



## DEPARTMENT OF PUBLIC WORKS

### Transportation Division

110 Crafts Street  
Newton, MA 02460

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Mayor

From: Isaac Prizant, City Traffic Engineer  
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Subject: Traffic Calming Evaluation and Prioritization

Date: February 19, 2020

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The City of Newton DPW has completed its 2019 review of traffic calming requests. The City receives traffic calming requests from constituents and/or Councilors via email or WebQA/311. Requests ask the City to address speed and safety concerns, typically on neighborhood streets.

### **Methodology**

The following process is completed for reviewing requests:

1. Receive Request – Traffic Engineer receives request via email, phone or WebQA/311 and reviews specific concerns.
2. Data Collection – Traffic Engineer sets-up radar recorder on-site for 48 hours to collect speed and vehicle volume data. Additionally, police crash reports are reviewed for the previous 2 years to get a count of reported crashes along the study corridor.
3. Data Analysis – Traffic Engineer inputs recorder's data into an evaluation scorecard. The evaluation factors the location's proximity to high pedestrian generators such as schools, village centers, transit stops, and parks. Additionally, the number of crashes over the previous 2-year period are incorporated into MassDOT's roadway segment crash worksheet for comparison to the average District 6 crash rate per roadway classification.
4. Prioritization – Traffic Engineer ranks all requests based on points earned, along with determining need for immediate action if data reveals a concern. Streets with a history of crashes, prevailing 85<sup>th</sup> percentile vehicular travel speeds above the speed limit, high pedestrian areas, and a crash rate exceeding the average District 6 crash rate for their respective classifications earn higher scores.
5. Improvements – The Department of Public Works will be focusing on implementing improvements on those streets which ranked highest. All traffic calming actions are discussed and reviewed with the City's Complete Streets Committee.

### **Potential Traffic Calming Techniques**

The following methods are possible traffic calming measures subject to location, feasibility, and best engineering practice:

1. Increased enforcement
2. Static and/or Dynamic Signage (i.e. speed feedback displays)
3. Pedestrian Actuated Devices (i.e. Rectangular Rapid Flash Beacons)
4. New or Improved Pavement Markings
5. Improvements to roadway geometry either through permanent changes to curbs, or using more tactile techniques such as paint, textured surfaces, flexible posts, etc.

## **Prioritization Results**

Based on the latest analysis, the current high priority locations for traffic calming are listed below. This priority location list includes roads evaluated in 2019 and compares them with roads included in previous years' traffic calming analyses.

- Lowell Avenue, between Washington Street and Otis Street
- Pearl Street, between Watertown Street and Centre Street
- Webster Street, between Cherry Street and Rowe Street
- Elliot Street, between Linden Street and Circuit Avenue
- Lexington Street, between River Street and Auburndale Avenue
- California Street, between Bridge Street and Dalby Street
- Adams Street, between Lincoln Road and Quirk Court
- Grant Avenue, between Commonwealth Avenue and Beacon Street
- Beacon Street, between Hammond Street and Hammond Pond Parkway
- Lowell Avenue, between Otis Street and Commonwealth Avenue

The complete list of roadway evaluations and priority rankings are attached to this memorandum.

In addition to the above list, Traffic Calming measures are currently under design at the following locations, which were previously identified as priority locations:

- Waltham Street, at Derby Street and Fairway Drive
- Waltham Street, at River Street
- Allen Avenue, at Pine Ridge Road and Plainfield Street
- Beethoven Avenue, at Puritan Road
- Walnut Street, at Crafts Street
- Walnut Street, between Homer Street and Forest Avenue

In the past two years, traffic calming measures have been implemented at the following locations:

- Auburn Street, at Woodland Road (Installed RRFB)
- Watertown Street, Eden Avenue to Adams Street (Installed painted shoulder, narrowed travel lanes)
- Hammond Street, between Reservoir Avenue and Suffolk Road (Installed speed feedback and LED-blinker 'STOP' signs)
- Walnut Street, at Minot Place (Constructed bumpout)
- Cabot Street, near the Cabot School (Installed RRFB)
- East Side Parkway (Constructed bumpouts, installed RRFB)
- Washington Street, from Newton Corner to Boston City Line (Installed parking chicanes, bicycle lanes and narrowed travel lanes)
- Waltham Street, from Waltham City Line to Crafts Street (Installed parking chicanes, bicycle lanes and narrowed travel lanes)
- Braeland Avenue, from Langley Road to Herrick Road (Installed painted street-level sidewalk, bicycle lane, and narrowed travel lane)
- Wolcott Street, at Ionia Street (Improved intersection geometry)

This Traffic Calming and Prioritization report provides an annual expansion and update of the City's priorities as DPW continues its effort in implementing traffic calming measures throughout the City's highest priority locations. DPW will continue to design and implement traffic calming measures at high priority locations, with each completed project providing an opportunity for other locations to rise as priorities.

## **2020 Evaluation**

We have begun data collection for traffic calming requests in 2020, and will continue throughout the year. In December 2020 / January 2021, we will be reviewing and evaluating all traffic calming requests, including a comparison with traffic calming requests from previous years.

Rank	Score	Study Location	Study Area Limits	School	Village	Park	Transit	Vehicle Volume	Num. of Crashes	Crash Rate	Speed Limit	MPH Over
1	97	Lowell Ave	Washington St/Otis St	PS	VC	x	TS	10001-12500	17	9.52	25	9
2	87	Pearl St	Watertown St/Centre St	PS	VC	MP	x	5001-7500	20	9.16	25	7
3	79	Webster St	Cherry St/Rowe St	x	VC	MP	x	5001-7500	18	7.83	25	6
4	78	Elliot St	Linden St/Circuit Ave	x	VC	MP	TS	5001-7500	7	4.94	25	6
5	74	Lexington St	River St/Auburndale Ave	PS	VC	x	x	12501-15000	16	2.24	30	5
6	73	California St	Bridge St/Dalby St	x	x	MP	x	12501-15000	8	4.26	30	3
7	72	Adams St	Lincoln Rd/Quirk Ct	PS	x	MP	x	5001-7500	7	11.53	25	5
8	70	Grant Ave	Comm Ave/Beacon St	x	x	MP	x	7501-10000	6	2.31	25	10
9	69	Beacon St	Hammond St/Hammond Pond Pkwy	x	x	x	x	12501-15000	12	2.47	30	3
10	68	Lowell Ave	Otis St/Commonwealth Ave	PS	x	x	x	7501-10000	9	2.21	30	6
11	67	Langley Rd	Beacon St/Glen Ave	x	VC	x	TS	5001-7500	9	8.03	25	2
12	66	Walnut St	Boylston St/Dedham St	PS	x	x	x	3001-4000	3	3.90	25	11
13	65	Dedham St	Winchester St/Walnut St	PS	x	MP	x	4001-5000	3	2.65	25	12
14	64	Florence St	Boylston St / Louise Rd	x	VC	x	x	5001-7500	7	4.04	30	4
15	63	Waverly Ave	Kenrick St/Church St	x	x	MP	x	12501-15000	8	3.12	30	3
16	62	Chestnut St	Comm Ave/Beacon St	x	x	x	x	12501-15000	3	0.51	20	11
17	61	Highland St	Washington St / Chestnut St	x	VC	MP	x	5001-7500	4	1.91	25	9
18	61	Otis St	Lowell Ave/Chestnut St	PS	VC	x	x	1001-2000	4	4.03	25	8
19	61	Langley Rd	Glen Ave/Boylston St	PS	VC	x	TS	5001-7500	5	2.14	30	6
20	59	Auburn St	Washington St / Greenough St	PS	x	MP	x	5001-7500	1	0.88	25	12
21	59	Centre St	Walnut St/Cushing St	x	VC	x	TS	10001-12500	12	5.62	35	-2
22	57	Hartman Rd	Greenwood St / Brookline St	x	x	x	x	1001-2000	3	4.42	25	8
23	57	Homer St	Walnut St/Cedar St	x	x	MP	x	5001-7500	7	3.23	30	5
24	56	Dudley Rd	Entire Road	PS	x	MP	x	2001-3000	4	1.63	25	9
25	56	Cherry St	Derby St/River St	PS	x	MP	x	5001-7500	4	2.70	25	7
26	53	Hobart Rd	Commonwealth Ave/Beacon St	PS	x	MP	x	4001-5000	2	2.28	25	6
27	52	Mill St	Berkshire Rd / Clinton Pl	PS	VC	x	TS	1001-2000	3	7.13	25	5
28	52	Tremont St	Park St/Town Line	PS	VC	MP	x	10001-12500	9	4.52	35	-6
29	52	Derby St	Cherry St/Sheridan St	PS	x	x	x	2001-3000	3	4.97	25	7

Rank	Score	Study Location	Study Area Limits	School	Village	Park	Transit	Vehicle Volume	Num. of Crashes	Crash Rate	Speed Limit	MPH Over
30	51	Eddy St	Entire Road	PS	VC	MP	TS	1001-2000	1	4.28	25	6
31	50	Pleasant St	Centre St/Lake Ave	PS	VC	MP	x	1001-2000	4	20.60	25	3
32	50	Central Ave	Entire Road	x	x	MP	TS	0-1000	2	9.13	25	5
33	48	Cypress St	Entire Road	PS	VC	x	TS	1001-2000	2	4.22	25	5
34	48	Newtonville Ave	Walnut St/Harvard St	x	VC	x	TS	2001-3000	5	11.73	25	2
35	47	Waverly Ave	Tremont St/Kenrick St	PS	x	MP	x	4001-5000	3	1.71	30	6
36	46	Ward St	Waverly Ave / Manet Rd	PS	x	x	x	5001-7500	1	0.63	25	9
37	46	Parmenter Rd	Entire Road	PS	x	MP	x	1001-2000	4	7.44	25	3
38	46	Christina St	Entire Road	x	x	MP	x	4001-5000	3	2.12	25	6
39	46	Ward St	Centre St/Grant Ave	PS	x	x	x	2001-3000	4	1.25	25	7
40	46	Waltham St	Town Line to Crafts St	x	x	x	x	10001-12500	5	2.40	30	4
41	45	Ellis St	Rte 9 Underpass/Chestnut St	x	x	MP	x	5001-7500	1	1.41	25	7
42	44	Newtonville Ave	Lewis Ter/Centre St	x	x	MP	x	2001-3000	3	2.86	25	8
43	44	Waverly Ave	Ward St /Kenilworth St	PS	x	x	TS	10001-12500	3	1.15	30	3
44	43	Nevada St	California St / Albemarle Rd	PS	x	MP	x	1001-2000	1	4.76	25	8
45	43	Vine St	Entire Road	PS	x	x	x	4001-5000	0	0.00	25	10
46	43	Dickerman Rd	Entire Road	x	x	x	TS	2001-3000	1	2.54	25	7
47	43	Dudley Rd	Greenwood St / Brookline St	PS	x	MP	x	3001-4000	1	0.83	25	8
48	41	Brookline St	Dudley St/Kesseler Way	x	x	MP	x	12501-15000	2	0.68	30	4
49	40	Valentine St	Highland St / Ellis Rd	x	x	x	x	3001-4000	1	0.60	25	10
50	40	Middlesex Rd	Norfolk Rd/Hammond St	PS	x	x	TS	3001-4000	3	6.72	25	1
51	40	Cabot St	East Side Pkwy/Laudholm Rd	PS	x	MP	x	3001-4000	1	2.53	25	7
52	39	Sumner St	Comm Ave/Willow St	x	VC	MP	TS	0-1000	2	10.79	25	3
53	39	Auburn St	Comm Ave/Central St	x	VC	MP	x	3001-4000	1	1.42	25	7
54	38	Braeland Ave	Langley Road / Herrick Road	x	VC	x	TS	2001-3000	1	5.02	25	4
55	38	Washington St	St. James/Town Line	PS	x	MP	x	7501-10000	5	1.73	35	-1
56	38	Fuller St	Temple St/Pickwick Rd	x	x	x	x	1001-2000	2	8.71	25	6
57	38	Lake Ave	Walnut/Rogers	x	VC	MP	TS	0-1000	1	6.63	25	4
58	36	Woodcliff Rd	Boylston St/Elinor Rd	PS	x	x	x	0-1000	3	13.95	25	3

Rank	Score	Study Location	Study Area Limits	School	Village	Park	Transit	Vehicle Volume	Num. of Crashes	Crash Rate	Speed Limit	MPH Over
59	36	Walnut St	Woodcliff Rd / Elinor Rd	PS	x	x	x	3001-4000	3	8.76	25	1
60	36	Auburndale St	Lexington/Rowe	PS	VC	x	x	3001-4000	0	0.00	25	7
61	35	High St	Eliot St/Boylston St	x	VC	MP	x	0-1000	2	12.20	25	3
62	35	Winchester St	Jaconnet St/Columbia Ave	x	x	x	x	5001-7500	1	1.88	30	7
63	34	Priscilla Rd	Entire Road	x	x	x	x	1001-2000	1	6.52	25	6
64	34	Derby St	Cherry St/Waltham St	PS	x	MP	x	2001-3000	0	0.00	30	7
65	33	Floral St	Entire Road	x	PS	x	TS	1001-2000	1	7.11	25	3
66	33	Newtonville Ave	Harvard St/Lewis Ter	x	x	MP	x	4001-5000	0	0.00	25	7
67	32	Kenrick St	Waverly Ave/Town Line	x	x	x	x	3001-4000	3	2.55	25	8
68	32	Grant Ave	Ward St /Commonwealth Ave	x	x	x	x	5001-7500	1	1.20	25	6
69	32	Fairway Dr	Entire Road	PS	x	MP	x	0-1000	1	3.75	25	3
70	32	Franklin St	Centre St/Waverly Ave	x	x	MP	x	1001-2000	1	2.28	25	4
71	32	Commonwealth Ave	Temple St/Chestnut St	PS	x	x	x	10001-12500	1	0.21	35	3
72	30	Centre St	Clark St/Allerton Rd	x	x	MP	x	15000+	1	0.63	35	1
73	29	Jasset St	Entire Road	x	VC	MP	x	0-1000	0	0.00	25	7
74	27	Norwood Ave	Centre St/Crescent Ave	x	VC	MP	x	1001-2000	1	7.21	25	1
75	27	Nonantum St	Cufflin St/Waverly Ave	x	x	MP	x	1001-2000	2	8.59	25	4
76	25	Maynard St	Entire Road	x	x	MP	x	0-1000	0	0.00	25	7
77	24	Bellevue St	Entire Road	x	x	MP	x	0-1000	1	3.87	25	2
78	23	Crosby Rd	Comm Ave/Hammond St	x	x	x	x	1001-2000	0	0.00	25	7
79	23	Eliot Ave	Entire Road	x	x	x	x	1001-2000	2	4.50	25	1
80	21	Glen Ave	Warren St/Elgin St	x	x	MP	x	1001-2000	0	0.00	25	5
81	20	Melrose St	West Pine St/Comm Ave	x	VC	MP	x	0-1000	0	0.00	25	4
82	20	Cherry Pl	Entire Road	PS	x	x	x	0-1000	0	0.00	25	5
83	19	Whittemore Rd	Entire Road	PS	x	x	x	0-1000	1	91.32	25	0
84	17	Hunnewell Ave	Washington St/Elmhurst Rd	PS	x	MP	x	0-1000	1	9.78	25	-2
85	17	Aberdeen St	Entire Road	x	VC	x	TS	0-1000	0	0.00	25	3
86	16	Upland Ave	Entire Road	x	VC	x	x	0-1000	0	0.00	25	4
87	16	Lewis St	Entire Road	x	x	MP	x	0-1000	0	0.00	25	4

Rank	Score	Study Location	Study Area Limits	School	Village	Park	Transit	Vehicle Volume	Num. of Crashes	Crash Rate	Speed Limit	MPH Over
88	15	Eastbourne Rd	Entire Road	x	x	x	x	0-1000	0	0.00	25	5
89	15	Forest Ave	Otis/Highland	x	x	x	x	0-1000	0	0.00	25	5
90	15	Withington Rd	Entire Road	PS	x	MP	x	0-1000	0	0.00	25	2
91	12	Trowbridge Ave	Entire Road	PS	x	MP	x	0-1000	0	0.00	25	1
92	12	Washington Park	Entire Road	PS	VC	x	x	0-1000	0	0.00	25	1
93	10	Marshall St	Entire Road	x	VC	x	x	0-1000	0	0.00	25	2
94	9	Cushing St	Centre St/Allerton Rd	x	x	x	x	0-1000	0	0.00	25	3
95	9	Wauwinet Rd	Entire Road	x	x	x	x	0-1000	0	0.00	25	3
96	8	Dorcar Rd	Vine St/Eastham St	PS	x	x	x	0-1000	0	0.00	25	1
97	8	Lorna Rd	Waverly Ave/Grallynn Rd	PS	x	x	x	0-1000	0	0.00	25	1
98	6	Garland Rd	Entire Road	x	x	x	x	0-1000	0	0.00	25	2
99	6	Ellis Rd	Entire Road	x	x	x	x	0-1000	0	0.00	25	2
100	5	Manemet Rd	Comm Ave/Homer St	x	x	x	x	0-1000	1	28.54	25	-3
101	5	George St	Entire Road	PS	x	x	x	0-1000	0	0.00	25	0
102	4	Tamworth Rd	Entire Road	x	x	x	TS	0-1000	0	0.00	25	0
103	4	Judith Rd	Entire Road	x	x	MP	x	0-1000	0	0.00	25	0
104	2	Waban Hill Rd	Entire Road	PS	x	x	x	0-1000	0	0.00	25	-1
105	1	Allerton Rd	Centre St/Cushing St	x	x	x	TS	0-1000	0	0.00	25	-1
106	0	Whitlowe Rd	Entire Road	x	x	x	x	0-1000	0	0.00	25	0
107	0	Berwick Rd	Entire Road	x	x	x	x	0-1000	0	0.00	25	0
108	0	Chestnut Ter	Entire Road	x	x	x	x	0-1000	0	0.00	25	0
109	0	Monadock Rd	Wachusett Rd/ Hammondswood Rd	x	x	x	x	0-1000	0	0.00	25	0
110	-3	Waban St	Pearl St/Walnut Park	PS	x	MP	x	0-1000	0	0.00	25	-4
111	-6	Wyoming Rd	California St/Nevada St	PS	x	MP	x	0-1000	0	0.00	25	-5
112	-14	Water St	Entire Road	x	x	MP	x	0-1000	0	0.00	25	-6