00 AM	44	0	0	0	44	12	52	0	0	64	0	16	36	0	52	101	75	2	0	178	338
8:15 AM	28	0	0	0	28	6	51	0	0	57	0	22	43	0	65	113	81	1	0	195	345
8:30 AM	42	0	0	0	42	3	42	0	0	45	0	19	39	0	58	102	64	1	0	167	312
8:45 AM	35	0	0	0	35	5	37	0	0	42	0	19	42	0	61	141	78	0	0	219	357
Total	149	0	0	0	149	26	182	0	0	208	0	76	160	0	236	457	298	4	0	759	1352
Grand Total	284	0	0	0	284	65	347	0	0	412	0	139	282	0	421	834	565	10	0	1409	2526
Approach %	100.0	0.0	0.0	0.0		15.8	84.2	0.0	0.0		0.0	33.0	67.0	0.0		59.2	40.1	0.7	0.0		
Total %	11.2	0.0	0.0	0.0	11.2	2.6	13.7	0.0	0.0	16.3	0.0	5.5	11.2	0.0	16.7	33.0	22.4	0.4	0.0	55.8	
Exiting Leg Total	214					565					834					913					2526

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

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
7:30 AM	34	0	0	0	34	11	39	0	0	50	0	13	30	0	43	128	73	2	0	203	330
7:45 AM	56	0	0	0	56	18	58	0	0	76	0	27	42	0	69	123	79	2	0	204	405
8:00 AM	44	0	0	0	44	12	52	0	0	64	0	16	36	0	52	101	75	2	0	178	338
8:15 AM	28	0	0	0	28	6	51	0	0	57	0	22	43	0	65	113	81	1	0	195	345
Total Volume	162	0	0	0	162	47	200	0	0	247	0	78	151	0	229	465	308	7	0	780	1418
% Approach Total	100.0	0.0	0.0	0.0		19.0	81.0	0.0	0.0		0.0	34.1	65.9	0.0		59.6	39.5	0.9	0.0		
PHF	0.723	0.000	0.000	0.000	0.723	0.653	0.862	0.000	0.000	0.813	0.000	0.722	0.878	0.000	0.830	0.908	0.951	0.875	0.000	0.956	0.875
Entering Leg	162	0	0	0	162	47	200	0	0	247	0	78	151	0	229	465	308	7	0	780	1418
Exiting Leg	132					308					465					513					1418
Total	294					555					694					1293					2836

PDI File #: 228414 D

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 7:00 AM

End Time: 9:00 AM

Class:

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Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
7:00 AM	1	0	0	0	1	0	1	0	0	1	0	0	1	0	1	2	4	0	0	6	9
7:15 AM	1	0	0	0	1	0	2	0	0	2	0	0	4	0	4	3	2	0	0	5	12
7:30 AM	3	0	0	0	3	0	4	0	0	4	0	0	1	0	1	3	4	0	0	7	15
7:45 AM	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	1	2	0	0	3	7
Total	5	0	0	0	5	0	10	0	0	10	0	0	7	0	7	9	12	0	0	21	43
8:00 AM	0	0	0	0	0	1	3	0	0	4	0	2	2	0	4	5	0	0	0	5	13
8:15 AM	1	0	0	0	1	0	2	0	0	2	0	1	0	0	1	4	1	0	0	5	9
8:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	2	0	2	5	2	0	0	7	10
8:45 AM	1	0	0	0	1	1	2	0	0	3	0	0	3	0	3	2	2	0	0	4	11
Total	2	0	0	0	2	2	8	0	0	10	0	3	7	0	10	16	5	0	0	21	43
Grand Total	7	0	0	0	7	2	18	0	0	20	0	3	14	0	17	25	17	0	0	42	86
Approach %	100.0	0.0	0.0	0.0		10.0	90.0	0.0	0.0		0.0	17.6	82.4	0.0		59.5	40.5	0.0	0.0		
Total %	8.1	0.0	0.0	0.0	8.1	2.3	20.9	0.0	0.0	23.3	0.0	3.5	16.3	0.0	19.8	29.1	19.8	0.0	0.0	48.8	
Exiting Leg Total	5					17					25					39					86
Buses	2	0	0	0	2	0	2	0	0	2	0	0	5	0	5	7	1	0	0	8	17
% Buses	28.6	0.0	0.0	0.0	28.6	0.0	11.1	0.0	0.0	10.0	0.0	0.0	35.7	0.0	29.4	28.0	5.9	0.0	0.0	19.0	19.8
Exiting Leg Total	0					1					7					9					17
Single-Unit Trucks	4	0	0	0	4	1	13	0	0	14	0	3	7	0	10	17	13	0	0	30	58
% Single-Unit	57.1	0.0	0.0	0.0	57.1	50.0	72.2	0.0	0.0	70.0	0.0	100.0	50.0	0.0	58.8	68.0	76.5	0.0	0.0	71.4	67.4
Exiting Leg Total	4					13					17					24					58
Articulated Trucks	1	0	0	0	1	1	3	0	0	4	0	0	2	0	2	1	3	0	0	4	11
% Articulated	14.3	0.0	0.0	0.0	14.3	50.0	16.7	0.0	0.0	20.0	0.0	0.0	14.3	0.0	11.8	4.0	17.6	0.0	0.0	9.5	12.8
Exiting Leg Total	1					3					1					6					11

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

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
7:15 AM	1	0	0	0	1	0	2	0	0	2	0	0	4	0	4	3	2	0	0	5	12
7:30 AM	3	0	0	0	3	0	4	0	0	4	0	0	1	0	1	3	4	0	0	7	15
7:45 AM	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	1	2	0	0	3	7
8:00 AM	0	0	0	0	0	1	3	0	0	4	0	2	2	0	4	5	0	0	0	5	13
Total Volume	4	0	0	0	4	1	12	0	0	13	0	2	8	0	10	12	8	0	0	20	47
% Approach Total	100.0	0.0	0.0	0.0		7.7	92.3	0.0	0.0		0.0	20.0	80.0	0.0		60.0	40.0	0.0	0.0		
PHF	0.333	0.000	0.000	0.000	0.333	0.250	0.750	0.000	0.000	0.813	0.000	0.250	0.500	0.000	0.625	0.600	0.500	0.000	0.000	0.714	0.783
Buses	2	0	0	0	2	0	2	0	0	2	0	0	2	0	2	2	1	0	0	3	9
Buses %	50.0	0.0	0.0	0.0	50.0	0.0	16.7	0.0	0.0	15.4	0.0	0.0	25.0	0.0	20.0	16.7	12.5	0.0	0.0	15.0	19.1
Single-Unit Trucks	2	0	0	0	2	0	8	0	0	8	0	2	4	0	6	9	6	0	0	15	31
Single-Unit %	50.0	0.0	0.0	0.0	50.0	0.0	66.7	0.0	0.0	61.5	0.0	100.0	50.0	0.0	60.0	75.0	75.0	0.0	0.0	75.0	66.0
Articulated Trucks	0	0	0	0	0	1	2	0	0	3	0	0	2	0	2	1	1	0	0	2	7
Articulated %	0.0	0.0	0.0	0.0	0.0	100.0	16.7	0.0	0.0	23.1	0.0	0.0	25.0	0.0	20.0	8.3	12.5	0.0	0.0	10.0	14.9
Buses	2	0	0	0	2	0	2	0	0	2	0	0	2	0	2	2	1	0	0	3	9
Single-Unit Trucks	2	0	0	0	2	0	8	0	0	8	0	2	4	0	6	9	6	0	0	15	31
Articulated Trucks	0	0	0	0	0	1	2	0	0	3	0	0	2	0	2	1	1	0	0	2	7
Total Entering Leg	4	0	0	0	4	1	12	0	0	13	0	2	8	0	10	12	8	0	0	20	47
Buses	0					1					2					6					9
Single-Unit Trucks	2					6					9					14					31
Articulated Trucks	1					1					1					4					7
Total Exiting Leg	3					8					12					24					47

PDI File #: **228414 D**
 Location: **N: Waltham Street NE: Watertown Street (Route 16)**
 Location: **E: Washington Street W: Washington Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

404 pages- see electronic file on website



Buses

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
7:30 AM	2	0	0	0	2	0	1	0	0	1	0	0	1	0	1	1	1	0	0	2	6
7:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	2	0	0	0	2	0	2	0	0	2	0	0	2	0	2	3	1	0	0	4	10
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	2	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
Total	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	4	0	0	0	4	7
Grand Total	2	0	0	0	2	0	2	0	0	2	0	0	5	0	5	7	1	0	0	8	17
Approach %	100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		87.5	12.5	0.0	0.0		
Total %	11.8	0.0	0.0	0.0	11.8	0.0	11.8	0.0	0.0	11.8	0.0	0.0	29.4	0.0	29.4	41.2	5.9	0.0	0.0	47.1	
Exiting Leg Total	0					1					7					9					17

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

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
7:30 AM	2	0	0	0	2	0	1	0	0	1	0	0	1	0	1	1	1	0	0	2	6
7:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total Volume	2	0	0	0	2	0	2	0	0	2	0	0	2	0	2	3	1	0	0	4	10
% Approach Total	100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		75.0	25.0	0.0	0.0		
PHF	0.250	0.000	0.000	0.000	0.250	0.000	0.500	0.000	0.000	0.500	0.000	0.000	0.500	0.000	0.500	0.750	0.250	0.000	0.000	0.500	0.417
Entering Leg	2	0	0	0	2	0	2	0	0	2	0	0	2	0	2	3	1	0	0	4	10
Exiting Leg	0					1					3					6					10
Total	2					3					5					10					20

PDI File #: **228414 D**
 Location: **N: Waltham Street NE: Watertown Street (Route 16)**
 Location: **E: Washington Street W: Washington Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

404 pages- see electronic file on website



Single-Unit Trucks

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	4	0	0	5	6
7:15 AM	1	0	0	0	1	0	1	0	0	1	0	0	3	0	3	2	2	0	0	4	9
7:30 AM	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	1	2	0	0	3	7
7:45 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	1	2	0	0	3	5
Total	2	0	0	0	2	0	7	0	0	7	0	0	3	0	3	5	10	0	0	15	27
8:00 AM	0	0	0	0	0	0	2	0	0	2	0	2	1	0	3	5	0	0	0	5	10
8:15 AM	1	0	0	0	1	0	1	0	0	1	0	1	0	0	1	3	1	0	0	4	7
8:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	3	2	0	0	5	7
8:45 AM	1	0	0	0	1	1	2	0	0	3	0	0	2	0	2	1	0	0	0	1	7
Total	2	0	0	0	2	1	6	0	0	7	0	3	4	0	7	12	3	0	0	15	31
Grand Total	4	0	0	0	4	1	13	0	0	14	0	3	7	0	10	17	13	0	0	30	58
Approach %	100.0	0.0	0.0	0.0		7.1	92.9	0.0	0.0		0.0	30.0	70.0	0.0		56.7	43.3	0.0	0.0		
Total %	6.9	0.0	0.0	0.0	6.9	1.7	22.4	0.0	0.0	24.1	0.0	5.2	12.1	0.0	17.2	29.3	22.4	0.0	0.0	51.7	
Exiting Leg Total	4					13					17					24					58

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

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
7:15 AM	1	0	0	0	1	0	1	0	0	1	0	0	3	0	3	2	2	0	0	4	9
7:30 AM	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	1	2	0	0	3	7
7:45 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	1	2	0	0	3	5
8:00 AM	0	0	0	0	0	0	2	0	0	2	0	2	1	0	3	5	0	0	0	5	10
Total Volume	2	0	0	0	2	0	8	0	0	8	0	2	4	0	6	9	6	0	0	15	31
% Approach Total	100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	33.3	66.7	0.0		60.0	40.0	0.0	0.0		
PHF	0.500	0.000	0.000	0.000	0.500	0.000	0.667	0.000	0.000	0.667	0.000	0.250	0.333	0.000	0.500	0.450	0.750	0.000	0.000	0.750	0.775
Entering Leg	2	0	0	0	2	0	8	0	0	8	0	2	4	0	6	9	6	0	0	15	31
Exiting Leg	2					6					9					14					31
Total	4					14					15					29					62

PDI File #: **228414 D**
 Location: **N: Waltham Street NE: Watertown Street (Route 16)**
 Location: **E: Washington Street W: Washington Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class: **Articulated Trucks**

404 pages- see electronic file on website



Articulated Trucks

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total					
	from North					from Northeast					from East					from West										
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total						
7:00 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	0	1	0	1	0	0	1	0	0	2	0	2	1	1	1	0	2	2	0	0	0	2	6
8:00 AM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	2	2
Total	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	2	0	0	2	2	0	0	0	2	5
Grand Total	1	0	0	0	1	1	3	0	0	4	0	0	2	0	2	1	3	0	0	4	4	0	0	0	11	
Approach %	100.0	0.0	0.0	0.0		25.0	75.0	0.0	0.0		0.0	0.0	100.0	0.0		25.0	75.0	0.0	0.0							
Total %	9.1	0.0	0.0	0.0	9.1	9.1	27.3	0.0	0.0	36.4	0.0	0.0	18.2	0.0	18.2	9.1	27.3	0.0	0.0	36.4						
Exiting Leg Total	1					3					1					6					11					

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

7:15 AM	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total					
	from North					from Northeast					from East					from West										
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total						
7:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	0	0	0	0	1	2	0	0	3	0	0	2	0	2	1	1	0	0	2	2	0	0	0	7	
% Approach Total	0.0	0.0	0.0	0.0		33.3	66.7	0.0	0.0		0.0	0.0	100.0	0.0		50.0	50.0	0.0	0.0							
PHF	0.000	0.000	0.000	0.000	0.000	0.250	0.500	0.000	0.000	0.375	0.000	0.000	0.500	0.000	0.500	0.250	0.250	0.000	0.000	0.250	0.875	0.000	0.000	0.000	0.875	
Entering Leg	0					1					2					1					7					
Exiting Leg	1					1					1					4					7					
Total	1					4					3					6					14					

PDI File #: 228414 D

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 7:00 AM

End Time: 9:00 AM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

Table with columns for Waltham Street, Watertown Street (Route 16), and Washington Street (from North, Northeast, East, West) and rows for time intervals (7:00 AM to 8:45 AM) and Grand Total.

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

Table with columns for Waltham Street, Watertown Street (Route 16), and Washington Street (from North, Northeast, East, West) and rows for time intervals (7:15 AM to 8:00 AM) and PHF, Entering Leg, Exiting Leg, Total.

PDI File #: 228414 D

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 7:00 AM

End Time: 9:00 AM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

Table with columns for Street (Waltham, Watertown, Washington), Direction (from North, Northeast, East, West), and various movement types (Right, Left, Hard Left, U-Turn, CW-EB, CW-WB, Total). Rows include time intervals (7:00 AM to 8:45 AM) and Grand Total.

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

Table with columns for Street (Waltham, Watertown, Washington), Direction (from North, Northeast, East, West), and various movement types. Rows include time intervals (8:00 AM to 8:45 AM), Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

PDI File #: 228414 D

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 4:00 PM

End Time: 6:00 PM

Class:

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Cars and Heavy Vehicles (Combined)

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
4:00 PM	38	0	0	0	38	9	41	0	0	50	1	44	64	0	109	74	60	2	0	136	333
4:15 PM	38	0	0	0	38	13	57	0	0	70	0	23	57	0	80	93	77	4	0	174	362
4:30 PM	32	1	0	1	34	8	51	0	0	59	1	28	42	0	71	88	75	5	0	168	332
4:45 PM	32	1	0	0	33	7	58	0	0	65	0	33	62	0	95	93	81	2	0	176	369
Total	140	2	0	1	143	37	207	0	0	244	2	128	225	0	355	348	293	13	0	654	1396
5:00 PM	30	0	0	0	30	9	51	0	0	60	0	23	63	0	86	73	81	0	0	154	330
5:15 PM	27	0	0	0	27	9	56	0	0	65	0	27	71	0	98	87	83	0	0	170	360
5:30 PM	24	0	0	0	24	9	51	0	0	60	0	47	49	0	96	96	84	3	0	183	363
5:45 PM	37	0	0	0	37	11	48	0	0	59	1	33	71	0	105	106	90	0	0	196	397
Total	118	0	0	0	118	38	206	0	0	244	1	130	254	0	385	362	338	3	0	703	1450
Grand Total	258	2	0	1	261	75	413	0	0	488	3	258	479	0	740	710	631	16	0	1357	2846
Approach %	98.9	0.8	0.0	0.4	15.4	84.6	0.0	0.0	0.4	34.9	64.7	0.0	52.3	46.5	1.2	0.0					
Total %	9.1	0.1	0.0	0.0	9.2	2.6	14.5	0.0	0.0	17.1	0.1	9.1	16.8	0.0	26.0	24.9	22.2	0.6	0.0	47.7	
Exiting Leg Total	350					634					712					1150					2846
Cars	253	2	0	1	256	74	405	0	0	479	3	258	468	0	729	695	621	16	0	1332	2796
% Cars	98.1	100.0	0.0	100.0	98.1	98.7	98.1	0.0	0.0	98.2	100.0	100.0	97.7	0.0	98.5	97.9	98.4	100.0	0.0	98.2	98.2
Exiting Leg Total	349					624					697					1126					2796
Heavy Vehicles	5	0	0	0	5	1	8	0	0	9	0	0	11	0	11	15	10	0	0	25	50
% Heavy Vehicles	1.9	0.0	0.0	0.0	1.9	1.3	1.9	0.0	0.0	1.8	0.0	0.0	2.3	0.0	1.5	2.1	1.6	0.0	0.0	1.8	1.8
Exiting Leg Total	1					10					15					24					50

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

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
5:00 PM	30	0	0	0	30	9	51	0	0	60	0	23	63	0	86	73	81	0	0	154	330
5:15 PM	27	0	0	0	27	9	56	0	0	65	0	27	71	0	98	87	83	0	0	170	360
5:30 PM	24	0	0	0	24	9	51	0	0	60	0	47	49	0	96	96	84	3	0	183	363
5:45 PM	37	0	0	0	37	11	48	0	0	59	1	33	71	0	105	106	90	0	0	196	397
Total Volume	118	0	0	0	118	38	206	0	0	244	1	130	254	0	385	362	338	3	0	703	1450
% Approach Total	100.0	0.0	0.0	0.0	15.6	84.4	0.0	0.0	0.3	33.8	66.0	0.0	51.5	48.1	0.4	0.0					
PHF	0.797	0.000	0.000	0.000	0.797	0.864	0.920	0.000	0.000	0.938	0.250	0.691	0.894	0.000	0.917	0.854	0.939	0.250	0.000	0.897	0.913
Cars	118	0	0	0	118	38	202	0	0	240	1	130	248	0	379	358	334	3	0	695	1432
Cars %	100.0	0.0	0.0	0.0	100.0	100.0	98.1	0.0	0.0	98.4	100.0	100.0	97.6	0.0	98.4	98.9	98.8	100.0	0.0	98.9	98.8
Heavy Vehicles	0	0	0	0	0	0	4	0	0	4	0	0	6	0	6	4	4	0	0	8	18
Heavy Vehicles %	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	1.6	0.0	0.0	2.4	0.0	1.6	1.1	1.2	0.0	0.0	1.1	1.2
Cars Enter Leg	118	0	0	0	118	38	202	0	0	240	1	130	248	0	379	358	334	3	0	695	1432
Heavy Enter Leg	0	0	0	0	0	0	4	0	0	4	0	0	6	0	6	4	4	0	0	8	18
Total Entering Leg	118	0	0	0	118	38	206	0	0	244	1	130	254	0	385	362	338	3	0	703	1450
Cars Exiting Leg	171					335					358					568					1432
Heavy Exiting Leg	0					4					4					10					18
Total Exiting Leg	171					339					362					578					1450

PDI File #: **228414 D**
 Location: **N: Waltham Street NE: Watertown Street (Route 16)**
 Location: **E: Washington Street W: Washington Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class: **Cars**

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	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
4:00 PM	38	0	0	0	38	9	40	0	0	49	1	44	63	0	108	72	58	2	0	132	327
4:15 PM	38	0	0	0	38	13	55	0	0	68	0	23	57	0	80	88	75	4	0	167	353
4:30 PM	31	1	0	1	33	7	50	0	0	57	1	28	40	0	69	85	73	5	0	163	322
4:45 PM	28	1	0	0	29	7	58	0	0	65	0	33	60	0	93	92	81	2	0	175	362
Total	135	2	0	1	138	36	203	0	0	239	2	128	220	0	350	337	287	13	0	637	1364
5:00 PM	30	0	0	0	30	9	49	0	0	58	0	23	61	0	84	73	80	0	0	153	325
5:15 PM	27	0	0	0	27	9	56	0	0	65	0	27	69	0	96	86	82	0	0	168	356
5:30 PM	24	0	0	0	24	9	50	0	0	59	0	47	49	0	96	93	83	3	0	179	358
5:45 PM	37	0	0	0	37	11	47	0	0	58	1	33	69	0	103	106	89	0	0	195	393
Total	118	0	0	0	118	38	202	0	0	240	1	130	248	0	379	358	334	3	0	695	1432
Grand Total	253	2	0	1	256	74	405	0	0	479	3	258	468	0	729	695	621	16	0	1332	2796
Approach %	98.8	0.8	0.0	0.4		15.4	84.6	0.0	0.0		0.4	35.4	64.2	0.0		52.2	46.6	1.2	0.0		
Total %	9.0	0.1	0.0	0.0	9.2	2.6	14.5	0.0	0.0	17.1	0.1	9.2	16.7	0.0	26.1	24.9	22.2	0.6	0.0	47.6	
Exiting Leg Total	349					624					697					1126					2796

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

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
5:00 PM	30	0	0	0	30	9	49	0	0	58	0	23	61	0	84	73	80	0	0	153	325
5:15 PM	27	0	0	0	27	9	56	0	0	65	0	27	69	0	96	86	82	0	0	168	356
5:30 PM	24	0	0	0	24	9	50	0	0	59	0	47	49	0	96	93	83	3	0	179	358
5:45 PM	37	0	0	0	37	11	47	0	0	58	1	33	69	0	103	106	89	0	0	195	393
Total Volume	118	0	0	0	118	38	202	0	0	240	1	130	248	0	379	358	334	3	0	695	1432
% Approach Total	100.0	0.0	0.0	0.0		15.8	84.2	0.0	0.0		0.3	34.3	65.4	0.0		51.5	48.1	0.4	0.0		
PHF	0.797	0.000	0.000	0.000	0.797	0.864	0.902	0.000	0.000	0.923	0.250	0.691	0.899	0.000	0.920	0.844	0.938	0.250	0.000	0.891	0.911
Entering Leg	118	0	0	0	118	38	202	0	0	240	1	130	248	0	379	358	334	3	0	695	1432
Exiting Leg	171					335					358					568					1432
Total	289					575					737					1263					2864

PDI File #: 228414 D

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 4:00 PM

End Time: 6:00 PM

Class:

404 pages - see electronic file on website



Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	2	2	0	0	4	6
4:15 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5	2	0	0	7	9
4:30 PM	1	0	0	0	1	1	1	0	0	2	0	0	2	0	2	3	2	0	0	5	10
4:45 PM	4	0	0	0	4	0	0	0	0	0	0	0	2	0	2	1	0	0	0	1	7
Total	5	0	0	0	5	1	4	0	0	5	0	0	5	0	5	11	6	0	0	17	32
5:00 PM	0	0	0	0	0	0	2	0	0	2	0	0	2	0	2	0	1	0	0	1	5
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	1	1	0	0	2	4
5:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3	1	0	0	4	5
5:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	2	0	2	0	1	0	0	1	4
Total	0	0	0	0	0	0	4	0	0	4	0	0	6	0	6	4	4	0	0	8	18
Grand Total	5	0	0	0	5	1	8	0	0	9	0	0	11	0	11	15	10	0	0	25	50
Approach %	100.0	0.0	0.0	0.0		11.1	88.9	0.0	0.0		0.0	0.0	100.0	0.0		60.0	40.0	0.0	0.0		
Total %	10.0	0.0	0.0	0.0	10.0	2.0	16.0	0.0	0.0	18.0	0.0	0.0	22.0	0.0	22.0	30.0	20.0	0.0	0.0	50.0	
Exiting Leg Total	1					10					15					24					50
Buses	2	0	0	0	2	1	4	0	0	5	0	0	5	0	5	8	3	0	0	11	23
% Buses	40.0	0.0	0.0	0.0	40.0	100.0	50.0	0.0	0.0	55.6	0.0	0.0	45.5	0.0	45.5	53.3	30.0	0.0	0.0	44.0	46.0
Exiting Leg Total	1					3					8					11					23
Single-Unit Trucks	3	0	0	0	3	0	4	0	0	4	0	0	5	0	5	3	7	0	0	10	22
% Single-Unit	60.0	0.0	0.0	0.0	60.0	0.0	50.0	0.0	0.0	44.4	0.0	0.0	45.5	0.0	45.5	20.0	70.0	0.0	0.0	40.0	44.0
Exiting Leg Total	0					7					3					12					22
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4	0	0	0	4	5
% Articulated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1	0.0	9.1	26.7	0.0	0.0	0.0	16.0	10.0
Exiting Leg Total	0					0					4					1					5

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

4:00 PM	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	2	2	0	0	4	6
4:15 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5	2	0	0	7	9
4:30 PM	1	0	0	0	1	1	1	0	0	2	0	0	2	0	2	3	2	0	0	5	10
4:45 PM	4	0	0	0	4	0	0	0	0	0	0	0	2	0	2	1	0	0	0	1	7
Total Volume	5	0	0	0	5	1	4	0	0	5	0	0	5	0	5	11	6	0	0	17	32
% Approach Total	100.0	0.0	0.0	0.0		20.0	80.0	0.0	0.0		0.0	0.0	100.0	0.0		64.7	35.3	0.0	0.0		
PHF	0.313	0.000	0.000	0.000	0.313	0.250	0.500	0.000	0.000	0.625	0.000	0.000	0.625	0.000	0.625	0.550	0.750	0.000	0.000	0.607	0.800
Buses	2	0	0	0	2	1	3	0	0	4	0	0	2	0	2	7	3	0	0	10	18
Buses %	40.0	0.0	0.0	0.0	40.0	100.0	75.0	0.0	0.0	80.0	0.0	0.0	40.0	0.0	40.0	63.6	50.0	0.0	0.0	58.8	56.3
Single-Unit Trucks	3	0	0	0	3	0	1	0	0	1	0	0	2	0	2	1	3	0	0	4	10
Single-Unit %	60.0	0.0	0.0	0.0	60.0	0.0	25.0	0.0	0.0	20.0	0.0	0.0	40.0	0.0	40.0	9.1	50.0	0.0	0.0	23.5	31.3
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	0	0	0	3	4
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	20.0	27.3	0.0	0.0	0.0	17.6	12.5
Buses	2	0	0	0	2	1	3	0	0	4	0	0	2	0	2	7	3	0	0	10	18
Single-Unit Trucks	3	0	0	0	3	0	1	0	0	1	0	0	2	0	2	1	3	0	0	4	10
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	0	0	0	3	4
Total Entering Leg	5	0	0	0	5	1	4	0	0	5	0	0	5	0	5	11	6	0	0	17	32
Buses	1					3					7					7					18
Single-Unit Trucks	0					3					1					6					10
Articulated Trucks	0					0					3					1					4
Total Exiting Leg	1					6					11					14					32

PDI File #: **228414 D**
 Location: **N: Waltham Street NE: Watertown Street (Route 16)**
 Location: **E: Washington Street W: Washington Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:

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Buses

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4	2	0	0	6	8
4:30 PM	1	0	0	0	1	1	0	0	0	1	0	0	1	0	1	2	1	0	0	3	6
4:45 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
Total	2	0	0	0	2	1	3	0	0	4	0	0	2	0	2	7	3	0	0	10	18
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	2
Total	0	0	0	0	0	0	1	0	0	1	0	0	3	0	3	1	0	0	0	1	5
Grand Total	2	0	0	0	2	1	4	0	0	5	0	0	5	0	5	8	3	0	0	11	23
Approach %	100.0	0.0	0.0	0.0		20.0	80.0	0.0	0.0		0.0	0.0	100.0	0.0		72.7	27.3	0.0	0.0		
Total %	8.7	0.0	0.0	0.0	8.7	4.3	17.4	0.0	0.0	21.7	0.0	0.0	21.7	0.0	21.7	34.8	13.0	0.0	0.0	47.8	
Exiting Leg Total	1					3					8					11					23

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

4:00 PM	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4	2	0	0	6	8
4:30 PM	1	0	0	0	1	1	0	0	0	1	0	0	1	0	1	2	1	0	0	3	6
4:45 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
Total Volume	2	0	0	0	2	1	3	0	0	4	0	0	2	0	2	7	3	0	0	10	18
% Approach Total	100.0	0.0	0.0	0.0		25.0	75.0	0.0	0.0		0.0	0.0	100.0	0.0		70.0	30.0	0.0	0.0		
PHF	0.500	0.000	0.000	0.000	0.500	0.250	0.375	0.000	0.000	0.500	0.000	0.000	0.500	0.000	0.500	0.438	0.375	0.000	0.000	0.417	0.563
Entering Leg	2	0	0	0	2	1	3	0	0	4	0	0	2	0	2	7	3	0	0	10	18
Exiting Leg	1					3					7					7					18
Total	3					7					9					17					36

PDI File #: **228414 D**
 Location: **N: Waltham Street NE: Watertown Street (Route 16)**
 Location: **E: Washington Street W: Washington Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:

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Single-Unit Trucks

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	1	0	0	1	3
4:45 PM	3	0	0	0	3	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	4
Total	3	0	0	0	3	0	1	0	0	1	0	0	2	0	2	1	3	0	0	4	10
5:00 PM	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	1	0	0	1	4
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	2
5:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	1	0	0	3	4
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	2
Total	0	0	0	0	0	0	3	0	0	3	0	0	3	0	3	2	4	0	0	6	12
Grand Total	3	0	0	0	3	0	4	0	0	4	0	0	5	0	5	3	7	0	0	10	22
Approach %	100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		30.0	70.0	0.0	0.0		
Total %	13.6	0.0	0.0	0.0	13.6	0.0	18.2	0.0	0.0	18.2	0.0	0.0	22.7	0.0	22.7	13.6	31.8	0.0	0.0	45.5	
Exiting Leg Total	0					7					3					12					22

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

4:45 PM	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
4:45 PM	3	0	0	0	3	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	4
5:00 PM	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	1	0	0	1	4
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	2
5:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	1	0	0	3	4
Total Volume	3	0	0	0	3	0	3	0	0	3	0	0	3	0	3	2	3	0	0	5	14
% Approach Total	100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		40.0	60.0	0.0	0.0		
PHF	0.250	0.000	0.000	0.000	0.250	0.000	0.375	0.000	0.000	0.375	0.000	0.000	0.750	0.000	0.750	0.250	0.750	0.000	0.000	0.417	0.875
Entering Leg	3	0	0	0	3	0	3	0	0	3	0	0	3	0	3	2	3	0	0	5	14
Exiting Leg	0					3					2					9					14
Total	3					6					5					14					28

PDI File #: **228414 D**
 Location: **N: Waltham Street NE: Watertown Street (Route 16)**
 Location: **E: Washington Street W: Washington Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:

404 pages- see electronic file on website



Articulated Trucks

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	0	0	0	3	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4	0	0	0	4	5
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	20.0	80.0	0.0	0.0	0.0	80.0	80.0
Exiting Leg Total	0					0					4					1					5

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

4:00 PM	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	0	0	0	3	4
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.750	0.000	0.000	0.000	0.750	1.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	0	0	0	3	4
Exiting Leg	0					0					3					1					4
Total	0					0					4					4					8

PDI File #: 228414 D

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 4:00 PM

End Time: 6:00 PM

Class:

404 pages- see electronic file on website



Bicycles (on Roadway and Crosswalks)

	Waltham Street							Watertown Street (Route 16)							Washington Street							Washington Street							Total
	from North							from Northeast							from East							from West							
	Right	Left	Hard Left	U-Turn	CW-EB	CW-WB	Total	Hard Right	Bear Right	Hard Left	U-Turn	CW-SEB	CW-NWB	Total	Hard Right	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Bear Left	Left	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	2	3
4:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	2	2	0	2	0	0	0	2	4	0	0	0	0	0	0	0	2	0	0	0	0	0	2	8
5:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	1	2	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Grand Total	1	0	0	0	0	3	4	0	3	0	0	0	2	5	0	0	0	0	0	0	0	2	0	0	0	0	0	2	11
Approach %	25.0	0.0	0.0	0.0	0.0	75.0		0.0	60.0	0.0	0.0	0.0	40.0		0.0	0.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0	0.0		
Total %	9.1	0.0	0.0	0.0	0.0	27.3	36.4	0.0	27.3	0.0	0.0	0.0	18.2	45.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.2	0.0	0.0	0.0	0.0	0.0	18.2	
Exiting Leg Total	3							2							2							4	11						

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

	Waltham Street							Watertown Street (Route 16)							Washington Street							Washington Street							Total
	from North							from Northeast							from East							from West							
	Right	Left	Hard Left	U-Turn	CW-EB	CW-WB	Total	Hard Right	Bear Right	Hard Left	U-Turn	CW-SEB	CW-NWB	Total	Hard Right	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Bear Left	Left	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	2	3
4:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	0	0	0	0	2	2	0	2	0	0	0	2	4	0	0	0	0	0	0	0	2	0	0	0	0	0	2	8
% Approach Total	0.0	0.0	0.0	0.0	0.0	100.0		0.0	50.0	0.0	0.0	0.0	50.0		0.0	0.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.500	0.000	0.000	0.000	0.250	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.667
Entering Leg	0	0	0	0	0	2	2	0	2	0	0	0	2	4	0	0	0	0	0	0	0	2	0	0	0	0	0	2	8
Exiting Leg	2							2							2							2	8						
Total	4							6							2							4	16						

PDI File #: 228414 D

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 4:00 PM

End Time: 6:00 PM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

Table with columns for Street (Waltham, Watertown, Washington), Direction (from North, Northeast, East, West), and various movement types (Right, Left, Hard Left, U-Turn, CW-EB, CW-WB, Total, etc.). Rows include time intervals (4:00 PM to 5:45 PM) and Grand Total.

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

Table with columns for Street (Waltham, Watertown, Washington), Direction (from North, Northeast, East, West), and various movement types. Rows include time intervals (4:00 PM to 4:45 PM), Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

PDI File #: **228414 E**
 Location: **S: Chestnut Street**
 Location: **E: Washington Street W: Washington Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

404 pages- see electronic file on website



Cars and Heavy Vehicles (Combined)

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	30	10	0	40	22	4	0	26	5	47	0	52	118
7:15 AM	45	18	0	63	11	4	0	15	5	74	0	79	157
7:30 AM	40	22	0	62	32	2	0	34	12	119	0	131	227
7:45 AM	66	33	0	99	48	6	0	54	6	111	0	117	270
Total	181	83	0	264	113	16	0	129	28	351	0	379	772
8:00 AM	48	39	1	88	34	4	0	38	6	106	0	112	238
8:15 AM	68	37	0	105	34	1	0	35	9	102	0	111	251
8:30 AM	55	35	0	90	39	2	0	41	12	103	0	115	246
8:45 AM	67	42	0	109	48	4	0	52	22	122	0	144	305
Total	238	153	1	392	155	11	0	166	49	433	0	482	1040
Grand Total	419	236	1	656	268	27	0	295	77	784	0	861	1812
Approach %	63.9	36.0	0.2		90.8	9.2	0.0		8.9	91.1	0.0		
Total %	23.1	13.0	0.1	36.2	14.8	1.5	0.0	16.3	4.2	43.3	0.0	47.5	
Exiting Leg Total				1053				313				446	1812
Cars	399	225	1	625	259	27	0	286	76	761	0	837	1748
% Cars	95.2	95.3	100.0	95.3	96.6	100.0	0.0	96.9	98.7	97.1	0.0	97.2	96.5
Exiting Leg Total				1021				301				426	1748
Heavy Vehicles	20	11	0	31	9	0	0	9	1	23	0	24	64
% Heavy Vehicles	4.8	4.7	0.0	4.7	3.4	0.0	0.0	3.1	1.3	2.9	0.0	2.8	3.5
Exiting Leg Total				32				12				20	64

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

8:00 AM	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
8:00 AM	48	39	1	88	34	4	0	38	6	106	0	112	238
8:15 AM	68	37	0	105	34	1	0	35	9	102	0	111	251
8:30 AM	55	35	0	90	39	2	0	41	12	103	0	115	246
8:45 AM	67	42	0	109	48	4	0	52	22	122	0	144	305
Total Volume	238	153	1	392	155	11	0	166	49	433	0	482	1040
% Approach Total	60.7	39.0	0.3		93.4	6.6	0.0		10.2	89.8	0.0		
PHF	0.875	0.911	0.250	0.899	0.807	0.688	0.000	0.798	0.557	0.887	0.000	0.837	0.852
Cars	227	148	1	376	153	11	0	164	48	420	0	468	1008
Cars %	95.4	96.7	100.0	95.9	98.7	100.0	0.0	98.8	98.0	97.0	0.0	97.1	96.9
Heavy Vehicles	11	5	0	16	2	0	0	2	1	13	0	14	32
Heavy Vehicles %	4.6	3.3	0.0	4.1	1.3	0.0	0.0	1.2	2.0	3.0	0.0	2.9	3.1
Cars Enter Leg	227	148	1	376	153	11	0	164	48	420	0	468	1008
Heavy Enter Leg	11	5	0	16	2	0	0	2	1	13	0	14	32
Total Entering Leg	238	153	1	392	155	11	0	166	49	433	0	482	1040
Cars Exiting Leg				574				196				238	1008
Heavy Exiting Leg				15				6				11	32
Total Exiting Leg				589				202				249	1040

PDI File #: **228414 E**
 Location: **S: Chestnut Street**
 Location: **E: Washington Street W: Washington Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

404 pages- see electronic file on website



Cars

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	28	9	0	37	21	4	0	25	5	45	0	50	112
7:15 AM	40	17	0	57	7	4	0	11	5	70	0	75	143
7:30 AM	39	21	0	60	31	2	0	33	12	116	0	128	221
7:45 AM	65	30	0	95	47	6	0	53	6	110	0	116	264
Total	172	77	0	249	106	16	0	122	28	341	0	369	740
8:00 AM	44	36	1	81	33	4	0	37	6	102	0	108	226
8:15 AM	66	37	0	103	34	1	0	35	9	98	0	107	245
8:30 AM	54	33	0	87	39	2	0	41	11	100	0	111	239
8:45 AM	63	42	0	105	47	4	0	51	22	120	0	142	298
Total	227	148	1	376	153	11	0	164	48	420	0	468	1008
Grand Total	399	225	1	625	259	27	0	286	76	761	0	837	1748
Approach %	63.8	36.0	0.2		90.6	9.4	0.0		9.1	90.9	0.0		
Total %	22.8	12.9	0.1	35.8	14.8	1.5	0.0	16.4	4.3	43.5	0.0	47.9	
Exiting Leg Total				1021				301				426	1748

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

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
8:00 AM	44	36	1	81	33	4	0	37	6	102	0	108	226
8:15 AM	66	37	0	103	34	1	0	35	9	98	0	107	245
8:30 AM	54	33	0	87	39	2	0	41	11	100	0	111	239
8:45 AM	63	42	0	105	47	4	0	51	22	120	0	142	298
Total Volume	227	148	1	376	153	11	0	164	48	420	0	468	1008
% Approach Total	60.4	39.4	0.3		93.3	6.7	0.0		10.3	89.7	0.0		
PHF	0.860	0.881	0.250	0.895	0.814	0.688	0.000	0.804	0.545	0.875	0.000	0.824	0.846
Entering Leg	227	148	1	376	153	11	0	164	48	420	0	468	1008
Exiting Leg				574				196				238	1008
Total				950				360				706	2016

PDI File #: 228414 E

Location: S: Chestnut Street

Location: E: Washington Street W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 7:00 AM

End Time: 9:00 AM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

Table with columns for Washington Street (from East), Chestnut Street (from South), and Washington Street (from West). Rows include time intervals (7:00 AM to 8:45 AM), Grand Total, Approach %, Total %, and Exiting Leg Total for Buses, Single-Unit Trucks, and Articulated Trucks.

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

Table showing peak hour analysis for 7:15 AM, 7:30 AM, 7:45 AM, and 8:00 AM. Columns include Washington Street (from East), Chestnut Street (from South), and Washington Street (from West). Rows include Total Volume, % Approach Total, PHF, and vehicle counts for Buses, Single-Unit Trucks, and Articulated Trucks.

PDI File #: **228414 E**
 Location: **S: Chestnut Street**
 Location: **E: Washington Street W: Washington Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

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157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Buses

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	2	1	0	3	0	0	0	0	0	1	0	1	4
7:15 AM	0	0	0	0	1	0	0	1	0	1	0	1	2
7:30 AM	1	1	0	2	0	0	0	0	0	1	0	1	3
7:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	3	3	0	6	1	0	0	1	0	3	0	3	10
8:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
8:30 AM	1	0	0	1	0	0	0	0	0	2	0	2	3
8:45 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total	3	0	0	3	0	0	0	0	0	4	0	4	7
Grand Total	6	3	0	9	1	0	0	1	0	7	0	7	17
Approach %	66.7	33.3	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
Total %	35.3	17.6	0.0	52.9	5.9	0.0	0.0	5.9	0.0	41.2	0.0	41.2	
Exiting Leg Total				8				3				6	17

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

7:00 AM	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	2	1	0	3	0	0	0	0	0	1	0	1	4
7:15 AM	0	0	0	0	1	0	0	1	0	1	0	1	2
7:30 AM	1	1	0	2	0	0	0	0	0	1	0	1	3
7:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Volume	3	3	0	6	1	0	0	1	0	3	0	3	10
% Approach Total	50.0	50.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.375	0.750	0.000	0.500	0.250	0.000	0.000	0.250	0.000	0.750	0.000	0.750	0.625
Entering Leg	3	3	0	6	1	0	0	1	0	3	0	3	10
Exiting Leg				4				3				3	10
Total				10				4				6	20

PDI File #: **228414 E**
 Location: **S: Chestnut Street**
 Location: **E: Washington Street W: Washington Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

404 pages- see electronic file on website



Single-Unit Trucks

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	0	0	0	0	1	0	0	1	0	1	0	1	2
7:15 AM	4	1	0	5	2	0	0	2	0	3	0	3	10
7:30 AM	0	0	0	0	1	0	0	1	0	1	0	1	2
7:45 AM	0	2	0	2	1	0	0	1	0	1	0	1	4
Total	4	3	0	7	5	0	0	5	0	6	0	6	18
8:00 AM	3	3	0	6	1	0	0	1	0	4	0	4	11
8:15 AM	2	0	0	2	0	0	0	0	0	3	0	3	5
8:30 AM	0	2	0	2	0	0	0	0	1	1	0	2	4
8:45 AM	2	0	0	2	1	0	0	1	0	1	0	1	4
Total	7	5	0	12	2	0	0	2	1	9	0	10	24
Grand Total	11	8	0	19	7	0	0	7	1	15	0	16	42
Approach %	57.9	42.1	0.0		100.0	0.0	0.0		6.3	93.8	0.0		
Total %	26.2	19.0	0.0	45.2	16.7	0.0	0.0	16.7	2.4	35.7	0.0	38.1	
Exiting Leg Total				22				9				11	42

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

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:15 AM	4	1	0	5	2	0	0	2	0	3	0	3	10
7:30 AM	0	0	0	0	1	0	0	1	0	1	0	1	2
7:45 AM	0	2	0	2	1	0	0	1	0	1	0	1	4
8:00 AM	3	3	0	6	1	0	0	1	0	4	0	4	11
Total Volume	7	6	0	13	5	0	0	5	0	9	0	9	27
% Approach Total	53.8	46.2	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.438	0.500	0.000	0.542	0.625	0.000	0.000	0.625	0.000	0.563	0.000	0.563	0.614
Entering Leg	7	6	0	13	5	0	0	5	0	9	0	9	27
Exiting Leg				14				6				7	27
Total				27				11				16	54

PDI File #: **228414 E**
 Location: **S: Chestnut Street**
 Location: **E: Washington Street W: Washington Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	1	1	0	0	1	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
7:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	2	0	0	2	1	0	0	1	0	1	0	1	4
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	1	0	0	1	0	0	0	0	0	0	0	0	1
Grand Total	3	0	0	3	1	0	0	1	0	1	0	1	5
Approach %	100.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
Total %	60.0	0.0	0.0	60.0	20.0	0.0	0.0	20.0	0.0	20.0	0.0	20.0	
Exiting Leg Total				2				0				3	5

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

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	1	1	0	0	1	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
7:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Volume	2	0	0	2	1	0	0	1	0	1	0	1	4
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.500	0.000	0.000	0.500	0.250	0.000	0.000	0.250	0.000	0.250	0.000	0.250	0.500
Entering Leg	2	0	0	2	1	0	0	1	0	1	0	1	4
Exiting Leg				2				0				2	4
Total				4				1				3	8

PDI File #: 228414 E
 Location: S: Chestnut Street
 Location: E: Washington Street W: Washington Street
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD
 Count Date: Thursday, February 10, 2022
 Start Time: 7:00 AM
 End Time: 9:00 AM

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Class: Bicycles (on Roadway and Crosswalks)

	Washington Street							Chestnut Street							Washington Street							Total	
	from East							from South							from West								
	Thru	Left	U-Turn	CW-SB	CW-NB	Total		Right	Left	U-Turn	CW-WB	CW-EB	Total		Right	Thru	U-Turn	CW-NB	CW-SB	Total			
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Grand Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	1							0							0							1	

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

7:00 AM	Washington Street							Chestnut Street							Washington Street							Total
	from East							from South							from West							
	Thru	Left	U-Turn	CW-SB	CW-NB	Total		Right	Left	U-Turn	CW-WB	CW-EB	Total		Right	Thru	U-Turn	CW-NB	CW-SB	Total		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PHF	0.000	0.000	0.000	0.000	0.000	0.000		0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	
Entering Leg	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	
Exiting Leg	1							0							0							1
Total	1							1							0							2

PDI File #: 228414 E
 Location: S: Chestnut Street
 Location: E: Washington Street W: Washington Street
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

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157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Count Date: Thursday, February 10, 2022
 Start Time: 7:00 AM
 End Time: 9:00 AM

Class: Pedestrians

	Washington Street						Chestnut Street						Washington Street						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
Total	0	0	0	0	1	1	0	0	0	2	1	3	0	0	0	0	0	0	4
8:00 AM	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	1	1	4
8:15 AM	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	0	0	4
8:45 AM	0	0	0	1	0	1	0	0	0	2	0	2	0	0	0	0	0	0	3
Total	0	0	0	1	1	2	0	0	0	5	6	11	0	0	0	0	1	1	14
Grand Total	0	0	0	1	2	3	0	0	0	7	7	14	0	0	0	0	1	1	18
Approach %	0	0	0	33.333	66.667		0	0	0	50	50		0	0	0	0	100		
Total %	0	0	0	5.5556	11.1111	16.667	0	0	0	38.889	38.889	77.778	0	0	0	0	5.5556	5.5556	
Exiting Leg Total	3						14						1						18

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

	Washington Street						Chestnut Street						Washington Street						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
8:00 AM	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	1	1	4
8:15 AM	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	0	0	4
8:45 AM	0	0	0	1	0	1	0	0	0	2	0	2	0	0	0	0	0	0	3
Total Volume	0	0	0	1	1	2	0	0	0	5	6	11	0	0	0	0	1	1	14
% Approach Total	0.0	0.0	0.0	50.0	50.0		0.0	0.0	0.0	45.5	54.5		0.0	0.0	0.0	0.0	100.0		
PHF	0.000	0.000	0.000	0.250	0.250	0.500	0.000	0.000	0.000	0.625	0.500	0.688	0.000	0.000	0.000	0.000	0.250	0.250	0.875
Entering Leg	0	0	0	1	1	2	0	0	0	5	6	11	0	0	0	0	1	1	14
Exiting Leg	2						11						1						14
Total	4						22						2						28

PDI File #: **228414 E**
 Location: **S: Chestnut Street**
 Location: **E: Washington Street W: Washington Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:

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Cars and Heavy Vehicles (Combined)

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	101	32	0	133	18	4	0	22	4	74	0	78	233
4:15 PM	82	44	0	126	27	2	0	29	10	83	0	93	248
4:30 PM	68	29	0	97	17	1	0	18	4	87	0	91	206
4:45 PM	95	34	0	129	28	1	0	29	6	83	0	89	247
Total	346	139	0	485	90	8	0	98	24	327	0	351	934
5:00 PM	89	36	0	125	19	1	0	20	9	70	0	79	224
5:15 PM	98	39	0	137	15	2	0	17	9	79	0	88	242
5:30 PM	90	42	0	132	24	5	0	29	5	90	0	95	256
5:45 PM	105	32	0	137	20	1	0	21	7	99	0	106	264
Total	382	149	0	531	78	9	0	87	30	338	0	368	986
Grand Total	728	288	0	1016	168	17	0	185	54	665	0	719	1920
Approach %	71.7	28.3	0.0		90.8	9.2	0.0		7.5	92.5	0.0		
Total %	37.9	15.0	0.0	52.9	8.8	0.9	0.0	9.6	2.8	34.6	0.0	37.4	
Exiting Leg Total				833				342				745	1920
Cars	716	286	0	1002	163	17	0	180	52	652	0	704	1886
% Cars	98.4	99.3	0.0	98.6	97.0	100.0	0.0	97.3	96.3	98.0	0.0	97.9	98.2
Exiting Leg Total				815				338				733	1886
Heavy Vehicles	12	2	0	14	5	0	0	5	2	13	0	15	34
% Heavy Vehicles	1.6	0.7	0.0	1.4	3.0	0.0	0.0	2.7	3.7	2.0	0.0	2.1	1.8
Exiting Leg Total				18				4				12	34

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

5:00 PM	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
5:00 PM	89	36	0	125	19	1	0	20	9	70	0	79	224
5:15 PM	98	39	0	137	15	2	0	17	9	79	0	88	242
5:30 PM	90	42	0	132	24	5	0	29	5	90	0	95	256
5:45 PM	105	32	0	137	20	1	0	21	7	99	0	106	264
Total Volume	382	149	0	531	78	9	0	87	30	338	0	368	986
% Approach Total	71.9	28.1	0.0		89.7	10.3	0.0		8.2	91.8	0.0		
PHF	0.910	0.887	0.000	0.969	0.813	0.450	0.000	0.750	0.833	0.854	0.000	0.868	0.934
Cars	376	147	0	523	75	9	0	84	29	335	0	364	971
Cars %	98.4	98.7	0.0	98.5	96.2	100.0	0.0	96.6	96.7	99.1	0.0	98.9	98.5
Heavy Vehicles	6	2	0	8	3	0	0	3	1	3	0	4	15
Heavy Vehicles %	1.6	1.3	0.0	1.5	3.8	0.0	0.0	3.4	3.3	0.9	0.0	1.1	1.5
Cars Enter Leg	376	147	0	523	75	9	0	84	29	335	0	364	971
Heavy Enter Leg	6	2	0	8	3	0	0	3	1	3	0	4	15
Total Entering Leg	382	149	0	531	78	9	0	87	30	338	0	368	986
Cars Exiting Leg				410				176				385	971
Heavy Exiting Leg				6				3				6	15
Total Exiting Leg				416				179				391	986

PDI File #: **228414 E**
 Location: **S: Chestnut Street**
 Location: **E: Washington Street W: Washington Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:

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Cars

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	100	32	0	132	16	4	0	20	3	73	0	76	228
4:15 PM	81	44	0	125	27	2	0	29	10	78	0	88	242
4:30 PM	66	29	0	95	17	1	0	18	4	84	0	88	201
4:45 PM	93	34	0	127	28	1	0	29	6	82	0	88	244
Total	340	139	0	479	88	8	0	96	23	317	0	340	915
5:00 PM	86	36	0	122	16	1	0	17	9	70	0	79	218
5:15 PM	97	39	0	136	15	2	0	17	9	78	0	87	240
5:30 PM	90	41	0	131	24	5	0	29	4	88	0	92	252
5:45 PM	103	31	0	134	20	1	0	21	7	99	0	106	261
Total	376	147	0	523	75	9	0	84	29	335	0	364	971
Grand Total	716	286	0	1002	163	17	0	180	52	652	0	704	1886
Approach %	71.5	28.5	0.0		90.6	9.4	0.0		7.4	92.6	0.0		
Total %	38.0	15.2	0.0	53.1	8.6	0.9	0.0	9.5	2.8	34.6	0.0	37.3	
Exiting Leg Total				815				338				733	1886

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

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
5:00 PM	86	36	0	122	16	1	0	17	9	70	0	79	218
5:15 PM	97	39	0	136	15	2	0	17	9	78	0	87	240
5:30 PM	90	41	0	131	24	5	0	29	4	88	0	92	252
5:45 PM	103	31	0	134	20	1	0	21	7	99	0	106	261
Total Volume	376	147	0	523	75	9	0	84	29	335	0	364	971
% Approach Total	71.9	28.1	0.0		89.3	10.7	0.0		8.0	92.0	0.0		
PHF	0.913	0.896	0.000	0.961	0.781	0.450	0.000	0.724	0.806	0.846	0.000	0.858	0.930
Entering Leg	376	147	0	523	75	9	0	84	29	335	0	364	971
Exiting Leg				410				176				385	971
Total				933				260				749	1942

PDI File #: 228414 E

Location: S: Chestnut Street

Location: E: Washington Street W: Washington Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 4:00 PM

End Time: 6:00 PM

Class:

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

Table with columns for Washington Street (from East, from West), Chestnut Street (from South), and Washington Street (from West). Rows include time intervals (4:00 PM to 5:45 PM), Grand Total, Approach %, Total %, and Exiting Leg Total for Buses, Single-Unit Trucks, and Articulated Trucks.

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

Table showing peak hour analysis for 4:15 PM. Columns include Washington Street (from East, from West), Chestnut Street (from South), and Washington Street (from West). Rows include time intervals (4:15 PM to 5:00 PM), Total Volume, % Approach Total, PHF, and vehicle counts for Buses, Single-Unit Trucks, and Articulated Trucks.

PDI File #: **228414 E**
 Location: **S: Chestnut Street**
 Location: **E: Washington Street W: Washington Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:

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157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Buses

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	4	0	4	4
4:30 PM	1	0	0	1	0	0	0	0	0	2	0	2	3
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	2	0	0	2	0	0	0	0	0	7	0	7	9
5:00 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	3	0	0	3	0	0	0	0	0	1	0	1	4
Grand Total	5	0	0	5	0	0	0	0	0	8	0	8	13
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
Total %	38.5	0.0	0.0	38.5	0.0	0.0	0.0	0.0	0.0	61.5	0.0	61.5	
Exiting Leg Total				8				0				5	13

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

4:15 PM	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:15 PM	0	0	0	0	0	0	0	0	0	4	0	4	4
4:30 PM	1	0	0	1	0	0	0	0	0	2	0	2	3
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
5:00 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
Total Volume	3	0	0	3	0	0	0	0	0	7	0	7	10
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.375	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.438	0.000	0.438	0.625
Entering Leg	3	0	0	3	0	0	0	0	0	7	0	7	10
Exiting Leg				7				0				3	10
Total				10				0				10	20

PDI File #: **228414 E**
 Location: **S: Chestnut Street**
 Location: **E: Washington Street W: Washington Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:

404 pages- see electronic file on website



Single-Unit Trucks

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	0	0	0	0	2	0	0	2	1	0	0	1	3
4:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
4:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
4:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	3	0	0	3	2	0	0	2	1	0	0	1	6
5:00 PM	1	0	0	1	3	0	0	3	0	0	0	0	4
5:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
5:30 PM	0	1	0	1	0	0	0	0	1	1	0	2	3
5:45 PM	1	1	0	2	0	0	0	0	0	0	0	0	2
Total	3	2	0	5	3	0	0	3	1	1	0	2	10
Grand Total	6	2	0	8	5	0	0	5	2	1	0	3	16
Approach %	75.0	25.0	0.0		100.0	0.0	0.0		66.7	33.3	0.0		
Total %	37.5	12.5	0.0	50.0	31.3	0.0	0.0	31.3	12.5	6.3	0.0	18.8	
Exiting Leg Total				6				4				6	16

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

5:00 PM	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
5:00 PM	1	0	0	1	3	0	0	3	0	0	0	0	4
5:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
5:30 PM	0	1	0	1	0	0	0	0	1	1	0	2	3
5:45 PM	1	1	0	2	0	0	0	0	0	0	0	0	2
Total Volume	3	2	0	5	3	0	0	3	1	1	0	2	10
% Approach Total	60.0	40.0	0.0		100.0	0.0	0.0		50.0	50.0	0.0		
PHF	0.750	0.500	0.000	0.625	0.250	0.000	0.000	0.250	0.250	0.250	0.000	0.250	0.625
Entering Leg	3	2	0	5	3	0	0	3	1	1	0	2	10
Exiting Leg				4				3				3	10
Total				9				6				5	20

PDI File #: **228414 E**
 Location: **S: Chestnut Street**
 Location: **E: Washington Street W: Washington Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:

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157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

	Washington Street				Chestnut Street				Washington Street				Total	
	from East				from South				from West					
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	1	0	0	0	0	0	0	3	0	3	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Grand Total	1	0	0	1	0	0	0	0	0	0	4	0	4	5
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0			
Total %	20.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	80.0	0.0	80.0		
Exiting Leg Total				4				0					1	5

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

4:00 PM	Washington Street				Chestnut Street				Washington Street				Total	
	from East				from South				from West					
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	1
Total Volume	1	0	0	1	0	0	0	0	0	0	3	0	3	4
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0			
PHF	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.750	1.000
Entering Leg	1	0	0	1	0	0	0	0	0	0	3	0	3	4
Exiting Leg				3				0					1	4
Total				4				0					4	8

PDI File #: 228414 E
 Location: S: Chestnut Street
 Location: E: Washington Street W: Washington Street
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD
 Count Date: Thursday, February 10, 2022
 Start Time: 4:00 PM
 End Time: 6:00 PM

404 pages- see electronic file on website



Bicycles (on Roadway and Crosswalks)

	Washington Street							Chestnut Street							Washington Street							Total	
	from East							from South							from West								
	Thru	Left	U-Turn	CW-SB	CW-NB	Total		Right	Left	U-Turn	CW-WB	CW-EB	Total		Right	Thru	U-Turn	CW-NB	CW-SB	Total			
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	1							0							0							1	

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

	Washington Street							Chestnut Street							Washington Street							Total	
	from East							from South							from West								
	Thru	Left	U-Turn	CW-SB	CW-NB	Total		Right	Left	U-Turn	CW-WB	CW-EB	Total		Right	Thru	U-Turn	CW-NB	CW-SB	Total			
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000		0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250		
Entering Leg	0	0	0	0	0	0		1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1
Exiting Leg	1							0							0							1	
Total	1							1							0							2	

PDI File #: 228414 E
 Location: S: Chestnut Street
 Location: E: Washington Street W: Washington Street
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

404 pages- see electronic file on website



Count Date: Thursday, February 10, 2022
 Start Time: 4:00 PM
 End Time: 6:00 PM

Class: Pedestrians

	Washington Street						Chestnut Street						Washington Street						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	0	0	2	4	6	0	0	0	3	3	6	0	0	0	0	0	0	12
4:15 PM	0	0	0	2	5	7	0	0	0	0	3	3	0	0	0	1	0	1	11
4:30 PM	0	0	0	1	1	2	0	0	0	1	1	2	0	0	0	0	0	0	4
4:45 PM	0	0	0	2	5	7	0	0	0	1	2	3	0	0	0	0	0	0	10
Total	0	0	0	7	15	22	0	0	0	5	9	14	0	0	0	1	0	1	37
5:00 PM	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	2	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
5:45 PM	0	0	0	1	3	4	0	0	0	1	2	3	0	0	0	0	0	0	7
Total	0	0	0	1	4	5	0	0	0	1	4	5	0	0	0	2	2	4	14
Grand Total	0	0	0	8	19	27	0	0	0	6	13	19	0	0	0	3	2	5	51
Approach %	0	0	0	29.63	70.37		0	0	0	31.579	68.421		0	0	0	60	40		
Total %	0	0	0	15.686	37.255	52.941	0	0	0	11.765	25.49	37.255	0	0	0	5.8824	3.9216	9.8039	
Exiting Leg Total	27						19						5						51

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

4:00 PM	Washington Street						Chestnut Street						Washington Street						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	0	0	2	4	6	0	0	0	3	3	6	0	0	0	0	0	0	12
4:15 PM	0	0	0	2	5	7	0	0	0	0	3	3	0	0	0	1	0	1	11
4:30 PM	0	0	0	1	1	2	0	0	0	1	1	2	0	0	0	0	0	0	4
4:45 PM	0	0	0	2	5	7	0	0	0	1	2	3	0	0	0	0	0	0	10
Total Volume	0	0	0	7	15	22	0	0	0	5	9	14	0	0	0	1	0	1	37
% Approach Total	0.0	0.0	0.0	31.8	68.2		0.0	0.0	0.0	35.7	64.3		0.0	0.0	0.0	100.0	0.0		
PHF	0.000	0.000	0.000	0.875	0.750	0.786	0.000	0.000	0.000	0.417	0.750	0.583	0.000	0.000	0.000	0.250	0.000	0.250	0.771
Entering Leg	0	0	0	7	15	22	0	0	0	5	9	14	0	0	0	1	0	1	37
Exiting Leg	22						14						1						37
Total	44						28						2						74

PDI File #: 228414 F
 Location: N: Highland Street S: Highland Street NW: Church driveway (north)
 Location: E: Davis Street W: Church driveway (south)
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD
 Count Date: Thursday, February 10, 2022
 Start Time: 7:00 AM
 End Time: 9:00 AM
 Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)					
	from North						from East						from South						from West						from Northwest					
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total
7:00 AM	0	0	30	4	0	34	2	0	0	0	0	2	0	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	46	
7:15 AM	0	0	47	3	0	50	1	0	0	6	0	7	8	43	0	0	0	51	0	0	0	0	0	0	0	0	0	108		
7:30 AM	1	0	52	5	0	58	3	0	0	24	0	27	33	86	0	0	0	119	0	0	1	0	0	1	0	0	0	205		
7:45 AM	2	0	64	11	0	77	6	0	0	34	0	40	39	81	0	0	0	120	0	0	0	0	0	0	0	0	0	237		
Total	3	0	193	23	0	219	12	0	0	64	0	76	80	220	0	0	0	300	0	0	1	0	0	1	0	0	0	596		
8:00 AM	2	0	60	8	0	70	2	1	0	33	0	36	29	62	0	0	0	91	1	0	3	0	0	4	0	0	0	201		
8:15 AM	5	0	67	4	0	76	3	0	0	34	0	37	28	85	1	0	0	114	0	1	0	0	0	1	0	0	0	228		
8:30 AM	5	0	65	16	0	86	4	0	0	39	0	43	32	74	1	0	0	107	1	1	6	0	0	8	0	0	0	244		
8:45 AM	5	0	57	21	0	83	10	2	0	46	0	58	30	82	0	0	0	112	1	1	7	0	0	9	0	0	0	262		
Total	17	0	249	49	0	315	19	3	0	152	0	174	119	303	2	0	0	424	3	3	16	0	0	22	0	0	0	935		
Grand Total	20	0	442	72	0	534	31	3	0	216	0	250	199	523	2	0	0	724	3	3	17	0	0	23	0	0	0	1531		
Approach %	3.7	0.0	82.8	13.5	0.0		12.4	1.2	0.0	86.4	0.0		27.5	72.2	0.3	0.0	0.0		13.0	13.0	73.9	0.0	0.0		0.0	0.0	0.0			
Total %	1.3	0.0	28.9	4.7	0.0	34.9	2.0	0.2	0.0	14.1	0.0	16.3	13.0	34.2	0.1	0.0	0.0	47.3	0.2	0.2	1.1	0.0	0.0	1.5	0.0	0.0	0.0	0.0		
Exiting Leg Total						571						274					661							0			25	1531		
Cars	20	0	433	72	0	525	31	3	0	207	0	241	196	513	2	0	0	711	3	3	17	0	0	23	0	0	0	1500		
% Cars	100.0	0.0	98.0	100.0	0.0	98.3	100.0	100.0	0.0	95.8	0.0	96.4	98.5	98.1	100.0	0.0	0.0	98.2	100.0	100.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	98.0		
Exiting Leg Total						561						271					643							0			25	1500		
Heavy Vehicles	0	0	9	0	0	9	0	0	0	9	0	9	3	10	0	0	13	0	0	0	0	0	0	0	0	0	0	31		
% Heavy Vehicles	0.0	0.0	2.0	0.0	0.0	1.7	0.0	0.0	0.0	4.2	0.0	3.6	1.5	1.9	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0		
Exiting Leg Total						10						3					18							0			0	31		

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

8:00 AM	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)					
	from North						from East						from South						from West						from Northwest					
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total
8:00 AM	2	0	60	8	0	70	2	1	0	33	0	36	29	62	0	0	0	91	1	0	3	0	0	4	0	0	0	0	201	
8:15 AM	5	0	67	4	0	76	3	0	0	34	0	37	28	85	1	0	0	114	0	1	0	0	0	1	0	0	0	0	228	
8:30 AM	5	0	65	16	0	86	4	0	0	39	0	43	32	74	1	0	0	107	1	1	6	0	0	8	0	0	0	0	244	
8:45 AM	5	0	57	21	0	83	10	2	0	46	0	58	30	82	0	0	0	112	1	1	7	0	0	9	0	0	0	0	262	
Total Volume	17	0	249	49	0	315	19	3	0	152	0	174	119	303	2	0	0	424	3	3	16	0	0	22	0	0	0	0	935	
% Approach Total	5.4	0.0	79.0	15.6	0.0		10.9	1.7	0.0	87.4	0.0		28.1	71.5	0.5	0.0	0.0		13.6	13.6	72.7	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.850	0.000	0.929	0.583	0.000	0.916	0.475	0.375	0.000	0.826	0.000	0.750	0.930	0.891	0.500	0.000	0.930	0.750	0.750	0.571	0.000	0.000	0.611	0.000	0.000	0.000	0.000	0.892		
Cars	17	0	245	49	0	311	19	3	0	146	0	168	117	298	2	0	0	417	3	3	16	0	0	22	0	0	0	0	918	
Cars %	100.0	0.0	98.4	100.0	0.0	98.7	100.0	100.0	0.0	96.1	0.0	96.6	98.3	98.3	100.0	0.0	0.0	98.3	100.0	100.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	98.2	
Heavy Vehicles	0	0	4	0	0	4	0	0	0	6	0	6	2	5	0	0	7	0	0	0	0	0	0	0	0	0	0	17		
Heavy Vehicles %	0.0	0.0	1.6	0.0	0.0	1.3	0.0	0.0	0.0	3.9	0.0	3.4	1.7	1.7	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8		
Cars Enter Leg	17	0	245	49	0	311	19	3	0	146	0	168	117	298	2	0	0	417	3	3	16	0	0	22	0	0	0	0	918	
Heavy Enter Leg	0	0	4	0	0	4	0	0	0	6	0	6	2	5	0	0	7	0	0	0	0	0	0	0	0	0	0	17		
Total Entering Leg	17	0	249	49	0	315	19	3	0	152	0	174	119	303	2	0	0	424	3	3	16	0	0	22	0	0	0	0	935	
Cars Exiting Leg						333						169					394							0				918		
Heavy Exiting Leg						5						2					10							0				17		
Total Exiting Leg						338						171					404							0			22	935		

PDI File #: 228414 F
 Location: N: Highland Street S: Highland Street NW: Church driveway (north)
 Location: E: Davis Street W: Church driveway (south)
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD
 Count Date: Thursday, February 10, 2022
 Start Time: 7:00 AM
 End Time: 9:00 AM
 Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Cars

	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)						
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Total
7:00 AM	0	0	29	4	0	33	2	0	0	0	0	2	0	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	45	3	0	48	1	0	0	6	0	7	7	43	0	0	0	50	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	1	0	51	5	0	57	3	0	0	23	0	26	33	83	0	0	0	116	0	0	1	0	0	1	0	0	0	0	0	0	0
7:45 AM	2	0	63	11	0	76	6	0	0	32	0	38	39	79	0	0	0	118	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3	0	188	23	0	214	12	0	0	61	0	73	79	215	0	0	0	294	0	0	1	0	0	1	0	0	0	0	0	0	582
8:00 AM	2	0	58	8	0	68	2	1	0	30	0	33	28	62	0	0	0	90	1	0	3	0	0	4	0	0	0	0	0	0	0
8:15 AM	5	0	67	4	0	76	3	0	0	33	0	36	28	83	1	0	0	112	0	1	0	0	0	1	0	0	0	0	0	0	0
8:30 AM	5	0	64	16	0	85	4	0	0	38	0	42	32	71	1	0	0	104	1	1	6	0	0	8	0	0	0	0	0	0	0
8:45 AM	5	0	56	21	0	82	10	2	0	45	0	57	29	82	0	0	0	111	1	1	7	0	0	9	0	0	0	0	0	0	0
Total	17	0	245	49	0	311	19	3	0	146	0	168	117	298	2	0	0	417	3	3	16	0	0	22	0	0	0	0	0	0	918
Grand Total	20	0	433	72	0	525	31	3	0	207	0	241	196	513	2	0	0	711	3	3	17	0	0	23	0	0	0	0	0	0	1500
Approach %	3.8	0.0	82.5	13.7	0.0		12.9	1.2	0.0	85.9	0.0		27.6	72.2	0.3	0.0	0.0		13.0	13.0	73.9	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Total %	1.3	0.0	28.9	4.8	0.0	35.0	2.1	0.2	0.0	13.8	0.0	16.1	13.1	34.2	0.1	0.0	0.0	47.4	0.2	0.2	1.1	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	561						271						643						0						25		1500				

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

	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)						
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Total
8:00 AM	2	0	58	8	0	68	2	1	0	30	0	33	28	62	0	0	0	90	1	0	3	0	0	4	0	0	0	0	0	0	0
8:15 AM	5	0	67	4	0	76	3	0	0	33	0	36	28	83	1	0	0	112	0	1	0	0	0	1	0	0	0	0	0	0	0
8:30 AM	5	0	64	16	0	85	4	0	0	38	0	42	32	71	1	0	0	104	1	1	6	0	0	8	0	0	0	0	0	0	0
8:45 AM	5	0	56	21	0	82	10	2	0	45	0	57	29	82	0	0	0	111	1	1	7	0	0	9	0	0	0	0	0	0	0
Total Volume	17	0	245	49	0	311	19	3	0	146	0	168	117	298	2	0	0	417	3	3	16	0	0	22	0	0	0	0	0	0	918
% Approach Total	5.5	0.0	78.8	15.8	0.0		11.3	1.8	0.0	86.9	0.0		28.1	71.5	0.5	0.0	0.0		13.6	13.6	72.7	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
PHF	0.850	0.000	0.914	0.583	0.000	0.915	0.475	0.375	0.000	0.811	0.000	0.737	0.914	0.898	0.500	0.000	0.000	0.931	0.750	0.750	0.571	0.000	0.000	0.611	0.000	0.000	0.000	0.000	0.000	0.000	0.886
Entering Leg	17	0	245	49	0	311	19	3	0	146	0	168	117	298	2	0	0	417	3	3	16	0	0	22	0	0	0	0	0	0	918
Exiting Leg	333						169						394						0						22		918				
Total	644						337						811						22						22		1836				

PDI File #: 228414 F
 Location: N: Highland Street S: Highland Street NW: Church driveway (north)
 Location: E: Davis Street W: Church driveway (south)
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD
 Count Date: Thursday, February 10, 2022
 Start Time: 7:00 AM
 End Time: 9:00 AM
 Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)					
	from North						from East						from South						from West						from Northwest					
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total
7:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:15 AM	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3		
7:30 AM	0	0	1	0	0	1	0	0	0	1	0	1	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	5		
7:45 AM	0	0	1	0	0	1	0	0	0	2	0	2	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	5		
Total	0	0	5	0	0	5	0	0	0	3	0	3	1	5	0	0	0	6	0	0	0	0	0	0	0	0	0	14		
8:00 AM	0	0	2	0	0	2	0	0	0	3	0	3	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	6		
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	3		
8:30 AM	0	0	1	0	0	1	0	0	0	1	0	1	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	5		
8:45 AM	0	0	1	0	0	1	0	0	0	1	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3		
Total	0	0	4	0	0	4	0	0	0	6	0	6	2	5	0	0	0	7	0	0	0	0	0	0	0	0	0	17		
Grand Total	0	0	9	0	0	9	0	0	0	9	0	9	3	10	0	0	0	13	0	0	0	0	0	0	0	0	0	31		
Approach %	0.0	0.0	100.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0		23.1	76.9	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	29.0	0.0	0.0	29.0	0.0	0.0	0.0	29.0	0.0	29.0	9.7	32.3	0.0	0.0	0.0	41.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	10						3						18						0						0	31				
Buses	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
% Buses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.2	0.0	22.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5		
Exiting Leg Total	0						0						0						0						0	2				
Single-Unit Trucks	0	0	7	0	0	7	0	0	0	7	0	7	3	8	0	0	0	11	0	0	0	0	0	0	0	0	0	25		
% Single-Unit	0.0	0.0	77.8	0.0	0.0	77.8	0.0	0.0	0.0	77.8	0.0	77.8	100.0	80.0	0.0	0.0	0.0	84.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.6		
Exiting Leg Total	8						3						14						0						0	25				
Articulated Trucks	0	0	2	0	0	2	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4		
% Articulated	0.0	0.0	22.2	0.0	0.0	22.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	15.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.9		
Exiting Leg Total	2						0						2						0						0	4				

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

7:15 AM	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)					
	from North						from East						from South						from West						from Northwest					
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total
7:15 AM	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3		
7:30 AM	0	0	1	0	0	1	0	0	0	1	0	1	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	5		
7:45 AM	0	0	1	0	0	1	0	0	0	2	0	2	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	5		
8:00 AM	0	0	2	0	0	2	0	0	0	3	0	3	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	6		
Total Volume	0	0	6	0	0	6	0	0	0	6	0	6	2	5	0	0	0	7	0	0	0	0	0	0	0	0	0	19		
% Approach Total	0.0	0.0	100.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0		28.6	71.4	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.750	0.000	0.000	0.750	0.000	0.000	0.000	0.500	0.000	0.500	0.500	0.417	0.000	0.000	0.000	0.583	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.792		
Buses	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
Buses %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5		
Single-Unit Trucks	0	0	4	0	0	4	0	0	0	4	0	4	2	3	0	0	0	5	0	0	0	0	0	0	0	0	0	13		
Single-Unit %	0.0	0.0	66.7	0.0	0.0	66.7	0.0	0.0	0.0	66.7	0.0	66.7	100.0	60.0	0.0	0.0	0.0	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.4		
Articulated Trucks	0	0	2	0	0	2	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4		
Articulated %	0.0	0.0	33.3	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.0	0.0	0.0	0.0	28.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.1		
Buses	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
Single-Unit Trucks	0	0	4	0	0	4	0	0	0	4	0	4	2	3	0	0	0	5	0	0	0	0	0	0	0	0	0	13		
Articulated Trucks	0	0	2	0	0	2	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4		
Total Entering Leg	0	0	6	0	0	6	0	0	0	6	0	6	2	5	0	0	0	7	0	0	0	0	0	0	0	0	0	19		
Buses	0						0						0						0						0	2				
Single-Unit Trucks	3						2						8						0						0	13				
Articulated Trucks	2						0						2						0						0	4				
Total Exiting Leg	5						2						12						0						0	19				

PDI File #: 228414 F
 Location: N: Highland Street S: Highland Street NW: Church driveway (north) E: Davis Street W: Church driveway (south)
 Location: E: Davis Street W: Church driveway (south)
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD
 Count Date: Thursday, February 10, 2022
 Start Time: 7:00 AM
 End Time: 9:00 AM
 Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Buses

	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)						
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Total	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Grand Total	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0						0						2						0						0						2

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

7:00 AM	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)						
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Total Volume	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.500	
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	
Entering Leg	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
Exiting Leg	0						0						2						0						0						2
Total	0						2						2						0						0						4

PDI File #: 228414 F
 Location: N: Highland Street S: Highland Street NW: Church driveway (north)
 Location: E: Davis Street W: Church driveway (south)
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD
 Count Date: Thursday, February 10, 2022
 Start Time: 7:00 AM
 End Time: 9:00 AM
 Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)						
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Total
7:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
7:45 AM	0	0	1	0	0	1	0	0	0	1	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	0	4	0	0	4	0	0	0	1	0	1	1	3	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	9
8:00 AM	0	0	1	0	0	1	0	0	0	3	0	3	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
8:30 AM	0	0	1	0	0	1	0	0	0	1	0	1	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
8:45 AM	0	0	1	0	0	1	0	0	0	1	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	0	3	0	0	3	0	0	0	6	0	6	2	5	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	16
Grand Total	0	0	7	0	0	7	0	0	0	7	0	7	3	8	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	25
Approach %	0.0	0.0	100.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0		27.3	72.7	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	28.0	0.0	0.0	28.0	0.0	0.0	0.0	28.0	0.0	28.0	12.0	32.0	0.0	0.0	0.0	44.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	8						3						14						0						25						

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

7:45 AM	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)						
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Total
7:45 AM	0	0	1	0	0	1	0	0	0	1	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	0	1	0	0	1	0	0	0	3	0	3	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
8:30 AM	0	0	1	0	0	1	0	0	0	1	0	1	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
Total Volume	0	0	3	0	0	3	0	0	0	6	0	6	1	6	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	16
% Approach Total	0.0	0.0	100.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0		14.3	85.7	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.750	0.000	0.000	0.750	0.000	0.000	0.000	0.500	0.000	0.500	0.250	0.500	0.000	0.000	0.000	0.583	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.800	
Entering Leg	0	0	3	0	0	3	0	0	0	6	0	6	1	6	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	16
Exiting Leg	6						1						9						0						16						
Total	9						7						16						0						32						

PDI File #: 228414 F
 Location: N: Highland Street S: Highland Street NW: Church driveway (north)
 Location: E: Davis Street W: Church driveway (south)
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD
 Count Date: Thursday, February 10, 2022
 Start Time: 7:00 AM
 End Time: 9:00 AM
 Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)					
	from North						from East						from South						from West						from Northwest					
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	0	2	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
Approach %	0.0	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total %	0.0	0.0	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0		0.0	50.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	2						0						2						0						4					

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

7:15 AM	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)					
	from North						from East						from South						from West						from Northwest					
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total
7:15 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	2	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
% Approach Total	0.0	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
PHF	0.000	0.000	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000		0.000	0.500	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	1.000
Entering Leg	0	0	2	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	4	
Exiting Leg	2						0						2						0						4					
Total	4						0						4						0						8					

PDI File #: **228414 F**
 Location: **N: Highland Street S: Highland Street NW: Church driveway (north)**
 Location: **E: Davis Street W: Church driveway (south)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

404 pages - see electronic file on website

PRECISION
D A T A
INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	Highland Street								Davis Street								Highland Street								Church driveway (south)								Church driveway (north)								Total
	from North								from East								from South								from West								from Northwest								
	Hard Right	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-NB	CW-SB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-NB	CW-SWB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Exiting Leg Total	1								0								0								0								0								1

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

	Highland Street								Davis Street								Highland Street								Church driveway (south)								Church driveway (north)								Total
	from North								from East								from South								from West								from Northwest								
	Hard Right	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-NB	CW-SB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-NB	CW-SWB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1				
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.250	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250				
Entering Leg	0								0								0								0								0								1
Exiting Leg	1								0								0								0								0								1
Total	1								0								0								0								0								2

PDI File #: 228414 F

Location: N: Highland Street S: Highland Street NW: Church driveway (north)

Location: E: Davis Street W: Church driveway (south)

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 4:00 PM

End Time: 6:00 PM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

Table with columns for Street (Highland Street, Davis Street, Church driveway (south), Church driveway (north)) and sub-columns for direction (from North, from East, from South, from West, from Northwest). Rows include time intervals (4:00 PM to 5:45 PM), Grand Total, and various vehicle metrics (Cars, Heavy Vehicles, Exiting Leg Total).

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

Table similar to the main data table but specifically for Peak Hour Analysis. It includes PHF (Peak Hour Factor) and % Approach Total for various vehicle types and directions.

PDI File #: 228414 F
 Location: N: Highland Street S: Highland Street NW: Church driveway (north)
 Location: E: Davis Street W: Church driveway (south)
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD
 Count Date: Thursday, February 10, 2022
 Start Time: 4:00 PM
 End Time: 6:00 PM
 Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Cars

	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)						Total						
	from North						from East						from South						from West						from Northwest												
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total							
4:00 PM	0	0	55	8	0	63	6	0	0	29	0	35	11	86	0	0	0	97	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	196
4:15 PM	0	0	53	6	0	59	7	0	0	42	0	49	17	83	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	208
4:30 PM	1	0	48	4	0	53	12	0	0	24	0	36	13	78	1	0	0	92	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	183
4:45 PM	3	1	40	3	0	47	9	1	0	32	0	42	17	79	0	0	0	96	0	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	188
Total	4	1	196	21	0	222	34	1	0	127	0	162	58	326	1	0	0	385	1	1	4	0	0	6	0	0	0	0	0	0	775						
5:00 PM	5	0	44	7	0	56	9	0	0	31	0	40	8	50	1	0	0	59	1	0	5	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	161
5:15 PM	2	0	47	3	0	52	18	1	0	34	0	53	5	56	0	0	0	61	1	0	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	169
5:30 PM	0	0	46	8	0	54	10	1	1	34	0	46	12	59	0	0	0	71	1	1	1	0	0	3	0	1	0	0	0	1	175						
5:45 PM	0	0	46	7	0	53	9	1	0	26	0	36	7	45	0	0	0	52	1	0	0	0	0	1	0	0	0	0	0	0	142						
Total	7	0	183	25	0	215	46	3	1	125	0	175	32	210	1	0	0	243	4	1	8	0	0	13	0	1	0	0	0	1	647						
Grand Total	11	1	379	46	0	437	80	4	1	252	0	337	90	536	2	0	0	628	5	2	12	0	0	19	0	1	0	0	0	1	1422						
Approach %	2.5	0.2	86.7	10.5	0.0		23.7	1.2	0.3	74.8	0.0		14.3	85.4	0.3	0.0	0.0		26.3	10.5	63.2	0.0	0.0		0.0	100.0	0.0	0.0	0.0								
Total %	0.8	0.1	26.7	3.2	0.0	30.7	5.6	0.3	0.1	17.7	0.0	23.7	6.3	37.7	0.1	0.0	0.0	44.2	0.4	0.1	0.8	0.0	0.0	1.3	0.0	0.1	0.0	0.0	0.0	0.1							
Exiting Leg Total	628						138						637						2						17						1422						

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

4:00 PM	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)						Total						
	from North						from East						from South						from West						from Northwest												
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total							
4:00 PM	0	0	55	8	0	63	6	0	0	29	0	35	11	86	0	0	0	97	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	196
4:15 PM	0	0	53	6	0	59	7	0	0	42	0	49	17	83	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	208
4:30 PM	1	0	48	4	0	53	12	0	0	24	0	36	13	78	1	0	0	92	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	183
4:45 PM	3	1	40	3	0	47	9	1	0	32	0	42	17	79	0	0	0	96	0	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	188
Total Volume	4	1	196	21	0	222	34	1	0	127	0	162	58	326	1	0	0	385	1	1	4	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	775
% Approach Total	1.8	0.5	88.3	9.5	0.0		21.0	0.6	0.0	78.4	0.0		15.1	84.7	0.3	0.0	0.0		16.7	16.7	66.7	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0							
PHF	0.333	0.250	0.891	0.656	0.000	0.881	0.708	0.250	0.000	0.756	0.000	0.827	0.853	0.948	0.250	0.000	0.000	0.963	0.250	0.250	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.931						
Entering Leg	4	1	196	21	0	222	34	1	0	127	0	162	58	326	1	0	0	385	1	1	4	0	0	6	0	0	0	0	0	0	775						
Exiting Leg	364						80						324						1						6												
Total	586						242						709						7						6												

PDI File #: 228414 F
 Location: N: Highland Street S: Highland Street NW: Church driveway (north)
 Location: E: Davis Street W: Church driveway (south)
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD
 Count Date: Thursday, February 10, 2022
 Start Time: 4:00 PM
 End Time: 6:00 PM
 Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)						
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Total
4:00 PM	0	0	0	1	0	1	1	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3		
4:15 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	5			
4:30 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2			
4:45 PM	0	0	2	0	0	2	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4			
Total	0	0	4	1	0	5	1	0	0	2	0	3	1	5	0	0	0	6	0	0	0	0	0	0	0	0	0	14			
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3			
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
5:30 PM	0	0	2	0	0	2	0	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	5			
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	3			
Total	0	0	2	0	0	2	0	0	0	4	0	4	1	4	0	0	0	5	0	0	0	0	0	0	0	0	0	11			
Grand Total	0	0	6	1	0	7	1	0	0	6	0	7	2	9	0	0	11	0	0	0	0	0	0	0	0	0	0	25			
Approach %	0.0	0.0	85.7	14.3	0.0		14.3	0.0	0.0	85.7	0.0		18.2	81.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Total %	0.0	0.0	24.0	4.0	0.0	28.0	4.0	0.0	0.0	24.0	0.0	28.0	8.0	36.0	0.0	0.0	0.0	44.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Exiting Leg Total	10						3						12						0						0						25
Buses	0	0	2	0	0	2	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	5			
% Buses	0.0	0.0	33.3	0.0	0.0	28.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	27.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0			
Exiting Leg Total	3						0						2						0						0						5
Single-Unit Trucks	0	0	4	1	0	5	1	0	0	6	0	7	2	6	0	0	8	0	0	0	0	0	0	0	0	0	0	20			
% Single-Unit	0.0	0.0	66.7	100.0	0.0	71.4	100.0	0.0	0.0	100.0	0.0	100.0	100.0	66.7	0.0	0.0	72.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.0			
Exiting Leg Total	7						3						10						0						0						20
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
% Articulated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Exiting Leg Total	0						0						0						0						0						0

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

	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)												
	from North						from East						from South						from West						from Northwest												
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Total						
4:00 PM	0	0	0	1	0	1	1	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3									
4:15 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	5									
4:30 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2										
4:45 PM	0	0	2	0	0	2	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4										
Total Volume	0	0	4	1	0	5	1	0	0	2	0	3	1	5	0	0	6	0	0	0	0	0	0	0	0	0	14										
% Approach Total	0.0	0.0	80.0	20.0	0.0		33.3	0.0	0.0	66.7	0.0		16.7	83.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
PHF	0.000	0.000	0.500	0.250	0.000	0.625	0.250	0.000	0.000	0.250	0.000	0.375	0.250	0.313	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.700									
Buses	0	0	2	0	0	2	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	5									
Buses %	0.0	0.0	50.0	0.0	0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.7										
Single-Unit Trucks	0	0	2	1	0	3	1	0	0	2	0	3	1	2	0	0	3	0	0	0	0	0	0	0	0	0	9										
Single-Unit %	0.0	0.0	50.0	100.0	0.0	60.0	100.0	0.0	0.0	100.0	0.0	100.0	100.0	40.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.3										
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
Buses	0	0	2	0	0	2	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	5										
Single-Unit Trucks	0	0	2	1	0	3	1	0	0	2	0	3	1	2	0	0	3	0	0	0	0	0	0	0	0	0	9										
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
Total Entering Leg	0	0	4	1	0	5	1	0	0	2	0	3	1	5	0	0	6	0	0	0	0	0	0	0	0	0	14										
Buses	3						0						2						0						0						5						
Single-Unit Trucks	3						2						4						0						0						9						
Articulated Trucks	0						0						0						0						0						0						0
Total Exiting Leg	6						2						6						0						0						0						14

PDI File #: **228414 F**
 Location: **N: Highland Street S: Highland Street NW: Church driveway (north)**
 Location: **E: Davis Street W: Church driveway (south)**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:

404 pages- see electronic file on website



PRECISION
 DATA
 INDUSTRIES, LLC
 157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Buses

	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)						
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
4:30 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	2	0	0	2	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	2	0	0	2	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
Approach %	0.0	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	40.0	0.0	0.0	40.0	0.0	0.0	0.0	0.0	0.0		0.0	60.0	0.0	0.0	0.0	60.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	3						0						2						0						5						

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

	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)						
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
4:30 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	2	0	0	2	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
% Approach Total	0.0	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.417
Entering Leg	0	0	2	0	0	2	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
Exiting Leg	3						0						2						0						5						
Total	5						0						5						0						10						

PDI File #: 228414 F
 Location: N: Highland Street S: Highland Street NW: Church driveway (north)
 Location: E: Davis Street W: Church driveway (south)
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD
 Count Date: Thursday, February 10, 2022
 Start Time: 4:00 PM
 End Time: 6:00 PM
 Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)							
	from North						from East						from South						from West						from Northwest							
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Total	
4:00 PM	0	0	0	1	0	1	1	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	2	0	0	2	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	0	0	2	1	0	3	1	0	0	2	0	3	1	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	9
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	2	0	0	2	0	0	0	2	0	2	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	0	2	0	0	2	0	0	0	4	0	4	1	4	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Grand Total	0	0	4	1	0	5	1	0	0	6	0	7	2	6	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Approach %	0.0	0.0	80.0	20.0	0.0	14.3	0.0	0.0	85.7	0.0	25.0	75.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	20.0	5.0	0.0	25.0	5.0	0.0	0.0	30.0	0.0	35.0	10.0	30.0	0.0	0.0	0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exiting Leg Total	7						3						10						0						20							

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

4:45 PM	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)							
	from North						from East						from South						from West						from Northwest							
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Total	
4:45 PM	0	0	2	0	0	2	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	2	0	0	2	0	0	0	2	0	2	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Total Volume	0	0	4	0	0	4	0	0	0	5	0	5	1	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	12
% Approach Total	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	33.3	66.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.625	0.000	0.625	0.250	0.500	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.600	0.600
Entering Leg	0	0	4	0	0	4	0	0	0	5	0	5	1	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Exiting Leg	2						1						9						0						0							
Total	6						6						12						0						24							

PDI File #: 228414 F
 Location: N: Highland Street S: Highland Street NW: Church driveway (north)
 Location: E: Davis Street W: Church driveway (south)
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD
 Count Date: Thursday, February 10, 2022
 Start Time: 4:00 PM
 End Time: 6:00 PM
 Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)						
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	0						0						0						0						0						0

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

	Highland Street						Davis Street						Highland Street						Church driveway (south)						Church driveway (north)						
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Exiting Leg	0						0						0						0						0						0
Total	0						0						0						0						0						0

PDI File #: 228414 F

Location: N: Highland Street S: Highland Street NW: Church driveway (north)

Location: E: Davis Street W: Church driveway (south)

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 4:00 PM

End Time: 6:00 PM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

Table with columns for street names (Highland Street, Davis Street, Church driveway) and directions (from North, from East, from South, from West, from Northwest). Rows include time intervals (4:00 PM to 5:45 PM) and summary rows (Grand Total, Approach %, Total %, Exiting Leg Total).

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

Table similar to the first one, but for peak hour analysis starting at 4:15 PM. It includes the same columns for street names and directions, with rows for time intervals (4:15 PM to 5:00 PM) and summary rows (Total Volume, % Approach Total, PHF, Entering Leg, Exiting Leg, Total).

PDI File #: 228414 F

Location: N: Highland Street S: Highland Street NW: Church driveway (north)

Location: E: Davis Street W: Church driveway (south)

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 4:00 PM

End Time: 6:00 PM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

Table with columns for street directions (Highland Street, Davis Street, Church driveway south/north) and movement types (Hard Right, Right, Thru, Left, U-Turn, CW-EB, CW-WB, Total). Rows include time intervals from 4:00 PM to 5:45 PM, Grand Total, and Exiting Leg Total.

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

Table with columns for street directions and movement types. Rows include time intervals from 4:30 PM to 5:15 PM, Total Volume, % Approach Total, PHF (Peak Hour Factor), and Entering/Exiting Leg counts.

PDI File #: 228414 G

Location: N: Chestnut Street S: Chestnut Street

Location: W: Davis Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 7:00 AM

End Time: 9:00 AM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

Table with columns for Chestnut Street (from North/South) and Davis Street (from West), including sub-columns for Right, Thru, U-Turn, and Total. Rows include time intervals (7:00 AM to 8:45 AM), Grand Total, Approach %, Total %, and Exiting Leg Total for both Cars and Heavy Vehicles.

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

Table showing peak hour analysis for 8:00 AM. Columns include Chestnut Street (from North/South) and Davis Street (from West) with sub-columns for Right, Thru, U-Turn, Total, and PHF. Rows include time intervals (8:00 AM to 8:45 AM), Total Volume, % Approach Total, PHF, and Exiting Leg Total for Cars and Heavy Vehicles.

PDI File #: **228414 G**
 Location: **N: Chestnut Street S: Chestnut Street**
 Location: **W: Davis Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

404 pages- see electronic file on website



Cars

	Chestnut Street				Chestnut Street				Davis Street				Total
	from North				from South				from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
7:00 AM	0	11	0	11	26	2	0	28	1	1	0	2	41
7:15 AM	7	15	0	22	7	0	0	7	4	5	0	9	38
7:30 AM	28	1	1	30	0	0	0	0	0	35	1	36	66
7:45 AM	32	0	3	35	0	0	0	0	0	48	0	48	83
Total	67	27	4	98	33	2	0	35	5	89	1	95	228
8:00 AM	36	0	1	37	0	1	0	1	2	35	0	37	75
8:15 AM	32	1	2	35	2	0	0	2	2	31	1	34	71
8:30 AM	41	0	0	41	2	0	0	2	0	51	0	51	94
8:45 AM	57	1	1	59	9	0	0	9	0	46	2	48	116
Total	166	2	4	172	13	1	0	14	4	163	3	170	356
Grand Total	233	29	8	270	46	3	0	49	9	252	4	265	584
Approach %	86.3	10.7	3.0		93.9	6.1	0.0		3.4	95.1	1.5		
Total %	39.9	5.0	1.4	46.2	7.9	0.5	0.0	8.4	1.5	43.2	0.7	45.4	
Exiting Leg Total				306				38				240	584

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

	Chestnut Street				Chestnut Street				Davis Street				Total
	from North				from South				from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
8:00 AM	36	0	1	37	0	1	0	1	2	35	0	37	75
8:15 AM	32	1	2	35	2	0	0	2	2	31	1	34	71
8:30 AM	41	0	0	41	2	0	0	2	0	51	0	51	94
8:45 AM	57	1	1	59	9	0	0	9	0	46	2	48	116
Total Volume	166	2	4	172	13	1	0	14	4	163	3	170	356
% Approach Total	96.5	1.2	2.3		92.9	7.1	0.0		2.4	95.9	1.8		
PHF	0.728	0.500	0.500	0.729	0.361	0.250	0.000	0.389	0.500	0.799	0.375	0.833	0.767
Entering Leg	166	2	4	172	13	1	0	14	4	163	3	170	356
Exiting Leg				180				6				170	356
Total				352				20				340	712

PDI File #: 228414 G

Location: N: Chestnut Street S: Chestnut Street

Location: W: Davis Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 7:00 AM

End Time: 9:00 AM

Class:

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Table with columns for Street (Chestnut Street, Davis Street), Direction (from North, from South, from West), and Vehicle Type (Right, Thru, U-Turn, Total). Rows include time intervals (7:00 AM to 8:45 AM), Grand Total, Approach %, and Exiting Leg Total.

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

Table with columns for Street (Chestnut Street, Davis Street), Direction (from North, from South, from West), and Vehicle Type (Right, Thru, U-Turn, Total). Rows include time intervals (7:15 AM to 8:00 AM), Total Volume, % Approach Total, PHF, and Exiting Leg Total.

PDI File #: **228414 G**
 Location: **N: Chestnut Street S: Chestnut Street**
 Location: **W: Davis Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

404 pages- see electronic file on website



Buses

	Chestnut Street				Chestnut Street				Davis Street				Total	
	from North				from South				from West					
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total		
7:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	1
7:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	1
7:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	1
Total	2	1	0	3	1	0	0	1	0	0	0	0	0	4
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	2	1	0	3	1	0	0	1	0	0	0	0	0	4
Approach %	66.7	33.3	0.0		100.0	0.0	0.0		0.0	0.0	0.0			
Total %	50.0	25.0	0.0	75.0	25.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0		
Exiting Leg Total				1				1					2	4

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

7:00 AM	Chestnut Street				Chestnut Street				Davis Street				Total	
	from North				from South				from West					
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total		
7:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	1
7:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	1
7:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	1
Total Volume	2	1	0	3	1	0	0	1	0	0	0	0	0	4
% Approach Total	66.7	33.3	0.0		100.0	0.0	0.0		0.0	0.0	0.0			
PHF	0.500	0.250	0.000	0.750	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	1.000
Entering Leg	2	1	0	3	1	0	0	1	0	0	0	0	0	4
Exiting Leg				1				1					2	4
Total				4				2					2	8

PDI File #: **228414 G**
 Location: **N: Chestnut Street S: Chestnut Street**
 Location: **W: Davis Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

404 pages- see electronic file on website



Single-Unit Trucks

	Chestnut Street				Chestnut Street				Davis Street				Total
	from North				from South				from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
7:00 AM	0	0	0	0	2	0	0	2	0	0	0	0	2
7:15 AM	0	1	0	1	2	0	0	2	1	0	0	1	4
7:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
7:45 AM	1	1	0	2	1	0	0	1	0	0	0	0	3
Total	1	2	0	3	6	0	0	6	1	0	0	1	10
8:00 AM	4	0	0	4	0	0	0	0	0	1	0	1	5
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	1	1	0	2	0	0	0	0	0	0	0	0	2
8:45 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total	6	1	0	7	0	0	0	0	0	2	0	2	9
Grand Total	7	3	0	10	6	0	0	6	1	2	0	3	19
Approach %	70.0	30.0	0.0		100.0	0.0	0.0		33.3	66.7	0.0		
Total %	36.8	15.8	0.0	52.6	31.6	0.0	0.0	31.6	5.3	10.5	0.0	15.8	
Exiting Leg Total				8				4				7	19

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

7:15 AM	Chestnut Street				Chestnut Street				Davis Street				Total
	from North				from South				from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
7:15 AM	0	1	0	1	2	0	0	2	1	0	0	1	4
7:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
7:45 AM	1	1	0	2	1	0	0	1	0	0	0	0	3
8:00 AM	4	0	0	4	0	0	0	0	0	1	0	1	5
Total Volume	5	2	0	7	4	0	0	4	1	1	0	2	13
% Approach Total	71.4	28.6	0.0		100.0	0.0	0.0		50.0	50.0	0.0		
PHF	0.313	0.500	0.000	0.438	0.500	0.000	0.000	0.500	0.250	0.250	0.000	0.500	0.650
Entering Leg	5	2	0	7	4	0	0	4	1	1	0	2	13
Exiting Leg				5				3				5	13
Total				12				7				7	26

PDI File #: **228414 G**
 Location: **N: Chestnut Street S: Chestnut Street**
 Location: **W: Davis Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:

404 pages- see electronic file on website



Articulated Trucks

	Chestnut Street				Chestnut Street				Davis Street				Total	
	from North				from South				from West					
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	0				0				0				0	

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

7:00 AM	Chestnut Street				Chestnut Street				Davis Street				Total	
	from North				from South				from West					
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg	0				0				0				0	
Total	0				0				0				0	

PDI File #: 228414 G
 Location: N: Chestnut Street S: Chestnut Street
 Location: W: Davis Street
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

404 pages- see electronic file on website



Count Date: Thursday, February 10, 2022
 Start Time: 7:00 AM
 End Time: 9:00 AM

Class: Bicycles (on Roadway and Crosswalks)

	Chestnut Street							Chestnut Street							Davis Street							Total
	from North							from South							from West							
	Right	Thru	U-Turn	CW-EB	CW-WB	Total		Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total			
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Grand Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	1							0							0							1

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

7:00 AM	Chestnut Street							Chestnut Street							Davis Street							Total
	from North							from South							from West							
	Right	Thru	U-Turn	CW-EB	CW-WB	Total		Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total			
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1		
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total Volume	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1		
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250		
Entering Leg	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1		
Exiting Leg	1							0							0							1
Total	1							1							0							2

PDI File #: 228414 G
 Location: N: Chestnut Street S: Chestnut Street
 Location: W: Davis Street
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

404 pages- see electronic file on website



Count Date: Thursday, February 10, 2022
 Start Time: 7:00 AM
 End Time: 9:00 AM

Class: Pedestrians

	Chestnut Street						Chestnut Street						Davis Street						Total
	from North						from South						from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
7:30 AM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	1	0	1	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	1	2	3	5
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	2
8:15 AM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2
8:30 AM	0	0	0	1	3	4	0	0	0	0	2	2	0	0	0	1	0	1	7
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
Total	0	0	0	1	3	4	0	0	0	1	5	6	0	0	0	1	1	2	12
Grand Total	0	0	0	1	3	4	0	0	0	2	6	8	0	0	0	2	3	5	17
Approach %	0	0	0	25	75		0	0	0	25	75		0	0	0	40	60		
Total %	0	0	0	5.8824	17.647	23.529	0	0	0	11.765	35.294	47.059	0	0	0	11.765	17.647	29.412	
Exiting Leg Total	4						8						5						17

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

8:00 AM	Chestnut Street						Chestnut Street						Davis Street						Total
	from North						from South						from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	2
8:15 AM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2
8:30 AM	0	0	0	1	3	4	0	0	0	0	2	2	0	0	0	1	0	1	7
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
Total Volume	0	0	0	1	3	4	0	0	0	1	5	6	0	0	0	1	1	2	12
% Approach Total	0.0	0.0	0.0	25.0	75.0		0.0	0.0	0.0	16.7	83.3		0.0	0.0	0.0	50.0	50.0		
PHF	0.000	0.000	0.000	0.250	0.250	0.250	0.000	0.000	0.000	0.250	0.625	0.750	0.000	0.000	0.000	0.250	0.250	0.500	0.429
Entering Leg	0						0						0						12
Exiting Leg	4						6						2						12
Total	8						12						4						24

PDI File #: 228414 G

Location: N: Chestnut Street S: Chestnut Street

Location: W: Davis Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 4:00 PM

End Time: 6:00 PM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

Table with columns for Chestnut Street (from North/South) and Davis Street (from West), including sub-columns for Right, Thru, U-Turn, and Total. Rows include time intervals (4:00 PM to 5:45 PM), Grand Total, Approach %, and Exiting Leg Total for both Cars and Heavy Vehicles.

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

Table showing peak hour analysis starting at 4:45 PM. Columns include Chestnut Street (from North/South) and Davis Street (from West) with sub-columns for Right, Thru, U-Turn, and Total. Rows include time intervals (4:45 PM to 5:30 PM), Total Volume, % Approach Total, PHF, and Exiting Leg Total for Cars and Heavy Vehicles.

PDI File #: **228414 G**
 Location: **N: Chestnut Street S: Chestnut Street**
 Location: **W: Davis Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**

404 pages- see electronic file on website



Class: **Cars**

	Chestnut Street				Chestnut Street				Davis Street				Total
	from North				from South				from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
4:00 PM	33	0	1	34	2	0	0	2	0	16	0	16	52
4:15 PM	48	0	1	49	2	0	0	2	0	23	1	24	75
4:30 PM	31	0	1	32	1	0	0	1	0	15	2	17	50
4:45 PM	37	2	0	39	3	2	0	5	1	22	0	23	67
Total	149	2	3	154	8	2	0	10	1	76	3	80	244
5:00 PM	40	6	1	47	4	0	0	4	2	14	0	16	67
5:15 PM	45	4	0	49	4	3	0	7	0	9	0	9	65
5:30 PM	44	1	3	48	2	0	0	2	0	20	1	21	71
5:45 PM	34	1	0	35	0	1	0	1	0	18	0	18	54
Total	163	12	4	179	10	4	0	14	2	61	1	64	257
Grand Total	312	14	7	333	18	6	0	24	3	137	4	144	501
Approach %	93.7	4.2	2.1		75.0	25.0	0.0		2.1	95.1	2.8		
Total %	62.3	2.8	1.4	66.5	3.6	1.2	0.0	4.8	0.6	27.3	0.8	28.7	
Exiting Leg Total				162				17				322	501

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

	Chestnut Street				Chestnut Street				Davis Street				Total
	from North				from South				from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
4:45 PM	37	2	0	39	3	2	0	5	1	22	0	23	67
5:00 PM	40	6	1	47	4	0	0	4	2	14	0	16	67
5:15 PM	45	4	0	49	4	3	0	7	0	9	0	9	65
5:30 PM	44	1	3	48	2	0	0	2	0	20	1	21	71
Total Volume	166	13	4	183	13	5	0	18	3	65	1	69	270
% Approach Total	90.7	7.1	2.2		72.2	27.8	0.0		4.3	94.2	1.4		
PHF	0.922	0.542	0.333	0.934	0.813	0.417	0.000	0.643	0.375	0.739	0.250	0.750	0.951
Entering Leg	166	13	4	183	13	5	0	18	3	65	1	69	270
Exiting Leg				82				16				172	270
Total				265				34				241	540

PDI File #: 228414 G

Location: N: Chestnut Street S: Chestnut Street

Location: W: Davis Street

City, State: Newton, MA

Client: VHB/M. Duranleau

Site Code: TBD

Count Date: Thursday, February 10, 2022

Start Time: 4:00 PM

End Time: 6:00 PM

Class:

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Table with columns for Chestnut Street (from North/South) and Davis Street (from West), including sub-columns for Right, Thru, U-Turn, and Total. Rows include time intervals (4:00 PM to 5:45 PM), Grand Total, Approach %, and Exiting Leg Total for Buses, Single-Unit Trucks, and Articulated Trucks.

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

Table showing peak hour analysis starting at 4:45 PM. Columns include Chestnut Street (from North/South) and Davis Street (from West) with sub-columns for Right, Thru, U-Turn, and Total. Rows include time intervals (4:45 PM to 5:30 PM), Total Volume, % Approach Total, PHF, and vehicle counts for Buses, Single-Unit Trucks, and Articulated Trucks.

PDI File #: **228414 G**
 Location: **N: Chestnut Street S: Chestnut Street**
 Location: **W: Davis Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:

404 pages- see electronic file on website



Buses

	Chestnut Street				Chestnut Street				Davis Street				Total
	from North				from South				from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0				0				0				0

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

4:00 PM	Chestnut Street				Chestnut Street				Davis Street				Total
	from North				from South				from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg	0				0				0				0
Total	0				0				0				0

PDI File #: **228414 G**
 Location: **N: Chestnut Street S: Chestnut Street**
 Location: **W: Davis Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:

404 pages- see electronic file on website



Single-Unit Trucks

	Chestnut Street				Chestnut Street				Davis Street				Total
	from North				from South				from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
4:00 PM	0	1	0	1	0	0	0	0	0	2	0	2	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
Total	2	1	0	3	0	0	0	0	0	2	0	2	5
5:00 PM	0	0	0	0	2	1	0	3	0	1	0	1	4
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
5:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	3	0	0	3	2	1	0	3	0	1	0	1	7
Grand Total	5	1	0	6	2	1	0	3	0	3	0	3	12
Approach %	83.3	16.7	0.0		66.7	33.3	0.0		0.0	100.0	0.0		
Total %	41.7	8.3	0.0	50.0	16.7	8.3	0.0	25.0	0.0	25.0	0.0	25.0	
Exiting Leg Total				5				1				6	12

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

4:45 PM	Chestnut Street				Chestnut Street				Davis Street				Total
	from North				from South				from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
4:45 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	2	1	0	3	0	1	0	1	4
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
Total Volume	4	0	0	4	2	1	0	3	0	1	0	1	8
% Approach Total	100.0	0.0	0.0		66.7	33.3	0.0		0.0	100.0	0.0		
PHF	0.500	0.000	0.000	0.500	0.250	0.250	0.000	0.250	0.000	0.250	0.000	0.250	0.500
Entering Leg	4	0	0	4	2	1	0	3	0	1	0	1	8
Exiting Leg				3				0				5	8
Total				7				3				6	16

PDI File #: **228414 G**
 Location: **N: Chestnut Street S: Chestnut Street**
 Location: **W: Davis Street**
 City, State: **Newton, MA**
 Client: **VHB/M. Duranleau**
 Site Code: **TBD**
 Count Date: **Thursday, February 10, 2022**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:

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Articulated Trucks

	Chestnut Street				Chestnut Street				Davis Street				Total
	from North				from South				from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0				0				0				0

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

4:00 PM	Chestnut Street				Chestnut Street				Davis Street				Total
	from North				from South				from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg	0				0				0				0
Total	0				0				0				0

PDI File #: 228414 G
 Location: N: Chestnut Street S: Chestnut Street
 Location: W: Davis Street
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

404 pages- see electronic file on website



Count Date: Thursday, February 10, 2022
 Start Time: 4:00 PM
 End Time: 6:00 PM

Class:

Bicycles (on Roadway and Crosswalks)

	Chestnut Street							Chestnut Street							Davis Street							Total
	from North							from South							from West							
	Right	Thru	U-Turn	CW-EB	CW-WB	Total		Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total			
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0			
Exiting Leg Total	1							0							0							1

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

4:00 PM	Chestnut Street							Chestnut Street							Davis Street							Total
	from North							from South							from West							
	Right	Thru	U-Turn	CW-EB	CW-WB	Total		Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total			
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250			
Entering Leg	0	0	0	0	0	0		0	0	0	0	0	0	0	1	0	0	0	1			
Exiting Leg	1							0							0							1
Total	1							0							1							2

PDI File #: 228414 G
 Location: N: Chestnut Street S: Chestnut Street
 Location: W: Davis Street
 City, State: Newton, MA
 Client: VHB/M. Duranleau
 Site Code: TBD

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Count Date: Thursday, February 10, 2022
 Start Time: 4:00 PM
 End Time: 6:00 PM

Class: Pedestrians

	Chestnut Street						Chestnut Street						Davis Street						Total	
	from North						from South						from West							
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total		
4:00 PM	0	0	0	2	1	3	0	0	0	0	0	1	1	0	0	0	4	1	5	9
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	5	5
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	2	1	3	0	0	0	0	0	1	1	0	0	0	10	3	13	17
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4	4
5:30 PM	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	1	3	4	7	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	3	5	8	11	
Grand Total	0	0	0	2	1	3	0	0	0	1	3	4	0	0	0	13	8	21	28	
Approach %	0	0	0	66.667	33.333		0	0	0	25	75		0	0	0	61.905	38.095			
Total %	0	0	0	7.1429	3.5714	10.714	0	0	0	3.5714	10.714	14.286	0	0	0	46.429	28.571	75		
Exiting Leg Total	3						4						21						28	

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

4:00 PM	Chestnut Street						Chestnut Street						Davis Street						Total	
	from North						from South						from West							
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total		
4:00 PM	0	0	0	2	1	3	0	0	0	0	0	1	1	0	0	0	4	1	5	9
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	5	5
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	2	1	3	0	0	0	0	0	1	1	0	0	0	10	3	13	17
% Approach Total	0.0	0.0	0.0	66.7	33.3		0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	76.9	23.1			
PHF	0.000	0.000	0.000	0.250	0.250	0.250	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.625	0.750	0.650	0.472	
Entering Leg	0	0	0	2	1	3	0	0	0	0	1	1	0	0	0	10	3	13	17	
Exiting Leg	3						1						13						17	
Total	6						2						26						34	

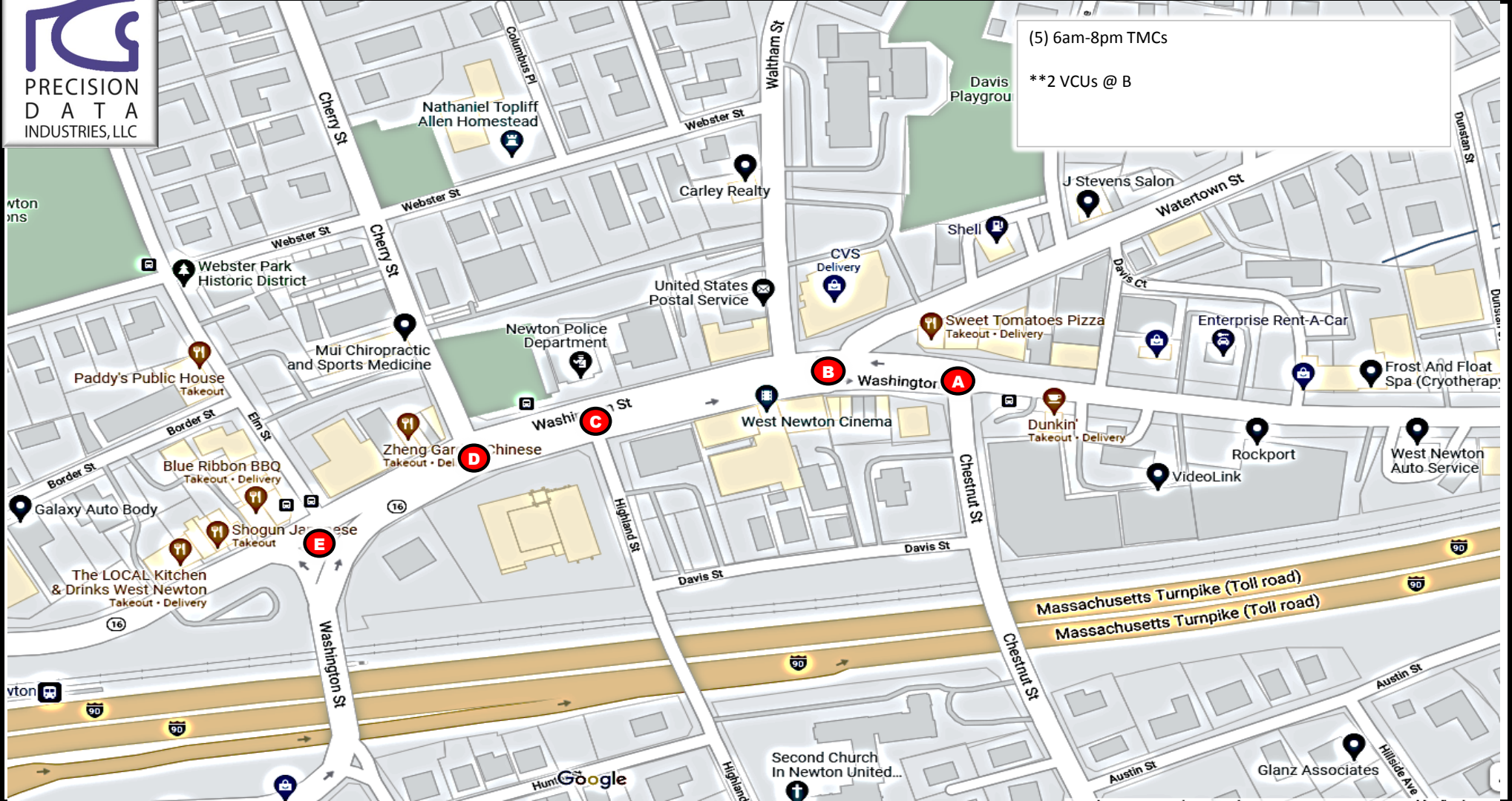
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October 2021 Traffic Count Data



Location Map: 218212 West Newton, MA

Precision Data Industries, LLC 157 Washington Street, Suite 2, Hudson, MA 01749 ph: 508-875-0100 email: datarequests@pdillc.com



(5) 6am-8pm TMCs
**2 VCUs @ B

Client: BETA	Engineer: J. Centracchio	Site Code: 5472-14	Date: Tues 10/19/2021	PDI Job # 218212	City, State: West Newton, MA
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PDI File #: 218212 A

Location: S: Chestnut Street

Location: E: Washington Street W: Washington Street

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

Table with columns for Washington Street (from East, from West), Chestnut Street (from South), and Total. Rows represent time intervals from 6:00 AM to 5:15 PM.

PDI File #: 218212 A

Location: S: Chestnut Street

Location: E: Washington Street W: Washington Street

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

Table with columns for Washington Street (from East, from West), Chestnut Street (from South), and Total. Rows include time intervals (5:30 PM to 7:45 PM), Grand Total, and Exiting Leg Total for Cars and Heavy Vehicles.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table for AM Peak Hour Analysis (8:00 AM) with columns for Washington Street (from East, from West), Chestnut Street (from South), and Total. Rows include time intervals (8:00 AM to 8:45 AM), Total Volume, % Approach Total, PHF, and Exiting Leg Total for Cars and Heavy Vehicles.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table for MidDay Peak Hour Analysis (1:45 PM) with columns for Washington Street (from East, from West), Chestnut Street (from South), and Total. Rows include time intervals (1:45 PM to 2:30 PM), Total Volume, % Approach Total, PHF, and Exiting Leg Total for Cars.

PDI File #: **218212 A**
 Location: **S: Chestnut Street**
 Location: **E: Washington Street W: Washington Street**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**
 Class:

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Cars and Heavy Vehicles (Combined)

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
Cars %	97.9	95.0	0.0	97.0	99.0	94.6	0.0	97.1	91.2	96.9	0.0	96.3	96.8
Heavy Vehicles	6	6	0	12	1	4	0	5	3	8	0	11	28
Heavy Vehicles %	2.1	5.0	0.0	3.0	1.0	5.4	0.0	2.9	8.8	3.1	0.0	3.7	3.2
Cars Enter Leg	280	114	0	394	100	70	0	170	31	253	0	284	848
Heavy Enter Leg	6	6	0	12	1	4	0	5	3	8	0	11	28
Total Entering Leg	286	120	0	406	101	74	0	175	34	261	0	295	876
Cars Exiting Leg				353				145				350	848
Heavy Exiting Leg				9				9				10	28
Total Exiting Leg				362				154				360	876

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
5:15 PM	87	43	0	130	38	20	0	58	6	82	0	88	276
5:30 PM	77	53	0	130	37	26	0	63	7	90	0	97	290
5:45 PM	90	50	0	140	42	22	0	64	11	90	0	101	305
6:00 PM	79	43	0	122	39	26	0	65	7	106	0	113	300
Total Volume	333	189	0	522	156	94	0	250	31	368	0	399	1171
% Approach Total	63.8	36.2	0.0		62.4	37.6	0.0		7.8	92.2	0.0		
PHF	0.925	0.892	0.000	0.932	0.929	0.904	0.000	0.962	0.705	0.868	0.000	0.883	0.960
Cars	323	189	0	512	156	93	0	249	31	358	0	389	1150
Cars %	97.0	100.0	0.0	98.1	100.0	98.9	0.0	99.6	100.0	97.3	0.0	97.5	98.2
Heavy Vehicles	10	0	0	10	0	1	0	1	0	10	0	10	21
Heavy Vehicles %	3.0	0.0	0.0	1.9	0.0	1.1	0.0	0.4	0.0	2.7	0.0	2.5	1.8
Cars Enter Leg	323	189	0	512	156	93	0	249	31	358	0	389	1150
Heavy Enter Leg	10	0	0	10	0	1	0	1	0	10	0	10	21
Total Entering Leg	333	189	0	522	156	94	0	250	31	368	0	399	1171
Cars Exiting Leg				514				220				416	1150
Heavy Exiting Leg				10				0				11	21
Total Exiting Leg				524				220				427	1171

PDI File #: 218212 A

Location: S: Chestnut Street

Location: E: Washington Street W: Washington Street

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:00 AM	12	6	0	18	10	3	0	13	2	14	0	16	47
6:15 AM	20	5	0	25	9	7	0	16	1	25	0	26	67
6:30 AM	23	11	0	34	12	3	0	15	3	35	0	38	87
6:45 AM	25	10	0	35	17	5	0	22	6	47	0	53	110
Total	80	32	0	112	48	18	0	66	12	121	0	133	311
7:00 AM	27	8	0	35	17	6	0	23	1	50	0	51	109
7:15 AM	23	23	0	46	17	21	0	38	9	70	0	79	163
7:30 AM	38	24	0	62	33	18	0	51	8	90	0	98	211
7:45 AM	62	44	0	106	31	20	0	51	6	128	0	134	291
Total	150	99	0	249	98	65	0	163	24	338	0	362	774
8:00 AM	66	32	0	98	27	9	1	37	6	79	0	85	220
8:15 AM	51	28	0	79	32	18	0	50	12	95	0	107	236
8:30 AM	53	55	0	108	25	16	0	41	17	104	0	121	270
8:45 AM	71	48	0	119	68	24	0	92	14	92	0	106	317
Total	241	163	0	404	152	67	1	220	49	370	0	419	1043
9:00 AM	59	27	0	86	19	19	0	38	8	71	0	79	203
9:15 AM	57	24	0	81	31	15	0	46	4	57	1	62	189
9:30 AM	48	14	0	62	19	12	0	31	5	60	0	65	158
9:45 AM	51	27	0	78	21	15	0	36	5	68	0	73	187
Total	215	92	0	307	90	61	0	151	22	256	1	279	737
10:00 AM	56	17	0	73	21	15	0	36	4	68	0	72	181
10:15 AM	56	15	0	71	15	17	0	32	2	43	0	45	148
10:30 AM	38	14	0	52	13	20	0	33	2	42	0	44	129
10:45 AM	49	22	0	71	25	14	0	39	4	54	0	58	168
Total	199	68	0	267	74	66	0	140	12	207	0	219	626
11:00 AM	42	23	1	66	16	13	0	29	4	47	0	51	146
11:15 AM	62	20	0	82	13	11	0	24	3	61	0	64	170
11:30 AM	57	25	0	82	19	15	0	34	2	55	0	57	173
11:45 AM	48	23	0	71	19	17	0	36	11	48	0	59	166
Total	209	91	1	301	67	56	0	123	20	211	0	231	655
12:00 PM	54	23	0	77	15	17	0	32	9	63	0	72	181
12:15 PM	65	28	0	93	18	23	0	41	10	59	0	69	203
12:30 PM	74	26	0	100	21	14	0	35	11	51	0	62	197
12:45 PM	64	26	0	90	20	20	0	40	9	61	0	70	200
Total	257	103	0	360	74	74	0	148	39	234	0	273	781
1:00 PM	57	19	0	76	30	19	0	49	8	52	0	60	185
1:15 PM	54	25	0	79	17	12	0	29	6	59	0	65	173
1:30 PM	64	27	0	91	13	21	0	34	5	58	0	63	188
1:45 PM	76	24	0	100	18	15	0	33	4	49	0	53	186
Total	251	95	0	346	78	67	0	145	23	218	0	241	732
2:00 PM	70	26	0	96	27	30	0	57	8	63	0	71	224
2:15 PM	56	26	0	82	22	9	0	31	6	83	0	89	202
2:30 PM	78	38	0	116	33	16	0	49	13	58	0	71	236
2:45 PM	98	50	0	148	37	22	0	59	8	47	0	55	262
Total	302	140	0	442	119	77	0	196	35	251	0	286	924
3:00 PM	74	41	0	115	31	23	0	54	9	55	0	64	233
3:15 PM	95	46	0	141	38	12	0	50	1	51	0	52	243
3:30 PM	63	32	0	95	18	22	0	40	16	86	0	102	237
3:45 PM	99	43	0	142	21	16	0	37	9	48	0	57	236
Total	331	162	0	493	108	73	0	181	35	240	0	275	949
4:00 PM	68	33	0	101	42	17	0	59	4	66	0	70	230
4:15 PM	87	57	0	144	40	19	0	59	7	70	0	77	280
4:30 PM	76	49	0	125	41	21	0	62	6	77	0	83	270
4:45 PM	74	44	0	118	48	24	0	72	4	74	0	78	268
Total	305	183	0	488	171	81	0	252	21	287	0	308	1048
5:00 PM	63	65	0	128	42	23	0	65	5	68	0	73	266
5:15 PM	86	43	0	129	38	19	0	57	6	78	0	84	270

PDI File #: 218212 A

Location: S: Chestnut Street

Location: E: Washington Street W: Washington Street

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars

Table with columns for Washington Street (from East, from West), Chestnut Street (from South), and Washington Street (from West). Rows include time intervals (5:30 PM to 7:45 PM), Grand Total, and Approach %.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table for AM Peak Hour Analysis (8:00 AM) with columns for Washington Street (from East, from West), Chestnut Street (from South), and Washington Street (from West). Rows include time intervals (8:00 AM to 8:45 AM), Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table for MidDay Peak Hour Analysis (1:45 PM) with columns for Washington Street (from East, from West), Chestnut Street (from South), and Washington Street (from West). Rows include time intervals (1:45 PM to 2:30 PM), Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table for PM Peak Hour Analysis (5:15 PM) with columns for Washington Street (from East, from West), Chestnut Street (from South), and Washington Street (from West). Rows include time intervals (5:15 PM to 6:00 PM), Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

PDI File #: **218212 A**
 Location: **S: Chestnut Street**
 Location: **E: Washington Street W: Washington Street**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**
 Class:

404 pages- see electronic file on website



**PRECISION
 D A T A
 INDUSTRIES, LLC**

157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Cars

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
Total Volume	323	189	0	512	156	93	0	249	31	358	0	389	1150
% Approach Total	63.1	36.9	0.0		62.7	37.3	0.0		8.0	92.0	0.0		
PHF	0.939	0.892	0.000	0.941	0.929	0.894	0.000	0.958	0.705	0.869	0.000	0.884	0.965
Entering Leg	323	189	0	512	156	93	0	249	31	358	0	389	1150
Exiting Leg				514				220				416	1150
Total				1026				469				805	2300

PDI File #: 218212 A

Location: S: Chestnut Street

Location: E: Washington Street W: Washington Street

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

Table with columns for Time, Washington Street (from East: Thru, Left, U-Turn, Total), Chestnut Street (from South: Right, Left, U-Turn, Total), Washington Street (from West: Right, Thru, U-Turn, Total), and Total. Rows represent 15-minute intervals from 6:00 AM to 5:15 PM.

PDI File #: 218212 A

Location: S: Chestnut Street

Location: E: Washington Street W: Washington Street

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

Table with columns for Washington Street (from East, from West), Chestnut Street (from South), and Washington Street (from West). Rows include time intervals (5:30 PM to 7:45 PM), Grand Total, Approach %, Total %, and vehicle types (Buses, Single-Unit Trucks, Articulated Trucks).

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table for AM Peak Hour Analysis with columns for Washington Street (from East, from West), Chestnut Street (from South), and Washington Street (from West). Rows include time intervals (7:15 AM to 8:00 AM), Total Volume, % Approach Total, PHF, and vehicle types (Buses, Single-Unit Trucks, Articulated Trucks).

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table for MidDay Peak Hour Analysis with columns for Washington Street (from East, from West), Chestnut Street (from South), and Washington Street (from West). Rows include time interval (10:00 AM) and vehicle types (Buses, Single-Unit Trucks, Articulated Trucks).

PDI File #: 218212 A

Location: S: Chestnut Street

Location: E: Washington Street W: Washington Street

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

Table with columns for Washington Street (from East), Chestnut Street (from South), and Washington Street (from West). Rows include time intervals (10:00 AM to 10:45 AM), Total Volume, % Approach Total, PHF, and vehicle type breakdown (Buses, Single-Unit Trucks, Articulated Trucks) for entering and exiting legs.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table with columns for Washington Street (from East), Chestnut Street (from South), and Washington Street (from West). Rows include time intervals (3:30 PM to 4:15 PM), Total Volume, % Approach Total, PHF, and vehicle type breakdown (Buses, Single-Unit Trucks, Articulated Trucks) for entering and exiting legs.

PDI File #: 218212 A

Location: S: Chestnut Street

Location: E: Washington Street W: Washington Street

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Buses

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
6:45 AM	0	2	0	2	0	0	0	0	0	0	0	0	2
Total	2	2	0	4	0	0	0	0	0	1	0	1	5
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
7:15 AM	1	0	0	1	0	1	0	1	0	2	0	2	4
7:30 AM	1	2	0	3	0	0	0	0	0	1	0	1	4
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	2	0	4	0	1	0	1	0	4	0	4	9
8:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
8:15 AM	1	0	0	1	0	0	0	0	0	2	0	2	3
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
8:45 AM	1	0	0	1	0	0	0	0	0	2	0	2	3
Total	3	0	0	3	0	0	0	0	0	5	0	5	8
9:00 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
9:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	2	0	0	2	0	0	0	0	0	2	0	2	4
10:00 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0	0	2	0	2	3
11:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	2	0	0	2	0	0	0	0	0	1	0	1	3
12:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
12:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
12:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	2	0	0	2	0	0	0	0	0	2	0	2	4
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
1:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	1	0	0	1	0	0	0	0	0	1	0	1	2
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	1	0	1	0	0	0	0	0	3	0	3	4
2:30 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
2:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	2	1	0	3	0	0	0	0	0	4	0	4	7
3:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	2
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	2	0	0	2	0	0	0	0	0	1	0	1	3
3:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	2	0	0	2	0	0	0	0	0	4	0	4	6
4:00 PM	1	0	0	1	1	0	0	1	0	1	0	1	3
4:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	1
4:30 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	2	1	0	3	1	0	0	1	0	3	0	3	7
5:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	2

PDI File #: **218212 A**
 Location: **S: Chestnut Street**
 Location: **E: Washington Street W: Washington Street**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**
 Class:

404 pages- see electronic file on website



Buses

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
5:30 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
5:45 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total	4	0	0	4	0	0	0	0	0	3	0	3	7
6:00 PM	1	0	0	1	0	0	0	0	0	3	0	3	4
6:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
6:30 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
6:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	4	0	0	4	0	0	0	0	0	4	0	4	8
7:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
7:15 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total	2	0	0	2	0	0	0	0	0	3	0	3	5
Grand Total	31	6	0	37	1	1	0	2	0	39	0	39	78
Approach %	83.8	16.2	0.0		50.0	50.0	0.0		0.0	100.0	0.0		
Total %	39.7	7.7	0.0	47.4	1.3	1.3	0.0	2.6	0.0	50.0	0.0	50.0	
Exiting Leg Total	40				6				32				78

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:45 AM	0	2	0	2	0	0	0	0	0	0	0	0	2
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
7:15 AM	1	0	0	1	0	1	0	1	0	2	0	2	4
7:30 AM	1	2	0	3	0	0	0	0	0	1	0	1	4
Total Volume	2	4	0	6	0	1	0	1	0	4	0	4	11
% Approach Total	33.3	66.7	0.0		0.0	100.0	0.0		0.0	100.0	0.0		
PHF	0.500	0.500	0.000	0.500	0.000	0.250	0.000	0.250	0.000	0.500	0.000	0.500	0.688
Entering Leg	2	4	0	6	0	1	0	1	0	4	0	4	11
Exiting Leg	4				4				3				11
Total	10				5				7				22

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
1:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	1	0	1	0	0	0	0	0	3	0	3	4
2:30 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total Volume	2	1	0	3	0	0	0	0	0	4	0	4	7
% Approach Total	66.7	33.3	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.500	0.250	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.333	0.000	0.333	0.438
Entering Leg	2	1	0	3	0	0	0	0	0	4	0	4	7
Exiting Leg	4				1				2				7
Total	7				1				6				14

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	2
5:30 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
5:45 PM	1	0	0	1	0	0	0	0	0	1	0	1	2

PDI File #: **218212 A**
 Location: **S: Chestnut Street**
 Location: **E: Washington Street W: Washington Street**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**
 Class:

404 pages- see electronic file on website



**PRECISION
 D A T A
 INDUSTRIES, LLC**

157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Buses

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:00 PM	1	0	0	1	0	0	0	0	0	3	0	3	4
Total Volume	4	0	0	4	0	0	0	0	0	6	0	6	10
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.625
Entering Leg	4	0	0	4	0	0	0	0	0	6	0	6	10
Exiting Leg				6				0				4	10
Total				10				0				10	20

PDI File #: 218212 A

Location: S: Chestnut Street

Location: E: Washington Street W: Washington Street

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

Table with columns for Washington Street (from East), Chestnut Street (from South), and Washington Street (from West). Rows include time intervals from 6:00 AM to 5:15 PM and total counts for each direction.

PDI File #: 218212 A

Location: S: Chestnut Street

Location: E: Washington Street W: Washington Street

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

Table with columns for Washington Street (from East), Chestnut Street (from South), and Washington Street (from West). Rows include time intervals (5:30 PM to 7:45 PM), Grand Total, Approach %, Total %, and Exiting Leg Total.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table for AM Peak Hour Analysis starting at 9:45 AM. Columns include Washington Street (from East), Chestnut Street (from South), and Washington Street (from West). Rows include time intervals (9:45 AM to 10:30 AM), Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table for MidDay Peak Hour Analysis starting at 10:30 AM. Columns include Washington Street (from East), Chestnut Street (from South), and Washington Street (from West). Rows include time intervals (10:30 AM to 11:15 AM), Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table for PM Peak Hour Analysis starting at 3:15 PM. Columns include Washington Street (from East), Chestnut Street (from South), and Washington Street (from West). Rows include time intervals (3:15 PM to 3:45 PM).

PDI File #: **218212 A**
 Location: **S: Chestnut Street**
 Location: **E: Washington Street W: Washington Street**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**
 Class:

404 pages- see electronic file on website



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 INDUSTRIES, LLC

157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	0	1	0	1	0	0	0	0	1	1	0	2	3
Total Volume	4	4	0	8	2	1	0	3	1	4	0	5	16
% Approach Total	50.0	50.0	0.0		66.7	33.3	0.0		20.0	80.0	0.0		
PHF	0.500	1.000	0.000	0.667	0.500	0.250	0.000	0.750	0.250	1.000	0.000	0.625	0.800
Entering Leg	4	4	0	8	2	1	0	3	1	4	0	5	16
Exiting Leg				6				5				5	16
Total				14				8				10	32

PDI File #: 218212 A

Location: S: Chestnut Street

Location: E: Washington Street W: Washington Street

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
6:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	2	0	0	0	0	0	0	0	0	2
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	2	0	2	0	0	0	0	1	0	0	1	3
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	1	2	0	3	3
Total	0	2	0	2	0	0	0	0	2	2	0	4	6
8:00 AM	0	0	0	0	0	0	0	0	0	2	0	2	2
8:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
8:30 AM	2	0	0	2	0	0	0	0	1	0	0	1	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	2	1	0	0	1	1	2	0	3	6
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
9:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
9:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	2	0	0	2	0	0	0	0	0	1	0	1	3
10:00 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
10:15 AM	3	0	0	3	0	0	0	0	0	1	0	1	4
10:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
10:45 AM	0	0	0	0	1	0	0	1	0	2	0	2	3
Total	5	0	0	5	2	0	0	2	0	3	0	3	10
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	1	1	0	2	0	0	0	0	0	0	0	0	2
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	1	0	2	0	0	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	2
12:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	1
12:30 PM	1	0	0	1	0	0	0	0	1	2	0	3	4
12:45 PM	1	0	0	1	1	0	0	1	0	1	0	1	3
Total	2	0	0	2	1	1	0	2	1	5	0	6	10
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	1
1:30 PM	0	1	0	1	0	0	0	0	1	0	0	1	2
1:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	2	0	2	0	1	0	1	1	0	0	1	4
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	1	0	1	0	2	0	2	3
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	2	0	2	3
3:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	2	0	0	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	1	0	0	1	0	1	0	1	2
4:15 PM	1	1	0	2	0	0	0	0	0	1	0	1	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	1	1	0	2	1	0	0	1	0	3	0	3	6
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0

PDI File #: **218212 A**
 Location: **S: Chestnut Street**
 Location: **E: Washington Street W: Washington Street**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**
 Class:

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Articulated Trucks

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	0	0	0	1	0	1	1
6:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0	0	1	0	1	2
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0	0	0	0	0	1
Grand Total	17	8	0	25	5	3	0	8	5	20	0	25	58
Approach %	68.0	32.0	0.0		62.5	37.5	0.0		20.0	80.0	0.0		
Total %	29.3	13.8	0.0	43.1	8.6	5.2	0.0	13.8	8.6	34.5	0.0	43.1	
Exiting Leg Total	25				13				20				58

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:45 AM	0	0	0	0	0	0	0	0	1	2	0	3	3
8:00 AM	0	0	0	0	0	0	0	0	0	2	0	2	2
8:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
8:30 AM	2	0	0	2	0	0	0	0	1	0	0	1	3
Total Volume	2	0	0	2	1	0	0	1	2	4	0	6	9
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		33.3	66.7	0.0		
PHF	0.250	0.000	0.000	0.250	0.250	0.000	0.000	0.250	0.500	0.500	0.000	0.500	0.750
Entering Leg	2	0	0	2	1	0	0	1	2	4	0	6	9
Exiting Leg	5				2				2				9
Total	7				3				8				18

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
10:00 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
10:15 AM	3	0	0	3	0	0	0	0	0	1	0	1	4
10:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
10:45 AM	0	0	0	0	1	0	0	1	0	2	0	2	3
Total Volume	5	0	0	5	2	0	0	2	0	3	0	3	10
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.417	0.000	0.000	0.417	0.500	0.000	0.000	0.500	0.000	0.375	0.000	0.375	0.625
Entering Leg	5	0	0	5	2	0	0	2	0	3	0	3	10
Exiting Leg	5				0				5				10
Total	10				2				8				20

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	1	0	0	1	0	1	0	1	2

PDI File #: **218212 A**
 Location: **S: Chestnut Street**
 Location: **E: Washington Street W: Washington Street**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**
 Class:

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Articulated Trucks

	Washington Street				Chestnut Street				Washington Street				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:15 PM	1	1	0	2	0	0	0	0	0	1	0	1	3
Total Volume	1	2	0	3	1	0	0	1	0	2	0	2	6
% Approach Total	33.3	66.7	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.250	0.500	0.000	0.375	0.250	0.000	0.000	0.250	0.000	0.500	0.000	0.500	0.500
Entering Leg	1	2	0	3	1	0	0	1	0	2	0	2	6
Exiting Leg				3				2				1	6
Total				6				3				3	12

PDI File #: 218212 A
 Location: S: Chestnut Street
 Location: E: Washington Street W: Washington Street
 City, State: West Newton, MA
 Client: BETA/J. Centracchio
 Site Code: 5472-14
 Count Date: Tuesday, October 19, 2021
 Start Time: 6:00 AM
 End Time: 8:00 PM

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Bicycles (on Roadway and Crosswalks)

	Washington Street							Chestnut Street						Washington Street						Total		
	from East							from South						from West								
	Thru	Left	U-Turn	CW-SB	CW-NB	Total		Right	Left	U-Turn	CW-WB	CW-EB	Total		Right	Thru	U-Turn	CW-NB	CW-SB		Total	
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Total	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	1	2
Total	0	0	0	0	0	0	0	0	1	0	1	0	2	0	1	0	0	0	0	0	1	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
8:30 AM	1	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	2	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
Total	2	0	0	0	0	0	2	0	0	0	0	0	0	1	4	0	0	0	0	0	5	7
9:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1
9:15 AM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	1	0	1	0	0	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	3
Total	1	1	0	1	0	0	3	1	0	0	1	0	2	0	1	0	0	0	0	0	1	6
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
1:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	1	0	1	0	2	0	1	0	0	0	0	0	1	3
2:00 PM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:15 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:30 PM	1	0	0	0	0	0	1	0	0	0	1	0	1	0	1	0	0	0	0	0	1	3
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	1	0	0	0	0	3	0	0	0	1	0	1	0	1	0	0	0	0	0	1	5
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	1	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2
3:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	3	0	1	0	0	0	4	5
3:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Total	1	0	0	0	0	0	1	2	0	0	1	0	3	0	3	0	1	0	0	0	4	8
4:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	0	1	0	0	0	2	0	2	0	0	0	0	0	0	0	0	3
5:00 PM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

PDI File #: 218212 A
 Location: S: Chestnut Street
 Location: E: Washington Street W: Washington Street
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 Site Code: 5472-14
 Count Date: Tuesday, October 19, 2021
 Start Time: 6:00 AM
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Bicycles (on Roadway and Crosswalks)

	Washington Street						Chestnut Street						Washington Street						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
7:00 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 PM	2	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	3
Total	3	0	0	1	0	4	0	0	0	0	0	0	0	1	0	0	0	1	5
Grand Total	14	2	0	2	0	18	3	2	0	7	0	12	1	16	0	1	0	18	48
Approach %	77.8	11.1	0.0	11.1	0.0		25.0	16.7	0.0	58.3	0.0		5.6	88.9	0.0	5.6	0.0		
Total %	29.2	4.2	0.0	4.2	0.0	37.5	6.3	4.2	0.0	14.6	0.0	25.0	2.1	33.3	0.0	2.1	0.0	37.5	
Exiting Leg Total	21						10						17						48

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

	Washington Street						Chestnut Street						Washington Street						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
8:15 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	2
8:30 AM	1	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	2	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
9:00 AM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1
Total Volume	2	0	0	0	0	2	1	0	0	0	0	1	1	4	0	0	0	5	8
% Approach Total	100.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0		20.0	80.0	0.0	0.0	0.0		
PHF	0.500	0.000	0.000	0.000	0.000	0.500	0.250	0.000	0.000	0.000	0.000	0.250	0.250	0.500	0.000	0.000	0.000	0.625	0.667
Entering Leg	2	0	0	0	0	2	1	0	0	0	0	1	1	4	0	0	0	5	8
Exiting Leg	5						1						2						8
Total	7						2						7						16

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

	Washington Street						Chestnut Street						Washington Street						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
1:45 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
2:00 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2:15 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2:30 PM	1	0	0	0	0	1	0	0	0	1	0	1	0	1	0	0	0	1	3
Total Volume	2	1	0	0	0	3	0	1	0	1	0	2	0	1	0	0	0	1	6
% Approach Total	66.7	33.3	0.0	0.0	0.0		0.0	50.0	0.0	50.0	0.0		0.0	100.0	0.0	0.0	0.0		
PHF	0.500	0.250	0.000	0.000	0.000	0.750	0.000	0.250	0.000	0.250	0.000	0.500	0.000	0.250	0.000	0.000	0.000	0.250	0.500
Entering Leg	2	1	0	0	0	3	0	1	0	1	0	2	0	1	0	0	0	1	6
Exiting Leg	1						2						3						6
Total	4						4						4						12

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

	Washington Street						Chestnut Street						Washington Street						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
3:15 PM	1	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	2
3:30 PM	0	0	0	0	0	0	1	0	0	0	0	1	0	3	0	1	0	4	5
3:45 PM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1

PDI File #: **218212 A**
 Location: **S: Chestnut Street**
 Location: **E: Washington Street W: Washington Street**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**

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Bicycles (on Roadway and Crosswalks)

	Washington Street						Chestnut Street						Washington Street						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2
Total Volume	1	0	0	0	0	1	2	0	0	3	0	5	0	3	0	1	0	4	10
% Approach Total	100.0	0.0	0.0	0.0	0.0		40.0	0.0	0.0	60.0	0.0		0.0	75.0	0.0	25.0	0.0		
PHF	0.250	0.000	0.000	0.000	0.000	0.250	0.500	0.000	0.000	0.375	0.000	0.625	0.000	0.250	0.000	0.250	0.000	0.250	0.500
Entering Leg	1	0	0	0	0	1	2	0	0	3	0	5	0	3	0	1	0	4	10
Exiting Leg						5						3						2	10
Total						6						8						6	20

PDI File #: 218212 A
 Location: S: Chestnut Street
 Location: E: Washington Street W: Washington Street
 City, State: West Newton, MA
 Client: BETA/J. Centracchio
 Site Code: 5472-14
 Count Date: Tuesday, October 19, 2021
 Start Time: 6:00 AM
 End Time: 8:00 PM
 Class:

404 pages- see electronic file on website



Pedestrians

	Washington Street						Chestnut Street						Washington Street						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:30 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	0	0	3	2	5	0	0	0	1	0	1	6
8:00 AM	0	0	0	1	1	2	0	0	0	2	0	2	0	0	0	0	1	1	5
8:15 AM	0	0	0	3	2	5	0	0	0	0	0	0	0	0	0	0	1	1	6
8:30 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	4	4	8	0	0	0	2	0	2	0	0	0	0	2	2	12
9:00 AM	0	0	0	0	1	1	0	0	0	2	1	3	0	0	0	0	0	0	4
9:15 AM	0	0	0	1	2	3	0	0	0	0	1	1	0	0	0	0	1	1	5
9:30 AM	0	0	0	1	2	3	0	0	0	1	0	1	0	0	0	2	2	4	8
9:45 AM	0	0	0	2	1	3	0	0	0	1	0	1	0	0	0	0	0	0	4
Total	0	0	0	4	6	10	0	0	0	4	2	6	0	0	0	2	3	5	21
10:00 AM	0	0	0	1	2	3	0	0	0	1	1	2	0	0	0	1	0	1	6
10:15 AM	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	1	1	2	4
10:30 AM	0	0	0	1	1	2	0	0	0	0	1	1	0	0	0	0	0	0	3
10:45 AM	0	0	0	3	1	4	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	0	0	0	5	5	10	0	0	0	1	3	4	0	0	0	2	1	3	17
11:00 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	2	3
11:15 AM	0	0	0	0	1	1	0	0	0	1	0	1	0	0	0	0	0	0	2
11:30 AM	0	0	0	0	1	1	0	0	0	2	1	3	0	0	0	0	0	0	4
11:45 AM	0	0	0	0	0	0	0	0	0	3	2	5	0	0	0	1	2	3	8
Total	0	0	0	0	3	3	0	0	0	6	3	9	0	0	0	2	3	5	17
12:00 PM	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	1	1	3
12:15 PM	0	0	0	2	1	3	0	0	0	4	0	4	0	0	0	1	0	1	8
12:30 PM	0	0	0	1	1	2	0	0	0	3	1	4	0	0	0	0	1	1	7
12:45 PM	0	0	0	2	2	4	0	0	0	2	5	7	0	0	0	1	1	2	13
Total	0	0	0	6	5	11	0	0	0	9	6	15	0	0	0	2	3	5	31
1:00 PM	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	0	0	4
1:15 PM	0	0	0	2	1	3	0	0	0	2	2	4	0	0	0	0	0	0	7
1:30 PM	0	0	0	2	2	4	0	0	0	3	0	3	0	0	0	0	0	0	7
1:45 PM	0	0	0	3	3	6	0	0	0	2	2	4	0	0	0	0	0	0	10
Total	0	0	0	7	6	13	0	0	0	8	7	15	0	0	0	0	0	0	28
2:00 PM	0	0	0	4	1	5	0	0	0	1	2	3	0	0	0	0	0	0	8
2:15 PM	0	0	0	1	0	1	0	0	0	2	0	2	0	0	0	0	1	1	4
2:30 PM	0	0	0	0	2	2	0	0	0	2	5	7	0	0	0	0	0	0	9
2:45 PM	0	0	0	1	1	2	0	0	0	2	2	4	0	0	0	1	0	1	7
Total	0	0	0	6	4	10	0	0	0	7	9	16	0	0	0	1	1	2	28
3:00 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	2	2	0	0	0	1	3	4	0	0	0	0	0	0	6
3:30 PM	0	0	0	2	3	5	0	0	0	2	2	4	0	0	0	0	0	0	9
3:45 PM	0	0	0	1	2	3	0	0	0	5	1	6	0	0	0	0	0	0	9
Total	0	0	0	3	8	11	0	0	0	8	6	14	0	0	0	0	0	0	25
4:00 PM	0	0	0	4	5	9	0	0	0	4	5	9	0	0	0	0	0	0	18
4:15 PM	0	0	0	2	1	3	0	0	0	2	2	4	0	0	0	0	0	0	7
4:30 PM	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	3
4:45 PM	0	0	0	1	4	5	0	0	0	0	1	1	0	0	0	0	0	0	6
Total	0	0	0	7	10	17	0	0	0	8	9	17	0	0	0	0	0	0	34
5:00 PM	0	0	0	0	2	2	0	0	0	0	4	4	0	0	0	0	0	0	6
5:15 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2

PDI File #: 218212 A
 Location: S: Chestnut Street
 Location: E: Washington Street W: Washington Street
 City, State: West Newton, MA
 Client: BETA/J. Centracchio
 Site Code: 5472-14
 Count Date: Tuesday, October 19, 2021
 Start Time: 6:00 AM
 End Time: 8:00 PM

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Pedestrians

	Washington Street						Chestnut Street						Washington Street						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
5:30 PM	0	0	0	4	0	4	0	0	0	3	0	3	0	0	0	1	1	2	9
5:45 PM	0	0	0	3	1	4	0	0	0	0	2	2	0	0	0	0	0	0	6
Total	0	0	0	7	3	10	0	0	0	3	8	11	0	0	0	1	1	2	23
6:00 PM	0	0	0	2	3	5	0	0	0	1	1	2	0	0	0	1	0	1	8
6:15 PM	0	0	0	1	1	2	0	0	0	0	2	2	0	0	0	0	0	0	4
6:30 PM	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	3
6:45 PM	0	0	0	1	1	2	0	0	0	1	0	1	0	0	0	0	0	0	3
Total	0	0	0	4	8	12	0	0	0	2	3	5	0	0	0	1	0	1	18
7:00 PM	0	0	0	0	6	6	0	0	0	0	2	2	0	0	0	0	0	0	8
7:15 PM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	1	1	3
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	8	8	0	0	0	0	2	2	0	0	0	0	1	1	11
Grand Total	0	0	0	54	71	125	0	0	0	61	60	121	0	0	0	12	15	27	273
Approach %	0	0	0	43.2	56.8		0	0	0	50.413	49.587		0	0	0	44.444	55.556		
Total %	0	0	0	19.78	26.007	45.788	0	0	0	22.344	21.978	44.322	0	0	0	4.3956	5.4945	9.8901	
Exiting Leg Total	125						121						27						273

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

	Washington Street						Chestnut Street						Washington Street						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
9:15 AM	0	0	0	1	2	3	0	0	0	0	1	1	0	0	0	0	1	1	5
9:30 AM	0	0	0	1	2	3	0	0	0	1	0	1	0	0	0	2	2	4	8
9:45 AM	0	0	0	2	1	3	0	0	0	1	0	1	0	0	0	0	0	0	4
10:00 AM	0	0	0	1	2	3	0	0	0	1	1	2	0	0	0	1	0	1	6
Total Volume	0	0	0	5	7	12	0	0	0	3	2	5	0	0	0	3	3	6	23
% Approach Total	0.0	0.0	0.0	41.7	58.3		0.0	0.0	0.0	60.0	40.0		0.0	0.0	0.0	50.0	50.0		
PHF	0.000	0.000	0.000	0.625	0.875	1.000	0.000	0.000	0.000	0.750	0.500	0.625	0.000	0.000	0.000	0.375	0.375	0.375	0.719
Entering Leg	0	0	0	5	7	12	0	0	0	3	2	5	0	0	0	3	3	6	23
Exiting Leg	12						5						6						23
Total	24						10						12						46

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

	Washington Street						Chestnut Street						Washington Street						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
12:15 PM	0	0	0	2	1	3	0	0	0	4	0	4	0	0	0	1	0	1	8
12:30 PM	0	0	0	1	1	2	0	0	0	3	1	4	0	0	0	0	1	1	7
12:45 PM	0	0	0	2	2	4	0	0	0	2	5	7	0	0	0	1	1	2	13
1:00 PM	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	0	0	4
Total Volume	0	0	0	5	4	9	0	0	0	10	9	19	0	0	0	2	2	4	32
% Approach Total	0.0	0.0	0.0	55.6	44.4		0.0	0.0	0.0	52.6	47.4		0.0	0.0	0.0	50.0	50.0		
PHF	0.000	0.000	0.000	0.625	0.500	0.563	0.000	0.000	0.000	0.625	0.450	0.679	0.000	0.000	0.000	0.500	0.500	0.500	0.615
Entering Leg	0	0	0	5	4	9	0	0	0	10	9	19	0	0	0	2	2	4	32
Exiting Leg	9						19						4						32
Total	18						38						8						64

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

	Washington Street						Chestnut Street						Washington Street						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	2	3	5	0	0	0	2	2	4	0	0	0	0	0	0	9
3:45 PM	0	0	0	1	2	3	0	0	0	5	1	6	0	0	0	0	0	0	9
4:00 PM	0	0	0	4	5	9	0	0	0	4	5	9	0	0	0	0	0	0	18

PDI File #: **218212 A**
 Location: **S: Chestnut Street**
 Location: **E: Washington Street W: Washington Street**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**
 Class:

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Pedestrians

	Washington Street						Chestnut Street						Washington Street						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
4:15 PM	0	0	0	2	1	3	0	0	0	2	2	4	0	0	0	0	0	0	7
Total Volume	0	0	0	9	11	20	0	0	0	13	10	23	0	0	0	0	0	0	43
% Approach Total	0.0	0.0	0.0	45.0	55.0		0.0	0.0	0.0	56.5	43.5		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.563	0.550	0.556	0.000	0.000	0.000	0.650	0.500	0.639	0.000	0.000	0.000	0.000	0.000	0.000	0.597
Entering Leg	0	0	0	9	11	20	0	0	0	13	10	23	0	0	0	0	0	0	43
Exiting Leg						20						23							43
Total						40						46							86

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

Table with columns for Street (Waltham, Watertown, Washington), Direction (from North, Northeast, East, West), and various vehicle movement categories (Right, Left, Hard Left, U-Turn, Total). Rows represent time intervals from 6:00 AM to 5:15 PM.

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

Table with columns for street names (Waltham Street, Watertown Street, Washington Street) and directions (from North, from Northeast, from East, from West). Rows include time intervals (5:30 PM to 7:45 PM), Grand Total, and Exiting Leg Total.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table for AM Peak Hour Analysis with columns for street names and directions. Rows include time intervals (7:45 AM to 8:30 AM), Total Volume, % Approach Total, PHF, and Exiting Leg.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table for MidDay Peak Hour Analysis with columns for street names and directions. Rows include time intervals (1:45 PM to 2:30 PM), Total Volume, % Approach Total, PHF, and Exiting Leg.

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

Table with columns for Waltham Street, Watertown Street (Route 16), Washington Street, and Washington Street (Route 16). Rows include Cars %, Heavy Vehicles, Cars Enter Leg, Heavy Enter Leg, Total Entering Leg, Cars Exiting Leg, Heavy Exiting Leg, and Total Exiting Leg.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table showing PM Peak Hour Analysis for 5:30 PM, 5:45 PM, 6:00 PM, and 6:15 PM. Columns include Waltham Street, Watertown Street (Route 16), Washington Street, and Washington Street (Route 16). Rows include Total Volume, % Approach Total, PHF, Cars, Heavy Vehicles, Cars Enter Leg, Heavy Enter Leg, Total Entering Leg, Cars Exiting Leg, Heavy Exiting Leg, and Total Exiting Leg.

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars

Table with columns for Street (Waltham, Watertown, Washington), Direction (from North, Northeast, East, West), and various traffic counts (Right, Left, Hard Left, U-Turn, Total) for each time slot from 6:00 AM to 5:15 PM.

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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Cars

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street (Route 16)					Total					
	from North					from Northeast					from East					from West										
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total						
5:30 PM	36	0	0	0	36	5	54	0	0	59	1	45	57	0	103	97	80	1	0	178	376					
5:45 PM	30	0	0	0	30	8	64	0	0	72	2	45	51	0	98	101	75	0	0	176	376					
Total	133	0	0	0	133	36	236	0	0	272	4	172	199	0	375	355	280	3	0	638	1418					
6:00 PM	36	1	0	0	37	9	68	0	0	77	3	42	51	0	96	120	73	1	0	194	404					
6:15 PM	26	0	0	0	26	8	56	0	0	64	0	52	57	0	109	90	59	0	0	149	348					
6:30 PM	24	0	0	0	24	4	67	0	0	71	0	40	49	0	89	87	62	0	0	149	333					
6:45 PM	21	0	0	0	21	2	40	0	0	42	2	51	59	0	112	69	45	0	0	114	289					
Total	107	1	0	0	108	23	231	0	0	254	5	185	216	0	406	366	239	1	0	606	1374					
7:00 PM	26	0	0	0	26	9	47	0	0	56	0	34	48	0	82	51	49	0	0	100	264					
7:15 PM	33	0	0	0	33	3	27	0	0	30	0	35	37	0	72	58	49	2	0	109	244					
7:30 PM	20	0	0	0	20	4	31	0	0	35	1	27	41	0	69	44	36	0	0	80	204					
7:45 PM	20	0	0	0	20	1	30	0	0	31	2	20	27	0	49	28	29	0	0	57	157					
Total	99	0	0	0	99	17	135	0	0	152	3	116	153	0	272	181	163	2	0	346	869					
Grand Total	1546	5	1	0	1552	287	2365	3	0	2655	39	1818	2408	0	4265	3891	2861	24	2	6778	15250					
Approach %	99.6	0.3	0.1	0.0		10.8	89.1	0.1	0.0		0.9	42.6	56.5	0.0		57.4	42.2	0.4	0.0							
Total %	10.1	0.0	0.0	0.0	10.2	1.9	15.5	0.0	0.0	17.4	0.3	11.9	15.8	0.0	28.0	25.5	18.8	0.2	0.0	44.4						
Exiting Leg Total						2129					2901					3899					6321					15250

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

7:45 AM	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street (Route 16)					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
7:45 AM	41	0	0	0	41	12	45	0	0	57	1	33	50	0	84	129	42	0	0	171	353
8:00 AM	39	1	0	0	40	10	39	0	0	49	0	24	53	0	77	85	74	0	0	159	325
8:15 AM	33	0	0	0	33	2	26	0	0	28	0	36	28	0	64	104	62	1	0	167	292
8:30 AM	42	0	0	0	42	7	55	0	0	62	1	30	32	0	63	109	64	0	0	173	340
Total Volume	155	1	0	0	156	31	165	0	0	196	2	123	163	0	288	427	242	1	0	670	1310
% Approach Total	99.4	0.6	0.0	0.0		15.8	84.2	0.0	0.0		0.7	42.7	56.6	0.0		63.7	36.1	0.1	0.0		
PHF	0.923	0.250	0.000	0.000	0.929	0.646	0.750	0.000	0.000	0.790	0.500	0.854	0.769	0.000	0.857	0.828	0.818	0.250	0.000	0.968	0.928
Entering Leg	155	1	0	0	156	31	165	0	0	196	2	123	163	0	288	427	242	1	0	670	1310
Exiting Leg						155					244					428					483
Total	311					440					716					1153					2620

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

1:45 PM	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street (Route 16)					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
1:45 PM	22	0	0	0	22	5	46	0	0	51	2	29	65	0	96	53	55	0	0	108	277
2:00 PM	29	0	0	0	29	5	41	0	0	46	0	40	55	0	95	74	39	1	0	114	284
2:15 PM	36	0	0	0	36	4	56	0	0	60	0	30	42	0	72	87	50	0	0	137	305
2:30 PM	41	0	0	0	41	12	62	0	0	74	3	31	49	0	83	71	46	0	0	117	315
Total Volume	128	0	0	0	128	26	205	0	0	231	5	130	211	0	346	285	190	1	0	476	1181
% Approach Total	100.0	0.0	0.0	0.0		11.3	88.7	0.0	0.0		1.4	37.6	61.0	0.0		59.9	39.9	0.2	0.0		
PHF	0.780	0.000	0.000	0.000	0.780	0.542	0.827	0.000	0.000	0.780	0.417	0.813	0.812	0.000	0.901	0.819	0.864	0.250	0.000	0.869	0.937
Entering Leg	128	0	0	0	128	26	205	0	0	231	5	130	211	0	346	285	190	1	0	476	1181
Exiting Leg						157					285					544					1181
Total	285					426					631					1020					2362

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

5:30 PM	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street (Route 16)					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
5:30 PM	36	0	0	0	36	5	54	0	0	59	1	45	57	0	103	97	80	1	0	178	376
5:45 PM	30	0	0	0	30	8	64	0	0	72	2	45	51	0	98	101	75	0	0	176	376
6:00 PM	36	1	0	0	37	9	68	0	0	77	3	42	51	0	96	120	73	1	0	194	404
6:15 PM	26	0	0	0	26	8	56	0	0	64	0	52	57	0	109	90	59	0	0	149	348

PDI File #: **218212 B**

Location: **N: Waltham Street NE: Watertown Street (Route 16)**

Location: **E: Washington Street W: Washington Street (Route 16)**

City, State: **West Newton, MA**

Client: **BETA/J. Centracchio**

Site Code: **5472-14**

Count Date: **Tuesday, October 19, 2021**

Start Time: **6:00 AM**

End Time: **8:00 PM**

Class:

404 pages- see electronic file on website



**PRECISION
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INDUSTRIES, LLC**

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street (Route 16)					Total	
	from North					from Northeast					from East					from West						
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total		
Total Volume	128	1	0	0	129	30	242	0	0	272	6	184	216	0	406	408	287	2	0	697	1504	
% Approach Total	99.2	0.8	0.0	0.0		11.0	89.0	0.0	0.0		1.5	45.3	53.2	0.0		58.5	41.2	0.3	0.0			
PHF	0.889	0.250	0.000	0.000	0.872	0.833	0.890	0.000	0.000	0.883	0.500	0.885	0.947	0.000	0.931	0.850	0.897	0.500	0.000	0.898	0.931	
Entering Leg	128	1	0	0	129	30	242	0	0	272	6	184	216	0	406	408	287	2	0	697	1504	
Exiting Leg					216					293					409						586	1504
Total					345					565					815						1283	3008

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

Table with columns for Street (Waltham, Watertown, Washington), Direction (from North, Northeast, East, West), and various vehicle movement categories (Right, Left, Hard Left, U-Turn, Total). Rows represent time intervals from 6:00 AM to 5:15 PM.

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

Table with columns for Street (Waltham, Watertown, Washington), Direction (from North, Northeast, East, West), and Movement (Right, Left, Hard Left, U-Turn, Total). Rows include time intervals (5:30 PM to 7:45 PM), Grand Total, and Exit Leg Total.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table with columns for Street (Waltham, Watertown, Washington), Direction (from North, Northeast, East, West), and Movement (Right, Left, Hard Left, U-Turn, Total). Rows include time intervals (6:45 AM to 7:30 AM), Total Volume, PHF, and Exit Leg Total.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table with columns for Street (Waltham, Watertown, Washington), Direction (from North, Northeast, East, West), and Movement (Right, Left, Hard Left, U-Turn, Total). Row includes time interval (12:00 PM).

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

Table with columns for Waltham Street, Watertown Street (Route 16), Washington Street, and Washington Street (Route 16). Rows include time intervals (12:00 PM to 12:45 PM), Total Volume, % Approach Total, PHF, and vehicle types (Buses, Single-Unit Trucks, Articulated Trucks).

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table with columns for Waltham Street, Watertown Street (Route 16), Washington Street, and Washington Street (Route 16). Rows include time intervals (2:00 PM to 2:45 PM), Total Volume, % Approach Total, PHF, and vehicle types (Buses, Single-Unit Trucks, Articulated Trucks).

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Buses

Table with columns for Street (Waltham, Watertown, Washington) and direction (from North, Northeast, East, West). Rows list times from 6:00 AM to 5:15 PM with counts for various bus types (Right, Left, Hard Left, U-Turn, Total) and a final Total column.

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Buses

Table with columns for Street (Waltham, Watertown, Washington), Direction (from North, Northeast, East, West), and Movement (Right, Left, Hard Left, U-Turn, Total). Rows include time slots from 5:30 PM to 7:45 PM, Grand Total, and Approach %.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table for AM Peak Hour Analysis with columns for Street, Direction, and Movement. Rows include time slots from 7:15 AM to 8:00 AM, Total Volume, PHF, and Entering/Exiting Leg.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table for MidDay Peak Hour Analysis with columns for Street, Direction, and Movement. Rows include time slots from 1:45 PM to 2:30 PM, Total Volume, PHF, and Entering/Exiting Leg.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table for PM Peak Hour Analysis with columns for Street, Direction, and Movement. Rows include time slots from 5:15 PM to 5:45 PM, Total Volume, PHF, and Entering/Exiting Leg.

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Buses

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street (Route 16)					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	0	0	0	3	4
Total Volume	1	0	0	0	1	0	0	0	0	0	0	0	4	0	4	6	0	0	0	6	11
% Approach Total	100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0		100.0	0.0	0.0	0.0		
PHF	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.500	0.000	0.000	0.000	0.500	0.688
Entering Leg	1	0	0	0	1	0	0	0	0	0	0	0	4	0	4	6	0	0	0	6	11
Exiting Leg					0					0				6						5	11
Total					1					0				10					11	22	

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

Table with columns for Street (Waltham Street, Watertown Street (Route 16), Washington Street, Washington Street (Route 16)), direction (from North, from Northeast, from East, from West), and movement (Right, Left, Hard Left, U-Turn, Total). Rows represent time intervals from 6:00 AM to 5:15 PM.

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

Table with columns for Street (Waltham, Watertown, Washington), Direction (from North, Northeast, East, West), and Movement (Right, Left, Hard Left, U-Turn, Total). Rows include time intervals (5:30 PM to 7:45 PM) and Grand Total.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table for AM Peak Hour Analysis (6:45 AM) with columns for Street, Direction, and Movement. Rows include time intervals (6:45 AM to 7:30 AM) and Total Volume.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table for MidDay Peak Hour Analysis (10:45 AM) with columns for Street, Direction, and Movement. Rows include time intervals (10:45 AM to 11:30 AM) and Total Volume.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table for PM Peak Hour Analysis (2:15 PM) with columns for Street, Direction, and Movement. Rows include time intervals (2:15 PM to 2:45 PM).

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street (Route 16)					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
3:00 PM	1	0	0	0	1	1	0	0	0	1	0	0	1	0	1	0	4	0	0	4	7
Total Volume	5	0	0	0	5	1	4	0	0	5	0	0	5	0	5	4	10	0	0	14	29
% Approach Total	100.0	0.0	0.0	0.0		20.0	80.0	0.0	0.0		0.0	0.0	100.0	0.0		28.6	71.4	0.0	0.0		
PHF	0.625	0.000	0.000	0.000	0.625	0.250	0.500	0.000	0.000	0.625	0.000	0.000	0.625	0.000	0.625	0.500	0.625	0.000	0.000	0.875	0.906
Entering Leg	5	0	0	0	5	1	4	0	0	5	0	0	5	0	5	4	10	0	0	14	29
Exiting Leg					1					10			4		4					14	29
Total					6					15			9		9					28	58

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

Table with columns for Street (Waltham, Watertown, Washington), Direction (from North, Northeast, East, West), and various truck movement categories (Right, Left, Hard Left, U-Turn, Total). Rows represent time intervals from 6:00 AM to 5:15 PM.

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

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PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

Table with columns for Street (Waltham, Watertown, Washington), Direction (from North, Northeast, East, West), and Movement (Right, Left, Hard Left, U-Turn, Total). Rows include time intervals (5:30 PM to 7:45 PM), Grand Total, Approach %, Total %, and Exiting Leg Total.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table for AM Peak Hour Analysis with columns for Street, Direction, and Movement. Rows include time intervals (9:15 AM to 10:00 AM), Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table for MidDay Peak Hour Analysis with columns for Street, Direction, and Movement. Rows include time intervals (12:00 PM to 12:45 PM), Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table for PM Peak Hour Analysis with columns for Street, Direction, and Movement. Rows include time intervals (2:00 PM to 2:30 PM).

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

	Waltham Street					Watertown Street (Route 16)					Washington Street					Washington Street (Route 16)					Total
	from North					from Northeast					from East					from West					
	Right	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Hard Left	U-Turn	Total	Hard Right	Right	Thru	U-Turn	Total	Thru	Bear Left	Left	U-Turn	Total	
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total Volume	1	0	0	0	1	0	1	0	0	1	0	1	2	0	3	1	2	0	0	3	8
% Approach Total	100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	33.3	66.7	0.0		33.3	66.7	0.0	0.0		
PHF	0.250	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.250	0.000	0.250	0.500	0.000	0.375	0.250	0.500	0.000	0.000	0.750	0.667
Entering Leg	1	0	0	0	1	0	1	0	0	1	0	1	2	0	3	1	2	0	0	3	8
Exiting Leg					1					2					1					4	8
Total					2					3					4					7	16

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

Table with columns for Street (Waltham, Watertown, Washington), Direction (from North, Northeast, East, West), and Movement (Right, Left, Hard Left, U-Turn, CW-EB, CW-WB, Total). Rows represent time intervals from 6:00 AM to 5:15 PM.

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

Table with columns for Street (Waltham, Watertown, Washington), Direction (from North, Northeast, East, West), and various movement types (Right, Left, Hard Left, U-Turn, CW-EB, CW-WB, Total). Rows include time intervals (5:30 PM to 7:45 PM), Grand Total, Approach %, Total %, and Exiting Leg Total.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table for AM Peak Hour Analysis with columns for Street, Direction, and movement types. Rows include time intervals (8:00 AM to 8:45 AM), Total Volume, % Approach Total, PHF, and Exiting/Entering Leg.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table for MidDay Peak Hour Analysis with columns for Street, Direction, and movement types. Rows include time intervals (1:45 PM to 2:30 PM), Total Volume, % Approach Total, PHF, and Exiting/Entering Leg.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table for PM Peak Hour Analysis with columns for Street, Direction, and movement types. Rows include time intervals (5:45 PM to 6:15 PM), Total Volume, % Approach Total, PHF, and Exiting/Entering Leg.

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



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INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	Waltham Street							Watertown Street (Route 16)							Washington Street							Washington Street (Route 16)							Total		
	from North							from Northeast							from East							from West									
	Right	Left	Hard Left	U-Turn	CW-EB	CW-WB	Total	Hard Right	Bear Right	Hard Left	U-Turn	CW-SEB	CW-NWB	Total	Hard Right	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Bear Left	Left	U-Turn	CW-NB	CW-SB	Total			
6:30 PM	0	0	0	0	1	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	1	4
Total Volume	0	0	0	0	1	1	2	0	1	1	0	2	2	6	0	0	2	0	0	2	4	0	1	1	0	2	0	4	16		
% Approach Total	0.0	0.0	0.0	0.0	50.0	50.0		0.0	16.7	16.7	0.0	33.3	33.3		0.0	0.0	50.0	0.0	0.0	50.0		0.0	25.0	25.0	0.0	50.0	0.0				
PHF	0.000	0.000	0.000	0.000	0.250	0.250	0.500	0.000	0.250	0.250	0.000	0.500	0.500	0.750	0.000	0.000	0.500	0.000	0.000	0.500	0.500	0.000	0.250	0.250	0.000	0.500	0.000	0.500	0.800		
Entering Leg	0	0	0	0	1	1	2	0	1	1	0	2	2	6	0	0	2	0	0	2	4	0	1	1	0	2	0	4	16		
Exiting Leg							3							5							3							5	16		
Total							5							11							7							9	32		

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

Table with columns for Street (Waltham Street, Watertown Street (Route 16), Washington Street, Washington Street (Route 16)), direction (from North, from Northeast, from East, from West), movement (Right, Left, Hard Left, U-Turn, CW-EB, CW-WB, Total), and time intervals (6:00 AM to 5:15 PM). Includes a 'Total' column for each time interval.

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

Table with columns for Street (Waltham, Watertown, Washington), Direction (from North, Northeast, East, West), and various movement types (Right, Left, Hard Left, U-Turn, CW-EB, CW-WB, Total). Rows include time intervals from 5:30 PM to 7:45 PM, Grand Total, and Exiting Leg Total.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table with columns for Street (Waltham, Watertown, Washington), Direction (from North, Northeast, East, West), and various movement types. Rows include time intervals from 9:45 AM to 10:30 AM, Total Volume, % Approach Total, PHF, and Entering/Exiting Leg Totals.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table with columns for Street (Waltham, Watertown, Washington), Direction (from North, Northeast, East, West), and various movement types. Rows include time intervals from 11:30 AM to 12:15 PM, Total Volume, % Approach Total, PHF, and Entering/Exiting Leg Totals.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table with columns for Street (Waltham, Watertown, Washington), Direction (from North, Northeast, East, West), and various movement types. Rows include time intervals from 3:15 PM to 3:45 PM, Total Volume, % Approach Total, PHF, and Entering/Exiting Leg Totals.

PDI File #: 218212 B

Location: N: Waltham Street NE: Watertown Street (Route 16)

Location: E: Washington Street W: Washington Street (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Waltham Street							Watertown Street (Route 16)							Washington Street							Washington Street (Route 16)							Total
	from North							from Northeast							from East							from West							
	Right	Left	Hard Left	U-Turn	CW-EB	CW-WB	Total	Hard Right	Bear Right	Hard Left	U-Turn	CW-SEB	CW-NWB	Total	Hard Right	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Bear Left	Left	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	0	0	0	0	5	5	0	0	0	0	2	0	2	0	0	0	0	1	0	1	0	0	0	0	3	3	6	14
Total Volume	0	0	0	0	17	21	38	0	0	0	0	8	8	16	0	0	0	0	4	3	7	0	0	0	0	16	16	32	93
% Approach Total	0.0	0.0	0.0	0.0	44.7	55.3		0.0	0.0	0.0	0.0	50.0	50.0		0.0	0.0	0.0	0.0	57.1	42.9		0.0	0.0	0.0	0.0	50.0	50.0		
PHF	0.000	0.000	0.000	0.000	0.607	0.525	0.559	0.000	0.000	0.000	0.000	0.500	0.400	0.444	0.000	0.000	0.000	0.000	0.500	0.250	0.350	0.000	0.000	0.000	0.000	0.667	0.444	0.615	0.596
Entering Leg	0	0	0	0	17	21	38	0	0	0	0	8	8	16	0	0	0	0	4	3	7	0	0	0	0	16	16	32	93
Exiting Leg							38							16							7							32	93
Total							76							32							14							64	186

PDI File #: 218212 C

Location: S: Highland Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

Table with columns for Washington Street (Route 16) from East, Highland Street from South, and Washington Street (Route 16) from West. Rows include time intervals from 6:00 AM to 5:15 PM and total counts for each direction.

PDI File #: 218212 C

Location: S: Highland Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

Table with columns for Washington Street (Route 16) from East, Highland Street from South, and Washington Street (Route 16) from West. Rows include time intervals (e.g., 5:30 PM, 6:00 PM) and summary rows (Grand Total, Approach %, Total %).

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table for AM Peak Hour Analysis starting at 7:45 AM. Columns include Washington Street (Route 16) from East, Highland Street from South, and Washington Street (Route 16) from West. Rows include time intervals (7:45 AM, 8:00 AM, 8:15 AM, 8:30 AM) and summary rows (Total Volume, % Approach Total, PHF, Cars, Heavy Vehicles).

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table for MidDay Peak Hour Analysis starting at 1:45 PM. Columns include Washington Street (Route 16) from East, Highland Street from South, and Washington Street (Route 16) from West. Rows include time intervals (1:45 PM, 2:00 PM, 2:15 PM, 2:30 PM) and summary rows (Total Volume, % Approach Total, PHF, Cars).

PDI File #: **218212 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**
 Class:

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 INDUSTRIES, LLC
 157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
Cars %	96.6	98.7	100.0	96.9	96.4	95.8	0.0	95.9	96.8	95.7	0.0	96.0	96.3
Heavy Vehicles	16	1	0	17	1	5	0	6	4	20	0	24	47
Heavy Vehicles %	3.4	1.3	0.0	3.1	3.6	4.2	0.0	4.1	3.2	4.3	0.0	4.0	3.7
Cars Enter Leg	449	76	1	526	27	113	0	140	122	449	0	571	1237
Heavy Enter Leg	16	1	0	17	1	5	0	6	4	20	0	24	47
Total Entering Leg	465	77	1	543	28	118	0	146	126	469	0	595	1284
Cars Exiting Leg				477				198				562	1237
Heavy Exiting Leg				21				5				21	47
Total Exiting Leg				498				203				583	1284

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

5:15 PM	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
5:15 PM	140	28	0	168	8	48	0	56	53	151	0	204	428
5:30 PM	127	21	0	148	7	67	0	74	59	170	0	229	451
5:45 PM	147	26	0	173	13	41	0	54	35	172	0	207	434
6:00 PM	125	22	1	148	8	56	0	64	29	163	0	192	404
Total Volume	539	97	1	637	36	212	0	248	176	656	0	832	1717
% Approach Total	84.6	15.2	0.2		14.5	85.5	0.0		21.2	78.8	0.0		
PHF	0.917	0.866	0.250	0.921	0.692	0.791	0.000	0.838	0.746	0.953	0.000	0.908	0.952
Cars	522	96	1	619	36	210	0	246	176	643	0	819	1684
Cars %	96.8	99.0	100.0	97.2	100.0	99.1	0.0	99.2	100.0	98.0	0.0	98.4	98.1
Heavy Vehicles	17	1	0	18	0	2	0	2	0	13	0	13	33
Heavy Vehicles %	3.2	1.0	0.0	2.8	0.0	0.9	0.0	0.8	0.0	2.0	0.0	1.6	1.9
Cars Enter Leg	522	96	1	619	36	210	0	246	176	643	0	819	1684
Heavy Enter Leg	17	1	0	18	0	2	0	2	0	13	0	13	33
Total Entering Leg	539	97	1	637	36	212	0	248	176	656	0	832	1717
Cars Exiting Leg				680				272				732	1684
Heavy Exiting Leg				13				1				19	33
Total Exiting Leg				693				273				751	1717

PDI File #: 218212 C

Location: S: Highland Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars

Table with columns for Street (Washington Street, Highland Street), Direction (from East, from South, from West), and Time intervals (6:00 AM to 5:15 PM). Rows show counts for Thru, Left, U-Turn, Right, and Total for each direction and time slot.

PDI File #: 218212 C

Location: S: Highland Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

Cars

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Table with columns for Washington Street (Route 16) from East, Highland Street from South, and Washington Street (Route 16) from West. Rows include time intervals (5:30 PM to 7:45 PM), Grand Total, Approach %, Total %, and Exiting Leg Total.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table for AM Peak Hour Analysis starting at 7:45 AM. Columns include Washington Street (Route 16) from East, Highland Street from South, and Washington Street (Route 16) from West. Rows include time intervals (7:45 AM to 8:30 AM), Total Volume, % Approach Total, PHF, and Exiting Leg Total.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table for MidDay Peak Hour Analysis starting at 1:45 PM. Columns include Washington Street (Route 16) from East, Highland Street from South, and Washington Street (Route 16) from West. Rows include time intervals (1:45 PM to 2:30 PM), Total Volume, % Approach Total, PHF, and Exiting Leg Total.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table for PM Peak Hour Analysis starting at 5:15 PM. Columns include Washington Street (Route 16) from East, Highland Street from South, and Washington Street (Route 16) from West. Rows include time intervals (5:15 PM to 6:00 PM), Total Volume, % Approach Total, PHF, and Exiting Leg Total.

PDI File #: **218212 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**

404 pages- see electronic file on website



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INDUSTRIES, LLC**

157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Class:

Cars

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
Total Volume	522	96	1	619	36	210	0	246	176	643	0	819	1684
% Approach Total	84.3	15.5	0.2		14.6	85.4	0.0		21.5	78.5	0.0		
PHF	0.939	0.889	0.250	0.938	0.692	0.795	0.000	0.842	0.746	0.946	0.000	0.902	0.946
Entering Leg	522	96	1	619	36	210	0	246	176	643	0	819	1684
Exiting Leg				680				272				732	1684
Total				1299				518				1551	3368

PDI File #: 218212 C

Location: S: Highland Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

Table with columns for Washington Street (Route 16) from East, Highland Street from South, and Washington Street (Route 16) from West. Rows include time intervals from 6:00 AM to 5:15 PM and total counts for each direction.

PDI File #: 218212 C

Location: S: Highland Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

Table with columns for Washington Street (Route 16) from East, Highland Street from South, and Washington Street (Route 16) from West. Rows include time intervals (5:30 PM to 7:45 PM), Grand Total, Approach %, Total %, and vehicle types (Buses, Single-Unit Trucks, Articulated Trucks).

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table for AM Peak Hour Analysis with columns for Washington Street (Route 16) from East, Highland Street from South, and Washington Street (Route 16) from West. Rows include time intervals (7:15 AM to 8:00 AM), Total Volume, % Approach Total, PHF, and vehicle types.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table for MidDay Peak Hour Analysis with columns for Washington Street (Route 16) from East, Highland Street from South, and Washington Street (Route 16) from West. Rows include time interval (10:45 AM) and vehicle types.

PDI File #: **218212 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**
 Class:

404 pages- see electronic file on website



Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
10:45 AM	9	1	0	10	0	2	0	2	0	10	0	10	22
11:00 AM	7	1	0	8	0	0	0	0	0	8	0	8	16
11:15 AM	6	0	0	6	0	0	0	0	0	6	0	6	12
11:30 AM	10	0	0	10	0	0	0	0	2	2	0	4	14
Total Volume	32	2	0	34	0	2	0	2	2	26	0	28	64
% Approach Total	94.1	5.9	0.0		0.0	100.0	0.0		7.1	92.9	0.0		
PHF	0.800	0.500	0.000	0.850	0.000	0.250	0.000	0.250	0.250	0.650	0.000	0.700	0.727
Buses	2	0	0	2	0	0	0	0	0	1	0	1	3
Buses %	6.3	0.0	0.0	5.9	0.0	0.0	0.0	0.0	0.0	3.8	0.0	3.6	4.7
Single-Unit Trucks	23	2	0	25	0	2	0	2	2	22	0	24	51
Single-Unit %	71.9	100.0	0.0	73.5	0.0	100.0	0.0	100.0	100.0	84.6	0.0	85.7	79.7
Articulated Trucks	7	0	0	7	0	0	0	0	0	3	0	3	10
Articulated %	21.9	0.0	0.0	20.6	0.0	0.0	0.0	0.0	0.0	11.5	0.0	10.7	15.6
Buses	2	0	0	2	0	0	0	0	0	1	0	1	3
Single-Unit Trucks	23	2	0	25	0	2	0	2	2	22	0	24	51
Articulated Trucks	7	0	0	7	0	0	0	0	0	3	0	3	10
Total Entering Leg	32	2	0	34	0	2	0	2	2	26	0	28	64
Buses				1				0				2	3
Single-Unit Trucks				22				4				25	51
Articulated Trucks				3				0				7	10
Total Exiting Leg				26				4				34	64

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

2:00 PM	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
2:00 PM	6	0	0	6	0	1	0	1	1	1	0	2	9
2:15 PM	3	0	0	3	0	1	0	1	0	9	0	9	13
2:30 PM	6	1	0	7	1	2	0	3	3	5	0	8	18
2:45 PM	7	0	0	7	0	2	0	2	0	3	0	3	12
Total Volume	22	1	0	23	1	6	0	7	4	18	0	22	52
% Approach Total	95.7	4.3	0.0		14.3	85.7	0.0		18.2	81.8	0.0		
PHF	0.786	0.250	0.000	0.821	0.250	0.750	0.000	0.583	0.333	0.500	0.000	0.611	0.722
Buses	2	1	0	3	0	0	0	0	2	5	0	7	10
Buses %	9.1	100.0	0.0	13.0	0.0	0.0	0.0	0.0	50.0	27.8	0.0	31.8	19.2
Single-Unit Trucks	18	0	0	18	0	6	0	6	2	11	0	13	37
Single-Unit %	81.8	0.0	0.0	78.3	0.0	100.0	0.0	85.7	50.0	61.1	0.0	59.1	71.2
Articulated Trucks	2	0	0	2	1	0	0	1	0	2	0	2	5
Articulated %	9.1	0.0	0.0	8.7	100.0	0.0	0.0	14.3	0.0	11.1	0.0	9.1	9.6
Buses	2	1	0	3	0	0	0	0	2	5	0	7	10
Single-Unit Trucks	18	0	0	18	0	6	0	6	2	11	0	13	37
Articulated Trucks	2	0	0	2	1	0	0	1	0	2	0	2	5
Total Entering Leg	22	1	0	23	1	6	0	7	4	18	0	22	52
Buses				5				3				2	10
Single-Unit Trucks				11				2				24	37
Articulated Trucks				3				0				2	5
Total Exiting Leg				19				5				28	52

PDI File #: 218212 C

Location: S: Highland Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Buses

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	3	0	0	3	0	0	0	0	0	1	0	1	4
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	4	0	0	4	0	0	0	0	0	1	0	1	5
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
7:15 AM	2	0	0	2	0	0	0	0	0	2	0	2	4
7:30 AM	2	0	0	2	0	0	0	0	0	2	0	2	4
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	4	0	0	4	0	0	0	0	0	5	0	5	9
8:00 AM	3	0	0	3	0	0	0	0	0	1	0	1	4
8:15 AM	0	0	0	0	0	0	0	0	0	2	0	2	2
8:30 AM	0	0	0	0	0	0	0	0	0	2	0	2	2
8:45 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total	4	0	0	4	0	0	0	0	0	6	0	6	10
9:00 AM	0	0	0	0	0	0	0	0	0	1	1	2	2
9:15 AM	4	1	0	5	0	0	0	0	0	0	0	0	5
9:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
9:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	5	1	0	6	0	0	0	0	0	2	1	3	9
10:00 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0	0	2	0	2	3
11:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
11:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
11:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	3	0	0	3	0	0	0	0	0	1	0	1	4
12:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
12:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
12:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	2	0	0	2	0	0	0	0	0	2	0	2	4
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
1:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	1	0	0	1	0	1	0	1	0	1	0	1	3
2:00 PM	1	0	0	1	0	0	0	0	0	1	1	2	3
2:15 PM	0	0	0	0	0	0	0	0	0	3	0	3	3
2:30 PM	0	1	0	1	0	0	0	0	0	1	1	2	3
2:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	2	1	0	3	0	0	0	0	0	5	0	5	10
3:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	2
3:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
3:30 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
3:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	2	0	0	2	0	0	0	0	0	4	0	4	6
4:00 PM	0	0	0	0	1	0	0	1	0	2	0	2	3
4:15 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
4:30 PM	1	1	0	2	0	0	0	0	0	1	0	1	3
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	3	1	0	4	1	0	0	1	0	4	0	4	9
5:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	2

PDI File #: 218212 C

Location: S: Highland Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Buses

Table with columns for Washington Street (Route 16) from East, Highland Street from South, and Washington Street (Route 16) from West. Rows include time intervals (5:30 PM to 7:45 PM), Grand Total, Approach %, Total %, and Exiting Leg Total.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table for AM Peak Hour Analysis starting at 7:15 AM. Columns include Washington Street (Route 16) from East, Highland Street from South, and Washington Street (Route 16) from West. Rows include time intervals (7:15 AM to 8:00 AM), Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table for MidDay Peak Hour Analysis starting at 1:45 PM. Columns include Washington Street (Route 16) from East, Highland Street from South, and Washington Street (Route 16) from West. Rows include time intervals (1:45 PM to 2:30 PM), Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table for PM Peak Hour Analysis starting at 5:15 PM. Columns include Washington Street (Route 16) from East, Highland Street from South, and Washington Street (Route 16) from West. Rows include time intervals (5:15 PM to 5:45 PM).

PDI File #: **218212 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**

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157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Class:

Buses

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:00 PM	1	0	0	1	0	0	0	0	0	3	0	3	4
Total Volume	5	0	0	5	0	0	0	0	0	6	0	6	11
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.625	0.000	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.688
Entering Leg	5	0	0	5	0	0	0	0	0	6	0	6	11
Exiting Leg				6				0				5	11
Total				11				0				11	22

PDI File #: 218212 C

Location: S: Highland Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

Table with columns for Washington Street (Route 16) from East, Highland Street from South, and Washington Street (Route 16) from West. Rows include time intervals from 6:00 AM to 5:15 PM and total counts for each direction.

PDI File #: 218212 C

Location: S: Highland Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

Table with columns for Washington Street (Route 16) from East, Highland Street from South, and Washington Street (Route 16) from West. Rows include time intervals (5:30 PM to 7:45 PM), Grand Total, Approach %, Total %, and Exiting Leg Total.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table for AM Peak Hour Analysis starting at 6:45 AM. Columns include Washington Street (Route 16) from East, Highland Street from South, and Washington Street (Route 16) from West. Rows include time intervals (6:45 AM to 7:30 AM), Total Volume, % Approach Total, PHF, and Exiting Leg Total.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table for MidDay Peak Hour Analysis starting at 10:45 AM. Columns include Washington Street (Route 16) from East, Highland Street from South, and Washington Street (Route 16) from West. Rows include time intervals (10:45 AM to 11:30 AM), Total Volume, % Approach Total, PHF, and Exiting Leg Total.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table for PM Peak Hour Analysis starting at 2:15 PM. Columns include Washington Street (Route 16) from East, Highland Street from South, and Washington Street (Route 16) from West. Rows include time intervals (2:15 PM to 2:45 PM) and Exiting Leg Total.

PDI File #: **218212 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**

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 INDUSTRIES, LLC**

157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Class:

Single-Unit Trucks

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:00 PM	2	1	0	3	1	0	0	1	1	2	0	3	7
Total Volume	15	1	0	16	1	5	0	6	3	13	0	16	38
% Approach Total	93.8	6.3	0.0		16.7	83.3	0.0		18.8	81.3	0.0		
PHF	0.625	0.250	0.000	0.667	0.250	0.625	0.000	0.750	0.375	0.650	0.000	0.667	0.731
Entering Leg	15	1	0	16	1	5	0	6	3	13	0	16	38
Exiting Leg				14				4				20	38
Total				30				10				36	76

PDI File #: 218212 C

Location: S: Highland Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

Table with columns for time intervals and movement directions (Thru, Left, U-Turn, Total) for Washington Street (Route 16) from East and West, and Highland Street from South. Includes a final Total column for each row.

PDI File #: **218212 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**

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Class:

Articulated Trucks

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	2	0	2	0	0	0	0	3
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	1
6:30 PM	0	0	0	0	0	1	0	1	0	2	0	2	3
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	1	0	1	0	2	0	2	4
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
7:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	2	0	0	2	0	0	0	0	0	0	0	0	2
Grand Total	37	9	0	46	1	14	0	15	10	47	0	57	118
Approach %	80.4	19.6	0.0		6.7	93.3	0.0		17.5	82.5	0.0		
Total %	31.4	7.6	0.0	39.0	0.8	11.9	0.0	12.7	8.5	39.8	0.0	48.3	
Exiting Leg Total	48				19				51				118

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	1	1	0	2	0	0	0	0	1	1	0	2	4
7:15 AM	0	4	0	4	0	0	0	0	1	1	0	2	6
7:30 AM	0	0	0	0	0	0	0	0	2	0	0	2	2
7:45 AM	0	1	0	1	0	1	0	1	1	5	0	6	8
Total Volume	1	6	0	7	0	1	0	1	5	7	0	12	20
% Approach Total	14.3	85.7	0.0		0.0	100.0	0.0		41.7	58.3	0.0		
PHF	0.250	0.375	0.000	0.438	0.000	0.250	0.000	0.250	0.625	0.350	0.000	0.500	0.625
Entering Leg	1	6	0	7	0	1	0	1	5	7	0	12	20
Exiting Leg	7				11				2				20
Total	14				12				14				40

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
10:00 AM	2	0	0	2	0	1	0	1	0	1	0	1	4
10:15 AM	0	0	0	0	0	1	0	1	0	2	0	2	3
10:30 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
10:45 AM	2	0	0	2	0	0	0	0	0	2	0	2	4
Total Volume	6	0	0	6	0	2	0	2	0	5	0	5	13
% Approach Total	100.0	0.0	0.0		0.0	100.0	0.0		0.0	100.0	0.0		
PHF	0.750	0.000	0.000	0.750	0.000	0.500	0.000	0.500	0.000	0.625	0.000	0.625	0.813
Entering Leg	6	0	0	6	0	2	0	2	0	5	0	5	13
Exiting Leg	5				0				8				13
Total	11				2				13				26

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	3	0	3	3
4:15 PM	1	1	0	2	0	0	0	0	0	1	0	1	3
4:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	1

PDI File #: **218212 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**

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PRECISION
D A T A
INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Articulated Trucks

	Washington Street (Route 16)				Highland Street				Washington Street (Route 16)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:45 PM	1	0	0	1	0	5	0	5	0	1	0	1	7
Total Volume	2	1	0	3	0	6	0	6	0	5	0	5	14
% Approach Total	66.7	33.3	0.0		0.0	100.0	0.0		0.0	100.0	0.0		
PHF	0.500	0.250	0.000	0.375	0.000	0.300	0.000	0.300	0.000	0.417	0.000	0.417	0.500
Entering Leg	2	1	0	3	0	6	0	6	0	5	0	5	14
Exiting Leg				5				1				8	14
Total				8				7				13	28

PDI File #: **218212 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**

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Bicycles (on Roadway and Crosswalks)

	Washington Street (Route 16)						Highland Street						Washington Street (Route 16)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
6:00 AM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	2
7:00 AM	1	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	1	0	0	0	0	1	1	1	0	0	1	3	0	2	0	0	0	0	6
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	1	1	1	0	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	2
Total	0	0	0	0	0	0	0	2	0	0	0	2	1	6	0	0	0	0	9
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1
9:30 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	2
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
11:00 AM	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	2
11:15 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	1	1	0	1	0	3	0	0	0	0	0	0	1	1	0	0	0	0	5
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
12:30 PM	2	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	3
12:45 PM	1	0	0	0	0	1	0	1	0	0	0	1	1	0	0	0	0	0	3
Total	3	0	0	0	0	3	0	1	0	1	0	2	1	1	0	0	0	0	7
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	2
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
2:30 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	4
2:45 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	2
Total	1	1	0	0	0	2	0	0	0	0	0	0	0	4	0	1	0	0	7
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
3:45 PM	1	0	0	2	0	3	0	1	0	0	0	1	0	3	0	0	0	0	7
Total	1	0	0	2	0	3	0	1	0	0	0	1	0	5	0	0	0	0	9
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2
4:15 PM	1	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	2
4:30 PM	1	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
Total	2	0	0	0	0	2	0	1	0	3	1	5	0	0	0	0	0	0	7
5:00 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

PDI File #: 218212 C
 Location: S: Highland Street
 Location: E: Washington St (Rt 16) W: Washington St (Rt 16)
 City, State: West Newton, MA
 Client: BETA/J. Centracchio
 Site Code: 5472-14
 Count Date: Tuesday, October 19, 2021
 Start Time: 6:00 AM
 End Time: 8:00 PM
 Class:

404 pages- see electronic file on website



Bicycles (on Roadway and Crosswalks)

	Washington Street (Route 16)						Highland Street						Washington Street (Route 16)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
5:30 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1
Total	3	0	0	1	0	4	0	0	0	0	0	0	1	0	0	0	0	0	5
6:00 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	2	0	0	0	0	2
6:15 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1
6:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	2	0	0	0	0	1	1	0	3	0	0	0	0	6
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
7:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	2
Grand Total	14	3	0	5	1	23	3	6	0	4	3	16	5	25	0	1	0	31	70
Approach %	60.9	13.0	0.0	21.7	4.3		18.8	37.5	0.0	25.0	18.8		16.1	80.6	0.0	3.2	0.0		
Total %	20.0	4.3	0.0	7.1	1.4	32.9	4.3	8.6	0.0	5.7	4.3	22.9	7.1	35.7	0.0	1.4	0.0	44.3	
Exiting Leg Total	34						15						21						70

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

	Washington Street (Route 16)						Highland Street						Washington Street (Route 16)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	1	1	1	0	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	2
Total Volume	0	0	0	0	0	0	0	2	0	0	0	2	1	6	0	0	0	0	9
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		14.3	85.7	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.500	0.250	0.750	0.000	0.000	0.000	0.875	0.750
Entering Leg	0	0	0	0	0	0	0	2	0	0	0	2	1	6	0	0	0	0	9
Exiting Leg	6						1						2						9
Total	6						3						9						18

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

	Washington Street (Route 16)						Highland Street						Washington Street (Route 16)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
12:30 PM	2	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	3
12:45 PM	1	0	0	0	0	1	0	1	0	0	0	1	1	0	0	0	0	0	3
Total Volume	3	0	0	0	0	3	0	1	0	1	0	2	1	1	0	0	0	0	7
% Approach Total	100.0	0.0	0.0	0.0	0.0		0.0	50.0	0.0	50.0	0.0		50.0	50.0	0.0	0.0	0.0		
PHF	0.375	0.000	0.000	0.000	0.000	0.375	0.000	0.250	0.000	0.250	0.000	0.500	0.250	0.250	0.000	0.000	0.000	0.500	0.583
Entering Leg	3	0	0	0	0	3	0	1	0	1	0	2	1	1	0	0	0	0	7
Exiting Leg	1						2						4						7
Total	4						4						6						14

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

	Washington Street (Route 16)						Highland Street						Washington Street (Route 16)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
3:45 PM	1	0	0	2	0	3	0	1	0	0	0	1	0	3	0	0	0	0	7
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2

PDI File #: **218212 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**
 Class:

404 pages- see electronic file on website



Bicycles (on Roadway and Crosswalks)

	Washington Street (Route 16)						Highland Street						Washington Street (Route 16)						Total	
	from East						from South						from West							
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total		
4:15 PM	1	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	2
Total Volume	2	0	0	2	0	4	0	1	0	3	0	4	0	5	0	0	0	5	13	
% Approach Total	50.0	0.0	0.0	50.0	0.0		0.0	25.0	0.0	75.0	0.0		0.0	100.0	0.0	0.0	0.0			
PHF	0.500	0.000	0.000	0.250	0.000	0.333	0.000	0.250	0.000	0.375	0.000	0.500	0.000	0.417	0.000	0.000	0.000	0.417	0.464	
Entering Leg	2	0	0	2	0	4	0	1	0	3	0	4	0	5	0	0	0	5	13	
Exiting Leg						7						3						3	13	
Total						11						7						8	26	

PDI File #: 218212 C
 Location: S: Highland Street
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 City, State: West Newton, MA
 Client: BETA/J. Centracchio
 Site Code: 5472-14
 Count Date: Tuesday, October 19, 2021
 Start Time: 6:00 AM
 End Time: 8:00 PM
 Class:

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Pedestrians

	Washington Street (Route 16)						Highland Street						Washington Street (Route 16)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
6:00 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	2	0	2	0	0	0	1	0	1	0	0	0	0	0	0	3
Total	0	0	0	2	1	3	0	0	0	1	0	1	0	0	0	0	0	0	4
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	1	0	1	0	0	0	0	1	1	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	1	1	0	0	0	1	1	2	0	0	0	0	0	0	3
Total	0	0	0	1	1	2	0	0	0	3	2	5	0	0	0	0	0	0	7
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	1	0	1	0	0	0	1	1	2	0	0	0	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
Total	0	0	0	1	0	1	0	0	0	1	3	4	0	0	0	0	0	0	5
9:00 AM	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	0	0	3
9:15 AM	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	0	0	2
9:30 AM	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
9:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
Total	0	0	0	1	3	4	0	0	0	1	3	4	0	0	0	0	0	0	8
10:00 AM	0	0	0	1	0	1	0	0	0	1	1	2	0	0	0	0	0	0	3
10:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
10:30 AM	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
10:45 AM	0	0	0	2	0	2	0	0	0	1	0	1	0	0	0	0	0	0	3
Total	0	0	0	4	1	5	0	0	0	2	2	4	0	0	0	0	0	0	9
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
11:45 AM	0	0	0	0	2	2	0	0	0	4	0	4	0	0	0	0	0	0	6
Total	0	0	0	2	2	4	0	0	0	4	0	4	0	0	0	0	0	0	8
12:00 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	1	1	4
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	2
Total	0	0	0	1	1	2	0	0	0	3	1	4	0	0	0	0	1	1	7
1:00 PM	0	0	0	2	0	2	0	0	0	1	3	4	0	0	0	0	0	0	6
1:15 PM	0	0	0	0	3	3	0	0	0	1	0	1	0	0	0	0	0	0	4
1:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	2	4	6	0	0	0	3	3	6	0	0	0	0	0	0	12
2:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
2:45 PM	0	0	0	2	1	3	0	0	0	1	0	1	0	0	0	1	0	1	5
Total	0	0	0	2	1	3	0	0	0	3	0	3	0	0	0	1	0	1	7
3:00 PM	0	0	0	1	4	5	0	0	0	0	0	0	0	0	0	1	0	1	6
3:15 PM	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	1	1	4
3:30 PM	0	0	0	0	2	2	0	0	0	0	1	1	0	0	0	0	0	0	3
3:45 PM	0	0	0	2	0	2	0	0	0	4	0	4	0	0	0	0	0	0	6
Total	0	0	0	3	7	10	0	0	0	4	3	7	0	0	0	1	1	2	19
4:00 PM	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	1	1	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	3
Total	0	0	0	0	1	1	0	0	0	4	3	7	0	0	0	0	1	1	9
5:00 PM	0	0	0	0	3	3	0	0	0	0	4	4	0	0	0	0	0	0	7
5:15 PM	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	0	0	2

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Pedestrians

	Washington Street (Route 16)						Highland Street						Washington Street (Route 16)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
5:30 PM	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	2
5:45 PM	0	0	0	1	0	1	0	0	0	1	4	5	0	0	0	1	0	1	7
Total	0	0	0	2	4	6	0	0	0	2	9	11	0	0	0	1	0	1	18
6:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
6:30 PM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2
6:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
Total	0	0	0	0	2	2	0	0	0	1	2	3	0	0	0	0	0	0	5
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	21	28	49	0	0	0	32	31	63	0	0	0	3	3	6	118
Approach %	0	0	0	42.857	57.143		0	0	0	50.794	49.206		0	0	0	50	50		
Total %	0	0	0	17.797	23.729	41.525	0	0	0	27.119	26.271	53.39	0	0	0	2.5424	2.5424	5.0847	
Exiting Leg Total	49						63						6						118

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

	Washington Street (Route 16)						Highland Street						Washington Street (Route 16)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
7:30 AM	0	0	0	1	0	1	0	0	0	0	1	1	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	1	1	0	0	0	1	1	2	0	0	0	0	0	0	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	1	0	1	0	0	0	1	1	2	0	0	0	0	0	0	3
Total Volume	0	0	0	2	1	3	0	0	0	2	3	5	0	0	0	0	0	0	8
% Approach Total	0.0	0.0	0.0	66.7	33.3		0.0	0.0	0.0	40.0	60.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.500	0.250	0.750	0.000	0.000	0.000	0.500	0.750	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.667
Entering Leg	0	0	0	2	1	3	0	0	0	2	3	5	0	0	0	0	0	0	8
Exiting Leg	3						5						0						8
Total	6						10						0						16

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

	Washington Street (Route 16)						Highland Street						Washington Street (Route 16)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
11:30 AM	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
11:45 AM	0	0	0	0	2	2	0	0	0	4	0	4	0	0	0	0	0	0	6
12:00 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	1	1	4
Total Volume	0	0	0	2	3	5	0	0	0	6	1	7	0	0	0	0	1	1	13
% Approach Total	0.0	0.0	0.0	40.0	60.0		0.0	0.0	0.0	85.7	14.3		0.0	0.0	0.0	0.0	100.0		
PHF	0.000	0.000	0.000	0.250	0.375	0.625	0.000	0.000	0.000	0.375	0.250	0.438	0.000	0.000	0.000	0.000	0.250	0.250	0.542
Entering Leg	0	0	0	2	3	5	0	0	0	6	1	7	0	0	0	0	1	1	13
Exiting Leg	5						7						1						13
Total	10						14						2						26

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

	Washington Street (Route 16)						Highland Street						Washington Street (Route 16)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
3:00 PM	0	0	0	1	4	5	0	0	0	0	0	0	0	0	0	0	1	0	1
3:15 PM	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0	1	1	4
3:30 PM	0	0	0	0	2	2	0	0	0	0	1	1	0	0	0	0	0	0	3

PDI File #: **218212 C**
 Location: **S: Highland Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**
 Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Washington Street (Route 16)						Highland Street						Washington Street (Route 16)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
3:45 PM	0	0	0	2	0	2	0	0	0	4	0	4	0	0	0	0	0	0	6
Total Volume	0	0	0	3	7	10	0	0	0	4	3	7	0	0	0	1	1	2	19
% Approach Total	0.0	0.0	0.0	30.0	70.0		0.0	0.0	0.0	57.1	42.9		0.0	0.0	0.0	50.0	50.0		
PHF	0.000	0.000	0.000	0.375	0.438	0.500	0.000	0.000	0.000	0.250	0.375	0.438	0.000	0.000	0.000	0.250	0.250	0.500	0.792
Entering Leg	0	0	0	3	7	10	0	0	0	4	3	7	0	0	0	1	1	2	19
Exiting Leg						10						7						2	19
Total						20						14						4	38

PDI File #: 218212 D

Location: N: Cherry Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

Table with columns for Cherry Street, Washington Street (Route 16) from North/East/West, and Total. Rows represent time intervals from 6:00 AM to 5:15 PM.

PDI File #: 218212 D

Location: N: Cherry Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

Table with columns for Cherry Street, Washington Street (Route 16) from North, East, and West, and various vehicle counts and percentages.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table showing AM Peak Hour Analysis with columns for Cherry Street, Washington Street (Route 16) from North, East, and West, and various vehicle counts and percentages.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table showing MidDay Peak Hour Analysis with columns for Cherry Street, Washington Street (Route 16) from North, East, and West, and various vehicle counts and percentages.

PDI File #: 218212 D

Location: N: Cherry Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

Table with columns for Cherry Street, Washington Street (Route 16) from North, East, and West, and rows for various vehicle types and legs.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table showing PM Peak Hour Analysis with columns for Cherry Street, Washington Street (Route 16) from North, East, and West, and rows for time intervals (5:15 PM to 6:00 PM) and summary statistics like PHF and Total Volume.

PDI File #: 218212 D

Location: N: Cherry Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars

	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
6:00 AM	8	8	0	16	9	29	0	38	40	9	0	49	103
6:15 AM	17	17	0	34	6	39	0	45	42	13	0	55	134
6:30 AM	23	35	0	58	6	58	0	64	56	17	0	73	195
6:45 AM	19	61	0	80	13	55	0	68	66	20	0	86	234
Total	67	121	0	188	34	181	0	215	204	59	0	263	666
7:00 AM	13	50	0	63	11	53	0	64	65	14	0	79	206
7:15 AM	20	82	0	102	14	75	0	89	101	25	0	126	317
7:30 AM	18	102	0	120	27	79	0	106	116	31	0	147	373
7:45 AM	15	106	0	121	24	113	0	137	131	33	0	164	422
Total	66	340	0	406	76	320	0	396	413	103	0	516	1318
8:00 AM	11	86	0	97	37	93	0	130	111	9	0	120	347
8:15 AM	14	115	0	129	24	76	0	100	130	20	0	150	379
8:30 AM	15	121	0	136	40	97	0	137	101	17	0	118	391
8:45 AM	9	79	0	88	36	99	0	135	135	20	0	155	378
Total	49	401	0	450	137	365	0	502	477	66	0	543	1495
9:00 AM	13	57	0	70	39	72	0	111	102	33	0	135	316
9:15 AM	13	47	0	60	24	90	0	114	94	33	0	127	301
9:30 AM	15	50	0	65	23	79	0	102	92	24	0	116	283
9:45 AM	12	48	0	60	16	63	0	79	109	25	0	134	273
Total	53	202	0	255	102	304	0	406	397	115	0	512	1173
10:00 AM	9	35	0	44	22	74	0	96	98	25	0	123	263
10:15 AM	8	35	0	43	26	89	0	115	73	22	0	95	253
10:30 AM	18	41	0	59	21	74	0	95	76	20	0	96	250
10:45 AM	13	35	0	48	27	83	0	110	85	21	0	106	264
Total	48	146	0	194	96	320	0	416	332	88	0	420	1030
11:00 AM	7	46	0	53	18	88	0	106	70	13	0	83	242
11:15 AM	18	38	0	56	18	80	0	98	89	17	0	106	260
11:30 AM	15	25	0	40	28	66	0	94	82	23	0	105	239
11:45 AM	15	45	0	60	23	82	0	105	79	20	0	99	264
Total	55	154	0	209	87	316	0	403	320	73	0	393	1005
12:00 PM	14	48	0	62	33	93	0	126	87	24	0	111	299
12:15 PM	20	53	0	73	37	98	0	135	80	34	1	115	323
12:30 PM	16	42	0	58	28	101	0	129	75	21	0	96	283
12:45 PM	19	44	0	63	39	76	0	115	86	27	0	113	291
Total	69	187	0	256	137	368	0	505	328	106	1	435	1196
1:00 PM	15	64	0	79	28	78	0	106	79	19	1	99	284
1:15 PM	14	39	0	53	33	79	0	112	86	26	0	112	277
1:30 PM	23	44	0	67	30	92	0	122	77	30	0	107	296
1:45 PM	17	50	0	67	34	101	0	135	87	29	0	116	318
Total	69	197	0	266	125	350	0	475	329	104	1	434	1175
2:00 PM	24	47	0	71	17	112	0	129	92	14	0	106	306
2:15 PM	18	54	0	72	31	115	0	146	93	35	0	128	346
2:30 PM	36	75	0	111	54	100	0	154	75	28	0	103	368
2:45 PM	18	49	0	67	52	125	0	177	79	19	0	98	342
Total	96	225	0	321	154	452	0	606	339	96	0	435	1362
3:00 PM	23	63	0	86	48	111	0	159	83	42	0	125	370
3:15 PM	24	55	0	79	43	105	0	148	97	29	0	126	353
3:30 PM	24	81	0	105	49	97	0	146	103	33	0	136	387
3:45 PM	19	51	0	70	45	133	0	178	86	34	0	120	368
Total	90	250	0	340	185	446	0	631	369	138	0	507	1478
4:00 PM	16	54	0	70	37	111	1	149	111	37	0	148	367
4:15 PM	23	59	0	82	48	126	0	174	116	43	0	159	415
4:30 PM	17	85	0	102	44	104	0	148	98	42	0	140	390
4:45 PM	25	43	0	68	56	94	0	150	132	49	0	181	399
Total	81	241	0	322	185	435	1	621	457	171	0	628	1571
5:00 PM	27	74	0	101	52	115	0	167	90	36	0	126	394
5:15 PM	21	75	0	96	43	132	1	176	122	34	0	156	428

PDI File #: 218212 D

Location: N: Cherry Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Cars

Table with columns for Cherry Street, Washington Street (Route 16) from North/East/West, and Total. Rows include time intervals from 5:30 PM to 8:00 PM and Grand Total.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table for AM Peak Hour Analysis starting at 7:45 AM. Columns include Cherry Street, Washington Street (Route 16) from North/East/West, and Total. Rows include time intervals and summary statistics like PHF and Total Volume.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table for MidDay Peak Hour Analysis starting at 1:45 PM. Columns include Cherry Street, Washington Street (Route 16) from North/East/West, and Total. Rows include time intervals and summary statistics like PHF and Total Volume.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table for PM Peak Hour Analysis starting at 5:15 PM. Columns include Cherry Street, Washington Street (Route 16) from North/East/West, and Total. Rows include time intervals and summary statistics like PHF and Total Volume.

PDI File #: **218212 D**
 Location: **N: Cherry Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**

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PRECISION
 D A T A
 INDUSTRIES, LLC

157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Class:

Cars

	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
Total Volume	89	310	1	400	208	506	2	716	511	150	0	661	1777
% Approach Total	22.3	77.5	0.3		29.1	70.7	0.3		77.3	22.7	0.0		
PHF	0.824	0.824	0.250	0.909	0.754	0.930	0.500	0.957	0.926	0.833	0.000	0.903	0.966
Entering Leg	89	310	1	400	208	506	2	716	511	150	0	661	1777
Exiting Leg				359				823				595	1777
Total				759				1539				1256	3554

PDI File #: 218212 D

Location: N: Cherry Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

Table with columns for Cherry Street (Right, Left, U-Turn, Total), Washington Street (Route 16) from East (Right, Thru, U-Turn, Total), and Washington Street (Route 16) from West (Thru, Left, U-Turn, Total), plus a final Total column. Rows represent time intervals from 6:00 AM to 5:15 PM.

PDI File #: 218212 D

Location: N: Cherry Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

Table with columns for Cherry Street, Washington Street (Route 16) from North/East/West, and Total. Rows include time intervals (5:30 PM to 7:45 PM), Grand Total, Approach %, Total %, and vehicle types (Buses, Single-Unit Trucks, Articulated Trucks).

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table with columns for Cherry Street, Washington Street (Route 16) from North/East/West, and Total. Rows include time intervals (9:15 AM to 10:00 AM), Total Volume, % Approach Total, PHF, and vehicle types (Buses, Single-Unit Trucks, Articulated Trucks).

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table with columns for Cherry Street, Washington Street (Route 16) from North/East/West, and Total. Row includes time interval 12:30 PM.

PDI File #: 218212 D

Location: N: Cherry Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

Table with columns for Cherry Street, Washington Street (Route 16) from North, East, and West, and various vehicle types (Buses, Single-Unit Trucks, Articulated Trucks) with counts and percentages.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table showing PM Peak Hour Analysis from 2:00 PM to 08:00 PM, including counts and percentages for Cherry Street and Washington Street (Route 16) from North, East, and West.

PDI File #: 218212 D

Location: N: Cherry Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Buses

	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
6:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	3	0	3	1	0	0	1	4
6:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	4	0	4	1	1	0	2	6
7:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
7:15 AM	0	1	0	1	0	2	0	2	1	0	0	1	4
7:30 AM	0	0	0	0	0	2	0	2	2	0	0	2	4
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	4	0	4	4	0	0	4	9
8:00 AM	2	0	0	2	0	3	0	3	1	0	0	1	6
8:15 AM	0	0	0	0	0	0	0	0	2	0	0	2	2
8:30 AM	0	1	0	1	0	0	0	0	1	0	0	1	2
8:45 AM	0	0	0	0	0	1	0	1	1	0	0	1	2
Total	2	1	0	3	0	4	0	4	5	0	0	5	12
9:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	1
9:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	4
9:30 AM	0	1	0	1	0	1	0	1	0	0	0	0	2
9:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	2	0	2	0	5	0	5	1	0	0	1	8
10:00 AM	0	0	0	0	0	1	0	1	1	0	0	1	2
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	2	0	0	2	3
11:00 AM	0	0	0	0	0	1	0	1	1	0	0	1	2
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	1
11:45 AM	0	0	0	0	0	1	0	1	0	1	0	1	2
Total	0	0	0	0	0	3	0	3	1	1	0	2	5
12:00 PM	0	0	0	0	0	0	0	0	2	0	0	2	2
12:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	1
12:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	2	0	2	3	0	0	3	5
1:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
1:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
Total	0	0	0	0	2	0	0	2	1	0	0	1	3
2:00 PM	0	1	0	1	0	1	0	1	1	1	0	2	4
2:15 PM	0	2	0	2	0	0	0	0	2	0	0	2	4
2:30 PM	0	2	0	2	0	0	0	0	0	0	0	0	2
2:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	5	0	5	0	2	0	2	3	1	0	4	11
3:00 PM	0	0	0	0	0	0	0	0	2	0	0	2	2
3:15 PM	1	0	0	1	0	0	0	0	1	0	0	1	2
3:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	2
3:45 PM	1	0	0	1	0	0	0	0	1	0	0	1	2
Total	2	0	0	2	0	2	0	2	4	0	0	4	8
4:00 PM	0	0	0	0	0	0	0	0	2	1	0	3	3
4:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	2
4:30 PM	0	0	0	0	0	1	0	1	1	0	0	1	2
4:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	3	0	3	4	1	0	5	8
5:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	2	0	0	2	2

PDI File #: 218212 D

Location: N: Cherry Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Buses

Table with columns for Cherry Street, Washington Street (Route 16) from East, and Washington Street (Route 16) from West. Rows include time intervals from 5:30 PM to 7:45 PM, Grand Total, Approach %, Total %, and Exiting Leg Total.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table for AM Peak Hour Analysis starting at 7:15 AM. Columns include Cherry Street, Washington Street (Route 16) from East, and Washington Street (Route 16) from West. Rows include time intervals from 7:15 AM to 8:00 AM, Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table for MidDay Peak Hour Analysis starting at 1:45 PM. Columns include Cherry Street, Washington Street (Route 16) from East, and Washington Street (Route 16) from West. Rows include time intervals from 1:45 PM to 2:30 PM, Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table for PM Peak Hour Analysis starting at 2:00 PM. Columns include Cherry Street, Washington Street (Route 16) from East, and Washington Street (Route 16) from West. Rows include time intervals from 2:00 PM to 2:30 PM and Total.

PDI File #: **218212 D**
 Location: **N: Cherry Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**

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 INDUSTRIES, LLC

157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Class:

Buses

	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
2:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	1
Total Volume	0	5	0	5	0	2	0	2	3	1	0	4	11
% Approach Total	0.0	100.0	0.0		0.0	100.0	0.0		75.0	25.0	0.0		
PHF	0.000	0.625	0.000	0.625	0.000	0.500	0.000	0.500	0.375	0.250	0.000	0.500	0.688
Entering Leg	0	5	0	5	0	2	0	2	3	1	0	4	11
Exiting Leg				1				8				2	11
Total				6				10				6	22

PDI File #: 218212 D

Location: N: Cherry Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

Table with columns for time intervals and truck counts from different directions: Cherry Street (from North), Washington Street (Route 16) (from East), and Washington Street (Route 16) (from West). Includes sub-columns for Right, Left, U-Turn, and Total counts.

PDI File #: 218212 D

Location: N: Cherry Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

Table with columns for Cherry Street, Washington Street (Route 16) from North, East, and West, and Total. Rows include time intervals from 5:30 PM to 7:45 PM, Grand Total, Approach %, Total %, and Exiting Leg Total.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table for AM Peak Hour Analysis starting at 9:15 AM. Columns include Cherry Street, Washington Street (Route 16) from North, East, and West, and Total. Rows include time intervals from 9:15 AM to 10:00 AM, Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table for MidDay Peak Hour Analysis starting at 10:45 AM. Columns include Cherry Street, Washington Street (Route 16) from North, East, and West, and Total. Rows include time intervals from 10:45 AM to 11:30 AM, Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table for PM Peak Hour Analysis starting at 2:00 PM. Columns include Cherry Street, Washington Street (Route 16) from North, East, and West, and Total. Rows include time intervals from 2:00 PM to 2:30 PM.

PDI File #: **218212 D**
 Location: **N: Cherry Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**
 Class:

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157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
2:45 PM	0	0	0	0	1	7	0	8	3	1	0	4	12
Total Volume	2	3	0	5	5	19	0	24	9	4	0	13	42
% Approach Total	40.0	60.0	0.0		20.8	79.2	0.0		69.2	30.8	0.0		
PHF	0.500	0.375	0.000	0.625	0.625	0.679	0.000	0.750	0.750	0.500	0.000	0.813	0.875
Entering Leg	2	3	0	5	5	19	0	24	9	4	0	13	42
Exiting Leg				9				12				21	42
Total				14				36				34	84

PDI File #: 218212 D

Location: N: Cherry Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

Table with columns for time intervals and truck counts categorized by street (Cherry Street, Washington Street) and direction (from North, from East, from West). Includes sub-columns for Right, Left, U-Turn, and Total counts.

PDI File #: 218212 D

Location: N: Cherry Street

Location: E: Washington St (Rt 16) W: Washington St (Rt 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

Table with columns for Cherry Street, Washington Street (Route 16) from North, East, and West, and Total. Rows include time intervals from 5:30 PM to 7:45 PM, Grand Total, Approach %, Total %, and Exiting Leg Total.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table for AM Peak Hour Analysis starting at 7:45 AM. Columns include Cherry Street, Washington Street (Route 16) from North, East, and West, and Total. Rows include time intervals from 7:45 AM to 8:30 AM, Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table for MidDay Peak Hour Analysis starting at 12:30 PM. Columns include Cherry Street, Washington Street (Route 16) from North, East, and West, and Total. Rows include time intervals from 12:30 PM to 1:15 PM, Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table for PM Peak Hour Analysis starting at 4:00 PM. Columns include Cherry Street, Washington Street (Route 16) from North, East, and West, and Total. Rows include time intervals from 4:00 PM to 4:30 PM.

PDI File #: **218212 D**
 Location: **N: Cherry Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**
 Class:

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157 Washington Street, Suite 2
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 Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

	Cherry Street				Washington Street (Route 16)				Washington Street (Route 16)				Total
	from North				from East				from West				
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	
4:45 PM	0	1	0	1	6	0	0	6	0	0	0	0	7
Total Volume	0	1	0	1	8	1	0	9	4	0	0	4	14
% Approach Total	0.0	100.0	0.0		88.9	11.1	0.0		100.0	0.0	0.0		
PHF	0.000	0.250	0.000	0.250	0.333	0.250	0.000	0.375	0.333	0.000	0.000	0.333	0.500
Entering Leg	0	1	0	1	8	1	0	9	4	0	0	4	14
Exiting Leg				8				5				1	14
Total				9				14				5	28

PDI File #: 218212 D
 Location: N: Cherry Street
 Location: E: Washington St (Rt 16) W: Washington St (Rt 16)
 City, State: West Newton, MA
 Client: BETA/J. Centracchio
 Site Code: 5472-14
 Count Date: Tuesday, October 19, 2021
 Start Time: 6:00 AM
 End Time: 8:00 PM

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Bicycles (on Roadway and Crosswalks)

	Cherry Street						Washington Street (Route 16)						Washington Street (Route 16)						Total
	from North						from East						from West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
7:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	0	0	1	0	1	0	0	0	1	1	0	0	0	0	0	3
8:00 AM	0	0	0	1	0	1	0	0	0	0	0	0	2	0	0	1	0	3	4
8:15 AM	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	1	2
8:30 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	1	0	0	0	1	1	1	0	0	2	0	0	0	0	0	0	0	3
Total	0	3	0	1	0	4	2	1	0	0	3	3	0	0	1	0	0	4	11
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
11:00 AM	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1
11:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	2	0	0	0	3	0	1	0	0	1	0	0	0	0	0	0	0	4
12:00 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1
12:45 PM	1	0	0	0	1	2	2	0	0	0	2	0	0	0	0	0	0	0	4
Total	1	0	0	0	1	2	3	1	0	0	4	0	0	0	0	0	0	0	6
1:00 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	1	2	0	0	0	0	0	1	0	0	0	0	0	1	3
2:00 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2:15 PM	0	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	2
2:30 PM	1	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	3
2:45 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	1	0	1	3	6	1	0	0	0	1	0	0	0	0	0	0	0	7
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
3:30 PM	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1	2
3:45 PM	0	0	0	5	0	5	0	1	0	0	1	0	0	0	0	1	0	1	7
Total	0	1	0	5	0	6	0	1	0	0	1	2	0	0	0	1	0	3	10
4:00 PM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	1	2
Total	0	0	0	0	2	2	2	2	0	0	4	1	0	0	0	0	0	1	7
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
5:15 PM	1	0	0	0	0	1	0	0	0	0	0	1	0	0	1	0	0	2	3

PDI File #: 218212 D
 Location: N: Cherry Street
 Location: E: Washington St (Rt 16) W: Washington St (Rt 16)
 City, State: West Newton, MA
 Client: BETA/J. Centracchio
 Site Code: 5472-14
 Count Date: Tuesday, October 19, 2021
 Start Time: 6:00 AM
 End Time: 8:00 PM
 Class:

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Bicycles (on Roadway and Crosswalks)

	Cherry Street						Washington Street (Route 16)						Washington Street (Route 16)						Total
	from North						from East						from West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
5:30 PM	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	2
5:45 PM	0	1	0	0	0	1	0	1	0	0	0	1	1	0	0	0	0	1	3
Total	1	1	0	0	0	2	0	3	0	0	0	3	3	0	0	1	0	4	9
6:00 PM	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	1	2
6:15 PM	0	0	0	0	2	2	0	0	0	0	0	0	1	0	0	0	0	1	3
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	1	2	3	0	0	0	0	0	0	2	0	0	0	1	3	6
7:00 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Grand Total	4	11	0	10	11	36	8	11	0	0	0	19	13	0	0	2	2	17	72
Approach %	11.1	30.6	0.0	27.8	30.6		42.1	57.9	0.0	0.0	0.0		76.5	0.0	0.0	11.8	11.8		
Total %	5.6	15.3	0.0	13.9	15.3	50.0	11.1	15.3	0.0	0.0	0.0	26.4	18.1	0.0	0.0	2.8	2.8	23.6	
Exiting Leg Total	29						24						19						72

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

8:00 AM	Cherry Street						Washington Street (Route 16)						Washington Street (Route 16)						Total
	from North						from East						from West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
8:00 AM	0	0	0	1	0	1	0	0	0	0	0	0	2	0	0	1	0	3	4
8:15 AM	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	1	2
8:30 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	1	0	0	0	1	1	1	0	0	0	2	0	0	0	0	0	0	3
Total Volume	0	3	0	1	0	4	2	1	0	0	0	3	3	0	0	1	0	4	11
% Approach Total	0.0	75.0	0.0	25.0	0.0		66.7	33.3	0.0	0.0	0.0		75.0	0.0	0.0	25.0	0.0		
PHF	0.000	0.375	0.000	0.250	0.000	0.500	0.500	0.250	0.000	0.000	0.000	0.375	0.375	0.000	0.000	0.250	0.000	0.333	0.688
Entering Leg	0	3	0	1	0	4	2	1	0	0	0	3	3	0	0	1	0	4	11
Exiting Leg	3						6						2						11
Total	7						9						6						22

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

12:30 PM	Cherry Street						Washington Street (Route 16)						Washington Street (Route 16)						Total
	from North						from East						from West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
12:30 PM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1
12:45 PM	1	0	0	0	1	2	2	0	0	0	0	2	0	0	0	0	0	0	4
1:00 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	1	0	0	1	2	4	3	0	0	0	0	3	0	0	0	0	0	0	7
% Approach Total	25.0	0.0	0.0	25.0	50.0		100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.250	0.000	0.000	0.250	0.500	0.500	0.375	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.438
Entering Leg	1	0	0	1	2	4	3	0	0	0	0	3	0	0	0	0	0	0	7
Exiting Leg	6						0						1						7
Total	10						3						1						14

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

3:15 PM	Cherry Street						Washington Street (Route 16)						Washington Street (Route 16)						Total
	from North						from East						from West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
3:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	2
3:45 PM	0	0	0	5	0	5	0	1	0	0	0	1	0	0	0	0	1	1	7

PDI File #: **218212 D**
 Location: **N: Cherry Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**
 Class:

404 pages- see electronic file on website



**PRECISION
 D A T A
 INDUSTRIES, LLC**

157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	Cherry Street						Washington Street (Route 16)						Washington Street (Route 16)						Total	
	from North						from East						from West							
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
4:00 PM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	1	0	5	2	8	0	1	0	0	0	1	2	0	0	0	1	3	12	
% Approach Total	0.0	12.5	0.0	62.5	25.0		0.0	100.0	0.0	0.0	0.0		66.7	0.0	0.0	0.0	33.3			
PHF	0.000	0.250	0.000	0.250	0.250	0.400	0.000	0.250	0.000	0.000	0.000	0.250	0.500	0.000	0.000	0.000	0.250	0.750	0.429	
Entering Leg	0	1	0	5	2	8	0	1	0	0	0	1	2	0	0	0	1	3	12	
Exiting Leg						7						3						2	12	
Total						15						4						5	24	

PDI File #: 218212 D
 Location: N: Cherry Street
 Location: E: Washington St (Rt 16) W: Washington St (Rt 16)
 City, State: West Newton, MA
 Client: BETA/J. Centracchio
 Site Code: 5472-14
 Count Date: Tuesday, October 19, 2021
 Start Time: 6:00 AM
 End Time: 8:00 PM
 Class:

404 pages- see electronic file on website



Pedestrians

	Cherry Street						Washington Street (Route 16)						Washington Street (Route 16)						Total
	from North						from East						from West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
6:00 AM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	1	1	2	4
6:15 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	2	0	2	0	0	0	0	2	2	0	0	0	1	2	3	7
7:00 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
7:15 AM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	1	1	3
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	3	2	5	0	0	0	0	0	0	0	0	0	1	1	2	7
8:00 AM	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	1	1	3
8:15 AM	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	3	3	6
8:30 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	2	4	5
8:45 AM	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	2	2	4	7
Total	0	0	0	4	5	9	0	0	0	0	0	0	0	0	0	4	8	12	21
9:00 AM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2
9:15 AM	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	3
9:30 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	2	4	6	0	0	0	0	0	0	0	0	0	0	0	0	6
10:00 AM	0	0	0	4	2	6	0	0	0	0	0	0	0	0	0	0	0	0	6
10:15 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
10:30 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
10:45 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	6	3	9	0	0	0	0	0	0	0	0	0	1	0	1	10
11:00 AM	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	1	0	1	3
11:15 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	2	2
11:45 AM	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	3	0	3	6
Total	0	0	0	3	4	7	0	0	0	0	0	0	0	0	0	4	1	5	12
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	3	2	5	0	0	0	0	0	0	0	0	0	1	0	1	6
12:30 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	4	1	5	0	0	0	0	0	0	0	0	0	1	1	2	7
Total	0	0	0	7	4	11	0	0	0	0	0	0	0	0	0	2	1	3	14
1:00 PM	0	0	0	3	2	5	0	0	0	0	0	0	0	0	0	0	0	0	5
1:15 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	4	3	7	0	0	0	0	0	0	0	0	0	0	0	0	7
2:00 PM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2
2:15 PM	0	0	0	3	1	4	0	0	0	0	0	0	0	0	0	0	1	1	5
2:30 PM	0	0	0	3	3	6	0	0	0	0	0	0	0	0	0	0	0	0	6
2:45 PM	0	0	0	1	2	3	0	0	0	1	0	1	0	0	0	0	0	0	4
Total	0	0	0	7	8	15	0	0	0	1	0	1	0	0	0	0	1	1	17
3:00 PM	0	0	0	6	2	8	0	0	0	0	0	0	0	0	0	0	0	0	8
3:15 PM	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	3	1	4	6
3:30 PM	0	0	0	3	1	4	0	0	0	0	0	0	0	0	0	3	3	7	7
3:45 PM	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	1	1	4	4
Total	0	0	0	12	5	17	0	0	0	0	0	0	0	0	0	3	5	8	25
4:00 PM	0	0	0	1	5	6	0	0	0	0	0	0	0	0	0	2	0	2	8
4:15 PM	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	3	3	5	5
Total	0	0	0	5	8	13	0	0	0	0	0	0	0	0	0	2	3	5	18
5:00 PM	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0	5	2	7	11
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	6	6

PDI File #: 218212 D
 Location: N: Cherry Street
 Location: E: Washington St (Rt 16) W: Washington St (Rt 16)
 City, State: West Newton, MA
 Client: BETA/J. Centracchio
 Site Code: 5472-14
 Count Date: Tuesday, October 19, 2021
 Start Time: 6:00 AM
 End Time: 8:00 PM
 Class: Pedestrians

404 pages- see electronic file on website



Pedestrians

	Cherry Street						Washington Street (Route 16)						Washington Street (Route 16)						Total
	from North						from East						from West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
5:30 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	5	0	5	6
5:45 PM	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	3	4	7	0	0	0	0	0	0	0	0	0	13	5	18	25
6:00 PM	0	0	0	1	4	5	0	0	0	0	0	0	0	0	0	0	1	1	6
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
6:30 PM	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	3
6:45 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	2	7	9	0	0	0	0	0	0	0	0	0	1	1	2	11
7:00 PM	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	4
7:15 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 PM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	2	2	4
7:45 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	1	7	8	0	0	0	0	0	0	0	0	0	0	2	2	10
Grand Total	0	0	0	61	64	125	0	0	0	1	2	3	0	0	0	32	30	62	190
Approach %	0	0	0	48.8	51.2		0	0	0	33.333	66.667		0	0	0	51.613	48.387		
Total %	0	0	0	32.105	33.684	65.789	0	0	0	0.5263	1.0526	1.5789	0	0	0	16.842	15.789	32.632	
Exiting Leg Total	125						3						62						190

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

	Cherry Street						Washington Street (Route 16)						Washington Street (Route 16)						Total
	from North						from East						from West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
8:00 AM	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	1	1	3
8:15 AM	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	3	3	6
8:30 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	2	4	5
8:45 AM	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	2	2	4	7
Total Volume	0	0	0	4	5	9	0	0	0	0	0	0	0	0	0	4	8	12	21
% Approach Total	0.0	0.0	0.0	44.4	55.6		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	33.3	66.7		
PHF	0.000	0.000	0.000	0.500	0.417	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.667	0.750	0.750
Entering Leg	0	0	0	4	5	9	0	0	0	0	0	0	0	0	0	4	8	12	21
Exiting Leg	9						0						12						21
Total	18						0						24						42

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

	Cherry Street						Washington Street (Route 16)						Washington Street (Route 16)						Total
	from North						from East						from West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
12:15 PM	0	0	0	3	2	5	0	0	0	0	0	0	0	0	0	1	0	1	6
12:30 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	4	1	5	0	0	0	0	0	0	0	0	0	1	1	2	7
1:00 PM	0	0	0	3	2	5	0	0	0	0	0	0	0	0	0	0	0	0	5
Total Volume	0	0	0	10	6	16	0	0	0	0	0	0	0	0	0	2	1	3	19
% Approach Total	0.0	0.0	0.0	62.5	37.5		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	66.7	33.3		
PHF	0.000	0.000	0.000	0.625	0.750	0.800	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.250	0.375	0.679
Entering Leg	0	0	0	10	6	16	0	0	0	0	0	0	0	0	0	2	1	3	19
Exiting Leg	16						0						3						19
Total	32						0						6						38

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

	Cherry Street						Washington Street (Route 16)						Washington Street (Route 16)						Total
	from North						from East						from West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:45 PM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	3	3	5
5:00 PM	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0	5	2	7	11
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	6	6

PDI File #: **218212 D**
 Location: **N: Cherry Street**
 Location: **E: Washington St (Rt 16) W: Washington St (Rt 16)**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**
 Class:

404 pages- see electronic file on website



**PRECISION
 D A T A
 INDUSTRIES, LLC**

157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Cherry Street						Washington Street (Route 16)						Washington Street (Route 16)						Total
	from North						from East						from West						
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
5:30 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	5	0	5	6
Total Volume	0	0	0	2	5	7	0	0	0	0	0	0	0	0	0	13	8	21	28
% Approach Total	0.0	0.0	0.0	28.6	71.4		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	61.9	38.1		
PHF	0.000	0.000	0.000	0.500	0.417	0.438	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.650	0.667	0.750	0.636
Entering Leg	0	0	0	2	5	7	0	0	0	0	0	0	0	0	0	13	8	21	28
Exiting Leg						7												21	28
Total						14												42	56

PDI File #: 218212 E

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington St (Route 16) W: Washington St (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



Cars and Heavy Vehicles (Combined)

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street (Route 16)					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:00 AM	20	0	0	0	20	3	36	1	0	40	54	7	3	0	64	0	0	0	0	0	124
6:15 AM	37	0	0	0	37	2	51	0	0	53	59	11	2	0	72	0	0	0	0	0	162
6:30 AM	41	0	0	0	41	7	71	0	0	78	77	14	1	0	92	0	0	0	0	0	211
6:45 AM	46	0	0	0	46	4	84	0	0	88	102	12	5	0	119	0	0	0	0	0	253
Total	144	0	0	0	144	16	242	1	0	259	292	44	11	0	347	0	0	0	0	0	750
7:00 AM	48	0	0	0	48	5	63	0	0	68	78	17	5	0	100	0	0	0	0	0	216
7:15 AM	64	0	0	0	64	3	103	0	0	106	129	16	4	0	149	0	0	0	0	0	319
7:30 AM	82	0	0	0	82	6	94	0	0	100	159	23	9	0	191	0	0	0	0	0	373
7:45 AM	81	0	0	0	81	8	130	0	0	138	160	25	4	0	189	0	0	0	0	0	408
Total	275	0	0	0	275	22	390	0	0	412	526	81	22	0	629	0	0	0	0	0	1316
8:00 AM	61	0	0	0	61	8	96	0	0	104	137	24	5	0	166	0	0	0	0	0	331
8:15 AM	50	0	0	0	50	4	97	0	0	101	147	38	4	0	189	0	0	0	0	0	340
8:30 AM	60	0	0	0	60	4	111	0	0	115	130	25	6	0	161	0	0	0	0	0	336
8:45 AM	53	0	0	0	53	14	103	0	0	117	150	41	8	0	199	0	0	0	0	0	369
Total	224	0	0	0	224	30	407	0	0	437	564	128	23	0	715	0	0	0	0	0	1376
9:00 AM	42	0	0	0	42	12	70	0	0	82	146	26	2	0	174	0	0	0	0	0	298
9:15 AM	26	0	0	0	26	11	100	0	0	111	129	23	6	0	158	0	0	0	0	0	295
9:30 AM	34	0	0	0	34	8	87	0	0	95	124	18	3	0	145	0	0	0	0	0	274
9:45 AM	24	0	0	0	24	8	83	0	0	91	143	21	4	0	168	0	0	0	0	0	283
Total	126	0	0	0	126	39	340	0	0	379	542	88	15	0	645	0	0	0	0	0	1150
10:00 AM	37	0	0	0	37	6	81	0	0	87	135	25	12	0	172	0	0	0	0	0	296
10:15 AM	29	0	0	0	29	10	96	0	0	106	99	17	1	0	117	0	0	0	0	0	252
10:30 AM	34	0	0	0	34	3	91	0	0	94	107	23	6	0	136	0	0	0	0	0	264
10:45 AM	41	0	0	0	41	8	100	0	0	108	104	21	2	0	127	0	0	0	0	0	276
Total	141	0	0	0	141	27	368	0	0	395	445	86	21	0	552	0	0	0	0	0	1088
11:00 AM	36	0	0	0	36	10	89	0	0	99	96	28	9	0	133	0	0	0	1	1	269
11:15 AM	26	0	0	0	26	14	86	0	0	100	112	16	8	0	136	0	0	0	0	0	262
11:30 AM	28	0	0	0	28	7	89	0	0	96	106	27	4	0	137	0	0	0	0	0	261
11:45 AM	35	0	0	0	35	5	91	0	0	96	107	31	12	0	150	0	0	0	0	0	281
Total	125	0	0	0	125	36	355	0	0	391	421	102	33	0	556	0	0	0	1	1	1073
12:00 PM	34	0	0	0	34	14	94	0	0	108	116	23	6	0	145	0	0	0	0	0	287
12:15 PM	21	0	0	0	21	13	120	0	0	133	118	43	7	0	168	0	0	0	0	0	322
12:30 PM	31	0	0	0	31	16	113	0	0	129	99	27	9	0	135	0	0	0	0	0	295
12:45 PM	30	0	0	0	30	7	92	0	0	99	123	31	8	0	162	0	0	0	0	0	291
Total	116	0	0	0	116	50	419	0	0	469	456	124	30	0	610	0	0	0	0	0	1195
1:00 PM	27	0	0	0	27	10	95	0	0	105	112	25	3	0	140	0	0	0	0	0	272
1:15 PM	31	0	0	0	31	10	108	0	0	118	108	18	3	0	129	0	0	0	0	0	278
1:30 PM	48	0	0	0	48	3	117	0	0	120	110	29	5	0	144	0	0	0	0	0	312
1:45 PM	42	0	0	0	42	7	110	0	0	117	131	17	6	0	154	0	0	0	0	0	313
Total	148	0	0	0	148	30	430	0	0	460	461	89	17	0	567	0	0	0	0	0	1175
2:00 PM	41	0	0	1	42	5	134	0	0	139	107	24	5	0	136	0	0	0	0	0	317
2:15 PM	28	0	0	0	28	12	131	0	0	143	126	29	4	0	159	0	0	0	0	0	330
2:30 PM	52	0	0	0	52	6	123	0	0	129	105	36	7	0	148	0	0	0	0	0	329
2:45 PM	45	0	0	0	45	16	143	0	0	159	96	17	5	0	118	0	0	0	0	0	322
Total	166	0	0	1	167	39	531	0	0	570	434	106	21	0	561	0	0	0	0	0	1298
3:00 PM	39	0	0	0	39	14	122	0	0	136	131	35	5	0	171	0	0	0	0	0	346
3:15 PM	37	0	0	0	37	9	136	0	0	145	130	25	3	0	158	0	0	0	0	0	340
3:30 PM	52	0	0	0	52	13	109	0	0	122	141	40	9	0	190	0	0	0	0	0	364
3:45 PM	31	0	0	0	31	6	153	0	0	159	127	31	3	0	161	0	0	0	0	0	351
Total	159	0	0	0	159	42	520	0	0	562	529	131	20	0	680	0	0	0	0	0	1401
4:00 PM	50	0	0	0	50	14	107	0	0	121	158	35	7	0	200	0	0	0	0	0	371
4:15 PM	45	0	0	0	45	14	143	0	0	157	149	44	9	0	202	0	0	0	0	0	404
4:30 PM	57	0	0	0	57	7	115	0	0	122	150	33	5	0	188	0	0	0	0	0	367
4:45 PM	38	0	0	0	38	8	110	0	0	118	176	36	8	0	220	0	0	0	0	0	376
Total	190	0	0	0	190	43	475	0	0	518	633	148	29	0	810	0	0	0	0	0	1518
5:00 PM	60	0	0	0	60	11	119	0	0	130	134	30	5	0	169	0	0	0	0	0	359
5:15 PM	52	0	0	0	52	13	151	0	0	164	157	50	11	0	218	0	0	0	0	0	434

PDI File #: 218212 E

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington St (Route 16) W: Washington St (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

Table with columns for Elm Street, Washington Street (Route 16) from North, East, South, and West, and Total. Rows include time intervals from 5:30 PM to 7:45 PM, Grand Total, and Exiting Leg Total.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table with columns for Elm Street, Washington Street (Route 16) from North, East, South, and West, and Total. Rows include time intervals from 7:30 AM to 8:15 AM, Total Volume, PHF, and Exiting Leg.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table with columns for Elm Street, Washington Street (Route 16) from North, East, South, and West, and Total. Rows include time intervals from 1:45 PM to 2:30 PM, Total Volume, PHF, and Exiting Leg.

PDI File #: 218212 E

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington St (Route 16) W: Washington St (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

Table with columns for Elm Street, Washington Street (Route 16) from North, East, South, and West. Rows include Cars %, Heavy Vehicles, Cars Enter Leg, Heavy Enter Leg, Total Entering Leg, Cars Exiting Leg, Heavy Exiting Leg, and Total Exiting Leg.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table with columns for Elm Street, Washington Street (Route 16) from North, East, South, and West. Rows include 5:45 PM, 5:45 PM, 6:00 PM, 6:15 PM, 6:30 PM, Total Volume, % Approach Total, PHF, Cars, Cars %, Heavy Vehicles, Heavy Vehicles %, Cars Enter Leg, Heavy Enter Leg, Total Entering Leg, Cars Exiting Leg, Heavy Exiting Leg, and Total Exiting Leg.

PDI File #: 218212 E

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington St (Route 16) W: Washington St (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



Cars

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street (Route 16)					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:00 AM	18	0	0	0	18	2	35	0	0	37	51	6	2	0	59	0	0	0	0	0	114
6:15 AM	36	0	0	0	36	2	45	0	0	47	54	11	2	0	67	0	0	0	0	0	150
6:30 AM	39	0	0	0	39	5	67	0	0	72	72	13	1	0	86	0	0	0	0	0	197
6:45 AM	43	0	0	0	43	2	82	0	0	84	90	12	5	0	107	0	0	0	0	0	234
Total	136	0	0	0	136	11	229	0	0	240	267	42	10	0	319	0	0	0	0	0	695
7:00 AM	44	0	0	0	44	4	61	0	0	65	72	17	5	0	94	0	0	0	0	0	203
7:15 AM	59	0	0	0	59	2	99	0	0	101	123	15	4	0	142	0	0	0	0	0	302
7:30 AM	79	0	0	0	79	4	88	0	0	92	145	23	9	0	177	0	0	0	0	0	348
7:45 AM	80	0	0	0	80	8	129	0	0	137	156	23	4	0	183	0	0	0	0	0	400
Total	262	0	0	0	262	18	377	0	0	395	496	78	22	0	596	0	0	0	0	0	1253
8:00 AM	57	0	0	0	57	7	91	0	0	98	125	24	5	0	154	0	0	0	0	0	309
8:15 AM	49	0	0	0	49	4	92	0	0	96	142	34	3	0	179	0	0	0	0	0	324
8:30 AM	59	0	0	0	59	4	102	0	0	106	125	25	6	0	156	0	0	0	0	0	321
8:45 AM	52	0	0	0	52	13	97	0	0	110	148	39	8	0	195	0	0	0	0	0	357
Total	217	0	0	0	217	28	382	0	0	410	540	122	22	0	684	0	0	0	0	0	1311
9:00 AM	40	0	0	0	40	12	68	0	0	80	138	24	2	0	164	0	0	0	0	0	284
9:15 AM	26	0	0	0	26	10	96	0	0	106	123	21	6	0	150	0	0	0	0	0	282
9:30 AM	33	0	0	0	33	7	82	0	0	89	117	17	3	0	137	0	0	0	0	0	259
9:45 AM	23	0	0	0	23	8	72	0	0	80	133	19	4	0	156	0	0	0	0	0	259
Total	122	0	0	0	122	37	318	0	0	355	511	81	15	0	607	0	0	0	0	0	1084
10:00 AM	35	0	0	0	35	4	74	0	0	78	130	23	9	0	162	0	0	0	0	0	275
10:15 AM	27	0	0	0	27	9	92	0	0	101	92	17	1	0	110	0	0	0	0	0	238
10:30 AM	32	0	0	0	32	3	83	0	0	86	103	22	6	0	131	0	0	0	0	0	249
10:45 AM	38	0	0	0	38	7	94	0	0	101	97	21	2	0	120	0	0	0	0	0	259
Total	132	0	0	0	132	23	343	0	0	366	422	83	18	0	523	0	0	0	0	0	1021
11:00 AM	34	0	0	0	34	8	84	0	0	92	84	28	9	0	121	0	0	0	1	1	248
11:15 AM	26	0	0	0	26	14	83	0	0	97	109	15	8	0	132	0	0	0	0	0	255
11:30 AM	26	0	0	0	26	6	77	0	0	83	103	24	3	0	130	0	0	0	0	0	239
11:45 AM	33	0	0	0	33	3	89	0	0	92	103	31	11	0	145	0	0	0	0	0	270
Total	119	0	0	0	119	31	333	0	0	364	399	98	31	0	528	0	0	0	1	1	1012
12:00 PM	31	0	0	0	31	14	88	0	0	102	108	20	6	0	134	0	0	0	0	0	267
12:15 PM	21	0	0	0	21	13	114	0	0	127	114	40	7	0	161	0	0	0	0	0	309
12:30 PM	30	0	0	0	30	14	106	0	0	120	93	24	9	0	126	0	0	0	0	0	276
12:45 PM	29	0	0	0	29	6	88	0	0	94	112	27	8	0	147	0	0	0	0	0	270
Total	111	0	0	0	111	47	396	0	0	443	427	111	30	0	568	0	0	0	0	0	1122
1:00 PM	26	0	0	0	26	9	91	0	0	100	109	25	3	0	137	0	0	0	0	0	263
1:15 PM	29	0	0	0	29	8	99	0	0	107	104	17	3	0	124	0	0	0	0	0	260
1:30 PM	46	0	0	0	46	3	114	0	0	117	105	29	5	0	139	0	0	0	0	0	302
1:45 PM	41	0	0	0	41	7	109	0	0	116	123	16	6	0	145	0	0	0	0	0	302
Total	142	0	0	0	142	27	413	0	0	440	441	87	17	0	545	0	0	0	0	0	1127
2:00 PM	41	0	0	1	42	4	125	0	0	129	100	20	5	0	125	0	0	0	0	0	296
2:15 PM	27	0	0	0	27	12	128	0	0	140	120	25	4	0	149	0	0	0	0	0	316
2:30 PM	49	0	0	0	49	6	118	0	0	124	101	35	7	0	143	0	0	0	0	0	316
2:45 PM	45	0	0	0	45	13	138	0	0	151	91	17	5	0	113	0	0	0	0	0	309
Total	162	0	0	1	163	35	509	0	0	544	412	97	21	0	530	0	0	0	0	0	1237
3:00 PM	35	0	0	0	35	14	119	0	0	133	128	33	5	0	166	0	0	0	0	0	334
3:15 PM	37	0	0	0	37	9	133	0	0	142	128	25	3	0	156	0	0	0	0	0	335
3:30 PM	51	0	0	0	51	11	106	0	0	117	138	40	9	0	187	0	0	0	0	0	355
3:45 PM	30	0	0	0	30	5	150	0	0	155	124	30	3	0	157	0	0	0	0	0	342
Total	153	0	0	0	153	39	508	0	0	547	518	128	20	0	666	0	0	0	0	0	1366
4:00 PM	49	0	0	0	49	14	107	0	0	121	152	35	7	0	194	0	0	0	0	0	364
4:15 PM	45	0	0	0	45	13	141	0	0	154	146	41	9	0	196	0	0	0	0	0	395
4:30 PM	56	0	0	0	56	6	113	0	0	119	145	32	4	0	181	0	0	0	0	0	356
4:45 PM	37	0	0	0	37	8	108	0	0	116	172	36	7	0	215	0	0	0	0	0	368
Total	187	0	0	0	187	41	469	0	0	510	615	144	27	0	786	0	0	0	0	0	1483
5:00 PM	60	0	0	0	60	10	118	0	0	128	132	30	5	0	167	0	0	0	0	0	355
5:15 PM	49	0	0	0	49	13	149	0	0	162	151	47	11	0	209	0	0	0	0	0	420

PDI File #: 218212 E

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington St (Route 16) W: Washington St (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



Cars

Table with columns for Street (Elm Street, Washington Street (Route 16)), direction (from North, East, South, West), and movement (Right, Thru, Left, U-Turn, Total). Rows include time intervals from 5:30 PM to 7:45 PM, Grand Total, and Approach %.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table with columns for Street (Elm Street, Washington Street (Route 16)), direction (from North, East, South, West), and movement (Right, Thru, Left, U-Turn, Total). Rows include time intervals from 7:30 AM to 8:15 AM, Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table with columns for Street (Elm Street, Washington Street (Route 16)), direction (from North, East, South, West), and movement (Right, Thru, Left, U-Turn, Total). Rows include time intervals from 1:45 PM to 2:30 PM, Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table with columns for Street (Elm Street, Washington Street (Route 16)), direction (from North, East, South, West), and movement (Right, Thru, Left, U-Turn, Total). Rows include time intervals from 5:45 PM to 6:30 PM.

PDI File #: 218212 E

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington St (Route 16) W: Washington St (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



PRECISION
D A T A
INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street (Route 16)					Total	
	from North					from East					from South					from West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total		
Total Volume	200	0	1	0	201	47	566	0	0	613	657	126	53	0	836	0	0	0	0	0	1650	
% Approach Total	99.5	0.0	0.5	0.0		7.7	92.3	0.0	0.0		78.6	15.1	6.3	0.0		0.0	0.0	0.0	0.0			
PHF	0.862	0.000	0.250	0.000	0.866	0.653	0.858	0.000	0.000	0.891	0.928	0.788	0.602	0.000	0.954	0.000	0.000	0.000	0.000	0.000	0.975	
Entering Leg	200	0	1	0	201	47	566	0	0	613	657	126	53	0	836	0	0	0	0	0	1650	
Exiting Leg					173					658					0						819	1650
Total					374					1271					836						819	3300

PDI File #: 218212 E

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington St (Route 16) W: Washington St (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

Table with columns for time intervals and vehicle counts from four directions: Elm Street (from North), Washington Street (Route 16) (from East), Washington Street (Route 16) (from South), and Washington Street (Route 16) (from West). Each direction has sub-columns for Right, Thru, Left, U-Turn, and Total. A final Total column is on the far right.

PDI File #: 218212 E

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington St (Route 16) W: Washington St (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

Table with columns for street directions (Elm Street, Washington Street (Route 16)) and movement types (Right, Thru, Left, U-Turn, Total). Rows include time intervals (5:30 PM to 7:45 PM), Grand Total, and vehicle type breakdowns (Buses, Single-Unit Trucks, Articulated Trucks).

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table with columns for street directions and movement types. Rows include time intervals (6:45 AM to 7:30 AM), Total Volume, PHF, and vehicle type breakdowns (Buses, Single-Unit Trucks, Articulated Trucks).

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table with columns for street directions and movement types. Row includes time interval (12:00 PM).

PDI File #: 218212 E

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington St (Route 16) W: Washington St (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



PRECISION DATA INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

Table with columns for Street (Elm Street, Washington Street (Route 16)), Direction (from North, from East, from South, from West), and Vehicle Type (Right, Thru, Left, U-Turn, Total). Rows include time intervals (12:00 PM to 12:45 PM), Total Volume, % Approach Total, PHF, and vehicle breakdown (Buses, Single-Unit Trucks, Articulated Trucks).

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table with columns for Street (Elm Street, Washington Street (Route 16)), Direction (from North, from East, from South, from West), and Vehicle Type (Right, Thru, Left, U-Turn, Total). Rows include time intervals (2:00 PM to 2:45 PM), Total Volume, % Approach Total, PHF, and vehicle breakdown (Buses, Single-Unit Trucks, Articulated Trucks).

PDI File #: 218212 E

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington St (Route 16) W: Washington St (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Buses

Table with columns for time slots (6:00 AM to 5:15 PM) and directions (Elm Street, Washington Street (Route 16) from North, East, South, West). Rows show counts for Right, Thru, Left, U-Turn, and Total for each direction, plus a final Total column.

PDI File #: 218212 E

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington St (Route 16) W: Washington St (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



Buses

Table with columns for Elm Street, Washington Street (Route 16) from North, East, South, and West. Rows include time slots (5:30 PM to 7:45 PM), Grand Total, Approach %, Total %, and Exiting Leg Total.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table for AM Peak Hour Analysis with columns for Elm Street, Washington Street (Route 16) from North, East, South, and West. Rows include time slots (7:15 AM to 8:00 AM), Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table for MidDay Peak Hour Analysis with columns for Elm Street, Washington Street (Route 16) from North, East, South, and West. Rows include time slots (11:45 AM to 12:30 PM), Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table for PM Peak Hour Analysis with columns for Elm Street, Washington Street (Route 16) from North, East, South, and West. Rows include time slots (5:15 PM to 5:45 PM).

PDI File #: **218212 E**
 Location: **N: Elm Street S: Washington Street (Route 16)**
 Location: **E: Washington St (Route 16) W: Washington St (Route 16)**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**
 Class:

404 pages- see electronic file on website



Buses

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street (Route 16)					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
6:00 PM	1	0	0	0	1	1	0	0	0	1	3	0	0	0	3	0	0	0	0	0	5
Total Volume	3	0	0	0	3	3	2	0	0	5	6	2	0	0	8	0	0	0	0	0	16
% Approach Total	100.0	0.0	0.0	0.0		60.0	40.0	0.0	0.0		75.0	25.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.375	0.000	0.000	0.000	0.375	0.375	0.250	0.000	0.000	0.625	0.500	0.250	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.667
Entering Leg	3	0	0	0	3	3	2	0	0	5	6	2	0	0	8	0	0	0	0	0	16
Exiting Leg					5					6					0					5	16
Total					8					11					8					5	32

PDI File #: 218212 E

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington St (Route 16) W: Washington St (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

Table with columns for Street (Elm Street, Washington Street (Route 16)), Direction (from North, from East, from South, from West), and Time slots (6:00 AM to 5:15 PM). Rows include counts for Right, Thru, Left, U-Turn, and Total for each direction and time slot.

PDI File #: 218212 E

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington St (Route 16) W: Washington St (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



Single-Unit Trucks

Table with columns for Street (Elm Street, Washington Street (Route 16)), direction (from North, East, South, West), and movement (Right, Thru, Left, U-Turn, Total). Rows include time intervals (5:30 PM to 7:45 PM), Grand Total, Approach %, and Total %.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table for AM Peak Hour Analysis with columns for Street, direction, and movement. Rows include time intervals (9:30 AM to 10:15 AM), Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table for MidDay Peak Hour Analysis with columns for Street, direction, and movement. Rows include time intervals (10:45 AM to 11:30 AM), Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table for PM Peak Hour Analysis with columns for Street, direction, and movement. Rows include time intervals (2:00 PM to 2:30 PM).

PDI File #: **218212 E**
 Location: **N: Elm Street S: Washington Street (Route 16)**
 Location: **E: Washington St (Route 16) W: Washington St (Route 16)**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**
 Class:

404 pages- see electronic file on website



Single-Unit Trucks

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street (Route 16)					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
2:45 PM	0	0	0	0	0	2	5	0	0	7	4	0	0	0	4	0	0	0	0	0	11
Total Volume	2	0	0	0	2	2	20	0	0	22	15	8	0	0	23	0	0	0	0	0	47
% Approach Total	100.0	0.0	0.0	0.0		9.1	90.9	0.0	0.0		65.2	34.8	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.250	0.000	0.000	0.000	0.250	0.250	0.625	0.000	0.000	0.688	0.938	0.500	0.000	0.000	0.719	0.000	0.000	0.000	0.000	0.000	0.783
Entering Leg	2	0	0	0	2	2	20	0	0	22	15	8	0	0	23	0	0	0	0	0	47
Exiting Leg					10					15					0					22	47
Total					12					37					23					22	94

PDI File #: 218212 E

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington St (Route 16) W: Washington St (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

Table with columns for Street (Elm Street, Washington Street (Route 16)), Direction (from North, from East, from South, from West), and Movement (Right, Thru, Left, U-Turn, Total). Rows represent time intervals from 6:00 AM to 5:15 PM.

PDI File #: 218212 E

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington St (Route 16) W: Washington St (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



Articulated Trucks

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street (Route 16)					Total	
	from North					from East					from South					from West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total		
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	1	0	0	1	1	1	0	0	2	0	0	0	0	0	0	3
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	1	0	0	0	1	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	3
6:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
Total	1	0	0	0	1	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	4
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	7	0	0	0	7	5	28	1	0	34	38	5	1	0	44	0	0	0	0	0	0	85
Approach %	100.0	0.0	0.0	0.0		14.7	82.4	2.9	0.0		86.4	11.4	2.3	0.0		0.0	0.0	0.0	0.0	0.0		
Total %	8.2	0.0	0.0	0.0	8.2	5.9	32.9	1.2	0.0	40.0	44.7	5.9	1.2	0.0	51.8	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	10					38					1					36					85	

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street (Route 16)					Total	
	from North					from East					from South					from West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total		
9:30 AM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	2
9:45 AM	0	0	0	0	0	0	1	0	0	1	3	0	0	0	3	0	0	0	0	0	0	4
10:00 AM	0	0	0	0	0	1	1	0	0	2	1	0	0	0	1	0	0	0	0	0	0	3
10:15 AM	1	0	0	0	1	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	3
Total Volume	1	0	0	0	1	1	3	0	0	4	7	0	0	0	7	0	0	0	0	0	0	12
% Approach Total	100.0	0.0	0.0	0.0		25.0	75.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.250	0.000	0.000	0.000	0.250	0.250	0.750	0.000	0.000	0.500	0.583	0.000	0.000	0.000	0.583	0.000	0.000	0.000	0.000	0.000	0.750	
Entering Leg	1	0	0	0	1	1	3	0	0	4	7	0	0	0	7	0	0	0	0	0	0	12
Exiting Leg					1					7				0							4	12
Total	2					11					7					4					24	

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street (Route 16)					Total	
	from North					from East					from South					from West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total		
12:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	0	3
12:30 PM	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3	0	0	0	0	0	0	3
12:45 PM	0	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	0	0	0	0	3
Total Volume	0	0	0	0	0	0	3	0	0	3	6	2	0	0	8	0	0	0	0	0	0	11
% Approach Total	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		75.0	25.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.375	0.750	0.500	0.000	0.000	0.667	0.000	0.000	0.000	0.000	0.000	0.917	
Entering Leg	0	0	0	0	0	0	3	0	0	3	6	2	0	0	8	0	0	0	0	0	0	11
Exiting Leg					2					6				0							3	11
Total	2					9					8					3					22	

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street (Route 16)					Total	
	from North					from East					from South					from West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total		
2:00 PM	0	0	0	0	0	0	1	0	0	1	1	1	0	0	2	0	0	0	0	0	0	3
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	1	0	0	0	1	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	3

PDI File #: **218212 E**
 Location: **N: Elm Street S: Washington Street (Route 16)**
 Location: **E: Washington St (Route 16) W: Washington St (Route 16)**
 City, State: **West Newton, MA**
 Client: **BETA/J. Centracchio**
 Site Code: **5472-14**
 Count Date: **Tuesday, October 19, 2021**
 Start Time: **6:00 AM**
 End Time: **8:00 PM**
 Class:

404 pages- see electronic file on website



PRECISION
 D A T A
 INDUSTRIES, LLC

157 Washington Street, Suite 2
 Hudson, MA 01749
 Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

	Elm Street					Washington Street (Route 16)					Washington Street (Route 16)					Washington Street (Route 16)					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
2:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total Volume	1	0	0	0	1	0	2	0	0	2	3	1	0	0	4	0	0	0	0	0	7
% Approach Total	100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		75.0	25.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.250	0.000	0.000	0.000	0.250	0.000	0.500	0.000	0.000	0.500	0.750	0.250	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.583
Entering Leg	1	0	0	0	1	0	2	0	0	2	3	1	0	0	4	0	0	0	0	0	7
Exiting Leg					1					3					0					3	7
Total					2					5					4					3	14

PDI File #: 218212 E

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington St (Route 16) W: Washington St (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

Table with columns for Street, Direction, and Movement (Right, Thru, Left, U-Turn, CW-SB, CW-NB, CW-WB, Total) and rows for time intervals from 6:00 AM to 5:15 PM.

PDI File #: 218212 E

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington St (Route 16) W: Washington St (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

Table with columns for street names (Elm Street, Washington Street (Route 16)), direction (from North, East, South, West), and movement types (Right, Thru, Left, U-Turn, CW-SB, CW-NB, CW-WB, CW-EB). Rows include time intervals (5:30 PM to 7:45 PM), Grand Total, Approach %, Total %, and Exiting Leg Total.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table for AM Peak Hour Analysis with columns for street names, directions, and movement types. Rows include time intervals (7:00 AM to 7:45 AM), Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table for MidDay Peak Hour Analysis with columns for street names, directions, and movement types. Rows include time intervals (1:45 PM to 2:30 PM), Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table for PM Peak Hour Analysis with columns for street names, directions, and movement types. Rows include time intervals (5:30 PM to 6:00 PM) and Total.

PDI File #: 218212 E

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington St (Route 16) W: Washington St (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

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404 pages- see electronic file on website



PRECISION
D A T A
INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	Elm Street							Washington Street (Route 16)							Washington Street (Route 16)							Washington Street (Route 16)							Total
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
6:15 PM	0	0	0	0	0	0	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	0	0	0	0	0	0	1	4	0	0	0	5	3	0	0	0	0	0	3	0	0	0	0	0	0	0	8	
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	80.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.500	0.000	0.000	0.000	0.625	0.375	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	
Entering Leg	0	0	0	0	0	0	0	1	4	0	0	0	5	3	0	0	0	0	0	3	0	0	0	0	0	0	0	8	
Exiting Leg							1						3							0							4	8	
Total							1						8							3							4	16	

PDI File #: 218212 E

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington St (Route 16) W: Washington St (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

Table with columns for Street, Direction, and various movement types (Right, Thru, Left, U-Turn, CW-WB, CW-SB, Total) for Pedestrians. Rows include time intervals from 6:00 AM to 5:15 PM.

PDI File #: 218212 E

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington St (Route 16) W: Washington St (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

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Pedestrians

Table with columns for Street (Elm Street, Washington Street (Route 16)), direction (from North, from East, from South, from West), and movement (Right, Thru, Left, U-Turn, CW-SB, CW-NB, CW-WB, CW-EB, Total). Rows include time intervals (5:30 PM to 7:45 PM), Grand Total, Approach %, Total %, and Exiting Leg Total.

AM Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

Table with columns for Street (Elm Street, Washington Street (Route 16)), direction (from North, from East, from South, from West), and movement (Right, Thru, Left, U-Turn, CW-SB, CW-NB, CW-WB, CW-EB, Total). Rows include time intervals (8:15 AM to 9:00 AM), Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

Table with columns for Street (Elm Street, Washington Street (Route 16)), direction (from North, from East, from South, from West), and movement (Right, Thru, Left, U-Turn, CW-SB, CW-NB, CW-WB, CW-EB, Total). Rows include time intervals (1:00 PM to 1:45 PM), Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

PM Peak Hour Analysis from 2:00 PM to 08:00 PM begins at:

Table with columns for Street (Elm Street, Washington Street (Route 16)), direction (from North, from East, from South, from West), and movement (Right, Thru, Left, U-Turn, CW-SB, CW-NB, CW-WB, CW-EB, Total). Rows include time intervals (6:00 PM to 6:30 PM), Total Volume, % Approach Total, PHF, and Entering/Exiting Leg.

PDI File #: 218212 E

Location: N: Elm Street S: Washington Street (Route 16)

Location: E: Washington St (Route 16) W: Washington St (Route 16)

City, State: West Newton, MA

Client: BETA/J. Centracchio

Site Code: 5472-14

Count Date: Tuesday, October 19, 2021

Start Time: 6:00 AM

End Time: 8:00 PM

Class:

404 pages- see electronic file on website



PRECISION
D A T A
INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Elm Street							Washington Street (Route 16)							Washington Street (Route 16)							Washington Street (Route 16)							Total
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
6:45 PM	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	1	1	2	7
Total Volume	0	0	0	0	4	9	13	0	0	0	0	1	10	11	0	0	0	0	2	1	3	0	0	0	0	6	2	8	35
% Approach Total	0.0	0.0	0.0	0.0	30.8	69.2		0.0	0.0	0.0	0.0	9.1	90.9	0.0	0.0	0.0	0.0	66.7	33.3	0.0	0.0	0.0	0.0	75.0	25.0				
PHF	0.000	0.000	0.000	0.000	0.333	0.750	0.813	0.000	0.000	0.000	0.000	0.250	0.313	0.306	0.000	0.000	0.000	0.000	0.500	0.250	0.375	0.000	0.000	0.000	0.000	0.500	0.500	0.667	0.547
Entering Leg	0	0	0	0	4	9	13	0	0	0	0	1	10	11	0	0	0	0	2	1	3	0	0	0	0	6	2	8	35
Exiting Leg							13						11							3							8	35	
Total							26						22							6							16	70	

Count Adjustments

COUNT ADJUSTMENT CALCULATIONS

Project Name: West Newton - Santander
 Project No: 15636.00
 Location: Newton, MA
 Date: March 2022

Chestnut Street closed during portion of February 2022 counts with traffic diverted to Davis Street. Volumes are not accurate, Existing Conditions based on Oct 2021 counts instead.

Average Comparison to Feb 2022
 0.99 0.99
 101% 101%
 (does not include Highland or Chestnut intersections)

Average Comparison to Oct 2021
 1.23 1.11
 82% 90%

INTERSECTION	MOVEMENT	APRIL 2019 EXISTING VOLUMES - RAW		OCTOBER 2021 EXISTING VOLUMES - RAW		FEBRUARY 2022 EXISTING VOLUMES - RAW		OCT 2021 TO FEB 2022 COMPARISON		OCT 2021 TO FEB 2022 COMPARISON		APR 2019 TO OCT 2021 COMPARISON		APR 2019 TO OCT 2021 COMPARISON		APR 2019 TO OCT 2021 COMPARISON (BY APPROACH)		
		7:30 AM	5:00 PM	7:45 AM	5:00 PM	8:00 AM	5:00 PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	
1. WASHINGTON STREET AT ELM STREET																		
Washington Street	WB T	602	594	434	555	407	526	-27	-29	94%	95%	-168	-39	72%	93%	70%	89%	
	WB R	50	76	24	44	54	60	30	16	225%	136%	-26	-32	48%	58%			
Washington Street	NB L	89	44	19	37	29	33	10	-4	153%	89%	-70	-7	21%	84%	83%	76%	
	NB T	123	259	112	137	117	139	5	2	104%	101%	-11	-122	91%	53%			
	NB R	641	774	574	641	573	672	-1	31	100%	105%	-67	-133	90%	83%			
Elm Street	SB R	467	260	252	210	266	227	14	17	106%	108%	-215	-50	54%	81%	54%	81%	
		1972	2007	1415	1624	1446	1657	31	33	102%	102%	-557	-383	72%	81%			
2. WASHINGTON STREET AT CHERRY STREET																		
Washington Street	EB L	94	136	80	151	97	148	17	-3	#DIV/0!	#DIV/0!	-14	15	85%	111%	90%	83%	
	EB T	547	638	500	488	470	520	-30	32	94%	107%	-47	-150	91%	76%			
Washington Street	WB T	574	593	400	517	415	492	15	-25	104%	95%	-174	-76	70%	87%	70%	89%	
	WB R	182	224	127	209	179	233	52	24	141%	111%	-55	-15	70%	93%			
Cherry Street	SB L	351	229	443	315	386	281	-57	-34	87%	89%	92	86	126%	138%	117%	133%	
	SB R	78	77	58	91	61	101	3	10	105%	111%	-20	14	74%	118%			
		1826	1897	1608	1771	1608	1775	4	4	100%	100%	-218	-126	88%	93%			
3. WASHINGTON STREET AT HIGHLAND STREET																		
Washington Street	EB T	657	675	698	615	630	641	-68	26	90%	104%	41	-60	106%	91%	105%	92%	
	EB R	241	192	242	185	225	149	-17	-36	93%	81%	1	-7	100%	96%			
Washington Street	WB L	136	104	99	94	93	66	-6	-28	94%	70%	-37	-10	73%	90%	70%	91%	
	WB T	605	572	419	522	413	511	-6	-11	99%	98%	-186	-50	69%	91%			
Highland Street	NB L	151	245	120	216	177	225	57	9	148%	104%	-31	-29	79%	88%	66%	93%	
	NB R	72	26	27	37	163	50	136	13	604%	135%	-45	11	38%	142%			
		1862	1814	1605	1669	1701	1642	96	-27	106%	98%	-257	-145	86%	92%			
4. WASHINGTON STREET AT WALTHAM STREET / WATERTOWN STREET																		
Washington Street	EB L			1	3	4	3	3		#DIV/0!	#DIV/0!	1	3	#DIV/0!	#DIV/0!	96%	93%	
	EB BL	312	313	253	286	303	338	50	52	400%	100%	-59	-27	81%	91%			
	EB T	417	388	449	362	473	362	24		105%	100%	32	-26	108%	93%			
Washington Street	WB T	270	202	170	208	167	254	-3	46	98%	122%	-100	6	63%	103%	65%	99%	
	WB R	162	163	124	174	79	130	-45	-44	64%	75%	-38	11	77%	107%			
	WB HR	20	26	2	4		1	-2	-3		25%	-18	-22	10%	15%			
Waltham Street	SB R	209	185	162	135	151	118	-11	-17	93%	87%	-47	-50	78%	73%	78%	73%	
Watertown Street	SWB R	261	289	174	242	190	206	16	-36	109%	85%	-87	-47	67%	84%	67%	81%	
	SWB HR	46	56	31	36	28	38	-3	2	90%	106%	-15	-20	67%	64%			
		1697	1622	1366	1450	1395	1450	29	2	102%	100%	-331	-172	80%	89%			
5. WASHINGTON STREET AT CHESTNUT STREET																		
Washington Street	EB T	367	356	421	330	433	338	12	8	103%	102%	54	-26	115%	93%	112%	93%	
	EB R	50	32	45	29	49	30	4	1	109%	103%	-5	-3	90%	91%			
Washington Street	WB L	166	185	163	211	154	149	-9	-62	94%	71%	-3	26	98%	114%	85%	110%	
	WB T	309	296	242	319	238	382	-4	63	98%	120%	-67	23	78%	108%			
Chestnut Street	NB L	143	95	65	91	11	9	-54	-82	17%	10%	-78	-4	45%	96%	46%	76%	
	NB R	256	235	117	161	155	78	38	-83	132%	48%	-139	-74	46%	69%			
		1291	1199	1053	1141	1040	986	-13	-155	99%	86%	-238	-58	82%	95%			

EXISTING VOLUMES

Project Name: West Newton - Santander
 Project No: 15636.00
 Location: Newton, MA
 Date: March 2022

Chestnut Street closed during portion of February 2022 counts with traffic diverted to Davis Street. Volumes are not accurate, Existing Conditions based on Oct 2021 counts instead.

based on Oct 2021 TMCs
 based on Feb 2022 ATR
 matches Feb 2022 TMCs

xx = balanced

INTERSECTION	MOVEMENT	APRIL 2019 EXISTING VOLUMES - RAW		OCTOBER 2021 EXISTING VOLUMES - RAW		FEBRUARY 2022 EXISTING VOLUMES - RAW		OCT 2021 VOLUMES - ADJUSTED		EXISTING VOLUMES - BALANCED	
		7:30 AM	5:00 PM	7:45 AM	5:00 PM	8:00 AM	5:00 PM	AM	PM	AM	PM
1. WASHINGTON STREET AT ELM STREET											
Washington Street	WB T	602	594	434	555	407	526	532	616	540	635
	WB R	50	76	24	44	54	60	29	49	30	50
Washington Street	NB L	89	44	19	37	29	33	23	41	25	40
	NB T	123	259	112	137	117	139	137	152	135	150
	NB R	641	774	574	641	573	672	703	711	715	710
Elm Street	SB R	467	260	252	210	266	227	309	233	310	235
		1972	2007	1415	1624	1446	1657				
2. WASHINGTON STREET AT CHERRY STREET											
Washington Street	EB L	94	136	80	151	97	148	98	167	100	170
	EB T	547	638	500	488	470	520	613	541	615	540
Washington Street	WB T	574	593	400	517	415	492	490	573	500	585
	WB R	182	224	127	209	179	233	156	232	160	235
Cherry Street	SB L	351	229	443	315	386	281	543	349	545	350
	SB R	78	77	58	91	61	101	71	101	70	100
		1826	1897	1608	1771	1608	1775				
3. WASHINGTON STREET AT HIGHLAND STREET											
Washington Street	EB T	657	675	698	615	630	641	855	682	860	685
	EB R	241	192	242	185	225	149	297	205	300	205
Washington Street	WB L	136	104	99	94	93	66	121	104	120	105
	WB T	605	572	419	522	413	511	513	579	515	580
Highland Street	NB L	151	245	120	216	177	225	147	240	145	240
	NB R	72	26	27	37	163	50	33	41	35	40
		1862	1814	1605	1669	1701	1642				
4. WASHINGTON STREET AT WALTHAM STREET / WATERTOWN STREET											
Washington Street	EB L			1	3	4	3	1	3	1	5
	EB BL	312	313	253	286	303	338	310	317	325	320
	EB T	417	388	449	362	473	362	550	401	570	405
Washington Street	WB T	270	202	170	208	167	254	208	231	220	245
	WB R	162	163	124	174	79	130	152	193	155	205
	WB HR	20	26	2	4		1	2	4	2	5
Waltham Street	SB R	209	185	162	135	151	118	198	150	200	155
Watertown Street	SWB R	261	289	174	242	190	206	213	268	215	285
	SWB HR	46	56	31	36	28	38	38	40	40	40
		1697	1622	1366	1450	1395	1450				
5. WASHINGTON STREET AT CHESTNUT STREET											
Washington Street	EB T	367	356	421	330	433	338	516	366	515	375
	EB R	50	32	45	29	49	30	55	32	55	30
Washington Street	WB L	166	185	163	211	154	149	200	234	200	235
	WB T	309	296	242	319	238	382	297	354	295	355
Chestnut Street	NB L	143	95	65	91	11	9	80	101	80	100
	NB R	256	235	117	161	155	78	143	179	145	180
		1291	1199	1053	1141	1040	986				

EXISTING VOLUMES

Project Name: West Newton - Santander
 Project No: 15636.00
 Location: Newton, MA
 Date: March 2022

Chestnut Street closed during portion of February 2022 counts with traffic diverted to Davis Street. Volumes are not accurate, Existing Conditions based on Oct 2021 counts instead.

based on Oct 2021 TMCs
 based on Feb 2022 ATR
 matches Feb 2022 TMCs

xx = balanced

INTERSECTION	MOVEMENT	APRIL 2019 EXISTING VOLUMES - RAW		OCTOBER 2021 EXISTING VOLUMES - RAW		FEBRUARY 2022 EXISTING VOLUMES - RAW		OCT 2021 VOLUMES - ADJUSTED		EXISTING VOLUMES - BALANCED	
		7:30 AM	5:00 PM	7:45 AM	5:00 PM	8:00 AM	5:00 PM	AM	PM	AM	PM
6. HIGHLAND STREET AT SITE DRIVEWAY Site Driveway	WB L										
	WB R										
Highland Street	NB T					340	275	180	281	180	280
	NB R										
Highland Street	SB L					318	215	418	309	420	310
	SB T										
7. HIGHLAND STREET AT CHURCH NORTH DRIVEWAY Church North Driveway	EB L										
	EB R						1		1		1
Highland Street	NB L					5	4	5	4	5	5
	NB T					338	268	180	281	180	280
Highland Street	SB T					298	210	401	302	405	305
	SB R					17	7	17	7	15	5
8. HIGHLAND STREET AT DAVIS STREET Church South Driveway	EB L					16	8	16	8	15	10
	EB T					3	1	3	1	5	1
	EB R					3	4	3	4	5	5
Davis Street	WB L					152	129				
	WB T						1		1		1
	WB R					22	49	45	62	45	60
Highland Street	NB L										
	NB T					305	215	124	214	125	215
	NB R					119	33	90	27	90	30
Highland Street	SB L					49	25	49	25	50	25
	SB T					249	186	352	278	355	280
	SB R										
9. DAVIS STREET AT SITE DRIVEWAY Davis Street	EB L										
	EB T					171	59	142	53	145	55
Davis Street	WB T					174	179	45	62	45	60
	WB R										
Site Driveway	SB L										
	SB R										
10. CHESTNUT STREET AT DAVIS STREET Davis Street	EB U					3	1				
	EB L					165	62	66	27	65	30
	EB R					4	2	76	26	80	25
Chestnut Street	NB L					1	5	21	32	20	30
	NB T					13	12	157	252	160	250
	SB U					4	4				
Chestnut Street	SB T					3	12	231	236	230	235
	SB R					172	166	24	30	25	30

Massachusetts Department of Transportation
 404 pages - see electronic file on website
 Statewide Traffic Data Collection
 2019 Weekday Seasonal Factors

Factor Group	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Axle Factor
R1	1.22	1.14	1.12	1.06	1.00	0.96	0.87	0.85	0.96	0.99	1.04	1.12	0.85
R2	0.95	0.96	0.98	0.97	0.97	0.93	0.97	0.94	0.96	0.90	0.92	0.93	0.96
R3	1.15	1.06	1.07	1.00	0.89	0.88	0.89	0.89	0.95	0.92	1.02	1.01	0.97
R4-R7	1.09	1.09	1.11	1.02	0.96	0.92	0.89	0.89	0.99	0.98	1.09	1.13	0.98
U1-Boston	1.03	1.01	0.98	0.94	0.94	0.92	0.95	0.93	0.94	0.94	0.97	1.04	0.96
U1-Essex	1.09	1.06	1.03	0.99	0.94	0.90	0.88	0.86	0.93	0.94	0.99	1.06	0.93
U1-Southeast	1.06	1.05	1.01	0.97	0.95	0.93	0.93	0.90	0.94	0.94	0.98	1.04	0.98
U1-West	1.19	1.14	1.09	0.95	0.92	0.89	0.89	0.86	0.91	0.95	0.97	1.07	0.84
U1-Worcester	1.02	1.04	0.97	0.94	0.93	0.91	0.95	0.91	0.93	0.92	0.95	1.10	0.88
U2	1.01	1.00	0.94	0.93	0.91	0.89	0.93	0.90	0.90	0.91	0.94	1.02	0.99
U3	1.06	1.03	0.98	0.94	0.93	0.91	0.95	0.91	0.92	0.93	0.97	1.00	0.98
U4-U7	1.01	1.00	0.95	0.92	0.88	0.86	0.92	0.91	0.92	0.94	0.99	1.04	0.99
Rec - East	1.04	1.16	1.12	0.98	0.92	0.88	0.77	0.81	0.94	1.02	1.08	1.12	0.99
Rec - West	1.30	1.23	1.32	1.18	0.95	0.82	0.70	0.69	0.97	0.96	1.16	1.15	0.98

Round off:

0-999 = 10

>1000 = 100

U = Urban

R = Rural

1 - Interstate

2 - Freeway and Expressway

3 - Other Principal Arterial

4 - Minor Arterial

5 - Major Collector

6 - Minor Collector

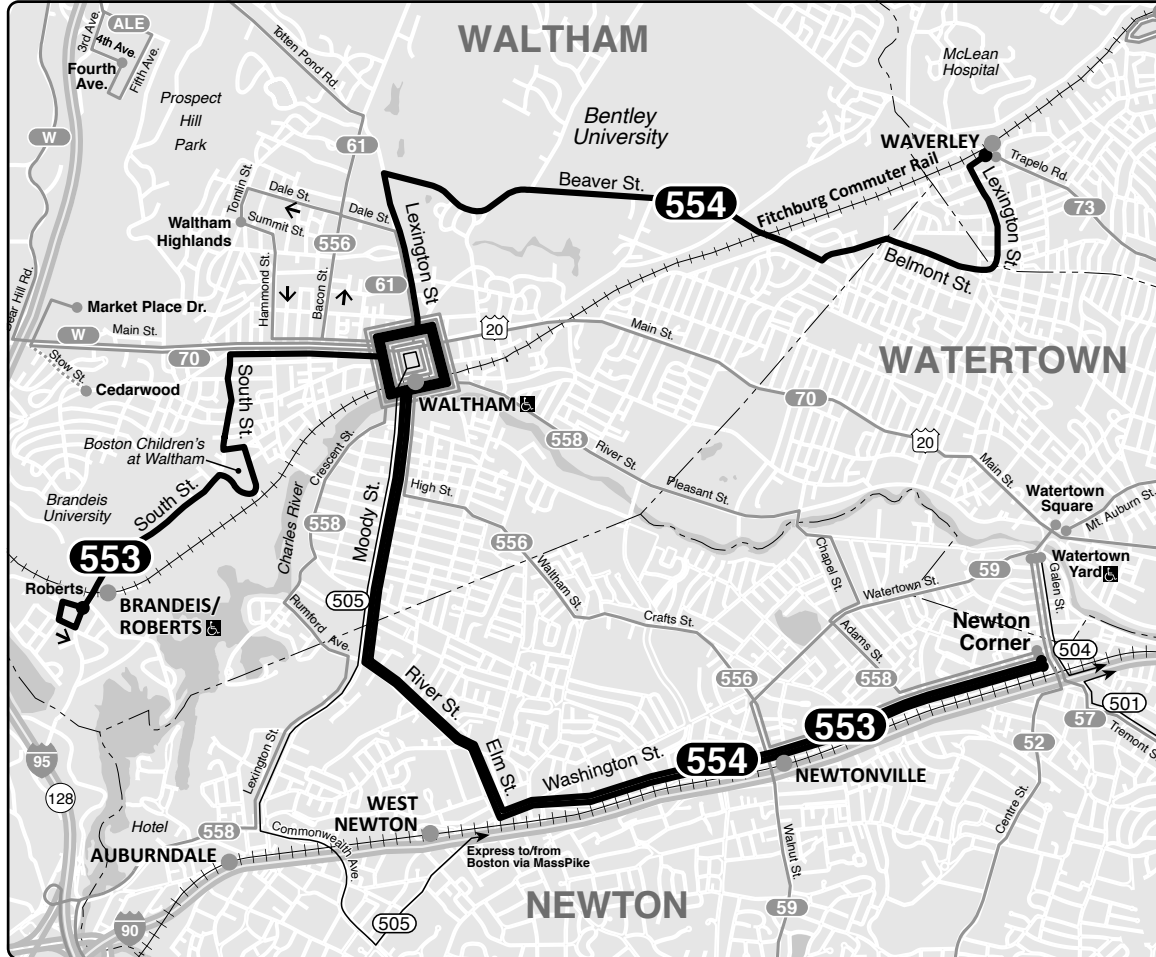
7 - Local Road and Street

<p>Recreational - East Group - Cape Cod (all towns) including the town of Plymouth south of Route 3A (stations 7014,7079,7080,7090,7091,7092,7093,7094,7095,7096,7097,7108 and 7178), Martha's Vineyard and Nantucket.</p>
<p>Recreational - West Group - Continuous Stations 2 and 189 including stations 1066,1067,1083,1084,1085,1086,1087,1088,1089,1090,1091,1092,1093,1094,1095,1096,1097,1098,1099,1100,1101,1102,1103,1104,1105,1106,1107,1108,1113,1114,1116,2196,2197 and 2198.</p>

404 pages- see electronic file on website

Public Transportation Schedules

Effective **March 13, 2022**



553 Roberts – Newton Corner

554 Waverley Sq – Newton Corner

Connections

- FITCHBURG LINE
- FRAMINGHAM/WORCESTER LINE



Information **617-222-3200**
 Lost and Found **617-222-1450**
 TTY **617-222-5146**

Realtime arrival information, maps, and more

mbta.com

- Transfer to bus/subway available on CharlieCard—good for 2 hours, pay fare difference.
- Children 11 & under ride free with a paying customer.
- ♿ All MBTA buses are accessible to people with disabilities.

	CharlieCard	Cash on board	Reduced fare
Local Bus	\$1.70	\$1.70	\$0.85
Local + Exp	\$4.25	\$5.95	\$2.10
Local + Subway	\$2.40	\$4.10	\$1.10

Fare/pass rules on mbta.com/fares or call **617-222-3200**

404 pages- see electronic file on website

Weekday 553 554

Inbound

	Roberts	Central Sq, Waltham	West Newton	Newton Corner
	6:25	6:34	6:47	6:58
A	6:45	6:57	7:06	7:16
	7:10	7:19	7:32	7:45
	7:55	8:08	8:21	8:34
A	8:15	8:27	8:37	8:48
	8:40	8:50	9:03	9:13
	9:25	9:35	9:47	9:57
A	9:45	9:58	10:08	10:19
	10:10	10:20	10:32	10:42
	10:55	11:05	11:15	11:25
	11:40	11:50	12:00	12:10
	12:25	12:36	12:48	12:59
	1:10	1:21	1:33	1:44
	1:55	2:06	2:18	2:29
	2:40	2:51	3:03	3:14
	3:25	3:36	3:48	3:59
	4:10	4:21	4:33	4:44
A	4:20	4:33	4:45	4:58
	4:55	5:06	5:18	5:29
	5:05	5:13	5:20	5:40
	5:40	5:51	6:03	6:14
	6:25	6:35	6:46	6:55
A	6:40	6:47	6:54	7:14
	7:10	7:20	7:31	7:40
	7:55	8:05	8:16	8:25
	8:40	8:50	9:01	9:10

Outbound

	Newton Corner	West Newton	Central Sq, Waltham		Roberts
	6:00	6:06	6:12	A	6:28
	6:30	6:38	6:46		7:00
	7:05	7:13	7:21		7:36
	7:30	7:37	7:43	A	8:03
	7:55	8:06	8:14		8:30
	8:40	8:51	8:59		9:17
	9:05	9:12	9:19	A	9:37
	9:20	9:34	9:41		9:59
	10:10	10:19	10:26		10:44
	10:50	11:04	11:11		11:29
	11:35	11:46	11:55		12:12
	12:15	12:26	12:34		12:54
	1:05	1:16	1:24		1:44
	1:50	2:01	2:09		2:29
	2:35	2:50	2:59		3:21
	3:20	3:35	3:44		4:06
	3:30	3:38	3:46	A	4:07
	4:05	4:20	4:29		4:48
	4:50	5:05	5:16		5:34
	5:05	5:13	5:20	A	5:40
	5:35	5:49	6:02		6:18
	6:20	6:34	6:47		7:03
	6:40	6:47	6:54	A	7:14
	7:00	7:14	7:27		7:43
	7:45	7:59	8:12		8:28
	8:30	8:44	8:57		9:13

Saturday 553

Inbound

	Roberts	Central Sq, Waltham	West Newton	Newton Corner
	6:30	6:38	6:47	6:56
	7:30	7:38	7:47	7:56
	8:40	8:50	8:59	9:09
	9:50	10:00	10:12	10:23
	11:15	11:27	11:39	11:50
	12:45	12:58	1:09	1:22
	2:15	2:27	2:39	2:49
	3:40	3:52	4:04	4:14
	5:10	5:22	5:34	5:45
	6:35	6:45	6:55	7:06

Outbound

	Newton Corner	West Newton	Central Sq, Waltham		Roberts
	7:00	7:05	7:13		7:26
	8:05	8:10	8:18		8:31
	9:15	9:22	9:30		9:44
	10:35	10:44	10:53		11:09
	12:00	12:11	12:21		12:37
	1:30	1:40	1:50		2:05
	3:00	3:09	3:19		3:33
	4:25	4:34	4:43		4:57
	5:55	6:04	6:13		6:27
	7:15	7:23	7:31		7:45

A start/end at Waverley Square at this time

554 trips are shaded

PM times are **bold**

Information in this timetable is subject to change without notice. Traffic and weather may affect running times.

Always check bus destination signs before boarding. Some buses may only serve a part, or skip portions of this route.

2022 Holidays

- SUN Memorial Day
- SUN Independence Day
- SUN Labor Day
- SUN Thanksgiving Day
- SUN Christmas Day
- SUN Christmas Day Observed
- SAT New Year's Eve
- SUN New Year's Day

Monday to Friday (except when Storm Service is operating)

Inbound to Boston		AM										PM													
ZONE	STATION	500	502	582	504	584	506	586	508	510	512	514	516	518	520	522	524	592	526	528	596	530	532	534	536
	Bikes Allowed	🚲	🚲						🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲
8	Worcester	4:15	5:00	-	6:00	-	7:00	-	8:00	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	-	5:00	6:00	-	7:00	8:20	9:20	10:20
8	Grafton	4:28	5:13	-	6:13	-	7:13	-	8:13	9:13	10:13	11:13	12:13	1:13	2:13	3:13	4:13	-	5:13	6:13	-	7:13	8:33	9:33	f 10:33
7	Westborough	4:32	5:17	-	6:17	-	7:17	-	8:17	9:17	10:17	11:17	12:17	1:17	2:17	3:17	4:17	-	5:17	6:17	-	7:17	8:37	9:37	f 10:37
6	Southborough	4:41	5:26	-	6:26	-	7:26	-	8:26	9:26	10:26	11:26	12:26	1:26	2:26	3:26	4:26	-	5:26	6:26	-	7:26	8:46	9:46	f 10:46
6	Ashland	4:45	5:30	-	6:30	-	7:30	-	8:30	9:30	10:30	11:30	12:30	1:30	2:30	3:30	4:30	-	5:30	6:30	-	7:30	8:50	9:50	f 10:50
5	Framingham	4:55	5:40	5:55	6:40	6:55	7:40	7:55	8:40	9:40	10:40	11:40	12:40	1:40	2:40	3:40	4:40	5:10	5:40	6:40	7:10	7:40	9:00	10:00	f 11:00
4	West Natick	5:00	5:45	6:00	6:45	7:00	7:45	8:00	8:45	9:45	10:45	11:45	12:45	1:45	2:45	3:45	4:45	5:15	5:45	6:45	7:15	7:45	9:05	10:05	f 11:05
4	Natick Center	5:05	-	6:05	-	7:05	-	8:05	8:50	9:50	10:50	11:50	12:50	1:50	2:50	3:50	4:50	5:20	5:50	6:50	7:20	7:50	9:10	10:10	f 11:10
3	Wellesley Square	5:09	-	6:09	-	7:09	-	8:09	8:54	9:54	10:54	11:54	12:54	1:54	2:54	3:54	4:54	5:24	5:54	6:54	7:24	7:54	9:14	10:14	f 11:14
3	Wellesley Hills	5:13	-	6:13	-	7:13	-	8:13	8:57	9:57	10:57	11:57	12:57	1:57	2:57	3:57	4:57	5:27	5:57	6:57	7:27	7:57	9:17	10:17	f 11:17
3	Wellesley Farms	5:16	-	6:16	-	7:16	-	8:16	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	5:30	6:00	7:00	7:30	8:00	9:20	10:20	f 11:20
2	Auburndale	5:21	-	6:21	-	7:21	-	8:21	9:05	f 10:05	f 11:05	-	f 1:05	-	-	-	-	-	-	f 7:35	-	f 9:25	f 10:25	-	
2	West Newton	5:24	-	6:24	-	7:24	-	8:24	9:08	f 10:08	f 11:08	-	f 1:08	-	-	-	-	-	-	f 7:38	-	f 9:28	f 10:28	-	
1	Newtonville	5:27	-	6:28	-	7:27	-	8:28	9:12	f 10:11	f 11:11	-	f 1:11	-	-	-	-	-	-	f 7:41	-	f 9:31	f 10:31	-	
1A	Boston Landing	L 5:34	L 6:07	L 6:35	L 7:07	L 7:35	L 8:07	L 8:35	L 9:18	L 10:17	L 11:17	L 12:12	L 1:17	L 2:12	L 3:12	L 4:12	L 5:12	L 5:42	L 6:12	L 7:12	L 7:47	L 8:12	L 9:37	L 10:37	L 11:32
1A	Lansdowne	L 5:39	L 6:12	L 6:40	L 7:12	L 7:40	L 8:12	L 8:40	L 9:23	L 10:22	L 11:22	L 12:17	L 1:22	L 2:17	L 3:17	L 4:17	L 5:17	L 5:47	L 6:17	L 7:17	L 7:52	L 8:17	L 9:42	L 10:42	L 11:37
1A	Back Bay	L 5:44	L 6:17	L 6:45	L 7:17	L 7:45	L 8:17	L 8:45	L 9:28	L 10:27	L 11:27	L 12:22	L 1:27	L 2:22	L 3:22	L 4:22	L 5:22	L 5:52	L 6:22	L 7:22	L 7:57	L 8:22	L 9:47	L 10:47	L 11:42
1A	South Station	5:50	6:23	6:51	7:23	7:51	8:23	8:51	9:34	10:33	11:33	12:28	1:33	2:28	3:28	4:28	5:28	5:58	6:28	7:28	8:03	8:28	9:53	10:53	11:48

Monday to Friday (except when Storm Service is operating)

Outbound from Boston		AM										PM											
ZONE	STATION	501	503	505	507	509	511	513	515	517	519	521	591	523	593	525	595	527	529	531	533	535	537
	Bikes Allowed	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲								🚲	🚲	🚲	🚲
1A	South Station	4:55	5:55	6:55	7:55	8:55	9:55	10:55	11:50	12:55	1:50	2:50	3:35	4:05	4:35	5:05	5:35	6:05	6:35	7:35	8:35	9:55	10:55
1A	Back Bay	5:01	6:01	7:01	8:01	9:01	10:01	11:01	11:56	1:01	1:56	2:56	3:41	4:11	4:41	5:11	5:41	6:11	6:41	7:41	8:41	10:01	11:01
1A	Lansdowne	5:06	6:06	7:06	8:06	9:06	10:06	11:06	12:01	1:06	2:01	3:01	3:46	4:16	4:46	5:16	5:46	6:16	6:46	7:46	8:46	10:06	11:06
1A	Boston Landing	f 5:11	f 6:11	7:11	8:11	9:11	f 10:11	f 11:11	f 12:06	f 1:11	f 2:06	f 3:06	3:51	4:21	4:51	5:21	5:51	6:21	6:51	f 7:51	f 8:51	f 10:11	f 11:11
1	Newtonville	-	-	-	-	-	-	-	f 12:11	-	f 2:11	f 3:11	3:56	-	4:56	-	5:56	-	6:56	f 7:56	f 8:56	f 10:16	f 11:16
2	West Newton	-	-	-	-	-	-	-	f 12:14	-	f 2:14	f 3:14	4:00	-	5:00	-	6:00	-	7:00	f 7:59	f 8:59	f 10:19	f 11:19
2	Auburndale	-	-	-	-	-	-	-	f 12:17	-	f 2:17	f 3:17	4:03	-	5:03	-	6:03	-	7:03	f 8:02	f 9:02	f 10:22	f 11:22
3	Wellesley Farms	f 5:21	6:21	7:21	8:21	9:21	10:21	11:21	12:21	1:21	2:21	3:21	4:07	-	5:07	-	6:07	-	7:06	8:06	9:06	10:26	11:26
3	Wellesley Hills	f 5:23	6:23	7:23	8:23	9:23	10:23	11:23	12:23	1:23	2:23	3:23	4:10	-	5:10	-	6:10	-	7:08	8:08	9:08	10:28	11:28
3	Wellesley Square	f 5:26	6:26	7:26	8:26	9:26	10:26	11:26	12:26	1:26	2:26	3:26	4:13	-	5:13	-	6:13	-	7:11	8:11	9:11	10:31	11:31
4	Natick Center	f 5:30	6:30	7:30	8:30	9:30	10:30	11:30	12:30	1:30	2:30	3:30	4:17	-	5:17	-	6:17	-	7:15	8:15	9:15	10:35	11:35
4	West Natick	5:35	6:35	7:35	8:35	9:35	10:35	11:35	12:35	1:35	2:35	3:35	4:22	4:38	5:22	5:38	6:22	6:38	7:20	8:20	9:20	10:40	11:40
5	Framingham	5:40	6:40	7:40	8:40	9:40	10:40	11:40	12:40	1:40	2:40	3:40	4:30	4:43	5:30	5:43	6:30	6:43	7:25	8:25	9:25	10:45	11:45
6	Ashland	5:46	6:46	7:46	8:46	9:46	10:46	11:46	12:46	1:46	2:46	3:46	-	4:49	-	5:49	-	6:49	7:31	8:31	9:31	10:51	11:51
6	Southborough	5:51	6:51	7:51	8:51	9:51	10:51	11:51	12:51	1:51	2:51	3:51	-	4:54	-	5:54	-	6:54	7:36	8:36	9:36	10:56	11:56
7	Westborough	6:00	7:00	8:00	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	-	5:03	-	6:03	-	7:03	7:45	8:45	9:45	11:05	12:05
8	Grafton	6:05	7:05	8:05	9:05	10:05	11:05	12:05	1:05	2:05	3:05	4:05	-	5:09	-	6:09	-	7:09	7:50	8:50	9:50	f 11:10	f 12:10
8	Worcester	6:21	7:21	8:21	9:21	10:21	11:21	12:21	1:21	2:21	3:21	4:21	-	5:28	-	6:28	-	7:28	8:08	9:06	10:06	11:26	12:26

Weekend & Storm Service

Inbound to Boston		AM							PM												
ZONE	STATION	1500	1502	1504	1506	1508	1510	1512	1514	1516	1518	2500	2502	2504	2506	2508	2510	2512	2514	2516	2518
	Bikes Allowed	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲
8	Worcester	5:10	7:10	9:10	11:10	1:10	3:10	5:10	7:10	9:10	11:10	5:23	7:23	9:23	11:23	1:23	3:23	5:23	7:23	9:23	11:23
8	Grafton	5:10	7:10	9:10	11:10	1:10	3:10	5:10	7:10	9:10	11:10	5:23	7:23	9:23	11:23	1:23	3:23	5:23	7:23	9:23	11:23
7	Westborough	5:27	7:27	9:27	11:27	1:27	3:27	5:27	7:27	9:27	11:27	5:35	7:35	9:35	11:35	1:35	3:35	5:35	7:35	9:35	11:35
6	Southborough	5:35	7:35	9:35	11:35	1:35	3:35	5:35	7:35	9:35	11:35	5:40	7:40	9:40	11:40	1:40	3:40	5:40	7:40	9:40	11:40
6	Ashland	5:40	7:40	9:40	11:40	1:40	3:40	5:40	7:40	9:40	11:40	5:50	7:50	9:50	11:50	1:50	3:50	5:50	7:50	9:50	11:50
5	Framingham	5:50	7:50	9:50	11:50	1:50	3:50	5:50	7:50	9:50	11:50	5:54	7:54	9:54	11:54	1:54	3:54	5:54	7:54	9:54	11:54
4	West Natick	5:54	7:54	9:54	11:54	1:54	3:54	5:54	7:54	9:54	11:54	5:59	7:59	9:59	11:59	1:59	3:59	5:59	7:59	9:59	11:59
4	Natick Center	5:59	7:59	9:59	11:59	1:59	3:59	5:59	7:59	9:59	11:59	6:04	8:04	10:04	12:04	2:04	4:04	6:04	8:04	10:04	12:04
3	Wellesley Square	6:04	8:04	10:04	12:04	2:04	4:04	6:04	8:04	10:04	12:04	6:07	8:07	10:07	12:07	2:07	4:07	6:07	8:07	10:07	12:07
3	Wellesley Hills	6:07	8:07	10:07	12:07	2:07	4:07	6:07	8:07	10:07	12:07	6:10	8:10	10:10	12:10	2:10</					

Crash Data (2015-2019)



INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Newton COUNT DATE : October 2021 (adjusted)

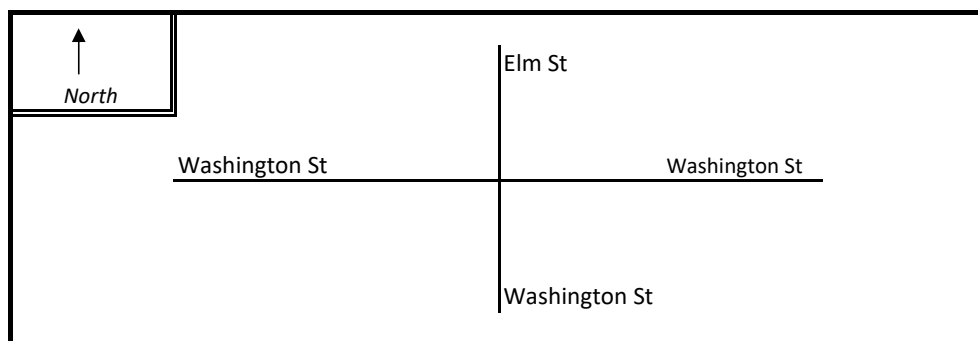
DISTRICT : 6 UNSIGNALIZED : SIGNALIZED : 0.71

~ INTERSECTION DATA ~

MAJOR STREET : Washington St

MINOR STREET(S) : Elm St

**INTERSECTION
DIAGRAM**
(Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	EB	WB		
PEAK HOURLY VOLUMES (AM/PM) :	900	235		685		1,820

" K " FACTOR : INTERSECTION ADT (V) = TOTAL DAILY APPROACH VOLUME :

TOTAL # OF CRASHES : # OF YEARS : AVERAGE # OF CRASHES PER YEAR (A) :

CRASH RATE CALCULATION :

0.43

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

Comments : MassDOT Crash Data (2015-2019)

Project Title & Date: Santander Bank Redevelopment, West Newton, MA



INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Newton COUNT DATE : October 2021 (adjusted)

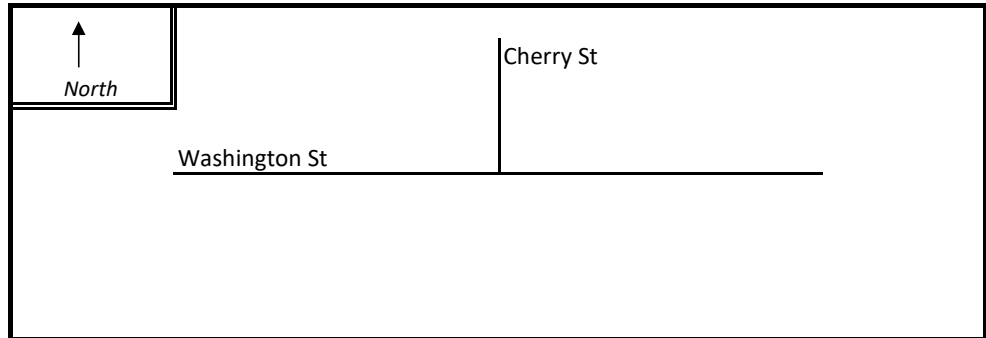
DISTRICT : 6 UNSIGNALIZED : SIGNALIZED :
0.71

~ INTERSECTION DATA ~

MAJOR STREET : Washington St

MINOR STREET(S) : Cherry St

**INTERSECTION
DIAGRAM**
(Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	EB	WB		
PEAK HOURLY VOLUMES (AM/PM) :		450	710	820		1,980

" K " FACTOR : INTERSECTION ADT (V) = TOTAL DAILY APPROACH VOLUME :

TOTAL # OF CRASHES : # OF YEARS : AVERAGE # OF CRASHES PER YEAR (A) :

CRASH RATE CALCULATION :

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

Comments : MassDOT Crash Data (2015-2019)
 Project Title & Date: Santander Bank Redevelopment, West Newton, MA



INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Newton COUNT DATE : Oct 2021/Feb 2022 (adjusted)

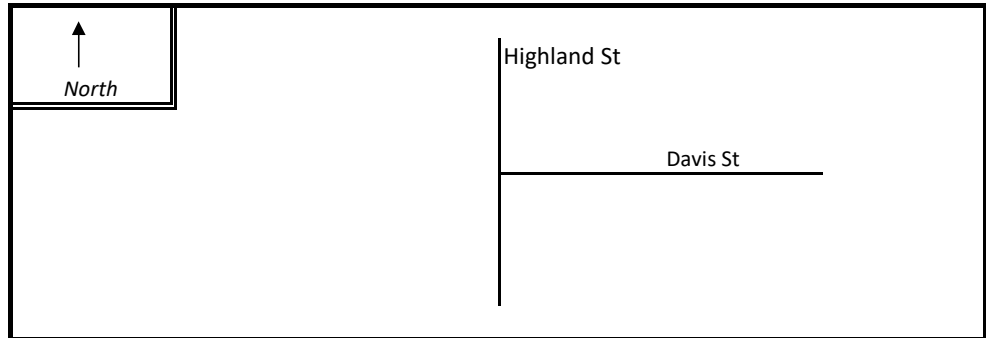
DISTRICT : 6 UNSIGNALIZED : 0.52 SIGNALIZED : 0.71

~ INTERSECTION DATA ~

MAJOR STREET : Highland St

MINOR STREET(S) : Davis St

**INTERSECTION
DIAGRAM**
(Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	EB	WB		
PEAK HOURLY VOLUMES (AM/PM) :	245	305	16	61		627

" K " FACTOR : INTERSECTION ADT (V) = TOTAL DAILY APPROACH VOLUME :

TOTAL # OF CRASHES : # OF YEARS : AVERAGE # OF CRASHES PER YEAR (A) :

CRASH RATE CALCULATION :

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

Comments : MassDOT Crash Data (2015-2019)
Project Title & Date: Santander Bank Redevelopment, West Newton, MA

1314 Washington Street Redevelopment

404 pages- see electronic file on website

Crash Number	City Town Name	Crash Date	Crash Severity	Crash Time	Max Injury Severity Reported	Number of Vehicles	Police Agency Type	Age of Driver - Youngest Known	Age of Driver - Oldest Known	Driver Contributing Circumstances (All Drivers)	Light Conditions	Manner of Collision	Motorist Type (All Persons)	Road Surface Condition	Total Fatalities	Total Non-Fatal Injuries	Vehicle Actions Prior to Crash (All Vehicles)	Vehicle Configuration (All Vehicles)	Vehicle Travel Directions (All Vehicles)	Weather Conditions	Crash Report IDs	Most Harmful Event (All Vehicles)	Street Number	Roadway
3996175	NEWTON	01/09/2015	Property damage only (none injured)	9:52 AM	No injury	3	Local police	25-34	55-64	D1: (No improper driving) / D2: (No improper driving) / D3: (No improper driving)	Daylight	Angle		Snow	0	0	V1: Travelling straight ahead / V2: Slowing or stopped in traffic / V3: Travelling straight ahead	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Passenger car) / V3:(Passenger car)	V1: W / V2: N / V3: W	Snow	150000027	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic) / V3:(Collision with motor vehicle in traffic)		WASHINGTON ST Rte 16 W / ELM ST
4008933	NEWTON	02/03/2015	Property damage only (none injured)	8:16 PM	No injury	2	Local police	25-34	35-44	D1: (No improper driving) / D2: (Unknown),(Unknown)	Dark - lighted roadway	Sideswipe, opposite direction		Snow	0	0	V1: Travelling straight ahead / V2: Travelling straight ahead	V1:(Passenger car) / V2:(Passenger car)	V1: N / V2: W	Clear	1500000157	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		ELM ST / WASHINGTON ST
4016506	NEWTON	02/19/2015	Non-fatal injury	10:40 AM	Non-fatal injury - Non-incapacitating	2	Local police	25-34	55-64	D1: (Unknown) / D2: (Unknown)	Daylight	Unknown		Wet	0	1	V1: Travelling straight ahead / V2: Travelling straight ahead	V1:(Passenger car) / V2:(Passenger car)	V1: W / V2: N	Cloudy	1500000257	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		ELM ST / WASHINGTON ST
4100179	NEWTON	08/26/2015	Property damage only (none injured)	12:56 PM	No injury	2	Local police	18-20	18-20	D1: (Distracted)	Daylight	Rear-end		Dry	0	0	V1: Travelling straight ahead / V2: Parked	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: W / V2: Not Reported	Clear	1500000940	V1:(Collision with parked motor vehicle) / V2:(Collision with motor vehicle in traffic)	1369	WASHINGTON ST
4147117	NEWTON	01/20/2016	Non-fatal injury	5:25 PM	Non-fatal injury - Incapacitating	1	Local police	55-64	55-64	D1: (Inattention)	Dark - lighted roadway	Single vehicle crash	P2: Pedestrian	Dry	0	1	V1: Turning right	V1:(Passenger car)	V1: W	Clear	1600000048 / 1600000048	V1:(Collision with pedestrian)		WASHINGTON ST / ELM ST
4226019	NEWTON	07/15/2016	Property damage only (none injured)	4:19 PM	No injury	3	Local police	35-44	75-84	D1: (Unknown) / D2: (Unknown)	Daylight	Angle		Dry	0	0	V1: Travelling straight ahead / V2: Turning right / V3: Parked	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Light truck(van, mini-van, pickup, sport utility)) / V3:(Passenger car)	V1: W / V2: S / V3: W	Clear	1600000697 / 1600000697	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic) / V3:(Collision with motor vehicle in traffic)		WASHINGTON ST Rte 16 W / ELM ST
4229246	NEWTON	07/29/2016	Property damage only (none injured)	1:31 PM	No injury	2	Local police	25-34	25-34	D1: (Inattention)	Daylight	Sideswipe, same direction		Dry	0	0	V1: Leaving traffic lane / V2: Parked	V1:(Passenger car) / V2:(Passenger car)	V1: W / V2: W	Clear	1600000744 / 1600000744	V1:(Collision with parked motor vehicle) / V2:(Collision with motor vehicle in traffic)		WASHINGTON AT / ELM ST / WASHINGTON
4283470	NEWTON	10/27/2016	Property damage only (none injured)	7:16 PM	No injury	2	Local police	35-44	55-64	D1: (Inattention) / D2: (No improper driving)	Dark - lighted roadway	Rear-end		Wet	0	0	V1: Travelling straight ahead / V2: Slowing or stopped in traffic	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: W / V2: W	Rain	1600001120 / 1600001120	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		WASHINGTON ST Rte 16 W / ELM ST
4300680	NEWTON	11/11/2016	Unknown	9:00 AM	Not reported	1	Local police				Daylight	Sideswipe, opposite direction		Dry	0	0	V1: Parked	V1:(Passenger car)	V1: N	Not Reported	1600001201 / 1600001201	V1:(Collision with parked motor vehicle)	1369	WASHINGTON TON ST
4402744	NEWTON	06/19/2017	Property damage only (none injured)	12:02 PM	No injury	2	Local police			D1: (No improper driving) / D2: (Other improper action)	Daylight	Angle		Dry	0	0	V1: Slowing or stopped in traffic / V2: Backing	V1:(Passenger car) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: N / V2: S	Clear	1700000718 / 1700000718	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		WASHINGTON TON ST
4473365	NEWTON	12/05/2017	Property damage only (none injured)	7:10 PM	No injury	2	Local police	35-44	35-44	D1: (No improper driving)	Dark - lighted roadway	Angle		Wet	0	0	V1: Travelling straight ahead / V2: Travelling straight ahead	V1:(Passenger car) / V2:(Passenger car)	V1: N / V2: W	Rain	1700001413	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		ELM ST / WASHINGTON TON ST
4515688	NEWTON	03/08/2018	Property damage only (none injured)	8:25 AM	No injury	2	Local police	25-34	25-34	D1: (Inattention)	Daylight	Sideswipe, same direction		Wet	0	0	V1: Travelling straight ahead / V2: Parked	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: W / V2: W	Snow	1800000261	V1:(Collision with parked motor vehicle) / V2:(Collision with motor vehicle in traffic)	1369	WASHINGTON TON STREET
4551945	NEWTON	06/01/2018	Property damage only (none injured)	12:43 PM	No injury	2	Local police	21-24	35-44	D1: (No improper driving) / D2: (Other improper action)	Daylight	Rear-end		Wet	0	0	V1: Slowing or stopped in traffic / V2: Travelling straight ahead	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Other e.g. farm equipment)	V1: W / V2: W	Rain	1800000612	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		ELM ST / WASHINGTON TON ST
4568146	NEWTON	06/21/2018	Property damage only (none injured)	1:11 AM	No injury	1	Local police	25-34	25-34	D1: (Wrong side or wrong way)	Dark - lighted roadway	Single vehicle crash		Dry	0	0	V1: Travelling straight ahead	V1:(Passenger car)	V1: W	Clear	1800000698	V1:(Collision with guardrail)	1369	WASHINGTON TON ST
4589154	NEWTON	08/05/2018	Property damage only (none injured)	2:42 AM	No injury	1	Local police	25-34	25-34	D1: (Operating vehicle in erratic, reckless, careless, negligent or aggressive manner),(Failure to keep	Dark - lighted roadway	Single vehicle crash		Dry	0	0	V1: Travelling straight ahead	V1:(Passenger car)	V1: E	Clear	1800000898	V1:(Collision with utility pole)	1362	WASHINGTON TON ST
4702016	NEWTON	04/25/2019	Not Reported	2:51 PM	Not reported	1	Local police				Unknown	Unknown		Unknown	0	0	V1: Parked	V1:(Passenger car)	V1: U	Unknown/Uknown	1900000418	V1:(Collision with motor vehicle in traffic)	1369	WASHINGTON TON ST

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Crash Number	City Town Name	Crash Date	Crash Severity	Crash Time	Max Injury Severity Reported	Number of Vehicles	Police Agency Type	Age of Driver - Youngest	Age of Driver - Oldest	Driver Contributing Circumstances (All Drivers)	Light Conditions	Manner of Collision	Motorist Type (All Persons)	Road Surface Condition	Total Fatalities	Total Non-Fatal Injuries	Vehicle Actions Prior to Crash (All Vehicles)	Vehicle Configuration (All Vehicles)	Vehicle Travel Directions (All Vehicles)	Weather Conditions	Crash Report IDs	Most Harmful Event (All Vehicles)	Street Number	Roadway
4072459	NEWTON	08/03/2015	Property damage only (none injured)	9:32 PM	No injury	1	Local police	35-44	35-44	D1: (No improper driving),(No improper driving)	Dark - lighted roadway	Sideswipe, same direction		Dry	0	0	V1: Slowing or stopped in traffic / V2: Travelling straight ahead / V3: Slowing or stopped in traffic	V1:(Passenger car) / V2:(Light truck(van, mini-van, pickup, sport utility)) / V3:(Light truck(van, mini-van, pickup, sport utility))	V1: W	Clear	1500000868	V1:(Collision with motor vehicle in traffic)	1359	WASHINGTON ST Rte 16 W
4106943	NEWTON	09/30/2015	Property damage only (none injured)	3:35 PM	No injury	3	Local police	25-34	45-54	D1: (Followed too closely),(No improper driving) / D2: (Driving too fast for conditions)	Daylight	Rear-end		Wet	0	0	V1: Slowing or stopped in traffic / V2: Travelling straight ahead / V3: Slowing or stopped in traffic	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Light truck(van, mini-van, pickup, sport utility)) / V3:(Light truck(van, mini-van, pickup, sport utility))	V1: E / V2: E / V3: E	Rain/Cloudy	1500001057	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic) / V3:(Collision with motor vehicle in traffic)	1349	WASHINGTON STREET Rte 16 E /
4217955	NEWTON	07/05/2016	Property damage only (none injured)	3:22 PM	No injury	2	Local police	21-24	35-44	D1: (Unknown) / D2: (Unknown)	Daylight	Sideswipe, same direction		Dry	0	0	V1: Travelling straight ahead / V2: Turning left	V1:(Single-unit truck (2-axle, 6-tires)) / V2:(Single-unit truck (2-axle, 6-tires))	V1: E / V2: E	Clear	1600000657 / 1600000657	V1:(Collision with embankment) / V2:(Collision with motor vehicle in traffic)		WASHINGTON STREET / CHERRY
4250524	NEWTON	09/13/2016	Non-fatal injury	3:40 PM	Non-fatal injury - Possible	2	Local police	35-44	35-44	D1: (No improper driving) / D2: (Inattention)	Daylight	Rear-end		Dry	0	1	V1: Slowing or stopped in traffic / V2: Travelling straight ahead	V1:(Passenger car) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: W / V2: W	Clear	1600000925 / 1600000925	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)	1349	WASHINGTON ST
4283393	NEWTON	10/09/2016	Property damage only (none injured)	12:37 AM	No injury	1	Local police	25-34	25-34	D1: (Failure to keep in proper lane or running off road)	Dark - lighted roadway	Single vehicle crash		Wet	0	0	V1: Travelling straight ahead	V1:(Passenger car)	V1: W	Clear	1600001039 / 1600001039	V1:(Collision with highway traffic sign post)	1349	WASHINGTON ST CHERRY STREET / WASHINGTON STREET
4284168	NEWTON	11/10/2016	Property damage only (none injured)	8:23 AM	No injury	2	Local police	55-64	55-64	D1: (No improper driving)	Daylight	Sideswipe, same direction		Dry	0	0	V1: Travelling straight ahead / V2: Changing lanes	V1:(Passenger car) / V2:(Unknown heavy truck, cannot classify)	V1: W / V2: W	Clear	1600001184 / 1600001184	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		CHERRY ST / WASHINGTON ST
4402635	NEWTON	06/09/2017	Non-fatal injury	8:24 AM	Non-fatal injury - Incapacitating	1	Local police	25-34	25-34	D1: (No improper driving)	Daylight	Single vehicle crash	P2: Pedestrian	Dry	0	1	V1: Turning left	V1:(Light truck(van, mini-van, pickup, sport utility))	V1: N	Clear	1700000670 / 1700000670	V1:(Collision with pedestrian)		CHERRY ST / WASHINGTON ST
4408257	NEWTON	01/25/2017	Not Reported	1:57 PM	Not reported	2	Local police				Daylight	Sideswipe, same direction		Dry	0	0	V1: Parked / V2: Parked	V1:(Passenger car) / V2:(Passenger car)	V1: Reported but invalid / V2: Reported but invalid	Clear	1700000080	V1:(Collision with parked motor vehicle) / V2:(Collision with parked motor vehicle)	1359	WASHINGTON ST CHERRY ST / WASHINGTON Rte 16 E
4408548	NEWTON	04/24/2017	Property damage only (none injured)	5:34 AM	No injury	1	Local police	35-44	35-44	D1: (No improper driving)	Dawn	Sideswipe, same direction		Dry	0	0	V1: Turning left	V1:(Passenger car)	V1: S	Clear	1700000467 / 1700000467	V1:(Collision with motor vehicle in traffic)		WASHINGTON ST CHERRY ST / WASHINGTON Rte 16 E
4409165	NEWTON	02/16/2017	Property damage only (none injured)	7:40 AM	No injury	2	Local police	35-44	45-54	D1: (No improper driving) / D2: (Failure to keep in proper lane or running off road)	Daylight	Angle		Wet	0	0	V1: Travelling straight ahead / V2: Travelling straight ahead	V1:(Passenger car) / V2:(Single-unit truck (2-axle, 6-tires))	V1: E / V2: E	Cloudy	1700000212 / 1700000212	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)	1326	WASHINGTON ST CHERRY ST / WASHINGTON Rte 16 W
4409188	NEWTON	04/20/2017	Property damage only (none injured)	3:16 PM	No injury	2	Local police	45-54	>84	D1: (Unknown) / D2: (Unknown)	Daylight	Sideswipe, same direction		Dry	0	0	V1: Travelling straight ahead / V2: Travelling straight ahead	V1:(Unknown heavy truck, cannot classify) / V2:(Passenger car)	V1: W / V2: W	Clear	1700000451 / 1700000451	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		WASHINGTON ST CHERRY ST / WASHINGTON Rte 16 W
4414595	NEWTON	07/24/2017	Property damage only (none injured)	8:10 AM	No injury	1	Local police	55-64	55-64		Daylight	Angle		Wet	0	0	V1: Slowing or stopped in traffic	V1:(Light truck(van, mini-van, pickup, sport utility))	V1: S	Cloudy/Rain	1700000844 / 1700000844	V1:(Collision with cyclist (bicycle, tricycle, unicycle, pedal car))		CHERRY ST / WASHINGTON ST
4443050	NEWTON	10/18/2017	Property damage only (none injured)	6:27 PM	No injury	2	Local police	21-24	45-54	D1: (No improper driving)	Dark - lighted roadway	Sideswipe, same direction		Dry	0	0	V1: Travelling straight ahead / V2: Changing lanes	V1:(Passenger car) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: E / V2: E	Clear	1700001219 / 1700001219	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)	1354	WASHINGTON ST
4463165	NEWTON	11/13/2017	Property damage only (none injured)	5:55 PM	No injury	2	Local police	25-34	35-44	D1: (No improper driving) / D2: (Failure to keep in proper lane or running off road)	Dark - lighted roadway	Rear-end		Wet	0	0	V1: Slowing or stopped in traffic / V2: Changing lanes	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Passenger car)	V1: E / V2: E	Rain	1700001322 / 1700001322	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)	1354	WASHINGTON ST CHERRY ST / WASHINGTON Rte 16 W
4473373	NEWTON	12/25/2017	Property damage only (none injured)	5:53 PM	No injury	2	Local police	55-64	55-64	D1: (No improper driving)	Dark - lighted roadway	Rear-end		Slush	0	0	V1: Slowing or stopped in traffic / V2: Travelling straight ahead	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: W / V2: W	Snow	1700001506	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		WASHINGTON STREET Rte 16 W
4487933	NEWTON	01/10/2018	Property damage only (none injured)	6:08 PM	No injury	2	Local police	55-64	55-64	D2: (Other improper action)	Dark - lighted roadway	Sideswipe, same direction		Sand, mud, dirt, oil, gravel	0	0	V1: Parked / V2: Other	V1:(Passenger car) / V2:(Passenger car)	V1: Not Reported / V2: W	Clear	1800000050	V1:(Collision with motor vehicle in traffic) / V2:(Collision with parked motor vehicle)	1359	WASHINGTON ST

Crash Number	City Town Name	Crash Date	Crash Severity	Crash Time	Max Injury Severity Reported	Number of Vehicles	Police Agency Type	Age of Driver - Youngest Known	Age of Driver - Oldest Known	Driver Contributing Circumstances (All Drivers)	Light Conditions	Manner of Collision	Motorist Type (All Persons)	Road Surface Condition	Total Fatalities	Total Non-Fatal Injuries	Vehicle Actions Prior to Crash (All Vehicles)	Vehicle Configuration (All Vehicles)	Vehicle Travel Directions (All Vehicles)	Weather Conditions	Crash Report IDs	Most Harmful Event (All Vehicles)	Street Number	Roadway
4548255	NEWTON	05/04/2018	Property damage only (none injured)	2:11 PM	No injury	1	Local police	45-54	45-54	D1: (Unknown)	Daylight	Single vehicle crash		Dry	0	0	V1: Turning right	V1:(Tractor/semi-trailer)	V1: N	Clear	1800000495	V1:(Collision with light pole or other post/support)		CHERRY STREET / WASHINGTON STREET
4621092	NEWTON	10/26/2018	Property damage only (none injured)	8:35 AM	No injury	2	Local police	35-44	75-84	D1: (Unknown)	Daylight	Sideswipe, same direction		Dry	0	0	V1: Travelling straight ahead / V2: Entering traffic lane	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Passenger car)	V1: E / V2: E	Clear	1800001222	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)	1354	WASHINGTON ST
4692793	NEWTON	03/01/2019	Non-fatal injury	5:37 PM	Non-fatal injury - Non-incapacitating	3	Local police	35-44	65-74	D1: (Failure to keep in proper lane or running off road),(Physical impairment) / D2: (No improper driving)	Dusk	Head-on		Dry	0	2	V1: Travelling straight ahead / V2: Turning right / V3: Parked	V1:(Passenger car) / V2:(Passenger car) / V3:(Light truck(van, mini-van, pickup, sport utility))	V1: E / V2: E / V3: U	Clear/Unknown	1900000222	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic) / V3:(Collision with motor vehicle in traffic)	1354	WASHINGTON ST
4702227	NEWTON	04/27/2019	Property damage only (none injured)	5:16 PM	No Apparent Injury (O)	2	Local police	25-34	55-64	D1: (No improper driving)	Daylight	Rear-end		Dry	0	0	V1: Parked / V2: Backing	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Passenger car)	V1: W / V2: W	Cloudy	1900000430	V1:(Collision with motor vehicle in traffic) / V2:(Collision with parked motor vehicle)	1349	WASHINGTON ST
4724466	NEWTON	06/22/2019	Property damage only (none injured)	1:33 PM	No Apparent Injury (O)	2	Local police	21-24	25-34	D1: (No improper driving) / D2: (Unknown)	Daylight	Rear-to-rear		Unknown	0	0	V1: Backing / V2: Backing	V1:(Passenger car) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: N / V2: S	Clear	1900000641	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)	1349	WASHINGTON ST
4747790	NEWTON	07/13/2019	Property damage only (none injured)	1:14 PM	No Apparent Injury (O)	2	Local police	>84	>84	D2: (Inattention)	Daylight	Sideswipe, same direction		Dry	0	0	V1: Parked / V2: Entering traffic lane	V1:(Passenger car) / V2:(Passenger car)	V1: W / V2: W	Clear	1900000718	V1:(Collision with motor vehicle in traffic) / V2:(Collision with parked motor vehicle)	1353	WASHINGTON ST
4784967	NEWTON	11/13/2019	Property damage only (none injured)	9:37 PM	No Apparent Injury (O)	2	Local police	35-44	65-74	D1: (Failure to keep in proper lane or running off road),(Physical impairment) / D2: (No improper driving)	Dark - lighted roadway	Sideswipe, same direction		Dry	0	0	V1: Travelling straight ahead / V2: Entering traffic lane	V1:(Passenger car) / V2:(Passenger car)	V1: W / V2: W	Clear	1900001170	V1:(Collision with parked motor vehicle) / V2:(Collision with parked motor vehicle)	1351	WASHINGTON ST
4834703	NEWTON	10/27/2019	Property damage only (none injured)	5:53 PM	No Apparent Injury (O)	2	Local police	35-44	35-44	D1: (Unknown)	Dark - lighted roadway	Sideswipe, same direction		Wet	0	0	V1: Turning left / V2: Turning right	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Passenger car)	V1: E / V2: W	Rain	1900001103	V1:(Collision with motor vehicle in traffic) / V2:(Unknown)		CHERRY ST / WASHINGTON ST

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Crash Number	City Town Name	Crash Date	Crash Severity	Crash Time	Max Injury Severity Reported	Number of Vehicles	Police Agency Type	Age of Driver - Youngest Known	Age of Driver - Oldest Known	Driver Contributing Circumstances (All Drivers)	Light Conditions	Manner of Collision	Motorist Type (All Persons)	Road Surface Condition	Total Fatalities	Total Non-Fatal Injuries	Vehicle Actions Prior to Crash (All Vehicles)	Vehicle Configuration (All Vehicles)	Vehicle Travel Directions (All Vehicles)	Weather Conditions	Crash Report IDs	Most Harmful Event (All Vehicles)	Street Number	Roadway
4008914	NEWTON	02/06/2015	Property damage only (none injured)	9:50 AM	No injury	2	Local police	35-44	35-44	D1: (No improper driving)	Daylight	Angle		Ice	0	0	V1: Travelling straight ahead / V2: Travelling straight ahead	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Passenger car)	V1: U / V2: U	Clear	1500000174	V1:(Collision with parked motor vehicle) / V2:(Collision with motor vehicle in traffic)	1321	WASHINGTON ST
4016525	NEWTON	02/22/2015	Property damage only (none injured)	1:55 PM	No injury	2	Local police			D1: (Unknown)	Daylight	Angle		Slush	0	0	V1: Travelling straight ahead / V2: Parked	V1:(Passenger car) / V2:(Passenger car)	V1: N / V2: N	Clear	1500000272	V1:(Collision with parked motor vehicle) / V2:(Collision with motor vehicle in traffic)	1321	WASHINGTON ST
4080531	NEWTON	08/22/2015	Not Reported	7:36 AM	Not reported	1	Local police				Daylight	Angle		Dry	0	0	V1: Parked	V1:(Light truck(van, mini-van, pickup, sport utility))	V1: Not Reported	Clear/Clear	1500000926	V1:(Collision with motor vehicle in traffic)	1321	WASHINGTON ST
4108102	NEWTON	10/30/2015	Property damage only (none injured)	12:21 PM	No injury	2	Local police	55-64	55-64	D1: (Inattention)	Daylight	Angle		Dry	0	0	V1: Travelling straight ahead / V2: Parked	V1:(Passenger car) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: W / V2: Not Reported	Clear	1500001175	V1:(Collision with parked motor vehicle) / V2:(Other)	1321	WASHINGTON ST
4132226	NEWTON	12/27/2015	Property damage only (none injured)	5:10 PM	No injury	2	Local police	65-74	75-84	D1: (No improper driving) / D2: (Inattention)	Dark - lighted roadway	Sideswipe, same direction		Wet	0	0	V1: Travelling straight ahead / V2: Parked	V1:(Passenger car) / V2:(Passenger car)	V1: E / V2: E	Rain	1500001393	V1:(Collision with parked motor vehicle) / V2:(Collision with motor vehicle in traffic)	1309	WASHINGTON ST Rte 16 E
4150208	NEWTON	02/07/2016	Not Reported	10:06 AM	Not Applicable	2	Local police			D1: (Unknown)	Daylight	Sideswipe, same direction		Dry	0	0	V1: Travelling straight ahead / V2: Not reported	V1:(Passenger car) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: W / V2: Not Reported	Clear	1600000125	V1:(Collision with pedestrian)	1309	WASHINGTON ST
4181430	NEWTON	04/09/2016	Property damage only (none injured)	11:31 AM	No injury	2	Local police	45-54	55-64	D1: (No improper driving) / D2: (Inattention)	Daylight	Rear-end		Dry	0	0	V1: Slowing or stopped in traffic / V2: Travelling straight ahead	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Passenger car)	V1: E / V2: E	Clear	1600000333 / 1600000333	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		HIGHLAND ST / WASHINGTON ST
4215340	NEWTON	06/09/2016	Property damage only (none injured)	1:22 PM	No injury	2	Local police	55-64	75-84	D1: (No improper driving) / D2: (No improper driving)	Daylight	Rear-end		Dry	0	0	V1: Backing / V2: Slowing or stopped in traffic	V1:(Passenger car) / V2:(Passenger car)	V1: W / V2: W	Clear	1600000572 / 1600000572	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)	1321	WASHINGTON ST
4224220	NEWTON	06/18/2016	Property damage only (none injured)	4:02 PM	No injury	2	Local police	25-34	25-34	D1: (Inattention)	Daylight	Angle		Dry	0	0	V1: Backing / V2: Parked	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: S	Clear	1600000600 / 1600000600	V1:(Collision with parked motor vehicle) / V2:(Collision with motor vehicle in traffic)	1321	WASHINGTON ST
4231957	NEWTON	08/02/2016	Property damage only (none injured)	6:01 PM	No injury	2	Local police	25-34	25-34	D1: (Glare)	Daylight	Angle		Dry	0	0	V1: Backing / V2: Parked	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: N / V2: E	Clear	1600000755 / 1600000755	V1:(Collision with parked motor vehicle) / V2:(Collision with motor vehicle in traffic)	1321	WASHINGTON ST
4242447	NEWTON	08/30/2016	Non-fatal injury	5:45 PM	Non-fatal injury - Possible	1	Local police	75-84	75-84	D1: (Inattention)	Daylight	Single vehicle crash		Dry	0	1	V1: Travelling straight ahead	V1:(Passenger car)	V1: W	Clear	1600000854 / 1600000854	V1:(Collision with other movable object)	1326	WASHINGTON ST
4300717	NEWTON	11/18/2016	Property damage only (none injured)	4:16 PM	No injury	2	Local police	25-34	25-34	D2: (Failure to keep in proper lane or running off road)	Daylight	Sideswipe, same direction		Dry	0	0	V1: Parked / V2: Travelling straight ahead	V1:(Passenger car) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: W / V2: W	Clear	1600001231 / 1600001231	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)	1309	WASHINGTON ST
4404010	NEWTON	06/01/2017	Non-fatal injury	9:41 PM	Non-fatal injury - Incapacitating	2	Local police	21-24	35-44		Dark - lighted roadway	Rear-end	P1: Pedestrian	Dry	0	1	V1: Parked / V2: Parked	V1:(Other e.g. farm equipment) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: W / V2: W	Clear	1700000640 / 1700000640	V1:(Collision with pedestrian) / V2:(Collision with motor vehicle in traffic)	1321	WASHINGTON ST
4408327	NEWTON	02/14/2017	Property damage only (none injured)	5:52 PM	No injury	2	Local police	65-74	65-74	D1: (Inattention),(Unknown)	Dark - lighted roadway	Rear-end		Wet	0	0	V1: Backing / V2: Parked	V1:(Passenger car) / V2:(Light truck(van, mini-van, pickup, sport utility))		Clear	1700000201 / 1700000201	V1:(Collision with parked motor vehicle) / V2:(Collision with motor vehicle in traffic)	1321	WASHINGTON ST
4423630	NEWTON	08/31/2017	Property damage only (none injured)	8:32 AM	No injury	2	Local police	25-34	45-54	D1: (No improper driving) / D2: (Unknown)	Daylight	Sideswipe, same direction		Dry	0	0	V1: Travelling straight ahead / V2: Turning right	V1:(Single-unit truck (2-axle, 6-tires)) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: E / V2: S	Clear	1700001005 / 1700001005	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		WASHINGTON ST / HIGHLAND ST
4450749	NEWTON	10/19/2017	Property damage only (none injured)	1:06 AM	No injury	1	Local police	35-44	35-44	D1: (Inattention)	Dark - lighted roadway	Single vehicle crash		Dry	0	0	V1: Travelling straight ahead	V1:(Passenger car)	V1: E	Clear	1700001220 / 1700001220	V1:(Collision with ditch)	1314	WASHINGTON ST

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Crash Number	City Town Name	Crash Date	Crash Severity	Crash Time	Max Injury Severity Reported	Number of Vehicles	Police Agency Type	Age of Driver - Youngest Known	Age of Driver - Oldest Known	Driver Contributing Circumstances (All Drivers)	Light Conditions	Manner of Collision	Motorist Type (All Persons)	Road Surface Condition	Total Fatalities	Total Non-Fatal Injuries	Vehicle Actions Prior to Crash (All Vehicles)	Vehicle Configuration (All Vehicles)	Vehicle Travel Directions (All Vehicles)	Weather Conditions	Crash Report IDs	Most Harmful Event (All Vehicles)	Street Number	Roadway
4495496	NEWTON	01/17/2018	Property damage only (none injured)	2:38 PM	No injury	2	Local police	45-54	55-64	D1: (No improper driving) / D2: (Inattention)	Daylight	Angle		Wet	0	0	V1: Travelling straight ahead / V2: Changing lanes	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Passenger car)	V1: W / V2: W	Snow	180000095	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)	1326	WASHINGTON ST
4529248	NEWTON	04/18/2018	Property damage only (none injured)	7:06 AM	No injury	2	Local police	45-54	45-54	D1: (Visibility obstructed)	Daylight	Sideswipe, same direction		Dry	0	0	V1: Travelling straight ahead / V2: Parked	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: W / V2: W	Clear	1800000438	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)	1309	WASHINGTON ST
4529261	NEWTON	04/14/2018	Property damage only (none injured)	7:03 PM	No injury	2	Local police	65-74	65-74	D1: (No improper driving)	Daylight	Rear-end		Dry	0	0	V1: Travelling straight ahead / V2: Travelling straight ahead	V1:(Passenger car) / V2:(Passenger car)	V1: W / V2: W	Clear	1800000427	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		HIGHLAND ST / WASHINGTON ST
4568076	NEWTON	06/27/2018	Property damage only (none injured)	7:48 AM	No injury	1	Local police	55-64	55-64	D1: (No improper driving)	Daylight	Angle		Dry	0	0	V1: Slowing or stopped in traffic	V1:(Passenger car)	V1: E	Clear	1800000721	V1:(Collision with motor vehicle in traffic)		WASHINGTON STREET Rte 16 E /
4620999	NEWTON	10/10/2018	Property damage only (none injured)	9:15 AM	No injury	2	Local police	55-64	55-64	D1: (Inattention)	Daylight	Angle		Dry	0	0	V1: Backing / V2: Parked	V1:(Passenger car) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: E / V2: S	Clear	1800001136	V1:(Collision with parked motor vehicle) / V2:(Collision with motor vehicle in traffic)	1321	WASHINGTON ST
4621004	NEWTON	10/10/2018	Non-fatal injury	7:11 PM	Non-fatal injury - Non-incapacitating	2	Local police	25-34	45-54	D1: (Unknown)	Dark - lighted roadway	Sideswipe, same direction		Dry	0	1	V1: Travelling straight ahead / V2: Travelling straight ahead	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Passenger car)	V1: E / V2: E	Clear	1800001141	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		HIGHLAND ST / WASHINGTON ST
4621052	NEWTON	10/17/2018	Property damage only (none injured)	2:40 PM	No injury	2	Local police	35-44	35-44	D1: (No improper driving),(No improper driving)	Daylight	Sideswipe, opposite direction		Dry	0	0	V1: Backing / V2: Parked	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: U / V2: Reported but invalid	Clear/Clear	1800001177	V1:(Collision with parked motor vehicle) / V2:(Collision with motor vehicle in traffic)	1321	WASHINGTON ST
4628522	NEWTON	10/27/2018	Non-fatal injury	8:18 PM	Non-fatal injury - Non-incapacitating	1	Local police	16-17	16-17	D1: (Inattention)	Dark - lighted roadway	Single vehicle crash	P2: Pedestrian	Wet	0	1	V1: Slowing or stopped in traffic	V1:(Light truck(van, mini-van, pickup, sport utility))	V1: W	Rain	1800001232	V1:(Collision with pedestrian)	1321	WASHINGTON ST
4776735	NEWTON	10/25/2019	Property damage only (none injured)	2:43 PM	No Apparent Injury (O)	2	Local police	65-74	65-74	D1: (No improper driving)	Daylight	Sideswipe, same direction		Dry	0	0	V1: Travelling straight ahead / V2: Parked	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: W / V2: S	Clear	1900001094	V1:(Collision with parked motor vehicle) / V2:(Collision with motor vehicle in traffic)	1321	WASHINGTON ST
4776747	NEWTON	10/29/2019	Property damage only (none injured)	7:16 PM	No Apparent Injury (O)	2	Local police	45-54	65-74	D1: (Failure to keep in proper lane or running off road) / D2: (No improper driving)	Dark - lighted roadway	Rear-end		Wet	0	0	V1: Turning right / V2: Turning right	V1:(Passenger car) / V2:(Passenger car)	V1: S / V2: S	Cloudy snow/sleet, hail (freezing rain or drizzle)	1900001108	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		HIGHLAND ST / WASHINGTON ST
4793283	NEWTON	12/01/2019	Property damage only (none injured)	7:16 PM	No Apparent Injury (O)	2	Local police	18-20	35-44	D1: (Failed to yield right of way) / D2: (No improper driving)	Dark - lighted roadway	Angle		Snow	0	0	V1: Turning left / V2: Travelling straight ahead	V1:(Passenger car) / V2:(Passenger car)	V1: S / V2: E		1900001229	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		HIGHLAND ST / WASHINGTON ST
4799229	NEWTON	12/06/2019	Property damage only (none injured)	2:16 PM	No Apparent Injury (O)	2	Local police	45-54	55-64	D1: (No improper driving)	Daylight	Sideswipe, same direction		Wet	0	0	V1: Parked / V2: Travelling straight ahead	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: W / V2: W	Cloudy/Snow	1900001254	V1:(Collision with motor vehicle in traffic) / V2:(Collision with parked motor vehicle)	1309	WASHINGTON STREET Rte SR16
4799389	NEWTON	12/20/2019	Property damage only (none injured)	1:14 PM	No Apparent Injury (O)	2	Local police	18-20	55-64	D1: (No improper driving) / D2: (Other improper action)	Daylight	Angle		Dry	0	0	V1: Travelling straight ahead / V2: Slowing or stopped in traffic	V1:(Passenger car) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: W / V2: W	Clear	1900001317	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)	1309	WASHINGTON ST

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Crash Number	City Town Name	Crash Date	Crash Severity	Crash Time	Max Injury Severity Reported	Number of Vehicles	Police Agency Type	Age of Driver - Youngest Known	Age of Driver - Oldest Known	Driver Contributing Circumstances (All Drivers)	Light Conditions	Manner of Collision	Motorist Type (All Persons)	Road Surface Condition	Total Fatalities	Total Non-Fatal Injuries	Vehicle Actions Prior to Crash (All Vehicles)	Vehicle Configuration (All Vehicles)	Vehicle Travel Directions (All Vehicles)	Weather Conditions	Crash Report IDs	Most Harmful Event (All Vehicles)	Street Number	Roadway
4033700	NEWTON	04/02/2015	Non-fatal injury	2:28 PM	Non-fatal injury - Possible	1	Local police	65-74	65-74	D1: (Operating vehicle in erratic, reckless, careless, negligent or aggressive manner)	Daylight	Not reported	P2: Pedestrian	Dry	0	1	V1: Turning left	V1:(Light truck(van, mini-van, pickup, sport utility))	V1: W	Clear	1500000436	V1:(Collision with pedestrian)		CHESTNUT ST / WASHINGTON ST
4040630	NEWTON	05/09/2015	Not Reported	10:32 AM	Not reported	1	Local police				Daylight	Sideswipe, same direction		Dry	0	0	V1: Parked	V1:(Passenger car)	V1: E	Clear/Clear	1500000557	V1:(Collision with motor vehicle in traffic)	1250	WASHINGTON ST
4055898	NEWTON	06/26/2015	Non-fatal injury	8:59 AM	Non-fatal injury - Possible	2	Local police	21-24	35-44	D1: (No improper driving) / D2: (No improper driving)	Daylight	Angle		Wet	0	1	V1: Travelling straight ahead / V2: Entering traffic lane	V1:(Passenger car) / V2:(Passenger car)	V1: E / V2: N	Rain	1500000737	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)	1250	WASHINGTON ST
4140253	NEWTON	01/18/2016	Property damage only (none injured)	4:05 PM	No injury	2	Local police	25-34	35-44	D1: (No improper driving) / D2: (Failed to yield right of way)	Daylight	Angle		Dry	0	0	V1: Travelling straight ahead / V2: Unknown	V1:(Passenger car) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: E / V2: E	Clear	1600000041 / 1600000041	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		CHESTNUT ST / WASHINGTON ST
4147465	NEWTON	01/13/2016	Property damage only (none injured)	8:25 AM	No injury	2	Local police	35-44	45-54	D1: (No improper driving) / D2: (Made an improper turn)	Daylight	Sideswipe, same direction		Dry	0	0	V1: Travelling straight ahead / V2: Turning right	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Bus (seats for 16 or more, including driver))	V1: N / V2: N	Clear	1600000024 / 1600000024	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		CHESTNUT STREET / WASHINGTON
4150226	NEWTON	02/04/2016	Property damage only (none injured)	11:53 AM	No injury	1	Local police				Daylight	Rear-end		Dry	0	0	V1: Backing	V1:(Light truck(van, mini-van, pickup, sport utility))	V1: N	Clear	1600000100 / 1600000100	V1:(Other)	1250	WASHINGTON ST
4186047	NEWTON	04/23/2016	Property damage only (none injured)	11:45 AM	No injury	2	Local police	25-34	55-64	D1: (Inattention) / D2: (No improper driving)	Daylight	Rear-end		Wet	0	0	V1: Travelling straight ahead / V2: Slowing or stopped in traffic	V1:(Passenger car) / V2:(Passenger car)	V1: N / V2: N	Rain	1600000379 / 1600000379	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		CHESTNUT ST / WASHINGTON ST
4408754	NEWTON	07/17/2017	Property damage only (none injured)	12:51 PM	No injury	2	Local police	25-34	75-84	D1: (Unknown) / D2: (Unknown)	Daylight	Angle		Dry	0	0	V1: Turning left / V2: Travelling straight ahead	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Passenger car)	V1: N / V2: E	Clear	1700000817 / 1700000817	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		CHESTNUT ST / WASHINGTON ST
4409178	NEWTON	05/17/2017	Property damage only (none injured)	12:18 PM	No injury	2	Local police	35-44	55-64	D1: (No improper driving) / D2: (No improper driving)	Daylight	Sideswipe, same direction		Dry	0	0	V1: Travelling straight ahead / V2: Parked	V1:(Unknown heavy truck, cannot classify) / V2:(Tractor/semi-trailer)	V1: W / V2: W	Clear	1700000566 / 1700000566	V1:(Collision with parked motor vehicle) / V2:(Collision with motor vehicle in traffic)	1249	WASHINGTON ST
4411242	NEWTON	08/10/2017	Property damage only (none injured)	12:13 PM	No injury	2	Local police	35-44	45-54	D1: (No improper driving) / D2: (Other improper action)	Daylight	Angle		Dry	0	0	V1: Parked / V2: Other	V1:(Light truck(van, mini-van, pickup, sport utility))	V1: S / V2: N	Clear	1700000912 / 1700000912	V1:(Collision with parked motor vehicle) / V2:(Collision with parked motor vehicle)	1250	WASHINGTON ST
4457395	NEWTON	11/08/2017	Property damage only (none injured)	8:42 AM	No injury	2	Local police	25-34	35-44	D1: (No improper driving) / D2: (Inattention)	Daylight	Angle		Dry	0	0	V1: Travelling straight ahead / V2: Entering traffic lane	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: E / V2: N	Clear	1700001295 / 1700001295	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)	1251	WASHINGTON ST
4463171	NEWTON	11/18/2017	Property damage only (none injured)	5:00 PM	No injury	2	Local police				Dark - lighted roadway	Angle		Wet	0	0	V1: Travelling straight ahead / V2: Turning left	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Passenger car)	V1: E / V2: S	Rain	1700001347	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		CHESTNUT ST / WASHINGTON ST
4484939	NEWTON	01/13/2018	Property damage only (none injured)	8:27 PM	No injury	1	Local police				Dark - lighted roadway	Sideswipe, same direction		Dry	0	0	V1: Parked	V1:(Light truck(van, mini-van, pickup, sport utility))	V1: W	Clear	1800000082	V1:(Collision with motor vehicle in traffic)	1251	WASHINGTON ST
4493860	NEWTON	01/10/2018	Non-fatal injury	5:14 PM	Non-fatal injury - Non-incapacitating	1	Local police				Daylight	Single vehicle crash	P1: Pedestrian	Slush	0	1	V1: Turning left	V1:(Light truck(van, mini-van, pickup, sport utility))	V1: S	Clear	1800000048	V1:(Collision with pedestrian)		WASHINGTON STREET / CHESTNUT
4499347	NEWTON	02/02/2018	Unknown	7:38 AM	Not reported	2	Local police				Daylight	Angle		Wet	0	0	V1: Parked / V2: Backing	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: Reported but invalid / V2: N	Clear	1800000154	V1:(Collision with parked motor vehicle) / V2:(Collision with parked motor vehicle)	1250	WASHINGTON ST
4548269	NEWTON	05/09/2018	Property damage only (none injured)	12:58 PM	No injury	2	Local police	18-20	18-20	D1: (No improper driving)	Daylight	Rear-end		Dry	0	0	V1: Slowing or stopped in traffic / V2: Slowing or stopped in traffic	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: W / V2: W	Clear	1800000514	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)	1251	WASHINGTON ST

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404 pages- see electronic file on website

Crash Number	City Town Name	Crash Date	Crash Severity	Crash Time	Max Injury Severity Reported	Number of Vehicles	Police Agency Type	Age of Driver - Youngest Known	Age of Driver - Oldest Known	Driver Contributing Circumstances (All Drivers)	Light Conditions	Manner of Collision	Motorist Type (All Persons)	Road Surface Condition	Total Fatalities	Total Non-Fatal Injuries	Vehicle Actions Prior to Crash (All Vehicles)	Vehicle Configuration (All Vehicles)	Vehicle Travel Directions (All Vehicles)	Weather Conditions	Crash Report IDs	Most Harmful Event (All Vehicles)	Street Number	Roadway
Washington Street at Chestnut Street (continued)																								
4568202	NEWTON	07/16/2018	Property damage only (none injured)	3:48 PM	No injury	2	Local police	25-34	25-34	D1: (No improper driving)	Daylight	Angle		Dry	0	0	V1: Slowing or stopped in traffic / V2: Backing	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Passenger car)	V1: E / V2: N	Clear	1800000807	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)	1250	WASHINGTON ST
4589282	NEWTON	08/16/2018	Property damage only (none injured)	11:27 AM	No injury	1	Local police	>84	>84	D1: (Inattention)	Daylight	Single vehicle crash		Dry	0	0	V1: Slowing or stopped in traffic	V1:(Passenger car)	V1: N	Clear	1800000924	V1:(Collision with other movable object)	1	CHESTNUT ST
4645804	NEWTON	12/18/2018	Property damage only (none injured)	1:47 PM	No injury	2	Local police	65-74	65-74	D1: (Unknown)	Daylight	Angle		Dry	0	0	V1: Travelling straight ahead / V2: Turning left	V1:(Passenger car) / V2:(Passenger car)	V1: E / V2: S	Clear	1800001444	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		CHESTNUT ST / WASHINGTON ST
4758628	NEWTON	08/10/2019	Property damage only (none injured)	11:00 AM	No Apparent Injury (O)	2	Local police	21-24	35-44	D1: (No improper driving) / D2: (No improper driving)	Daylight	Angle		Dry	0	0	V1: Turning left / V2: Travelling straight ahead	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: S / V2: W	Clear	1900000826	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		CHESTNUT ST / WASHINGTON ST
Highland Street at Davis Street																								
4300687	NEWTON	11/15/2016	Non-fatal injury	5:09 PM	Non-fatal injury - Possible	1	Local police	45-54	45-54	D1: (Inattention)	Dark - lighted roadway	Single vehicle crash	P3: Pedestrian	Wet	0	1	V1: Turning left	V1:(Passenger car)	V1: S	Rain/Cloudy	1600001209 / 1600001209	V1:(Collision with pedestrian)		DAVIS ST / HIGHLAND ST
4408355	NEWTON	03/13/2017	Property damage only (none injured)	8:40 AM	No injury	2	Local police	45-54	75-84	D1: (No improper driving) / D2: (Failure to keep in proper lane or running off road)	Daylight	Angle		Dry	0	0	V1: Turning right / V2: Turning left	V1:(Passenger car) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: W / V2: S	Clear	1700000300 / 1700000300	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		DAVIS ST / HIGHLAND ST
4470725	NEWTON	12/08/2017	Non-fatal injury	3:59 PM	Non-fatal injury - Non-incapacitating	2	Local police	21-24	21-24	D1: (No improper driving) / D2: (Distracted)	Daylight	Head-on		Dry	0	2	V1: Slowing or stopped in traffic / V2: Turning left	V1:(Passenger car) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: W / V2: E	Clear	1700001428	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		DAVIS ST / HIGHLAND ST
Chestnut Street at Davis Street																								
4016504	NEWTON	02/18/2015	Property damage only (none injured)	6:14 PM	No injury	2	Local police	75-84	75-84	D2: (Unknown)	Dark - roadway not lighted	Rear-end		Slush	0	0	V1: Parked / V2: Overtaking/passing	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Passenger car)	V1: N / V2: N	Cloudy	1500000250	V1:(Collision with parked motor vehicle) / V2:(Collision with parked motor vehicle)		CHESTNUT ST / DAVIS ST
4038605	NEWTON	04/16/2015	Property damage only (none injured)	10:05 AM	No injury	2	Local police	65-74	>84	D1: (Inattention),(Inattention) / D2: (No improper driving),(No improper driving)	Daylight	Rear-end		Dry	0	0	V1: Travelling straight ahead / V2: Turning left	V1:(Passenger car) / V2:(Passenger car)	V1: N / V2: N	Clear/Clear	1500000480	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		CHESTNUT ST / DAVIS ST
4758332	NEWTON	09/03/2019	Property damage only (none injured)	10:04 AM	No Apparent Injury (O)	2	Local police	21-24	45-54		Daylight	Angle		Dry	0	0	V1: Travelling straight ahead / V2: Turning left	V1:(Light truck(van, mini-van, pickup, sport utility)) / V2:(Light truck(van, mini-van, pickup, sport utility))	V1: S / V2: E	Clear	1900000907	V1:(Collision with motor vehicle in traffic) / V2:(Collision with motor vehicle in traffic)		CHESTNUT ST / DAVIS ST

Historic Traffic Growth

Traffic Volume Comparison - 2019 to Previous Studies

Turninv Movement Count Volumes

Intersection	Weekday Morning Peak Hour Volumes		
	2015-2016 ^a	2019 ^b	Change
Washington Street at Cherry Street	1,601	1,825	14.0%
Washington Street at Highland Street	1,957	1,855	-5.2%
Washington Street at Waltham Street and Watertown Street	1,815	1,695	-6.6%
Washington Street at Chestnut Street	1,164	1,290	10.8%
Washington Street at Lowell Avenue	1,810	1,870	3.3%
Washington Street at Walnut Street	2,410	2,140	-11.2%
<i>Total</i>	<i>10,757</i>	<i>10,675</i>	<i>-0.8%</i>

Intersection	Weekday Evening Peak Hour Volumes		
	2015-2016 ^a	2019 ^b	Change
Washington Street at Cherry Street	1,969	1,900	-3.5%
Washington Street at Highland Street	1,916	1,820	-5.0%
Washington Street at Waltham Street and Watertown Street	1,697	1,630	-3.9%
Washington Street at Chestnut Street	1,300	1,205	-7.3%
Washington Street at Lowell Avenue	2,135	2,005	-6.1%
Washington Street at Walnut Street	2,515	2,285	-9.1%
<i>Total</i>	<i>11,532</i>	<i>10,845</i>	<i>-6.0%</i>

a - 2015 counts from *The West Newton Enhancements Project Traffic Analysis Technical Memo* by HDR. 2016 counts from the *Washington Place Mixed Use Transit Oriented Development* by VHB.

b - 2019 counts conducted by VHB in April 2019

Site-Specific Traffic Growth

SITE-SPECIFIC VOLUMES

Project Name: West Newton - Santander
 Project No: 15636.00
 Location: Newton, MA
 Date: March 2022

INTERSECTION	MOVEMENT	From TIA (VHB)		From TIA (VHB)		From TIA (VHB)		From TIA (MDM)		From ITE Projections		From ITE Projections		From TIA (VHB)		From TIA (VHB)		TOTAL BACKGROUND DEVELOPMENTS	
		283 Melrose Street (Turtle Lane Playhouse)		Riverside Redevelopment		Russian School (Austin Street)		131 Rumford Avenue		15-21 Lexington Avenue		967 Washington Street		Dunstan East		275 Grove Street		AM	PM
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1. WASHINGTON STREET AT ELM STREET																			
Washington Street	WB T		2	12	7		14					4	2	33	18			49	43
Washington Street	WB R	1	1											2	1			3	2
Washington Street	NB L																		
Washington Street	NB T								5	1	2							1	7
Elm Street	NB R	3	2	10	15		14					1	4	26	26			40	61
Elm Street	SB R								5	2	2							2	7
2. WASHINGTON STREET AT CHERRY STREET																			
Washington Street	EB L																		
Washington Street	EB T	3	2	10	15		14					1	4	26	26			40	61
Washington Street	WB T	1	3	12	7		14					4	2	35	20			52	46
Washington Street	WB R	1	1						9		2			9	5			10	17
Cherry Street	SB L	1	2				4		16	2	1			10	10			13	33
Cherry Street	SB R																		
3. WASHINGTON STREET AT HIGHLAND STREET																			
Washington Street	EB T	4	4	10	15		18		10	2	1	1	4	36	35			53	87
Washington Street	EB R								6										6
Washington Street	WB L																		
Washington Street	WB T	2	4	12	7		14		4		2	4	2	44	24			62	57
Highland Street	NB L								5										5
Highland Street	NB R																		
4. WASHINGTON STREET AT WALTHAM STREET / WATERTOWN STREET																			
Washington Street	EB L																		
Washington Street	EB BL	2	2	5	7				5					11	8			18	22
Washington Street	EB T	2	2	5	8		18		5	2	1	1	4	26	27			36	65
Washington Street	WB T	1	2	6	4		14		2		2	4	2	33	19			44	45
Washington Street	WB R						4		3					1	1			1	8
Washington Street	WB HR																		
Waltham Street	SB R																		
Watertown Street	SWB R	1	2	6	3				2					10	6			17	13
Watertown Street	SWB HR								3					1	1			1	4
5. WASHINGTON STREET AT CHESTNUT STREET																			
Washington Street	EB T	2	2	5	8		10		5	2	1	1	4	26	27			36	57
Washington Street	EB R						8												8
Washington Street	WB L											1	1	12	6			13	7
Washington Street	WB T	1	2	6	4		10		5		2	4	2	35	20			46	45
Chestnut Street	NB L						8												8
Chestnut Street	NB R											1	1	13	9			14	10

SITE-SPECIFIC VOLUMES

Project Name: West Newton - Santander
 Project No: 15636.00
 Location: Newton, MA
 Date: March 2022

INTERSECTION	MOVEMENT	From TIA (VHB)		From TIA (VHB)		From TIA (VHB)		From TIA (MDM)		From ITE Projections		From ITE Projections		From TIA (VHB)		From TIA (VHB)		TOTAL BACKGROUND DEVELOPMENTS		
		283 Melrose Street (Turtle Lane Playhouse)		Riverside Redevelopment		Russian School (Austin Street)		131 Rumford Avenue		15-21 Lexington Avenue		967 Washington Street		Dunstan East		275 Grove Street				
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	
6. HIGHLAND STREET AT SITE DRIVEWAY Site Driveway Highland Street Highland Street	WB L WB R NB T NB R SB L SB T																			5 6
7. HIGHLAND STREET AT CHURCH NORTH DRIVEWAY Church North Driveway Highland Street Highland Street	EB L EB R NB L NB T SB T SB R																			5 6
8. HIGHLAND STREET AT DAVIS STREET Church South Driveway Davis Street Highland Street Highland Street	EB L EB T EB R WB L WB T WB R NB L NB T NB R SB L SB T SB R																			5 6
9. DAVIS STREET AT SITE DRIVEWAY Davis Street Davis Street Site Driveway	EB L EB T WB T WB R SB L SB R																			
10. CHESTNUT STREET AT DAVIS STREET Davis Street Chestnut Street Chestnut Street	EB U EB L EB R NB L NB T SB U SB T SB R																			8 8 14 18 13 15

Trip Generation

Trip Generation Summary

LUC SIZE	Previous Use							Full Build													Net New										
	Retail ²							Residential ¹							Retail ²						Net New										
	Gross Trips	Gross Person Trips ³	Vehicle Trips ⁷	Pass-by ⁸	Net Vehicle Trips	Transit Trips ⁹	Walk/Bike Trips	Gross Trips	Gross Person Trips ³	Internal Capture ⁴	Net Person Trips	Vehicle Trips ⁵	Transit Trips ⁶	Walk/Bike Trips	Gross Trips	Gross Person Trips ³	Internal Capture ⁴	Net Person Trips	Vehicle Trips ⁷	Pass-by ⁸	Net Vehicle Trips	Transit Trips ⁹	Walk/Bike Trips	Gross Trips	Net Person Trips	Total Vehicle Trips	Pass-By	Net New Vehicle Trips	Transit Trips	Walk/Bike Trips	
		1.82	1.82						1.18			1.12				1.82			1.82												
Weekday Daily				25%															25%												
Enter	215	391	193	48	145	20	20	97	114	23	91	64	12	7	113	206	19	187	92	23	69	9	9	210	278	156	23	133	21	16	
Exit	215	391	193	48	145	20	20	97	114	19	95	67	12	8	113	206	23	183	90	23	67	9	9	210	278	157	23	134	21	17	
Total	430	782	386	96	290	40	40	194	228	42	186	131	24	15	226	412	42	370	182	46	136	18	18	420	556	313	46	267	42	33	
Weekday Morning Peak Hour				25%															25%												
Enter	11	20	10	2	8	1	1	2	3	-	3	2	-	-	6	11	-	11	5	1	4	1	1	8	14	7	1	6	1	1	
Exit	8	15	7	2	5	1	1	8	9	-	9	6	1	1	4	7	-	7	3	1	2	-	-	12	16	9	1	8	1	1	
Total	19	35	17	4	13	2	2	10	12	-	12	8	1	1	10	18	-	18	8	2	6	1	1	20	30	16	2	14	2	2	
Weekday Evening Peak Hour				40%															40%												
Enter	33	60	30	12	18	3	3	14	16	7	9	6	1	1	21	38	4	34	17	6	11	2	2	35	43	23	6	17	3	3	
Exit	33	60	30	12	18	3	3	9	10	4	6	4	1	-	21	38	7	31	15	6	9	2	2	30	37	19	6	13	3	2	
Total	66	120	60	24	36	6	6	23	26	11	15	10	2	1	42	76	11	65	32	12	20	4	4	65	80	42	12	30	6	5	

1 Trip generation estimate based on ITE LUC 221 (Mid-Rise Residential), using regression equations.
 2 Trip generation estimate based on ITE LUC 822 (Strip Retail Plaza), using regression equation for weekday PM peak, average rates for weekday daily and weekday morning
 3 VOR rates for gross person trips based on Summary of Travel Trends, 2017 National Household Travel Survey, USDOT FHA
 4 Internal capture rates based on NCHRP Report 684
 5 Residential VOR rates based on US Census Bureau, 2013-2017 American Community Survey, City of Newton. National data used for retail due to lack of local data
 6 Residential transit credits applied based on US Census Bureau, 2013-2017 American Community Survey, City of Newton
 7 Retail VOR rates based on Summary of Travel Trends, 2017 National Household Travel Survey, USDOT FHA due to lack of local data
 8 Retail pass-by rates based on ITE LUC 821 (Shopping Plaza), 25-percent pass-by rate assumed for time periods with no available data
 9 Retail transit credits applied based local traffic studies due to lack of local data.

MODE SHARE

Mode Share	Existing	Full Build Mode Splits	
		Residential ¹	Retail ²
Drive	n/a	79%	90%
Transit	n/a	13%	5%
Walk / Bike	n/a	8%	5%
Total	0%	100%	100%

¹ Based on US Census Bureau, 2013-2017 American Community Survey, City of Newton

² Based on Summary of Travel Trends, 2017 National Household Travel Survey, USDOT FHA and adjusted to account for local conditions based on previously submitted traffic studies.

VOR

	ITE Raw Vehicle Trips to Person Trips ¹	Local Person Trips to Vehicle Trips ²
Residents	1.18	1.12
Retail ³	1.82	1.82

¹ Based on Summary of Travel Trends, 2017 National Household Travel Survey, USDOT FHA

² Based on US Census Bureau, 2013-2017 American Community Survey, City of Newton

³ National data used for both conversions due to lack of local data

SHARED TRIPS ¹

RETAIL - RESIDENTIAL

WEEKDAY DAILY						
RETAIL	%	#	BALANCED	#	%	RESIDENTIAL
EXIT ->	11%	206	23	114	33%	-> ENTER
ENTER <-	9%	206	19	114	38%	<- EXIT

TOTAL SHARED TRIPS - WEEKDAY DAILY			
	ENTER	EXIT	TOTAL
RETAIL	19	23	42
RES	23	19	42
TOTAL	42	42	84

WEEKDAY MORNING						
RETAIL	%	#	BALANCED	#	%	RESIDENTIAL
EXIT ->	14%	7	0	3	2%	-> ENTER
ENTER <-	17%	11	0	9	1%	<- EXIT

TOTAL SHARED TRIPS - WEEKDAY MORNING			
	ENTER	EXIT	TOTAL
RETAIL	0	0	0
RES	0	0	0
TOTAL	0	0	0

WEEKDAY EVENING						
RETAIL	%	#	BALANCED	#	%	RESIDENTIAL
EXIT ->	26%	38	7	16	46%	-> ENTER
ENTER <-	10%	38	4	10	42%	<- EXIT

TOTAL SHARED TRIPS - WEEKDAY EVENING			
	ENTER	EXIT	TOTAL
RETAIL	4	7	11
RES	7	4	11
TOTAL	11	11	22

¹ Weekday morning and evening internal capture rates based on NCHRP Report 684. Weekday daily internal capture rates based on ITE Trip Generation Handbook, 2nd Edition

ITE TRIP GENERATION WORKSHEET
 (11th Edition, Updated 2021)

LANDUSE: Multifamily Housing (Mid-Rise) - Not Close to Rail Transit: 4-10 stories
LANDUSE CODE: 221 Independent Variable --- Number of Dwelling Units
SETTING/LOCATION: General Urban/Suburban
JOB NAME: 1314 Washington Street Redevelopment 50 units **Proposed**
JOB NUMBER: 15636.00

WEEKDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	11	0.93	4.54	3.76	5.40	201	60	330	50%	50%
AM PEAK (ADJACENT ST)	30	0.91	0.37	0.15	0.53	173	26	490	23%	77%
PM PEAK (ADJACENT ST)	31	0.91	0.39	0.19	0.57	169	26	490	61%	39%

TRIPS:		BY AVERAGE			BY REGRESSION		
		Total	Enter	Exit	Total	Enter	Exit
DAILY		228	114	114	194	97	97
AM PEAK (ADJACENT ST)		19	4	14	10	2	8
PM PEAK (ADJACENT ST)		20	12	8	23	14	9

SATURDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	5	0.91	4.57	4.03	5.31	250	140	330	50%	50%
PEAK OF GENERATOR	5	0.92	0.39	0.34	0.43	250	140	330	51%	49%

TRIPS:		BY AVERAGE			BY REGRESSION		
		Total	Enter	Exit	Total	Enter	Exit
DAILY		230	115	115	250	125	125
PEAK OF GENERATOR		20	10	10	20	10	10

SUNDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	5	0.85	3.77	3.06	4.24	250	140	330	50%	50%
PEAK OF GENERATOR	5	0.79	0.32	0.26	0.42	250	140	330	55%	45%

TRIPS:		BY AVERAGE			BY REGRESSION		
		Total	Enter	Exit	Total	Enter	Exit
DAILY		190	95	95	202	101	101
PEAK OF GENERATOR		16	9	7	34	18	15

ITE TRIP GENERATION WORKSHEET
 (11th Edition, Updated 2021)

LANDUSE: Strip Retail Plaza (<40k)
LANDUSE CODE: 822 Independent Variable ---
SETTING/LOCATION: General Urban/Suburban
JOB NAME: 1314 Washington Street Redevelopment **FLOOR AREA (KSF):** 4.119 **Proposed**
JOB NUMBER: 15636.00

WEEKDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	4	0.96	54.45	47.86	65.07	19	9	35	50%	50%
AM PEAK (ADJACENT ST)	5	0.57	2.36	1.60	3.73	18	9	35	60%	40%
PM PEAK (ADJACENT ST)	25	0.56	6.59	2.81	15.20	21	3	39	50%	50%

TRIPS:		BY AVERAGE			BY REGRESSION		
		Total	Enter	Exit	Total	Enter	Exit
DAILY		226	113	113	404	202	202
AM PEAK (ADJACENT ST)		10	6	4	16	10	6
PM PEAK (ADJACENT ST)		28	14	14	41	21	21

SATURDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	--	--	--	--	--	--	--	--	--	--
PEAK OF GENERATOR	12	--	6.57	1.88	14.23	27	8	39	51%	49%

TRIPS:		BY AVERAGE			BY REGRESSION		
		Total	Enter	Exit	Total	Enter	Exit
DAILY		--	--	--	--	--	--
PEAK OF GENERATOR		27	14	13	--	--	--

SUNDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	--	--	--	--	--	--	--	--	--	--
PEAK OF GENERATOR	--	--	--	--	--	--	--	--	--	--

TRIPS:		BY AVERAGE			BY REGRESSION		
		Total	Enter	Exit	Total	Enter	Exit
DAILY		--	--	--	--	--	--
PEAK OF GENERATOR		--	--	--	--	--	--

ITE TRIP GENERATION WORKSHEET
 (11th Edition, Updated 2021)

LANDUSE: Strip Retail Plaza (<40k)
LANDUSE CODE: 822 Independent Variable ---
SETTING/LOCATION: General Urban/Suburban
JOB NAME: 1314 Washington Street Redevelopment **FLOOR AREA (KSF):** 7.887 **Existing**
JOB NUMBER: 15636.00

WEEKDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	4	0.96	54.45	47.86	65.07	19	9	35	50%	50%
AM PEAK (ADJACENT ST)	5	0.57	2.36	1.60	3.73	18	9	35	60%	40%
PM PEAK (ADJACENT ST)	25	0.56	6.59	2.81	15.20	21	3	39	50%	50%

TRIPS:		BY AVERAGE			BY REGRESSION		
		Total	Enter	Exit	Total	Enter	Exit
DAILY		430	215	215	564	282	282
AM PEAK (ADJACENT ST)		19	11	8	25	15	10
PM PEAK (ADJACENT ST)		52	26	26	66	33	33

SATURDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	--	--	--	--	--	--	--	--	--	--
PEAK OF GENERATOR	12	--	6.57	1.88	14.23	27	8	39	51%	49%

TRIPS:		BY AVERAGE			BY REGRESSION		
		Total	Enter	Exit	Total	Enter	Exit
DAILY		--	--	--	--	--	--
PEAK OF GENERATOR		52	27	25	--	--	--

SUNDAY

RATES:	# Studies	R^2	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	--	--	--	--	--	--	--	--	--	--
PEAK OF GENERATOR	--	--	--	--	--	--	--	--	--	--

TRIPS:		BY AVERAGE			BY REGRESSION		
		Total	Enter	Exit	Total	Enter	Exit
DAILY		--	--	--	--	--	--
PEAK OF GENERATOR		--	--	--	--	--	--

Trip Distribution

**Home to Work
Live in Newton**

Workplace City/Town	Count ¹	Adjustment Percentage ²	Adjusted Count	Percent of Total	Route Distribution							Cumulative Total						
					Route 16 to/from West	& Cherry Street to/from North	Waltham Street to/from North	Route 16 to/from East	Washingto n Street to/from East	Street & Highland Street to/from	Total	Route 16 to/from West	& Cherry Street to/from North	Waltham Street to/from North	Route 16 to/from East	Washingto n Street to/from East	Street & Highland Street to/from	Total
Boston city	12,720	0.5	6,360	23.8%	80%				15%	5%	100%	19.0%	0.0%	0.0%	0.0%	3.6%	1.2%	23.8%
Newton city	11,950	0.5	5,975	22.3%	10%	5%	5%	10%	15%	55%	100%	2.2%	1.1%	1.1%	2.2%	3.4%	12.3%	22.3%
Cambridge city	3,050	1	3,050	11.4%	30%			30%	40%		100%	3.4%	0.0%	0.0%	3.4%	4.6%	0.0%	11.4%
Waltham city	2,230	1	2,230	8.3%		75%	25%				100%	0.0%	6.3%	2.1%	0.0%	0.0%	0.0%	8.3%
Wellesley town	925	1	925	3.5%	100%						100%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	3.5%
Watertown Town city	750	1	750	2.8%				100%			100%	0.0%	0.0%	0.0%	2.8%	0.0%	0.0%	2.8%
Framingham town	745	1	745	2.8%	100%						100%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%
Brookline town	745	1	745	2.8%					20%	80%	100%	0.0%	0.0%	0.0%	0.0%	0.6%	2.2%	2.8%
Needham town	610	1	610	2.3%	75%					25%	100%	1.7%	0.0%	0.0%	0.0%	0.0%	0.6%	2.3%
Burlington town	460	1	460	1.7%	15%	85%					100%	0.3%	1.5%	0.0%	0.0%	0.0%	0.0%	1.7%
Lexington town	450	1	450	1.7%	15%	85%					100%	0.3%	1.4%	0.0%	0.0%	0.0%	0.0%	1.7%
Quincy city	420	1	420	1.6%	100%						100%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%
Natick town	375	1	375	1.4%	100%						100%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%
Malden city	330	1	330	1.2%	90%				10%		100%	1.1%	0.0%	0.0%	0.0%	0.1%	0.0%	1.2%
Worcester city	320	1	320	1.2%	100%						100%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%
Lowell city	280	1	280	1.0%	20%	80%					100%	0.2%	0.8%	0.0%	0.0%	0.0%	0.0%	1.0%
Woburn city	280	1	280	1.0%	30%	70%					100%	0.3%	0.7%	0.0%	0.0%	0.0%	0.0%	1.0%
Weston town	260	1	260	1.0%	5%	95%					100%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	1.0%
Dedham town	255	1	255	1.0%	100%						100%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%
Marlborough city	235	1	235	0.9%	100%						100%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%
Wayland town	205	1	205	0.8%	10%	90%					100%	0.1%	0.7%	0.0%	0.0%	0.0%	0.0%	0.8%
Medford city	180	1	180	0.7%	35%			25%	40%		100%	0.2%	0.0%	0.0%	0.2%	0.3%	0.0%	0.7%
Braintree Town city	180	1	180	0.7%	100%						100%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%
Billerica town	175	1	175	0.7%	20%	80%					100%	0.1%	0.5%	0.0%	0.0%	0.0%	0.0%	0.7%
Belmont town	165	1	165	0.6%				100%			100%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.6%
Canton town	165	1	165	0.6%	100%						100%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%
Concord town	160	1	160	0.6%	20%	80%					100%	0.1%	0.5%	0.0%	0.0%	0.0%	0.0%	0.6%
Norwood town	160	1	160	0.6%	100%						100%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%
Wilmington town	155	1	155	0.6%	30%	70%					100%	0.2%	0.4%	0.0%	0.0%	0.0%	0.0%	0.6%
Bedford town	145	1	145	0.5%	20%	80%					100%	0.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.5%
Totals	39,080		26,745	100.0%								43.6%	15.3%	3.2%	9.2%	12.4%	16.3%	100.0%
												44.0%	15.0%	3.0%	9.0%	12.0%	17.0%	100.0%

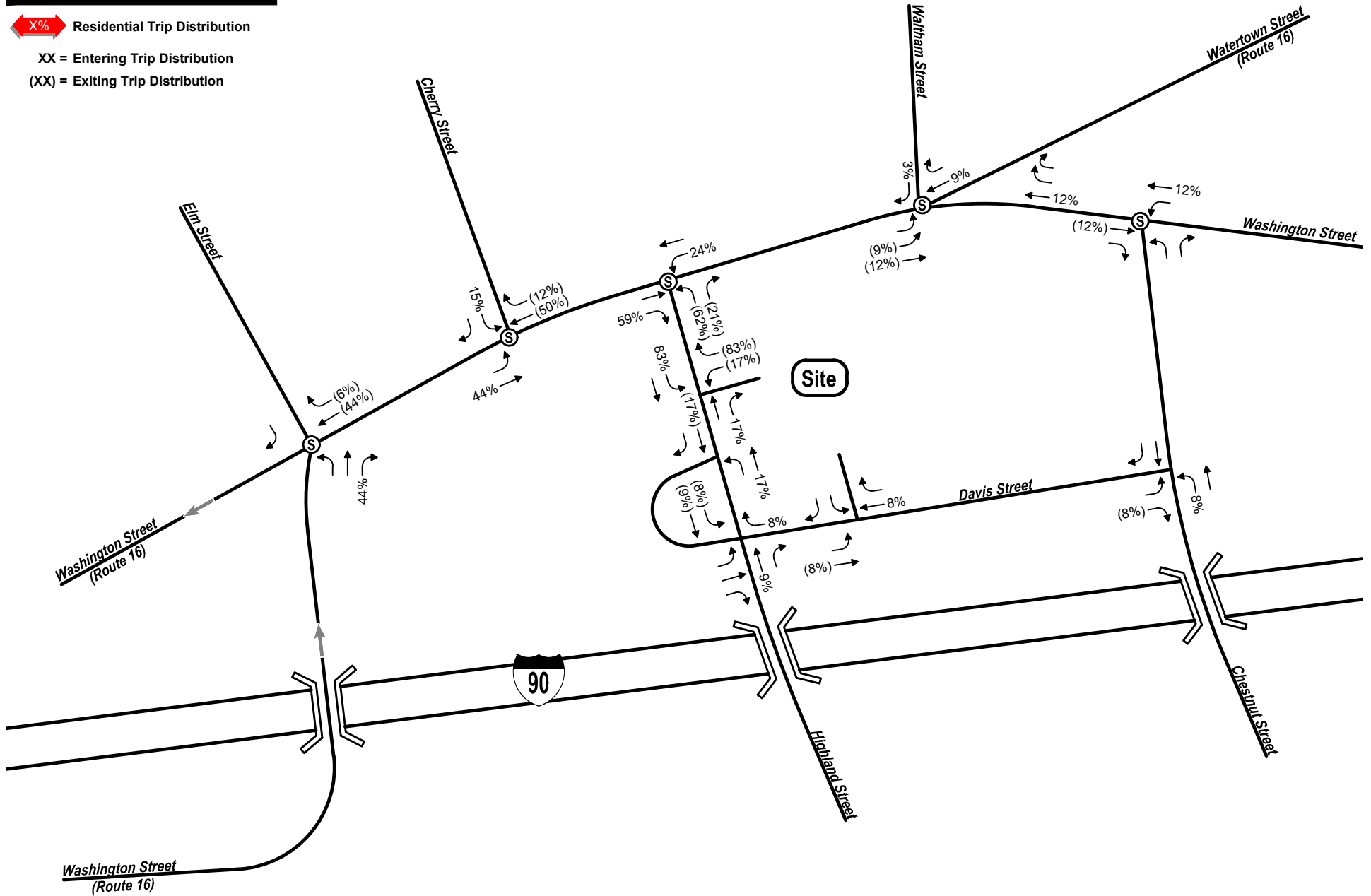
1 Commuting flow data based on the US Census Bureau Journey to Work data (2012-2016) for the City of Newton

2 Adjustments were made to some communities based on the likelihood that people who work in those communities would opt to live closer to their place of employment or closer to transit

X% Residential Trip Distribution

XX = Entering Trip Distribution

(XX) = Exiting Trip Distribution



Not to Scale



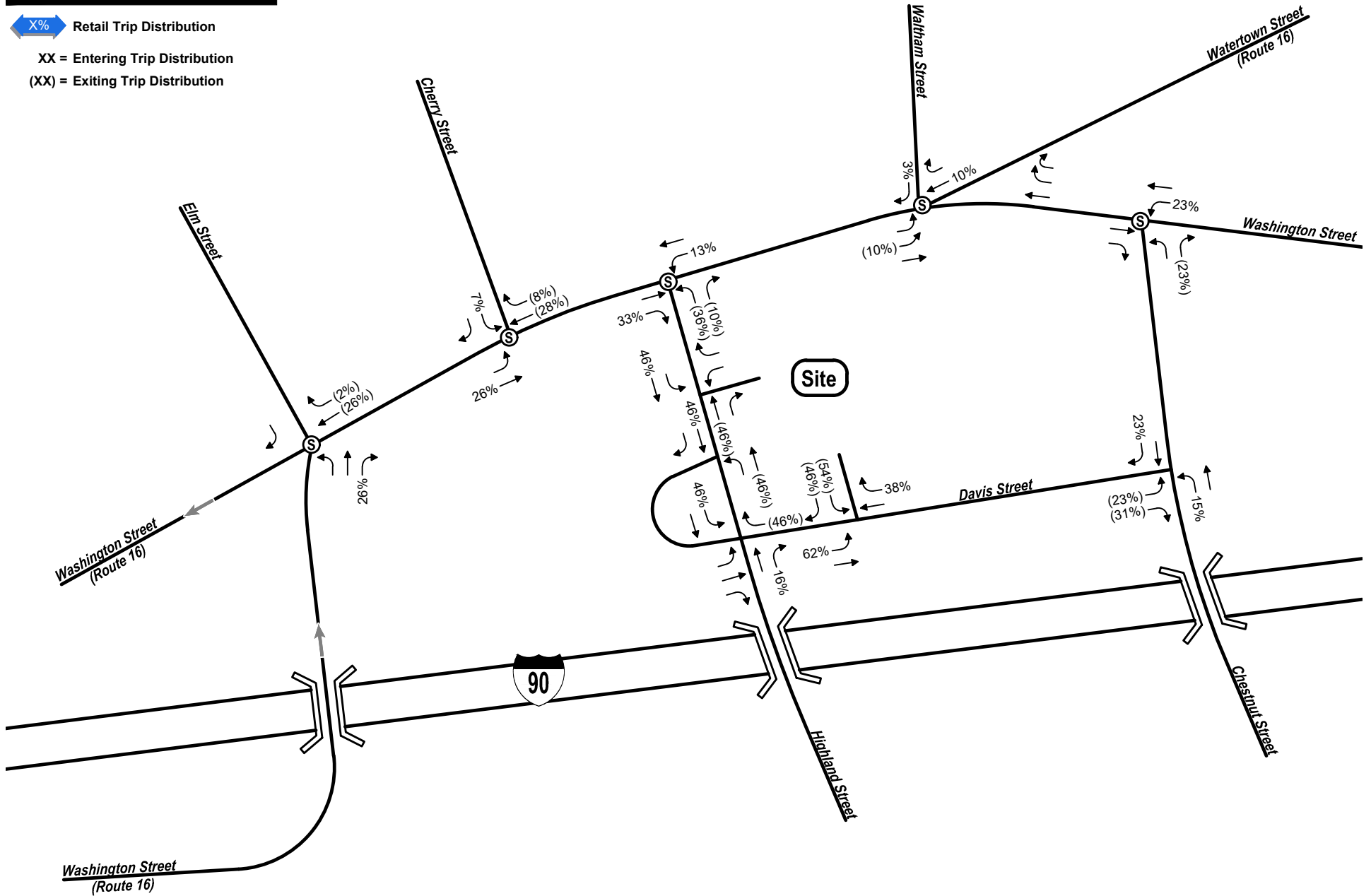
Residential Trip Distribution

**1314 Washington Street Redevelopment
Newton, Massachusetts**

X% Retail Trip Distribution

XX = Entering Trip Distribution

(XX) = Exiting Trip Distribution



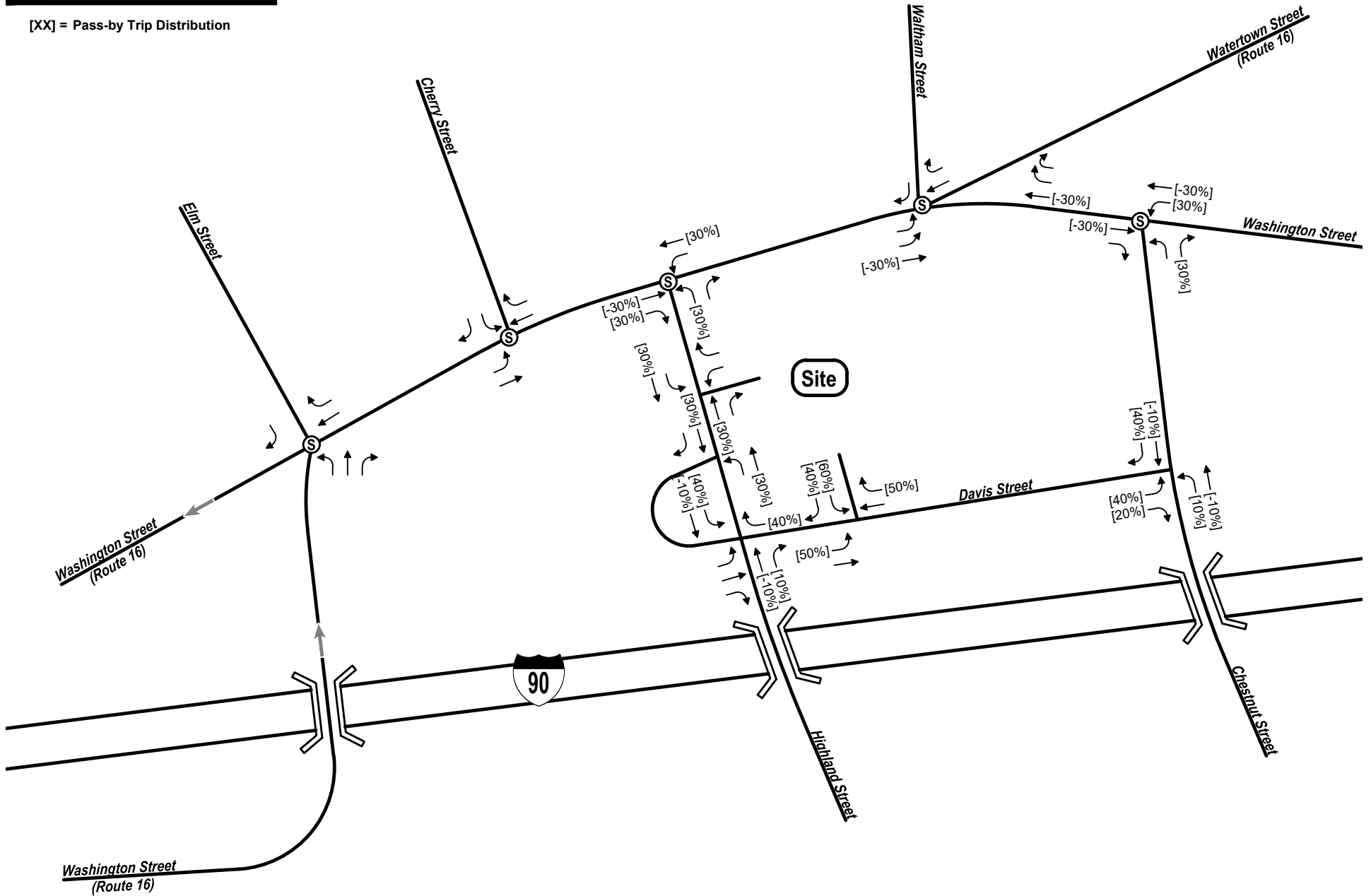
Not to Scale



Retail Trip Distribution

**1314 Washington Street Redevelopment
Newton, Massachusetts**

[XX] = Pass-by Trip Distribution



Not to Scale



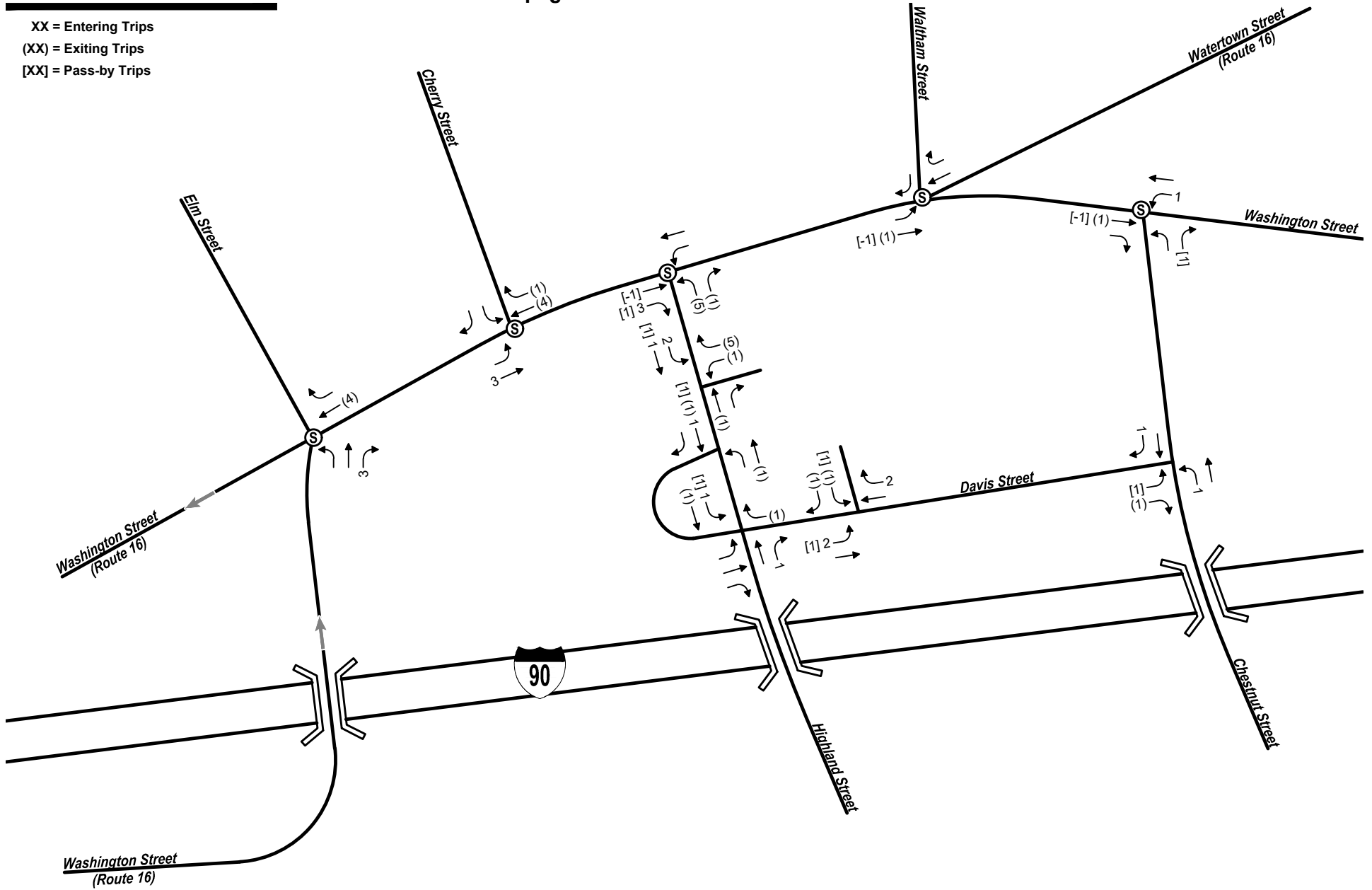
Retail Pass-by Trip Distribution

**1314 Washington Street Redevelopment
Newton, Massachusetts**

404 pages- see electronic file on website

Site-Generated Traffic Volume Networks

XX = Entering Trips
 (XX) = Exiting Trips
 [XX] = Pass-by Trips

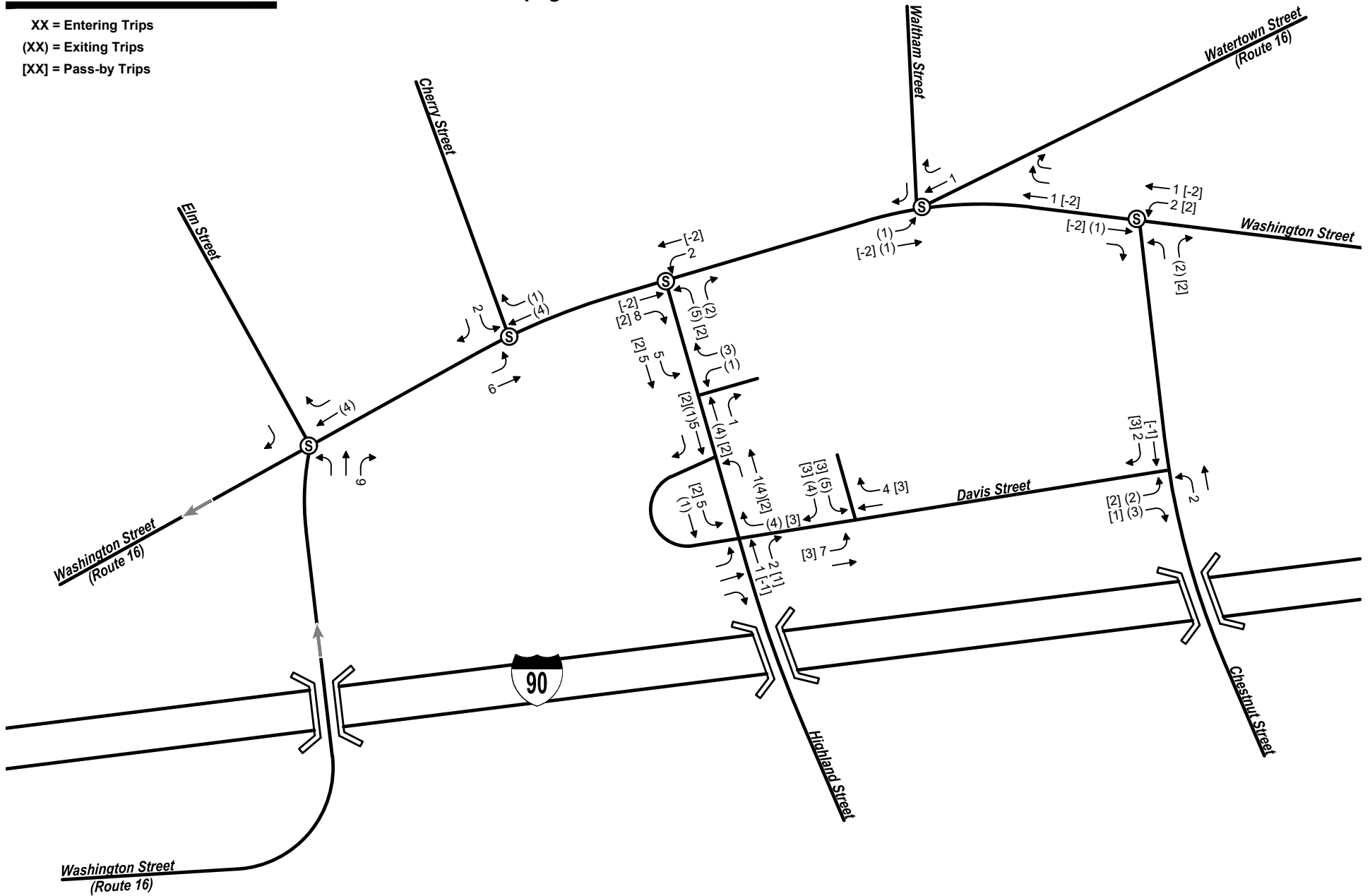


Not to Scale



Site-Generated Traffic Volumes
 Weekday Morning Peak Hour
1314 Washington Street Redevelopment
Newton, Massachusetts

XX = Entering Trips
 (XX) = Exiting Trips
 [XX] = Pass-by Trips



Not to Scale



Site-Generated Traffic Volumes
 Weekday Evening Peak Hour
1314 Washington Street Redevelopment
 Newton, Massachusetts

404 pages- see electronic file on website

Synchro Capacity Analyses

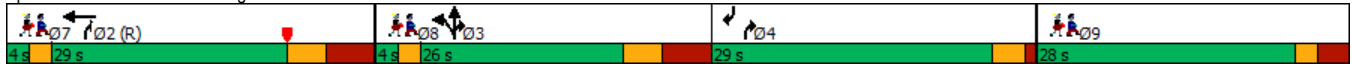


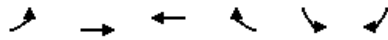
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø7	Ø8	Ø9
Lane Configurations					↕↕			↕	↕			↕			
Traffic Volume (vph)	0	0	0	0	540	30	25	135	715	0	0	310			
Future Volume (vph)	0	0	0	0	540	30	25	135	715	0	0	310			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	0	0	3404	0	0	1795	1538	0	0	1596			
Fit Permitted								0.992							
Satd. Flow (perm)	0	0	0	0	3404	0	0	1792	1538	0	0	1596			
Right Turn on Red			Yes			Yes	Yes		No			Yes			
Satd. Flow (RTOR)					4			164				685			
Link Speed (mph)		30			30			30		30					
Link Distance (ft)		100			336			433		533					
Travel Time (s)		2.3			7.6			9.8		12.1					
Confl. Peds. (#/hr)						4	3								
Peak Hour Factor	0.92	0.92	0.92	0.83	0.83	0.83	0.93	0.93	0.93	0.78	0.78	0.78			
Heavy Vehicles (%)	0%	0%	0%	0%	5%	4%	5%	5%	5%	0%	0%	3%			
Shared Lane Traffic (%)															
Lane Group Flow (vph)	0	0	0	0	687	0	0	172	769	0	0	397			
Turn Type					NA		Split	NA	custom			Prot			
Protected Phases					2		3	3	2 3 4			4	7	8	9
Permitted Phases															
Detector Phase					2		3	3	2 3 4			4			
Switch Phase															
Minimum Initial (s)					6.0		6.0	6.0				6.0	2.0	2.0	5.0
Minimum Split (s)					17.5		19.5	19.5				10.0	4.0	4.0	27.0
Total Split (s)					29.0		26.0	26.0				29.0	4.0	4.0	28.0
Total Split (%)					24.2%		21.7%	21.7%				24.2%	3%	3%	23%
Yellow Time (s)					3.5		3.5	3.5				3.0	2.0	2.0	2.0
All-Red Time (s)					4.5		4.5	4.5				1.0	0.0	0.0	3.0
Lost Time Adjust (s)					0.0			0.0				0.0			
Total Lost Time (s)					8.0			8.0				4.0			
Lead/Lag					Lag		Lag	Lag					Lead	Lead	
Lead-Lag Optimize?															
Recall Mode					C-Min		None	None				None	Min	Min	None
Act Effect Green (s)					38.1			18.0	82.7			22.6			
Actuated g/C Ratio					0.32			0.15	0.69			0.19			
v/c Ratio					0.63			0.42	0.73			0.46			
Control Delay					34.7			11.3	17.1			1.8			
Queue Delay					1.3			0.0	51.9			0.0			
Total Delay					36.0			11.3	69.0			1.8			
LOS					D			B	E			A			
Approach Delay					36.0			58.4			1.8				
Approach LOS					D			E			A				
Queue Length 50th (ft)					162			5	102			0			
Queue Length 95th (ft)					#384			68	#617			0			
Internal Link Dist (ft)		20			256			353			453				
Turn Bay Length (ft)															
Base Capacity (vph)					1083			408	1090			874			
Starvation Cap Reductn					208			0	0			0			
Spillback Cap Reductn					0			0	463			0			
Storage Cap Reductn					0			0	0			0			
Reduced v/c Ratio					0.79			0.42	1.23			0.45			

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 9 (8%), Referenced to phase 2:WBT, Start of Yellow
 Natural Cycle: 95
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.73
 Intersection Signal Delay: 39.7
 Intersection Capacity Utilization 60.3%
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Washington Street & Elm Street



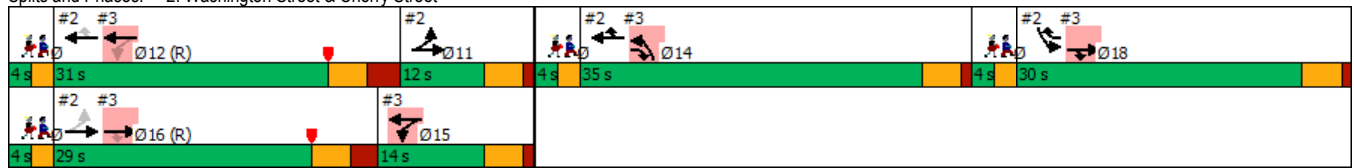


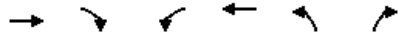
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2	Ø4	Ø6	Ø8	Ø12	Ø14	Ø15	Ø16
Lane Configurations	↖	↗	↖	↗	↖↗	↖↗								
Traffic Volume (vph)	100	615	500	160	545	70								
Future Volume (vph)	100	615	500	160	545	70								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Storage Length (ft)	200			0	100	0								
Storage Lanes	1			1	1	0								
Taper Length (ft)	25				25									
Satd. Flow (prot)	1787	1810	1810	1583	3342	0								
Flt Permitted	0.174				0.958									
Satd. Flow (perm)	327	1810	1810	1500	3342	0								
Right Turn on Red				Yes		Yes								
Satd. Flow (RTOR)				178	11									
Link Speed (mph)		30	30		30									
Link Distance (ft)		336	185		438									
Travel Time (s)		7.6	4.2		10.0									
Confl. Peds. (#/hr)				8		9								
Peak Hour Factor	0.86	0.86	0.90	0.90	0.90	0.90								
Heavy Vehicles (%)	1%	5%	5%	2%	3%	5%								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	116	715	556	178	684	0								
Turn Type	custom	NA	NA	custom	Prot									
Protected Phases	11	11 16	12 14	14 18	18		2	4	6	8	12	14	15	16
Permitted Phases	16			12										
Detector Phase	11	11 16	12 14	14 18	18									
Switch Phase														
Minimum Initial (s)	8.0				8.0		2.0	2.0	2.0	2.0	8.0	8.0	8.0	8.0
Minimum Split (s)	12.5				20.0		4.0	4.0	4.0	4.0	15.0	19.0	12.5	16.5
Total Split (s)	12.0				30.0		4.0	4.0	4.0	4.0	31.0	35.0	14.0	29.0
Total Split (%)	10.0%				25.0%		3%	3%	3%	3%	26%	29%	12%	24%
Yellow Time (s)	3.5				3.5		2.0	2.0	2.0	2.0	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0				1.0		0.0	0.0	0.0	0.0	3.0	1.0	1.0	2.5
Lost Time Adjust (s)	0.0				0.0									
Total Lost Time (s)	4.5				4.5									
Lead/Lag					Lag		Lead	Lead	Lead	Lead	Lag	Lag		Lag
Lead-Lag Optimize?														
Recall Mode	None				None		Min	Min	Min	Min	C-Min	None	None	C-Min
Act Effct Green (s)	32.0	32.0	47.6	80.2	28.5									
Actuated g/C Ratio	0.27	0.27	0.40	0.67	0.24									
v/c Ratio	0.65	1.48	0.77	0.16	0.85									
Control Delay	57.5	256.5	8.6	1.4	55.2									
Queue Delay	0.0	0.3	10.1	0.4	6.2									
Total Delay	57.5	256.7	18.7	1.8	61.4									
LOS	E	F	B	A	E									
Approach Delay		228.9	14.6		61.4									
Approach LOS		F	B		E									
Queue Length 50th (ft)	56	-675	138	4	268									
Queue Length 95th (ft)	m97	#835	m115	m4	#387									
Internal Link Dist (ft)		256	105		358									
Turn Bay Length (ft)	200				100									
Base Capacity (vph)	178	482	799	1154	802									
Starvation Cap Reductn	0	16	214	609	0									
Spillback Cap Reductn	0	3	88	0	82									
Storage Cap Reductn	0	0	0	0	0									
Reduced v/c Ratio	0.65	1.53	0.95	0.33	0.95									

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 12:WBT and 16:EBTL, Start of Yellow
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.48
 Intersection Signal Delay: 108.0 Intersection LOS: F
 Intersection Capacity Utilization 63.7% ICU Level of Service B
 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: 2: Washington Street & Cherry Street





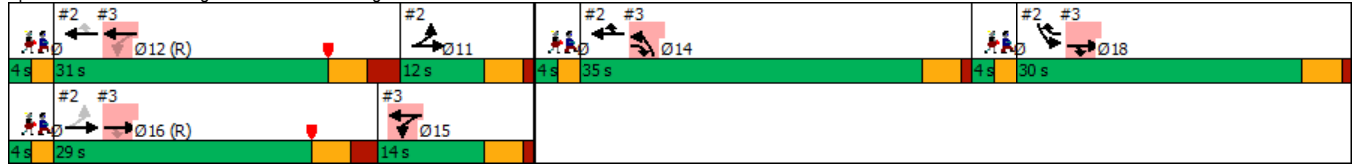
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø4	Ø6	Ø8	Ø11	Ø12	Ø16	Ø18
Lane Configurations	↑↑	↑	↓	↑	↓									
Traffic Volume (vph)	860	300	120	515	145	35								
Future Volume (vph)	860	300	120	515	145	35								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Storage Length (ft)		85	0		0	0								
Storage Lanes		1	1		1	0								
Taper Length (ft)			25		25									
Satd. Flow (prot)	3471	1524	1770	1810	1740	0								
Flt Permitted			0.163		0.961									
Satd. Flow (perm)	3471	1446	304	1810	1740	0								
Right Turn on Red		Yes				Yes								
Satd. Flow (RTOR)		265			10									
Link Speed (mph)	30			30	30									
Link Distance (ft)	185			301	145									
Travel Time (s)	4.2			6.8	3.3									
Confl. Peds. (#/hr)		7				8								
Confl. Bikes (#/hr)		5												
Peak Hour Factor	0.94	0.94	0.81	0.81	0.80	0.80								
Heavy Vehicles (%)	4%	6%	2%	5%	1%	4%								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	915	319	148	636	225	0								
Turn Type	NA	custom	custom	NA	Prot									
Protected Phases	16 18	14 18	15	12 15	14		2	4	6	8	11	12	16	18
Permitted Phases		16	12											
Detector Phase	16 18	14 18	15	12 15	14									
Switch Phase														
Minimum Initial (s)			8.0		8.0		2.0	2.0	2.0	2.0	8.0	8.0	8.0	8.0
Minimum Split (s)			12.5		19.0		4.0	4.0	4.0	4.0	12.5	15.0	16.5	20.0
Total Split (s)			14.0		35.0		4.0	4.0	4.0	4.0	12.0	31.0	29.0	30.0
Total Split (%)			11.7%		29.2%		3%	3%	3%	3%	10%	26%	24%	25%
Yellow Time (s)			3.5		3.5		2.0	2.0	2.0	2.0	3.5	3.5	3.5	3.5
All-Red Time (s)			1.0		1.0		0.0	0.0	0.0	0.0	1.0	3.0	2.5	1.0
Lost Time Adjust (s)			0.0		0.0									
Total Lost Time (s)			4.5		4.5									
Lead/Lag					Lag		Lead	Lead	Lead	Lead		Lag	Lag	Lag
Lead-Lag Optimize?														
Recall Mode			None		None		Min	Min	Min	Min	None	C-Min	C-Min	None
Act Effect Green (s)	50.0	78.2	36.0	32.0	25.1									
Actuated g/C Ratio	0.42	0.65	0.30	0.27	0.21									
v/c Ratio	0.63	0.30	0.71	1.32	0.61									
Control Delay	13.2	1.2	67.1	193.5	47.2									
Queue Delay	5.3	0.8	0.0	0.6	0.4									
Total Delay	18.5	2.0	67.1	194.2	47.6									
LOS	B	A	E	F	D									
Approach Delay	14.2			170.2	47.6									
Approach LOS	B			F	D									
Queue Length 50th (ft)	91	5	103	~556	148									
Queue Length 95th (ft)	m82	m4	m#126	#657	193									
Internal Link Dist (ft)	105			221	65									
Turn Bay Length (ft)		85												
Base Capacity (vph)	1447	1119	207	482	449									
Starvation Cap Reductn	460	520	0	13	0									
Spillback Cap Reductn	242	0	0	33	39									
Storage Cap Reductn	0	0	0	0	0									
Reduced v/c Ratio	0.93	0.53	0.71	1.42	0.55									

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 12:WBT and 16:EBTL, Start of Yellow
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.48
 Intersection Signal Delay: 72.1 Intersection LOS: E
 Intersection Capacity Utilization 53.7% ICU Level of Service A
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

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

Splits and Phases: 3: Highland Street & Washington Street



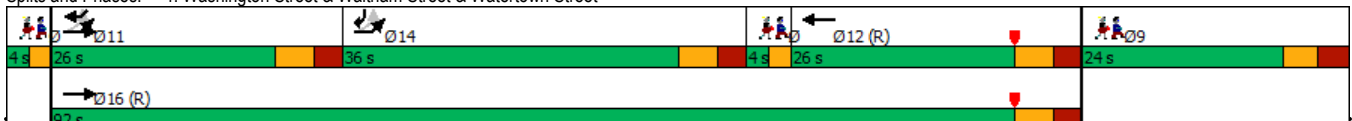


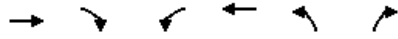
Lane Group	EBL2	EBL	EBT	WBT	WBR	WBR2	SBL	SBR	SWL	SWR	SWR2	Ø1	Ø2	Ø9	Ø16
Lane Configurations		↔	↕	↕				↕		↕					
Traffic Volume (vph)	1	325	570	220	155	2	0	200	0	215	40				
Future Volume (vph)	1	325	570	220	155	2	0	200	0	215	40				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Satd. Flow (prot)	0	1736	1810	3107	0	0	0	1580	0	1577	0				
Fit Permitted		0.999													
Satd. Flow (perm)	0	1825	1810	3107	0	0	0	1580	0	1577	0				
Right Turn on Red							Yes	Yes			No				
Satd. Flow (RTOR)								469							
Link Speed (mph)			30	30			30		30						
Link Distance (ft)			301	274			478		461						
Travel Time (s)			6.8	6.2			10.9		10.5						
Confl. Peds. (#/hr)							13				13				
Peak Hour Factor	0.96	0.96	0.96	0.88	0.88	0.88	0.92	0.92	0.79	0.79	0.79				
Heavy Vehicles (%)	0%	4%	5%	4%	1%	0%	0%	4%	0%	5%	0%				
Shared Lane Traffic (%)															
Lane Group Flow (vph)	0	340	594	428	0	0	0	217	0	323	0				
Turn Type	custom	Prot	NA	NA				Prot		Over					
Protected Phases		11 14	11 16	12				14		11		1	2	9	16
Permitted Phases	11 14														
Detector Phase	11 14	11 14	11 16	12				14		11					
Switch Phase															
Minimum Initial (s)				6.0				6.0		6.0		2.0	2.0	5.0	6.0
Minimum Split (s)				12.5				12.0		15.5		4.0	4.0	23.0	12.0
Total Split (s)				26.0				36.0		26.0		4.0	4.0	24.0	92.0
Total Split (%)				21.7%				30.0%		21.7%		3%	3%	20%	77%
Yellow Time (s)				3.5				3.5		3.5		2.0	2.0	3.0	3.5
All-Red Time (s)				2.5				2.5		2.5		0.0	0.0	3.0	2.5
Lost Time Adjust (s)				0.0				0.0		0.0					
Total Lost Time (s)				6.0				6.0		6.0					
Lead/Lag				Lag				Lag		Lead				Lead	
Lead-Lag Optimize?															
Recall Mode				C-Min				None		None		Min	Min	None	C-Min
Act Effect Green (s)		49.9	98.3	34.9				9.8		34.1					
Actuated g/C Ratio		0.42	0.82	0.29				0.08		0.28					
v/c Ratio		0.45	0.40	0.47				0.39		0.72					
Control Delay		52.2	5.1	38.9				2.0		51.7					
Queue Delay		1.1	1.5	2.9				0.8		8.5					
Total Delay		53.3	6.6	41.7				2.9		60.3					
LOS		D	A	D				A		E					
Approach Delay			23.6	41.7			2.9		60.3						
Approach LOS			C	D			A		E						
Queue Length 50th (ft)		271	85	148				0		205					
Queue Length 95th (ft)		330	100	212				0		#406					
Internal Link Dist (ft)			221	194			398		381						
Turn Bay Length (ft)															
Base Capacity (vph)		1065	1482	904				746		447					
Starvation Cap Reductn		487	670	356				0		0					
Spillback Cap Reductn		0	115	330				297		91					
Storage Cap Reductn		0	0	0				0		0					
Reduced v/c Ratio		0.59	0.73	0.78				0.48		0.91					

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 117 (98%), Referenced to phase 12:WBT and 16:EBT, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.72
 Intersection Signal Delay: 31.6 Intersection LOS: C
 Intersection Capacity Utilization 60.5% 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.

Splits and Phases: 4: Washington Street & Waltham Street & Watertown Street





Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø9
Lane Configurations	↑	↑	↑	↑	↑	↑	
Traffic Volume (vph)	515	55	200	295	80	145	
Future Volume (vph)	515	55	200	295	80	145	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		35	0		0	150	
Storage Lanes		1	1		1	1	
Taper Length (ft)			25		25		
Satd. Flow (prot)	1827	1482	1770	1827	1770	1583	
Flt Permitted			0.262		0.950		
Satd. Flow (perm)	1827	1449	488	1827	1770	1583	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		15				163	
Link Speed (mph)	30			30	30		
Link Distance (ft)	274			584	336		
Travel Time (s)	6.2			13.3	7.6		
Confl. Bikes (#/hr)		3					
Peak Hour Factor	0.85	0.85	0.90	0.90	0.89	0.89	
Heavy Vehicles (%)	4%	9%	2%	4%	2%	2%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	606	65	222	328	90	163	
Turn Type	NA	pm+ov	pm+pt	NA	Prot	pt+ov	
Protected Phases	6	3	5	2	3	3.5	9
Permitted Phases		6	2				
Detector Phase	6	3	5	2	3	3.5	
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0		5.0
Minimum Split (s)	12.5	12.5	12.5	12.5	12.5		24.0
Total Split (s)	50.0	21.0	24.0	74.0	21.0		25.0
Total Split (%)	41.7%	17.5%	20.0%	61.7%	17.5%		21%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		2.0
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0		3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.5		
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?							
Recall Mode	C-Min	None	None	C-Min	None		None
Act Effct Green (s)	67.4	78.5	86.3	86.3	11.1	27.4	
Actuated g/C Ratio	0.56	0.65	0.72	0.72	0.09	0.23	
v/c Ratio	0.59	0.07	0.46	0.25	0.55	0.33	
Control Delay	18.4	6.8	11.2	8.9	64.1	4.7	
Queue Delay	1.6	0.0	0.0	0.0	0.0	0.0	
Total Delay	19.9	6.8	11.2	8.9	64.1	4.7	
LOS	B	A	B	A	E	A	
Approach Delay	18.7			9.8	25.8		
Approach LOS	B			A	C		
Queue Length 50th (ft)	130	0	32	51	68	0	
Queue Length 95th (ft)	#620	22	123	184	118	31	
Internal Link Dist (ft)	194			504	256		
Turn Bay Length (ft)		35				150	
Base Capacity (vph)	1025	997	539	1313	213	541	
Starvation Cap Reductn	243	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	111	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.77	0.07	0.41	0.27	0.42	0.30	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 10 (8%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.59
 Intersection Signal Delay: 16.6 Intersection LOS: B
 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.

Splits and Phases: 5: Chestnut Street & Washington Street





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	180	0	0	420
Future Volume (vph)	0	0	180	0	0	420
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1900	0	1881	0	0	1863
Fit Permitted						
Satd. Flow (perm)	1900	0	1881	0	0	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	95		140			145
Travel Time (s)	2.2		3.2			3.3
Confl. Peds. (#/hr)				11	11	
Peak Hour Factor	0.92	0.92	0.86	0.86	0.84	0.84
Heavy Vehicles (%)	0%	0%	1%	0%	0%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	209	0	0	500
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	25.4%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	0	0	180	0	0	420
Future Vol, veh/h	0	0	180	0	0	420
Conflicting Peds, #/hr	0	0	0	11	11	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	86	86	84	84
Heavy Vehicles, %	0	0	1	0	0	2
Mvmt Flow	0	0	209	0	0	500
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	720	220	0	0	220	0
Stage 1	220	-	-	-	-	-
Stage 2	500	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	398	825	-	-	1361	-
Stage 1	821	-	-	-	-	-
Stage 2	613	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	394	816	-	-	1347	-
Mov Cap-2 Maneuver	394	-	-	-	-	-
Stage 1	813	-	-	-	-	-
Stage 2	613	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	-	1347	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	-	-	0	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	-	0	-	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	5	180	405	15
Future Volume (vph)	0	0	5	180	405	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1900	0	0	1880	1855	0
Fit Permitted				0.999		
Satd. Flow (perm)	1900	0	0	1880	1855	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	119			95	140	
Travel Time (s)	2.7			2.2	3.2	
Confl. Peds. (#/hr)			41			41
Peak Hour Factor	0.92	0.92	0.86	0.86	0.84	0.84
Heavy Vehicles (%)	0%	0%	0%	1%	2%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	215	500	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	25.7%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	0	0	5	180	405	15
Future Vol, veh/h	0	0	5	180	405	15
Conflicting Peds, #/hr	0	0	41	0	0	41
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	86	86	84	84
Heavy Vehicles, %	0	0	0	1	2	0
Mvmt Flow	0	0	6	209	482	18

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	753	532	541	0	-	0
Stage 1	532	-	-	-	-	-
Stage 2	221	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	380	551	1038	-	-	-
Stage 1	593	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	348	529	997	-	-	-
Mov Cap-2 Maneuver	348	-	-	-	-	-
Stage 1	566	-	-	-	-	-
Stage 2	789	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	997	-	-	-	-
HCM Lane V/C Ratio	0.006	-	-	-	-
HCM Control Delay (s)	8.6	0	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (vph)	15	5	5	0	0	45	0	125	90	50	355	0
Future Volume (vph)	15	5	5	0	0	45	0	125	90	50	355	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1795	0	0	1644	0	0	1774	0	0	1856	0
Fit Permitted		0.970									0.994	
Satd. Flow (perm)	0	1795	0	0	1644	0	0	1774	0	0	1856	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		122			101			629			95	
Travel Time (s)		2.8			2.3			14.3			2.2	
Confl. Peds. (#/hr)			13			13	13		11	11		13
Peak Hour Factor	0.61	0.61	0.61	0.77	0.77	0.77	0.86	0.86	0.86	0.84	0.84	0.84
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	2%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	41	0	0	58	0	0	250	0	0	483	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

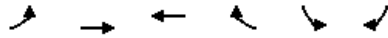
Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	54.3%
ICU Level of Service	A
Analysis Period (min)	15

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	5	5	0	0	45	0	125	90	50	355	0
Future Vol, veh/h	15	5	5	0	0	45	0	125	90	50	355	0
Conflicting Peds, #/hr	0	0	13	0	0	13	13	0	11	11	0	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	61	61	61	77	77	77	86	86	86	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	1	1	0	2	0
Mvmt Flow	25	8	8	0	0	58	0	145	105	60	423	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	796	817	449	-	765	222	436	0	0	261	0	0
Stage 1	556	556	-	-	209	-	-	-	-	-	-	-
Stage 2	240	261	-	-	556	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	-	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	-	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	-	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	-	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	307	313	614	0	336	823	1134	-	-	1315	-	-
Stage 1	519	516	-	0	733	-	-	-	-	-	-	-
Stage 2	768	696	-	0	516	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	265	288	599	-	309	804	1120	-	-	1301	-	-
Mov Cap-2 Maneuver	265	288	-	-	309	-	-	-	-	-	-	-
Stage 1	513	479	-	-	726	-	-	-	-	-	-	-
Stage 2	703	689	-	-	479	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.7	9.8	0	1
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1120	-	-	304	804	1301	-	-
HCM Lane V/C Ratio	-	-	-	0.135	0.073	0.046	-	-
HCM Control Delay (s)	0	-	-	18.7	9.8	7.9	0	-
HCM Lane LOS	A	-	-	C	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.2	0.1	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Volume (vph)	0	145	45	0	0	0
Future Volume (vph)	0	145	45	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1881	1900	0	1900	0
Fit Permitted						
Satd. Flow (perm)	0	1881	1900	0	1900	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		101	420		95	
Travel Time (s)		2.3	9.5		2.2	
Confl. Peds. (#/hr)	13			13		
Peak Hour Factor	0.66	0.66	0.77	0.77	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	220	58	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	11.0% ICU Level of Service A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↕	
Traffic Vol, veh/h	0	145	45	0	0	0
Future Vol, veh/h	0	145	45	0	0	0
Conflicting Peds, #/hr	13	0	0	13	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	66	66	77	77	92	92
Heavy Vehicles, %	0	1	0	0	0	0
Mvmt Flow	0	220	58	0	0	0
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	71	0	-	0	291	71
Stage 1	-	-	-	-	71	-
Stage 2	-	-	-	-	220	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1542	-	-	-	704	997
Stage 1	-	-	-	-	957	-
Stage 2	-	-	-	-	821	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1523	-	-	-	687	985
Mov Cap-2 Maneuver	-	-	-	-	687	-
Stage 1	-	-	-	-	946	-
Stage 2	-	-	-	-	811	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1523	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	-	-	0	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	-	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	65	80	20	160	230	25
Future Volume (vph)	65	80	20	160	230	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1702	0	0	1857	1810	0
Fit Permitted	0.978			0.995		
Satd. Flow (perm)	1702	0	0	1857	1810	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	420			422	336	
Travel Time (s)	9.5			9.6	7.6	
Confl. Peds. (#/hr)	4	6	2			2
Peak Hour Factor	0.66	0.66	0.89	0.89	0.70	0.70
Heavy Vehicles (%)	1%	1%	0%	2%	4%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	219	0	0	202	365	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	41.5%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	4.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	65	80	20	160	230	25
Future Vol, veh/h	65	80	20	160	230	25
Conflicting Peds, #/hr	4	6	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	89	89	70	70
Heavy Vehicles, %	1	1	0	2	4	0
Mvmt Flow	98	121	22	180	329	36

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	577	355	367	0	-	0
Stage 1	349	-	-	-	-	-
Stage 2	228	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.1	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.2	-	-	-
Pot Cap-1 Maneuver	480	691	1203	-	-	-
Stage 1	716	-	-	-	-	-
Stage 2	812	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	468	686	1201	-	-	-
Mov Cap-2 Maneuver	468	-	-	-	-	-
Stage 1	700	-	-	-	-	-
Stage 2	810	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.3	0.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1201	-	567	-	-
HCM Lane V/C Ratio	0.019	-	0.387	-	-
HCM Control Delay (s)	8.1	0	15.3	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.8	-	-



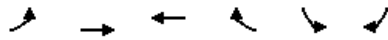
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø7	Ø8	Ø9
Lane Configurations					↕↕			↕	↕			↕			
Traffic Volume (vph)	0	0	0	0	635	50	40	150	710	0	0	235			
Future Volume (vph)	0	0	0	0	635	50	40	150	710	0	0	235			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	0	0	3454	0	0	1840	1583	0	0	1611			
Fit Permitted								0.990							
Satd. Flow (perm)	0	0	0	0	3454	0	0	1835	1583	0	0	1611			
Right Turn on Red			Yes			Yes	Yes		No			Yes			
Satd. Flow (RTOR)					6			164				620			
Link Speed (mph)		30			30			30			30				
Link Distance (ft)		100			336			433			533				
Travel Time (s)		2.3			7.6			9.8			12.1				
Confl. Peds. (#/hr)						17	4								
Confl. Bikes (#/hr)						4									
Peak Hour Factor	0.92	0.92	0.92	0.84	0.84	0.84	0.93	0.93	0.93	0.88	0.88	0.88			
Heavy Vehicles (%)	0%	0%	0%	0%	2%	7%	3%	2%	2%	0%	0%	2%			
Shared Lane Traffic (%)															
Lane Group Flow (vph)	0	0	0	0	816	0	0	204	763	0	0	267			
Turn Type					NA		Split	NA	custom			Prot			
Protected Phases					2		3	3	2 3 4			4	7	8	9
Permitted Phases															
Detector Phase					2		3	3	2 3 4			4			
Switch Phase															
Minimum Initial (s)					6.0		6.0	6.0			6.0	2.0	2.0	5.0	
Minimum Split (s)					17.5		19.5	19.5			10.0	4.0	4.0	27.0	
Total Split (s)					32.0		25.0	25.0			27.0	4.0	4.0	28.0	
Total Split (%)					26.7%		20.8%	20.8%			22.5%	3%	3%	23%	
Yellow Time (s)					3.5		3.5	3.5			3.0	2.0	2.0	2.0	
All-Red Time (s)					4.5		4.5	4.5			1.0	0.0	0.0	3.0	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0				
Total Lost Time (s)					8.0		8.0	8.0			4.0				
Lead/Lag					Lag		Lag	Lag					Lead	Lead	
Lead-Lag Optimize?															
Recall Mode					C-Min		None	None			None	Min	Min	None	
Act Effect Green (s)					46.6			17.0	87.6			20.0			
Actuated g/C Ratio					0.39			0.14	0.73			0.17			
v/c Ratio					0.61			0.51	0.66			0.34			
Control Delay					30.5			16.6	11.3			1.2			
Queue Delay					1.4			0.0	11.6			0.0			
Total Delay					31.9			16.6	22.8			1.2			
LOS					C			B	C			A			
Approach Delay					31.9			21.5			1.2				
Approach LOS					C			C			A				
Queue Length 50th (ft)					250			28	97			0			
Queue Length 95th (ft)					#456			101	#530			0			
Internal Link Dist (ft)		20			256			353			453				
Turn Bay Length (ft)															
Base Capacity (vph)					1344			401	1195			809			
Starvation Cap Reductn					321			0	0			0			
Spillback Cap Reductn					0			0	411			0			
Storage Cap Reductn					0			0	0			0			
Reduced v/c Ratio					0.80			0.51	0.97			0.33			

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 5 (4%), Referenced to phase 2:WBT, Start of Yellow
 Natural Cycle: 95
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.66
 Intersection Signal Delay: 23.0
 Intersection LOS: C
 Intersection Capacity Utilization 60.6%
 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.

Splits and Phases: 1: Washington Street & Elm Street





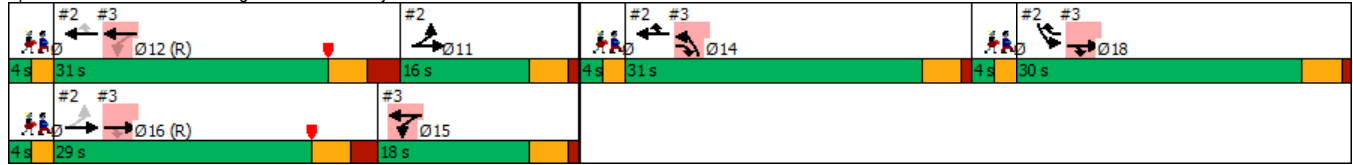
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2	Ø4	Ø6	Ø8	Ø12	Ø14	Ø15	Ø16
Lane Configurations	↕	↕	↕	↕	↕	↕								
Traffic Volume (vph)	170	540	585	235	350	100								
Future Volume (vph)	170	540	585	235	350	100								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Storage Length (ft)	200			0	100	0								
Storage Lanes	1			1	1	0								
Taper Length (ft)	25				25									
Satd. Flow (prot)	1787	1863	1845	1599	3365	0								
Flt Permitted	0.174				0.963									
Satd. Flow (perm)	327	1863	1845	1519	3365	0								
Right Turn on Red				Yes		Yes								
Satd. Flow (RTOR)				247	29									
Link Speed (mph)		30	30		30									
Link Distance (ft)		336	185		438									
Travel Time (s)		7.6	4.2		10.0									
Confl. Peds. (#/hr)				7		18								
Confl. Bikes (#/hr)				3										
Peak Hour Factor	0.85	0.85	0.95	0.95	0.92	0.92								
Heavy Vehicles (%)	1%	2%	3%	1%	0%	0%								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	200	635	616	247	489	0								
Turn Type	custom	NA	NA	custom	Prot									
Protected Phases	11	11 16	12 14	14 18	18		2	4	6	8	12	14	15	16
Permitted Phases	16			12										
Detector Phase	11	11 16	12 14	14 18	18									
Switch Phase														
Minimum Initial (s)	8.0				8.0		2.0	2.0	2.0	2.0	8.0	8.0	8.0	8.0
Minimum Split (s)	12.5				20.0		4.0	4.0	4.0	4.0	15.0	19.0	12.5	16.5
Total Split (s)	16.0				30.0		4.0	4.0	4.0	4.0	31.0	31.0	18.0	29.0
Total Split (%)	13.3%				25.0%		3%	3%	3%	3%	26%	26%	15%	24%
Yellow Time (s)	3.5				3.5		2.0	2.0	2.0	2.0	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0				1.0		0.0	0.0	0.0	0.0	3.0	1.0	1.0	2.5
Lost Time Adjust (s)	0.0				0.0									
Total Lost Time (s)	4.5				4.5									
Lead/Lag					Lag		Lead	Lead	Lead	Lead	Lag	Lag		Lag
Lead-Lag Optimize?														
Recall Mode	None				None		Min	Min	Min	Min	C-Min	None	None	C-Min
Act Effect Green (s)	36.0	36.0	48.4	77.8	25.4									
Actuated g/C Ratio	0.30	0.30	0.40	0.65	0.21									
v/c Ratio	0.84	1.14	0.83	0.22	0.67									
Control Delay	74.3	117.7	11.2	1.7	45.8									
Queue Delay	0.0	0.4	51.0	0.8	1.7									
Total Delay	74.3	118.1	62.2	2.4	47.5									
LOS	E	F	E	A	D									
Approach Delay		107.6	45.1		47.5									
Approach LOS		F	D		D									
Queue Length 50th (ft)	120	~592	189	16	170									
Queue Length 95th (ft)	#209	#573	m163	m14	228									
Internal Link Dist (ft)		256	105		358									
Turn Bay Length (ft)	200				100									
Base Capacity (vph)	238	558	753	1113	737									
Starvation Cap Reductn	0	25	209	585	0									
Spillback Cap Reductn	0	17	88	0	117									
Storage Cap Reductn	0	0	0	0	0									
Reduced v/c Ratio	0.84	1.19	1.13	0.47	0.79									

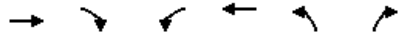
Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 12:WBT and 16:EBTL, Start of Yellow
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.18
 Intersection Signal Delay: 69.5
 Intersection Capacity Utilization 66.6%
 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: 2: Washington Street & Cherry Street



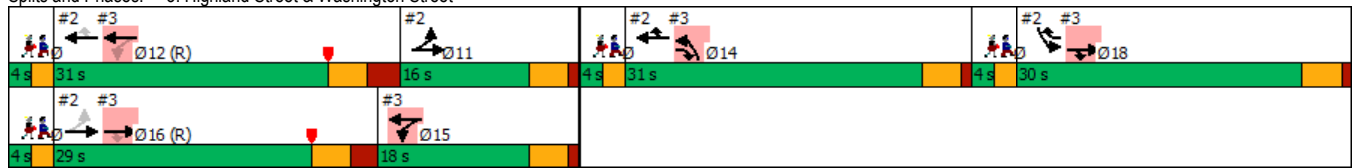


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø4	Ø6	Ø8	Ø11	Ø12	Ø16	Ø18
Lane Configurations	↑↑	↑	↓	↑	↓									
Traffic Volume (vph)	685	205	105	580	240	40								
Future Volume (vph)	685	205	105	580	240	40								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Storage Length (ft)		85	0		0	0								
Storage Lanes		1	1		1	0								
Taper Length (ft)			25		25									
Satd. Flow (prot)	3539	1615	1787	1845	1751	0								
Flt Permitted			0.163		0.959									
Satd. Flow (perm)	3539	1511	307	1845	1751	0								
Right Turn on Red		Yes				Yes								
Satd. Flow (RTOR)		208			6									
Link Speed (mph)	30			30	30									
Link Distance (ft)	185			301	145									
Travel Time (s)	4.2			6.8	3.3									
Confl. Peds. (#/hr)		11				6								
Peak Hour Factor	0.87	0.87	0.89	0.89	0.85	0.85								
Heavy Vehicles (%)	2%	0%	1%	3%	2%	0%								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	787	236	118	652	329	0								
Turn Type	NA	custom	custom	NA	Prot									
Protected Phases	16 18	14 18	15	12 15	14		2	4	6	8	11	12	16	18
Permitted Phases		16	12											
Detector Phase	16 18	14 18	15	12 15	14									
Switch Phase														
Minimum Initial (s)			8.0		8.0		2.0	2.0	2.0	2.0	8.0	8.0	8.0	8.0
Minimum Split (s)			12.5		19.0		4.0	4.0	4.0	4.0	12.5	15.0	16.5	20.0
Total Split (s)			18.0		31.0		4.0	4.0	4.0	4.0	16.0	31.0	29.0	30.0
Total Split (%)			15.0%		25.8%		3%	3%	3%	3%	13%	26%	24%	25%
Yellow Time (s)			3.5		3.5		2.0	2.0	2.0	2.0	3.5	3.5	3.5	3.5
All-Red Time (s)			1.0		1.0		0.0	0.0	0.0	0.0	1.0	3.0	2.5	1.0
Lost Time Adjust (s)			0.0		0.0									
Total Lost Time (s)			4.5		4.5									
Lead/Lag					Lag		Lead	Lead	Lead	Lead		Lag	Lag	Lag
Lead-Lag Optimize?														
Recall Mode			None		None		Min	Min	Min	Min	None	C-Min	C-Min	None
Act Effct Green (s)	46.9	75.8	40.0	36.0	25.9									
Actuated g/C Ratio	0.39	0.63	0.33	0.30	0.22									
v/c Ratio	0.57	0.22	0.44	1.18	0.86									
Control Delay	17.4	1.7	47.6	131.6	66.6									
Queue Delay	2.8	0.6	0.0	0.9	4.2									
Total Delay	20.2	2.4	47.6	132.4	70.8									
LOS	C	A	D	F	E									
Approach Delay	16.1			119.4	70.8									
Approach LOS	B			F	E									
Queue Length 50th (ft)	107	13	65	~474	241									
Queue Length 95th (ft)	m104	m16	m96	#688	#355									
Internal Link Dist (ft)	105			221	65									
Turn Bay Length (ft)		85												
Base Capacity (vph)	1386	1083	268	553	391									
Starvation Cap Reductn	465	543	0	56	0									
Spillback Cap Reductn	283	0	0	48	26									
Storage Cap Reductn	0	0	0	0	0									
Reduced v/c Ratio	0.85	0.44	0.44	1.31	0.90									

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 12:WBT and 16:EBTL, Start of Yellow
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.18
 Intersection Signal Delay: 62.1 Intersection LOS: E
 Intersection Capacity Utilization 55.5% ICU Level of Service B
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Highland Street & Washington Street



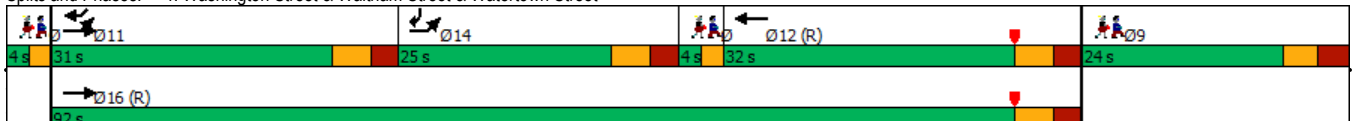


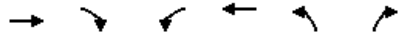
Lane Group	EBL	EBT	WBT	WBR	WBR2	SBL	SBR	SWL	SWR	SWR2	Ø1	Ø2	Ø9	Ø16
Lane Configurations														
Traffic Volume (vph)	320	405	245	205	5	0	155	0	285	40				
Future Volume (vph)	320	405	245	205	5	0	155	0	285	40				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Satd. Flow (prot)	1770	1863	3008	0	0	0	1627	0	1615	0				
Fit Permitted	0.950													
Satd. Flow (perm)	1770	1863	3008	0	0	0	1627	0	1615	0				
Right Turn on Red					Yes		Yes			No				
Satd. Flow (RTOR)			1				437							
Link Speed (mph)		30	30			30		30						
Link Distance (ft)		301	274			478		461						
Travel Time (s)		6.8	6.2			10.9		10.5						
Confl. Peds. (#/hr)					17					25				
Confl. Bikes (#/hr)				1	1					3				
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.87	0.87	0.83	0.83	0.83				
Heavy Vehicles (%)	2%	2%	4%	1%	0%	0%	1%	0%	2%	0%				
Shared Lane Traffic (%)														
Lane Group Flow (vph)	356	450	494	0	0	0	178	0	391	0				
Turn Type	Prot	NA	NA				Prot		Over					
Protected Phases	11 14	11 16	12				14		11		1	2	9	16
Permitted Phases														
Detector Phase	11 14	11 16	12				14		11					
Switch Phase														
Minimum Initial (s)			6.0				6.0		6.0		2.0	2.0	5.0	6.0
Minimum Split (s)			12.5				12.0		15.5		4.0	4.0	23.0	12.0
Total Split (s)			32.0				25.0		31.0		4.0	4.0	24.0	92.0
Total Split (%)			26.7%				20.8%		25.8%		3%	3%	20%	77%
Yellow Time (s)			3.5				3.5		3.5		2.0	2.0	3.0	3.5
All-Red Time (s)			2.5				2.5		2.5		0.0	0.0	3.0	2.5
Lost Time Adjust (s)			0.0				0.0		0.0					
Total Lost Time (s)			6.0				6.0		6.0					
Lead/Lag			Lag				Lag		Lead				Lead	
Lead-Lag Optimize?														
Recall Mode			C-Min				None		None		Min	Min	None	C-Min
Act Effct Green (s)	53.6	98.3	31.2				8.4		39.2					
Actuated g/C Ratio	0.45	0.82	0.26				0.07		0.33					
v/c Ratio	0.45	0.29	0.63				0.34		0.74					
Control Delay	50.6	5.3	47.1				1.8		48.4					
Queue Delay	7.8	1.0	40.3				0.7		5.7					
Total Delay	58.4	6.2	87.4				2.5		54.1					
LOS	E	A	F				A		D					
Approach Delay		29.3	87.4			2.5		54.1						
Approach LOS		C	F			A		D						
Queue Length 50th (ft)	280	90	191				0		240					
Queue Length 95th (ft)	m355	m109	256				0		#490					
Internal Link Dist (ft)		221	194			398		381						
Turn Bay Length (ft)														
Base Capacity (vph)	946	1526	783				625		527					
Starvation Cap Reductn	539	787	252				0		0					
Spillback Cap Reductn	0	91	318				222		88					
Storage Cap Reductn	0	0	0				0		0					
Reduced v/c Ratio	0.87	0.61	1.06				0.44		0.89					

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 113 (94%), Referenced to phase 12:WBT and 16:EBT, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.74
 Intersection Signal Delay: 47.3
 Intersection LOS: D
 Intersection Capacity Utilization 59.0%
 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: 4: Washington Street & Waltham Street & Watertown Street



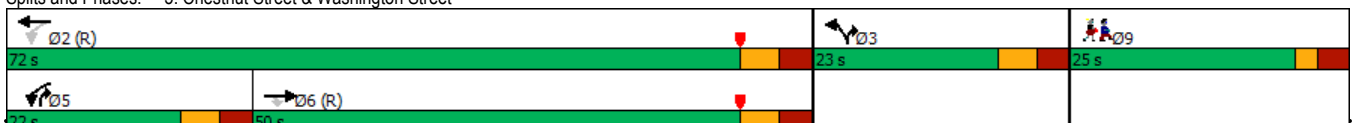


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø9
Lane Configurations	↑	↑	↑	↑	↑	↑	
Traffic Volume (vph)	375	30	235	355	100	180	
Future Volume (vph)	375	30	235	355	100	180	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		35	0		0	150	
Storage Lanes		1	1		1	1	
Taper Length (ft)			25		25		
Satd. Flow (prot)	1863	1615	1805	1845	1787	1599	
Flt Permitted			0.391		0.950		
Satd. Flow (perm)	1863	1615	743	1845	1787	1599	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		9				191	
Link Speed (mph)	30			30	30		
Link Distance (ft)	274			584	336		
Travel Time (s)	6.2			13.3	7.6		
Peak Hour Factor	0.89	0.89	0.95	0.95	0.94	0.94	
Heavy Vehicles (%)	2%	0%	0%	3%	1%	1%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	421	34	247	374	106	191	
Turn Type	NA	Perm	pm+pt	NA	Prot	pt+ov	
Protected Phases	6		5	2	3	3.5	9
Permitted Phases		6	2				
Detector Phase	6	6	5	2	3	3.5	
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0		5.0
Minimum Split (s)	12.5	12.5	12.5	12.5	12.5		24.0
Total Split (s)	50.0	50.0	22.0	72.0	23.0		25.0
Total Split (%)	41.7%	41.7%	18.3%	60.0%	19.2%		21%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		2.0
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0		3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.5		
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	C-Min	C-Min	None	C-Min	None		None
Act Effect Green (s)	67.0	67.0	85.0	85.0	12.4	27.8	
Actuated g/C Ratio	0.56	0.56	0.71	0.71	0.10	0.23	
v/c Ratio	0.40	0.04	0.39	0.29	0.58	0.37	
Control Delay	13.5	8.6	10.6	9.8	63.0	4.7	
Queue Delay	1.3	0.0	0.0	0.1	0.0	0.0	
Total Delay	14.8	8.6	10.6	9.9	63.0	4.7	
LOS	B	A	B	A	E	A	
Approach Delay	14.3			10.2	25.5		
Approach LOS	B			B	C		
Queue Length 50th (ft)	116	2	39	63	79	0	
Queue Length 95th (ft)	396	16	145	225	134	34	
Internal Link Dist (ft)	194			504	256		
Turn Bay Length (ft)		35				150	
Base Capacity (vph)	1043	908	665	1306	247	565	
Starvation Cap Reductn	410	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	221	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.67	0.04	0.37	0.34	0.43	0.34	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 7 (6%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.58
 Intersection Signal Delay: 14.9
 Intersection LOS: B
 Intersection Capacity Utilization 54.5%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 5: Chestnut Street & Washington Street





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	280	0	0	310
Future Volume (vph)	0	0	280	0	0	310
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1900	0	1900	0	0	1881
Fit Permitted						
Satd. Flow (perm)	1900	0	1900	0	0	1881
Link Speed (mph)	30		30			30
Link Distance (ft)	95		140			145
Travel Time (s)	2.2		3.2			3.3
Confl. Peds. (#/hr)				3	3	
Peak Hour Factor	0.92	0.92	0.80	0.80	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	350	0	0	352
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	19.6%
Analysis Period (min)	15
	ICU Level of Service A

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	0	0	280	0	0	310
Future Vol, veh/h	0	0	280	0	0	310
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	80	80	88	88
Heavy Vehicles, %	0	0	0	0	0	1
Mvmt Flow	0	0	350	0	0	352
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	705	353	0	0	353	0
Stage 1	353	-	-	-	-	-
Stage 2	352	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	406	695	-	-	1217	-
Stage 1	716	-	-	-	-	-
Stage 2	716	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	405	693	-	-	1214	-
Mov Cap-2 Maneuver	405	-	-	-	-	-
Stage 1	714	-	-	-	-	-
Stage 2	716	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	-	1214	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	-	-	0	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	-	0	-	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	1	5	280	305	5
Future Volume (vph)	0	1	5	280	305	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1644	0	0	1898	1878	0
Fit Permitted				0.999		
Satd. Flow (perm)	1644	0	0	1898	1878	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	119			95	140	
Travel Time (s)	2.7			2.2	3.2	
Confl. Peds. (#/hr)			21			21
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.25	0.25	0.80	0.80	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	4	0	0	356	353	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	28.7%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	0	1	5	280	305	5
Future Vol, veh/h	0	1	5	280	305	5
Conflicting Peds, #/hr	0	0	21	0	0	21
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	25	25	80	80	88	88
Heavy Vehicles, %	0	0	0	0	1	0
Mvmt Flow	0	4	6	350	347	6

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	733	371	374	0	-	0
Stage 1	371	-	-	-	-	-
Stage 2	362	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	391	679	1196	-	-	-
Stage 1	702	-	-	-	-	-
Stage 2	709	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	373	665	1172	-	-	-
Mov Cap-2 Maneuver	373	-	-	-	-	-
Stage 1	684	-	-	-	-	-
Stage 2	695	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1172	-	665	-	-
HCM Lane V/C Ratio	0.005	-	0.006	-	-
HCM Control Delay (s)	8.1	0	10.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (vph)	10	1	5	0	1	60	0	215	30	25	280	0
Future Volume (vph)	10	1	5	0	1	60	0	215	30	25	280	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1766	0	0	1647	0	0	1868	0	0	1875	0
Fit Permitted		0.969									0.996	
Satd. Flow (perm)	0	1766	0	0	1647	0	0	1868	0	0	1875	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		122			101			609			95	
Travel Time (s)		2.8			2.3			13.8			2.2	
Confl. Peds. (#/hr)			1			1	3		3	3		3
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.54	0.54	0.54	0.70	0.70	0.70	0.80	0.80	0.80	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	30	0	0	87	0	0	307	0	0	346	0
Sign Control		Stop			Stop			Free			Free	

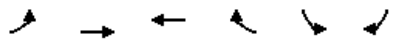
Intersection Summary		
Area Type:	Other	
Control Type:	Unsignalized	
Intersection Capacity Utilization	47.1%	ICU Level of Service A
Analysis Period (min)	15	

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	1	5	0	1	60	0	215	30	25	280	0
Future Vol, veh/h	10	1	5	0	1	60	0	215	30	25	280	0
Conflicting Peds, #/hr	0	0	1	0	0	1	3	0	3	3	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	54	54	54	70	70	70	80	80	80	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	1	0
Mvmt Flow	19	2	9	0	1	86	0	269	38	28	318	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	710	687	322	-	668	292	321	0	0	310	0	0
Stage 1	377	377	-	-	291	-	-	-	-	-	-	-
Stage 2	333	310	-	-	377	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	-	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	-	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	-	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	-	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	351	372	724	0	382	752	1250	-	-	1262	-	-
Stage 1	649	619	-	0	675	-	-	-	-	-	-	-
Stage 2	685	663	-	0	619	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	302	360	721	-	369	749	1246	-	-	1258	-	-
Mov Cap-2 Maneuver	302	360	-	-	369	-	-	-	-	-	-	-
Stage 1	647	600	-	-	673	-	-	-	-	-	-	-
Stage 2	605	661	-	-	600	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.5	10.5	0	0.6
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1246	-	-	374	737	1258	-	-
HCM Lane V/C Ratio	-	-	-	0.079	0.118	0.023	-	-
HCM Control Delay (s)	0	-	-	15.5	10.5	7.9	0	-
HCM Lane LOS	A	-	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.4	0.1	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Volume (vph)	0	55	60	0	0	0
Future Volume (vph)	0	55	60	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1900	1900	0	1900	0
Fit Permitted						
Satd. Flow (perm)	0	1900	1900	0	1900	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		101	420		95	
Travel Time (s)		2.3	9.5		2.2	
Confl. Peds. (#/hr)	1			1		
Peak Hour Factor	0.80	0.80	0.70	0.70	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	69	86	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary
 Area Type: Other
 Control Type: Unsignalized
 Intersection Capacity Utilization 7.0% ICU Level of Service A
 Analysis Period (min) 15

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↕	
Traffic Vol, veh/h	0	55	60	0	0	0
Future Vol, veh/h	0	55	60	0	0	0
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	80	70	70	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	69	86	0	0	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	87	0	0	156	87
Stage 1	-	-	-	87	-
Stage 2	-	-	-	69	-
Critical Hdwy	4.1	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	3.5	3.3
Pot Cap-1 Maneuver	1522	-	-	840	977
Stage 1	-	-	-	941	-
Stage 2	-	-	-	959	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1521	-	-	838	976
Mov Cap-2 Maneuver	-	-	-	838	-
Stage 1	-	-	-	940	-
Stage 2	-	-	-	958	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1521	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	30	25	30	250	235	30
Future Volume (vph)	30	25	30	250	235	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1736	0	0	1874	1872	0
Fit Permitted	0.973			0.995		
Satd. Flow (perm)	1736	0	0	1874	1872	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	420			432	336	
Travel Time (s)	9.5			9.8	7.6	
Confl. Peds. (#/hr)		3	8			8
Peak Hour Factor	0.80	0.80	0.94	0.94	0.86	0.86
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	69	0	0	298	308	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	43.4%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	30	25	30	250	235	30
Future Vol, veh/h	30	25	30	250	235	30
Conflicting Peds, #/hr	0	3	8	0	0	8
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	94	94	86	86
Heavy Vehicles, %	0	0	0	1	0	0
Mvmt Flow	38	31	32	266	273	35
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	629	302	316	0	-	0
Stage 1	299	-	-	-	-	-
Stage 2	330	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	449	742	1256	-	-	-
Stage 1	757	-	-	-	-	-
Stage 2	733	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	429	734	1246	-	-	-
Mov Cap-2 Maneuver	429	-	-	-	-	-
Stage 1	728	-	-	-	-	-
Stage 2	727	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	12.8	0.9		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1246	-	529	-	-	
HCM Lane V/C Ratio	0.026	-	0.13	-	-	
HCM Control Delay (s)	8	0	12.8	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-	

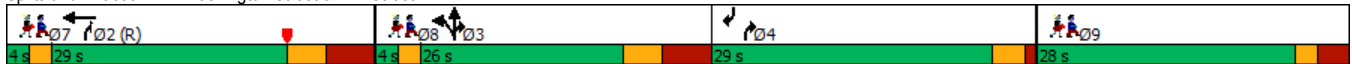


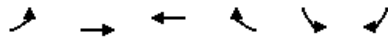
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø7	Ø8	Ø9
Lane Configurations					↕↕			↕	↕			↕			
Traffic Volume (vph)	0	0	0	0	610	35	25	140	785	0	0	325			
Future Volume (vph)	0	0	0	0	610	35	25	140	785	0	0	325			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	0	0	3404	0	0	1797	1538	0	0	1596			
Fit Permitted								0.993							
Satd. Flow (perm)	0	0	0	0	3404	0	0	1794	1538	0	0	1596			
Right Turn on Red			Yes			Yes	Yes		No			Yes			
Satd. Flow (RTOR)					4			164				685			
Link Speed (mph)		30			30			30			30				
Link Distance (ft)		100			336			433			533				
Travel Time (s)		2.3			7.6			9.8			12.1				
Confl. Peds. (#/hr)						4	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 (%)	0%	0%	0%	0%	5%	4%	5%	5%	5%	0%	0%	3%			
Shared Lane Traffic (%)															
Lane Group Flow (vph)	0	0	0	0	701	0	0	179	853	0	0	353			
Turn Type					NA		Split	NA	custom			Prot			
Protected Phases					2		3	3	2 3 4			4	7	8	9
Permitted Phases															
Detector Phase					2		3	3	2 3 4			4			
Switch Phase															
Minimum Initial (s)					6.0		6.0	6.0			6.0	2.0	2.0	5.0	
Minimum Split (s)					17.5		19.5	19.5			10.0	4.0	4.0	27.0	
Total Split (s)					29.0		26.0	26.0			29.0	4.0	4.0	28.0	
Total Split (%)					24.2%		21.7%	21.7%			24.2%	3%	3%	23%	
Yellow Time (s)					3.5		3.5	3.5			3.0	2.0	2.0	2.0	
All-Red Time (s)					4.5		4.5	4.5			1.0	0.0	0.0	3.0	
Lost Time Adjust (s)					0.0			0.0			0.0				
Total Lost Time (s)					8.0			8.0			4.0				
Lead/Lag					Lag		Lag	Lag					Lead	Lead	
Lead-Lag Optimize?															
Recall Mode					C-Min		None	None			None	Min	Min	None	
Act Effect Green (s)					35.7			18.0	82.7		25.0				
Actuated g/C Ratio					0.30			0.15	0.69		0.21				
v/c Ratio					0.69			0.44	0.81		0.40				
Control Delay					35.5			12.4	20.9		1.4				
Queue Delay					3.2			0.0	51.7		0.0				
Total Delay					38.8			12.4	72.6		1.4				
LOS					D			B	E		A				
Approach Delay					38.8			62.2			1.4				
Approach LOS					D			E			A				
Queue Length 50th (ft)					162			10	127		0				
Queue Length 95th (ft)					m#450			75	#916		0				
Internal Link Dist (ft)		20			256			353			453				
Turn Bay Length (ft)															
Base Capacity (vph)					1015			408	1059		874				
Starvation Cap Reductn					215			0	0		0				
Spillback Cap Reductn					0			0	491		0				
Storage Cap Reductn					0			0	0		0				
Reduced v/c Ratio					0.88			0.44	1.50		0.40				

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 9 (8%), Referenced to phase 2:WBT, Start of Yellow
 Natural Cycle: 105
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay: 44.0 Intersection LOS: D
 Intersection Capacity Utilization 63.5% 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: 1: Washington Street & Elm Street



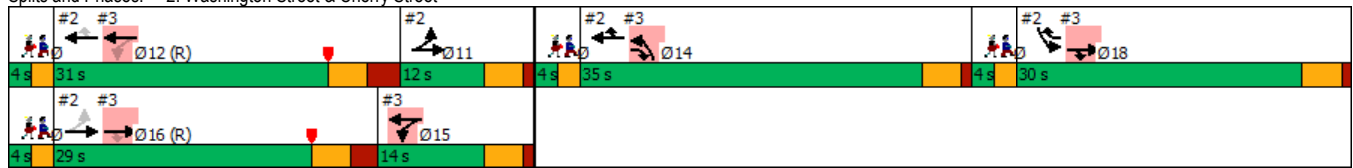


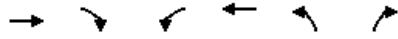
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2	Ø4	Ø6	Ø8	Ø12	Ø14	Ø15	Ø16
Lane Configurations	↖	↗	↖	↗	↖↗	↖↗								
Traffic Volume (vph)	105	680	575	175	575	70								
Future Volume (vph)	105	680	575	175	575	70								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Storage Length (ft)	200			0	100	0								
Storage Lanes	1			1	1	0								
Taper Length (ft)	25				25									
Satd. Flow (prot)	1787	1810	1810	1583	3343	0								
Flt Permitted	0.173				0.957									
Satd. Flow (perm)	325	1810	1810	1500	3343	0								
Right Turn on Red				Yes		Yes								
Satd. Flow (RTOR)				190	10									
Link Speed (mph)		30	30		30									
Link Distance (ft)		336	185		438									
Travel Time (s)		7.6	4.2		10.0									
Confl. Peds. (#/hr)				8		9								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92								
Heavy Vehicles (%)	1%	5%	5%	2%	3%	5%								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	114	739	625	190	701	0								
Turn Type	custom	NA	NA	custom	Prot									
Protected Phases	11	11 16	12 14	14 18	18		2	4	6	8	12	14	15	16
Permitted Phases	16			12										
Detector Phase	11	11 16	12 14	14 18	18									
Switch Phase														
Minimum Initial (s)	8.0				8.0		2.0	2.0	2.0	2.0	8.0	8.0	8.0	8.0
Minimum Split (s)	12.5				20.0		4.0	4.0	4.0	4.0	15.0	19.0	12.5	16.5
Total Split (s)	12.0				30.0		4.0	4.0	4.0	4.0	31.0	35.0	14.0	29.0
Total Split (%)	10.0%				25.0%		3%	3%	3%	3%	26%	29%	12%	24%
Yellow Time (s)	3.5				3.5		2.0	2.0	2.0	2.0	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0				1.0		0.0	0.0	0.0	0.0	3.0	1.0	1.0	2.5
Lost Time Adjust (s)	0.0				0.0									
Total Lost Time (s)	4.5				4.5									
Lead/Lag					Lag		Lead	Lead	Lead	Lead	Lag	Lag		Lag
Lead-Lag Optimize?														
Recall Mode	None				None		Min	Min	Min	Min	C-Min	None	None	C-Min
Act Effct Green (s)	32.0	32.0	47.7	80.6	28.8									
Actuated g/C Ratio	0.27	0.27	0.40	0.67	0.24									
v/c Ratio	0.64	1.53	0.87	0.17	0.86									
Control Delay	53.5	275.7	12.8	1.5	56.1									
Queue Delay	0.0	0.3	22.6	0.4	14.0									
Total Delay	53.5	276.0	35.4	1.9	70.1									
LOS	D	F	D	A	E									
Approach Delay		246.3	27.6		70.1									
Approach LOS		F	C		E									
Queue Length 50th (ft)	54	~716	218	6	276									
Queue Length 95th (ft)	m84	#1011	m127	m4	#403									
Internal Link Dist (ft)		256	105		358									
Turn Bay Length (ft)	200				100									
Base Capacity (vph)	178	482	799	1162	811									
Starvation Cap Reductn	0	18	186	611	0									
Spillback Cap Reductn	0	11	36	0	108									
Storage Cap Reductn	0	0	0	0	0									
Reduced v/c Ratio	0.64	1.59	1.02	0.34	1.00									

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 12:WBT and 16:EBTL, Start of Yellow
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.53
 Intersection Signal Delay: 118.9 Intersection LOS: F
 Intersection Capacity Utilization 68.5% ICU Level of Service C
 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: 2: Washington Street & Cherry Street





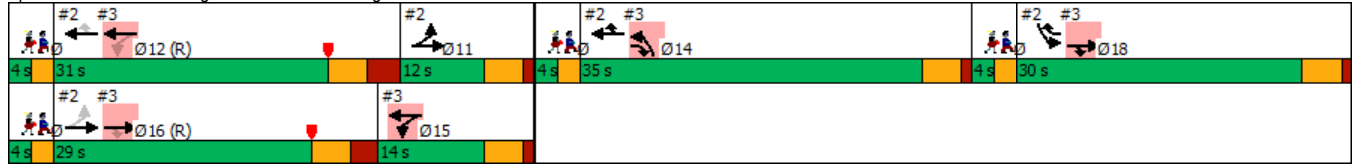
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø4	Ø6	Ø8	Ø11	Ø12	Ø16	Ø18
Lane Configurations	↑↑	↑	↓	↑	↓									
Traffic Volume (vph)	945	310	125	600	150	35								
Future Volume (vph)	945	310	125	600	150	35								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Storage Length (ft)		85	0		0	0								
Storage Lanes		1	1		1	0								
Taper Length (ft)			25		25									
Satd. Flow (prot)	3471	1524	1770	1810	1741	0								
Flt Permitted			0.163		0.961									
Satd. Flow (perm)	3471	1446	304	1810	1741	0								
Right Turn on Red		Yes				Yes								
Satd. Flow (RTOR)		250			9									
Link Speed (mph)	30			30	30									
Link Distance (ft)	185			301	145									
Travel Time (s)	4.2			6.8	3.3									
Confl. Peds. (#/hr)		7				8								
Confl. Bikes (#/hr)		5												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92								
Heavy Vehicles (%)	4%	6%	2%	5%	1%	4%								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	1027	337	136	652	201	0								
Turn Type	NA	custom	custom	NA	Prot									
Protected Phases	16 18	14 18	15	12 15	14		2	4	6	8	11	12	16	18
Permitted Phases		16	12											
Detector Phase	16 18	14 18	15	12 15	14									
Switch Phase														
Minimum Initial (s)			8.0		8.0		2.0	2.0	2.0	2.0	8.0	8.0	8.0	8.0
Minimum Split (s)			12.5		19.0		4.0	4.0	4.0	4.0	12.5	15.0	16.5	20.0
Total Split (s)			14.0		35.0		4.0	4.0	4.0	4.0	12.0	31.0	29.0	30.0
Total Split (%)			11.7%		29.2%		3%	3%	3%	3%	10%	26%	24%	25%
Yellow Time (s)			3.5		3.5		2.0	2.0	2.0	2.0	3.5	3.5	3.5	3.5
All-Red Time (s)			1.0		1.0		0.0	0.0	0.0	0.0	1.0	3.0	2.5	1.0
Lost Time Adjust (s)			0.0		0.0									
Total Lost Time (s)			4.5		4.5									
Lead/Lag					Lag		Lead	Lead	Lead	Lead		Lag	Lag	Lag
Lead-Lag Optimize?														
Recall Mode			None		None		Min	Min	Min	Min	None	C-Min	C-Min	None
Act Effect Green (s)	50.3	78.6	36.0	32.0	25.2									
Actuated g/C Ratio	0.42	0.66	0.30	0.27	0.21									
v/c Ratio	0.71	0.32	0.66	1.35	0.54									
Control Delay	13.8	1.4	60.1	205.5	44.7									
Queue Delay	13.2	0.9	0.0	1.0	0.3									
Total Delay	27.0	2.3	60.1	206.5	45.0									
LOS	C	A	E	F	D									
Approach Delay	20.9			181.2	45.0									
Approach LOS	C			F	D									
Queue Length 50th (ft)	102	7	92	~581	129									
Queue Length 95th (ft)	m90	m5	m#115	#781	200									
Internal Link Dist (ft)	105			221	65									
Turn Bay Length (ft)		85												
Base Capacity (vph)	1456	1118	207	482	449									
Starvation Cap Reductn	423	518	0	0	0									
Spillback Cap Reductn	289	0	0	51	39									
Storage Cap Reductn	0	0	0	0	0									
Reduced v/c Ratio	0.99	0.56	0.66	1.51	0.49									

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 12:WBT and 16:EBTL, Start of Yellow
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.53
 Intersection Signal Delay: 76.6 Intersection LOS: E
 Intersection Capacity Utilization 56.5% ICU Level of Service B
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

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

Splits and Phases: 3: Highland Street & Washington Street



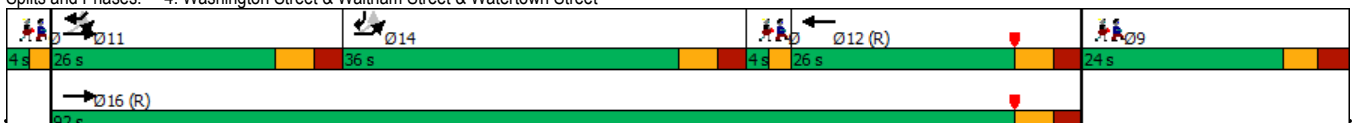


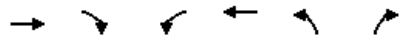
Lane Group	EBL2	EBL	EBT	WBT	WBR	WBR2	SBL	SBR	SWL	SWR	SWR2	Ø1	Ø2	Ø9	Ø16
Lane Configurations															
Traffic Volume (vph)	1	355	625	275	160	2	0	205	0	245	40				
Future Volume (vph)	1	355	625	275	160	2	0	205	0	245	40				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Satd. Flow (prot)	0	1736	1810	3143	0	0	0	1580	0	1576	0				
Fit Permitted															
Satd. Flow (perm)	0	1827	1810	3143	0	0	0	1580	0	1576	0				
Right Turn on Red							Yes	Yes			No				
Satd. Flow (RTOR)								454							
Link Speed (mph)			30	30			30		30						
Link Distance (ft)			301	274			478		461						
Travel Time (s)			6.8	6.2			10.9		10.5						
Confl. Peds. (#/hr)							13				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				
Heavy Vehicles (%)	0%	4%	5%	4%	1%	0%	0%	4%	0%	5%	0%				
Shared Lane Traffic (%)															
Lane Group Flow (vph)	0	387	679	475	0	0	0	223	0	309	0				
Turn Type	custom	Prot	NA	NA				Prot		Over					
Protected Phases		11 14	11 16	12				14		11		1	2	9	16
Permitted Phases	11 14														
Detector Phase	11 14	11 14	11 16	12				14		11					
Switch Phase															
Minimum Initial (s)				6.0				6.0		6.0		2.0	2.0	5.0	6.0
Minimum Split (s)				12.5				12.0		15.5		4.0	4.0	23.0	12.0
Total Split (s)				26.0				36.0		26.0		4.0	4.0	24.0	92.0
Total Split (%)				21.7%				30.0%		21.7%		3%	3%	20%	77%
Yellow Time (s)				3.5				3.5		3.5		2.0	2.0	3.0	3.5
All-Red Time (s)				2.5				2.5		2.5		0.0	0.0	3.0	2.5
Lost Time Adjust (s)				0.0				0.0		0.0					
Total Lost Time (s)				6.0				6.0		6.0					
Lead/Lag				Lag				Lag		Lead				Lead	
Lead-Lag Optimize?															
Recall Mode				C-Min				None		None		Min	Min	None	C-Min
Act Effect Green (s)		50.6	98.3	34.2				11.6		33.0					
Actuated g/C Ratio		0.42	0.82	0.28				0.10		0.28					
v/c Ratio		0.50	0.46	0.53				0.40		0.71					
Control Delay		50.6	6.2	39.9				2.1		52.1					
Queue Delay		1.8	2.8	4.1				0.9		6.0					
Total Delay		52.4	8.9	43.9				3.0		58.1					
LOS		D	A	D				A		E					
Approach Delay			24.7	43.9			3.0		58.1						
Approach LOS			C	D			A		E						
Queue Length 50th (ft)		311	91	165				0		196					
Queue Length 95th (ft)		340	135	248				0		#465					
Internal Link Dist (ft)			221	194			398		381						
Turn Bay Length (ft)															
Base Capacity (vph)		1050	1482	894				735		433					
Starvation Cap Reductn		488	663	329				0		0					
Spillback Cap Reductn		0	113	318				291		79					
Storage Cap Reductn		0	0	0				0		0					
Reduced v/c Ratio		0.69	0.83	0.84				0.50		0.87					

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 117 (98%), Referenced to phase 12:WBT and 16:EBT, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 31.7
 Intersection Capacity Utilization 65.6%
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 4: Washington Street & Waltham Street & Watertown Street



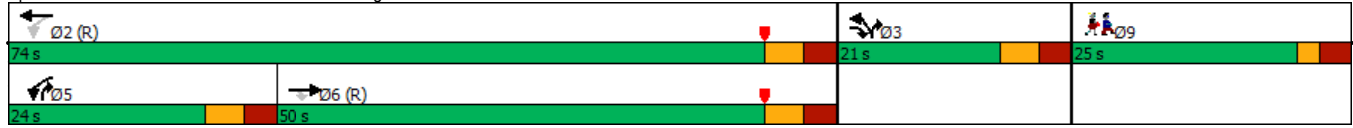


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø9
Lane Configurations	↑	↑	↑	↑	↑	↑	
Traffic Volume (vph)	570	55	220	350	85	165	
Future Volume (vph)	570	55	220	350	85	165	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		35	0		0	150	
Storage Lanes		1	1		1	1	
Taper Length (ft)			25		25		
Satd. Flow (prot)	1827	1482	1770	1827	1770	1583	
Flt Permitted			0.242		0.950		
Satd. Flow (perm)	1827	1449	451	1827	1770	1583	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		13				179	
Link Speed (mph)	30			30	30		
Link Distance (ft)	274			584	336		
Travel Time (s)	6.2			13.3	7.6		
Confl. Bikes (#/hr)		3					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	4%	9%	2%	4%	2%	2%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	620	60	239	380	92	179	
Turn Type	NA	pm+ov	pm+pt	NA	Prot	pt+ov	
Protected Phases	6	3	5	2	3	3 5	9
Permitted Phases		6	2				
Detector Phase	6	3	5	2	3	3 5	
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0		5.0
Minimum Split (s)	12.5	12.5	12.5	12.5	12.5		24.0
Total Split (s)	50.0	21.0	24.0	74.0	21.0		25.0
Total Split (%)	41.7%	17.5%	20.0%	61.7%	17.5%		21%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		2.0
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0		3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.5		
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?							
Recall Mode	C-Min	None	None	C-Min	None		None
Act Effct Green (s)	65.5	76.8	86.2	86.2	11.2	29.3	
Actuated g/C Ratio	0.55	0.64	0.72	0.72	0.09	0.24	
v/c Ratio	0.62	0.06	0.50	0.29	0.56	0.34	
Control Delay	18.4	7.0	11.8	9.3	64.3	4.5	
Queue Delay	1.3	0.0	0.0	0.0	0.0	0.0	
Total Delay	19.7	7.0	11.8	9.3	64.3	4.5	
LOS	B	A	B	A	E	A	
Approach Delay	18.6			10.3	24.8		
Approach LOS	B			B	C		
Queue Length 50th (ft)	99	1	36	62	69	0	
Queue Length 95th (ft)	#715	24	133	218	122	34	
Internal Link Dist (ft)	194			504	256		
Turn Bay Length (ft)		35				150	
Base Capacity (vph)	997	974	523	1311	213	558	
Starvation Cap Reductn	192	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	130	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.77	0.06	0.46	0.32	0.43	0.32	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 10 (8%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.62
 Intersection Signal Delay: 16.4 Intersection LOS: B
 Intersection Capacity Utilization 63.4% 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.

Splits and Phases: 5: Chestnut Street & Washington Street





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	185	0	0	435
Future Volume (vph)	0	0	185	0	0	435
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1900	0	1881	0	0	1863
Fit Permitted						
Satd. Flow (perm)	1900	0	1881	0	0	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	95		140			145
Travel Time (s)	2.2		3.2			3.3
Confl. Peds. (#/hr)				11	11	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	0%	0%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	201	0	0	473
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	26.2%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	0	0	185	0	0	435
Future Vol, veh/h	0	0	185	0	0	435
Conflicting Peds, #/hr	0	0	0	11	11	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	1	0	0	2
Mvmt Flow	0	0	201	0	0	473
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	685	212	0	0	212	0
Stage 1	212	-	-	-	-	-
Stage 2	473	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	417	833	-	-	1370	-
Stage 1	828	-	-	-	-	-
Stage 2	631	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	413	824	-	-	1356	-
Mov Cap-2 Maneuver	413	-	-	-	-	-
Stage 1	820	-	-	-	-	-
Stage 2	631	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	-	1356	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	-	-	0	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	-	0	-	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	5	185	420	15
Future Volume (vph)	0	0	5	185	420	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1900	0	0	1880	1855	0
Fit Permitted				0.999		
Satd. Flow (perm)	1900	0	0	1880	1855	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	119			95	140	
Travel Time (s)	2.7			2.2	3.2	
Confl. Peds. (#/hr)			41			41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	1%	2%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	206	473	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	26.5% ICU Level of Service A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	0	0	5	185	420	15
Future Vol, veh/h	0	0	5	185	420	15
Conflicting Peds, #/hr	0	0	41	0	0	41
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	1	2	0
Mvmt Flow	0	0	5	201	457	16
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	717	506	514	0	-	0
Stage 1	506	-	-	-	-	-
Stage 2	211	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	399	570	1062	-	-	-
Stage 1	610	-	-	-	-	-
Stage 2	829	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	366	548	1021	-	-	-
Mov Cap-2 Maneuver	366	-	-	-	-	-
Stage 1	583	-	-	-	-	-
Stage 2	797	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0.2		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1021	-	-	-	-	
HCM Lane V/C Ratio	0.005	-	-	-	-	
HCM Control Delay (s)	8.5	0	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (vph)	15	5	5	0	0	45	0	130	95	50	370	0
Future Volume (vph)	15	5	5	0	0	45	0	130	95	50	370	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1795	0	0	1644	0	0	1774	0	0	1856	0
Fit Permitted		0.970									0.994	
Satd. Flow (perm)	0	1795	0	0	1644	0	0	1774	0	0	1856	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		122			101			629			95	
Travel Time (s)		2.8			2.3			14.3			2.2	
Confl. Peds. (#/hr)			13			13	13		11	11		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
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	2%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	49	0	0	244	0	0	456	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

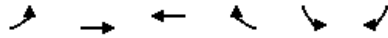
Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	55.5%
ICU Level of Service	B
Analysis Period (min)	15

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	5	5	0	0	45	0	130	95	50	370	0
Future Vol, veh/h	15	5	5	0	0	45	0	130	95	50	370	0
Conflicting Peds, #/hr	0	0	13	0	0	13	13	0	11	11	0	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	1	1	0	2	0
Mvmt Flow	16	5	5	0	0	49	0	141	103	54	402	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	753	778	428	-	727	217	415	0	0	255	0	0
Stage 1	523	523	-	-	204	-	-	-	-	-	-	-
Stage 2	230	255	-	-	523	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	-	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	-	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	-	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	-	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	329	330	631	0	353	828	1155	-	-	1322	-	-
Stage 1	541	534	-	0	737	-	-	-	-	-	-	-
Stage 2	777	700	-	0	534	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	289	306	615	-	327	809	1141	-	-	1308	-	-
Mov Cap-2 Maneuver	289	306	-	-	327	-	-	-	-	-	-	-
Stage 1	535	500	-	-	730	-	-	-	-	-	-	-
Stage 2	721	693	-	-	500	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17	9.7	0	0.9
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1141	-	-	327	809	1308	-	-
HCM Lane V/C Ratio	-	-	-	0.083	0.06	0.042	-	-
HCM Control Delay (s)	0	-	-	17	9.7	7.9	0	-
HCM Lane LOS	A	-	-	C	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.2	0.1	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Volume (vph)	0	150	45	0	0	0
Future Volume (vph)	0	150	45	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1881	1900	0	1900	0
Fit Permitted						
Satd. Flow (perm)	0	1881	1900	0	1900	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		101	420		95	
Travel Time (s)		2.3	9.5		2.2	
Confl. Peds. (#/hr)	13			13		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	163	49	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	11.2% ICU Level of Service A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↕	
Traffic Vol, veh/h	0	150	45	0	0	0
Future Vol, veh/h	0	150	45	0	0	0
Conflicting Peds, #/hr	13	0	0	13	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	1	0	0	0	0
Mvmt Flow	0	163	49	0	0	0
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	62	0	-	0	225	62
Stage 1	-	-	-	-	62	-
Stage 2	-	-	-	-	163	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1554	-	-	-	768	1009
Stage 1	-	-	-	-	966	-
Stage 2	-	-	-	-	871	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1535	-	-	-	750	997
Mov Cap-2 Maneuver	-	-	-	-	750	-
Stage 1	-	-	-	-	954	-
Stage 2	-	-	-	-	861	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1535	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	-	-	0	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	-	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	65	85	20	185	250	25
Future Volume (vph)	65	85	20	185	250	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1702	0	0	1857	1811	0
Fit Permitted	0.979			0.995		
Satd. Flow (perm)	1702	0	0	1857	1811	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	420			422	336	
Travel Time (s)	9.5			9.6	7.6	
Confl. Peds. (#/hr)	4	6	2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	0%	2%	4%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	163	0	0	223	299	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	43.0% ICU Level of Service A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	3.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	65	85	20	185	250	25
Future Vol, veh/h	65	85	20	185	250	25
Conflicting Peds, #/hr	4	6	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	0	2	4	0
Mvmt Flow	71	92	22	201	272	27
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	537	294	301	0	-	0
Stage 1	288	-	-	-	-	-
Stage 2	249	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.1	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.2	-	-	-
Pot Cap-1 Maneuver	506	748	1272	-	-	-
Stage 1	763	-	-	-	-	-
Stage 2	795	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	494	742	1270	-	-	-
Mov Cap-2 Maneuver	494	-	-	-	-	-
Stage 1	746	-	-	-	-	-
Stage 2	793	-	-	-	-	-
Approach	EB	NB	SB			
HCM Control Delay, s	13.1	0.8	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1270	-	609	-	-	
HCM Lane V/C Ratio	0.017	-	0.268	-	-	
HCM Control Delay (s)	7.9	0	13.1	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	1.1	-	-	

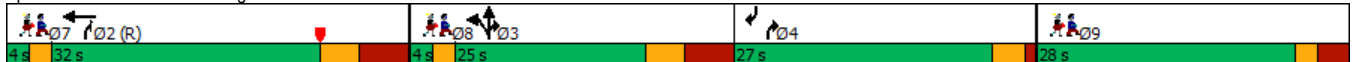


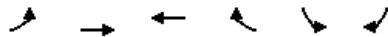
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø7	Ø8	Ø9
Lane Configurations					↕↕			↕	↕			↕			
Traffic Volume (vph)	0	0	0	0	705	55	40	160	800	0	0	250			
Future Volume (vph)	0	0	0	0	705	55	40	160	800	0	0	250			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	0	0	3454	0	0	1841	1583	0	0	1611			
Fit Permitted								0.990							
Satd. Flow (perm)	0	0	0	0	3454	0	0	1836	1583	0	0	1611			
Right Turn on Red			Yes			Yes	Yes		No			Yes			
Satd. Flow (RTOR)					6			164				620			
Link Speed (mph)		30			30			30			30				
Link Distance (ft)		100			336			433			533				
Travel Time (s)		2.3			7.6			9.8			12.1				
Confl. Peds. (#/hr)						17	4								
Confl. Bikes (#/hr)						4									
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%	0%	0%	0%	2%	7%	3%	2%	2%	0%	0%	2%			
Shared Lane Traffic (%)															
Lane Group Flow (vph)	0	0	0	0	826	0	0	217	870	0	0	272			
Turn Type					NA		Split	NA	custom			Prot			
Protected Phases					2		3	3	2 3 4			4	7	8	9
Permitted Phases															
Detector Phase					2		3	3	2 3 4			4			
Switch Phase															
Minimum Initial (s)					6.0		6.0	6.0			6.0	2.0	2.0	5.0	
Minimum Split (s)					17.5		19.5	19.5			10.0	4.0	4.0	27.0	
Total Split (s)					32.0		25.0	25.0			27.0	4.0	4.0	28.0	
Total Split (%)					26.7%		20.8%	20.8%			22.5%	3%	3%	23%	
Yellow Time (s)					3.5		3.5	3.5			3.0	2.0	2.0	2.0	
All-Red Time (s)					4.5		4.5	4.5			1.0	0.0	0.0	3.0	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0				
Total Lost Time (s)					8.0		8.0	8.0			4.0				
Lead/Lag					Lag		Lag	Lag					Lead	Lead	
Lead-Lag Optimize?															
Recall Mode					C-Min		None	None			None	Min	Min	None	
Act Effct Green (s)					43.6			17.0	87.6			23.0			
Actuated g/C Ratio					0.36			0.14	0.73			0.19			
v/c Ratio					0.66			0.54	0.75			0.34			
Control Delay					30.6			18.9	14.1			1.1			
Queue Delay					3.7			0.0	50.9			0.0			
Total Delay					34.3			18.9	65.1			1.1			
LOS					C			B	E			A			
Approach Delay					34.3			55.8			1.1				
Approach LOS					C			E			A				
Queue Length 50th (ft)					235			37	128			0			
Queue Length 95th (ft)					m#444			114	#924			0			
Internal Link Dist (ft)		20			256			353			453				
Turn Bay Length (ft)															
Base Capacity (vph)					1258			401	1155			809			
Starvation Cap Reductn					335			0	0			0			
Spillback Cap Reductn					0			0	460			0			
Storage Cap Reductn					0			0	0			0			
Reduced v/c Ratio					0.89			0.54	1.25			0.34			

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 5 (4%), Referenced to phase 2:WBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 40.9
 Intersection LOS: D
 Intersection Capacity Utilization 64.1%
 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.

Splits and Phases: 1: Washington Street & Elm Street





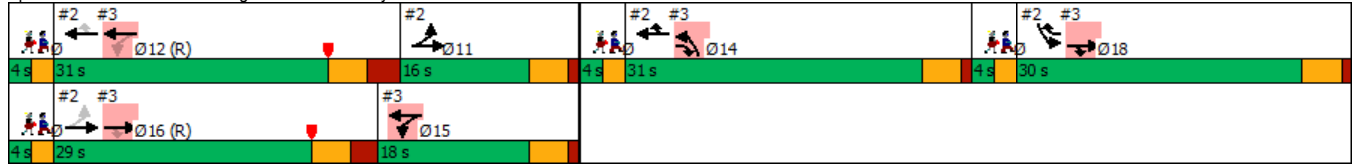
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2	Ø4	Ø6	Ø8	Ø12	Ø14	Ø15	Ø16
Lane Configurations	↕	↕	↕	↕	↕	↕								
Traffic Volume (vph)	175	625	655	260	400	105								
Future Volume (vph)	175	625	655	260	400	105								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Storage Length (ft)	200			0	100	0								
Storage Lanes	1			1	1	0								
Taper Length (ft)	25				25									
Satd. Flow (prot)	1787	1863	1845	1599	3373	0								
Flt Permitted	0.174				0.962									
Satd. Flow (perm)	327	1863	1845	1519	3373	0								
Right Turn on Red				Yes		Yes								
Satd. Flow (RTOR)				283	26									
Link Speed (mph)		30	30		30									
Link Distance (ft)		336	185		438									
Travel Time (s)		7.6	4.2		10.0									
Confl. Peds. (#/hr)				7		18								
Confl. Bikes (#/hr)				3										
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92								
Heavy Vehicles (%)	1%	2%	3%	1%	0%	0%								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	190	679	712	283	549	0								
Turn Type	custom	NA	NA	custom	Prot									
Protected Phases	11	11 16	12 14	14 18	18		2	4	6	8	12	14	15	16
Permitted Phases	16			12										
Detector Phase	11	11 16	12 14	14 18	18									
Switch Phase														
Minimum Initial (s)	8.0				8.0		2.0	2.0	2.0	2.0	8.0	8.0	8.0	8.0
Minimum Split (s)	12.5				20.0		4.0	4.0	4.0	4.0	15.0	19.0	12.5	16.5
Total Split (s)	16.0				30.0		4.0	4.0	4.0	4.0	31.0	31.0	18.0	29.0
Total Split (%)	13.3%				25.0%		3%	3%	3%	3%	26%	26%	15%	24%
Yellow Time (s)	3.5				3.5		2.0	2.0	2.0	2.0	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0				1.0		0.0	0.0	0.0	0.0	3.0	1.0	1.0	2.5
Lost Time Adjust (s)	0.0				0.0									
Total Lost Time (s)	4.5				4.5									
Lead/Lag					Lag		Lead	Lead	Lead	Lead	Lag	Lag		Lag
Lead-Lag Optimize?														
Recall Mode	None				None		Min	Min	Min	Min	C-Min	None	None	C-Min
Act Effect Green (s)	36.0	36.0	49.0	78.5	25.5									
Actuated g/C Ratio	0.30	0.30	0.41	0.65	0.21									
v/c Ratio	0.80	1.22	0.95	0.25	0.74									
Control Delay	65.6	145.0	16.9	1.7	49.2									
Queue Delay	0.0	0.5	44.6	0.9	4.1									
Total Delay	65.6	145.5	61.6	2.7	53.3									
LOS	E	F	E	A	D									
Approach Delay		128.0	44.8		53.3									
Approach LOS		F	D		D									
Queue Length 50th (ft)	109	~500	272	20	197									
Queue Length 95th (ft)	m#166	#718	m195	m16	260									
Internal Link Dist (ft)		256	105		358									
Turn Bay Length (ft)	200				100									
Base Capacity (vph)	238	558	753	1126	737									
Starvation Cap Reductn	0	26	182	582	0									
Spillback Cap Reductn	0	35	63	0	119									
Storage Cap Reductn	0	0	0	0	0									
Reduced v/c Ratio	0.80	1.30	1.25	0.52	0.89									

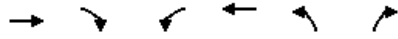
Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 12:WBT and 16:EBTL, Start of Yellow
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.30
 Intersection Signal Delay: 76.7 Intersection LOS: E
 Intersection Capacity Utilization 72.2% ICU Level of Service C
 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: 2: Washington Street & Cherry Street



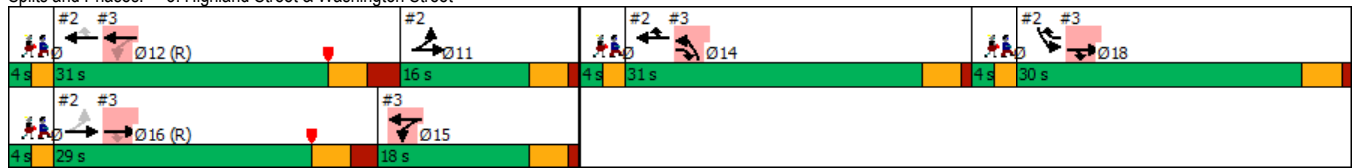


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø4	Ø6	Ø8	Ø11	Ø12	Ø16	Ø18
Lane Configurations	↑↑	↑	↓	↑	↓									
Traffic Volume (vph)	805	220	110	660	255	40								
Future Volume (vph)	805	220	110	660	255	40								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Storage Length (ft)		85	0		0	0								
Storage Lanes		1	1		1	0								
Taper Length (ft)			25		25									
Satd. Flow (prot)	3539	1615	1787	1845	1753	0								
Flt Permitted			0.163		0.959									
Satd. Flow (perm)	3539	1511	307	1845	1753	0								
Right Turn on Red		Yes				Yes								
Satd. Flow (RTOR)		189			6									
Link Speed (mph)	30			30	30									
Link Distance (ft)	185			301	145									
Travel Time (s)	4.2			6.8	3.3									
Confl. Peds. (#/hr)		11				6								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92								
Heavy Vehicles (%)	2%	0%	1%	3%	2%	0%								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	875	239	120	717	320	0								
Turn Type	NA	custom	custom	NA	Prot									
Protected Phases	16 18	14 18	15	12 15	14		2	4	6	8	11	12	16	18
Permitted Phases		16	12											
Detector Phase	16 18	14 18	15	12 15	14									
Switch Phase														
Minimum Initial (s)			8.0		8.0		2.0	2.0	2.0	2.0	8.0	8.0	8.0	8.0
Minimum Split (s)			12.5		19.0		4.0	4.0	4.0	4.0	12.5	15.0	16.5	20.0
Total Split (s)			18.0		31.0		4.0	4.0	4.0	4.0	16.0	31.0	29.0	30.0
Total Split (%)			15.0%		25.8%		3%	3%	3%	3%	13%	26%	24%	25%
Yellow Time (s)			3.5		3.5		2.0	2.0	2.0	2.0	3.5	3.5	3.5	3.5
All-Red Time (s)			1.0		1.0		0.0	0.0	0.0	0.0	1.0	3.0	2.5	1.0
Lost Time Adjust (s)			0.0		0.0									
Total Lost Time (s)			4.5		4.5									
Lead/Lag					Lag		Lead	Lead	Lead	Lead		Lag	Lag	Lag
Lead-Lag Optimize?														
Recall Mode			None		None		Min	Min	Min	Min	None	C-Min	C-Min	None
Act Effct Green (s)	47.0	76.5	40.0	36.0	26.5									
Actuated g/C Ratio	0.39	0.64	0.33	0.30	0.22									
v/c Ratio	0.63	0.22	0.45	1.30	0.82									
Control Delay	17.1	1.8	46.4	177.8	61.5									
Queue Delay	6.3	0.7	0.0	1.1	4.6									
Total Delay	23.4	2.5	46.4	178.9	66.1									
LOS	C	A	D	F	E									
Approach Delay	18.9			159.9	66.1									
Approach LOS	B			F	E									
Queue Length 50th (ft)	115	14	64	~582	233									
Queue Length 95th (ft)	m110	m15	m90	#801	#379									
Internal Link Dist (ft)	105			221	65									
Turn Bay Length (ft)		85												
Base Capacity (vph)	1386	1076	268	553	391									
Starvation Cap Reductn	453	549	0	30	0									
Spillback Cap Reductn	376	0	0	73	33									
Storage Cap Reductn	0	0	0	0	0									
Reduced v/c Ratio	0.94	0.45	0.45	1.49	0.89									

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 12:WBT and 16:EBTL, Start of Yellow
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.30
 Intersection Signal Delay: 77.5 Intersection LOS: E
 Intersection Capacity Utilization 60.6% ICU Level of Service B
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Highland Street & Washington Street



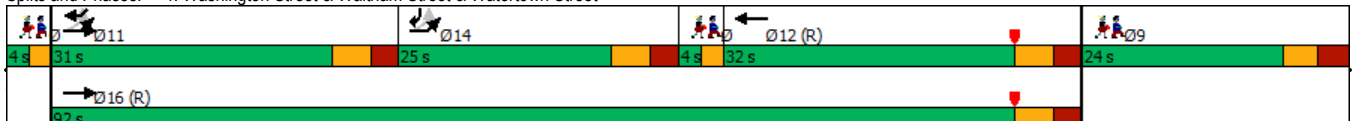


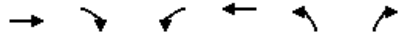
Lane Group	EBL2	EBL	EBT	WBT	WBR	WBR2	SBL	SBR	SWL	SWR	SWR2	Ø1	Ø2	Ø9	Ø16
Lane Configurations															
Traffic Volume (vph)	5	355	485	300	220	5	0	160	0	310	45				
Future Volume (vph)	5	355	485	300	220	5	0	160	0	310	45				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Satd. Flow (prot)	0	1770	1863	3041	0	0	0	1627	0	1615	0				
Fit Permitted		0.995													
Satd. Flow (perm)	0	1854	1863	3041	0	0	0	1627	0	1615	0				
Right Turn on Red							Yes	Yes			No				
Satd. Flow (RTOR)				1				414							
Link Speed (mph)			30	30			30		30						
Link Distance (ft)			301	274			478		461						
Travel Time (s)			6.8	6.2			10.9		10.5						
Confl. Peds. (#/hr)						17					25				
Confl. Bikes (#/hr)					1	1					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				
Heavy Vehicles (%)	0%	2%	2%	4%	1%	0%	0%	1%	0%	2%	0%				
Shared Lane Traffic (%)															
Lane Group Flow (vph)	0	391	527	570	0	0	0	174	0	386	0				
Turn Type	custom	Prot	NA	NA				Prot		Over					
Protected Phases		11 14	11 16	12				14		11		1	2	9	16
Permitted Phases	11 14														
Detector Phase	11 14	11 14	11 16	12				14		11					
Switch Phase															
Minimum Initial (s)				6.0				6.0		6.0		2.0	2.0	5.0	6.0
Minimum Split (s)				12.5				12.0		15.5		4.0	4.0	23.0	12.0
Total Split (s)				32.0				25.0		31.0		4.0	4.0	24.0	92.0
Total Split (%)				26.7%				20.8%		25.8%		3%	3%	20%	77%
Yellow Time (s)				3.5				3.5		3.5		2.0	2.0	3.0	3.5
All-Red Time (s)				2.5				2.5		2.5		0.0	0.0	3.0	2.5
Lost Time Adjust (s)				0.0				0.0		0.0					
Total Lost Time (s)				6.0				6.0		6.0					
Lead/Lag				Lag				Lag		Lead				Lead	
Lead-Lag Optimize?															
Recall Mode				C-Min				None		None		Min	Min	None	C-Min
Act Effect Green (s)		53.6	98.3	31.2				9.0		38.7					
Actuated g/C Ratio		0.45	0.82	0.26				0.08		0.32					
v/c Ratio		0.47	0.35	0.72				0.35		0.74					
Control Delay		52.1	5.7	49.1				1.9		48.8					
Queue Delay		12.9	1.4	53.3				0.9		17.0					
Total Delay		65.0	7.1	102.5				2.7		65.8					
LOS		E	A	F				A		E					
Approach Delay			31.8	102.5			2.7		65.8						
Approach LOS			C	F			A		E						
Queue Length 50th (ft)		311	99	218				0		241					
Queue Length 95th (ft)		m378	m124	#320				0		#546					
Internal Link Dist (ft)			221	194			398		381						
Turn Bay Length (ft)															
Base Capacity (vph)		983	1526	790				606		520					
Starvation Cap Reductn		566	764	235				0		0					
Spillback Cap Reductn		0	95	309				229		125					
Storage Cap Reductn		0	0	0				0		0					
Reduced v/c Ratio		0.94	0.69	1.19				0.46		0.98					

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 113 (94%), Referenced to phase 12:WBT and 16:EBT, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.74
 Intersection Signal Delay: 55.4 Intersection LOS: E
 Intersection Capacity Utilization 73.2% 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.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Washington Street & Waltham Street & Watertown Street



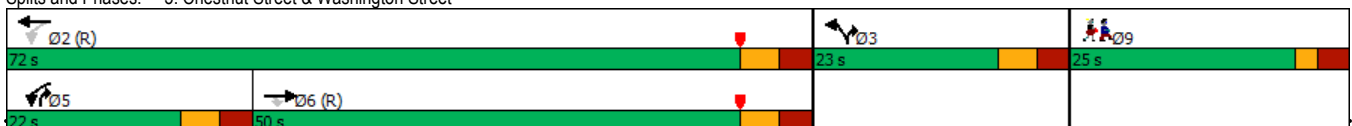


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø9
Lane Configurations	↑	↑	↑	↑	↑	↑	
Traffic Volume (vph)	445	40	250	415	110	195	
Future Volume (vph)	445	40	250	415	110	195	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		35	0		0	150	
Storage Lanes		1	1		1	1	
Taper Length (ft)			25		25		
Satd. Flow (prot)	1863	1615	1805	1845	1787	1599	
Flt Permitted			0.340		0.950		
Satd. Flow (perm)	1863	1615	646	1845	1787	1599	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		10				212	
Link Speed (mph)	30			30	30		
Link Distance (ft)	274			584	336		
Travel Time (s)	6.2			13.3	7.6		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	0%	0%	3%	1%	1%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	484	43	272	451	120	212	
Turn Type	NA	Perm	pm+pt	NA	Prot	pt+ov	
Protected Phases	6		5	2	3	3.5	9
Permitted Phases		6	2				
Detector Phase	6	6	5	2	3	3.5	
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0		5.0
Minimum Split (s)	12.5	12.5	12.5	12.5	12.5		24.0
Total Split (s)	50.0	50.0	22.0	72.0	23.0		25.0
Total Split (%)	41.7%	41.7%	18.3%	60.0%	19.2%		21%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		2.0
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0		3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.5		
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	C-Min	C-Min	None	C-Min	None		None
Act Effect Green (s)	66.0	66.0	84.4	84.4	13.0	28.8	
Actuated g/C Ratio	0.55	0.55	0.70	0.70	0.11	0.24	
v/c Ratio	0.47	0.05	0.48	0.35	0.62	0.39	
Control Delay	14.6	8.5	11.8	10.6	64.9	4.6	
Queue Delay	1.4	0.0	0.0	0.3	0.0	0.0	
Total Delay	16.0	8.5	11.8	10.9	64.9	4.6	
LOS	B	A	B	B	E	A	
Approach Delay	15.4			11.3	26.4		
Approach LOS	B			B	C		
Queue Length 50th (ft)	130	2	45	84	90	0	
Queue Length 95th (ft)	470	18	158	278	150	36	
Internal Link Dist (ft)	194			504	256		
Turn Bay Length (ft)		35				150	
Base Capacity (vph)	1024	892	608	1298	245	582	
Starvation Cap Reductn	343	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	354	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.71	0.05	0.45	0.48	0.49	0.36	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 7 (6%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.62
 Intersection Signal Delay: 15.8
 Intersection LOS: B
 Intersection Capacity Utilization 59.6%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 5: Chestnut Street & Washington Street





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	295	0	0	330
Future Volume (vph)	0	0	295	0	0	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1900	0	1900	0	0	1881
Fit Permitted						
Satd. Flow (perm)	1900	0	1900	0	0	1881
Link Speed (mph)	30		30			30
Link Distance (ft)	95		140			145
Travel Time (s)	2.2		3.2			3.3
Confl. Peds. (#/hr)				3	3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	321	0	0	359
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	20.7%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	0	0	295	0	0	330
Future Vol, veh/h	0	0	295	0	0	330
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	1
Mvmt Flow	0	0	321	0	0	359
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	683	324	0	0	324	0
Stage 1	324	-	-	-	-	-
Stage 2	359	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	418	722	-	-	1247	-
Stage 1	738	-	-	-	-	-
Stage 2	711	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	417	720	-	-	1243	-
Mov Cap-2 Maneuver	417	-	-	-	-	-
Stage 1	736	-	-	-	-	-
Stage 2	711	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	-	1243	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	-	-	0	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	-	0	-	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	1	5	295	325	5
Future Volume (vph)	0	1	5	295	325	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1644	0	0	1898	1878	0
Fit Permitted				0.999		
Satd. Flow (perm)	1644	0	0	1898	1878	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	119			95	140	
Travel Time (s)	2.7			2.2	3.2	
Confl. Peds. (#/hr)			21			21
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1	0	0	326	358	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	29.5% ICU Level of Service A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	0	1	5	295	325	5
Future Vol, veh/h	0	1	5	295	325	5
Conflicting Peds, #/hr	0	0	21	0	0	21
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	1	0
Mvmt Flow	0	1	5	321	353	5
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	708	377	379	0	-	0
Stage 1	377	-	-	-	-	-
Stage 2	331	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	404	674	1191	-	-	-
Stage 1	698	-	-	-	-	-
Stage 2	732	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	386	661	1167	-	-	-
Mov Cap-2 Maneuver	386	-	-	-	-	-
Stage 1	681	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.5	0.1		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1167	-	661	-	-	
HCM Lane V/C Ratio	0.005	-	0.002	-	-	
HCM Control Delay (s)	8.1	0	10.5	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	10	1	5	0	1	60	0	230	30	25	300	0
Future Volume (vph)	10	1	5	0	1	60	0	230	30	25	300	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1767	0	0	1647	0	0	1870	0	0	1875	0
Fit Permitted		0.969									0.996	
Satd. Flow (perm)	0	1767	0	0	1647	0	0	1870	0	0	1875	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		122			101			609			95	
Travel Time (s)		2.8			2.3			13.8			2.2	
Confl. Peds. (#/hr)			1			1	3		3	3		3
Confl. Bikes (#/hr)												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%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	17	0	0	66	0	0	283	0	0	353	0
Sign Control		Stop			Stop			Free			Free	

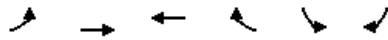
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization 48.9%	ICU Level of Service A											
Analysis Period (min) 15												

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	1	5	0	1	60	0	230	30	25	300	0
Future Vol, veh/h	10	1	5	0	1	60	0	230	30	25	300	0
Conflicting Peds, #/hr	0	0	1	0	0	1	3	0	3	3	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	1	0
Mvmt Flow	11	1	5	0	1	65	0	250	33	27	326	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	684	669	330	-	653	271	329	0	0	286	0	0
Stage 1	383	383	-	-	270	-	-	-	-	-	-	-
Stage 2	301	286	-	-	383	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	-	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	-	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	-	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	-	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	365	381	716	0	389	773	1242	-	-	1288	-	-
Stage 1	644	616	-	0	690	-	-	-	-	-	-	-
Stage 2	712	679	-	0	616	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	326	369	713	-	377	770	1238	-	-	1284	-	-
Mov Cap-2 Maneuver	326	369	-	-	377	-	-	-	-	-	-	-
Stage 1	642	598	-	-	688	-	-	-	-	-	-	-
Stage 2	650	677	-	-	598	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.5	10.2	0	0.6
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1238	-	-	396	757	1284	-	-
HCM Lane V/C Ratio	-	-	-	0.044	0.088	0.021	-	-
HCM Control Delay (s)	0	-	-	14.5	10.2	7.9	0	-
HCM Lane LOS	A	-	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0.1	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Volume (vph)	0	55	60	0	0	0
Future Volume (vph)	0	55	60	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1900	1900	0	1900	0
Fit Permitted						
Satd. Flow (perm)	0	1900	1900	0	1900	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		101	420		95	
Travel Time (s)		2.3	9.5		2.2	
Confl. Peds. (#/hr)	1			1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	60	65	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	7.0%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↕	
Traffic Vol, veh/h	0	55	60	0	0	0
Future Vol, veh/h	0	55	60	0	0	0
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	60	65	0	0	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	66	0	0	126	66
Stage 1	-	-	-	66	-
Stage 2	-	-	-	60	-
Critical Hdwy	4.1	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	3.5	3.3
Pot Cap-1 Maneuver	1549	-	-	874	1003
Stage 1	-	-	-	962	-
Stage 2	-	-	-	968	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1548	-	-	872	1002
Mov Cap-2 Maneuver	-	-	-	872	-
Stage 1	-	-	-	961	-
Stage 2	-	-	-	967	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1548	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	30	25	30	275	260	30
Future Volume (vph)	30	25	30	275	260	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1736	0	0	1874	1873	0
Fit Permitted	0.973			0.995		
Satd. Flow (perm)	1736	0	0	1874	1873	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	420			432	336	
Travel Time (s)	9.5			9.8	7.6	
Confl. Peds. (#/hr)		3	8			8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	60	0	0	332	316	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	46.0%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	30	25	30	275	260	30
Future Vol, veh/h	30	25	30	275	260	30
Conflicting Peds, #/hr	0	3	8	0	0	8
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	1	0	0
Mvmt Flow	33	27	33	299	283	33
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	673	311	324	0	-	0
Stage 1	308	-	-	-	-	-
Stage 2	365	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	424	734	1247	-	-	-
Stage 1	750	-	-	-	-	-
Stage 2	707	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	404	726	1237	-	-	-
Mov Cap-2 Maneuver	404	-	-	-	-	-
Stage 1	720	-	-	-	-	-
Stage 2	701	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	13.1	0.8		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1237	-	506	-	-	
HCM Lane V/C Ratio	0.026	-	0.118	-	-	
HCM Control Delay (s)	8	0	13.1	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-	

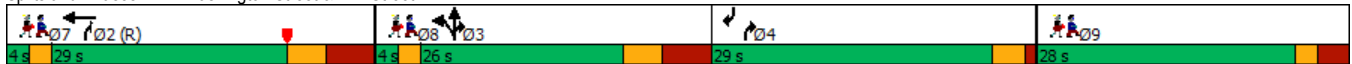


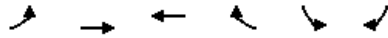
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø7	Ø8	Ø9
Lane Configurations					↕↕			↕	↕			↕			
Traffic Volume (vph)	0	0	0	0	615	35	25	140	790	0	0	325			
Future Volume (vph)	0	0	0	0	615	35	25	140	790	0	0	325			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	0	0	3404	0	0	1797	1538	0	0	1596			
Fit Permitted								0.993							
Satd. Flow (perm)	0	0	0	0	3404	0	0	1794	1538	0	0	1596			
Right Turn on Red			Yes			Yes	Yes		No			Yes			
Satd. Flow (RTOR)					4			164				685			
Link Speed (mph)		30			30			30			30				
Link Distance (ft)		100			336			433			533				
Travel Time (s)		2.3			7.6			9.8			12.1				
Confl. Peds. (#/hr)						4	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 (%)	0%	0%	0%	0%	5%	4%	5%	5%	5%	0%	0%	3%			
Shared Lane Traffic (%)															
Lane Group Flow (vph)	0	0	0	0	706	0	0	179	859	0	0	353			
Turn Type					NA		Split	NA	custom			Prot			
Protected Phases					2		3	3	2 3 4			4	7	8	9
Permitted Phases															
Detector Phase					2		3	3	2 3 4			4			
Switch Phase															
Minimum Initial (s)					6.0		6.0	6.0			6.0	2.0	2.0	5.0	
Minimum Split (s)					17.5		19.5	19.5			10.0	4.0	4.0	27.0	
Total Split (s)					29.0		26.0	26.0			29.0	4.0	4.0	28.0	
Total Split (%)					24.2%		21.7%	21.7%			24.2%	3%	3%	23%	
Yellow Time (s)					3.5		3.5	3.5			3.0	2.0	2.0	2.0	
All-Red Time (s)					4.5		4.5	4.5			1.0	0.0	0.0	3.0	
Lost Time Adjust (s)					0.0			0.0			0.0				
Total Lost Time (s)					8.0			8.0			4.0				
Lead/Lag					Lag		Lag	Lag					Lead	Lead	
Lead-Lag Optimize?															
Recall Mode					C-Min		None	None			None	Min	Min	None	
Act Effect Green (s)					35.7			18.0	82.7		25.0				
Actuated g/C Ratio					0.30			0.15	0.69		0.21				
v/c Ratio					0.70			0.44	0.81		0.40				
Control Delay					35.7			12.4	21.2		1.4				
Queue Delay					3.5			0.0	51.7		0.0				
Total Delay					39.1			12.4	72.9		1.4				
LOS					D			B	E		A				
Approach Delay					39.1			62.5			1.4				
Approach LOS					D			E			A				
Queue Length 50th (ft)					165			10	129		0				
Queue Length 95th (ft)					m#455			75	#927		0				
Internal Link Dist (ft)		20			256			353			453				
Turn Bay Length (ft)															
Base Capacity (vph)					1015			408	1059		874				
Starvation Cap Reductn					215			0	0		0				
Spillback Cap Reductn					0			0	496		0				
Storage Cap Reductn					0			0	0		0				
Reduced v/c Ratio					0.88			0.44	1.53		0.40				

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 9 (8%), Referenced to phase 2:WBT, Start of Yellow
 Natural Cycle: 105
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay: 44.3
 Intersection Capacity Utilization 63.7%
 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: 1: Washington Street & Elm Street



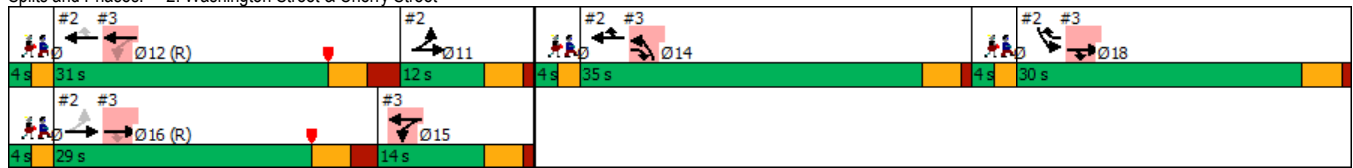


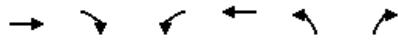
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2	Ø4	Ø6	Ø8	Ø12	Ø14	Ø15	Ø16
Lane Configurations	↖	↗	↖	↗	↖↗	↖↗								
Traffic Volume (vph)	105	685	580	175	575	70								
Future Volume (vph)	105	685	580	175	575	70								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Storage Length (ft)	200			0	100	0								
Storage Lanes	1			1	1	0								
Taper Length (ft)	25				25									
Satd. Flow (prot)	1787	1810	1810	1583	3343	0								
Flt Permitted	0.175				0.957									
Satd. Flow (perm)	329	1810	1810	1500	3343	0								
Right Turn on Red				Yes		Yes								
Satd. Flow (RTOR)				190	10									
Link Speed (mph)		30	30		30									
Link Distance (ft)		336	185		438									
Travel Time (s)		7.6	4.2		10.0									
Confl. Peds. (#/hr)				8		9								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92								
Heavy Vehicles (%)	1%	5%	5%	2%	3%	5%								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	114	745	630	190	701	0								
Turn Type	custom	NA	NA	custom	Prot									
Protected Phases	11	11 16	12 14	14 18	18		2	4	6	8	12	14	15	16
Permitted Phases	16			12										
Detector Phase	11	11 16	12 14	14 18	18									
Switch Phase														
Minimum Initial (s)	8.0				8.0		2.0	2.0	2.0	2.0	8.0	8.0	8.0	8.0
Minimum Split (s)	12.5				20.0		4.0	4.0	4.0	4.0	15.0	19.0	12.5	16.5
Total Split (s)	12.0				30.0		4.0	4.0	4.0	4.0	31.0	35.0	14.0	29.0
Total Split (%)	10.0%				25.0%		3%	3%	3%	3%	26%	29%	12%	24%
Yellow Time (s)	3.5				3.5		2.0	2.0	2.0	2.0	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0				1.0		0.0	0.0	0.0	0.0	3.0	1.0	1.0	2.5
Lost Time Adjust (s)	0.0				0.0									
Total Lost Time (s)	4.5				4.5									
Lead/Lag					Lag		Lead	Lead	Lead	Lead	Lag	Lag		Lag
Lead-Lag Optimize?														
Recall Mode	None				None		Min	Min	Min	Min	C-Min	None	None	C-Min
Act Effct Green (s)	32.0	32.0	47.9	80.6	28.8									
Actuated g/C Ratio	0.27	0.27	0.40	0.67	0.24									
v/c Ratio	0.64	1.55	0.87	0.17	0.87									
Control Delay	53.4	281.0	12.8	1.4	56.4									
Queue Delay	0.0	0.3	23.9	0.4	14.9									
Total Delay	53.4	281.3	36.7	1.9	71.3									
LOS	D	F	D	A	E									
Approach Delay		251.0	28.7		71.3									
Approach LOS		F	C		E									
Queue Length 50th (ft)	53	~725	222	5	276									
Queue Length 95th (ft)	m83	#1021	m128	m4	#403									
Internal Link Dist (ft)		256	105		358									
Turn Bay Length (ft)	200				100									
Base Capacity (vph)	178	482	799	1161	809									
Starvation Cap Reductn	0	18	184	613	0									
Spillback Cap Reductn	0	11	37	0	109									
Storage Cap Reductn	0	0	0	0	0									
Reduced v/c Ratio	0.64	1.61	1.02	0.35	1.00									

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 12:WBT and 16:EBTL, Start of Yellow
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.55
 Intersection Signal Delay: 121.5 Intersection LOS: F
 Intersection Capacity Utilization 68.8% ICU Level of Service C
 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: 2: Washington Street & Cherry Street





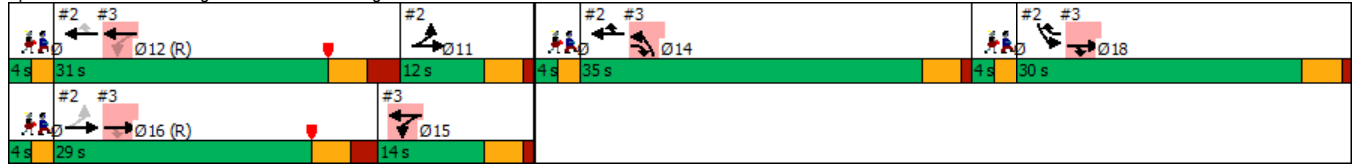
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø4	Ø6	Ø8	Ø11	Ø12	Ø16	Ø18
Lane Configurations	↑↑	↑	↓	↑	↓									
Traffic Volume (vph)	945	315	125	600	155	35								
Future Volume (vph)	945	315	125	600	155	35								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Storage Length (ft)		85	0		0	0								
Storage Lanes		1	1		1	0								
Taper Length (ft)			25		25									
Satd. Flow (prot)	3471	1524	1770	1810	1743	0								
Flt Permitted			0.164		0.961									
Satd. Flow (perm)	3471	1446	305	1810	1743	0								
Right Turn on Red		Yes				Yes								
Satd. Flow (RTOR)		254			9									
Link Speed (mph)	30			30	30									
Link Distance (ft)	185			301	145									
Travel Time (s)	4.2			6.8	3.3									
Confl. Peds. (#/hr)		7				8								
Confl. Bikes (#/hr)		5												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92								
Heavy Vehicles (%)	4%	6%	2%	5%	1%	4%								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	1027	342	136	652	206	0								
Turn Type	NA	custom	custom	NA	Prot									
Protected Phases	16 18	14 18	15	12 15	14		2	4	6	8	11	12	16	18
Permitted Phases		16	12											
Detector Phase	16 18	14 18	15	12 15	14									
Switch Phase														
Minimum Initial (s)			8.0		8.0		2.0	2.0	2.0	2.0	8.0	8.0	8.0	8.0
Minimum Split (s)			12.5		19.0		4.0	4.0	4.0	4.0	12.5	15.0	16.5	20.0
Total Split (s)			14.0		35.0		4.0	4.0	4.0	4.0	12.0	31.0	29.0	30.0
Total Split (%)			11.7%		29.2%		3%	3%	3%	3%	10%	26%	24%	25%
Yellow Time (s)			3.5		3.5		2.0	2.0	2.0	2.0	3.5	3.5	3.5	3.5
All-Red Time (s)			1.0		1.0		0.0	0.0	0.0	0.0	1.0	3.0	2.5	1.0
Lost Time Adjust (s)			0.0		0.0									
Total Lost Time (s)			4.5		4.5									
Lead/Lag					Lag		Lead	Lead	Lead	Lead		Lag	Lag	Lag
Lead-Lag Optimize?														
Recall Mode			None		None		Min	Min	Min	Min	None	C-Min	C-Min	None
Act Effect Green (s)	50.3	78.6	36.0	32.0	25.4									
Actuated g/C Ratio	0.42	0.66	0.30	0.27	0.21									
v/c Ratio	0.71	0.32	0.66	1.35	0.55									
Control Delay	13.9	1.4	60.0	205.5	45.0									
Queue Delay	14.3	1.0	0.0	1.0	0.3									
Total Delay	28.1	2.3	60.0	206.5	45.3									
LOS	C	A	E	F	D									
Approach Delay	21.7			181.2	45.3									
Approach LOS	C			F	D									
Queue Length 50th (ft)	102	7	92	~581	133									
Queue Length 95th (ft)	m90	m5	m#115	#781	205									
Internal Link Dist (ft)	105			221	65									
Turn Bay Length (ft)		85												
Base Capacity (vph)	1453	1119	207	482	449									
Starvation Cap Reductn	425	520	0	0	0									
Spillback Cap Reductn	289	0	0	51	39									
Storage Cap Reductn	0	0	0	0	0									
Reduced v/c Ratio	1.00	0.57	0.66	1.51	0.50									

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 12:WBT and 16:EBTL, Start of Yellow
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.55
 Intersection Signal Delay: 76.9 Intersection LOS: E
 Intersection Capacity Utilization 56.7% ICU Level of Service B
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

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

Splits and Phases: 3: Highland Street & Washington Street



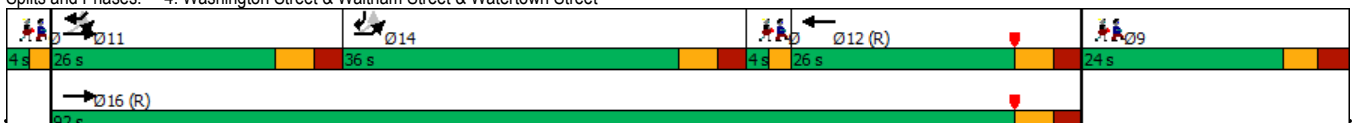


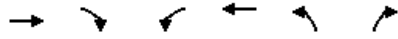
Lane Group	EBL2	EBL	EBT	WBT	WBR	WBR2	SBL	SBR	SWL	SWR	SWR2	Ø1	Ø2	Ø9	Ø16
Lane Configurations															
Traffic Volume (vph)	1	355	625	275	160	2	0	205	0	245	40				
Future Volume (vph)	1	355	625	275	160	2	0	205	0	245	40				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Satd. Flow (prot)	0	1736	1810	3143	0	0	0	1580	0	1576	0				
Fit Permitted															
Satd. Flow (perm)	0	1827	1810	3143	0	0	0	1580	0	1576	0				
Right Turn on Red							Yes	Yes			No				
Satd. Flow (RTOR)								454							
Link Speed (mph)			30	30			30		30						
Link Distance (ft)			301	274			478		461						
Travel Time (s)			6.8	6.2			10.9		10.5						
Confl. Peds. (#/hr)							13				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				
Heavy Vehicles (%)	0%	4%	5%	4%	1%	0%	0%	4%	0%	5%	0%				
Shared Lane Traffic (%)															
Lane Group Flow (vph)	0	387	679	475	0	0	0	223	0	309	0				
Turn Type	custom	Prot	NA	NA				Prot		Over					
Protected Phases		11 14	11 16	12				14		11		1	2	9	16
Permitted Phases	11 14														
Detector Phase	11 14	11 14	11 16	12				14		11					
Switch Phase															
Minimum Initial (s)				6.0				6.0		6.0		2.0	2.0	5.0	6.0
Minimum Split (s)				12.5				12.0		15.5		4.0	4.0	23.0	12.0
Total Split (s)				26.0				36.0		26.0		4.0	4.0	24.0	92.0
Total Split (%)				21.7%				30.0%		21.7%		3%	3%	20%	77%
Yellow Time (s)				3.5				3.5		3.5		2.0	2.0	3.0	3.5
All-Red Time (s)				2.5				2.5		2.5		0.0	0.0	3.0	2.5
Lost Time Adjust (s)				0.0				0.0		0.0					
Total Lost Time (s)				6.0				6.0		6.0					
Lead/Lag				Lag				Lag		Lead				Lead	
Lead-Lag Optimize?															
Recall Mode				C-Min				None		None		Min	Min	None	C-Min
Act Effect Green (s)		50.6	98.3	34.2				11.6		33.0					
Actuated g/C Ratio		0.42	0.82	0.28				0.10		0.28					
v/c Ratio		0.50	0.46	0.53				0.40		0.71					
Control Delay		50.6	6.2	39.9				2.1		52.1					
Queue Delay		1.8	2.8	4.1				0.9		6.0					
Total Delay		52.4	8.9	43.9				3.0		58.1					
LOS		D	A	D				A		E					
Approach Delay			24.7	43.9			3.0		58.1						
Approach LOS			C	D			A		E						
Queue Length 50th (ft)		312	92	165				0		196					
Queue Length 95th (ft)		339	135	248				0		#465					
Internal Link Dist (ft)			221	194			398		381						
Turn Bay Length (ft)															
Base Capacity (vph)		1050	1482	894				735		433					
Starvation Cap Reductn		488	663	329				0		0					
Spillback Cap Reductn		0	113	318				291		79					
Storage Cap Reductn		0	0	0				0		0					
Reduced v/c Ratio		0.69	0.83	0.84				0.50		0.87					

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 117 (98%), Referenced to phase 12:WBT and 16:EBT, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 31.7
 Intersection Capacity Utilization 65.6%
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 4: Washington Street & Waltham Street & Watertown Street





Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø9
Lane Configurations	↑	↑	↑	↑	↑	↑	
Traffic Volume (vph)	570	55	220	350	85	165	
Future Volume (vph)	570	55	220	350	85	165	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		35	0		0	150	
Storage Lanes		1	1		1	1	
Taper Length (ft)			25		25		
Satd. Flow (prot)	1827	1482	1770	1827	1770	1583	
Flt Permitted			0.242		0.950		
Satd. Flow (perm)	1827	1449	451	1827	1770	1583	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		13				179	
Link Speed (mph)	30			30	30		
Link Distance (ft)	274			584	336		
Travel Time (s)	6.2			13.3	7.6		
Confl. Bikes (#/hr)		3					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	4%	9%	2%	4%	2%	2%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	620	60	239	380	92	179	
Turn Type	NA	pm+ov	pm+pt	NA	Prot	pt+ov	
Protected Phases	6	3	5	2	3	3 5	9
Permitted Phases		6	2				
Detector Phase	6	3	5	2	3	3 5	
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0		5.0
Minimum Split (s)	12.5	12.5	12.5	12.5	12.5		24.0
Total Split (s)	50.0	21.0	24.0	74.0	21.0		25.0
Total Split (%)	41.7%	17.5%	20.0%	61.7%	17.5%		21%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		2.0
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0		3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.5		
Lead/Lag	Lag		Lead				
Lead-Lag Optimize?							
Recall Mode	C-Min	None	None	C-Min	None		None
Act Effct Green (s)	65.5	76.8	86.2	86.2	11.2	29.3	
Actuated g/C Ratio	0.55	0.64	0.72	0.72	0.09	0.24	
v/c Ratio	0.62	0.06	0.50	0.29	0.56	0.34	
Control Delay	18.4	7.1	11.8	9.3	64.3	4.5	
Queue Delay	1.3	0.0	0.0	0.0	0.0	0.0	
Total Delay	19.7	7.1	11.8	9.3	64.3	4.5	
LOS	B	A	B	A	E	A	
Approach Delay	18.6			10.3	24.8		
Approach LOS	B			B	C		
Queue Length 50th (ft)	100	1	36	62	69	0	
Queue Length 95th (ft)	#716	24	133	218	122	34	
Internal Link Dist (ft)	194			504	256		
Turn Bay Length (ft)		35				150	
Base Capacity (vph)	997	974	523	1311	213	558	
Starvation Cap Reductn	192	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	130	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.77	0.06	0.46	0.32	0.43	0.32	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 10 (8%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.62
 Intersection Signal Delay: 16.4 Intersection LOS: B
 Intersection Capacity Utilization 63.4% 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.

Splits and Phases: 5: Chestnut Street & Washington Street





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		Y			Y
Traffic Volume (vph)	1	5	185	0	2	440
Future Volume (vph)	1	5	185	0	2	440
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1672	0	1881	0	0	1863
Fit Permitted	0.992					
Satd. Flow (perm)	1672	0	1881	0	0	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	95		140			145
Travel Time (s)	2.2		3.2			3.3
Confl. Peds. (#/hr)				11	11	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	0%	0%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	6	0	201	0	0	480
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	34.7%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	W	T	T	T	T
Traffic Vol, veh/h	1	5	185	0	2	440
Future Vol, veh/h	1	5	185	0	2	440
Conflicting Peds, #/hr	0	0	0	11	11	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	1	0	0	2
Mvmt Flow	1	5	201	0	2	478

Major/Minor	Minor1	Major1	Major2	Major3	Major4
Conflicting Flow All	694	212	0	0	212
Stage 1	212	-	-	-	-
Stage 2	482	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	412	833	-	-	1370
Stage 1	828	-	-	-	-
Stage 2	625	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	407	824	-	-	1356
Mov Cap-2 Maneuver	407	-	-	-	-
Stage 1	820	-	-	-	-
Stage 2	624	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	704	1356	-
HCM Lane V/C Ratio	-	-	0.009	0.002	-
HCM Control Delay (s)	-	-	10.2	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	5	185	425	15
Future Volume (vph)	0	0	5	185	425	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1900	0	0	1880	1855	0
Fit Permitted				0.999		
Satd. Flow (perm)	1900	0	0	1880	1855	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	119			95	140	
Travel Time (s)	2.7			2.2	3.2	
Confl. Peds. (#/hr)			41			41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	1%	2%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	206	478	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	26.7%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	0	0	5	185	425	15
Future Vol, veh/h	0	0	5	185	425	15
Conflicting Peds, #/hr	0	0	41	0	0	41
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	1	2	0
Mvmt Flow	0	0	5	201	462	16
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	722	511	519	0	-	0
Stage 1	511	-	-	-	-	-
Stage 2	211	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	397	567	1057	-	-	-
Stage 1	606	-	-	-	-	-
Stage 2	829	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	364	545	1016	-	-	-
Mov Cap-2 Maneuver	364	-	-	-	-	-
Stage 1	579	-	-	-	-	-
Stage 2	797	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0.2		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1016	-	-	-	-	
HCM Lane V/C Ratio	0.005	-	-	-	-	
HCM Control Delay (s)	8.6	0	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (vph)	15	5	5	0	0	45	0	130	95	55	370	0
Future Volume (vph)	15	5	5	0	0	45	0	130	95	55	370	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1795	0	0	1644	0	0	1774	0	0	1856	0
Fit Permitted		0.970									0.994	
Satd. Flow (perm)	0	1795	0	0	1644	0	0	1774	0	0	1856	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		122			101			629			95	
Travel Time (s)		2.8			2.3			14.3			2.2	
Confl. Peds. (#/hr)			13			13	13		11	11		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
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	2%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	49	0	0	244	0	0	462	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

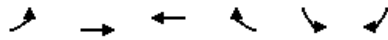
Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	55.8%
ICU Level of Service	B
Analysis Period (min)	15

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	5	5	0	0	45	0	130	95	55	370	0
Future Vol, veh/h	15	5	5	0	0	45	0	130	95	55	370	0
Conflicting Peds, #/hr	0	0	13	0	0	13	13	0	11	11	0	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	1	1	0	2	0
Mvmt Flow	16	5	5	0	0	49	0	141	103	60	402	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	765	790	428	-	739	217	415	0	0	255	0	0
Stage 1	535	535	-	-	204	-	-	-	-	-	-	-
Stage 2	230	255	-	-	535	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	-	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	-	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	-	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	-	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	323	325	631	0	347	828	1155	-	-	1322	-	-
Stage 1	533	527	-	0	737	-	-	-	-	-	-	-
Stage 2	777	700	-	0	527	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	283	299	615	-	319	809	1141	-	-	1308	-	-
Mov Cap-2 Maneuver	283	299	-	-	319	-	-	-	-	-	-	-
Stage 1	527	490	-	-	730	-	-	-	-	-	-	-
Stage 2	721	693	-	-	490	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.3	9.7	0	1
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1141	-	-	321	809	1308	-	-
HCM Lane V/C Ratio	-	-	-	0.085	0.06	0.046	-	-
HCM Control Delay (s)	0	-	-	17.3	9.7	7.9	0	-
HCM Lane LOS	A	-	-	C	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.2	0.1	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Volume (vph)	5	150	45	2	2	1
Future Volume (vph)	5	150	45	2	2	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1880	1890	0	1756	0
Fit Permitted		0.999			0.968	
Satd. Flow (perm)	0	1880	1890	0	1756	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		101	420		95	
Travel Time (s)		2.3	9.5		2.2	
Confl. Peds. (#/hr)	13			13		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	168	51	0	3	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	21.9%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↕	
Traffic Vol, veh/h	5	150	45	2	2	1
Future Vol, veh/h	5	150	45	2	2	1
Conflicting Peds, #/hr	13	0	0	13	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	1	0	0	0	0
Mvmt Flow	5	163	49	2	2	1
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	64	0	-	0	236	63
Stage 1	-	-	-	-	63	-
Stage 2	-	-	-	-	173	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1551	-	-	-	757	1007
Stage 1	-	-	-	-	965	-
Stage 2	-	-	-	-	862	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1532	-	-	-	736	995
Mov Cap-2 Maneuver	-	-	-	-	736	-
Stage 1	-	-	-	-	950	-
Stage 2	-	-	-	-	852	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.2	0		9.5		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1532	-	-	-	806	
HCM Lane V/C Ratio	0.004	-	-	-	0.004	
HCM Control Delay (s)	7.4	0	-	-	9.5	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	65	85	20	185	250	25
Future Volume (vph)	65	85	20	185	250	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1702	0	0	1857	1811	0
Fit Permitted	0.979			0.995		
Satd. Flow (perm)	1702	0	0	1857	1811	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	420			422	336	
Travel Time (s)	9.5			9.6	7.6	
Confl. Peds. (#/hr)	4	6	2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	0%	2%	4%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	163	0	0	223	299	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	43.0%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	3.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	65	85	20	185	250	25
Future Vol, veh/h	65	85	20	185	250	25
Conflicting Peds, #/hr	4	6	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	0	2	4	0
Mvmt Flow	71	92	22	201	272	27
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	537	294	301	0	-	0
Stage 1	288	-	-	-	-	-
Stage 2	249	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.1	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.2	-	-	-
Pot Cap-1 Maneuver	506	748	1272	-	-	-
Stage 1	763	-	-	-	-	-
Stage 2	795	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	494	742	1270	-	-	-
Mov Cap-2 Maneuver	494	-	-	-	-	-
Stage 1	746	-	-	-	-	-
Stage 2	793	-	-	-	-	-
Approach	EB	NB	SB			
HCM Control Delay, s	13.1	0.8	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1270	-	609	-	-	
HCM Lane V/C Ratio	0.017	-	0.268	-	-	
HCM Control Delay (s)	7.9	0	13.1	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	1.1	-	-	



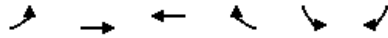
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø7	Ø8	Ø9
Lane Configurations					↕↕			↕	↕			↕			
Traffic Volume (vph)	0	0	0	0	710	55	40	160	810	0	0	250			
Future Volume (vph)	0	0	0	0	710	55	40	160	810	0	0	250			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	0	0	0	0	3455	0	0	1841	1583	0	0	1611			
Fit Permitted								0.990							
Satd. Flow (perm)	0	0	0	0	3455	0	0	1836	1583	0	0	1611			
Right Turn on Red			Yes			Yes	Yes		No			Yes			
Satd. Flow (RTOR)					6			164				620			
Link Speed (mph)		30			30			30			30				
Link Distance (ft)		100			336			433			533				
Travel Time (s)		2.3			7.6			9.8			12.1				
Confl. Peds. (#/hr)						17	4								
Confl. Bikes (#/hr)						4									
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%	0%	0%	0%	2%	7%	3%	2%	2%	0%	0%	2%			
Shared Lane Traffic (%)															
Lane Group Flow (vph)	0	0	0	0	832	0	0	217	880	0	0	272			
Turn Type					NA		Split	NA	custom			Prot			
Protected Phases					2		3	3	2 3 4			4	7	8	9
Permitted Phases															
Detector Phase					2		3	3	2 3 4			4			
Switch Phase															
Minimum Initial (s)					6.0		6.0	6.0			6.0	2.0	2.0	5.0	
Minimum Split (s)					17.5		19.5	19.5			10.0	4.0	4.0	27.0	
Total Split (s)					32.0		25.0	25.0			27.0	4.0	4.0	28.0	
Total Split (%)					26.7%		20.8%	20.8%			22.5%	3%	3%	23%	
Yellow Time (s)					3.5		3.5	3.5			3.0	2.0	2.0	2.0	
All-Red Time (s)					4.5		4.5	4.5			1.0	0.0	0.0	3.0	
Lost Time Adjust (s)					0.0		0.0	0.0			0.0				
Total Lost Time (s)					8.0		8.0	8.0			4.0				
Lead/Lag					Lag		Lag	Lag					Lead	Lead	
Lead-Lag Optimize?															
Recall Mode					C-Min		None	None			None	Min	Min	None	
Act Effct Green (s)					43.6			17.0	87.6		23.0				
Actuated g/C Ratio					0.36			0.14	0.73		0.19				
v/c Ratio					0.66			0.54	0.76		0.34				
Control Delay					30.6			18.9	14.4		1.1				
Queue Delay					4.0			0.0	51.2		0.0				
Total Delay					34.6			18.9	65.6		1.1				
LOS					C			B	E		A				
Approach Delay					34.6			56.4			1.1				
Approach LOS					C			E			A				
Queue Length 50th (ft)					236			37	131		0				
Queue Length 95th (ft)					m#445			114	#941		0				
Internal Link Dist (ft)		20			256			353			453				
Turn Bay Length (ft)															
Base Capacity (vph)					1258			401	1155		809				
Starvation Cap Reductn					336			0	0		0				
Spillback Cap Reductn					0			0	491		0				
Storage Cap Reductn					0			0	0		0				
Reduced v/c Ratio					0.90			0.54	1.33		0.34				

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 5 (4%), Referenced to phase 2:WBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.76
 Intersection Signal Delay: 41.3
 Intersection LOS: D
 Intersection Capacity Utilization 64.3%
 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: 1: Washington Street & Elm Street





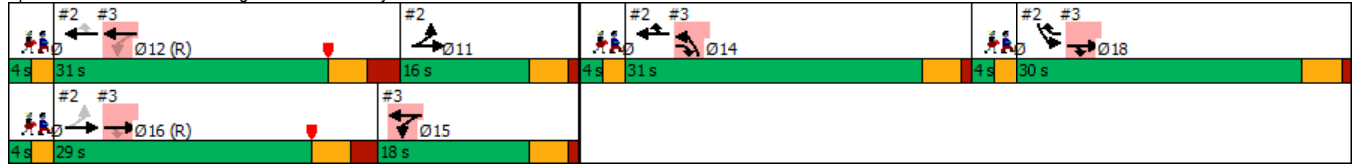
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2	Ø4	Ø6	Ø8	Ø12	Ø14	Ø15	Ø16
Lane Configurations	↖	↖	↖	↖	↖	↖								
Traffic Volume (vph)	175	635	660	265	400	105								
Future Volume (vph)	175	635	660	265	400	105								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Storage Length (ft)	200			0	100	0								
Storage Lanes	1			1	1	0								
Taper Length (ft)	25				25									
Satd. Flow (prot)	1787	1863	1845	1599	3373	0								
Flt Permitted	0.174				0.962									
Satd. Flow (perm)	327	1863	1845	1519	3373	0								
Right Turn on Red				Yes		Yes								
Satd. Flow (RTOR)				288	26									
Link Speed (mph)		30	30		30									
Link Distance (ft)		336	185		438									
Travel Time (s)		7.6	4.2		10.0									
Confl. Peds. (#/hr)				7		18								
Confl. Bikes (#/hr)				3										
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92								
Heavy Vehicles (%)	1%	2%	3%	1%	0%	0%								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	190	690	717	288	549	0								
Turn Type	custom	NA	NA	custom	Prot									
Protected Phases	11	11 16	12 14	14 18	18		2	4	6	8	12	14	15	16
Permitted Phases	16			12										
Detector Phase	11	11 16	12 14	14 18	18									
Switch Phase														
Minimum Initial (s)	8.0				8.0		2.0	2.0	2.0	2.0	8.0	8.0	8.0	8.0
Minimum Split (s)	12.5				20.0		4.0	4.0	4.0	4.0	15.0	19.0	12.5	16.5
Total Split (s)	16.0				30.0		4.0	4.0	4.0	4.0	31.0	31.0	18.0	29.0
Total Split (%)	13.3%				25.0%		3%	3%	3%	3%	26%	26%	15%	24%
Yellow Time (s)	3.5				3.5		2.0	2.0	2.0	2.0	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0				1.0		0.0	0.0	0.0	0.0	3.0	1.0	1.0	2.5
Lost Time Adjust (s)	0.0				0.0									
Total Lost Time (s)	4.5				4.5									
Lead/Lag					Lag		Lead	Lead	Lead	Lead	Lag	Lag		Lag
Lead-Lag Optimize?														
Recall Mode	None				None		Min	Min	Min	Min	C-Min	None	None	C-Min
Act Effect Green (s)	36.0	36.0	49.0	78.5	25.5									
Actuated g/C Ratio	0.30	0.30	0.41	0.65	0.21									
v/c Ratio	0.80	1.24	0.95	0.26	0.74									
Control Delay	65.3	152.7	17.5	1.7	49.2									
Queue Delay	0.0	0.5	43.9	0.9	4.1									
Total Delay	65.3	153.2	61.4	2.6	53.3									
LOS	E	F	E	A	D									
Approach Delay		134.2	44.6		53.3									
Approach LOS		F	D		D									
Queue Length 50th (ft)	109	~518	269	20	197									
Queue Length 95th (ft)	m#163	#735	m193	m16	260									
Internal Link Dist (ft)		256	105		358									
Turn Bay Length (ft)	200				100									
Base Capacity (vph)	238	558	753	1127	737									
Starvation Cap Reductn	0	26	183	581	0									
Spillback Cap Reductn	0	35	88	0	119									
Storage Cap Reductn	0	0	0	0	0									
Reduced v/c Ratio	0.80	1.32	1.26	0.53	0.89									

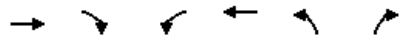
Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 12:WBT and 16:EBTL, Start of Yellow
 Natural Cycle: 120
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.30
 Intersection Signal Delay: 78.9 Intersection LOS: E
 Intersection Capacity Utilization 72.4% ICU Level of Service C
 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: 2: Washington Street & Cherry Street



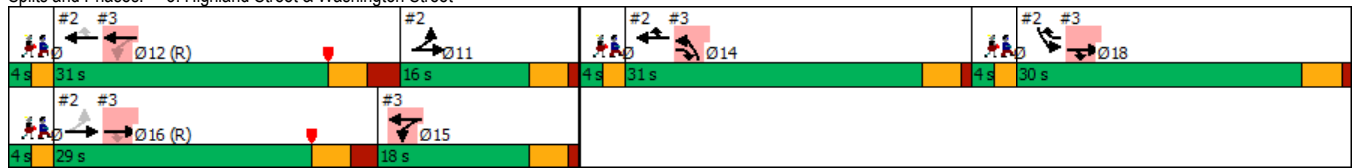


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø4	Ø6	Ø8	Ø11	Ø12	Ø16	Ø18
Lane Configurations	↑↑	↑	↓	↑	↓									
Traffic Volume (vph)	805	230	110	660	265	40								
Future Volume (vph)	805	230	110	660	265	40								
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900								
Storage Length (ft)		85	0		0	0								
Storage Lanes		1	1		1	0								
Taper Length (ft)			25		25									
Satd. Flow (prot)	3539	1615	1787	1845	1751	0								
Flt Permitted			0.163		0.958									
Satd. Flow (perm)	3539	1511	307	1845	1751	0								
Right Turn on Red		Yes				Yes								
Satd. Flow (RTOR)		197			6									
Link Speed (mph)	30			30	30									
Link Distance (ft)	185			301	145									
Travel Time (s)	4.2			6.8	3.3									
Confl. Peds. (#/hr)		11				6								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92								
Heavy Vehicles (%)	2%	0%	1%	3%	2%	0%								
Shared Lane Traffic (%)														
Lane Group Flow (vph)	875	250	120	717	331	0								
Turn Type	NA	custom	custom	NA	Prot									
Protected Phases	16 18	14 18	15	12 15	14		2	4	6	8	11	12	16	18
Permitted Phases		16	12											
Detector Phase	16 18	14 18	15	12 15	14									
Switch Phase														
Minimum Initial (s)			8.0		8.0		2.0	2.0	2.0	2.0	8.0	8.0	8.0	8.0
Minimum Split (s)			12.5		19.0		4.0	4.0	4.0	4.0	12.5	15.0	16.5	20.0
Total Split (s)			18.0		31.0		4.0	4.0	4.0	4.0	16.0	31.0	29.0	30.0
Total Split (%)			15.0%		25.8%		3%	3%	3%	3%	13%	26%	24%	25%
Yellow Time (s)			3.5		3.5		2.0	2.0	2.0	2.0	3.5	3.5	3.5	3.5
All-Red Time (s)			1.0		1.0		0.0	0.0	0.0	0.0	1.0	3.0	2.5	1.0
Lost Time Adjust (s)			0.0		0.0									
Total Lost Time (s)			4.5		4.5									
Lead/Lag					Lag		Lead	Lead	Lead	Lead		Lag	Lag	Lag
Lead-Lag Optimize?														
Recall Mode			None		None		Min	Min	Min	Min	None	C-Min	C-Min	None
Act Effct Green (s)	47.0	76.5	40.0	36.0	26.5									
Actuated g/C Ratio	0.39	0.64	0.33	0.30	0.22									
v/c Ratio	0.63	0.23	0.45	1.30	0.85									
Control Delay	17.2	1.8	46.4	177.8	64.4									
Queue Delay	6.7	0.7	0.0	1.1	6.4									
Total Delay	23.9	2.6	46.4	178.9	70.8									
LOS	C	A	D	F	E									
Approach Delay	19.2			159.9	70.8									
Approach LOS	B			F	E									
Queue Length 50th (ft)	116	16	64	~582	243									
Queue Length 95th (ft)	m110	m17	m90	#801	#401									
Internal Link Dist (ft)	105			221	65									
Turn Bay Length (ft)		85												
Base Capacity (vph)	1386	1079	268	553	391									
Starvation Cap Reductn	457	546	0	30	0									
Spillback Cap Reductn	376	0	0	73	33									
Storage Cap Reductn	0	0	0	0	0									
Reduced v/c Ratio	0.94	0.47	0.45	1.49	0.92									

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 12:WBT and 16:EBTL, Start of Yellow
 Natural Cycle: 120
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.30
 Intersection Signal Delay: 78.0 Intersection LOS: E
 Intersection Capacity Utilization 61.1% ICU Level of Service B
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Highland Street & Washington Street



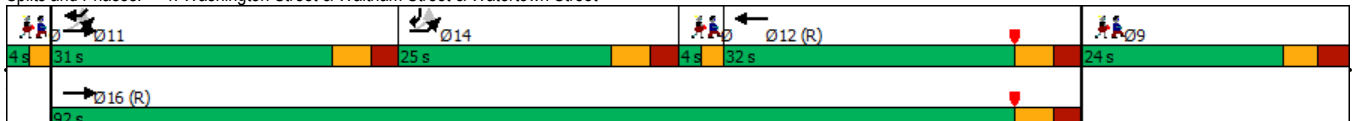


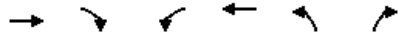
Lane Group	EBL2	EBL	EBT	WBT	WBR	WBR2	SBL	SBR	SWL	SWR	SWR2	Ø1	Ø2	Ø9	Ø16
Lane Configurations															
Traffic Volume (vph)	5	355	485	300	220	5	0	160	0	310	45				
Future Volume (vph)	5	355	485	300	220	5	0	160	0	310	45				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Satd. Flow (prot)	0	1770	1863	3041	0	0	0	1627	0	1615	0				
Fit Permitted		0.995													
Satd. Flow (perm)	0	1854	1863	3041	0	0	0	1627	0	1615	0				
Right Turn on Red							Yes	Yes			No				
Satd. Flow (RTOR)				1				414							
Link Speed (mph)			30	30			30		30						
Link Distance (ft)			301	274			478		461						
Travel Time (s)			6.8	6.2			10.9		10.5						
Confl. Peds. (#/hr)						17					25				
Confl. Bikes (#/hr)					1	1					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				
Heavy Vehicles (%)	0%	2%	2%	4%	1%	0%	0%	1%	0%	2%	0%				
Shared Lane Traffic (%)															
Lane Group Flow (vph)	0	391	527	570	0	0	0	174	0	386	0				
Turn Type	custom	Prot	NA	NA				Prot		Over					
Protected Phases		11 14	11 16	12				14		11		1	2	9	16
Permitted Phases	11 14														
Detector Phase	11 14	11 14	11 16	12				14		11					
Switch Phase															
Minimum Initial (s)				6.0				6.0		6.0		2.0	2.0	5.0	6.0
Minimum Split (s)				12.5				12.0		15.5		4.0	4.0	23.0	12.0
Total Split (s)				32.0				25.0		31.0		4.0	4.0	24.0	92.0
Total Split (%)				26.7%				20.8%		25.8%		3%	3%	20%	77%
Yellow Time (s)				3.5				3.5		3.5		2.0	2.0	3.0	3.5
All-Red Time (s)				2.5				2.5		2.5		0.0	0.0	3.0	2.5
Lost Time Adjust (s)				0.0				0.0		0.0					
Total Lost Time (s)				6.0				6.0		6.0					
Lead/Lag				Lag				Lag		Lead				Lead	
Lead-Lag Optimize?															
Recall Mode				C-Min				None		None		Min	Min	None	C-Min
Act Effect Green (s)		53.6	98.3	31.2				9.0		38.7					
Actuated g/C Ratio		0.45	0.82	0.26				0.08		0.32					
v/c Ratio		0.47	0.35	0.72				0.35		0.74					
Control Delay		52.1	5.7	49.1				1.9		48.8					
Queue Delay		12.9	1.4	53.3				0.9		17.0					
Total Delay		65.0	7.1	102.4				2.7		65.8					
LOS		E	A	F				A		E					
Approach Delay			31.8	102.4			2.7		65.8						
Approach LOS			C	F			A		E						
Queue Length 50th (ft)		311	100	218				0		241					
Queue Length 95th (ft)		m378	m124	#320				0		#546					
Internal Link Dist (ft)			221	194			398		381						
Turn Bay Length (ft)															
Base Capacity (vph)		983	1526	790				606		520					
Starvation Cap Reductn		566	765	235				0		0					
Spillback Cap Reductn		0	95	309				229		125					
Storage Cap Reductn		0	0	0				0		0					
Reduced v/c Ratio		0.94	0.69	1.19				0.46		0.98					

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 113 (94%), Referenced to phase 12:WBT and 16:EBT, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.74
 Intersection Signal Delay: 55.4 Intersection LOS: E
 Intersection Capacity Utilization 73.2% 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.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Washington Street & Waltham Street & Watertown Street



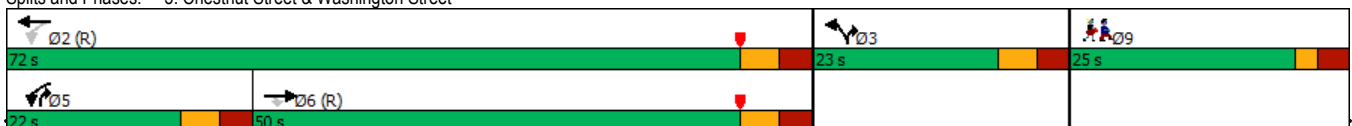


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø9
Lane Configurations	↑	↑	↑	↑	↑	↑	
Traffic Volume (vph)	445	40	255	415	110	200	
Future Volume (vph)	445	40	255	415	110	200	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		35	0		0	150	
Storage Lanes		1	1		1	1	
Taper Length (ft)			25		25		
Satd. Flow (prot)	1863	1615	1805	1845	1787	1599	
Flt Permitted			0.340		0.950		
Satd. Flow (perm)	1863	1615	646	1845	1787	1599	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		10				217	
Link Speed (mph)	30			30	30		
Link Distance (ft)	274			584	336		
Travel Time (s)	6.2			13.3	7.6		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	0%	0%	3%	1%	1%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	484	43	277	451	120	217	
Turn Type	NA	Perm	pm+pt	NA	Prot	pt+ov	
Protected Phases	6		5	2	3	3.5	9
Permitted Phases		6	2				
Detector Phase	6	6	5	2	3	3.5	
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0		5.0
Minimum Split (s)	12.5	12.5	12.5	12.5	12.5		24.0
Total Split (s)	50.0	50.0	22.0	72.0	23.0		25.0
Total Split (%)	41.7%	41.7%	18.3%	60.0%	19.2%		21%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		2.0
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0		3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.5		
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	C-Min	C-Min	None	C-Min	None		None
Act Effect Green (s)	65.9	65.9	84.4	84.4	13.0	28.9	
Actuated g/C Ratio	0.55	0.55	0.70	0.70	0.11	0.24	
v/c Ratio	0.47	0.05	0.49	0.35	0.62	0.40	
Control Delay	14.8	8.6	11.9	10.6	64.9	4.6	
Queue Delay	1.5	0.0	0.0	0.3	0.0	0.0	
Total Delay	16.2	8.6	11.9	10.9	64.9	4.6	
LOS	B	A	B	B	E	A	
Approach Delay	15.6			11.3	26.1		
Approach LOS	B			B	C		
Queue Length 50th (ft)	131	2	46	84	90	0	
Queue Length 95th (ft)	470	18	161	278	150	37	
Internal Link Dist (ft)	194			504	256		
Turn Bay Length (ft)		35				150	
Base Capacity (vph)	1023	891	609	1298	245	587	
Starvation Cap Reductn	343	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	354	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	0.71	0.05	0.45	0.48	0.49	0.37	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 7 (6%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.62
 Intersection Signal Delay: 15.9
 Intersection LOS: B
 Intersection Capacity Utilization 59.9%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 5: Chestnut Street & Washington Street





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	1	5	300	1	5	335
Future Volume (vph)	1	5	300	1	5	335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1672	0	1900	0	0	1880
Fit Permitted	0.992					0.999
Satd. Flow (perm)	1672	0	1900	0	0	1880
Link Speed (mph)	30		30			30
Link Distance (ft)	95		140			145
Travel Time (s)	2.2		3.2			3.3
Confl. Peds. (#/hr)				3	3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	6	0	327	0	0	369
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	31.6%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	W	T	T	T	T
Traffic Vol, veh/h	1	5	300	1	5	335
Future Vol, veh/h	1	5	300	1	5	335
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	1
Mvmt Flow	1	5	326	1	5	364
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	704	330	0	0	330	0
Stage 1	330	-	-	-	-	-
Stage 2	374	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	406	716	-	-	1241	-
Stage 1	733	-	-	-	-	-
Stage 2	700	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	403	714	-	-	1237	-
Mov Cap-2 Maneuver	403	-	-	-	-	-
Stage 1	731	-	-	-	-	-
Stage 2	697	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	10.7	0		0.1		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	633	1237	-	
HCM Lane V/C Ratio	-	-	0.01	0.004	-	
HCM Control Delay (s)	-	-	10.7	7.9	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0	0	-	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	1	5	300	330	5
Future Volume (vph)	0	1	5	300	330	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1644	0	0	1898	1878	0
Fit Permitted				0.999		
Satd. Flow (perm)	1644	0	0	1898	1878	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	119			95	140	
Travel Time (s)	2.7			2.2	3.2	
Confl. Peds. (#/hr)			21			21
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1	0	0	331	364	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization 29.8%	ICU Level of Service A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	0	1	5	300	330	5
Future Vol, veh/h	0	1	5	300	330	5
Conflicting Peds, #/hr	0	0	21	0	0	21
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	1	0
Mvmt Flow	0	1	5	326	359	5

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	719	383	385	0	-	0
Stage 1	383	-	-	-	-	-
Stage 2	336	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	398	669	1185	-	-	-
Stage 1	694	-	-	-	-	-
Stage 2	728	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	380	656	1161	-	-	-
Mov Cap-2 Maneuver	380	-	-	-	-	-
Stage 1	677	-	-	-	-	-
Stage 2	713	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.5	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1161	-	656	-	-
HCM Lane V/C Ratio	0.005	-	0.002	-	-
HCM Control Delay (s)	8.1	0	10.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	10	1	5	0	1	65	0	230	35	30	300	0
Future Volume (vph)	10	1	5	0	1	65	0	230	35	30	300	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1767	0	0	1647	0	0	1866	0	0	1873	0
Fit Permitted		0.969									0.995	
Satd. Flow (perm)	0	1767	0	0	1647	0	0	1866	0	0	1873	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		122			101			609			95	
Travel Time (s)		2.8			2.3			13.8			2.2	
Confl. Peds. (#/hr)			1			1	3		3	3		3
Confl. Bikes (#/hr)												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%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	17	0	0	72	0	0	288	0	0	359	0
Sign Control		Stop			Stop			Free			Free	

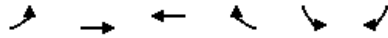
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	49.5%					ICU Level of Service A						
Analysis Period (min)	15											

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	1	5	0	1	65	0	230	35	30	300	0
Future Vol, veh/h	10	1	5	0	1	65	0	230	35	30	300	0
Conflicting Peds, #/hr	0	0	1	0	0	1	3	0	3	3	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	1	0
Mvmt Flow	11	1	5	0	1	71	0	250	38	33	326	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	701	686	330	-	667	273	329	0	0	291	0	0
Stage 1	395	395	-	-	272	-	-	-	-	-	-	-
Stage 2	306	291	-	-	395	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	-	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	-	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	-	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	-	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	356	373	716	0	382	771	1242	-	-	1282	-	-
Stage 1	634	608	-	0	688	-	-	-	-	-	-	-
Stage 2	708	675	-	0	608	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	313	359	713	-	367	768	1238	-	-	1278	-	-
Mov Cap-2 Maneuver	313	359	-	-	367	-	-	-	-	-	-	-
Stage 1	632	587	-	-	686	-	-	-	-	-	-	-
Stage 2	641	673	-	-	587	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.8	10.3	0	0.7
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1238	-	-	383	755	1278	-	-
HCM Lane V/C Ratio	-	-	-	0.045	0.095	0.026	-	-
HCM Control Delay (s)	0	-	-	14.8	10.3	7.9	0	-
HCM Lane LOS	A	-	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0.1	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Volume (vph)	10	55	60	5	10	5
Future Volume (vph)	10	55	60	5	10	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1885	1881	0	1760	0
Fit Permitted		0.992			0.967	
Satd. Flow (perm)	0	1885	1881	0	1760	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		101	420		95	
Travel Time (s)		2.3	9.5		2.2	
Confl. Peds. (#/hr)	1			1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	71	70	0	16	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	20.1%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	10	55	60	5	10	5
Future Vol, veh/h	10	55	60	5	10	5
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	11	60	65	5	11	5

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	71	0	0	151	69
Stage 1	-	-	-	69	-
Stage 2	-	-	-	82	-
Critical Hdwy	4.1	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	3.5	3.3
Pot Cap-1 Maneuver	1542	-	-	846	1000
Stage 1	-	-	-	959	-
Stage 2	-	-	-	946	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1541	-	-	838	999
Mov Cap-2 Maneuver	-	-	-	838	-
Stage 1	-	-	-	951	-
Stage 2	-	-	-	945	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1541	-	-	-	886
HCM Lane V/C Ratio	0.007	-	-	-	0.018
HCM Control Delay (s)	7.4	0	-	-	9.1
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	35	30	30	275	260	35
Future Volume (vph)	35	30	30	275	260	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1734	0	0	1874	1870	0
Fit Permitted	0.974			0.995		
Satd. Flow (perm)	1734	0	0	1874	1870	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	420			432	336	
Travel Time (s)	9.5			9.8	7.6	
Confl. Peds. (#/hr)		3	8			8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	71	0	0	332	321	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	46.9%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	35	30	30	275	260	35
Future Vol, veh/h	35	30	30	275	260	35
Conflicting Peds, #/hr	0	3	8	0	0	8
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	1	0	0
Mvmt Flow	38	33	33	299	283	38
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	675	313	329	0	-	0
Stage 1	310	-	-	-	-	-
Stage 2	365	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	422	732	1242	-	-	-
Stage 1	748	-	-	-	-	-
Stage 2	707	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	402	724	1233	-	-	-
Mov Cap-2 Maneuver	402	-	-	-	-	-
Stage 1	718	-	-	-	-	-
Stage 2	701	-	-	-	-	-
Approach	EB	NB	SB			
HCM Control Delay, s	13.3	0.8	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1233	-	506	-	-	
HCM Lane V/C Ratio	0.026	-	0.14	-	-	
HCM Control Delay (s)	8	0	13.3	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-	

Sight Distance

Stopping Sight Distance and Intersection Sight Distance Calculator [v0.97]
Based on 'A Policy on Geometric Design of Highways and Streets', AASHTO, 2004

Section I	Section III																																																																
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ISD, case B3:</td> <td style="border: none; text-align: center;">290</td> <td style="border: none;"></td> </tr> </table> </td> <td style="border: none; text-align: center;"> <table style="width:100%; border: none;"> <tr> <td style="width: 50%; border: none;"></td> <td style="width: 50%; border: none; text-align: center;"> <table style="width:100%; border: none;"> <tr> <td style="width: 50%; border: none; text-align: center;">No</td> <td style="width: 50%; border: none;"></td> </tr> <tr> <td style="width: 50%; border: none; text-align: center;">No</td> <td style="width: 50%; border: none;"></td> </tr> <tr> <td style="width: 50%; border: none; text-align: center;">No</td> <td style="width: 50%; border: none;"></td> </tr> </table> </td> </tr> </table> </td> </tr> <tr> <td style="border: none;"><small>[note: if number of lanes crossed exceeds 6, or if grades are steep, consult the manual]</small></td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">Minimum Calculated ...</td> <td style="border: none;">Condition Met?</td> </tr> <tr> <td style="border: none;"> <table style="width:100%; border: none;"> <tr> <td style="width: 50%; border: none;">... 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ISD, case B3:</td> <td style="border: none; text-align: center;">200</td> <td style="border: none;"></td> </tr> </table> </td> <td style="border: none; text-align: center;"> <table style="width:100%; border: none;"> <tr> <td style="width: 50%; border: none;"></td> <td style="width: 50%; border: none; text-align: center;"> <table style="width:100%; border: none;"> <tr> <td style="width: 50%; border: none; text-align: center;">Yes</td> <td style="width: 50%; border: none;"></td> </tr> <tr> <td style="width: 50%; border: none; text-align: center;">No</td> <td style="width: 50%; border: none;"></td> </tr> <tr> <td style="width: 50%; border: none; text-align: center;">Yes</td> <td style="width: 50%; border: none;"></td> </tr> </table> </td> </tr> </table> </td> </tr> <tr> <td style="border: none;"><small>[note: minimum ISD is equal to required SSD]</small></td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">Calculated ...</td> <td style="border: none;">Condition Met?</td> </tr> <tr> <td style="border: none;"> <table style="width:100%; border: none;"> <tr> <td style="width: 50%; border: none;">... 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(rounded to nearest 5 feet)	90	looking right [north]					
<table style="width:100%; border: none;"> <tr> <td style="width: 50%; border: none;">Observed SSD:</td> <td style="width: 20%; border: none; text-align: center;">340</td> <td style="width: 30%; border: none;">traveling NB</td> </tr> <tr> <td style="border: none;">(rounded to nearest 5 feet)</td> <td style="border: none; text-align: center;">90</td> <td style="border: none;">traveling SB</td> </tr> </table>	Observed SSD:	340	traveling NB	(rounded to nearest 5 feet)	90	traveling SB	Sag of vertical curve over I-90 Signal at Wash. St
Observed SSD:	340	traveling NB					
(rounded to nearest 5 feet)	90	traveling SB					

Stopping Sight Distance and Intersection Sight Distance Calculator [v0.97]
Based on 'A Policy on Geometric Design of Highways and Streets', AASHTO, 2004

Section I	Section III																								
Project Information <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Project Number: 15636.00</td> <td style="width: 50%;">Analyst: VHB</td> </tr> <tr> <td>City/Town, State: Newton, MA</td> <td>Client:</td> </tr> <tr> <td>Location: Davis Street at Site driveway</td> <td></td> </tr> </table>	Project Number: 15636.00	Analyst: VHB	City/Town, State: Newton, MA	Client:	Location: Davis Street at Site driveway		ISD and SSD Calculations (rounded up to the next highest 5 feet) [sources: SSD - AASHTO, pp.110-117; ISD - AASHTO, pp. 650 - 664] <i>Cases are described in detail on subsequent pages. In summary...</i> B1: left turn from minor road, from stop control B2: right turn from minor road, from stop control B3: crossing maneuver from minor road, from stop control, assuming left- and right turns are not permitted [otherwise, case B1 or B2 would supercede]																		
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The minor street predominantly serves... Passenger Cars Sight distance location intersection is... Proposed Total number of lanes on Major Street is... 2 Grade Information [enter down slope as a negative number]	<div style="border: 1px solid black; padding: 5px;"> <p>Desirable Calculated ...</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">... ISD, case B1:</td> <td style="width: 20%; text-align: center;">280</td> <td style="width: 30%;">Condition Met?</td> </tr> <tr> <td>... ISD, case B2:</td> <td style="text-align: center;">240</td> <td style="text-align: center;">No</td> </tr> <tr> <td>... ISD, case B3:</td> <td style="text-align: center;">240</td> <td style="text-align: center;">Yes</td> </tr> </table> <p style="font-size: small; color: gray;">[note: if number of lanes crossed exceeds 6, or if grades are steep, consult the manual]</p> </div>	... ISD, case B1:	280	Condition Met?	... ISD, case B2:	240	No	... ISD, case B3:	240	Yes															
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