Cape Cod Canal Bridges Update

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History

- The Bourne Bridge and Sagamore Bridge are both owned, maintained and operated by the United States Army Corps of Engineers (USACE)
- Built between 1933 and 1935
- Major rehabilitation project was done in 1981
- Since then there have been almost annual maintenance projects on both bridges – including joint replacements on the Sagamore last spring with the same happening on the Bourne this spring

Partnership with USACE

Memorandum of Understanding:

- Agreement executed with MassDOT and the USACE to share information and streamline the process between agencies

Coordination Meetings:

Senior Staff:

- Meets on a quarterly basis
  - In constant communication
  - Ensures priorities and goals are set and met

Weekly Calls:

- Coordination with field staff on maintenance and traffic control
- Formed a close relationship to minimize impacts to the public

Current Condition

- Comprehensive inspections scheduled every 24 months
- Currently the bridges are rated as “Fair”
- Both bridges are “functionally obsolete”
  - Narrow travel lanes
  - No median
  - No shoulders
- **Major rehabilitation project will be needed by 2025**
  - **USACE forecast shows that the bridges may need to be posted for load limits before 2025**

USACE Major Rehabilitation Evaluation Report

- First step for the USACE to initiate a project
- Includes the National Environmental Policy Act (NEPA) filing
- Evaluation Schedule:
  - USACE currently holding a series of public information meetings
  - Draft Report and public comment period – Summer 2019
  - Final Report with FONSI – Winter 2019
- Report will result in a recommendation for rehabilitation or replacement
  - Does not provide:
    - A final bridge design
    - Funding – would need Congressional authorization

Potential Options

Major Rehabilitation:

- Intensive traffic impacts – including full bridge closures for extend periods of time
- Each bridge would require two major projects over the next 50 years

Replace as Authorized:

- 2 travel lanes in each direction with updated standards
- Added median, shoulder and sidewalk
- Built next to current structures with demolition happening after construction

Replace with Added Lane:

- 3 lanes in each direction
- Added median, shoulder, and sidewalk
- Built next to current structures with demolition happening after construction

Cape Cod Canal Transportation Study

December 2018

Bourne, Plymouth, Sandwich, Wareham

Study Purpose

- The purpose of MassDOT's conceptual planning study is to evaluate existing and future transportation safety and congestion deficiencies in the Cape Cod Canal study area.
- This includes the development and analysis of multimodal transportation alternatives for roadways, transit, and bicycle and pedestrian facilities in order to address identified deficiencies.
- A final report will include the study's analytical findings, a recommended plan of transportation improvements, and preliminary cost estimates for these improvements.
- Additionally, the MassDOT study process has involved significant coordination with the US Army Corps of Engineers (USACE) on its Major Rehabilitation Evaluation of the Bourne and Sagamore bridges.

Study Process & Framework

- Step 1: Goals and Objectives, Evaluation Criteria, and Public Involvement Plan.
- Step 2: Existing Conditions, Future Conditions, and Issues Evaluation.
- Step 3: Alternatives Development.
- Step 4: Alternatives Analysis.
- Step 5: Recommendations.

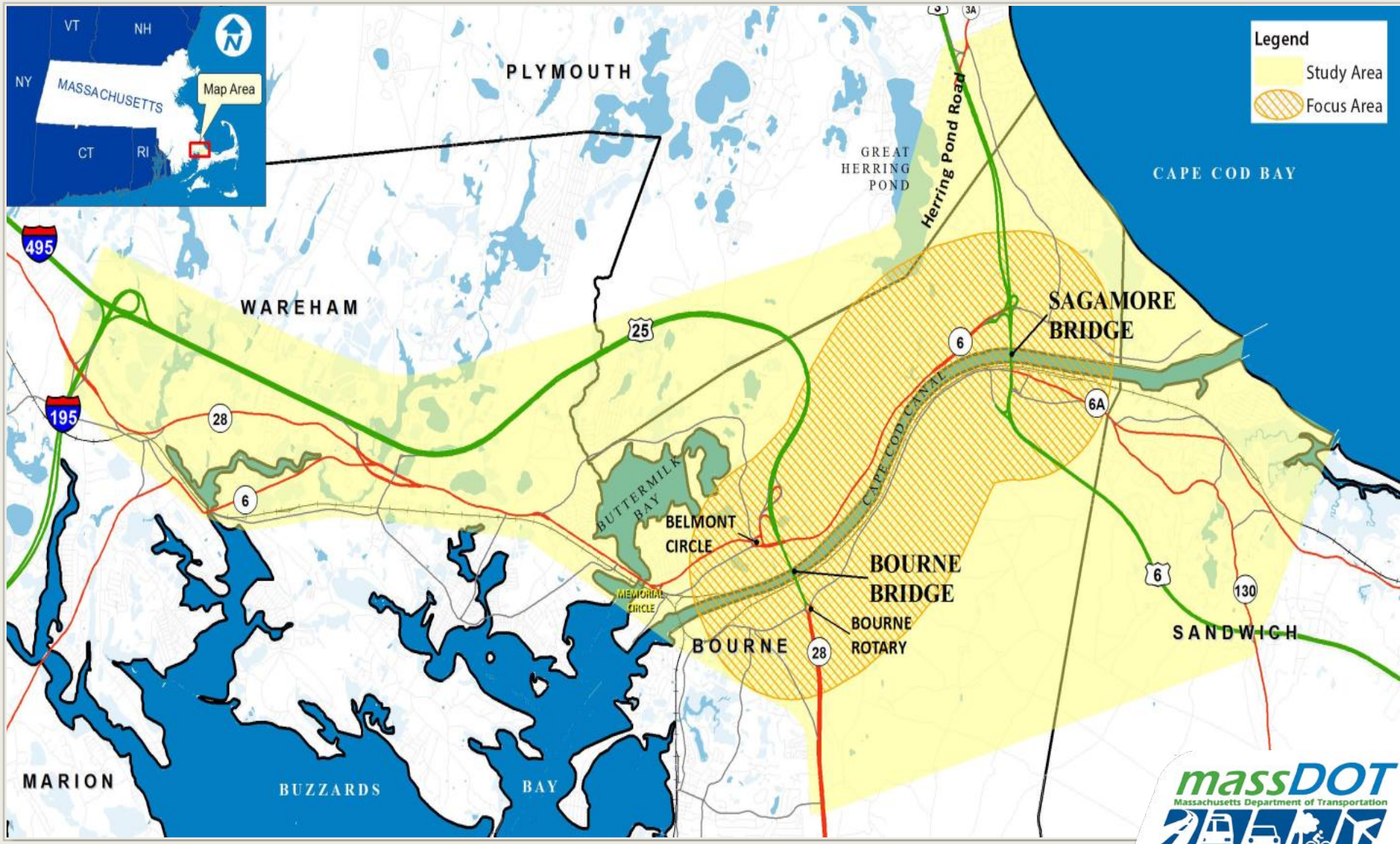
Study Goal

- Improve transportation mobility and accessibility in the Cape Cod Canal Area, and provide reliable year-round connectivity over the canal and between the Sagamore and Bourne Bridges.

Study Objectives

- Improve multimodal connectivity and mobility levels across the Canal to avoid degrading quality of life on the Cape.
- Ensure that cross-canal connectivity does not become a barrier to reliable intra-community travel within Bourne and Sandwich.
- Create a reliable multimodal connection across the Canal to assure public safety in the event of an emergency evacuation of portions of the Cape and to accommodate first responders trying to reach the Cape.

Study Area


VT
NH
NY
MASSACHUSETTS
Map Area
CT
RI
PLYMOUTH
GREAT HERRING POND
Herring Pond Road
CAPE COD BAY
Legend
Study Area
Focus Area
495
WAREHAM
25
SAGAMORE BRIDGE
6
6A
195
28
6
CAPE COD CANAL
BUTTERMILK BAY
BELMONT CIRCLE
BOURNE BRIDGE
MEMORIAL CIRCLE
BOURNE ROTARY
BOURNE
28
6
130
SANDWICH
MARION
BUZZARDS
BAY

Access System - Two Parts

Part 1: Bridges spanning Cape Cod Canal linking to Network (Responsibility of the U.S. Army Corps of Engineers (USACE)).

- Sagamore Bridge
- Bourne Bridge

Part 2: "Gateway" roads and intersections linking to bridges (Responsibility of MassDOT).

- Sagamore Interchange (Reconstructed in 2006)
- Route 6 at Exit 1C
- Belmont Circle
- Bourne Rotary

Study's Conceptual Design

- Focus on year-round safety and mobility problem locations
- Design for future (2040) fall weekday PM peak period
- Seek further improvements for summer Saturday peak, as feasible
- Not intending to resolve all peak-season traffic problems
- Assumes new bridges to be built adjacent to existing bridges

Current Status

- Study process is substantially complete
  - Final public information meeting to be held in early 2019
- As part of public involvement plan:
  - 11 Working Group Meetings were held
  - 3 Public Informational Meetings were conducted
- Study Website is a repository for meeting presentation and meeting notes:

https://www.mass.gov/cape-cod-canal-transportation-study

Next Steps

- MassDOT plans to hold a Public Informational Meeting in early 2019 (planned for February) to present its draft study recommendations.
- Draft Study Report – 30-day public comment period after Public Informational Meeting
- Once study is finalized, MassDOT will advance some of the recommended investments through its project development and capital planning processes
- MassDOT will continue to coordinate with the USACE on their study of the Bourne and Sagamore Bridges.