Welcome Aboard!

County Planners Association
July 16, 2021
Ferries in Context

- Key component of national transportation systems
- Trans-Hudson: commuters and recreational users
- Service- private operators, NYC DOT, Port Authority, NYC EDC
- Studies- NYC EDC, Port Authority, Regional Plan Association, NJTPA
- Expansion
Why Expand Ferry Service for Hudson County?

- Dense population
- Waterfront access
- Congested roadways and transit systems
- Exploring transportation options

With all our water access, passenger ferry service offers a great new potential!
Study Goal

- Examine the potential for new ferry landings at 6 proposed locations:
  - Bayfront Redevelopment area of Jersey City
  - Bayonne’s Newark Bay waterfront
  - south Harrison
  - Hoboken
  - South Kearny
  - West New York
Study Process

- Outreach and Partnerships
- Data Collection
- Site Analysis
- Data Assessment and Analysis
- Travel Demand Modeling
- Financial Analysis
- Identify Next Steps
Public Outreach (virtual)
June 2020-March 2021

- Technical Advisory Committee (3)
- Roundtable Discussions:
  - Regional Governments
  - Local Private Ferry Operators
  - National Transportation Agencies
- Virtual Public Meetings (5 meetings, 144 attendees)
- Newsletter (3 newsletters, 107 signups)
- Photo Contest (41 photos, 1,547 votes)
- Online Survey (1,083 respondents)
Community Concerns

- Similar feedback heard throughout all outreach:
  - Cost is critical; keep service affordable for all
  - Convenience and access
  - Multimodal connections
  - Focus on underserved areas
  - Alternative ferry destinations
Data Collection – Physical Conditions

- Water Depths, Currents, Tides
- Bridge Heights
- Environmental Conditions
- Allowable Vessel Speeds
- Potential Vessel Specifications
Data Collection – Demographics

Preliminary Catchment Areas Data

- Resident Characteristics
  - Census tract data for a 10-15 minutes drive distance around proposed ferry landing
  - Population, environmental justice population factors, employment, and income
- Expected Growth
  - Census ACS
- Daily Trip Patterns
  - NJRTM-E and CTPP
Data Collection - Best Practices

Case Studies

NYC Ferry

NYC Ferry Routes/Services
- Astoria
- East River
- Rockaway
- Soundview
- South Brooklyn
- Shuttle Service
  - Governors Island
  - Summer Weekend Service

Other Ferry Services
- Staten Island Ferry Service Area

Map as of 03/22/20

MBTA Ferry

MBTA Ferry Route Map

HUDSON COUNTY
FERRY SERVICE EXPANSION STUDY
Route Selection

Hudson River
- Existing service
- Reduce costs, expand destinations
- New routes under evaluation

Newark Bay
- New concept
- Multi-stop routes
- Future inter-county connection potential
- Underserved areas
- Environmental Justice population factors
- Study goals alignment
1) **Base Route:**
South Harrison - South Kearny - Bayfront - West Bayonne

2) **‘Three Stops Only’:**
South Kearny – Bayfront – West Bayonne

3) **Newark Route:**
Newark – South Kearny – Bayfront – West Bayonne

### ROUTE TRAVEL TIMES

<table>
<thead>
<tr>
<th>Route</th>
<th>One-way (incl. dwell times)</th>
<th>Round trip (incl. dwell times)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Route</td>
<td>50 minutes</td>
<td>1 hour 40 minutes</td>
</tr>
<tr>
<td>Three Stops Only</td>
<td>27 minutes</td>
<td>54 minutes</td>
</tr>
<tr>
<td>Newark Route</td>
<td>50 minutes</td>
<td>1 hour 40 minutes</td>
</tr>
</tbody>
</table>

*assumes 2 vessels
## Potential Demand Growth

<table>
<thead>
<tr>
<th>Average Weekday Ridership By Route</th>
<th>Base Route</th>
<th>Three Stops Only Route</th>
<th>Newark Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newark</td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>South Harrison</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Kearny</td>
<td>17</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Bayfront</td>
<td>75</td>
<td>69</td>
<td>65</td>
</tr>
<tr>
<td>Bayonne</td>
<td>78</td>
<td>70</td>
<td>68</td>
</tr>
<tr>
<td><strong>Total Route Ridership</strong></td>
<td><strong>187</strong></td>
<td><strong>141</strong></td>
<td><strong>142</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Average Weekday Ridership By Route – Future Development Impact</th>
<th>Base Demand</th>
<th>Planned Developments*</th>
<th>Total Ridership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Demand</td>
<td>187</td>
<td>529</td>
<td>717</td>
</tr>
<tr>
<td>Planned Developments*</td>
<td>141</td>
<td>544</td>
<td>685</td>
</tr>
<tr>
<td><strong>Total Ridership</strong></td>
<td><strong>142</strong></td>
<td><strong>497</strong></td>
<td><strong>639</strong></td>
</tr>
</tbody>
</table>

*Assumes $7 fare, three vessels. Estimated completion of developments between 2021-2066
Demand Analysis: Results

- How many daily riders needed?
  - 1,000 riders/day to be financially self-supporting

<table>
<thead>
<tr>
<th>Three Concept Routes</th>
<th>Base Route</th>
<th>Three Stops</th>
<th>Newark Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Weekday Ridership By Route</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Route Ridership</td>
<td>187</td>
<td>141</td>
<td>142</td>
</tr>
<tr>
<td>Average Weekday Ridership with Future Development Impact</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Ridership</td>
<td>717</td>
<td>685</td>
<td>639</td>
</tr>
</tbody>
</table>
## Financial Analysis

### OPERATIONS

<table>
<thead>
<tr>
<th></th>
<th>Base Route</th>
<th>3 Stops Only</th>
<th>Newark</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Revenue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fare</td>
<td>$855k</td>
<td>$710k</td>
<td>$650k</td>
</tr>
<tr>
<td>Other Operating</td>
<td>$8.5k</td>
<td>$7.1k</td>
<td>$6.5k</td>
</tr>
<tr>
<td><strong>Total Operating Revenue</strong></td>
<td>$866k</td>
<td>$720k</td>
<td>$655k</td>
</tr>
<tr>
<td><strong>Operating Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vessel (Crew Labor, Fuel, Maintenance, Insurance)</td>
<td>$2.1M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shoreside (Insurance, Staff, Facility, Management, and Support)</td>
<td>$1.1M - $1.4M</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Operating Expenditure</strong></td>
<td>$3.5M</td>
<td>$3.2M</td>
<td>$3.5M</td>
</tr>
<tr>
<td><strong>Net Operating Income</strong></td>
<td>($2.6M)</td>
<td>($2.5M)</td>
<td>($2.8M)</td>
</tr>
</tbody>
</table>

Table: One Year Pro Forma - without future developments (2020)
## Financial Analysis

### OPERATIONS

<table>
<thead>
<tr>
<th></th>
<th>Base Route</th>
<th>3 Stops Only</th>
<th>Newark</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Revenue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fare</td>
<td>$1,732k</td>
<td>$1,588k</td>
<td>$1,525k</td>
</tr>
<tr>
<td>Other Operating</td>
<td>$17.3k</td>
<td>$15.9k</td>
<td>$15.2k</td>
</tr>
<tr>
<td><strong>Total Operating Revenue</strong></td>
<td>$1,749k</td>
<td>$1,604k</td>
<td>$1,541k</td>
</tr>
<tr>
<td><strong>Operating Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vessel (Crew Labor, Fuel, Maintenance, Insurance)</td>
<td>$2.1M</td>
<td>$2.1M</td>
<td>$2.1M</td>
</tr>
<tr>
<td>Shoreside (Insurance, Staff, Facility, Management, and Support)</td>
<td>$1.1M - $1.4M</td>
<td>$1.1M - $1.4M</td>
<td>$1.1M - $1.4M</td>
</tr>
<tr>
<td><strong>Total Operating Expenditure</strong></td>
<td>$3.5M</td>
<td>$3.2M</td>
<td>$3.5M</td>
</tr>
<tr>
<td><strong>Net Operating Income</strong></td>
<td>($1.7M)</td>
<td>($1.5M)</td>
<td>($1.9M)</td>
</tr>
</tbody>
</table>

Table: One Year Pro Forma - with future developments (2020)
Key Findings

- Minor infrastructure, navigational challenges
- Interest exists
- Access- multi-modal connections essential
- Financial sustainability dependent on increased ridership demand or subsidies
- New technologies
- Potential transportation connections
- Planned future development growth
Potential Funding Sources and Partnerships

- Public Subsidies
- Private Subsidies
- Public/Private Partnerships
- Grants
- Increased revenue
Hudson County Ferry Study Schedule

Initial stakeholder outreach
- June 2020

Create Technical Advisory Committee
- Aug 2020 – March 2021: outreach events

Study Launch

Public Outreach Launch

Data Collection/Analysis

Draft Study Report

Public Comment Period

Final Report Release
- June 2021

Ongoing virtual outreach events, survey, stakeholder discussions, and TAC meetings
Thank You!

Contact:

Kevin Force, Project Manager
kforce@hcnj.us

hudcoferrystudy.com

hudsoncountyferry@gmail.com
Study Objectives

- Assess current ridership, future market demand, and price elasticity of demand
- Analyze proposed routes within the context of transit services and multi-modal transportation corridors
- Explore all feasible options to grant all residents access to the waterfront and to ferry transportation, with minimum possible physical and economic barriers
- Identify potential constraints and restrict impacts to environment
- Identify potential public and private partners and funding sources
- Engage in local and regional coordination
- Develop case study profiles of comparable ferry service systems
- Outline next steps toward implementation for identified potential ferry service.
Next Steps - Implementation

• Secure funding
• Establish service characteristics
• Construct ferry landings
• Secure vessel(s)

• Secure a Homeport for vessel maintenance and fueling.
• Procure experienced vessel operator
• Promote ferry service with a multi-faceted marketing plan