City of Newton Ruthanne Fuller

DEPARTMENT OF PUBLIC WORKS

Transportation Division 110 Crafts St Newton, MA 02460

From: Adrian Ayala, City Traffic Engineer

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Subject: Traffic Calming Evaluation and Prioritization

Date: March 2, 2023

The City of Newton Department of Public Works (DPW) has completed its 2022 review of traffic calming requests. Traffic calming is the combination of physical and visual measures that reduce vehicle speeds, crash frequency and severity, and improves the quality of life of all road users through the creation of safer and more livable streets. Traffic calming results in the desired effect of slower speeds and safer roads, without relying on driver compliance or regulatory enforcement of speed limits.

Traffic calming requests are received through a variety of means, including direct requests from constituents and/or city councilors via email and WebQA/311. In addition to requests submitted by elected officials and residents, city staff (DPW, Newton Police Department, Newton Public Schools, Planning Department, Mayor's Office, etc.), identify observed concerns and subsequently add to traffic calming requests. Requests ask the city to address speed and traffic safety concerns, typically on neighborhood streets. DPW evaluates and prioritizes traffic calming requests on an annual basis.

Upon identification of the highest-ranked traffic calming priorities throughout the city, the DPW, in collaboration with the Complete Streets Working Group (CSWG) and the Planning Department, focuses its efforts on implementing improvements at these high-priority locations. The purpose of this annual memorandum is for DPW to be transparent regarding the identification of traffic calming priorities.

Methodology

The following process is completed for reviewing requests:

- 1. Receive Request: Traffic Engineer receives request and reviews specific traffic safety 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 5 years to get a count of reported crashes along the road segment.
- 3. Data Analysis: Traffic Engineer inputs recorder's data into an evaluation spreadsheet. 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 5-year period are incorporated into MassDOT's roadway segment crash worksheet for comparison to the current average District 6 crash rate per roadway classification. All prioritization factors contributing to a road segment's ranking are listed in the attached Appendix A.
- **4. Prioritization:** Traffic Engineer ranks all requests based on points earned, along with determining need for immediate action if data reveals an immediate concern. Streets with a history of crashes, prevailing 85th percentile vehicular travel speeds above the speed limit, vicinity to pedestrian demand generators, and a crash rate exceeding the average District 6 crash rate for their respective classifications earn higher scores.

5. Improvements – The DPW will be focusing on implementing improvements on those streets which ranked highest. All traffic calming actions are discussed and reviewed with the CSWG.

Revised Prioritization Factors

This year's data analysis considered additional factors that had not been used for evaluation in prior years' analyses. These additional factors include bicycle and pedestrian crashes, the presence of school bus stops or MBTA bus stop, a street segment's sidewalk is a significant walking route to school, and more, all of which are described in the attached **Appendix A**. These additional factors were selected through thoughtful collaboration between the DPW's Transportation Division, the Planning Department, and the Complete Streets Working Group, and serve to create a more comprehensive priority ranking process.

Potential Traffic Calming Measures

A partial list of potential traffic calming measures is provided below. The intent of this list is to provide some examples of common traffic calming techniques that may be applied to high-priority locations.

Vertical deflection countermeasures: Speed humps, raised pedestrian crossings, or raised table intersections that raise roadways for various lengths to slow drivers.

Horizontal countermeasures: Median islands, chicanes or curves, or sidewalk curb extensions that change the horizontal cross-section of a roadway. These countermeasures essentially narrow the roadway width and create an environment that slows down drivers.

Road diets and pavement marking countermeasures: Strategies such as improved pavement markings, road diets, lane narrowing, and/or increased number of crosswalks. A road diet is a roadway configuration that involves narrowing or eliminating travel lanes to calm traffic speeds and increase safety of all roadway users. Road diets may include techniques such as paint, textured surfaces, flexible posts, etc. Increasing the number of crosswalk to meet pedestrian demand changes the perception of the roadway to drivers, increases general awareness of the presence of pedestrians, and encourages slower vehicles speeds.

Dynamic feedback signage: Signs that command driver attention, and/or communicate posted speed limits and provide real-time speed feedback to drivers.

Pedestrian actuated signage: Enhanced signage devices that produce improved vehicle stopping and yielding behavior to crossing pedestrians. Characteristics include brighter indications, unique beacon arrangements and flash patterns, and activation only when pedestrians are present. Examples of such include Rectangular Rapid-Flashing Beacons (RRFBs).

Highest New Priority Locations for Traffic Calming

Based on the latest analysis, the current high priority locations for traffic calming are listed below. This priority location list includes roads evaluated in 2022 and compares them with roads included in previous years' traffic calming analyses.

- Langley Rd, between Glen Ave and Boylston St
- Beacon St, between Albion St and Crescent Ave
- **Dudley Rd,** between Boylston St and Greenwood St
- Watertown St, between Dunstan St and Albemarle Rd
- Waltham St, between Crafts St and Waltham City Line
- Vine St, entire road
- Cypress St, between Parker St and Jackson St
- Grant Ave, between Commonwealth Ave and Beacon St

- **Beacon St**, between Hammond St and Hammond Pond Pkwy
- Brandeis Rd, between Adeline Rd and Greenwood St
- **Dedham St,** between Winchester St and Walnut St

The complete list of roadway evaluations and priority rankings can be found in Appendix C.

Ongoing Locations Undergoing Traffic Calming

In addition to the above list, traffic calming measures are currently under design or in process at the following locations, which were previously identified as priority locations:

- Brookline St, between Dudley Rd and Oak Hill St: Construction of raised table intersection and improved pedestrian crossings at Brookline St at Spaulding Ln/Hartman Rd
- California St at Los Angeles St (private developer funded): Major intersection improvements, installation of new pedestrian crossings and RRFB
- California St, between Bridge St and Dalby St: Major intersection improvements at California St at Chapel St, construction of sidewalk bump-outs and improved pedestrian crossings
- Chestnut St, between Commonwealth Ave and Beacon St: Major intersection improvements, including sidewalk bump-outs and improved pedestrian crossings, at Chestnut St at Fuller St and the installation of new pedestrian crossings at Chestnut St at Moffat Rd, Chestnut St at Byfield Rd, and at a mid-block location between Short St and Roslyn Rd
- Elliot St, between Linden St and Circuit Ave: Major intersection improvements at Elliot St at Mechanic St, construction of improved bicycle and pedestrian accommodations at both Elliot St at Linden St and at Elliot St at Cottage St
- Florence St, between Boylston St and Louise Rd (private developer funded): Construction of raised mid-block crossing between Louise Rd and Tanglewood Rd
- Langley Rd at Union St (private developer funded): Construction of sidewalk bump-outs and installation of RRFBs
- Langley Rd at Warren St/Chase St: Major intersection improvements, installation of new pedestrian crossings and RRFB
- Langley Rd at Jackson St (private developer funded): Construction of sidewalk bump-outs and improved pedestrian crossings
- Lexington St, between River St and Auburndale Ave: Construction of sidewalk bump-outs and installation of RRFBs at Lexington St at Roberta Rd, and at Lexington St at Orris St
- Lowell Ave, between Otis St and Commonwealth Ave: Major intersection improvements at Lowell Ave at Highland St/Hull St, construction of sidewalk bump-outs and improved pedestrian crossings
- Lowell Ave, between Washington St and Otis St: Major intersection improvements at Lowell Ave at Austin St, construction of sidewalk bump-outs, median improvements, improved pedestrian crossings, installation of RRFB
- Waltham St at Derby St/Fairway Dr: Major intersection improvements, construction of sidewalk bump-outs, median improvements, improved pedestrian crossings, installation of RRFB
- Watertown St at Eddy St/Eliot Ave: Intersection flex-post trial and on-going analysis of design alternatives
- Waverley Ave, between Kenrick St and Church St: Construction of raised table intersection at Waverley Ave at Franklin St
- Webster St, between Cherry St and Rowe St: Installation of new pedestrian crossings with RRFBs
- Various: Installation of 20+ RRFBs at various city-wide pedestrian crossings

Completed Traffic Calming Locations (CY2021 and CY2022)

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

- Allen Ave at Pine Ridge Rd and Plainfield St: Construction of sidewalk bumpouts and implementation of 20 MPH Safety Zone speed limit
- **Beethoven Ave at Puritan Rd:** Construction of raised intersection and implementation of 20 MPH Safety Zone speed limit
- Chestnut St at Amherst Rd/Tamworth Rd and Larchmont Ave: Minor intersection improvements, installation of new pedestrian crossings
- Crafts St at Walnut St: Major intersection improvements (elimination of right-turn slip lane), construction of bumpouts and new pedestrian crossings
- Pearl St, between Watertown St and Centre St: Installation of LED-blinker 'STOP' signs and replacement of school zone flashers with speed feedback displays
- Walnut St, between Homer St and Forest Ave: Minor intersection improvements, installation of new crosswalks, and installation of RRFB at Whole Foods/Carthay Circle
- Walnut St, in Newtonville: Construction of sidewalk bumpouts at several locations

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.

2023 Evaluation

We have begun data collection for traffic calming requests in 2023 and will continue throughout the year. In early 2024, we will be reviewing and evaluating all traffic calming requests, including a comparison with traffic calming requests from previous years.

Attachments:

Appendix A: Prioritization Factors

Appendix B: MassDOT District 6 Current Average Crash Rates by Functional Class

Appendix C: Complete Priority Ranking List

Appendix A: Prioritization Factors

<u>Field Name</u>	<u>Description</u>
Speed Over Limit	The difference, in MPH, between the recorded 85th percentile speed and the speed limit.
Vehicle Volume	Recorded average daily traffic volume.
Total Crashes	Total crashes that occurred along the roadway segment in a 5-year period (2018 - 2022).
Non-Motorist Involved Crashes	Total non-motorist involved crashes that occurred along the roadway segment in a 5-year period (2018 - 2022).
Exceeds D6 Crash Rate	Indicates whether or not the roadway segment's crash rate exceeds the currently published average MassDOT District 6 crash rate for its functional classification.
MBTA Bus Stops	The count of MBTA bus stops along, and within an 1/8th of a mile from, the roadway segment.
Parks	The count of parks along, and within an 1/8th of a mile from, the roadway segment.
School Bus Stops	The count of Newton Public Schools' bus stops along, and within an 1/8th of a mile from, the roadway segment.
MBTA Commuter Rail Stations	The count of MBTA commuter rail stations along, and within an 1/8th of a mile from, the roadway segment.
Schools	The count of public schools, private schools and universities along, and within an 1/8th of a mile from, the roadway segment.
Village Centers	The count of village centers along, and within an 1/8th of a mile from, the roadway segment.
MBTA Green Line Stations	The count of MBTA green line stations along, and within an 1/8th of a mile from, the roadway segment.
Vulnerable User Land Uses	Indicates whether or not there is a land use that may attract vulnerable users along, and/or within an 1/8th of a mile from, the roadway segment (a different land use not already captured above).
Sidewalk Snow Clearing Route	Indicates whether or not the roadway segment is along a DPW-designated sidewalk snow clearing route. These routes coincide with established critical walking routes.

Appendix B: MassDOT District 6 Current Average Crash Rates by Functional Class

Functional Class	Average Crash Rate
Arterial	3.58
Collector	3.33
Local	2.36

NOTES:

- 1. Average Crash Rate expressed in crashes per million vehicle miles traveled.
- 2. Average Crash Rate based upon crash information queried on February 28, 2023.

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Ranking	Street	From	То	Vehicle Volume	Speed Limit	85th Percentile Speed	Speed Over Limit	Total Crashes	Non-Motorist Involved Crashes	Crash Rate	D6 Crash Rate	Exceeds D6 Crash Rate	MBTA Bus Stops	Parks	School Bus Stops	MBTA Commuter Rail Stops	Schools	Village Centers	MBTA Green Line Stops	Vulnerable Users	Sidewalk Snow Clearing Route	Score
1	LANGLEY RD	GLEN AVE	BOYLSTON ST	5,001 - 7,500	30	36	6	15 - 16	4	2.39	3.33	NO	1	1	4		1	1		YES	YES	117
2	BEACON ST	ALBION ST	CRESCENT AVE	7,501 - 10,000	30	34	4	13 - 14	4	2.74	3.58	NO		2	2		2	1		YES	YES	108
3	DUDLEY RD	BOYLSTON ST	GREENWOOD ST	2,001 - 3,000	20	36	16	7 - 8	0	1.75	2.36	NO		2	5		1	1		YES	NO	106
4	WATERTOWN ST	DUNSTAN ST	ABLEMARLE RD	7,501 - 10,000	35	36	1	> 16	2	3.75	3.58	YES		2	18		1	1		YES	YES	105
5	WALTHAM ST	CRAFTS ST	WALTHAM CITY LINE	10,001 - 12,500	30	35	5	> 16	3	2.97	3.58	NO	4		7		1			NO	YES	103
6	VINE ST	ENTIRE ROAD	ENTIRE ROAD	4,001 - 5,000	25	35	10	15 - 16	0	4.61	3.33	YES			5		1			NO	YES	99
7	CYPRESS ST	PARKER ST	JACKSON ST	1,001 - 2,000	25	35	10	5 - 6	0	4.02	3.58	YES	3	2			2	1		YES	YES	98
8	GRANT AVE	COMMONWEALTH AVE	BEACON ST	7,501 - 10,000	25	35	10	9 - 10	0	3.39	3.33	YES								NO	YES	93
9	BEACON ST	HAMMOND ST	HAMMOND POND PKWY	12,500 - 15,000	30	33	3	> 16	3	1.74	3.58	NO					1	1		YES	YES	91
9	BRANDEIS RD	ADELINE RD	GREENWOOD ST	3,001 - 4,000	20	31	11	9 - 10	1	2.35	3.33	NO			2		2			NO	YES	91
9	DEDHAM ST	WINCHESTER ST	WALNUT ST	4,001 - 5,000	25	37	12	3 - 4	1	1.27	3.58	NO	2	2			1			NO	YES	91
12	AUBURN ST	WASHINGTON ST	GREENOUGH ST	5,001 - 7,500	25	37	12	3 - 4	0	1.24	2.36	NO	5	2	4		1			YES	NO	88
13	CRAFTS ST	WATERTOWN ST	WASHINGTON ST	7,501 - 10,000	25	33	8	> 16	0	2.74	3.58	NO	6	3			1			YES	YES	83
13	EAST SIDE PKWY	NEWTONVILLE AVE	HILLTOP ST	1,001 - 2,000	20	30	10	1 - 2	0	3.70	3.33	YES	2	1	2		-			YES	NO	83
15	CENTRE ST	WALNUT ST	CUSHING ST	10,001 - 12,500	35	33	-2	> 16	2	3.81	3.58	YES	5	-	10			1	1	NO	YES	82
15	DEDHAM ST	ROSALIE RD	SHARPE RD	10,001 - 12,500	30	39	9	13 - 14	0	1.57	3.58	NO	6		2			1	1	NO	YES	82
17	NORTH ST	ENTIRE ROAD	ENTIRE ROAD		30	34	4	> 16		2.82		NO	4	1	1		1	1		NO NO		81
				10,001 - 12,500	30				2		3.58		4	1	6		1	1		NO	YES	
17	NAHANTON ST	NAHANTON WOODS	DEDHAM ST	15,000 +		38	8	9	0	0.58	3.58	NO		1	6		1	1		VEC	YES	81
18	ADAMS ST	LINCOLN RD	QUIRK CT	5,001 - 7,500	25	30	5	11 - 12	0	6.65	3.33	YES	2	1			1	1		YES	YES	79
18	HIGHLAND ST	WASHINGTON ST	CHESTNUT ST	5,001 - 7,500	25	34	9	11 - 12	0	2.10	2.36	NO	5	2	3			1		YES	NO	79
18	FLORAL ST	ENTIRE ROAD	ENTIRE ROAD	1,001 - 2,000	25	28	3	3 - 4	1	6.07	2.36	YES	6	2	10			1	1	YES	NO	79
18	OTIS ST	LOWELL AVE	CHESTNUT ST	1,001 - 2,000	25	33	8	7 - 8	0	4.19	3.33	YES		1	4					YES	NO	79
22	DUDLEY RD	GREENWOOD ST	BROOKLINE ST	2,001 - 3,000	20	33	13	1-2	0	0.50	2.36	NO			3					NO	YES	77
23	DERBY ST	CHERRY ST	SHERIDAN ST	1,001 - 2,000	25	32	7	5 - 6	1	7.31	3.33	YES					1			NO	NO	76
24	CHERRY ST	DERBY ST	RIVER ST	5,001 - 7,500	25	32	7	11 - 12	1	2.77	3.33	NO	2	2			1			NO	YES	75
25	MANEMET RD	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	20	27	7	1 - 2	1	12.90	2.36	YES			4					NO	NO	73
26	WISWALL RD	ENTIRE ROAD	ENTIRE ROAD	2,001 - 3,000	25	30	5	3 - 4	1	1.39	3.33	NO	11		5		3	1		NO	YES	72
27	AUSTIN ST	LOWELL AVE	CHESTNUT ST	2,001 - 3,000	25	34	9	3 - 4	0	1.02	3.58	NO	6	1	3			2		YES	NO	70
27	CENTRAL AVE	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	30	5	5 - 6	0	8.42	2.36	YES	7	2	2	1		1		YES	NO	70
28	NAHANTON ST	WINCHESTER ST	NAHANTON WOODS	15,000 +	30	37	7	9	0	0.98	3.58	NO	1	1						YES	YES	71
29	WALNUT ST	BOYLSTON ST	DEDHAM ST	3,001 - 4,000	25	36	11	3 - 4	0	1.90	3.58	NO	1	1	1		1	1		NO	NO	69
29	LINWOOD AVE	CRAFTS ST	ADAMS ST	1,001 - 2,000	25	29	4	5 - 6	1	5.37	2.36	YES	1				1	1		YES	NO	69
31	CHESTNUT ST	AMHERST RD	BOYLSTON ST	10,001 - 12,500	30	36	6	7 - 8	1	1.96	3.58	NO			3					NO	YES	68
31	CHAPEL ST	CALIFORNIA ST	WATERTOWN ST	1,001 - 2,000	25	31	6	3 - 4	0	4.18	2.36	YES	3	2	1			1		YES	NO	68
31	CROSBY RD	ENTIRE ROAD	ENTIRE ROAD	1,001 - 2,000	25	32	7	1 - 2	0	2.61	2.36	YES		1	3		2	1		NO	NO	68
34	LINCOLN ST	WOODWARD ST	BOWDOIN ST	5,001 - 7,500	25	32	7	1 - 2	0	1.17	3.33	NO	3	1	8			1		YES	YES	67
34	WOLCOTT ST	IONIA ST	ROWE ST	1,001 - 2,000	25	32	7	3 - 4	0	6.69	3.33	YES	2		3			1		NO	NO	67
36	RIVER ST	LEXINGTON ST	AUBURNDALE AVE	5,001 - 7,500	30	33	3	> 16	1	2.86	3.33	NO	8	1	5					NO	YES	66
37	WARD ST	WAVERLEY AVE	MANET RD	5,001 - 7,500	25	34	9	1 - 2	0	0.23	3.33	NO		1	2		2			NO	YES	65
37	VALENTINE ST	HIGHLAND ST	ELLIS RD	3,001 - 4,000	25	35	10	5 - 6	0	1.39	3.33	NO			1					NO	YES	65
39	HIGH ST	ELLIOT ST	BOYLSTON ST	0 - 1,000	25	28	3	5 - 6	0	12.36	2.36	YES	3	1	11			1		YES	NO	63
39	LAKE AVE	WALNUT ST	ROGERS ST	0 - 1,000	25	29	4	1 - 2	0	2.67	2.36	YES	2	2	8			1	1	YES	NO	63
41	LOWELL AVE	WASHINGTON ST	WALNUT ST	4,001 - 5,000	25	31	6	7 - 8	0	2.99	3.33	NO	5	2	1			1		YES	YES	62
41	PEARL ST	JEWETT ST	CENTRE ST	3,001 - 4,000	25	29	4	7 - 8	0	3.44	3.33	YES	3	2	4			1		NO	NO	62
41	MELROSE ST	WEST PINE ST	COMMONWEALTH AVE	0 - 1,000	25	29	4	1 - 2	0	3.83	2.36	YES	2	2	9			1		YES	NO	62
41	FAXON ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	30	5	3 - 4	0	9.30	2.36	YES	3	2	1			1		YES	NO	62
45	KENRICK ST	ENTIRE ROAD	ENTIRE ROAD	2,001 - 3,000	25	35	10	1-2	0	0.49	3.33	NO		1	_			_		YES	NO	60
45	RUMFORD AVE	ENTIRE ROAD	ENTIRE ROAD	2,001 - 3,000	25	30	5	5-6	0	5.17	2.36	YES	3		4					NO	NO	60
45	MILL ST	BERKSHIRE RD	CLINTON PL	1,001 - 2,000	25	30	5	3 - 4	0	3.52	3.33	YES	, j	2	1		1			YES	NO	60
43	IVILLE 31	DERIKOTTIKE KD	CLINTON FL	1,001 - 2,000	23	30		3-4	U	3.32	3.33	ILS			1		1			ILJ	NO	30

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Ranking	Street	From	То	Vehicle Volume	Speed Limit	85th Percentile Speed	Speed Over Limit	Total Crashes	Non-Motorist Involved Crashes	Crash Rate	D6 Crash Rate	Exceeds D6 Crash Rate	MBTA Bus Stops	Parks	School Bus Stops	MBTA Commuter Rail Stops	Schools	Village Centers	MBTA Green Line Stops	Vulnerable Users	Sidewalk Snow Clearing Route	Score
48	MILL ST	WALNUT ST	BERKSHIRE RD	2,001 - 3,000	30	33	3	3 - 4	1	4.42	3.33	YES	1	1	2		1			NO	NO	59
48	FULLER ST	TEMPLE ST	PICKWICK RD	1,001 - 2,000	25	31	6	5 - 6	0	10.57	2.36	YES			2					NO	NO	59
48	AUBURNDALE AVE	LEXINGTON ST	ROWE ST	3,001 - 4,000	25	32	7	1 - 2	1	0.86	3.33	NO	2		3			1		NO	NO	59
51	NEWTONVILLE AVE	LEWIS TER	CENTRE ST	2,001 - 3,000	25	33	8	5 - 6	0	2.28	3.58	NO	2	1	2					YES	NO	58
52	CABOT ST	EAST SIDE PKWY	LAUDHOLM RD	3,001 - 4,000	25	33	8	1 - 2	0	1.00	3.33	NO		2	1		2			NO	YES	57
52	NEWTONVILLE AVE	WALNUT ST	HARVARD ST	2,001 - 3,000	25	27	2	7 - 8	0	6.17	3.58	YES	5	1	1	1	1	1		YES	NO	57
52	PLEASANT ST	CENTRE ST	LAKE AVE	1,001 - 2,000	25	28	3	3 - 4	0	6.80	2.36	YES	3	3	2		1	1		YES	NO	57
55	ELLIS ST	ENTIRE ROAD	ENTIRE ROAD	5,001 - 7,500	25	32	7	1 - 2	0	1.06	3.33	NO		1	5			1		YES	NO	56
55	WAVERLEY AVE	TREMONT ST	CHURCH ST	4,001 - 5,000	30	36	6	3 - 4	0	1.43	3.33	NO	2	1	3		1			YES	YES	56
55	EDDY ST	ENTIRE ROAD	ENTIRE ROAD	2,001 - 3,000	25	31	6	1 - 2	1	2.16	2.36	NO	2		8					NO	NO	56
58	WINCHESTER ST	JACONNET ST	RACHEL RD	4,001 - 5,000	30	37	7	7 - 8	0	2.00	3.33	NO	2		1					NO	YES	55
58	AUBURN ST	COMMONWEALTH AVE	CENTRAL ST	3,001 - 4,000	25	32	7	1 - 2	0	0.50	2.36	NO	4		2		1	1		YES	NO	55
58	GARLAND RD	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	27	2	1 - 2	1	4.03	2.36	YES	6							YES	NO	55
61	SPIERS RD	ENTIRE ROAD	ENTIRE ROAD	1,001 - 2,000	25	29	4	3 - 4	0	1.63	3.33	NO	8		7		1	1		YES	YES	54
62	CHERRY ST	DERBY ST	WALTHAM CITY LINE	3,001 - 4,000	30	32	2	11 - 12	0	4.22	3.33	YES	1		1		1			NO	YES	53
62	WARD ST	CENTRE ST	GRANT AVE	2,001 - 3,000	25	32	7	3 - 4	0	1.84	3.33	NO	1		1					YES	YES	53
64	CALIFORNIA ST	NEVADA ST	BRIDGE ST	7,501 - 10,000	30	33	3	7 - 8	1	1.47	3.33	NO	1				1			NO	YES	51
64	WASHINGTON ST	ST JAMES ST	BOSTON CITY LINE	7,501 - 10,000	35	34	-1	15 - 16	1	1.95	3.58	NO	4	1	4		1	1		YES	YES	51
64	HOMER ST	WALNUT ST	CEDAR ST	5,001 - 7,500	30	35	5	5 - 6	0	0.93	3.33	NO	1	1	2					YES	YES	51
67	GREENWOOD ST	DUDLEY RD	LITTLEFIELD RD	1,001 - 2,000	25	28	3	3 - 4	0	4.62	3.33	YES			5					NO	YES	50
67	BELLEVUE ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	27	2	5 - 6	0	8.63	2.36	YES	4	1	2		1			YES	NO	50
67	CEDAR ST	COMMONWEALTH AVE	MILL ST	0 - 1,000	25	29	4	1-2	0	3.08	2.36	YES		1	2					YES	NO	50
67	LEWIS ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	29	4	1-2	0	11.01	2.36	YES		1	2					YES	NO	50
67	MAYNARD ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	32	7	0	0	0.00	2.36	NO	4	1	1		2			YES	NO	50
72	DERBY ST	CHERRY ST	WALTHAM ST	2,001 - 3,000	25	32	7	1-2	0	2.46	3.33	NO			3		1			YES	NO	49
72	DICKERMAN RD	ENTIRE ROAD	ENTIRE ROAD	2,001 - 3,000	25	32	7	0	0	0.00	2.36	NO	3		7				1	NO	NO	49
72	WATERTOWN ST	CRAFTS ST	HAWTHORN ST	10,001 - 12,500	30	32	2	7 - 8	0	1.43	3.58	NO	5	3	1			1		YES	YES	49
72	WALKER ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	28	3	3 - 4	0	9.10	2.36	YES	2	2	1					YES	NO	49
72	WEST ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	27	2	3 - 4	0	16.25	2.36	YES	5	1			1	1		YES	NO	49
77	NEWTONVILLE AVE	HARVARD ST	LEWIS TER	4,001 - 5,000	25	32	7	3 - 4	0	1.75	3.58	NO	3	2						NO	NO	48
77	HARTMAN RD	GREENWOOD ST	BROOKLINE ST	1,001 - 2,000	25	33	8	1 - 2	0	1.10	2.36	NO			3		1			NO	NO	48
77	SHERIDAN ST	ENTIRE ROAD	ENTIRE ROAD	1,001 - 2,000	25	29	4	3 - 4	0	4.67	2.36	YES	2		1					NO	NO	48
77	JASSET ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	32	7	0	0	0.00	2.36	NO	3	2	1			1		YES	NO	48
81	CHRISTINA ST	ENTIRE ROAD	ENTIRE ROAD	4,001 - 5,000	25	31	6	5 - 6	0	1.32	2.36	NO	2	1	4					NO	NO	47
81	BROOKLINE ST	DUDLEY RD	KESSELER WAY	12,500 - 15,000	30	34	4	5 - 6	0	0.69	3.58	NO			4					NO	YES	47
83	WINCHESTER ST	JACONNET ST	COLUMBIA AVE	3,001 - 4,000	30	37	7	1 - 2	0	2.26	3.33	NO	1							NO	YES	46
83	ELIOT AVE	ENTIRE ROAD	ENTIRE ROAD	1,001 - 2,000	25	27	2	3 - 4	0	2.95	2.36	YES			11					NO	NO	46
83	ABERDEEN ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	28	3	1 - 2	0	9.73	2.36	YES	2		3			1	1	NO	NO	46
86	NEVADA ST	CALIFORNIA ST	ALBEMARLE RD	1,001 - 2,000	25	33	8	1 - 2	0	1.67	2.36	NO					1			NO	NO	45
86	EVERETT ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	32	7	0	0	0.00	2.36	NO	1	2	5			1		NO	NO	45
88	PARMENTER RD	ENTIRE ROAD	ENTIRE ROAD	1,001 - 2,000	25	28	3	7 - 8	0	12.15	2.36	YES								NO	NO	44
88	PINE ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	28	3	1 - 2	0	3.43	2.36	YES	3	1	1		1			NO	NO	44
90	HIGHLAND ST	VALENTINE ST	LOWELL AVE	0 - 1,000	25	29	4	1-2	0	2.61	2.36	YES			1					NO	NO	43
90	WASHINGTON PARK	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	26	1	1 - 2	0	2.55	2.36	YES	3	1	1		2	1		YES	NO	43
92	CHESTNUT ST	HIGHLAND ST	AUSTIN ST	5,001 - 7,500	30	32	2	1-2	1	0.36	3.58	NO						1		YES	YES	42
92	HOBART RD	INTERVALE RD	BEACON ST	3,001 - 4,000	25	28	3	3 - 4	0	3.07	2.36	YES								NO	NO	42
92	ADAMS ST	WATERTOWN ST	CALIFORNIA ST	2,001 - 3,000	25	29	4	3 - 4	0	2.61	3.33	NO	1	2	1			1		YES	YES	42
92	WENDELL RD	DEDHAM ST	BOULDER RD	0 - 1,000	25	32	7	0	0	0.00	2.36	NO					1			YES	NO	42
96	CALIFORNIA ST	CRAFTS ST	NEVADA ST	5,001 - 7,500	30	34	4	3 - 4	0	1.01	3.33	NO	1	1			2			NO	YES	41
		12.00.000	1	3,001 .,500		J		1		01	5.55					ļ	<u> </u>	1		5	3	

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Ranking	Street	From	То	Vehicle Volume	Speed Limit	85th Percentile Speed	Speed Over Limit	Total Crashes	Non-Motorist nvolved Crashes	Crash Rate	D6 Crash Rate	Exceeds D6 Crash Rate	MBTA Bus Stops	Parks	School Bus Stops	MBTA Commuter Rail Stops	Schools	Village Centers	MBTA Green Line Stops	/ulnerable Users	Sidewalk Snow Clearing Route	Score
97	COMMONWEALTH AVE	TEMPLE ST	CHESTNUT ST	10,001 - 12,500	35	38	3	7 - 8	0	0.59	3.58	NO					1			NO	YES	40
97	WAVERLEY AVE	WARD ST	KENILWORTH ST	10,001 - 12,500	30	33	3	9 - 10	0	1.52	3.33	NO								NO	YES	40
97	WALLACE ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	32	7	0	0	0.00	2.36	NO	1	1	3					NO	NO	40
97	CENTRE ST	CLARK ST	ALLERTON RD	15,000 +	35	36	1	1 - 2	0	0.73	3.58	NO	3	2	4					YES	YES	40
101	MIDDLESEX RD	ENTIRE ROAD	ENTIRE ROAD	3,001 - 4,000	25	26	1	3 - 4	0	3.20	2.36	YES			3		1		1	NO	NO	39
102	GRANT AVE	WARD ST	COMMONWEALTH AVE	5,001 - 7,500	25	31	6	1 - 2	0	0.36	3.33	NO								NO	NO	38
102	BRAELAND AVE	LANGLEY RD	HERRICK RD	2,001 - 3,000	25	29	4	0	0	0.00	2.36	NO	4	1			1	1	1	YES	NO	38
102	ROOSEVELT RD	ENTIRE ROAD	ENTIRE ROAD	1,001 - 2,000	25	28	3	1 - 2	1	3.33	3.33	NO	1		2					NO	YES	38
102	WAUWINET RD	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	28	3	1 - 2	0	10.25	2.36	YES			1					NO	NO	38
106	SHORNECLIFFE RD	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	31	6	1 - 2	0	1.82	2.36	NO								YES	NO	37
107	BLAKE ST	CABOT ST	800 FT S OF WITHINGTON RD	0 - 1,000	25	27	2	1 - 2	0	5.84	2.36	YES		2			1			NO	NO	36
108	HAMMOND ST	COMMONWEALTH AVE	WARD ST	4,001 - 5,000	25	30	5	0	0	0.00	3.33	NO		1						NO	YES	35
108	WOODLAND RD	WASHINGTON ST	CHESWICK RD	1,001 - 2,000	30	30	0	1 - 2	0	3.27	2.36	YES	2		8		1			NO	NO	35
110	CABOT ST	WALNUT ST	HARVARD ST	3,001 - 4,000	30	31	1	1 - 2	0	0.97	3.33	NO	2	1	2		3	1		YES	YES	33
110	FAIRWAY DR	ENTIRE ROAD	ENTIRE ROAD	1,001 - 2,000	25	28	3	1 - 2	0	1.03	2.36	NO			10					YES	NO	33
110	CUSHING ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	28	3	0	0	0.00	2.36	NO	3	1	7			1		YES	NO	33
110	BRANDEIS RD	ROOSEVELT RD	ADELINE RD	3,001 - 4,000	30	30	0	3 - 4	0	3.75	3.33	YES			1					NO	YES	33
114	COMMONWEALTH AVE	CHESTNUT ST	PRINCE ST	10,001 - 12,500	35	37	2	3 - 4	0	0.53	3.58	NO			1		1			NO	YES	32
114	GLEN AVE	WARREN ST	ELGIN ST	1,001 - 2,000	25	30	5	0	0	0.00	2.36	NO			6					NO	NO	32
114	MARSHALL ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	29	4	0	0	0.00	2.36	NO	1	1	5					YES	NO	32
114	JEFFERSON ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	24	-1	5 - 6	0	53.46	2.36	YES	3	1	5			1		NO	NO	32
118	FRANKLIN ST	CENTRE ST	WAVERLEY AVE	1,001 - 2,000	25	29	4	1 - 2	0	2.20	2.36	NO	1	2						YES	NO	31
118	SUMNER ST	COMMONWEALTH AVE	WILLOW ST	0 - 1,000	25	28	3	0	0	0.00	2.36	NO	2	2	5			1		YES	NO	31
118	THORNTON ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	26	1	1 - 2	0	13.02	2.36	YES	1	1	2					NO	NO	31
118	EASTBOURNE RD	WARD ST	WESTBOURNE RD	0 - 1,000	25	30	5	0	0	0.00	2.36	NO			1					YES	NO	31
118	WABAN AVE	MANITOBA RD	COLLINS RD	0 - 1,000	25	29	4	0	0	0.00	2.36	NO					1	1	1	YES	NO	31
123	HARVARD ST	NEWTONVILLE AVE	CABOT ST	2,001 - 3,000	25	25	0	3 - 4	0	3.90	2.36	YES	1	1			1			NO	NO	30
123	TREMONT ST	ENTIRE ROAD	ENTIRE ROAD	10,001 - 12,500	35	29	-6	> 16	1	1.93	3.58	NO	4	2	2		2	1		YES	YES	30
123	LINWOOD AVE	ADAMS ST	BRIDGE ST	0 - 1,000	25	26	1	1 - 2	0	4.85	2.36	YES	1					1		NO	NO	30
123	SHARPE RD	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	30	5	0	0	0.00	2.36	NO	1		2		1			NO	NO	30
123	WASHBURN AVE	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	26	1	1 - 2	0	5.42	2.36	YES	1				1			NO	NO	30
128	WESTCHESTER RD	ENTIRE ROAD	ENTIRE ROAD	1,001 - 2,000	25	24	-1	3 - 4	0	3.18	2.36	YES		2	1		3			NO	NO	29
128	CLIFTON RD	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	26	1	1 - 2	0	7.28	2.36	YES					1			NO	NO	29
128	WARREN ST	LANGLEY RD	GLEN AVE	0 - 1,000	25	29	4	0	0	0.00	2.36	NO			5			1	1	NO	NO	29
131	PLEASANT ST	HOMER ST	LAKE AVE	1,001 - 2,000	25	27	2	1 - 2	0	2.00	2.36	NO		2	4		1	1		YES	NO	28
131	CHERRY PL	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	30	5	0	0	0.00	2.36	NO		1			1			NO	NO	28
133	NONANTUM ST	ENTIRE ROAD	ENTIRE ROAD	1,001 - 2,000	25	29	4	1 - 2	0	1.66	2.36	NO		1	2					NO	NO	26
134	TAMWORTH RD	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	25	0	1 - 2	0	12.81	3.33	YES			3					NO	NO	25
135	MONADNOCK RD	WACHUSETT RD	HAMMONDSWOOD RD	0 - 1,000	25	25	0	1 - 2	0	11.97	2.36	YES					1			NO	NO	24
135	UPLAND AVE	DEDHAM ST	HEATHERLAND RD	0 - 1,000	25	29	4	0	0	0.00	2.36	NO	3	1						NO	NO	24
137	CRESCENT AVE	CENTRE ST	BEACON ST	1,001 - 2,000	25	22	-3	1 - 2	0	3.54	2.36	YES	2	2	2		1	1		YES	NO	23
137	ERIE AVE	HARTFORD ST	BOWDOIN ST	0 - 1,000	25	26	1	0	0	0.00	2.36	NO	2	2	7			1		YES	NO	23
139	FRANKLIN ST	WAVERLEY AVE	BEECHCROFT RD	0 - 1,000	25	25	0	1 - 2	0	4.46	2.36	YES								NO	NO	22
140	GODDARD ST	ENTIRE ROAD	ENTIRE ROAD	2,001 - 3,000	30	33	3	0	0	0.00	2.36	NO	1		3					NO	NO	21
141	WOODCLIFF RD	BOYLSTON ST	ELINOR RD	0 - 1,000	25	28	3	1 - 2	0	1.76	2.36	NO					1			NO	NO	19
141	ALLERTON RD	CENTRE ST	CUSHING ST	0 - 1,000	25	25	0	0	0	0.00	2.36	NO	3	2	7			1		YES	NO	19
143	DEDHAM ST	WOODCLIFF RD	ELINOR RD	3,001 - 4,000	25	26	1	1 - 2	0	1.55	3.58	NO					1			NO	YES	17
143	UPLAND AVE	HEATHERLAND RD	BRUSH HILL RD	0 - 1,000	25	28	3	0	0	0.00	2.36	NO	1		1					NO	NO	17
145	NORWOOD AVE	CENTRE ST	CRESCENT AVE	0 - 1,000	25	26	1	0	0	0.00	2.36	NO		2			1	1		YES	NO	16
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Ranking	Street	From	То	Vehicle Volume	Speed Limit	85th Percentile Speed	Speed Over Limit	Total Crashes	Non-Motorist Involved Crashes	Crash Rate	D6 Crash Rate	Exceeds D6 Crash Rate	MBTA Bus Stops	Parks	School Bus Stops	MBTA Commuter Rail Stops	Schools	Village Centers	MBTA Green Line Stops	Vulnerable Users	Sidewalk Snow Clearing Route	Score					
145	CARLETON ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	22	-3	1 - 2	0	38.41	2.36	YES	3	2	2			1		NO	NO	16					
147	WOODWARD ST	UPLAND RD	CARVER RD	4,001 - 5,000	35	35	0	1 - 2	0	0.37	3.33	NO			4					NO	YES	15					
147	BERNARD ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	27	2	0	0	0.00	2.36	NO		1	4					NO	NO	15					
147	WITHINGTON RD	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	27	2	0	0	0.00	2.36	NO		3			1			NO	NO	15					
150	GIBBS ST	CENTRE ST	SUMNER ST	0 - 1,000	25	25	0	0	0	0.00	2.36	NO	1	2	5					YES	NO	13					
150	TROWBRIDGE AVE	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	26	1	0	0	0.00	2.36	NO	1				1			YES	NO	13					
152	GARDNER ST	PEARL ST	SCHOOL ST	0 - 1,000	25	21	-4	3 - 4	0	20.89	2.36	YES		2	2		2			NO	NO	12					
153	ELLIS RD	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	27	2	0	0	0.00	2.36	NO			1					NO	NO	11					
153	FOREST AVE	OTIS ST	HIGHLAND ST	0 - 1,000	25	27	2	0	0	0.00	2.36	NO			1					NO	NO	11					
155	GREYLOCK RD	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	22	-3	1 - 2	0	34.76	2.36	YES			2					NO	NO	9					
155	JUDITH RD	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	25	0	0	0	0.00	2.36	NO	4							YES	NO	9					
157	PRISCILLA RD	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	25	0	0	0	0.00	2.36	NO		1	3		1	1		NO	NO	8					
157	ASHFORD RD	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	21	-4	1 - 2	0	19.57	2.36	YES			1					YES	NO	8					
157	LORNA RD	WAVERLEY AVE	GRALYNN RD	0 - 1,000	25	26	1	0	0	0.00	2.36	NO		1			1			NO	NO	8					
157	WHITLOWE RD	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	25	0	0	0	0.00	2.36	NO	3		5					NO	NO	8					
161	RIDGE AVE	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	21	-4	1 - 2	0	10.39	2.36	YES	2	1			1			NO	NO	7					
162	BERWICK RD	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	25	0	0	0	0.00	2.36	NO	2	2	1					NO	NO	5					
163	HOBART RD	COMMONWEALTH AVE	INTERVALE RD	3,001 - 4,000	25	24	-1	1 - 2	0	0.75	2.36	NO			3					NO	NO	3					
163	ORRIS ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	25	0	0	0	0.00	2.36	NO	1				1			NO	NO	3					
163	WHITTEMORE RD	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	25	0	0	0	0.00	2.36	NO	2		1					NO	NO	3					
166	DORCAR RD	VINE ST	EASTHAM RD	0 - 1,000	25	25	0	0	0	0.00	2.36	NO			2					NO	NO	2					
166	RICKER RD	TREMONT ST	RICKER TER	0 - 1,000	25	25	0	0	0	0.00	2.36	NO	1		1					NO	NO	2					
168	CHESTNUT TER	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	24	-1	0	0	0.00	2.36	NO			5					NO	NO	0					
168	HUNNEWELL AVE	WASHINGTON ST	ELMHURST RD	0 - 1,000	25	23	-2	0	0	0.00	2.36	NO	2	1				1		YES	NO	0					
168	RESERVOIR AVE	ENTIRE ROAD	ENTIRE ROAD	2,001 - 3,000	30	27	-3	1 - 2	0	1.45	2.36	NO			4		1			YES	NO	0					
171	GEORGE ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	24	-1	0	0	0.00	2.36	NO	4							NO	NO	-1					
171	WABAN HILL RD	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	24	-1	0	0	0.00	2.36	NO					2			NO	NO	-1					
173	WABAN ST	JEWETT ST	THORNTON ST	0 - 1,000	25	22	-3	0	0	0.00	2.36	NO	1	1	2		2			YES	NO	-2					
173	WATER ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	19	-6	1 - 2	0	17.79	2.36	YES		1						YES	NO	-2					
175	GROVE HILL PARK	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	19	-6	1 - 2	0	33.66	2.36	YES		2	3					NO	NO	-3					
176	ISLINGTON RD	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	21	-4	0	0	0.00	2.36	NO	2	3	4					YES	NO	-6					
177	CHANNING ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	21	-4	0	0	0.00	2.36	NO	1	2				1		NO	NO	-15					
177	FARLOW RD	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	21	-4	0	0	0.00	2.36	NO								YES	NO	-15					
179	WYOMING RD	CALIFORNIA ST	PARKWAY RD	0 - 1,000	25	20	-5	0	0	0.00	2.36	NO					1			NO	NO	-23					
180	WEST PINE ST	MELROSE ST	EDGEWATER PARK	0 - 1,000	25	19	-6	0	0	0.00	2.36	NO		1						YES	NO	-24					
181	HOLLIS ST	ENTIRE ROAD	ENTIRE ROAD	0 - 1,000	25	17	-8	0	0	0.00	2.36	NO	2	2						YES	NO	-31					