2017/18

Vision Zero Boston Update

WHO ARE WE?

In March of 2015, Boston Mayor Martin J. Walsh announced that the City of Boston was joining cities and towns worldwide in adopting Vision Zero, a commitment to eliminate traffic fatalities and severe injuries on City streets. He appointed the Vision Zero Task Force, a multi-departmental team led by Commissioner Gina N. Fiandaca that includes representatives from Transportation, Public Works, Public Health, Police, Emergency Management Services, Public Schools, the Elderly Commission, the Commission for Persons with Disabilities, the Department of Innovation and Technology, the New Urban Mechanics, and advocacy groups Boston Cyclists Union, LivableStreets Alliance, and WalkBoston. The Task Force generally meets once a month to review progress and provide input on policies and projects aimed at making our streets safer.

WHAT DO WE DO?

In December 2015 the City released its Vision Zero Action Plan that outlines four major strategies: Reducing speeds and designing safer streets; tackling distracted and impaired driving; engaging Bostonians; and holding ourselves accountable.

This, our second annual review, tracks our progress in reducing fatal and severe crashes, and summarizes our progress on safety improvement policies and projects. It also sets the stage to establish priorities for the coming years.

2017 REVIEW

FATAL CRASHES

14 fatal traffic crashes in 2017, down from 21 in 2016

REDUCED SPEEDS

Reduced the default speed limit from 30 to 25 mph and more than doubled the number of speed feedback signs to 57

NEIGHBORHOOD SLOW STREETS

Installed the City's first two Neighborhood Slow Streets zones in the Talbot Norfolk Triangle (Dorchester) and Stonybrook (Jamaica Plain)

PRIORITY CORRIDORS, IMPROVED INTERSECTIONS

Made corridor improvements on Beacon Street, Kneeland Street and Tremont Street, and improved intersections in other locations

FOCUS ON EQUITY

Developed a framework for prioritizing projects that will improve safety and address inequities across the City

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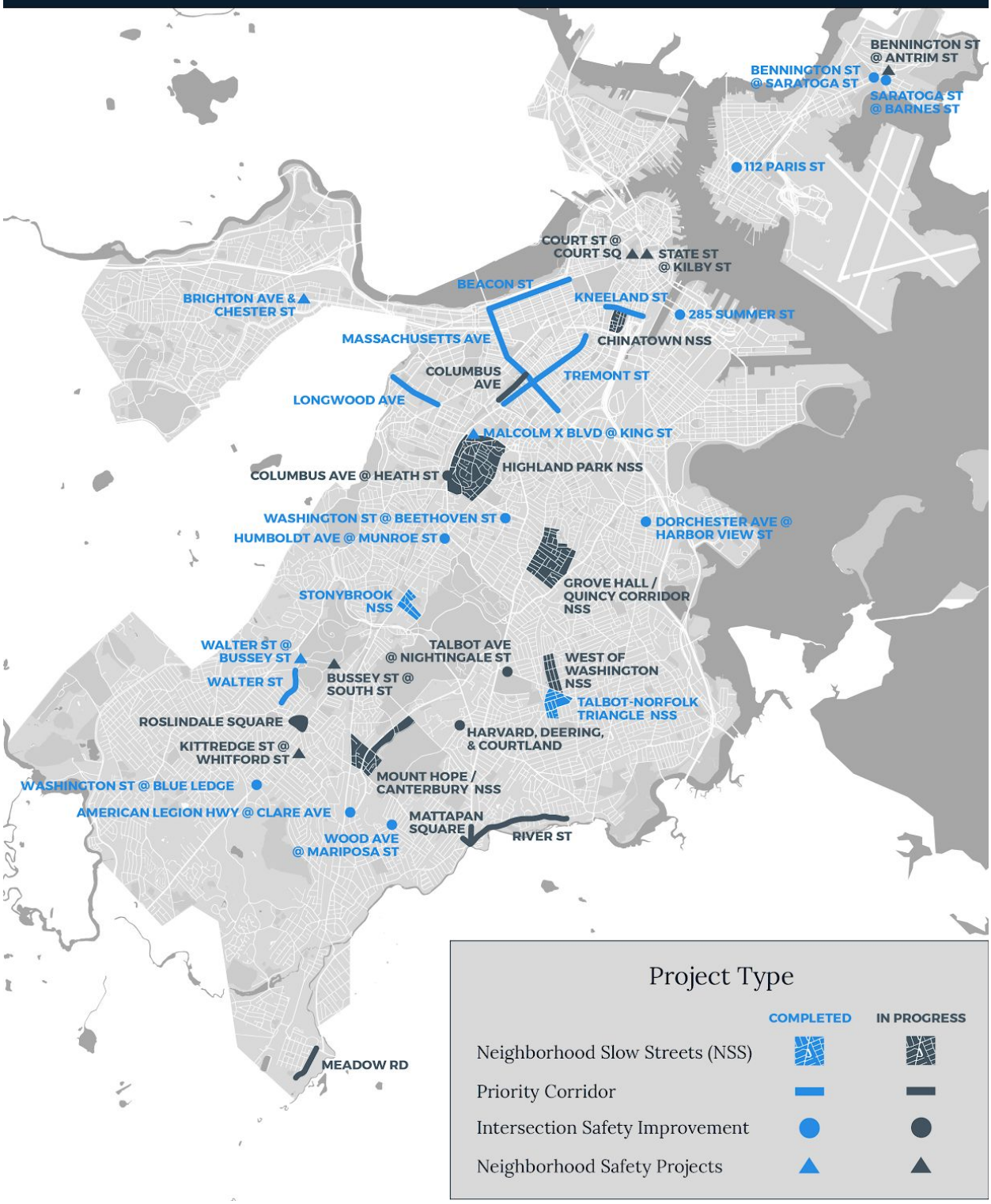
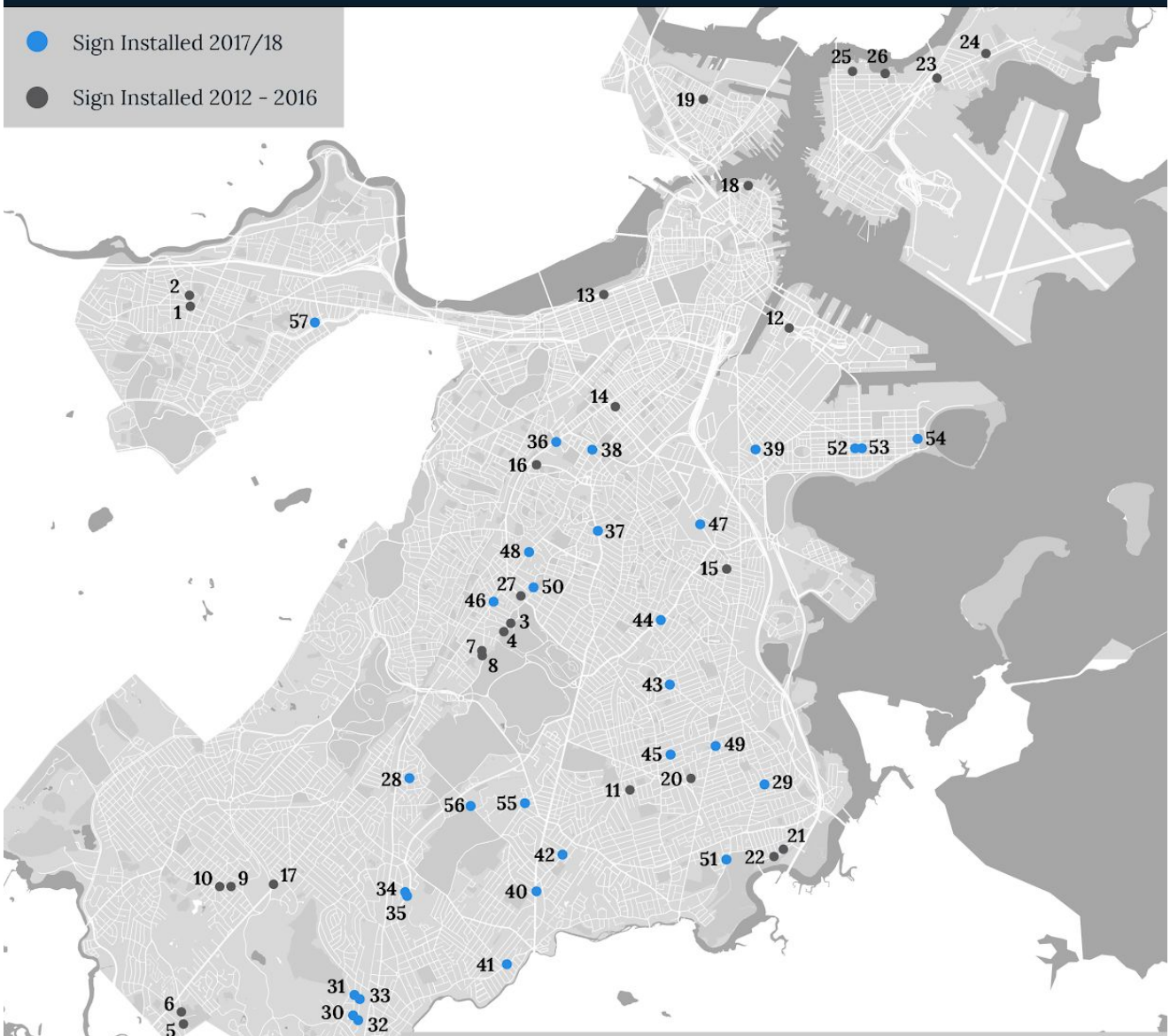
COMPLETED AND ONGOING PROJECTS



SPEED FEEDBACK SIGNS IN BOSTON



SPEED FEEDBACK SIGN LOCATIONS

1.	73 Parsons St	**20.**	112 Welles Ave	**39.**	200 Old Colony Ave
2.	104 Parsons St	**21.**	27 Hill Top St	**40.**	1436 Blue Hill Ave
3.	489 Walnut Ave	**22.**	44 Hill Top St	**41.**	625 River St
4.	32 Sigourney St	**23.**	504 Bennington St	**42.**	487 Norfolk St
5.	351 Grove St	**24.**	720 Bennington St	**43.**	351 Geneva Ave
6.	297 Grove St	**25.**	Condor St & Brooks St	**44.**	367 Columbia Rd
7/8.	176 Forest Hills St	**26.**	Condor St & Glendon St	**45.**	52 Lyndhurst St
9.	125 Lagrange St	**27.**	2044 Columbus Ave	**46.**	3175 Washington St
10.	148 Lagrange St	**28.**	Hyde Park Ave & Southbourne Rd	**47.**	2000 Massachusetts Ave
11.	114 Norfolk St	**29.**	Ashmont St & Humes Rd	**48.**	2870 Washington St
12.	349 Summer St	**30.**	30 Austin St	**49.**	1658 Dorchester Ave
13.	266 Beacon St	**31.**	90 Austin St	**50.**	334 Walnut Ave
14.	540 Massachusetts Ave	**32.**	37 Summer St	**51.**	943 Adams St
15.	26 Pleasant St	**33.**	102 Summer St	**52/53.**	L St and 6th St
16.	56 Malcolm X Blvd	**34/5.**	980 American Legion Hwy	**54.**	123 Farragut Road
17.	4594 Washington St	**36.**	1180 Tremont St	**55.**	Harvard St & Estella St
18.	513 Commercial St	**37.**	240 Warren St	**56.**	Walk Hill St & Paine St
19.	215 Bunker Hill St	**38.**	711 Shawmut Ave	**57.**	1251 Commonwealth Ave

25 MPH Speed Limit Change

Mayor Walsh and Transportation Commissioner Fiandaca worked with Governor Charlie Baker and the State Legislature to encourage passage of a state law in August 2016 that enabled cities and towns in Massachusetts to adopt a 25 mph speed limit in "thickly settled areas." With strong support from the Boston City Council, Commissioner Fiandaca declared the entire city thickly settled, and the Council passed an ordinance reducing the citywide default speed limit from 30 mph to 25 mph, effective January 9, 2017.

A study released in August 2018 by the Insurance Institute for Highway Safety concluded that after Boston reduced the default speed limit to 25 mph, the odds of speeding fell by 8.5% for vehicles exceeding 30 mph and 29.3% for vehicles exceeding 35 mph.[1]

TO SUPPORT THE SPEED LIMIT CHANGE WE:

Launched a 25 mph public outreach campaign *including MBTA ads, buttons, magnets, and posters distributed at schools, by Main Streets groups and at public meetings. Sent a flyer in 7 languages to over 250,000 vehicle owners with their excise tax bills.*

Posted over 100 new 25 mph city-wide speed limit signs *at gateways onto City streets, such as the I-93 exit at Purchase Street.*

Held a Speed Sign Data Challenge *to develop a framework for selecting sites for speed feedback signs. The winner, Steve Willard of curio.org, is shown with Commissioner Fiandaca at the location of a new sign he suggested on Geneva Avenue in Dorchester.*

Installed additional speed feedback signs *at sites throughout the City suggested as part of the data challenge. We now have 57 speed feedback signs in operation, including the one shown on Washington Street near the Egleston Square Main Streets district.*

[1] Hu, Wen & Chiccino, Jessica B. (2018). Lowering the Speed Limit from 30 mph to 25 mph in Boston: Effects on Vehicle Speeds. Arlington, VA: Insurance Institute for Highway Safety.

Neighborhood Slow Streets

Neighborhood Slow Streets is the program to reduce speeds on residential streets by installing traffic calming devices in strategic locations throughout a defined neighborhood. The first two Neighborhood Slow Streets zones were completed in the Talbot Norfolk Triangle in Codman Square and Stonybrook in Jamaica Plain. Five more neighborhoods, selected in 2017 through an application process, are in planning and design. The next round of Neighborhood Slow Streets zones have been selected from applications submitted in 2018. For more information see the Neighborhood Slow Streets website: boston.gov/neighborhood-slow-streets.

TRAFFIC CALMING IN NEIGHBORHOOD SLOW STREETS ZONES INCLUDES:

Posted gateway signage *to identify the entrances to the Neighborhood Slow Streets Zone in the Talbot Norfolk Triangle.*

Installed temporary curb extensions *using pavement markings and flex posts at New England Avenue and Southern Avenue in the Talbot Norfolk Triangle.*

Installed speed humps *in Stonybrook (shown) and in the Talbot Norfolk Triangle. These are the first speed humps the City has installed in over 10 years.*

Priority Corridors: Beacon Street

Made changes to Beacon Street in the Back Bay between Berkeley Street and Massachusetts Avenue to manage vehicle speeds, reduce the number and severity of crashes, and increase walking comfort.

CHANGES ON BEACON STREET INCLUDE:

Added daylighting at intersections *to open up sight lines at corners.*

Right-sized this residential street *to two general travel lanes and* **installed a physically separated bike lane.**

Modified timing of WALK signals to give pedestrians a head start *when crossing the street (ongoing).*

Formalized right-turn-only lane *between Arlington Street and Berkeley Street.*

Priority Corridors: Kneeland Street

The repaving of Kneeland Street provided an opportunity to incorporate safety improvements on the stretch between Atlantic Avenue and Washington Street. Kneeland Street was identified as a high crash corridor for pedestrians, cyclists and motorists.

CHANGES ON KNEELAND STREET INCLUDE:

Improved pedestrian visibility *by opening sight lines. Repainted crosswalks and "Don't Block the Box" markings. Modified the timing of WALK signals to give pedestrians a head start.*

Added a left turn lane *at Harrison Avenue, creating more predictability for vehicles making this move.*

Created space for new bike facilities in both directions *connecting to South Station and Washington Street.*

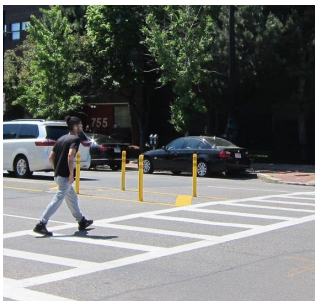
Identified new parking spaces and extended parking hours on side streets, *including Harrison Avenue and Marginal Road.*

Priority Corridors: Tremont Street

As a short term measure to improve safety along Tremont Street, we installed "tactical crossing islands" using pavement markings and flex posts at non-signalized intersections between Melnea Cass Boulevard in Roxbury and Herald Street in the South End. Planning for longer term changes is in progress.

SHORT-TERM CHANGES ON TREMONT ST INCLUDE:

Created "tactical islands" using yellow pavement markings and flex posts." *Shown: Tactical island on Tremont Street near Douglas Street in Lower Roxbury's Douglas Square*



Enabled pedestrians to focus on one direction of travel at a time while crossing by creating a refuge. *Shown: Tactical island on Tremont Street at Worcester Street.*

Encouraged drivers to pay attention and slow down by installing pedestrian delineators. *Shown: Tactical island with pedestrian delineator on Tremont Street near Aguadilla Street in the South End.*

Improved Intersections

Changes were made in response to fatal crashes and to prevent crashes at a number of intersections using the rapid implementation tool kit: Pavement markings, flex posts, signage.

EXAMPLES OF IMPROVED INTERSECTIONS INCLUDE:

Added new crosswalk and daylighting *on Washington Street at Beethoven Street in the heart of the Egleston Square Main Streets District.*

Used pavement markings and flex posts to better guide vehicles through a curve *approaching the intersection on Wood Avenue near Mariposa Street in Mattapan.*

Added new crosswalks, daylighting and channelization lines *in the Roslindale Square Main Streets District after the roads were repaved.*

Added a new crosswalk and tactical curb extensions *on Neponset Avenue and Canterbury Street, near the Haley Pilot School.*

Neighborhood Safety Projects

Boston Public Works Department, working with Boston Transportation Department, is addressing problematic intersections by moving curbs, constructing islands, and in many cases adding new signals and rapid flash beacons. These capital projects are complex and often require addressing drainage and other utility issues.

EXAMPLES OF NEIGHBORHOOD SAFETY PROJECTS INCLUDE:

Installed a new crosswalk *at a bus stop on Malcolm X Boulevard near King Street* **with curb extensions, pedestrian refuge island, and rapid flash beacons.**

Constructed curb extensions and extended the median to create pedestrian refuge space *for the crossing of Brighton Avenue at Chester Street.*

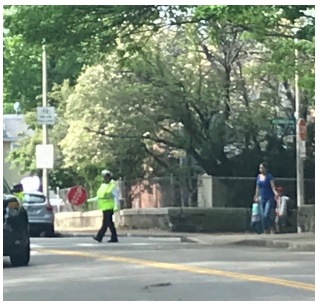
Installed curb extension and Rapid Flash Beacon *at Saratoga and Barnes Street, adjacent to Orient Height MBTA Station in East Boston.*

Equitable Decision Making

This year we developed a Framework for Equitable Decision Making with the help of a Mayor's Office of New Urban Mechanics Summer Fellow[2]. The Framework includes a commitment to work with others to VISUALIZE how transportation projects relate to people and places; PRIORITIZE equity when making decision; and DISCUSS a commitment to addressing inequities across the City of Boston.

DEFINING PEOPLE, PLACES AND STREETS:

PEOPLE: *An equitable approach centers on the experiences of people who, for various reasons, have greater vulnerability on the street.*



PLACES: *We will prioritize places where people gather or receive services - schools, libraries, Boston Centers for Youth and Families, parks, homeless shelters, Main Streets Districts, as well as places of opportunity - higher education and job centers.*

STREETS: *We take stock of the physical characteristics of roadways with greater safety concerns, and we will prioritize locations where we've seen people injured and locations with similar characteristics.*

[2] The Framework was developed by Taylor Cain, a Mayor's Office of New Urban Mechanic's Summer Fellow.

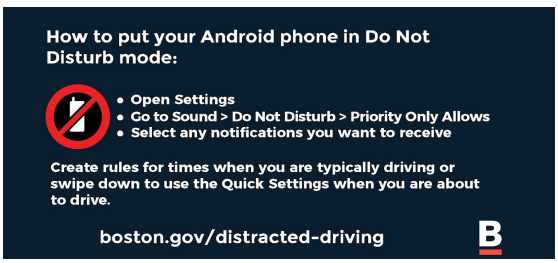
Going Forward
PRIORITIES FOR 2018 INCLUDE:

Increased Investment
In April 2018, Mayor Martin J. Walsh announced a new investment of $5 million to support projects identified in Go Boston 2030, the city's mobility plan. The top priority of the plan is increasing safety on our streets. The new funds will expand the City's Vision Zero team with two new planners, two new engineers, and four operations staff to help with the installation and maintenance of street improvements. Increases in the budget for capital improvements include an additional $750,000 for "Walkable Streets" and an additional $300,000 for the Strategic Bike Network Plan (now $1.2 million per year). In the coming four years the City expects to build 15 Neighborhood Slow Streets areas, 15 miles of protected bike lanes, and improve 15 of the most challenging intersections.

Tackling Distracted Driving
We are making strides in reducing speeds and designing our streets to be more safe, but unless we address the problem of increasing use of electronic devices while driving, we will not reach our goal of zero traffic fatalities. We are working with our partners at MassDOT and the Executive Office of Public Safety and Security to raise public awareness of this issue. We are also working with groups such as Safe Roads Alliance and End Distracted Driving to educate drivers and passengers and to advocate for policies that will help curb the trend.

Relaunch of Boston's Safest Driver
One tool to help with Distracted Driving and other unsafe driving behaviors is the app launched by the Mayor's Office of New Urban Mechanics (MONUM) in 2016 called "Boston's Safest Driver." The app runs in the background and tracks locations where the driver is speeding, taking turns too quickly, braking harshly, and using the phone while driving. Results from the initial launch suggest the app is very effective at changing driver behavior. MONUM will be relaunching the app in the fall of 2018 with support from the National Safety Council's Road to Zero Safe Systems grant program.

Focus on Schools
We will be upgrading school zone flashers throughout the City and focusing on schools as we select locations for future safety improvements. One area that is being studied is Walnut Avenue near the Ellis School in Roxbury.



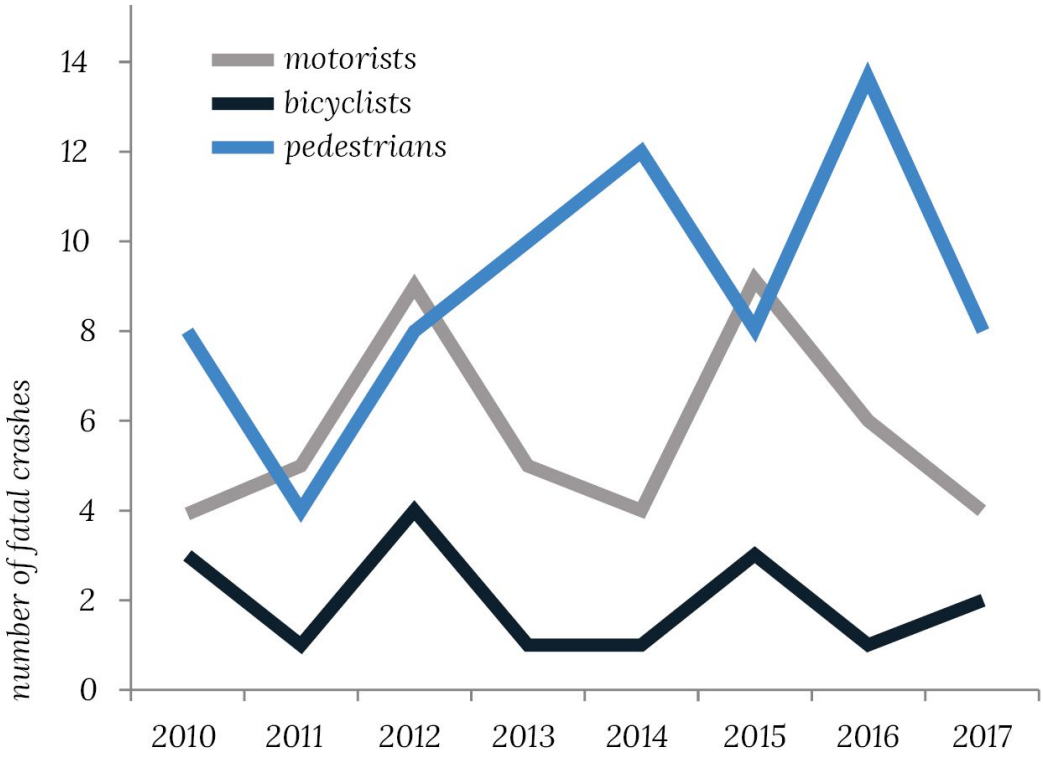
By the Numbers: Fatal Crashes

FATAL CRASHES BY MODE

In 2017 there were 14 fatal crashes on City of Boston streets, down from 20 and 21 the previous two years. Excluded are crashes that were due to driver medical issues, intentional assaults, and incidents involving a driver or passenger who fell out of a moving vehicle. Note that we were unable to determine if crashes should be excluded for data prior to 2015.

	2010	2011	2012	2013	2014	2015	2016	2017
PEDESTRIANS	8	4	8	10	12	9	14	8
CYCLISTS	3	1	4	1	1	3	1	2
MOTORISTS	4	5	9	5	4	8	6	4
TOTAL	15	10	21	16	17	20	21	14

TABLE 1: YEARLY FATALITIES, BY MODE



By the Numbers: Injury Crashes

INJURY CRASHES BY MODE

As a proxy for injury crashes we are using 911 incidents where Emergency Management Services were requested. We do not have a way of determining the severity of the incident or whether there was an actual injury, but this statistic provides a consistent way to measure crashes that may have resulted in injuries.

Based on this data, cyclist crashes over the last 3 years have been decreasing, pedestrian crashes rose in 2016 but fell in 2017, and motorist crashes have been steadily increasing.

	2015	2016	2017
PEDESTRIANS	786	895	772
CYCLISTS	503	426	390
MOTORISTS	2,826	3,049	3,375
TOTAL	4,115	4,370	4,537

TABLE 2: YEARLY INJURY CRASHES, BY MODE

Increase in Motorist Crashes

Although we don't have data to determine the cause of the increase in motorist crashes, national trends suggest distracted driving may play a role, as well as a general increase in motor vehicle traffic on our roadways. We will continue to seek ways to understand the reasons behind this trend and how we can reverse it.