Route 6 (Scenic Highway) Corridor Improvements

Concept Design Presentation

Virtual Meeting | March 7, 2022 | 12:00 PM
Project No. 606082
**Project Team:**

- **MassDOT Project Manager**
  - Muazzez G. Reardon, P.E.

- **MassDOT Legislative Liaison**
  - Gareth Saunders

- **MassDOT District 5 Project Development Engineer**
  - Pamela Haznar, P.E.

- **MassDOT District 5 Operations Engineer**
  - Bill Travers

- **Consultant Project Manager**
  - Jonathan Kapust, P.E. (HNTB)
Agenda

01 Project History
02 Project Goals
03 Proposed Design
04 Project Impacts
05 Timeline
Project Location

- Approximately 1.5 miles of Route 6
- Nightingale Road intersection
- Edgehill Road intersection
- No work along Scenic Overlook
How did we get here?

- **March 2014**: Road Safety Audit Conducted
- **Fall 2019**: Project Initiation
- **Fall/Winter 2020/2021**: Borings Performed, Additional Survey Collected
- **Fall 2021**: Alternatives Analysis
Recent public outreach

• Letters Sent to Public Officials
  • January 2020

• Comment Response Letters Received
  • Letter from Town of Bourne January 2020
Existing Issues

Safety Concerns:

• Significant number of crashes
  • Vehicles cross centerline
• Road Safety Audit in 2014 found:
  • High Speeds
  • Lack of Shoulders
  • Hydroplaning
  • Drainage Issues
Existing Issues (cont’d)

Safety Concerns:

• Lack of adequate drainage is contributor to crashes.

• Drainage Swale and Cross Slope/ Superelevation improvements needed.
What do we want to accomplish?
Project Purpose

To improve safety within the corridor by:

• Lane and Shoulder Widening
  • Improve substandard widths
• Center Raised Median
  • Address crossover crashes
• Cross slope Improvements
  • Update the cross slope in curves to improve vehicular control
  • Improve stormwater catchment to minimize flow across lanes
• Address icing in winter storm road events
Project Purpose (cont’d)

To improve safety within the corridor:

• Westbound Swale/ Upgraded Drainage System
  • Reduce ponding in roadway and probability of hydroplaning
  • Address icing in winter storm road events

• Install a Shared Use Path
  • Response to municipality request
  • Provides a safe, healthy alternative mode of travel
How will bicyclists and pedestrians be impacted?
Bicycle and Pedestrian Connections

- 10' Shared Use Path
  - Protected
  - Connection to Scenic Overlook
  - New crossing at Edgehill Road
What alternatives were considered?
Existing Roadway

Shared Use Path Width: N/A
Lanes Maintained in TTCP: N/A
Earthwork (Total Cut): N/A
Cost: N/A
**Alternative 1: Wide Median Concept**

- **Shared Use Path Width:** not included
- **Lanes Maintained in TTCP:** 2 WB, 1 EB (all stages)
- **Earthwork (Total Cut):** 93,000 cubic yards
- **Cost:** $11.6 million
Alternative 2: Narrowed Cross Section

- Shared Use Path Width: not included
- Lanes Maintained in TTCP: 2 WB, 1 EB (all stages)
- Earthwork (Total Cut): 72,500 cubic yards
- Cost: $9.9 million
Alternative No. 3: Shared Use Path EB Side

Shared Use Path Width: 10 feet
Lanes Maintained in TTCP: 4 (Stages 2 - 4)
Earthwork (Total Cut): 108,000 cubic yards
Cost: $15.7 million
What is the preferred alternative?
Preferred Alternative At-A-Glance
Alternative No. 3

- 10’ minimum width shared use path along Route 6 Eastbound
- Swale along Route 6 westbound
- Additional width for lanes and shoulders
- 4’ wide raised median – no barrier
- Majority of widening into westbound hillside
Preferred Alternative
Preferred Alternative

- PROPOSED 4 FOOT SHOULDER
- PROPOSED 2 X 11 FOOT LANES
- PROPOSED MEDIAN 2 X 4 FOOT SHOULDERS 4 FOOT RAISED CEMENT CONCRETE PAVEMENT AND SLOPED EDGING
- LIMIT OF GRADING
- EXISTING STATE HIGHWAY LAYOUT LINE
- ROUTE 6 (SCENIC HIGHWAY)
- PROPOSED 2 X 11 FOOT LANES
- PROPOSED 4 FOOT SHOULDER
- PROPOSED 10 FOOT SHARED-USE PATH
Preferred Alternative

LIMIT OF WORK

EXISTING STATE HIGHWAY LAYOUT LINE

WATER TOWER

ROUTE 6 (SCENIC HIGHWAY)
Preferred Alternative

ROUTE 6 (SCENIC HIGHWAY)

- PROPOSED GUARDRAIL
- PROPOSED 2 X 11 FOOT LANES
- PROPOSED 4 FOOT SHOULDER
- PROPOSED MEDIAN
  - 2 X 4 FOOT SHOULDERS
  - 4 FOOT RAISED CEMENT CONCRETE PAVEMENT AND SLOPED EDGING
- END DRAINAGE SWALE
- MEET AND TIE INTO EXISTING SIDEWALK AT SCENIC OVERLOOK

DPW
Preferred Alternative

- Meet and tie into existing median for Edgehill Road
- Add crossing at Edgehill Road
- Add sidewalk from Edgehill Road to Scenic Overlook exit
- Meet and tie into existing sidewalk at Scenic Overlook
What are the environmental, cultural resource, and community impacts?
Existing Environmental Resources and Demographics

Legend
- Project Limits
- MassDEP Wetlands Canal
- Cape Cod Canal Access Property

EJ Criteria by Block Group
- Minority
- Income

Median Installation on Route 8 (Scenic Highway)
MassDOT Project No. 606882
Bourne, MA
Environmental Impact Evaluation

• Wetlands and Biological Resources
  – No impacts to regulated wetlands

• Recreational and Cultural Resource Areas
  – No impacts to Inventoried Property
  – No impacts to protected open space

• Community Representation
  – Expanded analysis of project impacts on all populations including impacts on low-income, minority and limited English proficient populations
  – Advanced project notice and opportunity for meaningful public engagement
What is the construction approach and how will road users be affected?
Construction Staging and Traffic Impacts

• Staged construction (approximately 4 stages)
• 4 lanes maintained
• No detours
Our next steps

1. Public Outreach
   Spring 2022

2. 25% Design Submission
   Summer 2022

3. Design Public Hearing
   Fall 2022

4. Project Advertisement
   Anticipated Fall 2024

5. Begin Construction
   Anticipated Winter 2025
Questions and discussion
Comments and Questions?

- Contact Gareth Saunders at gareth.saunders@dot.state.ma.us