



## DEPARTMENT OF PUBLIC WORKS

### Transportation Division

110 Crafts Street  
Newton, MA 02460

Ruthanne Fuller

Mayor

From: Jason S. Sobel, P.E., PTOE  
Director of Transportation Operations

Subject: Traffic Calming Prioritization – 2018 Evaluation

Date: March 2019

---

The City of Newton DPW has completed its 2018 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 analysis, the City plans to implement traffic calming measures at the following top ranked roads. Full traffic calming evaluation results are attached to this memorandum.

<b>Rank</b>	<b>Study Location</b>	<b>Study Area Limits</b>
1	Pearl Street	Watertown Street to Centre Street
2	Webster Street	Cherry Street to Rowe Street
3	Lexington Street	River Street to Auburndale Avenue
4	Adams Street	Lincoln Road to Quirk Court
5	Walnut Street	Beacon Street to Lincoln Street
6	Grant Avenue	Commonwealth Avenue to Beacon Street
7	Langley Road	Beacon Street to Glen Avenue
8	Walnut Street	Boylston Street to Dedham Street
9	Dedham Street	Winchester Street to Walnut Street
10	Florence Street	Boylston Street to Louise Road

The above table lists locations identified as traffic calming priorities based on the 2018 evaluation and prioritization. For reference, the locations previously identified as priorities for traffic calming (from the 2017 evaluation and prioritization) were the following:

- Lowell Avenue, between Washington Street and Highland Avenue
- Hammond Street, between Boylston Street and Beacon Street
- Elliot Street, between Linden Street and Circuit Avenue
- Lowell Avenue, between Otis Street and Commonwealth Avenue
- Waltham Street, between High Street and River Street
- Langley Road, between Glen Avenue and Boylston Street
- Waverly Avenue, between Kenrick Street and Church Street
- Auburn Street, between Woodbine Street and Bourne Street
- Allen Avenue, between Woodward Street and Beacon Street
- Beethoven Avenue, between Woodward Street and Beacon Street
- Watertown Street, between Washington Street and Walnut Street

It is noted that traffic calming measures have already been implemented at several of the above 2017 priority locations, and traffic calming measures have been tested (with temporary flexible delineator posts) at several others. DPW will continue to design and implement traffic calming measures at the 2017 priority locations list. The new 2018 list of priority locations for traffic calming will supplement the previously identified priority locations.

## **2019 Evaluation**

We have begun data collection for traffic calming requests in 2019, and will continue throughout the year. In December 2019 / January 2020, we will be reviewing and evaluating all traffic calming requests, including a comparison with traffic calming requests from previous years that have not previously been identified as priority locations.

Rank	Score	Study Location	Study Area Limits	School	Village	Park	Transit	Vehicle Volume	Num. of Crashes	Crash Rate	Speed Limit	MPH Over
1	87	Pearl St	Watertown St/Centre St	PS	VC	MP	x	5001-7500	20	9.16	25	7
2	79	Webster St	Cherry St/Rowe St	x	VC	MP	x	5001-7500	18	7.83	25	6
3	74	Lexington St	River St/Auberndale Ave	PS	VC	x	x	12501-15000	16	2.24	30	5
4	72	Adams St	Lincoln Rd/Quirk Ct	PS	x	MP	x	5001-7500	7	11.53	25	5
5	71	Walnut St	Beacon St/Lincoln St	x	VC	MP	TS	10001-12500	16	3.04	30	4
6	70	Grant Ave	Comm Ave/Beacon St	x	x	MP	x	7501-10000	6	2.31	25	10
7	67	Langley Rd	Beacon St/Glen Ave	x	VC	x	TS	5001-7500	9	8.03	25	2
8	66	Walnut St	Boylston St/Dedham St	PS	x	x	x	3001-4000	3	3.90	25	11
9	65	Dedham St	Winchester St/Walnut St	PS	x	MP	x	4001-5000	3	2.65	25	12
10	64	Florence St	Boylston St / Louise Rd	x	VC	x	x	5001-7500	7	4.04	30	4
11	61	Highland St	Washington St / Chestnut St	x	VC	MP	x	5001-7500	4	1.91	25	9
12	61	Otis St	Lowell Ave/Chestnut St	PS	VC	x	x	1001-2000	4	4.03	25	8
13	59	Auburn St	Washington St / Greenough St	PS	x	MP	x	5001-7500	1	0.88	25	12
14	57	Hartman Rd	Greenwood St / Brookline St	x	x	x	x	1001-2000	3	4.42	25	8
15	56	Dudley Rd	Entire Road	PS	x	MP	x	2001-3000	4	1.63	25	9
16	56	Cherry St	Derby St/River St	PS	x	MP	x	5001-7500	4	2.70	25	7
17	53	Hobart Rd	Commonwealth Ave/Beacon St	PS	x	MP	x	4001-5000	2	2.28	25	6
18	52	Mill St	Berkshire Rd / Clinton Pl	PS	VC	x	TS	1001-2000	3	7.13	25	5
19	52	Tremont St	Park St/Town Line	PS	VC	MP	x	10001-12500	9	4.52	35	-6
20	51	Eddy St	Entire Road	PS	VC	MP	TS	1001-2000	1	4.28	25	6
21	50	Pleasant St	Centre St/Lake Ave	PS	VC	MP	x	1001-2000	4	20.60	25	3
22	50	Central Ave	Entire Road	x	x	MP	TS	0-1000	2	9.13	25	5
23	47	Waverly Ave	Tremont St/Kenrick St	PS	x	MP	x	4001-5000	3	1.71	30	6
24	46	Ward St	Waverly Ave / Manet Rd	PS	x	x	x	5001-7500	1	0.63	25	9
25	46	Parmenter Rd	Entire Road	PS	x	MP	x	1001-2000	4	7.44	25	3

Rank	Score	Study Location	Study Area Limits	School	Village	Park	Transit	Vehicle Volume	Num. of Crashes	Crash Rate	Speed Limit	MPH Over
26	46	Christina St	Entire Road	x	x	MP	x	4001-5000	3	2.12	25	6
27	46	Ward St	Centre St/Grant Ave	PS	x	x	x	2001-3000	4	1.25	25	7
28	46	Waltham St	Town Line to Crafts St	x	x	x	x	10001-12500	5	2.40	30	4
29	45	Ellis St	Rte 9 Underpass/Chestnut St	x	x	MP	x	5001-7500	1	1.41	25	7
30	43	Nevada St	California St / Albemarle Rd	PS	x	MP	x	1001-2000	1	4.76	25	8
31	43	Vine St	Entire Road	PS	x	x	x	4001-5000	0	0.00	25	10
32	43	Dickerman Rd	Entire Road	x	x	x	TS	2001-3000	1	2.54	25	7
33	40	Valentine St	Highland St / Ellis Rd	x	x	x	x	3001-4000	1	0.60	25	10
34	40	Middlesex Rd	Norfolk Rd/Hammond St	PS	x	x	TS	3001-4000	3	6.72	25	1
35	39	Sumner St	Comm Ave/Willow St	x	VC	MP	TS	0-1000	2	10.79	25	3
36	39	Auburn St	Comm Ave/Central St	x	VC	MP	x	3001-4000	1	1.42	25	7
37	38	Braeland Ave	Langley Road / Herrick Road	x	VC	x	TS	2001-3000	1	5.02	25	4
38	38	Washington St	St. James/Town Line	PS	x	MP	x	7501-10000	5	1.73	35	-1
39	36	Woodcliff Rd	Boylston St/Elinor Rd	PS	x	x	x	0-1000	3	13.95	25	3
40	36	Walnut St	Woodcliff Rd / Elinor Rd	PS	x	x	x	3001-4000	3	8.76	25	1
41	34	Priscilla Rd	Entire Road	x	x	x	x	1001-2000	1	6.52	25	6
42	34	Derby St	Cherry St/Waltham St	PS	x	MP	x	2001-3000	0	0.00	30	7
43	32	Kenrick St	Waverly Ave/Town Line	x	x	x	x	2001-3000	1	1.42	25	8
44	32	Grant Ave	Ward St /Commonwealth Ave	x	x	x	x	5001-7500	1	1.20	25	6
45	32	Fairway Dr	Entire Road	PS	x	MP	x	0-1000	1	3.75	25	3
46	32	Franklin St	Centre St/Waverly Ave	x	x	MP	x	1001-2000	1	2.28	25	4
47	27	Norwood Ave	Centre St/Crescent Ave	x	VC	MP	x	1001-2000	1	7.21	25	1
48	27	Nonantum St	Cufflin St/Waverly Ave	x	x	MP	x	1001-2000	2	8.59	25	4
49	23	Crosby Rd	Comm Ave/Hammond St	x	x	x	x	1001-2000	0	0.00	25	7
50	20	Melrose St	West Pine St/Comm Ave	x	VC	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
51	20	Cherry Pl	Entire Road	PS	x	x	x	0-1000	0	0.00	25	5
52	19	Whittemore Rd	Entire Road	PS	x	x	x	0-1000	1	91.32	25	0
53	17	Hunnewell Ave	Washington St/Elmhurst Rd	PS	x	MP	x	0-1000	1	9.78	25	-2
54	16	Upland Ave	Entire Road	x	VC	x	x	0-1000	0	0.00	25	4
55	12	Trowbridge Ave	Entire Road	PS	x	MP	x	0-1000	0	0.00	25	1
56	10	Marshall St	Entire Road	x	VC	x	x	0-1000	0	0.00	25	2
57	9	Cushing St	Centre St/Allerton Rd	x	x	x	x	0-1000	0	0.00	25	3
58	9	Wauwinet Rd	Entire Road	x	x	x	x	0-1000	0	0.00	25	3
59	6	Garland Rd	Entire Road	x	x	x	x	0-1000	0	0.00	25	2
60	6	Ellis Rd	Entire Road	x	x	x	x	0-1000	0	0.00	25	2
61	5	Manemet Rd	Comm Ave/Homer St	x	x	x	x	0-1000	1	28.54	25	-3
62	5	George St	Entire Road	PS	x	x	x	0-1000	0	0.00	25	0
63	4	Tamworth Rd	Entire Road	x	x	x	TS	0-1000	0	0.00	25	0
64	2	Waban Hill Rd	Entire Road	PS	x	x	x	0-1000	0	0.00	25	-1
65	1	Allerton Rd	Centre St/Cushing St	x	x	x	TS	0-1000	0	0.00	25	-1
66	0	Whitlowe Rd	Entire Road	x	x	x	x	0-1000	0	0.00	25	0