Agenda

1. Welcome & Introductions
2. Reconstruction of Route 9 (Middle to Maple/South Maple)
3. B43 Transit Mobility Planning and Alternatives Study
4. Transit Signal Priority Implementation
5. Q&A
Project Team

MassDOT Highway Division
Responsible for Administering the Project Development Phase

Greenman-Pedersen, Inc.
Planning, Design & Engineering

Toole Design Group
Alternatives Analysis & Planning

Howard Stein Hudson
Public Involvement
Agency Partners
Reconstruction of Route 9 from Middle Street to Maple Street
Project Area
Why Do We Need This Project?

- Deficient Pedestrian Accommodations
- Deficient Bicycle Accommodations
- Deficient Bus Stop Accommodations
- Intersection Safety & Capacity Issues
- Safety & Capacity Issues along Route 9
- Lack of Trail Connectivity
Existing Issues: Deficient Pedestrian Accommodations
Existing Issues: Deficient Bicycle Accommodations
Existing Issues:
Deficient Bus Stop Accommodations
Existing Issues:
Intersection Safety & Capacity Issues
Existing Issues: Safety & Capacity Issues on Route 9
Existing Issues:
Lack of Trail Connectivity
Project Goals

• Improve safety and increase accessibility for pedestrians and bicyclists
• Improve safety and increase vehicle capacity at intersections
• Improve bus stop accommodations and efficiency
• Reduce congestion and traffic delays
• Promote connectivity and walkability
• Incorporate streetscape elements e.g. landscaping
• Improve drainage and upgrade utilities
• Accommodate and be sensitive to abutters, existing vegetation, and historic resources
Proposed Improvements

• Capacity & Traffic Signal Improvements
  – Two-Way Left Turn Lane along Route 9 corridor
  – Optimized Signal Timing
  – Additional Turn Lane Capacity

• Norwottuck Trail Connections
  – New Access Points to the Norwottuck Trail
  – Bike and Pedestrian Access on South Maple

• Street Trees and Landscaping
Proposed Improvements (contd.)

- **Accessible Pedestrian & Bicycle Accommodations**
  - Accommodations on both sides of Route 9
  - ADA compliant sidewalks & wheelchair ramps
  - 8’ Shared-Use Paths or 5’ bicycle lanes and sidewalks
  - Crosswalks with timed crossings and bicycle accommodations at signalized intersections

- **Bus Stop Accommodations**
  - Bus pull-offs
  - Upgraded accommodations with new bus shelters
Street Design Section

Typical Section
Russell Street (Route 9)
Proposed Improvements
Proposed Improvements 2

Russell Street (Route 9)

- Batting Cages
- Retail Shops
- Psychic Readings
- 50/50 Fitness Nutrition
Proposed Improvements 3

Typical Section
Russell Street (Route 9) Beyond Home Depot
Proposed Improvements 4

Russell Street at North/South Maple Streets
Proposed Improvements 5

Typical Section
South Maple Street
Proposed Improvements 6

South Maple Street
Proposed Improvements 7

South Maple Street
Proposed Improvements 8

Russell Street at Spruce Hill Road
Proposed Improvements 9

Russell Street
Proposed Improvements 10
Proposed Improvements 11

Middle Street Shared-Use Path Connection
Construction Impacts

- Roadside work during regular construction hours
- During off-peak hours
  - Paving and roadway reconstruction
  - Water, sewer and drainage upgrades
- Short term detours and/or alternating traffic expected at times
- Limit impacts to abutters and businesses
- Maintain access
  - Driveways
  - Pedestrian routes
  - Bus stops
  - Norwottuck Trail
Environmental Permitting

• Massachusetts Environmental Policy Act Environmental Notification Form (ENF)
• National Environmental Policy Act Categorical Exclusion
• Wetlands Protection Act Notice of Intent (NOI)
• U.S. Army Corps of Engineers Clean Water Act, Section 404 Permitting
• National Historic Preservation, Act Section 106
Anticipated Project Schedule

- Preliminary Design Submittal
  October 3, 2018

- Design Public Hearing
  June 25, 2019

- Design, ROW & Env. Permitting Completed
  Summer/Fall 2021

- Advertisement
  Fall 2021

- Anticipated Construction Start
  Spring 2022
Share Your Feedback

Share your feedback on the proposed 25% design plans for Reconstruction on Route 9:

• Comment tonight
• Fill out and mail-in a comment sheet
• Email Michael Trepanier at michael.trepanier@dot.state.ma.us

MassDOT Project File No. 605032
Reconstruction on Route 9
From Middle Street to North/South Maple Streets
B43 Transit Mobility Planning & Alternatives Study
B-43 Delay Hotspots

**B43 Line Heavy Delay Areas**

- **I-91 Interchange**
  - Heavy delay from signal (especially WB in PM peak)

- **UMASS Haigis Mall**
  - Heavy pedestrian traffic
  - Bus idle for schedule

- **Route 9 at University Drive**
  - Significant delays experienced for eastbound left

- **Downtown Northampton**
  - Vehicle delay & congestion due to poor signal timing / phasing
  - Heavy pedestrian traffic
  - Delays due to high volume on-street parking

- **Route 9 at N/S Maple Street**
  - Poor signal coordination
  - Delays at high volume malls

- **Downtown Amherst**
  - Heavy pedestrian traffic
  - On-Street parking
  - High volume stops

**HADLEY**

**NORTHAMPTON**

**AMHERST**

[Map of locations with detailed descriptions of each hot spot]
Deficient Bus Stop and Pedestrian Accommodations
Rapid Bus Model to Increase Ridership along the Corridor
B43 Transit Mobility Study Alternative

- Mixed-flow BRT system
- Reroute along 116 / Terminate at Haigis Mall
- Transit Signal Priority (TSP) system-wide
- Stop consolidation
- Move stops curbside at Malls and UMass
- Enhanced passenger amenities
Transit Mobility Alternative Modeling Results

- Transit Travel Time:
  - 26% to 30% faster
- Ridership:
  - 40% increase @ 15 min.
  - 65% increase @ 10 min.
Project Area
Transit Improvements

- TSP implemented along the existing route
- Enhanced bus stops with shelters, sidewalks and pedestrian crossings
- Other changes i.e., route changes and bus branding, etc. would be implemented by PVT A
Bus Stops
Bus Stop Design Example: Before
Bus Stop Design Example: After
Transit Signal Priority Implementation
What is Transit Signal Priority (TSP)?

TSP uses technology to hold green lights longer or shorten red lights to help buses move through signalized intersections.

TSP is different than signal pre-emption which turns traffic lights green in the path of emergency vehicles.
Signal Operators

Northampton Signals
- Bedford Terrace
- West St
- New South St
- Route 5
- Market St

MassDOT Signals
- I91 SB
- Bay Rd
- Middle St
- East St
- Maple St
- Rt 116
- Cinemark Dr
- Greenvale Dr
- University Dr
- Comm Ave
- N. Pleasant St
- Lowes
- Home Depot

Amherst Signals
- Big Y Dr
- Amity St
- Kelloq Ave
- Amity St
- North Pleasant St
TSP Implementation for PVTA Blue Route 43

TSP Objectives

• Improved schedule adherence
• Improved transit travel time efficiency
• Minimize impacts to normal traffic operations

MassDOT Project # 608786
TSP Status

1. Advertised: September 15, 2018

2. Pre-Construction Meeting: May 2, 2019

3. Shop Drawing Approval: May 16, 2019

4. Anticipated Completion: December 2019
Q&A

Share your feedback on the proposed 25% design plans for Reconstruction on Route 9:
  • Fill out a comment sheet
  • Email Michael Trepanier at michael.trepanier@dot.state.ma.us

Learn more about the project and stay informed through the design process:
  • mass.gov/route-9-corridor-improvement-project

If you have questions or would like more information, contact:
  • Jeff Dietrich at jdietrich@hshassoc.com or (617)-482-7080 x220

MassDOT Project File No. 605032
Reconstruction on Route 9 From Middle Street to Maple/South Maple Street