



# **BOS Revitalization Committee**

Embark Richmond Highway Project Overview and Status

Elizabeth Hagg, Deputy Director, OCR

October 10, 2017

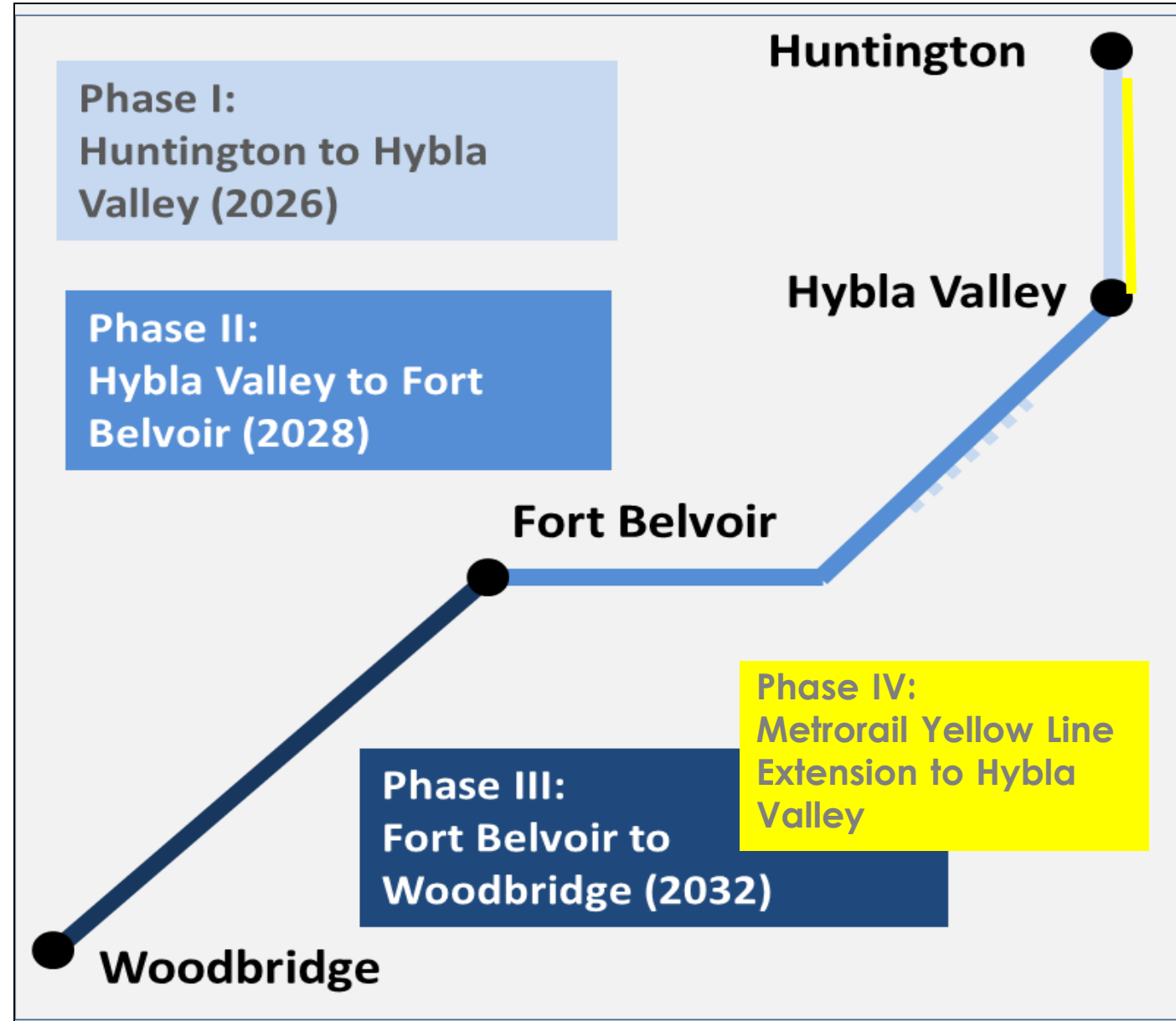
# Route 1 Multimodal Alternatives Analysis

- Conducted by Virginia Department of Rail and Public Transportation (VDRPT)
- 15 mile section of Route 1 from I-495 through Fairfax County, to Route 123 at Woodbridge in Prince William County
- Recommended a program of **multimodal transportation improvements** for adoption by Fairfax County and Prince William Co.
- Defined transit, roadway, and bicycle/pedestrian projects that could be implemented
- BOS endorsed Alt. 4 BRT/Metrorail hybrid in May 2015



# Scope & Phasing of Transportation Improvements

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



# What is Bus Rapid Transit (BRT)?

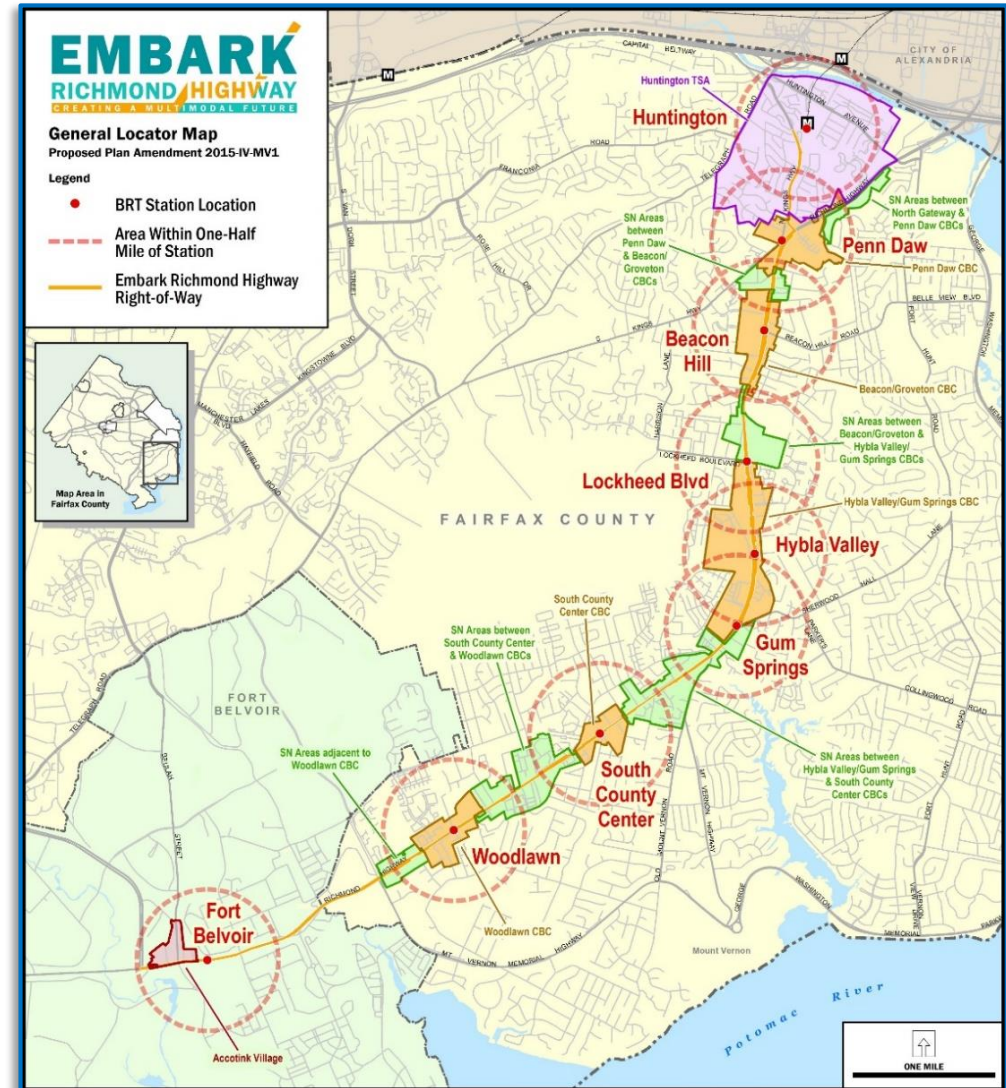
- BRT is a high quality bus-based system that delivers fast, comfortable, frequent and cost-effective services at Metro-level frequencies.
- Utilizes advanced technologies to improve customer convenience and reduce delays.
- Key elements of BRT:
  - Running Ways – dedicated lanes vs. mixed traffic
  - BRT Specialized Vehicles
  - Stations
  - Service and Operations
  - Advanced Technology
  - Branding
  - Integration with local buses





# Embark Project Scope and Study Area

- Embark Richmond Highway is a multi-faceted project comprised of a Comprehensive Plan amendment to support BRT and future Metrorail, a BRT System, a road widening project, and urban design guidelines
- Managed thru multi-departmental and inter-governmental coordination
- Plan development guided by an appointed 13 member Advisory Group
- Extensive outreach and communication conducted throughout process



# Development of Conceptual Plans



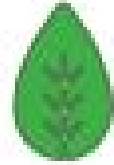
- Focus on Four CBCs - Penn Daw, Beacon/Groveton, Hybla Valley/Gum Springs, and Woodlawn
- New grid of streets proposed to create more walkable blocks, support greater density, and provide more options for local trips
- Massing studies used to visualize the mix of uses, building heights, and densities
- Concepts developed and refined by consultant through an urban design framework



# Proposed Richmond Highway Urban Design Framework: ECOLOGY

The Embark corridor bisects a vibrant ecological area where there are deeply embedded stream systems and natural areas.

## FINDING AN URBAN DESIGN RATIONALE



### ECOLOGY



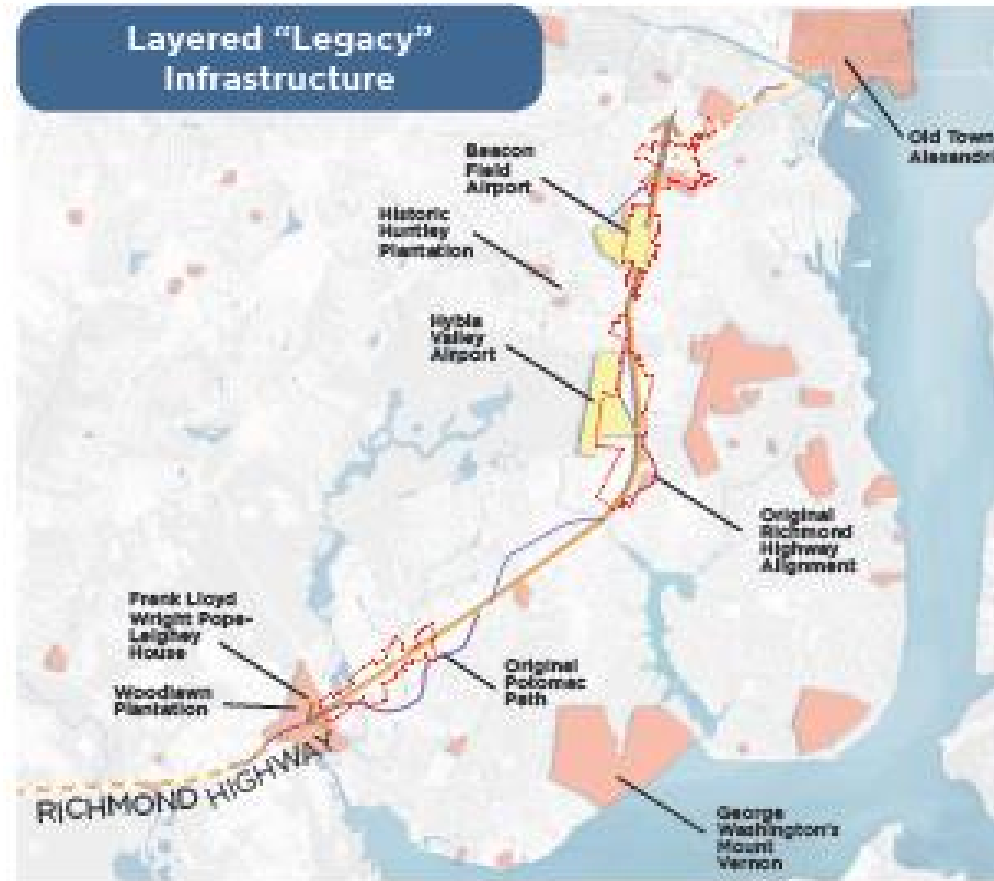
# Proposed Richmond Highway Corridor Urban Design Framework

## LEGACY

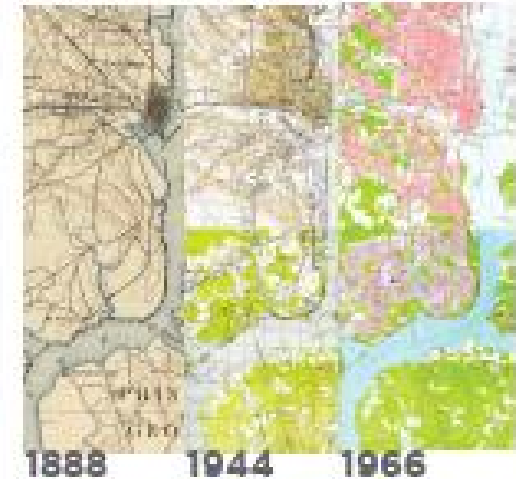
Remnants of previous infrastructure such as the former alignment of Route 1, parcel geometries and development patterns, as well as historic sites and buildings, have left a corridor-wide legacy to celebrate and reflect in future development.



### LEGACY

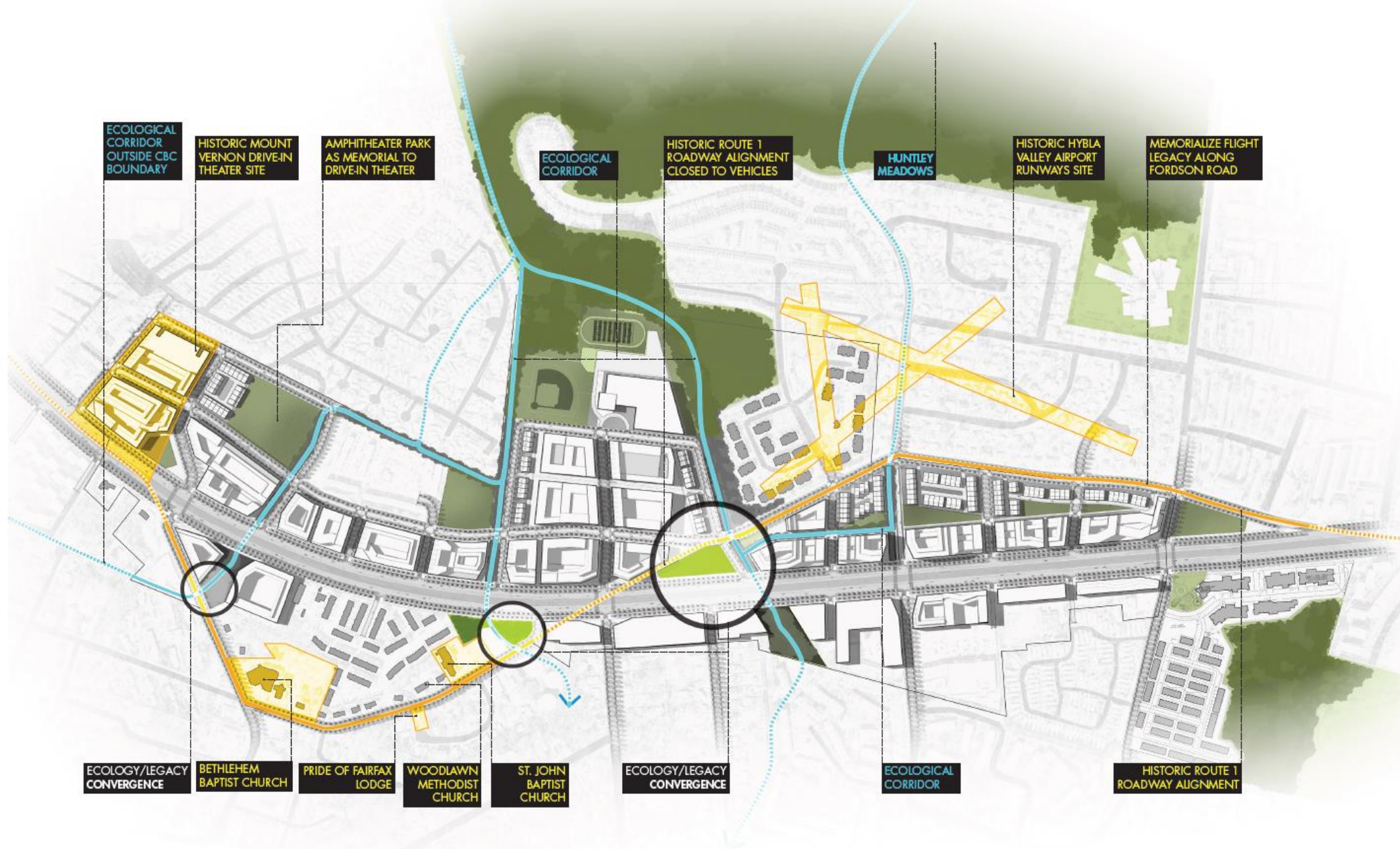


- Technology and suburbanization has increasingly extracted the "legacy" infrastructure from the "ecological" infrastructure.
- Development patterns and street network geometry have increasingly become distant from the corridor's topography.



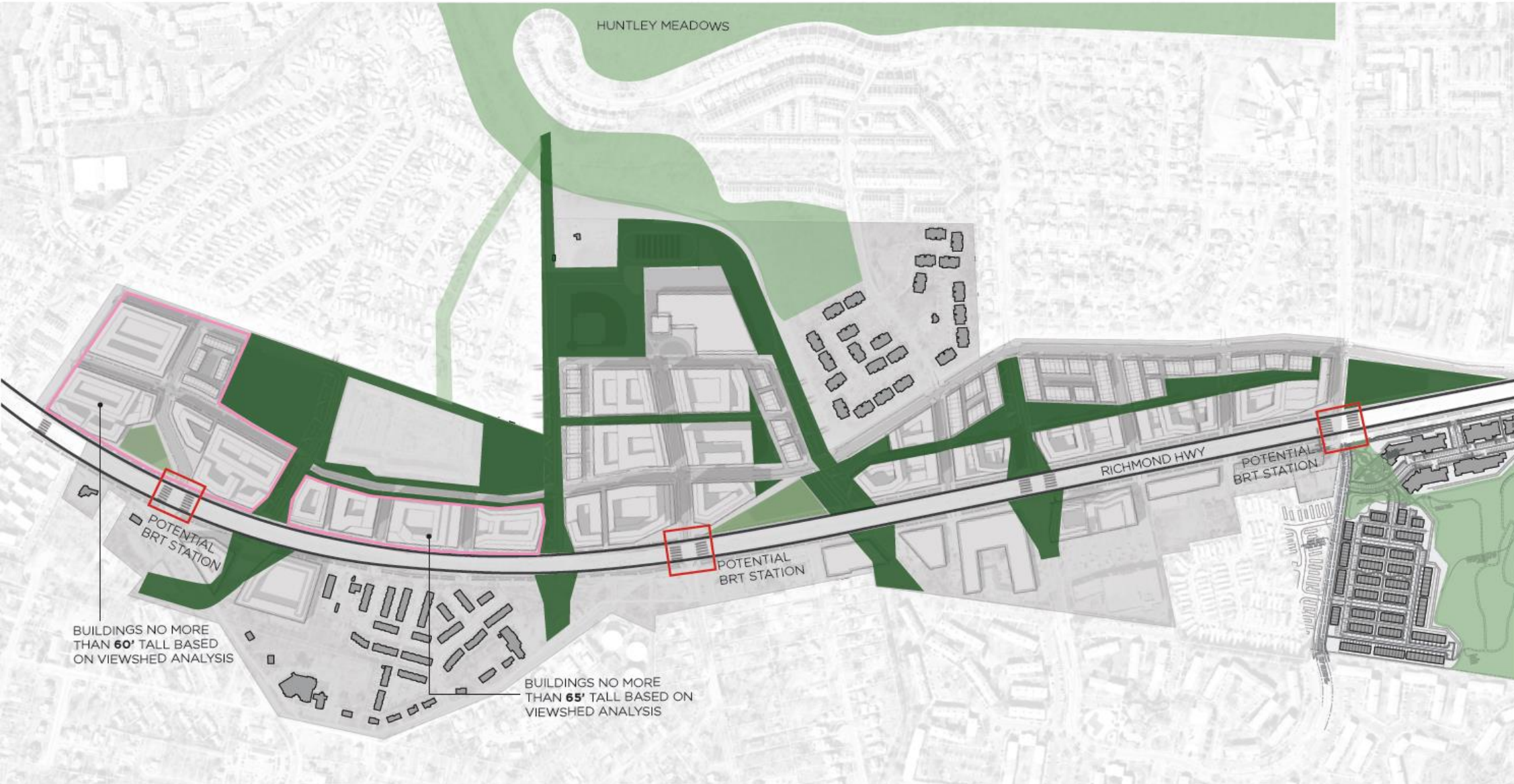


# HYBLA VALLEY - GUM SPRINGS CBC LEGACY + ECOLOGY CONVERGENCE





# HYBLA VALLEY - GUM SPRINGS CBC GREEN SPACE CONNECTION





# Hybla Valley/Gum Springs Concept Plan



TO REQUEST THIS INFORMATION IN AN ALTERNATE FORMAT, CALL THE PLANNING DIVISION, 703-324-1380 TTY 711 (VIRGINIA RELAY)

MEETING  
FAIRFAX COUNTY COMPREHENSIVE PLAN UPDATE  
SEPTEMBER 16, 2017



# HYBLA VALLEY - GUM SPRINGS CBC INSPIRATION



ECO-QUARTER /  
ECOLOGICAL CORRIDOR  
LILLE, FRANCE



GREEN WALKWAYS AND SOCIAL SPACES  
VANCOUVER, BRITISH COLUMBIA, CANADA



LEGACY BRANDING  
ON STREET  
WINSLOW, ARIZONA



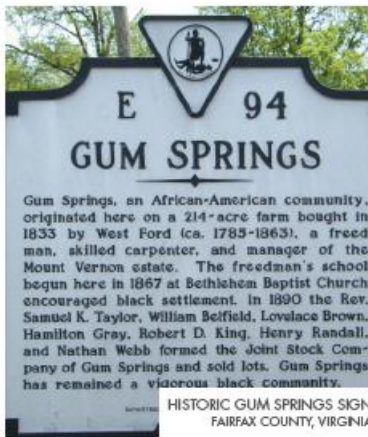
SIGNAGE ON STREET  
PARIS, FRANCE



ECO-QUARTER /  
ECOLOGICAL CORRIDOR  
LILLE, FRANCE



LEGACY ART  
NEW YORK CITY



HISTORIC GUM SPRINGS SIGN  
FAIRFAX COUNTY, VIRGINIA



EXISTING LEGACY OF FLIGHT MEMORIAL  
FAIRFAX COUNTY, VIRGINIA



WALKWAYS THROUGH  
URBAN GREEN AREAS  
CHENGDU, CHINA



LEGACY SCULPTURE  
BOSTON, MASSACHUSETTS



SIGNAGE ON STREET AND PUBLIC PLAZAS  
ORANGE COUNTY, CALIFORNIA

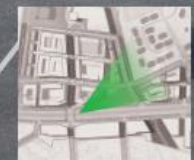


# HYBLA VALLEY - GUM SPRINGS CBC VIEW OF THE LEGACY PARK



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STATION  
3C BOARD  
33

# Richmond Highway Widening

## Mount Vernon Memorial Highway to Napper Road

Route 1 Widening (\$ in Millions)	Need	Available Funding	Request
Project Estimate	215.0		Current project estimate
RSTP		27.1	Allocated by NVTA
Revenue Sharing		15.9	Sourced from State Revenue Sharing funds
Regional NVTA		1.0	Sourced from Regional NVTA funds
Funding Gap			171.0 –Requested \$90M through CTB Smart Scale program (FY18–23). Not awarded
Total	215.0	44.0	171.0

### Possible ways to address \$171M funding gap:

- NVTA regional, additional federal RSTP funds or state Revenue Sharing, local revenues, and developer contributions



# Richmond Highway Bus Rapid Transit Huntington Metro to Hybla Valley

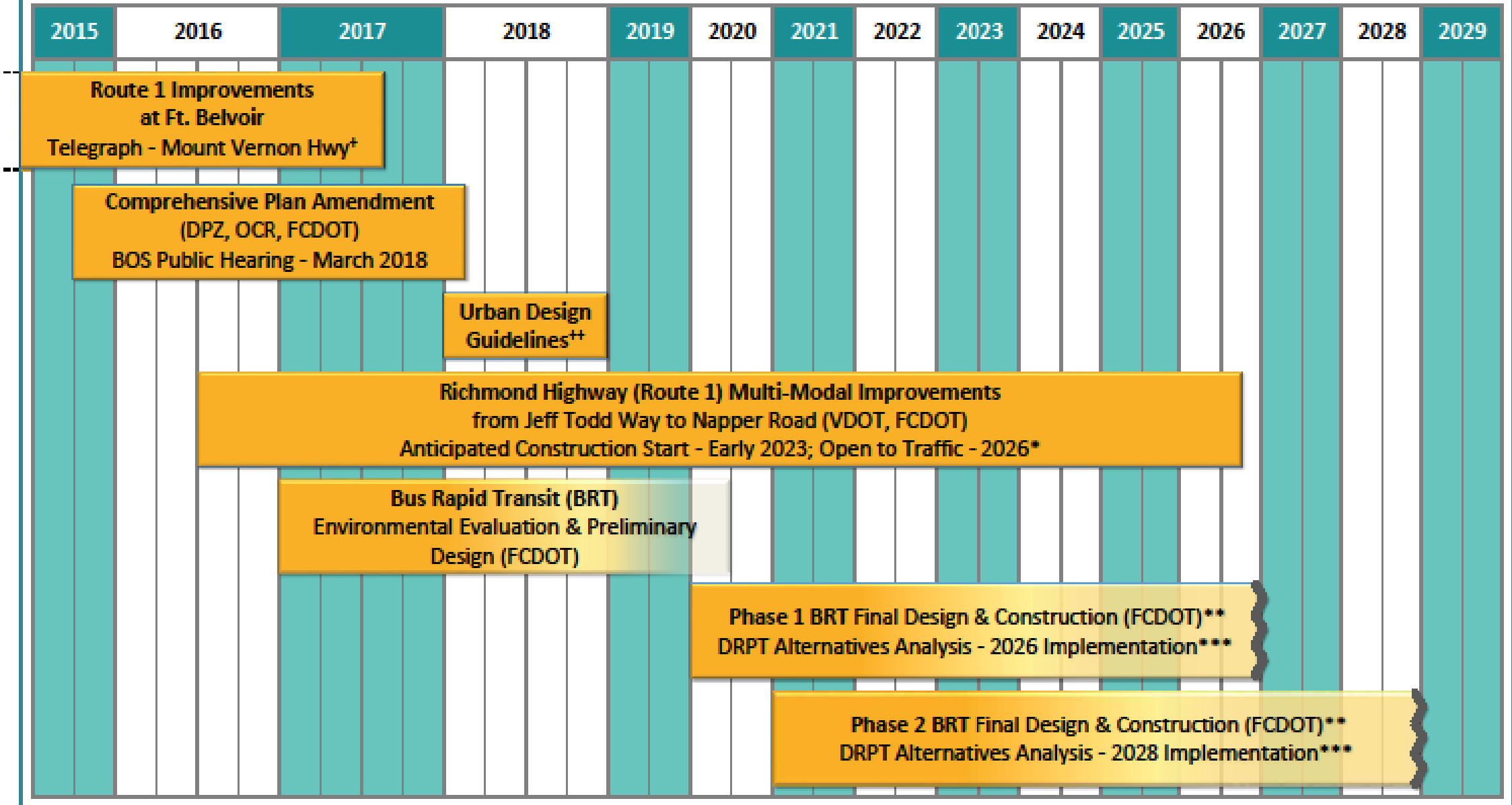
Richmond Highway BRT (\$ in Millions)	Need	Available Funding	Request
Phase 1 Estimate <sup>1</sup>	324.6		Estimate per VA DRPT multi-modal analysis
RSTP & CMAQ <sup>2</sup>		26.4	Allocated by NVTA
VDRPT Grant <sup>3</sup>		4.0	Approx. amount from VA DRPT FY 2016 Grant
Local Revenue		6.0	Approved by BOS September 20, 2016 -Requested \$100M through CTB Smart Scale program (FY18-23). Not awarded
Funding Gap			288.5
Total	324.6	36.1	288.5

## Possible ways to address \$288M gap:

- NVTA regional, additional CMAQ/RSTP, Smart Scale, New Starts (~40-50%), local/developer contributions.

- 1) Planning level estimate based from VDRPT MM AA Study, subject to change as project moves into preliminary design
- 2) Regional Surface Transportation Program/Congestion Mitigation Air Quality
- 3) Virginia Department of Rail and Public Transportation

## Richmond Highway Long Term Projects (with Lead Agencies)



<sup>†</sup> Note: Project by the Federal Highway Administration (FHWA) and Eastern Federal Lands Highway Division (EFLHD). Both are the lead agencies, coordinating with Fairfax County, the U.S. Army Garrison Fort Belvoir, and VDOT on this project.



# Questions?