Cape Cod Canal Transportation Study
First Working Group Meeting
Upper Cape Cod Regional Technical School

Bourne, Plymouth, Sandwich, Wareham
October 29, 2014
Agenda

• Welcome and Introductions
• Study Background and Purpose
• Study Process, Working Group
• Review of Study Framework Material
  ▪ Study Area
  ▪ Goals and Objectives
  ▪ Evaluation Criteria
  ▪ Public Involvement Plan
• Schedule/Next Steps
Welcome & Introductions

• MassDOT
  ▪ Ethan Britland – Project Manager

• Study Team
  ▪ Ed Hollingshead - Team Project Manager (FST)
  ▪ Bill Reed – Principal in Charge (FST)
  ▪ Ken Buckland – Public Involvement (Cecil Group)
  ▪ Tory Fletcher – Natural Resources (Normandeau)
  ▪ Sudhir Murthy – Travel Demand Modeling (TrafInfo)
  ▪ Frank Mahady – Economics (FXM Associates)
  ▪ Chris Menge - Air and Noise (HMM&H)
  ▪ Meg Harper - Cultural Resources (AHS)
  ▪ Leslie Haines - Tolls (Parsons Transportation Group)
Working Group

- Invited representatives of study area interest organizations:
  - Municipal, state and federal government (elected officials and staff)
  - Study area neighborhood associations
  - Bicycling advocates
  - Regional planning and transit agencies
  - Environmental/water resources interests
  - Recreational interests

- Role of the Group:
  - To provide input to the team on the study process
  - Act as conduit for information/issues with representative organization
Study Background & Purpose

The Bourne and Sagamore Bridges provide the only vehicular connections across the Cape Cod Canal. They link 15 communities and 215,000 residents with the mainland.
Study Background & Purpose

Scenic Highway and Sandwich Road which parallel the Cape Cod Canal act as east/west connectors linking the two bridges.
For decades reaching Cape Cod involved peak season delays followed by unimpeded off-season access
Now off-season access is complicated by lane closures to allow ongoing bridge maintenance.
Ongoing off-season maintenance is an indication that unfettered off-season connectivity across the Canal is entering a new and different era.
Study Background & Purpose

Why Now?
Aging infrastructure requires ongoing maintenance

- Two 79 year old bridges in salt water environment
- As aging continues different bridge components will deteriorate at differing but unrelenting rates
- In 2035 - this study’s future year - bridges will be 100 years old
Study Background & Purpose

• There is not an impending risk to connectivity

• Bridges can be maintained for decades to come with associated impacts to:
  • Mobility – increased off-season delays
  • Safety – lane closures could impact emergency response times
  • Economy – travel time increases for movement of residents and goods
Study Background & Purpose

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Study Background & Purpose

- MassDOT recognizes that achieving long term reliable connectivity will require time and money.

- Consequently, MassDOT has begun a two part approach to reach reliable connectivity:
  - Part One – this Planning Study will result in publicly vetted alternatives for future detailed study in the state (MEPA) and federal (NEPA) environmental review processes.
  - Part Two – MassDOT has begun to explore the potential of a Public Private Partnership (P3) as an alternative procurement process. P3 projects are typically funded in part or in whole by tolls or user fees.
Study Cases

Understanding the problems to be solved

- **Existing and future no-build** – allows us to understand how future problems differ from the present

Phased multimodal improvement plan that balance complexity/cost with time

- **Near-Term** – could implement smaller scale lower cost/impact multimodal improvements to improve Canal area mobility
  - Example - designate bicycle and pedestrian route around Belmont Circle
Study Background & Purpose

- **Mid-Term** – could implement medium scale improvements to improve Canal area mobility
  - Example - improve multimodal mobility with enhanced use of transit and add turn lanes or signals to congested intersections

- **Long Term** – third bridge would address reliability of cross Canal connectivity and potentially create much improved Canal area mobility
• Study Purpose –
  ▪ Conduct a planning study to identify and analyze (at a conceptual level) bridge and non-bridge alternatives that meet the study’s goals and objectives in an open and collaborative process
  ▪ Develop a multi-phased multi modal Improvement Plan. Generate traffic data and conceptual costs to inform the ongoing P3 evaluation process and
Study Process

• Step 1: Goals and Objectives, Evaluation Criteria, and Public Involvement Plan
• Step 2: Existing Conditions and Issues Evaluation
• Step 3: Alternatives Development
• Step 4: Alternatives Analysis
• Step 5: Recommendations
A set of short, medium and long-term alternatives that can be advanced forward into project development
Draft Goals and Objectives
Study Framework: Draft Goals

• To establish an additional crossing of the Cape Cod Canal to address the diminishing quality and reliability of year-round connectivity over the Cape Cod Canal, due to the aging Sagamore and Bourne Bridges

• To create/improve multimodal mobility in the Cape Cod Canal area
Study Framework: Draft Objectives

• Create reliable multimodal connectivity and mobility levels such that the quality of life on Cape Cod is not diminished by unreliable connectivity across the Cape Cod Canal.

• Create a reliable multimodal connection across Cape Cod Canal to maintain/enhance public safety in the event of the need for an emergency evacuation of portions of Cape Cod and to accommodate first responders accessing Cape Cod.

• Ensure that cross canal connectivity does not become a barrier to reliable intra-community connectivity for the Town of Bourne.
# Study Framework: Evaluation Criteria

<table>
<thead>
<tr>
<th>Transportation Impacts</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>Vehicles</strong></td>
<td>Corridor intersections level of service (LOS)</td>
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<td>Corridor volume to capacity ratios</td>
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<td>50th and 95th percentile queues</td>
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<td><strong>Pedestrian and bicycles</strong></td>
<td>Mobility and connectivity</td>
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<td>Bicycle/pedestrian delay</td>
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<td>Expansion/provision of bicycle facilities</td>
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<td><strong>Travel time</strong></td>
<td>Expansion/provision of pedestrian facilities</td>
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<td>Average roadway travel time in study area</td>
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<td>Average roadway delay</td>
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<td><strong>Safety</strong></td>
<td>Conformance with AASHTO and MassDOT standards</td>
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<td><strong>Vehicular safety</strong></td>
<td>Delay to emergency vehicle access</td>
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<td><strong>Pedestrian and bicycle safety</strong></td>
<td>Compliance with ADA requirements</td>
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<td>Compliance with MassDOT requirements</td>
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<td><strong>Environment</strong></td>
<td>Impact to coastal resources (sq. ft.)</td>
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<td><strong>Environmental impacts</strong></td>
<td>Impact to wetland resources (sq. ft.)</td>
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<td>Impact to ACEC</td>
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<td>Impact to rare species/habitat</td>
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<td>Impact to public water supply</td>
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## Study Framework: Evaluation Criteria

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<tr>
<th>Community impacts</th>
<th>Community</th>
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<tr>
<td></td>
<td>Impact to protected and recreational open space</td>
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<td>Impacts to Environmental Justice neighborhoods</td>
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<td>Impact to historical/archeological resources</td>
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<td>Visual</td>
<td>Visual impacts</td>
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<th>Alternative Feasibility</th>
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<td>Right of way impacts</td>
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<tr>
<td>Cost</td>
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**Cape Cod Canal Transportation Study**

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Study Framework: Public Involvement Plan

Goal of Public Involvement Plan:
Achieve early and continuous public involvement to gather informed public support for proposed improvements

- Elicit and collect detailed responses and comprehensive comments during the study and concept development phases
Study Framework: Public Involvement Plan

Multiple levels of communication:

• Meetings with ...
  ▪ Working Group
  ▪ Focus groups
  ▪ General public

• Get the word out
  ▪ Email, mail, media, and online outlets
Study Framework: Public Involvement Plan

Public Informational Meeting Presentations:

- Problem Statement
- Conditions Assessments
- Preliminary Alternatives, with Evaluations
- Draft recommendations
Study Framework: Public Involvement Plan

Cape Cod Canal Transportation Study Working Group:

• Representatives of public and private entities and interest groups
• Meets to present and discuss study elements and progress
Study Schedule

What is the Project Schedule?

• Task 1 – Define the Study Area, Goals and Objectives, Evaluation Criteria and Public Involvement Plan. Also, have a Working Group and Public Meeting. – Completed November 2014

• Task 2 – Analyze Existing Conditions and Complete Data Collection. Produce Future Conditions Model. Identify Issues and Opportunities. Have a Work Group and Public Meeting. – Completed May 2015
Study Schedule

What is the Project Schedule?

- Task 3 – Alternatives Development. Have a Working Group and Public Meeting. – Completed August 2015

- Task 4 – Conduct Alternatives Analysis looking at Mobility, Safety, Environmental, Land Use, Economic, Community and Cost Effects. Have a Working Group and Public Meeting. – Completed November 2015
Study Schedule

What is the Project Schedule?

• Task 5 – Recommendations and Draft Report. Have a Working Group and Public Meeting. – Completed November 2015

• Task 6 – Final Report. – Completed February 2016

• Task 7 – Complete Environmental Notification Form (ENF). Have a Working Group Meeting. – Completed March 2016
Next Steps

• Finalize Study Framework (Goals/Objectives, Study Area, Evaluation Criteria, and Public Involvement Plan)
• Study website launch
• Existing Conditions
  ▪ Data Collection – Summer and off season traffic data collected
  ▪ Development of vehicular traffic model
  ▪ Generate future travel demand
  ▪ Coordinate with ACOE on program for bridge maintenance
  ▪ Identify issues and constraints
• Public Meeting (November 2014)
• Next Working Group Meeting (February 2015)
Questions?

Comments and feedback can be emailed to Ethan Britland
ethan.britland@state.ma.us