Vision Zero
City of Boston
Together we can eliminate fatal & serious crashes

Beacon St Community Meeting
06.01.16
visionzeroboston.org
Agenda

Introduction to Vision Zero
Beacon Street data
Group work: Help define project objectives
Visit stations
“Driving, walking, or riding a bike on Boston’s streets should not be a test of courage.”

-Mayor Walsh
Vision Zero Boston

March 2015: Mayor Walsh announces Vision Zero Boston
Goal: Eliminate traffic fatalities and severe injuries

Traffic crashes are not accidents; they are preventable

Design for people who are most vulnerable benefits everyone
People come first
Vision Zero promises action in four critical areas

- Reducing speeds and building safer streets
- Tackling distracted and impaired driving
- Engaging Bostonians with Vision Zero
- Holding ourselves accountable for results
Focus on Rapid Implementation

Low cost, high impact actions that can be taken in months rather than years:

- **Signal timing changes**: shorter cycles, LPI, lagging left turns
- **Pavement markings**: separate uses, road diets
- **Paint and flex posts**: pedestrian refuge islands, curb extensions, protected spaces
Speed really matters

20 MPH

18% likelihood of fatality or severe injury

30 MPH

50% likelihood of fatality or severe injury

40 MPH

77% likelihood of fatality or severe injury

Source: Impact Speed and a Pedestrian’s Risk of Severe Injury or Death, Brian Tefft. AAA Foundation for Traffic Safety, 2011
Older adults are more likely to suffer in a crash

Source: Impact Speed and a Pedestrian’s Risk of Severe Injury or Death, Brian Tefft. AAA Foundation for Traffic Safety, 2011
Beacon Street: Data
General description

- Classification: arterial roadway
- Arlington Street to Massachusetts Avenue
  - 3 travel lanes + parking both sides
- Massachusetts Avenue to Kenmore Square
  - 2 travel lanes + parking both sides
- Pavement width = 47 feet
Households and population

- Beacon Street is in Census Block #108
- Units of housing: ~4,094 units
- Population: ~6,662 people
Walking commuters

2013 American Community Survey
Weekend automobile volumes

Vision Zero | City of Boston

2016, Boston Transportation Department
Area bicycle use
Arlington to Berkeley: Hourly automobile volumes, Wed-Sat
## Speed data summary

### Arlington to Berkeley

<table>
<thead>
<tr>
<th>Speed (MPH)</th>
<th>Total Vehicles</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 20</td>
<td>9,955</td>
<td>68%</td>
</tr>
<tr>
<td>Over 30</td>
<td>664</td>
<td>5%</td>
</tr>
<tr>
<td>Over 40</td>
<td>22</td>
<td>&lt;1%</td>
</tr>
<tr>
<td><strong>Total Volume</strong></td>
<td><strong>14,543</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Dartmouth to Exeter

<table>
<thead>
<tr>
<th>Speed (MPH)</th>
<th>Total Vehicles</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 20</td>
<td>8,715</td>
<td>72%</td>
</tr>
<tr>
<td>Over 30</td>
<td>2,361</td>
<td>20%</td>
</tr>
<tr>
<td>Over 40</td>
<td>85</td>
<td>&lt;1%</td>
</tr>
<tr>
<td><strong>Total Volume</strong></td>
<td><strong>12,060</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Hereford to Mass Ave

<table>
<thead>
<tr>
<th>Speed (MPH)</th>
<th>Total Vehicles</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 20</td>
<td>6,432</td>
<td>72%</td>
</tr>
<tr>
<td>Over 30</td>
<td>1,720</td>
<td>19%</td>
</tr>
<tr>
<td>Over 40</td>
<td>68</td>
<td>&lt;1%</td>
</tr>
<tr>
<td><strong>Total Volume</strong></td>
<td><strong>8,950</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Mass Ave to Charlesgate

<table>
<thead>
<tr>
<th>Speed (MPH)</th>
<th>Total Vehicles</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 20</td>
<td>8,194</td>
<td>70%</td>
</tr>
<tr>
<td>Over 30</td>
<td>806</td>
<td>7%</td>
</tr>
<tr>
<td>Over 40</td>
<td>22</td>
<td>&lt;1%</td>
</tr>
<tr>
<td><strong>Total Volume</strong></td>
<td><strong>11,705</strong></td>
<td></td>
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</tbody>
</table>

2016, Boston Transportation Department
Volumes at travel speeds

- <30 MPH
- >31 MPH

2016, Boston Transportation Department
Average crash rate
(per Million Vehicle Miles Traveled)

Statewide urban streets (all): 2.14
Statewide urban principal arterials: 3.49
Beacon St (2012-2014): 7.71

Sources: MassDOT, BTD, BPD
Crash frequency, 2012-2014

1 in 4 crashes occurred on Fridays Between 6PM and 6AM [42%]
Crashes by mode, 2012-2014
Common crash types, 2012-2014

• Angle crashes: 25%
• Sideswipes (vehicles traveling in the same direction): 22%
• Rear-end crashes: 16%
• Vehicles hit a parked car: 15%
On-street parking
Adjacent parking

Off-street approximations based on site visits

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Safety improvements to date

Signals timed to 25 mph

• Posted signs to inform drivers
Safety improvements to date

Radar speed feedback sign

- Installed in March
Safety improvements to date

Focused enforcement efforts
Researching evidence-based safety countermeasures

Sources:

- Federal Highway Administration
- Transportation professional organizations
- MassDOT
- City of Boston
- Peer cities
What we've heard so far: Likes

- Architecture
- Trees and plantings
- Proximity to esplanade, open space, restaurants, shops, schools
- History
- Connection to other neighborhoods
- Room for double-parking
What we've heard so far: Dislikes

- Speeding drivers all day
  - Weekend drag racing
- Feeling unsafe crossing the street, getting out of cars, riding a bike
- Frequent damage to parked cars
- People riding bikes on sidewalks
- Double-parked cars and trucks
- Noise and exhaust from traffic
Comfort walking down Beacon St

- Comfort level from least (1) to most (5)
- Number of responses:
  - 1: 20
  - 2: 18
  - 3: 43
  - 4: 19
  - 5: 18
Comfort level from least (1) to most (5)

- Comfort crossing Beacon St

<table>
<thead>
<tr>
<th>Comfort Level</th>
<th>Number of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>35</td>
</tr>
<tr>
<td>2</td>
<td>43</td>
</tr>
<tr>
<td>3</td>
<td>33</td>
</tr>
<tr>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>5</td>
<td>8</td>
</tr>
</tbody>
</table>
Comfort biking on Beacon St

Number of responses

Comfort level from least (1) to most (5)

<table>
<thead>
<tr>
<th>Comfort level</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>70</td>
</tr>
<tr>
<td>2</td>
<td>37</td>
</tr>
<tr>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>
Comfort driving on Beacon St

Number of responses

Comfort level from least (1) to most (5)

- 1: 11
- 2: 16
- 3: 38
- 4: 38
- 5: 27
What we’ve heard so far: Goals

• Manage travel speeds
• Improve safety for pedestrians
Our next steps

Develop several potential designs
Continue community discussions
  • Surveys, meetings, website
Decide on approach that is based on research, best practices
Implement
What we need from you

Refine the project objectives

- What should the outcomes be?
- Avoid specific interventions (i.e., don't say things like “change this sign”)
Group feedback
Visit stations

• Learn about other nearby streets
• Vote for the design interventions you want us to explore
• Draw your ideas for Beacon Street
• Leave written comments
Thank you

www.visionzeroboston.org/beaconst

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