

VISION ZERO BOSTON 2016 REVIEW

Making Our Streets Safer

Mayor Martin J. Walsh
April 2017





Age-Friendly **Boston**

BOSTON



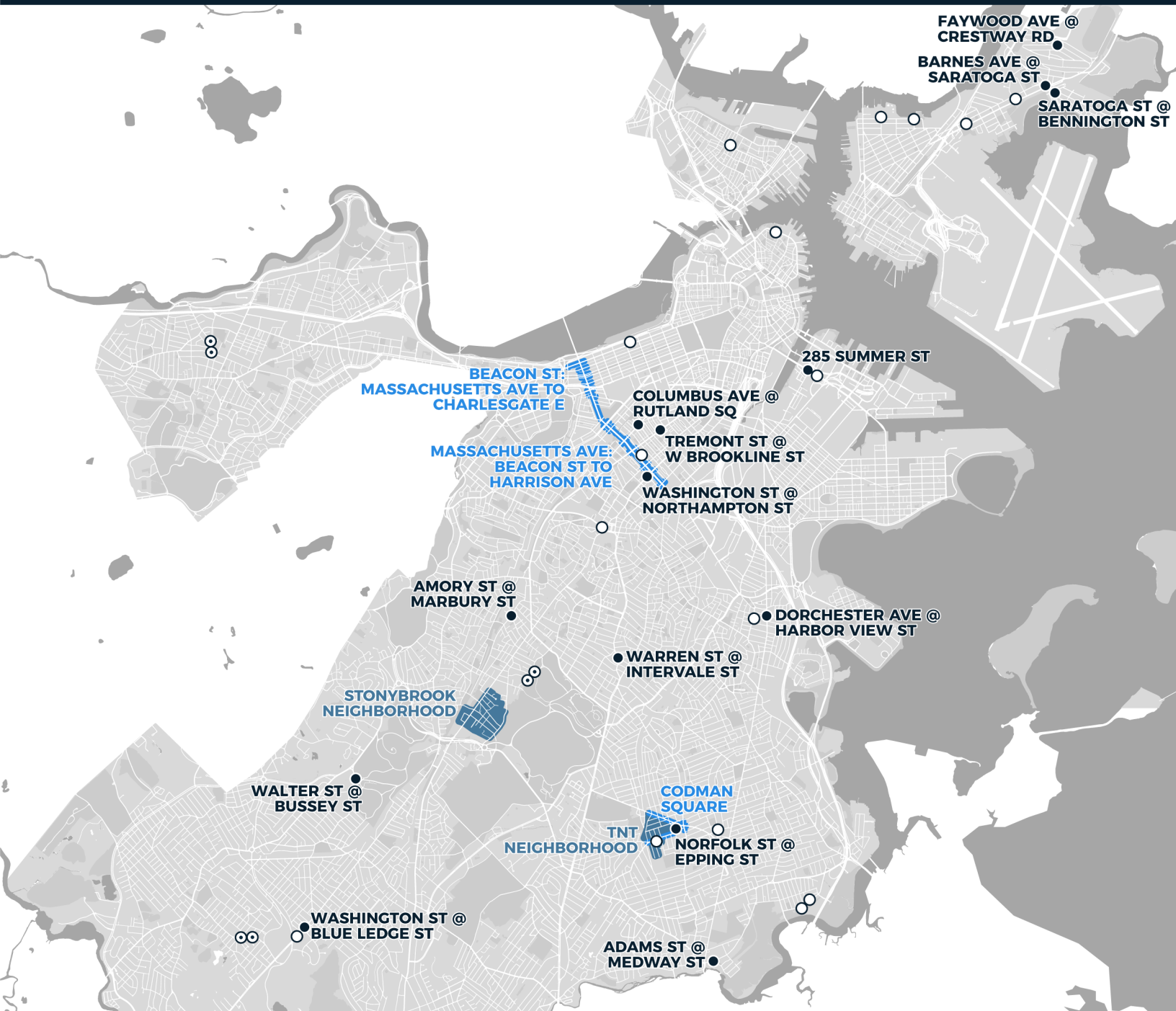
MAKING OUR STREETS SAFER

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, an effort to reduce serious and fatal traffic crashes¹. Mayor Walsh immediately appointed a working Task Force comprised of representatives of several government agencies as well as local advocacy groups. In December 2015, the City of Boston's Vision Zero Action Plan was released. The Plan emphasizes Boston's commitment to safe streets and outlines the City's Vision Zero Strategies.

This, our first annual review, summarizes the accomplishments of the last year, provides an assessment of fatal and serious traffic crash trends, and summarizes our priorities for 2017.

¹We use the word "crash," instead of "accident," to emphasize that most traffic collisions could be avoided through better street design and safer habits.

VISION ZERO SAFETY PROJECTS • 2016



Safety Project Type

-  Intersection Safety Improvement
-  Speed Radar Sign
-  sign installed before 2016
-  Priority Corridor (improvements in progress)
-  Neighborhood Slow Streets (improvements in progress)

2016 ACCOMPLISHMENTS

In 2016, the Vision Zero Task Force met monthly and worked together to advance our shared Vision Zero goal. Together, we accomplished the tasks listed below related to our Action Plan.

PRIORITY CORRIDORS

In our Action Plan, we identified two priority corridors where we wanted to reduce speeds and build safer streets, based on their crash histories: Codman Square, and Massachusetts Avenue in the Back Bay, Fenway and South End.

In Codman Square, we improved crosswalks and created plans for bike lanes and for improved crossings on Norfolk Street. On Massachusetts Avenue, we improved crosswalks and installed protected bike lanes in the southbound direction from Beacon Street to Westland Avenue.

25 MPH CITYWIDE DEFAULT SPEED LIMIT

Mayor Walsh and City of Boston Transportation Commissioner Gina N. Fiandaca worked with Governor Charlie Baker, members of the Massachusetts State Legislature and the Boston City Council to reduce the Citywide default speed limit from 30 mph to 25 mph. The speed limit was officially changed January 9, 2017. Our public awareness campaign included:

- ▶ Mailing a multi-lingual flyer about speed, safety, and the 25 mph speed limit change to more than 200,000 Bostonians who receive excise tax bills
- ▶ Running a social media awareness campaign
- ▶ Issuing press releases
- ▶ Placing advertisements on MBTA buses and trains and at the Registry of Motor Vehicles in Boston
- ▶ Creating posters in six languages, which were shared with community organizations, schools, and Main Streets businesses across the City
- ▶ Installing new signs to notify drivers entering the City of the new default speed limit in Boston

NEIGHBORHOOD SLOW STREETS

We launched Neighborhood Slow Streets, a program to reduce speeds on residential streets by changing the physical character of the streets with traffic calming devices. We developed plans for two pilot areas: the Talbot-Norfolk Triangle in Dorchester and the Stonybrook neighborhood in Jamaica Plain. Implementation is planned for 2017.

SAFE CROSSINGS

We developed processes to create safer street crossings using tools that can be installed in a relatively short time period. These tools include high-visibility crosswalks, additional pavement markings, signs, flex posts, and signal changes. We tested these ideas in seven locations in response to severe crashes and will continue to implement them proactively and after severe crashes.

BOSTON'S SAFEST DRIVER

With the help of Cambridge Telematics and The Arbella Insurance Foundation, we launched a mobile app that provides feedback on one's driving behaviors and awards points for safe driving. We saw that drivers who used the app improved their safe driving practices over time, including reductions in distracted driving, harsh braking, speeding, and other unsafe behaviors.

COMMUNITY ENGAGEMENT AROUND TRAFFIC SAFETY

We shared the goals of Vision Zero and engaged Bostonians in discussions about traffic safety at over 30 community meetings and events. Mayor Walsh spoke about the importance of Vision Zero in his State of the City address. We also launched a Safety Concerns Map, which allows you to tell us your transportation safety concerns. We've received over 10,000 responses from all of Boston's neighborhoods.

REDUCE SPEEDS AND BUILD SAFER STREETS

- ▶ Installed protected bike lanes on a block of Beacon Street and began work on additional improvements along the corridor
- ▶ Completed seven Rapid Implementation Projects in locations where there were severe or fatal crashes involving pedestrians struck by motorists
- ▶ Updated the City's practice on traffic signals to include more Leading Pedestrian Intervals (LPis) and automatic recall in the downtown area

EDUCATION AND ENFORCEMENT

- ▶ Installed 16 Speed Feedback Signs throughout the City
- ▶ Partnered with the Executive Office of Safety and Security in their "Life is worth a second look" transportation safety campaign
- ▶ Under a grant from MassDOT, WalkBoston worked with Boston Police and others to produce and disseminate a pedestrian safety video
- ▶ The State passed legislation to require Amphibious Tour Operators to have a separate driver and tour guide, blind spot cameras, and sensors. The legislation takes effect April 2017
- ▶ Boston Police performed High Visibility Enforcement at the top 10 crash locations
- ▶ Continued to require contractors to have Truck Side Guards and Blind Spot Mirrors and provided inspections through Boston's Inspectional Services Department

ENGAGE BOSTONIANS IN VISION ZERO

- ▶ The City of Boston Commission on the Affairs of the Elderly and WalkBoston led an Age-Friendly Boston campaign to engage older residents in transportation safety
- ▶ Created a mailing insert about the Vision Zero Safety Concerns Map and mailed it to more than 300,000 Bostonians with the census mailing. Provided Safety Concern forms in different languages to various community groups so that they could gather input at events and at public meetings
- ▶ Created a brochure in six languages about speed, safety, and the 25 mph speed limit change and mailed it to more than 200,000 Bostonians with their excise tax bills

HOLD OURSELVES ACCOUNTABLE

- ▶ Created an online crash map, which displays crashes that result in injuries or fatalities. We are working to improve the data flow so that updates can occur on a regular monthly basis

TRENDS IN FATAL AND SERIOUS CRASHES

In 2016, 22 people were killed in traffic crashes on City-owned streets. Fifteen were walking, one was biking, and six were traveling by motor vehicle, including one person who was on a motor scooter. Of the 15 people who lost their lives while walking, seven were older adults and two were under three years old.

In the Vision Zero Action Plan, we committed to holding ourselves accountable by reviewing the crash data each year. We now have three years of injury crash data from Boston Emergency Medical Services (EMS), and six years of fatal crash data from the Boston Police Department (BPD).

Over the last three years, we've seen a decrease in crashes involving people on bikes and no clear pattern in crashes involving people in motor vehicles. **We see an increasing trend in injurious and fatal crashes involving people walking.** This increase in pedestrian fatalities is consistent with national trends. Since 2009, the number of people killed while walking in the U.S. has increased each year. According to National Highway Transportation Safety Board, it is too soon to know why this is happening. However, it is widely believed that the increasing use of technology while driving and intoxicated driving combined with distracted driving are major reasons for the increase.

	2010	2011	2012	2013	2014	2015	2016
PEDESTRIANS	8	4	8	10	12	9	15
CYCLISTS	3	1	4	1	1	3	1
MOTORISTS	4	5	9	5	4	11	6
TOTAL	15	10	21	16	17	23	22

TABLE 1: YEARLY FATAL CRASHES, BY MODE

	2014	2015	2016
PEDESTRIANS	724	789	904
CYCLISTS	555	512	431
MOTORISTS	3,731	2,984	3,213
TOTAL	5,010	4,285	4,548

TABLE 2: YEARLY INJURY CRASHES, BY MODE

SOURCES

Fatality crash data from Boston Police, Injury crash data from Boston EMS.

Fatality crash data does not include crashes on roadways that are not owned by the City of Boston

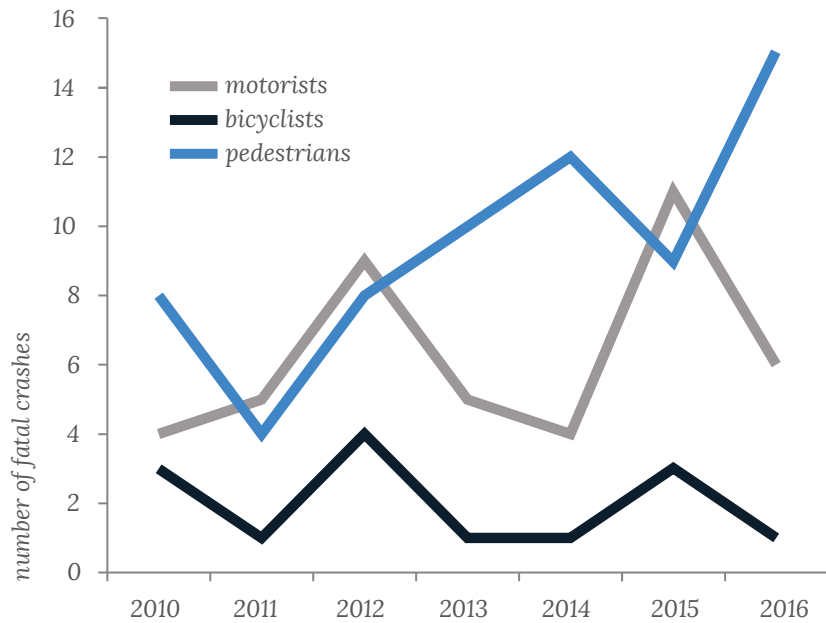


FIGURE 1: YEARLY FATAL CRASHES, BY MODE

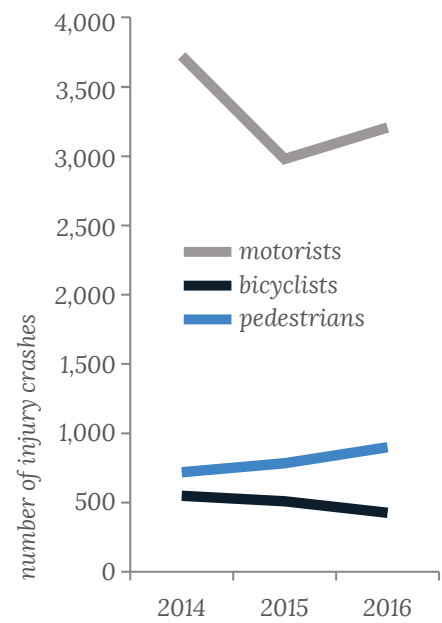


FIGURE 2: YEARLY INJURY CRASHES, BY MODE

Although a small percentage of injury crashes involve people walking, most of the people killed in crashes are pedestrians. From 2014–2016, 58% of the people killed in crashes were walking.

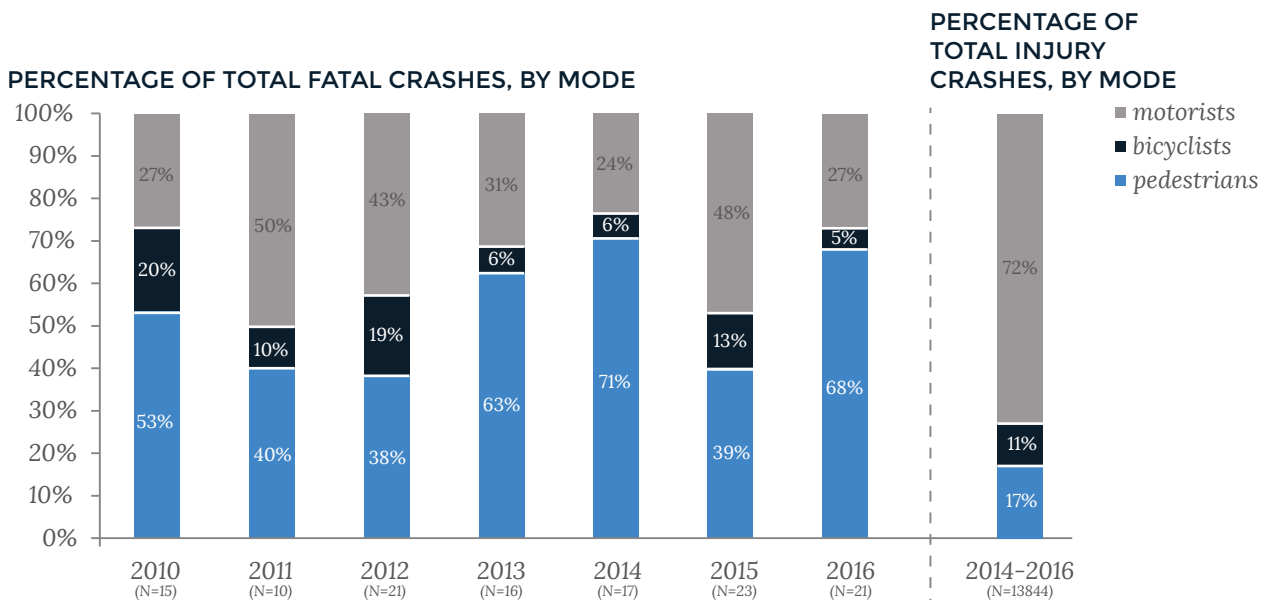


FIGURE 3: PERCENTAGE OF TOTAL FATAL CRASHES AND OF TOTAL INJURY CRASHES, BY MODE

IDENTIFYING HIGH CRASH AREAS

Using MassDOT's methodology for defining crash clusters and EMS data from June 2014 through October 2016, the City of Boston's Department of Innovation and Technology (DoIT) created crash cluster maps for each mode of travel (figures 5, 6, and 7.) Areas with the highest concentration of crashes are shown in darker colors.

PEDESTRIAN CRASH CLUSTERS

Pedestrian crash clusters with the highest densities are located:

- ▶ In Downtown and in Back Bay, where there are large numbers of people walking (Copley Square, Chinatown)
- ▶ In neighborhood Main Streets districts (Codman Square, Dudley Square, Egleston Square)
- ▶ Where we have concentrations of homeless residents and recovery services (Massachusetts Avenue and Melnea Cass Boulevard)
- ▶ On Columbia Road near Franklin Park.

BICYCLIST CRASH CLUSTERS

Bicyclist crash clusters with the highest densities are located:

- ▶ Where there are very high volumes of bicyclists (Massachusetts Avenue in the Back Bay and Columbus Avenue near the Southwest Corridor path)
- ▶ Intersections with lots of Green Line trolley tracks (Cleveland Circle and Huntington Avenue at South Huntington Avenue)
- ▶ Near the intersection of Cambridge Street and State Street.

MOTORIST CRASH CLUSTERS

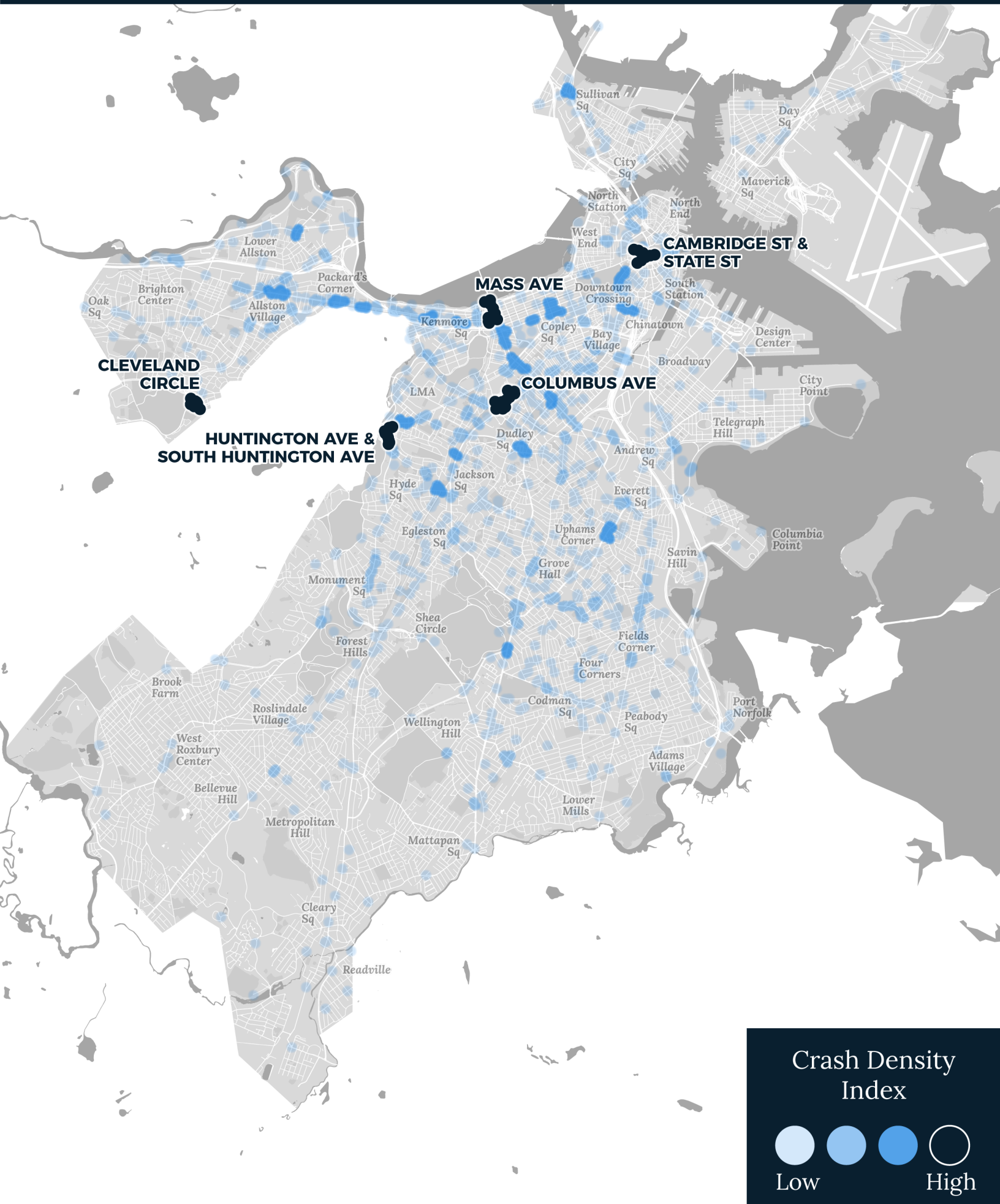
Motorist crash clusters with the highest densities are located:

- ▶ Near highway entrances (Cambridge Street and Soldiers Field Road, Leverett Circle, Massachusetts Avenue and Melnea Cass Boulevard)
- ▶ Along arterial roadways (Columbus Avenue, Blue Hill Avenue, American Legion Highway, Columbia Road)
- ▶ In other locations that may have skewed angle streets or other site specific conditions.

The analysis does not account for the total volumes of people traveling by all modes. It also does not include any demographic information, such as age. We plan to gather additional information over the next several years to better understand crash rates and to evaluate whether the impacts of traffic crashes are falling disproportionately on underserved communities.



BICYCLIST CRASH CLUSTERS • JUNE 2014-OCTOBER 2016

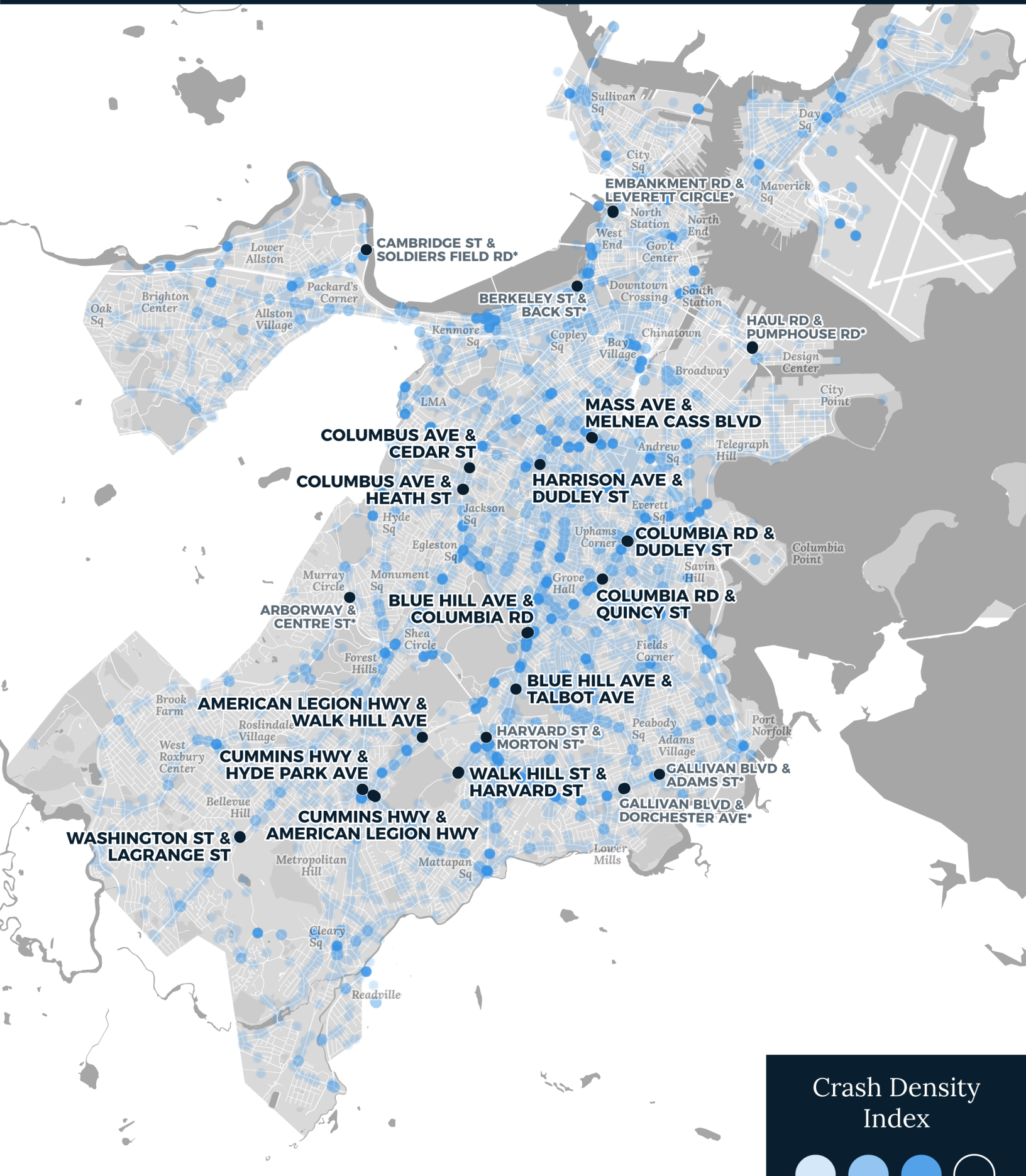


Crash Density Index





MOTORIST CRASH CLUSTERS • JUNE 2014-OCTOBER 2016



*CRASH CLUSTER ON STATE-OWNED ROADWAY

Crash Density Index

Low

High

PRIORITIES FOR 2017

In response to the growing number of pedestrian injuries and deaths over the last few years, the Vision Zero Task Force will focus our efforts to improve safety for people walking this year. **We will give priority to locations that are:**

- ▶ **In neighborhoods with many children or older adults**
- ▶ **Near schools and public parks**
- ▶ **At bus stops**

The list of projects below is not an exhaustive list of everything the city is doing to promote safety. Ongoing capital projects, implementation of the Bike Network Plan, street redesigns by developers, ADA accessibility improvements and other changes we make in response to concerns will continue in addition to the projects listed below.

SAFE CROSSINGS

We have chosen two general areas for safe crossings along major corridors: Chinatown and Mattapan Square. Chinatown is home to many children and older adults, has many busy bus routes and T stops, and children of the Josiah Quincy School participate in the Safe Routes to School program. Mattapan Square was highlighted by the Age-Friendly Boston program as an area with a large elderly and disability population and many safety concerns. It has a high number of crashes for being in a less-dense part of the City.

NEIGHBORHOOD SLOW STREETS

We will evaluate Neighborhood Slow Streets applications this spring and select two or three new neighborhoods to join the program. Work will continue in the Talbot-Norfolk Triangle and Stonybrook neighborhoods.

CORRIDOR SAFETY IMPROVEMENTS

Corridor safety improvements will continue for Beacon Street (Arlington Street to Massachusetts Avenue), Codman Square (Norfolk Street), and Massachusetts Avenue (Harrison Avenue to Melnea Cass Boulevard).

INTERSECTION SAFETY IMPROVEMENTS

The Boston Public Works and Transportation Departments will make intersection safety improvements initiated prior to the adoption of Vision Zero at the following locations:

- ▶ Malcolm X Boulevard at King Street
- ▶ Kittredge Street at Whitford Street
- ▶ South Street at Bussey Street
- ▶ Devonshire Street at Winthrop Square
- ▶ Dorchester Avenue at Bailey Street
- ▶ Court Street at Court Square
- ▶ State Street at Kilby Street
- ▶ American Legion Highway at Plaza Entrance (new signal)
- ▶ Fairfield Street at Newbury Street (new signal)
- ▶ Geneva Ave at Olney St (new signal)
- ▶ Blue Hill Ave at Castlegate Rd (new signal)

COMMUNITY ENGAGEMENT AND EDUCATION

Outreach on the new 25 mph default speed limit will continue, including the installation of more speed radar signs, use of a mobile speed radar trailer, outreach at community meetings, and warnings and enforcement by Boston Police.

Distracted driving is a serious issue in Boston and worldwide. We can't tackle this issue alone, however we can work with our partners at MassDOT and with universities and insurance companies to explore policies and outreach strategies that can work in Boston and the region. We will continue to promote Boston's Safest Driver app and to seek other ways to encourage fully attentive driving.

DATA ANALYSIS

We will advance our data analysis to include demographic information and health equity. To help set future priorities, we will identify corridors and intersections with high crash rates.

FIXING OUR STREETS

We work throughout the year to improve the operating conditions of our streets for all users. This work includes ADA accessibility improvements, signal re-timing, installation of Audible Pedestrian Signals, sidewalk repair and reconstruction, street resurfacing, refreshing pavement markings, sign installation, and regulation review.

ONGOING AND FUTURE STREET RECONSTRUCTION PROJECTS

We want Vision Zero principles to be at the heart of all our transportation projects as we continue to make changes to our city. Safety improvements are included in several major street reconstruction projects such as Connect Historic Boston and the redesign of Commonwealth Avenue. Projects that are in the planning stages such as the redesign of Melnea Cass Boulevard are also being driven by concerns for the safety of people walking, taking the bus, riding bicycles, and traveling by motor vehicles. Vision Zero is a principle, not just a program, and will continue to influence all that we do.

