



**VISION  
ZERO**  
CAMBRIDGE

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# **ACTION PLAN**

December 2017



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# 1. LETTER FROM THE CITY MANAGER

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To the Cambridge Community:

I am pleased to share Cambridge's Vision Zero Action Plan, and to lay out this strong framework for how we will achieve Vision Zero in our city. Vision Zero is an initiative to reduce and ultimately eliminate transportation fatalities and serious injuries, while at the same time creating safe, healthy, and equitable mobility for all those who travel in Cambridge.

As with all of the work we do in Cambridge, Vision Zero requires ongoing commitments to equity and collaboration, not only in how we plan and make decisions, but also in how we implement our Vision Zero-related programs. The foundation for our Action Plan is data driven decision-making. We seek to identify the fundamental causes for traffic crashes, injuries, and fatalities, to come up with creative and implementable solutions to prevent those incidents, and to evaluate our successes—and remaining challenges—so that we can do even better in the future.

To implement the plan, we have identified 42 actions that the City will undertake, divided into seven high-level commitments:

- Design and operate safe streets;
- Improve large vehicle, taxi/for-hire vehicle, and TNC safety;
- Ensure equity in all efforts;
- Lead by example;
- Engage the public;
- Create partnerships; and
- Use data to direct our efforts and measure our progress

Our shared Vision Zero commitment reinforces our focus on safety and the actions that we can collectively take to create the safest possible transportation system—and the safest possible city.

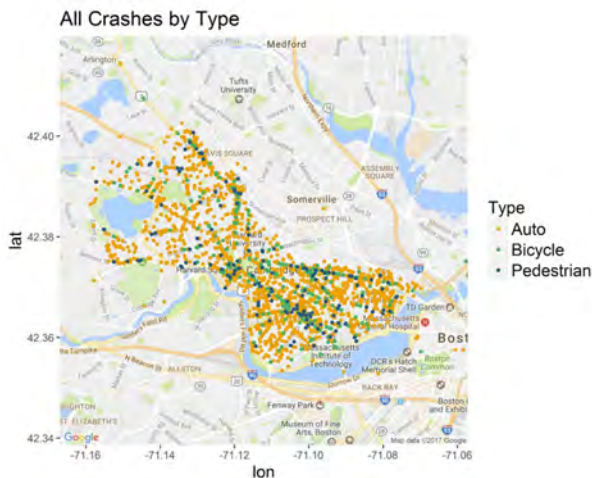
As City Manager, I believe effective communication, collaboration, and public process are critical to successful initiatives, and these will be central themes that will guide our approach for Vision Zero. By coming together as a community, we will continue making it safe and easy for people of all ages and abilities to travel between work, school, shops, and other destinations, whether they choose to walk, bicycle, drive, or take transit. I look forward to working with the City Council and the entire community to enhance the safety of our city.

Sincerely,  
Louis A. DePasquale  
City Manager

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## 2. EXECUTIVE SUMMARY

Transportation is a key element of what makes Cambridge the vibrant, lively city it is; residents, businesses, and visitors alike enjoy the walkability, convenience, and healthy lifestyle available here. Whether walking, cycling, using transit, driving, or moving around Cambridge another way, our residents and visitors need safe streets. While Cambridge has long been a leader in improving bicycle and pedestrian facilities and safety, significant challenges remain. Traffic violence impacts our public health, our public safety, our quality of life and can disproportionately impact our most vulnerable residents.



While Cambridge benefits from a long history of support for walking, bicycling, and transit, our dense, urban environment does pose challenges. Although Cambridge's crowded, narrow streets result in lower and safer speeds, we also have less street real estate available for the competing uses of people who drive, bicycle, or walk. Additionally, a significant amount of vehicular traffic in Cambridge passes through with no origin or destination within the city, on roads that are not under local control.

As a city, we have committed to taking the steps necessary to address these challenges and eliminate all traffic fatalities and serious injuries—Vision Zero represents this commitment. Vision Zero is a strategy to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all. The Vision Zero approach consists first and foremost of an acknowledgment that crashes are preventable. By examining the factors that cause crashes, from infrastructure to behavior and societal factors, we can make the changes necessary to eliminate traffic fatalities and serious injuries. Vision Zero also acknowledges that human beings will always make mistakes, so we must have systems in place to ensure that they are not fatal or life changing.

This Action Plan is the blueprint for how we will reach zero fatalities and serious injuries in our city. Each action step detailed in the plan includes specific short and longer term goals, and falls into one of seven categories:

- A. Design and Operate Safe Streets:** The City will design and operate our streets to ensure that people of all ages and abilities can walk, bike, use transit and drive safely. Action steps include:

- Lower default speed limit to 25 MPH
- Improve safety for all modes in city squares
- Grow network of separated bike lanes
- Traffic Calming
- Safer Pedestrian Crossings
- Change infrastructure, roadway layout, and curb usage to prevent stopping and parking in bike lanes, crosswalks, and pedestrian ramps
- Special Slow Speed Zones
- Establish Rapid Response Protocol for fatalities and serious injuries.
- Enhance intersection safety
- Safe Routes to Transit
- Enforcement

**B. Improve Large Vehicle, Taxi/For-Hire Vehicles, and TNC Safety:** The City will minimize the negative impacts of large vehicles, taxis/for-hire vehicles, and Transportation Network Company vehicles, while ensuring they can provide necessary services to Cambridge residents, students, workers and visitors. Action steps include:

- Improve understanding of impacts of large vehicle delivery in Cambridge
- Truck safety education for people who walk or bike
- “Watch for Bikes” stickers for taxis, TNCs, and car share vehicles
- Increase adoption of truck side guards in Cambridge
- Tour Bus Safety
- Coordination and education for TNCs and car share companies

**C. Ensure equity in Vision Zero:** The City will ensure all Vision Zero efforts promote equity and inclusiveness and protect people of all ages and abilities, paying particular attention to vulnerable and underserved populations. Action steps include:

- Complete roll-out of Accessible Pedestrian Signals (APS)
- Ensure all Vision Zero outreach and communication efforts reach underserved and vulnerable residents
- Safe Routes for Seniors and Persons with Disabilities
- Continue use of Five Year Plan for Streets and Sidewalks to improve safety, accessibility, and mobility for all residents
- Create specialized traffic safety training programs and educational materials for vulnerable populations
- Safe Routes to Schools

**D. Lead by Example:** The City will lead by example in all things related to traffic safety. City policies and actions will reflect our commitment to Vision Zero. Action steps include:

- Renewed focus on safety in City operations
- Review crashes involving City employees conducting City business
- Vision Zero training for all Cambridge Police Officers
- Ensure that City employees are operating vehicles in the safest manner possible
- Develop and pilot general employee training on Vision Zero and rules of the road

**E.** Engage the public on Vision Zero: The City will engage the public to gather feedback on traffic safety related concerns and priorities, educate and change behaviors to improve public safety and public health. Action steps include:

- Establish a standing advisory committee on Vision Zero
- Solicit feedback on traffic safety from the public
- Raise awareness of Vision Zero initiate to educate and engage with community members
- The City will build on its extensive portfolio of traffic safety educational opportunities for all residents who walk, bike, drive or take transit
- “Getting Around Cambridge” Magazine
- Support and expand Bike Month activities
- Distribute “Watch for Bike” decals

**F.** Create Partnerships: The City will partner with universities, private businesses, and other local and state entities to improve traffic safety. Action steps include:

- Create partnerships with Universities, Businesses, and Nonprofits
- Partner with local municipalities, state and federal-level organizations
- Partner with researchers to support safety related research and test safety related technology

**G.** Use Data to Direct Efforts and Measure our Progress: The City will develop metrics to guide decision-making, measure progress on Vision Zero activities and share successes and challenges in a transparent way. Action steps include:

- Ensure Vision Zero is a data-driven effort
- Make all Vision Zero related data available to the public
- Create a Vision Zero Safety Portal
- Develop key metrics to measure Vision Zero progress



## 3. INTRODUCTION

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Transportation is a key element of what makes Cambridge the vibrant, lively city it is; residents, businesses, and visitors alike enjoy the walkability, convenience, and healthy lifestyle available here. Whether walking, cycling, using transit, driving, or moving around Cambridge another way, our residents and visitors need safe streets. While Cambridge has long been a leader in improving bicycle and pedestrian facilities and safety, significant challenges remain.

As a City, we have committed to taking the steps necessary to eliminate all traffic fatalities and serious injuries—Vision Zero represents this commitment. Vision Zero is a strategy to eliminate all traffic fatalities and serious injuries, while increasing safe, healthy, equitable mobility for all.

## 4. WHAT IS VISION ZERO

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First implemented in Sweden in the 1990s, Vision Zero has proved successful across Europe—and is now gaining momentum in major American cities. The fundamental concept behind Vision Zero, that no traffic related death or serious injury is acceptable, is a change from the traditional cost-benefit or economic based models used to measure acceptable risks from traffic crashes. In Sweden, traffic deaths have fallen by half since 2000, thanks to Vision Zero.<sup>1</sup>

The Vision Zero approach consists first and foremost of an acknowledgment that crashes are preventable. By examining the factors that cause crashes, from infrastructure to behavior to societal factors, we can make the changes necessary to eliminate traffic fatalities and serious injuries. Vision Zero also acknowledges that human beings will always make mistakes, so we must have systems in place to ensure mistakes do not cause fatalities or serious injuries.

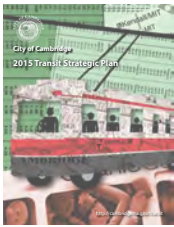
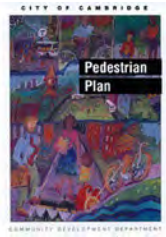
Vision Zero has now spread across the world, including US cities like New York City, Los Angeles, Seattle, and Washington D.C., among others. While each community crafts a Vision Zero program that is unique to its needs and conditions, there are certain elements common to successful Vision Zero programs including political commitment, multi-disciplinary leadership and cooperation, a transparent, data-driven systems-based approach, and community engagement.<sup>2</sup> Vision Zero focuses on identifying the steps necessary to meet its goal through the creation of a collaborative framework, based on the elements outlined above.

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<sup>1</sup><http://www.economist.com/blogs/economist-explains/2014/02/economist-explains-16>

<sup>2</sup><http://visionzeronet.org/wp-content/uploads/2015/12/VZ-Components-Fact-Sheet.pdf>

# 5. HISTORY



Transportation policy and planning in Cambridge, with its longstanding emphasis on the sustainable modes of walking, biking and using transit, laid the groundwork for Vision Zero. As far back as the early 1990s, the City has encouraged active transportation and transit over driving. The Vehicle Trip Reduction Ordinance (VTRO) of 1992 mandates a variety of measures to encourage residents and people commuting to Cambridge to reduce automobile usage.<sup>3</sup>

In 1998, the City passed the Parking and Transportation Demand Management (PTDM) Ordinance. The PTDM Ordinance is a national model for improving mobility and access, reducing congestion and air pollution, and increasing safety by promoting walking, bicycling, public transit, and other sustainable modes. The PTDM ordinance, made permanent in 2006, requires owners of non-residential properties who install additional parking to implement certain measures that discourage single occupancy vehicle commuting trips.<sup>4</sup> In addition to these two ordinances, the City has developed mode-specific plans, such as the Pedestrian Plan, the Cambridge Bicycle Plan, and the Transit Strategic Plan, all of which lay out policies and guidelines that shape transportation in our community.

The efforts to lower vehicle miles traveled and transportation emissions of the past 25 years have been paying off. Cambridge leads the nation in walkability and the percentage of residents who get to work without using a car. Bicycling is now seen as a fully viable mode of transportation and has experienced extreme growth; bicycling has tripled. Importantly, the population has grown significantly—both those who live and those who work in the city—without a corresponding growth in traffic.

The City of Cambridge is a leader in incorporating health and safety into all transportation planning and implementation of capital projects. The City created a Traffic Calming program in the mid-1990s with the goal of improving the quality of life in neighborhoods while enabling people to use their motor vehicles on city streets more safely. Elements like curb extensions, raised crosswalks and intersections, and other features are incorporated into capital reconstruction projects. The Department of Public Works, in collaboration with the Community Development Department and the Traffic, Parking, and Transportation Department, has also focused on improving accessibility around Cambridge as part of their Five Year Plan for Streets and Sidewalks.

<sup>3</sup><https://www.cambridgema.gov/cdd/transportation/programs/strategiesandpolicies>

<sup>4</sup><https://www.cambridgema.gov/CDD/Transportation/fordevelopers/ptdm>



The Cambridge Public Schools Wellness Policy commits to promoting walking and bicycling to school as part of their efforts to encourage active transportation. More recently, the Community Development Department formalized its Safe Routes to School Program to expand the City's support of the School Wellness Policy. The City continues to work hard to ensure that users of all ages and abilities have the safe, convenient mobility they deserve.

Healthy Eating and Active Living was identified as one of the four priority areas of the 2015 Cambridge Community Health Improvement Plan<sup>5</sup>, which includes two objectives related to increasing active and sustainable transportation and reduction of injuries among people who bike and walk.

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<sup>5</sup><http://www.cambridgepublichealth.org/policy-practice/public-health-accreditation/Final-Cambridge-CHIP-Report.pdf>

# 6. TRANSPORTATION IN CAMBRIDGE TODAY

Resident, visitors, workers, and students in Cambridge have more transportation options than ever before and more people are opting to walk, bike, and take transit. Almost 70% of Cambridge residents commute in a sustainable way, while drive alone trips have fallen

to only 30.7%. Vehicle ownership in Cambridge has also fallen in past years, with the percentage of households that own a car falling from 72% in 1990 to 69% in 2014. Given population growth of more than 13,000 people during this time frame, the number of Cantabrigians living car-free is even more significant.



More than 7% of Cambridge commuters bicycle to work as of 2013, one of the highest percentages among cities of its size in the country. Another 24% of residents walk to work, and 28% take transit. Cambridge was named the most walkable city in the US<sup>6</sup> based on the 2012 American Communities Survey, and has the highest Walk Score<sup>7</sup> in all of Massachusetts.

The City has invested heavily in bike infrastructure, increasing the approximate mileage of bicycle facilities in Cambridge from 24 miles in 2004 to 37 miles in 2014, and installing more than 1,300 bike racks as well as seasonal and year-round on-street bike stalls. Cambridge is also an owner of Hubway, the bike share system operating in Cambridge, Boston, Brookline, and Somerville. Launched in Cambridge in 2012, riders have since taken more than 6 million rides system-wide, traveled more than 9 million miles, and offset more than 6 million pounds of CO2 emissions.<sup>8</sup>

Most of Cambridge is just a short walk from public transit, including six stations on the Red Line, one Green Line station, the Commuter Rail, 34 MBTA bus routes, and multiple publicly-accessible shuttles. More than 250,000 public transit trips start and end in Cambridge each day, including 140,000 red line trips, 13,000 green line trips, and 85,000 bus rides.

<sup>6</sup>[www.governing.com/topics/urban/gov-most-walkable-cities.html](http://www.governing.com/topics/urban/gov-most-walkable-cities.html)

<sup>7</sup>[www.walkscore.com/ma/](http://www.walkscore.com/ma/)

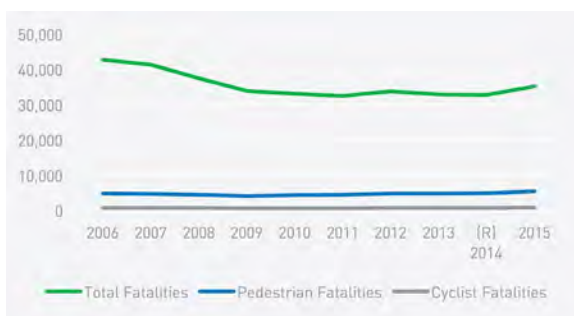
<sup>8</sup>[www.thehubway.com/about/media-kit](http://www.thehubway.com/about/media-kit)

# 7. NATIONAL SAFETY TRENDS

Over time, there has been a downward trend in traffic fatalities nationwide. However, in the past several years, there has been an alarming reversal in that trend. Motor vehicle deaths in 2016 increased by 6% over the 2015 level, while motor vehicle mileage increased by only 3%. Further, the total deaths in 2016 is 14% over 2014 levels and represents the highest number of deaths since 2007.<sup>9</sup>

In 2015, the most recent year for which data is available, 5,376 pedestrians were killed by a car—466 people more than in 2014, or more than a 9% increase. Pedestrian fatalities represented 15% of all traffic fatalities in 2015. On average, a pedestrian was killed every 1.6 hours and injured every 7.5 minutes.<sup>10</sup> Between 2005 and 2014, Americans were 7.2 times more likely to die as a pedestrian than from a natural disaster.<sup>11</sup>

Recently released statistics for 2015 show 818 bicyclists killed in motor vehicle crashes nationwide, a 12.2% increase from 729 bicyclists killed in 2014. These numbers represent 2.3% of all motor vehicle fatalities.<sup>12</sup>



Of additional concern is the disproportionate rate at which traffic violence impacts disadvantaged or vulnerable populations. Nationally, people of color and older adults are overrepresented among pedestrian deaths. Non-white individuals account for 34.9% of the national population but make up 46.1% of pedestrian deaths. Older adults are similarly at higher risk: individuals 65 years or older are 50% more likely than younger individuals to be struck and killed by a car while walking.<sup>13</sup>

The emergence of distracted driving as a significant factor in crashes, injuries, and fatalities is another important trend. The National Highway Traffic Safety Administration defines distracted driving as occurring when drivers divert their attention from driving to another activity. While cell phone usage and texting are most frequently associated with distracted driving, eating, talking to passengers, and adjusting radio or climate controls

<sup>9</sup>[www.nsc.org/newsdocuments/2017/12-month-estimates.pdf](http://www.nsc.org/newsdocuments/2017/12-month-estimates.pdf)

<sup>10</sup>National Highway Traffic Safety Administration. Traffic Safety Facts: Pedestrians 2015 Data.(2017). Available at [crashstats.nhtsa.dot.gov/api/public/viewpublication/812375](http://crashstats.nhtsa.dot.gov/api/public/viewpublication/812375)

<sup>11</sup>Smart Growth America (2016) Dangerous by Design 2016[PDF file], p. II. Available at [www.smartgrowthamerica.org/dangerous-by-design/](http://www.smartgrowthamerica.org/dangerous-by-design/)

<sup>12</sup>National Highway Traffic Safety Administration. Traffic Safety Facts: Bicyclists and Other Cyclists 2015 Data.(2017). Available at [crashstats.nhtsa.dot.gov/api/public/viewpublication/812382](http://crashstats.nhtsa.dot.gov/api/public/viewpublication/812382)

<sup>13</sup>Smart Growth America (2016) Dangerous by Design 2016[PDF file], p. IV.

all contribute to driver distraction.<sup>14</sup> A two-second distraction can increase your likelihood of crashing by twenty fold.<sup>15</sup>

In 2015, 10% of fatal crashes and 15% of crashes with an injury were reported to be impacted by distracted driving. Fatalities in these crashes numbered 3,477 nationwide, including 551 non-occupant deaths including pedestrians, cyclists, and other bystanders. Data collection related to distracted driving relies on police crash reports, and given the challenges of identifying distraction as a factor in crashes and ensuring it is reported, underreporting seems likely. Changes to methodologies in data collection at the national level also make it difficult to identify trends in distracted driving over time.<sup>16</sup>

Anecdotally, drivers seem more distracted than ever before. Smartphones have become a ubiquitous part of our lives, providing constant distraction, including in the car. A recent study<sup>15</sup> looked at 3.1 million drivers who took more than 570 million trips between December 2016 and February 2017. The study found that drivers used smartphones on 88% of trips, actively using them on average 3.5 minutes out of every hour on the road.

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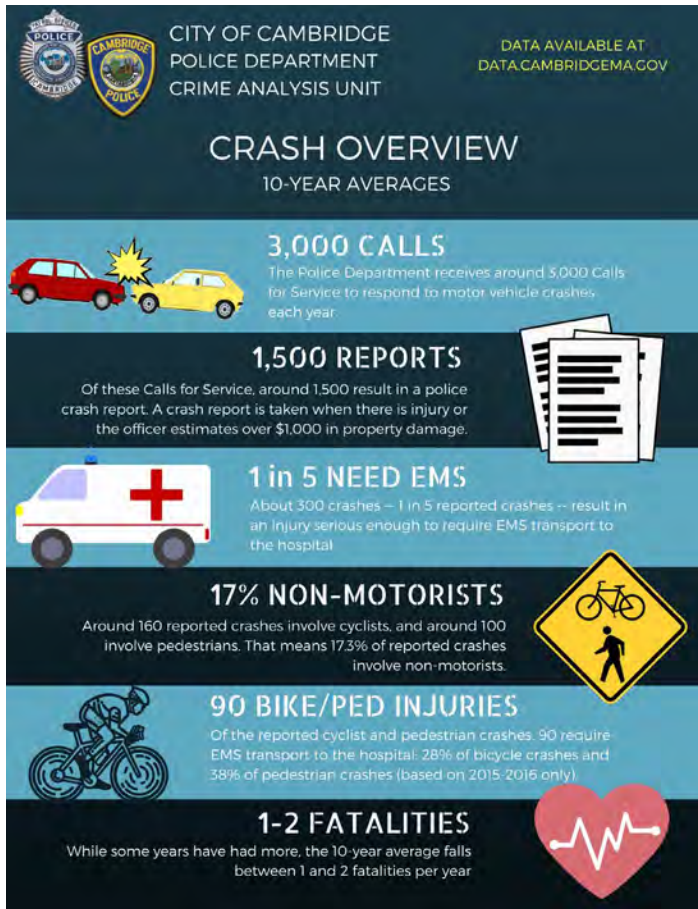
<sup>14</sup><https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812381>

<sup>15</sup>Zendrive (2017) Zendrive Research: Largest Distracted Driving Behavior Study. April 2017 [PDF file] p. 3. Available at <https://www.zendrive.com/datastudy/distracted-driving/>

<sup>16</sup><https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812381>

# 8. LOCAL SAFETY TRENDS

While Cambridge benefits from a long history of support for walking, bicycling, and transit, our dense, urban environment does pose challenges. While Cambridge’s crowded, narrow streets result in lower and safer speeds, we also have less street real estate available for the competing needs of people who drive, bike, walk, and take transit. Additionally, a significant amount of vehicular traffic in Cambridge passes through with no origin or destination within the city, on roads that are not under local control.

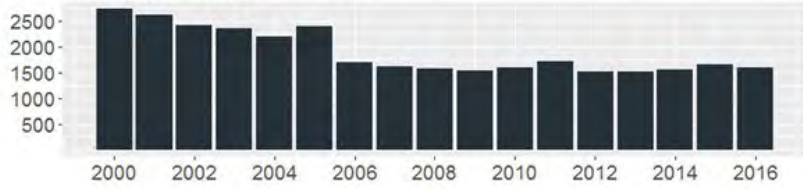


In Cambridge, the majority of traffic crashes exclusively involve motor vehicles; on average only 17% of reportable crashes involve people biking or walking. Motor vehicle crashes have fallen since the early 2000s, and crashes involving pedestrians have been generally steady over time. In contrast, crashes involving cyclists have exhibited much more variability. Bicycle crashes increased from the mid-2000s to the early 2010s, corresponding with the increase in bike ridership. However, in spite of continued increases in ridership, bicycle crashes have trended downward since 2012, and normalizing the crash data for increases in bike ridership, the bike crash rate has generally trended downward in recent years.

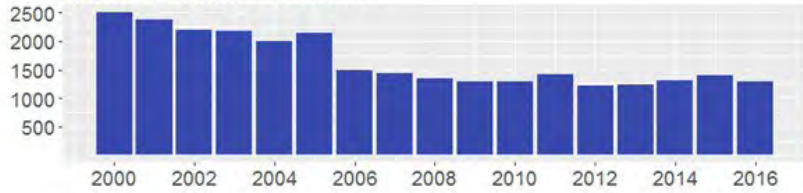
Studies have shown that cyclists and pedestrians benefit from safety in numbers; with more non-motorists on the road, drivers are more likely to be cautious of cyclists and pedestrians. As a result, a cyclist or pedestrian is less likely to be involved in a collision.

While local trends have been positive, two pedestrians and two cyclists were killed in Cambridge in 2016. This tragic year highlighted the need for Vision Zero in Cambridge.

### All Reportable Crashes



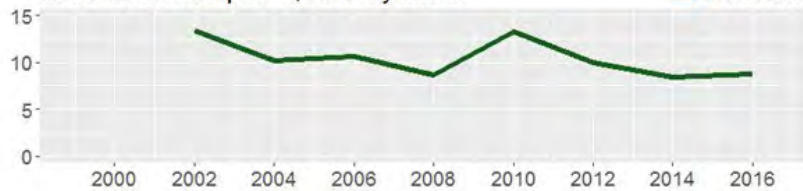
### Motor Vehicle Crashes



### Non-Motor Vehicle Crashes

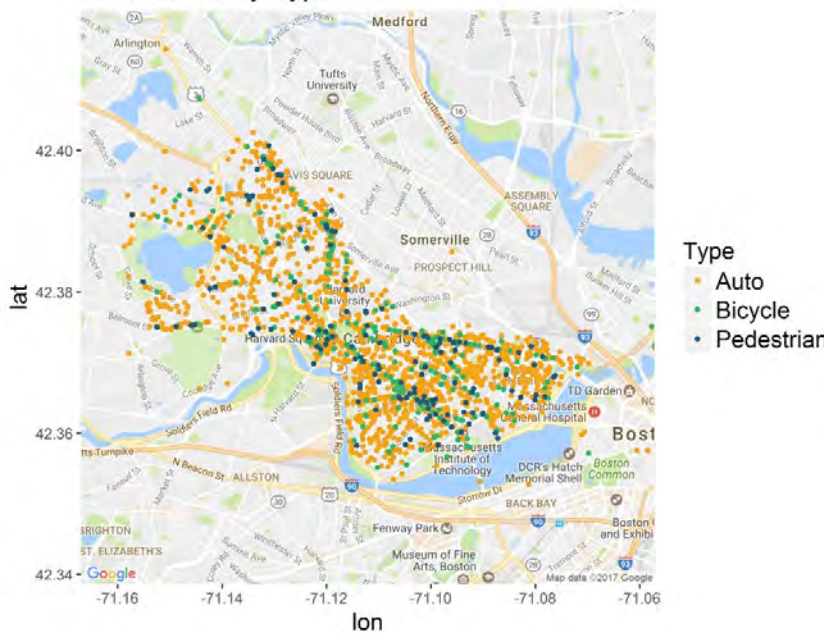


### Bike Crashes per 1,000 Cyclists



■ Bicycle  
■ Pedestrian

### All Crashes by Type



Reportable crashes are broadly distributed across the city. Crashes of all types occur most frequently along Massachusetts Avenue near Central Square, Harvard Square, and Porter Square, as well as along Cambridge and Hampshire Streets near Inman Square. In 2015 and 2016, these four areas together accounted for 21% of all crashes, 30% of all bicycle crashes, and 27% of all crashes with EMS transports. The total number of crashes generally correlates with where the greatest number of people are traveling. This is why it is important to evaluate crash rates to identify the most dangerous locations.

# 9.

## WHY VISION ZERO?

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The need to commit to Vision Zero and create this type of action plan is absolutely clear when viewed against a series of national trends and emerging issues that create both challenges and opportunities with respect to the safety of our transportation system. As described above, the long-term national trend of declining fatalities has now started to head in the opposite direction. Paired with rapidly evolving transportation technologies, the potential for both positive and negative impacts is increased.

- The increase in distracted driving is a threat to all transportation users, and is particularly acute in a complex urban environment such as Cambridge where there are already multiple distractions, a wide range of users, and where a moment of inattention can lead to tragedy.
- The increase in local delivery activity that has accompanied the continued rise of online retail has added a significant number of large vehicles, often operating in a suboptimal manner and adding to the chaotic feel of many urban streets.
- Similarly, the rise of Transportation Network Companies (TNCs) like Uber and Lyft, while convenient for users, has created a new class of vehicle operators in urban environments, who are at times driven by economic and customer service concerns, sometimes at the expense of safe operations. These same drivers may also have less access to training and safety education than other professional drivers.
- The ongoing development of automated vehicles (AVs) creates both opportunities and threats in terms of safety. Done properly, an AV could be much safer than a conventional human-operated vehicle, taking advantage of advanced sensors, communications among vehicles, and high speed processing to observe and adapt to a complex urban environment. However, an AV without the proper technology and development to handle these situations could be a menace on urban streets, particularly when a driver is expected to play a partial—but diminished—role in operating the vehicle. While AV technology is advancing and local, state, and federal agencies have begun to tackle the policy and regulatory issues related to AVs, there is tremendous uncertainty and need for further research around these issues.
- Ongoing uncertainty about diminishing funding sources for transportation at the Federal, State, and local levels makes it more difficult to find money to pay for transportation projects. And while safety is often stated as the number one priority, safety-related concerns can often be outweighed by potential reductions in travel time or congestion when economic cost-benefit analysis is a factor in decision-making. It is essential to keep safety at the forefront of decision-making.

With all of these factors in play, Vision Zero is a critical addition to the conversation around transportation, public health, sustainability, and ensuring that the safety of those who travel in Cambridge is a paramount consideration.

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## **VISION ZERO IS A PUBLIC HEALTH ISSUE.**

Each year, more than 40,000 people are killed in traffic crashes, a preventable epidemic that must be addressed with the same data-driven rigor used by public health officials to address any other epidemic.<sup>17</sup> Ensuring active transportation is a safe and feasible option also enables an active lifestyle and better overall health for all community members. In Cambridge, Vision Zero is embedded in Cambridge's Community Health Improvement Plan, as part of its Healthy Eating and Active Living health priority area.

## **VISION ZERO IS A PUBLIC SAFETY ISSUE.**

Traffic violence impacts the safety of the general public every day, with the same negative outcomes we see from crime, natural disasters and other public safety issues.

## **VISION ZERO IS A QUALITY OF LIFE ISSUE.**

Safe streets create a walkable, bikeable environment that is welcoming and safe for people of all ages and abilities.

## **VISION ZERO IS AN EQUITY ISSUE.**

Traffic violence, or the harm crashes cause to road users, disproportionately impacts disadvantaged and vulnerable populations.

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<sup>17</sup><http://visionzeronetwork.org/project/the-central-role-of-public-health-in-vision-zero/>



# 10.

# WHAT IS THE ACTION PLAN?

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This Action Plan is a blueprint of steps we need to take, as a municipal government and as a community, to reach Vision Zero. The Action Plan is organized around a set of seven high-level commitments. Within each commitment, there are concrete action items that support and move us toward Vision Zero.

## To reach Vision Zero we will:

- A. Design and operate safe streets.**
- B. Improve large vehicle, taxi/for-hire vehicles, and TNC safety.**
- C. Ensure equity in all efforts.**
- D. Lead by example.**
- E. Engage the public.**
- F. Create partnerships.**
- G. Use data to direct efforts and measure our progress.**

In addition to these commitments, there are five cross-cutting themes common to all our Vision Zero efforts. These themes include data driven decision-making, equity, mode share shift, collaboration, and public health.

**Data Driven Decision-making:** The City will ensure that the policies we implement and the interventions we make are as effective as possible by leveraging data to guide policy and decision-making. The City will ensure that all elements of Vision Zero, from infrastructure improvements to changes in policy and strategy are evidence-based and data driven, and that their impacts are measured and evaluated for effectiveness, to inform future projects, and to achieve meaningful outcomes.

**Equity:** While we have a commitment specifically related to ensuring equity in our Vision Zero efforts, we must be vigilant to consider issues of equity in every action we take. The Vision Zero process will consider and address equity in all planning, decision-making, implementation, and programming.

**Mode Share Shift:** As we promote safe and sustainable transportation, we promote the shift away from single occupant vehicles to support citywide goals to reduce greenhouse gas emissions and to improve our environment. This also supports the safe operation of streets, the health of residents, visitors, and workers, and the growth of safe networks for people who walk, bike, and use transit.

**Collaboration:** Successful collaboration has been identified as one of the most important elements of successful Vision Zero efforts across the world. We will collaborate and encourage collaboration on every level, across City departments, with other municipalities, the Commonwealth of Massachusetts, advocates, and residents, and through partnerships with the private sector, not-for-profit, and public health organizations.

**Public Health:** Safeguarding public health is a key government responsibility, and a safe transportation system is essential to this. From enabling easy access to healthcare and healthy food to providing safe opportunities for exercise and an active lifestyle, public health and transportation go hand in hand.

The Cambridge Vision Zero Working Group created this draft action plan. The Working Group is made up of staff members from many municipal departments, including Traffic, Parking and Transportation, Community Development, the Police Department, the Commission for Persons with Disabilities, the Public Health Department, and Cambridge Public Schools, among others. See Appendix A for a full list of departments on the working group.

This action plan is a living document that we will revisit regularly, adding and changing as we make progress and measure our effectiveness in meeting our commitments and our ultimate goal of zero fatalities and serious injuries. Going forward, we will work to incorporate guidance from the Vision Zero Advisory Committee (details on p. 43) as well as feedback we receive as we engage the public.



# 11. ACTION PLAN INITIATIVES

*A. Design and Operate Safe Streets: The City will design and operate our streets to ensure that people of all ages and abilities can walk, bike, use transit, and drive safely.*



Photo credit  
Courtesy PEDS  
[www.peds.org](http://www.peds.org)  
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## Action Item: Lower Default Speed Limit To 25 Mph

**Description:** The Cambridge City Council approved the speed limit reduction on November 7, 2016, through the adoption of Section 193 of the Municipal Modernization Act. This section grants municipalities the right to lower speed limits in thickly settled areas. On Thursday, December 8, 2016, we lowered the speed limit on city-owned streets to 25 miles per hour (MPH), unless otherwise posted. This was an important step towards improving the safety of everyone who lives in, works in, or visits Cambridge, and is a significant component of the Vision Zero initiative.

Speed is one of the most important factors in traffic safety; crashes that occur at lower speeds cause less injury. In fact, a pedestrian hit by a car traveling 40 MPH has a 1 in 10 chance of surviving a crash, while a pedestrian hit by a car traveling 20 MPH has a 9 in 10 chance of surviving.

The City has posted the new speed limit at the city line at various locations, as permitted by state law and recommended by MassDOT. Additionally, the Cambridge Police Department received a \$50,000 grant to support and supplement speed enforcement and pedestrian safety. The City will also continue to promote awareness of the new speed limit and increase understanding of both this local change as well as the importance of speed reduction in improving the outcome of crashes. We will also work with neighboring communities including Boston and Somerville, to promote the adoption and the importance of the 25 MPH speed limit to make the whole region safer by creating a 25 MPH zone within the inner core. Finally, we will continue to advocate for 25 MPH speed limits on roads and bridges under state jurisdiction where the operating characteristics match those of local connecting roads.

### Fiscal Year 2018 goal\*

Launch Drive 25 campaign.

### 3-year goal

Continue outreach to educate the public on the speed limit.  
Develop improved methods to measure speed citywide.

\*The 2018 Fiscal Year runs from July 1, 2017-June 30, 2018. The 2019 Fiscal Year runs from July 1, 2018-June 30, 2019.

## Action Item: Special Slow Speed Zones

**Description:** In addition to lowering the default speed limit to 25 MPH, the City has several opportunities to impose special low speed Safety Zones.

The Cambridge City Council recently adopted Section 194 of the Municipal Modernization Act, which grants municipalities the right to create 20 MPH Safety Zones, without additional state approval. 20 MPH Safety Zones can be an effective tool to slow traffic on streets with high levels of pedestrian activity, on small neighborhood streets, and in



locations with vulnerable road users.

The City will develop a set of criteria to determine appropriate locations for “Safety Zones” within Cambridge. Considerations for criteria may include proximity to land-uses serving vulnerable populations such as senior centers and senior housing, parks, and hospitals.

In addition, over the years the City has created 34 25 MPH Slow Zones, based on engineering studies and with approval from the state. While these 25 MPH Slow Zones are now the same as the default speed limit,

they allow for additional regulatory speed limit signage that is otherwise prohibited. For this reason, we will keep the remaining 25 MPH Slow Zones and ensure they are all properly signed.

Finally, we will enhance our 20 MPH School Zones program. Currently, our traffic regulations list 29 School Zones and 15 School Zone flashers. We will conduct an audit of School Zones, ensuring that all appropriate signs are installed and School Zone flashers are set to appropriate hours. We also implement technology options to allow for remote programming of the School Zone flashers, ensuring better timing and fewer interruptions of service.

### Fiscal Year 2018 goal

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Develop criteria for 20 MPH Safety Zones. Update school flasher inventory.

### 3-year goal

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Implement improved technology for better control of School Zone flashers; establish 20 MPH Safety Zones in Squares; explore additional locations for Safety Zones; include Safety Zone into tool box of traffic calming solutions.

## Action Item: Improve Safety For All Modes In City Squares

**Description:** Cambridge's squares represent the centers of social and economic life in the city. It is essential that we create a safe environment for all users of the squares, especially for people who walk, bike, and take transit. The City will increase safety and improve the operations of squares for all users. We will prioritize evidence-based decision making for upcoming traffic improvements, evaluating historical crash and citation data to identify the areas of highest need and the most effective strategies for optimum safety improvement.

Starting in 2017, we will design and start construction on an improved, safer, Inman Square. In 2018 we will overhaul the operation of the Porter Square intersection, providing simplified signal operations, more attractive functioning of the jug handle for cyclists turning left onto Somerville Ave., better pedestrian crossings and fewer conflicts for all modes. Safety improvements have recently been completed in Kendall Square, and additional enhancements are being planned for Central Square, Harvard Square, and Lechmere (as part of the Green Line Extension and the development of the North Point district). As changes are implemented, we will be measuring and evaluating improvements, making adjustments and additional interventions as needed.

### Fiscal Year 2018 goal

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Start reconstruction of Inman Square.

### Fiscal Year 2019 goal

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Complete reconstruction of Inman Square, implement changes to Porter Square.

### 3-year goal

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Incorporate additional Square improvements into the Five Year Plan for Streets and Sidewalks based on data analysis and feedback from the Envision Cambridge planning process, and the Cambridge Bicycle Plan.

## Action Item: Establish Rapid Response Protocol For Fatalities And Serious Injuries.

**Description:** The City will develop a Vision Zero Rapid Response Protocol to guide our response to fatalities and serious injuries. While the goal of Vision Zero is to eliminate all traffic-related deaths and serious injuries, until we reach zero it is essential to plan for and address the immediate aftermath of a fatal or serious crash. Tragic incidents impact those who are directly involved, their families, friends, co-workers, and the entire surrounding community.

Elements of the protocol will include deployment of the Cambridge Community Response Network, establishment of an incident response team to evaluate and analyze each fatality and serious injury, fast tracking of after-incident recommendations, and efforts to establish

formal protocols for coordination with state agencies when crashes occur on facilities outside of City jurisdiction.

The Cambridge Community Response Network (CCRN) was established by the Cambridge Public Health Department, the Police Department, the Department of Human Service Programs, Peace Commission, Emergency Communications, and the Public Schools to respond to both the immediate and long-term impacts of trauma on a community. CCRN helps residents, students, and those who work in Cambridge identify the various tools and resources needed to build resiliency and better recover from a traumatic episode. The Rapid Response Plan will include a process to activate the network in the event of a fatal or serious crash to help support everyone impacted by the tragedy, whether it be friend, family or local community of a victim, bystanders, responders, or anyone struggling to deal with the trauma of the crash.

The Rapid Response protocol will also establish an incident response team made up of representatives of City departments as well as members of the Vision Zero Advisory Committee. While police investigation of a fatal or serious crash takes significant time during which details and findings cannot be made public, the Vision Zero response team will complete a site visit at the locations of any fatality or serious injury within 3 business days of the crash. The team will evaluate and analyze the crash site, conditions, and known details of each incident in order to make recommendations to the City for action, including measures such as street design changes, educational efforts, community outreach, or support. Short-term recommendations will be reviewed and implemented by relevant departments within 30 days whenever feasible. We will develop a plan for implementing longer-term, larger scale changes within 60 days of the incident, if such changes are warranted.

In Cambridge, many of the most highly traveled, and highest speed roadways are not under City jurisdiction. These same roadways, including Fresh Pond and Alewife Brook Parkways and Memorial Drive, provide pedestrian and bicycle access to important natural and recreational resources, as well as to key regional multi-use paths. We will work to establish a formal process to work with the State if traffic related fatalities or serious injuries occur on these roads. If necessary, the City will work collaboratively with other Massachusetts Vision Zero communities to ensure the State is supporting our Vision Zero goals.

**Fiscal Year 2018 goal**

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Establish formal rapid response protocol.

**Fiscal Year 2019 goal**

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Develop a framework to coordinate with state agencies to respond to crashes on state roads.

**3-year goal**

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Continue to implement and refine protocol; monitor incidents and incorporate findings into other Vision Zero action items whenever appropriate.

## Action Item: Grow Network Of Separated Bike Lanes

**Description:** The City will take advantage of opportunities to further develop a network of separated bike lanes in key locations that improve safety and mobility. This will include separated bike lane retrofit projects (quickly implemented lanes created with pavement markings separated with flexible delineators and parking), incorporation of separated bike lanes on City and private development street reconstruction projects, and the evaluation of existing bike lanes for opportunities to add separation. The City will use data-driven strategies and community input to identify locations with the greatest need for separation and prioritize these areas for implementation. We will track the efficacy of separated bike lanes on an ongoing basis, evaluating the occurrence of incidents and seeking feedback from the community in order to inform future separation projects.

In December 2016, the City installed two separated bike lane demonstration projects using temporary materials. The goal of these demonstrations was to allow the City to gain experience with the installation and maintenance of flexible delineators, as well as the ongoing maintenance and operations activities such as street sweeping, snow clearance, and catch basin cleaning. At the same time, the demonstration projects provided an opportunity for a short-term expansion of the bicycle network. The two locations selected for the demonstrations were identified as adding meaningfully to the safety of the system, having limited impacts, and were believed to be maintainable. The installation locations were:

- Massachusetts Avenue Northbound (east/odd side of the street) from Sidney Street to Douglass Street
- Massachusetts Avenue Northbound (east/odd side of the street) from Waterhouse Street to Everett Street

The Fiscal Year 2017 Participatory Budgeting process provided another opportunity to introduce additional separated bike lanes. The “Separate Bike Lanes from Traffic” project provided \$50,000 in the Fiscal 2017 budget specifically to implement parking separated bike lanes. Separated bicycle lanes were installed at two locations during the summer of 2017:



- Mass Ave (Trowbridge Street to Quincy Street)
- Brattle Street (Eliot Street to Mason Street)

Also in the summer of 2017, the City implemented the first of our larger separated bike lane installations on Cambridge Street between Harvard Square and Inman Square, using flexible bollards and parking to provide separation. Through a robust community processes and using lessons learned from the Cambridge Street project, we will identify additional locations for future installations. The process of the first installation will also inform how quickly we can execute additional installations.

As new above grade bike facilities have come on line City crews have been clearing them during and immediately after storms. With new on street protected facilities coming on board last winter and into the future, DPW is working with other City departments to develop snow clearing procedures which meet our current practices in other areas. Finally during significant events DPW will also work with other departments to place message boards in strategic locations throughout the city to warn both motor vehicles and bicyclists of road conditions and the importance of sharing the street.

**Fiscal Year 2018 goal**

Implement and evaluate 3 separated bike lane projects.

**Fiscal Year 2019 goal**

Implement and evaluate 3 separated bike lane projects.

**3-year goal**

Establish protocols for evaluation and implementation of additional separated lanes. Incorporate projects in the 5-Year plan for Streets and Sidewalks

**Action Item: Enhance Intersection Safety**

**Description:** Intersections introduce significant potential conflict between modes; it is essential that we design intersections to minimize conflicts and allow all users to navigate safely.

The City has a toolbox of engineering improvements that can be applied to intersections to improve safety. We will evaluate intersections to prioritize high crash locations and identify evidence-based strategies on a case-by-case basis. We will evaluate the occurrence of crashes and citations before and after implementation in order to track the efficacy of traffic changes. Some of the items in our safety toolbox include:

- Turning Vehicle Improvements
  - Exclusive turn lanes
  - Protected left and right turn signal phases
  - Turn restrictions





- Pedestrian and Bicycle Signal Phasing



- Lead Pedestrian Intervals (LPIs): Allow pedestrians to start their crossing several seconds before parallel vehicle traffic gets a green light. Appropriate at locations where pedestrians cross with concurrent vehicle movements, which include turning conflicts.
- Leading Bike Intervals (LBIs): Allow people biking to enter the intersection prior to vehicles, using bicycle signals, to maximize visibility where concurrent turning movements cross separated bike facilities.



- Concurrent protected pedestrian and/or bicycle phases: Allow pedestrians and/or bicyclists to move concurrently with adjacent traffic free from conflicts. This requires turn restrictions or protected turn phases to eliminate conflicts.
  - Exclusive phases: Where other signal phasing for vulnerable users is either not possible or not appropriate, exclusive phases allow pedestrians or bicyclists to cross at an intersection while all vehicular traffic is stopped.
  - Bicycle Specific Signals: Bicycle signals make crossing intersections safer for people biking by clarifying when to enter an intersection and by restricting conflicting vehicle movements.
- Accessible Pedestrian Signals
- Sight Distance
  - Daylighting (removing parking or other fixed objects) to improve sight distance to and from side streets.
  - Locating crosswalks to maximize visibility.
  - Daylighting to improve sight distance to and from crosswalks.

- Pavement Markings

- Crosswalks: Crosswalks should be provided across all legs of an intersection where connecting sidewalks exist and pedestrian demand warrants a crossing.
- Bicycle box: Provides an opportunity for bicyclists to line up in front of vehicles at a red signal to improve visibility and allow for safe turns.



- Two-stage turn queue box: Provides guidance to allow cyclists to enter the intersection, move to the right, and wait for the signal change to complete a left turn with fewer conflicts by moving concurrently with traffic from the other direction.
- Intersection crossing markings: Bike lane markings continue across the intersection to delineate travel paths and highlight potential conflict points.



- Green pavement markings: Green markings should be provided to mark critical areas of bicycle facilities including conflict zones and intersection control features. This draws the attention of both people biking and driving to improve compliance and safety.
- Remove unwarranted signals that decrease safety. Drivers, cyclists and pedestrians often ignore unwarranted signals, reducing overall safety. The City will continue to remove these unwarranted signals as appropriate, replacing them with more effective traffic control devices and traffic calming improvements.

#### Fiscal Year 2018 goal

Install green markings at 20 intersections.

#### Fiscal Year 2019 goal

Create Intersection Improvement Plans for two high crash locations not being addressed by other projects. Improve line of sight conditions at 5 locations. Install green markings at 20 intersections.

#### 3-year goal

Execute two Intersection Improvement Plans. Create and execute Intersection Improvement Plans for at least 2 intersections per year. Develop ongoing program for line of sight improvements.

## Action Item: Traffic Calming



**Description:** The connection between speed and negative outcomes for victims of crashes is clear. In addition to lowering speed limits, traffic calming changes the physical environment to slow vehicular traffic and reinforce safe driver behaviors, creating streets that are designed so that people drive at speeds appropriate to the environment. Traffic Calming involves the creation of physical and visual cues, using a variety of tools such as speed tables, sidewalk curb extensions, landscaping, and roadway markings that slow the speed of traffic and increase safety. In general, traffic calming changes to streets are constructed in conjunction with other road work such as paving, sidewalk reconstruction or significant utility work.

The City will continue to work with neighborhoods to address safety concerns through the Traffic Calming program, overseen by CDD. In addition, the City now considers traffic calming a standard tool for street designs, and elements such as raised crossings and sidewalk curb extensions are regularly incorporated into capital reconstruction projects. Traffic calming elements will also be considered for installation as the City proactively identifies locations in need of safety improvements as part of our overall Vision Zero efforts.



### Fiscal Year 2018 goal

Install raised intersection at Healy Street.

### Fiscal Year 2019 goal

Complete community process for Sixth Street.

### 3-year goal

Continue Traffic Calming program; continue to integrate traffic calming elements into the Five Year Plan for Streets and Sidewalks.

### Action Item: Safe Routes To Transit

**Description:** Transit is key to Cambridge's future. Ensuring that all users, from the oldest to the youngest, can safely access transit is critical to ensuring safe mobility across Cambridge. Building off the existing Bus Stop Improvement Fund, which provides funds to improve conditions at select bus stops around the city, we will identify problem areas and make improvements at key transit locations, improving access and safety for transit users. This could include adding crosswalks, repairing sidewalks, improving lighting, adding bus shelters, and other improvements.

#### Fiscal Year 2018 goal

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Install Green Street at Pearl Street bus bulb to alleviate crowding.

#### Fiscal Year 2019 goal

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Implement safety improvements at 3 bus stop locations.

#### 3-year goal

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Complete evaluation of all bus stops to identify potential access and safety improvements



### Action Item: Safer Pedestrian Crossings

**Description:** Pedestrian crossings at non-signalized locations can be challenging, particularly on streets with more than one lane in each direction. We are addressing the safety challenges of these locations in a variety of ways. We are currently undertaking an evaluation of the recently installed Pedestrian Hybrid Beacons and several types of pedestrian activated flashing beacons around the city. The results of this evaluation will guide our use of these devices moving forward. To support

these efforts, Cambridge residents approved the *Safer Crosswalks for Busy Roads* project as part of the Fiscal Year 2018 set of Participatory Budgeting projects. The project will provide \$104,000 to install rectangular rapid flash beacons (RRFB) at six locations around the city. The budget proposal included a list of suggested locations that will be evaluated by the Traffic, Parking, and Transportation, CDD, and Public Works departments.

We are also working to reduce the number and design of multi-lane uncontrolled pedestrian crossings. Multi-lane uncontrolled pedestrian crossings are generally associated with higher crash rates. Options for improving safety include reducing the number of lanes, using a signal to control the crossing, or using other improvements such as curb extensions or crossing islands.



Finally, we will improve visibility at intersections for drivers and pedestrians by restricting parking close to crosswalks and intersections.

### **Fiscal Year 2018 goal**

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Install 2 Rectangular Rapid Flash Beacons (RRFBs).

### **Fiscal Year 2019 goal**

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Install remaining RRFBs funded by participatory budgeting. Restrict parking to improve sight distances at 20 key locations, based on crash analysis and feedback from the public.

### **3-year goal**

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Complete review and mitigation of all multi-lane uncontrolled pedestrian crossings.

## Action Item: Enforcement

**Description:** Enforcement is an important component to the success of Vision Zero. Enforcement of traffic laws and regulations encourages safe behavior on the part of all road users. In addition, enforcement is a key component necessary to ensure adoption of new Vision Zero policies like the 25 MPH speed limit, turning restrictions, and other targeted behaviors.



The goal of the Cambridge Police Department's Traffic Unit is to serve the community by enforcing the motor vehicle traffic laws of the Commonwealth as well as reducing the number and severity of crashes in the city. The unit is charged with enforcing laws and regulations for all road users, including people who drive, bike, and walk. Most of the current enforcement programs are a direct response to community complaints regarding speeding and other violations. The ultimate goal is to foster greater traffic safety for motorists, bicyclists, and pedestrians.

The Traffic, Parking and Transportation Department's Parking Control Officers enforce parking regulations, with an emphasis on safety related infractions such as no stopping violations, parking in bus stops, parking in bike lanes, blocking pedestrian ramps, disability parking spaces, and other safety-focused violations.



Traffic enforcement will support the goals of Vision Zero, will reflect the values of our community, and will aim to change behaviors of all modes towards a safer Cambridge. As part of Vision Zero, enforcement will focus on factors and behaviors that are known to contribute to traffic related crashes.

Enhanced enforcement against vehicles stopping and parking in bus stops and bike lanes means more predictable and safer travel for all modes. When a bus stop is blocked, transit riders are forced to exit the bus in the street, risking their safety as well as that of passing people biking. Drivers who block bicycle lanes cause hazards for people who bike, walk and drive, as cyclists must move unpredictably into traffic to avoid the hazard.

In addition to issuing violations, police officers take a proactive role in educating road users on their responsibilities as drivers, cyclists, and pedestrians. Officers take every opportunity to educate the public on the rules of the road, whether it is a driver making an illegal left turn, a cyclist running a red light, a pedestrian crossing against the light at a signalized intersection, or a passerby stopping at an educational table set up in one of our Squares.

The City will work to ensure that enforcement strategies are evidence-based and rooted in crash and citation data, and that all departments are working together to implement complementary strategies. We will track key safety metrics to evaluate the efficacy of any directed changes in enforcement.

#### **Fiscal Year 2018 goal**

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Use current \$50,000 grant to enhance existing speed and pedestrian safety enforcement.

#### **3-year goal**

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Continue to apply for grant funding opportunities. Incorporate additional data analysis into decision-making process for use of enforcement resources.

### **Action Item: Change Infrastructure, Roadway Layout, And Curb Usage To Prevent Stopping And Parking In Bike Lanes, Crosswalks, And Pedestrian Ramps**

**Description:** As roads are redesigned, the City will work to create physical infrastructure that will inherently prevent people from parking illegally in unsafe locations, blocking bike lanes, crosswalks, and pedestrian ramps, or disability parking. This will include the installation of separated bike lanes as discussed earlier in this document. In addition, we will make changes to how we manage our curbside space to provide safe locations for deliveries and drop-off/pick up for taxis and TNCs. We will explore the need for expanded loading zones during peak periods of the day. Providing appropriate space for these activities will decrease intrusions into bike lanes, crosswalks, and pedestrian ramps. The City will emphasize cross-agency collaboration to ensure that changes to infrastructure are jointly strategized and appropriate changes to enforcement are considered. We will monitor safety metrics to track the efficacy of these changes.

#### **Fiscal Year 2019 goal**

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Based on analysis of for-hire driver dooring crashes, pilot dedicated pick-up/ drop off zones at three locations. Based on analysis of pedestrian crashes, pilot installation of protected pedestrian zones using flexible bollards at 2 crosswalk locations.

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***B. Improve Large Vehicle, Taxi/For-Hire Vehicles, and TNC Safety: The City will minimize the negative impacts of large vehicles, taxis/for-hire vehicles, and Transportation Network Company vehicles, while ensuring they can provide necessary services to Cambridge residents, students, workers and visitors.***

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**Action Item: Improve Understanding Of Impacts Of Large Vehicle Delivery In Cambridge**

**Description:** The City will undertake a delivery solutions study that will consider a number of issues related to truck deliveries and how they interact with other road users. This is a particularly important safety issue for vulnerable users for several reasons:

- The interaction between trucks and vulnerable users such as cyclists and pedestrians can be dangerous, and can lead to serious injuries and fatalities.
- Truck drivers sometimes stop in bike lanes, either because they want to be closer to their delivery location than the nearest loading zone or because no loading zone space is available.
- As we install more facilities that require restricting curbside functions, the demand for truck loading remains, so it is important that we provide options for that loading activity to occur. Loading activities will not simply disappear in the face of new regulatory signage.

The scope of the study includes evaluating best practices for managing, enforcing, and potentially pricing truck loading zones and developing recommendations for policy, operational, and enforcement changes. The study will include national and international best practices, and will develop case study solutions for specific locations within Cambridge. In addition, the study will include significant outreach to local and national delivery companies, local businesses, institutional stakeholders, and freight/logistics experts. The City will also work closely with other nearby municipalities, regional partners, and state agencies to better understand how we can jointly develop local and regional solutions related to truck safety.

The study is expected to take six to nine months to complete, and should be finalized by early 2018. To the extent that the study produces any early action items that can begin to be implemented prior to completion, we will attempt to move these forward as quickly as possible, particularly if they relate to critical safety issues.

**Fiscal Year 2018 goal**

Complete Delivery Solutions Study.

**3-year goal**

Implement recommendations from Delivery Solutions Study



## Action Item: Increase Adoption Of Truck Side Guards In Cambridge

**Description:** In a dense urban environment like Cambridge, large trucks operate side by side with cyclists and pedestrians every day. From the food we eat to the clothes we wear, large vehicles deliver the goods we need to live. However, large vehicles have a disproportionately negative impact on traffic safety.

In 2015, the Department of Public Works (DPW) partnered with the US Department of Transportation Volpe National Transportation Systems Center in Kendall Square to install equipment on heavy-duty vehicles in the DPW fleet to improve safety for pedestrians and cyclists. Side guards are installed to make sure pedestrians and cyclists are not swept under a heavy-duty vehicle in the event of a side-impact crash. Additional mirrors are installed to reduce blind spots and improve the ability to see cyclists and pedestrians near large vehicles.

The Fiscal Year 2017 budget included \$150,000 for the pilot. Six trucks were outfitted with side guards and mirrors. In the coming year, the City will plan for and start to install truck side guards and mirrors on all eligible vehicles in the City fleet. Furthermore, City staff will bring a local ordinance to the City Council that will require the installation of truck side guards and mirrors on all eligible vehicles belonging to businesses with contracts with the City. We will also encourage our local institutional partners, like Harvard and MIT, to include side guard and mirror requirements in their contracts.

The City will also develop an outreach and education program for the trucking industry to encourage voluntary installation of truck side guards and mirrors on all trucks. Outreach will target companies that operate large vehicles in Cambridge, with specific attention paid to companies involved in crashes within the city.

### Fiscal Year 2018 goal

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Introduce draft truck side guard ordinance to the City Council. Continue coordination with the City of Boston on side guard issues.

### Fiscal Year 2019 goal

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Complete installation of side guards on all eligible City-owned vehicles. Expand regional cooperation on side guard issues to additional neighbors in the region.

### 3-year goal

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Establish outreach program to encourage voluntary adoption of truck side guards, pursue state legislation on truck side guards.

## Action Item: Truck Safety Education For People Who Walk Or Bike

**Description:** The operation of large vehicles on city streets is challenging for operators. While it is clearly the driver's responsibility to operate their vehicle safely, educating people who bike and walk about large vehicle blind spots as well other challenges related to operating in the city helps people protect themselves.

Information about blind spots is included in educational materials for people who travel around Cambridge, such as the Street Code, which includes visuals that demonstrate blind spots. The City also brings large vehicles to community events to demonstrate how side guards work, and to allow residents to experience and understand truck blind spots in a safe and hands-on way.

### Fiscal Year 2018 goal

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Increase number of "Touch-a-Truck" events from 3 to 5; distribute 1,000 Street Code pamphlets.

### 3-year goal

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Develop additional materials for public education.



## Action Item: Tour Bus Safety

**Description:** Cambridge is a popular destination for visitors, attracting tour buses every day to sites around the city, including MIT, Harvard, Cambridge Common, North Cambridge, and the Alewife station. Building on past outreach, the City will develop materials for outreach and education for tour bus operators. Materials will focus on road safety, compliance with truck exclusions, use of legal and safe pick-up/drop-off, and parking locations, and blocking bike lanes. Additional enforcement efforts will be deployed as needed.

### Fiscal Year 2019 goal

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Explore current conditions related to tour buses including data collection. Continue coordination with local universities and institutions on tour bus issues.

### 3-year goal

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Roll-out expanded Tour Bus Safety education program.

### Action Item: “Watch For Bikes” Stickers For Taxis, TNCs, And Car Share Vehicles

**Description:** For several years, the License Commission has been installing passenger side window “Watch for Bikes” decals on all taxis during their mandated inspections. Additionally, Zipcar installed “Watch for Bikes” decals on all vehicles in their fleet in winter of 2016.

#### Fiscal Year 2018 goal

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Updated installation of “Watch for Bike” stickers on all taxis, including driver mirror stickers and passenger door stickers. Work with new car share companies to install “Watch for Bike” stickers.

#### Fiscal Year 2019 goal

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Start discussions with TNC companies to distribute driver mirror and passenger door stickers to TNC Drivers.

### Action Item: Coordination And Education For TNCs And Car Share Companies



**Description:** In recent years, the emergence of the sharing economy has introduced novel modes of transportation to serve the needs of Cambridge residents. Car sharing companies like Zipcar and TNCs like Uber and Lyft have changed the way we travel around Cambridge and the region. At the same time, these services have also introduced challenges such as drivers who may not be familiar with driving in Cambridge and a significant increase in pick-up and drop-off activities at the curb.

Data analysis has shown that doorings, or crashes that occur when drivers or passengers open their car doors into oncoming cyclists, are the most common type of crashes involving TNC drivers. We will use that information to target our education and outreach. The City will work with TNC and car share companies such as Zipcar and Uber to improve cooperation and enhance education for drivers. The City will hold meetings with these stakeholders, and will identify opportunities for training and education for their drivers.

#### Fiscal Year 2018 goal

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Start discussion with TNC companies to develop a safety education program for TNC drivers. Coordinate with the City of Boston and other local municipalities to coordinate efforts.

#### 3-year goal

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Roll-out safety education program for TNC drivers.

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***C. Ensure Equity in Vision Zero: The City will ensure all Vision Zero efforts promote equity and inclusiveness and protect people of all ages and abilities, paying particular attention to vulnerable and underserved populations.***

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**Action Item: Complete Roll-Out Of Accessible Pedestrian Signals (APS)**

**Description:** The City will develop a long-term plan to upgrade all signalized intersections with accessible pedestrian signals (APS). The APS equipment includes pushbuttons that include locator tones, audible signals, vibrotactile warnings, and confirmation lights, consistent with current Manual on Uniform Traffic Control Devices (MUTCD) and American with Disabilities Act (ADA)/Massachusetts Architectural Access Board (MAAB) standards and guidelines.

To accomplish this, we will use several parallel approaches:

- We will create and maintain an inventory of all APS locations throughout Cambridge, including legacy (older) audible signals, and the newer, Manual of Uniform Traffic Control Devices (MUTCD) compliant integrated vibrotactile APS with pushbutton activation.
- We will create a prioritized list to replace legacy units with vibrotactile APS units.
- We will continue to include compliant equipment on all new signal installations and major upgrades, including those facilitated by private development projects.
- We will create a list of remaining locations that do not have APS and prioritize the list with the help of the Commission for Persons with Disabilities, and establish a schedule for installation, and submit appropriate budget requests each year to meet the schedule.

In addition to the long term compliance plan, we will create a policy to review and prioritize requests from the public to add APS to particular intersections, respond to noise complaints, and other issues related to the units.

**Fiscal Year 2018 goal**

Finalize inventory of existing units.

**3-year goal**

Replace all legacy units with compliant units.

### **Action Item: Continue Use Of *Five Year Plan For Streets And Sidewalks* To Improve Safety, Accessibility, And Mobility For All Residents**

**Description:** The *Five Year Plan for Streets and Sidewalks*, issued each year by the Department of Public Works, acts as the City's practical roadmap for capital improvements. In the past, significant efforts have been made to ensure the Five Year Plan advances the City's accessibility, vehicle trip reduction, and sustainability goals. Additional efforts are underway to ensure the *Five Year Plan for Streets and Sidewalks* incorporates and prioritizes the goals of the City's Bicycle, Pedestrian, and Transit Plans.

All projects undertaken as part of the *Five Year Plan for Streets and Sidewalks* include accessibility upgrades. Pedestrian ramps will be upgraded to provide accessible crosswalks that meet federal, state, and local requirements. Where possible, raised crosswalks reduce the need for mobility-impaired pedestrians to ramp up and down at each side street crossing while reducing the speeds of turning vehicles. Projects are also evaluated for inclusion of low stress bicycle facilities and improved bus stops.

### **Action Item: Ensure All Vision Zero Outreach And Communication Efforts Reach Underserved And Vulnerable Residents**

**Description:** Cambridge is a diverse city, with a diverse population. Nationally, research has shown that vulnerable populations are disproportionately impacted by and susceptible to harm from traffic related crashes. It is our responsibility to ensure that we actively work to address this inequality and ensure that we make specific efforts to reach and positively impact vulnerable populations.

To this end, we will establish a process to ensure all Vision Zero outreach and communication efforts reach the city's underserved and vulnerable residents. We will use strategies that have proven successful for the Department of Human Service Programs (DHSP), the Cambridge Public Health Department, and the Envision Cambridge planning process. We will also provide information that is accessible to people with low or no vision, using plain language and will do so in multiple languages and with cultural awareness.

We will also encourage participation in Vision Zero by representatives from City Departments that serve vulnerable populations, including DHSP, the Public Health Department, and the Public School District, and will expand the diversity of representation on our internal staff Vision Zero Working Group. We will also regularly revisit our procedures and ensure we are effectively reaching and impacting targeted populations.

We will also look for opportunities to promote Vision Zero through existing programs such as Cambridge in Motion.

#### Fiscal Year 2018 goal

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Staff training on creating accessible documents.  
Deploy multi-lingual high school workers to do outreach in parks over the summer.

#### Fiscal Year 2019 goal

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Develop a communication strategy to ensure our Vision Zero outreach materials and messaging are reaching underserved populations. Translate Vision Zero materials into additional languages to reach all populations.

### Action Item: Create Specialized Traffic Safety Training Programs And Educational Materials For Vulnerable Populations



**Description:** It is important that we provide education and outreach for vulnerable populations that specifically address the needs of particular groups. Whether it is the older population, recently arrived residents, individuals with disabilities, families, or youth, we will customize our training to

best address the challenges faced by each group. We will continue to develop educational, training, and outreach materials in multiple languages and will ensure that the language used to write our materials is accessible to a large audience and not just people who are familiar with technical terms.

In 2015, working in collaboration with the DHSP Community Engagement Team and the Public Health Department, the Community Development Department hosted a series of focus groups with immigrant communities and families to determine marketing strategies to encourage bicycle use in Cambridge. This effort led to increased participation in bicycle education workshops and a series of public service announcements in our Hubway stations inviting the community to bike. We would like to incorporate this type of engagement into our Vision Zero programming and education.

#### Fiscal Year 2019 goal

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Work with City staff and community groups to identify populations and specific needs for each identified community.

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## Action Item: Safe Routes For Seniors And Persons With Disabilities

**Description:** We will work with our community of older residents, individuals with disabilities, staff from the Council on Aging, and the Commission for Persons with Disabilities to identify areas with large senior and disabled populations and implement targeted safety improvements that will improve safety and mobility. Improvements may include 20 MPH Safety Zones, shorter crossing distances, additional crosswalks and improved pedestrian ramps.

In 2014, the Community Development Department, Council on Aging and Cambridge Public Health Department hosted a series of focus groups with seniors to learn how to increase access to public transportation in Cambridge. This effort led to a series of ongoing Senior CharlieCard registration events, as well as updated comments for the MBTA during the City's regular operational meetings. This same collaboration also led to a similar process focusing on healthy aging and bicycling in Cambridge, revealing significant interest in cycling from seniors. In addition, we created a "Senior Cycling Tips" document.

The City's Snow Exemption Program provides snow shoveling assistance to low income elderly and/or disabled homeowners; if eligible, the City will clear a homeowner's sidewalk. This program is a partnership of the Council on Aging, the Commission for Persons with Disabilities, and the Recreation Division. In addition, the Council on Aging and the Mayor's Summer Youth Employment Program (MSYEP) created a list of high school students who are interested in shoveling snow for a fee in their local neighborhoods. Individuals who do not qualify for the exemption program can access the list and make arrangements directly with the students.

In addition, the Department of Public Works is clearing approximately 10% of all City sidewalks, as well as typical snow clearing on all city roadways. This represents a significant expansion over the past few years. Locations targeted for clearing were prioritized through consultation with the Commission for Persons with Disabilities and members of the Cambridge Pedestrian Committee.

Factors that were considered in the process were bus routes which are general indicators of high pedestrian and vehicular activity as well as proximity to: public and private school property, libraries, youth centers, senior centers and elderly housing, Galleria and Twin City Mall, and a 100' buffer of MBTA subway stops. Using this process, DPW was able to commit to expanding its efforts on the high volume bus stop streets by providing more detailed clearing at not only the bus stops, but all cross walks and pedestrian ramps on a given street. As of 2016 Crews clear bus stops and ramps along most major roadways.

### Fiscal Year 2018 goal

Build upon the outreach of the Snow Exemption Program with other City departments that also serve low income elderly and/or disabled individuals including Fuel Assistance, the Multi-Service Center, and the Commission for Persons with Disabilities. We will create a flyer to advertise the Snow Exemption Program for the upcoming 2017/2018 snow season. We will continue to work with eligible individuals to ensure their sidewalks are safe and clear for all pedestrians. Update and begin distribution of the Senior Cycling Tips brochure.

### Fiscal Year 2019 goal

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Implement safety improvements at two locations with large senior populations, based on data analysis and collaboration with stakeholders in the senior community.

### 3-year goal

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Establish framework for ongoing traffic safety improvements targeted at the senior population.

## Action Item: Safe Routes To Schools

**Description:** We will continue and expand the collaboration between the Police Department (Traffic Enforcement & Youth & Family Services), CDD, TPT, and the Public Schools in promoting student pedestrian and bike safety; including ongoing education of CPS families, student bicycle and pedestrian trainings, and annual reviews of recommended walking and biking routes, issues related to signals, signage, traffic supervisor postings, and school bus routes. We will continue to improve the safety of walking and biking routes to schools with the goal of increasing the number of students who walk and bike to school.

### Fiscal Year 2018 goal

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Provide bike training for 2<sup>nd</sup> graders at 8 elementary schools and on-bike training at one upper school.

### Fiscal Year 2019 goal

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Establish a Safe Routes to School working group that includes all departments that work on Safe Routes to School issues, as well as parent representatives, and develop targets that encompass all the work being done in this area. Provide on-bike training for all 6<sup>th</sup> graders and bike and pedestrian training for all 2<sup>nd</sup> graders.



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***D. Lead by Example: The City will lead by example in all things related to traffic safety. City policies and actions will reflect our commitment to Vision Zero.***

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**Action Item: Renewed Focus Safety In City Operations**

**Description:** The City is renewing our focus on safety in all manner of operations, including traffic safety. The Department of Public Works hired a Safety Officer who will act as a safety resource for City Departments. The Safety Officer will be key to ensuring best practices in training and policies, resulting in safer operation of City-owned vehicles and equipment as well as safer work zones to protect workers and people who walk, bike or drive near work zones.

**Fiscal Year 2018 goal**

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Train all DPW drivers who operate sanitation equipment, aerial lift vehicles for both tree trimming and electrical work, snow removal equipment, and dump trucks on the Vision Zero Large Truck Defensive Driver Program.

**Fiscal Year 2019 goal**

---

Develop a comprehensive safety plan to include the updated safety manual, safety policies, safety training and field observations for drivers and workers. We will also conduct crash reviews to reduce future crashes.

**3-year goal**

---

Continue to establish best safety practices, introduce cutting edge safety training and establish a new safety culture to reduce vehicle crashes to make the city a safer place to visit, cycle and walk in.

**Action Item: Ensure That City Employees Are Operating Vehicles In The Safest Manner Possible**

**Description:** Every day, City employees operate a variety of vehicles on Cambridge streets, from sedans to garbage trucks. We will ensure that every employee is driving in the safest manner possible, including strict adherence to the 25 MPH speed limit. We will issue policies and guidance on distracted driving, clarifying and standardizing City policy on mobile device usage while driving as well as best practice guidance on the use of two-way radios. We will also provide a Vision Zero driver safety training to all employees who drive City-owned vehicles or are required to drive personal vehicles in the course of their job. We will also issue Vision Zero branded stickers for vehicles to reinforce speed limit compliance and safe driving.

**Fiscal Year 2018 goal**

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Issue an updated and consistent driving policy that addresses issues of distracted driving, covering all municipal employees who drive vehicles as part of their job responsibilities.

**3-year goal**

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Provide Vision Zero training to all municipal employees who drive vehicles as part of their job responsibilities.

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### Action Item: Review Crashes Involving City Employees Conducting City Business

**Description:** The City will establish a review committee that will examine crashes that involve City vehicles and City employees on City business. Through analysis of crashes, we can identify trends and opportunities to reduce the number and severity of crashes involving City employees.

#### Fiscal Year 2018 goal

Establish a crash review committee and start regular meetings.

#### Fiscal Year 2019 goal

Establish system to track crashes.

#### 3-year goal

Lower crash rate for City employees conducting City business.

### Action Item: Develop And Pilot General Employee Training On Vision Zero And Rules Of The Road.

**Description:** We will develop and pilot a training program on Vision Zero and the new Street Code materials for a group of City employees. We will use this experience to determine if this training, or something similar should be available for all City staff and/or made available to members of the public.

#### Fiscal Year 2019 goal

Conduct pilot training.



### Action Item: Vision Zero Training For All Cambridge Police Officers

**Description:** Police officers in Massachusetts are required to attend at least 40 hours of in-service training each year. Officers receive updated information and instruction in a wide variety of subjects. Beginning in 2017, all officers are required to take a one hour course on Vision Zero given by the Lieutenant of the Traffic Unit as part of In-Service training.

#### Fiscal Year 2018 goal

Implement in-service Vision Zero training, covering general Vision Zero concepts.

#### Fiscal Year 2019 goal

Continue annual in-service training, introducing additional Vision Zero topics.

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***E. Engage the Public on Vision Zero: The City will engage the public to gather feedback on traffic safety related concerns and priorities, educate and change behaviors to improve public safety and public health.***

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**Action Item: Establish A Standing Advisory Committee On Vision Zero**

**Description:** To ensure inclusion of the community and other stakeholders in the City's Vision Zero Action Plan and the ongoing implementation of Vision Zero initiatives, the City will convene the Vision Zero Advisory Committee.

To ensure Vision Zero is a truly collaborative initiative, we will include representation from the most appropriate stakeholders and have reserved a number of seats on this committee for a number of specific stakeholders:

- City Departments including: City Manager's Office, Traffic, Parking, and Transportation, Community Development, Public Works, Police, Public Health, Cambridge Public Schools
- City Standing Committees: Bicycle Committee, Pedestrian Committee, Transit Advisory Committee
- Advocacy Organizations: LivableStreets, Boston Cyclists Union, WalkBoston, Massachusetts Bicycle Coalition, Cambridge Bicycle Safety
- Business and Institutional Stakeholders: Massachusetts Institute of Technology, Harvard University, Lesley University, Cambridge Chamber of Commerce.

In addition to soliciting membership from these specific organizations, we released a general solicitation for three to five general community members to serve on the advisory committee, with the goal of garnering representation from a range of transportation system users who bring a variety of different perspectives. The first meeting of the Advisory Committee occurred in May of 2017.

**Fiscal Year 2018 goal**

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Establish and start quarterly meetings of the Vision Zero Advisory Committee. Work with the Committee to establish Committee goals.

**Fiscal Year 2019 goal**

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Incorporate guidance from the committee into subsequent revisions of the Action Plan.

### **Action Item: Solicit Feedback On Traffic Safety From The Public**

**Description:** The City will engage residents, and people who travel to and through Cambridge, in person and online, to solicit feedback on safety. An online Vision Zero “safety portal” will provide opportunities for members of the public to share their thoughts, concerns and ideas about safety in Cambridge, as well as to report specific locations where they have safety concerns. The City will also go out into the community to foster discussions about Vision Zero. Whether at community events or public meetings, the City will lead the conversation on safety, ensuring we address concerns and use the feedback to improve safety.

#### **Fiscal Year 2018 goal**

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Establish framework for tracking input from the public.  
Participate in at least three citywide events to collect public feedback.

#### **Fiscal Year 2019 goal**

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Implement online map to collect public feedback.

### **Action Item: Raise Awareness Of Vision Zero Initiate To Educate And Engage With Community Members**

**Description:** We will develop a communications and outreach strategy that will bring awareness of Vision Zero to the public. The outreach strategy will raise awareness about traffic safety, explain the connections between specific actions we are implementing on our streets (such as the Inman Square left turn restrictions) and Vision Zero, and address specific issues such as speeding and distracted driving to change behaviors. These outreach efforts will include a variety of materials, web content, and social media. We will start work on our strategy with a \$15,000 Community Compact grant from the Commonwealth, and we will work across all City departments to incorporate Vision Zero messaging into City communications whenever appropriate.

#### **Fiscal Year 2018 goal**

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Engage 100 CLRS students in creating innovative ideas for Vision Zero streets as part of the Glocal Challenge.  
Participate in at least three citywide events to distribute Vision Zero information. Procure consultant services to develop outreach strategy.

#### **Fiscal Year 2019 goal**

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Complete outreach strategy and start implementation.

## **Action Item: The City Will Build On Its Extensive Portfolio Of Traffic Safety Educational Opportunities For All Residents Who Walk, Bike, Drive Or Take Transit**

**Description:** Efforts include:

- Bicycle education workshops are offered between 24 and 36 times a year. Certain trainings are offered for a general audience, while others are targeted at specific groups, such as older riders, high school students, or non-native English speakers. These trainings include both in-classroom and on-road instruction.
- CYCLE Kids teaches cycling skills in physical education classes, and has been in Cambridge elementary schools for several years, working with 4th and 5th graders.
- CDD's Safe Routes to School Program includes a 2nd grade pedestrian/bike safety unit of 4 PE classes and a 6th grade on-bike training of 2 PE classes.
- The Community Development Department distributes educational materials and brochures to demonstrate the rules of the road and to educate the community on how to get around without driving alone (Getting Around Cambridge maps, Bicycling in Cambridge, Walk This Way, Using Public Transit, Watch for Bikes, etc.).
- The City's new Street Code pamphlet educates all road users on the rules of the road. From clarifying the rights and responsibilities we all have as road users to setting expectations for safe and courteous behaviors, this new material helps us all get where we are going safely. We will distribute the pamphlet through a variety of methods, including our websites, outreach and education at all Parking and Transportation Demand Management sites, the Cambridge Public Schools, and at all City buildings.

### **Fiscal Year 2018 goal**

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Distribute 1,000 copies of the "Street Code."

### **Fiscal Year 2019 goal**

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Incorporate "Street Code" content into online and in person communications.



**Action Item: “Getting Around Cambridge” Magazine**

**Description:** The City developed a magazine that was distributed to all Cambridge households (and many employees, university students/staff) featuring information on getting around Cambridge in a safe and active way. In addition to information specifically on Vision Zero, this publication shares safety information about walking, biking, and using transit, as well as additional content that will help people who live, work, study, and play in Cambridge navigate safely, comfortably, and conveniently around the city.

**Fiscal Year 2018 goal**

Distribute “Getting Around Cambridge” Magazine to all 51,150 Cambridge households.

**Fiscal Year 2019 goal**

Involve Vision Zero Advisory Committee in content creation for the next issue of “Getting Around Cambridge”.



**Action Item: Support And Expand Bike Month Activities**

**Description:** The City will continue and expand our Bike Month activities each May. Bike Month is an established program to raise awareness of bicycling as a convenient, safe, and comfortable way to get around. Activities include hosting breakfasts along well-traveled routes to thank people for biking, distributing safety information, and gathering feedback on needed infrastructure. We also host a series of bicycle tune-ups and outreach events to thank the community for using sustainable modes and to create a culture of cycling as the norm for travel. The Cambridge Bicycle Committee leads a community ride this month. Finally, we host many bike education workshops to teach the community the rules of the road, and maintenance tips. Every participant receives a free helmet. We will incorporate Vision Zero education and messaging into Bike Month activities.

**Fiscal Year 2018 goal**

Distribute materials about Vision Zero related projects at Bike Month Events.

**Fiscal Year 2019 goal**

Expand Vision Zero role in Bike Month, including opportunities to distribute Vision Zero materials and collect public input. Incorporate outreach and education for non-cyclists to Bike Month activities.

**Action Item: Distribute “Watch For Bike” Decals**

**Description:** The City will continue to widely distribute “Watch for Bikes” stickers. These stickers are intended to be placed on driver side mirrors, and remind drivers to look for people biking when pulling into traffic and before opening doors. The stickers were distributed with all resident and visitor parking permits as part of the 2017 Resident Information Booklet and through the ‘Watch for Bikes: Tips for Sharing the Road’ pamphlet. Our goal is to also have stickers on all taxis, car share vehicles and Uber and Lyft cars, as well as on all City vehicles. We will also encourage employees to place stickers on their personal cars.

**Fiscal Year 2018 goal**

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Place decals on all City-owned vehicles.

**Fiscal Year 2019 goal**

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Distribute decals to all City buildings for distribution to employees for use on personal cars.

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***F. Create Partnerships: The City will partner with universities, private businesses, and other local and state entities to improve traffic safety.***

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**Action Item: Create Partnerships With Universities, Businesses, And Nonprofits**

**Description:** Cambridge has a wide network of universities, nonprofits and large employers. We will work closely with this network and other local organizations to widen the reach of Vision Zero message and initiatives. Examples include collaborating with universities to distribute bike and pedestrian safety information to the thousands of new student-residents each year, working with large employers to educate workers on safe commuting, and leveraging relationships with nonprofit organizations and other institutions to reach their constituencies.

**Fiscal Year 2019 goal**

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Develop a pilot program to bring Vision Zero messaging to several large organizations.

**3-year goal**

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Expand partnership program based on lessons learned from pilot.

## **Action Item: Partner With Local Municipalities, State And Federal-Level Organizations**

**Description:** As a part of the larger metropolitan area, it is important that we work closely with our neighbors, as well as agencies at the state and federal level to effectively advance Vision Zero and traffic safety. We will work closely with neighboring cities like Boston who have adopted Vision Zero, as well as coordinating with local cities and towns to share best practices and plan improvements that can make the entire region safer, like the recent speed limit reduction. We also work with the Massachusetts Department of Transportation (MassDOT), the Department of Conservation and Recreation (DCR), and other state agencies to improve facilities in Cambridge under their jurisdiction, and to improve statewide regulation and policies, including advancing Vision Zero priorities in state policy.

### **Fiscal Year 2019 goal**

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Establish regular meetings with representatives of local and state agencies involved in Vision Zero to explore opportunities for collaboration and joint advocacy.

## **Action Item: Partner With Researchers To Support Safety Related Research And Test Safety Related Technology**

**Description:** Cambridge is home to world-class universities and businesses doing cutting edge research in every field, including transportation and safety. The City will build partnerships with these researchers to bring their work to the streets of Cambridge. Cambridge can act as a lab, where our residents, visitors and workers and can contribute to and benefit from breakthroughs in transportation and safety research, from autonomous vehicles to sensors and lighting.

### **Fiscal Year 2018 goal**

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Continue discussions and coordination for existing research projects.

### **3-year goal**

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Expand existing partnerships and identify and grow relationships with new partners.



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*G. Use Data to Direct Efforts and Measure our Progress: The City will develop metrics to guide decision-making, measure progress on Vision Zero activities and share successes and challenges in a transparent way.*

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**Action Item: Ensure Vision Zero Is A Data-Driven Effort**

**Description:** This year, the Police Department has hired a dedicated traffic data analyst. This analyst will act as the central clearinghouse for traffic data analysis, looking at past analysis that has been done, coordinating, and guiding analytics moving forward, and helping to shape how we direct our efforts for maximum impact. We will also review our current data collection practices to ensure we are gathering the most valuable information and directing our efforts in the right way. For example, the rise of TNCs has introduced a new crash factor. Current data collection can be inconsistent in recording whether or not drivers involved in crashes were TNC drivers. Standardizing this collection of this data point will help us better understand the impact of TNCs on safety, and better target our efforts to mitigate negative impacts.

Vision Zero data analysis will build on significant past efforts. The Police Department has worked diligently to make data from crash reports available via the City's Open Data Portal. In prior years, the City has done extensive work to collect data on cycling comfort levels on our roadway network, as presented in the Cambridge Bicycle Plan. We currently use data provided by the public through the Commonwealth Connect application to guide enforcement against bike lane and sidewalk obstructions and to direct efforts to address unplowed sidewalks and bike lanes.

**Fiscal Year 2018 goal**

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Create a data strategy that will lay out how we will collect and disseminate data.

**Action Item: Create A Vision Zero Safety Portal**

**Description:** The City will create a Vision Zero Web portal that will act as a central clearinghouse for traffic safety information for the City. The Portal will be a single source for safety information in the Cambridge, from project-related updates to information on new safety treatments.

**Fiscal Year 2018 goal**

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Grow existing Vision Zero webpage to incorporate additional information on Vision Zero, Vision Zero related projects and other key resources.

**Fiscal Year 2019 goal**

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Migrate Vision Zero website to the new City template, creating a seamless one-stop experience that is independent of any single City Department.

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### **Action Item: Make All Vision Zero Related Data Available To The Public**

**Description:** Through the Vision Zero Safety Portal and Cambridge Open Data Portal, make Vision Zero related safety data open to the public. This will entail both synthesizing data and sharing it in clear, concise ways that tell the story of Vision Zero and safety in Cambridge, as well as sharing raw data for use by the public and stakeholders to review and analyze on their own.

#### **Fiscal Year 2018 goal**

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Incorporate data sharing strategies and goals into an overall Data Strategy, including inventory of already available open data.

#### **Fiscal Year 2019 goal**

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Launch data dashboard for Vision Zero webpage.

### **Action Item: Develop Key Metrics To Measure Vision Zero Progress**

**Description:** During the first year of the action plan, we will develop a set of metrics that will help us measure success in the seven key areas of the program, focusing on meaningful outcomes that emphasize safety and which factor in changes in usage of modes of transportation over time (such as increased bike ridership).

#### **Fiscal Year 2018 goal**

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Establish and start to track an initial set of indicators.

#### **Fiscal Year 2019 goal**

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Set up process to review indicators on an annual basis and add additional indicators as needed.

# 12. CONCLUSION

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This Action Plan documents the collaborative, community-wide efforts to prevent traffic fatalities in Cambridge. Encompassing policy changes, improved street design, data analysis, and robust public outreach, the Action Plan describes the cross-departmental commitment to Vision Zero and the fundamental changes necessary to create a safe, sustainable city. This plan reflects our united investment in a transportation system that is above all safe, but is also accessible and efficient for all users and promotes the use of sustainable modes.

This Action Plan is a living document; one that will grow and change as we complete initiatives, explore new types of interventions, and refine our objectives based on outcomes and data. As we engage with the community and implement city policies and procedures that reflect our commitment to safety, we will see that the components of Vision Zero combine to create a transportation system – and a city – that prioritizes the wellbeing of its people above all else.



# A. APPENDIX

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## Vision Zero Working Group Membership

### **City Manager's Office**

Lee Gianetti

### **Commission for Persons with Disabilities**

Michael Muehe

Kate Thurman

### **Community Development Department**

Jennifer Lawrence

Cara Seiderman

Bridget Martin

### **Department of Human Service Programs**

Janice Alger

Katie Urquhart

### **Department of Public Works**

Kathy Watkins

Jerry Friedman

Kenneth Bergeron

### **Department of Traffic, Parking, and Transportation**

Joseph Barr

Patrick Baxter

Brooke McKenna

### **License Commission**

Andrea Boyer

### **Personnel Department**

Jamie Matthews

### **Police Department**

Lieutenant Rick Riley

Lieutenant Dan Wagner

Devon Bracher

Matthew Nelson

### **Procurement Department**

Natalie Sullivan

### **Public Health Department**

Josefine Wendel

### **Public School District**

Rosalie Rippey

# B. APPENDIX

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## Vision Zero Advisory Committee Membership\*

Steve Crossley, *Cambridge Chamber of Commerce representative*

Nicolas Dard, *resident*

Nathanael Fillmore, *Cambridge Bicycle Safety*

Amy Flax, *Cambridge Bicycle Committee*

Richard Fries, *Massachusetts Bicycle Coalition*

Jim Gascoigne, *Cambridge Transit Committee*

Diane Gray, *Harvard University*

Anne Kreider, *resident*

Peter Kuhlmann, *resident*

Wendy Landman, *WalkBoston*

Michael Muehe, *Cambridge Commission for Persons with Disabilities*

Sean Peirce, *Cambridge Pedestrian Committee*

Jennifer Quick, *resident*

Stacy Thompson, *Livable Streets Alliance*

Michele Trifiro, *Lesley University*

Todd Robinson, *Massachusetts Institute of Technology*

Stephen H. Varrichio, *resident*

Becca Wolfson, *Boston Cyclists Union*

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\*Additional City staff will work with the Advisory Committee as needed.

# C. APPENDIX

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## City Council Resolution

IN CITY COUNCIL

March 21, 2016

WHEREAS: The City of Cambridge has for many years been seeking to enhance safety for all users of our public streets, including people who drive, walk, bicycle, and use public transportation, and

WHEREAS: The City of Cambridge has for many years promoted the use of sustainable modes of transportation, including walking, cycling, and public transportation, and more recently established a formal Safe Routes to School Program; and

WHEREAS: A number of communities across the United States and around the world have begun to adopt a Vision Zero goal, which involves working towards the elimination of transportation fatalities and severe injuries; and

WHEREAS: These communities have come together under the banner of the Vision Zero Network ([visionzeronetwork.org](http://visionzeronetwork.org)), which promotes Vision Zero nationally and helps to create information sharing among peer communities; and

WHEREAS: Vision Zero involves focusing on improving transportation safety from a public health and harm reduction perspective, an approach that is broadly consistent with the City's transportation, public health, and community sustainability goals; and

WHEREAS: Committing to Vision Zero will reinforce existing sustainable transportation policies and plans, including the Vehicle Trip Reduction Ordinance, the Climate Protection Plan, the Pedestrian Plan, the Bicycle Plan, the Transit Strategic Plan, the Five-Year Street and Sidewalk Reconstruction Plan, and the City's Community Health Improvement Plan; and

WHEREAS: The key City departments involved in transportation are supportive of a Vision Zero goal, including Community Development, Police, Public Health, Public Works, and Traffic, Parking, and Transportation; and

WHEREAS: These department have jointly performed a detailed analysis of crash statistics to understand the crash rates and safety issues in Cambridge, to provide a data-driven basis for understanding how safety can be improvement, now therefore be it

RESOLVED: That the City of Cambridge goes on record as committing to Vision Zero, with goals of eliminating transportation fatalities and serious injuries, as well as continuing to reduce the crash rates for all modes; and

RESOLVED: That the key City departments noted above will develop an initial Vision Zero Action Plan, which will be updated bi-annually (every two years); and

RESOLVED: That the key City departments noted above will continue to develop yearly updates to the crash statistics and safety analysis, which will provide a basis for developing updates to the Action Plan and generally pursue actions aimed at achieving the goals of Vision Zero.

