



Main Street CORRIDOR STUDY

EXISTING CONDITIONS

PURPOSE

The Old Colony Planning Council (OCPC) in collaboration with the City of Brockton is currently conducting the Main Street Brockton Corridor Study. The study area includes Main Street in Brockton from the West Bridgewater town line through Brockton Downtown to the Avon town line.

The purpose of this study is to evaluate existing and future mobility operating conditions, safety, and circulation as well as bicycle, pedestrian, public transit, parking, and land use conditions.

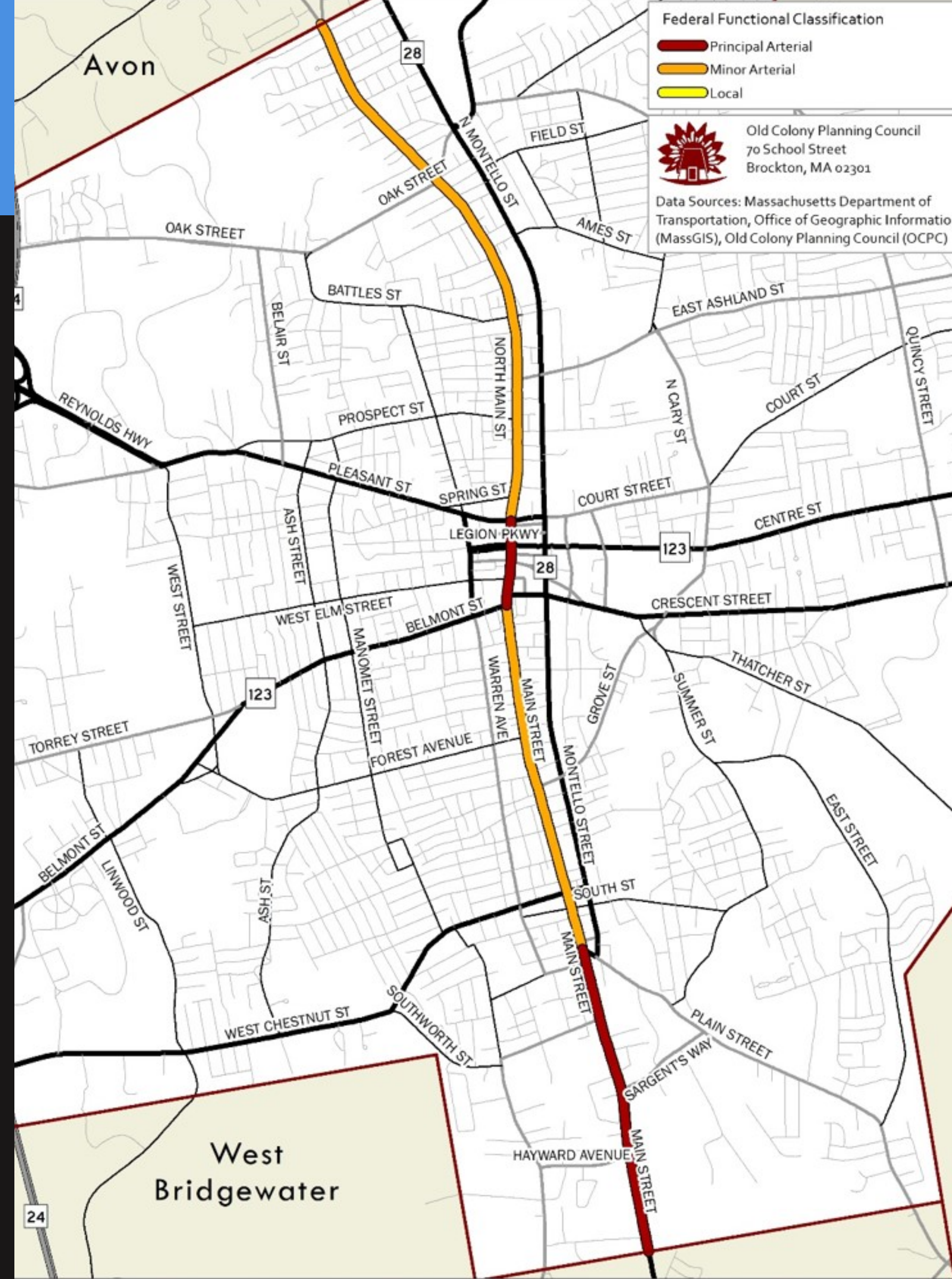


MAIN STREET CORRIDOR STUDY

Corridor Study Geographic Scope

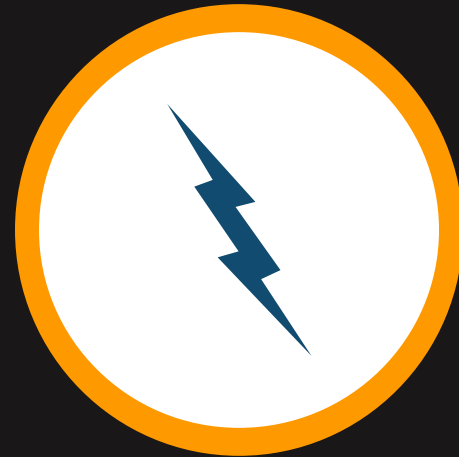
(5.2 miles total)

- Federal Functional classification - Minor Arterial and Principal Arterial (eligible for federal funding)
- Mostly under Brockton jurisdiction
- State jurisdiction south of Sargent's Way/Sylvia Avenue
- Two-lane facility except for south of Skyview Avenue (it becomes a four-way cross-section)



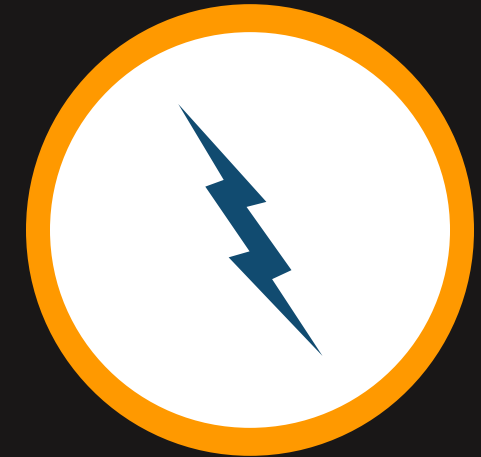
MAIN STREET CORRIDOR STUDY

STUDY FOCUS:



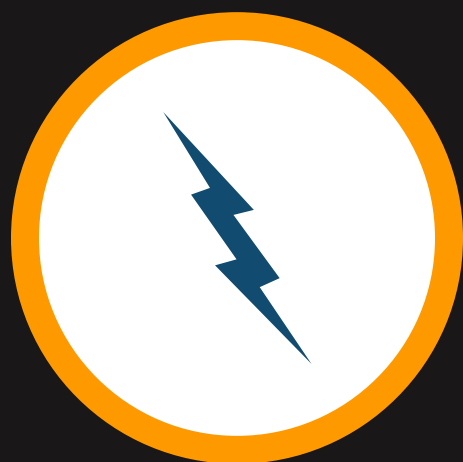
Traffic Volumes and Congestion

·Average daily traffic (24-hour), speeds, heavy vehicle volumes, and peak hour intersection turning movement volumes and intersection congestion



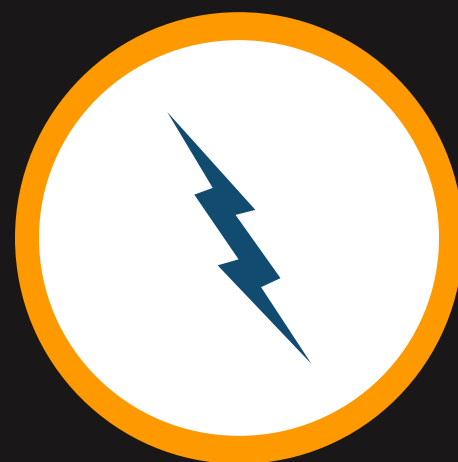
Safety

·The number, severity, and types of crashes and crash rates



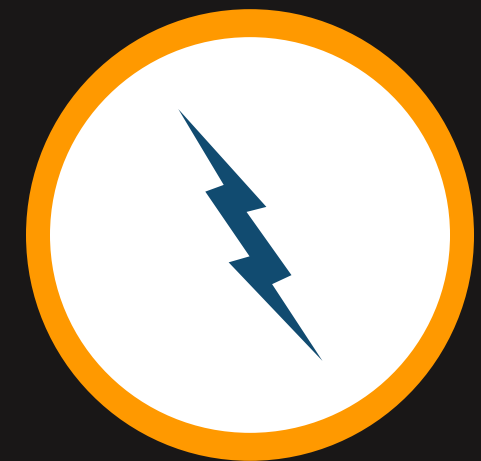
The Built Environment

·Condition of the built environment including pavement, sidewalks, pavement markings, traffic control devices and signage



Mobility Operations

·Convenience, facility accommodations, transit and access



Land Use and Public Health

·The potential impacts of changing land use and new development on traffic and transportation and wellness of the community

TIMELINE

OCT. 2019

- Analyze and Assess Existing Conditions

MAY 2020

- Future Conditions Analysis
- Draft Recommendations
- Second Public Meeting

SEPT. 2019

- Review Existing Conditions
- Data Collection

FEB. 2020

- Stakeholders Meeting
- Public Outreach/ Input
- Online Survey

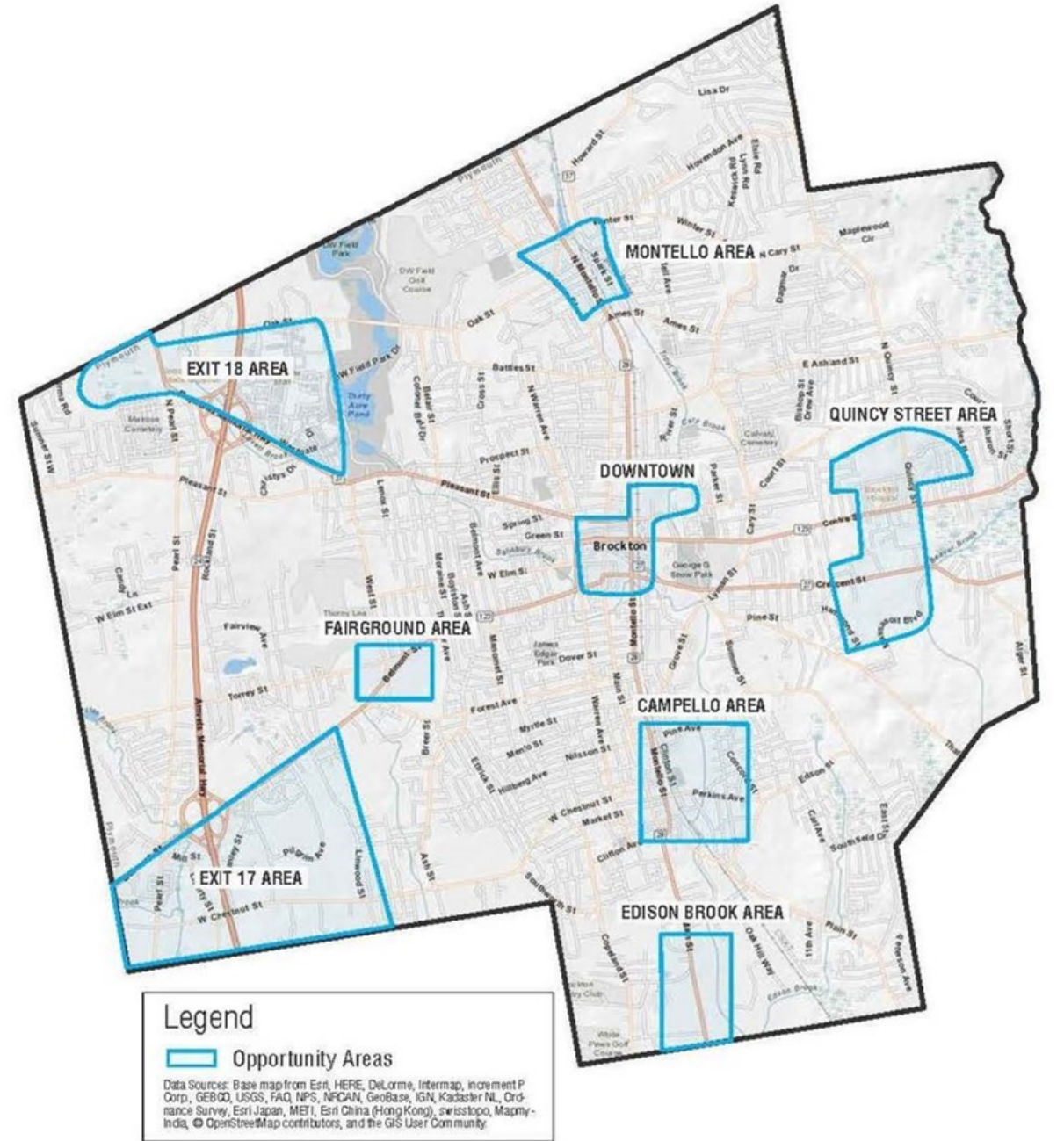
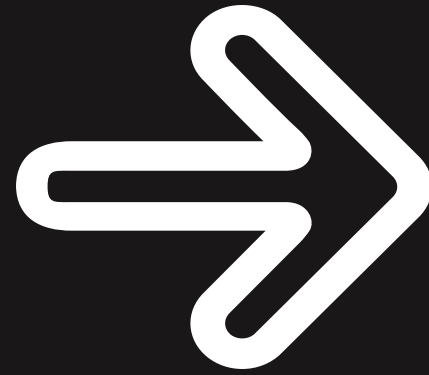
AUG. 2020

- Draft Report/Review
- Final Report

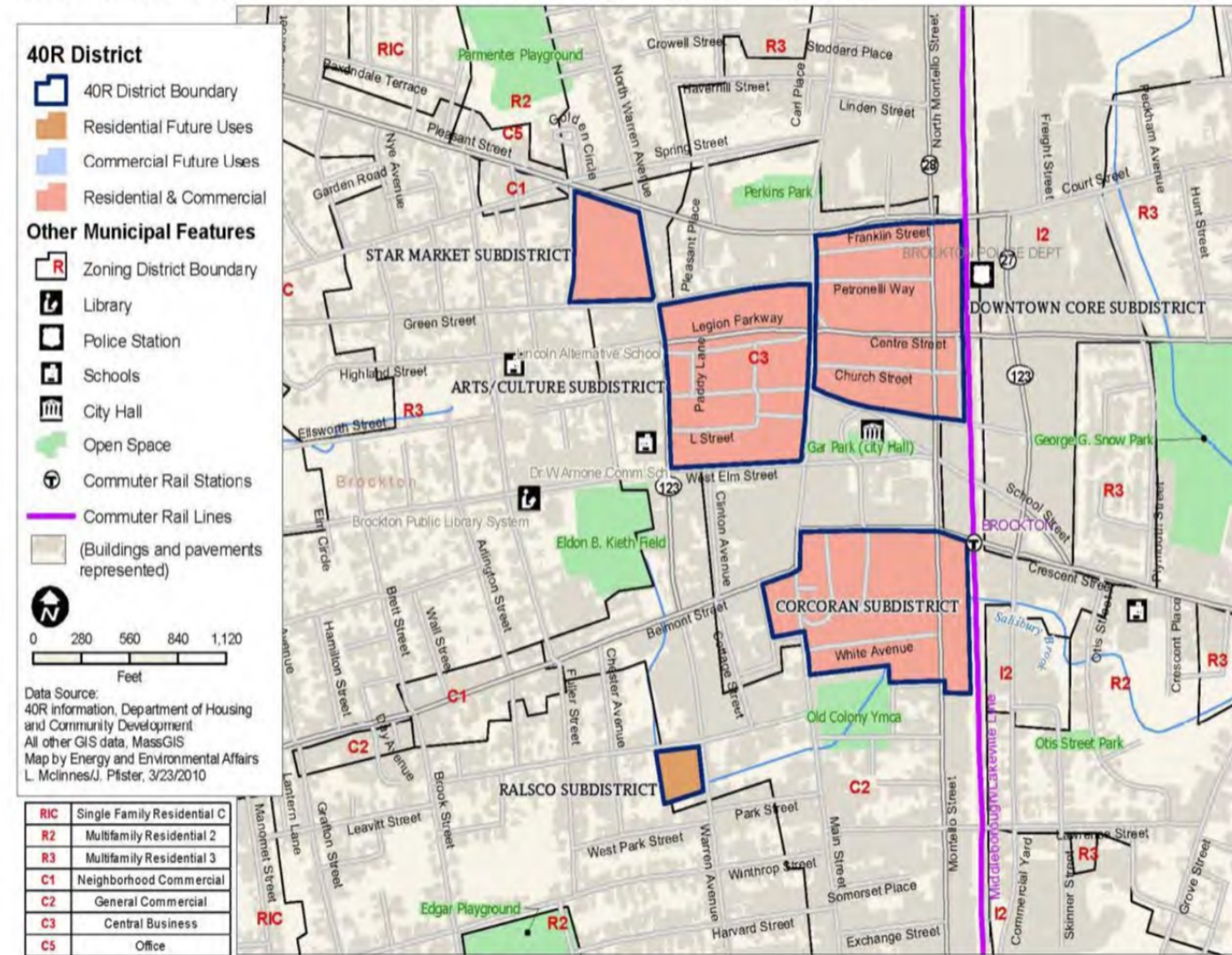


MAIN STREET CORRIDOR STUDY

Development Focus Areas (Opportunity Areas)

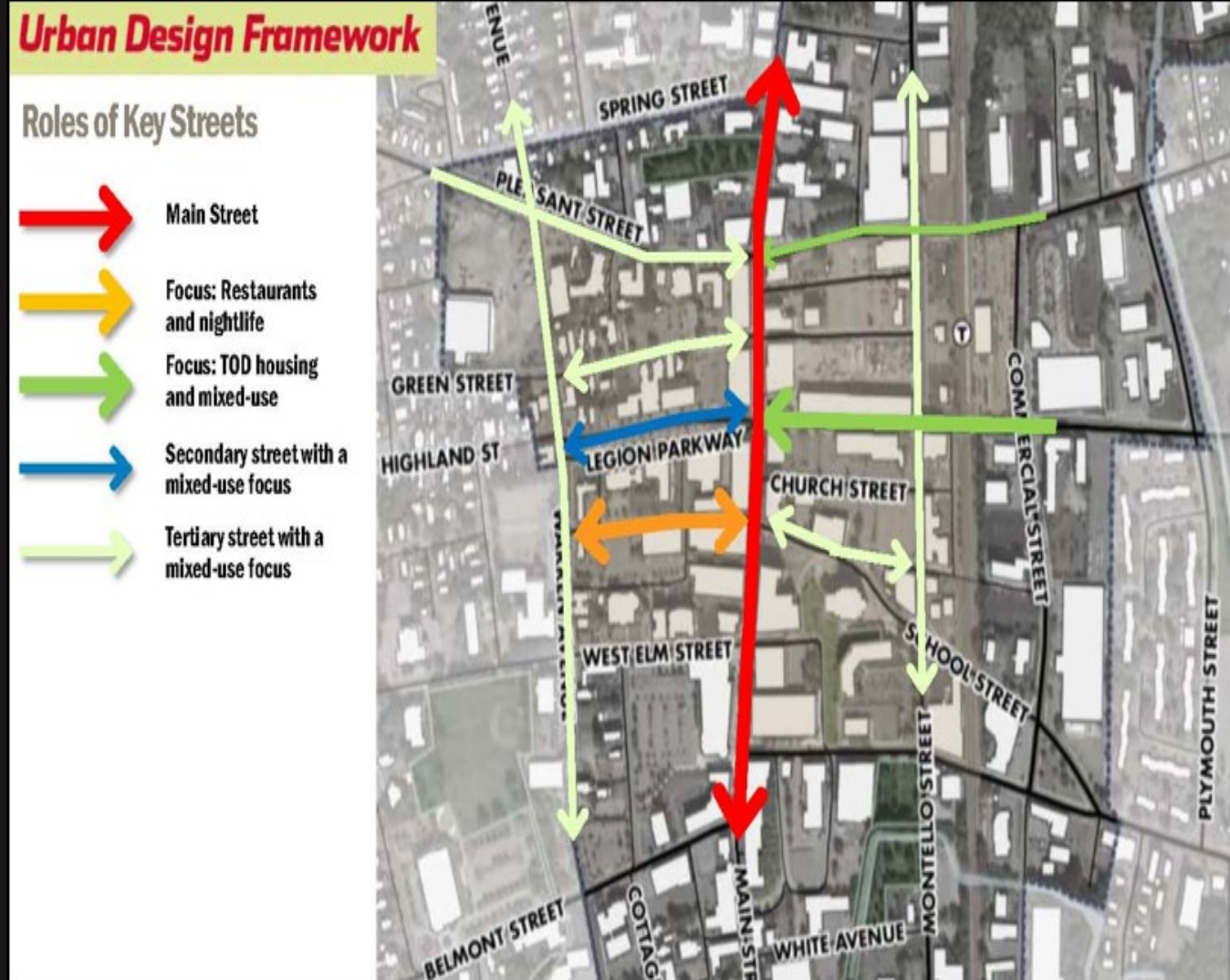


40R Smart Growth Development
 Downtown Brockton Smart Growth Overlay District, Brockton

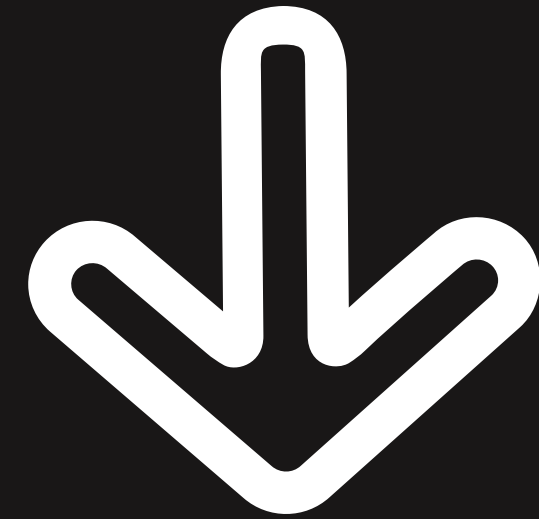


40 R Smart Growth

MAIN STREET CORRIDOR STUDY



CSX Freight Yard Site (Downtown)



Brockton's Downtown Action Strategy



MAIN STREET CORRIDOR STUDY

Main Street Brockton Corridor Study Delay/Congestion

Intersection Peak Hour Level-of- Service Analysis

	Intersection	Traffic Control	AM Peak Existing LOS	PM Peak Existing LOS
1	Main Street at Skyview Drive	Stop	B	A
2	Main Street (Route 28) at Hayward Avenue	Stop	F	F
3	Main Street (Route 28) at Sargent's Way (and Sylvia Avenue)	Signal	C	B
4	Main Street (Route 28) at Brookside Avenue and Brockton Area Transit garage	Signal	C	C
5	Main Street (Route 28) at Keith Avenue and Plain Street	Signal	B	B
6	Main Street at Market Street and East Market Street	Stop	D	F
7	Main Street Perkins Avenue	Signal	B	B
8	Main Street at East Chestnut Street and West Chestnut Street	Stop	D	F
9	Main Street at Nilsson Street and East Nilsson Street	Stop	C, D	F, E
10	Main Street at Grove Street	Stop	F	F
11	Main Street at Forest Avenue and Martin Place	Stop	F	F
12	Main Street at Lawrence Street	Stop	E	F
13	Main Street at Belmont Street (Route 123)	Signal	B	B
14	Main Street at Crescent Street (Route 123)	Signal	A	A
15	Main Street at West Elm Street and East Elm Street	Signal	A	B
16	Main Street at School Street and Frederick Douglass Avenue	Signal	B	B
17	Main Street at Legion Parkway and Centre Street (Route 123)	Signal	B	B
18	Main Street at Pleasant Street and Court Street (Route 27)	Signal	B	B
19	North Main Street at Prospect Street	Stop	E	F
20	North Main Street at Elliot Street and Waverly Street	Stop	D	F
21	North Main Street at East Ashland Street and West Ashland Street	Signal	C	C
22	North Main Street at Battle Street and East Battles Street	Signal	B	B
23	North Main Street at Ames Street	Signal	A	B
24	North Main Street at Oak Street and Howard Street	Signal	C	E
25	North Main Street/West Main Street at East Main Street (at the Avon Line)	Stop	C	E

Downtown Intersections

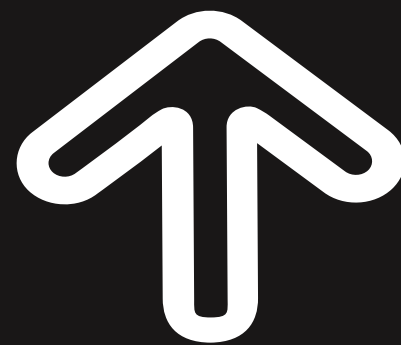
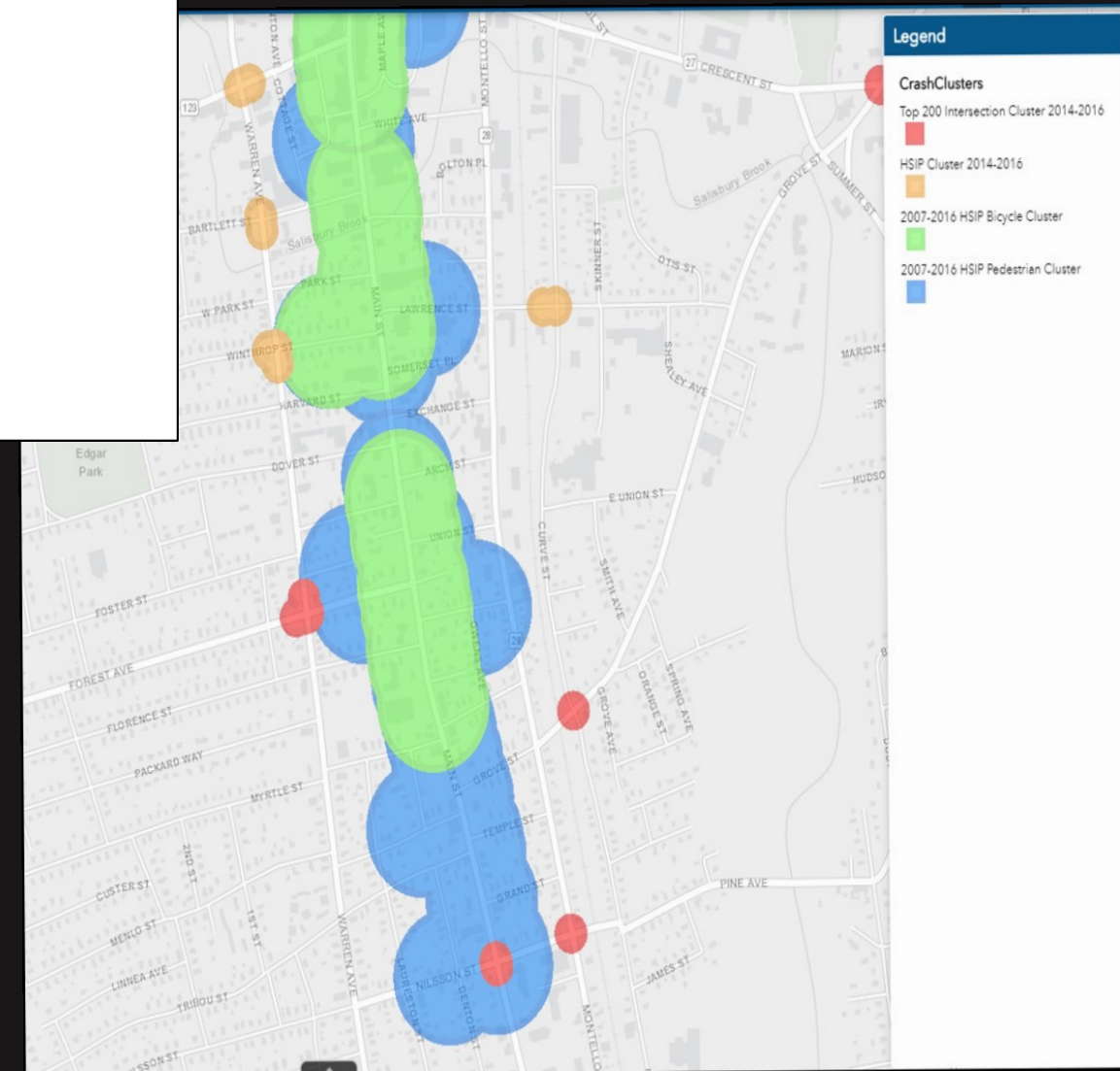
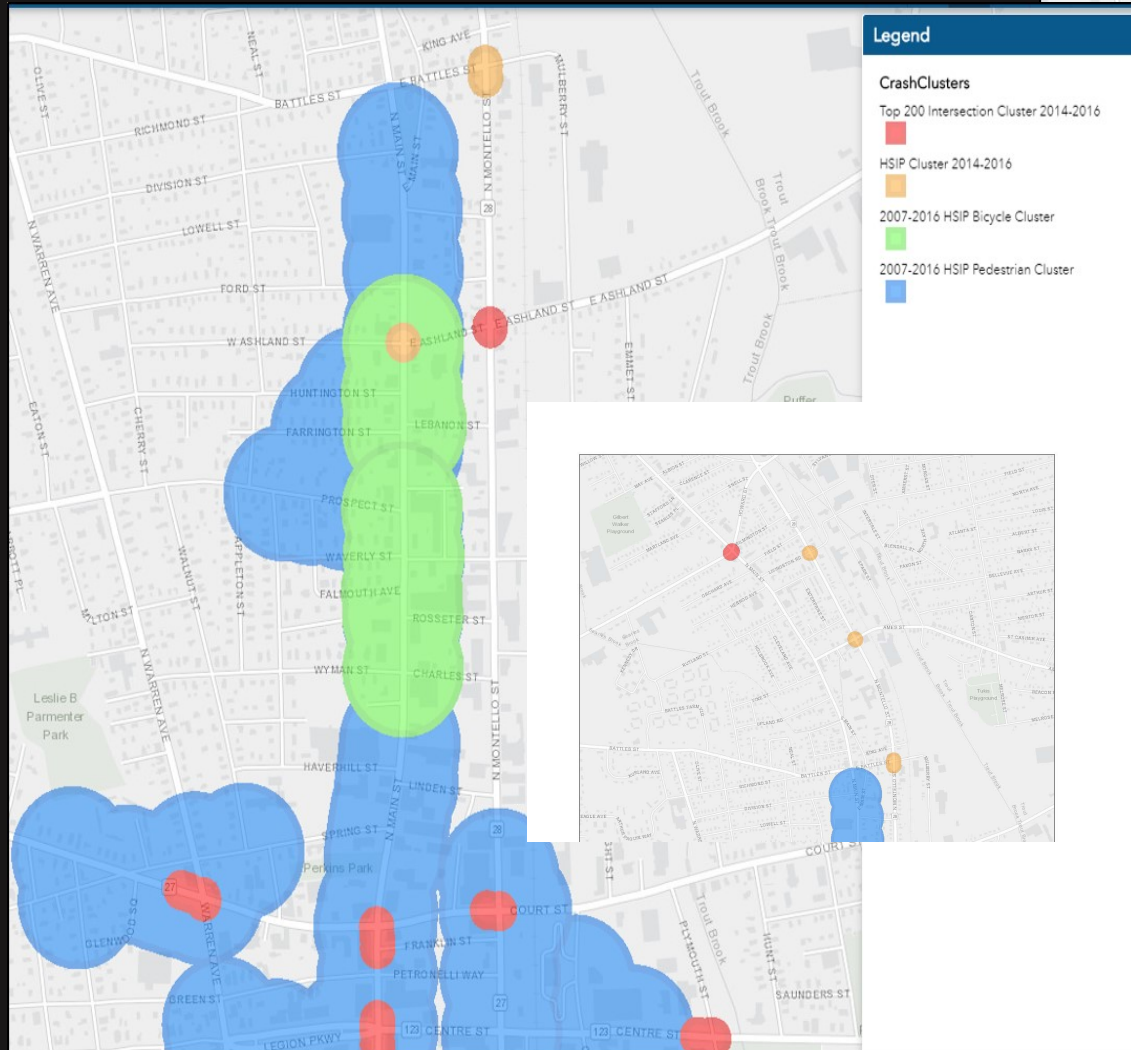
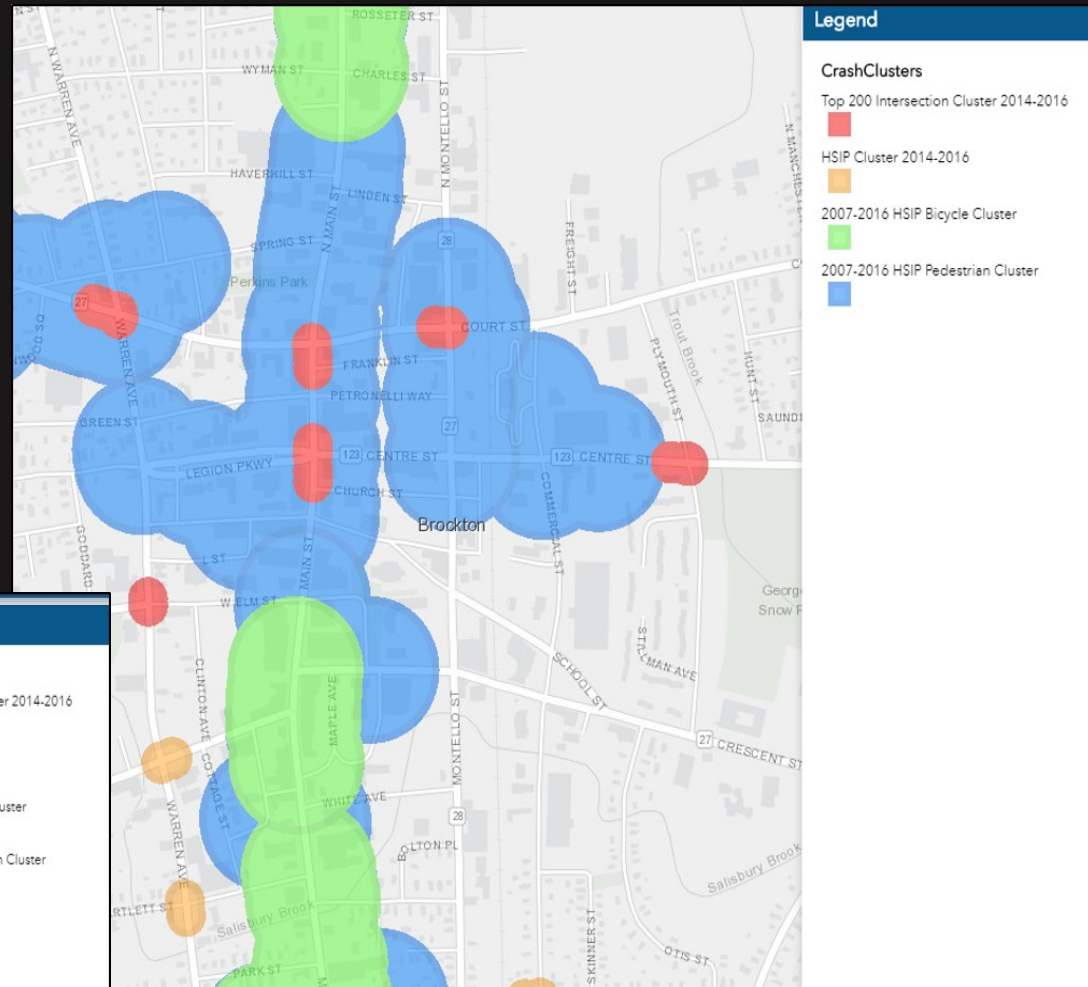


High Crash Locations

Montello



Campello



Downtown

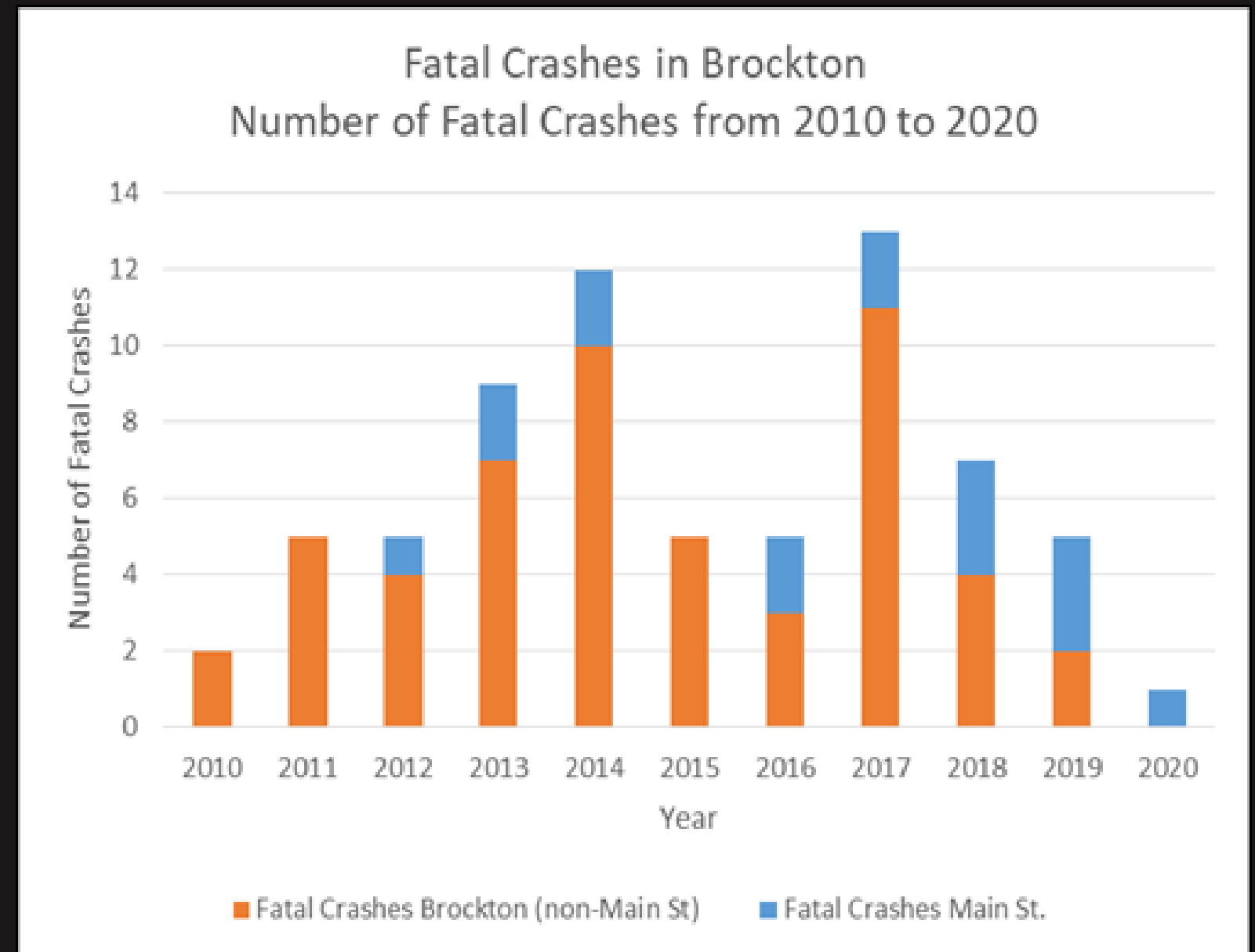
MAIN STREET CORRIDOR STUDY

Main Street Brockton Corridor Study Fatal Crash History (Ten Year)

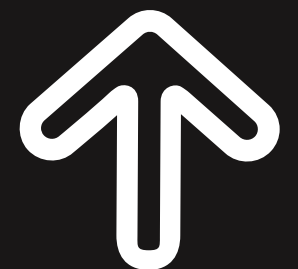
Location	Crash Date	Crash Time	Driver Contributing Circumstances (All Drivers)	Age of Driver	Light Conditions
MAIN ST / E NILSSON ST	05/02/2012	9:27 AM	Collision with pedestrian	35-44	Daylight
886 MAIN STREET	08/22/2013	10:02 PM	Collision with pedestrian (Operating reckless/negligent)	55-64	Dark - lighted roadway
1489 MAIN ST	10/14/2013	4:58 PM	Failed to yield right of way	16-17 & 21-24	Daylight
LEGION PKWY / MAIN ST	03/22/2014	1:14 AM	Disregarded traffic control	25-34 & 35-44	Daylight
553 MAIN ST	08/29/2014	4:42 PM	Collision with pedestrian	21-24	Daylight
1293 MAIN ST	10/18/2016	6:42 PM	Collision with bicycle	18-20	Daylight
133 NORTH MAIN STREET	11/25/2016	1:29 AM	Collision with pedestrian hit and run	NA	Dark - lighted roadway
UNION STREET / MAIN ST	02/26/2017	10:13 AM	Collision with pedestrian	55-64	Daylight
201 NORTH MAIN ST	4/26/2017	12:12 AM	Collision with pedestrian	25-34	Dark - lighted roadway
PERKINS AVENUE / SOUTH STREET / MAIN STREET	04/19/2018	10:30 AM	Angle distracted driving	25-34 & 45-54	Daylight
MAIN STREET / CENTRE STREET Rte SR123 W / LEGION PARKWAY Rte SR123 W	04/21/2018	9:29 PM	Collision with pedestrian	45-54 & 45-54	Dark - lighted roadway
NORTH MAIN STREET / DIVISION STREET	7/9/2018	9:37 PM	Angle (Operating reckless/negligent)	21-24 & 25-34	Dark - lighted roadway
1 AMES STREET 50 FT EAST OF N. MAIN	4/9/2019	9:26 AM	Collision with pedestrian	21-24	Daylight
581 MAIN STREET	08/23/2019	8:19 PM	Collision with pedestrian hit by emergency vehicle	25-34	Dark - roadway not lighted
706 MAIN STREET	12/10/2019	4:17 PM	Collision with pedestrian hit by emergency vehicle	NA	Not reported
2000 MAIN STREET	01/19/2020	1:24 AM	Lane departure while passing in the snow	21-24	Not reported

Fatal Crashes

- Total fatal crashes in Brockton 2010 to 2020 is 69
- Main Street Corridor fatal crashes 2010 to 2020 total 16
- Main Street accounts for about 23 percent of Brockton's fatal crashes in the time period
- Fifty percent of Main Street Corridor fatal crashes Involved a pedestrian

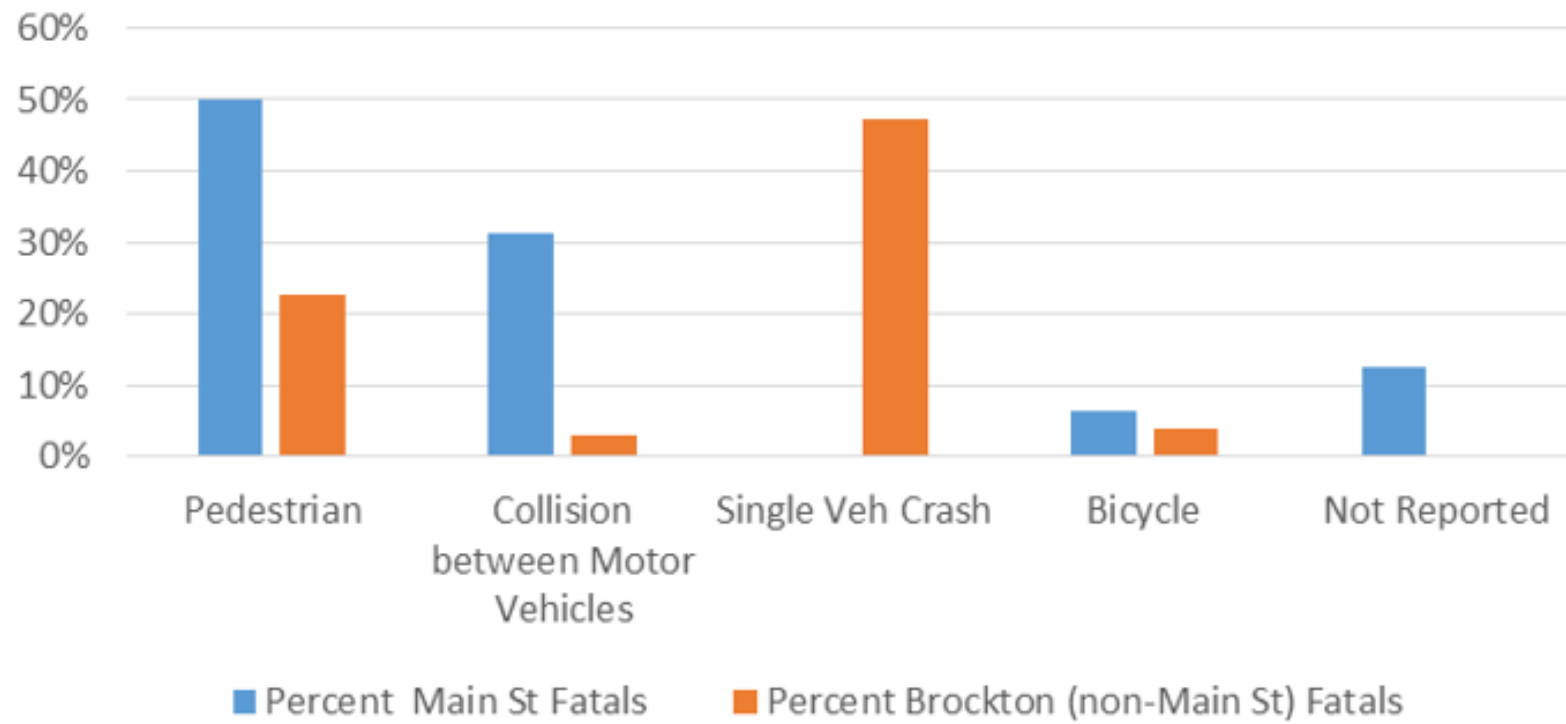


Fatal Crashes 2010-2020



MAIN STREET CORRIDOR STUDY

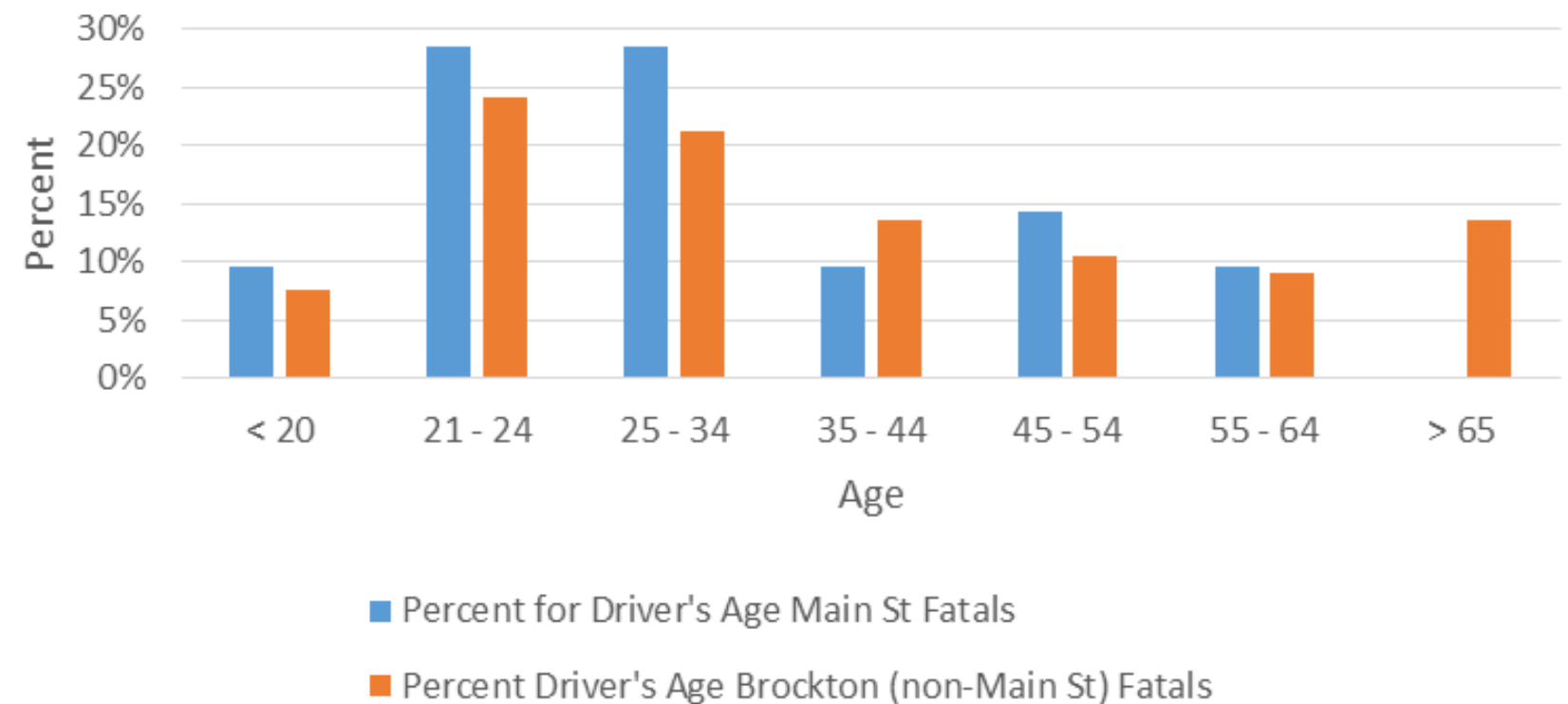
Brockton Fatal Crashes 2010 to 2020
(percent)



Fatal Crash Percentage by Type



Fatal Crashes Brockton
Age of Drivers (percent) 2010 to 2020



Fatal Crash Percentage by Age

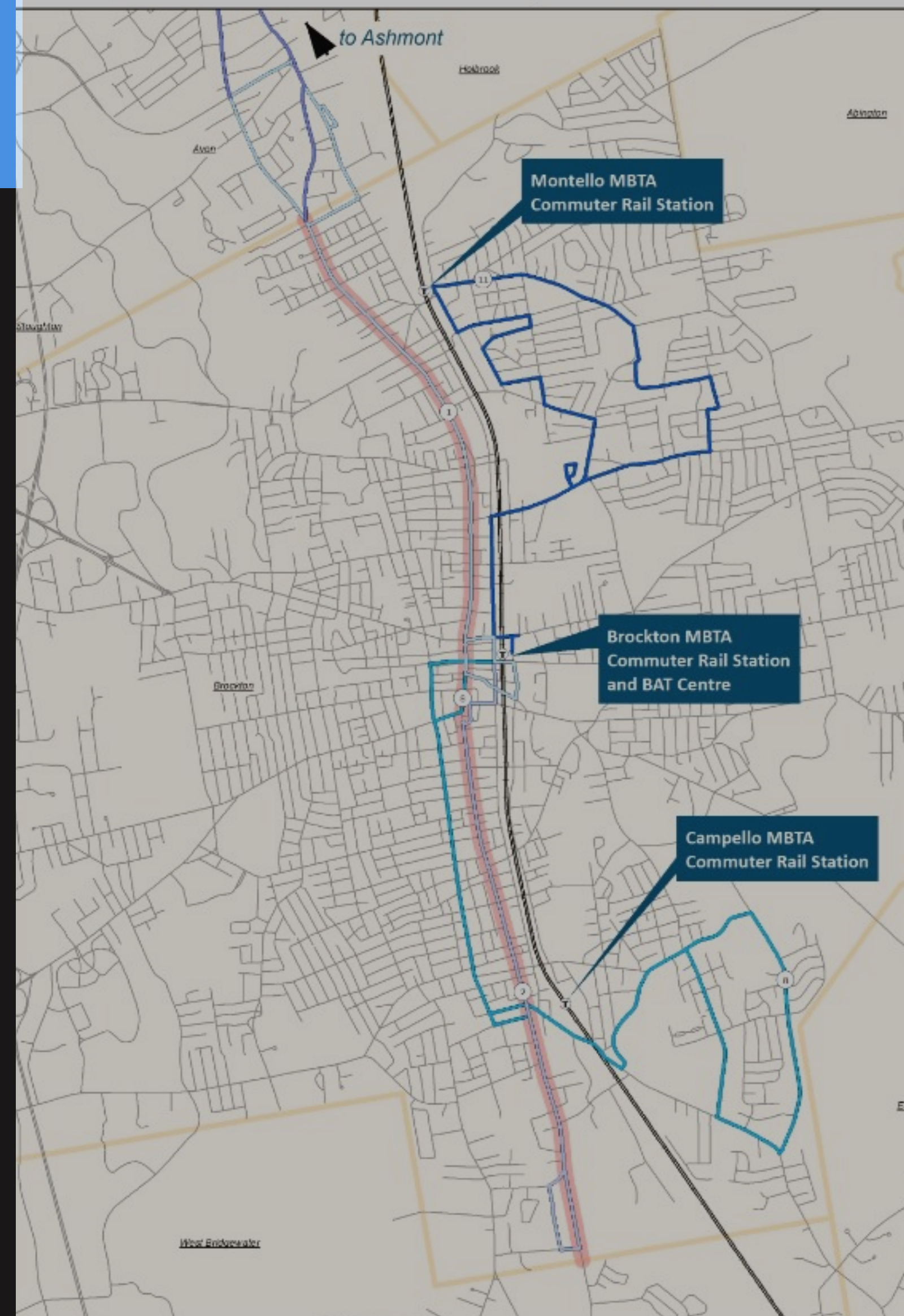


MAIN STREET CORRIDOR STUDY

Bus Routes

- Campello
- Southfield
- Montello
- Ashmont

visit www.ridebat.org
for more info



Existing Conditions

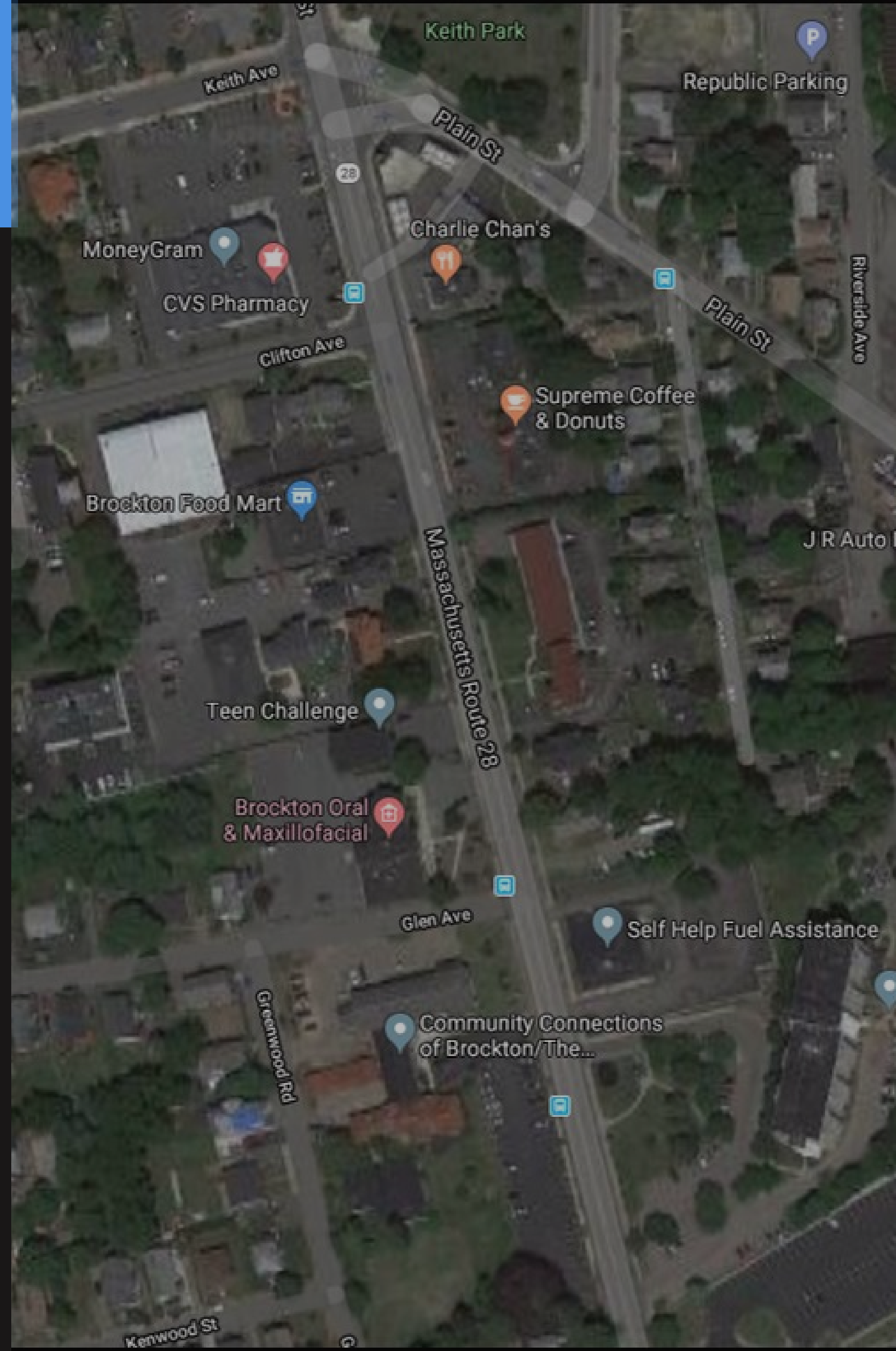
Campello Area

- Poor intersection alignment
- Long delays on the stop sign control Hayward Avenue (left and right turns during the peak hours Level of Service “F”)
- Satisfies threshold volumes for signal installation in previous studies (FHWA MUTCD requirements)



MAIN STREET CORRIDOR STUDY

- Pedestrian (wheelchair) and bicyclist fatalities



East Nilsson Street/Main Street

- Long delays on the stop sign control Nilsson/East Nilsson Street approaches right, through, left turns during the peak hours Level of Service “F”)
- Fatal pedestrian crash 2012
- MassDOT Top 200 crash list
- Pedestrian crash cluster



Main Street Downtown Brockton

- Main Street between Belmont Street and Court Street lacks traffic signal coordination (no physical connectivity)
- On the MassDOT Top 200 Crash List
- Pedestrian and bicycle crash cluster (top 5% crash locations in the OCPC region)
- Lack of overhead signal faces, and chronic red light running due to lack of visibility and distracted driving



MAIN STREET CORRIDOR STUDY

Two Way Main Street Conversion

- Infrastructure improvements required to support conversion
- Limited right of way along some Downtown streets (Truck turning constraints)

- Conversion of streets from one way to two way will not adversely affect Downtown Traffic Operations*
Consultant study completed for City of Brockton

 -Existing One Way

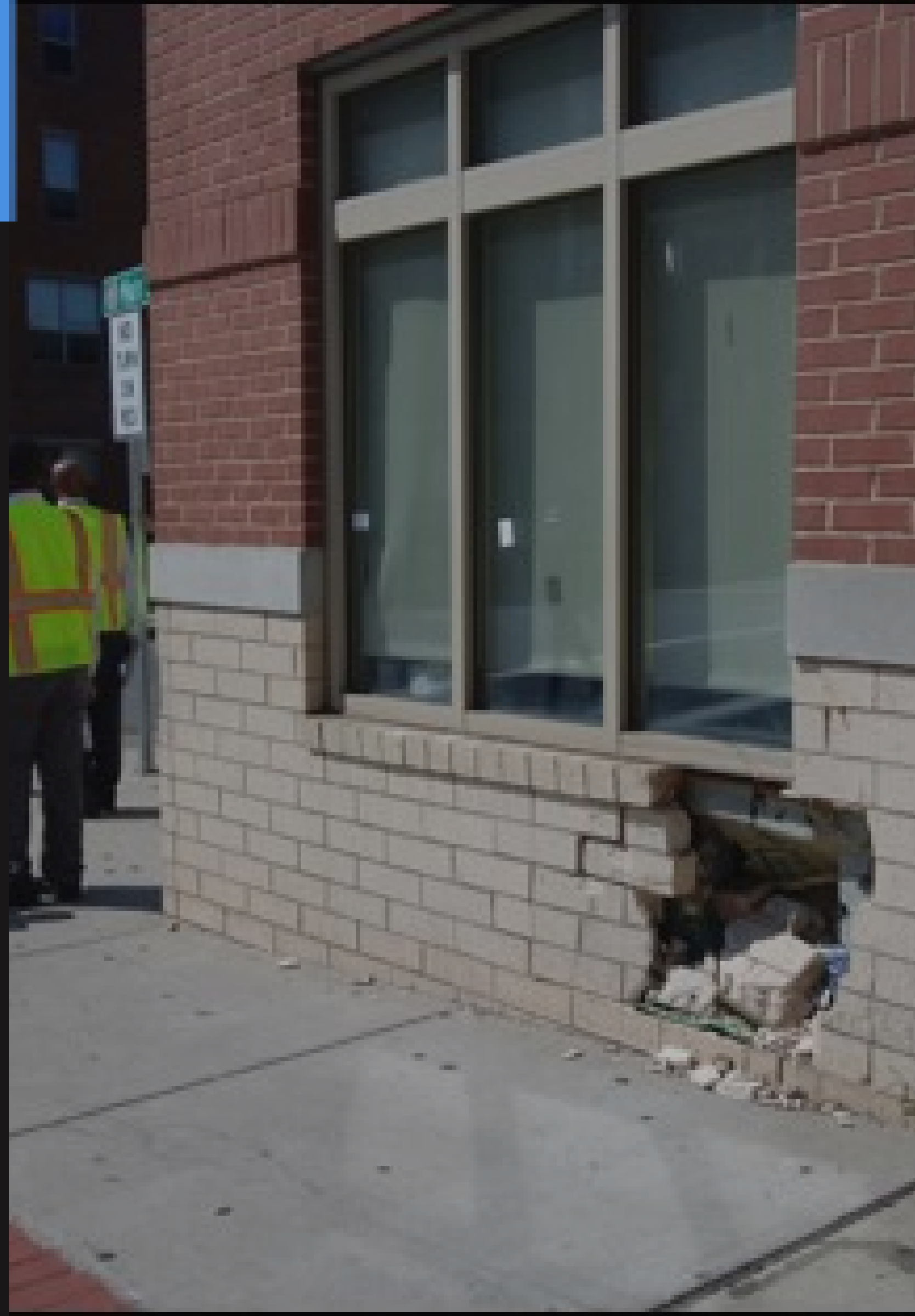
 -Existing Two Way

 -Proposed Two Way conversion



MAIN STREET CORRIDOR STUDY

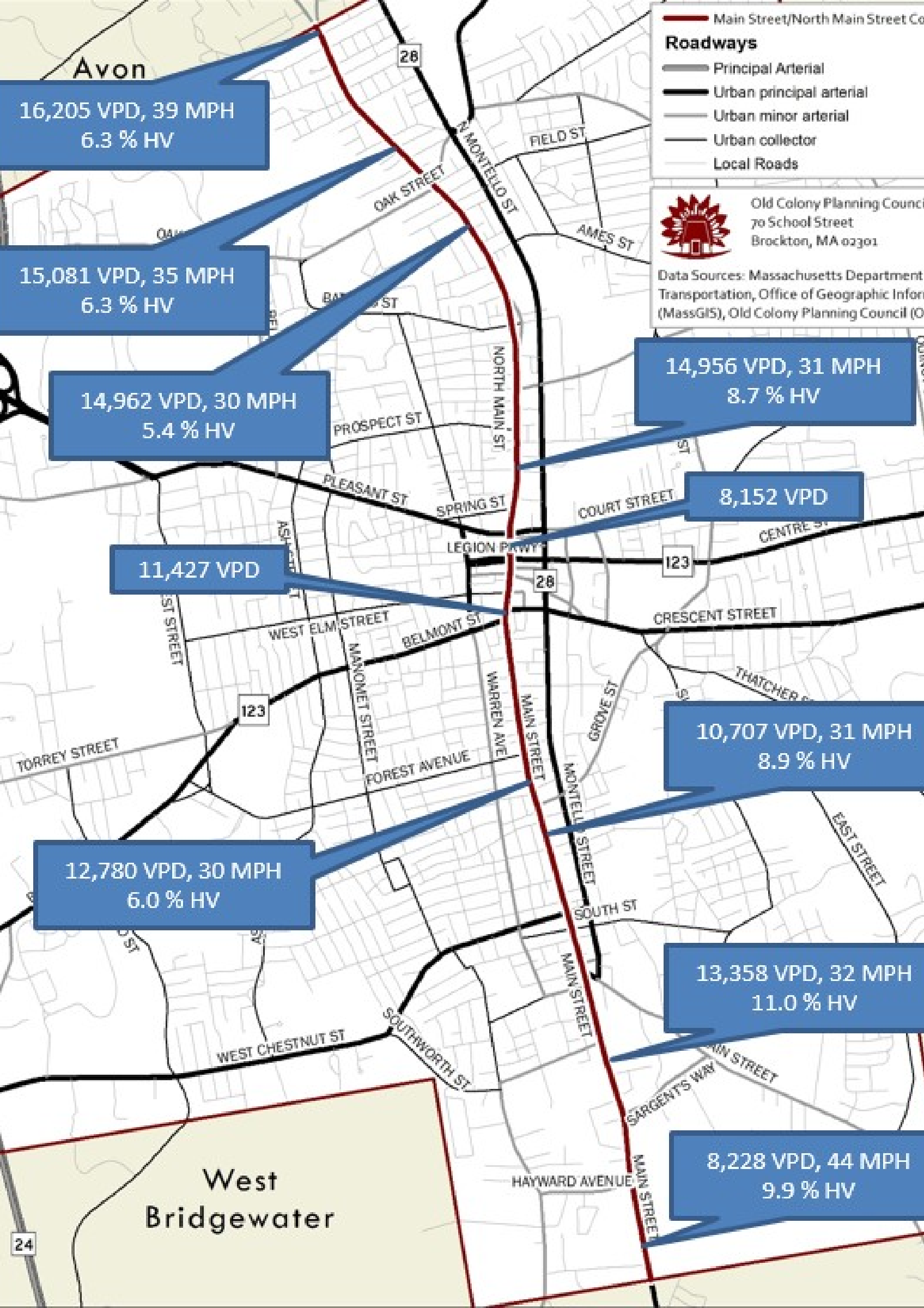
- Two fatal crashes, 2014 (angle), 2018 (pedestrian)
- Eastbound Legion Parkway approach misaligned
- Neighborhood Health Center building hit several times
- In the region's 5% crash cluster for pedestrian crashes
- This intersection is on the MassDOT top 200 Crash List



Montello Area

- Poor intersection alignment (not a conventional four-way intersection at Main Street/Howard Street)
- Vehicles parked in front of Montello News interfering with turning movements
- Long delays Level of Service “E” during the afternoon peak hours
- This intersection is on the MassDOT top 200 Crash List





Next Steps

- Continue stakeholder engagement
- Develop potential improvements
- Improvements and potential projects finalized
- Complete Draft Report July 2020
- Conduct Stakeholder Review
- 2nd Public Workshop
- Final Report August 2020

THANK YOU

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Webpage

http://www.ocpcrpa.org/corridor_study_2020.html

Survey

<https://www.surveymonkey.com/r/MainStreetBrockton2020>

www.ocpcrpa.org