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.
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)
<table>
<thead>
<tr>
<th>Focus</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic Volumes and Congestion</td>
<td>Average daily traffic (24-hour), speeds, heavy vehicle volumes, and peak hour intersection turning movement volumes and intersection congestion</td>
</tr>
<tr>
<td>Safety</td>
<td>The number, severity, and types of crashes and crash rates</td>
</tr>
<tr>
<td>The Built Environment</td>
<td>Condition of the built environment including pavement, sidewalks, pavement markings, traffic control devices and signage</td>
</tr>
<tr>
<td>Mobility Operations</td>
<td>Convenience, facility accommodations, transit and access</td>
</tr>
<tr>
<td>Land Use and Public Health</td>
<td>The potential impacts of changing land use and new development on traffic and transportation and wellness of the community</td>
</tr>
</tbody>
</table>
**MAIN STREET CORRIDOR STUDY**

**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
Development Focus Areas (Opportunity Areas)

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

Legend
- Opportunity Areas

40 R Smart Growth
MAIN STREET CORRIDOR STUDY

Brockton’s Downtown Action Strategy

CSX Freight Yard Site (Downtown)
## Main Street Brockton Corridor Study

### Delay/Congestion

### Intersection Peak Hour Level-of-Service Analysis

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

Montello

Campello

Downtown
# Main Street Brockton Corridor Study

## Fatal Crash History (Ten Year)

<table>
<thead>
<tr>
<th>Location</th>
<th>Crash Date</th>
<th>Crash Time</th>
<th>Driver Contributing Circumstances (All Drivers)</th>
<th>Age of Driver</th>
<th>Light Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAIN ST / E NILSSON ST</td>
<td>05/02/2012</td>
<td>9:27 AM</td>
<td>Collision with pedestrian</td>
<td>35-44</td>
<td>Daylight</td>
</tr>
<tr>
<td>886 MAIN STREET</td>
<td>08/22/2013</td>
<td>10:02 PM</td>
<td>Collision with pedestrian (Operating reckless/negligent)</td>
<td>55-64</td>
<td>Dark - lighted roadway</td>
</tr>
<tr>
<td>1489 MAIN ST</td>
<td>10/14/2013</td>
<td>4:58 PM</td>
<td>Failed to yield right of way</td>
<td>16-17 &amp; 21-24</td>
<td>Daylight</td>
</tr>
<tr>
<td>LEGION PKWY / MAIN ST</td>
<td>03/22/2014</td>
<td>1:14 AM</td>
<td>Disregarded traffic control</td>
<td>25-34 &amp; 35-44</td>
<td>Daylight</td>
</tr>
<tr>
<td>553 MAIN ST</td>
<td>08/29/2014</td>
<td>4:42 PM</td>
<td>Collision with pedestrian</td>
<td>21-24</td>
<td>Daylight</td>
</tr>
<tr>
<td>1293 MAIN ST</td>
<td>10/18/2016</td>
<td>6:42 PM</td>
<td>Collision with bicycle</td>
<td>18-20</td>
<td>Daylight</td>
</tr>
<tr>
<td>133 NORTH MAIN STREET</td>
<td>11/25/2016</td>
<td>1:29 AM</td>
<td>Collision with pedestrian hit and run</td>
<td>NA</td>
<td>Dark - lighted roadway</td>
</tr>
<tr>
<td>UNION STREET / MAIN ST</td>
<td>02/26/2017</td>
<td>10:13 AM</td>
<td>Collision with pedestrian</td>
<td>55-64</td>
<td>Daylight</td>
</tr>
<tr>
<td>201 NORTH MAIN ST</td>
<td>04/26/2017</td>
<td>12:12 AM</td>
<td>Collision with pedestrian</td>
<td>25-34</td>
<td>Dark - lighted roadway</td>
</tr>
<tr>
<td>PERKINS AVENUE / SOUTH STREET / MAIN STREET</td>
<td>04/19/2018</td>
<td>10:30 AM</td>
<td>Angle distracted driving</td>
<td>25-34 &amp; 45-54</td>
<td>Daylight</td>
</tr>
<tr>
<td>MAIN STREET / CENTRE STREET Rte SR123 W / LEGION PARKWAY Rte SR123 W</td>
<td>04/21/2018</td>
<td>9:29 PM</td>
<td>Collision with pedestrian</td>
<td>45-54 &amp; 45-54</td>
<td>Dark - lighted roadway</td>
</tr>
<tr>
<td>NORTH MAIN STREET / DIVISION STREET</td>
<td>07/09/2018</td>
<td>9:37 PM</td>
<td>Angle (Operating reckless/negligent)</td>
<td>21-24 &amp; 25-34</td>
<td>Dark - lighted roadway</td>
</tr>
<tr>
<td>1 AMES STREET 50 FT EAST OF N. MAIN</td>
<td>04/09/2019</td>
<td>9:26 AM</td>
<td>Collision with pedestrian</td>
<td>21-24</td>
<td>Daylight</td>
</tr>
<tr>
<td>581 MAIN STREET</td>
<td>08/23/2019</td>
<td>8:19 PM</td>
<td>Collision with pedestrian hit by emergency vehicle</td>
<td>25-34</td>
<td>Dark - roadway not lighted</td>
</tr>
<tr>
<td>706 MAIN STREET</td>
<td>12/10/2019</td>
<td>4:17 PM</td>
<td>Collision with pedestrian hit by emergency vehicle</td>
<td>NA</td>
<td>Not reported</td>
</tr>
<tr>
<td>2000 MAIN STREET</td>
<td>01/19/2020</td>
<td>1:24 AM</td>
<td>Lane departure while passing in the snow</td>
<td>21-24</td>
<td>Not reported</td>
</tr>
</tbody>
</table>
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
Main Street Corridor Study

Fatal Crash Percentage by Type

- Brockton Fatal Crashes 2010 to 2020 (percent)
  - Pedestrian
  - Collision between Motor Vehicles
  - Single Veh Crash
  - Bicycle
  - Not Reported

Fatal Crash Percentage by Age

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

- Percent for Driver's Age Main St Fatals
- Percent Driver's Age Brockton (non-Main St) Fatals
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)
- 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
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
- 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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jpereira@ocpcrpa.org
www.ocpcrpa.org

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

Survey
https://www.surveymonkey.com/r/MainStreetBrockton2020
www.ocpcrpa.org