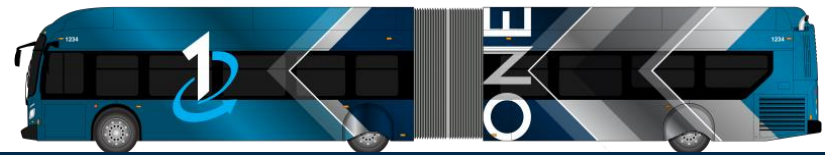


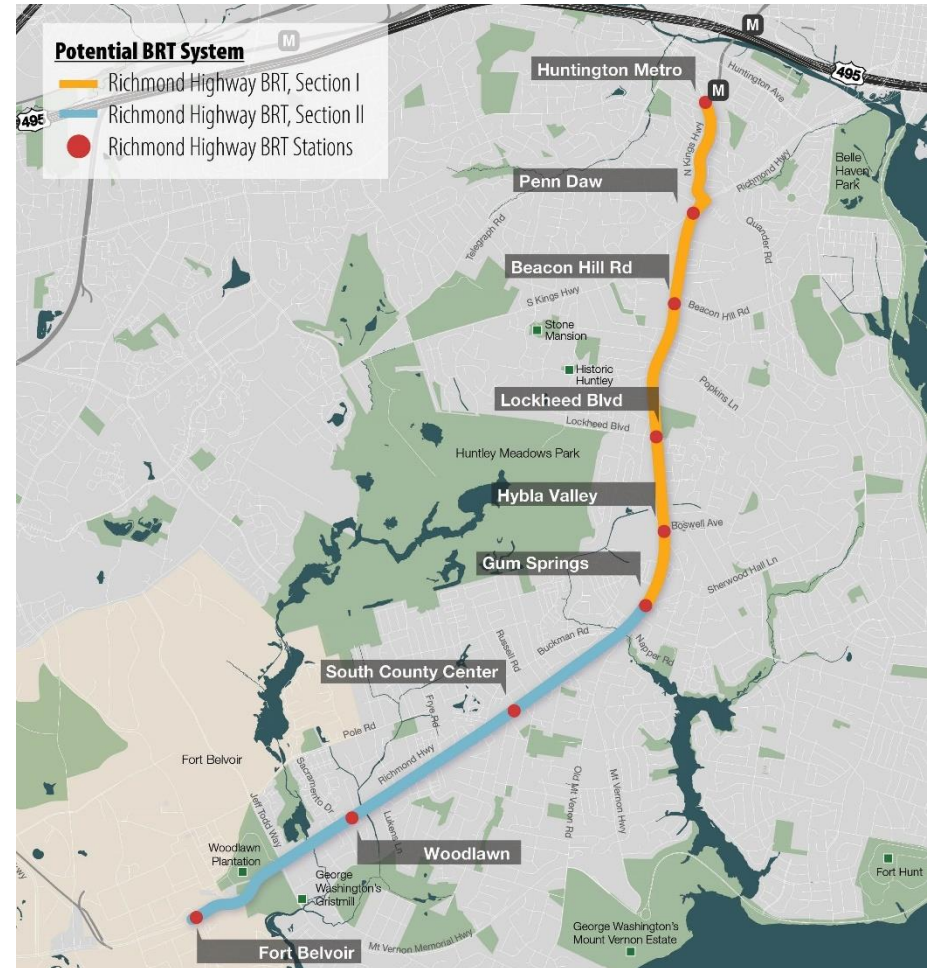


County of Fairfax, Virginia

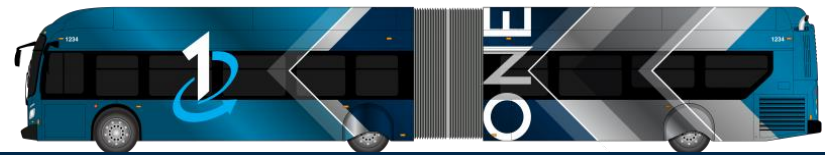


Richmond Highway Bus Rapid Transit Transportation Advisory Commission

November 15, 2022



The Richmond Highway BRT project is funded in part by the Northern Virginia Transportation Authority.

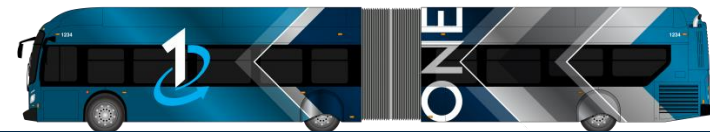


Agenda

- Richmond Highway Corridor Improvements Overview
- BRT Project Overview
- Turn Lane Analysis
 - Survey Results
 - Recommendations
- 12-Month Outlook



Richmond Highway Corridor Improvements Overview



Richmond Highway Bus Rapid Transit



Project Coordination



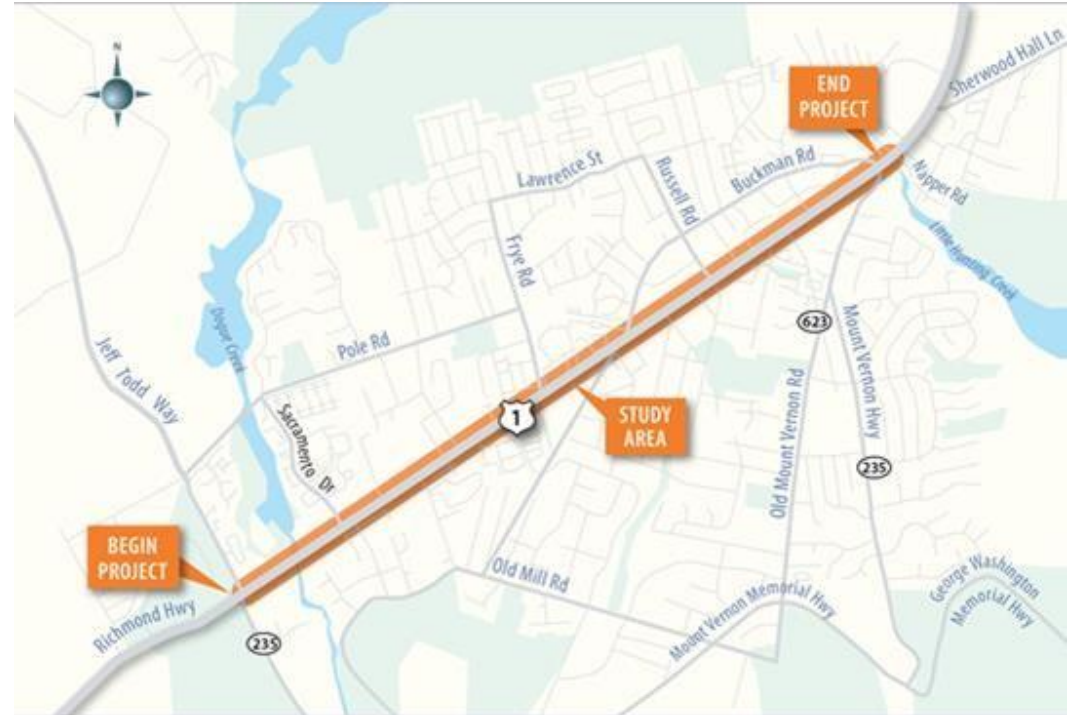
Embark Richmond Highway is an initiative focused on creating a multimodal future for Richmond Highway Corridor where residents, workers, and visitors can walk, bike, or drive to the places they want to go. The components of the Embark Richmond Highway project include:



- ⇒ Fairfax County-led components of EMBARK are providing the vision for the design of the widening of Richmond Highway from Jeff Todd Way to Sherwood Hall Lane.
- ⇒ Fairfax County Board of Supervisors approved the Embark Comprehensive Plan Amendment on March 20, 2018
- ⇒ Coordination between state and local agencies occurs regularly at project progress meetings and during informal discussions and mini-workshops.
- ⇒ VDOT maintains Richmond Highway and makes final decisions considering the positions of its partners and the public
- ⇒ Fairfax County Board of Supervisors has endorsed this project

Project Overview

- **Widening of Richmond Highway (US Route 1) from four lanes to six lanes**
 - Jeff Todd Way to Sherwood Hall Lane
 - Approximately 3 miles
- **Safety improvements**
- **Congestion relief**
- **Intersection improvements**
- **Median reservation for future Fairfax County Bus Rapid Transit (BRT)**
- **Sidewalks and separate bicycle paths on both sides of road**
- **Three bridge replacements**
- **Potential noise walls**
- **Utility relocations**
- **Stormwater management**





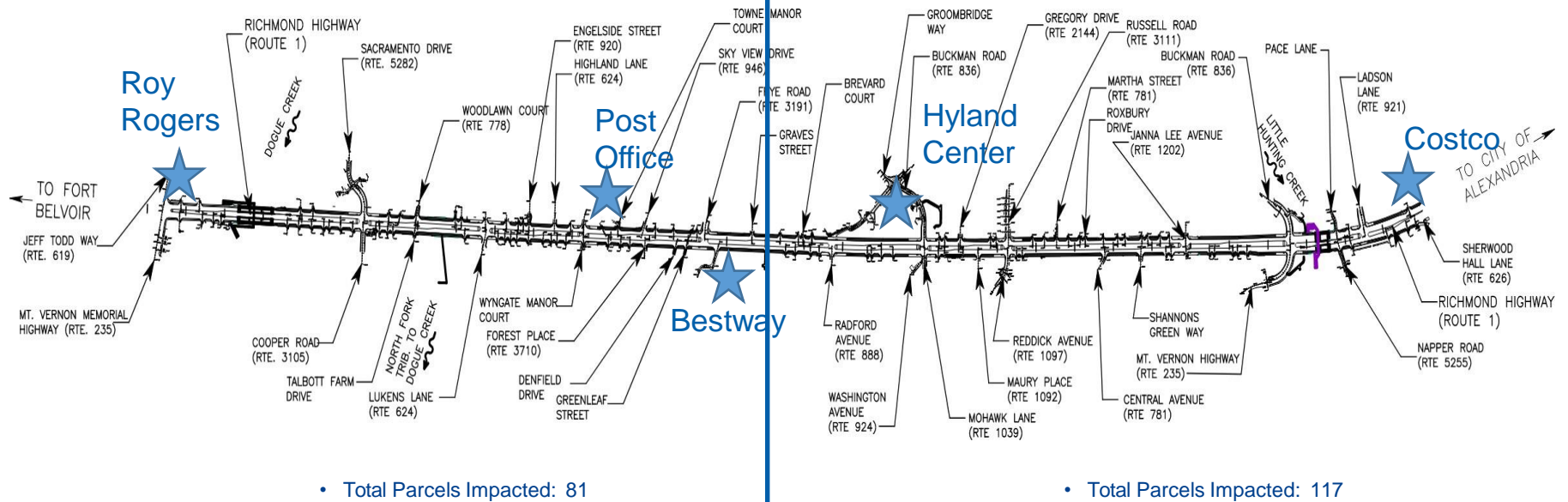
Project Phases

Phase 1

Jeff Todd Way to
0.13 mi. North of Frye Road
1.45 miles

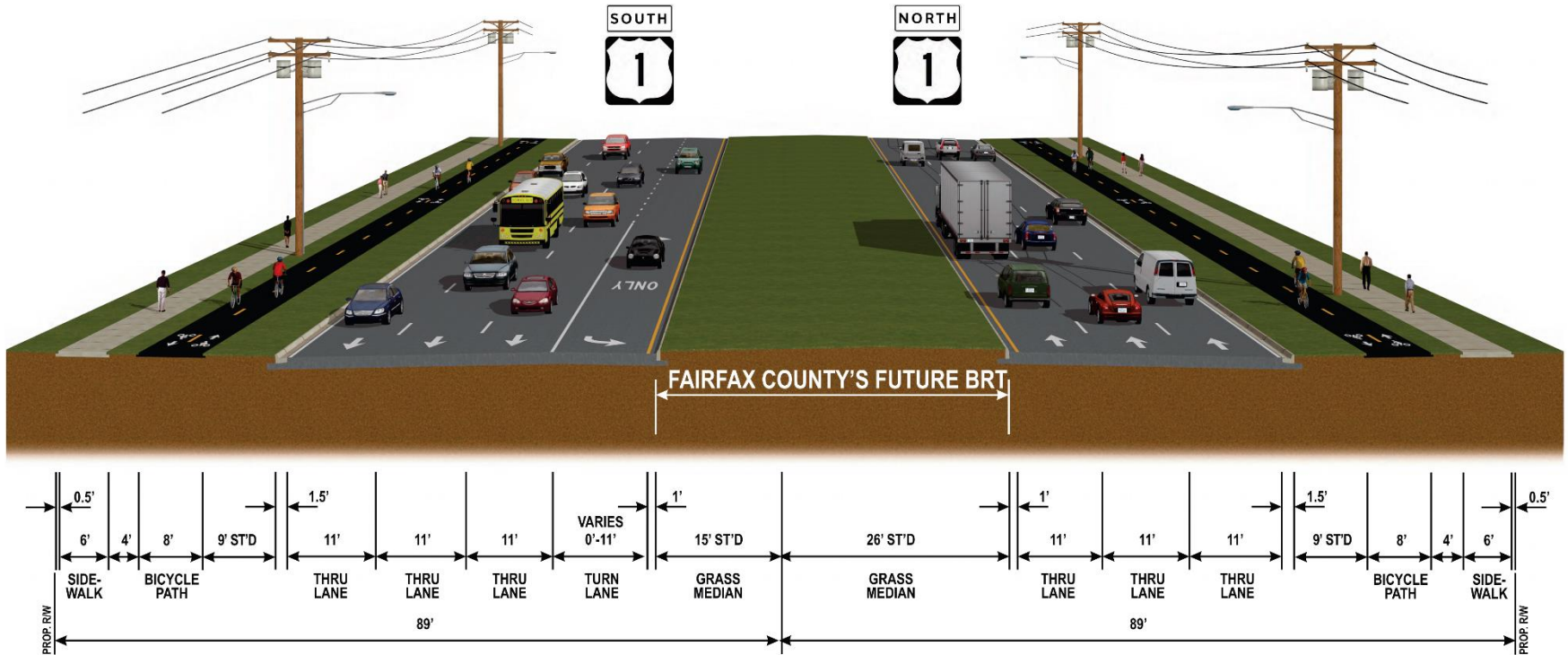
Phase 2

0.13 mi. North of Frye Road
to Sherwood Hall
1.65 miles





Typical Cross Section

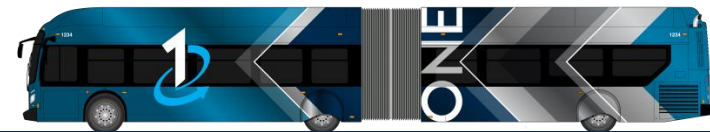


The intent of this exhibit is to depict the configuration of elements within the proposed right-of-way width of 178 ft. For clarity, potential landscaping is not depicted.

Design Update

- **Continued coordination with the community**
 - **Mount Vernon Council of Citizens Association (MVCCA) Meetings**
 - **Elected official town halls**
 - **Chamber of Commerce meetings**
- **Incorporated design adjustments in response to internal/external comments and to meet state and local requirements**
- **Third Party development coordination (Ongoing)**
- **Utility coordination for relocations (Ongoing)**
- **Right-of-way acquisitions**
 - **Total acquisitions in process for entire corridor**
 - **14 properties already acquired**
 - **Right-of-way for Phase 1 (southern half) anticipated to begin early next year**
- **More information available at the [project website \(http://www.virginiadot.org/richmondhighway\)](http://www.virginiadot.org/richmondhighway)**

BRT Overview



Richmond Highway Bus Rapid Transit

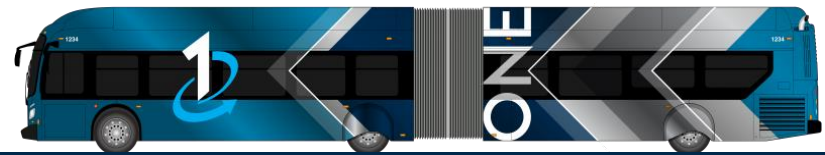




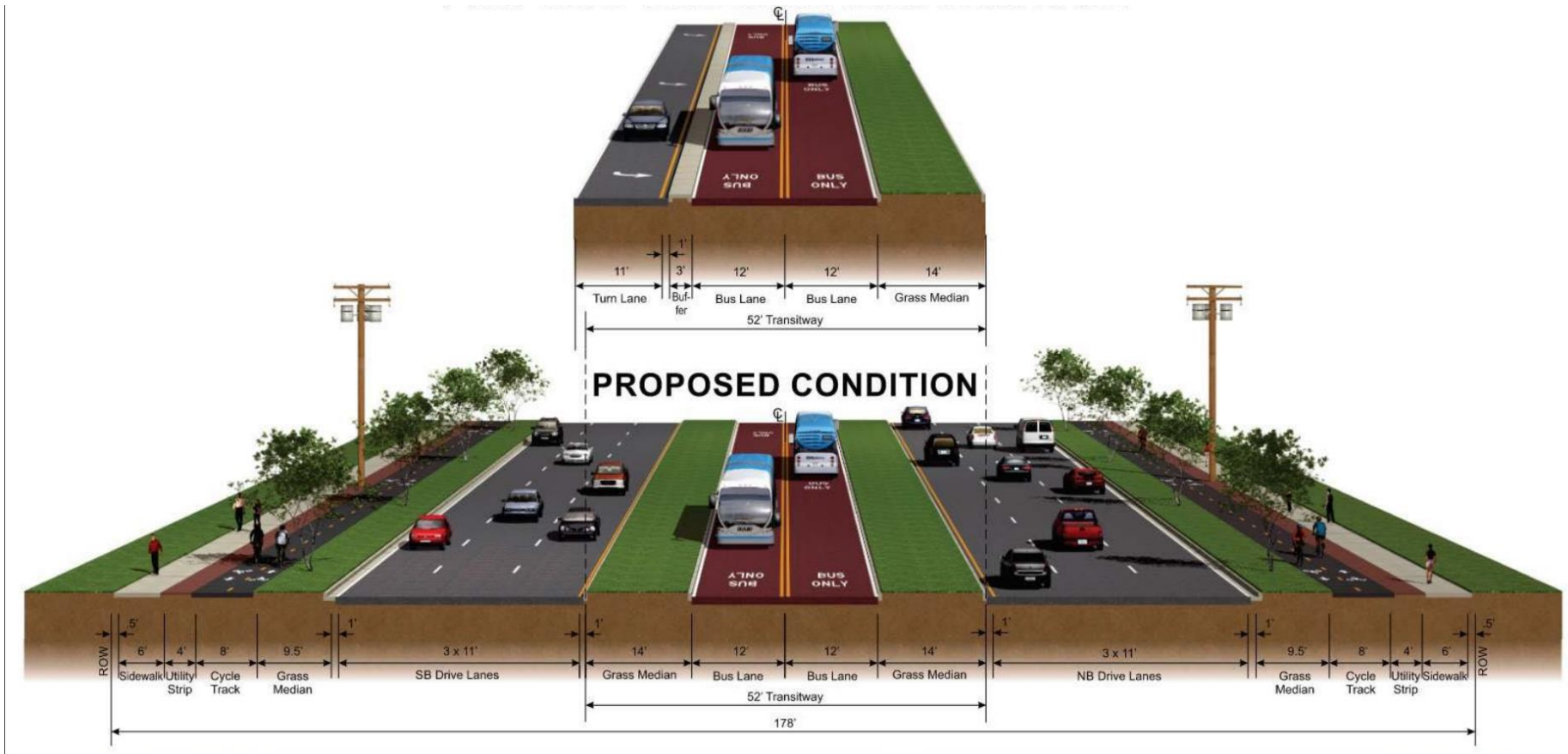
Overview

- The Richmond Highway Bus Rapid Transit (BRT) Project is an effort to plan, design, and construct a BRT system between Huntington Metrorail Station and Fort Belvoir
- Nine potential BRT stations, with the system constructed in two sections

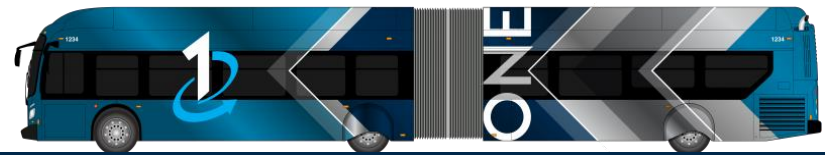




Typical Section

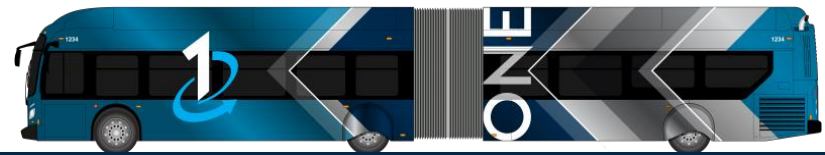


Note: Landscaping does not reflect actual design. For illustrative purposes only



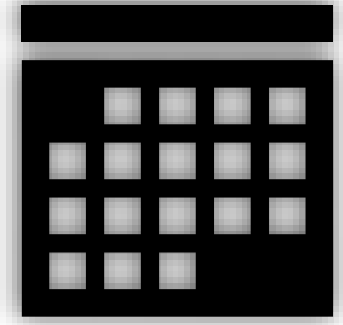
Design Update

- **Design at approximately 60% complete**
- **Website has updated roll plans**
 - [fairfaxcounty.gov/transportation/ richmond-hwy-brt/materials](https://fairfaxcounty.gov/transportation/richmond-hwy-brt/materials)
- **National Environmental Policy Act (NEPA)**
 - Federal Transit Administration (FTA) determined the project met criteria for a Categorical Exclusion in January 2022
- **North Kings Highway intersection improvements were presented at a public meeting in April 2022**
- **Branding effort concluded**
 - BRT system is now called “The One”
- **Community Charm outreach and mini-meetings were held in summer 2022**
- **With VDOT concurrence, the design speed for the corridor has been reduced from 45 to 35 mph**
- **Third Party coordination (Ongoing)**
- **Utility coordination for relocations (Ongoing)**

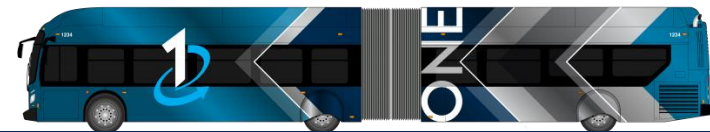


BRT 12-Month Outlook

- Station Renaming Outreach (Fall 2022)
- Sound Wall Coordination (Fall 2022)
- Final Station Renaming Decision (December 2022)
- Readiness to Enter FTA Engineering (January 2023)
- FTA Project Rating (March 2023)
- 90% Design Milestone (June 2023)
- Right-of-way acquisition/demolition (Ongoing)
- Third Party coordination (Ongoing)
- Utility coordination for relocations (Ongoing)

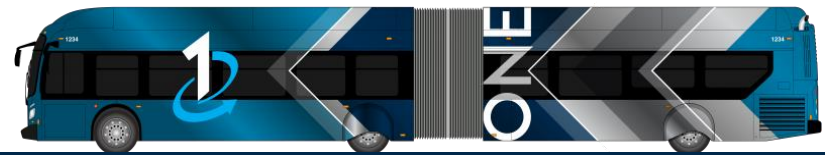


Turn Lane Analysis



Richmond Highway Bus Rapid Transit

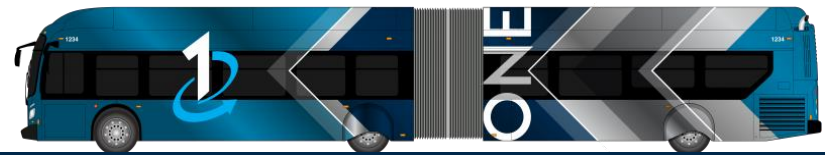




Background

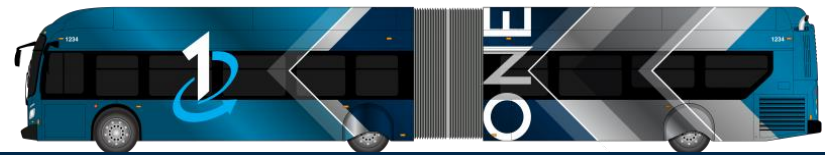
- As part of the BRT project design endorsement, the Board of Supervisors directed County staff to evaluate potential design modifications to narrow cross section along Richmond Highway
- Objectives were to enhance:
 - BRT operations
 - Bicycle & pedestrian safety
 - Vehicular safety
 - Intersection Operations
 - Corridor Operations
- 13 intersections evaluated for potential left/right turn lane reductions
- Analysis was coordinated with VDOT
- Results of the initial analysis presented at May 3, 2022, public meeting
 - 12 of 30 recommendations/modifications to be incorporated
 - Plus 2 recommendations for future off-street parking





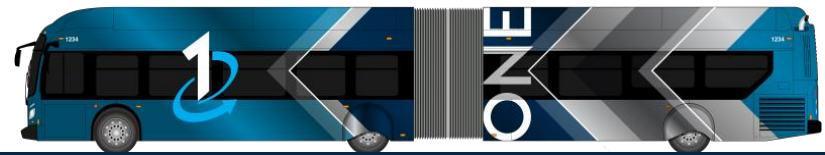
Survey Responses

- An online survey was also conducted to receive feedback from the May 3 public meeting
- Survey and comment period was open May 3 - May 31, 2022.
- There were 430 responses overall, though not all respondents answered all questions.
 - About 200-250 people responded to each of the intersection questions.
- Surveys in English and Spanish were available online as well as on paper at the public meeting on May 3.
- The survey results generally agreed with the staff's recommendations



Background

- **The same recommendations made on May 3, 2022, were made to the BRT Executive Committee on June 10, 2022, with consideration given to the public feedback received**
 - BRT Executive Committee approved implementation of all but 3 recommendations
 - Requested additional review of three turn lane recommendations
 - Southbound right turn lane at Beacon Hill
 - Southbound right turn lane at North Buckman
 - Eastbound right turn lane at Sacramento Drive
- **Additional analysis was presented to the BRT Executive Committee on September 28, 2022**
 - BRT Executive Committee approved the final 3 recommendations



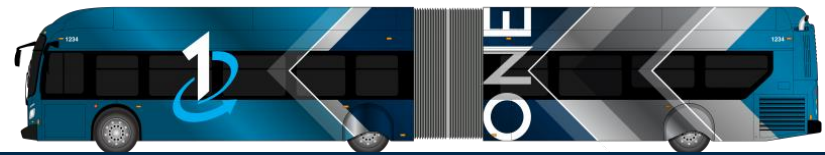
County of Fairfax, Virginia

Summary of all Recommendations

Approved recommendations

- 14 of 31 reductions/modifications will be incorporated
- Plus 2 recommendations for future off-peak street parking

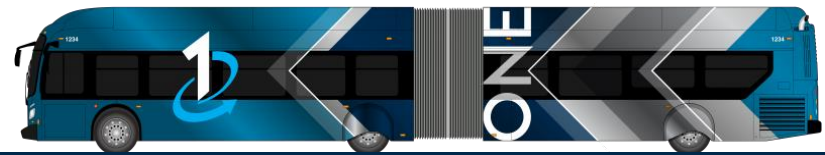
Intersection with Richmond Highway	Potential Modification	Recommended for Implementation
Shields Avenue	Remove 2 nd left turn lane along northbound Richmond Highway	No
Shields Avenue	Reduce median width on north side of intersection	Yes
Shields Avenue	Remove dedicated right turn lane along southbound Richmond Highway	Yes
Shields Avenue	Remove 2 nd dedicated right turn lane along eastbound Shields Avenue	No
Shields Avenue	Replace asphalt with landscaped grass median along southbound Richmond Highway south of the intersection	Yes
Shields Avenue	Remove/reduce the width of the grass medians south of the intersection	No
Entrance to Kings Crossing	Remove 4 th through lane along northbound Richmond Highway	No
Furman Lane	Replace asphalt lane with grass median	Yes



County of Fairfax, Virginia

Summary of all Recommendations

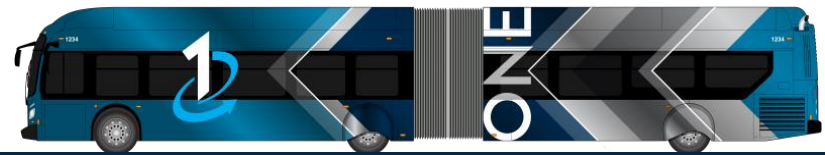
Intersection with Richmond Highway	Potential Modification	Recommended for Implementation
Southgate Drive	Remove through/right turn lane along southbound Richmond Highway	Yes
Beacon Hill Road	Remove dedicated right turn lane along southbound Richmond Highway	Changed to Yes (with conditions)
Beacon Hill Road	Remove dedicated right turn lane along northbound Richmond Highway	Yes
Memorial Street	Remove dedicated right turn lane along eastbound Memorial Street	No (dual purposed for future off-peak parking)
Memorial Street	Remove dedicated right turn lane along southbound Richmond Highway	No
Arlington Drive	Remove dedicated right turn lane along westbound Arlington Drive	No
Fordson Road/Boswell Ave	Remove dedicated right turn lane along eastbound Fordson Road	No
Sherwood Hall Lane	Remove dedicated right turn lane along northbound Richmond Highway	No
Sherwood Hall Lane	Remove 2 nd left turn lane along northbound Richmond Highway	Yes
Sherwood Hall Lane	Remove dedicated right turn lane along southbound Richmond Highway	Yes
Sherwood Hall Lane	Remove dedicated right turn lane along eastbound Sherwood Hall Lane	No



County of Fairfax, Virginia

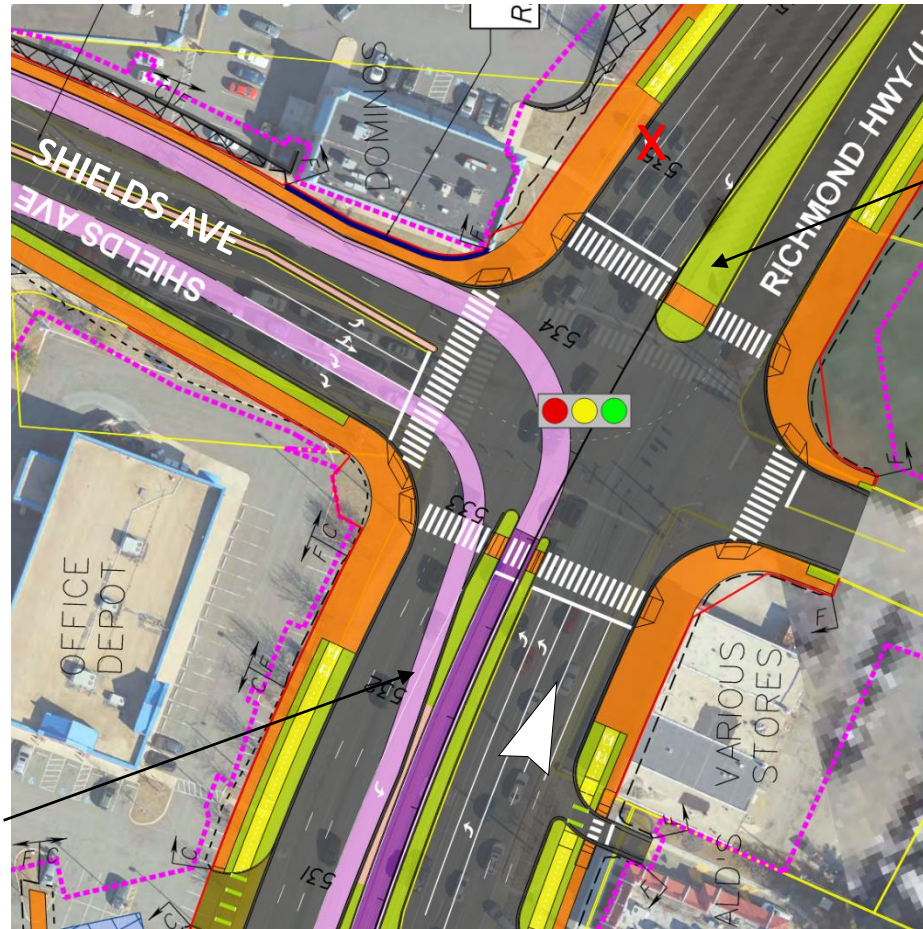
Summary of all Recommendations

Intersection with Richmond Highway	Potential Modification	Recommended for Implementation
Ladson Lane	Remove through/right turn lane along southbound Richmond Highway	No
Ladson Lane	Removed dedicated right turn lane along eastbound Ladson Lane	Yes
Buckman Rd/ Mt Vernon Hwy	Remove through/right turn lane along eastbound Buckman Road	Yes
Buckman Rd/ Mt Vernon Hwy	Remove dedicated right turn lane along southbound Richmond Highway	No
Buckman Rd/ Mt Vernon Hwy	Remove 2 nd left turn lane along southbound Richmond Highway	No
Buckman Rd/ Mt Vernon Hwy	Remove dedicated right turn lane along westbound Mount Vernon Highway	Yes
Buckman Rd/ Mt Vernon Hwy	Remove dedicated right turn lane along northbound Richmond Highway	Yes
Buckman Rd/ Mt Vernon Hwy	Remove dedicated northbound left turn lane along Richmond Highway	Yes
Buckman Rd/ Mt Vernon Hwy	Potential for a crosswalk on the north leg of the intersection	Yes
Sacramento Drive/Cooper Road	Remove dedicated right turn lane along eastbound Sacramento Drive	No (dual-purposed for future off-peak parking)
Jeff Todd Way/Mount Vernon Memorial Highway	Remove dedicated right turn lane along westbound Mt Vernon Memorial Highway	No
Jeff Todd Way/Mount Vernon Memorial Highway	Remove 2 nd left turn lane along westbound Mt Vernon Memorial Highway	No



Shields Ave

- Remove dedicated right turn lane along southbound Richmond Highway
- Reduce the median width on the north side of the intersection



REDUCE
MEDIAN
WIDTH

BRT IN
MIXED
TRAFFIC



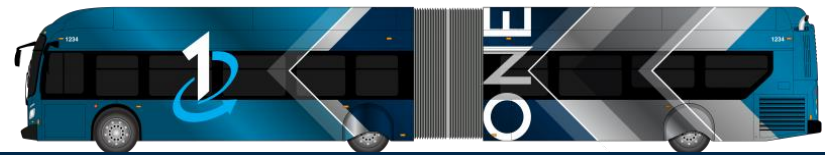
Proposed lane
configuration



Lane to be
removed

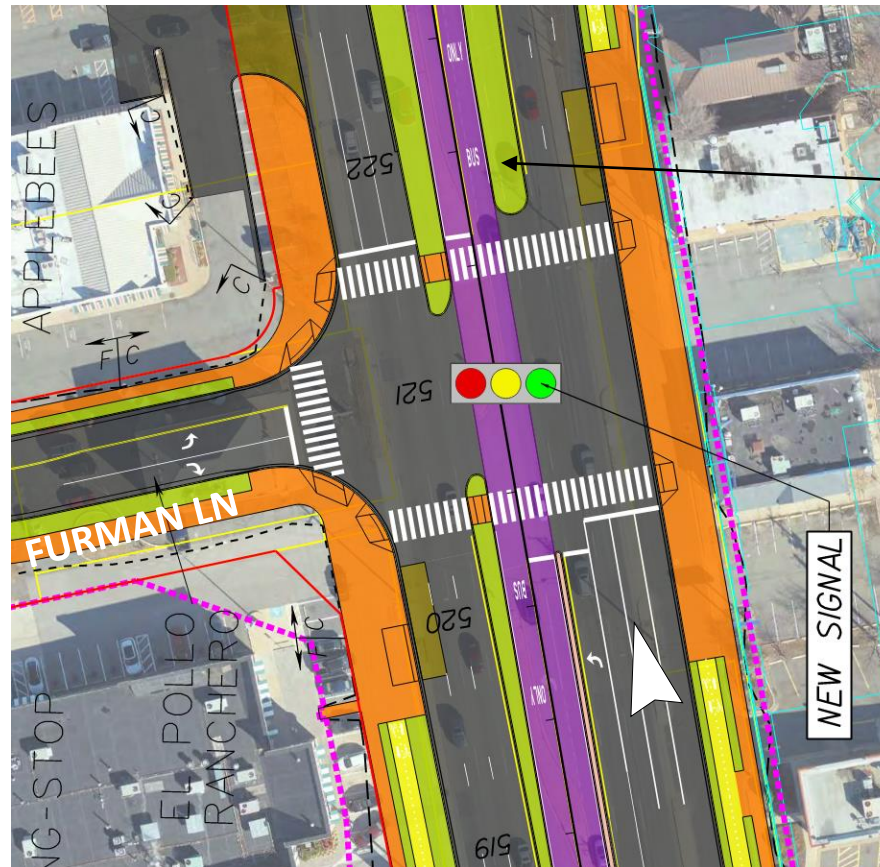


Direction of
Northbound Richmond
Highway Travel



Furman Lane

- Remove the 4th northbound lane at the Furman Lane and replace with grass



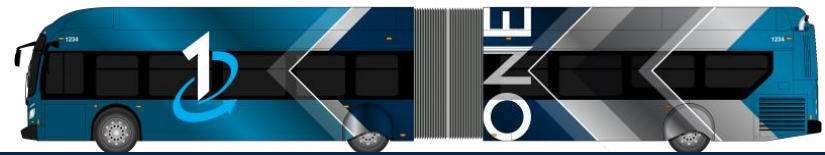
Proposed lane configuration



Lane to be removed

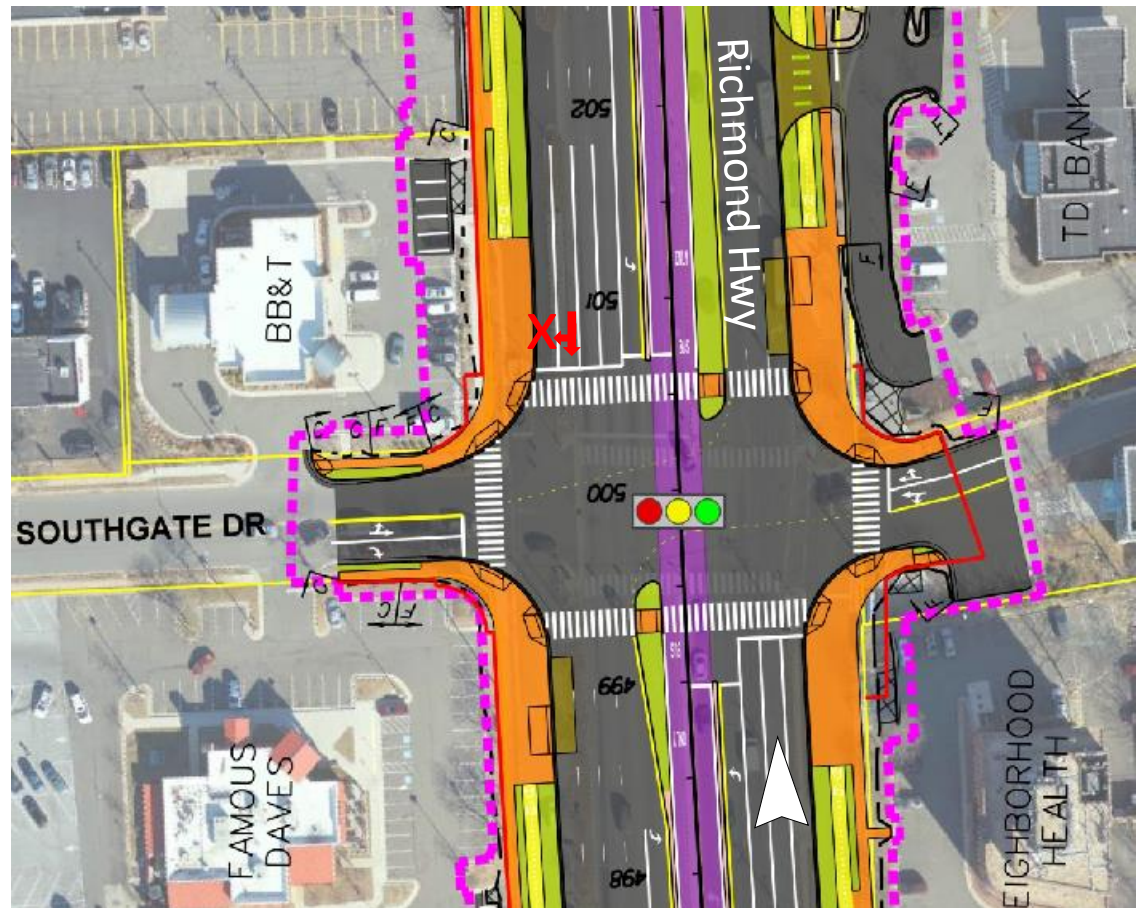


Direction of Northbound Richmond Highway Travel



Southgate Drive

- Remove through/right turn lane along southbound Richmond Highway



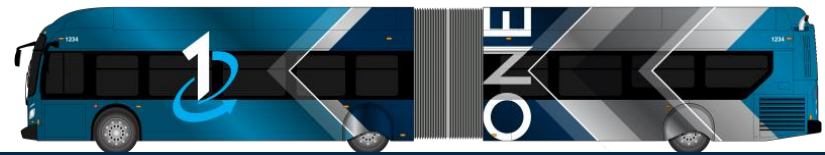
Proposed lane configuration



Lane to be removed



Direction of Northbound Richmond Highway Travel



Beacon Hill Road

- Remove dedicated right turn lane along southbound Richmond Highway
- VDOT has agreed to remove the SB right turn lane with some conditions



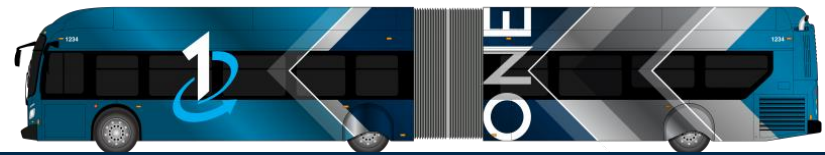
Proposed lane configuration



Lane to be removed



Direction of Northbound Richmond Highway Travel



Memorial Street

- Dedicated eastbound right turn lane will not be removed due to significant queues during peak hours
- Embark plan amendment calls for future on-street parking along Memorial
- Eastbound right turn lane will remain for potential future dual purpose (time of day parking)

Potential off-peak on-street parking



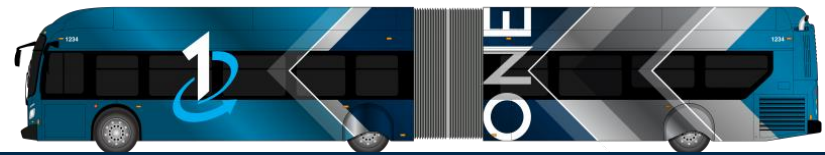
Proposed lane configuration



Lane to be removed

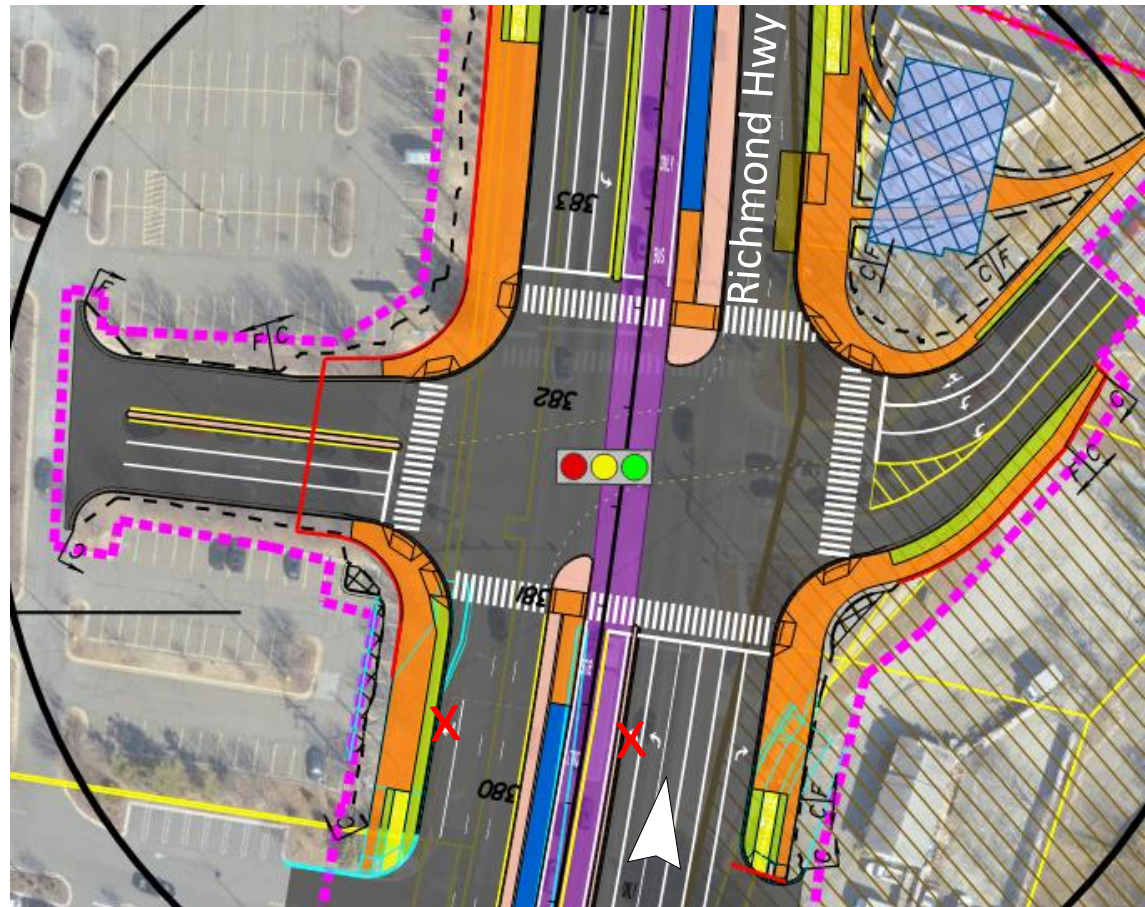


Direction of Northbound Richmond Highway Travel



Sherwood Hall Lane

- Remove 2nd left turn lane along northbound Richmond Highway
- Remove dedicated right turn lane along southbound Richmond Highway



Proposed lane configuration



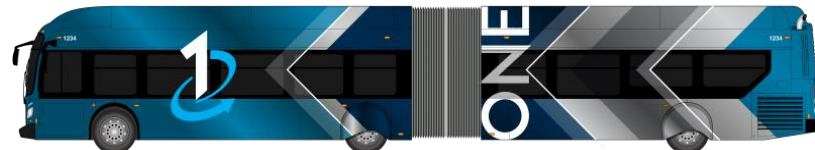
Lane to be removed



Direction of Northbound Richmond Highway Travel



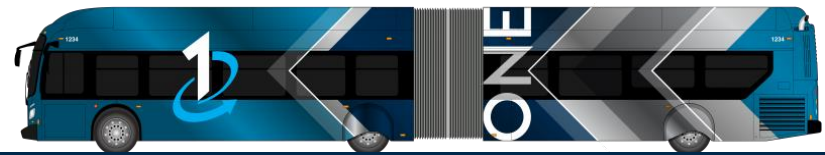
County of Fairfax, Virginia



Ladson Lane

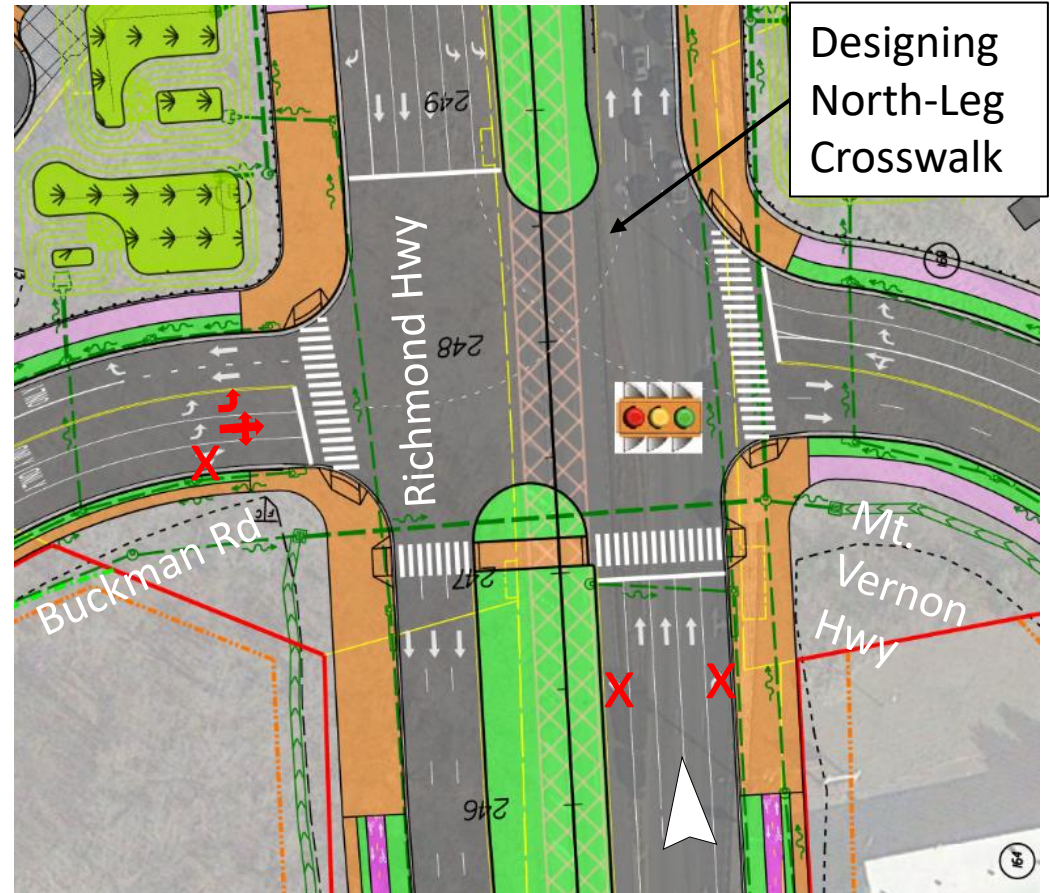
- Remove dedicated right turn lane along eastbound Ladson Lane





Mount Vernon/Buckman Intersection

- Remove through/right turn lane along eastbound North Buckman Road
- Remove dedicated right turn lane along northbound Richmond Highway
- Remove dedicated northbound left turn lane along Richmond Highway
- Potential for a crosswalk on the north leg of intersection



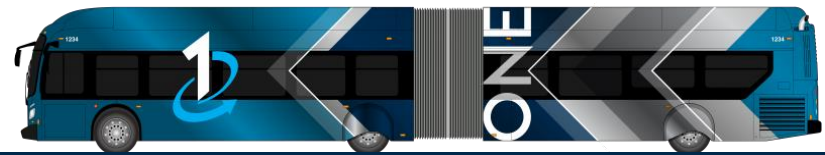
Proposed lane configuration



Lane to be removed



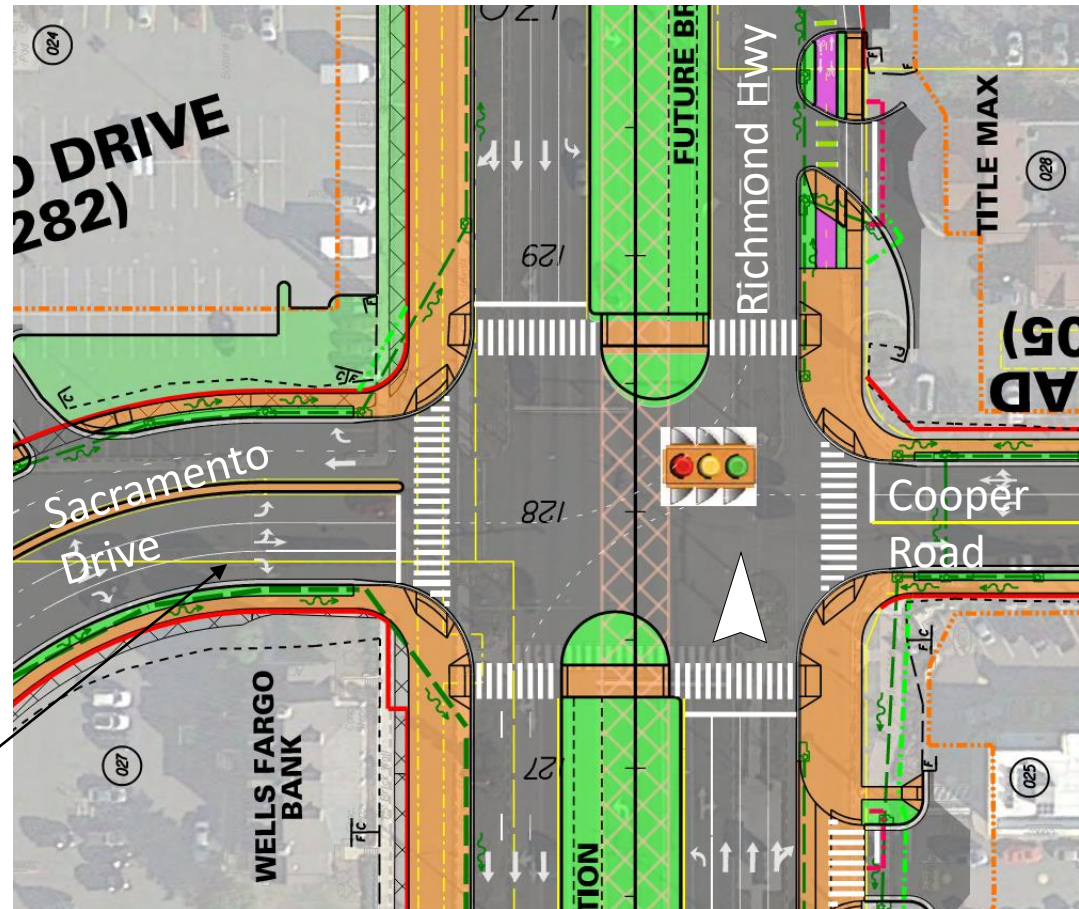
Direction of Northbound Richmond Highway Travel



Sacramento Drive

- Dedicated eastbound right turn lane will not be removed due to significant queues during peak hours
- Embark plan amendment calls for future on-street parking along Sacramento
- Eastbound right turn lane will remain for potential future dual purpose

Potential off-peak on-street parking



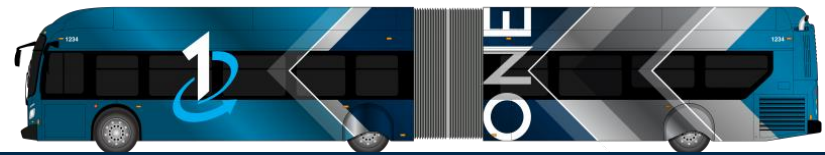
Proposed lane configuration



Lane to be removed

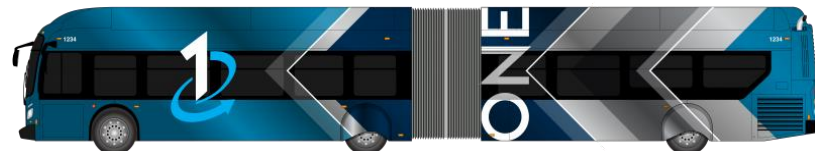


Direction of Northbound Richmond Highway Travel



Conclusions

- **Richmond Highway BRT Executive Committee Approved Recommendations**
 - 14 of 31 reductions/modifications will be incorporated
 - Plus 2 recommendations for future off-peak street parking
- **BRT and VDOT Design Teams are incorporating the approved changes into the plans**



Questions?