

Springfield to Quantico Enhanced Public Transportation Feasibility Study

Elected Officials Meeting

October 14, 2021

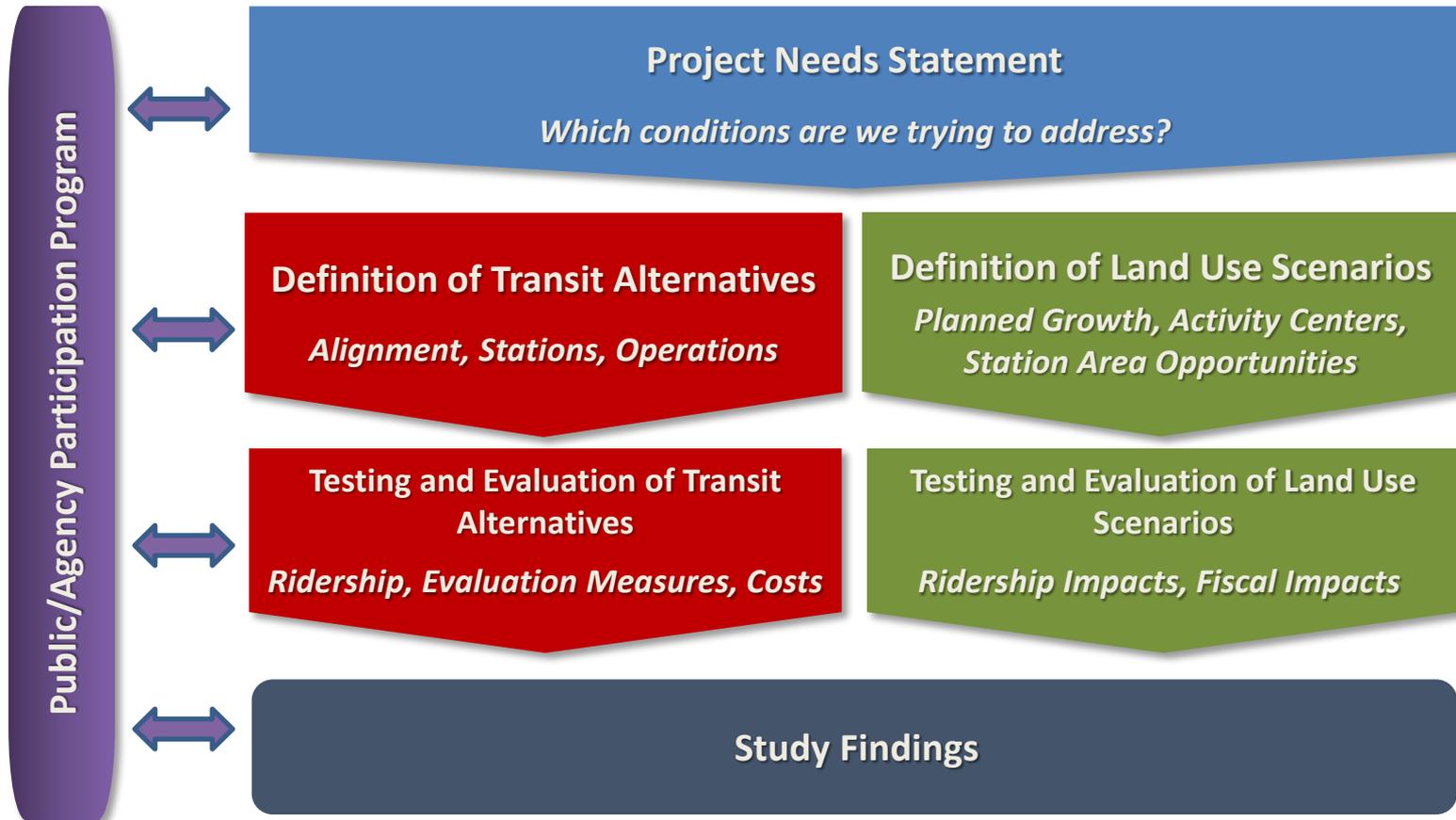


Virginia Department of Rail and Public Transportation

Meeting Agenda

- Introductions / Welcome
- Public and Stakeholder Outreach Status
- Summary of Evaluation Results
- Other Considerations for Metrorail Extensions
- Order-of-Magnitude Costs
- Next Steps

Study Technical Approach



Study Schedule



Public and Stakeholder Outreach

Public and Stakeholder Outreach

- Completed Activities:
 - Technical Advisory Committee
 - Elected officials briefings
 - DRPT website page
 - Project factsheet
 - On-Line survey
 - Pop-up events
 - Public Meeting #1 (May)
 - Public Meeting #2 (July)
 - Public Meeting #3 (Sept)
- Upcoming Activities:
 - Posting and review of draft report



<http://www.drpt.virginia.gov/transit/springfield-to-quantico/>

September Public Meetings

Two meetings held:

- Tuesday, September 21:
 - 45 Registrants/ 23 participants (not including DRPT/consultants)
- Thursday, September 23:
 - 40 Registrants/ 24 participants (not including DRPT/consultants)
- Closed captioning services were requested and provided.
- Spanish interpretation services were available.
- Pop-ups were held to distribute flyers at F-S Metro station and PRTC Transit Center

YOU'RE INVITED! 

Join us for a public meeting about potential transit enhancements for Fairfax and Prince William counties.

The Virginia Department of Transportation (VDOT) is conducting a study to evaluate potential transit options between the Potomac-Spottery Metro Station in Fairfax County and the Quantico Train Station in Prince William County. The study will include a public meeting to gather input from the community on potential transit options and to discuss the study's findings.

DRPT is offering the same meeting on Zoom for your convenience.

Register ahead of the meeting by scanning the QR code or visiting www.drpt.org/transportation.

Tuesday, September 21, 2022, 7 p.m.
Thursday, September 23, 2022, 7 p.m.

DRPT is committed to making this meeting accessible to all participants. If you need accommodations, please contact the project manager at transportation@drpt.org or call 703-683-4400. We will make every effort to accommodate your needs.

Project Manager:
 Rebecca Hinkle | rebecca.hinkle@drpt.org
 703-683-4400
 703-683-4400
 @VirginiaDRPT

September Public Meetings

Some Issues/Questions discussed:

- What are assumptions about design/configuration of BRT option along Route 1 and Metrorail extensions (at-grade/elevated)?
- What actions can counties (especially Prince William County) take now with TOD/land use to make Metro a remote possibility in the future?
- Need for more direct connections to Town of Quantico
- Inclusion of VRE capacity improvements and ridership gains in the Baseline
- How were the alternatives selected?
- Have you looked at the Metrorail Blue Line option without the double back to Fort Belvoir?
- BRT can serve as a precursor to Metro. BRT stations should be in areas with not a lot of development so that it's footprint can accommodate adding Metro later and include adequate parking.

Summary of Evaluation Results

Enhanced Public Transit is Needed Because...

Existing transit does not
serve all trips well

Transit services may need
enhancements to support **future
development**

Transit can improve **equity** by
connecting low-income and minority
populations to opportunities

Transit connections to key regional
activity centers, such as Fort Belvoir
and Quantico bases, are limited

Traffic congestion is severe and
continuing to get worse

Access to Transit Services is reliant on
park & ride or long walks to the bus

Transit Alternatives Evaluated in the Study



Metrorail – Blue Line Extension



Metrorail – Yellow Line Extension



Bus Rapid Transit

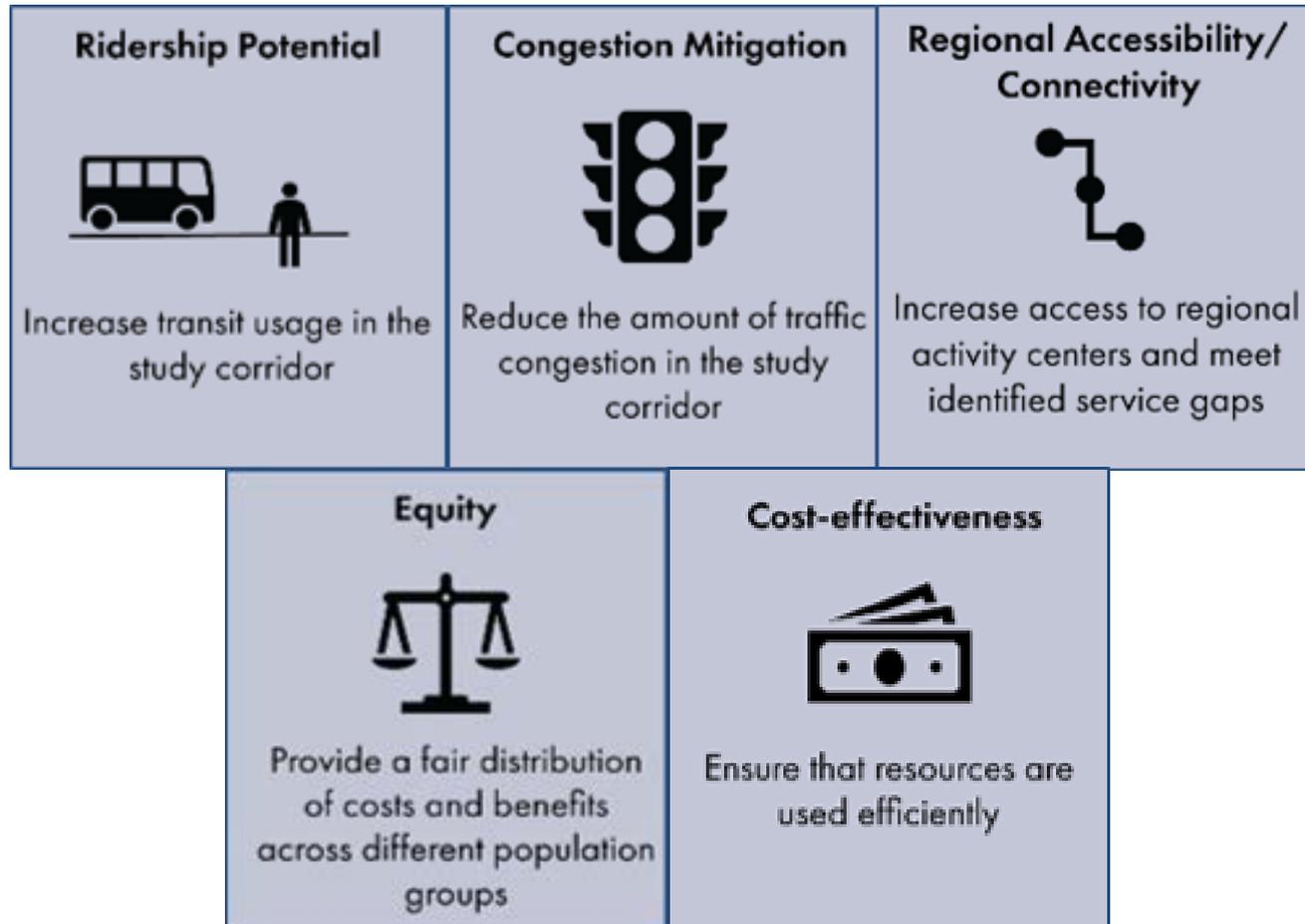


VRE Service Improvements

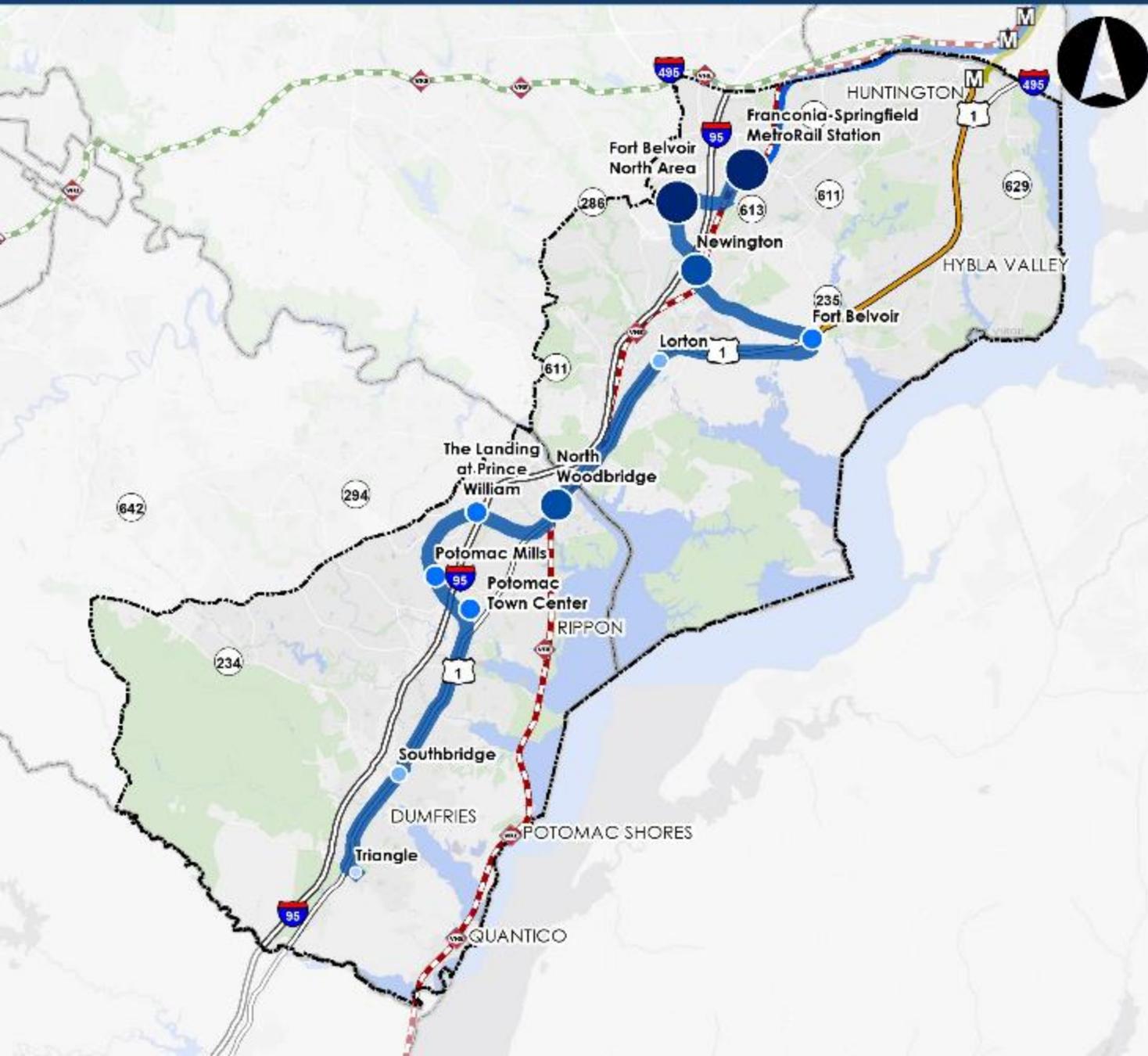


Express Bus Routes

How are we evaluating feasibility?



Projected Blue Line Daily Boardings



- MetroRail Stations
- Virginia Railway Express (VRE) Stations
- County Boundary

MetroRail Routes

- Blue
- Yellow

VRE Routes

- Fredericksburg
- Manassas
- Richmond Highway BRT

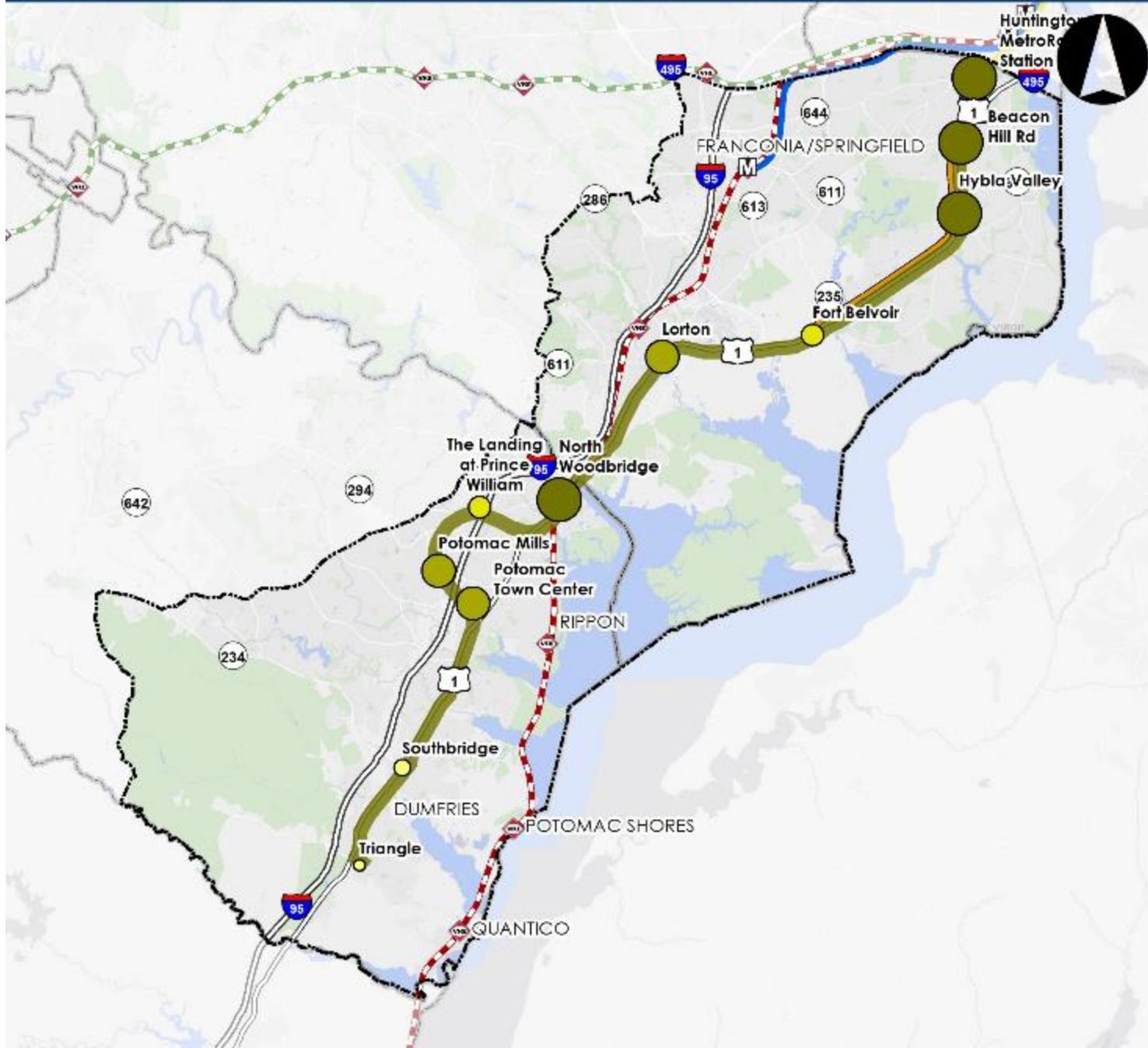
Blue Line Alignment

Projected Blue Line Daily Boardings

- < 1,000
- 1,000 - 1,500
- 1,500 - 2,000
- 2,000 - 2,500
- > 2,500



Projected Yellow Line Daily Boardings



Metrorail Stations

Virginia Railway Express (VRE) Stations

County Boundary

Richmond Highway BRT

Metrorail Routes

Blue
 Yellow

VRE Routes

Fredericksburg
 Manassas

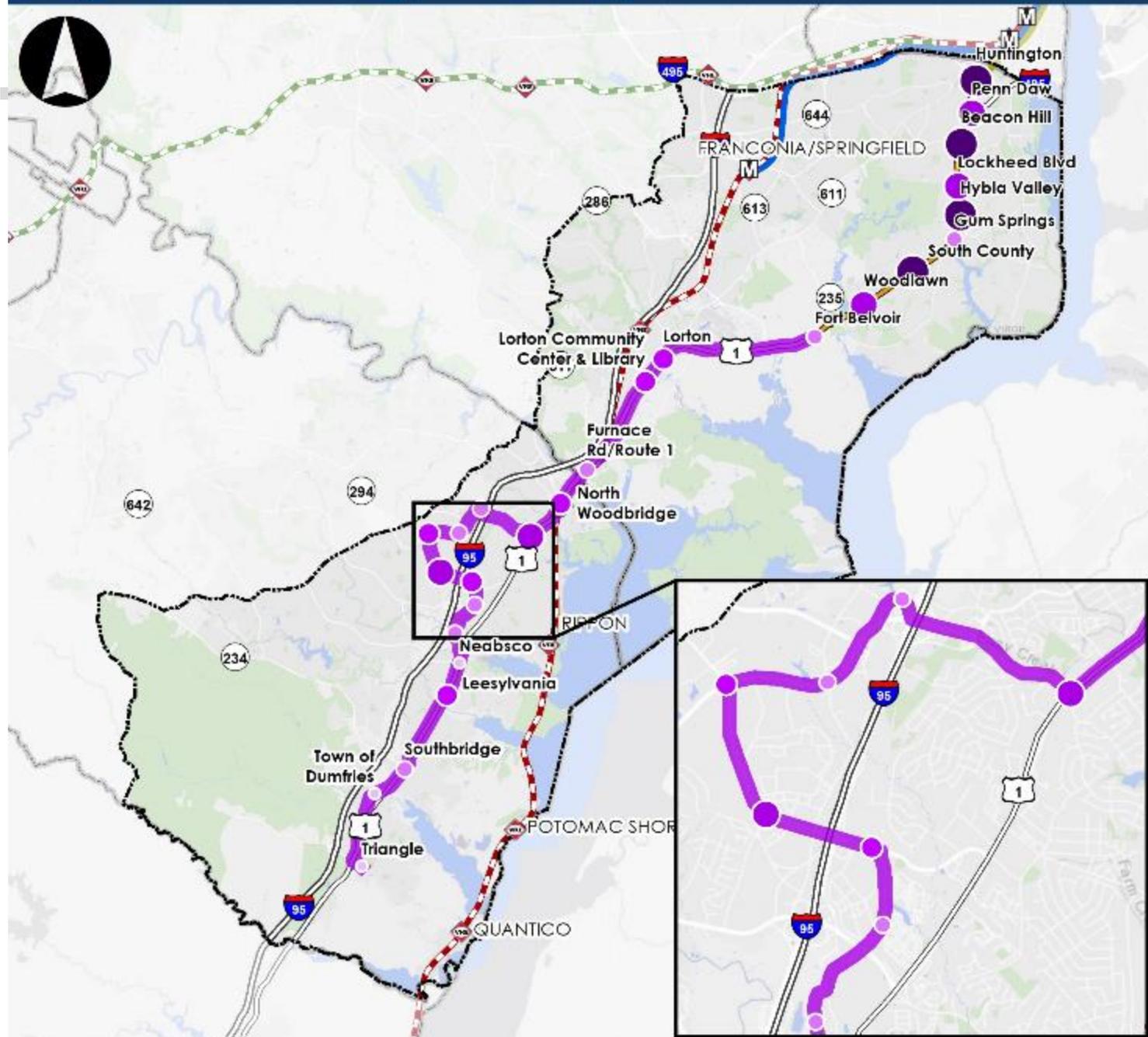
Potential Yellow Line Alignment

Projected Yellow Line Daily Boardings

< 1,000
 1,000 - 1,500
 1,500 - 2,000
 2,000 - 2,500
 > 2,500



Projected BRT Daily Boardings



- Metrorail Stations
- Virginia Railway Express (VRE) Stations
- County Boundary
- Richmond Highway BRT
- Metrorail Routes**
 - Blue
 - Yellow
- VRE Routes**
 - Fredericksburg
 - Manassas
- Potential BRT Alignment
- Projected BRT Daily Boardings**
 - < 250
 - 250 - 500
 - 500 - 750
 - 750 - 1,000
 - > 1,000



Summary of Evaluation Results

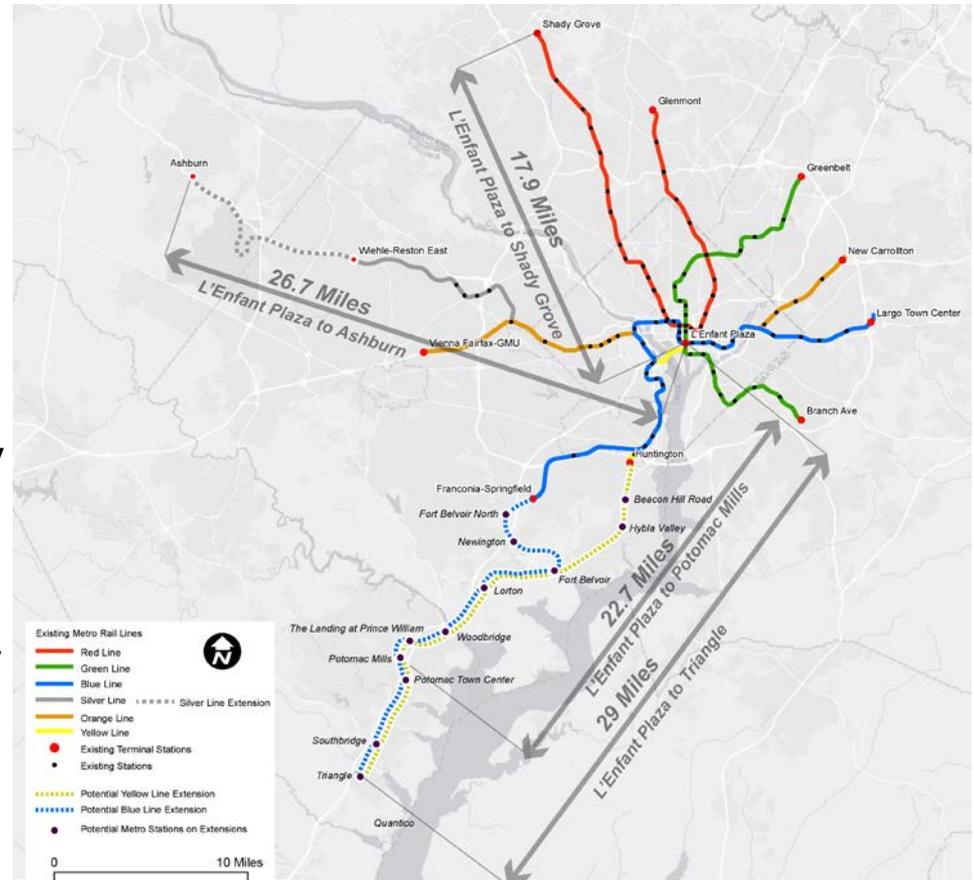
	Additional Express Bus	BRT Extension	Additional VRE Service*	Metrorail Blue	Metrorail Yellow
Ridership Potential	★★	★★★★	★★	★★★★	★★★★
Congestion Mitigation	★	★★	★	★★★★	★★★★
Regional Accessibility	★★	★★★★	★★	★★★★	★★★★
Equity	★	★★★★	★★	★★★★	★★★★
Cost-Effectiveness	★★★★	★★	★	★	★

* Additional Service Above Transforming Rail in Virginia Improvements Included in Baseline

Other Considerations for Metrorail Extensions

Other Considerations for Metrorail Extensions

- Metrorail extension would be a significant addition to the Metro system
- Core capacity needs must be addressed first
- Legal / governance implications of adding Prince William County to the Metro transit system
- Annual capital and operating budget subsidy contributions for Prince William County (and an increase for Fairfax County)



L'Enfant Plaza to Triangle
Track Length = 46 Miles (Blue)
Track Length = 37 Miles (Yellow)

Review of Governance/Legal Impacts of Extension

Extending Metrorail Service to Prince William County has unique legal and governance ramifications.

- Extending Metrorail service into PWC does not require amending the WMATA Compact. It does require PWC to become a member of the Northern Virginia Transportation District (District) and the Washington Metropolitan Area Transit Zone (Zone)
- Enlarging the District to include PWC - NVTC would control process by which the NOVA District is enlarged to include PWC, as well as PWC's obligations as they relate to NVTC members' responsibilities
- Enlarging the Zone to include PWC - NVTC would notify WMATA that the District has been enlarged, delivering the terms of PWC's financial commitment to Metro services as part of this notification, and the WMATA Board would need to approve
- Terms of service to be provided to PWC through WMATA to be negotiated
- PWC's financial commitments would extend beyond construction costs of extension to include share of annual operating and capital subsidy (by formula), annual obligations to Virginia's Metro Capital Fund, and other negotiated financial obligations
- Resolving impact on PRTC as a result of PWC membership in the NOVA District

Order of Magnitude Costs

Cost Estimate Inputs

	Express Bus	VRE*	BRT	Short BRT	Blue Line	Short Blue Line	Yellow Line	Short Yellow Line
Fixed Guideway Route Miles	n/a	n/a	20.3	13.5	26.3	19.8	26.6	20.1
New Stations	n/a	n/a	17	13	10	8	10	8
New Vehicles Required	44	28	20	15	120	102	120	102
Increase in Annual Veh. Rev. Hours	45 K	59 K	71 K	55 K	400 K	324 K	400 K	324 K

* Additional Service Above Transforming Rail in Virginia Improvements Included in Baseline

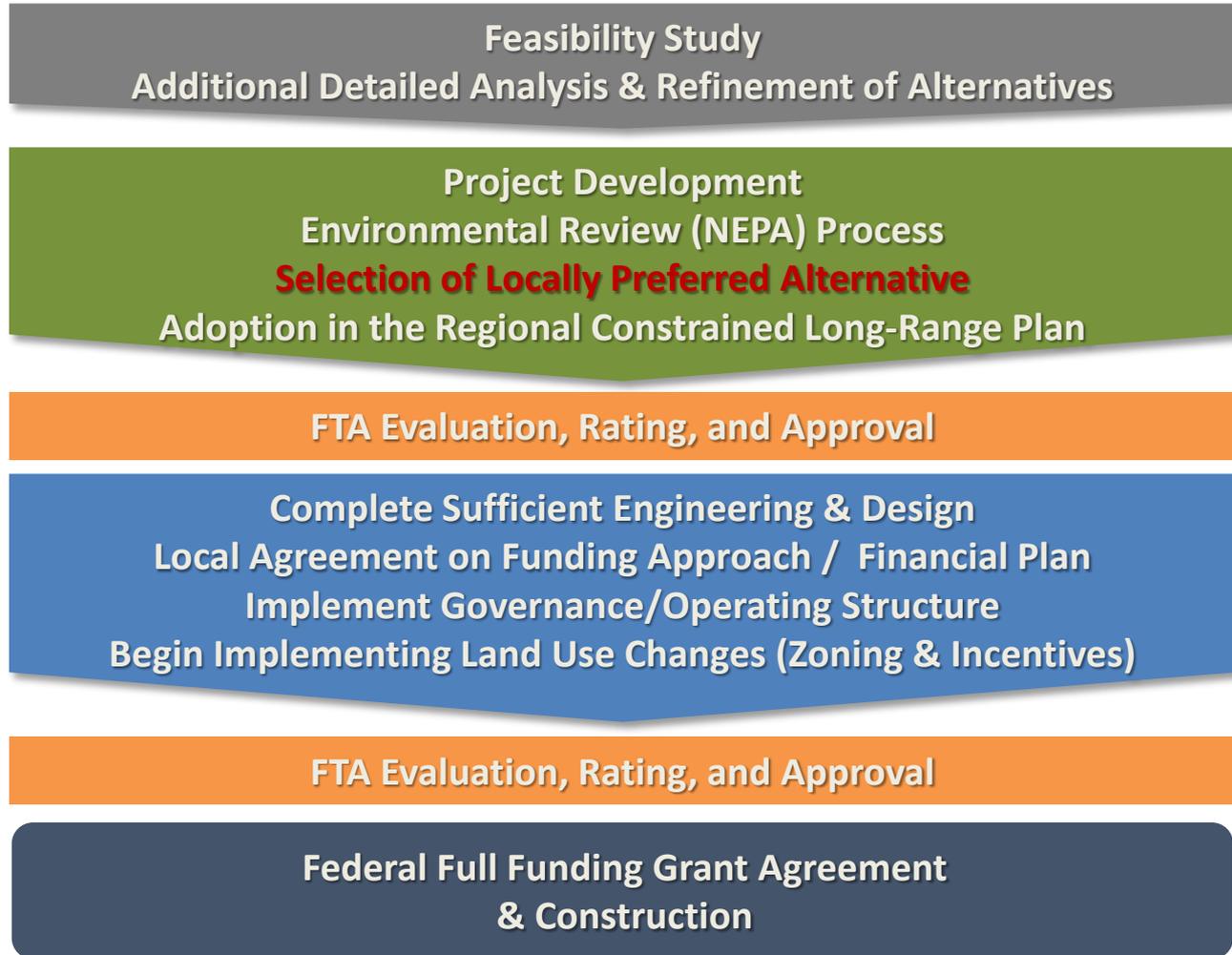
Estimated Costs of Alternatives (\$2030)

Additional Costs Beyond What is Included in the Future Baseline

	Express Bus	VRE	BRT	Short BRT	Blue Line	Short Blue Line	Yellow Line	Short Yellow Line
Total Capital Cost Range	\$37 M - \$56 M	\$116 M - \$174 M	\$2.4 B - \$3.6 B	\$1.6 B - \$2.4 B	\$18.1 B - \$27.2 B	\$13.6 B - \$20.5 B	\$18.3 B - \$27.5 B	\$13.8 B - \$20.8 B
Annual O&M Cost	\$7 M	\$80 M	\$19 M	\$15 M	\$168 M	\$135 M	\$168 M	\$135 M
Annual Net Cost: Cap + O&M - Fare Revenue	\$8 M	\$46 M	\$133 M	\$90 M	\$764 M	\$579 M	\$771 M	\$587 M

Discussion & Meeting Wrap-Up

Corridor Feasibility Study is the 1st Step in Multi-Step Project Development Process*



Next Steps

- Posting and review of study report
 - The draft report will be posted on the website
<http://drpt.virginia.gov/transit/springfield-to-quantico/>
- Finalization and submittal of report to General Assembly