

Cape Cod Canal Transportation Study Update and Investments

June 17, 2019

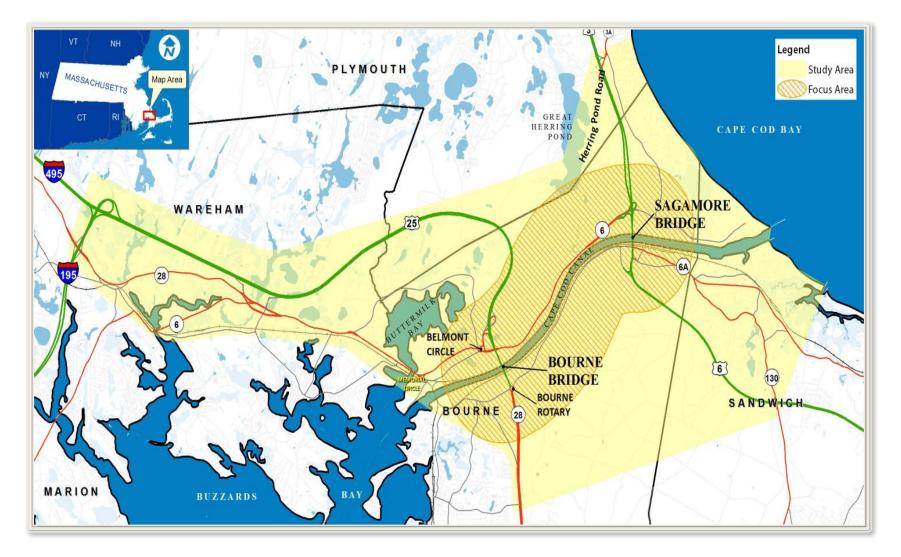


Cape Cod Canal Transportation Study Background

- The study's purpose is to evaluate existing / future transportation safety and congestion deficiencies in the Cape Cod Canal Study Area
 - Included the development and analysis of multimodal transportation alternatives for roadways, transit, and bicycle and pedestrian facilities
 - 11 Working Group Meetings were held in Bourne and Sandwich
 - 4 Public Informational Meetings were held in the Town of Bourne
 - Involved significant coordination with owners of the Bourne and Sagamore Bridges, the US Army Corps of Engineers (USACE)
 - USACE is conducting its own study of the two bridges
- A final report will include the study's analytical findings, a recommended plan of transportation improvements, and preliminary cost estimates for these improvements
 - 30-day public comment period ends June 20th draft report available
 - at <u>mass.gov/cape-cod-canal-transportation-study</u>



Study Area





Gateway Locations





Recommended Improvements

<u>Multimodal:</u>

- Bicycle/Pedestrian
- Park & Ride Facilities

<u>Roadway Improvements:</u>

- Local Intersections
- Gateway Locations



Multimodal Recommendations

Bicycle/Pedestrian

- Provide three new additional accessible connections to Cape Cod Canal Bikeway
- Improve bicycle/pedestrian facilities along Cape Cod Regional Transit Authority (CCRTA) bus routes.
- Provide accessible connections along roadway approaches to Sagamore and Bourne Bridges (including 'Complete Street' design of Adams Street)



Multimodal Recommendations

Park & Ride Facilities:

- Construct new Park & Ride lot at Route 6 Exit 2
- Potential new Plymouth & Brockton commuter bus stop
- Provide connection to new Service Road bike path
- Provide bicycle storage facilities.



Recommendations – Local Intersections

Intersection/Signal

Signal Timing / Adaptive Signal Improvements:

- Scenic Highway at Meetinghouse Road
- Scenic Highway at Nightingale Road

Route 6A at Cranberry Highway/Sandwich Road:

• Add new turn lane

Route 130 at Cotuit Road:

• Install traffic signal

Sandwich Road at Bourne Rotary Connector:

• Install new traffic signal and through lane



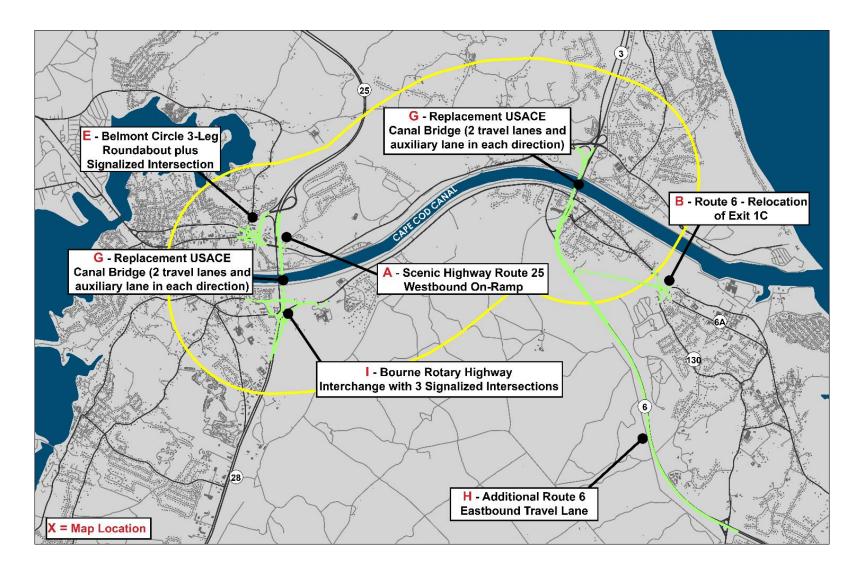
Recommendations – Gateway Locations

Case 3A Elements:

- Improvements analyzed under Case 3A would provide the greatest long-term benefits to accessibility and mobility for Cape Cod residents, employers, and visitors.
- Would provide a reliable multimodal transportation system in the event of an emergency evacuation
- Improvements focused on improving existing infrastructure, thereby minimizing anticipated impacts.



Case 3A Travel Demand Model





Elements/Map Locations of Case 3A:

- A. New Scenic Highway to Route 25 westbound on-ramp.
- B. Relocation of Exit 1C on Route 6 westbound
- E. Belmont Circle reconstruction as a 3-leg roundabout with signalized intersection.
- H. Construct Route 6 eastbound travel lane to Exit 2.
- I. Reconstruct Bourne Rotary as an interchange.



Case 3A Summary and Cost (in millions)

Cost Estimates (\$ in millions)		
Location	2030	2040
Scenic Highway to Route 25 Westbound On-Ramp	\$11	\$16
Route 6 - Exit 1C Relocation	\$51	\$75
Belmont Circle Reconstruction	\$23	\$33
Route 6 Eastbound Travel Lane	\$48	\$71
Bourne Rotary Interchange	\$87	\$127
Sagamore Bridge Approach	\$64	\$95
Bourne Bridge Approach	\$84	\$125

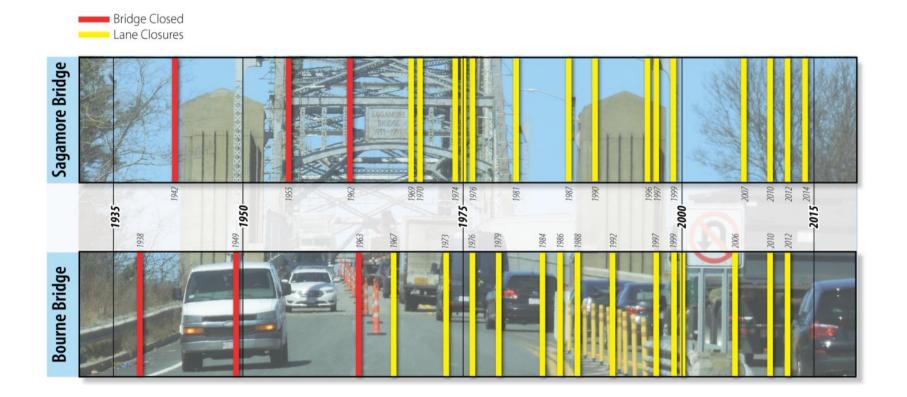
From Study to Design



- \$10 million in the Draft 2020-2024 MassDOT Capital Investment Plan (CIP)
 - Initial Investment
 - Bring design to pre-25% to begin permitting
- Sequence recommendations to address regional traffic and plan for seamlessly blending into any work done by USACE
 - Coordinate projects that need to be done prior to USACE actions
- Evaluate and identify environmental impacts/permitting
- Identify various components that make the most impact and coordinate with USACE on long term plan for bridges
 Timeline:
- 2 year process for initial design work
- Periodic stakeholder updates at key milestones



USACE's Bridge Maintenance History





Cape Cod Bridges

Bourne Bridge Repairs

- Managed by the USACE work completed
- Lane reduction was removed before Memorial Day

USACE Coordination Update

- Finalizing the USACE Major Rehabilitation Evaluation Report
 - While this report is being finalized, MassDOT is planning and advancing projects