

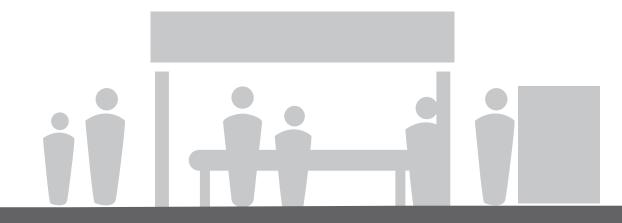


Welcome!

RICHMOND HIGHWAY BUS RAPID TRANSIT (BRT)

COMMUNITY MEETING #3



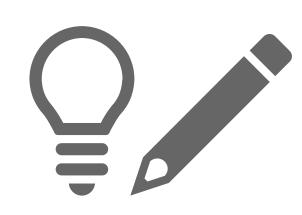


Agenda: 6:30-8:30 PM open house, with a presentation at 7:00 PM

The purpose of the Richmond Highway Bus Rapid Transit System is to provide higher quality transit service on US Route 1 / Richmond Highway from I-495 / Huntington Metrorail Station to Fort Belvoir.



Scan this code with your phone to watch a short video about the project! (YouTube: tiny.cc/RHBRT)



We want to hear from you! You can submit comments by completing activities at stations, speaking with staff, and/or filling out a comment form (paper or online).

Link to comment form: surveymonkey.com/r/FCDOTBRT3





Translation:

- Hay personal que habla español y estamos ofreciendo traducción al español para la presentación.
- There are staff here who speak Spanish, and we are offering Spanish translation for the presentation. Additional language services can be requested free of charge by contacting Fairfax County Department of Transportation at 703-877- 5600, TTY 711.



Project website:

FairfaxCounty.gov/transportation/richmond-hwy-brt









PROJECT BACKGROUND



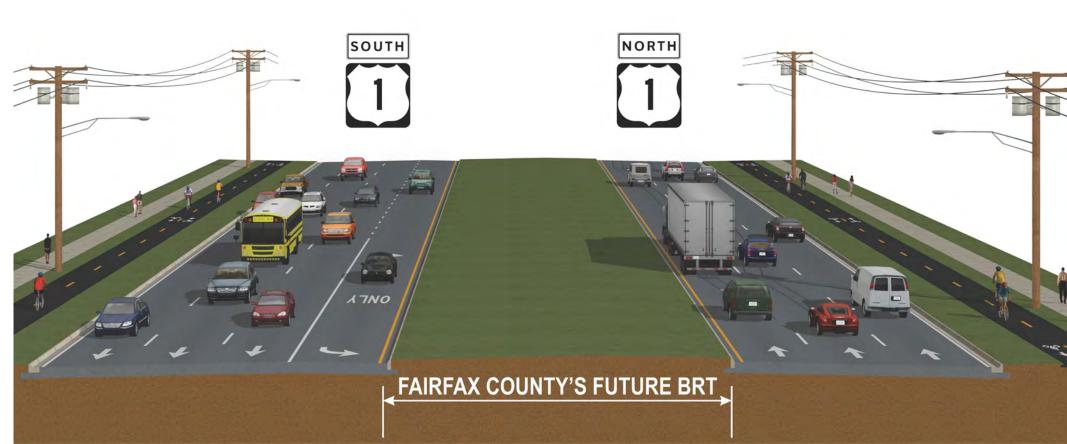
Embark Richmond Highway

Plan Amendment 2015-IV-MV1



- <u>Lead</u>: Fairfax County Department of Planning and Development
- Amendment to the Fairfax County Comprehensive Plan, adopted by the Board of Supervisors on March 20, 2018.
- Supports the recommendations of the Route
 1 Multimodal Alternatives Analysis, led by
 the Virginia Department of Rail and Public
 Transportation.
- Establishes corridor-wide planning goals and objectives, with an urban design vision and land use changes in support of BRT. To further support that vision, the County is currently developing urban design guidelines for the Richmond Highway corridor.

Richmond Highway Road Improvements



- <u>Leads</u>: Federal Highway Administration & Virginia Department of Transportation (in coordination with FCDOT)
- Richmond Highway is planned to be widened to six lanes, with space for both BRT and bicycle and pedestrian improvements.
- Two projects:
 - » Telegraph Road to Mount Vernon Highway: completed fall 2017.
 - » Jeff Todd Way to Napper Road: environmental and preliminary design work is underway, with construction anticipated from 2023 to 2026.

Richmond Highway BRT



- <u>Lead</u>: Fairfax County Department of Transportation
- Implementation of BRT from Huntington Metrorail Station to Fort Belvoir.
- Project includes environmental evaluation, design, construction, and investigation of funding opportunities.
- Considering the need for:
 - » Additional roadway widening.
 - » Bicycle & pedestrian improvements and connections to local walkways, trails, & bicycle facilities.
 - » Streetscape improvements.



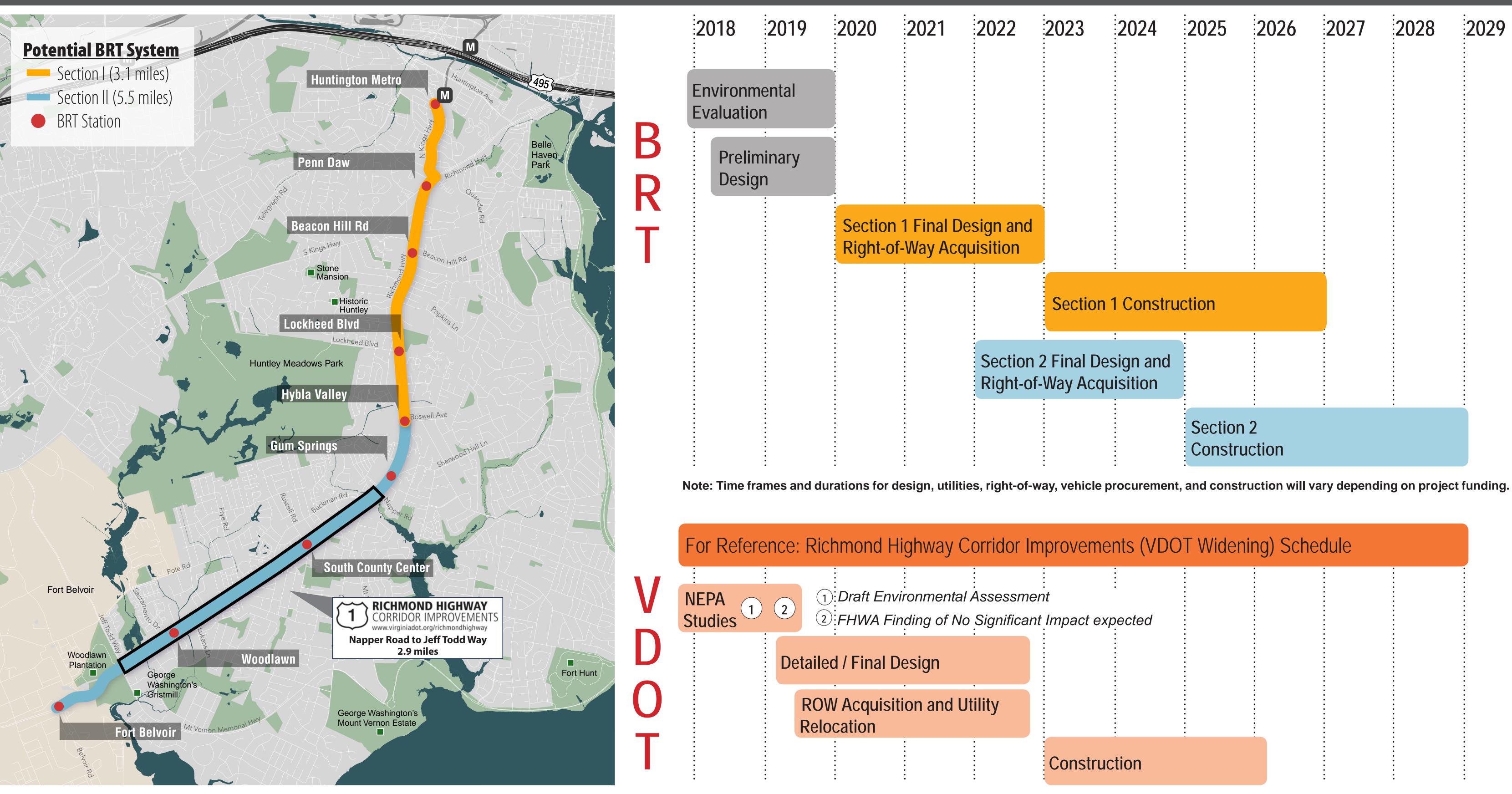








STUDY AREA & PRELIMINARY SCHEDULE









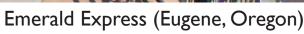
WHAT IS A BUS RAPID TRANSIT (BRT) SYSTEM?

BRT is a high-quality public transportation system designed to be fast, reliable, and more convenient than traditional bus routes. It operates much like rail service, on a dedicated transit way, but with the flexibility and lower cost of bus vehicles.

While key elements of the Richmond Highway BRT system have not been finalized, BRT systems often include those described below.

- SERVICE PLANS & **FREQUENCIES** that prioritize reliable, frequent, and efficient service.
- DEDICATED LANES & TRAFFIC SIGNAL PRIORITY that allow free-flow travel, minimize traffic-related delays, reduce overall travel times, and enhance reliability.
- STATIONS offering easier boarding to improve accessibility, off-board fare collection to expedite boarding, and high-quality pedestrian connectivity to enhance safety and access.
- **BUSES** designed for improved passenger comfort and additional passenger capacity.
- INFORMATION TECHNOLOGY **SYSTEMS** with features such as real-time bus tracking, innovative fare collection, and more.
- **SYSTEM-WIDE BRANDING** to establish a unique and recognizable identity for the system.

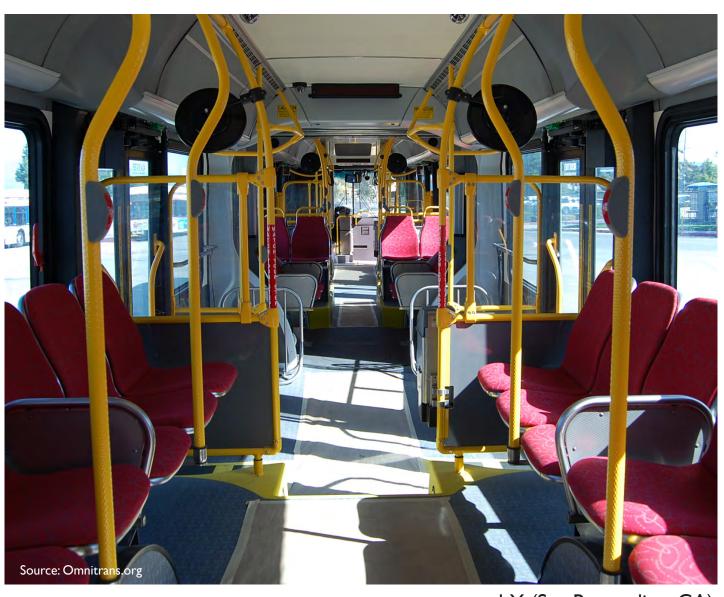


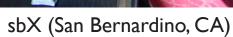




CTfastrak (Hartford, Connecticut)









Strip & Downtown Express (Clark County, Nevada)



Swift (Snohomish County, Washington)



GRTC Pulse (Richmond, Virginia)







ENVIRONMENTAL RESOURCES

The National Environmental Policy Act (NEPA) requires the project team to study how the project will affect the community and the environment before making decisions.

Types of questions Resource or topic to be answered in the environmental document Socioeconomics What do we know about the people who live in the study area? How might the project impact the population? Where are schools, Community libraries, and religious Facilities institutions? How could the project affect these facilities? Land Use What types of land uses are in the corridor? How might the project change land use? Environmental Where are lowincome and minority Justice populations in the study area, and how might they be affected by the project? **Economics** What are the employment patterns and major employers in the area? How could the project change future economic trends? Visual and What types of changes could the project make Aesthetic to the visual quality of Resources the corridor?

The environmental effects of transportation projects include more than just impacts to natural resources—they also include impacts to social, cultural, historic, and economic resources, as well as to air quality and noise.



South County Center



Fort Belvoir



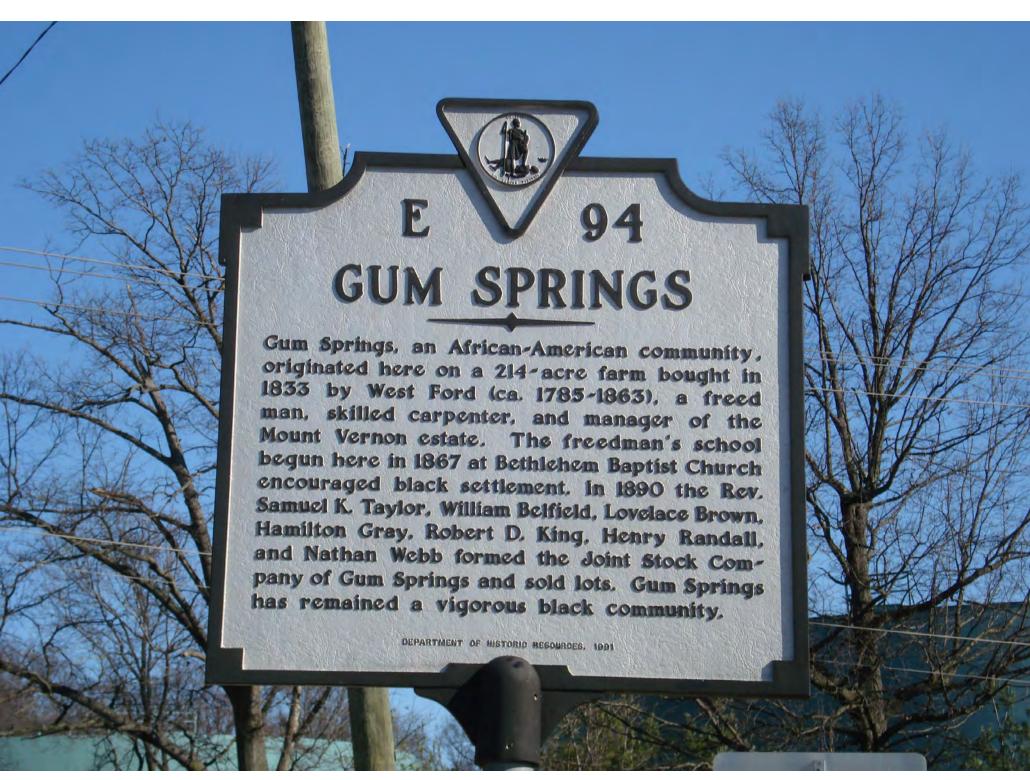
Walking along Richmond Highway





ENVIRONMENTAL RESOURCES (CONTINUED)

Resource or topic	Types of questions to be answered in the environmental document
Air Quality	How might the air quality in the corridor change if the project is built?
Noise and Vibration	How might noise and vibrations coming from the corridor change if the project is built?
Hazardous Materials	Where are places along the corridor that might be contaminated and might need to be cleaned up or avoided if the project is constructed?
Cultural Resources	Are there historic buildings in the area? How might cultural resources be affected by the project?
Section 4(f) Resources	Where are public parks in the corridor? What impacts might the project have on these resources?
Natural Resources	How might wetlands, floodplains, habitat, soils, and wildlife be impacted if the project were built?
Indirect and Cumulative Effects	Could the project induce population growth?



Gum Springs signage



Historic Huntley



Little Hunting Creek





Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on architectural and archaeological historic properties.

There are four steps to the Section 106 Process:

Initiate the Process

- Identify State
 Historic
 Preservation
 Office (SHPO)
- IdentifyConsultingParties (CPs)
- Determine Area of Potential Effect (APE)

Identify
Historic
Properties

- Identify historic properties within the APE
- Consult SHPO and CPs

Assess Effects

- Identify potential adverse effects
- Consult SHPO and CPs

Resolve Adverse Effects

- Develop measures, including avoidance where prudent and feasible, to address any adverse effects
- Prepare Memorandum of Agreement (MOA) to address adverse, if there are any

Resources Identified







Historic Properties listed or eligible for listing on the National Register for Historic Places (NRHP) within the Project APE:

- Fort Belvoir Military Railroad Historic District
- Woodlawn Plantation
- Woodlawn Cultural Landscape
- Original Mount Vernon High School
- Camp A.A. Humphreys Pump Station and Filter Building
- St. Louis Catholic Church and School
- A&A Rentals

NRHP eligibility is under review for four additional resources:

- Richmond Highway
- Gum Springs Historic District

- Fairhaven Historic District
- Jefferson Manor Historic District

Check out the maps on the table to see the location of these resources along the corridor! If you have comments about historic properties and those under review, please make sure to submit them in writing via the comment form (paper or electronic version).

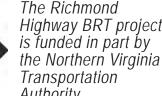














INTRODUCTION TO THE CONCEPTUAL DESIGN

Conceptual Design

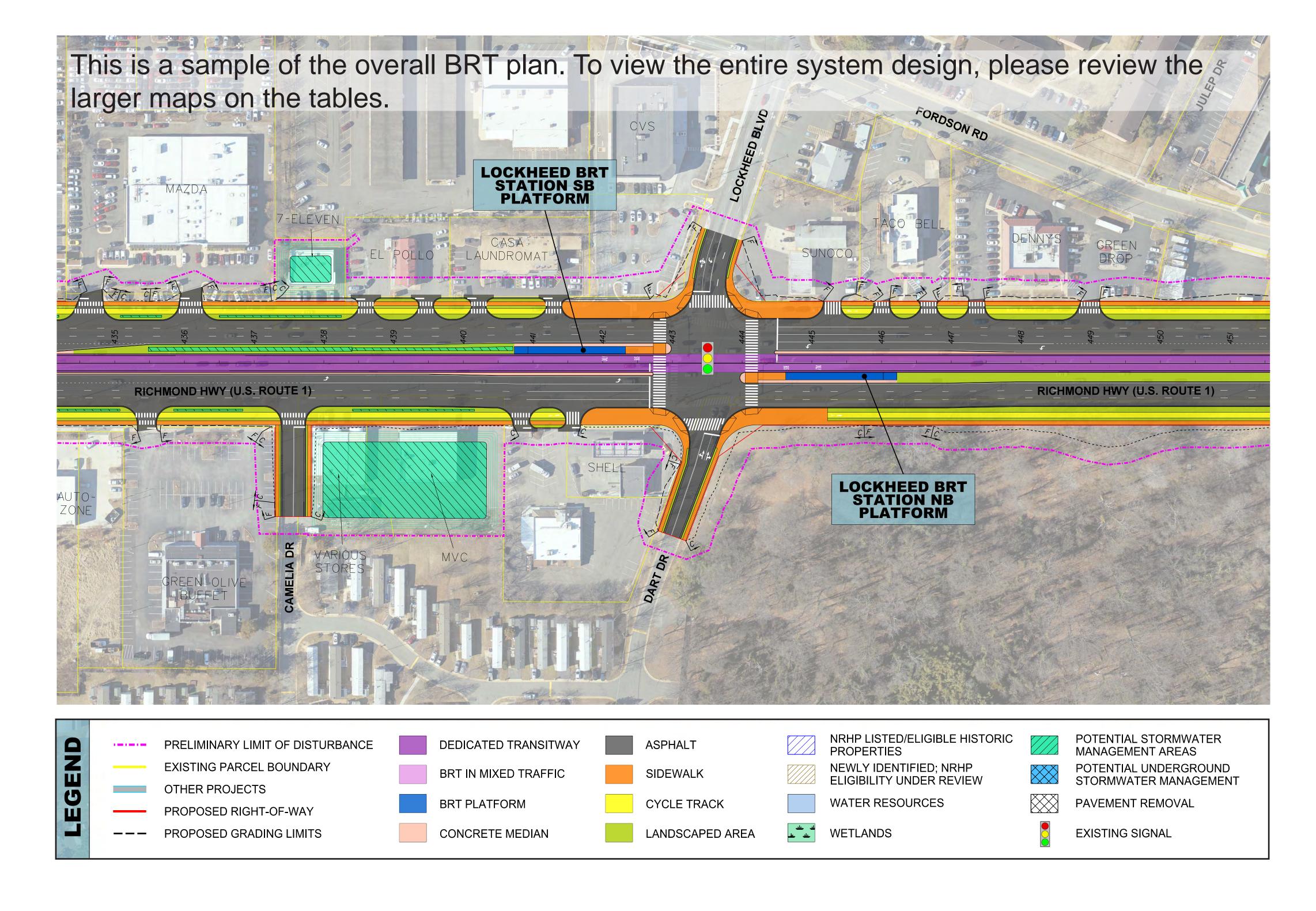
- Comprehensive Plan defined the typical section and survey mapping provided the base for developing a design
- Roadway design was developed to define outer limits of project disturbance

Engineer, Refine, Repeat

- Work with the community and stakeholders on the design to find opportunities to:
 - » Minimize impacts
 - » Improve safety
 - » Improve corridor conditions

What are you seeing?

- Gray areas show the proposed reconstruction of the roadway lanes
- Purple areas are the proposed BRT lanes
- Dark blue areas are the proposed BRT station platforms





STORMWATER MANAGEMENT

Stormwater Overview

This project must meet environmental standards for both the Virginia Department of Environmental Quality and Fairfax County.

Stormwater Best Management Practices (BMPs) are used to:

- Improve water quality by treating runoff to remove nutrients, sediments, and pollutants.
- Slow and detain water during storms to prevent stream erosion.

Requirements

- Reduce phosphorus release by 20% (from existing conditions)
- Slow stormwater release to that of a forested condition
- Make the best use of available space

Stormwater Toolkit

This project uses a variety of BMPs to maximize treatment within the available space.





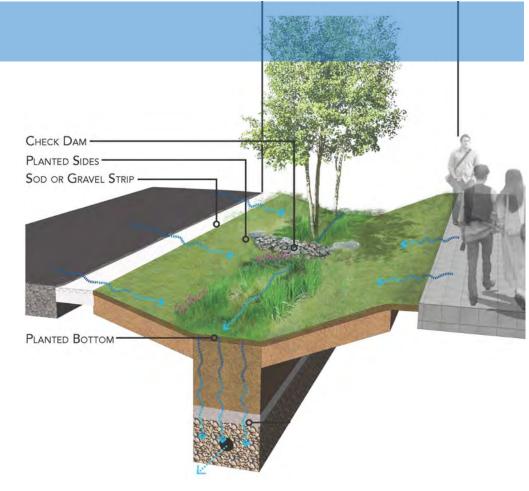
- Treat and hold a large amount of water.
- Placed outside the street area in adjacent parcels.
- Can be integrated into parks and neighborhoods, and landscaped to be an amenity.



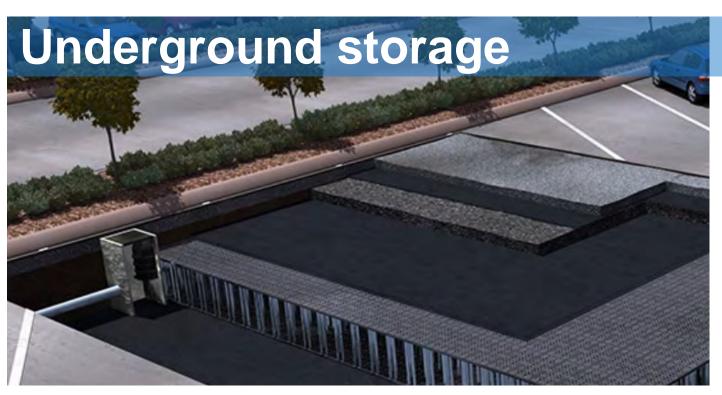


- Smaller than ponds,
 Fully landscaped and constructed with shallow,
 temporary ponding.
 with layers of
- Like ponds, can be a park or neighborhood amenity.
- and constructed with layers of plants, soils, and stone to filter and slow runoff.





- Treat and hold stormwater as it flows off the road.
- Placed in the roadway median and/or between the road and sidepath.
- Generally covered with turf, and mowed regularly.
- May contain trees and other plants.



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



- When space is restricted, can detain stormwater under parking lots, sidewalks, trails, or landscape areas.
- Increase the capacity to hold significant volumes of water without using additional surface space.

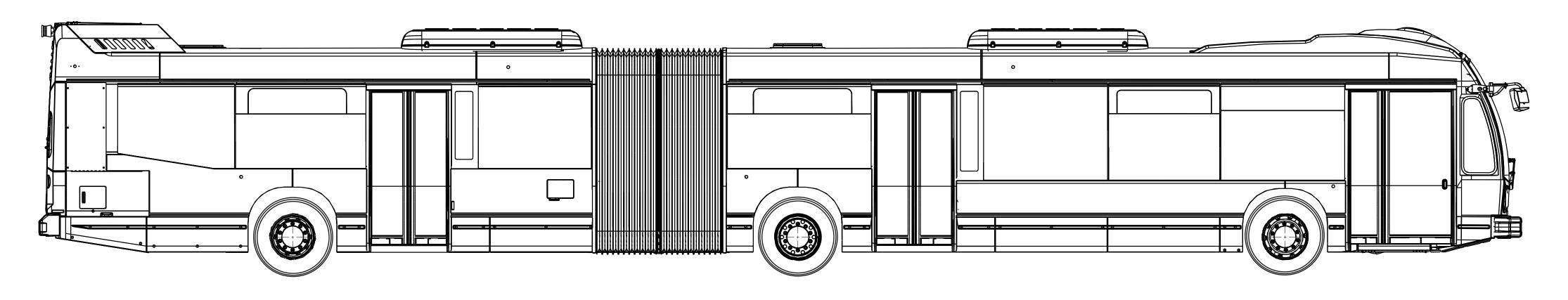






FEATURES OF A BRT VEHICLE

The buses that will be used with this system have not yet been designed, but could include the features described below.

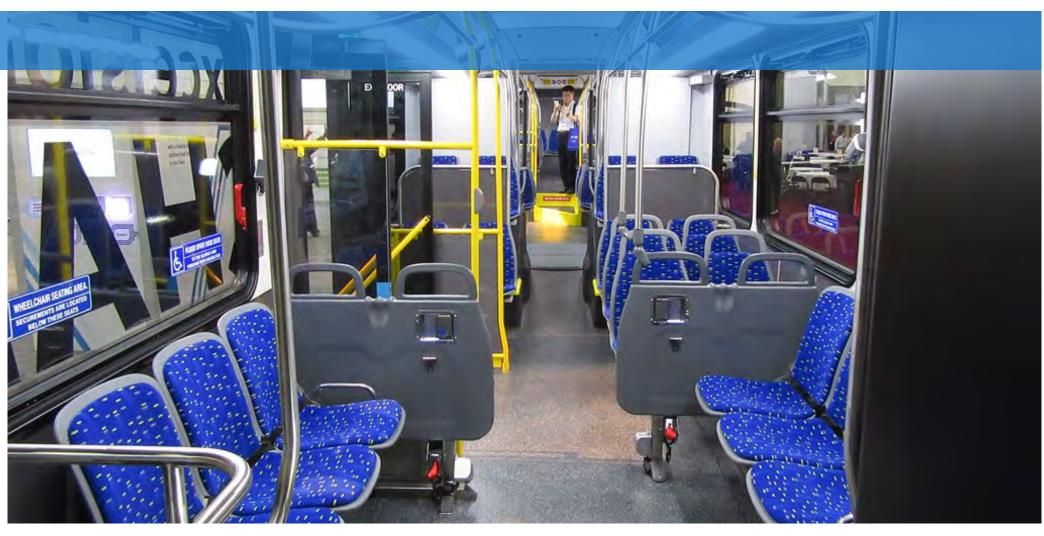




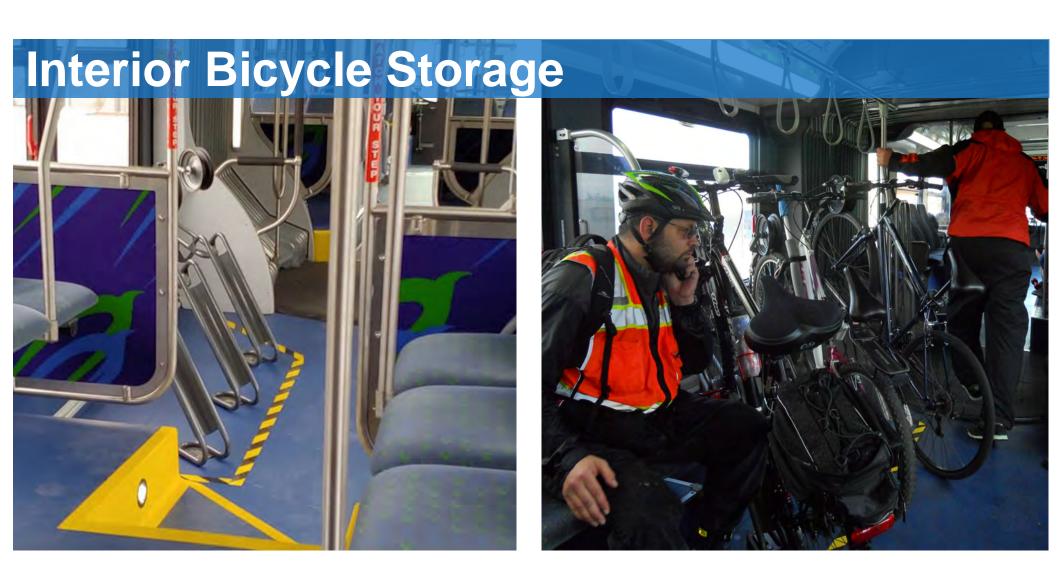






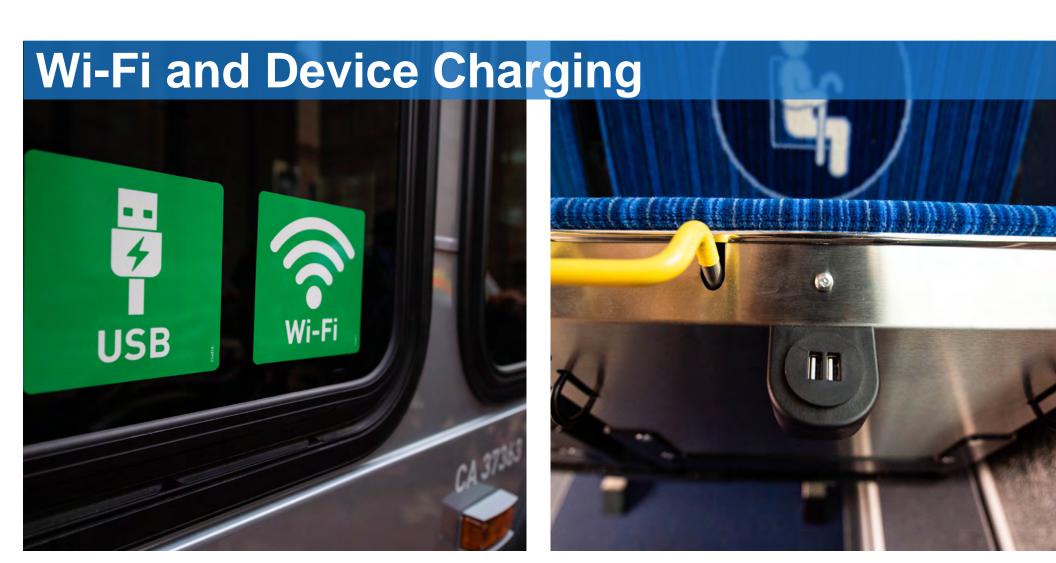








The Richmond
Highway BRT project
is funded in part by
the Northern Virginia
Transportation
Authority.









STATION AREA INFOGRAPHIC

While the Richmond Highway BRT system has not yet been designed, the system may include the common BRT elements shown on the graphic below.

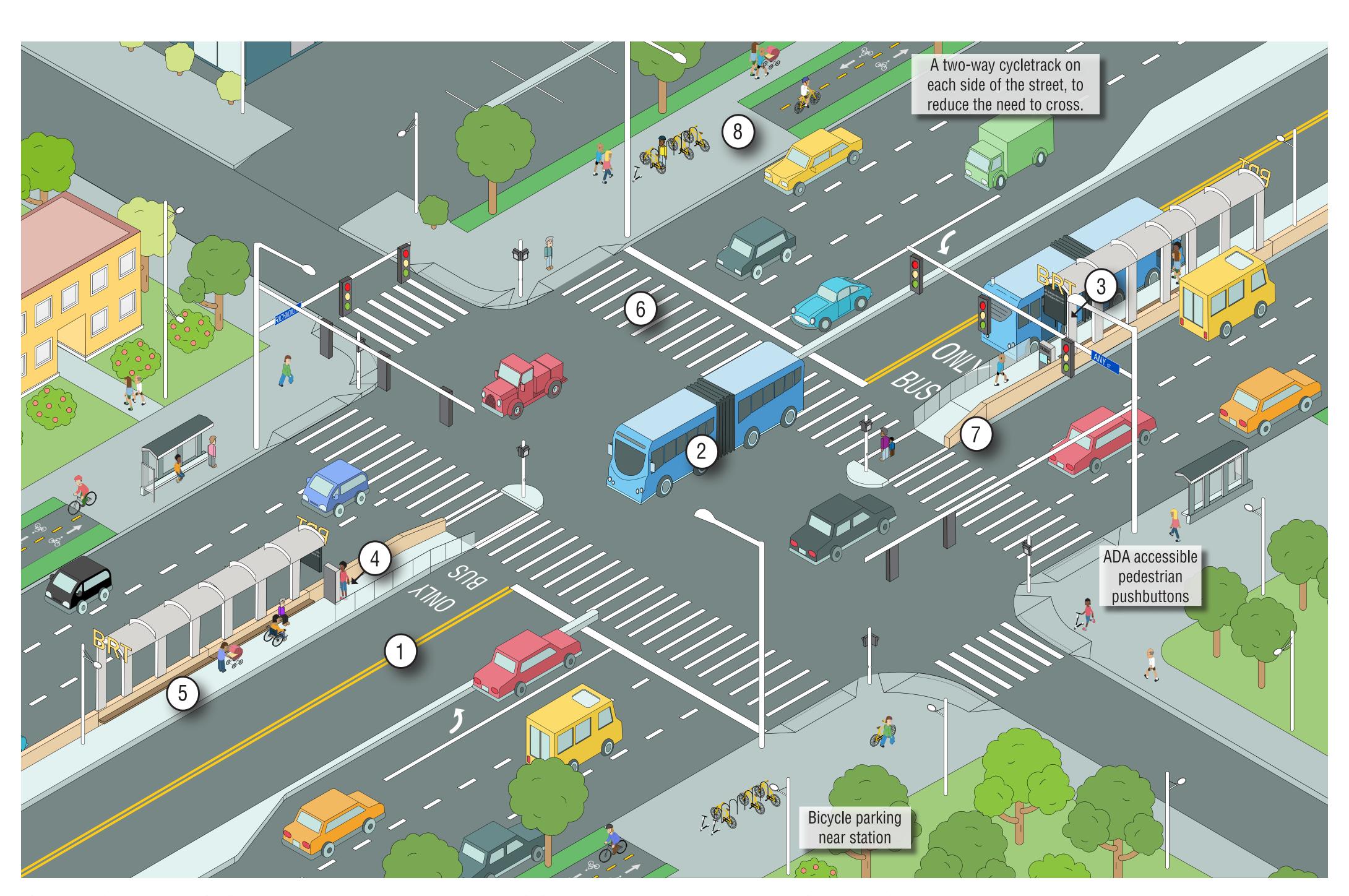
- 1 Exclusive BRT transitway
- Near-level boarding platforms

2 Articulated (longer) buses

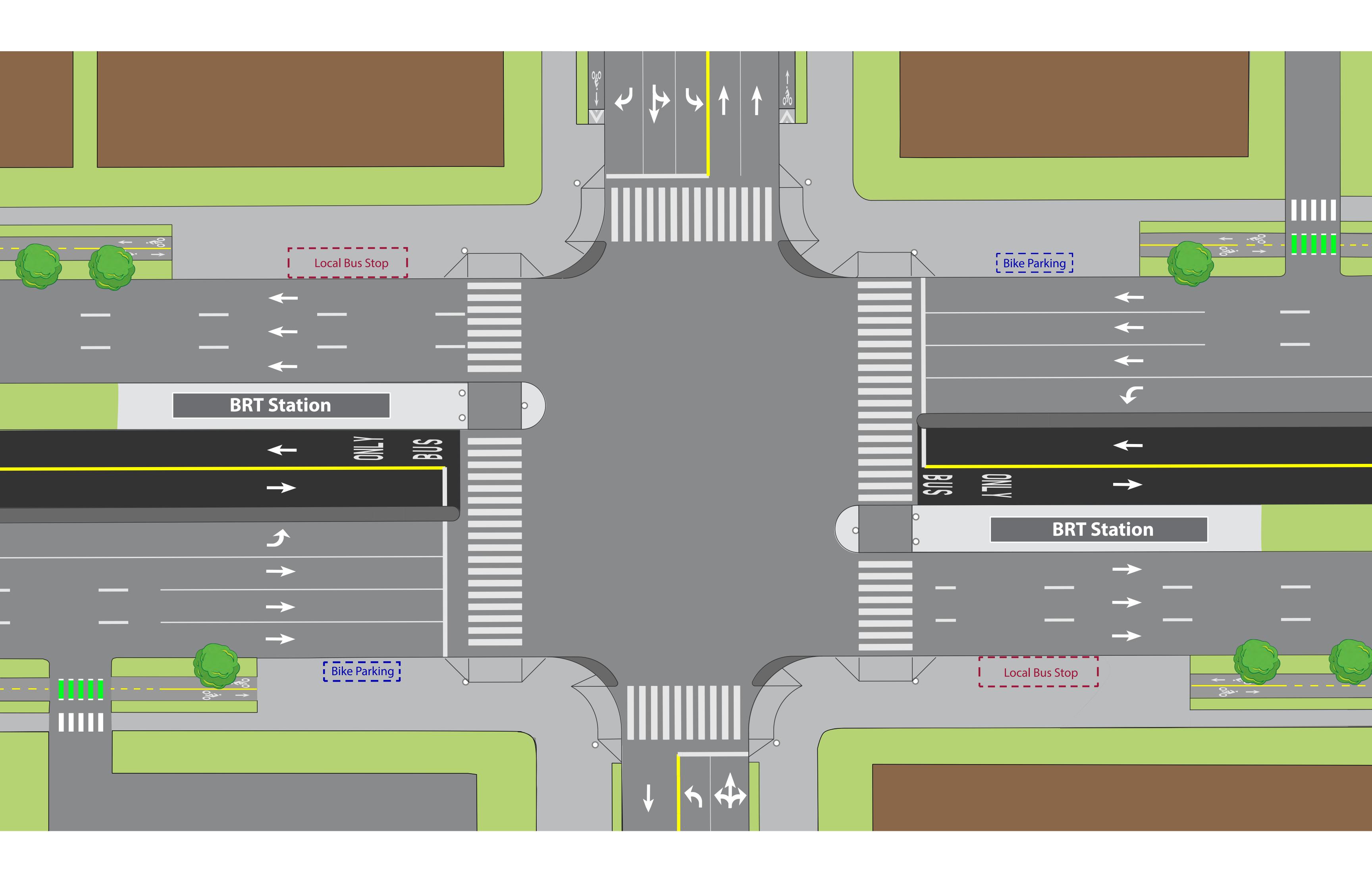
- 6 High visibility, wide crosswalks
- Real-time bus tracking and arrival information
- 7 ADA accessible boarding

4 Off-board fare collection

8 Enhanced bicycling and walking connections



This graphic is provided for illustrative purposes only and does not represent a proposed station design.







OVERVIEW OF THE STATION DESIGN PROCESS

The project team is currently developing theme concepts for the stations for the Richmond Highway BRT system.

- The final station design will reflect a common theme all along the corridor. We are presenting three draft themes tonight, for your input.
- The themes were developed based on review of the design influences, shown in the yellow box, and input from Station Design Workgroup discussions/workshops.

Process



Ideas to support the architectural design of the station

Develop draft design theme concepts

Three ideas based on project team workshops

We are here!

Develop station design concept options

Refine the three ideas and their station elements (canopies, benches, system maps, etc.)

Finalize design concept options

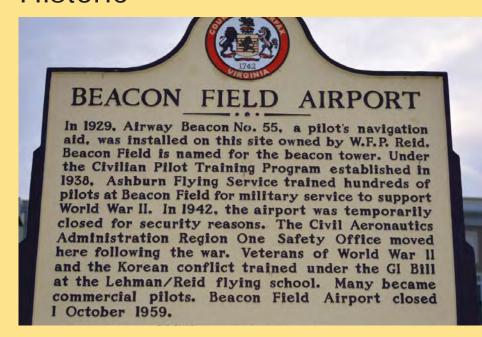
Refine the three station concepts and select two to move forward

Choose final preferred design concepts

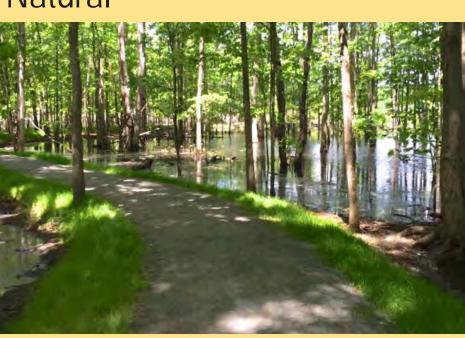
Project Executive Committee will select the final concept

Design Influences

Historic



Natural



Architectural



Institutional



Embark Richmond Highway
Urban Design Concepts

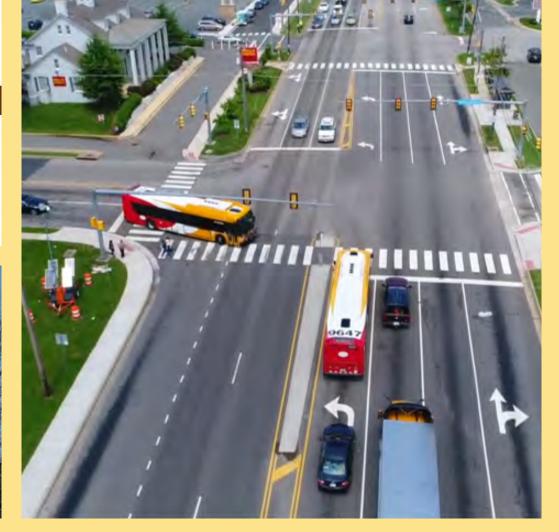


Cultural





Context/Physical Surroundings











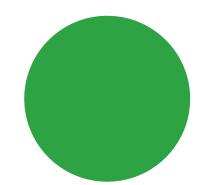
ACTIVITY: STATION DESIGN THEMES

The next six boards describe three draft conceptual themes for station design.

Each theme includes different elements:

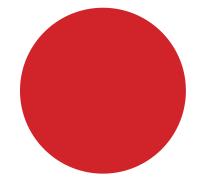
- Corridor resources which are related to the theme
- Forms, colors, and materials inspired by the resources

On the following boards, please tell us which elements you would like to see reflected in future station design concepts, using the dot stickers provided.



Elements you like most

(Put a green dot by the resources, forms, colors, and/or materials that you most hope to see reflected in the station design.)



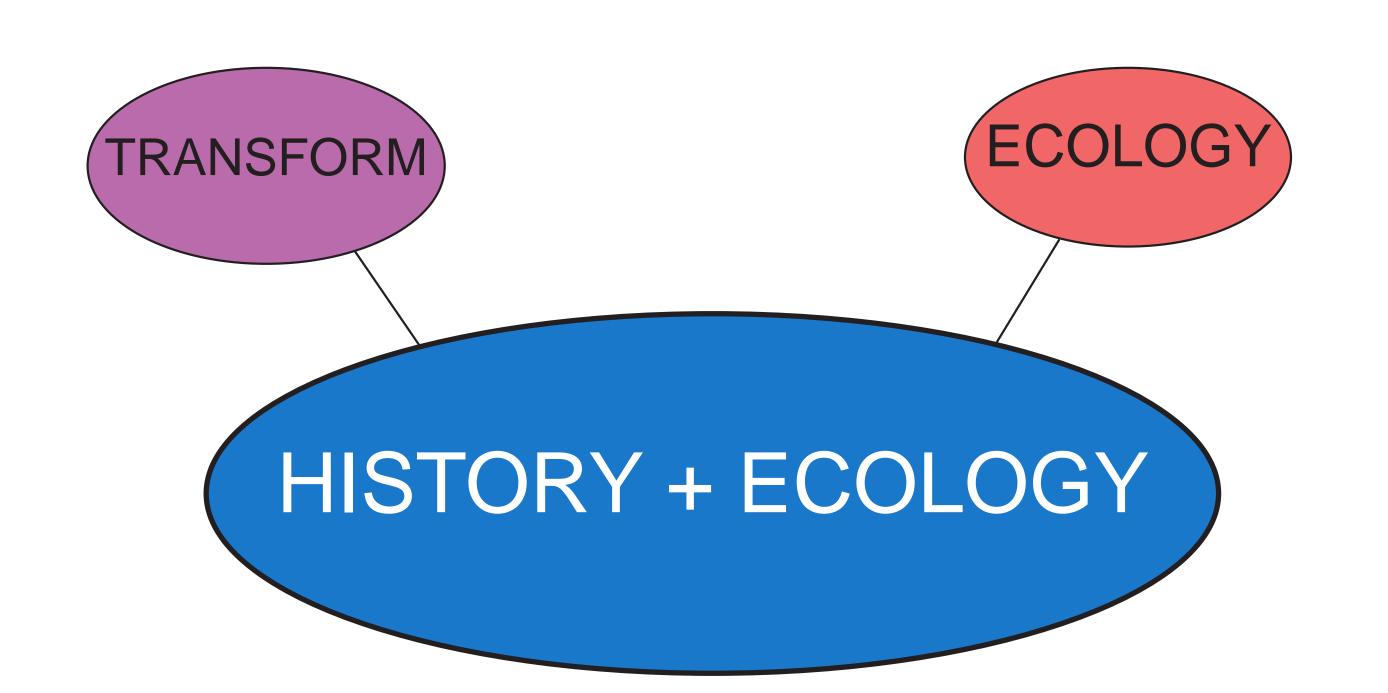
Elements you like the least

(Put a red dot by the resources, forms, colors, and/or materials that you do not wish to see reflected in the station design.)









The history of the Richmond Highway corridor is a history of transformation. Access to the Potomac and the natural ecology resulted in a prime location for farming, but the act of colonial settlement greatly altered that ecology, replacing wetlands with farmlands and otherwise reconfiguring the natural environment.

As development continues in this region, it is done with a regard for that history but also a greater understanding of how new development can both respect and restore the natural environment.

The History + Ecology theme embodies the confulence of these influences and represents how transit can play a role in the restoration of ecological balance.

Resources



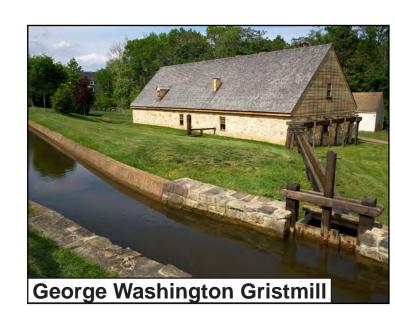




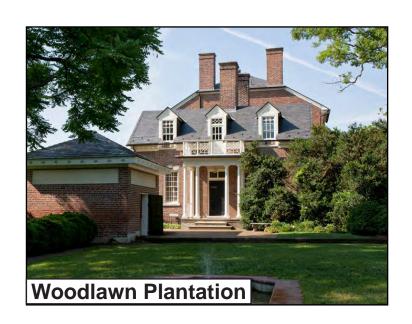








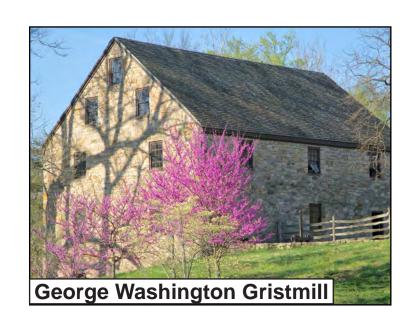


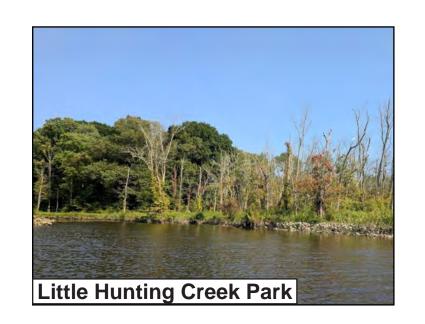














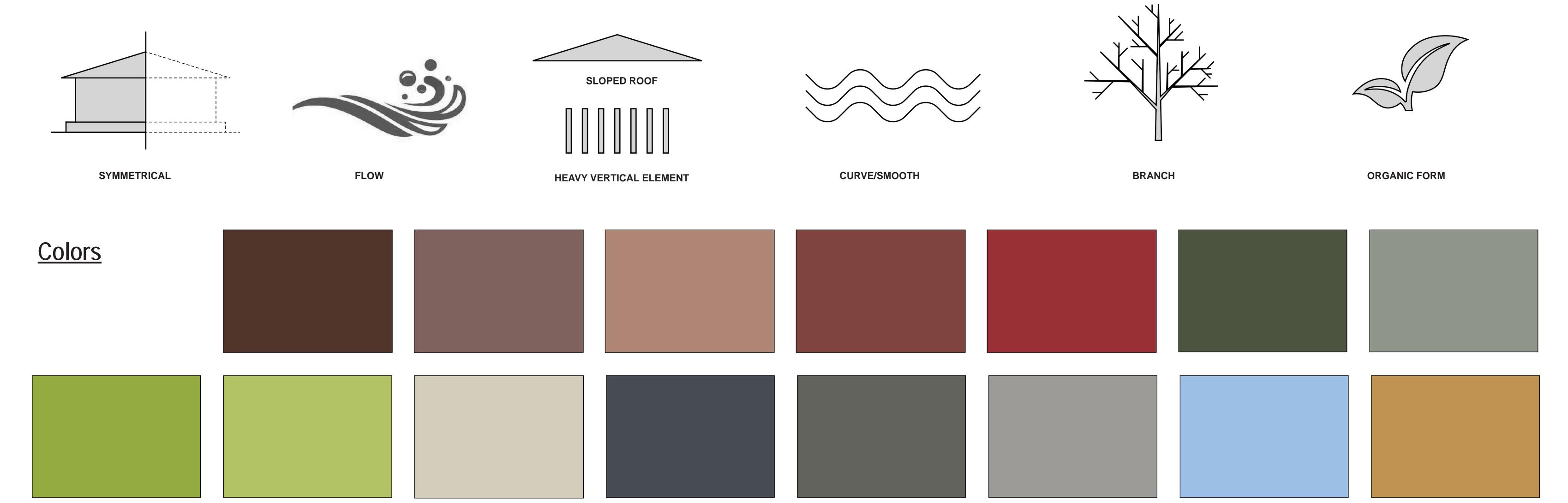




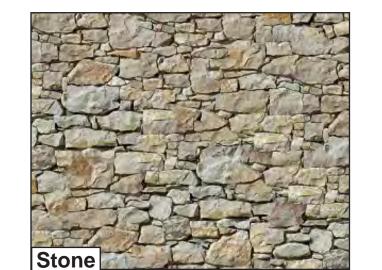


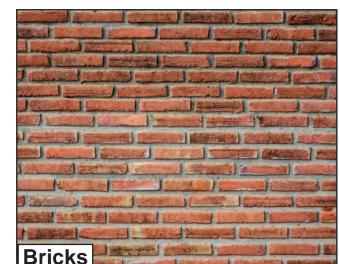
THEME #1: HISTORY + ECOLOGY

Forms



<u>Materials</u>



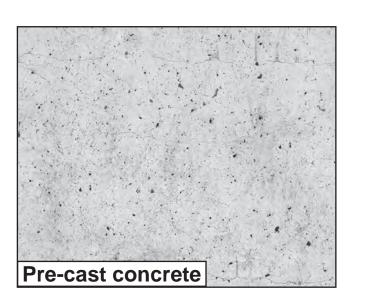


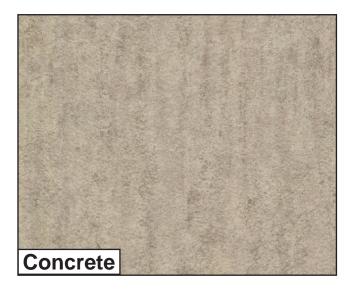


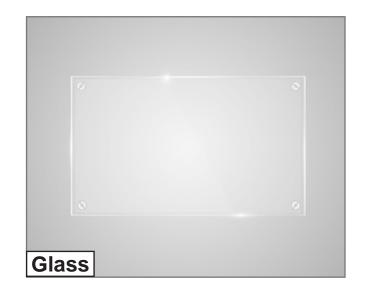










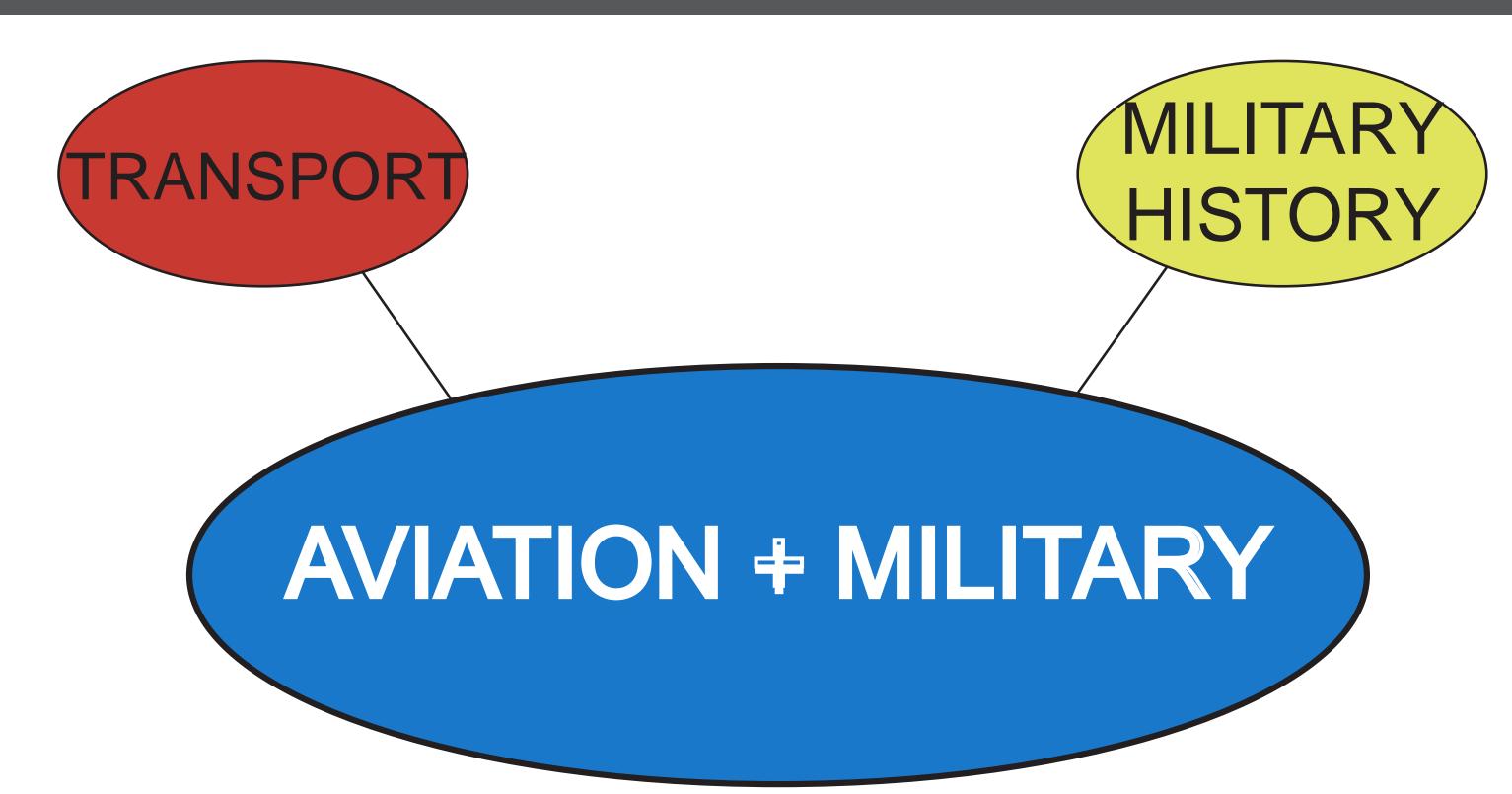








THEME #2: AVIATION + MILITARY



The Richmond Highway corridor has a storied military history which continues to this day with its association to Fort Belvoir, colonial homes, and parks from former forts. The corridor also played a unique role in the development of aviation, with local airports that originally served as part of the growth of that form of transportation converted to flight training centers during World War II.

While those uses are gone today, their spirit continues through place names such as Beacon Hill and Lockheed Boulevard, and through the historic markers and memorials reflecting this period.

The Aviation + Military theme honors this history with a focus on the role of flight with its dynamic shapes and materials reflecting the ideals of movement and connection.

Resources





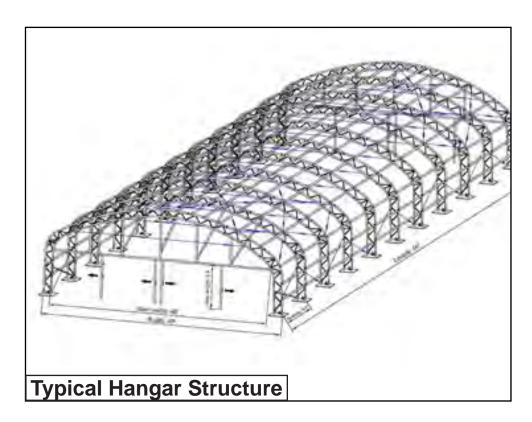


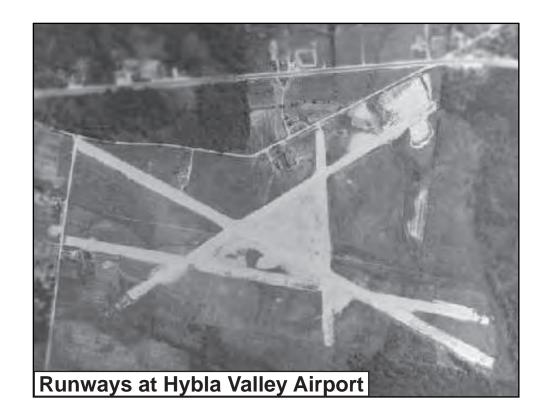






















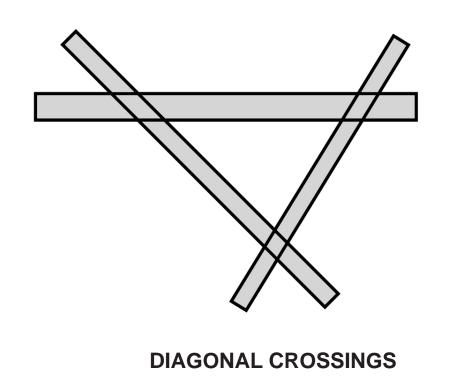
RICHMOND HIGHWAY BUS RAPID TRANSIT

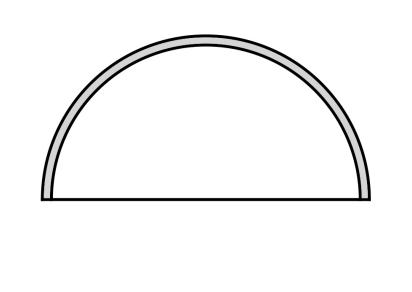




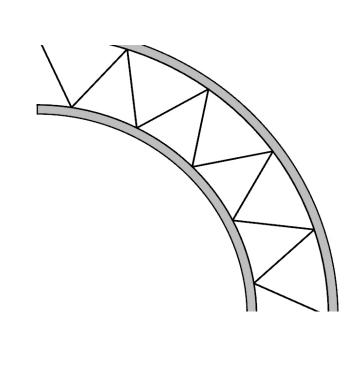
THEME #2: AVIATION + MILITARY

Forms

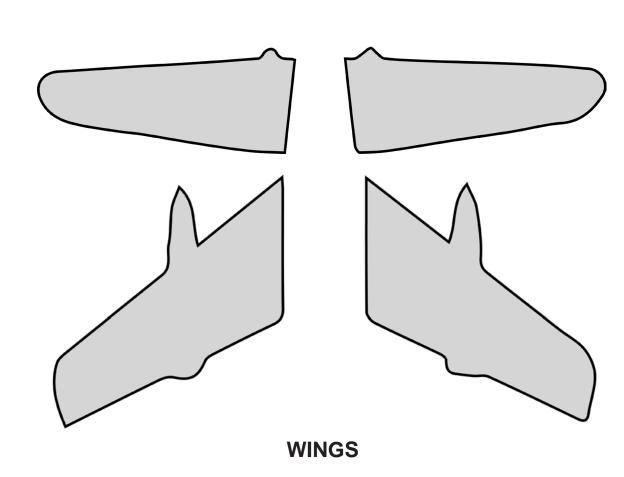


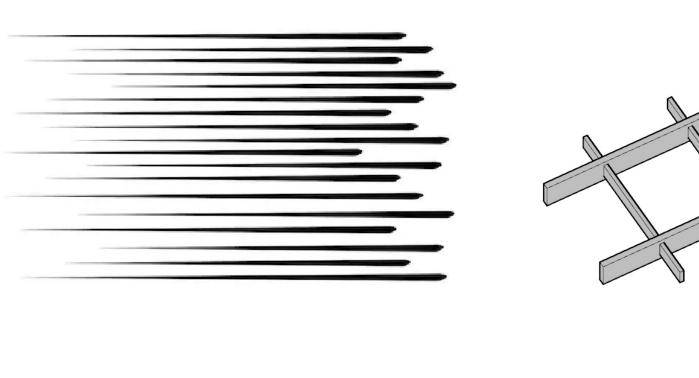


ARCH

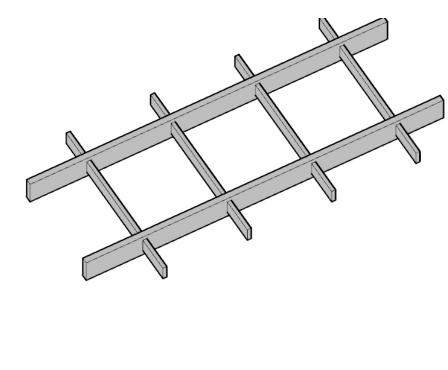


TRUSS



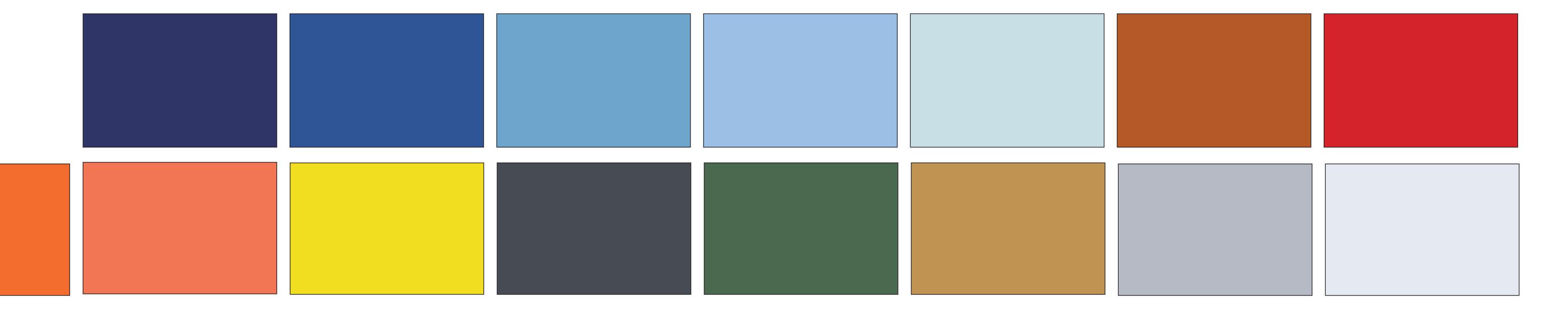


MOVEMENT

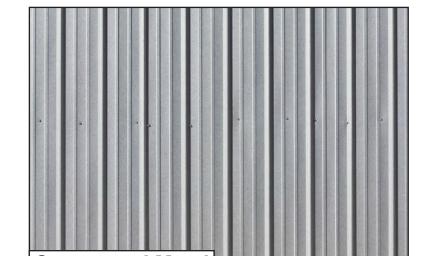


WAFFLE

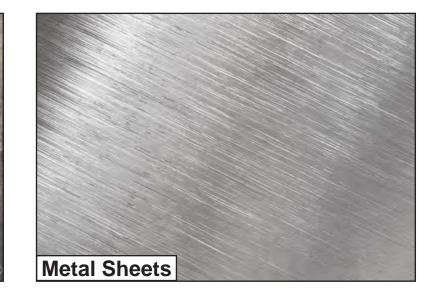
<u>Colors</u>



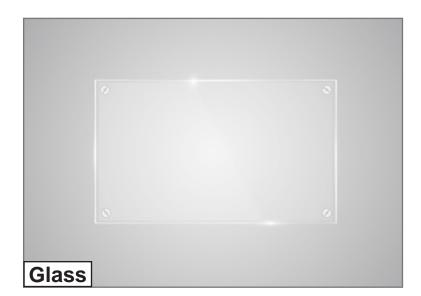
<u>Materials</u>

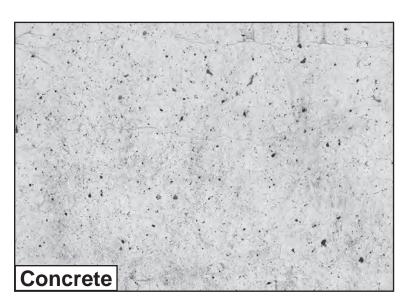




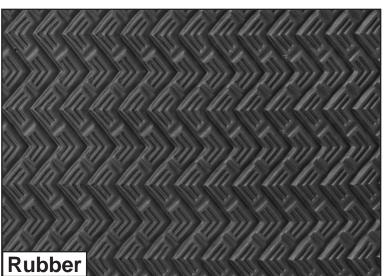












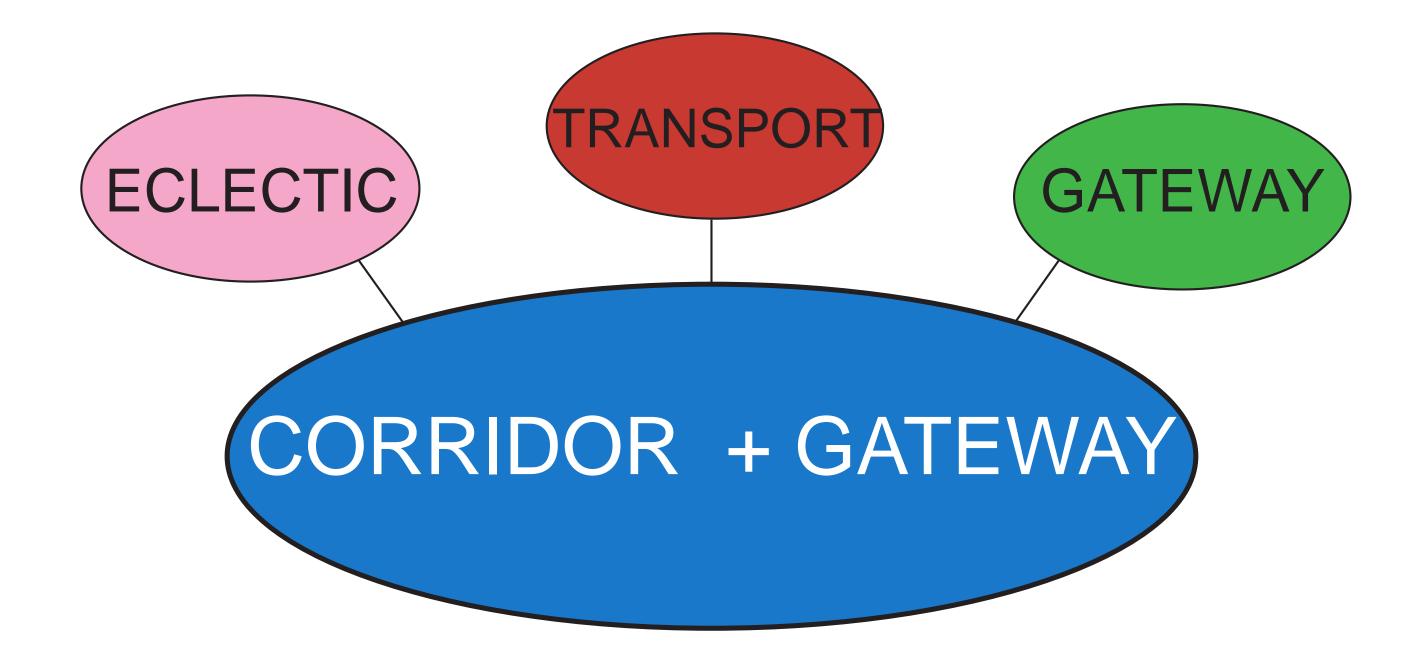






THEME #3: CORRIDOR + GATEWAY





From its conception in the 1920's, route one was a critical element in the transportation network for the United states, connecting the major cities of the East Coast. A predecessor to the interstate highway system, the post-WWII boom car culture spurred the development of an eclectic mix of housing, service stations, restaurants and motels along the Richmond Highway corridor, reflecting its role as a gateway to the DMV area.

This role continues to this day, with Huntington Metro Station serving as a gateway into the metro system and Richmond Highway continuing to serve as a major transportation route, shopping destination, and connector to flourishing neighborhoods.

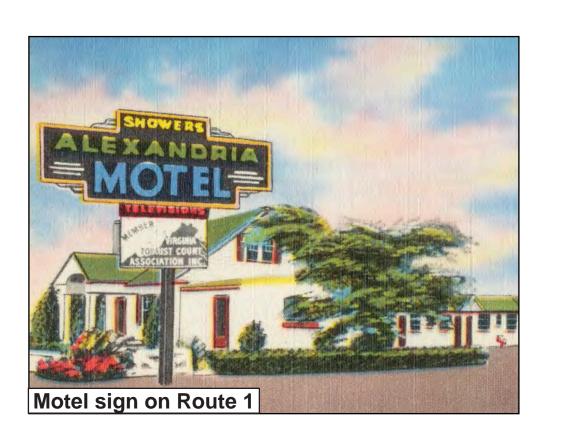
The Corridor + Gateway theme captures the exuberance of this era of transportation transformation with simple (yet iconic) forms, diverse colors and bold lighting/signage.

Resources







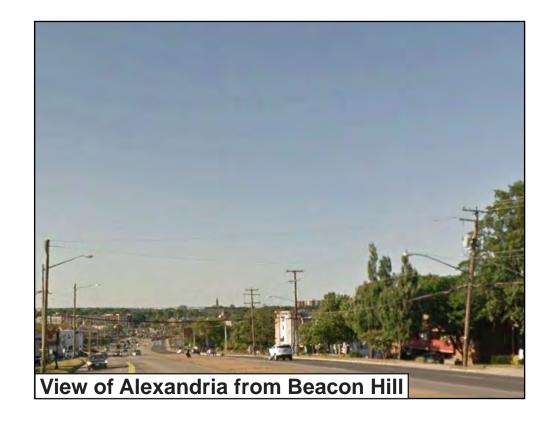






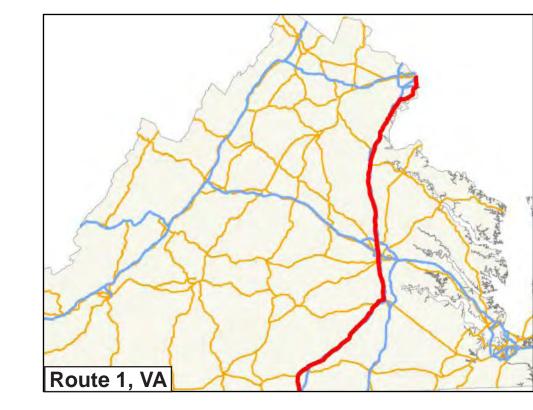










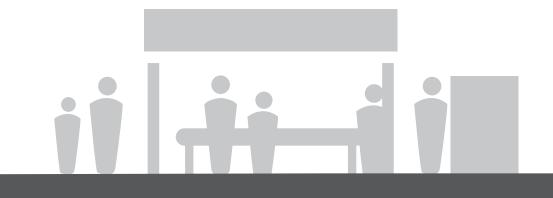








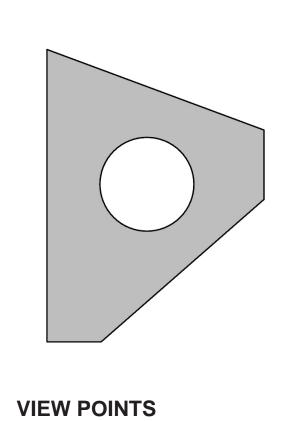


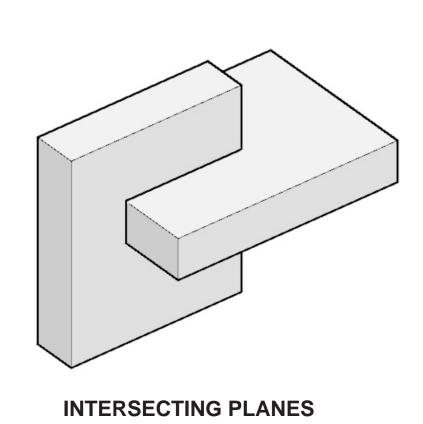


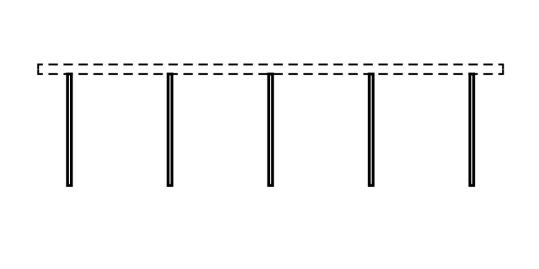
THEME #3: CORRIDOR + GATEWAY

<u>Forms</u>

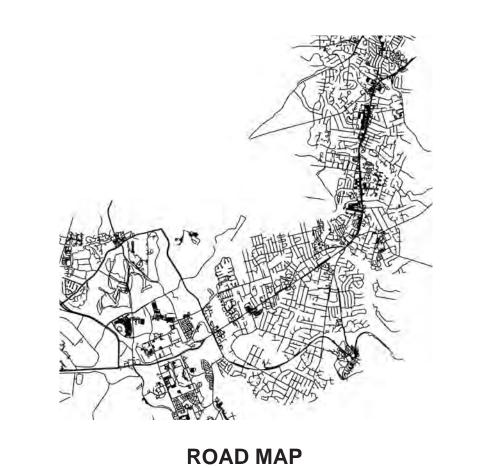


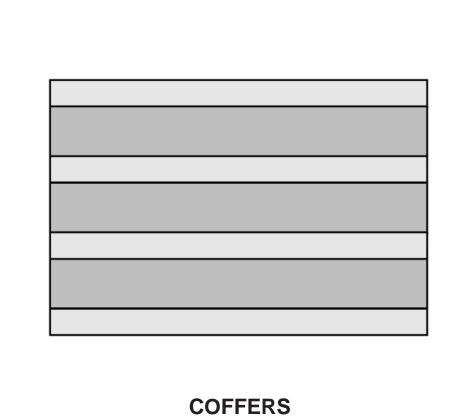




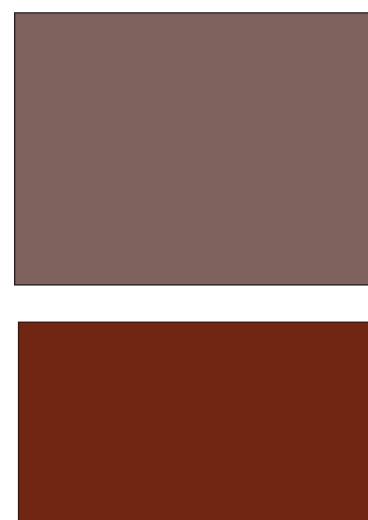


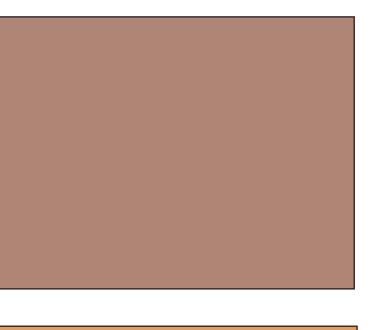
MINIMALISM





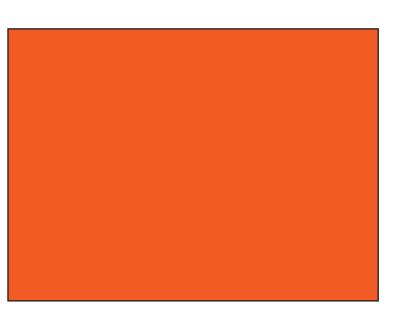
Colors



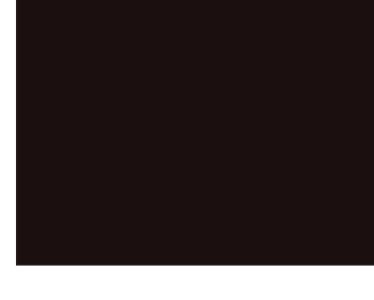




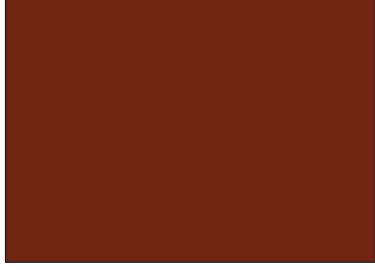


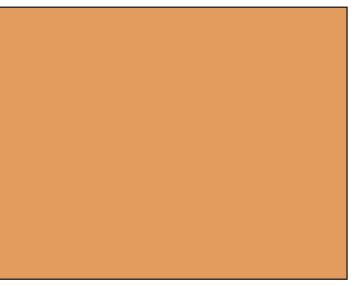














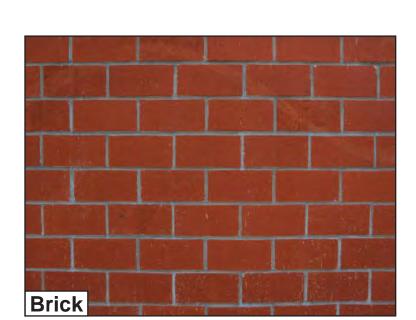


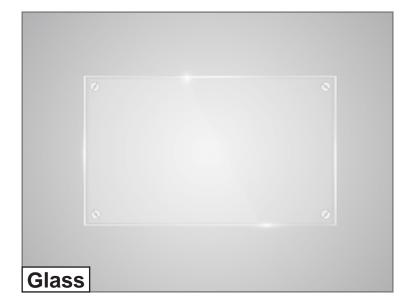




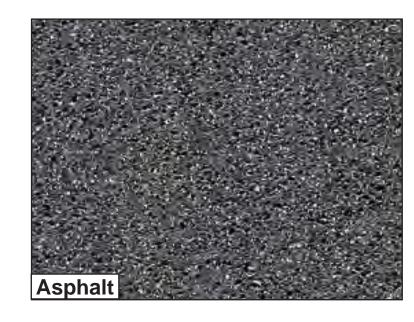


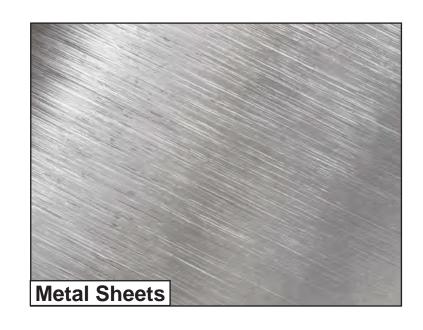
<u>Materials</u>

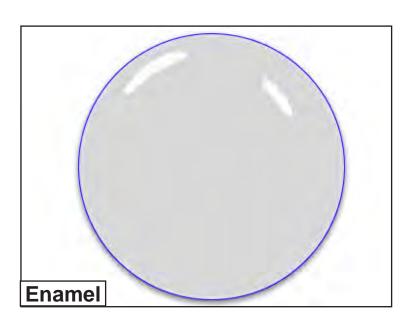




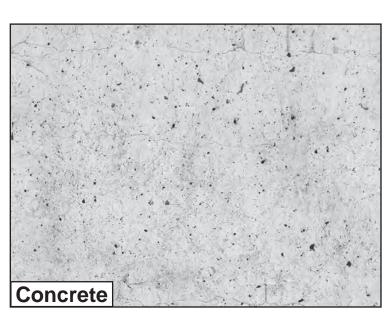














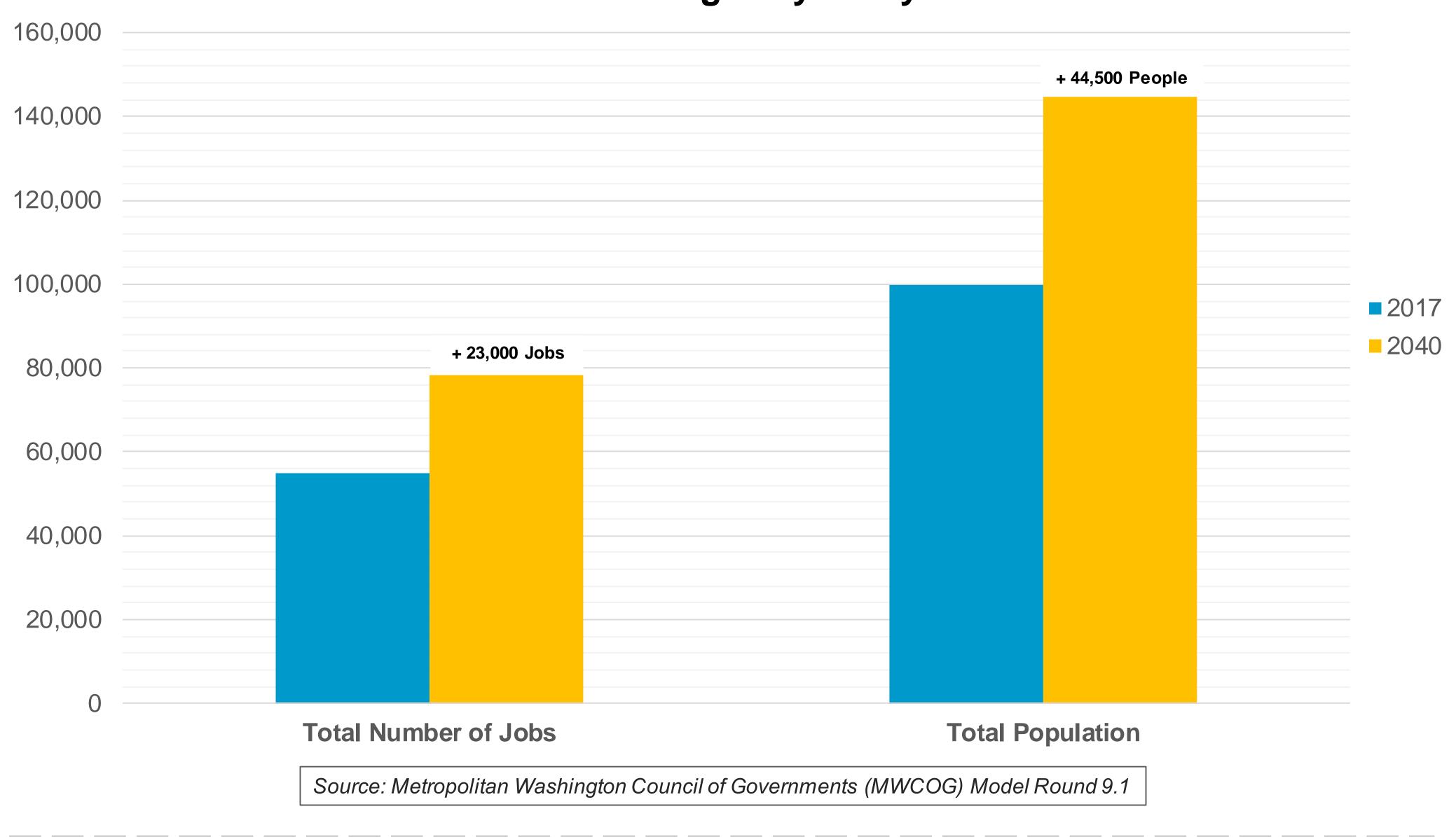






LAND USE AND TRAFFIC VOLUME

Population and Employment Growth in Richmond Highway Study Area



Traffic Volumes along Richmond Highway



2017 AADT based on VDOT's 2017 Average Daily Traffic Volumes Publication 2040 AADT projections based on MWCOG Model Round 9.1

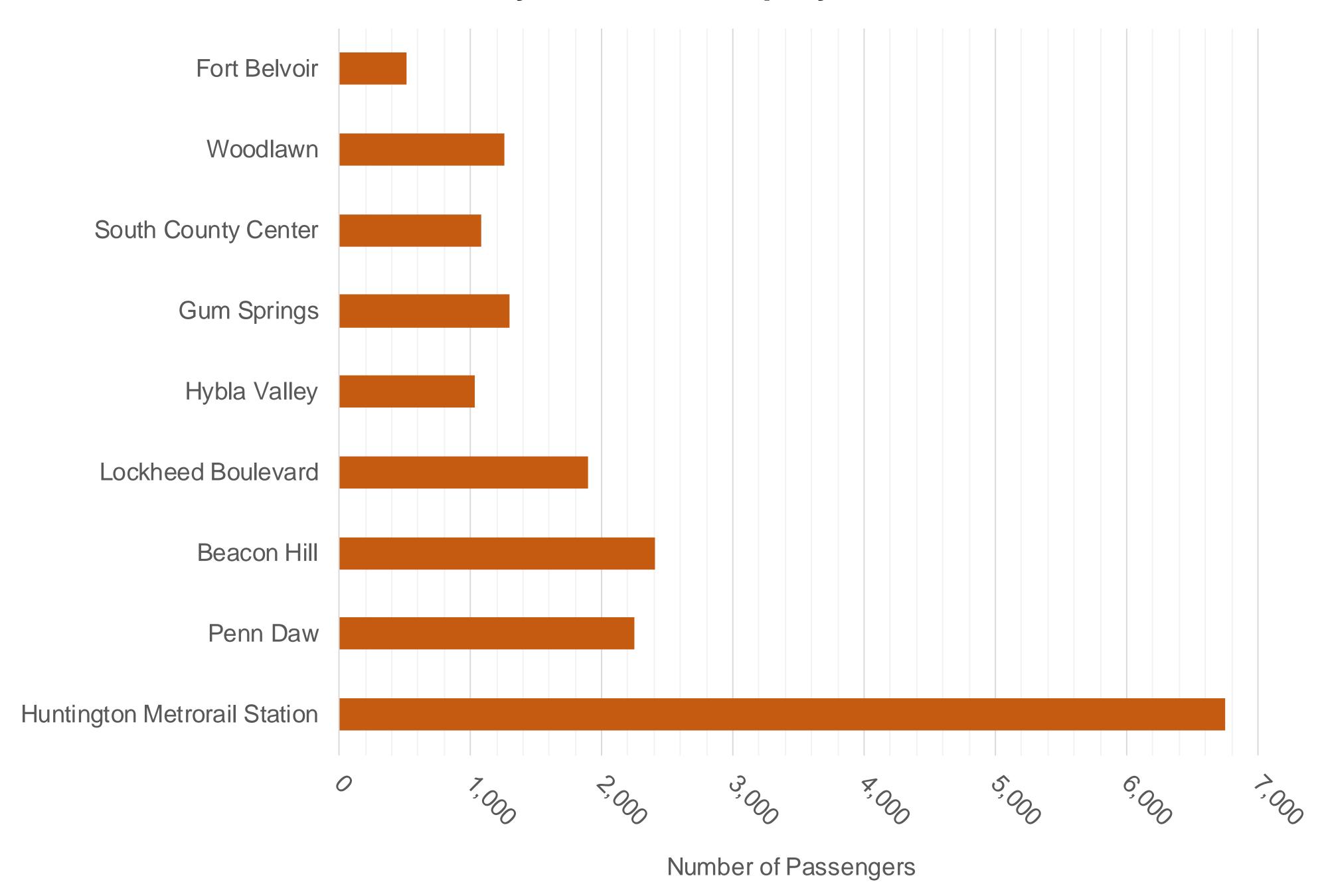






Total Weekday BRT Ridership (number of people who ride the BRT) for All Stations: 18,500 Passengers

2040 Weekday BRT Ridership By Station



Source: STOPS Model using WMATA and Fairfax County DOT General Transit Feed Specification (GTFS) Network





BRT TRAFFIC SIGNAL OPERATIONS

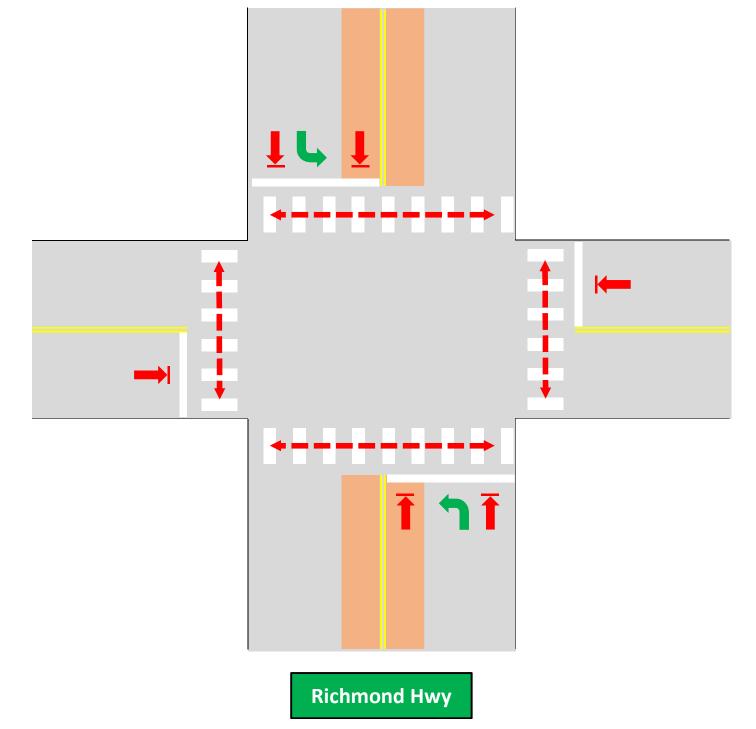
Traffic Signal Sequence at a Typical Intersection along Richmond Highway

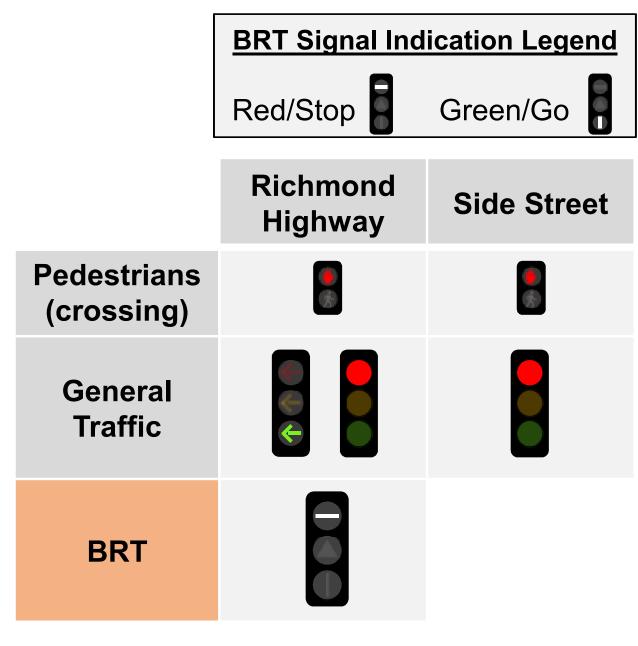
Green:

 Left-turn traffic along Richmond Highway

Red:

- Through traffic along Richmond Highway
- BRT along Richmond Highway
- All traffic along the side streets
- Pedestrians crossing Richmond Highway
- Pedestrians crossing the side streets



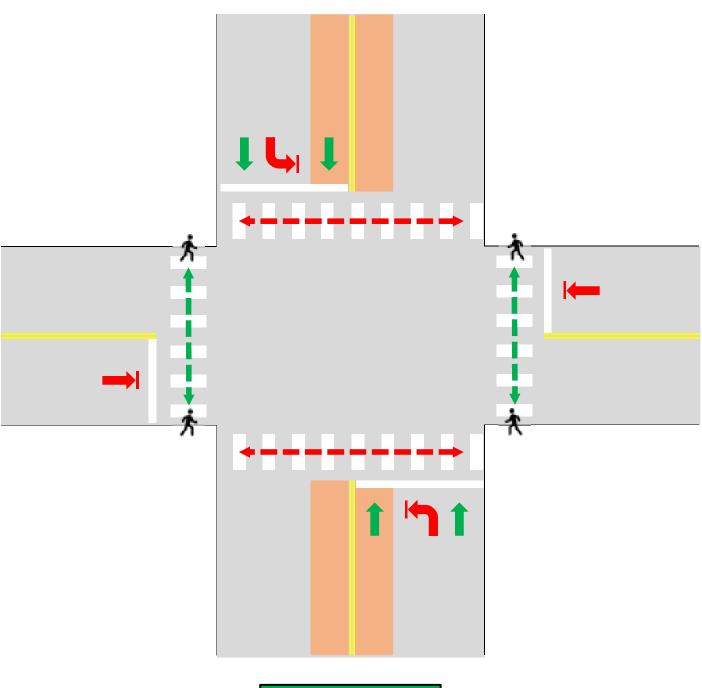


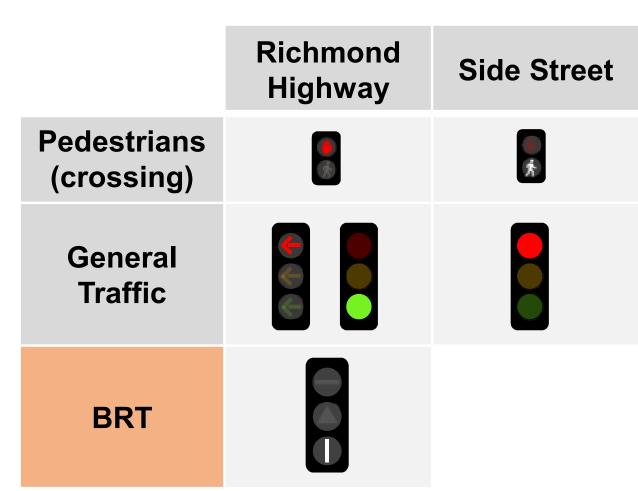
Green:

- Through traffic along Richmond Highway
- BRT along Richmond Highway
- Pedestrians crossing the side streets

Red:

- Left-turn traffic along Richmond Highway
- All traffic along the side streets
- Pedestrians crossing Richmond Highway





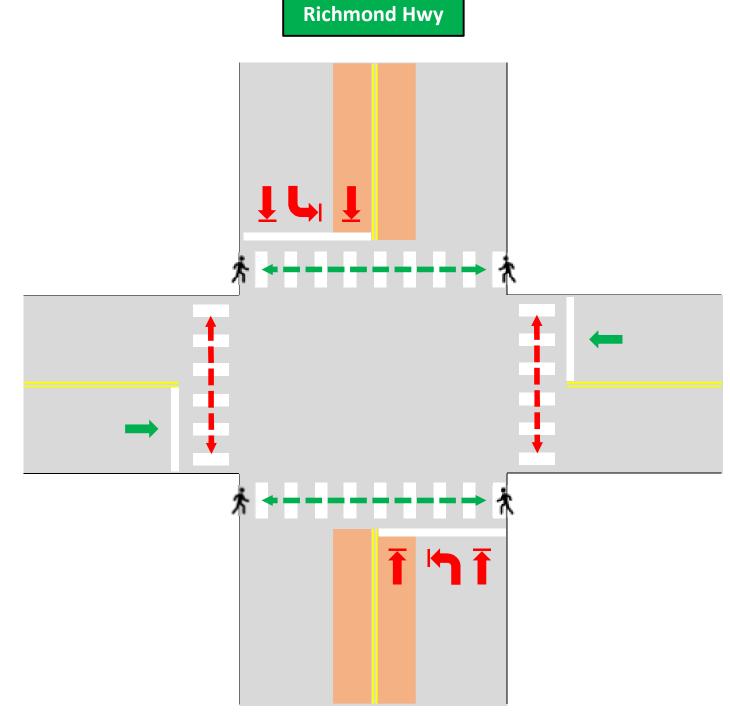


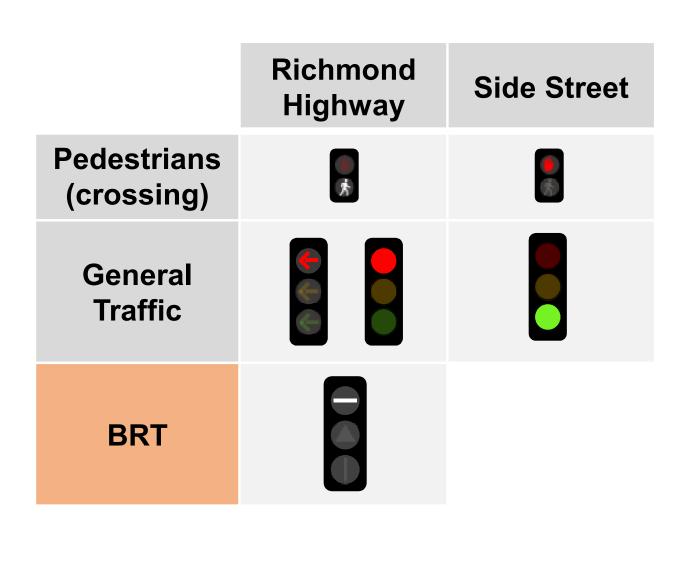
Green:

- All traffic along the side street
- Pedestrians crossing Richmond Highway

Red:

- Left-turn traffic along Richmond Highway
- Through traffic along Richmond Highway
- BRT along Richmond Highway
- Pedestrians crossing the side streets





TRANSIT SIGNAL PRIORITY (TSP)

TSP prioritizes bus movements through signalized intersections using vehicle location and wireless communication.

TSP Benefits



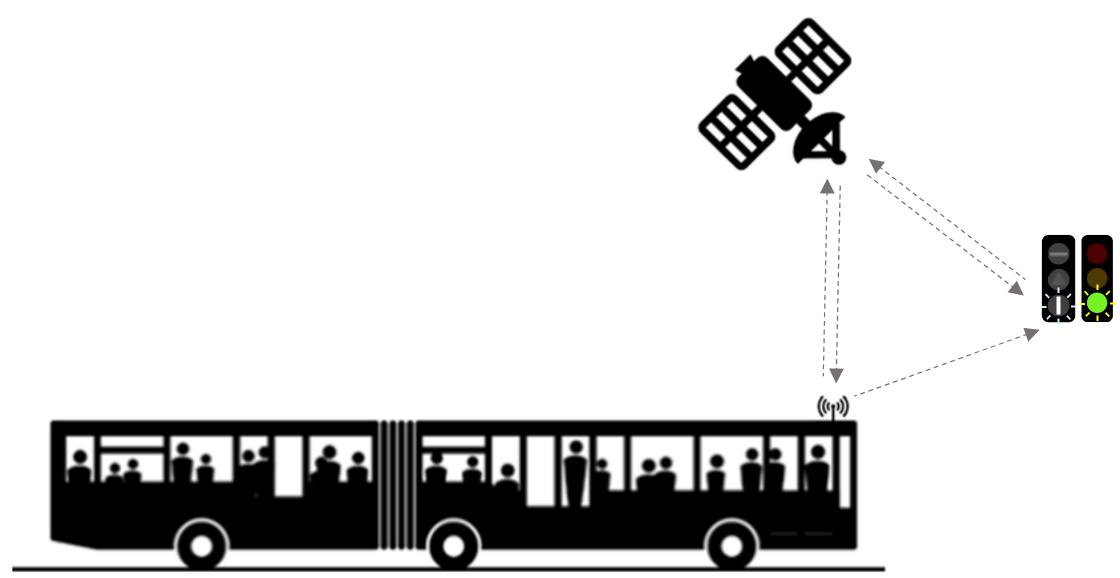
Reduced Daley / Improved Travel Times



Schedule Adherence / Transit Reliability



Increased Ridership











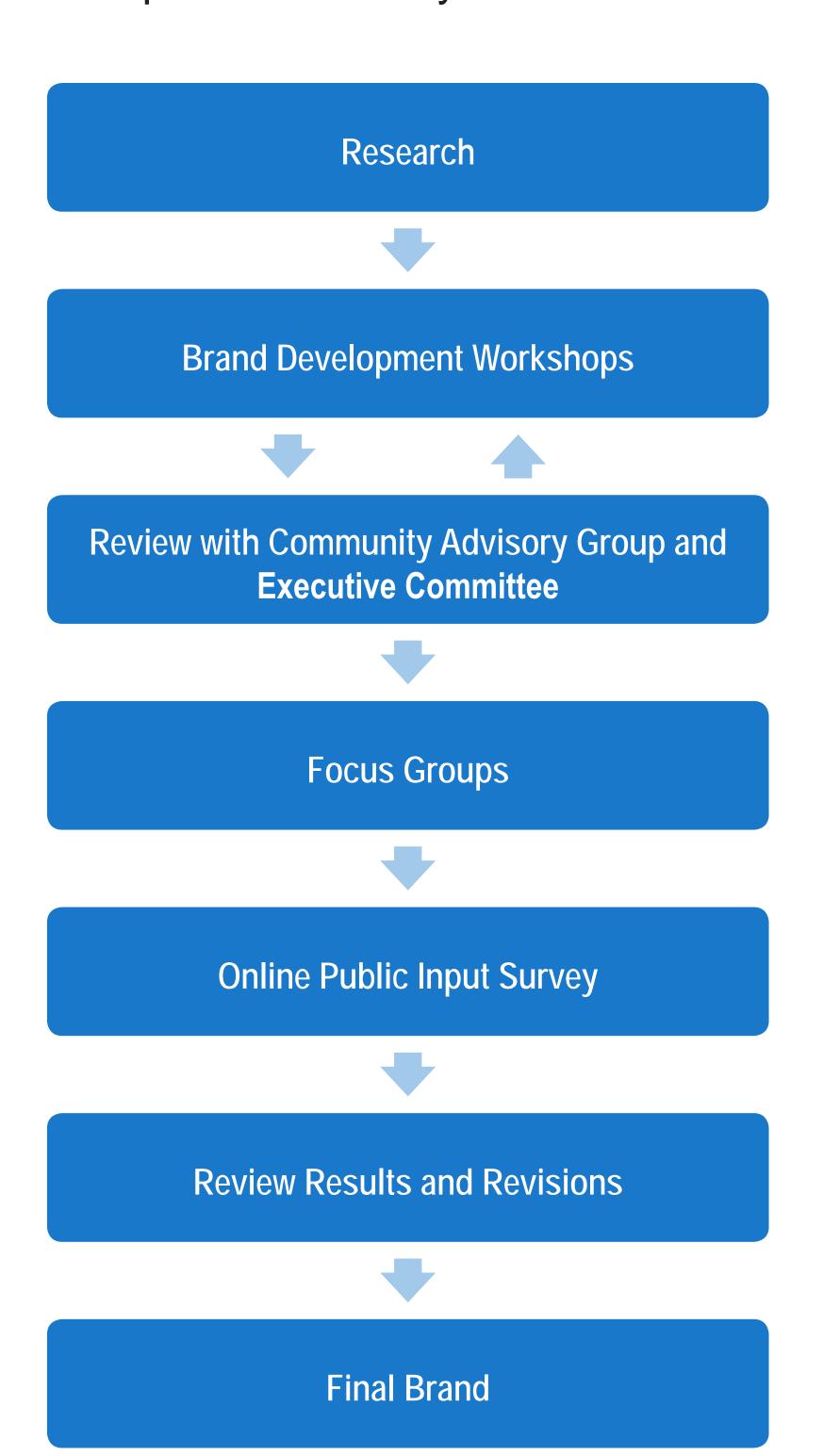
BRANDING

What is Branding?

 The Richmond Highway BRT brand will include a name, logo, colors, materials, and other elements that will bring the service to life and help frame the BRT Program and the BRT service.

The BRT Brand Development Process

- The project team is developing branding options with the help of the Brand Development Team (BDT), which is a group made up of community members/leaders and FCDOT staff.
- The Community Advisory Group and the BRT Executive Committee are also providing their input on draft concepts.
- Following focus group review of revised options, the community will be asked to provide input via a survey.



Examples of BRT Branding Elements



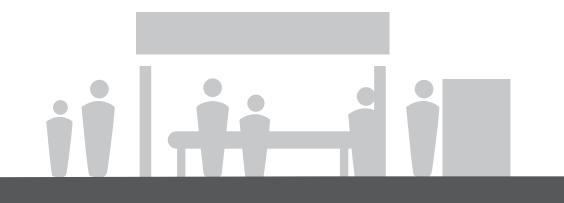








NEXT STEPS & STAYING INVOLVED





Public Meeting #3 September 2019 (We are here!)



Public Meeting #4 Late 2019 or Early 2020

Between Meeting #3 and Meeting #4, the Project Team will:

- Review comments from this meeting to better understand the needs in the corridor and what people would like to see in station areas
- Continue to refine the system design
- Continue to develop the draft station design
- Continue to analyze property impacts
- Finalize reports that describe the types of impacts that the project could have on environmental resources
- Refine branding options and gather input
- Continue to work on securing funding

Five ways to provide your comments:

1. Fill out the online comment form



Link to comment form: surveymonkey.com/r/ FCDOTBRT3

2. Complete the paper comment form and place it in the comment box tonight

3. Mail your comment form via USPS to:

- **FCDOT** Richmond Highway BRT Project Manager 4050 Legato Rd, Suite 400 Fairfax, VA 22033
- 4. Use the comment form on the BRT project website
- **5. Email comments** to the BRT project email address: DOTBRT@fairfaxcounty.gov

Track the project on social media:



/FFXTransportation /fairfaxconnector



- @fairfaxcounty
- @ffxconnector

Visit the Richmond Highway BRT Website to:

- Sign up for the project email list to receive project updates
- View an interactive Story Map to learn more about the project
- View materials from this meeting and others
- Review answers to frequently asked questions
- Check for information about upcoming meetings and other input opportunities

Project website:

fairfaxcounty.gov/transportation/richmondhwy-brt

Want to continue the discussion? Join us for an interactive event on Facebook Live in October! More details on the project

website.







ACTIVITY: OUTREACH IDEAS

Have some ideas for where or how we should share BRT updates?

Tell us by writing them on a sticky note and placing it on this board!

Places to distribute or post flyers about upcoming meetings (e.g., coffee shops, stores, parks, or other places you think you would notice a flyer)
Blogs, newspapers, or other websites that you check for local news
Suggested pop-up event locations (places where we put up a table and distribute materials about the project e.g., busy stores, school events, places of worship, ongoing community meetings, etc.)
Other ideas

