

# Embark Richmond Highway Community Meeting #2

July 25, 2016  
West Potomac High School  
7:00-9:00 pm



# Tonight's Presentation

- ◆ Embark Background
- ◆ Feedback from *May 9, 2016* Open House
- ◆ Urban Design
- ◆ Draft Richmond Highway Typical Cross Section
- ◆ Transportation Analysis Overview
- ◆ Questions and Answers

# I. EMBARK BACKGROUND

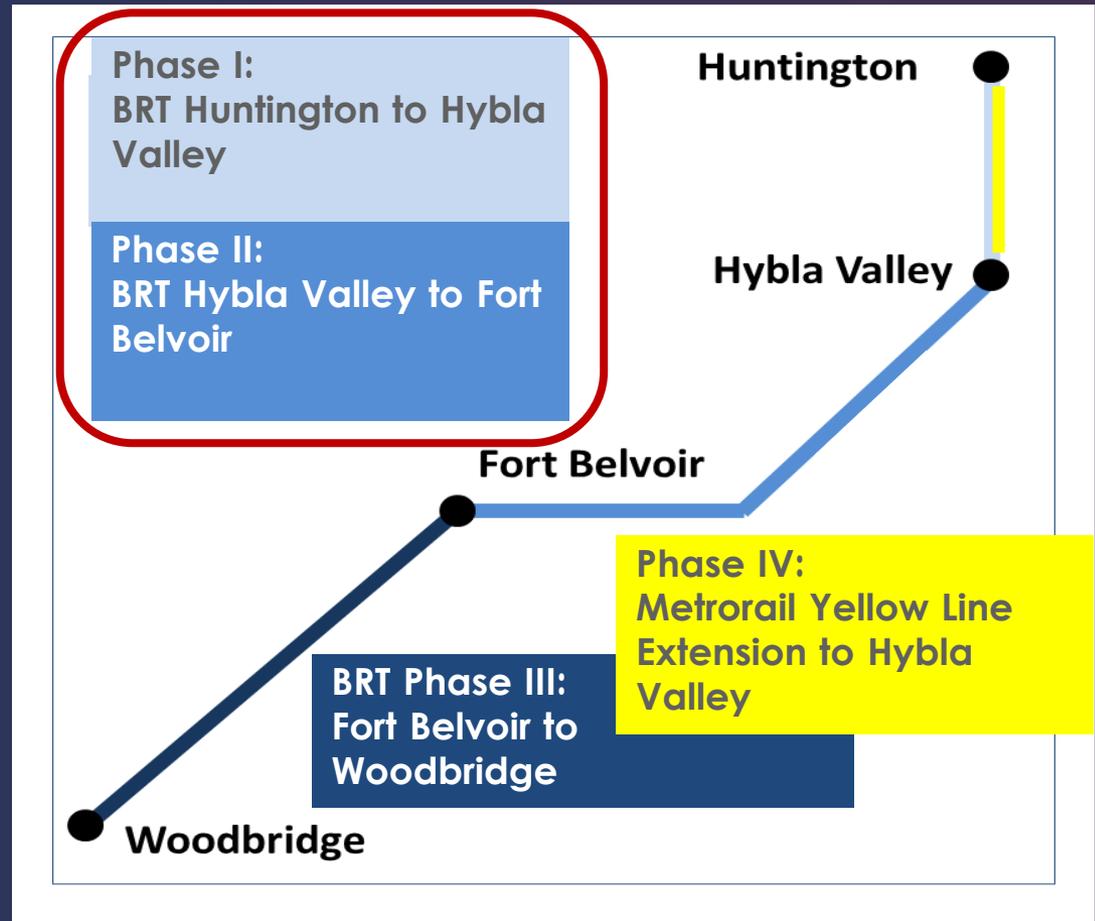


# Embark Richmond Highway

- Enhances economic success in the corridor
- Creates a walkable, bikable, transit-oriented Richmond Highway
- Builds upon a state-led study to identify the type of transit mode:

## “BRT/Metrorail Hybrid”

- Median running Bus Rapid Transit (BRT)
- Metrorail extension to Hybla Valley
- Roadway Widening
- Bicycle and Pedestrian Facilities



# Embark Components: Huntington to Accotink



## Comprehensive Planning

- Land use and urban design guidance at 9 stations
- Transportation guidance, including planned transit modes

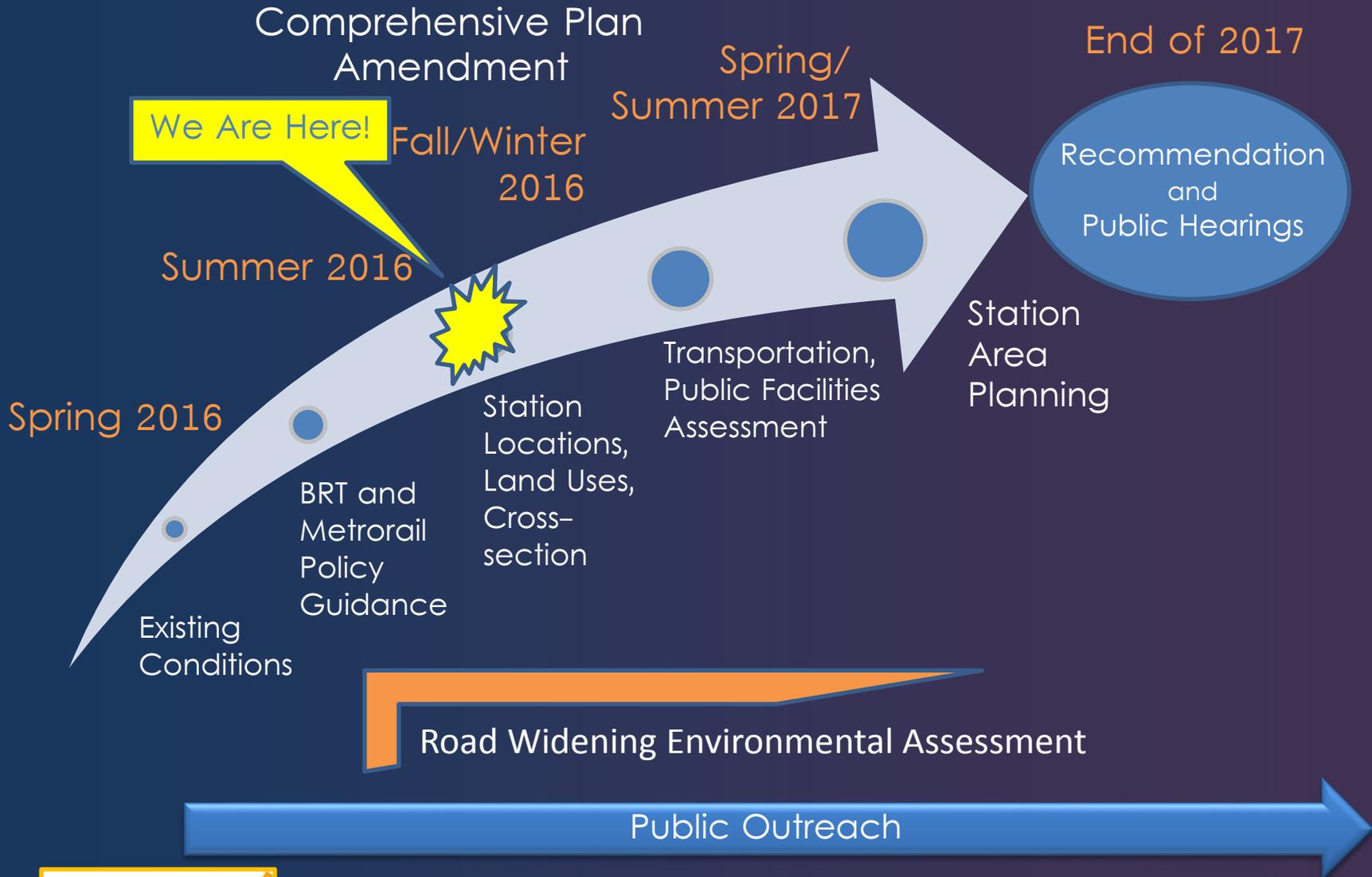
## Environmental Work

- Bus Rapid Transit and Route 1 widening

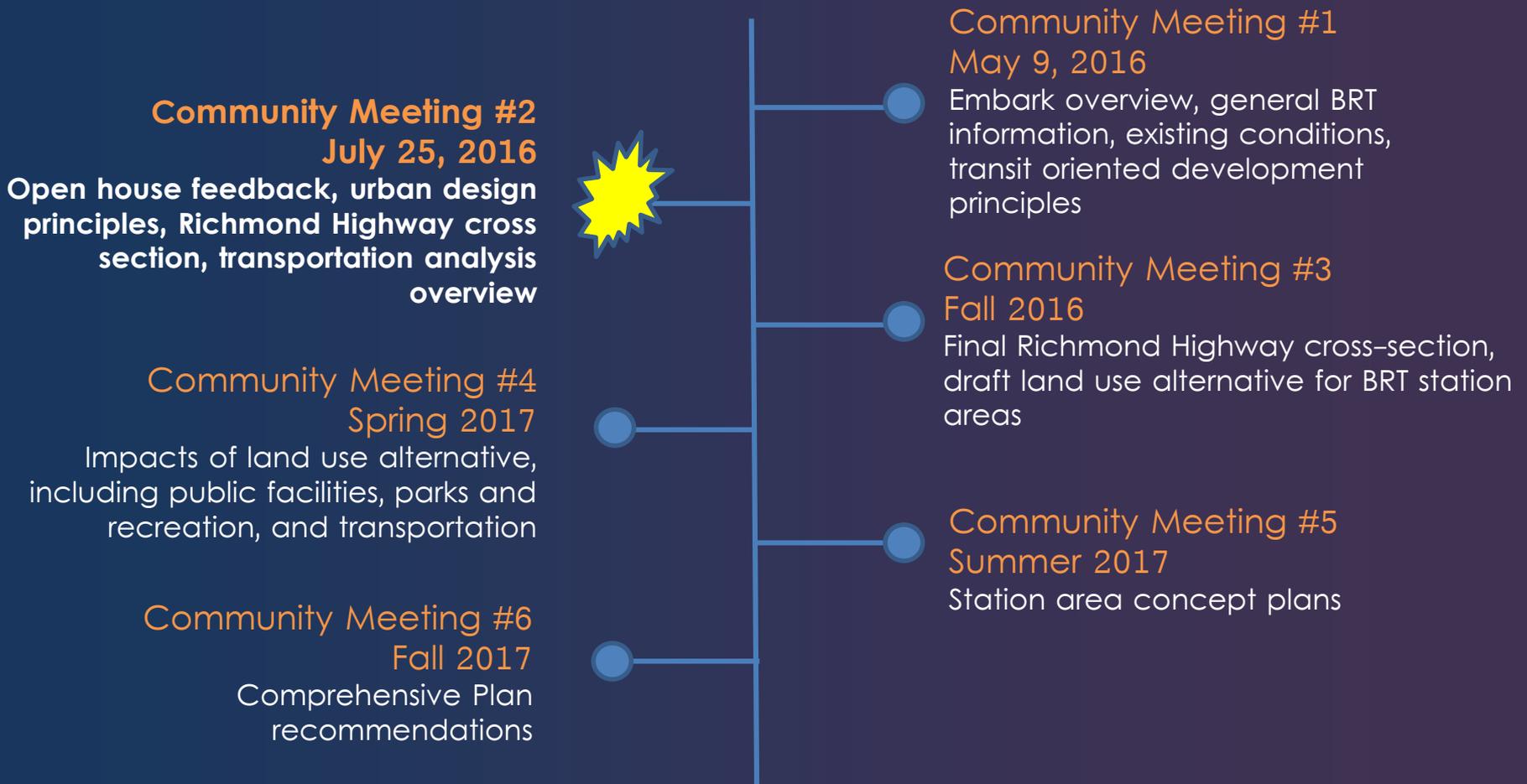
## Bus Rapid Transit System Planning and Design

- Project Management Consultant Team to aid in environmental, design and implementation work
- Proposal bids being evaluated, selection anticipated late 2016

# Components and General Timeline



# Anticipated Community Meetings



December 2017 – Planning Commission public hearing  
January 2018 – Board of Supervisors public hearing

## II. FEEDBACK FROM MAY 9, 2016 OPEN HOUSE

# Community Exercise Results

What is your vision for a bus rapid transit future and the ultimate extension of the Metrorail Yellow Line from Huntington to Hybla Valley?

# Community Exercise Results

Access to community services

Variety of housing types

Housing for all incomes

Stormwater control and stream restoration

trade and service jobs

Interconnected system of accessible sidewalks and trails

Reliable and frequent transit service

A diversity of jobs

Shopping/entertainment destinations

Greenery and open spaces

Well connected bike lanes

Community gathering places

Access to public schools



Generated using: worditout.com

# III. URBAN DESIGN

# Urban Design Principles

## Building Communities

- ◆ Create compact, walkable, mixed-use, transit oriented communities
- ◆ Use the street network as the physical framework to balance and integrate economic, land use, environmental, transportation and social goals
- ◆ Provide a network of public open spaces that integrate into the fabric of the neighborhood
- ◆ Integrate and restore surrounding natural resources
- ◆ Promote community identity and public life
- ◆ Build upon cultural heritage resources

# Urban Design Principles

## Economic Development

- ◆ Create desirable places for investment
- ◆ Create opportunities for synergy among land uses (residential, retail, office, hospitality)

## Healthy Communities

- ◆ Create physically and socially active environments that provide access to nature, recreation, and community interaction
- ◆ Promote healthy lifestyle
- ◆ Integrate the built environment with the natural environment
- ◆ Improve tree canopy, stormwater management, stream health

# Street Hierarchy

Richmond Highway



Great Street



Avenue

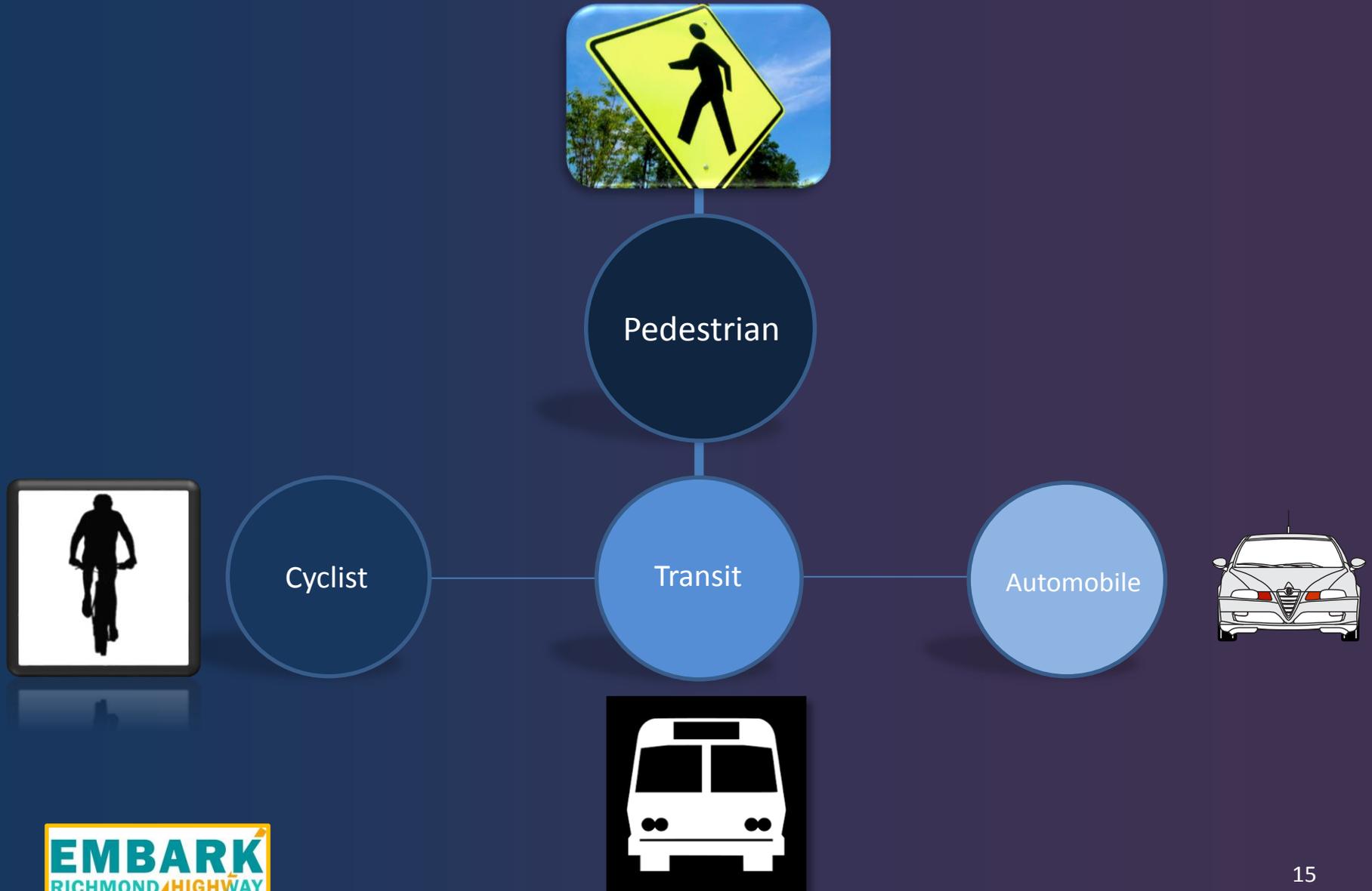
Local Street



Pedestrian Street



# Multimodal Components



# Benefits of Street Grid Network

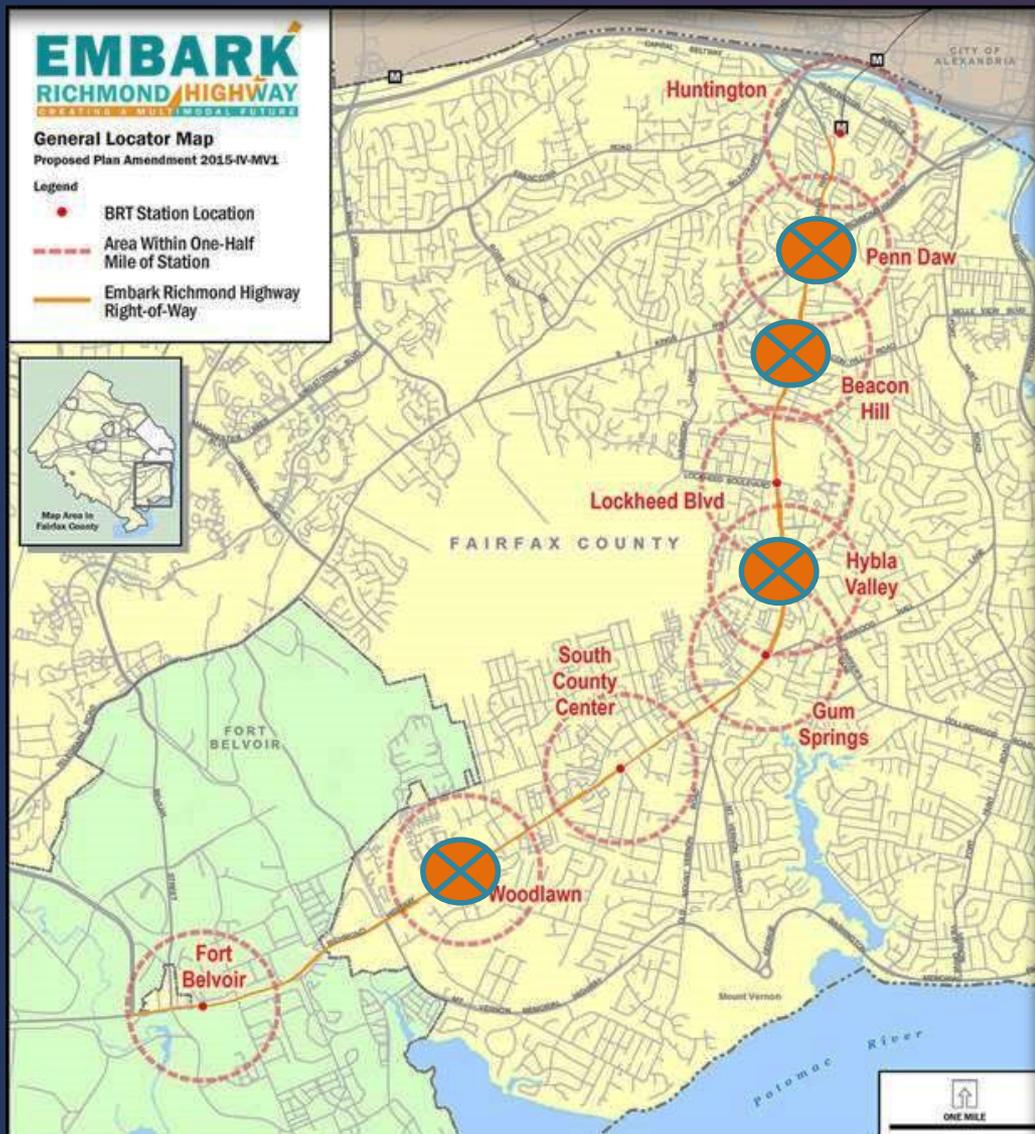
- ◆ Relieve congested Richmond Highway intersections to improve circulation along corridor
- ◆ Redistribute traffic across the entire street network
- ◆ Provide shorter and more direct routes
- ◆ Calm traffic with narrow streets, frequent cross streets, which encourage slower vehicle operating speeds
- ◆ Create shorter street crossings to increase safety for pedestrians and bicyclists
- ◆ Improves access for emergency services

# Considerations for Creating a Street Grid Network

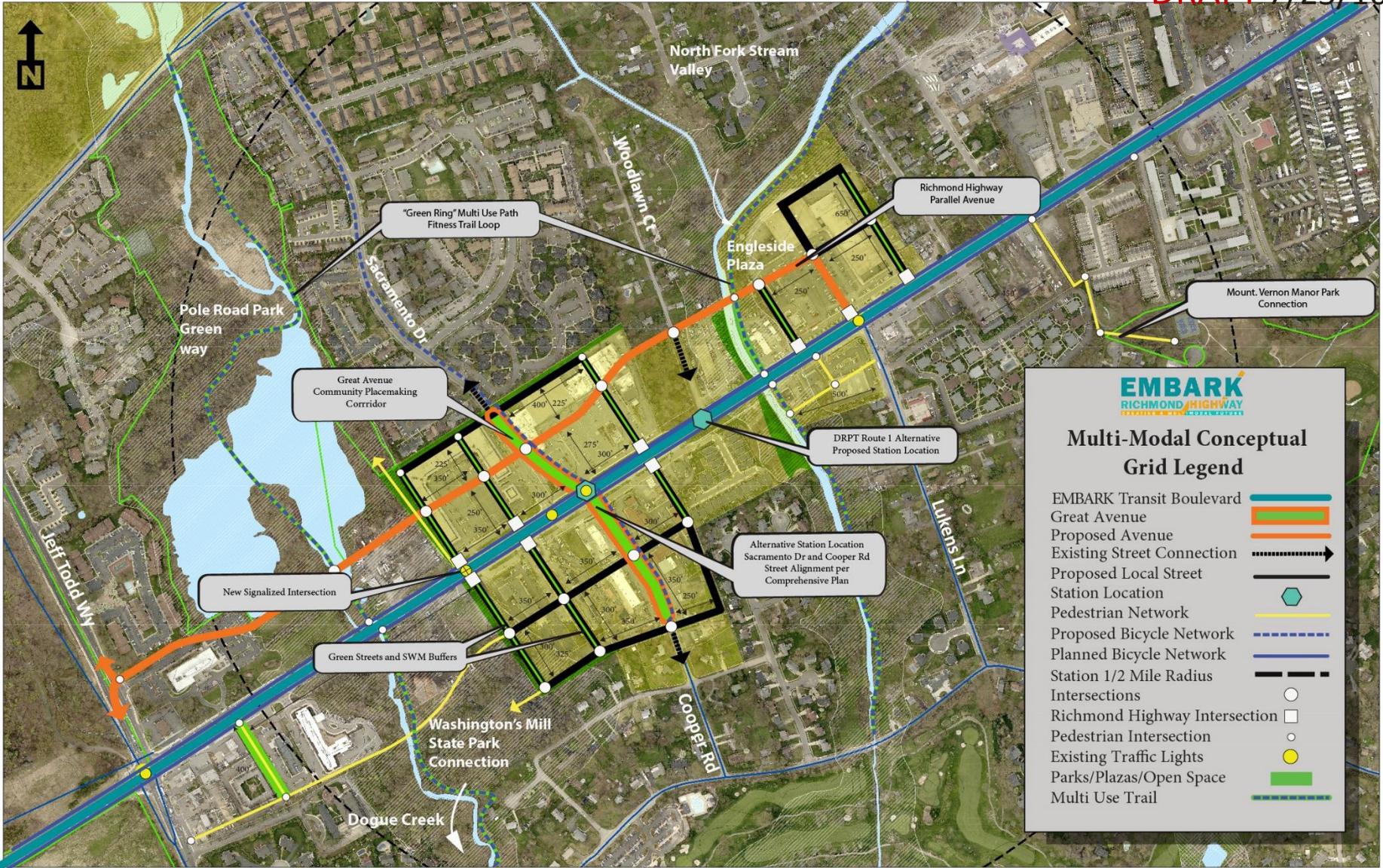
- ◆ BRT station locations
- ◆ Block size to accommodate development
- ◆ Adjacent land use characteristics
- ◆ Public space, placemaking, and livability
- ◆ Connections into existing communities
- ◆ Safety, walkability, connectivity

# Opportunities for Street Grid Network

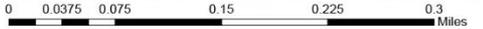
- ◆ Penn Daw
- ◆ Beacon Hill
- ◆ Hybla Valley/  
Gum Springs
- ◆ Woodlawn

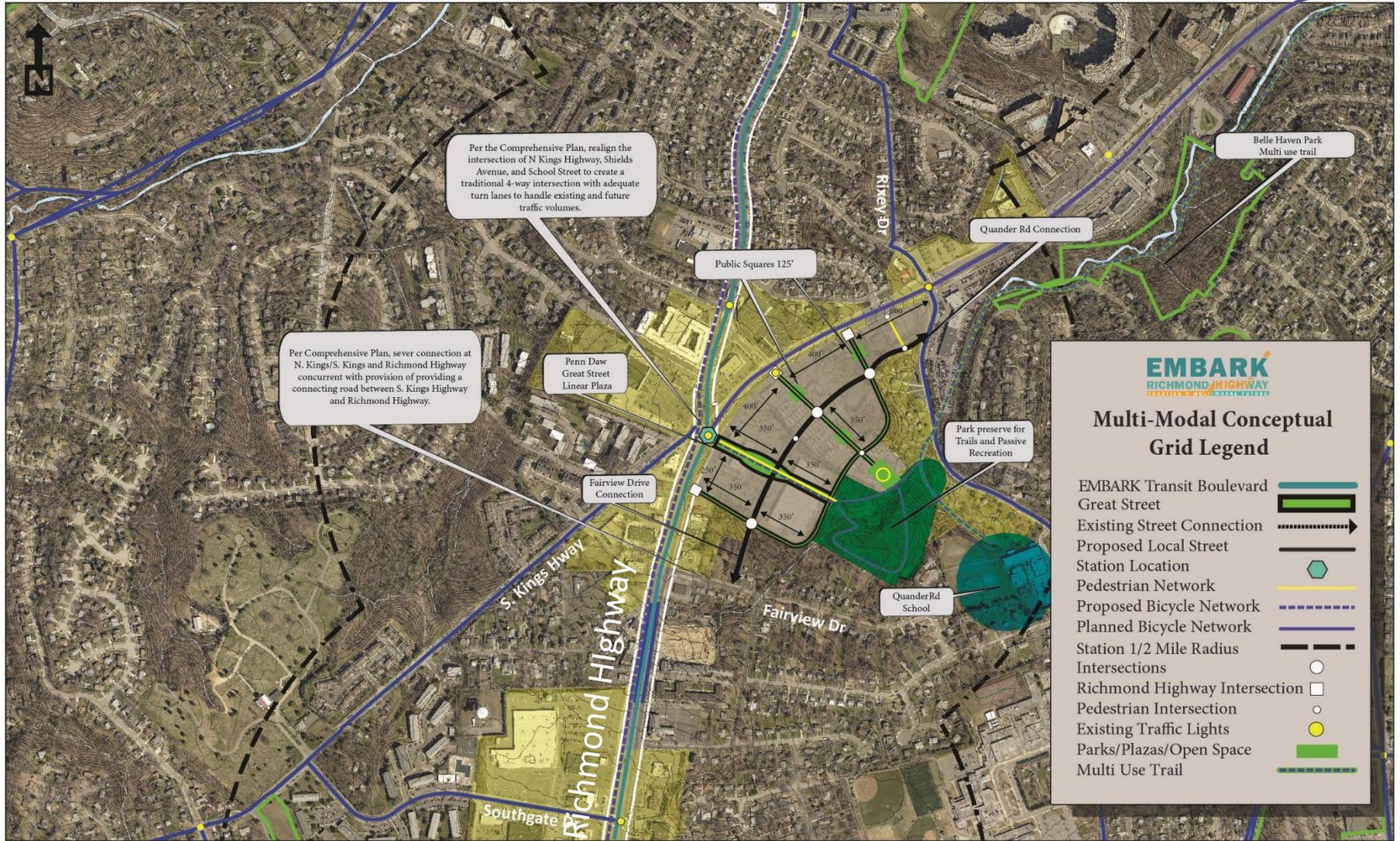


Indicates General Grid Location



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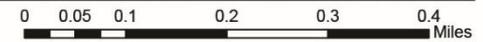


**EMBARK**  
RICHMOND HIGHWAY  
CREATING A MULTIMODAL FUTURE

### Multi-Modal Conceptual Grid Legend

- EMBARK Transit Boulevard
- Great Street
- Existing Street Connection
- Proposed Local Street
- Station Location
- Pedestrian Network
- Proposed Bicycle Network
- Planned Bicycle Network
- Station 1/2 Mile Radius
- Intersections
- Richmond Highway Intersection
- Pedestrian Intersection
- Existing Traffic Lights
- Parks/Plazas/Open Space
- Multi Use Trail

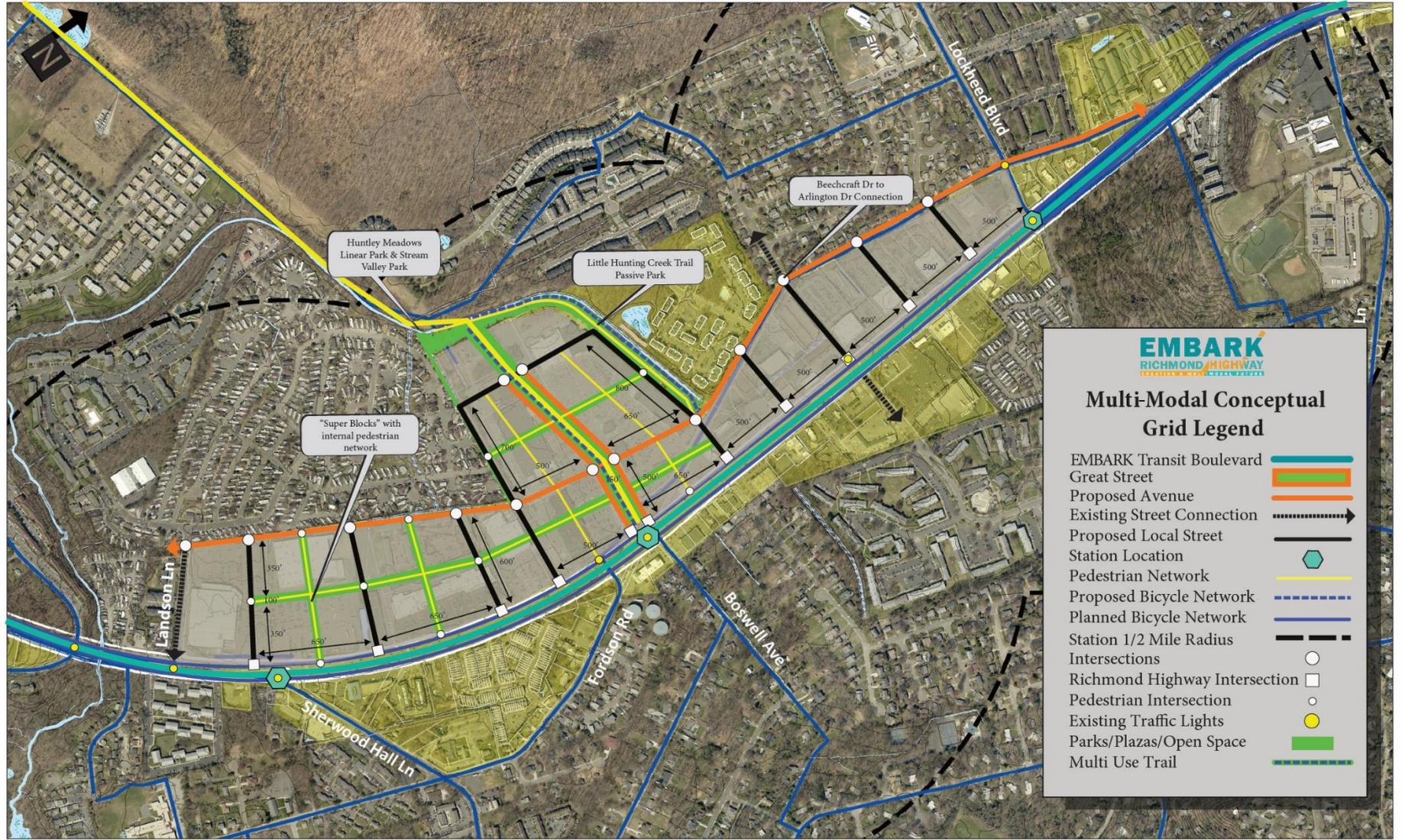
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# IV. DRAFT RICHMOND HIGHWAY TYPICAL CROSS SECTION

# Draft Richmond Highway Cross Section

**Notes:**

This section is consistent with the current Comprehensive Plan section right-of-way with updated VDOT trail (shared use path) standards.

Right-of-way width could change depending upon location of street lights and utilities.

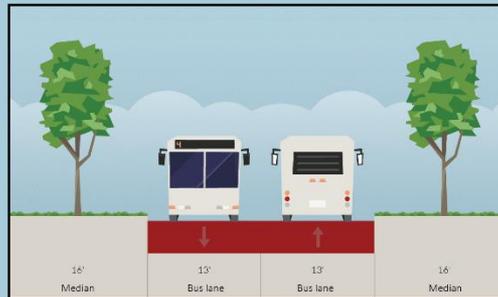
Location of the street light and utility poles will be determined with the design of the road including possible placement in the building zone.

For a majority of the corridor utilities will be located on one side of the road. Location shown is for illustrative purposes only.

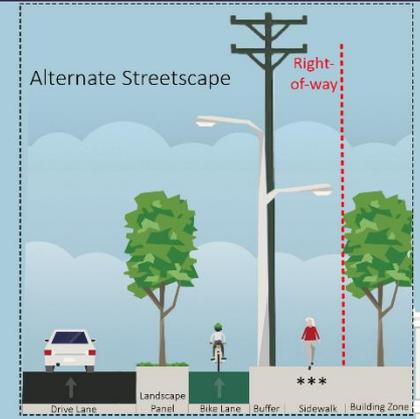
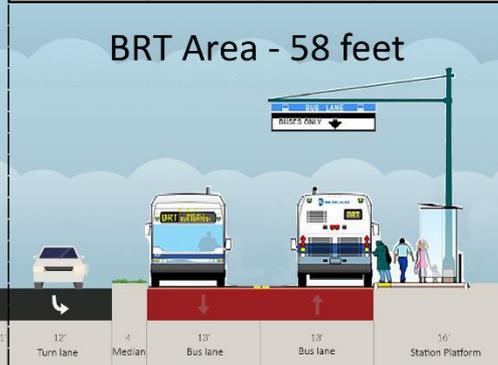
\*\*\*Placement of components from roadway curb to edge of right-of-way, including their dimensions, will be finalized with design.

## Richmond Highway - 178 feet

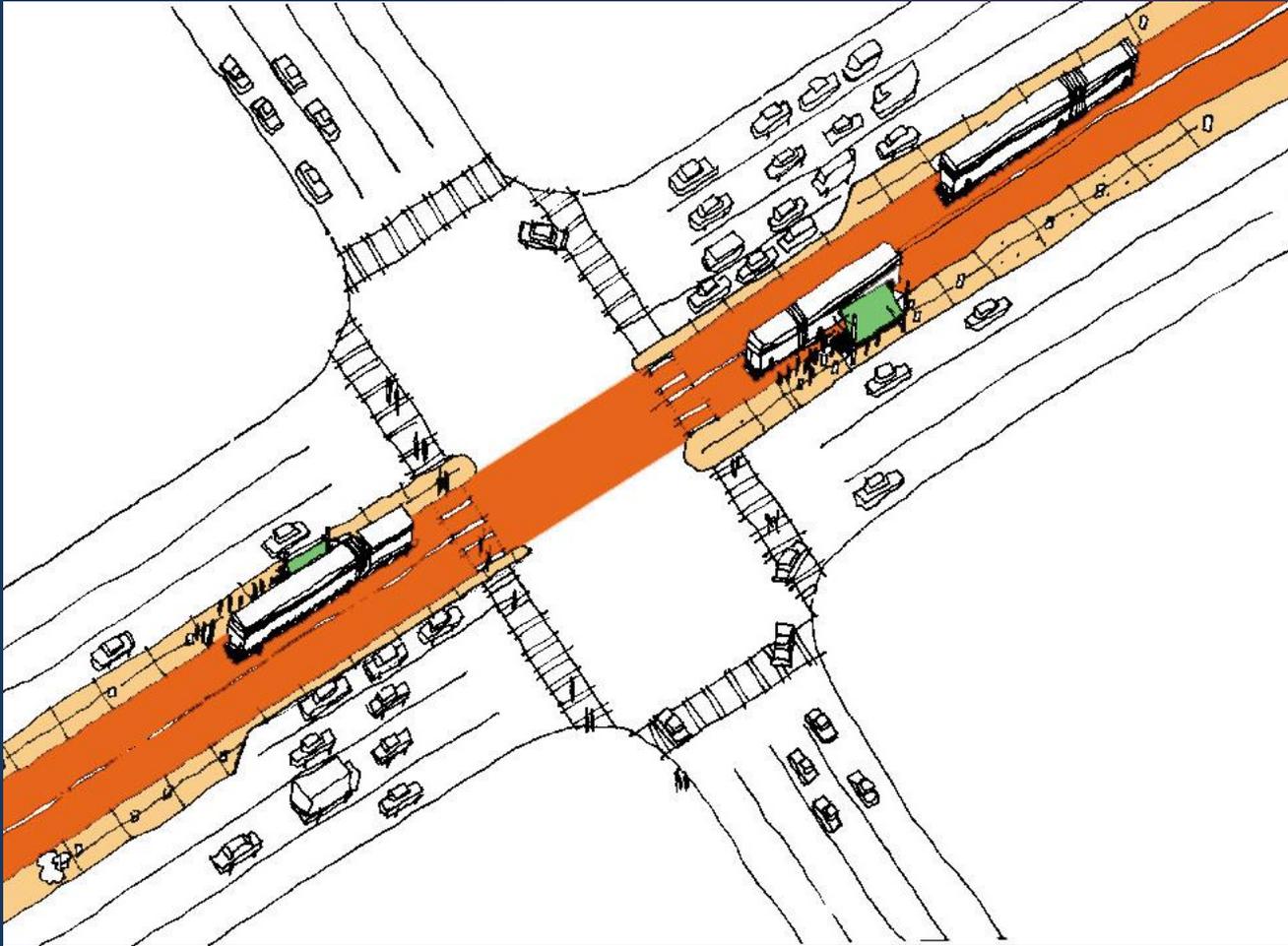
### DRAFT Proposal



### BRT Area - 58 feet



# Typical Median Far-side Platform



- **Pros:**
  - Preserves left-turn lanes
  - Passengers cross behind stopped buses
  - Improved sight distance for left turns
- **Cons:**
  - Double-stopping buses

# Draft Richmond Highway Cross Section

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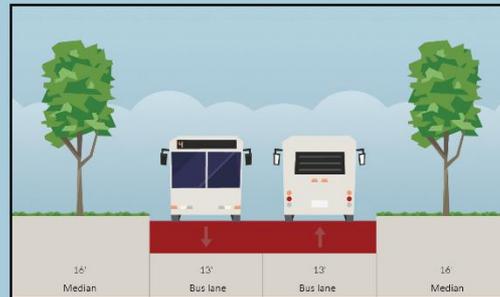
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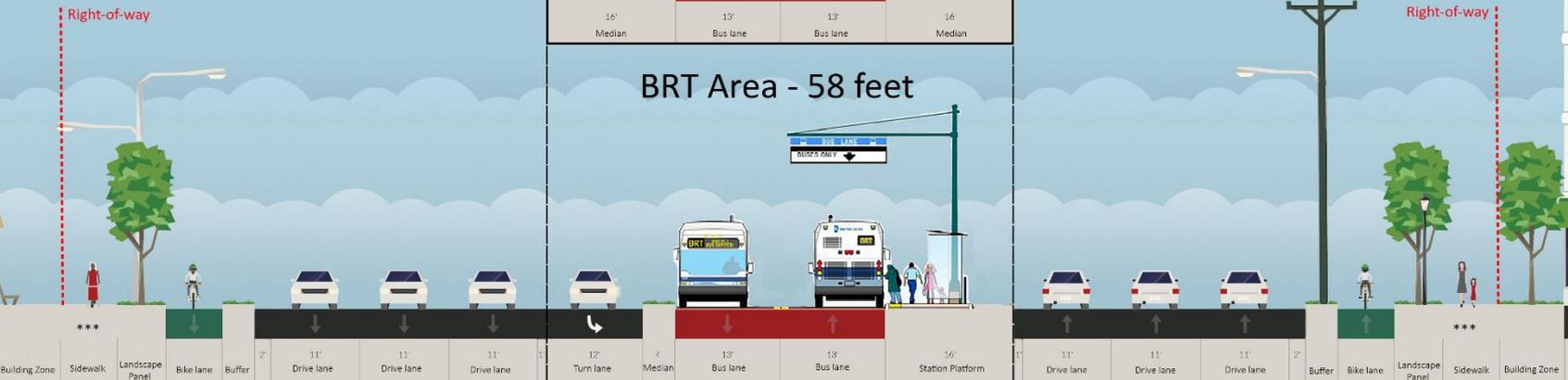
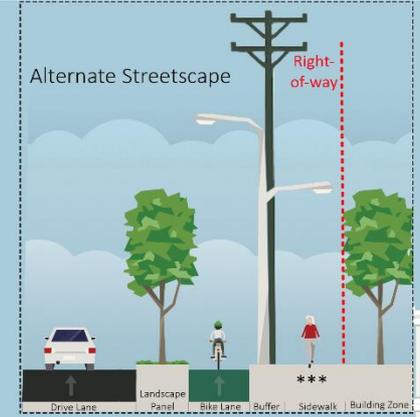
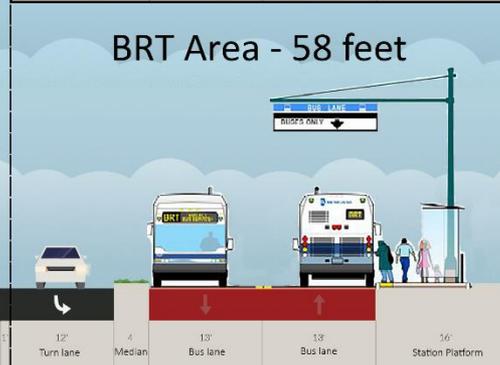
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## Richmond Highway - 178 feet

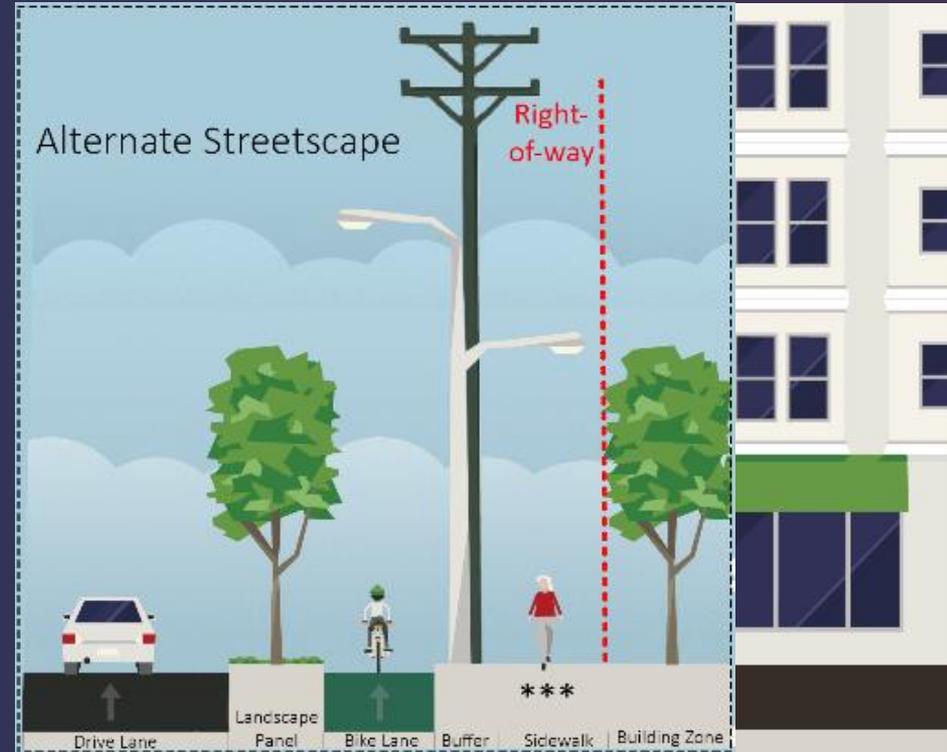
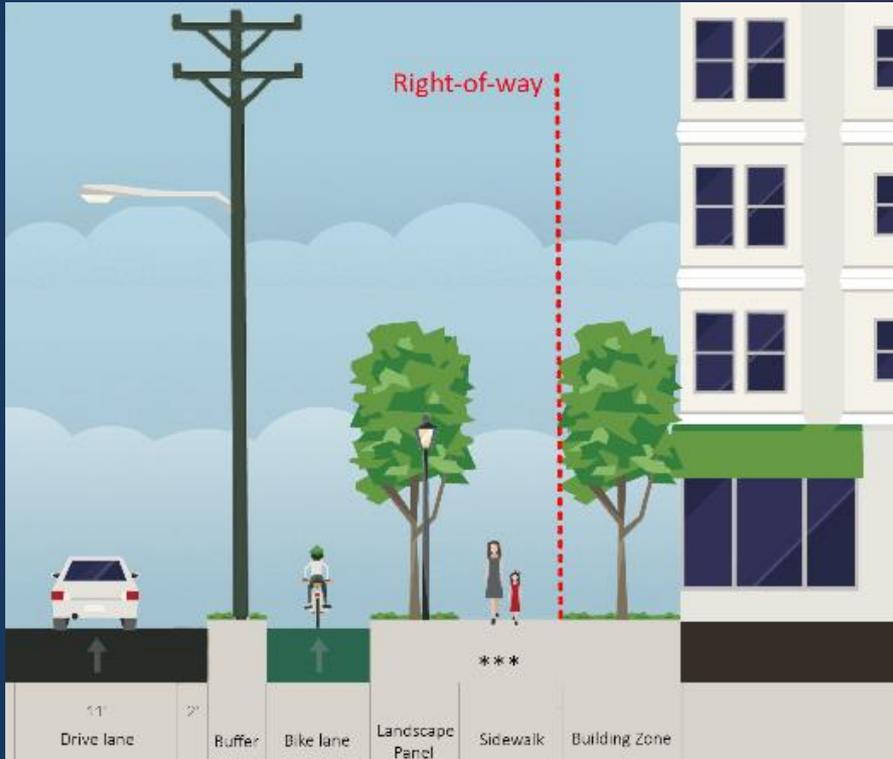
### DRAFT Proposal



### BRT Area - 58 feet



# Comparison of Streetscape





Ramp  
between  
sidewalk  
and bus  
shelter

Separated bike lane treatment at bus shelter

<https://www.flickr.com/photos/greenlaneproject/2254124790>  
Photo Credit: Adam Coppola Photography  
Seattle, WA



Ramp  
between  
sidewalk  
and bus  
shelter

Separated bike lane treatment at bus shelter

<http://www.treehugger.com/bikes/why-protected-bike-lanes-should-be-called-protected-bike-lanes-not-cycle-tracks-separated-bike-lanes-or-advanced-bike-lanes.html>



Separated bike lane  
wide enough for  
passing



<http://usa.streetsblog.org/category/issues-campaigns/bike-lanes/>  
Oak Street, San Francisco. Photo: SFMTA

# Arlington/Alexandria, VA Metroway BRT



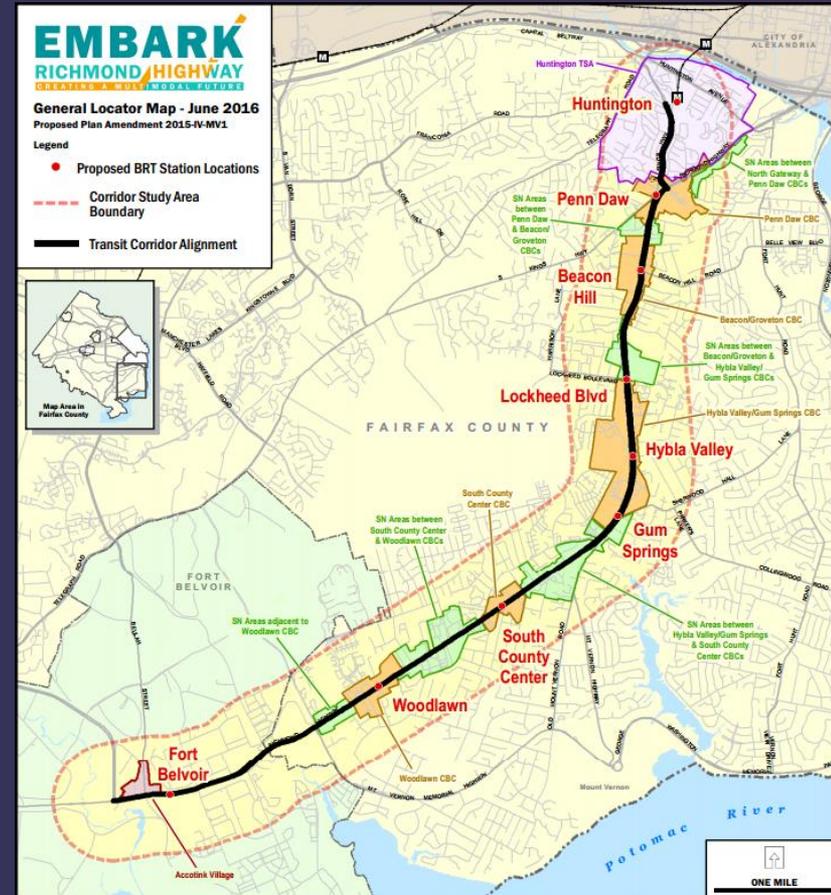
Source: [www.flickr.com/BeyondDC](http://www.flickr.com/BeyondDC)

# V. TRANSPORTATION ANALYSIS OVERVIEW

# Embark Richmond Highway Transportation Analysis

Multi-step analysis over the next several months to:

- Compare current conditions vs. expected future conditions with implementation of BRT system
- Estimate future traffic volumes
- Evaluate intersection level of service (LOS) and conceptual grids of streets
- Identify pedestrian and bicycle connections



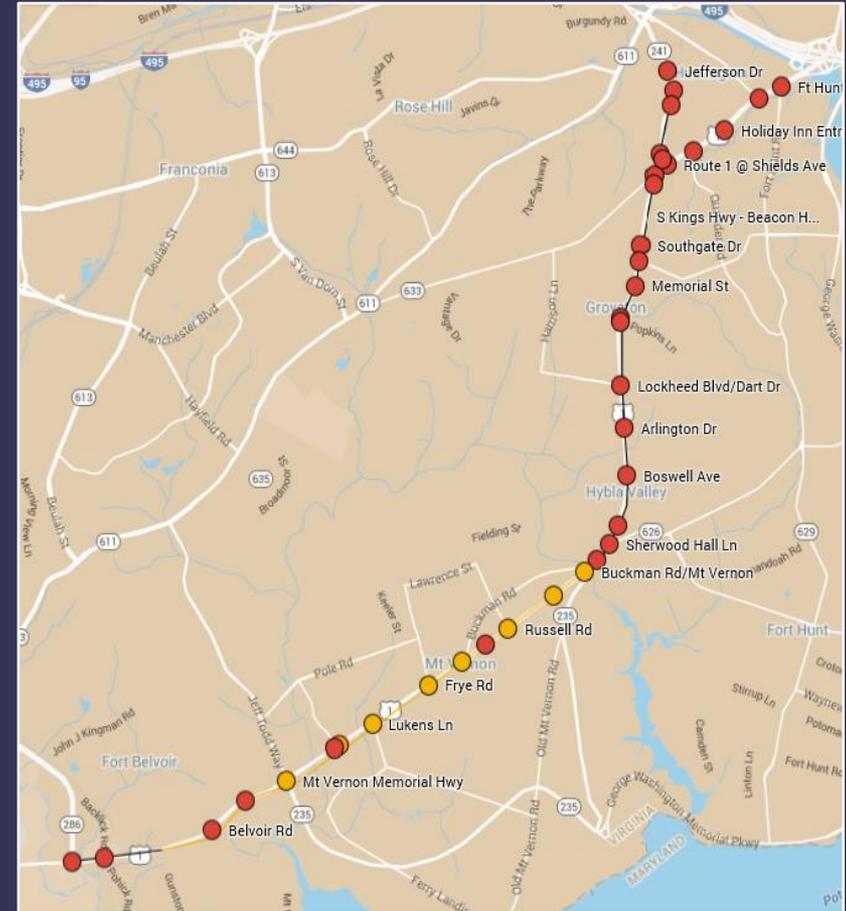
Study area

# Transportation Analysis Summer 2016

## ◆ Data collection

- Traffic volumes at intersections, during AM and PM peak times
- Pedestrian and bicycle counts
- Population and employment
- Transit ridership and travel times

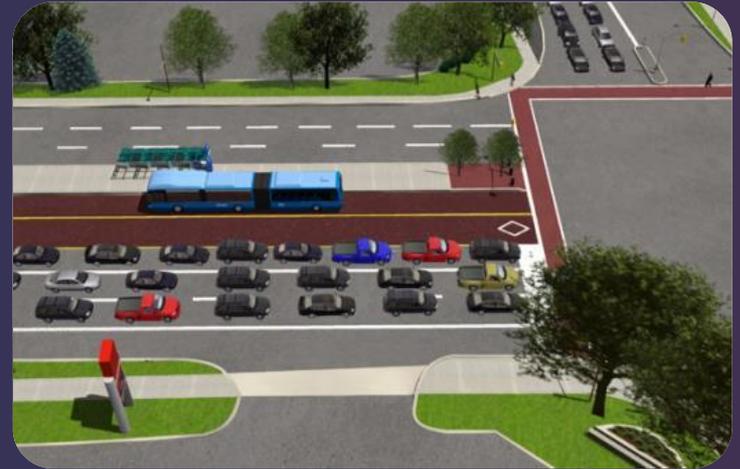
## ◆ Influence of regional roads



*Traffic count locations*

# Transportation Analysis Summer/Fall 2016

- ◆ Develop Future Conditions Model
- ◆ Evaluate conceptual grids of streets
- ◆ Refine Richmond Highway cross section and locations of BRT stations



# Draft Goals, Objectives and Measures of Effectiveness (MOEs)

*Balance livability with traffic and transit performance*

Goal	Objective	MOEs*
Mitigate traffic impacts from land use changes	<ul style="list-style-type: none"> <li>Evaluate north/south road capacity</li> <li>Evaluate proposed grid of streets</li> </ul>	<ul style="list-style-type: none"> <li>Intersection Level of Service</li> <li>Queue lengths</li> <li>Intersection delay</li> <li>Travel speed</li> <li>Travel time reliability (Auto)</li> <li>Local traffic volumes</li> </ul>
Provide high-quality, high performance BRT	<ul style="list-style-type: none"> <li>Estimate transit ridership</li> <li>Assess BRT performance</li> <li>Evaluate BRT station locations</li> </ul>	<ul style="list-style-type: none"> <li>BRT frequency</li> <li>Travel time reliability (Transit)</li> <li>Travel speed</li> <li>Ridership</li> <li>Safety</li> <li>Affordable transit service</li> </ul>
Improve bicycle and pedestrian connectivity, access, attractiveness, and safety	<ul style="list-style-type: none"> <li>Evaluate proposed grid of streets</li> <li>Increase bicycle facilities</li> <li>Increase pedestrian network connectivity</li> </ul>	<ul style="list-style-type: none"> <li>Pedestrian crossing times</li> <li>Corridor crossing opportunities</li> <li>Miles of pedestrian/bicycle facilities</li> <li>Network completeness</li> <li>Access to transit</li> </ul>

\* Based on modeling

# VI. QUESTIONS AND ANSWERS

# Upcoming Event

Ask Fairfax! Online Q+A

Thursday, July 28

11:00 am

<http://www.fairfaxcounty.gov/askfairfax>

- ◆ Choose the topic “*Learn about the Embark Richmond Highway Initiative*”.
- ◆ Questions may be submitted in advance and will be answered live for one hour.
- ◆ Live questions may also be asked during the hour.
- ◆ If similar questions are submitted, we will choose one that best represents the spirit of the question.



# Contact Us and Stay Updated



Website:

<http://www.fairfaxcounty.gov/dpz/embarrichmondhwy>

Listserv:

<http://www.fairfaxcounty.gov/email/lists/>

Email:

[DPZ-RichmondHighway@fairfaxcounty.gov](mailto:DPZ-RichmondHighway@fairfaxcounty.gov)

Facebook:

<https://www.facebook.com/fairfaxlanduse>

Call Planning and Zoning Staff: (703)324-1380

Call Transportation Staff: (703)877-5600



# Open House Activities

- ◆ Read through display boards
- ◆ Talk to staff
- ◆ We want to hear from you
  - Write down your thoughts on the flip charts or comment cards
  - Fill out the survey

# VI. QUESTIONS AND ANSWERS

End of presentation

Meet us in the cafeteria for the  
open house!