Boston Street Complete Streets Study

Salem, MA

Presented by VHB

October 2, 2017
Overview

- Study Area
- Study Objective
- Data Collection
- Existing Conditions
- Previous Corridor Studies
- Potential Improvements
- TIP/PNF Process
Study Area
Study Objective

- Review existing conditions including
  - Traffic volumes throughout the corridor
  - Pedestrian and bicycle accommodations
  - Safety of vehicles, pedestrians, and bicyclists
  - Driveway access
  - Location of bus stops
  - Lighting
  - Greenspace

- Provide potential recommended improvement options
  - Alternatives based on “Complete Streets” concept
  - Incorporate public feedback
Data Collection

- Data collection conducted on Tuesday, September 20th and Wednesday, September 21st, 2016

- Turning Movement Counts (TMC)
- Automated Traffic Recorder (ATR)
- Mid-Block Crosswalk Peak Period Counts
Existing Conditions – Traffic Volumes

- **Boston Street**
  - Average Daily Traffic: 17,500 – 22,300 vehicles per day
  - Weekday Morning Peak Hour
    - 1,200 – 1,500 vehicles per hour
    - 55% - 60% traffic traveling EB
  - Weekday Evening Peak Hour
    - 1,250 – 1,500 vehicles per hour
    - Near 50/50% split between EB and WB
Existing Conditions – Bike/Ped Data

- Bicycle Data on Boston Street
  - Up to 2 bicycles per direction recorded in AM peak hour
  - Up to 4 bicycles per direction recorded in PM peak hour

AM (PM) Pedestrian Volumes
- Mid-Block Crossing Pedestrian Volumes
- Signalized Crossing Pedestrian Volumes
Existing Conditions – Crash Data

- No fatal injuries reported

Number of Crashes during five year period (2011-2015):

- Grove Street: 19
- Nichols Street: 10
- Safford Street: 8
- Rawlins Street: 29
- Highway Safety Improvement Program (HSIP) Eligible: 56
- Federal Street: 18
- Proctor Street: 6
- Pope Street: 9
- Essex Street: 29

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Highway Safety Improvement Program (HSIP) Eligible
Existing Conditions – Signalized Level of Service

AM (PM) Overall Level-of-Service (LOS) for Signalized Intersections

- Boston Street
- Grove Street
- Nichols Street
- Rawlins Street
- Safford Street
- Nichols Street

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C (D)
Existing Conditions – Deficiencies

- No ADA ramps at crosswalk
- No pedestrian walk signals at intersection
- Sidewalk is cracked and crumbling
- Sidewalk is cracked and crumbling
Previous Corridor Studies

- Route 107 Corridor Study
  - Includes concept for Boston Street at Essex Street

Source: Route 107 Corridor Study, MassDOT and McMahon Associates, November 2016
Potential Improvements

- Improved Pedestrian Accommodations
  - Level sidewalks throughout
  - ADA Ramps at all crosswalk landings
  - Efficient spacing of mid-block crossings
- Connect to Main Street accommodations in Peabody

- Improved Bicycle Accommodations
  - Several potential treatments
    - On-road buffered bike lanes
    - Separated bike lanes
    - Parking separated bike lanes

- Maintain Vehicular Operations
MassDOT Project Need Form (PNF) Process

- Overview of Project Development

**PROCESS**

- **STEP I** Problem/Need/Opportunity Identification
- **STEP II** Planning
- **STEP III** Project Initiation
- **STEP IV** Environmental/Design/ROW Process
- **STEP V** Programming
- **STEP VI** Procurement
- **STEP VII** Construction
- **STEP VIII** Project Assessment

**OUTCOMES**

1. Project Need Form (PNF)
2. Project Planning Report (if necessary)
3. Project Initiation Form (PIF)
4. Identification of Appropriate Funding
5. Definition of Appropriate Next Steps
6. Project Review Committee Action
7. Plans, Specs and Estimates (PSOE)
8. Environmental Studies and Permits
9. Right-of-Way Plans
10. Permits
11. Regional and State TIP
12. Programming of Funds
13. Construction Bids and Contractor Selection
14. Built Project

- Step I: Problem/Need/Opportunity Identification

**PROJECT DEFINITION**

- Define problem, need, or opportunity
- Define goals and objectives
- Define context
- Identify Project Constituents
- Define and initiate public outreach for the planning process

**PNF Evaluation**

- Suggested Revisions
- MassHighway District Review, Advisory Opinion and Guidance
- Proceed with Project Planning / No Go

Source: MassDOT
MAPC Transportation Improvement Program (TIP)

- The TIP is the rolling, five-year capital funding document that outlines all the chosen and potential transportation infrastructure projects eligible for funding in the region.

- Cities and towns in Eastern MA submit potential transportation infrastructure projects to the Boston Region Metropolitan Planning Organization (MPO) for potential funding.

- The MPO must evaluate each project and prioritize which projects are added to the TIP to receive federal and state roadway funding.