SAFETY ACTION VISION ZERO PLAN

SAFE STREETS FOR ALL (SS4A)

OLD COLONY PLANNING COUNCIL
DRAFT APRIL 2025

BETA
IMPROVING COMMUNITIES TOGETHER

ACKNOWLEDGMENTS

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1 EXECUTIVE SUMMARY

WHAT IS A SAFETY ACTION (VISION ZERO) PLAN?

The Old Colony Planning Council (OCPC) received a federal Safe Streets for All (SS4A) planning grant in 2023 to develop a Safety Action (Vision Zero) Plan. The plan is a roadmap for specific actions and policies the region can implement to reduce roadway deaths and serious injuries. The plan enables the 17 communities across the Old Colony Region in Southeastern Massachusetts to apply for implementation funding provided through the SS4A program to design and construct recommendations outlined in the plan.

KEY PLAN GOALS

1. Envision a **goal of zero** roadway deaths and serious injuries
2. **Identify high injury network** - intersections and roadway segments
3. Collect **feedback from the public** on unsafe roadways and intersections
4. **Develop recommendations** for site specific safety projects and regional safety policies and strategies
5. Determine evaluation **measures of success**
6. Ensure OCPC is **eligible for implementation funds** through Safe Streets for All (SS4A).

PLANNING PROCESS

As part of the planning process, OCPC convened the planning team and formed an action committee, developed a Vision Zero goal, conducted a safety analysis identifying key crash trends and high crash clusters, reviewed relevant past plans and policies, created recommendations and identified performance measures for ongoing plan evaluation. Throughout the process, OCPC engaged the public and key stakeholders.

A VISION ZERO GOAL FOR THE OCPC REGION

OCPC developed a goal for achieving Vision Zero. Vision Zero is a strategy to eliminate all traffic fatalities and severe injuries. This is a goal that recognizes just one traffic death is unacceptable and the pain and suffering associated with just one roadway death is preventable.

The Old Colony Planning Council has committed to a goal to achieve zero roadway deaths and serious injuries in 20 years, by 2045.

OCPC has set a goal to achieve zero roadway deaths and serious injuries by

2045.

PUBLIC ENGAGEMENT

OCPC gathered input from the public and stakeholders to enhance understanding of safety issues and inform potential recommendations. The public engagement process involved meetings with the Vision Zero Action Committee, stakeholder meetings with each of the 17 OCPC communities, a virtual public meeting, and an interactive map and project dashboard which received over 150 responses.

KEY ISSUES WE HEARD

- Speeding
- Distracted & impaired driving
- Unsafe pedestrian & cyclist experience
- Road departures
- Atypical intersection geometry
- Accessibility for people with disabilities
- Nighttime visibility

SAFETY ANALYSIS

The plan analyzed crash trends and developed a high injury network (map of high crash and high risk locations). The safety analysis informed the plan's recommended safety policies and countermeasures and the site specific projects identified at high injury intersections and roadway segments.

CRASH TRENDS

Between 2018-2022, 119 crashes resulted in a fatal injury and 875 crashes resulted in a serious injury in the region. Of the nearly 40,000 crashes reported, around 31% resulted in an injury, higher than statewide (24%). Crashes most likely to result in serious or fatal injury involved motorcycles, pedestrians and cyclists, speeding, road departures into trees and poles, head ons, and dark conditions.

HIGH INJURY NETWORK

The high injury network is a selection of intersections and roadway corridors with either (a) a history of past crashes resulting in injury or (b) high risk roadway characteristics likely to result in future crashes. The high injury network was developed using 2018-2022 crashes from MassDOT. It prioritized serious and fatal injuries, non-motorist crashes, and environmental justice communities.

PROJECTS AND STRATEGIES

Combining the results of the high injury network and community input, the plan identifies key projects across the region at high injury intersections and roadway segments. **The top 50 projects are on page 49 and the top projects for each community are in Appendix B.** For each of the top 50 projects, the plan provides preliminary countermeasures to address key safety concerns. Besides the site specific safety recommendations, regionwide policies and strategies were identified to address key parts of the Safe System Approach - Safer People, Safer Vehicles, Safer Speeds, Safer Roads and Post-Crash Care. **Recommended policies and strategies are on page 58.**

MEASURING PROGRESS

As communities in the OCPC Region implement recommended projects and strategies, they will evaluate if implemented improvements have the desired safety outcomes, moving the region closer to its Vision Zero Goal. The plan identifies measures of outcome, measures of implementation, and key milestones and targets towards zero fatal and serious injuries by 2045. Recommended performance measures to evaluate include number of safety projects/ strategies implemented by community each year and number of fatal and serious crashes over the past five years by crash type.

2 INTRODUCTION

This chapter describes what a Safety Action (Vision Zero) Plan is, OCPC's unique planning context and process for developing this plan, the roadway safety problem and the region's Vision Zero goal.

WHAT IS A SAFETY ACTION (VISION ZERO) PLAN?

In 2021, the Bipartisan Infrastructure Bill established the Safe Streets and Roads for All (SS4A) program which funds regional planning initiatives aimed at reducing serious and fatal injuries on roadways within the United States.

The SS4A grant program centers on a Safe System Approach that recognizes:

- Death and serious injuries on our roads are unacceptable.
- People make mistakes.
- Responsibility is shared.
- Safety is proactive.
- Redundancy is crucial.

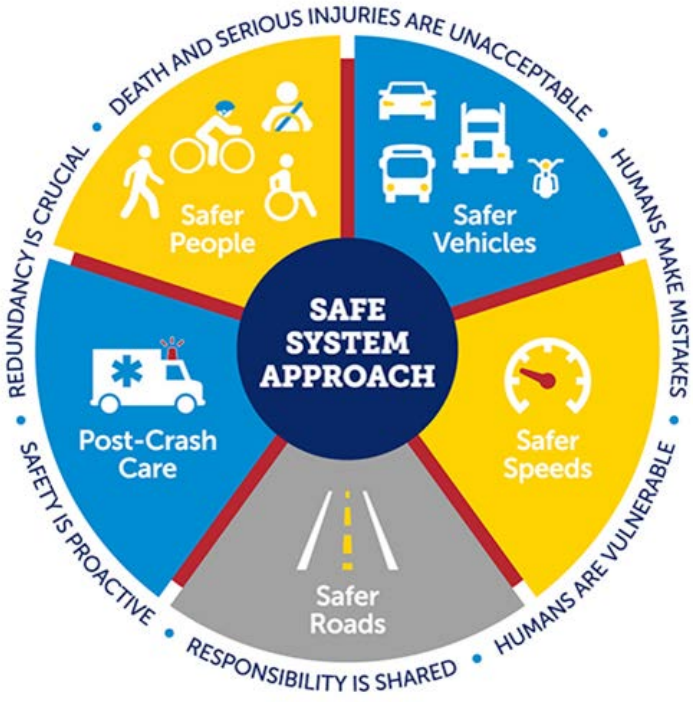
The Old Colony Planning Council (OCPC) received a SS4A planning grant in 2023 to develop a Safety Action (Vision Zero) Plan, which is a roadmap for specific actions and policies the region can implement to reduce roadway deaths and serious injuries. The plan enables communities across the Old Colony Region in Southeastern Massachusetts to apply for implementation funding provided through the SS4A program to design and construct recommendations outlined in the Safety Action (Vision Zero) Plan.

Every Safety Action Plan through the SS4A grant program must include the eight key components, outlined below. OCPC's Safety Action (Vision Zero) Plan includes all required components, with some modifications to the chapter order.

COMPONENTS OF A SAFE STREETS FOR ALL (SS4A) SAFETY ACTION PLAN

1. Leadership Commitment & Goal Setting
2. Planning Structure
3. Engagement & Collaboration
4. Safety Analysis
5. Equity Considerations
6. Policy & Process Changes
7. Strategy & Project Selection
8. Progress & Transparency

FHWA SAFE SYSTEM APPROACH



THE PLANNING PROCESS

OCPC began the planning process by convening the planning team and forming an action committee comprised of key stakeholders to guide the planning process through key decision points. OCPC also developed a Vision Zero goal - an anticipated date to strive for zero fatal and serious crashes. The team then conducted a safety analysis identifying key crash characteristics and high crash clusters, conducted a review of relevant past plans and policies, and created recommendations for specific policies, projects, and strategies to be implemented towards achieving the Vision Zero goal. Throughout the planning process, OCPC focused on engagement of the public and stakeholders from OCPC communities.

ENGAGEMENT, EQUITY & COLLABORATION

- Vision Zero Action Committee Meetings
- Identification of Environmental Justice Communities and Priority Weights
- Project Updates at MPO Meetings
- Interviews with Municipalities
- Website, Dashboard and Interactive Map
- Evaluation of High Injury Network, including those in Environmental Justice Communities
- Public Meetings

GOAL SETTING & PROJECT SET UP

- Develop and Publicly Commit to Vision Zero Goal
- Formation of Planning Team and Action Committee

SAFETY ANALYSIS

- Data Collection
  - Roadway Crashes
  - Roadway Characteristics
  - Environmental Justice
- Safety Trends in Region
- High Injury Network Identification
  - Historic Crashes
  - Risk Factors

PLAN & POLICY REVIEW

- Relevant Past Planning Efforts
- Review of Existing Policies
- Desired Policy Changes

PROJECTS & STRATEGIES

- Proven Safety Countermeasures
- High Injury Network Prioritization and Projects
- Regionwide Roadway Safety Strategies

PROGRESS & TRANSPARENCY

- Ongoing monitoring
- Publicly available plan and progress

THE OCPC PLANNING CONTEXT: 17 COMMUNITIES IN SOUTHEASTERN MASSACHUSETTS

The Old Colony Planning Region is comprised of 17 cities and towns in southeastern Massachusetts. The largest community within the region is Brockton, a medium sized city known for its industrial past and ethnic and cultural diversity. Brockton also has the highest poverty rate in the region. The roads in the Brockton area have a much more urban feel than other areas in the OCPC region and experience relatively heavy pedestrian traffic. Within the region, there are other dense town centers, for example, Plymouth near the waterfront, Bridgewater town center near Bridgewater State University, and Stoughton town center.

Besides denser commercial areas, the region has a diversity of land uses and associated roadway types. Higher volume roadways provide access to limited access highways (Routes 3 and 44) as well as larger more auto-dominant commercial areas with large box retail like Commerce Way in Plymouth. Rural character roadways also exist through the lower density towns like Plympton and Duxbury with tighter roadways and more natural elements on the roadside. Towns like Abington and Whitman have a more suburban character with dense single family land uses.

The OCPC region is served by the Massachusetts Bay Transportation Authority (MBTA), providing service to the Boston area with buses and commuter rail. The commuter rail lines serving the area from Boston are the Fall River/ New Bedford line (formerly Middleborough/ Lakeville line) and the Kingston Line. Brockton, Bridgewater, Abington, Whitman, Hanson, Halifax and Kingston have commuter rail stations. The regional transit agencies in the area are Brockton Area Transit (BAT) and Greater Attleboro Taunton Regional Transit Authority (GATRA). BAT operates buses within Brockton and to neighboring communities and GATRA serves eastern and central portions of the Old Colony region, operating buses within Plymouth, Kingston, Duxbury, and Pembroke.

QUICK FACTS ABOUT THE OLD COLONY PLANNING REGION

Total Population: 394,000

Population Density (Densest Community): 4,910 People/Square Mile (Brockton)

Population Density (Least Dense Community): 194 People/Square Mile (Plympton)

Percent People of Color: 31%

Percent People Under 18: 7%

Percent People Over 65: 17%

Source: OCPC Community Data Portal (using the 2020 Census)


Rural Type Roadway


Urban Type Roadway

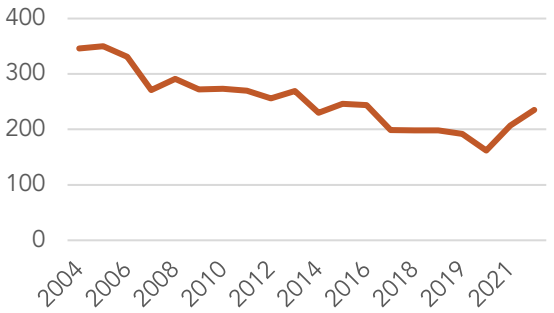
OCPC'S ROADWAY SAFETY PROBLEM

When a community member is seriously injured or killed while getting around, this unpredictable event causes a unique grief to families and loved ones. These tragedies also affect all of us - they create the perception that roadways are unsafe. This is particularly true when it comes to walking, biking or rolling - when there is less physical protection in the event of a crash.

Serious and fatal crashes in OCPC communities have been trending downwards since 2004. However, the past couple years have seen an uptick, a concerning trend the Safety Action (Vision Zero) Plan recommendations seek to address.

Between 2004 and 2022, crashes involving someone outside a vehicle (walking, biking etc.) have fluctuated but have not seen any noticeable trend. This plan recognizes many roadways in the OCPC region have not been designed to prioritize safety for people outside vehicles, reflected in non-motorist crashes being over-represented in the serious and fatal injury crashes in the region. When people feel unsafe walking, biking or rolling, this has the possibility to foster social isolation and less interaction with the community and roadways, while also harming those who cannot drive due to physical or financial constraints.

Serious and Fatal Crashes
2004 - 2022



Non-Motorist Serious and Fatal Crashes
2004 - 2022

A VISION ZERO GOAL FOR THE OCPC REGION

As part of the Safety Action (Vision Zero) Plan, OCPC has developed a goal for achieving Vision Zero. Vision Zero is a strategy to eliminate all traffic fatalities and severe injuries. This is a goal that recognizes just one traffic death is unacceptable and the pain and suffering associated with just one roadway death is preventable.

The Old Colony Planning Council has committed to a goal to achieve zero roadway deaths and serious injuries in 20 years, by 2045. The charts on the following page outline the necessary crash decreases to reach this goal.

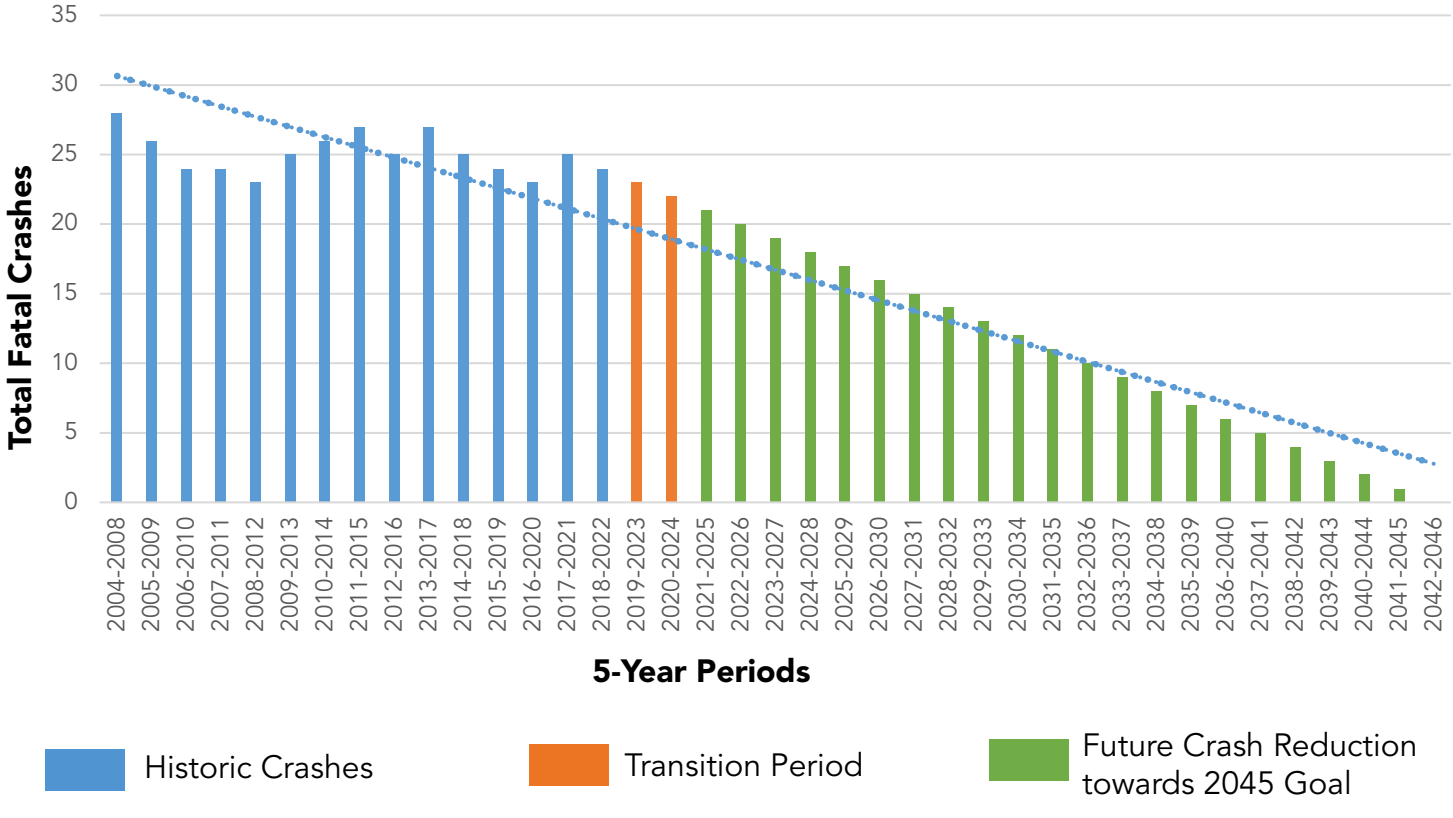
OCPC has set a goal to achieve zero roadway deaths and serious injuries by

2045.

The OCPC Vision Zero Goal was developed by mapping past trends and analyzing necessary crash reduction towards zero serious and fatal injuries. The following tables outline the Vision Zero evaluation.

Vision Zero Goal - Old Colony Planning Council Region

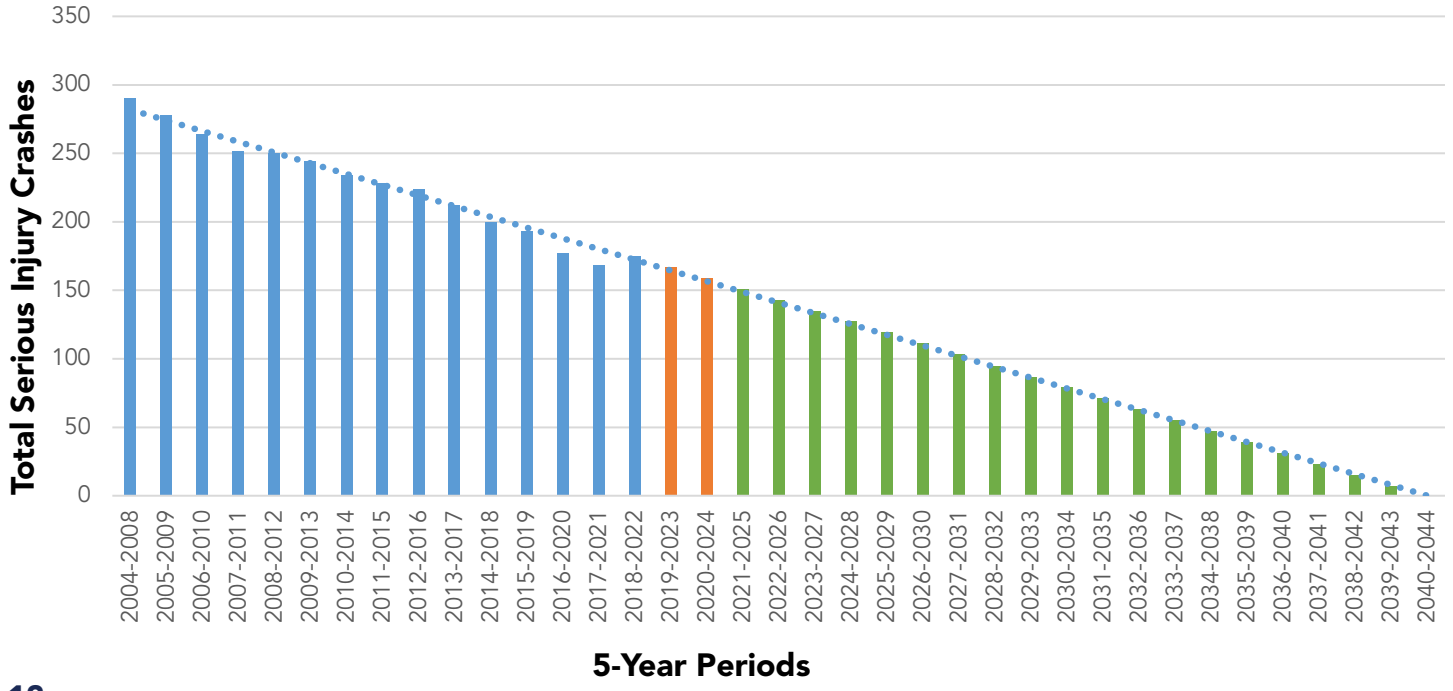
5-Year Rolling Average Fatal Injury Crashes



Historic Crashes | Transition Period | Future Crash Reduction towards 2045 Goal

Vision Zero Goal - Old Colony Planning Council Region

5-Year Rolling Average Serious Injury Crashes



3 PUBLIC ENGAGEMENT

This chapter describes engagement methods used to gather input from the public and stake holders, key safety concerns heard throughout the engagement process, and specific locations described by participants during the engagement process.

ENGAGEMENT GOALS

Engage a **diverse and geographically representative selection of people who use, maintain and enforce safety** on OCPC's roads through a variety of engagement channels.

Enhance understanding of safety issues identified through the crash data analysis with anecdotal and qualitative information.

ENGAGEMENT METHODS

Vision Zero Action Committee - Joint Transportation Committee

OCPC's Joint Transportation Committee functioned as the Vision Zero Action Committee for the Safety Action (Vision Zero) Plan. The group is comprised of representatives from all OCPC communities, Massachusetts Bay Transportation Authority (MBTA), Brockton Area Transit (BAT), Greater Attleboro Taunton Regional Transit Authority (GATRA) and MassDOT. The project team presented to the group three times during the duration of the project to receive feedback on the methodology for selecting locations, share the draft high injury network and present the final plan.

Stakeholder Meetings with Each OCPC Community

The project team conducted individual stakeholder meetings with each of the seventeen OCPC communities. The meetings were typically attended by municipal staff - emergency services, public works, town managers/administrators or planners. These meetings offered extensive insight on problem areas in each community, widespread issues like distracted drivers or speeding, and types of treatments each community is considering to address ongoing safety issues.

Public Meeting

The project team held a public meeting on December 11, 2024. The meeting informed the general public about the Safe Streets for All (SS4A) grant program and shared key crash trends and initial findings on top locations identified through the high injury network development. The team solicited feedback from participants on additional locations where they would like to see improvements in their communities and key safety issues they think are important.

Interactive Map and Dashboard

An interactive map was published online as part of the public engagement process. The map received over 150 responses with suggestions on specific locations in need of improvements. Results are in Appendix A.

WHAT WE HEARD: SAFETY CONCERNS

The Comprehensive Safety Action (Vision Zero) Plan seeks to identify and address key safety issues within OCPC communities. The planning team through the engagement process heard an abundance of safety issues that people are concerned about in the region. Key themes that arose throughout were speeding, distracted or impaired driving, wide and complex intersection geometry and lacking pedestrian and bicycle accommodation.

COMMON CONCERNS HEARD FROM MUNICIPALITIES AND THE PUBLIC

- Speeding
- Distracted driving
- Drunk or impaired driving
- Poor sight lines/visibility
- Unsafe pedestrian crossings
- Crosswalk stopping compliance
- Stop sign compliance
- Lack of sidewalks and sufficient crossing opportunities
- Conflicting turning movements at intersections
- Accessibility for people with disabilities
- Commercial driveway turning conflicts
- Atypical or misaligned intersection geometry
- Road departure crashes, collisions with objects (ex. poles) on side of road
- Nighttime visibility
- Red light running
- Biking/driving conflicts

Public meeting participants and town staff frequently indicated **speeding** as the top safety issue

WHAT WE HEARD: PREFERRED TYPES OF SAFETY IMPROVEMENTS

Below is a selection of types of safety improvements heard throughout the public and stakeholder engagement process. Some communities prefer certain treatments to others. For example, some OCPC communities are hesitant to install speed humps due to plowing concerns while other communities are more open to installation.

Speed Management

- Speed tables (varied opinions)
- Lowering speed limit
- Speed feedback radar signs
- Narrowing travel lanes
- Enforcement
- Improved School Zone signage

Pedestrian and Bicycle Safety

- Pedestrian crossing islands
- Rapid Rectangular Flashing Beacons (RRFBs)
- Curb extensions at crosswalks
- Expanded sidewalks
- Bike lanes

Intersection Safety

- Tightening turning radii and geometric improvements at intersections
- Roundabout
- All-way Stop
- Tree trimming to improve sight lines
- Overhead flashing beacon

Other

- Striped shoulders
- Access management

The Town of Easton recently implemented an all-way stop at the intersection of Turnpike Street and Purchase Street, historically a regional high crash location. Representatives of the town have indicated that, since implementation, crashes have decreased significantly at the location. OCPC and the town will continue to monitor this location for safety issues. In general, all-way stops are being considered in the region at high crash areas where warranted to improve safety and better manage conflicts.

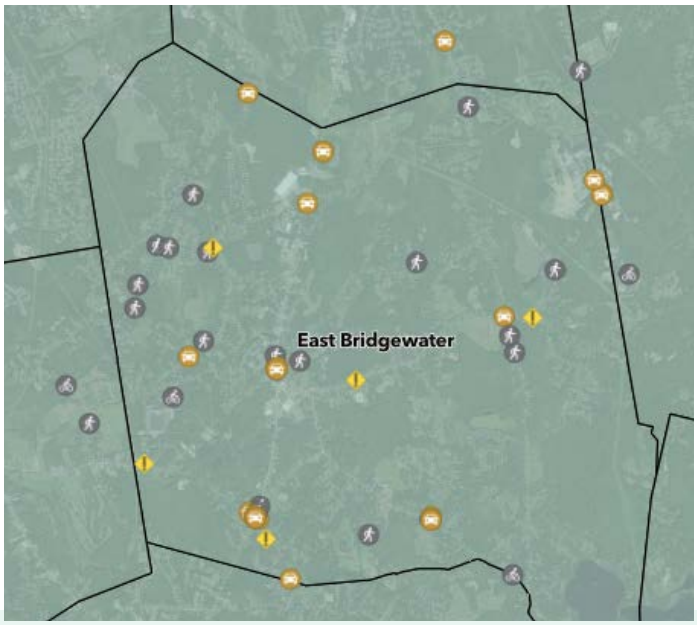
WHAT WE HEARD: SPECIFIC LOCATIONS IN NEED OF SAFETY IMPROVEMENTS

Through development of the high injury network, a thorough crash analysis was conducted. In addition, community feedback is incorporated into the plan to better understand the user experience of intersections and roadways in the region and make sure no key locations are missed.

"The West Bridgewater Rail Trail would be a very nice bypass for cycling to avoid a busy road, but the east end (at East Street) ends abruptly at a large steep embankment, where it is difficult (and muddy) to get a bike back up to the road." - Map Respondent

"Vehicles hardly stop for pedestrians at the crosswalks on South Street - this applies to anything within the vicinity of the library. There is a large apartment complex, senior housing, and library patrons - all of which are walking in this area but trying to get a car to stop for you at the crosswalks is next to impossible." - Map Respondent, Plymouth

"Many Brockton crosswalks are set back from the intersection, putting them into blind spots" - Public Meeting Attendee



Community members and municipal staff provided specific locations for safety improvements through the interactive map

4 SAFETY ANALYSIS

This chapter describes crash characteristics and trends in the OCPC region, contributing factors to crashes, including environmental and roadway characteristics and human behaviors, and spe cific high injury and high risk intersections and segments.

The goal of the safety analysis chapter is to identify historic crash trends and high crash clusters across the OCPC communities. The analysis informs what types of safety policies and countermeasures make the most sense in the region and which intersections and roadways are most in need of safety improvements.

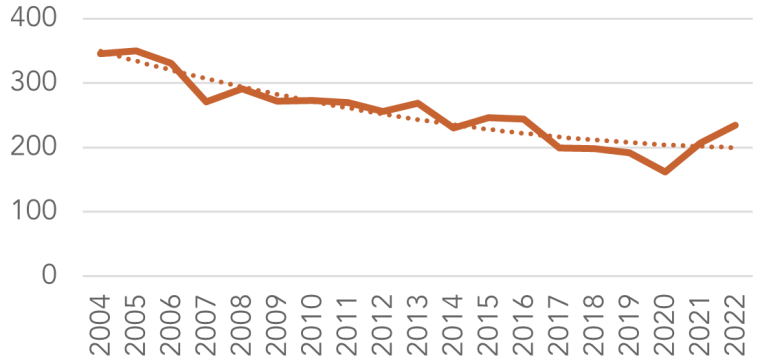
Historic crashes by severity from 2004-2022 were examined to understand the general change in crashes over the years, but the analysis focuses more heavily on the most recent available five years of crash data from 2018-2022. All crash information was collected from the MassDOT Impact Portal, the roadway crash database for the Commonwealth of Massachusetts. The analysis of safety trends includes all roads in the OCPC region, including interstates, but high crash clusters are not identified on interstates. Interstates make up a very small percentage of serious and fatal crashes in the OCPC region.

Between the years 2004 and 2022, OCPC communities have seen an overall decrease in the number of crashes resulting in a serious or fatal injury. However, since 2020, the region has seen a modest uptick in the number of crashes resulting in serious or fatal injury, highlighting a worrying trend away from past progress.

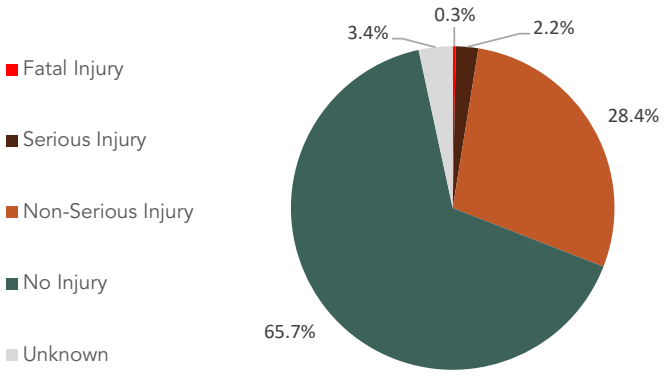
Between 2018-2022, 30.9 percent of crashes resulted in an injury, which is significantly higher than Massachusetts as a whole (24%). Of the injury crashes during this time, 875 crashes resulted in a serious injury and 119 crashes resulted in a death to a person involved in the crash - around 2.5 percent of all crashes, slightly higher than the statewide percentage (around 2.1 percent).

Of all crashes, the most common types of crashes in the region are angle crashes (30%), rear-end crashes (26%) and single vehicle crashes (25%). The diversity of crash types reflects the diversity of roadway types in the region, from the more urban environment in Brockton to the more rural type roadways in towns such as Duxbury or Plympton.

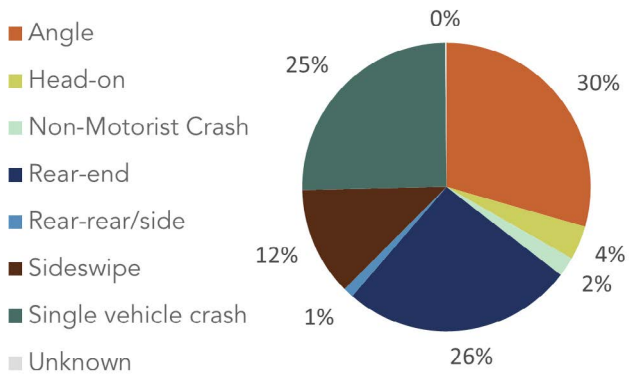
Serious & Fatal Crashes 2004-2022



Crash Severity 2018-2022



Crash Types 2018-2022



Source: MassDOT Impact Portal

MAP 1. FATAL & SERIOUS INJURY CRASHES 2018-2022

Map 1 shows the distribution of fatal and serious injury crashes across the OCPC communities between the years 2018 and 2022. Of the 119 fatal crashes during the study period, Brockton experienced the most with 33 total fatal crashes, followed by Stoughton and Bridgewater with 11 fatal crashes each. At least one fatal crash occurred in every community in the OCPC region during the study time period. Brockton and Plymouth experienced the most severe injuries crashes, with 286 and 117 crashes, respectively.

875
Serious Injury Crashes 2018-2022

119
Fatal Crashes 2018-2022

NORWOOD
CANTON
RANDOLPH
BRAINTREE
WEYMOUTH
HINGHAM
SCITUATE
NORWELL
WALPOLE
HOLBROOK
AVON
ROCKLAND
ABINGTON
HANOVER
MARSHFIELD
SHARON
BROCKTON
STOUGHTON
FOXBOROUGH
WHITMAN
PEMBROKE
EAST BRIDGEWATER
HANSON
DUXBURY
EASTON
WEST BRIDGEWATER
MANSFIELD
HALIFAX
KINGSTON
NORTON
BRIDGEWATER
PLYMPTON
RAYNHAM
TAUNTON
MIDDLEBOROUGH
CARVER
PLYMOUTH
DIGHTON
BERKLEY
LAKEVILLE
REHOBOTH
SWANSEA
SOMERSET
FREETOWN
ROCHESTER
WAREHAM
BOURNE
SANDWICH
FALL RIVER
ACUSHNET
MARION

- Serious injury crash
- Fatal crash

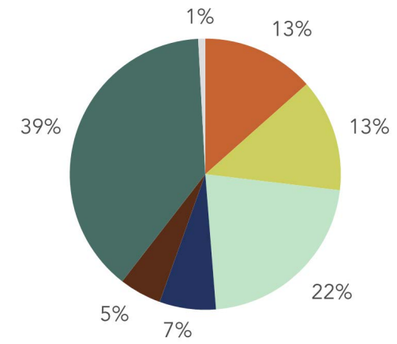
Source: MassDOT Impact Portal

N
W E
S

0 0.5 1 2 Miles

MAP 2. FATAL CRASHES BY TYPE 2018-2022

Map 2 shows fatal crashes between 2018 and 2022 by crash type. As seen in the map and chart below, most fatal crashes during the period involved a single vehicle (39%), followed by crashes with a non-motorist (22%), head-on crashes (13%) and angle crashes (13%), demonstrating the deadliest crash types in the region.



Crash Type
- Angle
- Head-on
- Non-Motorist Crash
- Rear-end
- Sideswipe
- Single vehicle crash
- Unknown

Source: MassDOT Impact Portal

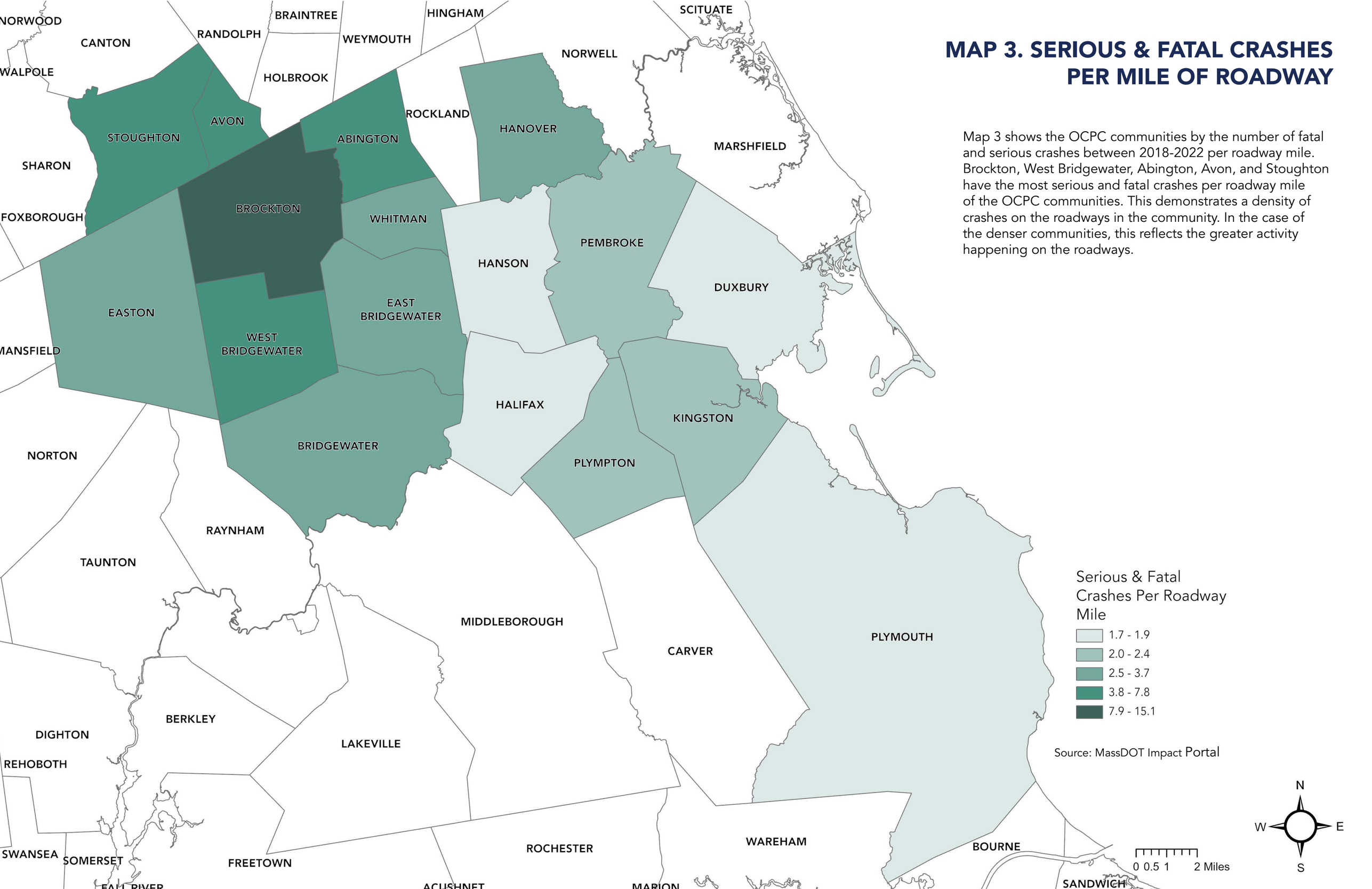
N
W E
S

0 0.5 1 2 Miles

NORWOOD
CANTON
RANDOLPH
BRAINTREE
WEYMOUTH
HINGHAM
SCITUATE
NORWELL
WALPOLE
HOLBROOK
AVON
ROCKLAND
HANOVER
STOUGHTON
ABINGTON
MARSHFIELD
SHARON
BROCKTON
FOXBOROUGH
WHITMAN
PEMBROKE
HANSON
DUXBURY
EASTON
EAST BRIDGEWATER
WEST BRIDGEWATER
MANSFIELD
HALIFAX
KINGSTON
BRIDGEWATER
PLYMPTON
NORTON
RAYNHAM
TAUNTON
MIDDLEBOROUGH
CARVER
PLYMOUTH
BERKLEY
DIGHTON
LAKEVILLE
REHOBOTH
WAREHAM
BOURNE
SWANSEA
SOMERSET
FREETOWN
ROCHESTER
SANDWICH
FALL RIVER
ACUSHNET
MARION

MAP 3. SERIOUS & FATAL CRASHES PER MILE OF ROADWAY

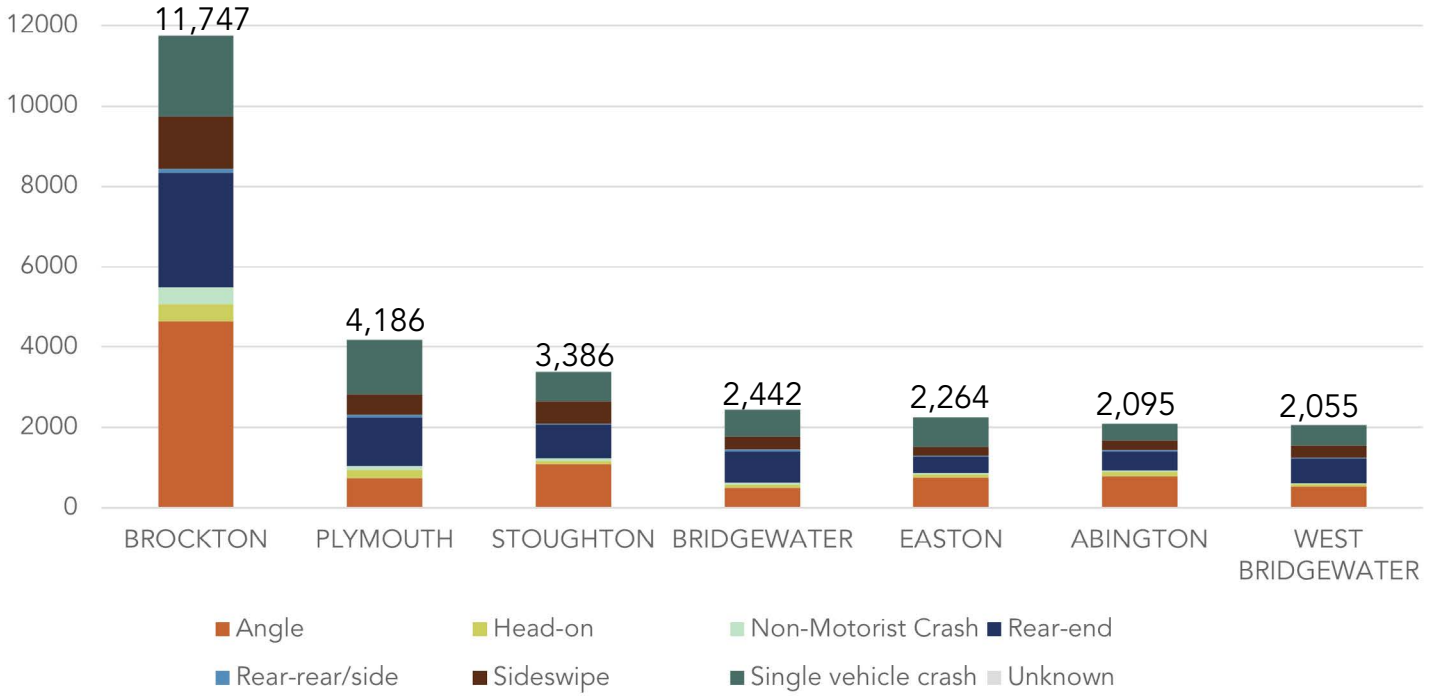
Map 3 shows the OCPC communities by the number of fatal and serious crashes between 2018-2022 per roadway mile. Brockton, West Bridgewater, Abington, Avon, and Stoughton have the most serious and fatal crashes per roadway mile of the OCPC communities. This demonstrates a density of crashes on the roadways in the community. In the case of the denser communities, this reflects the greater activity happening on the roadways.



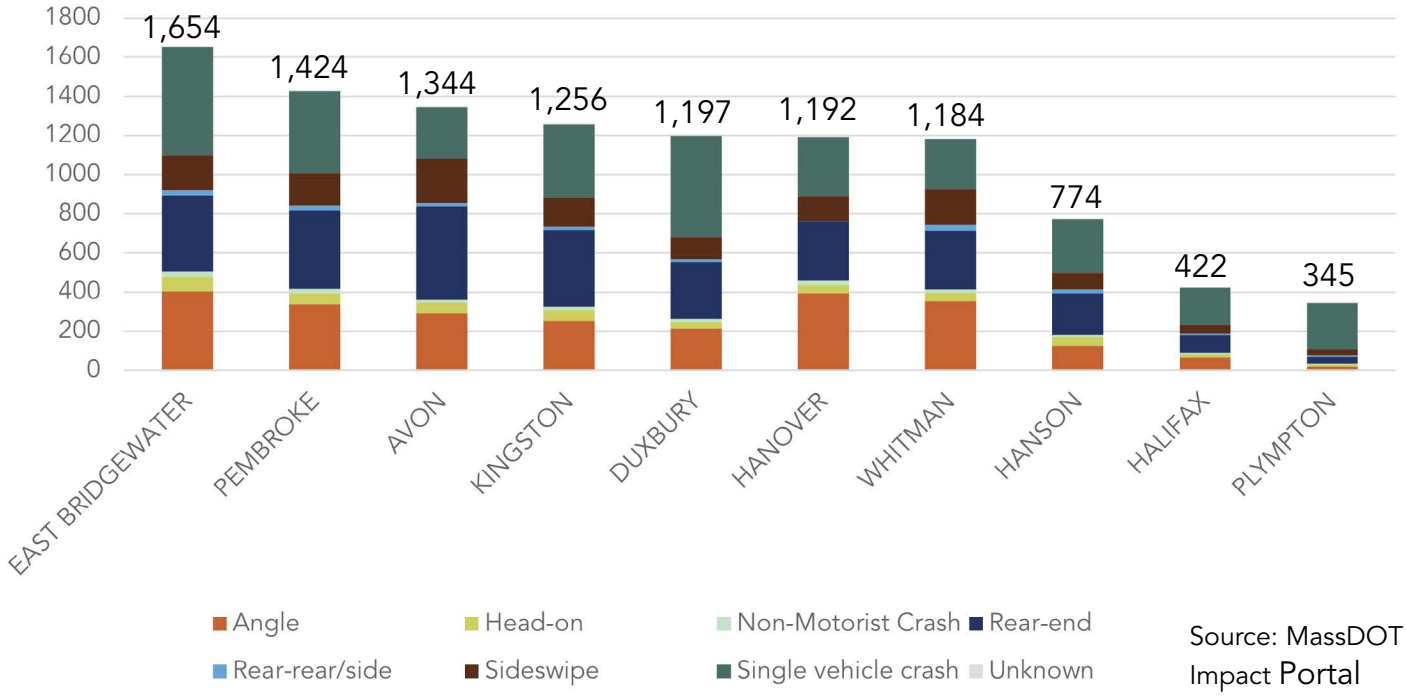
Source: MassDOT Impact Portal

Brockton experienced the most crashes in the region with nearly 12,000 crashes. Crash types in the region varied by community. For example, Brockton had the highest percentage of crashes involving a non-motorist (3.5 percent), reflecting the higher number of people walking and biking in the city. Plympton had the highest percentage of crashes involving a single vehicle (68 percent) reflecting the more rural nature of the town's roadways. Demonstrating the relative density of OCPC communities, most crashes do involve multiple vehicles, not just single vehicle crashes characteristic of more rural regions.

Crash Types 2018-2022:
By Community with Over 2,000 Crashes



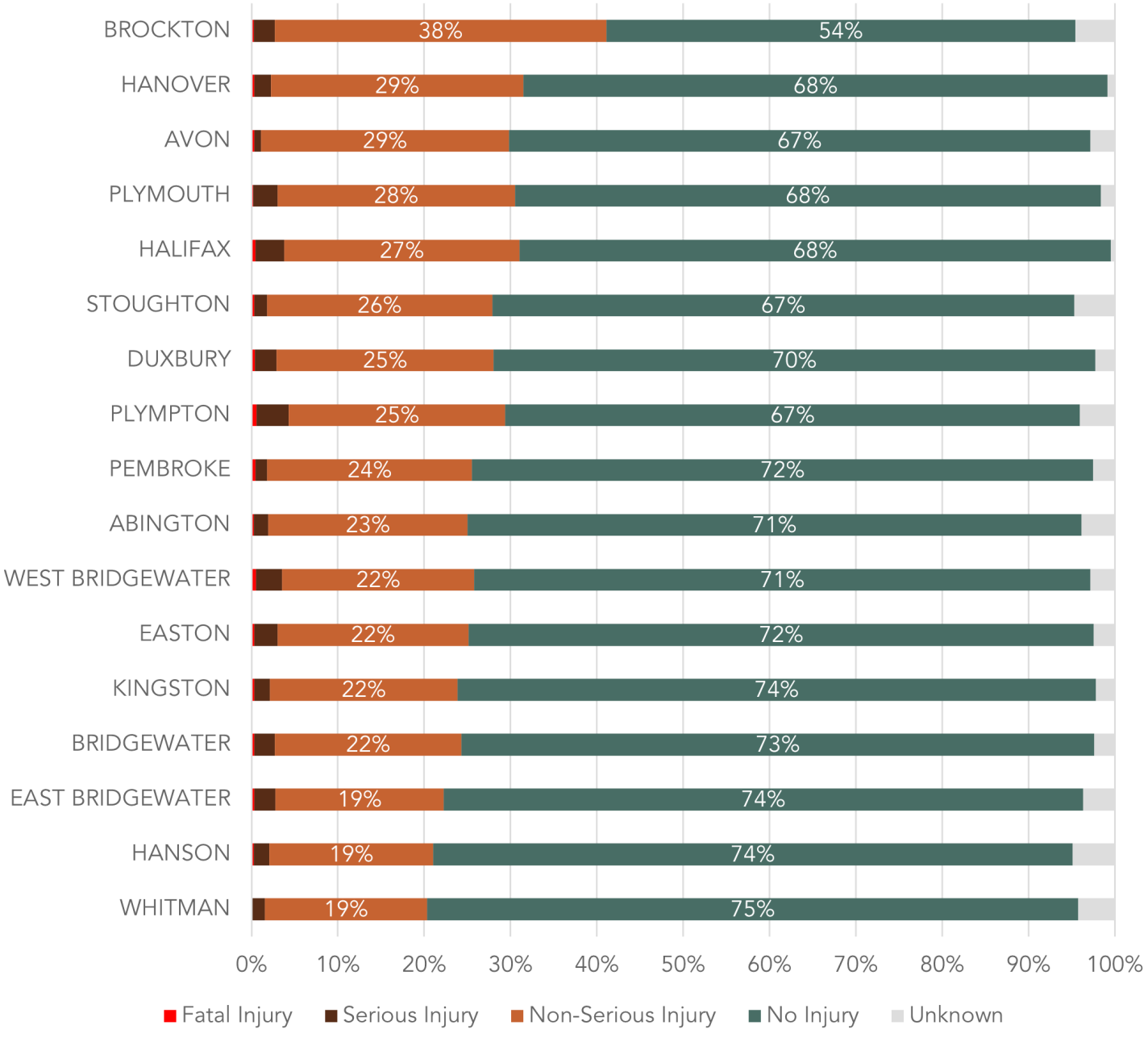
Crash Types 2018-2022:
By Community with Less than 2,000 Crashes



Source: MassDOT Impact Portal

Of the OCPC cities and towns, Brockton also had a significantly greater percentage of crashes involving an injury (41 percent of crashes) than the other communities. However, Plympton had the highest percentage of crashes resulting in either a serious or fatal injury (4.3 percent), compared to other communities, though had the fewest crashes overall. The chart below demonstrates the difference in the severity of crashes across communities in the region.

Percentage of Crashes by Injury Severity



Source: MassDOT Impact Portal

FATAL AND SERIOUS INJURY CRASH CHARACTERISTICS

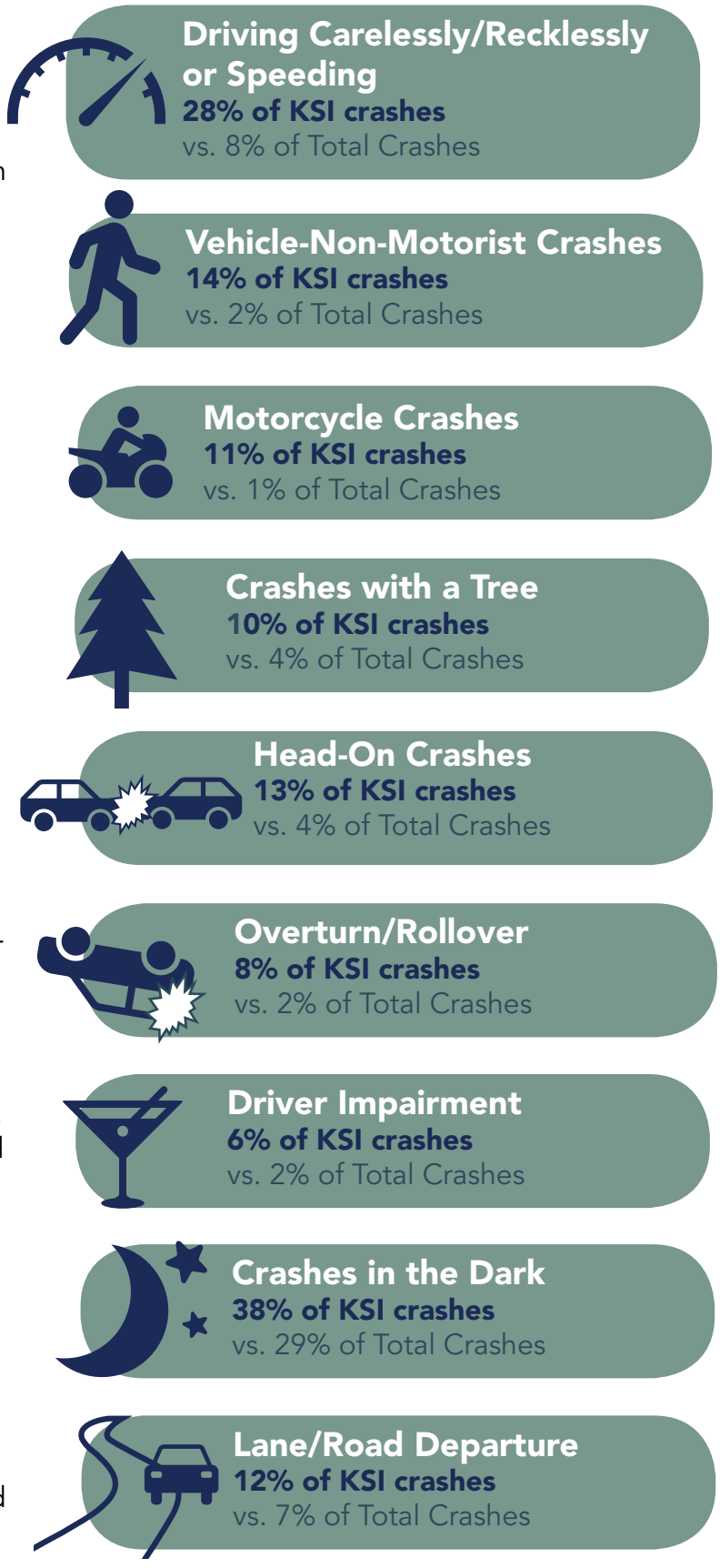
SUMMARY OF OVER-REPRESENTED CRASH TYPES

Recognizing some crash types are more likely to result in a serious or fatal injury, the safety analysis includes a test of proportions or over-representation analysis comparing all roadway crashes to just fatal and serious injury crashes during the study period. The over-representation analysis looked at a variety of factors including roadway factors (e.g. speed limit and roadway jurisdiction), environmental factors (e.g. lighting and weather conditions), crash types (e.g. vehicle-pedestrian crash, single vehicle crash), and driver contributing factors (e.g. speeding, failure to yield).

To the right is a summary of the key findings from the over-representation analysis, examining crashes 2018-2022. **The abbreviation "KSI" is used to describe crashes where someone was Killed or Seriously Injured.** The most over-represented crashes are reckless driving or speeding crashes, comprising 8% of all crashes and 28% of serious and fatal injury crashes. Speeding is widely understood to increase the severity of a crash, confirmed in the OCPC region as well.

Crashes where a vehicle hits a non-motorist (a person walking, biking, etc.) are also highly over-represented, comprising just 2% of all crashes and 14% of serious injury and fatal crashes. This finding underlines the need for safety improvements that protect people traveling outside vehicles. Of crashes with a non-motorist, crashes with a pedestrian are more common and more over-represented than those with a cyclist. Crashes involving a motorcyclist are also highly over-represented, comprising 11% of serious or fatal injury crashes and just 1% of all crashes.

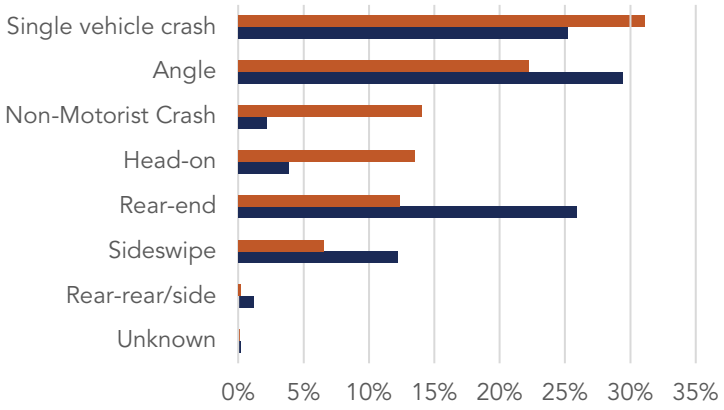
Other over-represented crash types include crashes with vehicles striking trees (10% of KSI vs. 4% of total), head-on crashes (13% of KSI vs. 4% of total), overturns/rollovers (8% of KSI vs. 2% of total), crashes where a driver was impaired by alcohol or drugs (6% of KSI vs. 2% of total) and crashes in dark conditions (38% of KSI vs. 29% of total).



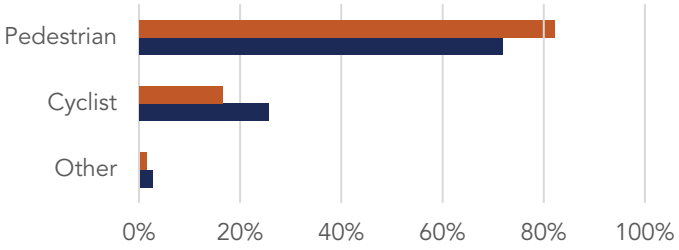
These charts offer detail on the over-representation analysis and methods for identifying over- and under- represented crash types and contributing factors. The tables include crash type, single vehicle crash type, vulnerable user crash type, lighting conditions, weather conditions, roadway jurisdiction, driver contributing circumstances, speed limit, crash year, crashes by roadway type, driver impairment, and road user type.

In the charts, if the orange bar is longer than the blue bar, it indicates the percentage of crashes resulting in a fatal or serious injury is greater than the percentage of all crashes. Conversely, some notable under-represented crash types include rear-end crashes, sideswipe crashes, crashes with an animal, crashes in the snow or freezing rain, and crashes on roadways with a speed limit of 25 MPH or less.

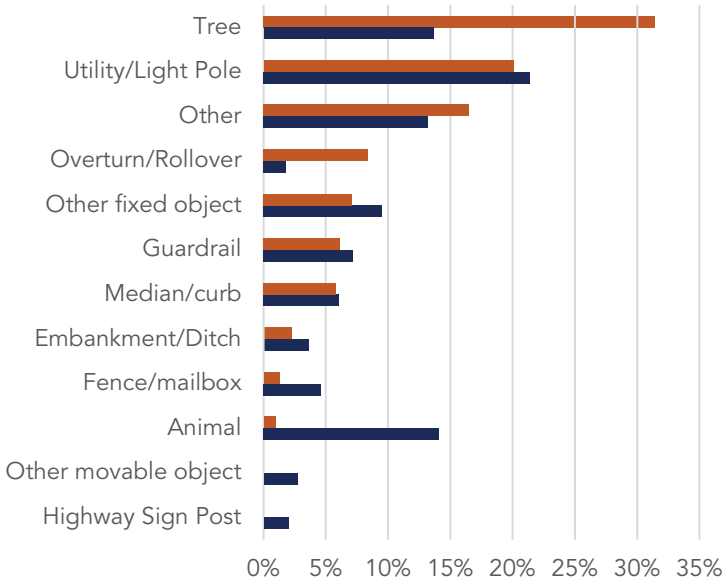
Crash Type



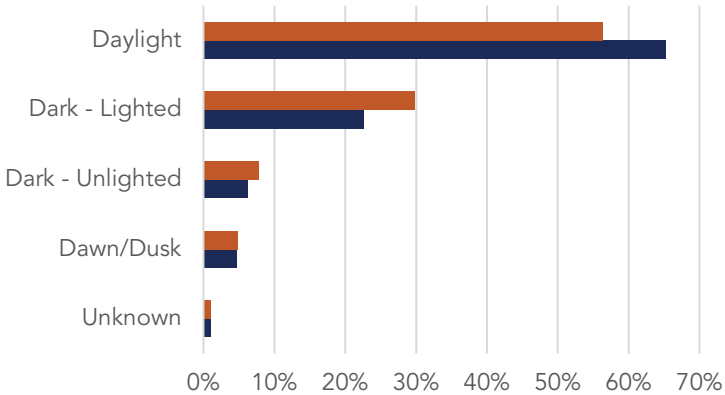
Vulnerable User Type



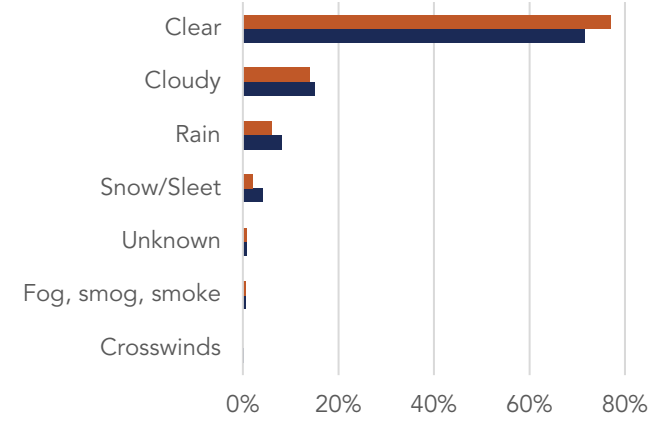
Single Vehicle Crash Type



Lighting Conditions



Weather Conditions

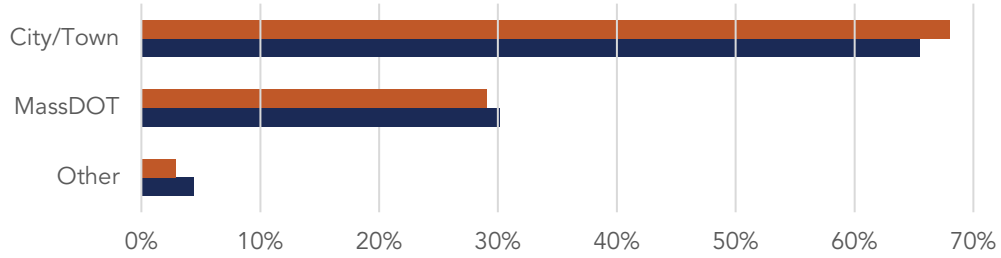


Serious or Fatal Injury (KSI) crashes

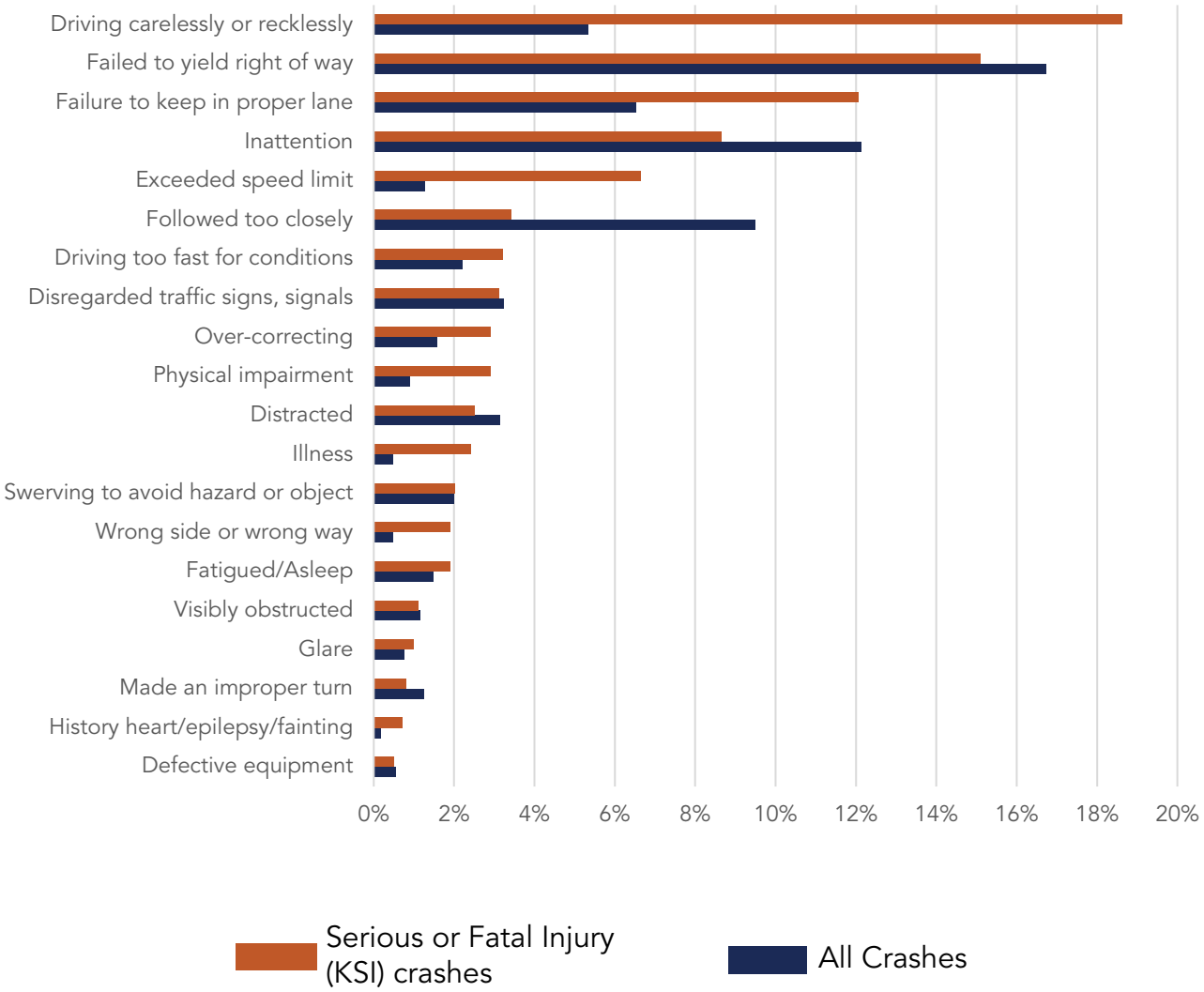
All Crashes

Source: MassDOT Impact Portal

Road Jurisdiction

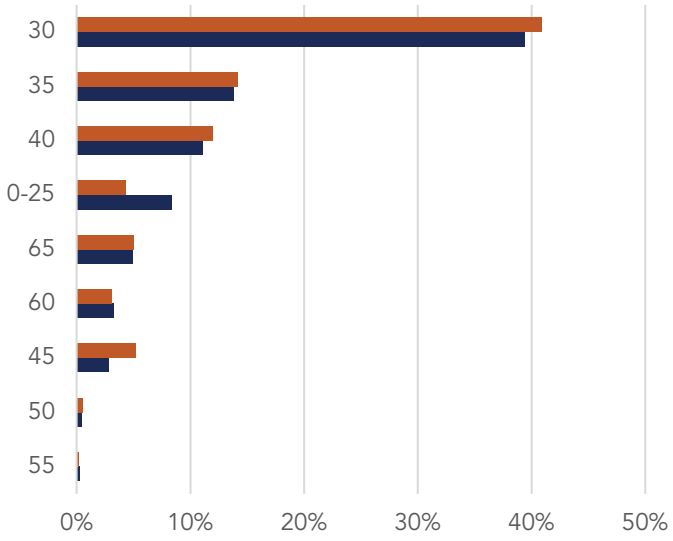


Driver Contibuting Circumstance

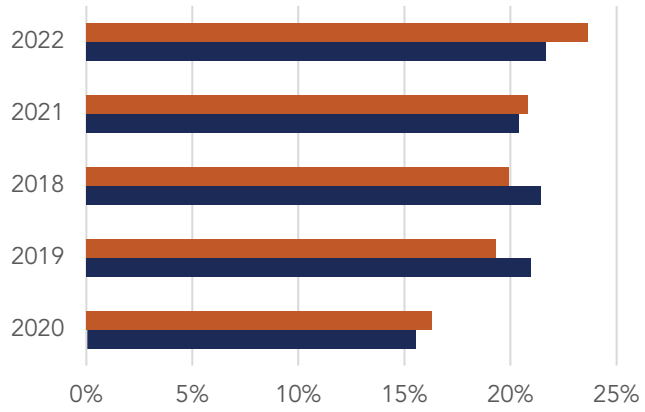


Source: MassDOT Impact Portal

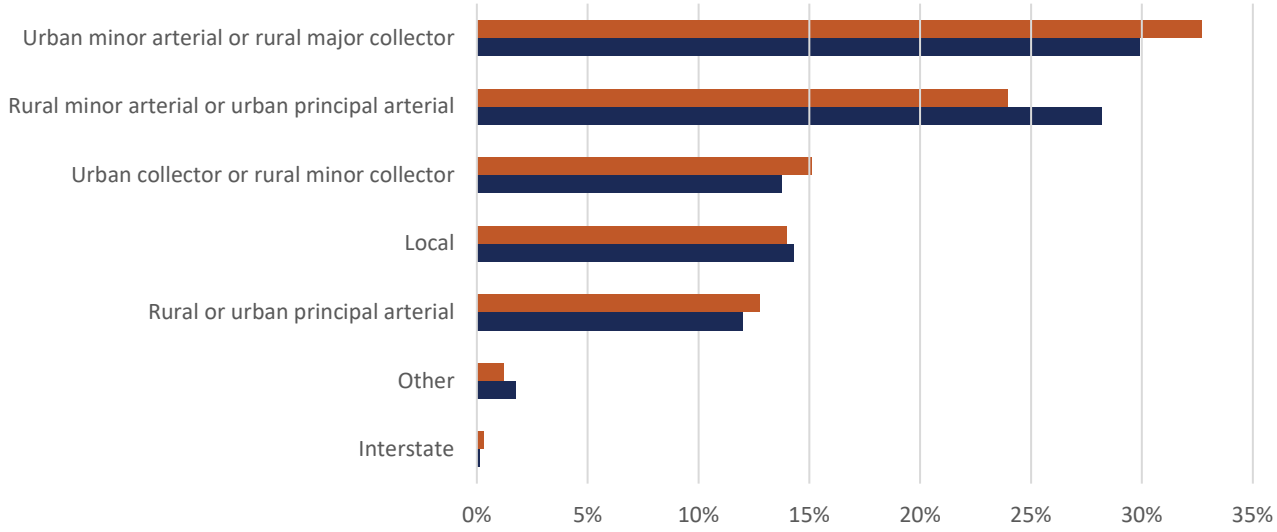
Speed Limit



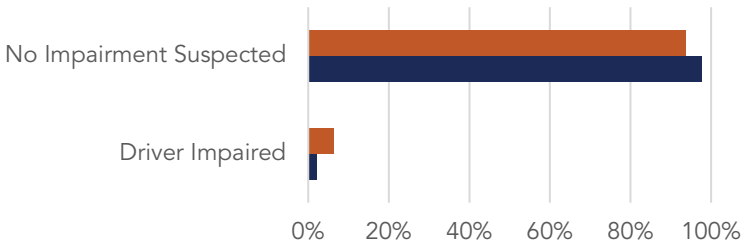
Year



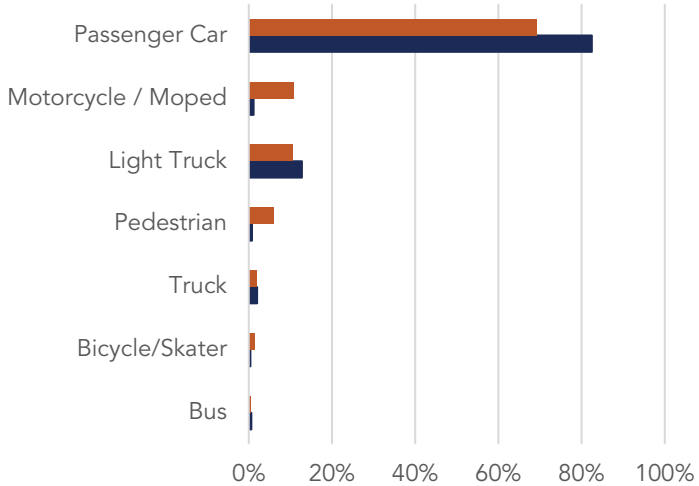
Roadway Type



Driver Impairment (Drugs or Alcohol)



Road User



Serious or Fatal Injury (KSI) crashes

All Crashes

Source: MassDOT Impact Portal

HIGH INJURY NETWORK: HISTORIC CRASH TRENDS

The development of the high injury network is a critical part of the Safety Action (Vision Zero) Plan. The high injury network is a selection of intersections and roadway corridors with either (a) a history of past crashes resulting in injury or (b) high risk roadway characteristics likely to result in future crashes. The incorporation of not only past crashes, but also high risk features seeks to be both reactive and proactive towards improving roadway safety.

The first high injury network component, intersections and segments prioritized based on historic crashes, was developed using an ArcGIS based tool that linked crash point locations to roadways and intersections. Then the roadways and intersections were given a severity score based on the severity of linked crashes. The crashes were linked to roadways and intersections by putting a 150 foot buffer around intersections and a 50 foot buffer around roadway segments.

Recognizing the importance of prioritizing people outside vehicles most in danger of injury from a crash, the analysis also gave additional weight to crashes where a vulnerable road user (e.g. someone walking or biking) was injured.

The analysis further prioritized underserved neighborhoods (environmental justice communities) with higher populations of people of color, lower income families and residents with limited English proficiency by weighting these communities higher.

SEVERITY SCORE

Vulnerable user crash: 1.5 pts each
Non-serious injury crash: 1 pt each
Serious injury crash: 5 pts each
Fatal injury crash: 15 pts each

x 1.5 if in an **EJ Community**

INPUTS

Roadway Segments (MassDOT Road Inventory 2022)

Roadway Crashes (MassDOT Impact Portal 2018-2022)

EJ Communities (MassGIS EJ Layer 2020)

Intersections (Derived from MassDOT Road Inventory 2022)

↓

PROCESS

1. Identify the crashes occurring at each segment and intersection

2. Identify whether an intersection or segment is in an EJ area

3. Create a severity score for each segment and intersection based on crash characteristics

↓

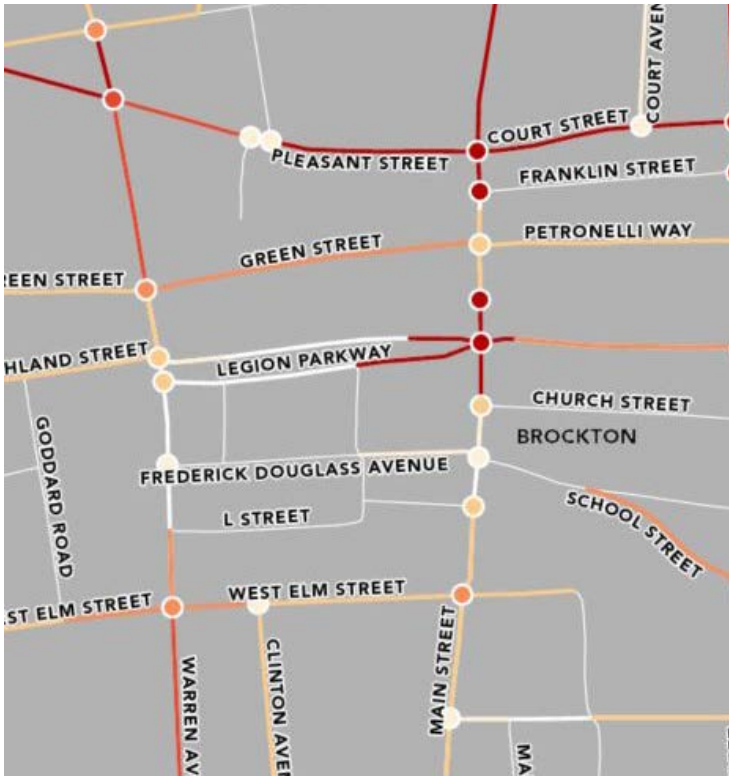
OUTPUTS

High Injury Network - **Segments**

High Injury Network - **Intersections**

The top location identified through the analysis is on Main Street in Brockton near Franklin Street and Pleasant Street. The area had three serious injury crashes, 37 other injury crashes and 13 crashes involving a non-motorist (someone walking, biking or rolling) between 2018-2022. The location is also located in an environmental justice block group, and received a total severity score of 107.25 points. The location is shown below.

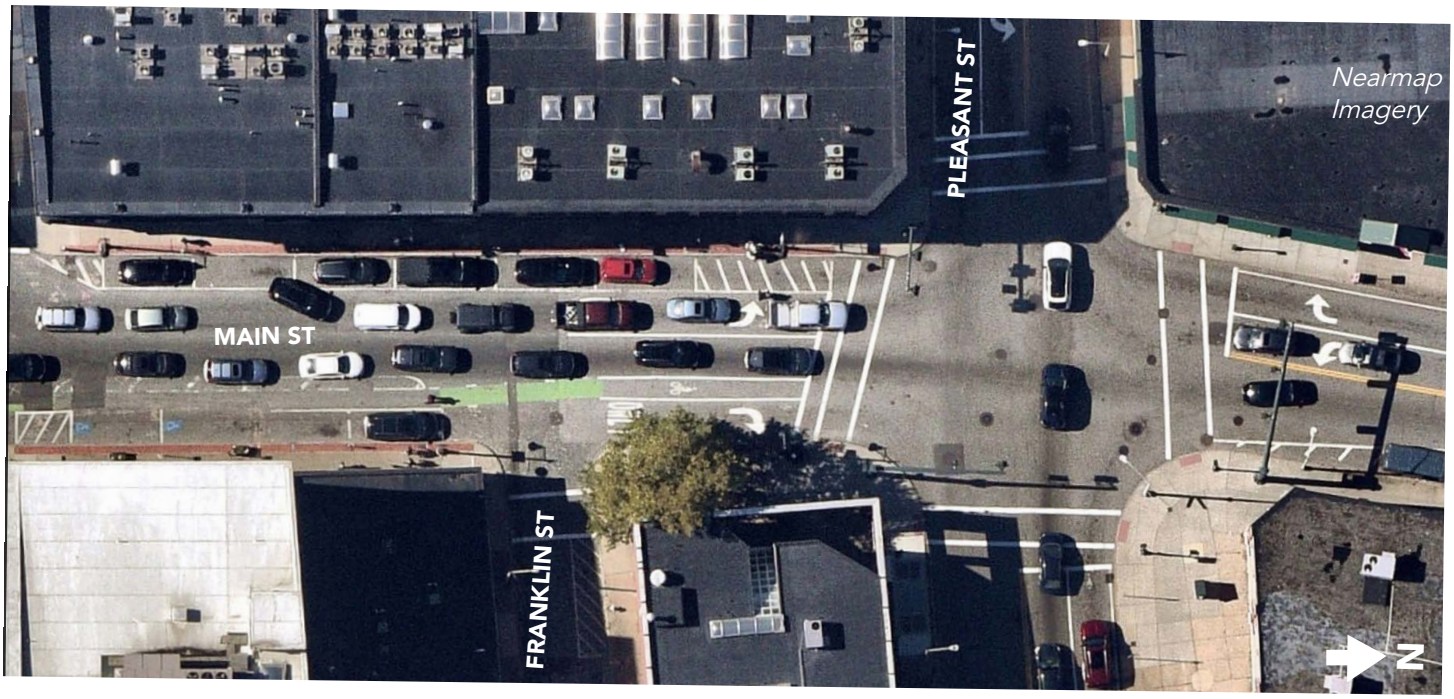
Shown in the map on the right, many top locations are located in Brockton including several others on Main Street, a high injury corridor in the region.



Selection of High Injury Segments and Intersections in Downtown Brockton. The darker colors represent higher injury intersections and segments.

Top Regional Location

Main Street near Franklin Street and Pleasant Street in Brockton



3
Serious Injury Crashes

37
Other Injury Crashes

13
Crashes involving a Non-Motorist

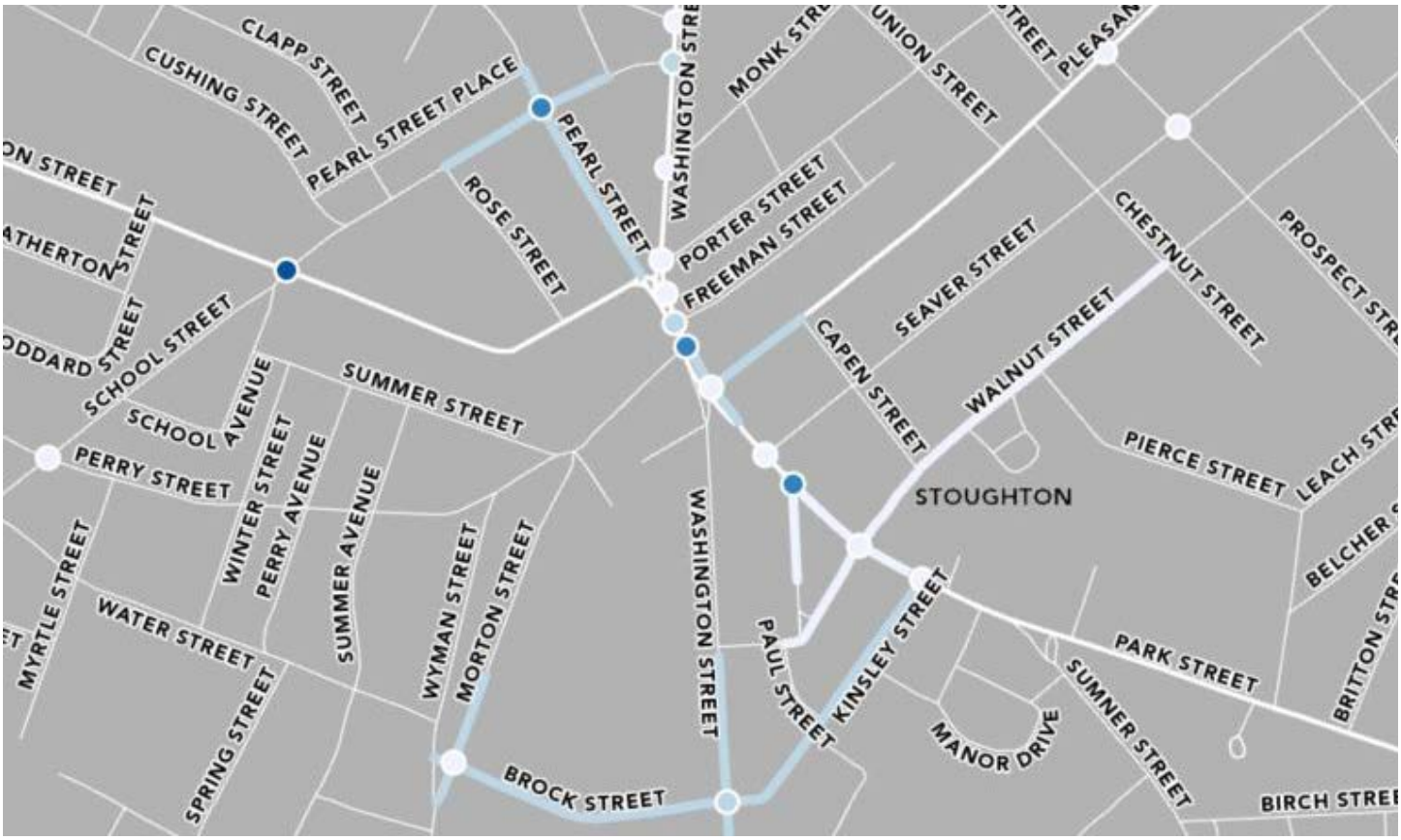
HIGH INJURY NETWORK: ROADWAY RISK

The second component of the high injury network identification is the risk-based analysis. The goal of risk-based analysis is to understand what roadway characteristics are correlated with high crash locations and to then use this information to predict locations at risk for future serious or fatal injury crashes. Risk-based prediction models were first initialized in ArcGIS Pro, and the Random Forest Regression model was chosen as the machine learning model for risk-based prediction. Crash data for the OCPC region was used to train the random forest model, which then learned the correlation between high-risk road features and top intersection and corridor locations.

The results of the risk-based analysis include risk-based top intersection and top corridor maps. The scores of intersections and corridors indicate the predicted score that the location is expected to receive each year. Additionally, intersections and corridors contain risk-based Z-scores, which indicate how the location compares to all locations in the OCPC region. For the purposes of mapping, only locations that are identified in the top 50% of high-risk locations (Z-score greater than 0) have been included in the risk-based maps. Often, intersections and segments flagged through the risk based analysis have an existing history of crashes.

HIGH RISK ROADWAY FEATURES

- Pavement Width
- Functional Classification
- Speed Limits
- Average Daily Traffic



Selection of High Risk Segments and Intersection in Stoughton. The darker colors represent higher risk intersections and segments.

MAP 4. HIGH INJURY NETWORK: COMBINED TOP REGIONWIDE AND COMMUNITY LOCATIONS

The combined high injury network adds together the risk and historic crash scores, includes any recent fatal crashes that have occurred since 2022 from MassDOT Impact and provides a 25% weight for locations highlighted by public participants and municipalities. The combined locations inform the projects described in further detail in Chapter 7.

NORWOOD
CANTON
RANDOLPH
BRAINTREE
WEYMOUTH
HINGHAM
SCITUATE
NORWELL
WALPOLE
HOLBROOK
AVON
ABINGTON
ROCKLAND
MARSHFIELD
SHARON
STOUGHTON
HANOVER
PEMBROKE
FOXBOROUGH
WHITMAN
BROCKTON
EAST BRIDGEWATER
HANSON
DUXBURY
MANSFIELD
HALIFAX
EASTON
WEST BRIDGEWATER
BRIDGEWATER
PLYMPTON
KINGSTON
NORTON
RAYNHAM
TAUNTON
MIDDLEBOROUGH
CARVER
PLYMOUTH
DIGHTON
BERKLEY
LAKEVILLE
REHOBOTH
SWANSEA
SOMERSET
FREETOWN
ROCHESTER
WAREHAM
BOURNE
FALL RIVER
ACUSHNET
MARION
SANDWICH

Intersections - Combined Score
- 18 - 27
- 28 - 40
- 41 - 60
- 61 - 99
- 100 - 180

Segments - Combined Score
- 22 - 34
- 35 - 51
- 52 - 71
- 72 - 107
- 108 - 222

0 0.5 1 2 Miles

N
W E
S

5 POLICY AND PROCESS REVIEW

This chapter describes previous relevant planning efforts relevant to roadway safety, identifies existing policies that support roadway safety, and informs strategies described in the Strategies and Projects chapter.

This Safety Action (Vision Zero) Plan builds on other planning efforts and policy development aimed at improving roadway safety. To best offer recommendations for improvements to the policies and processes in the region, this chapter aims to understand past recommendations that have been developed through previous planning efforts both statewide and in the region, and any existing relevant policies. The review of existing plans and policies informs the strategies outlined in the Strategies and Projects section of the Safety Action (Vision Zero) Plan.

PREVIOUS PLANNING EFFORTS

Plan	Goal	Relevant Recommendations
Vision 2050 Old Colony Long-Range Transportation Plan	Plan for future transportation needs for the Old Colony region	Infrastructure improvements, safety education and awareness, data driven approaches to identify locations, prioritizes improvements. Focus on underserved communities to address disparities in road safety, inclusive planning. Policy and enforcement - speed management policies, enhanced enforcement.
OCPC Bicycle and Pedestrian Connectivity and Livability Study, 2018	Advance bicycle and pedestrian connectivity throughout the Old Colony region	Documents existing bicycle and pedestrian infrastructure, highlights best practices, and provides a framework for developing future proposals, including goals and policies for a fully integrated multimodal transportation system. The study also provides technical analyses, including a sidewalk gap analysis and a proposed bicycle network.
Massachusetts Strategic Highway Safety Plan (SHSP), 2023	Achieve zero roadway fatalities and serious injuries	Implement speed management, address top-risk locations and populations, affect change in vehicle design features and use, accelerate research, do what works, more pilot projects, and public education.
Massachusetts Vulnerable Road User Safety Assessment, 2023	Improve safety for vulnerable road users (people walking, cycling, or rolling)	Implement site specific projects, systemic projects (adequate walk time, NTOR, LPIs, and countdown), material procurement (ex. RRFBs, speed feedback radar signs), support top VRU communities to facilitate safer crossings, separated bicycle facilities and traffic calming.
OCPC Active Transportation Study, 2021	Improve bicycle and pedestrian mobility in the OCPC Region, for commuting and recreational uses	Implement site specific recommendations identified for each town. Recommendations include bike lanes, new or wider sidewalks, multi-use trails, crosswalks, curb extensions, signage, intersection improvements, signal improvements, and accessibility upgrades. Focuses on safety, accessibility and connectivity.

Plan	Goal	Relevant Recommendations
City of Brockton Safety Action Plan, 2024	Establish Brockton's vision and goals for transportation safety and identify high-crash, high-risk intersections and streets and actions.	Lower speed limits from 30 mph to 25 mph in thickly settled or business districts. Align city design standards with state guidance for safe walking and biking facilities. Revise development review guidelines to prioritize road user safety over driver delay, following national and state guidance.
Town of Avon 2040 Master Plan	Develop a shared vision and actions guiding Avon for the next couple of decades.	Ensure all modes of travel, by foot, bicycle, motor vehicles, freight and transit are safe; maintain the small-town feel that demands safe streets, attractive streetscapes, and a transportation network that supports (not divides), neighborhoods.
Town of Bridgewater Comprehensive Master Plan, 2022	Develop a shared vision and actions guiding Bridgewater for the next couple of decades.	Develop town-wide pedestrian and bicycle master plans to link regional and local connections, fill in network gaps, and improve access to transit. Clarify and enforce the Town's zoning requirement for pedestrian circulation, ensuring that all new major development enhances the town-wide pedestrian/bikeway system.
Envision Duxbury: Town of Duxbury Master Plan, 2019	Improve walkability and bikability in the town.	Improve the Town's transportation networks to create a safer and more inclusive system for growing number of seniors in the Town and people who do not drive. Makes zoning recommendations to incrementally improve nodes of current activity such as neighborhood business districts, as walkable, amenity-rich neighborhood centers.
East Bridgewater Master Plan, 2024	Develop a shared vision and actions guiding East Bridgewater for the next couple of decades.	Enhance Sidewalk Infrastructure: Collaborate with the Complete Streets program and state initiatives to improve and expand sidewalks. Engage the Community: Conduct public outreach to understand and address residents' priorities. Support Safe Crossings: Extend crossing guard hours at the town center to assist students using the public library.
Envision Easton Community Master Plan, December, 2014	A safe transportation system for all users. A connected transportation system, within Easton and to the region.	Improve pedestrian visibility. Identify locations for improved lighting and include these locations in future projects. Review pedestrian sign inventory. Identify locations where signage may be warranted such as crosswalks as well as locations where signage may be overused and install new signs or remove existing signs as appropriate.

Plan	Goal	Relevant Recommendations
Hanson 2034 Master Plan, 2024	Mitigate future traffic increases through pedestrian safety efforts, aesthetics, and promotion of public transit. Create a pedestrian-safe connection between open and public spaces	Use Master Plan as a guide for understanding vehicle and pedestrian safety to assess the impact of new growth. Identify gaps in pedestrian-safe ways surrounding parks.
Town of Halifax Master Plan, 2010	Develop a shared vision and actions guiding Halifax for the next couple of decades.	Require pedestrian / bicycle easements between subdivisions and nearby destinations, unless explicitly waived during subdivision review. Design/adopt a skeletal town-wide pedestrian/bicycle path system to which individual paths can be connected.
Hanover 300, Master Plan, 2018	Develop a shared vision and actions guiding Hanover for the next couple of decades.	Develop a plan for adding sidewalks to key roadways in town, specifically in areas where trails do not connect.
Hanson 2024-2034 Master Plan, 2024	Develop a shared vision and actions guiding Hanson for the next couple of decades.	Use Master Plan as a guide for understanding vehicle and pedestrian safety to assess the impact of new growth. Identify gaps in pedestrian-safe ways surrounding parks.
Kingston Master Plan, December 2017	Develop a shared vision and actions guiding Kingston for the next couple of decades.	Enhance walkability throughout Kingston: Expand sidewalk network, create walkable streets, expand bike lanes and routes. Enhance pedestrian and bicycle safety- balance street capacity improvements with pedestrian safety, control curbcuts and maintain slow vehicle speeds in activity centers, upgrade sidewalks and pedestrian crosswalks. Make Complete Streets- adopt complete streets policy and capital improvement program. Improve Curb Appeal of Town Center and Commercial Corridors- improve street and sidewalk accessibility.
Pembroke Master Plan, 2024	Develop a shared vision and actions guiding Pembroke for the next couple of decades.	Form a Bicycle and Pedestrian Committee to solicit and provide feedback on bicycle and pedestrian needs. Develop a townwide Bicycle and Pedestrian Plan, including an implementation plan and prioritization ranking, focused on programs and building new bicycle and pedestrian facilities to improve connectivity throughout the Town and planning for year-round maintenance of facilities.
Plymouth Center Master Plan, 2019	Develop a shared vision and actions guiding Plymouth for the next couple of decades.	Improve crosswalk safety by adding elements such as improved lighting, pavement markings, bump outs, raised crosswalks, additional reflective signage, rapid flashing beacons and signs.

EXISTING POLICIES AND PROGRAMS

MassDOT Complete Streets Funding Program

The intent of the MassDOT Complete Streets Funding Program is to provide planning and construction funding to municipalities demonstrating a commitment to Complete Streets principles. Complete Streets are roadways that balance the needs of all road users, including people taking the bus, walking, using a wheelchair, biking, and driving. The program recognizes Complete Streets are often safer streets with more reliable public transport, and more efficient operations for all users.

The Complete Streets program through MassDOT requires municipalities first adopt a Complete Streets policy, then develop a list of prioritized complete streets projects, and then apply for construction funding. All communities in OCPC, except Plympton, have adopted a Complete Streets policy. Most communities have applied for project funding. Of those that have not, Halifax, Hanover, Duxbury and Avon have completed prioritization plans and Pembroke has a policy.

COMMUNITIES WITH ADOPTED COMPLETE STREETS POLICIES

Abington
Avon
Bridgewater
Brockton
Duxbury
East Bridgewater
Easton
Halifax
Hanover
Hanson
Kingston
Pembroke
Plymouth
Whitman
West Bridgewater
Stoughton

MassDOT Safe Routes to School Program

The MassDOT Safe Route to School program is a federally funded program that aims to increase safe walking, biking, and rolling activities among public elementary, middle, and high school students. The program encourages using active modes of transportation to get to school through educational programs, improving infrastructure to schools, and providing safety training to students.

COMMUNITIES WITH SAFE ROUTES TO SCHOOL

Abington
Avon
Bridgewater
Brockton
Duxbury
East Bridgewater
Easton
Halifax
Hanson
Kingston
Pembroke
Plymouth
Plympton
Stoughton
West Bridgewater

SAFE ROUTES TO SCHOOL - PARTNER SCHOOLS

- Beaver Brook Elementary School, *Abington*
- Woodsdale Elementary School, *Abington*
- Ralph D. Butler Elementary School, *Avon*
- Bridgewater Middle School, *Bridgewater*
- Bridgewater-Raynham Regional High School, *Bridgewater*
- George H Mitchell Elementary, *Bridgewater*
- Therapeutic Day School, *Bridgewater*
- Arnone School, *Brockton*
- Ashfield Middle School, *Brockton*
- Brockton High School, *Brockton*
- Brockton Virtual Learning Academy, *Brockton*
- Brookfield Elementary School, *Brockton*
- Downey Elementary School, *Brockton*
- East Middle School (Brockton), *Brockton*
- Edgar B. Davis K-8 School, *Brockton*
- Edison Academy, *Brockton*
- Gilmore Elementary School, *Brockton*
- Hancock School, *Brockton*
- Huntington Alternative School, *Brockton*
- Kennedy Elementary School, *Brockton*
- Manthala George, Jr. Global Studies School, *Brockton*
- Mary E. Baker Elementary School, *Brockton*
- New Heights Charter School, *Brockton*
- North Middle School, *Brockton*
- Plouffe Middle School, *Brockton*
- PROMISE College and Career Academy, *Brockton*
- Raymond Elementary School, *Brockton*
- South Middle School, *Brockton*
- West Middle School, *Brockton*
- Chandler Elementary School, *Duxbury*
- Duxbury High School, *Duxbury*
- Central Elementary School, *East Bridgewater*
- East Bridgewater JR/SR High School, *East Bridgewater*
- Gordon W. Mitchell School, *East Bridgewater*
- Richardson Olmsted Elementary School, *Easton*
- Halifax Elementary School, *Halifax*
- Bryantville Elementary School, *Pembroke*
- Hobomock Elementary School, *Pembroke*
- North Pembroke Elementary School, *Pembroke*
- Pembroke Community Middle School, *Pembroke*
- Pembroke High School, *Pembroke*
- Cold Spring Elementary School, *Plymouth*
- Federal Furnace Elementary School, *Plymouth*
- Hedge Elementary School, *Plymouth*
- Manomet Elementary School, *Plymouth*
- Nathaniel Morton Elementary School, *Plymouth*
- Plymouth Community Intermediate School, *Plymouth*
- Plymouth South Middle School, *Plymouth*
- South Elementary School, *Plymouth*
- West Elementary School, *Plymouth*
- Joseph R. Dawe, Jr. Elementary School, *Stoughton*
- O'Donnell Middle School, *Stoughton*
- South Elementary School, *Stoughton*
- Stoughton High School, *Stoughton*
- Wilkins Elementary School, *Stoughton*
- Howard Elementary School, *West Bridgewater*
- Spring Street School, *West Bridgewater*
- West Bridgewater Middle-Senior High School, *West Bridgewater*
- Oliver Ames High School, *Easton*

EXISTING DESIGN GUIDELINES

MassDOT Highway Division Manuals and Publications

MassDOT provides guidance for construction specifications and details, as well as a variety other design guides and manuals, that serve to help project engineers, construction contractors, and others. These manuals provide guidance for the designing, building, and maintenance of roads and bridges in Massachusetts.

Separated Bike Lane Planning & Design Guide – 2015 MassDOT

The MassDOT Separated Bike Lane Planning & Design Guide provides guidance on applications of separated bike lanes as well as the design and configuration of bike lanes. This includes bike lane design through intersections and transit stops, guidance on necessary locations to add bike lane signalization, considerations for parking and landscaping, and many other features.

Guidelines for the Planning and Design of Roundabouts – 2022 MassDOT

The MassDOT Guidelines for the Planning and Design of Roundabouts guide provides key details to the planning, analysis, and design of roundabouts in communities. The guide includes key pointers on how to conduct public outreach for roundabout concepts, explains safety principles for roundabout design and outlines design principles such as inscribed diameter size, entry and exit widths, and accommodation for pedestrians and bicycles.

MassDOT Bridge Manual – Hundredth Anniversary Edition – April 2024 MassDOT

The MassDOT Bridge Manual is a standard document that aims to promote efficiencies in the design and construction of bridges in Massachusetts by providing uniform bridge design requirements, construction details, as well as pre-designing common bridge details. The manual also aims to share the knowledge that engineers in Massachusetts have accumulated from the design of bridges over the past 100 years and incorporate this knowledge into bridge design details with the goal of building long-lasting and safe bridges.

Manual on Uniform Traffic Control Devices for Streets and Highways 11th Edition – USDOT Federal Highway Administration – December 2023

The newly updated MUTCD provides standards for traffic signals, pavement markings, traffic signage, and many more traffic features, to ensure that states have consistent and safe infrastructure for public roadway users. The recent updates to the MUTCD have incorporated many changes to the way we design roadways to accommodate all users, with an exclusive section dedicated to the design and implementation of bike traffic signals.

NACTO Urban Street Design Guide

NACTO's Urban Street Design Guide provides guidelines for the design of roadways that emphasize the importance on providing spaces for all road users, such as pedestrians, bicyclists, and public transit users. The guide serves as a toolbox full of roadway and intersection design elements for making streets safer, more livable, and more economically vibrant.

Public Right-of-Way Accessibility Guidelines (PROWAG)

The Public Right-of-Way Accessibility Guidelines (PROWAG) provides standards to make streets, sidewalks, and transit stops accessible for users. This includes standards for accessible roadway design elements such as sidewalk ramps, sidewalks, pedestrian signals, transit stop infrastructure, shared use paths, and many more.

Accessible Pedestrian Signal Installation Policy – Effective June 2021 – MassDOT

MassDOT has created the Accessible Pedestrian Signal Installation Policy (APS) with the commitment of installing APS devices at all new traffic signals, at crosswalks, and at existing traffic signals when being redesigned or updated. APS allows pedestrians who are blind or visually impaired to know when the WALK interval at a traffic signal begins and ends through both audible and vibrotactile functions.

Project Development and Design Guide (PDDG) – MassDOT 2023

The purpose of the MassDOT Project Development and Design Guide is to define the project development process and guide the planning and design of transportation projects for the MassDOT Highway division. The guide is currently being updated from the previous 2006 version to incorporate process changes and guidance that have occurred since 2006. The purpose of the guide is also to provide designers and decision-makers with guidelines on how to incorporate multi-modal elements and context sensitive design into transportation projects.

The main sections of the guidebook which relate to safety are broken into the following:

Project Development – This section focuses on how transportation projects move through the design phase to the construction phase, which includes planning, design, environmental review, right-of-way assessments. This also includes strategies to assess projects after completion.

Basic Design – Outlines the guidelines on how all users will share roads safely at a variety of facilities. These include: intersections, interchanges, bridges, shared use paths, and intermodal facilities and rest areas. This section also includes the design of many other roadway elements such as alignments, landscaping, and accounting for drainage and erosion.

Design Standards – The design guide provides several chapters focused on design elements and traffic management strategies, including cross-section & roadside elements, intersections, shared use paths, access management, traffic calming and traffic management, and work zone management.

Plans, Specifications, and Cost Estimates – As in the chapter title, this section focuses on providing the outline for technical plans and specifications for designers and MassDOT officials that work on the design of transportation projects.

6 COUNTERMEASURES TOOLBOX

This chapter describes proven safety countermeasures that can be used to address specific crash types identified during the safety analysis.

In recent years, the emphasis on roadway safety has resulted in an abundance of research and guidance on safety countermeasure effectiveness. Countermeasures aim to address specific crash types, but not every countermeasure works at every location.

Where applicable, countermeasure descriptions include information on crash modification factors (CMFs). CMFs provide an estimated reduction in crashes with the implementation of a countermeasure, based on the results of past studies. A CMF is the percentage of crashes that are expected to still occur after implementation of a countermeasure, so for example, a CMF of .15 would mean just 15% of crashes are expected to occur after implementation, or an 85% reduction in crashes.

Recognizing the unique needs of communities in the OCPC Region, this plan identifies proven safety countermeasures that address the high injury crash types identified during the safety analysis - single vehicle crashes, angle crashes, head-on crashes, motorcycle crashes, pedestrian crashes and bicycle/scooter crashes.

PROVEN SAFETY COUNTERMEASURES REFERENCE RESOURCES

- Federal Highway Administration (FHWA) Proven Safety Countermeasures
- National Association of City Transportation Officials (NACTO) Urban Street Design Guide
- NACTO Urban Bikeway Design Guide
- MassDOT Separated Bicycle Design Guide
- CMF Clearinghouse
- Small Town and Rural Design Guide
- Manual on Uniform Traffic Control Devices (MUTCD)

SINGLE VEHICLE CRASH COUNTERMEASURES

A **crash modification factor (CMF)** is the percentage of crashes that are expected to still occur after implementation of a countermeasure

Speeding

Countermeasure	Estimated Cost	Crash Modification Factor
Narrow travel lanes	$75,000 per mile	0.76
Road Diet (4 to 3 lanes)	$1,000,000 per mile	0.53 - 0.81
Speed feedback radar signs	$16,000	0.95 (rural single vehicle crashes)

Edge of Road and Curve Visibility

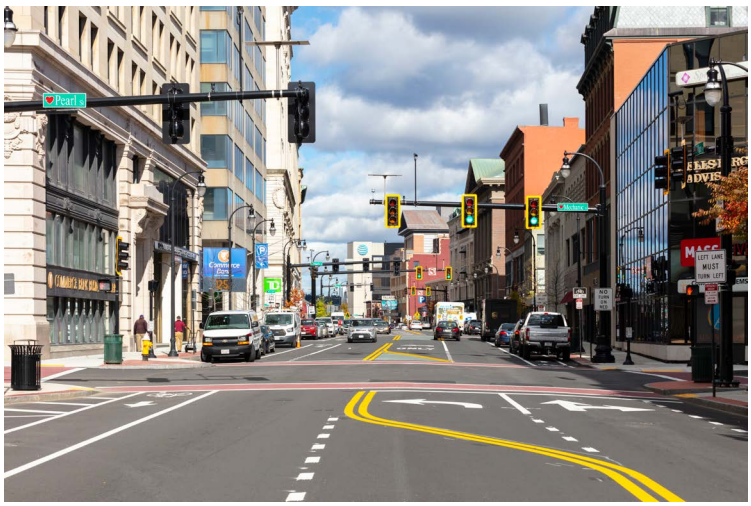
Countermeasure	Estimated Cost	Crash Modification Factor
Reflective edge lines (paint)	$6,500 per mile per lane line	0.85
Shoulder rumble strips	$10/foot	0.49-0.87 (run-off road, fatal and injury crashes)
Chevrons	$500/sign	0.84 (fatal and injury crashes)

Wet or Dark Conditions

Countermeasure	Estimated Cost	Crash Modification Factor
High Friction Surface Treatment	$280,000 per mile per lane	0.48 (wet road crashes)
Wet reflective pavement markings (thermoplastic)	$10,500 per mile per lane	0.88 (injury crashes)
Install lighting	$12,500 each	0.63 (injury crashes)

Obstructions on Side of Road

Countermeasure	Estimated Cost	Crash Modification Factor
Reflective object markers on utility poles, guardrails and posts on side of road	$50/each	NA
Relocate utility poles	$15,000/pole	0.86



4 to 3 lane road diet in Worcester, MA

Speed feedback radar sign

ANGLE CRASH COUNTERMEASURES

Conflicting Turning Movements and Speeding

Countermeasure	Estimated Cost	Crash Modification Factor
Roundabout	$500,000 per roundabout	0.18-0.22 (severe crashes)
No Turn on Red	$500	NA
2-Way to 4-Way Stop	$3,000	0.25 (angle crashes)
Protected Left Turn Phasing	$15,000	0.67
Road Diet	$1,000,000 per mile	0.53-0.81
Access management (driveway closures, restricted movements)	Small project: <$100,000 Medium: $100,000-500,000	0.6-0.9
Advanced Stop Signs	$3,000	0.86
Flashing Beacon	$10,000	0.95

Red Light Running

Countermeasure	Estimated Cost	Crash Modification Factor
Yellow Change Interval Modification	$5,000	0.88
Backplates with retroreflective borders	$400 each	0.85
Red light running camera*	Contractor typically installs free for a portion of citation revenue	varies

*as of the writing of this report, automated enforcement is not permitted in Massachusetts

Retroreflective backplates
(Source: FHWA)

Access management - driveway closure

VEHICLE-PEDESTRIAN CRASH COUNTERMEASURES

Visibility

Countermeasure	Estimated Cost	Crash Modification Factor
Rapid Rectangular Flashing Beacon (RRFB)	$30,000	0.53 (pedestrian crashes)
Curb Extension at Crosswalk	$30,000 per extension	NA

Speeds

Countermeasure	Estimated Cost	Crash Modification Factor
Raised Crosswalks	$100,000/crosswalk	0.64
Raised Intersection	$250,000	NA
Speed Humps	$30,000/hump	0.6

Separation in Space and Time

Countermeasure	Estimated Cost	Crash Modification Factor
Leading Pedestrian Intervals (LPIs)	$5,000	0.40
Pedestrian Crossing Islands	$10,000 per island	0.44
Pedestrian Hybrid Beacons	$150,000	0.45
Sidewalks	$450,000/mile	0.11-0.45
Paved Shoulder	$900,000 per mile	0.29

Pedestrian Hybrid Beacons have been found to reduce vehicle pedestrian crashes by 55% (Source: FHWA).

Curb extensions shorten the pedestrian crossing distance and enhance visibility.

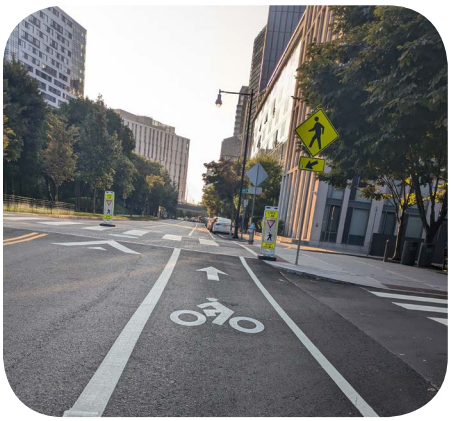
VEHICLE-BICYCLE CRASH COUNTERMEASURES

Speeds

Countermeasure	Estimated Cost	Crash Modification Factor
Bicycle Boulevard	Varies depending on devices	0.37 (vehicle-bicycle crashes)
Raised bicycle crossing	$40,000	0.49 (vehicle bicycle crashes)

Separation

Countermeasure	Estimated Cost	Crash Modification Factor
Bike Lanes	$35,000 per mile	0.65 (vehicle-bicycle crashes)
Add bike lane separation	$65,000 per mile	0.57 (vehicle-bicycle crashes)



Bicycle Lane

Trails fully separated from traffic present fewer vehicle conflicts

Protected bicycle lane

HEAD-ON CRASH COUNTERMEASURES

Crossing Center Line

Countermeasure	Estimated Cost	Crash Modification Factor
Centerline rumble strips	$10/foot	0.56
Median Barrier	NA	0.03 (cross median crashes)

Centerline rumble strips (Source: FHWA).

Median Barrier

7 STRATEGIES AND PROJECTS

This chapter describes the top 50 projects across the OCPC Region, top projects for each City/Town, and regionwide safety strategies for reducing serious and fatal crashes.

The Strategies and Projects section turns the problem identification into concrete action steps for improving safety in the OCPC Region by merging all the crash analysis, proven countermeasures, and community input.

Top projects were developed by merging high injury network locations close to each other into combined projects, and then reprioritizing the projects based on the crash severity, risk scores, environmental justice characteristics and community input. Crashes were attached to intersections within 150 foot buffers and to segments within 50 foot buffers.

For each project, the types of injury crashes, and specifically fatal and serious injury crashes, were identified to assist with the targeted countermeasure selection for each location. Both the top 50 projects in the region, and the top projects for each municipality, are identified. Preliminary recommended countermeasures were identified for each of the top 50 projects in the region. In Appendix B of the report, projects identified as top municipal safety projects are listed.

In addition to the focused recommendations provided for each of the top project locations, strategies were identified for improving safety, based on elements of the Safe System Approach. Strategies were recommended based on the specific crash types and needs of the OCPC Region.

PROJECT DEVELOPMENT AND PRIORITIZATION

Develop Projects
Combine high injury intersections and segments into projects.

↓

Prioritize Projects
Give each project a score and rank based on crash severity, risk, community input, environmental justice and vulnerable users.

PROJECT PRIORITIZATION CRITERIA

Minor Injury Crash (2018-2022) - **1 pt each**
+
Serious Injury Crash (2018-2022) - **5 pt each**
+
Fatal Injury Crash (2018-2022) - **15 pt each**
+
Vulnerable User Crash (2018-2022) - **1.5 pt each**
+
Fatal crash (1/1/2023 - 10/22/2024) - **15 pt**
+
Average risk score for project area - **5 pt**

x

Environmental Justice **1.25**

x

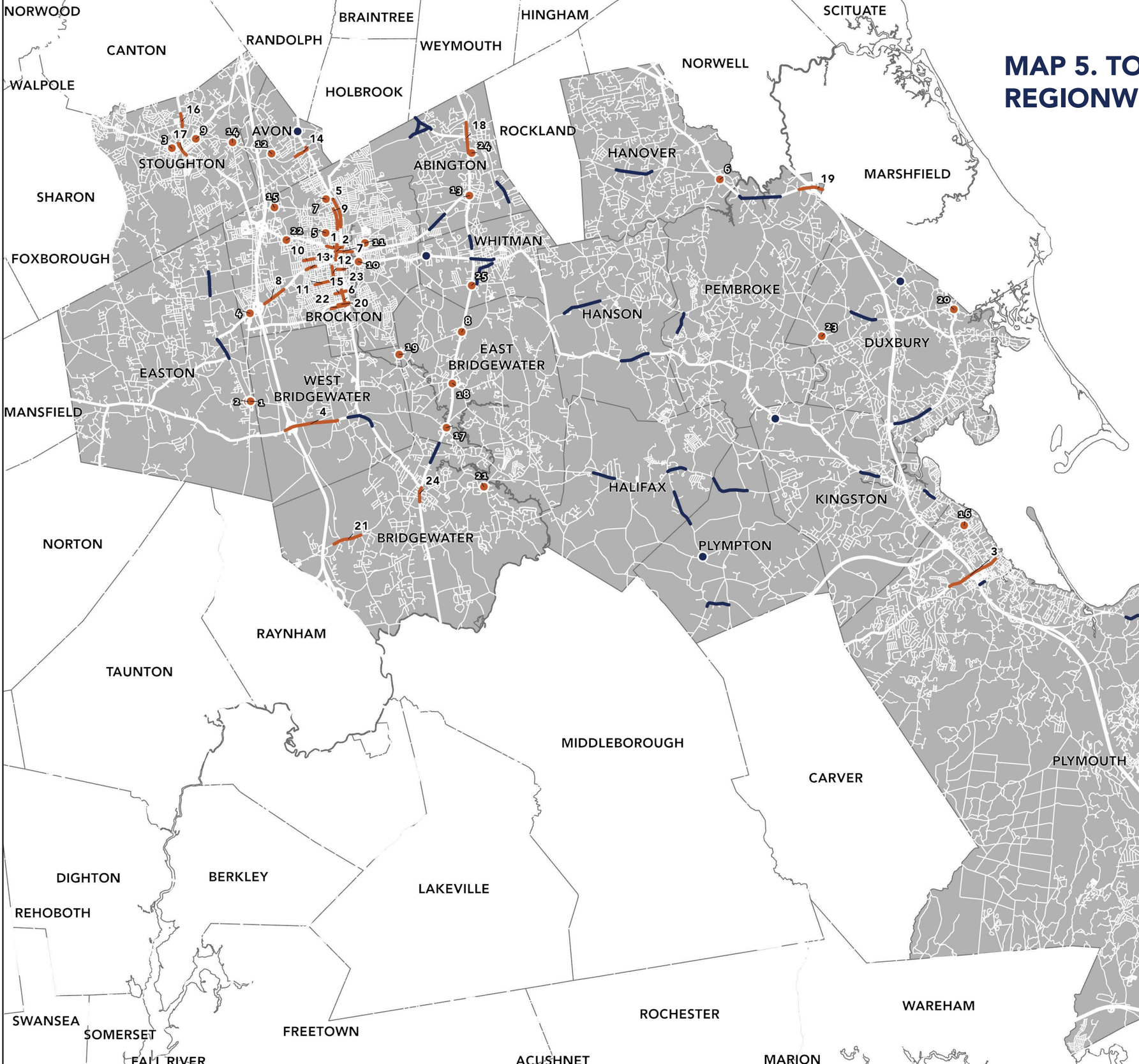
Community Priority **1.25**

MAP 5. TOP PROJECTS REGIONWIDE AND BY MUNICIPALITY

Map 5 shows the top 50 regional projects in orange and the top projects in each municipality in blue, for a total of 84 projects at intersections and along corridors within the 17 OCPC communities.

Of the top 50 projects, 22 are in Brockton and 5 are in Stoughton. Bridgewater, Abington, East Bridgewater, and West Bridgewater have three each. The others are distributed across the other municipalities.

Top regional corridors and intersections are labeled by project rank. The projects are described on the following pages. Municipal projects are descibed in Appendix B.



TOP 50 REGIONWIDE PROJECTS

Corridors

All crash information from 2018-2022, or recent fatal crashes since 2023 from MassDOT IMPACT

EJ Community - Is it in a MassGIS EJ community?

RSA - Was an RSA Conducted through MassDOT Road Safety Audit Program somewhere along the corridor?

TIP - Is the project listed funded on the Transportation Improvement Program?

Highway Safety Improvement Program (HSIP) - Is anywhere along the corridor listed as a HSIP Cluster, including a Pedestrian or Bicycle Cluster by MassDOT 2019-2021?

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
1	Pleasant Street and Court Street from Spring Street to Montello Street	Brockton	1.10	2	Yes	320	126	11	Angle (3), Head-On (1), Sideswipe (1), Single Vehicle (2), Rear-end (2), Pedestrian (1), Other Non-Motorist (1)	• Intersection realignment at Spring Street intersection • Upgrade to ladder style crosswalks • Upgrade all signals to include countdown and APS • Evaluate tightening turning radii to shorten crossing distances • Evaluate additional mid-block crossing opportunities • Install ladder style crosswalks with RRFBs or curb extensions at mid-block crossings • Consider widening sidewalks • Reconstruct accessible ramps • Backplates • Improve parking delineation by 169 Court Street • Ensure all travel lanes are 10.5-11 feet wide.	N	Y	Y
2	Main Street from Spring Street to Belmont Street including Main Street at Legion Pkwy	Brockton	0.25	2	Yes	295	117	8	Angle (2), Rear-end (3), Pedestrian (2), Other Non-Motorist (1)	• Curb extensions at crosswalks particularly where parking blocks crosswalk visibility • Upgrade to ladder style crosswalks • Reduce pedestrian delay at signalized intersections • Upgrade all signals to include countdown and APS • Optimize clearance intervals • Consider signal timing and phasing adjustments including dedicated left turn phasing • Consider providing bike lane at sidewalk level • Access management including narrowing of driveway entrances.	N	Y	Y
3	Samoset Street from Marc Drive to Court Street	Plymouth	1.00	2	Yes	262	109	9	Angle (3), Pedestrian (2), Single Vehicle (1), Rear-end (1), Head-on (1), Bicyclist (1)	• Reconstruct fully accessible sidewalks and ramps • Provide bike shoulders and provide consistently 11' travel lanes. • Provide ladder style crosswalks and pedestrian signals at the intersection with the plaza by 113 Samoset Street • Consider tightening the plaza entrance to shorten the crossing distance. • Consider road diet along the corridor. • Access management. • Ladder style crosswalks throughout for improved visibility for people walking.	N	Y	0
4	W Center Street from west of Route 24 ramps to N Elm Street	West Bridgewater	0.98	2	No	254	130	16	Angle (3), Pedestrian (2), Rear-end (5), Sideswipe (2), Single Vehicle (4)	• Reconstruct sidewalks and widen where possible ensuring meet accessibility requirements • Stripe ladder style crosswalks across side streets and reconstruct ramps to improve visibility • Provide RRFB at existing crosswalk by 320 West Center Street • Stripe edge line and narrow travel lanes to 11' • Stripe double yellow centerline • Provide bike lane with buffer where space is available • Access management • Consider relocating utility poles to the back of sidewalk • Install reflective object markers on utility poles • Install advance intersection warning signage on 106 in advance of Lincoln Street intersection • Evaluate tightening turning radii at Lincoln Street and Prospect Street • Evaluate intersection realignment at N Elm Street and West Center Street intersection including tightening turning radii • Removing or realigning slip lanes and narrowing travel lanes and access management.	Y	N	0

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
5	N Montello Street from E Ashland Street to Livingston Road	Brockton	0.81	2	Yes	236	146	8	Angle (5), Rear-end (2), Single Vehicle (1)	• At Battles Street and Livingston Street intersections: access management • Overhead flashing beacon • Evaluate signal installation • Consider curb extensions and RRFBs at mid block crossings • Consider bicycle accommodation • Upgrade to ladder style crosswalks • Speed feedback radar signs.	N	N	Y
6	Main Street from Grand Street to south of Market Street	Brockton	0.44	2	Yes	216	101	12	Angle (4), Pedestrian (3), Sideswipe (2), Rear-end (2), Single Vehicle (1)	• Consider curb extensions at intersections and mid-block with crosswalks • Upgrade to ladder style crosswalks • Consider additional mid-block crossing opportunities • Restrict parking by intersections • Ensure consistent 11' traffic lanes • Install signal at Nilsson intersection. RSA at Nilsson	Y	Y	Y
7	Center Street from west of Main Street to Hunt Street	Brockton	0.47	2	Yes	211	125	4	Pedestrian (2), Angle (1), Rear-end (1)	• Ensure 11' travel lanes • Reconstruct sidewalks • Raise bike lane to sidewalk level • Upgrade to ladder style crosswalks and reconstruct ramps • Signalize Plymouth Street intersection and install pedestrian signals with countdown and APS • Evaluate road diet between Commercial Street and Plymouth Street • Limit parking near the Plymouth Street intersection • Evaluate removal of right turn lane approaching Plymouth Street eastbound • Speed feedback radar signs • Consider installing additional lighting • Access management (Has RSA)	Y	Y	Y
8	Belmont Street from east of MA-24 ramps to east of Magnolia Avenue	Brockton	0.66	1	Yes	194	97	9	Angle (3), Pedestrian (3), Rear-end (3)	• Access management • Provide mid-block crossing opportunities with median refuge in existing median • Consider opportunities for median refuge islands at intersections • Consider separated bicycle accommodation options along the corridor • Shorten crossing distances across Belmont Court and the VA hospital entrance • Speed feedback radar signs • Examine signal phasing and timing particularly for people walking • Evaluate clearance intervals.	Y	Y	Y
9	N Main Street from Huntington Street to Ames Street	Brockton	0.58	2	Yes	178	79	6	Angle (2), Pedestrian (2), Head-On (1), Single Vehicle (1)	• Stripe edge lines • Narrow lanes to consistently 11' • Provide curb extensions at intersections and mid-block crossings to shorten crossing distances and calm traffic • Provide additional opportunities to cross N Main Street • Upgrade signals to include countdown and APS • Install retroreflective backplates • Upgrade to all ladder style crosswalks • Install speed feedback radar signs.	N	Y	Y
10	W Elm Street west of Moraine Street to Elm Avenue	Brockton	0.29	2	Yes	174	108	7	Angle (5), Pedestrian (1), Rear-end (1)	• Narrow travel lanes to 11' • Upgrade to ladder style crosswalks • Evaluate signal or all way stop control at the Belmont Ave intersection • Consider installing crosswalk across Elm Street at Byron Ave • Consider additional locations for pedestrian crossings • Consider providing sidewalk level bike lane • Bike lane buffer • Evaluate phasing • Timing and clearance intervals at existing Ash Street signal. "	Y	Y	Y

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
11	Forest Avenue from Mamomet Street to Warren Avenue	Brockton	0.56	2	Yes	159	82	7	Angle (2), Head-On (2), Pedestrian (1), Rear-end (1), Sideswipe (1)	• Update crosswalks to ladder crosswalks • Consider additional speed enhancements such as speed feedback radar signs • Bumpouts at intersections with ladder crosswalks • Evaluate on street parking management • Evaluate clearance intervals and timings at corridor intersections • Access management at businesses • Review for ladder crosswalks across all side streets • Ensure 11' travel lanes • Continue to evaluate for head on crash reduction"	N	N	Y
12	Warren Avenue from Florence Street to Bartlett Street	Brockton	0.44	2	Yes	159	90	7	Angle (4), Pedestrian (2), Single Vehicle (1)	• Reconstruct accessible ramps • Upgrade to ladder style crosswalks • Stripe bike facilities • Provide additional opportunities to cross Warren Avenue • Consider traffic calming options including speed feedback radar signs or curb extensions • Consider narrowing travel lanes to 10.5 feet • install reflective object markers to utility poles."	N	N	Y
13	Belmont Street from Moraine Street to Elm Avenue	Brockton	0.28	2	Yes	139	83	2	Angle (2)	• Narrow travel lanes to consistent 11' • Realign crosswalks across Belmont Street • Provide ladder style crosswalks • Stripe bike lanes or bike friendly shoulders where space allows • Consider curb extensions or median refuge islands to shorten crossing distances and reduce speeds • Access management including delineation between parking areas and sidewalks and reducing driveway and curb cut widths • Consider widening sidewalk • Consider installing speed feedback radar signs • Consider intersection ahead signage and overhead in advance of Manomet Street and an overhead flashing beacon. • Evaluate Manomet Street intersection for a traffic light or all way stop control. • Consider raised crosswalks across minor side streets. "	N	N	Y
14	Harrison Boulevard and E Main Street from intersection of Harrison Boulevard and W Main Street to E Main Street, including the intersection of E Main Street and W Spring Street	Avon	0.45	1	Yes	126	51	2	Angle (1), Unknown (1)w	• Consider intersection realignment at E Main Street and Harrison Boulevard intersection to remove slip lanes • Install pedestrian signals including countdown and APS • Install retroreflective backplates • Evaluate clearance intervals. • Consider roundabout at W Main and Harrison Boulevard. • Ensure 11' travel lanes. • Install double yellow center line. • Improve lighting. • Consider installing dedicated bike lanes. • Consider signal at Spring Street. (Has RSA)"	Y	Y	Y
15	Nilsson Street from Warren Avenue to Montello Street	Brockton	0.32	2	Yes	118	84	1	Angle (1)	• Nilsson St and Main St - evaluate need for traffic signals • Consider overhead flashing beacon • Install intersection ahead and pedestrian warning signs • Construct crosswalk bumpouts with upgraded ramps and ladder painted crosswalks • Evaluate lighting along the corridor • Install overhead LED streetlights • Evaluate need for painted bumpout makings at intersections for vehicles parked too close to intersections • Install ladder crossings across unmarked side streets • Evaluate ramp condition and compliance with ADA • Consider marked parking spaces along the corridor • Consider marking travel lanes with double yellow	Y	N	Y

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
16	Washington Street from Phillips Avenue to Charles Avenue including Washington Street at Central Street intersection	Stoughton	0.37	1	Yes	113	58	5	Angle (3), Sideswipe (2)	• Access management • Evaluate clearance intervals • Provide consistently 11' travel lanes • Provide ladder style crosswalks • Widen sidewalks where possible.	Y	N	N
17	Park Street from Walnut Street to north of School Street including downtown Stoughton	Stoughton	0.40	2	Yes	107	49	3	Pedestrian (2), Angle (1)	• Evaluate for traffic signal at Pearl Street and School Street • Consider adding advance stop warning signs • Upgrade sidewalks and curb ramps with ladder crosswalks • Consider median pedestrian enhancements such as landscape refuge islands • Enhance speed zone signage with speed feedback radar signs • Evaluate clearance intervals and signal timings in downtown • Consider road diet • Consider longer left turn pocket • Evaluate Washington street northeastbound approach (1 signal head not MUTCD compliant) • Upgrade to APS pedestrian push buttons • Evaluate onstreet parking and access management • Evaluate the impacts from the upcoming housing projects • Consider RRFB enhancements with raised crosswalk.	Y	N	N
18	Bedford Street from south of Shaw Ave to north of Oak St, includes improvements at the intersection of Bedford St and Clark St, Randolph St RT139, Bates St, and Shaw Ave	Abington	0.84	1	No	96	38	4	Angle (2), Sideswipe (2)	• Location has had some updates since RSA (approaches WB and EB expanded one lane) monitor improvements • Review access management of Dunkin and gas stations • Evaluate clearance intervals and timings • Upgrade crossings to ladder crosswalks • Consider widening of crosswalk ramps and evaluate bumpouts • Corridor wide evaluate need for road diet (2 to 1 lane) • Enhance pedestrian crossing near Bates St • RRFB with consideration for a refuge island • Remove passing zone near Washington St • Ladder crosswalks at Shaw Ave • Install RRFB • Evaluate need for a signal	Y	Y	N
19	Church Street from Pembroke east town line to Riverside Drive	Pembroke	0.66	1	No	96	74	1	Angle (1)	• Signal clearance intervals and timing updates • Evaluate for long term roundabout projects at North River Plaza and/or Oak St Exd • Restripe crosswalks with ladder crosswalks • Monitor access management at gas stations - specifically near Old Oak St • Evaluate road diet • Evaluate speed management corridor wide - consider reduction of lanes to 11 ft • Evaluate need for intersection tracking lines at North River Plaza and Old Oak St • Old Oak St at Church St - upgrade pedestrian heads to APS countdown • Restripe with ladder crosswalks • Review for exclusive pedestrian phasing	N	N	Y

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
20	South Street/Perkins Avenue from Warren Avenue to east of Montello Street	Brockton	0.31	2	Yes	85	43	3	Angle (1), Head-On (1), Rear-end (1)	• Add ladder crosswalk markings at Warren Ave intersection • Consider future management of parking including marked parking spaces • Clearance intervals and timings updates at Main street • Consider crosswalk bumpouts at South St/Main St intersection • Install pedestrian exclusive phasing and APS pedestrian crossing signal heads • Update crosswalk markings to ladder crosswalks • Add exclusive pedestrian phasing and APS pedestrian crossings to Montello St and Perkins Ave intersection • Provide crosswalk ramps and ladder painted markings • Corridorwide evaluation of speeds • Parking and access management	N	Y	Y
21	Pleasant Street from Home Depot to Prospect Street	Bridgewater	0.78	2	Yes	84	37	5	Rear-end (2), Head-On (2), Angle (1)	• Restripe crosswalks in ladder style • Reconstruct sidewalk in poor condition • Access management • Evaluate clearance intervals, provide elephant tracks and add green paint to the bike lanes at Elm Street intersection. • Trim vegetation and add speed feedback radar sign by Brownfield Drive • Narrow travel lanes to 11' consistently along the corridor • Consider striping buffered bike lanes in existing shoulder • Extend westbound left turn pocket at Home Depot driveway and consider constructing median	N	Y	N
22	Market Street from Copeland Street to Montello Street, including Warren Avenue at Market Street	Brockton	0.48	2	Yes	81	55	2	Angle (1), Sideswipe (1)	• Market St at Warren Ave - Install advanced pedestrian crossing signage • Improve street lighting • Restripe crosswalks with ladder crosswalks • Upgrade ramps and curbing to ADA standards • Reduce Market St EB approach to one lane • Install cross traffic does not stop signage • Consider all way stop • Evaluate for signal • Install LED stop signage • Install ladder crosswalks at Market St and Main St • Evaluate crosswalk bumpouts for pedestrians and for better sight distance from Market St • Monitor corridor for speed concerns • Consider additional school zone markings and signage near Warren Ave • Consider additional crosswalk infrastructure near schools such as raised crossings or decorative crosswalks • Coordinate with schools on resources needed to manage crosswalks on Market St	Y	N	Y
23	Lawrence Street from Main Street to Perkins Street	Brockton	0.21	2	Yes	79	40	4	Angle (2), Pedestrian (1), Single Vehicle (1)	• Consider access management of nearby businesses and corridorwide • Evaluate sight distance from Lawrence St turning onto Main St when vehicles are parked • Upgrade to ladder crosswalks along corridor • Install pedestrian signals and phasing to Montello St at Lawrence St intersection • Install ladder crosswalks • Review and upgrade curb ramps for ADA compliance • Install painted ladder crosswalks at Lawrence St and Perkins St • Evaluate for all-way stop control	N	N	Y

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
24	Bedford St from south of Maple Ave to Main St/ Summer St (Downtown Bridgewater)	Bridgewater	0.26	1	No	77	34	5	Pedestrian (2), Angle (1), Rear-end (1), Sideswipe (1)	• Monitor and evaluate upgrades at Maple Ave crossings • Evaluate need for RRFB at midblock crossing north of the Maple Ave and Bedford St intersection • Monitor and evaluate pedestrian crossing upgrades at Grove St and Bedford St • evaluate need for RRFB for midblock crossing south of intersection • continue speed management corridor wide • consider speed feedback signage • narrowing of travel lanes by painted lines or by adding bike lanes along Bedford St • evaluate and upgrade pedestrian ramps and refuge islands to meet ADA standards at Central Square • review RSA for Central Square improvements conducted in 2020 for future projects	Y	N	Y

Intersections

#	Intersection	City/Town	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
1	Purchase St and Turnpike St	Easton	MassDOT	No	85	42	4	Angle (3), Rear-End (1)	• Advanced warning signs • Monitor improvements from conversion from 2-way to all-way stop • Replace pole mounted with overhead beacon • Stop ahead signage if necessary • Install ladder crosswalk	Y	Y	Y
2	Purchase St and Washington St	Easton	MassDOT	No	76.25	41	5	Angle (5)	• Remove passing zone • (RSA - limited visibility due to on street parking • Remove on street parking • Install overhead beacon • Consider installing traffic signal • Install advanced warning signage to north/southbound approaches • Enhance enforcement • Speed feedback radar signs • Tighten intersection/bring stop bars	Y	Y	Y
3	Canton St and School St	Stoughton	Town	Yes	58.59375	29	1	Angle (1)	• Install RRFB • Evaluate traffic signal with pedestrian accommodations • Evaluate summer street dead end/one way • Relocate poles • Install ladder crosswalks • Install overhead flashing beacon • Evaluate all-way stop • Potential curb extension on southwest corner • Update crosswalk skew angle	Y	Y	Y
4	Marshall Corner	Brockton	City	Yes	56.875	19	3	Angle (2), Head-On (1)	• Adjust signal timing and phasing • Install pedestrian signals • Adjust clearance intervals • Access management • Tracking lines for turning movements	Y	Y	Y
5	Prospect St and N Warren Ave	Brockton	City	Yes	44.375	20	1	Single Vehicle (1)	• Install overhead signals (with pedestrian signals) • Install ladder style crosswalks • Evaluate stop line placement • Access management for nearby driveway	N	Y	N

#	Intersection	City/Town	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
6	Columbia Rd at Broadway	Hanover	MassDOT	Yes	42.5	20	1	Angle (1)	• Install ladder style crosswalks • Consider additional lighting • Evaluate overhead signals • Construct pedestrians ramps • Provide lane designations (markings) • Evaluate signal timing and clearance intervals • Consider road diet • Reconfigure intersection alignment with left turn phasing	Y	N	Y
7	N Main Street at Oak/ Howard St	Brockton	City	Yes	41.875	29	0	None. Other injury crashes include Angle (18), Rear-End (5), Head-On (3), Single Vehicle (2), Sideswipe (1)	• Overhead signals • Continental crosswalks • Evaluate signal phasing • Lane usage and clearance intervals • Evaluate parking and crosswalk on Wilmington Street for blocked sight lines/potential for curb extension"	N	N	Y
8	N Bedford St and Highland St	East Bridgewater	MassDOT	No	38.75	23	2	Angle (2)	• Consider roundabout or signal • Tighten curb radii • Modify intersection geometry • Consider multi-use paths or pedestrian improvements • Short term- consider tightening of travel lanes and radii using retroreflective paint • Signal optimization and clearance intervals	N	Y	N
9	Pleasant St and Lincoln St	Stoughton	Town	Yes	37.5	30	0	None. Other injury crashes include Angle (25), Sideswipe (3), Single vehicle (2).	• Access management and parking control • Evaluate all-way stop control • Realign approaches • Install overhead flashing beacon • Install ladder crosswalks • Consider ROW concerns • Evaluate future need for a signal	Y	N	Y
10	Crescent St and Lyman St	Brockton	City	Yes	35.625	27	0	None. Other injury crashes include Angle (19), Sideswipe (5), Rear-End (1) and Single Vehicle (1)	• FROM TIP - Work on this project includes reconstruction of the Lyman Street Summer Street and Grove Street intersection including the right turn slip lane from Summer Street northbound to Lyman Street eastbound. The existing traffic signal will be replaced pavement will be reclaimed or overlaid and new loop detection installed. Pedestrian facilities (pedestrian curb ramps and pedestrian signals) will be installed/reconstructed to meet ADA/ MUTCD compliance. New pavement markings and signage will be installed. The deteriorating Grove Street bridge which crosses the Salisbury Plain River will be entirely replaced. Project length includes 600 feet on Summer Street and 500 feet on Grove Street/Lyman Street for a total of approximately 1100 feet.	Y	Y	Y
11	Court St and Cary/N Cary St	Brockton	City	Yes	35	25	0	None. Other injury crashes include Single Vehicle Crash (5), Sideswipe (1),	• Consider roundabout • Install ladder style crosswalks and square off crosswalks • Install countdown pedestrian signals • Expand refuge island • Construct curb extension on northeast corner"	N	N	Y
12	Harrison Blvd and Pond St	Avon	MassDOT	Yes	29.6875	19	0	None. Other injury crashes include Rear-end (7), Angle (5), Single Vehicle (4), Sideswipe (3)	• Evaluate recent improvements constructed in 2023.	Y	Y	N

#	Intersection	City/Town	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
13	Bedford St and Brockton Ave	Abington	MassDOT	No	28.75	19	1	Rear-end (1)	• Stripe tracking lines through the intersection • Evaluate clearance intervals and signal timings • Access management -restricting bank of america driveway • Provide lane use markings • Evaluate need for dedicated left turn lanes • Install flashing yellow arrow on left turns • Provide approach lane use signage	Y	Y	Y
14	Central St and Turnpike St	Stoughton	Town	Yes	28.75	15	2	Single Vehicle (1), Rear-end (1)	• Convert post mounted signals to overhead/mast arm • Upgrade pedestrian signal equipment • Consider stop signage for southbound right turn channelized movement • Evaluate need for left turn pockets • Clearance intervals and timings • Evaluate flashing yellow arrow if applicable	N	N	Y
15	Oak St and Campanelli Industrial Dr	Brockton	City	Yes	26.875	20	0	CHECK - should be two intersections? None. Other injury crashes include Angle (12), Rear-End (6), Sideswipe (1), Pedestrian (1).	• Install crosswalk across north leg (with refuge island) • Low hanging signal mast arm • Reconstruct signal • Curb extension on north east corner • Crosswalk with refuge island on east leg • Evaluate signal for timing optimization (clearance intervals) • Evaluate east leg westbound for lane usage for lane reduction • Reduce to one receiving lane	N	N	N
16	Cherry St and Standish Ave	Plymouth	Town	Yes	23.4375	12	0	None. Other injury crashes include Angle (7), Sideswipe (1), Bicycle (1), Sideswipe (1), Single Vehicle (1), Head-on (1)	• Upgrade pedestrian signals • Consider installing overhead signals • Evaluate clearance intervals and timing updates • Reconstruct pedestrian ramps • Consider traffic calming on Cherry Street including speed feedback signage • Establish school zone infrastructure on Standish Ave	N	N	N
17	Bedford St and West/East St	East Bridgewater	MassDOT	No	21.25	17	0	CHECK - No Serious Crashes? None. Other injury crashes include Angle (7), Rear-end (4), Head-On (2), Sideswipe (3) and Single Vehicle (1).	• Consider roundabout • Evaluate need for road diet with dedicated left turns lanes at intersection • Evaluate signal timings and clearance interval evaluation • North and west leg crossings for pedestrians (ladder crosswalks) with ADA ramps	Y	Y	Y
18	Bedford St and Spring St	East Bridgewater	MassDOT	No	20	16	0	None. Other injury crashes include Angle (4), Head-on (4), Rear-end (6), Sideswipe (1), Single vehicle (1)	• Evaluate lane configuration on all approaches • Clearance intervals • Update signal timings • Access management at the gas station • Additional pedestrian enhancement signage • Upgrade to ladder crosswalks • Relocate crossings and include exclusive pedestrian phasing • Consider future larger projects such as roundabouts • Intersection alignment changes to Central St and Spring St approaches	Y	Y	N
19	Plain St and Belmont St	West Bridgewater	City or Town	No	20	12	2	Angle (1), Head-on (1)	• Tighten intersection with painted or landscape bumpouts • Consider double stop signs • Consider LED stop signage • Consider single lane or mini roundabout • Access management (if applicable) for the variety store	N	N	N

#	Intersection	City/Town	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
20	Cox Corner	Duxbury	MassDOT	No	19	11	2	Angle (2)	• Narrow approaches • Tighten curb radius • Consider roundabout or installation of signal • Consider installation of sidewalks or bike lanes.	Y	N	Y
21	Walnut St and Plymouth St	Bridgewater	Town	No	17	3	1	Single vehicle (1)	• Install intersection ahead signage • Install ladder style crosswalks	N	N	N
22	Pleasant St and Reynolds Memorial Hwy/West St	Brockton	City	Yes	15.625	7	0	CHECK - should include area to right. None. Other injury crashes include Angle (3), Single vehicle crash (2), and Rear-end (2).	• Stripe tracking lines through the intersection • Extend receiving lanes south/east leg • Access management • Extend/recalculate clearance intervals • Access control • Geometric improvements (to slip lanes and approach realignments) • Consider additional pedestrian accommodations	Y	Y	Y
23	Franklin St and Summer St	Duxbury	City or Town	No	14	14	0	None. Other injury crashes include Angle (11), Rear-end (1), Sideswipe (2)	• Evaluate need for a roundabout or a signal • Tighten curb radii • Maintenance of vegetation • Evaluate impacts of signal/roundabout on High St skew approach • RSA - narrow travel lanes	Y	Y	N
24	Washington St and Adams St	Abington	City or Town	No	12.5	6	1	Head-On (1)	• Formalize T intersection • Reconfigure crosswalks in ladder style at the new intersection • Consider bumpout on northeast corner for wider sidewalk and buffer from park area • Consider further traffic calming on Washington St such as bump outs on the Washington St crosswalk or speed feedback signs	N	N	N
25	Bedford St and Auburn St	Whitman	MassDOT	No	10	10	0	None. Other injury crashes include Angle (3), Head-on (2), Rear-end (3), Sideswipe (1), Single Vehicle (1)	• Evaluate recent improvements/consider whether should be removed from the list	Y	Y	N
26	Temple St and Old Mansion Ln	Whitman	MassDOT	No	9	5	1	Single vehicle (1)	• Provide T intersection advance signage • Install reflective object markers on poles • Install speed feedback radar signs	N	N	N

RECOMMENDED POLICIES & STRATEGIES

Besides the site specific safety recommendations within the Safety Action (Vision Zero) Plan, regionwide strategies were identified to address key parts of the Safe System Approach - Safer People, Safer Vehicles, Safer Speeds, Safer Roads, and Post-Crash Care. The strategies listed were developed referencing plans described in the Policy and Process Review, as well as other federal, state and regional sources on safety strategies.

Safer People

Strategy/Policy	Implementation Level	Crash Type	Strategy Type
Coordinate with MassDOT to spread the word on the "Eyes Up, Phones Down" campaign to reduce distracted driving and crashes caused by distracted driving.	Regional/ State	Distracted driving	Education
Pursue further updates and expansions to current Complete Streets policies, and assist and encourage unregistered communities to adopt new Complete Streets policies to align with national best practices and state-provided resources.	Local/Regional	Pedestrian/ Cyclist	Policy development
Enhance road safety for vulnerable users by educating drivers through police-issued flyers and citations when traffic violations occur, promoting better behavior towards pedestrians and cyclists.	Local	Cyclist/ Pedestrian	Education
Collaborate with community partners and law enforcement to target DUI behaviors through focused enforcement activities and educational programs, including initiatives with local school districts to address underage impaired driving.	Local/ Regional/ State	All	Education
Strive for a safe transportation system that minimizes the risk of serious injury to motorized and vulnerable users of the system and helps the Region and Commonwealth move towards its Vision Zero goals.	Local/ Regional/ State	All	Policy development
Promote driver education on stopping distances when operating at higher speeds and/or on high-speed roads. Promote road user education on safe vehicle operation and visibility around trucks.	Local/ Regional/ State	All	Education
Research and pilot driver feedback signs known as SmartSigns, than can detect unsafe driving behaviors such as speeding, texting while driving and not wearing a seatbelt. These signs can display custom messages to drivers and collect data on the number of distracted or speeding drivers.	Local/ Regional/ State	All	Education/ data collection

Safer Vehicles

Strategy/Policy	Implementation Level	Crash Type	Strategy Type
Implement targeted communication for low-belt use groups, car seat checks to provide hands-on education for installing and using car seats, publicize fines for seat belt violations, and high-visibility seat belt law enforcement to educate residents on the risks and encourage seat belt use.	Regional/ Local	Vehicles	Education/ Enforcement
Emphasize the need for timely and accurate reporting of crash data involving freight vehicles or at-grade rail crossings.	Regional/ Local	Vehicles	Data collection
Develop policies that relate to the safety and use of micromobility devices such as scooters and electric bicycles.	Local/ Regional/ State	All	Policy development

Safer Speeds

Strategy/Policy	Implementation Level	Crash Type	Strategy Type
Opt-in to Ch90s17C of Massachusetts General Law to reduce the statutory speed limit from 30 mph to 25 mph on any or all city- or town-owned roadways within a thickly settled or business district.	Local	All	Policy development
Utilize lighted solar power signs and portable speed signs to increase driver awareness.	Local/Regional	All	Infrastucture upgrades
Consider speed humps and speed tables where appropriate, balancing with snow removal concerns.	Local	All	Infrastucture upgrades
Advocate for self-enforcing speeds in downtown areas by implementing traffic control devices, pavement markings, and signage to naturally slow traffic. Complement these measures with educational campaigns to inform drivers about safe target speeds and importanace of adhering to them for community safety.	Local/Regional	All	Infrastucture upgrades
Prioritize road user safety over driver delay in current operations and future designs, following the guidelines from the MassDOT Project Development and Design Guide to ensure infrastructure improvements focus on pedestrians, cyclists and other vulnerable road users.	Local/Regional/State	All	Policy development

Safer Speeds (Continued)

Strategy/Policy	Implementation Level	Crash Type	Strategy Type
Guide municipalities in opting for 20 MPH safety zones near parks, playgrounds, childcare centers, hospitals, older adult housing, senior centers and areas frequently visited by older adults or children. Provide assistance in acquiring appropriate signage and implementing roadway treatments to effectively cue drivers to reduce their speed in these zones.	Regional	Pedestrian/Cyclist	Speed limit change and infrastructure upgrade
Implement speed limit reductions and enforce with speed feedback signs and digital speed trailers.	Local/Regional	All	Infrastucture upgrades

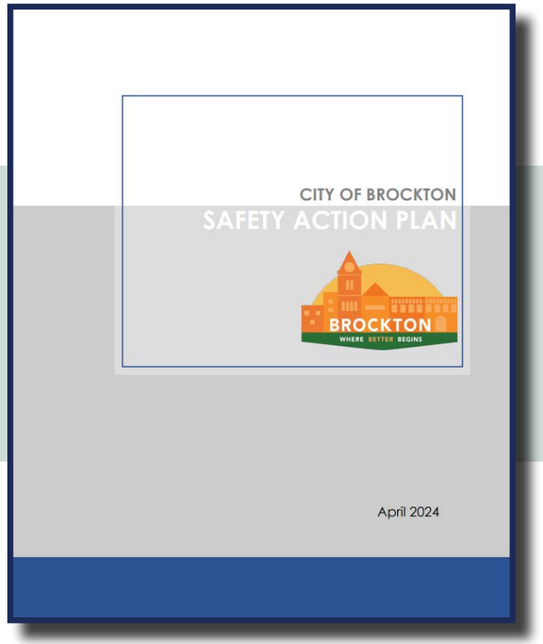
Safer Roads

Strategy/Policy	Implementation Level	Crash Type	Strategy Type
Improve highway safety at intersections by collaborating with MassDOT and municipal partners to identify high-risk areas using data-driven processes, focusing on infrastructure enhancements to reduce crashes and serious injuries.	Regional/ State	All	Infrastructure upgrades
Update City design standards to align with state guidance on safe walking and biking facilities (e.g., MassDOT PDDG, MassDOT Separated Bike Lane Planning and Design Guide, MassDOT Roundabout Planning and Design Guide)	Local	Cyclist/ Pedestrian	Design standards
Develop or revise development review guidelines to prioritize road user safety over driver delay in operations and design decisions in accordance with National and state guidance such as NCHRP Report 1036 and MassDOT PDDG.	Local	All	Policy development
Collaborate with towns and cities to review roadway resurfacing projects and timelines. Offer guidance on integrating low-cost safety improvements during repaving, such as enhanced signage, pavement markings, and traffic calming measures to improve overall road safety.	Local/Regional	All	Quick-build
Enhance sidewalk connectivity and construct PROWAG-compliant sidewalk ramps to promote walking and improve pedestrian safety. These improvements will create accessible, continuous pathways that encourage more walking trips and ensure safe, inclusive pedestrian environments.	Local/Regional/State	Pedestrian	Accessibility/ Infrastructure upgrades
Implement targeted safety countermeasures at locations with a history of fatalities and high injury crash rates. Focus on data-driven soluations such as enhanced signage, improved lighting, all-way stop control, traffic calming measures, and infrastructure redesigns to reduce the risk of future incidents and improve overall road safety.	Local/Regional/State	All	Infrastructure upgrades
Collaborate with communities to create maintenance schedules for clearing sidewalks and intersection approaches of vegetation that obstruct sight distance or hinder wheelchair accessibility. Educate residents on keeping sidewalks free from trash, recycle bins, and other obstructions to ensure safe and accessible pedestrian pathways.	Local/Regional/State	Pedestrian	Maintenance/ Accessibility/ Education
Work with communities to improve the recording of crash data by police officers and other first responders, including improvements in geo-recording of crash data.	Regional	All	Data collection
Work with communities to apply for the Rectangular Rapid Flashing Beacon (RRFB) application survey, which if accepted, MassDOT will provide RRFB assemblies to municipalities at no cost. RRFB assemblies must be installed at marked crosswalk locations with ADA compliant ramps with a municipality owned public roadway, as well as be installed in compliance with MassDOT standards, PROWAG, and Archtectural Access Board Regulations. The cost of installation will fall on the municipality.	Local/Regional/State	Pedestrian	Infrastructure upgrades
Utilize effective signage: reflective flexible signs in unsignalized crossings that remind drivers to yield to pedestrians, narrow travel lanes and slow traffic.	Local	Pedestrians	Quick-build/ Infrastructure upgrades
Enhance street liveliness by creating parklets and pop-up parks to encourage community gatherings and activities. Install benches, trees, planters, banners and pedestrian scale lighting to improve safety, comfort, and the overall aesthetic of public spaces.	Local / Regional	Cyclist/ Pedestrian	Quick-build/ Infrastructure upgrades
Paint fog lines to narrow vehicle travel lanes, reducing vehicle speed and lowering crash rates as bicycle and pedestrian volumes increase.	Local/ Regional	All	Infrastructure upgrades
Implement curb radius tightening at intersections to force vehicles to reduce speed, enhancing pedestrian safety and shortening crossing distances. Use paint for temporary adjustments.	Local/Regional	All	Infrastructure upgrades

Post Crash Care

Strategy/Policy	Implementation Level	Crash Type	Strategy Type
Enhance emergency response effectiveness by ensuring injured individuals receive medical care within the "golden hour" (under 60 minutes) to significantly improve survival rates.	Local/ Regional	All	Education
Increase use of traffic signal priority (hold current green light) for transit vehicles and traffic signal pre-emption for emergency vehicles (override programmed phasing to provide approaching emergency vehicles a green light).	Local/ Regional	All	Infrastructure Upgrades
Partner with local hospitals or outreach groups to provide bystandard training courses to the public. Promote the Community Emergency Response Team (CERT) program, which trains community members in first responder skills. Partner with local trauma centers which are required to provide injury prevention programs.	Local/ Regional	All	Policy Development

In addition to the projects and strategies described within the OCPC Safety Action Vision Zero Plan, the Brockton Safety Action Plan provides a complete overview of high crash locations in Brockton and top projects and strategies for the City. The Brockton Safety Action Plan offers a more granular focus within the City of Brockton. The OCPC Safety Action Plan should be treated as a supplement to the Brockton plan. See Appendix C for a link to the Brockton Safety Action Plan.



8 EQUITY ANALYSIS

This chapter describes equity indicators and evaluates the recommended projects through a lens of equitable distribution across OCPC communities.

As described in the Safety Analysis and the Projects and Strategies chapters, the high injury network development and the project prioritization processes both prioritized Environmental Justice (EJ) communities - communities with underserved populations, specifically communities of color, communities with limited English proficiency and lower income communities. The high injury network and project prioritization weighted EJ communities with a multiplier of 1.25x.

This Equity Analysis chapter seeks to further evaluate the proposed projects through an equity lens.

"Environmental Justice means the just treatment and meaningful involvement of all people, regardless of income, race, color, national origin, Tribal affiliation or disability"
- USDOT

MassGIS Environmental Justice Communities

The Massachusetts Executive Office of Energy and Environmental Affairs (EEA) Environmental Justice Policy informed the development of the MassGIS EJ Communities map which identifies EJ populations based on 2020 Census Block Groups. An EJ community is identified if a block group meets one or more of the following criteria:

- Annual median income (AMI) is at or below 65% of the statewide AMI
- Minorities (people besides non-Hispanic white) comprise 40% or more of population
- 25% of households or more lack English language proficiency
- Minorities comprise 25% or more and the City/Town's AMI is at or below 150% of statewide AMI

In the OCPC Region...

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census block groups qualify on income, minority population or minority and income.

They are in Stoughton, Avon, Brockton, Hanover, Halifax, Bridgewater, and Plymouth.

MAP 6. TOP PROJECTS IN ENVIRONMENTAL JUSTICE COMMUNITIES

The top projects were assessed to understand the projects located fully or partially within an environmental justice community, as defined by the EEA and MassGIS. Map 6 shows the top projects overlayed with the environmental justice communities in the OCPC Region.

NORWOOD
CANTON
RANDOLPH
BRAINTREE
WEYMOUTH
HINGHAM
SCITUATE
NORWELL
WALPOLE
HOLBROOK
ROCKLAND
AVON
STOUGHTON
ABINGTON
HANOVER
MARSHFIELD
SHARON
WHITMAN
FOXBOROUGH
BROCKTON
PEMBROKE
HANSON
DUXBURY
EAST BRIDGEWATER
EASTON
WEST BRIDGEWATER
MANSFIELD
HALIFAX
KINGSTON
BRIDGEWATER
PLYMPTON
NORTON
RAYNHAM
TAUNTON
MIDDLEBOROUGH
CARVER
PLYMOUTH
DIGHTON
BERKLEY
LAKEVILLE
REHOBOTH
SWANSEA
SOMERSET
FREETOWN
ROCHESTER
WAREHAM
BOURNE
FALL RIVER
ACUSHNET
MARION
SANDWICH

MassGIS 2020 Environmental Justice Census Tracts

Top Intersection Projects

- Top Regional Intersections
- Top Municipal Intersections

Top Corridor Projects

- Top Regional Corridors
- Top Municipal Corridors

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9 PROGRESS AND TRANSPARENCY

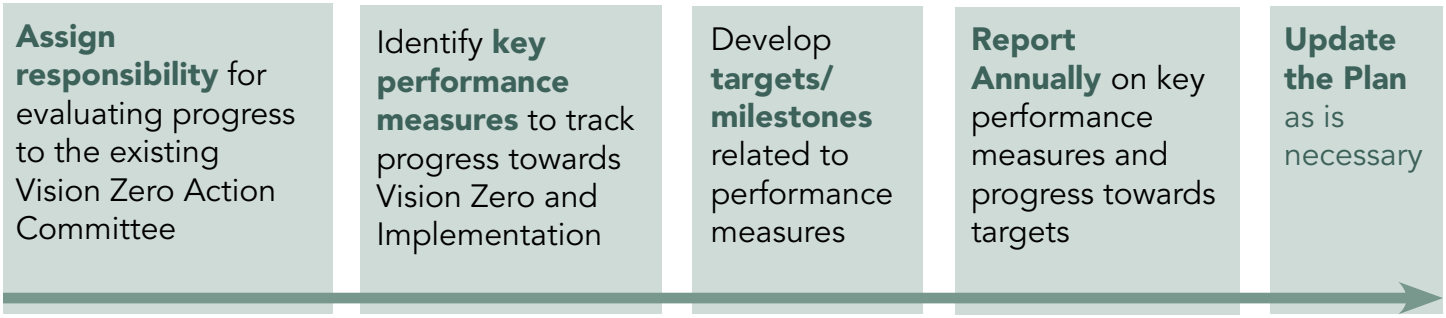
This chapter describes a framework for evaluating and monitoring safety outcomes from projects and strategies recommended in the plan and identifies clear, trackable performance measures and outcomes towards Vision Zero.

As communities in the OCPC Region implement the projects and strategies recommended within the Safety Action (Vision Zero) Plan, it will be important to understand if the implemented improvements have the desired safety outcomes, moving the region closer to its Vision Zero goal. This chapter provides a framework for the ongoing evaluation of safety projects and outcomes.

Reporting progress is focused around answering the following questions over time.

- Are safety projects, strategies and enforcement being implemented?
- Are the projects and strategies resulting in a decrease in the number of serious and fatal injury crashes? What types of crashes specifically?
- Are the projects and strategies being implemented equitably?
- Is the public aware of the region's Vision Zero goal and the progress OCPC communities are making towards the goal?
- Are there any new safety issues or crash hotspots in the OCPC region?

EVALUATION AND REPORTING FRAMEWORK



Assign Responsibility

To ensure tracking is completed efficiently and timely every year, OCPC will have dedicated staff in charge of monitoring the progress of the Safety Action (Vision Zero) Plan as outlined in this chapter.

In addition, OCPC will task the existing Vision Zero Action Committee - with representatives from transit agencies, fire and police departments, town administrators, and MassDOT - to review the progress of safety measure implementation and assist OCPC with annual reporting. Action committees most commonly meet 2-4 times per year. The committee will be convened in advance of the 2026 annual report.

Having dedicated staff and a group in charge will ensure accountability towards tracking the progress of the action plan and movement towards Vision Zero.

Key Performance Measures

As part of the annual reporting process, OCPC will focus on tracking the most high impact and easily trackable measures with available data while also continuing to improve data availability and reliability, particularly crash data reporting. Below are several key performance measures OCPC will use to track progress on both implementing the Safety Action (Vision Zero) Plan and on moving towards zero fatal or serious crashes.

MEASURES OF OUTCOME (Has roadway safety improved in line with Vision Zero Goals?)

1. # of fatal and serious crashes over the past five years
2. # of fatal and serious crashes over the past five years by type
   - Single Vehicle
   - Angle
   - Head On
   - Pedestrian
   - Bicycle
   - Motorcycle

MEASURES OF IMPLEMENTATION (Have safety improvements been implemented?**)**

1. # of safety projects/strategies in Safety Action (Vision Zero) Plan completed year by year regionwide and by community
2. # of Vision Zero communications with OCPC residents, stakeholders and advisory group members (meetings, social media posts, etc.)
3. % of projects implemented in EJ communities year by year

Key Outcome Milestones and Targets

The following tables below show the targets for the key outcome measures of fatal and serious crashes over time, tracking towards zero fatal and serious crashes in 2045. The crashes are broken down by crash types that are more likely to result in fatal and serious injury. The performance measures were developed by calculating the average fatal and serious crashes that occurred per year between the years 2018-2022, the most recent available years of data. Then, using 2045 as a target for zero fatal and serious crashes, calculated the required decrease in fatal and serious crashes per year to reach zero. As shown in the following tables, the 2025-2030 and 2040-2045 targets were calculated by reducing the baseline serious and fatal crashes per year linearly from the baseline 2018-2022 average crash rates.

PERFORMANCE MEASURE: 5-YEAR ROLLING AVERAGE **FATAL CRASHES**

User/Crash Type	**Baseline** Average crashes per year 2018-2022	**2030 Target** Average crashes per year 2026-2030	**2045 Target** Average crashes per year 2036-2045
All	26.4	17.2	0
Motorist - All	21.8	14.2	0
Motorist - Single Vehicle	13.6	8.9	0
Motorist - Head-On	4.0	2.6	0
Pedestrian	5.6	3.7	0
Bicyclist	1.6	1.0	0
Motorcyclist	3.0	2.0	0

Measures are based on MassDOT Impact Data, excluding interstates

PERFORMANCE MEASURE: 5-YEAR ROLLING AVERAGE **SERIOUS INJURY CRASHES**

User/Crash Type	**Baseline** Average crashes per year 2018-2022	**2030 Target** Average crashes per year 2026-2030	**2045 Target** Average crashes per year 2036-2040
All	175	114.1	0
Motorist - All	153.2	99.9	0
Motorist - Single Vehicle	66.0	43.0	0
Motorist - Head-On	26.4	17.2	0
Pedestrian	16.6	10.8	0
Bicyclist	3.6	2.3	0
Motorcyclist	29.2	19.0	0

Measures are based on MassDOT Impact Data, excluding interstates

Annual Reporting

The SS4A program requires annual public and accessible reporting on progress toward reducing roadway fatalities and serious injuries and public posting of the Action Plan online. To comply, a report will be published annually that shares progress on the outcome and implementation performance measures over time. The report will be publicly accessible, provided on the OCPC website, presented at a Old Colony MPO meeting and shared with USDOT. The online reporting will be supplemented through statistics provided on the OCPC online dashboard, described in further detail below.

Online Dashboard

As part of the Safety Action (Vision Zero) Plan planning process, OCPC developed an online dashboard for sharing crash data. This dashboard will be expanded to include information over time on how the OCPC region is tracking towards their Vision Zero goals and action plan project completion. This dashboard will be used both internally by OCPC staff and by communities to track their own progress, while also providing residents and stakeholders an opportunity to keep track of projects in the pipeline and crash reduction.

Updating the Plan

After five years, the safety trends and prioritized projects within the OCPC Region may have changed. At this point, pending the availability of funding, OCPC will evaluate whether an update to the plan is needed to update the project lists, strategies and safety analysis using new crash data and any new understanding of safety countermeasures that may have evolved.

APPENDIX A.

Responses to Online Dashboard

NORWOOD
CANTON
RANDOLPH
BRAINTREE
HOLBROOK
WEYMOUTH
HINGHAM
NORWELL
SCITUATE
WALPOLE
ROCKLAND
AVON
ABINGTON
STOUGHTON
HANOVER
PEMBROKE
MARSHFIELD
FOXBOROUGH
SHARON
BROCKTON
WHITMAN
HANSON
DUXBURY
MANSFIELD
EASTON
WEST BRIDGEWATER
EAST BRIDGEWATER
HALIFAX
KINGSTON
BRIDGEWATER
PLYMPTON
NORTON
TAUNTON
RAYNHAM
MIDDLEBOROUGH
CARVER
PLYMOUTH
REHOBOTH
BERKLEY
DIGHTON
LAKEVILLE
SOMERSET
FREETOWN
ROCHESTER
WAREHAM
BOURNE
SWANSEA
FALL RIVER
ACUSHNET
MARION
SANDWICH

Type of safety concern

- Accessibility for People with Disabilities Concern
- Biking Concern
- Driving Concern
- General Safety Concern
- Walking Concern
- <all other values>

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0 0.5 1 2 Miles

ID	Safety Concern	Details
4	Walking Concern	test
5	Biking Concern	test
6	Walking Concern	test
7	Walking Concern	test
8	Walking Concern	Test
9	Driving Concern	Speeding
10	Driving Concern	At the stop sign pulling out of Pleasant St onto Rt. 27, the site lines are blocked by arborvitaes.
11	Driving Concern	Lights change too quickly
12	General Safety Concern	The S curve is dangerous; cars go too fast in this section. We need pedestrian and bike infrastructure. The middle school is nearby, and students often walk and bike in this area. Washington street intersections are too big and hard to navigate for some.
13	Driving Concern	The lane layout is confusing; lanes are right turn only straight and left turn only combined. Left turn only is the norm.
14	General Safety Concern	Whether biking, walking, or driving, this intersection is hard to navigate due to a lack of sight lines and speeding vehicles.
15	other	Testing point
16	General Safety Concern	The bushes make it hard to get out
17	Driving Concern	Red Light Running.
18	Walking Concern	Red light running. Concern for pedestrians crossing Main Street.
19	General Safety Concern	Long queues from Herring Pond Road to State Road North. Need signalization to manage traffic flow and provide pedestrian accomodations.
20	General Safety Concern	Speeding is a concern as this location borders a Sliver Lake Regional High School. Needs traffic management though a traffic signal or roundabout.
21	Walking Concern	Narrow road with high speed traffic, no sidewalks or bike lanes but popular for both
22	Walking Concern	Would wish for more sidewalks to walk and bike on, as there's a lot of speeding in Abington, which seems to be both a North South and East West cut through community, thanks!
23	General Safety Concern	<Null>
24	Walking Concern	Sidewalks are useless, intersection geometry needs changing.
25	Walking Concern	<Null>
26	General Safety Concern	During the commuting hours, traffic backs up and blocks intersection creating road rage
27	General Safety Concern	During the commuting hours, traffic backs up and blocks intersection creating road rage, emergency vehicles cannot get through, essentially grid locks intersection
28	General Safety Concern	When train arrives congestion getting out is dangerous for drivers. Sometimes people treat it as an exit only with vehicles in the entrance lane trying to get out. Need a light
29	Accessibility for People with Disabilities Concern	<Null>
30	Walking Concern	The street has increasingly become more of a cut through street and with two straight aways on either end, with a curve in the middle, people speed down the straight aways and fly around the curve. There are no sidewalks making it very dangerous for people to walk or bike on since cars can't see someone walking when they're coming around the curve. I personally saw a child on a bicycle get hit by a car because a woman was speeding around the curve and couldn't see the kid until she got around the first part of the curve. Also, with a VERY busy farm at one end, the road is nearly impossible to walk down during the busy season.
31	Driving Concern	"Please reduce the speed limit on Plymouth Street, it is currently 45mph and drivers are easily at 50+mph. This intersection is becoming deadly. I'd like to see a 35mph speed limit from both directions."
32	Walking Concern	Street does not have sidewalks, and although the speed limit is 25-30 MPH on the entire street, people do not adhere to this. It would be nice to have sidewalks in place.
33	Driving Concern	Poor viability and very high traffic flow make a dangerous intersection.
34	Walking Concern	Stretch of road without sidewalk (not continuous with sidewalks before and after)
35	<Null>	<Null>
36	Driving Concern	Very bad intersection. Slow 106 down to 25 mph 300 feet before both directions approaching Bridge st . People are Dying and Hurting badly up there.
37	Driving Concern	The intersection of Pond and Washigton is difficult to naviagte near the corner store.
38	Driving Concern	"Very dangerous intersection with frequent accidents with cars coming out of Bridge St onto Route 106. "
39	General Safety Concern	"Slopes downhill. People run the red light (cannot stop in time due to slope) and illegally turn on red all the time. Sign placements are nonsensical. I've complained to MassDOT numerous times and they've made no visible changes. There's been one fatality near this intersection and my mother almost got killed as a child here in the 70s. 1. There needs to be a flashing sign connected to the lights that says ""RED LIGHT AHEAD"" some distance before the Elmwood Post Office. 2. There needs to be a ""NO RIGHT TURN ON RED"" sign placed near the right lane where drivers face East St (see attached image)."
40	General Safety Concern	People CONSISTENTLY running red light at this intersection. Need a delayed green light or cameras to deter offenders.
41	Driving Concern	The intersection is very dangerous. It needs a left turn signal.
42	Biking Concern	There is no distinguished sidewalk or marked bike lane. It is very dangerous especially during rush hour.
43	Driving Concern	"The intersection of Bridge St. and Rte. 106 (Plymouth St.). Cars traveling eastbound on Rte. 106 cannot be seen by drivers attempting to turn onto Rte 106 from Bridge St. because the cars already traveling on Rte. 106 come over a hill into the intersection. The situation is made significantly worse by speeding drivers and a lack of enforcement. In the 15 years I've lived nearby, I've seen 8-10 crashes and 0 speeding tickets/EBPD presence."
44	General Safety Concern	<Null>
45	Driving Concern	There are accident here all the time. There needs to be Left Turn traffic signals at this intersection for traffic on RT 18 North and South. Without dedicated a dedicated left turn arrow people taking lefts can't see vehicles coming down outer lanes.
46	Driving Concern	there have been so many accidents here. many times people cant see the cars on purchase street or do not slow down. the guard rail at the property has been damaged on a regular basis.
47	Walking Concern	Horrendous intersection for everybody: walkers (kids mostly), but also cars, bikes etc.

ID	Safety Concern	Details
48	Walking Concern	Lots of people walk & bike on Washington St, an extremely busy fast road (40mph+) with narrow shoulders. If a sidewalk or bike lane was put in from Central St to Crescent St, a whole walking/biking loop could be made from "downtown/ central" EB via Central, to Washington to Crescent to Bridge to Bedford/106 and back to the center of town, including schools & the Y etc. Lots of sidewalks are already in place on most of these streets.
49	Driving Concern	"the intersection of Bridge St and Plymouth St (rte 106) is awful! Cars coming from the east (Halifax direction) go too fast and come over a hill before reaching the intersection. If you are on Bridge St and trying to make a turn or go straight across north you can't see what's coming at you. If you are on the other side (Bridge Street heading south) it is also very hard to see those cars approaching on 106. This was made even worse last year when the guardrail was put up to protect the house on the corner after a crash took out their garage. Unfortunately the guardrail blocks even more of the view east onto 106, especially if you are in a small car. I drive a Co-rolla and my line of sight stares straight into the guardrail. I now have to creep further into the intersection to see around this making me much more of a target to be hit. Perhaps larger cars or SUVs don't have this problem but I know several people with smaller cars that won't use the intersection because of that. "
50	General Safety Concern	Unsafe intersection for all roadway users. The off-set left turns are very challenging, not to mention vehicles fly on 138. A signal may not be warranted for volumes out of Elm Street, but this intersection needs serious improvements. A sidewalk would be nice too.
51	Walking Concern	Vehicles hardly stop for pedestrians at the cross walks on South Street- this applies to anything within the vicinity of the library. There is a large apartment complex, senior housing, and library patrons- all of which are walking in this area but trying to get a car to stop for you at the cross walks is next to impossible.
52	Accessibility for People with Disabilities Concern	Areas along this stretch of road have bushes overflowing onto the sidewalk and then in the same area have a sign ce-mented into it, which creates a really tight area for wheelchair users to squeeze through.
53	Driving Concern	This section of Russell Street should either not have parking on the side of the road or should be a one way- drivers fly up and down this road and you almost always have to pull over to let a car coming in the opposite direction pass by.
54	Walking Concern	Corner of the cement pathway through the Training Green is cracked, and falling apart causing a hole in the corner here. Particularly in the fall this is a hazard when the leaves fill in the hole and pedestrians cannot see that there is a 6in hole in the ground. Damage has been reported to Town multiple times with no results.
55	Driving Concern	Traffic backs up here during commuting hours- mostly after work as people get off the highway. Long backup can result in emergency vehicles having a hard time getting through.
56	Driving Concern	"This intersection needs better traffic control. Cars from the Old Oak Street/Shell Gas Station side going left do not merge appropriately with cars coming from the opposite side going right. I've nearly been hit multiple times. Also, cars turning left onto Old Oak Street from the highway are almost always backed up in the morning causing signifi-cant delay. "
57	Driving Concern	This intersection is constantly backed up, no matter the time of day. Cars coming off the highway will scoot themselves forward in order to make the light, but will then block the intersection from cars coming across.
58	Driving Concern	During commuting hours traffic backs up and blocks intersection.
59	Driving Concern	The intersections around here are chaotic, 3a has a lot of volume making it hard to get in and out of the nook. Same with crescent.
60	Driving Concern	4-way intersection with a high accident rate.
61	Driving Concern	Terrible 6 way intersection, constant congestion.
62	General Safety Concern	Poor sight lines in both directions.
63	General Safety Concern	<Null>
64	General Safety Concern	This spot is dangerous for walkers, drivers and bikers. When pulling out of Maple Street, you have to pause and look left, because someone runs the red light on Central Street going right almost every time.
65	Driving Concern	Route 18 heading to and from Bridgewater at the intersection of 106 there needs to be a left turn arrow there have been many accidents there and you take your life in your hands taking a left onto East Street either way
66	Driving Concern	When leaving the town hall's horse shoe- the on coming traffic from Winter Street does not yield. The drivers on Winter Street assume they have the right of way.
67	Walking Concern	When driving through down town Plymouth, there is one flashing pedestrian sign, the rest of them are not. Drivers seem to assume the rest of them are also flashing beacons, and they do not yield for pedestrians.
68	Driving Concern	"Kids are not using the proper pedestrian crossing tools. They are popping out of the woods to cross. There have been a few close calls. "
69	Walking Concern	There is a lot of pedestrians and bikes but no sidewalks or bike lanes
70	Driving Concern	"When traveling E on 106, the protected left lane light is not properly timed. Also, this whole stretch of 106 constantly gets backed up"
71	<Null>	the traffic is very heavy and going fast, trying to pull out is very hard.
72	General Safety Concern	"Tatte line queues into street, I can't get my pastries in a timely fashion and I keep almost getting clipped by cars (this was a test point by BETA, not a real point)"
73	General Safety Concern	"complete streets, need vehicle, pedestrian and bike improvements -James Downey; Town of Plymouth "
74	General Safety Concern	"complete streets, need vehicle, pedestrian and bike improvements -James Downey, Town of Plymouth DPW"
75	Walking Concern	"Needs a pedestrian crossing "
76	Walking Concern	Needs a pedestrian crossing
77	Walking Concern	Needs a pedestrian crossing
78	General Safety Concern	Route 80 - need to connect sidewalk gaps on Route 80, connecting commerce way to the town line, and the segment that is missing in front of Megansett Dr, behind the West Plymouth shopping center.
79	Walking Concern	There are no side walks on this main street. It's an access road to the train station for many, people drive very fast on the road, including large trucks.
80	Accessibility for People with Disabilities Concern	There is absolutely no way anyone who has a disability could navigate the street to get to the train or shopping. There is not enough room on the sides of the road to pass safely with a white cane or a wheelchair.
81	Driving Concern	Very bad curve, with people driving too fast. Those exiting Bonney Hill Lane have difficulty exiting street. Maybe a flash-ing light?
82	Walking Concern	Cars are going too fast and not prepared for cross walk, a flashing rapid beacon at this location would be great. Especial-ly the new development at Cordage and a nice restaurant on the corner of Court and Forest Ave
83	Driving Concern	Very dangerous intersection! Both Toby Garden and Tremont Street(Rte 3a) are heavily traveled. Needs a traffic light…

ID	Safety Concern	Details
84	Driving Concern	Bad intersection. Cars on rt 53 are going to fast for any other car to turn on fast enough. Many accidents here over the 25 years we've lived here!
85	Walking Concern	No crosswalks….trying to cross when walking or biking is nearly impossible.
86	Driving Concern	This is a direct route for bus transportation from the school, students driving from campus and parents alike. Cars traveling both directions on Tremont street, with a blind spot bend, creates not only backed up traffic, but risks in turning onto Tremont.
87	Driving Concern	The number of near accidents turning onto Tremont street both from Chestnut Street and Tobey Garden is astounding. 4 way stop or light would certainly be welcome here.
88	Driving Concern	<Null>
89	Driving Concern	Tremont, Tobey Garden and Chestnut Street intersection
90	Driving Concern	Franklin and Route 53, Duxbury
91	General Safety Concern	This location it's very difficult for drivers and pedestrians. This would be a great location to add a fully signalized light with pedestrian amenities. Cars traveling on Main Street rarely want to stop for cars going from East Nilsson to Nilsson Street. This area also has had some temporary improvements made with daylighting and added crosswalks but all of that has faded at this point. There was also an idea of adding more lighting to this area which still hasn't happened.
92	General Safety Concern	This intersection needs to be fully signalized it currently has a blinking red for drivers on Warren Ave but it's very difficult for drivers coming off Market Street to continue going straight or to take a left onto Warren Ave. Drivers on Market Street trying to take a left onto Warren Ave frequently inch out and cover the crosswalk in this area. This is near the South Middle School and Huntington school where there are many kids walking. There has been incidents of students hit by vehicles on Warren Ave traveling home from school on foot.
93	Walking Concern	This area has a high number of pedestrians moving around there's a corner liquor store laundromat grocery store cannabis dispensary and services for folks dealing with homelessness and substance abuse in this area. This intersection always has a large number of vehicles traveling through Pleasant streets and cars coming down on Warren Ave there's always back up and cars driving aggressively. It's hard to turn left on Pleasant going towards Warren Ave when driving. This area is not as well lit as it should be at night. Mitigation should be taken to ensure potions are safe. Parking should also be evaluated in this area to make sure vehicles are only temporary parking for the liquor store and dispensary and not for the whole day. This area is also close to a fire station.
94	Walking Concern	This intersection needs to be redesigned in general. It's a walk-in concern because it's not well designed for pedestrian behavior, the crosswalk is too far back on Spring Street and pedestrians will not double back to use the crosswalk if they are traveling East on Pleasant Street.
95	Walking Concern	This intersection has always been very difficult for all modes of traveling it still feels very unsafe for pedestrians to move around this area. This area could easily be redesigned to still accommodate the through traffic of vehicles but with significantly more pedestrian safety measures in place. This area is also an entrance for pedestrians and bicyclists to access DW fields Park and the road should be designed to accommodate for that in the future.
96	Driving Concern	There are serious accidents at this intersection quite often. The intersection is at Rte 138 and purchase st in Easton.
97	Driving Concern	The angle of the stop on Whitman St makes it hard to take a right turn. Plus the hill right before the intersection impacts view lines.
98	General Safety Concern	People drive way too fast on this street. There is no room to walk or ride bikes
99	Driving Concern	Repeated accidents
100	Driving Concern	No Parking!
101	Walking Concern	Pedestrian connectivity from Rexhame Beach to Rt 139 should be made a priority.
102	Driving Concern	Unsafe travelling east-west along Purchase Street. High speed and high crash location.
103	Walking Concern	No pedestrian or bicycle accommodations between Robert Drive (Target/Avalon) and Bay Road (5 Corners Intersection). Sawmill Development, Gaslight/Lamplighter condos, and Avalon apartments would benefit from a safe sidewalk connection to local grocery stores and restaurants.
104	Driving Concern	Main Street westbound vehicles do not have a stop sign. Confusion often occurs due to other approaches treating the intersection as a four-way stop. Intersection may benefit from redesign including geometry improvements to the Rockery.
105	Walking Concern	sidewalk gap
106	Driving Concern	many accidents, pedestrian safety improvements and walking to school.
107	Walking Concern	All of Bay Road has very narrow shoulders and presents walking concerns. There existing sidewalks on Randall Street and Lincoln Street, and sidewalk on Bay Road in the vicinity of Lincoln Street. Extending the sidewalk on Bay Road to Randall Street would improve walking conditions, especially since Randall Street connects to a school
108	Biking Concern	Biking lanes throughout Plymouth lack safety and need to be redesigned to better integrate bike lanes into the town. Multitudes of bikes lanes are painted on the right side of the fog line and should be designed with more safety in mind.
109	General Safety Concern	"The current two lanes of traffic approaching the intersection of Dunkin Donuts (coming from the Randolph area) should immediately be SEPARATED into 1) a STRAIGHT SINGLE LANE proceeding into and through the Residential Area or 2) drivers must make a RIGHT TURN ONLY into the Dunkin Donuts Business Area. There have been multiple instances where vehicles aggressively jockey for position (at elevated speeds) as they pass the lights, causing dangerous driving circumstances and safety concerns for the residents. "
110	General Safety Concern	Another vote for this location, and have also almost been hit by traffic running the red light off Central when pulling out of Maple. Two suggestions, make the Maple red last another second to allow the red light runners to clear the intersection, and have the Spring St. red last another second to allow traffic coming off Maple to clear the intersection.
111	Walking Concern	Hobart St. would benefit from having a sidewalk. It's a popular walking street, with town ball fields and playground, conservation land and cemetery all used daily by walkers. Would be nice if people didn't have to mix with the traffic.
112	Driving Concern	Cars regularly speed on this road.
113	Walking Concern	When exiting Wayside Farm there are no sidewalks, forcing people to walk a narrow dirt path within a few feet of fast moving traffic. When crossing the town line into Whitman, there is a sidewalk that abruptly ends when crossing into East Bridgewater.
114	General Safety Concern	Stop building so many houses and roads so we have parks and places to go and be safe. Having sidewalks has been a huge benefit for my town and my neighborhood, maybe more?
115	Driving Concern	need to have a left turn signal
116	Driving Concern	Thisi is a driving concern.. In the evening,,only 1 small lightbulb is at the intersection of the Wayside Farm community and route 18. It illuminates very little, thus making this a dangerous spot. Proper lighting is sorely needed.
117	Driving Concern	traffic light should either be delayed so people looking to take a left on East Street can go first, or make the left lane on rte. 18 a left turn only. People don't know where to stop at the light and with 2 lanes it makes it hard to take that turn.
118	Walking Concern	"Where are all the sidewalks? Walking is treacherous especially with all the tractor trailer trucks barreling down the street. By the way, why are they still going down this neighborhood? I though it was voted to stop them from doing so?"
119	Biking Concern	This strip of 106 is dangerous for walkers and bikers. It would be nice if the sidewalk extended from Latham farm to Johnny macaronis. Even better if it went past Pomponoho pines.

ID	Safety Concern	Details
120	Driving Concern	When driving south on busy route 18, people must make a left turn if they want to enter the Wayside Farm development. The street has been widen only slightly to allow for cars to pass on the right hand side of vehicles waiting to take the left turn. At this point, cars are going approximately 45 to 50 mph,often only inches away from waiting cars and trucks. . It is inevitable that someone will get rear-ended and pushed into oncoming traffic. In the evening, matters are worse because there is no effective lighting at this intersection.
121	Driving Concern	Make Maple one way away from Bedford St. Then allocate that time on the lights to Bedford St to reduce the backup.
122	Walking Concern	No sidewalks on Oak St in East Bridgewater.
123	Walking Concern	Fast driving traffic and lack of side walks. Kids frequently riding bicycles often risk getting hit
124	Biking Concern	The sidewalks in East Bridgewater are horrible! No access or safety for small kids that ride bikes. Cars typically drive over the speed limit and the kids can't ride safely.
125	Walking Concern	It would be great if Washington street had a sidewalk. There is no bus system that connects East Bridgewater people to public transit. The closest train to this side of town is the Whitman commuter rail station and people without cars should be able to access it by foot or bike more safely. People walk down all parts of washington street all the time, but people speed and it is unsafe
126	General Safety Concern	People do not yield here and its caused much danger
127	Driving Concern	There should be a stop sign here!
128	Walking Concern	No sidewalks
129	Walking Concern	No sidewalks
130	General Safety Concern	Very short street (Morse Ave) between Central St and Plymouth St in a residential area and school zone, along side of town green and residential homes. Very large 18 wheeler trucks and larger, turning onto this very short street at a high rate of speed where there is often pedestrians from schools and church as well as town events. They should not be using this cut off to get to Plymouth Street. They should be going to the traffic lights at route 18 and Central St as this is a very dangerous situation. Also there is a median between the 2 streets with lots of trees, shrubs and plantings that make it difficult for drivers to see oncoming vehicles. Many accidents occur because of this situation.
131	Driving Concern	Needs a left turn signal
132	Driving Concern	There are many accidents in this intersection. A left turn signal would be helpful.
133	Walking Concern	There is no sidewalk and no bike lane. Very dangerous
134	<Null>	School Zone but no signs. Posted 40 mph when it should be 20 mph when school is getting in and / or getting out. There are two school in this area
135	Walking Concern	I believe the fence in picture is on town property. The fence creates a hazard to pedestrians walking alone or with a dog (as in my case) when cars drive by during periods of heavy traffic. There is roughly 2 feet from the fence to the white line (edge of road). Pedestrians need to wait along the edge of the fence to let cars pass by before passing the fence.
136	Walking Concern	The Pleasant Street bridge located between Summer Street and Matfield Street has very little to no shoulder to walk on. It is a hazard for pedestrians for the reason that it is hard to see oncoming cars in the curve. In addition, the sidewalk leading to the bridge is constantly littered with trash, vegetation, and broken asphalt. A recent accident further added to the deterioration of the sidewalk leading to the bridge from Matfield Street.
137	Driving Concern	Very dangerous intersection trying to turn left onto Route 106 on 18 North. There are two lanes heading south. A possible solution is a delayed left turn or delayed north and south.
138	Walking Concern	Sidewalks are needed on Central street. Many people have to walk their dogs in the street and cars are flying down the road at greater than 50 mph.
139	Walking Concern	Junipers/red cedars planted along edge of sidewalk are overgrown forcing pedestrians to walk into the street. Trees need massive trimming.
140	Walking Concern	Trees planted along edge of sidewalk overhang sidewalk. Pedestrians need to walk into the street to pass by.
141	Driving Concern	Intersection is at an odd angle, state will be redesigning it soon. In meantime, how about changing the light cycle: have Highland St eastbound get 15 seconds of green light, then have the Highland St westbound get 15 seconds. This will stop the problem of left turning traffic going head-on at each other.
142	Driving Concern	"Needs a turn arrow. Extremely dangerous. "
143	Driving Concern	The addition of left turn arrows are greatly needed, especially for traffic heading Northbound on Route 18. I live on West Street and when traveling home on Route 18 North (Bedford Street), it is extremely challenging to make a safe left turn onto Route 106 West (West Street). Countless times, drivers heading South on Route 18 *try* to be kind by stopping in the intersection and waving and/or flashing their headlights to motion for drivers to turn left in front of them onto Route 106 West. HOWEVER, even though cars in the left lane of Route 18 Southbound may stop, cars in the right lane of Route 18 Southbound often do not stop or slow down an and it is impossible for the driver attempting a left turn from Route 18 North to see those drivers approaching. There are near misses multiple times a day and several documented accidents.
144	Driving Concern	Constant accidents at the intersection of Route 18 and Route 106 at both West Street and East Street.
145	Driving Concern	Routes 18 & 106 in East Bridgewater is dangeroit trying to take a left from 18 onto 106. Sometimes people will let you go, but you can’t see around their vehicles to know if someone else is coming. There definitely needs to be left arrows for both West and East Streets.
146	Driving Concern	The intersection of Route 18 and Route 106 is a major accident zone in East Bridgewater. Going North/South you can not see when during going either direction. People think its helpful to wave you on, then you get in an accident because you can't see down the hill or up the hill and the left lane blocks visibility. You really need at minimum a single green light going North, then a single green for south, so each direction is stopped on a red for the opposite direction. Super dangerous, something needs to be done
147	General Safety Concern	can't get out of Laurel St turning left toward Rt 18 when a train is coming because drivers block the intersection. Need signage "do not block intersection: not that they will be read.
148	General Safety Concern	this intersection should be redesign. get rid of the island and make it a 90 degree turn. you can not see anything coming down Elm St when on Belmont St
149	Driving Concern	Rt 18 and 106. The right lane needs to be an only lane. No exceptions. Heading towards Bridgewater. When your turning left you can’t see the cars in right lane then they get smashed
150	Driving Concern	The intersection of Court, Cherry and Prince streets in North Plymouth is disastrously dangerous. Especially dangerous is heading south and attempting to turn left onto Prince. This area needs a new design! Complicating the situation is that this is a highly traveled pedestrian area as well! Please review and help!
151	General Safety Concern	Sidewalks are needed to connect Franklin street sidewalks to Central street. Trucks/motorcycles/cars are flying around this blind corner that is now residential with 2-3 young children per household.
152	Walking Concern	Connect the sidewalks from the school to the remainder of the sidewalk on the EB side. Dangerous area for students to share the road with drivers speeding after a school zone.

ID	Safety Concern	Details
153	General Safety Concern	"East St. is a residential dense street and has no sidewalks to speak of. It is very unsafe to walk on. An ordinance passed to block heavy, industrial trucks from using the street months ago but still hasn't gone into effect for one reason or another. At the Bedford/East/West street intersection up the road is a collision waiting to happen. There is no delayed Left turn light to allow traffic to turn across the incoming traffic lane. It doesn't have a Left Turn Only sign or street paint so it clogs up traffic while a vehicle waits to take a Left turn. It causes cars to sharply turn into the other lane, increasing chances of a collision."
154	Driving Concern	Major congestion at peak times including rush hour and school dismissals. Very frequent near misses due to speeding both north and southbound on franklin street.
155	Driving Concern	"This is genuinely the worst intersection I have ever driven. Every direction of traffic consistently runs the red light. Light timing results in cars still occupying the intersection once the light changes for central street in either direction. "
156	Driving Concern	Multiple offshoot roads of varying traffic in this location make for an absolute free for all when large commercial vehicles are entering and exiting. The entrance to the gas station is used as an "unofficial right lane" for commercial vehicles exiting franklin street, leading to numerous near misses with traffic entering and exiting Tri Town Convenience
157	General Safety Concern	Frequent speeding and disregard for school zone, residential area
158	General Safety Concern	Frequent speeding, general dangerous driving around this turn. Heavier commercial vehicles will often veer over the line when westbound toward town center.
159	Driving Concern	Traffic lights needed here. Several accidents have occurred at this location. Along with accidents long wait times to pull onto route 28. This intersection supports cut-through traffic that people use to avoid the center of West Bridgewater. The intersection becomes even more dangerous after snow storms as snow is piled up in the adjoining parking lots making to see traffic.
160	Driving Concern	Route 18 East St and Bedford st. Extremely dangerous intersection.
161	Driving Concern	Elmwood Way and East St you cannot see the traffic when trying to make a left turn. Trees and bushes are blocking the view.
162	Walking Concern	There should be a street light near the cross walk. It's very dark on that corner from dusk till dawn.
163	Driving Concern	Notoriously dangerous intersection. Need a light to support safer traffic travel. Many accidents and near misses over the years. Whitman PD and town overall has been and is aware of the concern. There is nothing there to improve traffic.
164	Biking Concern	High vehicle speeds and no shoulders on Scotland St make cycling feel very unsafe. The speed humps further south help a lot, but need additional traffic calming for the northern section. This is an important link between Bridgewater and W. Bridgewater.
165	Biking Concern	The West Bridgewater Rail Trail would be a very nice bypass for cycling to avoid a busy road, but the east end (at East Street) ends abruptly at a large steep embankment, where it is difficult (and muddy) to get a bike back up to the road.
166	Driving Concern	A traffic light here would make getting on/off Pleasant St much safer. With the traffic volume on Rt 106 it is sometimes almost impossible.
167	Driving Concern	This set of lights are very dangerous people heading north trying to take a left can not because their are 2 lanes cars stop on the right or taking a left are unable to because and of the lanes going left or taking a right can't go because the other lane speeds through the intersection and don't give the right of way so many accidents there!! Should be delayed light at this intersection just ask the e. Bridgewater police they are there probably 3 to 4 times a month?!! And the light also down from this intersection at Joppa grill needs a right turn only arrow on the right lane people get in that lane and speed up to the other cars going straight and cut the cars off going straight!! Please give this intersection a facelift Elwood area residents will be more than greatfull ! One child almost got killed here on a bike Thank you!!
168	Driving Concern	Two lanes from church street turn into Oak St which is one lane
169	Driving Concern	Dunkin traffic backs into street
170	Walking Concern	This area needs a cross walk, especially near new apartments
171	Driving Concern	The light is prioritized for the shopping plaza and housing units. A car will pull in or out of either parking lot and the light is triggered to stop traffic on Crescent St.
172	General Safety Concern	The morning drop off is so dangerous here. People will kind of pull off to the shoulder to drop their kids off but they end up blocking traffic. Some when pull out of the shoulder will do a U turn on all 4 lanes of traffic. Individuals pulling out of or into Plymouth Street have caused so many close calls either with other cars or with students crossing.
173	Driving Concern	There needs more signage earlier for left turn only
174	Biking Concern	There is no shoulder for bikes for peds. The blind corner makes it impossible to safely bike or walk

APPENDIX B.

Projects By Municipality

ABINGTON

Corridors

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
18	Bedford Street from south of Shaw Ave to north of Oak St, includes improvements at the intersection of Bedford St and Clark St, Randolph St RT139, Bates St, and Shaw Ave	Abington	0.84	MassDOT	No	96	38	4	Angle (2), Sideswipe (2)	• Location has had some updates since RSA (approaches WB and EB expanded one lane) monitor improvements • Review access management of Dunkin and gas stations • Evaluate clearance intervals and timings • Upgrade crossings to ladder crosswalks • Consider widening of crosswalk ramps and evaluate bumpouts • Corridor wide evaluate need for road diet (2 to 1 lane) • Enhance pedestrian crossing near Bates St • RRFB with consideration for a refuge island • Remove passing zone near Washington St • Ladder crosswalks at Shaw Ave • Install RRFB • Evaluate need for a signal	Y	Y	N
27	Richard Fitts Drive, Chestnut Street and Hancock Street including the triangle of all 3 intersections	Abington	0.56	Town	No	66	49	4	Single Vehicle (2), Head-On (1), Bicyclist (1)	Countermeasures not included for projects ranked 25 or lower. Refer to RSA for countermeasures.	Y	Y	Y
28	Brockton Avenue Brockton Avenue from Mill Street to High Street in front of the Walmart	Abington	0.59	MassDOT	No	61	32	3	Angle (2), Head-On (1)	Countermeasures not included for projects ranked 25 or lower	N	Y	N
33	Plymouth Street from Pilgrim Street to Hersey Lane, including intersections of Summer Street and Plymouth Street and Centre Avenue and Plymouth Street.	Abington	0.65	Town	No	52	25	3	Vehicle (1)	Countermeasures not included for projects ranked 25 or lower. Refer to RSA for countermeasures.	Y	N	N

Intersections

#	Intersection	City/Town	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
13	Bedford St and Brockton Ave	Abington	MassDOT	No	28.75	19	1	Rear-end (1)	• Stripe tracking lines through the intersection • Evaluate clearance intervals and signal timings • Access management -restricting Bank of America driveway • Provide lane use markings • Evaluate need for dedicated left turn lanes • Install flashing yellow arrow on left turns • Provide approach lane use signage	Y	Y	Y
24	Washington St and Adams St	Abington	City or Town	No	12.5	6	1	Head-On (1)	• Formalize T intersection • Reconfigure crosswalks in ladder style at the new intersection • Consider bumpout on northeast corner for wider sidewalk and buffer from park area • Consider further traffic calming on Washington St such as bump outs on the Washington St crosswalk or speed feedback signs	N	N	N

AVON

Corridors

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
14	Harrison Boulevard and E Main Street from intersection of Harrison Boulevard and W Main Street to E Main Street, including the intersection of E Main Street and W Spring Street	Avon	0.45	MassDOT	Yes	126	51	2	Angle (1), Unknown (1)	• Consider intersection realignment at E Main Street and Harrison Boulevard intersection to remove slip lanes • Install pedestrian signals including countdown and APS • Install retroreflective backplates • Evaluate clearance intervals. • Consider roundabout at W Main and Harrison Boulevard. • Ensure 11' travel lanes. • Install double yellow center line. • Improve lighting. • Consider installing dedicated bike lanes. • Consider signal at Spring Street.	Y	Y	Y

Intersections

#	Intersection	City/Town	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
12	Harrison Blvd and Pond St	Avon	MassDOT	Yes	29.6875	19	0	None. Other injury crashes include Rear-end (7), Angle (5), Single Vehicle (4), Sideswipe (3)	• Evaluate recent improvements constructed in 2023.	Y	Y	N
31	E Main St and W Main St	Avon	MassDOT	Yes	3.125	2	0	None. Other injury crashes include Sideswipe (1), Single Vehicle (1)	• Evaluate future RSA to be completed • Evaluate for road diet • Formalize T intersection by removing the W Main St slip lane leg • Realign crossings with ladder painted crosswalks • Short term - clearance intervals timing adjustments • Pedestrian APS signal upgrades • Additional pedestrian signage	N	N	N

BRIDGEWATER

Corridors

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
21	Pleasant Street from Home Depot to Prospect Street	Bridgewater	0.78	Town	Yes	84	37	5	Rear-end (2), Head-On (2), Angle (1)	• Restripe crosswalks in ladder style • Reconstruct sidewalk in poor condition • Access management • Evaluate clearance intervals, provide elephant tracks and add green paint to the bike lanes at Elm Street intersection. • Trim vegetation and add speed feedback radar sign by Brownfield Drive • Narrow travel lanes to 11' consistently along the corridor • Consider striping buffered bike lanes in existing shoulder • Extend westbound left turn pocket at Home Depot driveway and consider constructing median"	N	Y	N
24	Bedford St from south of Maple Ave to Main St/ Summer St (Downtown Bridgewater)	Bridgewater	0.26	MassDOT	No	77	34	5	Pedestrian (2), Angle (1), Rear-end (1), Sideswipe (1)	• Monitor and evaluate upgrades at Maple Ave crossings • Evaluate need for RRFB at midblock crossing north of the Maple Ave and Bedford St intersection • Monitor and evaluate pedestrian crossing upgrades at Grove St and Bedford St • Evaluate need for RRFB for midblock crossing south of intersection • Continue speed management corridor wide • Consider speed feedback signage • Narrow of travel lanes by painted lines or by adding bike lanes along Bedford St • evaluate and upgrade pedestrian ramps and refuge islands to meet ADA standards at Central Square • review RSA for Central Square improvements conducted in 2020 for future projects	Y	N	Y
41	Broad Street from High Street to Comfort Street, High Street and Broad Street int	Bridgewater	0.59	MassDOT	Yes	35	16	3	Head-On (2), Sideswipe (1)	Countermeasures not included for projects ranked 25 or lower	N	Y	N

Intersections

#	Intersection	City/Town	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
21	Walnut St and Plymouth St	Bridgewater	Town	No	17	3	1	Single vehicle (1)	• Install intersection ahead signage • Install ladder style crosswalks	N	N	N

BROCKTON

Corridors

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
1	Pleasant Street and Court Street from Spring Street to Montello Street	Brockton	1.10	City	Yes	320	126	11	Angle (3), Head-On (1), Sideswipe (1), Single Vehicle (2), Rear-end (2), Pedestrian (1), Other Non-Motorist (1)	• Intersection realignment at Spring Street intersection • Upgrade to ladder style crosswalks • Upgrade all signals to include countdown and APS • Evaluate tightening turning radii to shorten crossing distances • Evaluate additional mid-block crossing opportunities • Install ladder style crosswalks with RRFBs or curb extensions at mid-block crossings • Consider widening sidewalks • Reconstruct accessible ramps • Backplates • Improve parking delineation by 169 Court Street • Ensure all travel lanes are 10.5-11 feet wide.	N	Y	Y
2	Main Street from Spring Street to Belmont Street including Main Street at Legion Pkwy	Brockton	0.25	City	Yes	295	117	8	Angle (2), Rear-end (3), Pedestrian (2), Other Non-Motorist (1)	• Curb extensions at crosswalks particularly where parking blocks crosswalk visibility • Upgrade to ladder style crosswalks • Reduce pedestrian delay at signalized intersections • Upgrade all signals to include countdown and APS • Optimize clearance intervals • Consider signal timing and phasing adjustments including dedicated left turn phasing • Consider providing bike lane at sidewalk level • Access management including narrowing of driveway entrances.	N	Y	Y
5	N Montello Street from E Ashland Street to Livingston Road	Brockton	0.81	City	Yes	236	146	8	Angle (5), Rear-end (2), Single Vehicle (1)	• At Battles Street and Livingston Street intersections: access management • Overhead flashing beacon • Evaluate signal installation • Consider curb extensions and RRFBs at mid block crossings • Consider bicycle accommodation • Upgrade to ladder style crosswalks • Speed feedback radar signs.	N	N	Y
6	Main Street from Grand Street to south of Market Street	Brockton	0.44	City	Yes	216	101	12	Angle (4), Pedestrian (3), Sideswipe (2), Rear-end (2), Single Vehicle (1)	• Consider curb extensions at intersections and mid-block with crosswalks • Upgrade to ladder style crosswalks • Consider additional mid-block crossing opportunities • Restrict parking by intersections • Ensure consistent 11' traffic lanes • Install signal at Nilsson intersection. RSA at Nilsson	Y	Y	Y
7	Center Street from west of Main Street to Hunt Street	Brockton	0.47	City	Yes	211	125	4	Pedestrian (2), Angle (1), Rear-end (1)	• Ensure 11' travel lanes • Reconstruct sidewalks • Raise bike lane to sidewalk level • Upgrade to ladder style crosswalks and reconstruct ramps • Signalize Plymouth Street intersection and install pedestrian signals with countdown and APS • Evaluate road diet between Commercial Street and Plymouth Street • Limit parking near the Plymouth Street intersection • Evaluate removal of right turn lane approaching Plymouth Street eastbound • Speed feedback radar signs • Consider installing additional lighting • Access management	Y	Y	Y

BROCKTON

Corridors (Continued)

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
8	Belmont Street from east of MA-24 ramps to east of Magnolia Avenue	Brockton	0.66	MassDOT	Yes	194	97	9	Angle (3), Pedestrian (3), Rear-end (3)	• Access management • Provide mid-block crossing opportunities with median refuge in existing median • Consider opportunities for median refuge islands at intersections • Consider separated bicycle accommodation options along the corridor • Shorten crossing distances across Belmont Court and the VA hospital entrance • Speed feedback radar signs • Examine signal phasing and timing particularly for people walking • Evaluate clearance intervals.	Y	Y	Y
9	N Main Street from Huntington Street to Ames Street	Brockton	0.58	City	Yes	178	79	6	Angle (2), Pedestrian (2), Head-On (1), Single Vehicle (1)	• Stripe edge lines • Narrow lanes to consistently 11' • Provide curb extensions at intersections and mid-block crossings to shorten crossing distances and calm traffic • Provide additional opportunities to cross N Main Street • Upgrade signals to include countdown and APS • Install retroreflective backplates • Upgrade to all ladder style crosswalks • Install speed feedback radar signs.	N	Y	Y
10	W Elm Street west of Moraine Street to Elm Avenue	Brockton	0.29	City	Yes	174	108	7	Angle (5), Pedestrian (1), Rear-end (1)	• Narrow travel lanes to 11' • Upgrade to ladder style crosswalks • Evaluate signal or all way stop control at the Belmont Ave intersection • Consider installing crosswalk across Elm Street at Byron Ave • Consider additional locations for pedestrian crossings • Consider providing sidewalk level bike lane • Bike lane buffer • Evaluate phasing • Timing and clearance intervals at existing Ash Street signal.	Y	Y	Y
11	Forest Avenue from Mamomet Street to Warren Avenue	Brockton	0.56	City	Yes	159	82	7	Angle (2), Head-On (2), Pedestrian (1), Rear-end (1), Sideswipe (1)	• Update crosswalks to ladder crosswalks • Consider additional speed enhancements such as speed feedback radar signs • Bumpouts at intersections with ladder crosswalks • Evaluate on street parking management • Evaluate clearance intervals and timings at corridor intersections • Access management at businesses • Review for ladder crosswalks across all side streets • Ensure 11' travel lanes • Continue to evaluate for head on crash reduction	N	N	Y
12	Warren Avenue from Florence Street to Bartlett Street	Brockton	0.44	City	Yes	159	90	7	Angle (4), Pedestrian (2), Single Vehicle (1)	• Reconstruct accessible ramps • Upgrade to ladder style crosswalks • Stripe bike facilities • Provide additional opportunities to cross Warren Avenue • Consider traffic calming options including speed feedback radar signs or curb extensions • Consider narrowing travel lanes to 10.5 feet • install reflective object markers to utility poles.	N	N	Y

BROCKTON

Corridors (Continued)

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
13	Belmont Street from Moraine Street to Elm Avenue	Brockton	0.28	City	Yes	139	83	2	Angle (2)	• Narrow travel lanes to consistent 11' • Realign crosswalks across Belmont Street • Provide ladder style crosswalks • Stripe bike lanes or bike friendly shoulders where space allows • Consider curb extensions or median refuge islands to shorten crossing distances and reduce speeds • Access management including delineation between parking areas and sidewalks and reducing driveway and curb cut widths • Consider widening sidewalk • Consider installing speed feedback radar signs • Consider intersection ahead signage and overhead in advance of Manomet Street and an overhead flashing beacon. • Evaluate Manomet Street intersection for a traffic light or all way stop control. • Consider raised crosswalks across minor side streets.	N	N	Y
15	Nilsson Street from Warren Avenue to Montello Street	Brockton	0.32	City	Yes	118	84	1	Angle (1)	• Nilsson St and Main St - evaluate need for traffic signals • Consider overhead flashing beacon • Install intersection ahead and pedestrian warning signs • Construct crosswalk bumpouts with upgraded ramps and ladder painted crosswalks • Evaluate lighting along the corridor • Install overhead LED streetlights • Evaluate need for painted bumpout makings at intersections for vehicles parked too close to intersections • Install ladder crossings across unmarked side streets • Evaluate ramp condition and compliance with ADA • Consider marked parking spaces along the corridor • Consider marking travel lanes with double yellow	Y	N	Y
20	South Street/Perkins Avenue from Warren Avenue to east of Montello Street	Brockton	0.31	City	Yes	85	43	3	Angle (1), Head-On (1), Rear-end (1)	• Add ladder crosswalk markings at Warren Ave intersection • Consider future management of parking including marked parking spaces • Clearance intervals and timings updates at Main street • Consider crosswalk bumpouts at South St/Main St intersection • Install pedestrian exclusive phasing and APS pedestrian crossing signal heads • Update crosswalk markings to ladder crosswalks • Add exclusive pedestrian phasing and APS pedestrian crossings to Montello St and Perkins Ave intersection • Provide crosswalk ramps and ladder painted markings • Corridorwide evaluation of speeds • Parking and access management	N	Y	Y

BROCKTON

Corridors (Continued)

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
22	Market Street from Copeland Street to Montello Street, including Warren Avenue at Market Street	Brockton	0.48	City	Yes	81	55	2	Angle (1), Sideswipe (1)	• Market St at Warren Ave - Install advanced pedestrian crossing signage • Improve street lighting • Restripe crosswalks with ladder crosswalks • Upgrade ramps and curbing to ADA standards • Reduce Market St EB approach to one lane • Install cross traffic does not stop signage • Consider all way stop • Evaluate for signal • Install LED stop signage • Install ladder crosswalks at Market St and Main St • Evaluate crosswalk bumpouts for pedestrians and for better sight distance from Market St • Monitor corridor for speed concerns • Consider additional school zone markings and signage near Warren Ave • Consider additional crosswalk infrastructure near schools such as raised crossings or decorative crosswalks • Coordinate with schools on resources needed to manage crosswalks on Market St	Y	N	Y
23	Lawrence Street from Main Street to Perkins Street	Brockton	0.21	City	Yes	79	40	4	Angle (2), Pedestrian (1), Single Vehicle (1)	• Consider access management of nearby businesses and corridorwide • Evaluate sight distance from Lawrence St turning onto Main St when vehicles are parked • Upgrade to ladder crosswalks along corridor • Install pedestrian signals and phasing to Montello St at Lawrence St intersection • Install ladder crosswalks • Review and upgrade curb ramps for ADA compliance • Install painted ladder crosswalks at Lawrence St and Perkins St • Evaluate for all-way stop control	N	N	Y
30	W Elm Street from Newbury Street to Warren Avenue	Brockton	0.18	City	Yes	54	30	3	Angle (1), Head-On (1), Pedestrian (1)	Countermeasures not included for projects ranked 25 or lower. Refer to RSA for countermeasures.	Y	Y	Y

Intersections

#	Intersection	City/Town	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
4	Marshall Corner	Brockton	City	Yes	56.875	19	3	Angle (2), Head-On (1)	• Adjust signal timing and phasing • Install pedestrian signals • Adjust clearance intervals • Access management • Tracking lines for turning movements	Y	Y	Y
5	Prospect St and N Warren Ave	Brockton	City	Yes	44.375	20	1	Single Vehicle (1)	• Install overhead signals (with pedestrian signals) • Install ladder style crosswalks • Evaluate stop line placement • Access management for nearby driveway	N	Y	N

BROCKTON

Intersections (Continued)

#	Intersection	City/Town	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
7	N Main Street at Oak/ Howard St	Brockton	City	Yes	41.875	29	0	None. Other injury crashes include Angle (18), Rear-End (5), Head-On (3), Single Vehicle (2), Sideswipe (1)	• Overhead signals • Continental crosswalks • Evaluate signal phasing • Lane usage and clearance intervals • Evaluate parking and crosswalk on Wilmington Street for blocked sight lines/potential for curb extension	N	N	Y
10	Crescent St and Lyman St	Brockton	City	Yes	35.625	27	0	None. Other injury crashes include Angle (19), Sideswipe (5), Rear-End (1) and Single Vehicle (1)	• FROM TIP - Work on this project includes reconstruction of the Lyman Street Summer Street and Grove Street intersection including the right turn slip lane from Summer Street northbound to Lyman Street eastbound. The existing traffic signal will be replaced pavement will be reclaimed or overlaid and new loop detection installed. Pedestrian facilities (pedestrian curb ramps and pedestrian signals) will be installed/reconstructed to meet ADA/ MUTCD compliance. New pavement markings and signage will be installed. The deteriorating Grove Street bridge which crosses the Salisbury Plain River will be entirely replaced. Project length includes 600 feet on Summer Street and 500 feet on Grove Street/Lyman Street for a total of approximately 1100 feet.	Y	Y	Y
11	Court St and Cary/N Cary St	Brockton	City	Yes	35	25	0	None. Other injury crashes include Single Vehicle Crash (5), Sideswipe (1),	• Consider roundabout • Install ladder style crosswalks and square off crosswalks • Install countdown pedestrian signals • Expand refuge island • Construct curb extension on northeast corner	N	N	Y
15	Oak St and Campanelli Industrial Dr	Brockton	City	Yes	26.875	20	0	None. Other injury crashes include Angle (12), Rear-End (6), Sideswipe (1), Pedestrian (1).	• Install crosswalk across north leg (with refuge island) • Low hanging signal mast arm • Reconstruct signal • Curb extension on north east corner • Crosswalk with refuge island on east leg • Evaluate signal for timing optimization (clearance intervals) • Evaluate east leg westbound for lane usage for lane reduction • Reduce to one receiving lane	N	N	N
22	Pleasant St and Reynolds Memorial Hwy/West St	Brockton	City	Yes	15.625	7	0	None. Other injury crashes include Angle (3), Single vehicle crash (2), and Rear-end (2).	• Stripe tracking lines through the intersection • Extend receiving lanes south/east leg • Access management • Extend/recalculate clearance intervals • Access control • Geometric improvements (to slip lanes and approach realignments) • Consider additional pedestrian accommodations	Y	Y	Y

DUXBURY

Corridors

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
49	Tremont Street includes intersections of Oak Street and Elm Street	Duxbury	1.06	MassDOT	No	19	13	1	Angle (1)	Countermeasures not included for projects ranked 25 or lower. Refer to RSA for countermeasures.	Y	Y	N
51	Congress Street including intersections of Franklin Street and King Phillips Path	Duxbury	0.72	Town	No	12	8	1	Angle (1)	Countermeasures not included for projects ranked 25 or lower. Refer to RSA for countermeasures.	Y	N	N

Intersections

#	Intersection	City/Town	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
20	Cox Corner	Duxbury	MassDOT	No	19	11	2	Angle (2)	• Narrow approaches • Tighten curb radius • Consider roundabout or installation of signal • Consider installation of sidewalks or bike lanes.	Y	N	Y
23	Franklin St and Summer St	Duxbury	City or Town	No	14	14	0	None. Other injury crashes include Angle (11), Rear-end (1), Sideswipe (2)	• Evaluate need for a roundabout or a signal • Tighten curb radii • Maintenance of vegetation • Evaluate impacts of signal/roundabout on High St skew approach • RSA - narrow travel lanes	Y	Y	N
27	Temple St and Lincoln St	Duxbury	Town	No	8	1	1	Bicycle (1)	• Consider intersection realignment • Construct curb extensions • Update stop signage height for MUTCD compliance • Realign stop bars • Consider installing overhead flashing beacon	N	N	N

EASTON

Corridors

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasure (if a Top 50 project)	RSA?	TIP?	HSIP? 19-21
25	Washington Street Belmont Street to South of Depot Street	Easton	0.62	MassDOT	No	69	35	5	Angle (3), Head-On (1), Single Vehicle (1)	Countermeasures not included for projects ranked 25 or lower. Refer to RSA for countermeasures.	Y	Y	N
43	Washington Street North of Elm Street to Main Street	Easton	0.67	MassDOT	No	33	18	2	Angle (2)	Countermeasures not included for projects ranked 25 or lower	N	Y	N

Intersections

#	Intersection	City/Town	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
1	Purchase St and Turnpike St	Easton	MassDOT	No	85	42	4	Angle (3), Rear-End (1)	• Advanced warning signs • Monitor improvements from conversion from 2-way to all-way stop • Replace pole mounted with overhead beacon • Stop ahead signage if necessary • Install ladder crosswalk	Y	Y	Y
2	Purchase St and Washington St	Easton	MassDOT	No	76.25	41	5	Angle (5)	• Remove passing zone • Remove on street parking • Install overhead beacon • Consider installing traffic signal • Install advanced warning signage to north/southbound approaches • Enhance enforcement • Speed feedback radar signs • Tighten intersection/bring stop bars	Y	Y	Y

HALIFAX

Corridors

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasure (if a Top 50 project)	RSA?	TIP?	HSIP? 19-21
31	Plymouth Street from Monponsett Street to Richmond Park Road	Halifax	0.52	Town	Yes	54	12	2	Pedestrian (2)	Countermeasures not included for projects ranked 25 or lower	N	N	N
34	Plymouth Street from Circuit Street to Thompson Street	Halifax	0.60	Town	Yes	51	19	3	Angle (1), Sideswipe (1), Single Vehicle (1)	Countermeasures not included for projects ranked 25 or lower. Refer to RSA for countermeasures.	Y	N	N
42	Monponsett Street from Palmer Hill Road North to Halifax town line	Halifax	1.00	Town	Yes	34	11	4	Single Vehicle (4)	Countermeasures not included for projects ranked 25 or lower	N	N	N

HANOVER

Corridors

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasure (if a Top 50 project)	RSA?	TIP?	HSIP? 19-21
37	Hanover Street from west of Plain Street to east of Grove Street, including intersections	Hanover	1.01	MassDOT	No	48	26	3	Angle (3)	Countermeasures not included for projects ranked 25 or lower	N	N	N

Intersections

#	Intersection	City/Town	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
6	Columbia Rd at Broadway	Hanover	MassDOT	Yes	42.5	20	1	Angle (1)	• Install ladder style crosswalks • Consider additional lighting • Evaluate overhead signals • Construct pedestrians ramps • Provide lane designations (markings) • Evaluate signal timing and clearance intervals • Consider road diet • Reconfigure intersection alignment with left turn phasing	Y	N	Y

HANSON

Corridors

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasure (if a Top 50 project)	RSA?	TIP?	HSIP? 19-21
44	Main Street from Crooker Place to Monponsett Street	Hanson	0.77	Town	No	31	11	1	Single Vehicle (1)	Countermeasures not included for projects ranked 25 or lower	N	N	N
45	W Washington Street from Sawmill Lane to Independence Avenue	Hanson	1.05	Town	No	20	8	2	Angle (1), Head-On (1)	Countermeasures not included for projects ranked 25 or lower	N	N	N

KINGSTON

Corridors

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasure (if a Top 50 project)	RSA?	TIP?	HSIP? 19-21
35	Main Street Green Street to Evergreen Street	Kingston	0.52	Town	No	50	15	3	Bicyclist (1), Head-On (1), Sideswipe (1)	Countermeasures not included for projects ranked 25 or lower	N	N	N
36	Main Street Crescent Street to Cole Avenue	Kingston	0.35	MassDOT	No	48	15	3	Head-On (2), Single Vehicle (1)	Countermeasures not included for projects ranked 25 or lower	N	N	N

Intersections

#	Intersection	City/Town	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
28	Pembroke St and Lake/ Station St	Kingston	Town	No	6.875	4	0	None. Other injury crashes include Angle (4)	• Consider striping bike lanes • Construct continuous sidewalks • Consider roundabout or signal • Tighten lanes (focus on southbound approach) • Install school zone signage/markings	Y	N	N

PEMBROKE

Corridors

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasure (if a Top 50 project)	RSA?	TIP?	HSIP? 19-21
19	Church Street from Pembroke east town line to Riverside Drive	Pembroke	0.66	MassDOT	No	96	74	1	Angle (1)	• Signal clearance intervals and timing updates • Evaluate for long term roundabout projects at North River Plaza and/or Oak St Exd • Restripe crosswalks with ladder crosswalks • Monitor access management at gas stations - specifically near Old Oak St • Evaluate road diet • Evaluate speed management corridor wide - consider reduction of lanes to 11 ft • Evaluate need for intersection tracking lines at North River Plaza and Old Oak St • Old Oak St at Church St - upgrade pedestrian heads to APS countdown • Restripe with ladder crosswalks • Review for exclusive pedestrian phasing	N	N	Y
40	Schoosett Street from Washington Street / Columbia Road to Water Street	Pembroke	1.15	MassDOT	No	41	27	3	Rear-end (2), Bicyclist (1)	Countermeasures not included for projects ranked 25 or lower. Refer to RSA for countermeasures.	Y	N	N
52	Mattakeesett Street from Maquan Street to Mattakeeset Street near ball fields	Pembroke	1.19	Town	No	9	7	0	None. Other injuries include: Head-On (3), Single Vehicle (3), Rear-end (1)	Countermeasures not included for projects ranked 25 or lower	N	N	N

PLYMOUTH

Corridors

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasure (if a Top 50 project)	RSA?	TIP?	HSIP? 19-21
3	Samoset Street from Marc Drive to Court Street	Plymouth	1.00	Town	Yes	262	109	9	Angle (3), Pedestrian (2), Single Vehicle (1), Rear-end (1), Head-on (1), Bicyclist (1)	• Reconstruct fully accessible sidewalks and ramps • Provide bike shoulders and provide consistently 11' travel lanes. • Provide ladder style crosswalks and pedestrian signals at the intersection with the plaza by 113 Samoset Street • Consider tightening the plaza entrance to shorten the crossing distance. • Consider road diet along the corridor. • Access management. • Ladder style crosswalks throughout for improved visibility for people walking.	N	Y	N
38	State Road from Hibiscus Lane to east of Hibiscus Lane	Plymouth	0.66	MassDOT	No	41	11	5	Head-On (2), Single Vehicle (2), Sideswipe (1)	Countermeasures not included for projects ranked 25 or lower	N	N	N
47	Summer Street Summer Street at Westerly Road	Plymouth	0.16	Town	Yes	20	12	1	Sideswipe (1)	Countermeasures not included for projects ranked 25 or lower	N	N	N

Intersections

#	Intersection	City/Town	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
16	Cherry St and Standish Ave	Plymouth	Town	Yes	23.4375	12	0	None. Other injury crashes include Angle (7), Sideswipe (1), Bicycle (1), Sideswipe (1), Single Vehicle (1), Head-on (1)	• Upgrade pedestrian signals • Consider installing overhead signals • Evaluate clearance intervals and timing updates • Reconstruct pedestrian ramps • Consider traffic calming on Cherry Street including speed feedback signage • Establish school zone infrastructure on Standish Ave	N	N	N
30	State Rd and Herring Pond Rd	Plymouth	MassDOT	No	6.25	1	1	Head-On	• Evaluate for signal warrants • Narrow travel lanes • Consider further speed reduction on State Rd including traffic feedback signage • Access management at gas station and car wash	N	N	N

PLYMPTON

Corridors

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasure (if a Top 50 project)	RSA?	TIP?	HSIP? 19-21
26	County Road from Halifax town line to Lake Street	Plympton	1.12	Town	Yes	68	13	4	Angle (1), Head-On (1), Rear-end (1), Single Vehicle (1)	Countermeasures not included for projects ranked 25 or lower	N	N	N
50	Prospect Road from Main Street to west of Parsonage Road	Plympton	0.67	Town	No	15	7	2	Head-On (1), Rear-end (1)	Countermeasures not included for projects ranked 25 or lower. Refer to RSA for countermeasures.	Y	N	N

Intersections

#	Intersection	City/Town	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
29	Center St and Palmer Rd (MA-58)	Plympton	Town	No	6.25	5	0	None. Other injury crashes include Angle (2), Rear-end (1), Head-on (1), Single Vehicle (1)	• Tighten curb radii • Trim vegetation	N	N	N

STOUGHTON

Corridors

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasure (if a Top 50 project)	RSA?	TIP?	HSIP? 19-21
16	Washington Street from Phillips Avenue to Charles Avenue including Washington Street at Central Street intersection	Stoughton	0.37	MassDOT	Yes	113	58	5	Angle (3), Sideswipe (2)	• Access management • Evaluate clearance intervals • Provide consistently 11' travel lanes • Provide ladder style crosswalks • Widen sidewalks where possible.	Y	N	N
17	Park Street from Walnut Street to north of School Street including downtown Stoughton	Stoughton	0.40	Town	Yes	107	49	3	Pedestrian (2), Angle (1)	• Evaluate for traffic signal at Pearl Street and School Street • Consider adding advance stop warning signs • Upgrade sidewalks and curb ramps with ladder crosswalks • Consider median pedestrian enhancements such as landscape refuge islands • Enhance speed zone signage with speed feedback radar signs • Evaluate clearance intervals and signal timings in downtown • Consider road diet • Consider longer left turn pocket • Evaluate Washington street northeastbound approach (1 signal head not MUTCD compliant) • Upgrade to APS pedestrian push buttons • Evaluate onstreet parking and access management • Evaluate the impacts from the upcoming housing projects • Consider RRFB enhancements with raised crosswalk.	Y	N	N

Intersections

#	Intersection	City/Town	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
3	Canton St and School St	Stoughton	Town	Yes	58.59375	29	1	Angle (1)	• Install RRFB • Evaluate traffic signal with pedestrian accommodations • Evaluate summer street dead end/one way • Relocate poles • Install ladder crosswalks • Install overhead flashing beacon • Evaluate all-way stop • Potential curb extension on southwest corner • Update crosswalk skew angle	Y	Y	Y
9	Pleasant St and Lincoln St	Stoughton	Town	Yes	37.5	30	0	None. Other injury crashes include Angle (25), Sideswipe (3), Single vehicle (2).	• Access management and parking control • Evaluate all-way stop control • Realign approaches • Install overhead flashing beacon • Install ladder crosswalks • Consider ROW concerns • Evaluate future need for a signal	Y	N	Y
14	Central St and Turnpike St	Stoughton	Town	Yes	28.75	15	2	Single Vehicle (1), Rear-end (1)	• Convert post mounted signals to overhead/mast arm • Upgrade pedestrian signal equipment • Consider stop signage for southbound right turn channelized movement • Evaluate need for left turn pockets • Clearance intervals and timings • Evaluate flashing yellow arrow if applicable	N	N	Y

WEST BRIDGEWATER

Corridors

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasure (if a Top 50 project)	RSA?	TIP?	HSIP? 19-21
4	W Center Street from west of Route 24 ramps to N Elm Street	West Bridgewater	0.98	Town	No	254	130	16	Angle (3), Pedestrian (2), Rear-end (5), Sideswipe (2), Single Vehicle (4)	• Reconstruct sidewalks and widen where possible ensuring meet accessibility requirements • Stripe ladder style crosswalks across side streets and reconstruct ramps to improve visibility • Provide RRFB at existing crosswalk by 320 West Center Street • Stripe edge line and narrow travel lanes to 11' • Stripe double yellow centerline • Provide bike lane with buffer where space is available • Access management • Consider relocating utility poles to the back of sidewalk • Install reflective object markers on utility poles • Install advance intersection warning signage on 106 in advance of Lincoln Street intersection • Evaluate tightening turning radii at Lincoln Street and Prospect Street • Evaluate intersection realignment at N Elm Street and West Center Street intersection including tightening turning radii • Removing or realigning slip lanes and narrowing travel lanes and access management.	Y	N	N
32	S Main Street from E Center Street to Emerson Ave, focusing on intersection of Ash St and Bryant St	West Bridgewater	0.49	MassDOT	No	53	24	2	Angle (1), Single Vehicle (1)	Countermeasures not included for projects ranked 25 or lower. Refer to RSA for countermeasures.	Y	Y	N
39	W Center Street from Howard Street to N Main Street, focusing on those two intersections	West Bridgewater	0.32	Town	No	41	24	2	Angle (2)	Countermeasures not included for projects ranked 25 or lower. Refer to RSA for countermeasures.	Y	Y	N

Intersections

#	Intersection	City/Town	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
19	Plain St and Belmont St	West Bridgewater	City or Town	No	20	12	2	Angle (1), Head-on (1)	• Tighten intersection with painted or landscape bumpouts • Consider double stop signs • Consider LED stop signage • Consider single lane or mini roundabout • Access management (if applicable) for the variety store	N	N	N

WHITMAN

Corridors

#	Corridor	City/Town	Length (mi)	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasure (if a Top 50 project)	RSA?	TIP?	HSIP? 19-21
29	Temple Street in downtown Whitman from Hancock Street to Davis Avenue including intersections with Bedford, Beluah, and Washington	Whitman	0.64	MassDOT	No	57	47	1	Pedestrian (1)	• Temple St and Bedford Street - clearance interval • Signal timing updates with exclusive pedestrian phasing • Upgrade to ladder crosswalks • Evaluate for access management concerns from businesses on 4 corners of intersection • Corridor wide - add ladder crossings across side streets • Consider speed feedback signs for speeding concerns • Evaluate signal improvements at Bedford and Temple St from TIP project completed 2019 • Temple St at West St - evaluate geometry for yield slip lane from West St to Temple St • Consider geometric improvements to improve sight distance • Evaluate T-type intersection by removing yield leg and connecting Martin St and West St • Corridor wide - add ladder crossings across side streets • Consider RRFB for midblock crossing near Silver St • Monitor and evaluate upgrades to Temple St and Washington St intersection	Y	Y	N
46	School Street School Street from Auburn Street to Washington Street	Whitman	0.80	Town	No	20	13	1	Single Vehicle (1)	Countermeasures not included for projects ranked 25 or lower	N	N	N
48	Bedford Street from Forest Street to Pine Street	Whitman	0.34	MassDOT	No	19	6	2	Single Vehicle (2)	Countermeasures not included for projects ranked 25 or lower	N	N	N

Intersections

#	Intersection	City/Town	Jurisdiction	EJ Community	Score	Total Injury Crashes	Fatal/ Serious Injury Crashes	Fatal/Serious Crash Types	Countermeasures	RSA?	TIP?	HSIP? 19-21
25	Bedford St and Auburn St	Whitman	MassDOT	No	10	10	0	None. Other injury crashes include Angle (3), Head-on (2), Rear-end (3), Sideswipe (1), Single Vehicle (1)	• Evaluate recent improvements/consider whether should be removed from the list	Y	Y	N
26	Temple St and Old Mansion Ln	Whitman	MassDOT	No	9	5	1	Single vehicle (1)	• T intersection advance signage • Install reflective object markers on poles • Install speed feedback radar signs	N	N	N

APPENDIX C.

Brockton Safety Action Plan

The Brockton Safety Action Plan is located **here**. The plan should be treated as a supplement to this report for the City of Brockton.