Mount Auburn Street
Project Update

Town of Watertown

Thursday, May 14, 2015
HISTORY

➤ Reconstructed by MassHighway in 1980s

➤ Four lanes, no turn lanes except at Arlington Street

➤ Designed mainly to process cars through signals
HISTORY

- 2009 – Investigated improvements in Coolidge Square
- 2010 – Feasibility Study for Road Diet
- March 2011 – Public Works Subcommittee Meeting
- February 2012 – Functional Design Report
- June/July 2013 – Project Updates
- April 2014 – Project Initiated by MassDOT - $12.2 million
- November 2014 – Topographic Survey Completed
- January 2015 – Project Update to Public Works Subcommittee
DATA COLLECTION

2010 two-way average daily traffic (ADT) volumes
DATA COLLECTION

2010 AM(PM) peak hour traffic volumes
GOALS

Accommodate Traffic

Design Year 2030 two-way average daily traffic (ADT) volumes
DESIGN YEAR TRAFFIC

2030 AM(PM) peak hour traffic volumes
GOALS

Perception & Context

“Town Street” instead of “State Highway”

- Welcoming and Wayfinding Signage
- Identify Coolidge Square as a Business District
Traffic Calming

Keep vehicle speeds appropriate to context while accommodating traffic so it doesn’t divert to side streets

- Narrower roadway/Road Diet
- Bump-outs
- Radar signage

GOALS
MassDOT Project Development & Design Guide

“The careful selection of roadway cross-section elements...is needed to achieve a context-sensitive design that accommodates all users safely...The goals of selecting an appropriate roadway cross-section and the design of roadside elements are [to] develop a transportation infrastructure that provides access for all, a real choice of modes, and safety in equal measure for each mode of travel.

- Promote healthy transportation & livable communities
- Triple bicycling, transit, and walking mode share
- Use CMAQ funds to expand bicycle facilities
Stormwater Management

- Improved drainage
- Reduction in paved area
- Reduction in concentrated run-off
**ROAD DIET**

Reduction in the number of through roadway lanes

To provide space for **all users**.
**ROAD DIET**

Why a road diet?

Accommodate all roadway users: Vehicles, Bicycles, Pedestrians, Transit

Improve traffic operations

Improve safety

Add traffic calming, green space

Reduce stormwater runoff

Achieve Complete Streets objectives
ROAD DIET

Shouldn’t fewer lanes mean *less* capacity?
ROAD DIET

Shouldn’t fewer lanes mean *less* capacity?

Turning vehicles block left lane

Lane-changers interrupt right lane flow
ROAD DIET

Shouldn’t fewer lanes mean *less* capacity?
CONCEPTS

Retain Four Lanes

Road Diet
RAISED MEDIAN CONCEPT

- Inconvenient for minor streets/ driveways and emergency access
TWO WAY LEFT TURN LANE

- Closely spaced streets and driveways pose potential conflicts
SINGLE THROUGH LANE CONCEPT

- Most flexible for turning movements, bike lane placement
TYPICAL SECTION

EXISTING ROADWAY SECTION
SCALE: N.T.S

SINGLE THROUGH LANE ALTERNATIVE
SCALE: N.T.S
SINGLE THROUGH LANE CONCEPT
Conventional Bike Lanes

Diagram of a single through lane concept with conventional bike lanes shown both in a drawing and a photograph.
SINGLE THROUGH LANE CONCEPT
At-Grade Cycle Track
SINGLE THROUGH LANE CONCEPT
Raised Cycle Track
(Two-Way)
SINGLE THROUGH LANE CONCEPT

Raised Cycle Track

(One-Way, below sidewalk)
SINGLE THROUGH LANE CONCEPT
Raised Cycle Track
(One-Way, at grade with sidewalk)
AM(PM) peak hour Level of Service
*Assumes optimized signal timing in the future
NEXT STEPS

Current Phase
- Public Workshops – Working Sessions
- Road Safety Audit
- Preliminary (25%) Engineered Design
- Utility Coordination

Next Phase
- Construction Funding through TIP
- Final Design (75%/100%) and Bid Documents
- Project Award and Construction
Questions?