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

Bourne, Plymouth, Sandwich, Wareham

October 29, 2014

massDOT
Massachusetts Department of Transportation
Office of Transportation Planning

FAY, SPOFFORD & THORNDIKE

FST
100 YEARS

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)

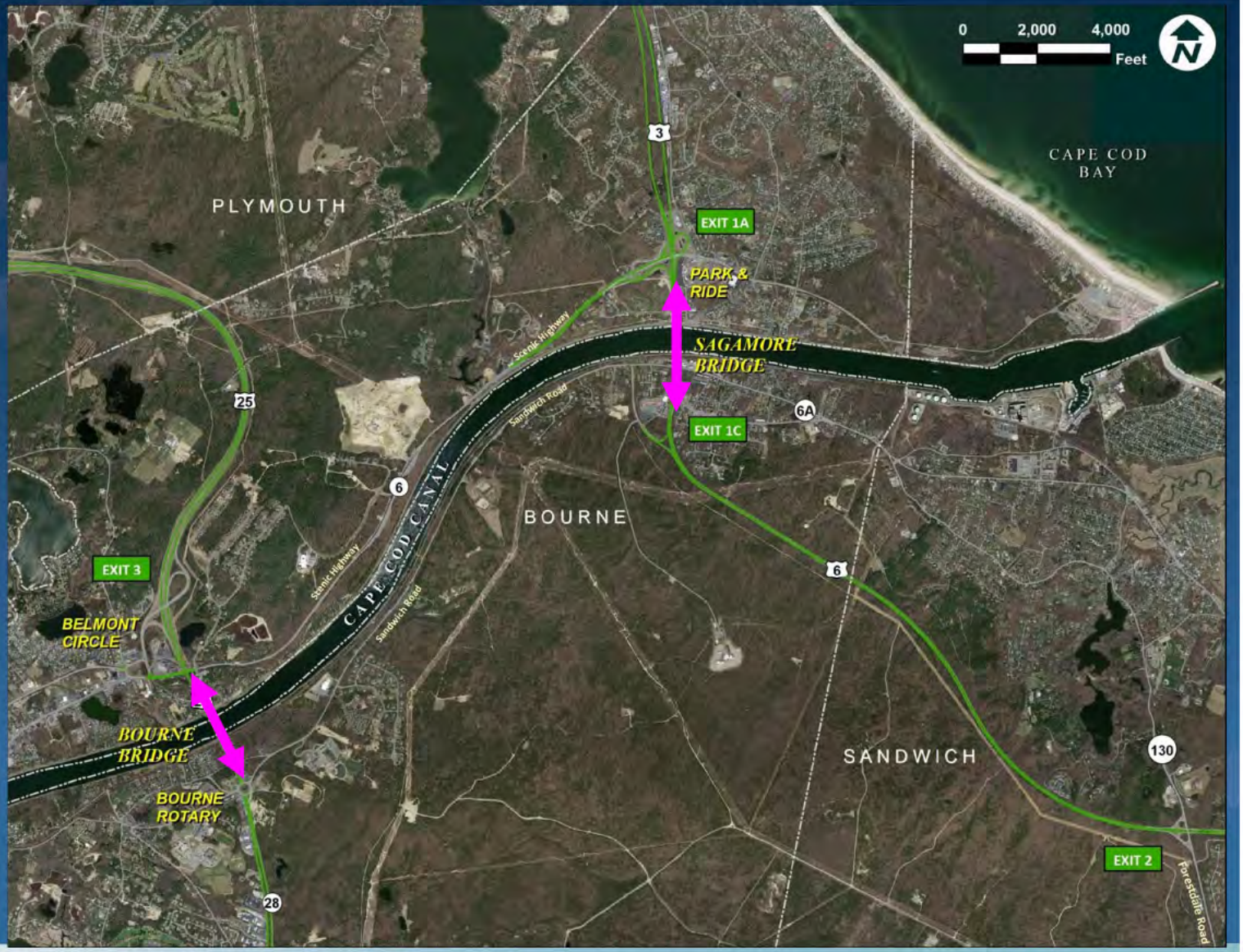
Working Group

- 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.



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Study Background & Purpose

Scenic Highway and Sandwich Road which parallel the Cape Cod Canal act as east/west connectors linking the two bridges

Study Background & Purpose

For decades reaching Cape Cod involved peak season delays followed by unimpeded off-season access

Study Background & Purpose

Now off-season access is complicated by lane closures to allow ongoing bridge maintenance

Study Background & Purpose

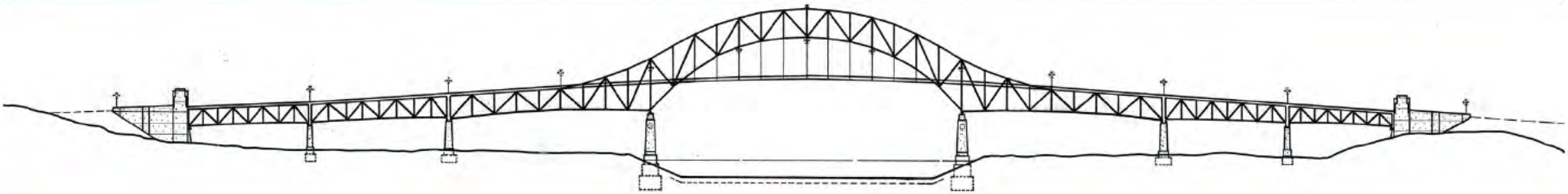
Ongoing off-season maintenance is an indication that unfettered off-season connectivity across the Canal is entering a new and different era

Study Background & Purpose

Why Now?

Study Background & Purpose

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

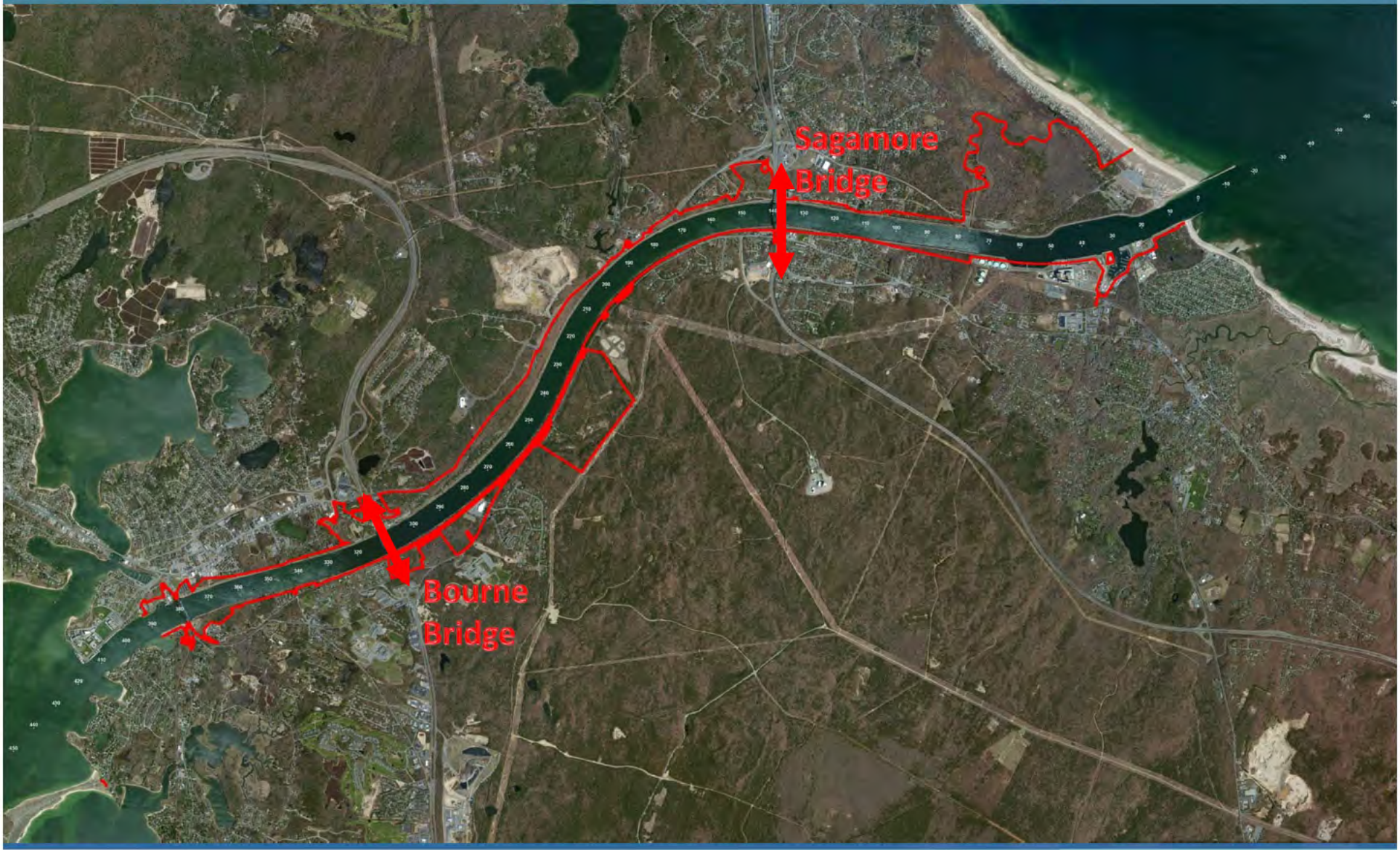
Study Background & Purpose

- 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

Army Corps of Engineers Property



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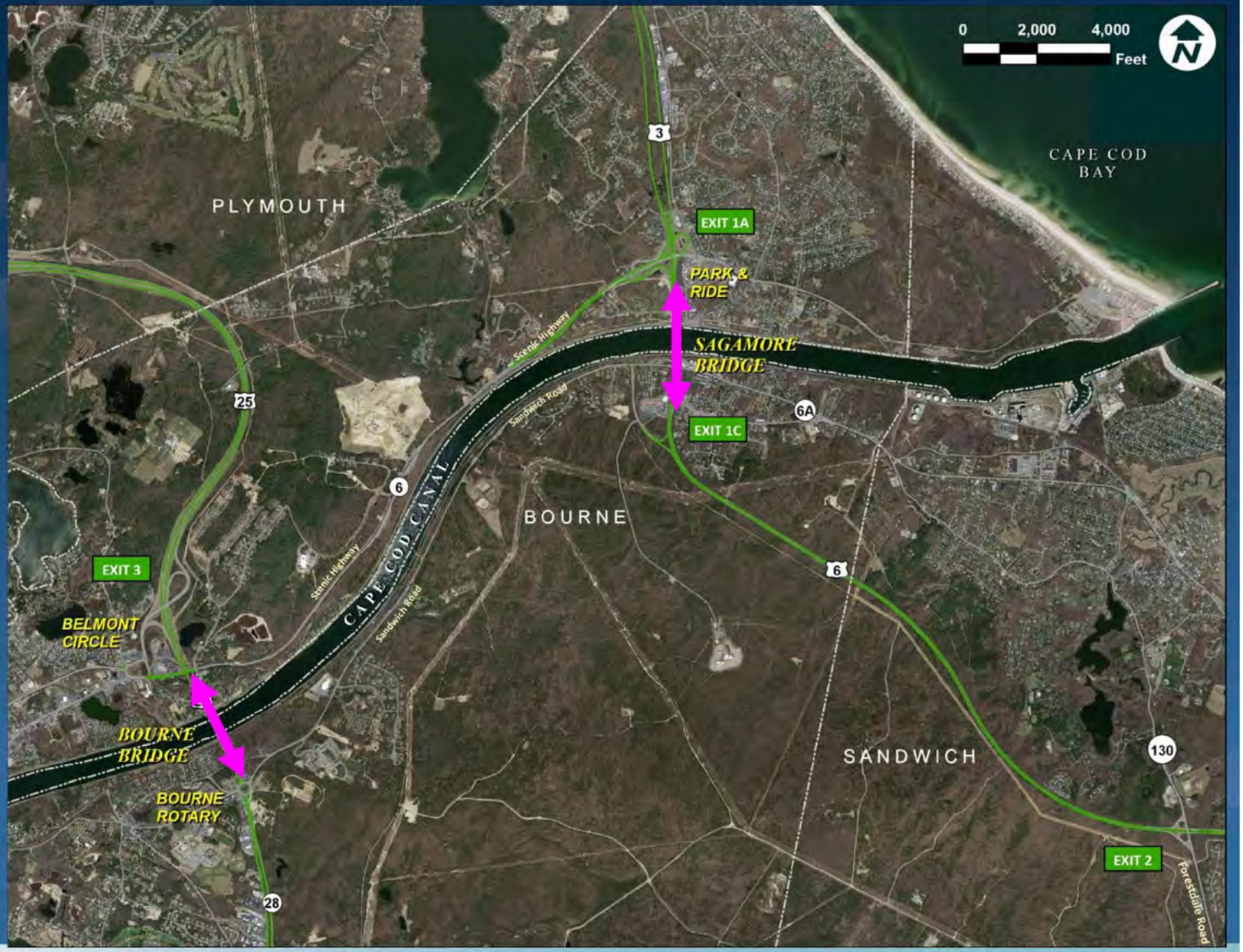

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Study Background & Purpose

- 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 Background & Purpose

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 Background & Purpose

- 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

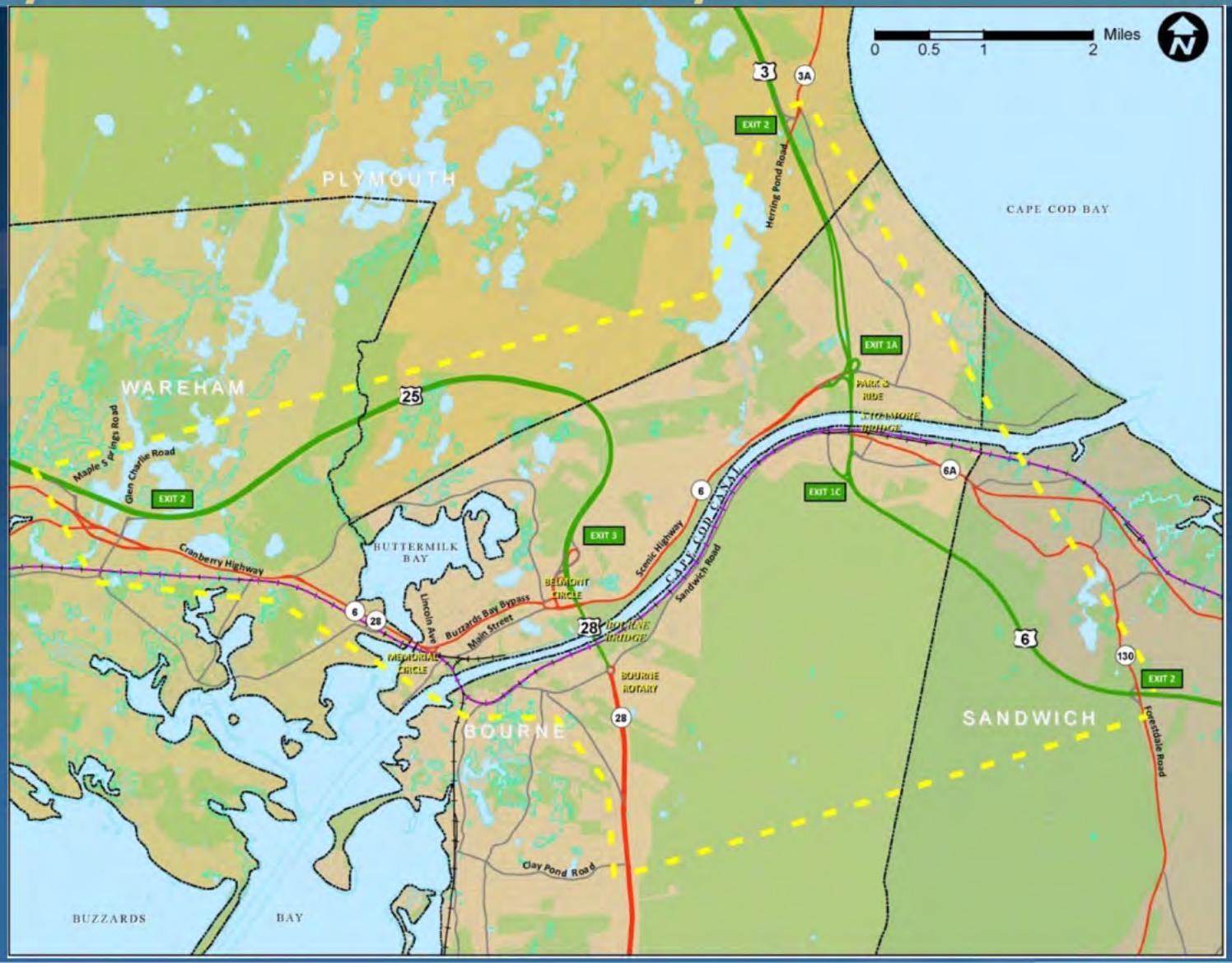
Study Process

- 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

Study Product

A set of short, medium and long-term alternatives that can be advanced forward into project development

Study Framework: Study Area



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Study Framework: Draft Goals

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

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

Study Framework: Evaluation Criteria

Community	
Community impacts	Impact to protected and recreational open space
	Impacts to Environmental Justice neighborhoods
	Impact to historical/archeological resources
Visual	Visual impacts
Alternative Feasibility	
Right of way impacts	Permanent and temporary right of way impacts
Cost	Capital and maintenance costs
Construction phase impacts	Construction duration
	Impacts to abutting land owners
	Impacts to marine traffic
	Impacts to vehicular traffic

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

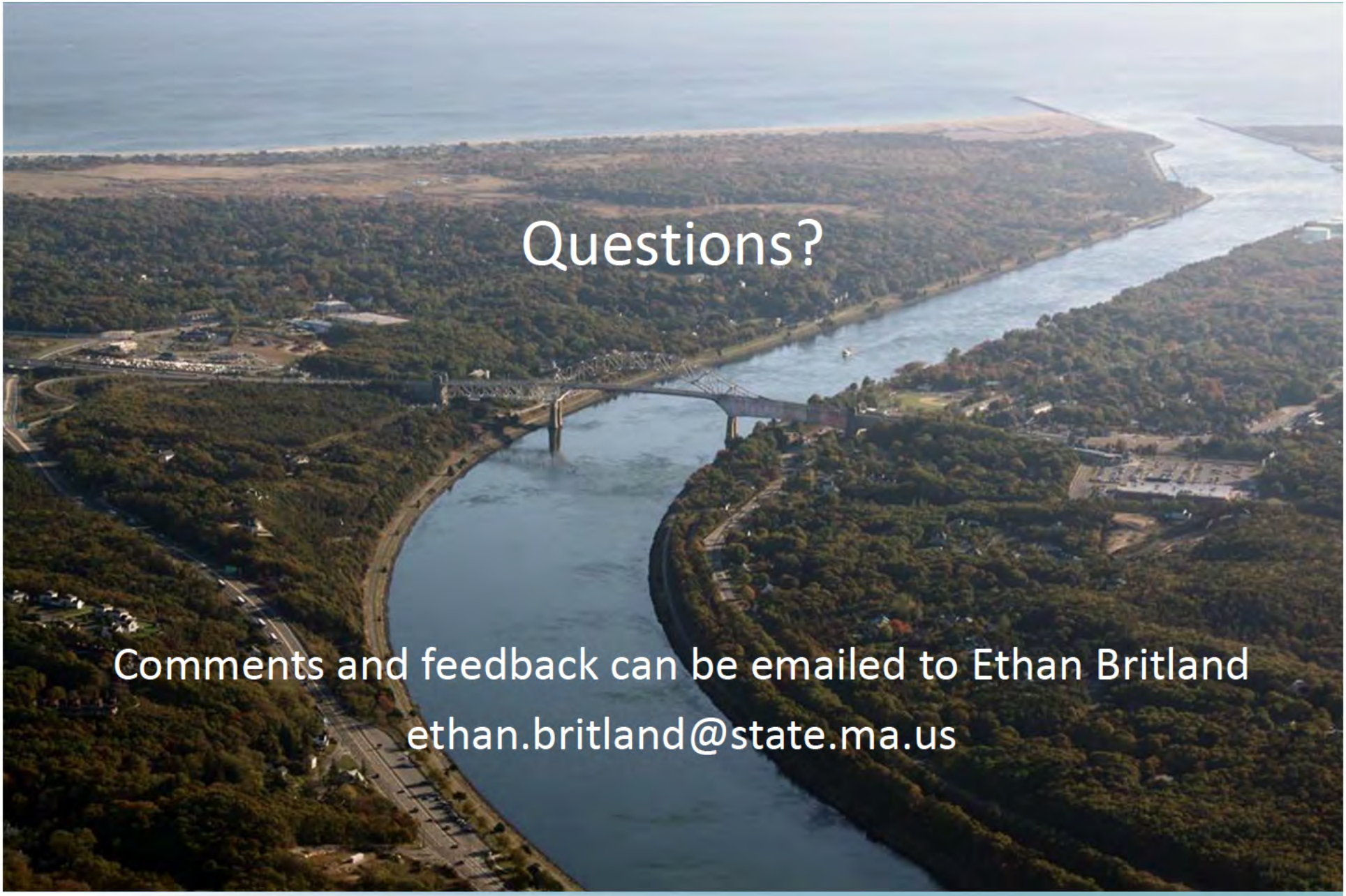
Study Schedule

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