



Northern Virginia Regional Commission

Market Analysis for Commuter Ferry Service on the Occoquan, Potomac, & Anacostia Rivers Final Report

Alexandria Waterfront Commission

February 18, 2014

Prepared by:



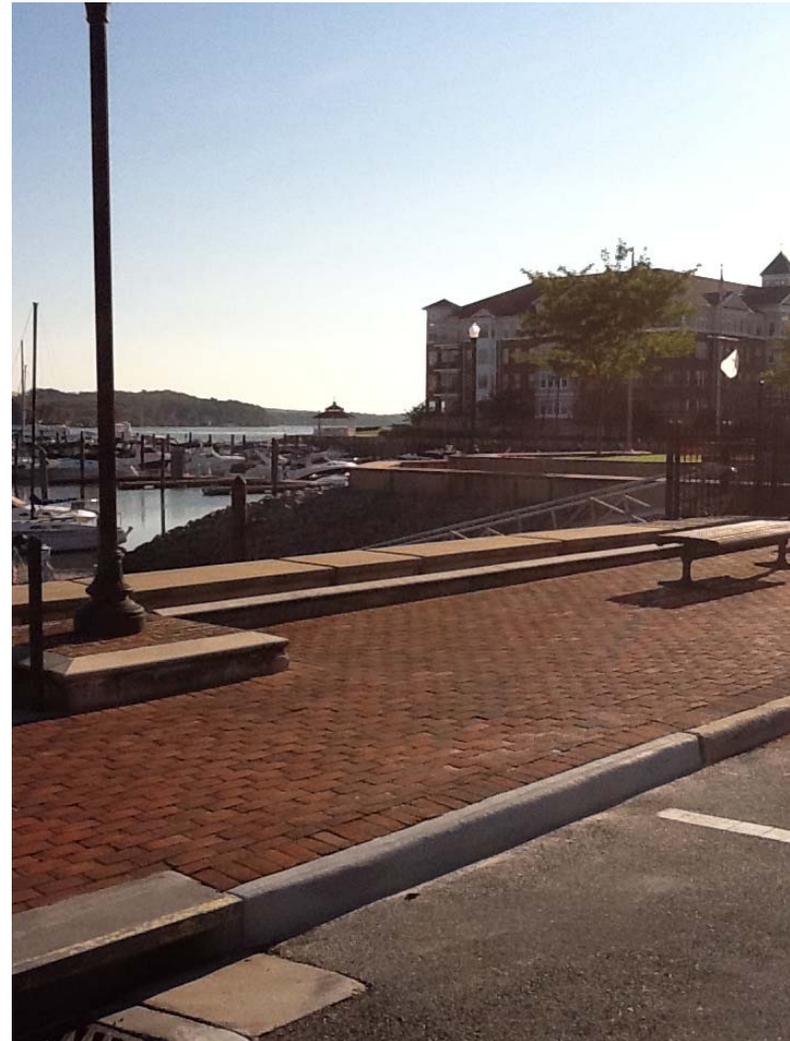
In association with:

- Foursquare Integrated Transportation Planning
- Gallop Corporation
- WB&A Market Research
- CJI Research
- Shapiro Transportation Consulting
- HR&A Advisors

Today's Meeting



- Project Overview
- Market Feasibility of Top Corridors
- Implementation Steps



Project Stakeholders



- Study conducted by the Northern Virginia Regional Commission
- With financial commitments from:
 - Town of Indian Head, Maryland
 - Charles County, Maryland, Economic Development
 - City of Alexandria, Virginia
 - Town of Quantico, Virginia
 - Fairfax County Board of Supervisors
 - Prince William Board of County Supervisors
 - Office of Intermodal Planning and Investment, Office of Virginia Secretary of Transportation
 - District of Columbia Department of



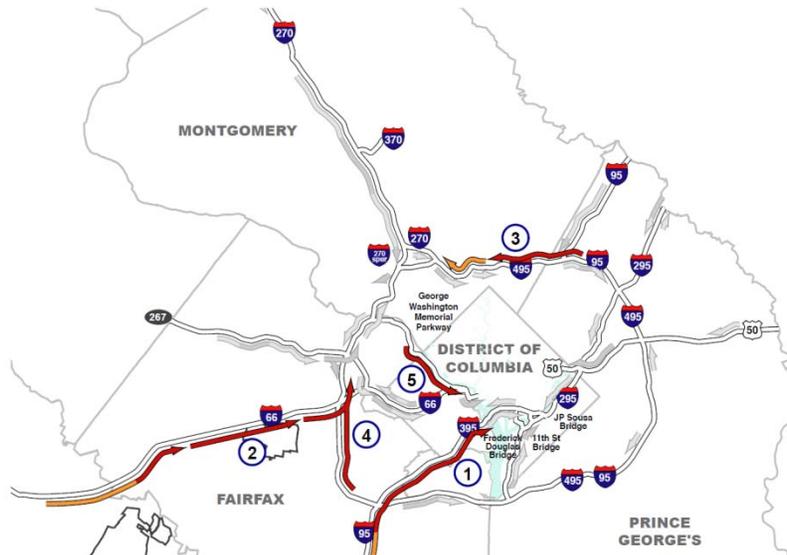
Summary of Ferry Activity in Other Places



Context of Passenger Ferries



Longest Delay Corridors- Morning Peak Period (2011)



CRAIN'S
NEW YORK BUSINESS

Article can be found at <http://www.crainsnewyork.com/article/20130217/OPINION/302179987>

Roland Lewis: Ferries are NY's forgotten transit link

Sandy shows how vital they are to the region.

Roland Lewis

Published: February 17, 2013 - 5:59 am

If New Yorkers ever needed a reminder that we are island people, Superstorm Sandy gave us an impossible-to-ignore wake-up call. And what did we wake up to, soon after the storm? Ferries crisscrossing our waterways on their usual routes but jammed with commuters. With roads congested and tunnels flooded, our resilient ferry system gave us the ability to get around, just as it has in other emergencies.

September 15, 2009



Prince William County
Department of Transportation



Potomac River Commuter Ferry Service Study & Route Proving Exercise

FINAL REPORT

Submitted By:

Greenhorn & O'Mara, Inc.
Potomac Riverboat Company
Straughan Environmental Services, Inc.

N NELSON
NYGAARD

Stakeholder Interviews Highlights



■ Opportunities

- Jurisdictions focused on multimodal solutions that add options
- Economy - Transportation is the basic necessity needed to grow the region's jobs and housing markets.
- Numerous waterfront developments (Yards Park, The Wharf, etc.)
- Crossing the river - no bridges between Woodrow Wilson and Nice
- Potomac Bridges aging and/or at capacity in peaks

■ Constraints

- Waterfront property not developed for ferries. Much of it protected by military or NPS
- Public perceptions - ferry travel not in public vernacular
- Landside access and intermodal connections are crucial but do not exist
- Commuter destinations decentralizing

■ Policy Issues

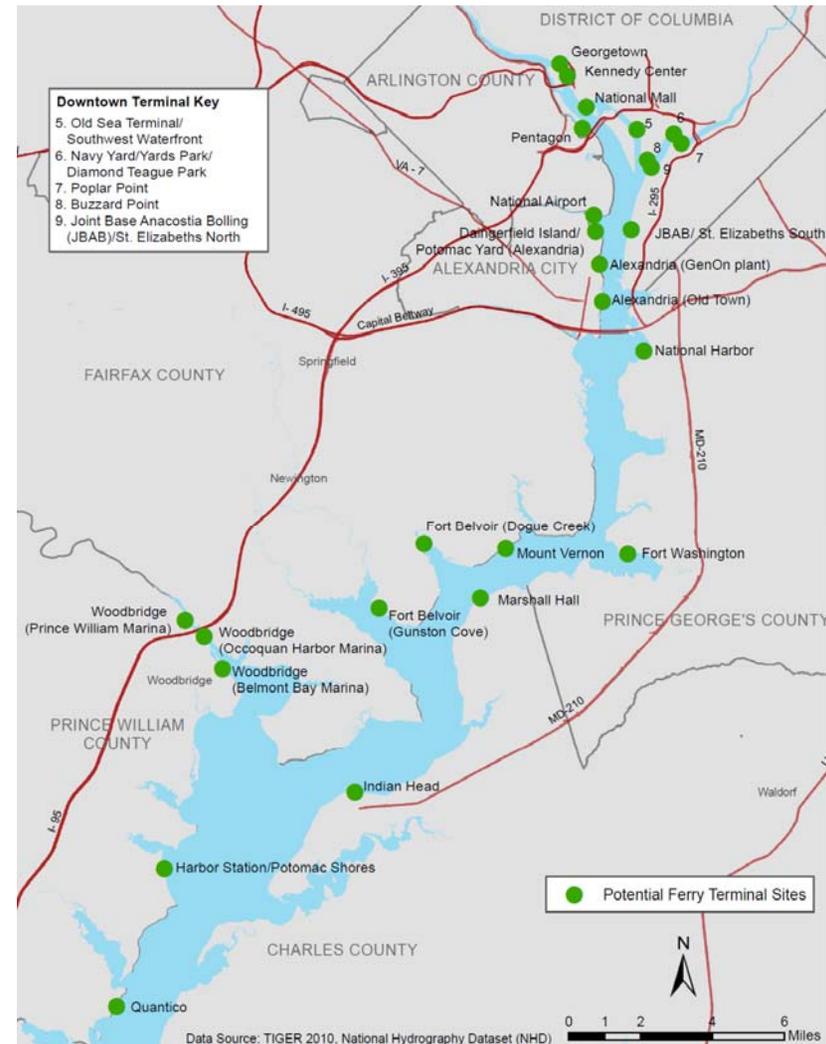
- Funding - not enough transportation funding in the region today

- Focus - have many other critical transportation needs that require focus of policy makers, does adding another

Technical Analysis



- Started with 260 different terminal combinations
- Initial assessment of market and terminal locations, 13 of 26 terminals eliminated, reduced to 67 corridors
- Corridors evaluated based on market size and travel time saving



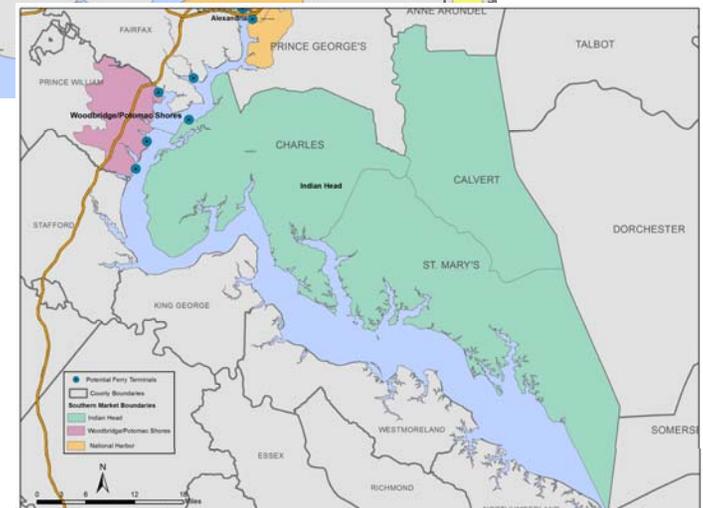
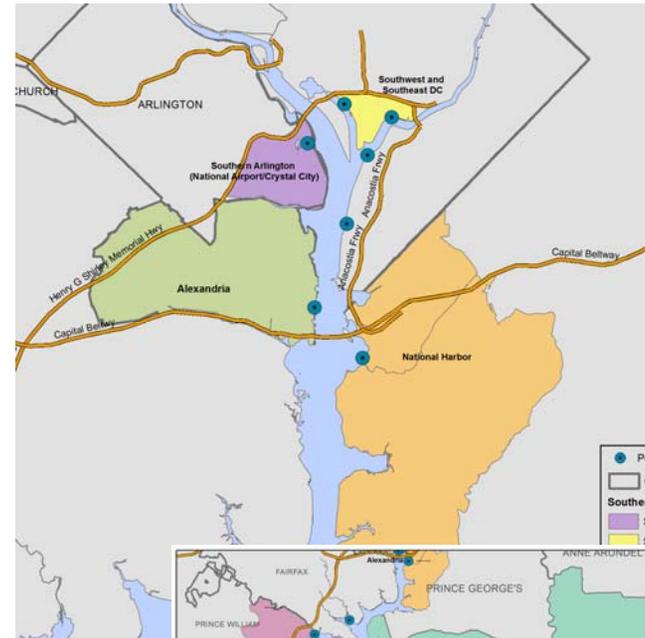
Market Areas Identified For Study



- SE and SW Washington, DC
- Alexandria
- Eastern Prince William County
- National Airport/Crystal City
- Southern Maryland
- National Harbor

Conducted household telephone survey - 1200 interviews

WMCOG Model to quantify travel markets

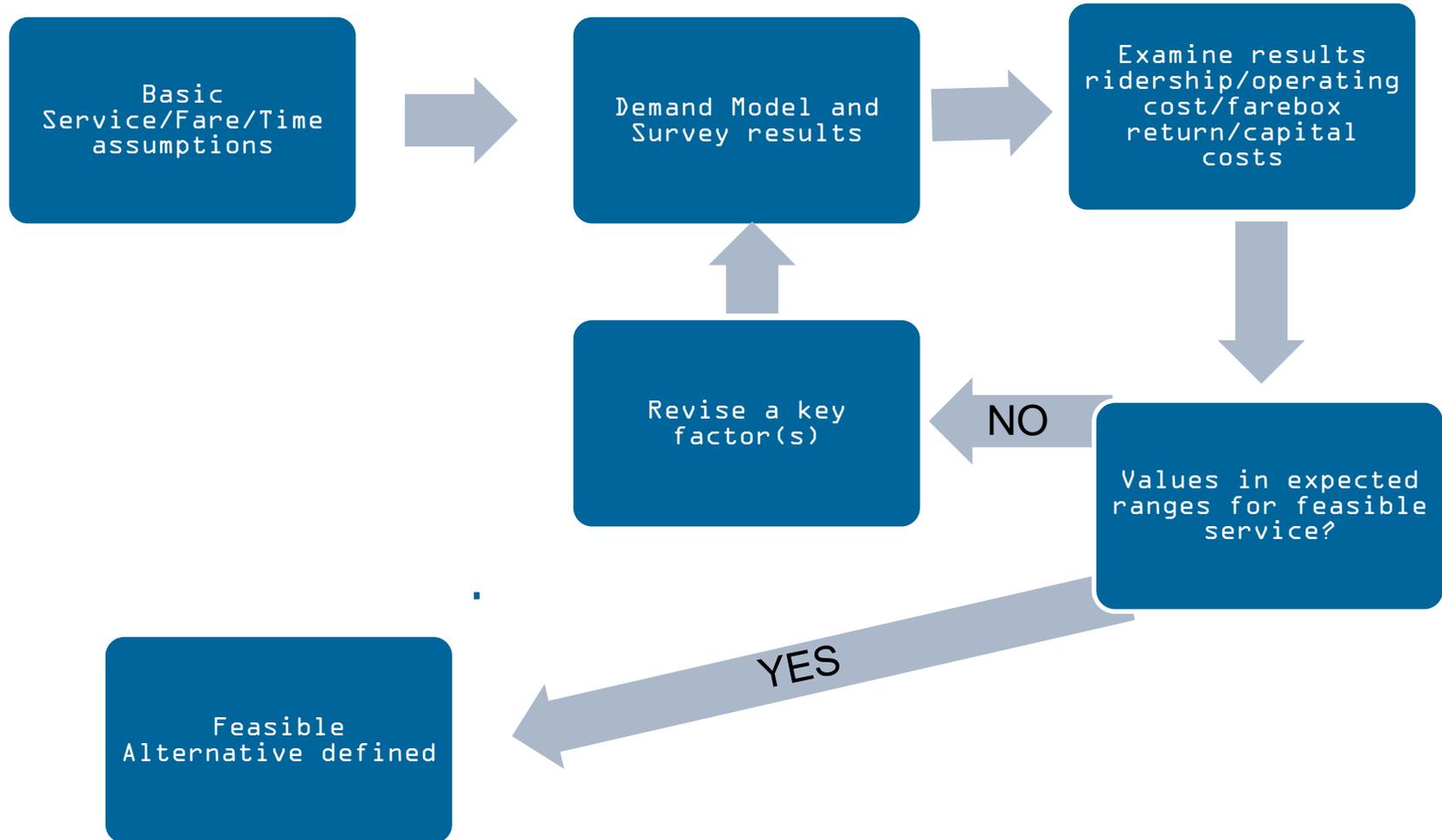


Household Survey Highlights



- 53% of area travelers who currently travel parallel to a potential ferry route do so to get to work
- Of those travelers who make their way parallel to a ferry route 60% are driving alone
- Major concern of these drivers - traffic, followed by total travel time and parking cost
- 30% of people surveyed are likely to try a ferry, but familiarity with mode is an issue for many
- People making their current trip by car are more likely to try a ferry than those who commute by an existing transit mode
- Potential ferry terminals mentioned

Demand and Service Model Cycle



Demand Modeling



- Based on Travel Behavior from WMCOG model as projected for 2018
- Market areas analyzed were constrained based on experience of other successful ferry systems
- Access was projected based on walk and transit access, not park and ride, on a door to door basis.

Example: Market for Alexandria was modeled with demand characteristics very similar to the King Street (Old Town) Metro Station.

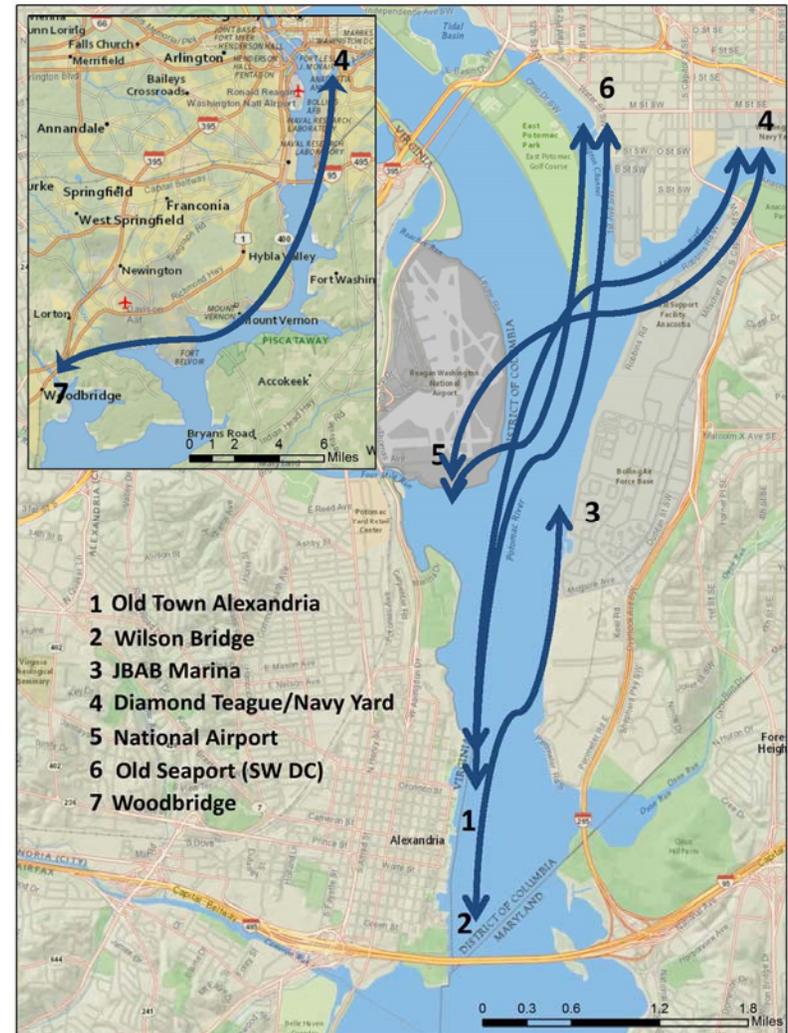
- Modeled differing levels of service and different levels of fare

Results:

Corridors with Sustainable Markets



- Old Town Alexandria to and from Southwest, DC and Southeast, DC
- National Airport to Southwest, DC and Southeast, DC
- Alexandria to JBAB



Alexandria/National/DC



What would service look like?

- Smaller ferries, around 50 passengers
- Frequent service - departures every 15 minutes
- Service operating approximately 5 am to 9 pm, seven days per week.
- Fares might vary based on how service is provided, but in the range of \$8 to \$10 per trip



- Ridership in range of 1,000 to 2,000 +

Alexandria –JBAB/DHS



- Service for work trips -- peak weekday
- Trips every 15 to 20 minutes in peak
- Fare based on a number of factors including degree of participation from sponsoring agencies, US Navy, US Air Force, DIA, DHS, USCG
- Closed system, only people with security clearance would be able to ride
- Ridership in range of 300 to 500 trips per day
- JBAB/DHS ready to provide terminal and shore side circulation on base

Summary



- The shorter connections between Alexandria and DC and National Airport and DC have enough market potential that they could be pursued.
- With some amount of public subsidy to establish adequate shore-side facilities and assist in service start-up, these are very likely long-term, viable commercial markets that could add depth to the greater Metropolitan DC transportation options.
- These services would likely be expanded further to offer circulation to National Harbor as well as along the DC waterfront, especially to Georgetown,

Summary (cont.)



- Long distance services that parallel VRE and I-95 might make sense, long-term, as capacity supplements or as construction mitigation
- Long distance commuter services must be paired with other viable markets to make operations financially viable
- Longer distance routes would have a much better probability of success if build from a solid base of successful shorter distance commuter operations

Steps to Implementation



- Roll out/implementation plan
 - Secure terminal locations and arrangements
 - Environmental analysis and documentation
 - Identify how service is delivered and governed
 - Identify shore side connectivity solutions

- Create funding stream
 - Funding/construction for facility and connectivity gaps at potential terminal sites
 - Funding for start up of service

Sustainable corridors are commercially viable, however, this is a new concept and needs spark to get it moving.

QUESTIONS?



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Stakeholder Interviews



- September and October, 2012 completed 17 interviews with more than 80 individuals:
 - Washington, DC, -- Council and DDOT
 - Southern Maryland counties: Prince George's, Charles, Tri-County
 - Northern Virginia counties: Arlington, Fairfax, Prince William
 - All major military installations
 - Towns of Indian Head and Quantico
 - City of Alexandria
 - Office of Intermodal Planning and Investment, Office of Virginia Secretary of Transportation, Office of Public Private Partnerships, Department of Rail and Public Transportation.
 - PRTC, WMATA, National Airport, National Harbor
 - Federal Agencies - DHS, MARAD, National Park Service, National Capital Planning Commission, General Services Administration
 - Real Estate Developers, Navy Yard, Buzzard's Point, The Wharf
 - Non-profits like Passenger Vessel Association,