

Water Transportation Study & Business Planning Update

September 11, 2017

Two Water Transportation Studies

Comprehensive Boston Harbor Water Transportation Study and Business Plans

- Baseline site profiles for planning of passenger ferry routes in the harbor



- Comprehensive business plans for up to three financially sustainable services that can be launched in one to five years

Water Transportation Strategy for the Boston Harbor Islands National and State Park

- Baseline site profiles for planning new services at Park Gateway sites



- Strategy and scope for an RFP to procure a ferry service operator including recommendations for one or two new services

Deliverables: Comprehensive Boston Harbor Study

30

site profiles

Stated Preference Survey to gather additional data on possible ridership

10 sites

with models for estimated ridership demand

3 corridors

detailed market and feasibility analysis + estimates of ridership, time savings, operating costs, deficits/subsidies, and seasonality

Model congestion mitigation and reduced emissions

Financial Model + Business Plan for up to 3 new routes based on these findings

Project Schedule

June + July 2017

- stakeholder workshops
- background research on existing conditions and potential sites

Aug + Sept 2017

- site profiles
- recommendations of sites for further study

- stated preference survey

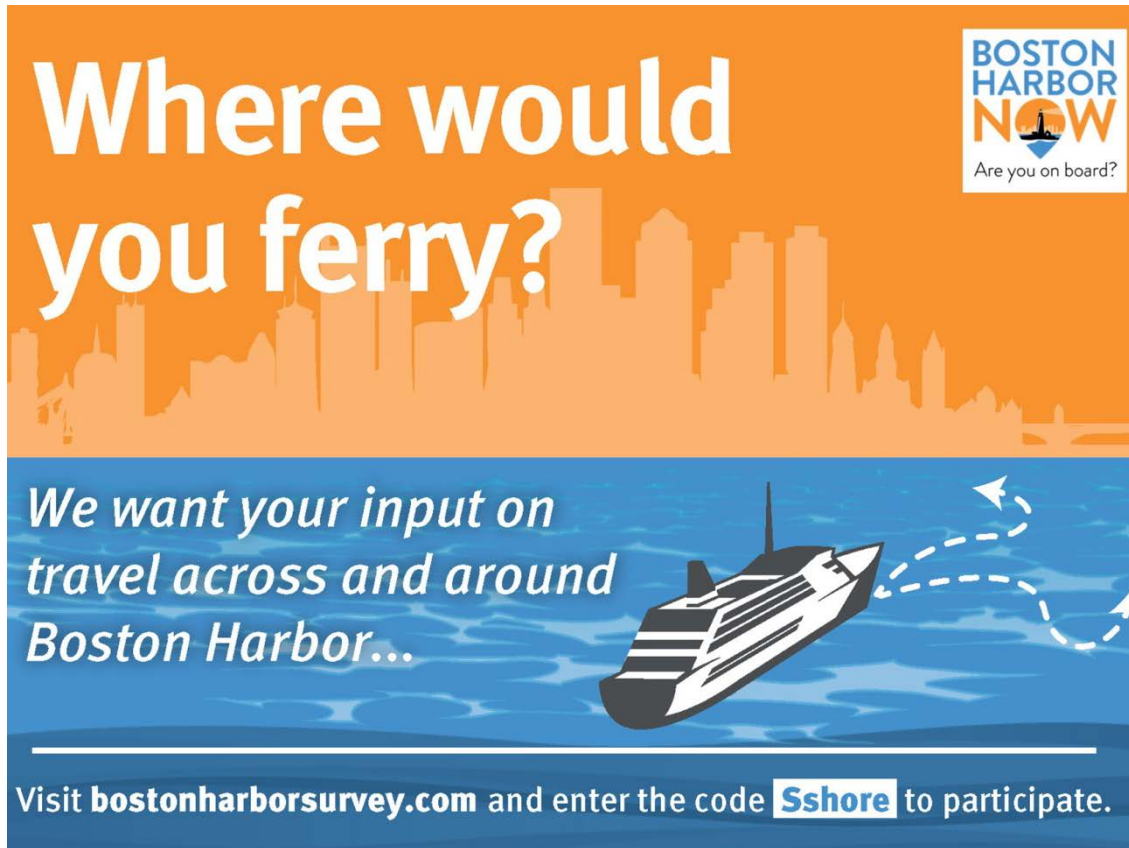
October 2017

- develop an overall strategy with a set of sites and corridors being analyzed for market and operational feasibility

Nov to Feb 2018

- overall strategy + strategic implementation plan

Survey Update:



The poster features an orange background with a white silhouette of the Boston skyline. In the top right corner is the 'BOSTON HARBOR NOW' logo with the tagline 'Are you on board?'. The main text 'Where would you ferry?' is in large white letters. Below this, on a blue background representing water, is an illustration of a ferry boat with dashed white arrows showing its path. The text 'We want your input on travel across and around Boston Harbor...' is written in white. At the bottom, a white line separates the text 'Visit bostonharborsurvey.com and enter the code **Sshore** to participate.'

Where would you ferry?

BOSTON HARBOR NOW
Are you on board?

We want your input on travel across and around Boston Harbor...


Visit bostonharborsurvey.com and enter the code **Sshore** to participate.

- Launched - August 21 (after live testing period & consultation w/ OPMI)
- To date: 2500+ taken
 - In person (on boat) interviews
 - Posters and postcards
 - Digital promotion
 - Key stakeholders & municipal partners
- Survey data analysis in begins in October

Survey Update Continued:

Boston Harbor Now is conducting a comprehensive study of water transportation in Boston Harbor.

Participate in the process by visiting **bostonharborsurvey.com** and entering the code **Sshore**.

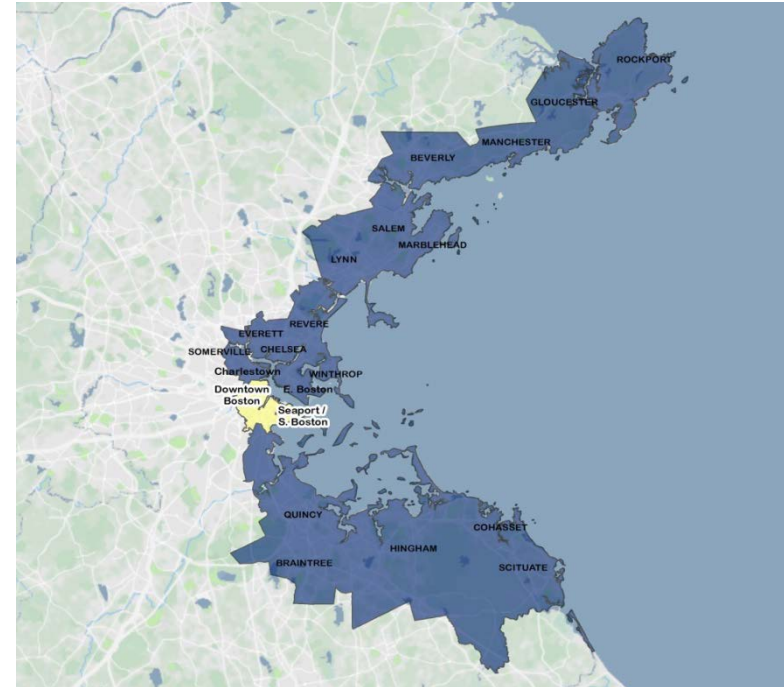


The results of this survey will inform the future of transportation throughout the Harbor.

The water transportation study is being conducted on behalf of Federal and State agencies. You can learn more about the process at www.bostonharbornow.org/water-transportation-study.

This survey is being conducted by Steer Davies Gleave (SDG) www.steerdaviesgleave.com. The information you provide will be treated as strictly confidential. Please send any comments or questions to TravelSurvey@sdgworld.net.

BOSTON HARBOR NOW
Are you on board?



Surveys coded to track outreach and enable project management team to promote targeted outreach.

Survey area developed from preliminary research of potential interest and ridership as well as feedback from workshops

Next Step:

- BHN and consultant team to work with OPMI
 - Analyze survey data
- Present finds back to key stakeholders and municipal partners
- Public events and meetings
 - Water Transportation Advisory Council
 - MassDOT and FMCB
 - Seaport Economic Council
- Other activities? Organizations?

10 sites

with models for estimated ridership demand

3 corridors

detailed market and feasibility analysis + estimates of ridership, time savings, operating costs, deficits/subsidies, and seasonality

Model congestion mitigation and reduced emissions

Financial Model + Business Plan

for up to 3 new routes based on these findings



Appendix

- Sponsors & consultant team
- History & summary of regional services
- Additional study objectives
- Past board presentation

Study Sponsors

- MassDOT
- Massport
- National Park Service
- Seaport Council of the Executive Office of Housing and Economic Affairs
- Massachusetts Convention Center Authority
- The Barr Foundation
- Cabot Family Charitable Trust
- Envoy Hotel
- Clippership Wharf



Consultant Team

- Steer Davies Gleave
- KPFF
- Moffatt and Nichol
- Elliott Bay Design Group
- Progressions
- Norris and Norris



Ferry History

1600's & 1700's

Before the bridges

1630's:

ferry from Boston to
Charlestown, Chelsea,
and Cambridge
+ Neponset River
crossing
+Fore River ferry

1800's

New developments

1829: Steam ferries
begin operation

1833: Service from
East Boston to
downtown

1860: Leisure service
to Nantasket

1900 to 1950's

Flourishing to fading

1900's and 1910's:
peak period for
passenger ferry service

1952: East Boston
Ferry stops operating

1970's to 2000

Mitigation

1975: Hingham service
(1984 mitigation for SE
expressway expansion)

1987: Charlestown
service (Central Artery
North Area)

1997: Lovejoy to WTC
(Third Harbor Tunnel)

Adapted from BRA's *Boston Inner Harbor Water Transportation Plan* (January 2000)





Existing Passenger Ferry Service in Boston Harbor and to the Islands

Hingham to Boston

MBTA Service



Docks: Hewitt's Cove to Rowes Wharf

Daily Service

Frequency - 18 departures (direct service)

Fare - \$9.25/ride

Farebox Recovery - 68% (system-wide, 2015)

Owner: MBTA owns two boats and contracts with BHC; Operators own additional boats in service

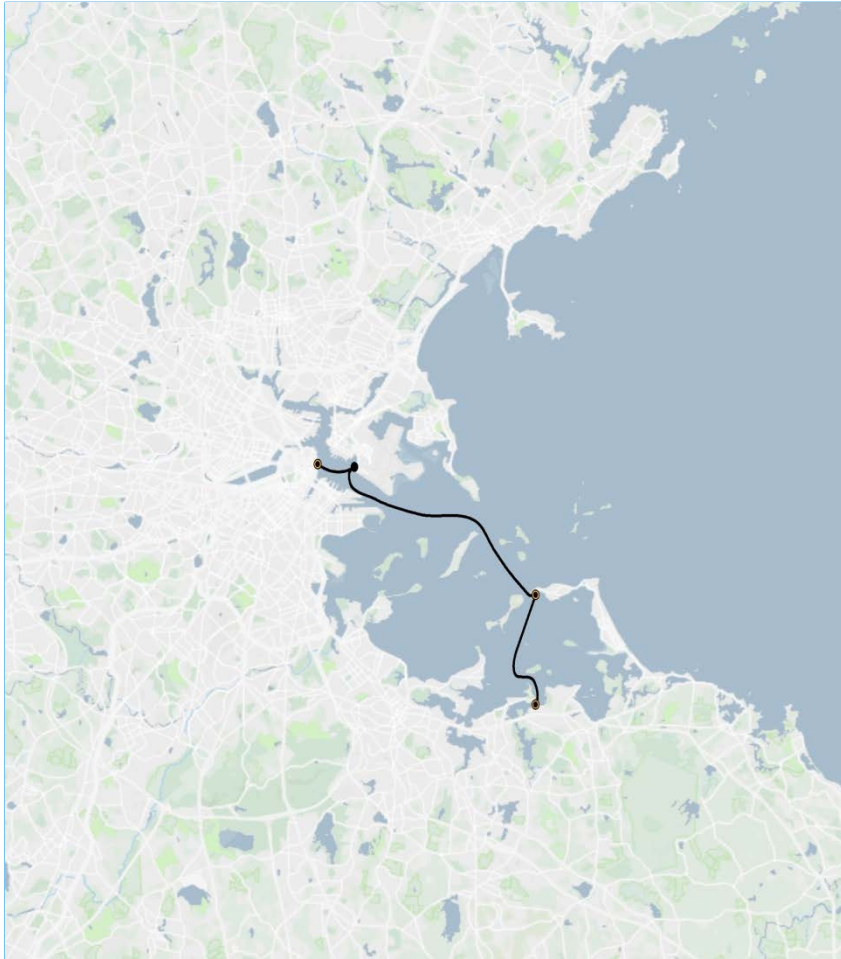
Operator: Boston Harbor Cruises

Funding: MBTA



Hingham to Hull to Logan to Boston

MBTA Service



Docks: Long Wharf North, Logan Airport, Pemberton Point, Hewitt's Cove (+ Grape)

Daily Service

- Hingham: 15 arrivals and departures
- Hull: 9 departures, 15 arrivals
- Logan: 14 landings

Fare - \$9.25/ride

Farebox Recovery - 68% (system-wide, 2015)

Owner: MBTA contracts with BHC; MBTA owns two boats

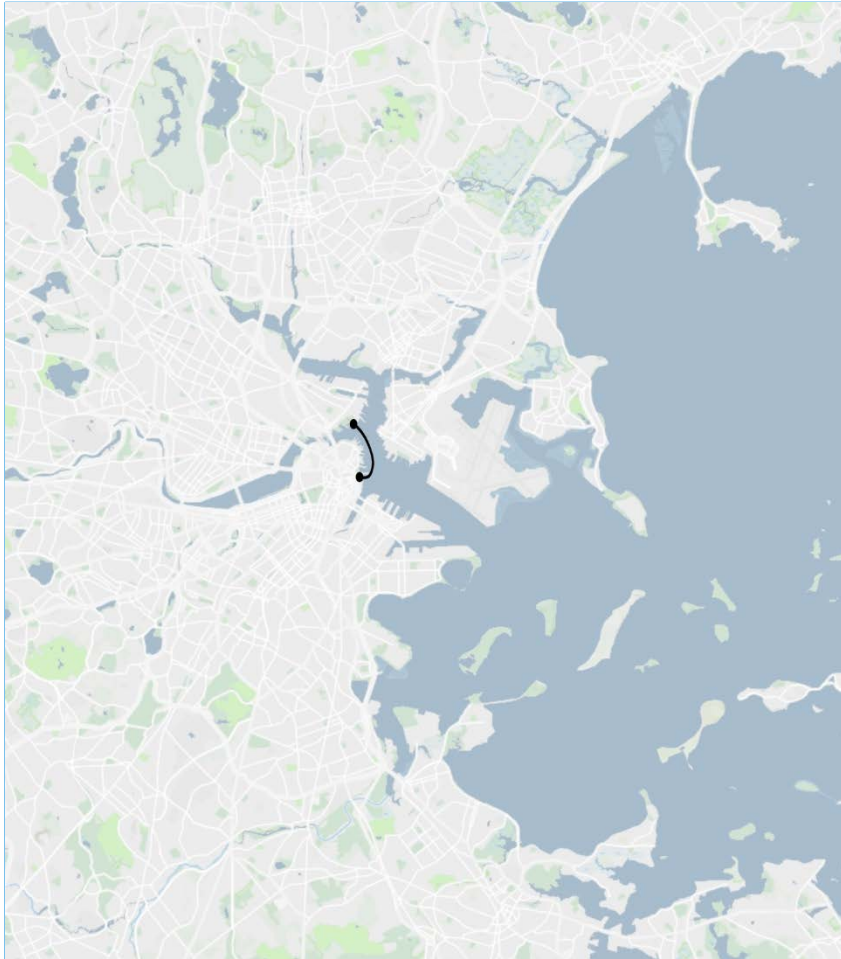
Operator: Boston Harbor Cruises

Funding: MBTA



Long Wharf to Charlestown

MBTA Service



Docks: Long Wharf South to Navy Yard (Pier 4)

Daily Service

Frequency - 39 daily weekday roundtrips

Fare - \$3.50/ride

Farebox Recovery - 68% (system-wide, 2015)

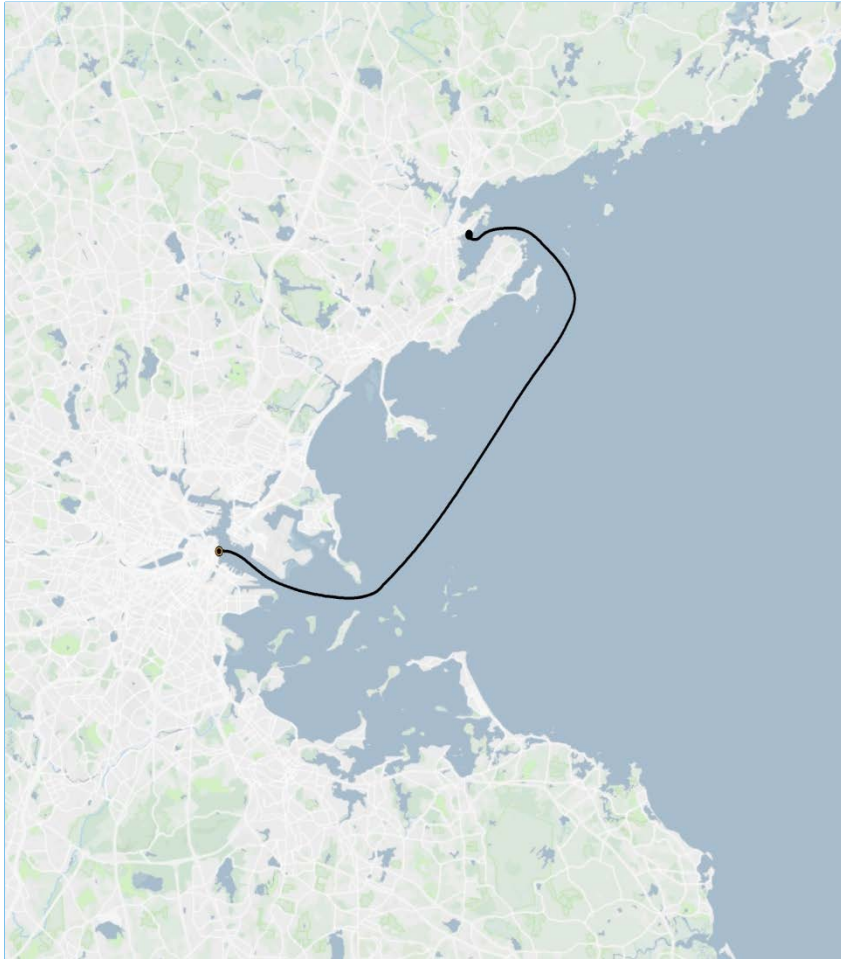
Owner: MBTA contracts with BHC; MBTA owns two boats

Operator: Boston Harbor Cruises

Funding: MBTA



Salem to Boston



Docks: Salem Ferry Terminal to Long Wharf

Daily Service (Seasonal)

Frequency - 5 trips/day

Fare - \$25/ride (\$8 for commuter boat)

Farebox Recovery - (To be determined)

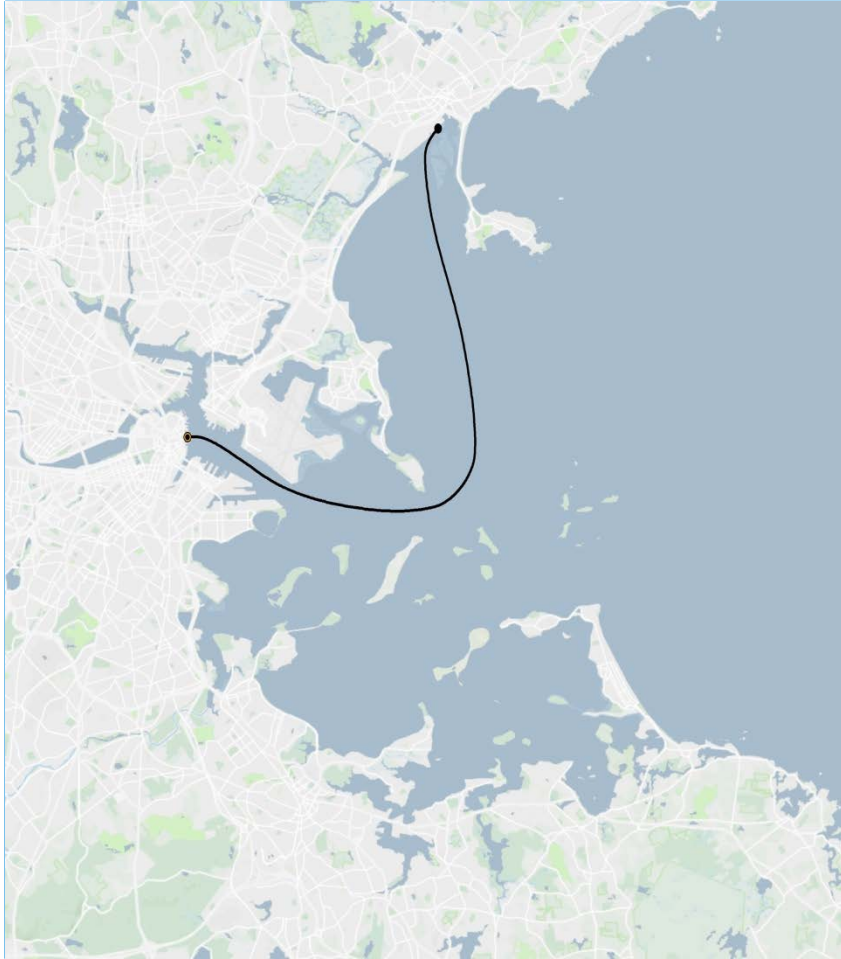
Owner: Salem owns the boat and contracts with BHC for operations

Operator: Boston Harbor Cruises

Funding: Salem and farebox



Lynn to Boston



Docks: Blossom Street Pier to Long Wharf

Daily Service (Short term mitigation)

Frequency - 1 trip/day

Fare - \$7

Farebox Recovery - (To be determined)

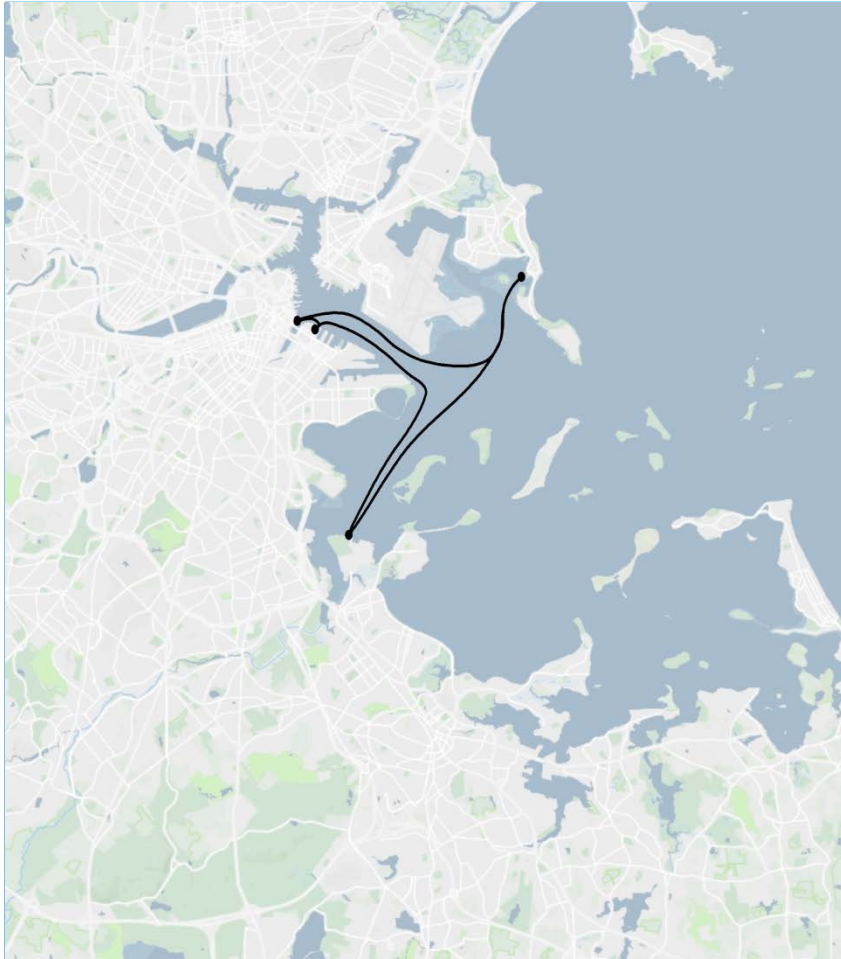
Owner: BHC owns the boat

Operator: Boston Harbor Cruises

Funding: MassDOT and City of Lynn



Winthrop to Quincy to Boston



Docks: Winthrop Ferry Dock, Marina Bay/Squantum Point, Fan Pier, Rowes Wharf

Daily Service (Seasonal)

Frequency - 6 to 8 trips/day

Fare - \$8.50

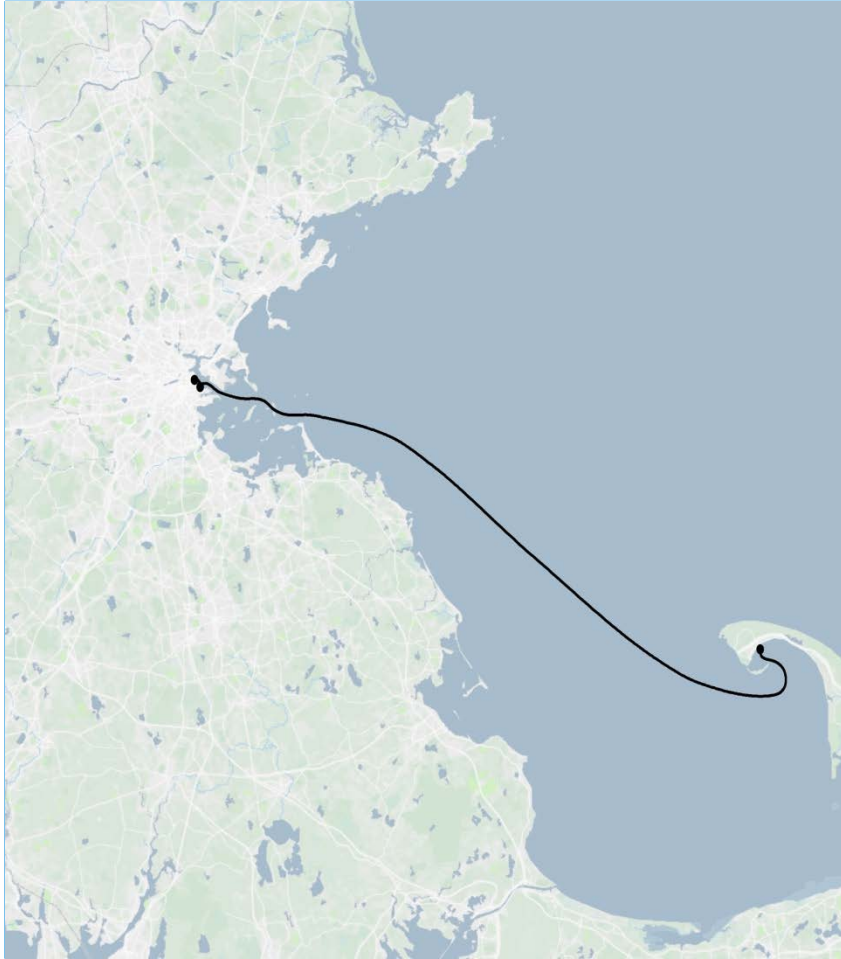
Farebox Recovery - (To be determined)

Owner/Operator: Town of Winthrop owns and operates the boat

Funding: Town of Winthrop and farebox with temporary MBTA support



Boston to Provincetown



Docks: World Trade Center West, Central Wharf, and MacMillan Pier

Daily Service (Seasonal)

Frequency - 1 to 4 trips/day/operator

Fare - \$59

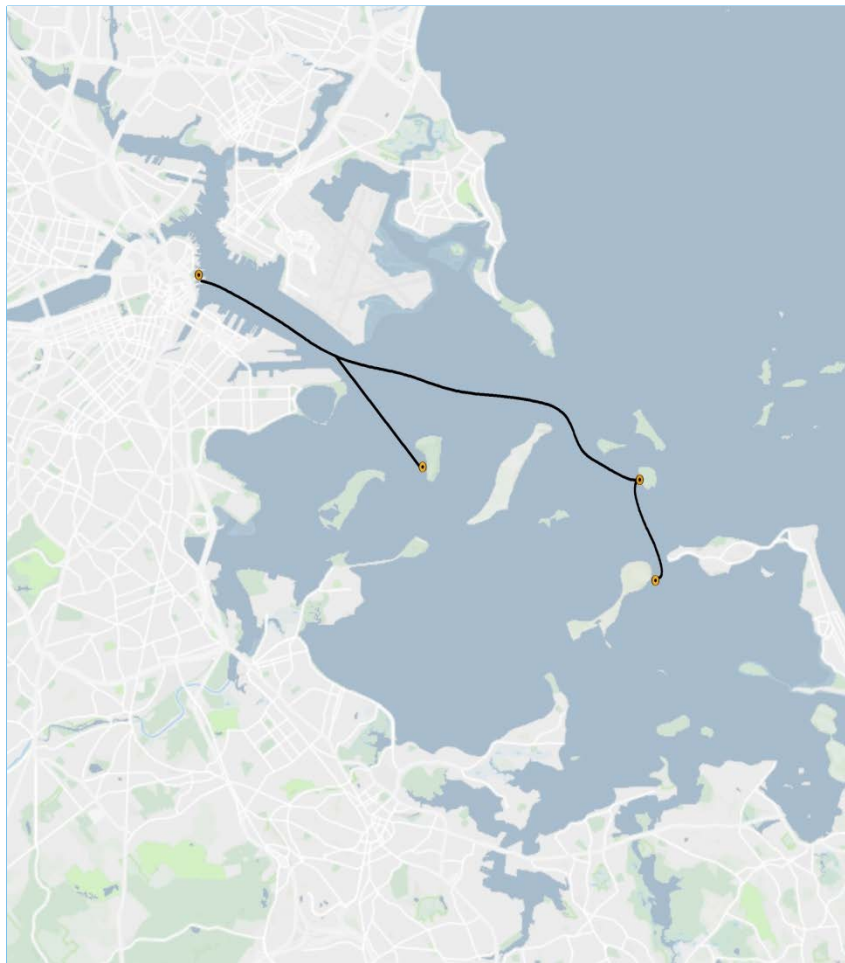
Farebox Recovery - 100%

Owner/Operator: Boston Harbor Cruises and Bay State Cruise Company own and operate boats

Funding: Farebox with market rate ticket pricing



Boston to Georges, Spectacle, Peddocks (+ Inter-Island)



Docks: Long Wharf North

Daily Service (Seasonal)

- Georges: 3 to 7 departures to the island
- Spectacle: 3 to 6 departures to the island
- Peddocks: 2 direct trips to the island

Fare - \$17

Farebox Recovery - (To be determined)

Owner: BHN contract to BHC

Operator: Boston Harbor Cruises

Funding: Farebox



Hingham and Hull to Five Islands



Docks: Hewitt's Cove, Pemberton Point

Daily Service (Seasonal)

- Grape: 5 landings/day (Wed. to Sun. only)
- Peddocks: 6 landings/day
- Georges: 7 landings/day
- Lovells: 4 landings/day
- Bumpkin: 3 landings/day (Wed. to Sun. only)

Fare - \$17

Farebox Recovery - (To be determined)

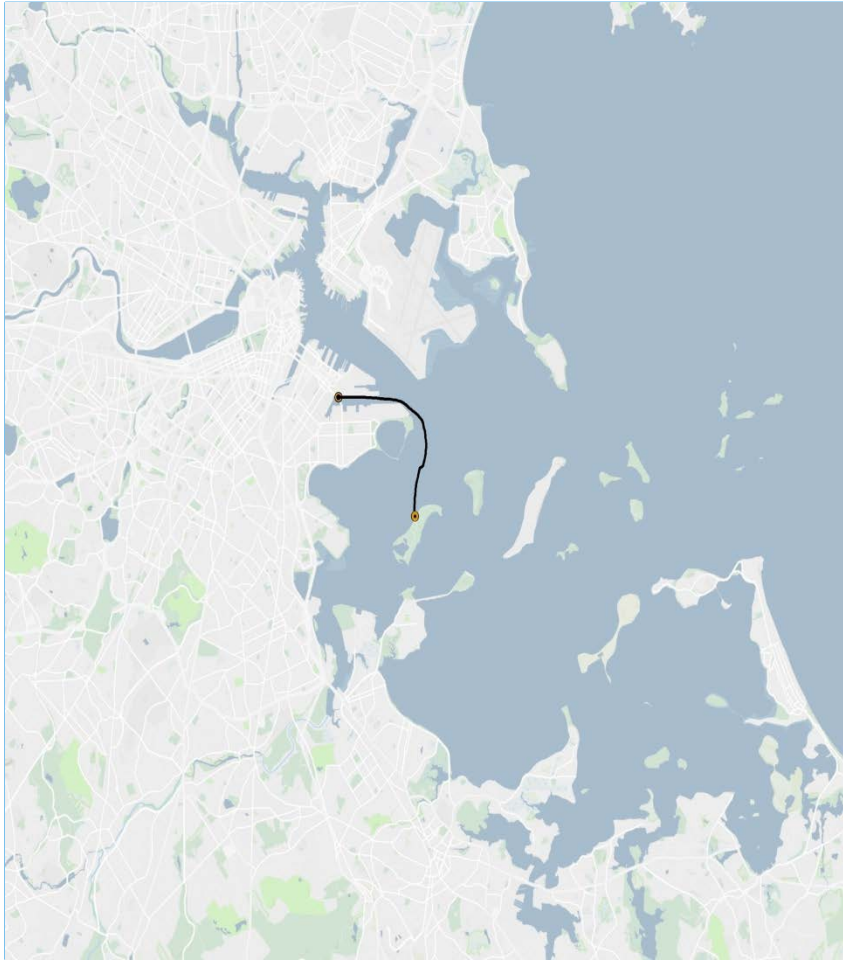
Owner: BHN contracts with BHC

Operator: Boston Harbor Cruises

Funding: Farebox



Boston to Thompson Island



Docks: EDIC/Marine Industrial Park

Daily Service (Seasonal)

Frequency - 3 weekend departures to the island

Fare - \$17

Farebox Recovery - (To be determined)

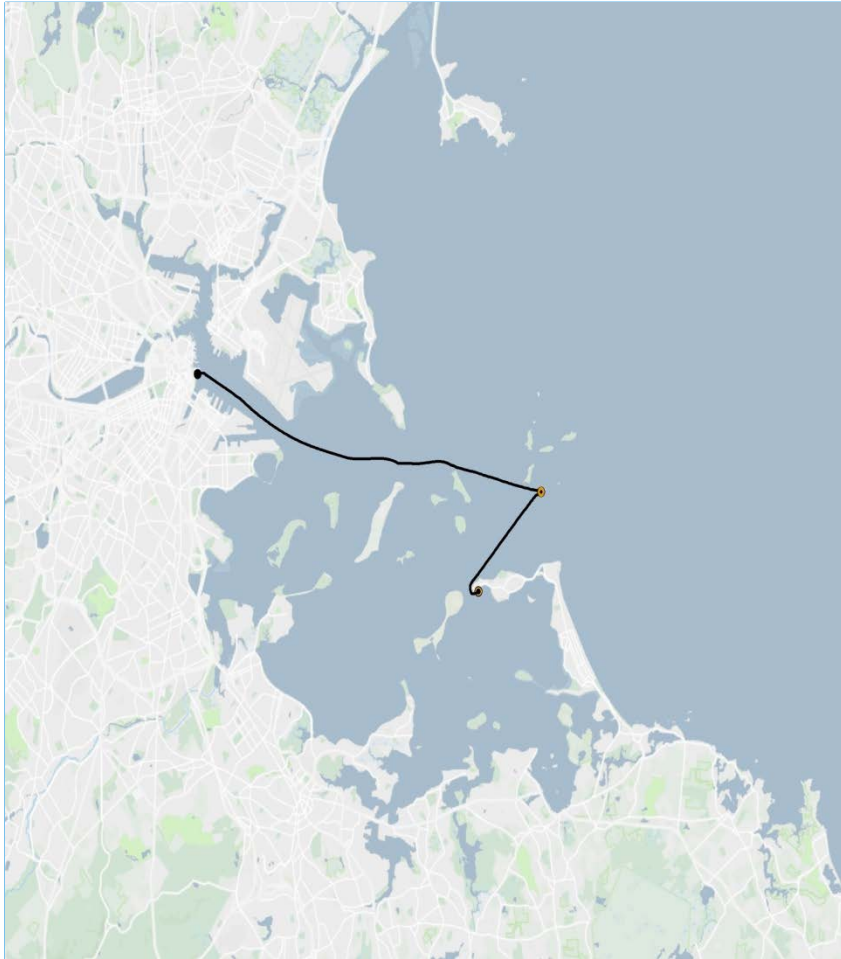
Owner/Operator: Thompson Island Outward

Bound owns and operates the boat

Funding: Thompson Island and farebox



Boston and Hull to Boston Light



Docks: Central Wharf and Pemberton Point

Daily Service (Seasonal)

- 2 departures per day to Little Brewster from Boston on Friday, Saturday, and Sunday
 - 3 departures from Hull two days each summer
- Fare - \$30 (\$41 if climbing the light house)
Farebox Recovery - (To be determined)

Owner: BHN contracts with UMass Marine Operations

Operator: UMass Marine Operations

Funding: Farebox



Service Delivery Model



Public/Private Partnership

Contract Relationship



Public Operator

Organization, staffing, and management with marine expertise



Private Operator

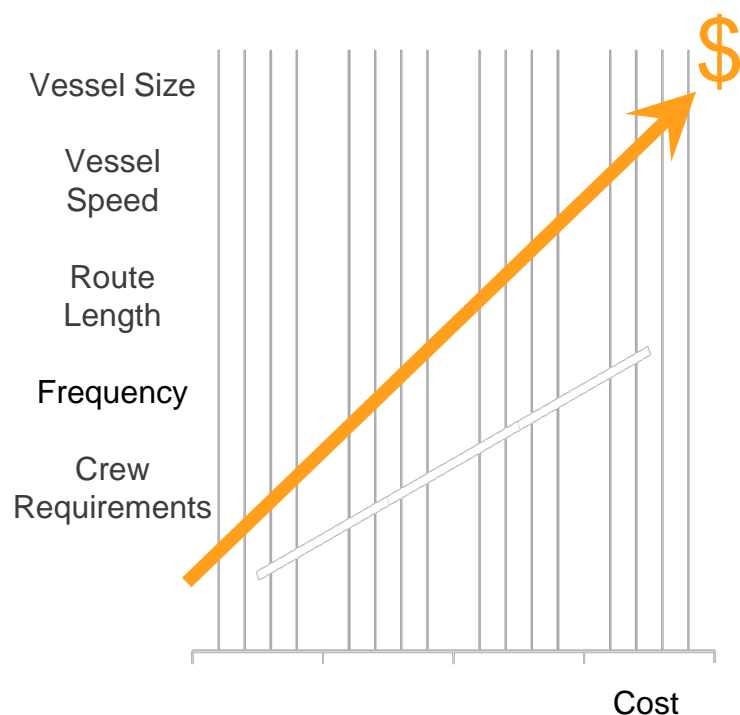
Economic Feasibility



Sustainable Funding



Understanding Costs



Sustainable Funding

- Operating Revenue
 - Farebox Recovery
 - Parking or other user fees
- Ancillary Revenues
 - Advertising/Concessions
- Public Subsidy
 - Local General fund
 - Dedicated Tax (sales, property, parking, etc)
 - Transportation District
- Public/Private Partnerships
- Private Funding



Performance Measures



Passenger Performance Measures

- Safe
- Reliable
- On-Time
- Cost Effective
- Experience or Satisfaction

Organizational Performance Measures

- Number of passengers carried
- Meeting financial goals




New Vessel Technologies



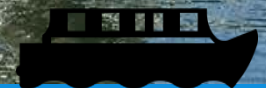
Environmentally Responsible Design

- Vessel Operating Goals
 - Minimize energy use
 - Minimize air emissions and discharge
- Vessel Construction Goals
 - Minimize drag
 - Maximize use of recycled and renewable material
 - Minimize waste and scrap
- New Tech
 - Design software
 - Diesel /Electric
 - Hydrogen Fuel Cell



A photograph of a modern waterfront development. On the left, a building with a glass facade and a green metal upper section is visible. A person in a colorful shirt and red pants walks on a concrete dock. A white metal pedestrian bridge with railings extends from the dock towards the right. In the background, several tall glass skyscrapers are reflected in the water. The sky is clear and blue.

Break-out Session 2: Your Criteria for Prioritizing Sites and Routes



Past Board Presentations





Water Transportation Advisory Council

March 9th, 2017



Key facts and details

- Water Transportation Advisory Council was created by statute in 2016.
- Chaired by the Secretary of Transportation
 - staffed by MassDOT and the MBTA
- Membership is proscribed in statute, though it may be expanded. Currently includes:
 - Co-Chairs of the Joint Committee on Transportation.
 - Several Mayors and Town Managers from coastal communities
 - Massport, Seaport Economic Council...
 - Boston Harbor Cruises & Steam Ship Authority
 - Boston Harbor Now
- Authority: Advisory to the Secretary of Transportation



9/13/2017

31



Water Transportation Advisory Council Overview

On July 31st, 2016 the Legislature enacted HB 4450, creating the Water Transportation Advisory Council

- Create a vision for a comprehensive system of water transportation services to serve the commonwealth's ferry passengers, including commuters and tourists
- Identify an overall vision for the ferry system to enable the transportation of people, goods and vehicles by water
- Develop a series of goals and objectives to support the overall vision
- Identify implementable policies and improvements including, but not limited to, investment of public funds to support operating and capital expenses for existing and new ferry services
- Support the state agencies and independent authorities responsible for planning, designing, constructing, operating, funding and maintaining the ferry transportation infrastructure facilities
- Meet at least quarterly and report on activities every 6 months



9/13/2017

Key Element of Work Plan

- Review and give feedback BostonHarborNow Sustainable Water Transportation Study*
- Business cases presentations for current and past services
- Infrastructure/Systems tours
- Geographic Working Groups to explore connectivity and coordination options. Including:
 - Land side connectivity
 - Walking, biking, & transit
 - Parking best practice
 - Economic development & supportive land use

*more information on next slide



9/13/2017

Summary: “A Comprehensive and Integrated Water Transportation System Study for Boston Harbor”

- Boston Harbor Now to solicit and manage consultants on behalf of principal clients MassDOT and Massport plus a consortium of public and private funders
- Goals 1) Compile baseline site profiles for planning of passenger ferry services
2) Comprehensive business plans for up to three **financially sustainable services** that can be launched in 1-5 years
- RFP to be issued in March of 2017 and 8-10 months to complete work
- Geography is Gloucester to Provincetown, inner and outer harbor up to dams
- Also includes National Park Service funded *Transportation Vision, Strategy and Action Plan for the Boston Harbor Islands National and State Park*



9/13/2017

Study: Project Deliverables

- Criteria defined and consistent data compiled for +/- 25 potential passenger ferry sites harbor wide. Can serve as a baseline for ongoing evaluation and planning if maintained and updated
- Clear and transparent methodology for evaluating which sites can support financially sustainable services and in what time frame
- Business plans for up to three new or expanded and financially sustainable services that could be launched in next 1-5 years



9/13/2017

Key MassDOT & MBTA Staff

Astrid Glynn – MassDOT Rail & Transit Administer

John Ray – Assistant General Manager Commuter Rail Services

Mimi Lannin – Deputy Director of Finance Rail & Water Transportation

QUESTIONS?



9/13/2017

36



Appendix



9/13/2017

Water Transportation Advisory Council Members

- Secretary of Transportation (Chair)
- General Manager of the MBTA
- House Chair on Joint Committee on Transportation
- Senate Chair on Joint Committee on Transportation
- President of Boston Harbor Now
- Officer of Boston Harbor Now
- Executive Director of Seaport Economic Council
- General Manager of Woods Hole, Martha's Vineyard and Nantucket Steamship Authority
- CEO of Massport
- Representatives of private ferry operations
- Mayors of Boston, Lynn, New Bedford, Quincy and Salem
- Town Managers of Hingham, Hull, Provincetown and Winthrop



9/13/2017

Water Transportation Advisory Council Members

- Stephanie Pollack – Secretary of Transportation and MassDOT CEO
- Brian Shortsleeve – MBTA Acting General Manager
- Senator Thomas McGee – Senate Chair on Joint Committee on Transportation
- Representative William Strauss – House Chair on Joint Committee on Transportation
- Cathy Abbott – Boston Harbor Now
- Philip Griffiths – Boston Harbor Now
- Caroline Kirk – Seaport Economic Council
- Ellen Cebula - Seaport Economic Council
- Wayne Lamson – Steamship Authority
- Tom Glynn – MassPort
- Alison Nolan – Boston Harbor Cruises
- Martin Walsh - City of Boston
- Judith Kennedy – City of Lynn
- Jon Mitchell – City of New Bedford,
- Thomas Koch City of Quincy
- Kim Driscoll – City of Salem;
- Ted Alexiades – Town of Hingham
- Philip Lemnios – Town of Hull
- David Panagore – Town of Provincetown
- James McKenna – Town of Winthrop
- Carlo DeMaria - Everett
- James Folk - Convention Center Authority



9/13/2017

Calendar (DRAFT)

February 23 10am to 12pm	<ul style="list-style-type: none">• Work Plan/Schedule Adoption• Winthrop Case Study• Final update on Boston Harbor Now Study• Set Working Groups
May 25 10am to 2pm	<ul style="list-style-type: none">• Boston Harbor Infrastructure & Ferry Locations Tour and meeting• Quincy Case Study
September 14 10am to 12pm	<ul style="list-style-type: none">• Lynn/Salem Case Study• Understanding the work of the SEC – Presentation by Ellen Cebula• Parking best practices
December 15 10am to 12pm	<ul style="list-style-type: none">• TBD



9/13/2017



Are you on board?

A Comprehensive and Integrated Water Transportation System Study for Boston Harbor

- Criteria defined and consistent data compiled for +/- 25 potential passenger ferry sites harbor wide. Can serve as a baseline for ongoing evaluation and planning if maintained and updated
- Clear and transparent methodology for evaluating which sites can support financially sustainable services and in what time frame
- Business plans for up to three new or expanded and financially sustainable services that could be launched in next 1-5 years
- From NPS study a framework for next Harbor Islands ferry contract (2019)



Are you on board?

A Comprehensive and Integrated Water Transportation System Study for Boston Harbor

Study Approach

- Establish a comprehensive list of potential passenger ferry sites harbor-wide, anticipate +/- 25 sites
- Compile site profiles, including potential ridership demand, infrastructure, local development/zoning/planning activities and intermodal connectivity
- Evaluate each site for likelihood of supporting financially responsible service in 1-5 years and 5-10 years
- Select +/- 10 promising sites for ridership demand modelling
- Select +/-3 sites or networks for detailed market and feasibility analysis
- Develop comprehensive business plan and financial sustainability analysis



Are you on board?

A Comprehensive and Integrated Water Transportation System Study for Boston Harbor

Project Implementation Schedule

- January/February 2017 - Boston Harbor Now and, MassDOT finalizing consultant scope of services and confirming funding commitments
- March 2017 – anticipated release of RFP
- Anticipate 8-10 months for work once contract awarded