



## Northern Virginia Regional Commission

### NVRC M495 Marine Highway Ferry Summit #3

**June 4, 2018**

**Wharf Dockmaster Building – 101 District Square SW Washington, DC**

Welcome by Phil Mendelson, DC Council Chairman  
Moderator – Frank Principi, Woodbridge District Supervisor  
Presentation by Tim Payne, Nelson Nygaard, Consultant



The fourth M495 Ferry Summit drew more than 75 people to the Dockmaster Building at the Wharf in Washington, DC. Participants, including elected officials, transportation agencies, private businesses and citizens, discussed the results of the Infrastructure Gap Analysis study while ferries traveled to and from the Wharf along the Potomac River in the background. This study confirmed that there is a market to support commuter fast ferry from Woodbridge to Joint Base Anacostia-

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Bolling, and other destinations in DC. The study's lead consultant told the crowd that with a public-private partnership in place, commuting by ferry from Woodbridge could be a reality in 2-3 years.

**Read Full Story:** [D.C. might be large enough to support commuter ferries, says study – Washington Times](#)

Introduction by Frank Principi – Mr. Principi provided an overview of why a fast ferry could offer a solution to the I-95/395 traffic congestion. The current contract has gathered stakeholder groups to discuss the possibility and support for the M495 Marine Highway initiative from Woodbridge into DC. Although there is no funding to fully implement, there have been various studies to learn more. Today's audience includes federal, state and local officials. All of them together need to work out how to share the risks to make this happen.

Welcome by Chairman Phil Mendelson – The Chairman stated that “ferry service makes sense if it can help with congestion as a way for people to get into the District”. The Chairman is supportive of the effort to ensure the proposed system is viable so the private sector companies can run the operations successfully. The Council of District of Columbia has been interested in the study for some time and wants to support whatever makes most sense, and is interested in how the community reacts to the idea.



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Infrastructure Gap Analysis by Tim Payne, Principal, Nelson Nygaard.

What will it take to get a ferry system operating in the DMV Region? We need two terminals to make a ferry service, so the study's intent is to analyze what this area has available. However, we are looking at a very specific market – Woodbridge to SE/SW District of Columbia. While there might be even greater demand in other areas, there is no infrastructure to make that possible. So that's why we are looking at Woodbridge, where there are marina's, and to other points along the Potomac and Anacostia Rivers as well as National Harbor and Georgetown since there is already tourist market in place. Research has shown that public-private partnership model has been demonstrated to work best in which, the public-sector would be responsible for managing the terminals (providing land, funding to build infrastructure) and the private sector would own and operate the vessels. Having a terminal is not the only critical aspect of the service, but where the ferry drops you off needs to be walkable to employment centers and/ or to alternative transportation such as the metro or bus. The Potomac River has navigability issues due to being a tidal basin and water depth could be an issue. The study examined a wide range of locations to evaluate the infrastructure gaps of the various sites. A federal grant has been awarded, but it comes with a lot of strings attached. Not just a matter of whether there is interest, but how many and is it financially feasible? For the commuter ferry to be feasible there needs to be a market. The study examined current commuting patterns. For example, the vast majority of Woodbridge commuters are driving to locations such as Joint Base Anacostia Bolling (JBAB), Navy Yard, and the Department of Homeland Security as there are not alternative transit options readily available. The benefits for a ferry system from this location would include a more comfortable and reliable ride on a ferry for commuters because there is enough room for them to work while riding and there would be a time savings.





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### Questions & Answers

The following is a summary of the Question and Answer session at the summit.

***Q. How much money needs to be raised to finance the first route?***

A. Funds would be raised from both the private and public sectors. The studies have shown that there is a viable market for commuter ferry service between Woodbridge and D.C., and supports the private sector making a return on investments on the commuter service. The estimated cost of the vessels is \$5M (used) and \$10 million (new). As envisioned by the stakeholder group, the public sector (local, state, and/or federal government) would be requested to invest in the shoreside infrastructure, e.g., docks, passenger terminals, lighting, parking (where required). The one-time capital costs would vary based on the infrastructure already in place at the location. A fast ferry dock is estimated at \$500,000 while a more extensive passenger terminal station could price at \$2M. The total land side investment would range from \$3 million to \$5 million.

***Q. Would daily fast ferry operations need to be subsidized?***

A. It is ultimately dependent on the market whether a public subsidy would be required for service between Woodbridge and the Department of Homeland Security (Saint Elizabeth Campus) and Joint Base Anacostia Bolling (JBAB). This study concluded that there is a strong business case to move forward with service between these three destinations. Prior studies have concluded that a public subsidy is not required for shorter routes. In fact, Entertainment Cruises' four new fast ferry vessels are currently operating between the Wharf, National Harbor, Georgetown, and Old Town Alexandria without a subsidy.

The General Services Administration has informed the stakeholder group that the existing federal government commuter benefit would be authorized for use on-board fast ferries. The Federal Transit Benefit offers federal government employees a \$255 a month travel subsidy for transportation and has confirmed that employees who use fast ferry would qualify for this subsidy. Other subsidies will also be explored as the market for ferry service is price sensitive. The target audience for the commuter ferry system is single occupancy vehicle commuters who are not as aware as the cost of their commute as those who use public transportation, and tend to underestimate the costs. In order to engage this market, it will be important to make use of available subsidies to keep the price attractive.

***Q. When will the Potomac Commuter Fast Ferry Service be operational?***

A. The launch of a commuter fast ferry service could be accomplished within 5 years. The construction of vessels is estimated at one year. If everything were to line up perfectly, it could take as little as two years, but there are still many hurdles to overcome. With the conclusion of this study, efforts are now focused on establishing a small stakeholder group of public and private organizations that will partner for the Woodbridge-DHS-JBAB service. With these two steps completed, the launch of the service



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could be done quickly. This approach is designed to ensure long-term sustainability of the program. A key factor in this timetable is whether the stakeholder group will draw down an existing grant award of \$4M from the Federal Transit Administration and whether FTA will require an Environmental Impact Statement (EIS).

***Q. Does the Infrastructure Gap Analysis Study take into account future development and future transportation projects along the I-95 corridor?***

A. The study is based on current conditions, as the objective is to focus on the desired timeframe for implementing the service. In Prince William County there is constant debate about whether or not future projections should be included given that they have chosen to invest in buses and railroads. Future development will increase the need for more transportation options and past studies have shown that the ferry will supplement, not compete with, other mass transit services. Fast ferry service from Woodbridge to DHS and JBAB does not compete with existing VRE and PRTC service, as those systems do not offer service to these locations.

A survey of households in the under 15 minute and 15-30 minute vicinity of the proposed locations reveal that the primary market is not currently mass transit users, but rather single occupancy vehicle users that have not identified a mass transit service that works for them. This suggests that future expansion of current transit operations will not affect the market for commuter ferry service.

***Q. There are several recreational uses of the Potomac River, including boaters and kayakers. Will the ferry service have a negative impact on the recreational use of the waterway?***

A. There are multiple areas across the country where commercial and recreational activities coexist in the waterway. This includes the New York Harbor, Seattle Waterfront, and San Francisco Bay. Ferry service and recreational activities are regulated and monitored by the U.S. Coast Guard to prevent interference with one another and allow waterways to be utilized for different purposes. Safety will also be the number one priority for all involved.

***Q. The study bases the travel time of the ferry between Woodbridge, DHS, and JBAB on a speed of 35 knots. Is this realistic?***

A. The majority of the route is open channel where the ferry can travel at speeds greater than 35 knots. In the "no wake" zones the ferry will need to travel at slower speeds. 35 knots is an average speed used for planning purposes and is realistic given current conditions. Depending on the location of the docks, the travel time could go up but this is not anticipated to have a large impact on the market. The single most important benefit of commuting by ferry over single occupancy vehicles is reliability. The travel time of a ferry commute is consistent, whereas travel time on the interstate can vary considerably based on traffic conditions.



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***Q. The wake caused by ferries can be problematic as they cause disruptions for residents living and using the water, and can cause erosion. How will the wake and wash of the vessels be mitigated?***

A. Wake and wash is a concern on the part of ferry operators as it is a liability issue. Newer vessels are now using technology that allows the vessel to travel at high speeds without causing a wake to mitigate their impact without affecting service. The Prince William ferry study demonstrated a wake and wash of three inches. Boaters are just as concerned by the underwater energy generated by ferries, particularly in narrow channels. This matter will continue to be examined as the project moves forward.

***Q. Will you be requesting changes to the current “no wake” zones?***

A. The stakeholder group has no plans to seek waivers from no wake zones on the Occoquan River, under the Woodrow Wilson Bridge, or through Old Town Alexandria. The stakeholder group intends to use vessel design opportunities and may consider wake attenuator technology to manage wake concerns.

***Q. The on-going studies have been funded by a number of organizations – private, public, and non-profit over the years. Will more funding become available and to what extent will Congressional funds be available for this project?***

A. The stakeholder group has raised nearly \$1M in study funds from more than a dozen organizations since 2009. The stakeholder group has also been awarded a nearly \$4M capital grant from the FTA (currently held by VDOT). Operational funds are awarded annually by the Federal Maritime Administration (US Department of Transportation) to “designated” ferry systems around the country on a formula-based approach. Given that MARAD has “designated” our project as a federal waterway (M495), we anticipate that upon launch, the service would receive formula funds.

***Q. Did the study analyze the impact of the planned construction of the Fredrick Douglass Memorial Bridge on future fast ferry service in the area?***

A. The study did not specifically analyze the proposed bridge construction on our project but the design plans have been reviewed and as long as clearance remains consistent, there are no long-term issues that would affect ferry service. There may be short-term disruptions to service caused during the construction period.

***Q. What data was used for this study? Did you factor in modal connections?***

A. This study drew from four different sets of transportation user data. Sources include the Metropolitan Washington Council of Governments, Maryland Department of Transportation, the Virginia Department of Transportation Data that uses StreetLightData (a San Francisco-based private



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firm), and a Nelson Nygaard ferry client. These four sources provided reliable commuter travel patterns to and from Woodbridge, DHS, and JBAB.

The large data sets demonstrated that more than 6,000 commuters travel to and from these three locations daily. The study concluded that more than 1,300 commuters would use this service if the trip time was under an hour (including travel to/from home) and the out-of-pocket cost are \$10 per trip, \$20 roundtrip. This fare assumes commuters would also use the Federal Transit Benefit subsidy (\$255 per month).

***Q. Employees of Joint Base Anacostia Bolling rely on their private vehicles to get around the base. Since the ferries will not transport vehicles, will this deter employees from commuting by ferry?***

A. Joint Base Anacostia-Bolling is considering implementing an internal shuttle system to transport employees around the base and to the Department of Homeland Security Campus. The DHS facility has limited parking capability of 4 to 1 ratio of people to parking spaces. This would alleviate on base traffic and parking constraints and encourage employees to use mass transit for commuting.

***Q. How would ice on the river system impact fast ferry service?***

A. A previous study conducted by the stakeholder group specifically looked at the impact of ice and debris on service. The study found that ice would impact service but there is a high level of predictability regarding when these conditions would occur. A ferry app on a smart phone could forewarn passengers with significant lead-time and enable them to use other means to get to and from work. A household survey done as part of the last study concluded that more than 90% of respondents reported that the occasional closing of ferry service due to river conditions would not affect their usage if they are given advanced notice.