

Welcome.

Please enjoy the music. We will begin shortly.

Can you hear the music? Make sure your audio is working. If your computer doesn't have a mic or you are having trouble with the audio, you can also call in on your phone using the information in your registration confirmation or:

Ph: 312 626 6799

Webinar ID:879 9735 5683

Meeting passcode: 637379

Springfield to Quantico Enhanced Public Transportation Feasibility Study

Public Meeting #2

July 27, 2021

7:00-8:30 PM

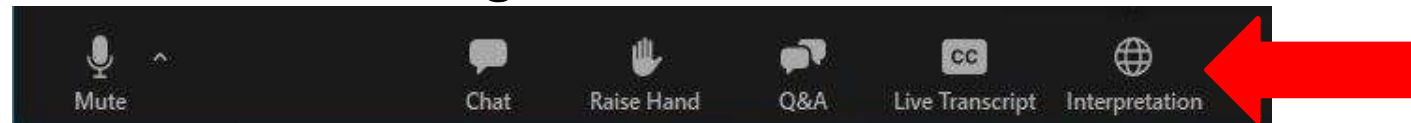


Virginia Department of Rail and Public Transportation

drpt.virginia.gov/transit/springfield-to-quantico/

Bienvenidos.

Si a usted le gustaría escuchar la presentación en español, tenemos un intérprete disponible. Haga clic en el globo terraceo en su barra de navegación.



De Springfield a Quantico Estudio de Viabilidad Sobre la Mejora del Transporte Publico

Reunión Publica #2
27 de Julio 2021
7:00-8:30 PM



drpt.virginia.gov/transit/springfield-to-quantico/

Welcome.

Springfield to Quantico Enhanced Public Transportation Feasibility Study

Public Meeting #2
July 27, 2021
7:00-8:30 PM



Virginia Department of Rail and Public Transportation

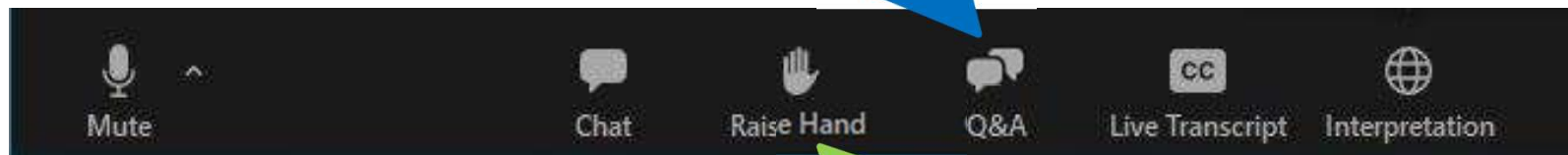
drpt.virginia.gov/transit/springfield-to-quantico/

What you can expect during this meeting

1. This meeting is being recorded
2. Presentation portion
3. Question and Answer portion

During the presentation:

- Video and chat will be disabled throughout the entire meeting
- Microphones will be muted
- Use the Q&A feature to type in questions



During the Q&A portion:

- Raise your hand if you'd like to ask a question verbally
- Once you raise your hand you will be called on and given the ability to unmute yourself
- You are welcome to continue using the Q&A feature

Introductions

- DRPT:
 - Jen DeBruhl, Chief of Public Transportation
 - Todd Horsley, Director of Northern Virginia Transit Programs
 - Ciara Williams, NoVA Transit Planning Manager
 - Randy Selleck, Rail Planning and Environmental Manager
- Consultant Team:
 - Tom Harrington, Cambridge Systematics
 - Dalia Leven, Cambridge Systematics
 - Diana Barreto, PRR
 - Sue Knapp, KFH Group
 - Yolanda Takesian, Kittelson & Associates

Presentation Outline

- Study Introduction
- Public Survey Results
- Preliminary Alternatives Considered
- Preliminary Evaluation Results
- Next Steps
- Q&A

Study Introduction

Study Background

- Virginia General Assembly approved a 2020 budget amendment directing DRPT to conduct a feasibility study :

"F. The Department of Rail and Public Transportation, in cooperation with Fairfax and Prince William counties, shall evaluate enhanced public transportation services from the Franconia-Springfield Metro Station to Fort Belvoir, Lorton, Potomac Mills, and Marine Corps Base Quantico in Prince William County, including the cost and feasibility of extending the Blue Line and other multimodal options such as bus rapid transit along Interstate 95 and U.S. Route 1. The Director of the Department of Rail and Public Transportation shall submit a report of its findings to the Chairs of the House Appropriations Committee and the Senate Finance and Appropriations Committee by December 1, 2021."

- Study must be completed by December 1, 2021
- A range of multimodal transit investments will be evaluated

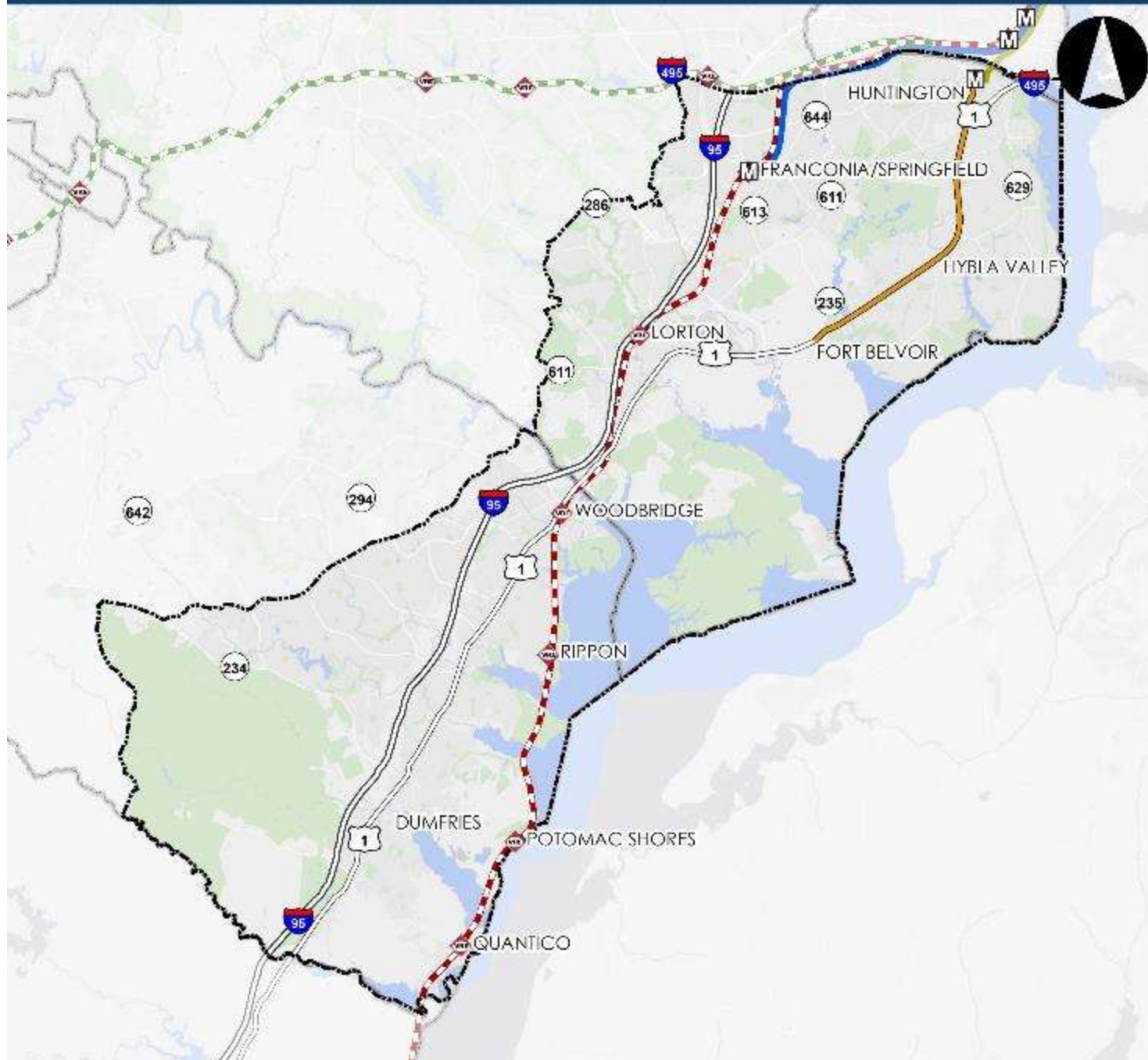
Study Outcomes

Comprehensive, objective **evaluation of feasibility** for a range of potential enhanced transit alternatives to inform recommendations about future investment in the corridor based on comparing:

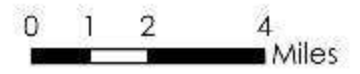
- Costs
- Benefits
- Impacts



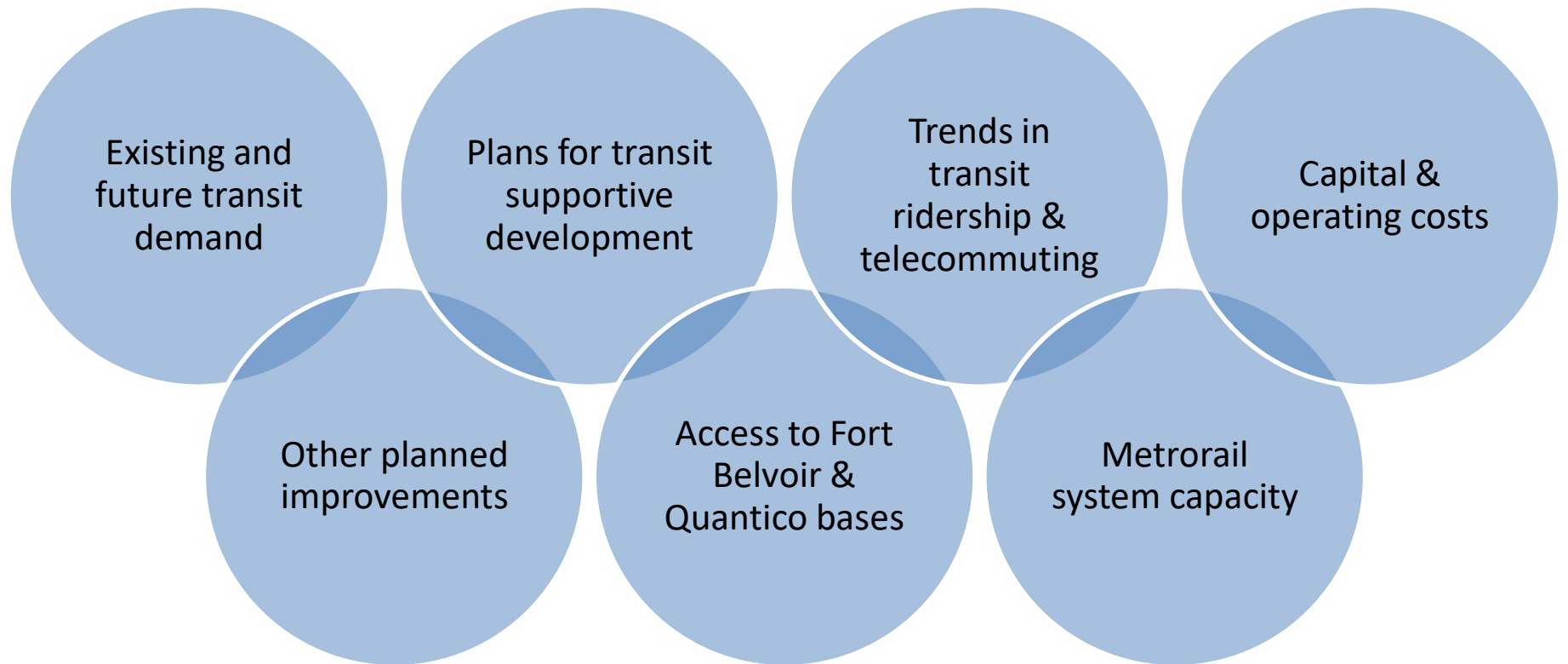
STUDY AREA



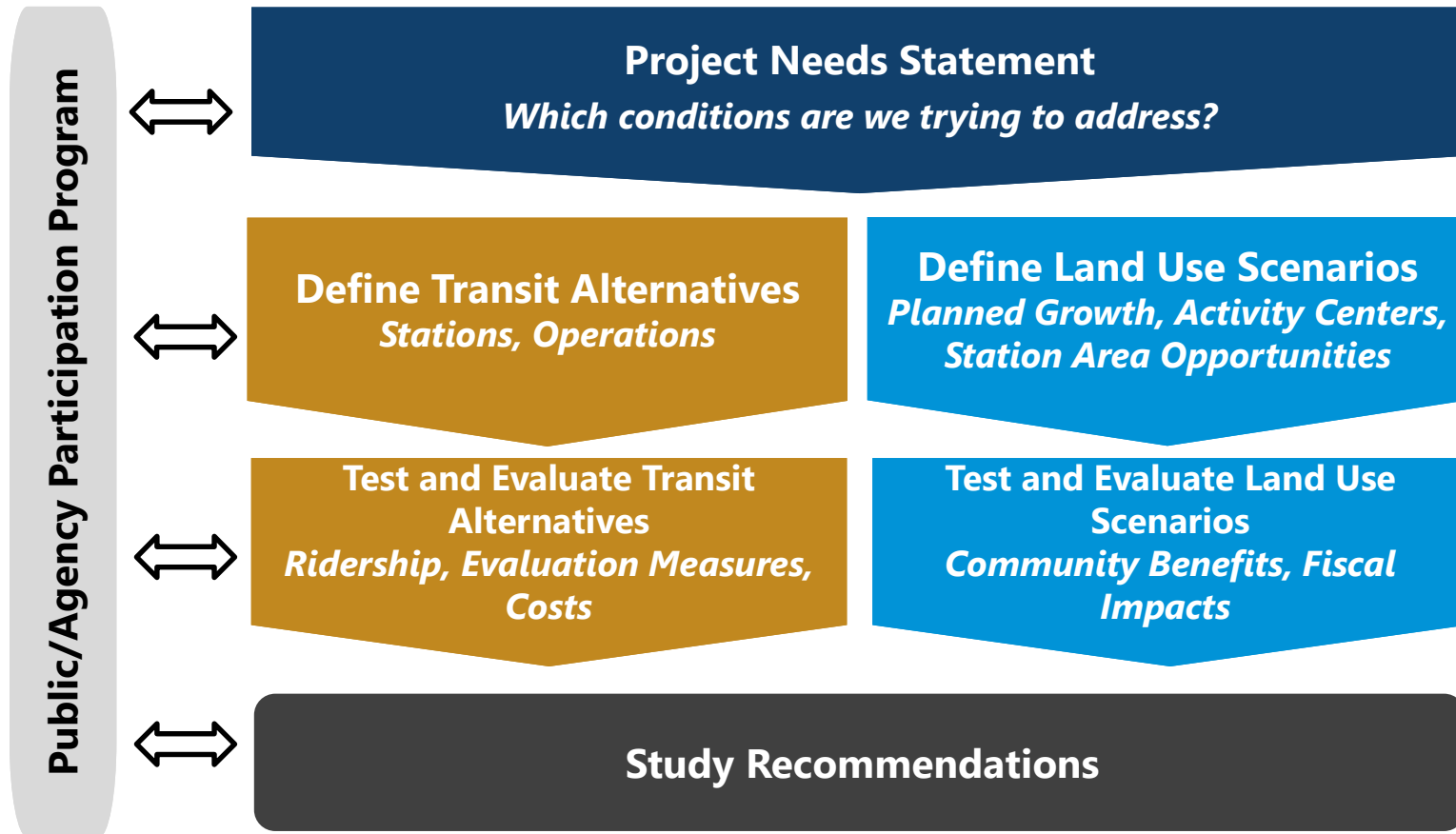
- Metrorail Stations
- Virginia Railway Express (VRE) Stations
- Study Area
- County Boundary
- I-95
- US Route 1
- Richmond Highway BRT
- Metrorail Routes**
 - Blue
 - Yellow
- VRE Routes**
 - Fredericksburg
 - Manassas



Key Issues for the Study to Consider



Study Technical Approach



Study Schedule



- Draft report will be completed by September 2021
- Final report will be submitted to General Assembly by December 1, 2021

Stay Engaged!

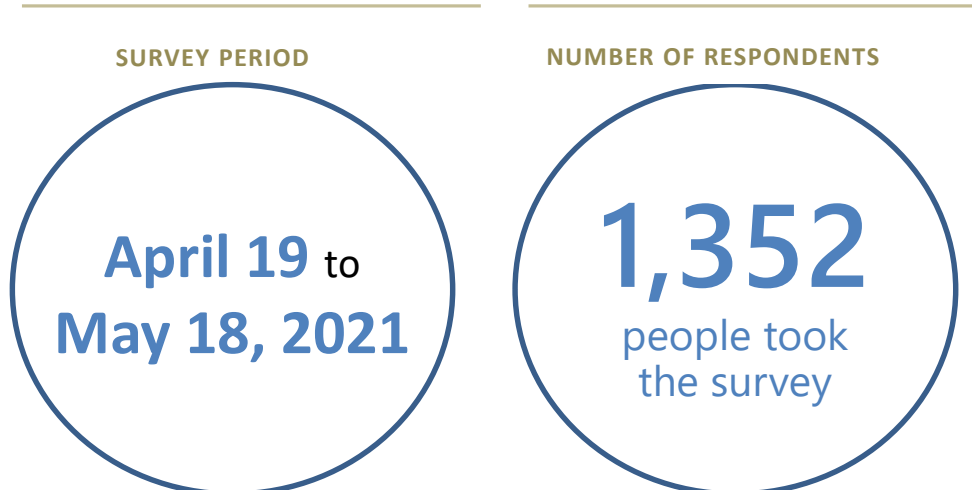
Let us know what you think:

- Project website:
<http://www.drpt.virginia.gov/transit/springfield-to-quantico/>
- Third round of public meetings will be held in September.

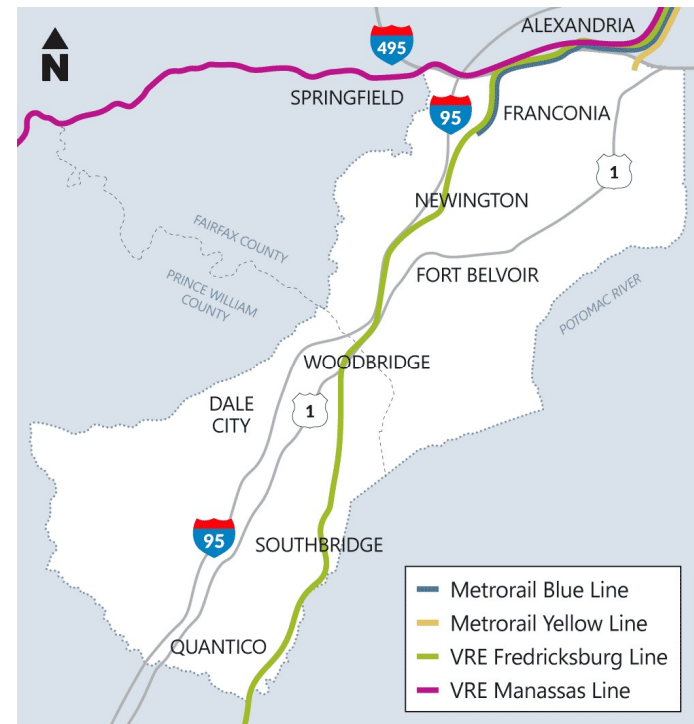
Public Survey Results

Survey Overview

- Survey objectives: gain an understanding of 1) regional and local corridor use both pre-and post-pandemic, 2) travel behavior, and 3) how different transit alternatives could best serve the needs of corridor users.



*54% of respondents live in Prince William County
32% of respondents live in Fairfax County*

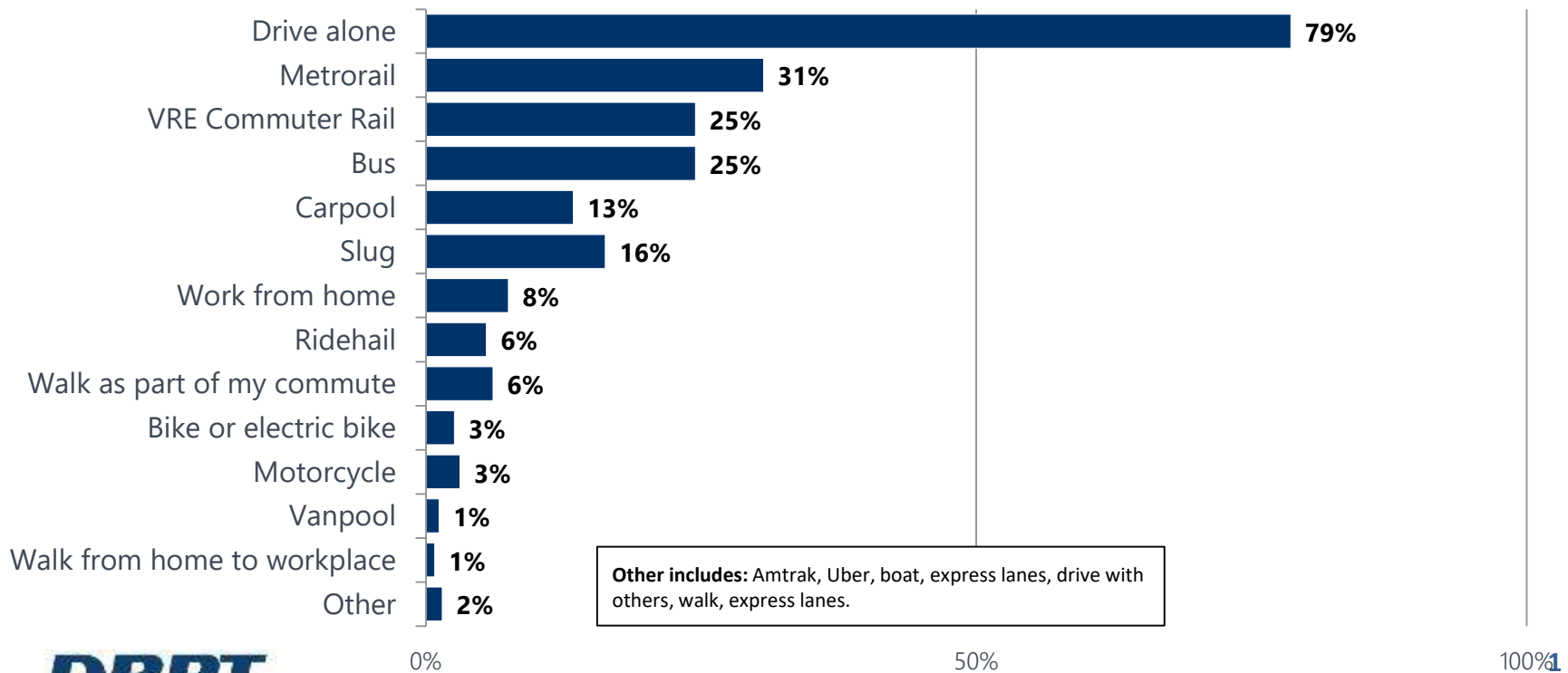


Download the Comprehensive Survey Report here:
http://drpt.virginia.gov/media/3476/vadrpt_spring-to-quant-report_071921.pdf

Drive alone, Metrorail, VRE Commuter Rail, and bus are the most common travel modes for work commutes before the pandemic.

Please tell us how you typically traveled anywhere along the study corridor for your work commute before COVID

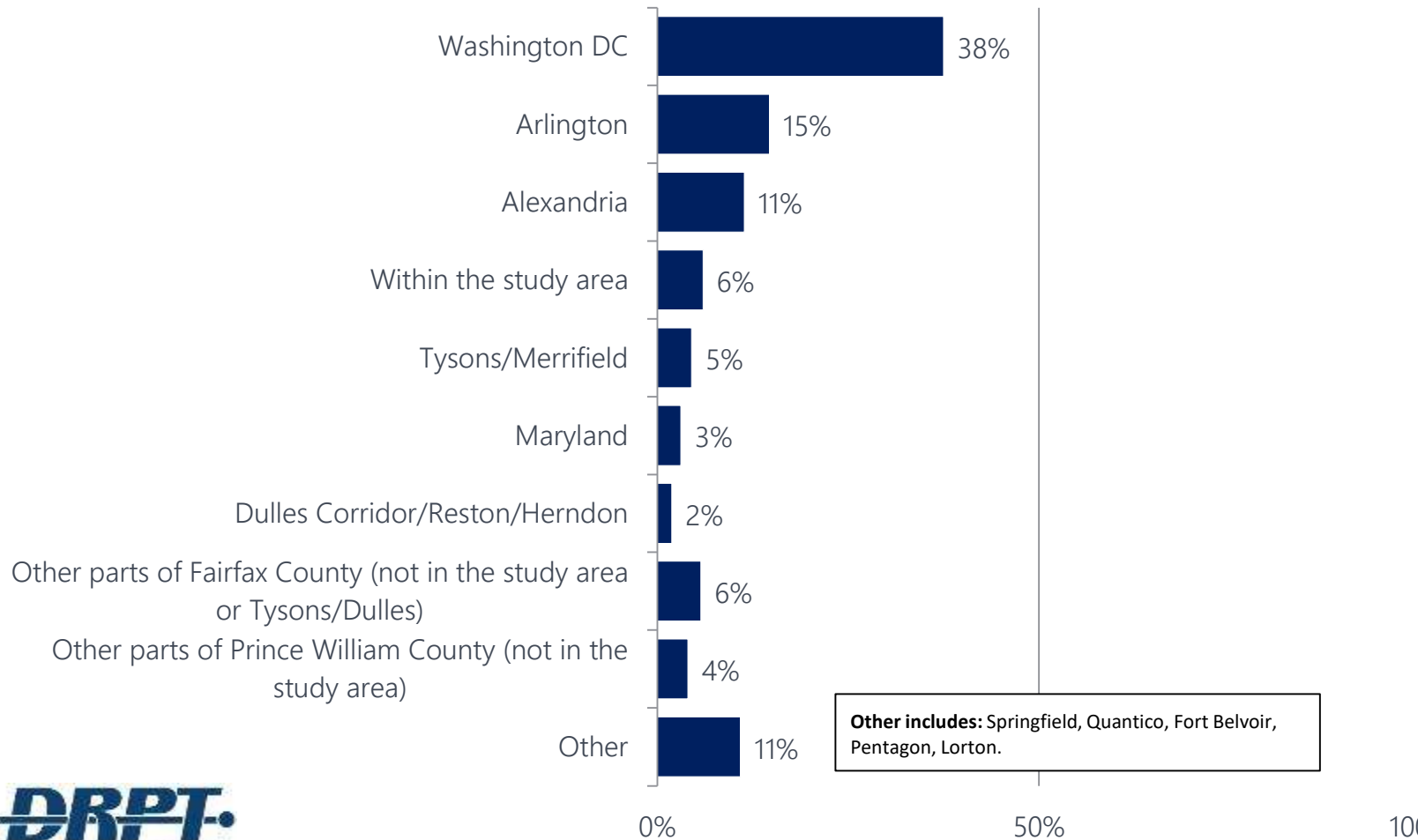
Base: Respondents travel to or from work (n = 889). Percentages sum to more than 100%.



Over a third (38%) commuted to Washington D.C. for work before COVID.

Where did you work before COVID?

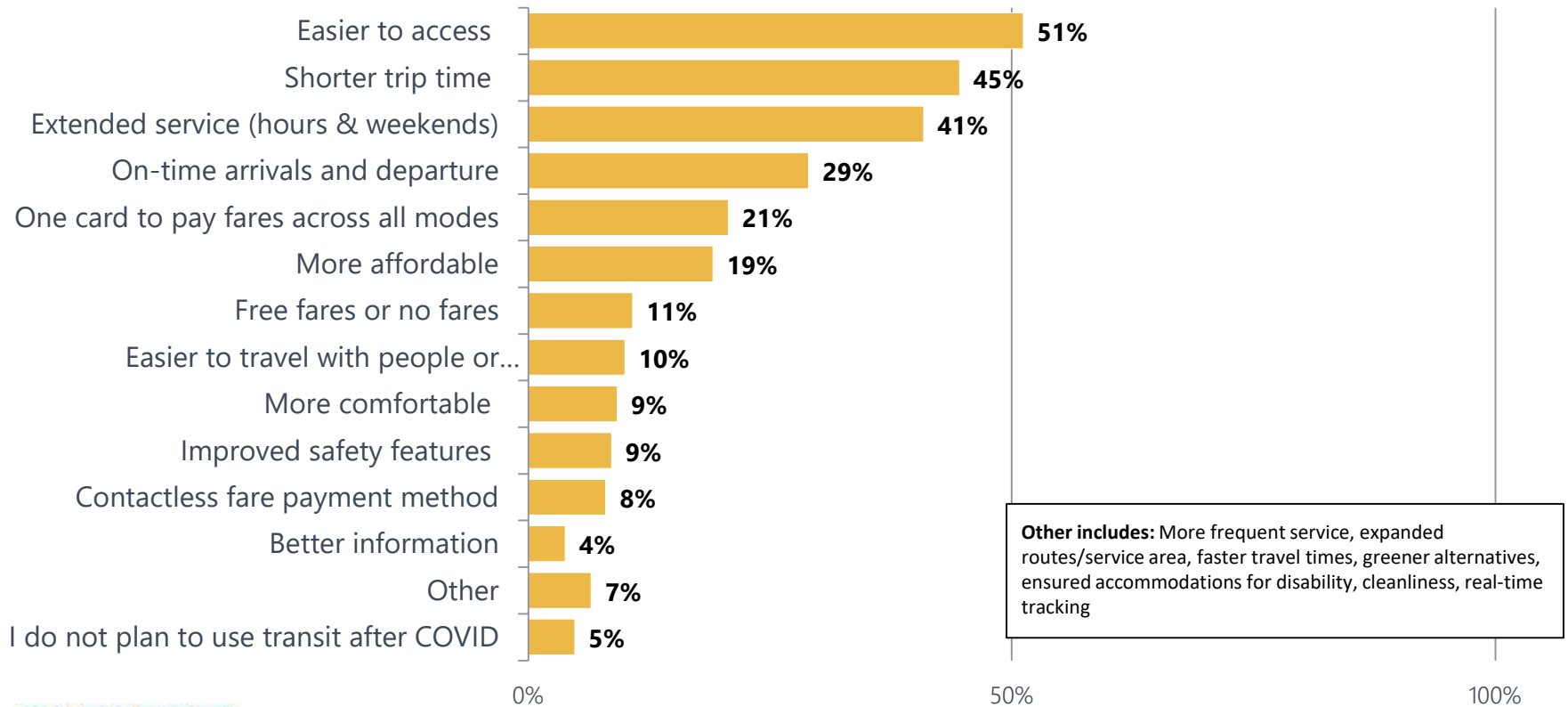
Base: Respondents travel to or from work (n = 845).



Easier access, shorter trip time, and extended service time are the top motivators for using public transit.

What are the top three features that would motivate you to use (or use more often) public transit for your trips along the study corridor when things return to normal after COVID?

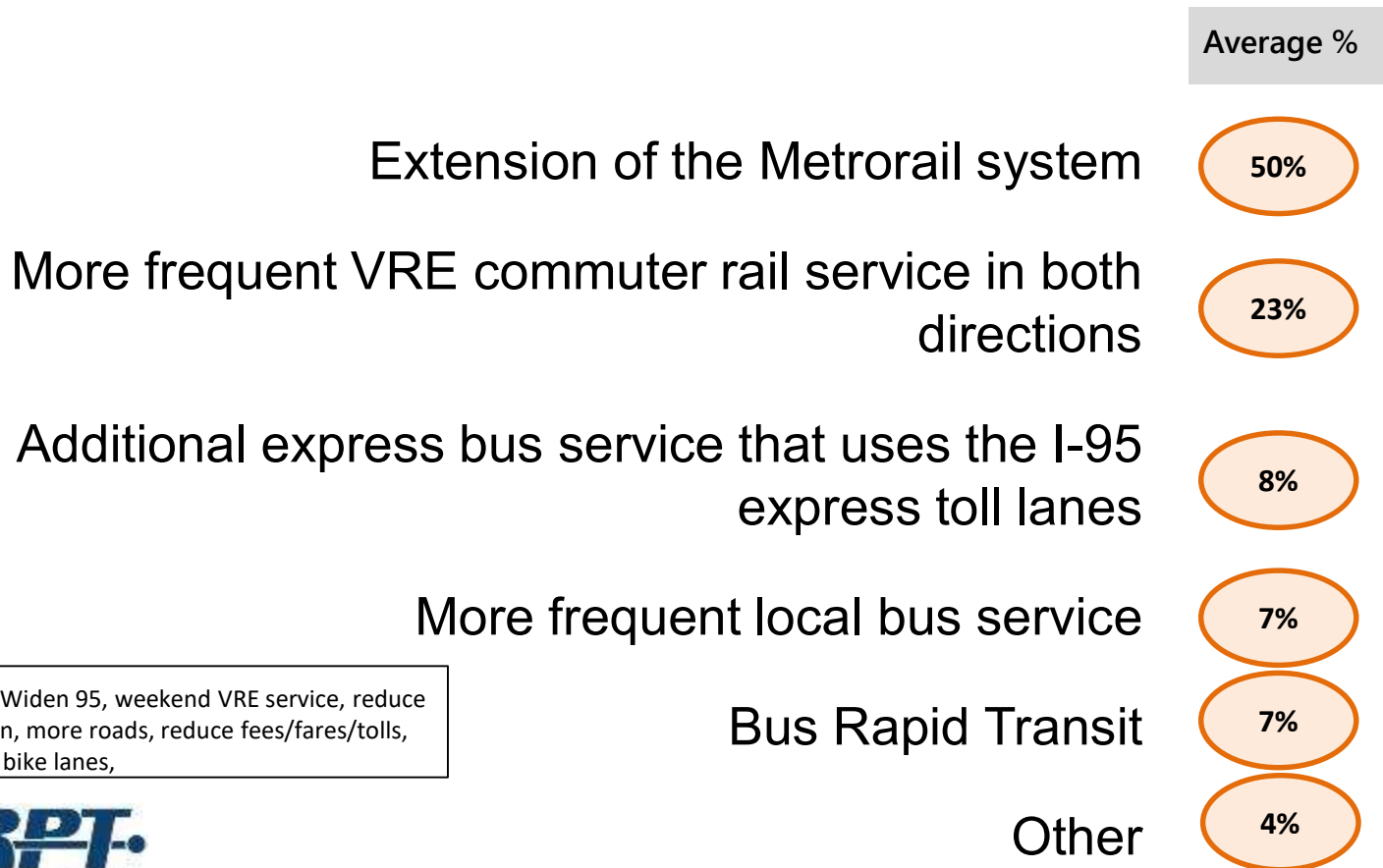
Base: all respondents (n = 1,184). Percentages sum to more than 100%.



When balancing trade-offs in funding, respondents favor extending the Metrorail system more than any other transportation improvement.

Let's imagine you could allocate the budget for transportation improvements in the study corridor. What percent should be spent on the following enhanced transit options?

Base: all respondents (n = 1,117).



Other includes: Widen 95, weekend VRE service, reduce traffic congestion, more roads, reduce fees/fares/tolls, expand Amtrak, bike lanes,



A majority (61%-81%) expect to use the corridor for commuting to work, regardless of preferred type of transit improvement.

For your preferred type of enhanced transit _____, what do you expect would be the purpose of your trips along the study corridor during weekdays?

Base: all respondents.

	Extension of the Metrorail system (n = 680)	More frequent VRE commuter rail service in both directions (n = 225)	Additional express bus service that uses the I-95 express toll lanes (n = 58)	More frequent local bus service (n = 48)	Bus rapid transit (n = 38)	Other (n = 62)
Travel to or from work	66%	61%	81%	65%	66%	66%
Recreational activities	56%	53%	12%	46%	29%	42%
Errands/shopping	44%	37%	12%	52%	32%	40%
Visit family or friends	33%	35%	9%	27%	13%	35%
Medical appointments	27%	17%	16%	40%	26%	24%
Non-commute work-related travel	25%	26%	9%	27%	18%	18%
Travel to or from school	8%	6%	7%	4%	5%	3%
Other	4%	3%	10%	10%	5%	13%



Other includes: work, volunteering, traveling to airport, community/cultural/religious events, entertainment/leisure

Franconia/Springfield/Newington, Woodbridge, and Potomac Mills are the most expected destinations within the study area.

For your preferred type of enhanced transit _____, what do you expect would be your most likely destinations within the study area?

Base: all respondents.

	Extension of the Metrorail system <i>(n = 680)</i>	More frequent VRE commuter rail service in both directions <i>(n = 225)</i>	Additional express bus service that uses the I-95 express toll lanes <i>(n = 58)</i>	More frequent local bus service <i>(n = 48)</i>	Bus rapid transit <i>(n = 38)</i>	Other <i>(n = 62)</i>
Franconia/Springfield/Newington	48%	46%	53%	52%	41%	41%
Woodbridge	45%	33%	41%	54%	35%	41%
Potomac Mills	48%	33%	22%	60%	24%	26%
Fort Belvoir	29%	21%	33%	29%	24%	25%
Dumfries	32%	26%	22%	27%	21%	23%
Quantico Marine Base	32%	22%	19%	25%	15%	28%
Lorton	28%	19%	16%	27%	18%	21%
Lake Ridge	19%	9%	22%	27%	18%	13%
Dale City	18%	10%	14%	23%	21%	13%
Mount Vernon/Hybla Valley	20%	11%	5%	21%	15%	20%
Triangle	11%	7%	10%	21%	9%	10%
Other	4%	7%	14%	4%	15%	21%



Other includes: Stafford, Rippon, Potomac shores, Occoquan, Fredericksburg, Alexandria

Washington D.C. is the most expected destination outside the study area.

For your preferred type of enhanced transit _____, what do you expect would be your most likely destinations outside of the study area?

Base: all respondents.

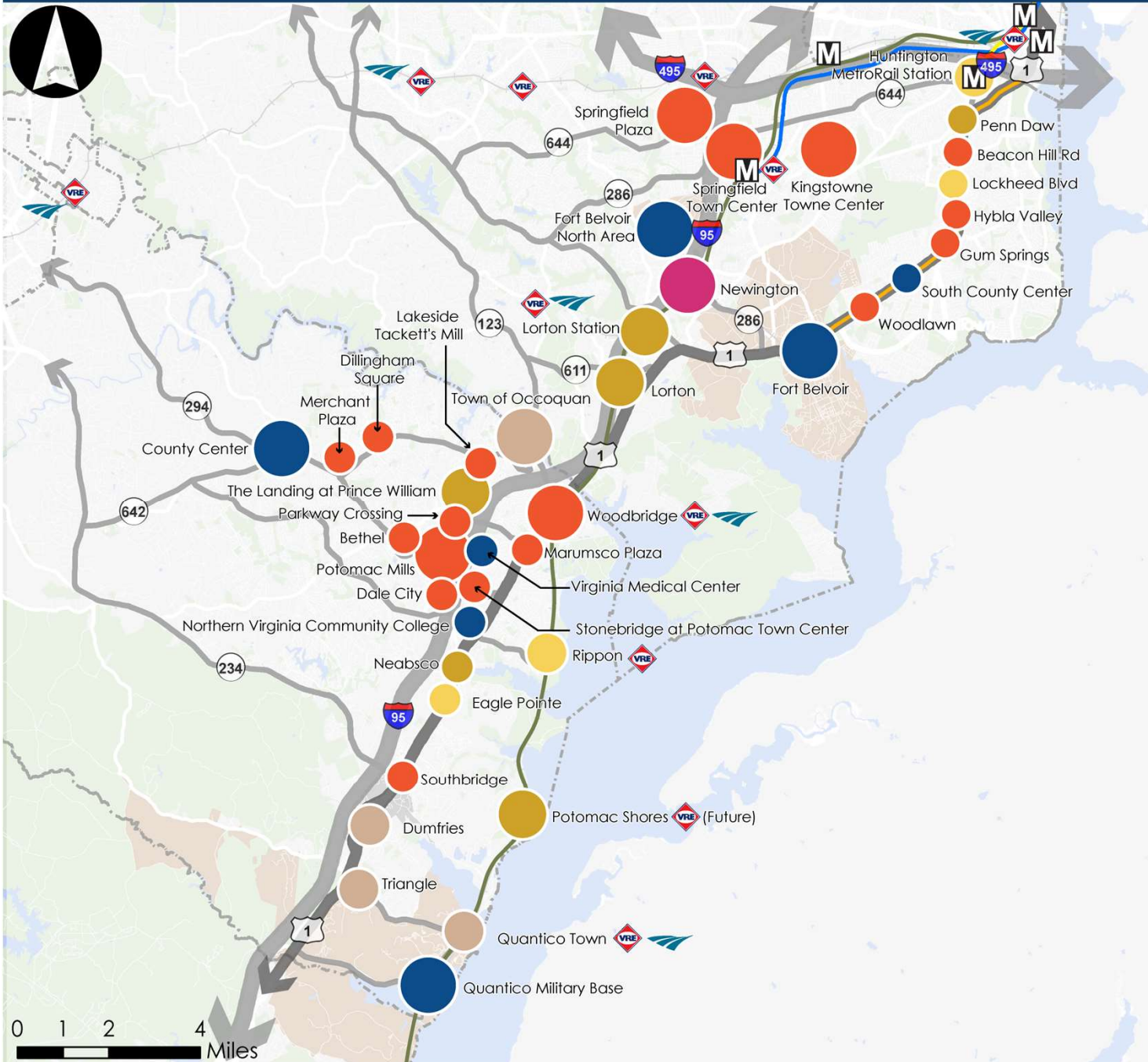
	Extension of the Metrorail system (n = 680)	More frequent VRE commuter rail service in both directions (n = 225)	Additional express bus service that uses the I-95 express toll lanes (n = 58)	More frequent local bus service (n = 48)	Bus rapid transit (n = 38)	Other (n = 62)
Washington DC	78%	77%	66%	58%	56%	59%
Alexandria	49%	48%	19%	54%	35%	34%
Arlington	39%	39%	24%	44%	21%	26%
Pentagon	26%	16%	40%	23%	32%	11%
Tysons/Merrifield	34%	22%	17%	29%	24%	21%
Dulles Corridor/Reston/Herndon	28%	22%	17%	13%	12%	18%
Other parts of Prince William County	18%	9%	9%	31%	24%	16%
Other parts of Fairfax County	18%	12%	9%	23%	18%	16%
Maryland	15%	9%	5%	8%	6%	11%
Mark Center	9%	4%	16%	8%	9%	7%
Other	2%	10%	3%	6%	9%	11%



Other includes: Richmond, Fredericksburg, Stafford, airport, Spotsylvania

Preliminary Alternatives Considered

Activity Centers



- M** Metrorail Stations
- VRE** Virginia Railway Express (VRE) Stations
- Amtrak Stations

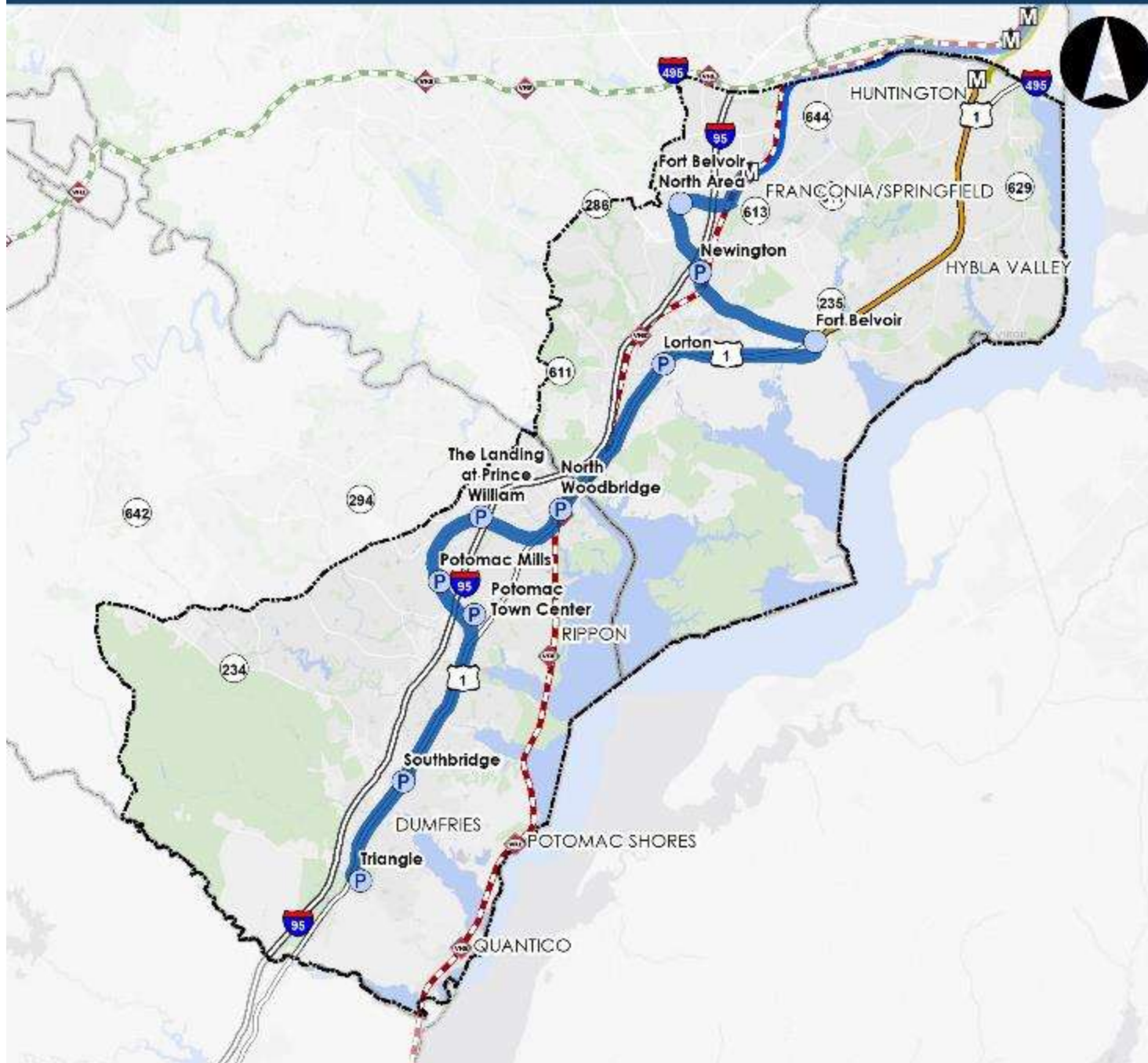
Metrorail Routes

- Blue
- Yellow
- VRE/Amtrak Route
- Richmond Hwy BRT

Place Types of Activity Centers

- Suburban Commercial
- Institutional/Military Campus
- Mixed Use
- Historic Small Town
- Suburban Residential
- Industrial

Blue Line Alternative



- M Metrorail Stations
- VRE Virginia Railway Express (VRE) Stations

County Boundary

Metrorail Routes

- Blue
- Yellow

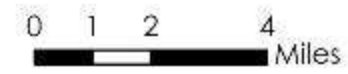
VRE Routes

- Fredericksburg
- Manassas
- Richmond Highway BRT

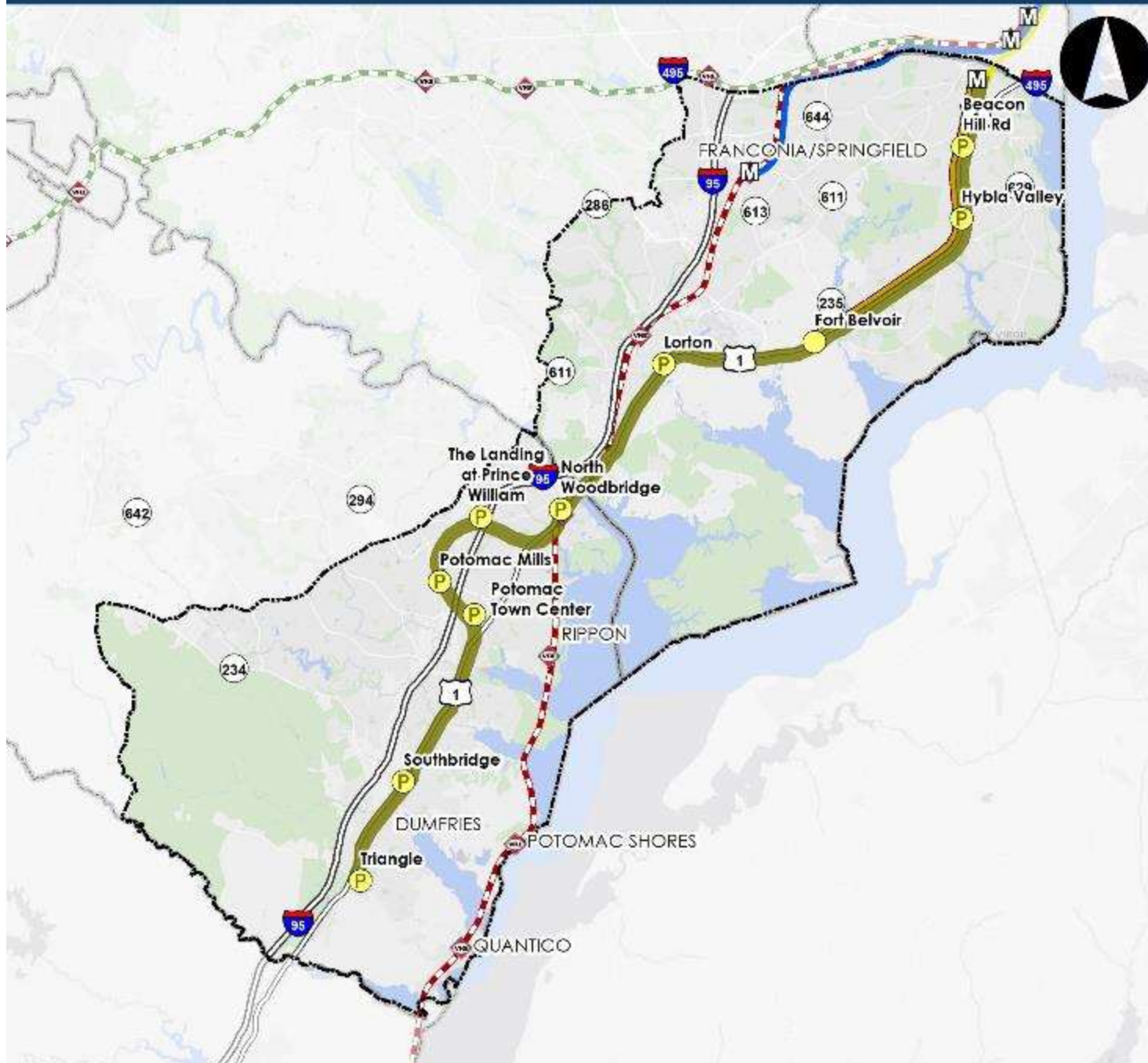
Blue Line Alignment

Blue Line Stations

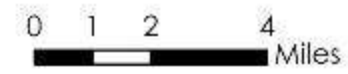
- With Parking
- Without Parking



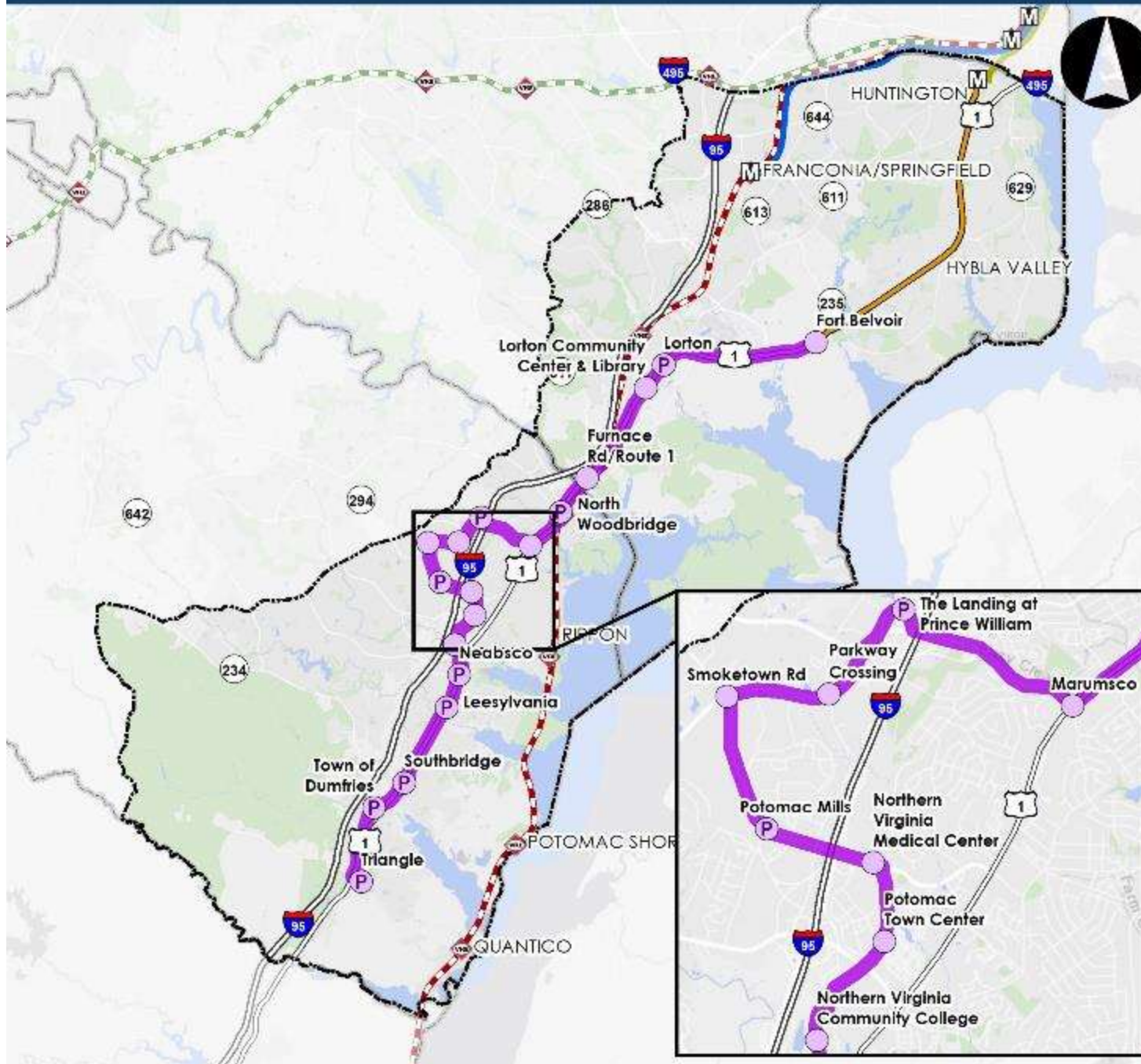
Yellow Line Alternative



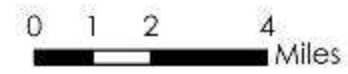
- Metrorail Stations
- Virginia Railway Express (VRE) Stations
- County Boundary
- Richmond Highway BRT
- Metrorail Routes**
 - Blue
 - Yellow
- VRE Routes**
 - Fredericksburg
 - Manassas
- Yellow Line Alignment**
 - Yellow Line Alignment
- Yellow Line Stations**
 - With Parking
 - Without Parking

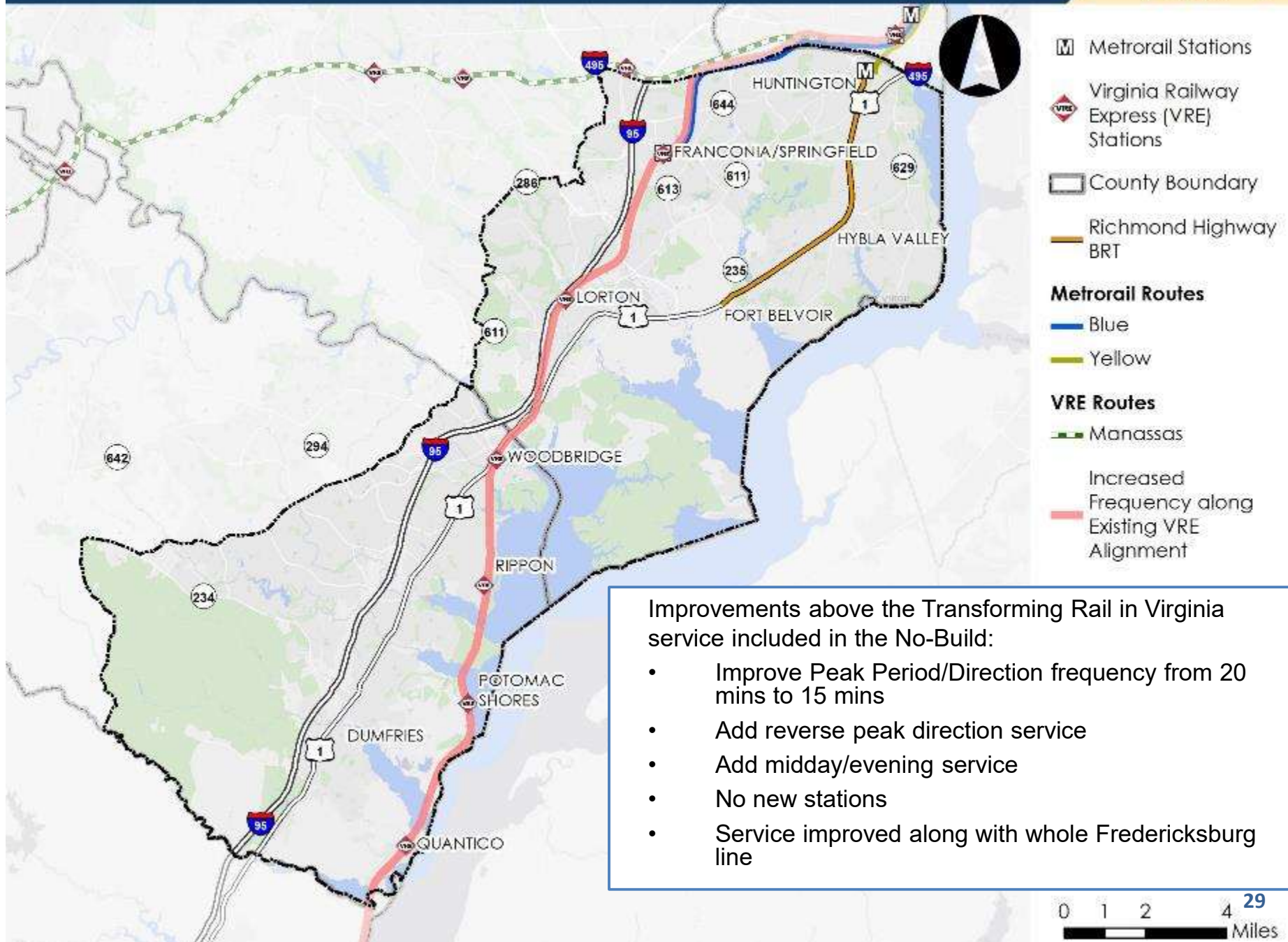


BRT Alternative



- Metrorail Stations
- Virginia Railway Express (VRE) Stations
- County Boundary
- Richmond Highway BRT
- Metrorail Routes**
 - Blue
 - Yellow
- VRE Routes**
 - Fredericksburg
 - Manassas
- BRT Alignment
- BRT Stations**
 - With Parking
 - Without Parking

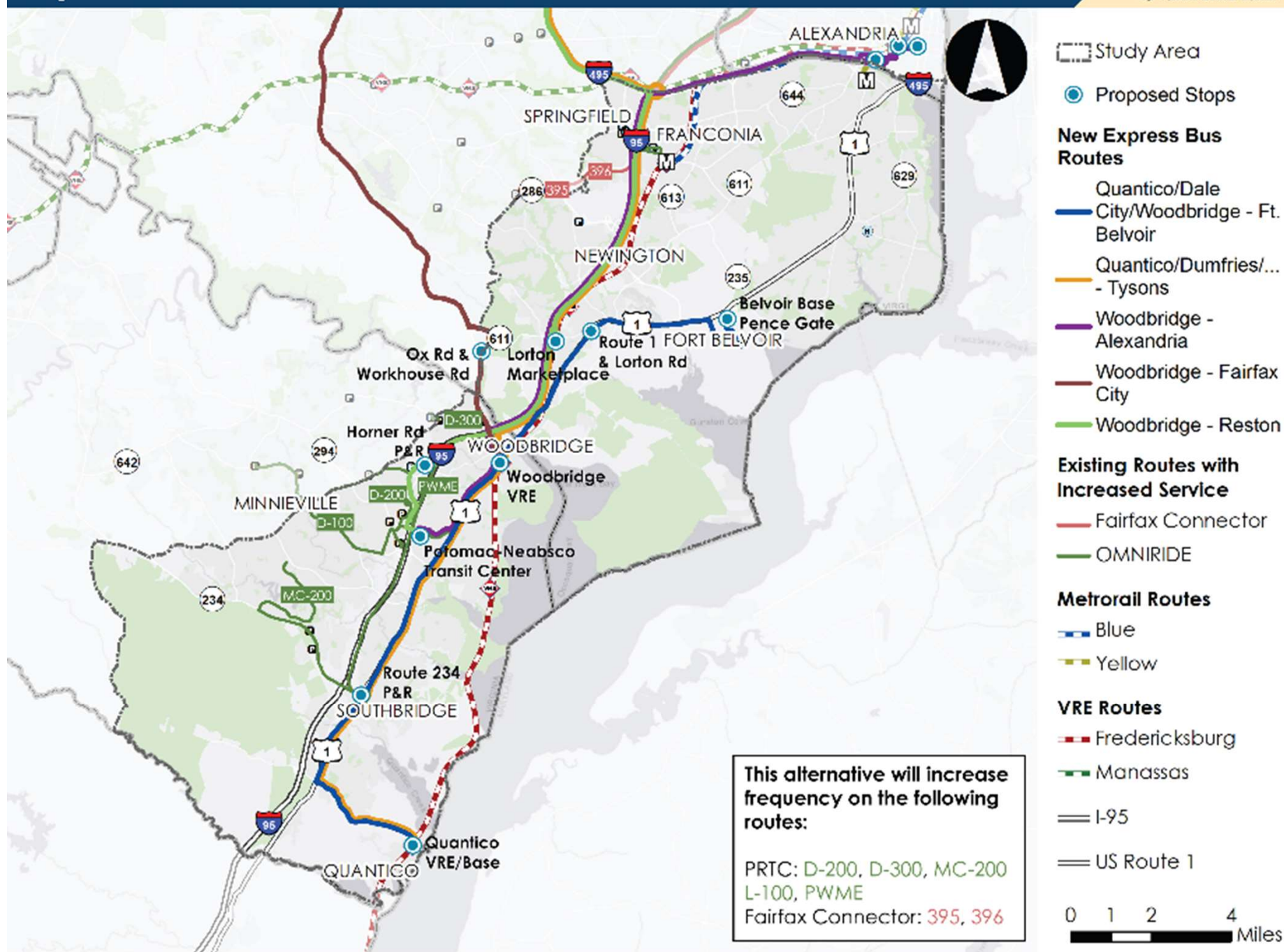




Improvements above the Transforming Rail in Virginia service included in the No-Build:

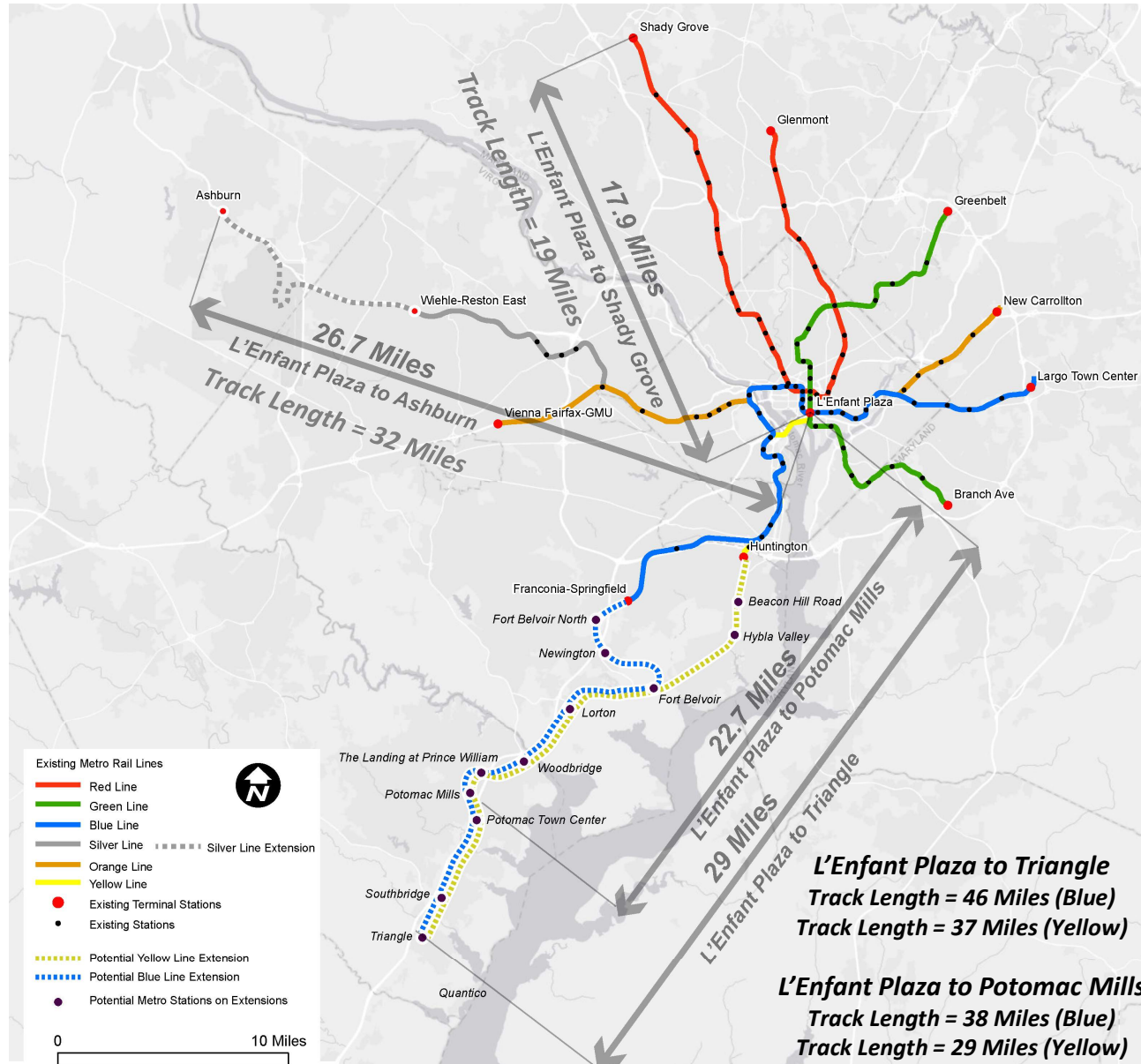
- Improve Peak Period/Direction frequency from 20 mins to 15 mins
- Add reverse peak direction service
- Add midday/evening service
- No new stations
- Service improved along with whole Fredericksburg line

Express Bus Alternative






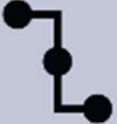


Regional Reference

Transit extensions would be longer than existing Metrorail lines



Preliminary Evaluation Results

How are we evaluating the alternatives?

Goals for Enhanced Transit		
Ridership Potential  Increase transit usage in the study corridor	Congestion Mitigation  Reduce the amount of traffic congestion in the study corridor	Equity  Provide a fair distribution of costs and benefits across different population groups
Regional Accessibility/ Connectivity  Increase access to regional activity centers and meet identified service gaps	Cost-effectiveness  Ensure that resources are used efficiently	Development Potential  Create opportunities for development around stations or stops

Ridership Potential

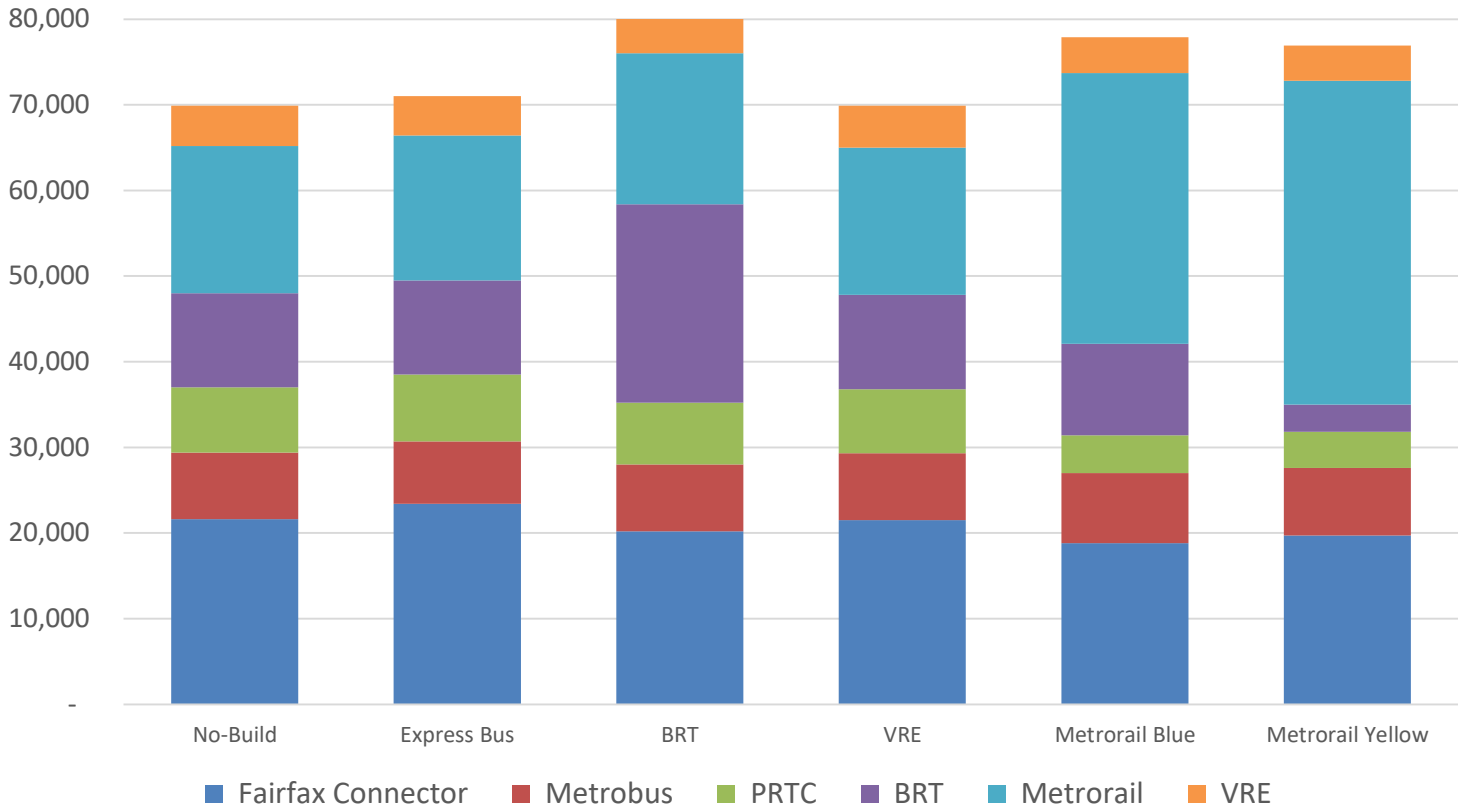


Increase transit usage in the study corridor

Total Transit Boardings

BRT Alternative has the highest number of transit boardings in the Study Corridor.

Total Transit Boardings in the Study Corridor



A 'boarding' is counted every time someone gets on a new transit vehicle

Includes only rail stations in the Study Corridor (Note: VRE alternative does not include new stations.)

DRAFT RESULTS – SUBJECT TO CHANGE



Transforming Rail Ridership Gains

The majority of the ridership increase associated with Transforming Rail in Virginia improvements are included in the No-Build.

Existing VRE Boardings in Study Corridor	No-Build VRE Boardings in Study Corridor	VRE Alternative Boardings in Study Corridor
2,600	4,700 (82% from existing)	4,900 (4% from No-Build)

*Includes only rail stations in the Study Corridor. (Note: VRE alternative does not include new stations.)

Some additional boardings would occur outside of the Study Corridor

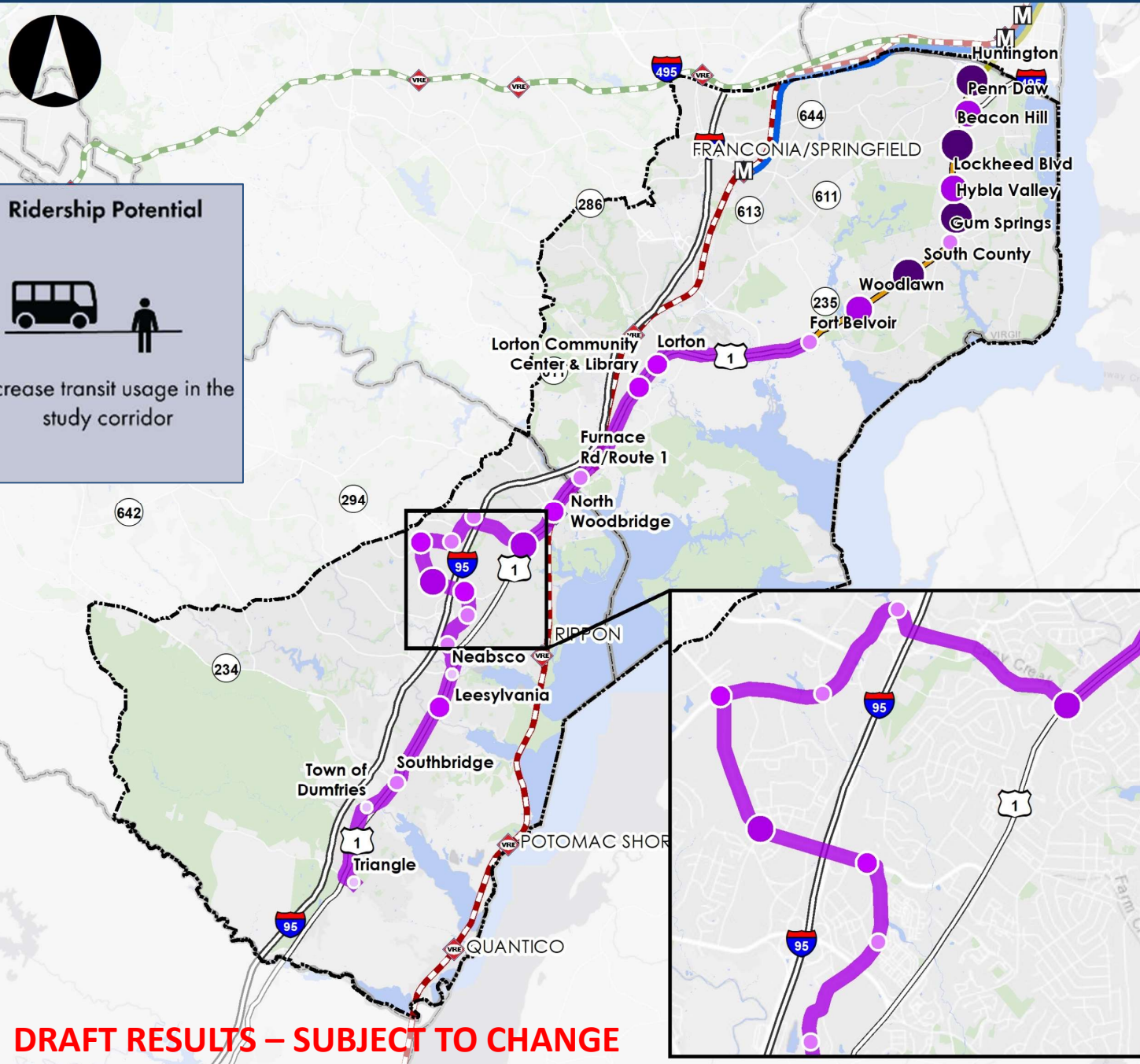
Projected BRT Daily Boardings



Ridership Potential



Increase transit usage in the study corridor



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

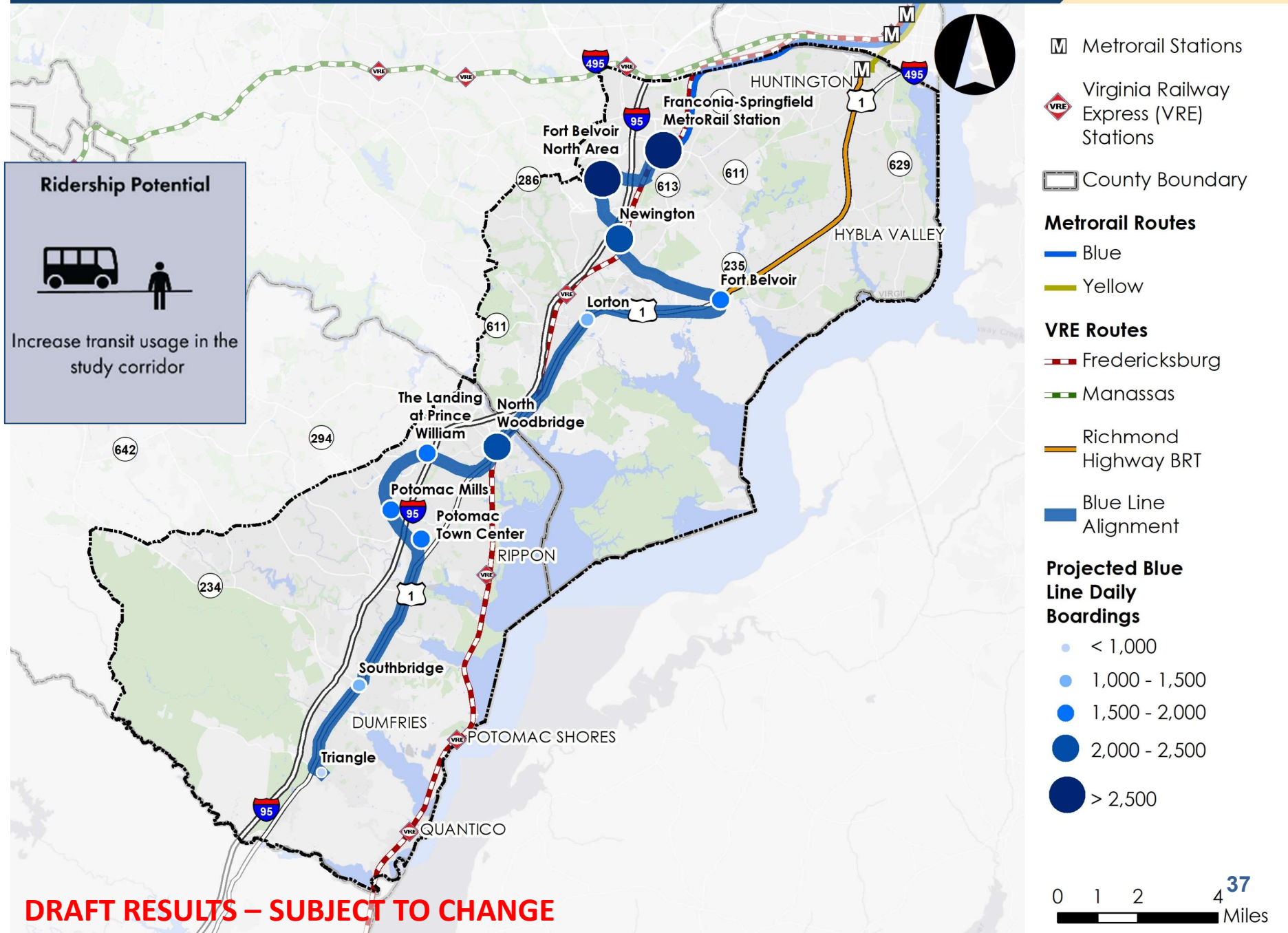
750 - 1,000

> 1,000

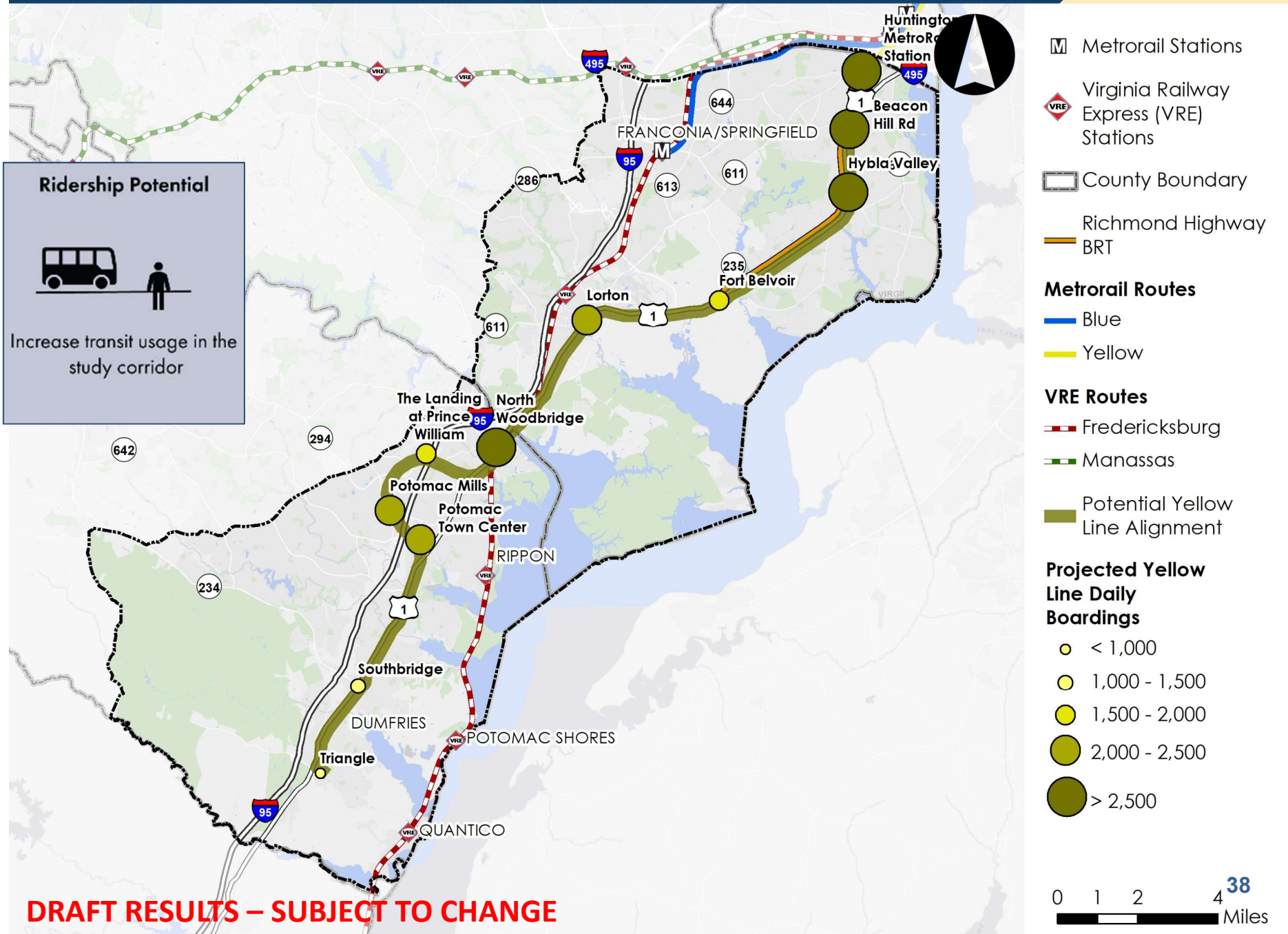
0 1 2 4 ³⁶/₄ Miles

DRAFT RESULTS – SUBJECT TO CHANGE

Projected Blue Line Daily Boardings



Projected Yellow Line Daily Boardings



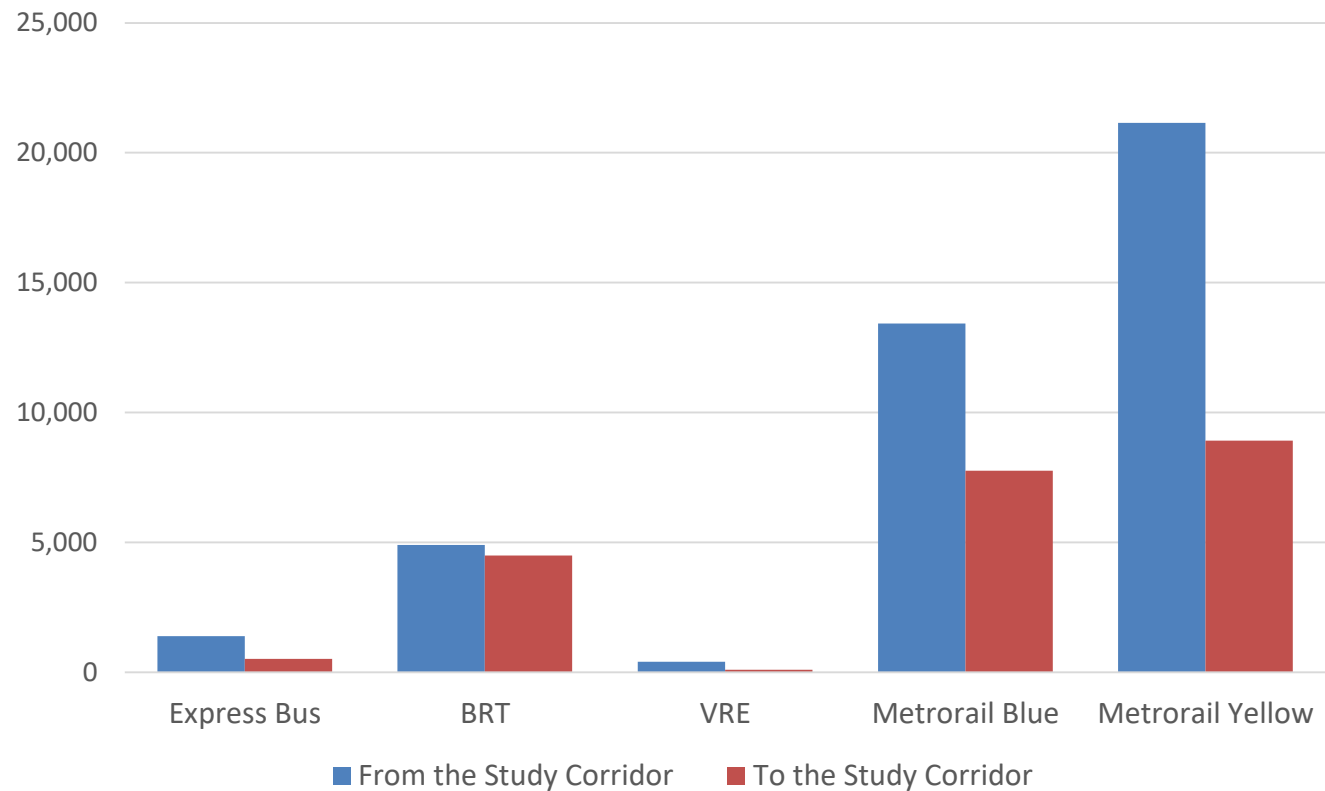
DRAFT RESULTS – SUBJECT TO CHANGE



New Transit Trips

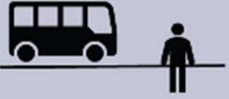
The Yellow Line Alternative creates the most new transit trips to and from the Study Corridor compared with the No-Build.

New Transit Trips in the Study Corridor



Unlike boardings, transit trips are only counted once end to end, regardless of how many routes are used.

Ridership Potential



Increase transit usage in the study corridor

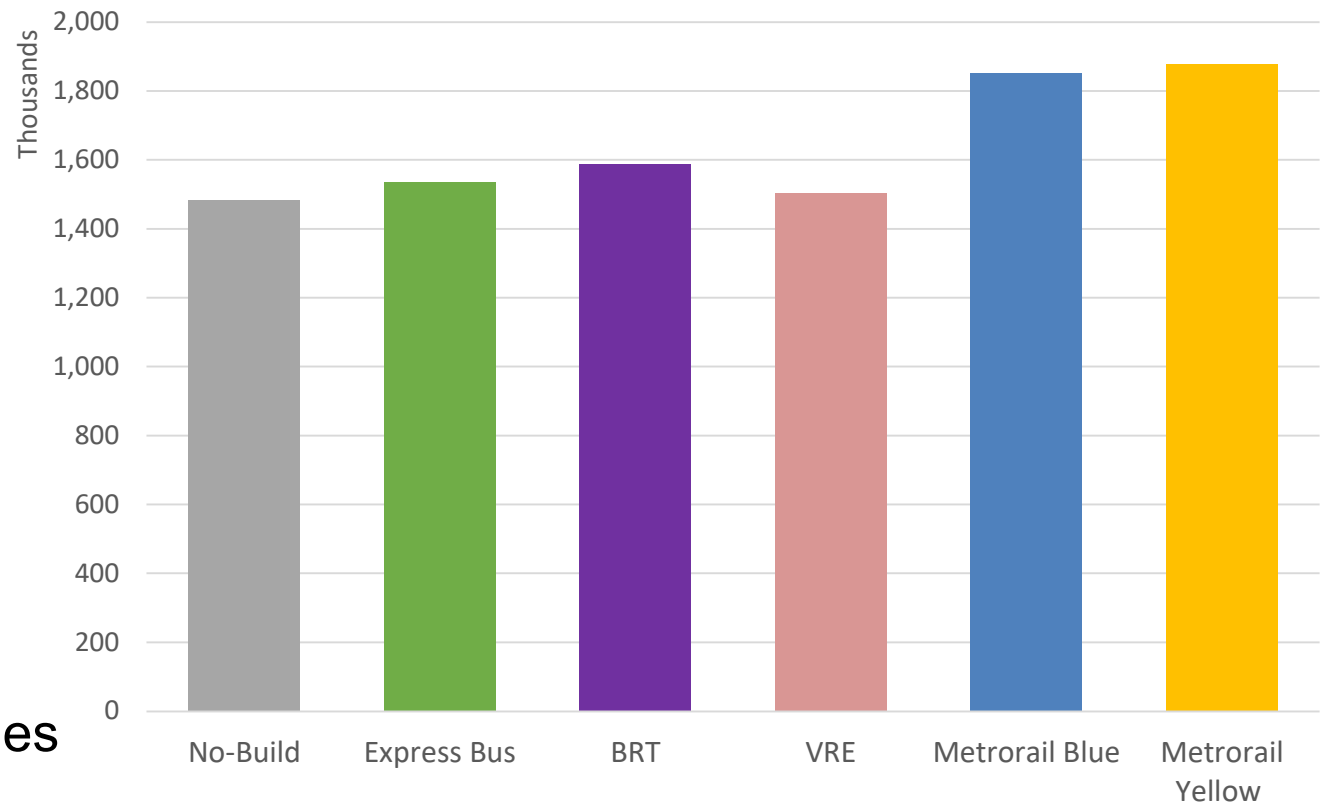
Person-Miles Traveled by Transit

The Metrorail Alternatives carry more people for longer distances in the Study Corridor than the other alternatives.

Person-Miles of travel quantifies the distance people are traveling on transit – so longer trips count more in this metric.

Includes all transit modes

PMT by Transit in the Study Corridor



Congestion Mitigation

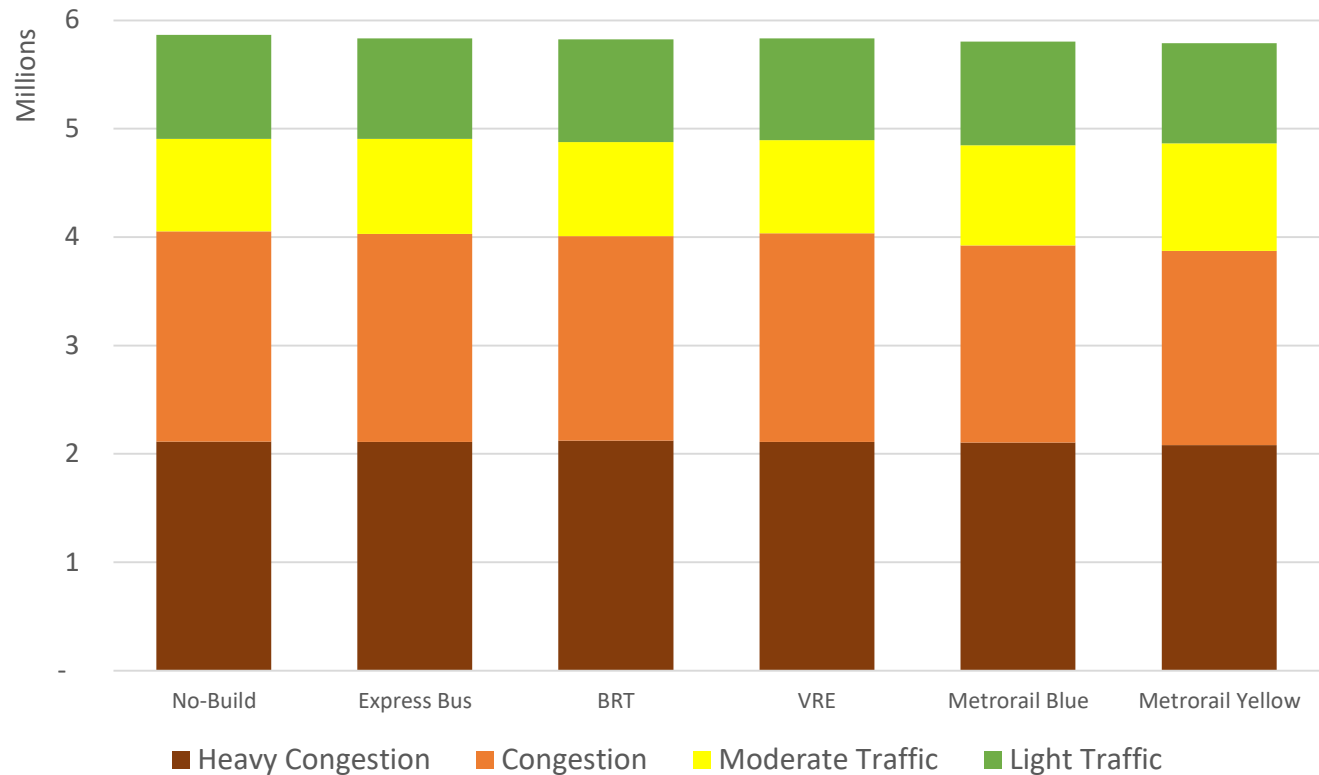


Reduce the amount of traffic congestion in the study corridor

Vehicle Miles Traveled

In all cases, total VMT goes down compared to the No-Build – but by less than 2%.

VMT by Congestion Level



Vehicle-Miles of travel is the amount of travel by cars occurring in the Study Corridor.

Congestion Mitigation

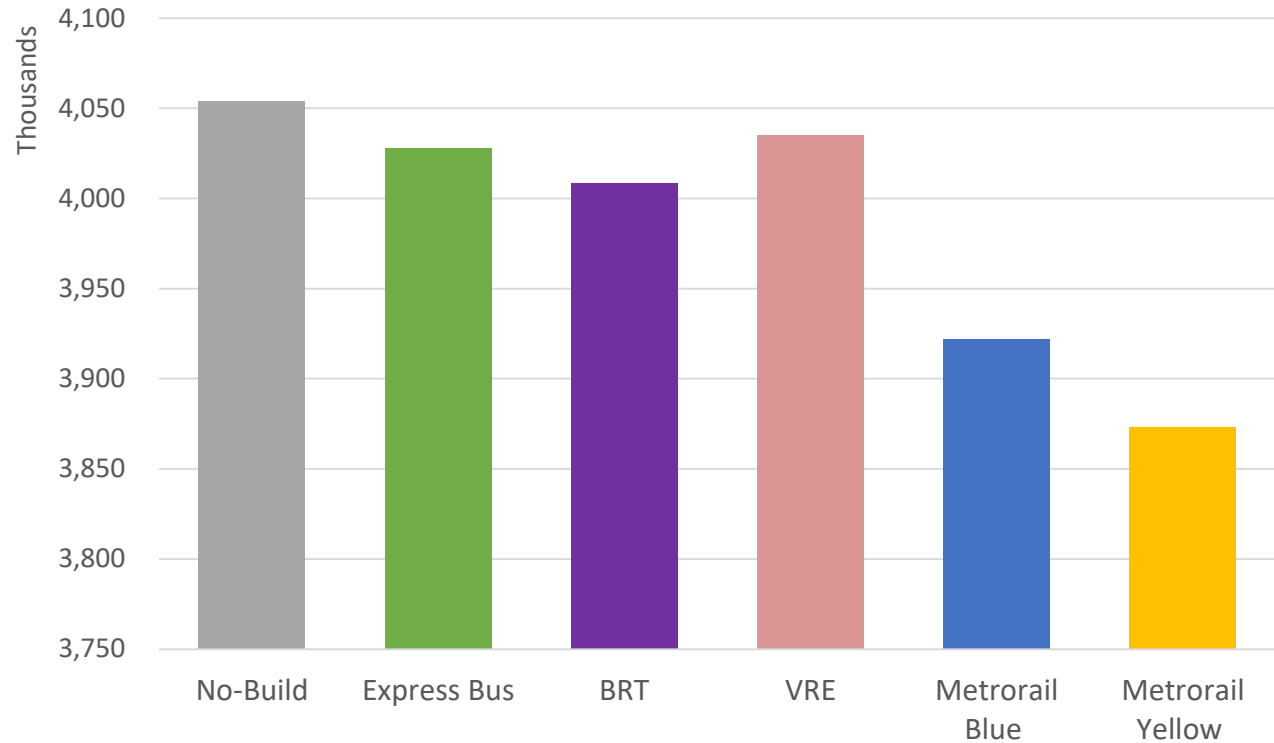


Reduce the amount of traffic congestion in the study corridor

Congested VMT

All of the alternatives decrease congestion on roads in the Study Corridor compared with the No-Build.

Congestion in the Study Corridor



Includes “severe congestion” and “congestion” – so lower is better

Regional Accessibility/
Connectivity



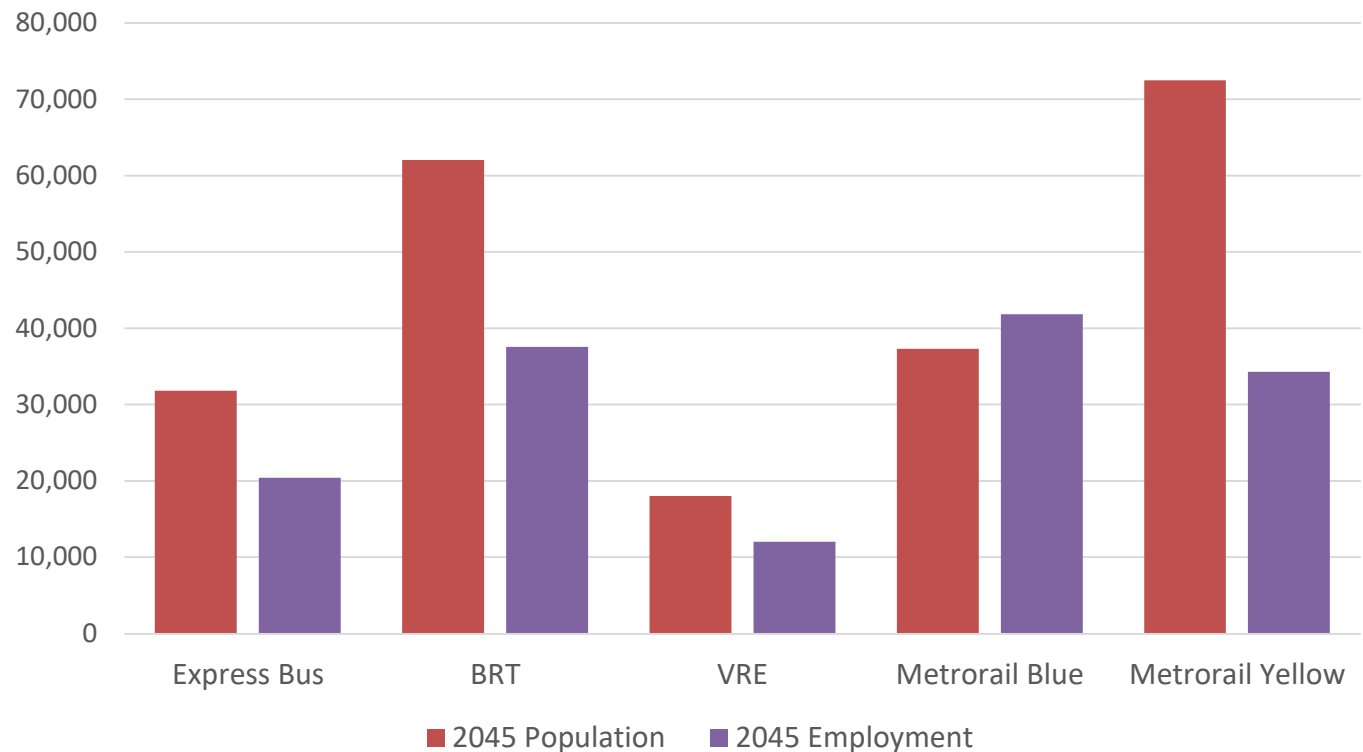
Increase access to regional activity centers and meet identified service gaps

Walk Access to Transit

By 2045, the Yellow Line and BRT Alternatives will provide high quality transit to the most residents. The Blue Line Alternative will have the most jobs within a half-mile of transit.

Jobs and Population near Transit

Within a half-mile of transit stops with new/improved service



Includes only rail stations in the Study Corridor. (Note: BRT alternative only includes the extension south of Ft. Belvoir.)



DRAFT RESULTS – SUBJECT TO CHANGE

DL17 Regional Accessibility/
Connectivity

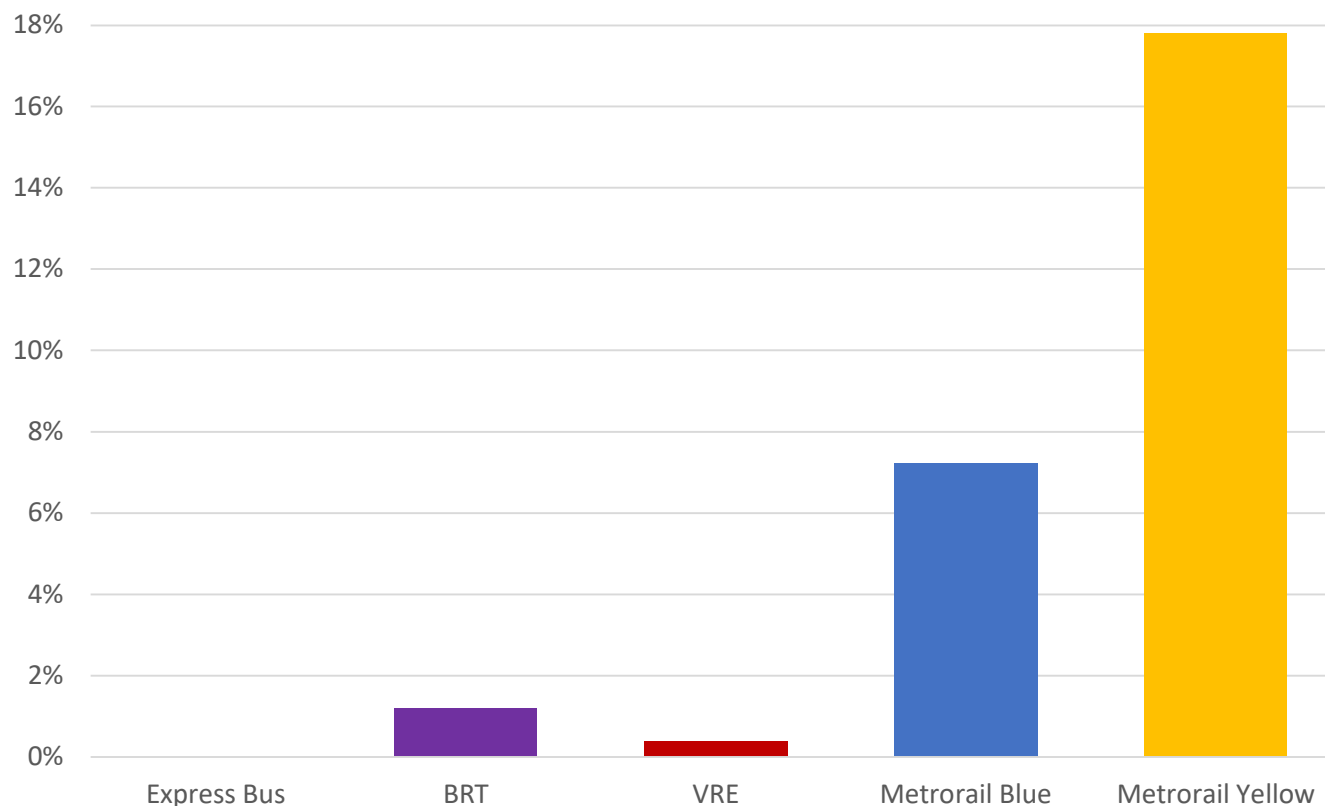


Increase access to regional activity centers and meet identified service gaps

Access to Jobs

The Yellow Line Metrorail Alternative provides the biggest increase in accessibility to jobs by transit for Study Corridor residents.

New Jobs Accessible within 60 mins by Transit (Peak)



Percent of new jobs accessible to residents of the Study Corridor within 60 mins by transit as compared to the No-Build.



DRAFT RESULTS – SUBJECT TO CHANGE

Slide 44

DL17

Needs to be updated with new numbers

Dalia Leven, 7/21/2021

Equity



Provide a fair distribution of costs and benefits across different population groups

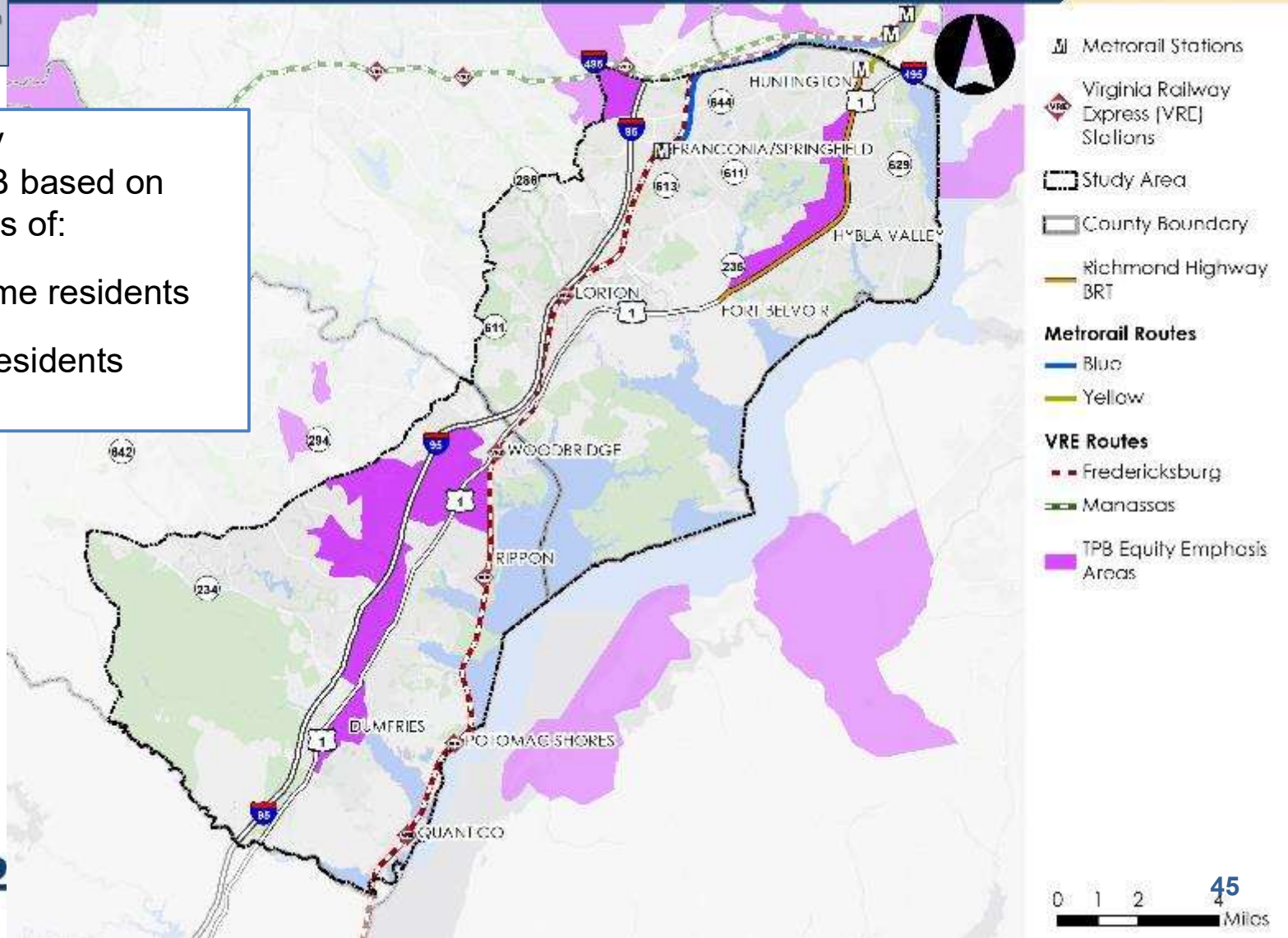
Equity Emphasis Areas

Equity Emphasis Areas



Developed by MWCOG/TPB based on concentrations of:

- Low-income residents
- Minority residents



0 1 2 45 Miles

Equity

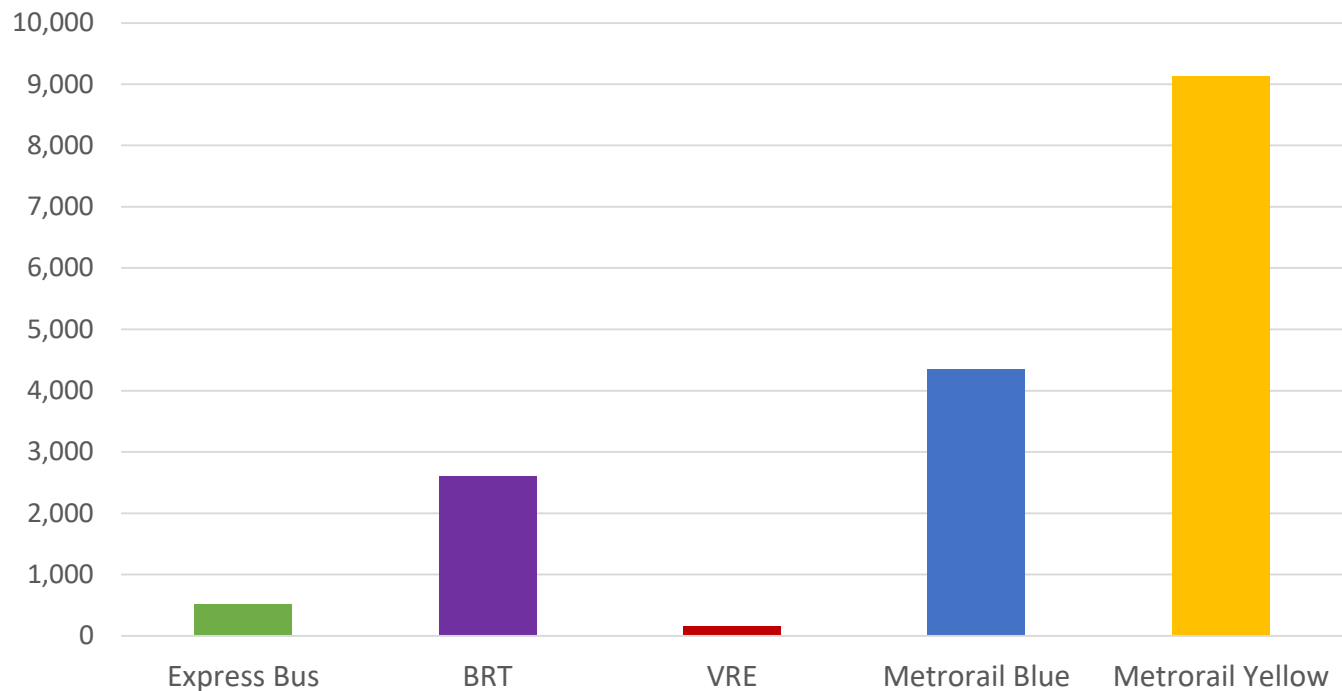


Provide a fair distribution of costs and benefits across different population groups

Equity Transit Trips

- Across all Alternatives, new transit trips from EEAs grow more than from the overall Study Corridor.
- The Yellow Line Alternative includes the most new transit trips made by EEA residents

New EEA Transit Trips from the Study Corridor



New transit trips from EEAs in the Study Corridor as compared to the No-Build.

Equity

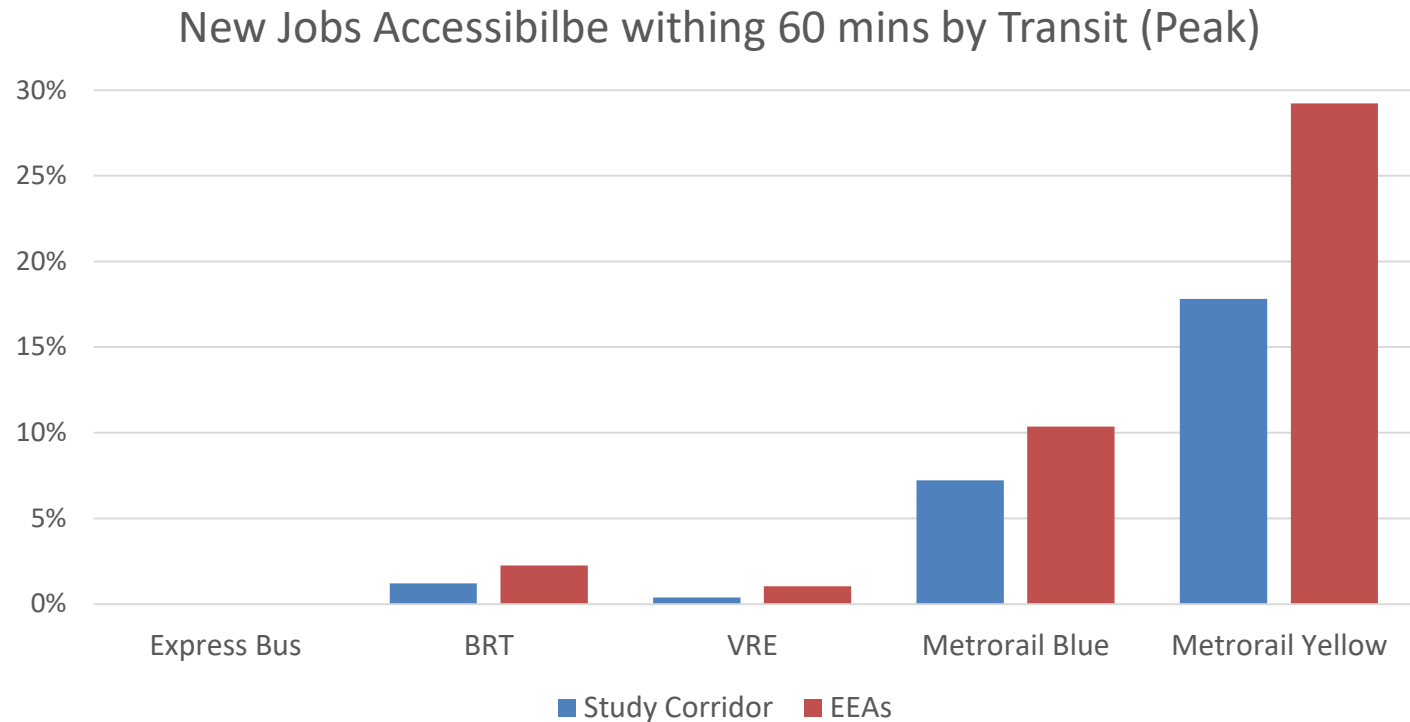


Provide a fair distribution of costs and benefits across different population groups

Job Accessibility for EEAs

- Across all Alternatives, job accessibility for EEAs grow more than for the overall Study Corridor.
- The Yellow Line Alternative shows the biggest increase in accessibility for EEA residents

Percent increase in the average number of jobs accessible for residents of EEAs in the Study Corridor as compared to the No-Build



Equity

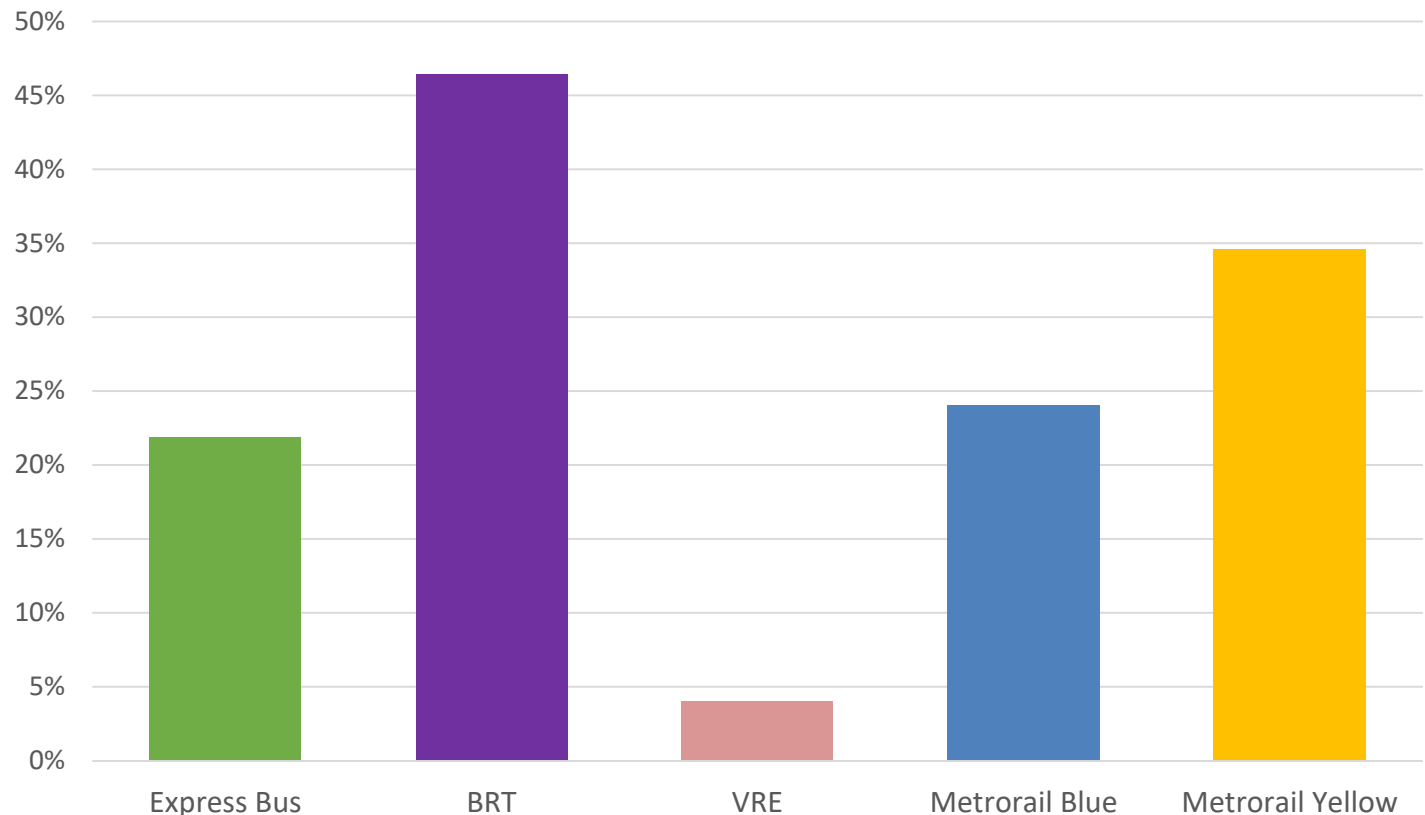


Provide a fair distribution of costs and benefits across different population groups

EEA Residents at Transit Stations

Residents near the BRT Alternatives are more than 45% residents of EEAs and most likely to be low-income and/or minority.

Portion of Residents near Transit that live in EEAs



EEA percentage of the people who live within half-mile of transit



DRAFT RESULTS – SUBJECT TO CHANGE

Cost-effectiveness



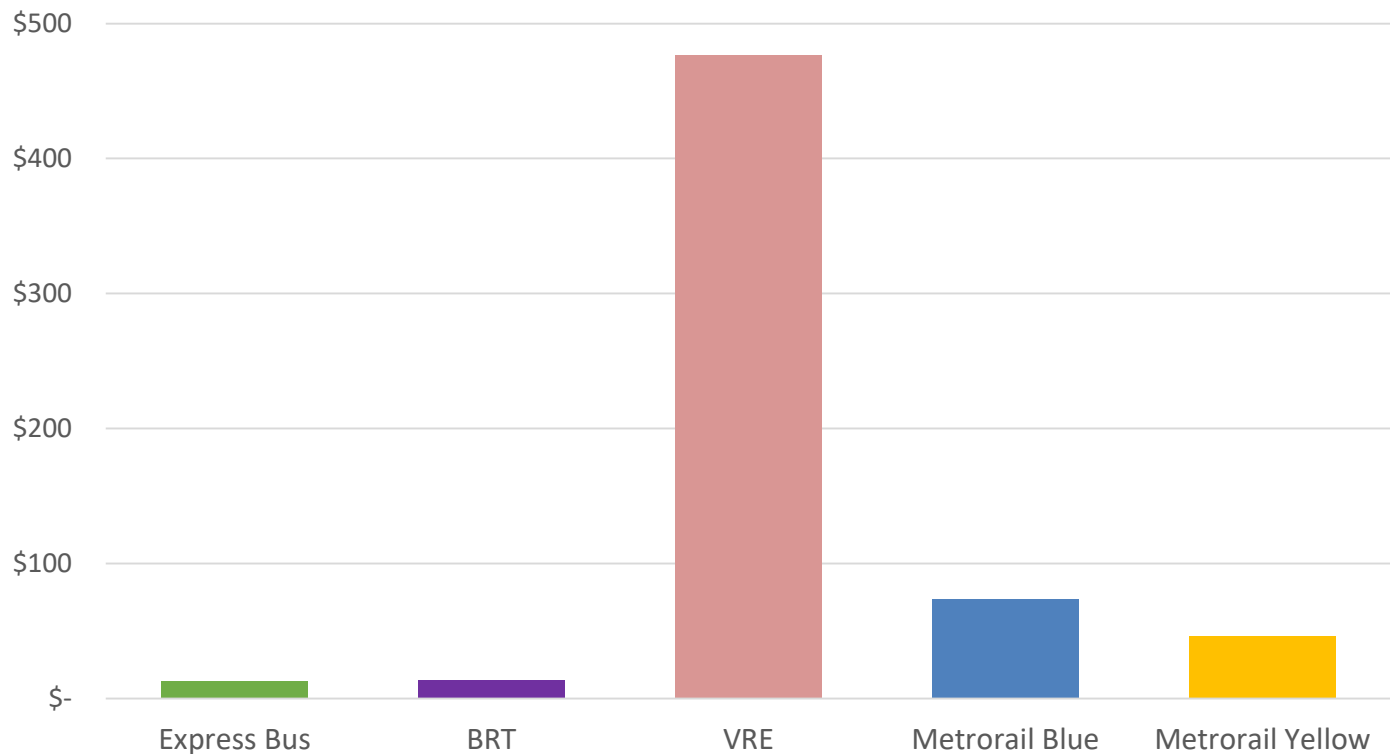
Ensure that resources are used efficiently

Total Cost per Transit Boarding

The Bus Alternatives are significantly more cost effective than the rail alternatives.

Estimated cost per transit boarding in the Study Corridor – lower is better. Note that the VRE ridership gains due to Transforming Rail in Virginia are in the No Build and are not reflected here.

Total Cost per Transit Boarding



All costs in 2019 \$

How will we evaluate land use?



- Potential development around selected station areas
- Land use around stations will impact ridership
 - County Small Area Plans
 - Additional Transit Oriented Development
 - Note – to be considered in additional analysis (wasn't used in the results presented today)

Development Potential





Create opportunities for development around stations or stops

Station Area Density

Some potential stations already have densities higher than some existing stations – but lower than WMATA guidelines for system expansion

Station	Average Weekday Boardings (2019)	Activity Density – (People + Jobs/Acre) 1 Mile Radius
Fort Belvoir	N/A	3.1
Triangle**	N/A	3.1 (6.7 – 18.0)**
Southbridge	N/A	5.1
Fort Belvoir North	N/A	6.4
Congress Heights	2,503	6.8
Branch Ave*	5,496	7.0
North Woodbridge**	N/A	7.3 (26.7 – 40.0)**
Addison Road-Seat Pleasant	2,788	7.4
Cheverly	1,029	7.8
Morgan Boulevard	1,832	7.8
Lorton**	N/A	8.3
Deanwood	1,474	8.5
Van Dorn Street	2,038	9.2
Suitland	4,593	9.4
Newington	N/A	9.6
The Landing at Prince William**	N/A	9.6 (11.0 – 23.0)**
Largo Town Center*	4,147	9.7
Potomac Mills	N/A	10.3
Naylor Road	2,423	10.7
Potomac Town Center	N/A	10.8
Franconia-Springfield*	4,869	11.8
Landover	1,754	12.1
Beacon Hill Road**	N/A	12.4
Shady Grove*	11,480	12.8
Hybla Valley**	N/A	14.5
Huntington*	5,320	15.2
Dunn Loring-Merrifield	3,970	16.6



 Potential Metro Stations
 Existing Metro Stations

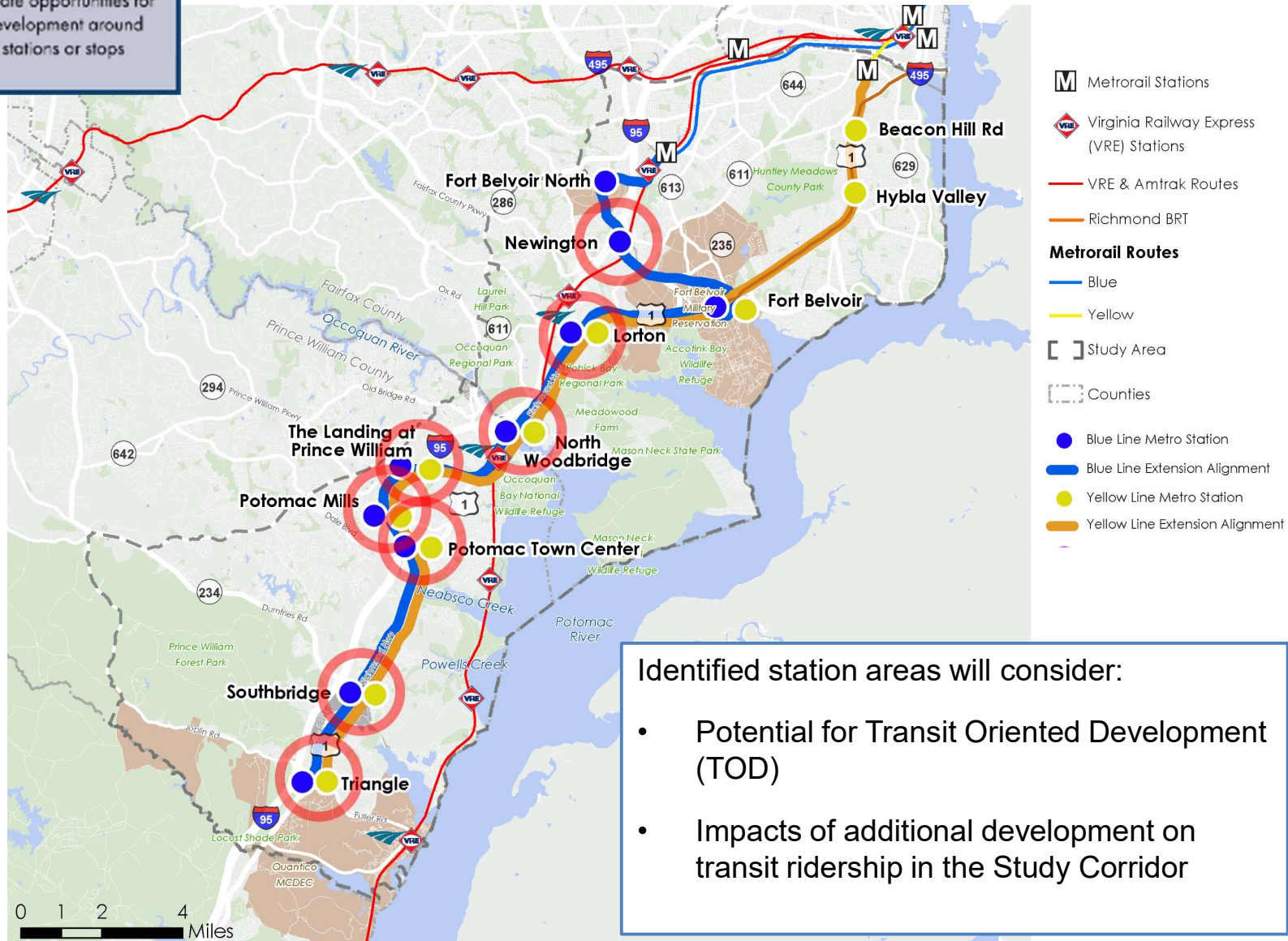
*Terminal Station
 ** Higher Density proposed in Small Area Plans

Development Potential



Create opportunities for development around stations or stops

Land Use Analysis



Identified station areas will consider:

- Potential for Transit Oriented Development (TOD)
- Impacts of additional development on transit ridership in the Study Corridor

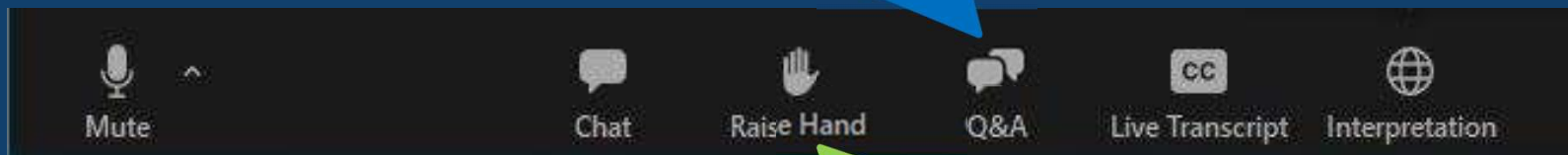
Next Steps

Next Steps

- **August:** Additional Analysis
- **September:** Final Public Meetings (in person!)
- **December:** Final Report

Questions & Answers

How to ask questions:



- Raise your hand if you'd like to ask a question verbally
- Once you raise your hand you will be called on and given the ability to unmute yourself
- You are welcome to continue using the Q&A feature

Callers:

- Raise hand = *9
- Unmute = *6