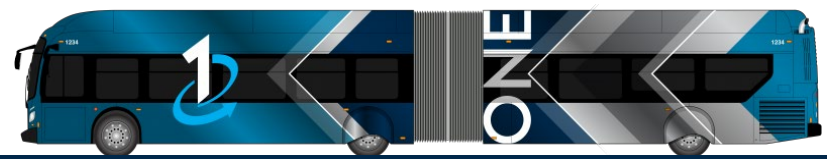
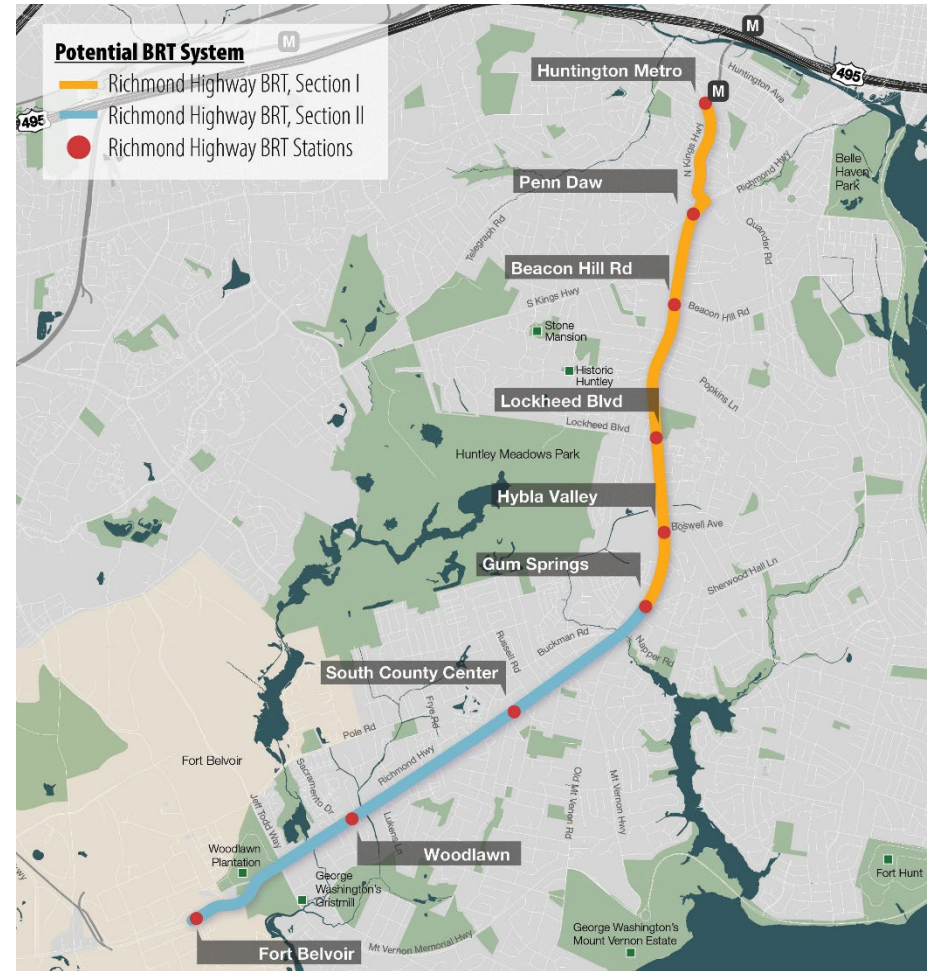




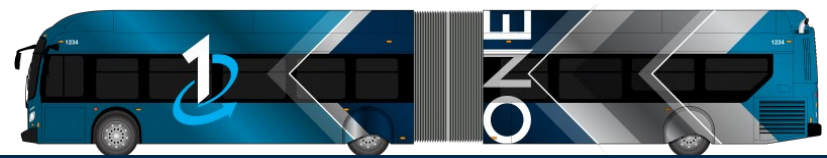
County of Fairfax, Virginia



Richmond Highway Bus Rapid Transit Additional Turn Lane Analysis May 3, 2022



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

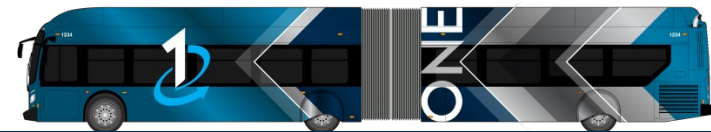


Agenda

- **Branding Launch**
- **Project Update**
- **Turn Lane Analysis**
 - Background
 - Objectives
 - Example Intersections
 - Summary of Findings
 - Survey & other ways to provide feedback
- **Upcoming Meetings**
- **Q&A**

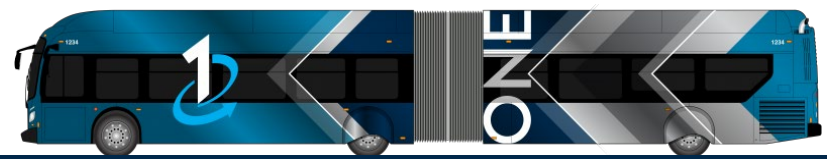


Branding Launch



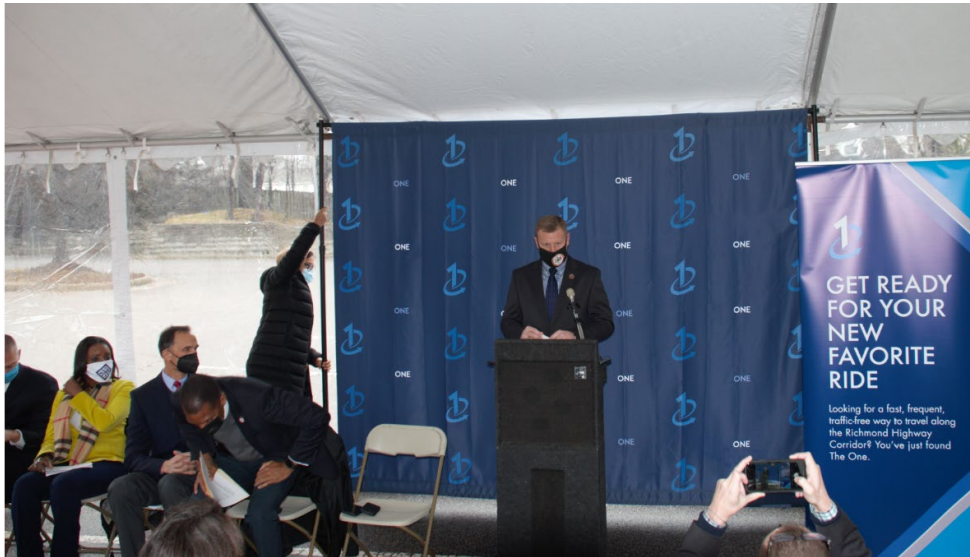
Richmond Highway Bus Rapid Transit

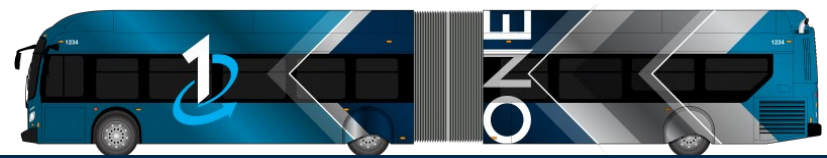




Richmond Highway BRT has a New Identity!

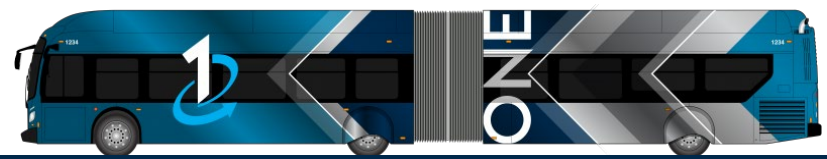
- On Friday, February 25, 2022, Fairfax County officials launched the brand identity for the BRT project
 - Developed with input from community members and stakeholders over three years.





Brand Development Process

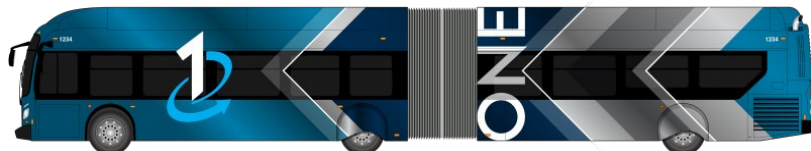
- Fairfax County sought input from a broad cross section of the Richmond Highway community. **Community input played a critical role in the development of the brand.**
 - Volunteers from the community joined a **Branding Development Team** and worked to pare down a list of 84 names to put forward three for consideration by focus groups and the public.
 - Several brand options were tested in **focus groups** with residents along the corridor and then with an **online survey** with the Richmond Highway community.



Meet “The One”!

This name, colors, and logo will be used at BRT stations and on the buses, to help people recognize and remember the new bus service.



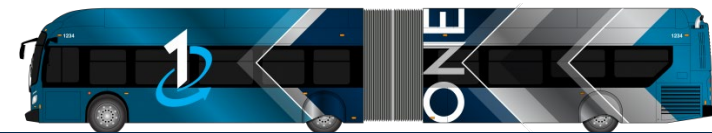


Why “The One”?

- The One is a **short and simple name**, so it’s easy for people to learn and recall.
- It references the place that the buses will run – **up and down Route 1** – so everyone in the community can understand its location.
- The name speaks to the **uniqueness of the service**. If you’re looking for a fast, frequent, traffic-free way to travel along the Richmond Highway Corridor, **this is *The One* way to do it!**

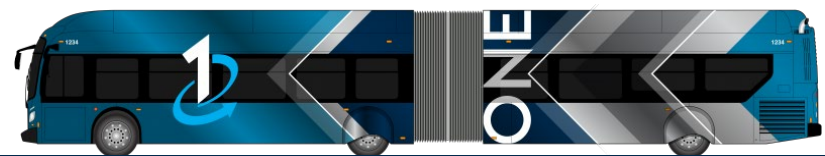


Project Updates



Richmond Highway Bus Rapid Transit

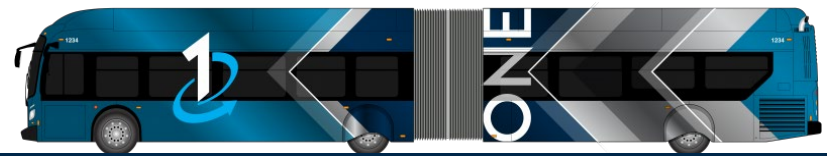




National Environmental Policy Act (NEPA)

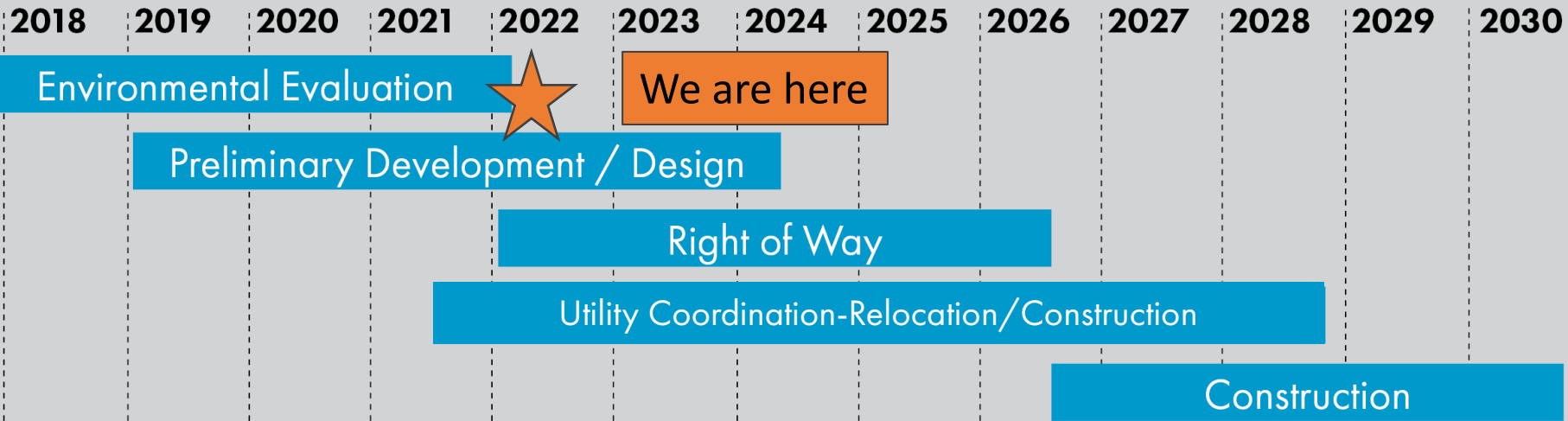
- Requires federal agencies to assess environmental effects of proposed actions prior to making decisions
- Federal Transit Administration (FTA) determined the project met criteria for a Categorical Exclusion in January 2022
- Document available:
 - fairfaxcounty.gov/transportation/richmond-hwy-brt/materials

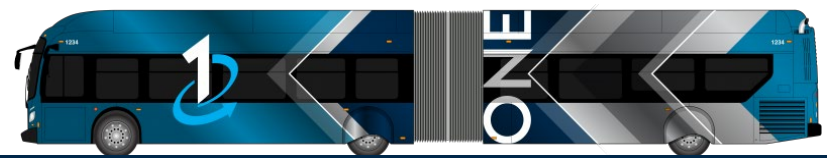




Schedule

PROJECT TIMELINE (Updated April 2022)





Capital Cost Estimate and Funding

Total Project Cost
\$795M* in 2030 dollars

Federal Funding

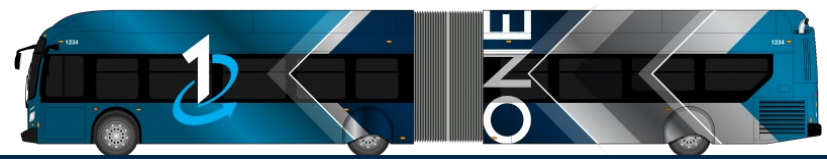
FTA Capital Investment Grant (49%), Congestion Mitigation & Air Quality, Regional Surface Transportation Program and other federal funding programs

Local Funding

NVTA (regional), Smart Scale (state), County & Other Match

Note: *Cost based on an approximate 60% design and is subject to change and refinement as more engineering/design is completed





County of Fairfax, Virginia

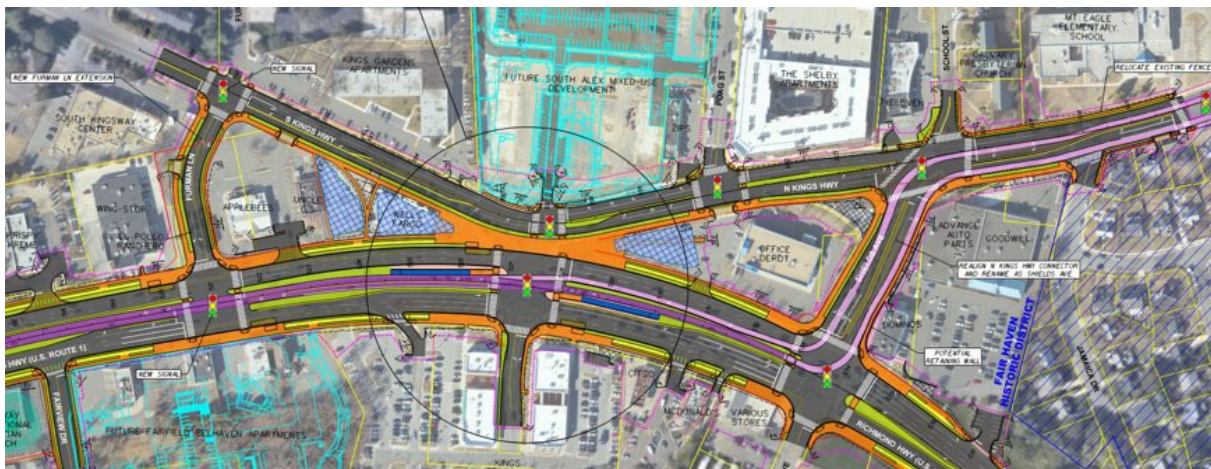
Summary of PIM #10 - Design Updates and North Kings Highway

- Meeting held on April 28, 2022
- Where you can find information:

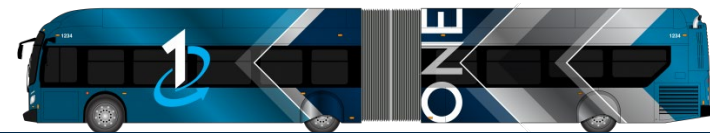
[Richmond Highway BRT - The One | Transportation \(fairfaxcounty.gov\)](https://www.fairfaxcounty.gov/transportation/richmond-highway-brt-the-one)

- Posted Presentation and Roll Maps:

[Project Materials | Transportation \(fairfaxcounty.gov\)](https://www.fairfaxcounty.gov/transportation/project-materials)

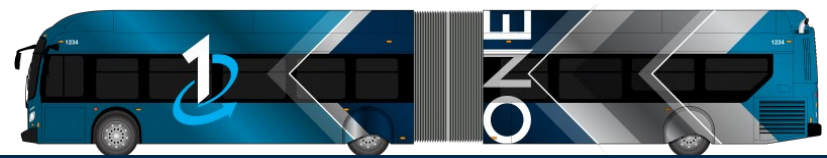


Turn Lane Analysis



Richmond Highway Bus Rapid Transit

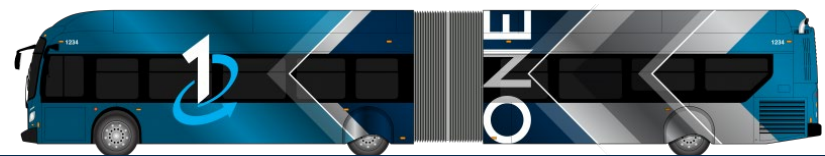




Background

- On June 27, 2021, in response to community concerns and as part BRT project design endorsement, the Board directed staff to evaluate potential design modifications
 - Objective of narrowing cross section along Richmond Highway
 - Identified 13 intersections for potential left/right turn lane reductions
- Analysis was completed in coordination with Virginia Department of Transportation (VDOT)



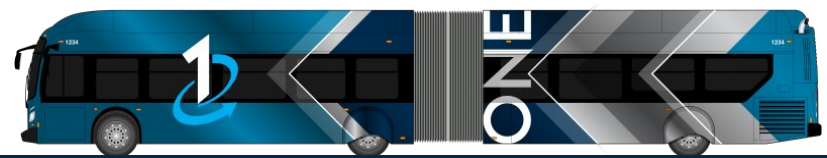


Background

- **Intersections that were identified for potential turn lane reductions:**

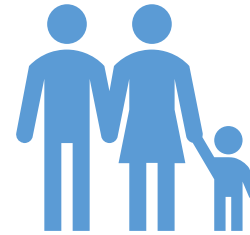
- Richmond Highway cross-section between Furman Lane and Shields Avenue
- Richmond Highway & North Kings Highway/Shields Avenue
- Richmond Highway & (New) Furman Lane Extension
- Richmond Highway & Fordson Road/Boswell Avenue
- Richmond Highway & Arlington Drive
- Richmond Highway & Memorial Street
- Richmond Highway & Beacon Hill Road
- Richmond Highway & Southgate Drive
- Richmond Highway & Sherwood Hall Lane
- Richmond Highway & North Buckman Road/Mount Vernon Highway
- Richmond Highway & Ladson Lane
- Richmond Highway & Sacramento Drive/Cooper Road
- Richmond Highway & Jeff Todd Way/Mount Vernon Memorial Highway

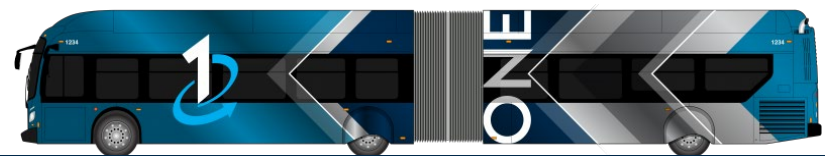




Objectives

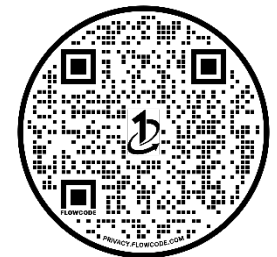
- BRT Operations
- Bicycle/Pedestrian Safety
- Vehicular Safety
- Intersection Operations
- Corridor Operations





Overview

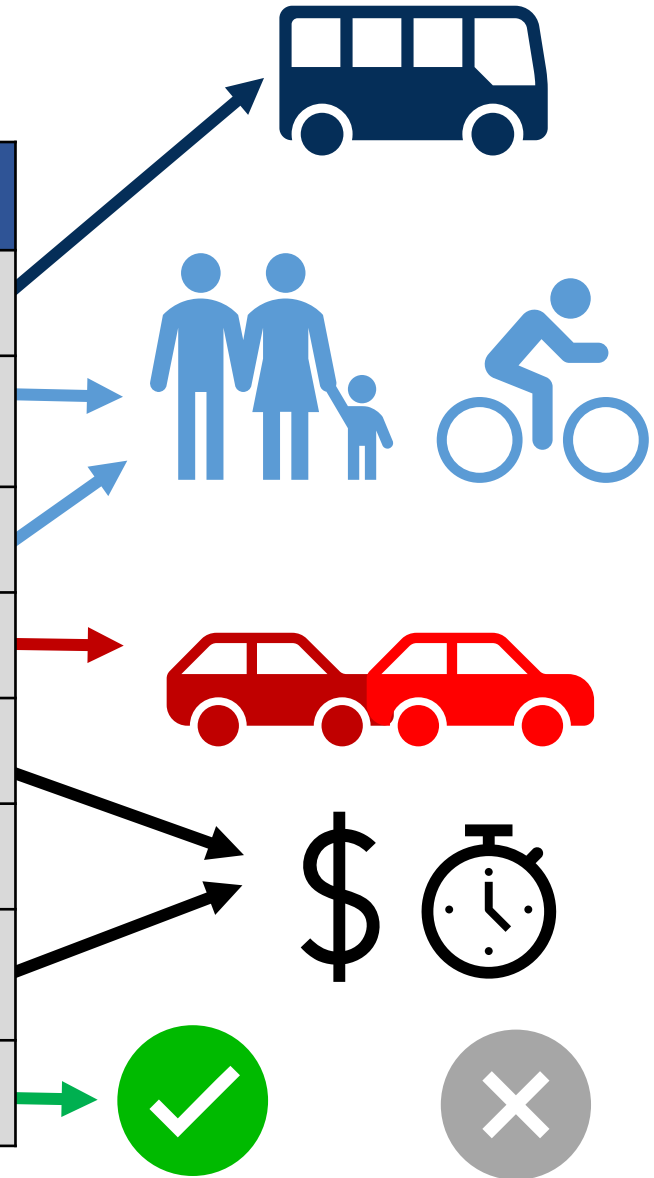
- **13 intersections reviewed**
 - Many intersections have multiple lanes identified for analysis
- **The board displays contain information about all 13 locations and findings**
- **Tonight's presentation:**
 - Explains how to read the boards
 - Shows two examples
 - Provide summary of results for all intersections
 - General questions and answers
- **After Presentation**
 - Technical staff is available at all board to discuss findings
 - Survey is available in paper format and online
 - Online survey link: surveymonkey.com/r/RHBRT11



How To Read The Boards

Standard Format:

Findings for Removal of Southbound Right Turn Lane (SBR)	
BRT impact	No impact
Ped. crossing distance	11-foot reduction
Walk time for signal	Potential 3 second reduction
Potential conflicts	Potential increase for rear-ends
Delay	No significant impact
Existing lane (Y/N)	Yes (shared thru/right)
Cost impacts & other considerations	Additional project cost, VDOT Design Waiver
Recommendation	Remove



How To Read The Boards

Standard Format (cont'd):

Intersection Delay (seconds)						
	AM Peak Hour			PM Peak Hour		
	SBR	SB Approach	Overall Intersection	SBR Delay	SB Approach	Overall Intersection
Base Design	14.7	34.8	20.9	11.4	18.3	17.7
Lane Reduction	26.2	42.5	23.9	41.2	40.9	30.7

How To Read The Boards

Standard Format (cont'd):

- Maximum queue lengths
- Base and lane reduction scenario
- AM and PM peak hour



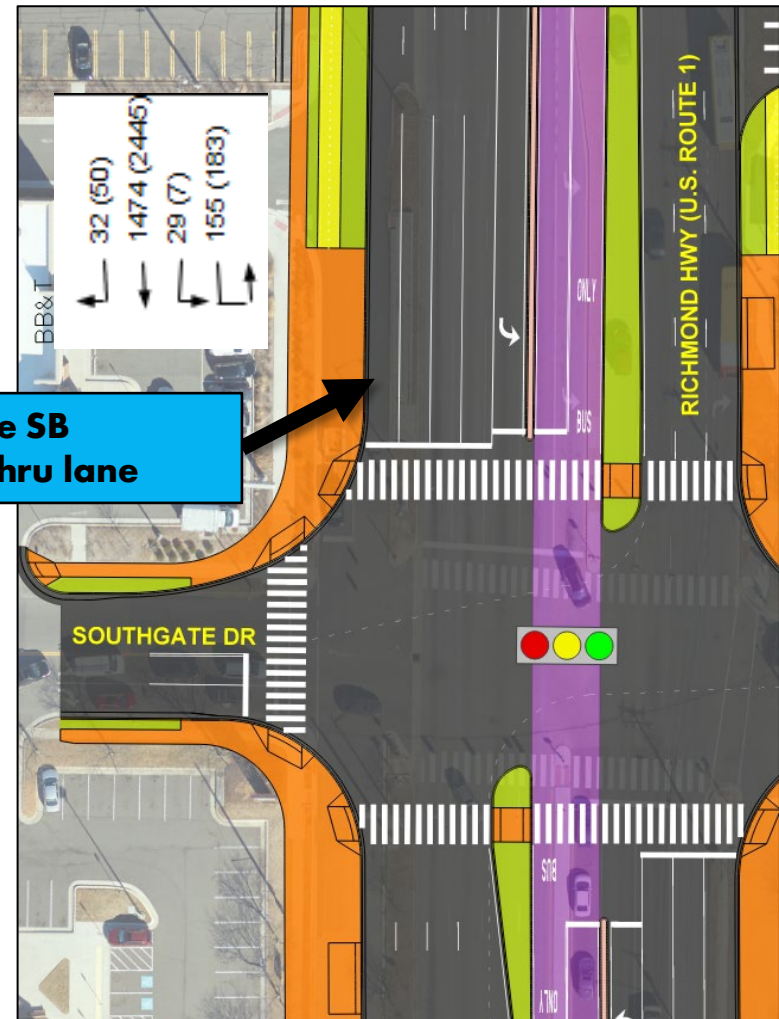
Example: Southgate Drive

Potential modification: Removal of southbound (SB) thru/right turn lane along Richmond Highway

Findings for Removal of SB Right Turn Lane	
BRT impact	No impact
Ped. crossing distance	11-foot reduction
Walk time for signal	Potential 3 sec. reduction
Potential conflicts	Potential increase for rear-ends
Delay	Increased SB delay (20+ sec.)
Existing lane (Y/N)	Yes
Cost impacts/other considerations	Additional project cost, VDOT Design Waiver
Recommendation	Remove



Remove SB right/thru lane



	Intersection Delay (s)					
	AM Peak Hour			PM Peak Hour		
	SBR	SB Approach	Overall Intersection	SBR Delay	SB Approach	Overall Intersection
Base Design	14.7	34.8	20.9	11.4	18.3	17.7
Lane Reduction	26.2	42.5	23.9	41.2	40.9	30.7

LEGEND:

Potential modifications for analysis/evaluation

Example: Memorial Street - Eastbound

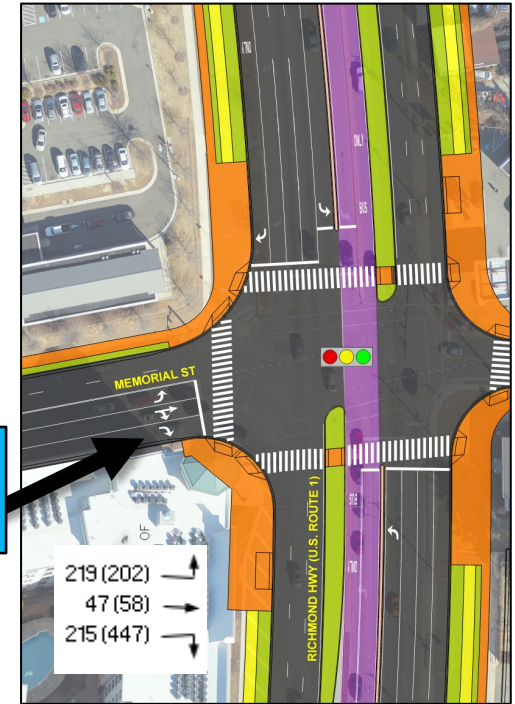
Potential modification:
Removal of eastbound (EB)
right turn lane along
Memorial Street

LEGEND:

Potential modifications
for analysis/evaluation

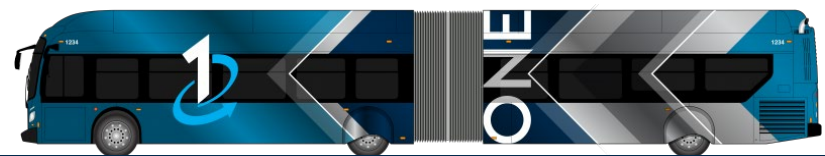
	Intersection Delay (s)					
	AM Peak Hour			PM Peak Hour		
	EBR	EB Approach	Overall Intersection	EBR	EB Approach	Overall Intersection
Base Design	35.6	69.7	27.0	35.3	49.9	26.1
Lane Reduction	150.6	171.8	33.5	137.4	141.3	38.0

Potential for
removal right
turn lane



Findings for Removal of EB Right Turn Lane	
BRT impact	No Impact
Ped Crossing Distance	11-foot reduction
Walk time for signal	With mainline green
Potential Conflicts	Potential increase for rear-ends
Delay	Increased EB delay (100+s)
Existing Lane (Y/N)	Yes
Cost Impacts/Other Considerations	Additional project cost, possible VDOT design waiver
Recommendation	Do not remove



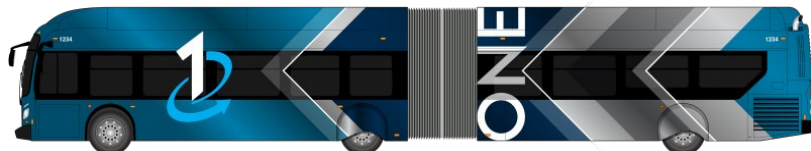


Summary of Findings

Approximately 40% of potential turn lane removals are recommended for implementation

Intersection with Richmond Highway	Potential Modification	Recommended for Implementation
Shields Avenue	Remove 2 nd left turn lane along northbound Richmond Highway	No
	Reduce median width on north side of intersection	Yes
	Remove dedicated right turn lane along southbound Richmond Highway	Yes
	Remove 2 nd dedicated right turn lane along eastbound Shields Avenue	No
	Replace asphalt with landscaped grass median along southbound Richmond Highway south of the intersection	Yes
	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

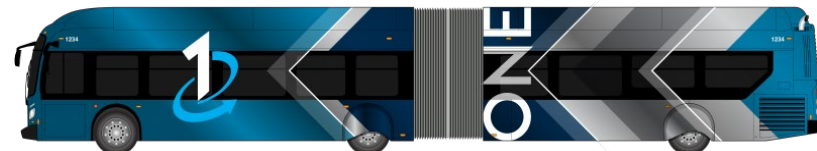




Summary of Findings

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	No
	Remove dedicated right turn lane along northbound Richmond Highway	Yes
Memorial Street	Remove dedicated right turn lane along eastbound Memorial Street	No (consideration for off-peak parking)
	Remove dedicated right turn lane along southbound Richmond Highway	
Arlington Drive	Remove dedicated right turn lane along westbound Arlington Drive	No
Fordson Road/Boswell Avenue	Remove dedicated right turn lane along eastbound Fordson Road	No
Sherwood Hall Lane	Remove dedicated right turn lane along northbound Richmond Highway	No
	Remove 2 nd left turn lane along northbound Richmond Highway	Yes
	Remove dedicated right turn lane along southbound Richmond Highway	Yes
	Remove dedicated right turn lane along eastbound Sherwood Hall Lane	No

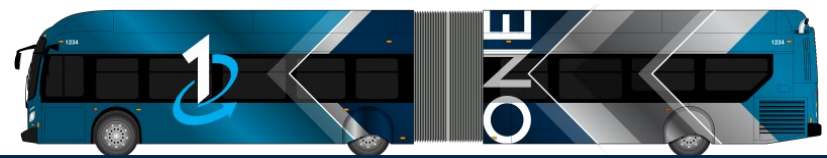




Summary of Findings

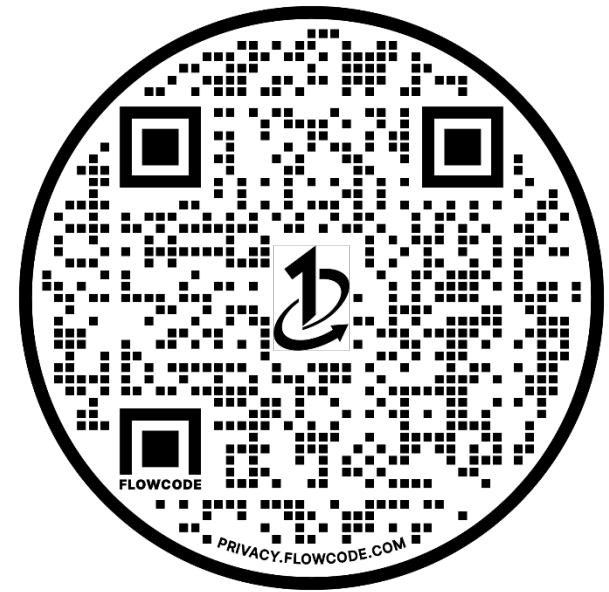
Intersection with Richmond Highway	Potential Modification	Recommended for Implementation
Ladson Lane	Remove through/right turn lane along southbound Richmond Highway	No
	Remove dedicated right turn lane along eastbound Ladson Lane	Yes
North Buckman Road/Mount Vernon Highway	Remove through/right turn lane along eastbound North Buckman Road	Yes
	Remove dedicated right turn lane along southbound Richmond Highway	No
	Remove 2 nd left turn lane along southbound Richmond Highway	No
	Remove dedicated right turn lane along westbound Mount Vernon Highway	No
	Remove dedicated right turn lane along northbound Richmond Highway	Yes
	Remove dedicated northbound left turn lane along Richmond Highway	Yes
Sacramento Drive/Cooper Road	Remove dedicated right turn lane along eastbound Sacramento Drive	No (consideration for off-peak parking)
Jeff Todd Way/Mount Vernon Memorial Highway	Remove dedicated right turn lane along westbound Mount Vernon Memorial Highway	No
	Remove 2 nd left turn lane along westbound Mount Vernon Memorial Highway	No



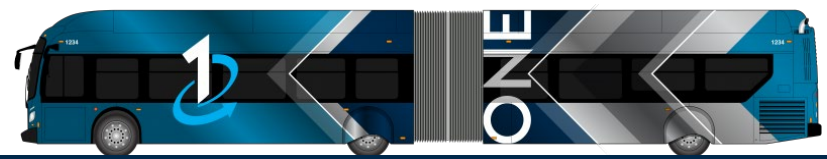


Survey

- **Survey and comment period will close May 27, 2022**
 - You can complete the survey tonight, or online anytime before the end of the day May 27
- **Contact information for submitting comments in other ways will be shown during the Q&A**

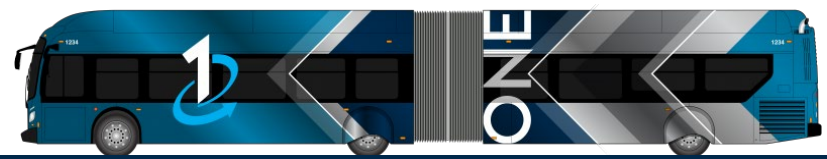


surveymonkey.com/r/RHBRT11



Community Comments / Q&A

- Please line up as discussed if you would like to share a comment or ask a question.
- We ask that comments/questions be kept to about 2-3 minutes per person to provide more people an opportunity to speak.
- We will take up to 20 minutes of questions to allow additional time to review boards and speak with staff.
- Please keep questions general during the Q&A. You can speak with staff at the boards to ask questions about specific locations.



Contact Information

Website: fairfaxcounty.gov/transportation

Key words: Richmond Highway BRT

- **Survey:**
 - surveymonkey.com/r/RHBRT11
- **Email:**
 - DOTBRT@fairfaxcounty.gov
- **Mail:**
 - Fairfax County Department of Transportation, Richmond Highway BRT Project Manager, 4050 Legato Rd, Fairfax, VA 22033

To inquire about a particular property, please email the Project Team at DOTBRT@fairfaxcounty.gov with "right-of-way" or "ROW" in the subject line or call the main transportation line at 703-877-5600

