

Embark Richmond Highway Advisory Group Meeting #7

May 23, 2016



Presentation Outline

- May 9 open house – summary of dot exercise and survey results
- Revised bus rapid transit definition
- Street design and draft conceptual grids – Beacon/Groveton–Hybla Valley–Gum Springs and Woodlawn
- Richmond Highway draft proposed cross section

I. OPEN HOUSE – SUMMARY OF DOT EXERCISE AND SURVEY RESULTS

Dot Exercise Results

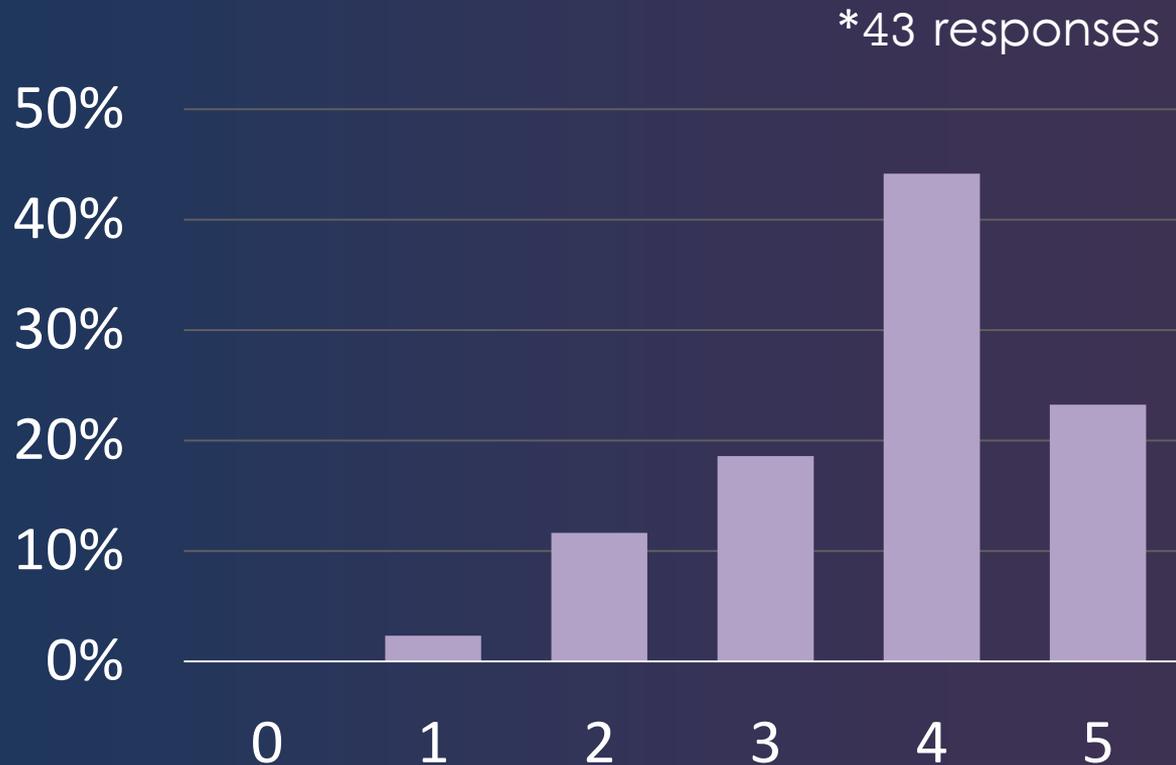
What is your vision for a bus rapid transit future and the ultimate extension of the Metrorail Yellow Line from Huntington to Hybla Valley?

well connected bike lanes
Community gathering places greenery and open spaces
shopping/entertainment destinations
interconnected sidewalks and trails
reliable and frequent transit service
a diversity of jobs
stormwater control and stream restoration
housing for all incomes
variety of housing types

Generated using: <http://worditout.com>

Survey Results

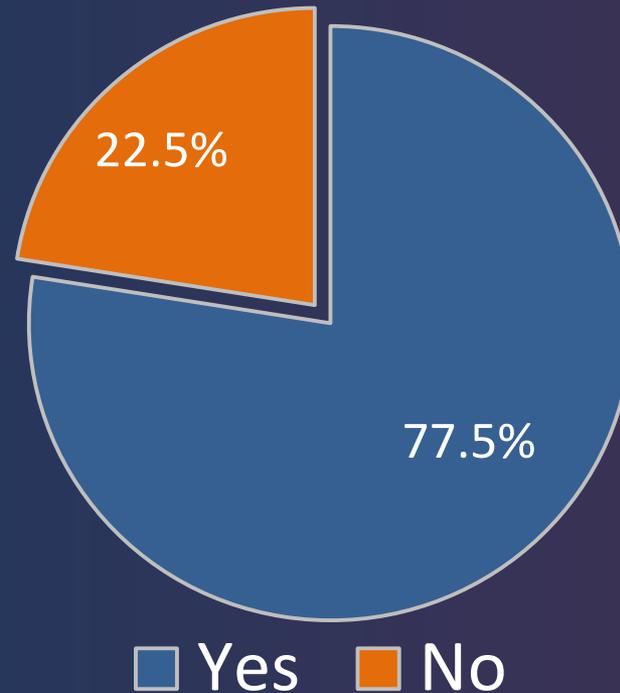
On a scale of zero to five, how informative was the meeting? (0 = not at all informative; 5 = very informative)



Survey Results (cont.)

Were you satisfied with the opportunities to express your opinions?

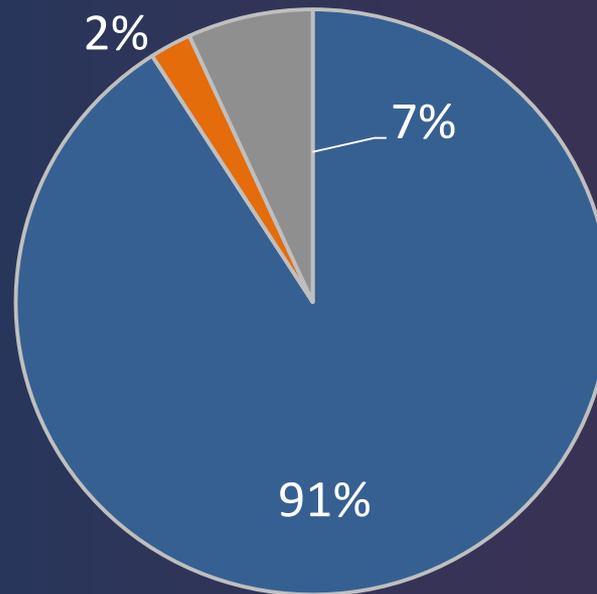
*40 responses



Survey Results (cont.)

Are you likely to participate in this project again?

*44 responses



■ Yes ■ No ■ Maybe

Survey Results (cont.)

What additional information about the project would you like to learn about in the future?

- Road widening impact
- Affordable housing
- Timeframe for implementation
- Extent of community involvement
- Existing bus service – changes with bus rapid transit
- Redevelopment ideas for community business centers
- Stormwater management

Survey Results (cont.)

What concerns do you have about the ideas you heard this evening?

- Impacts to neighborhoods – traffic, school capacity, accessibility from stations to neighborhoods
- Length of process
- Land acquisition – extent/boundaries, cost
- Funding availability for implementation
- Efforts to engage the diverse groups of residents along the corridor
- Displacement of affordable housing

Survey Results (cont.)

What do you like most about the ideas heard this evening?

- Change
- Having a reliable, attractive transit option
- Enthusiasm and support from elected officials
- Plans and investment to improve this part of the county
- Community revitalization
- Better cycling infrastructure
- Walkable communities

II. REVISED BUS RAPID TRANSIT DEFINITION

Add To Glossary Of Comprehensive Plan:

“BUS RAPID TRANSIT (BRT): A flexible, rubber-tired, rapid-transit mode that mostly operates in a dedicated right-of-way with at-grade intersections. Limited sections are in mixed traffic. BRT is an integrated system of facilities, services, and amenities that collectively improves the speed, reliability, and identity of bus transit. Distinguishing features may include:

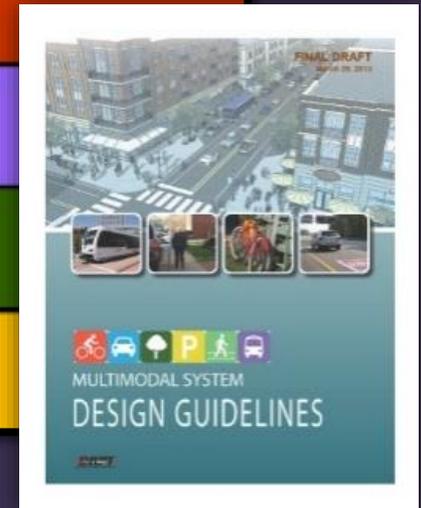
- Distinctive and clearly designated stops/stations with unique passenger amenities at regularly spaced stations;
- Standard or extended sized buses with distinct appearance, high quality passenger comfort, low floor or high platform, and multiple doors for easy and fast boarding/alighting at stops/stations;
- Frequent service headways throughout the day;
- Off-board fare collection; and
- Well organized movement of buses along the line, including optimized signal timing and intersection treatments, dispatching at stops and passenger information controlled by various Intelligent Transportation Systems (ITS) measures to provide reliability.”

III. Street Design and Conceptual Grids

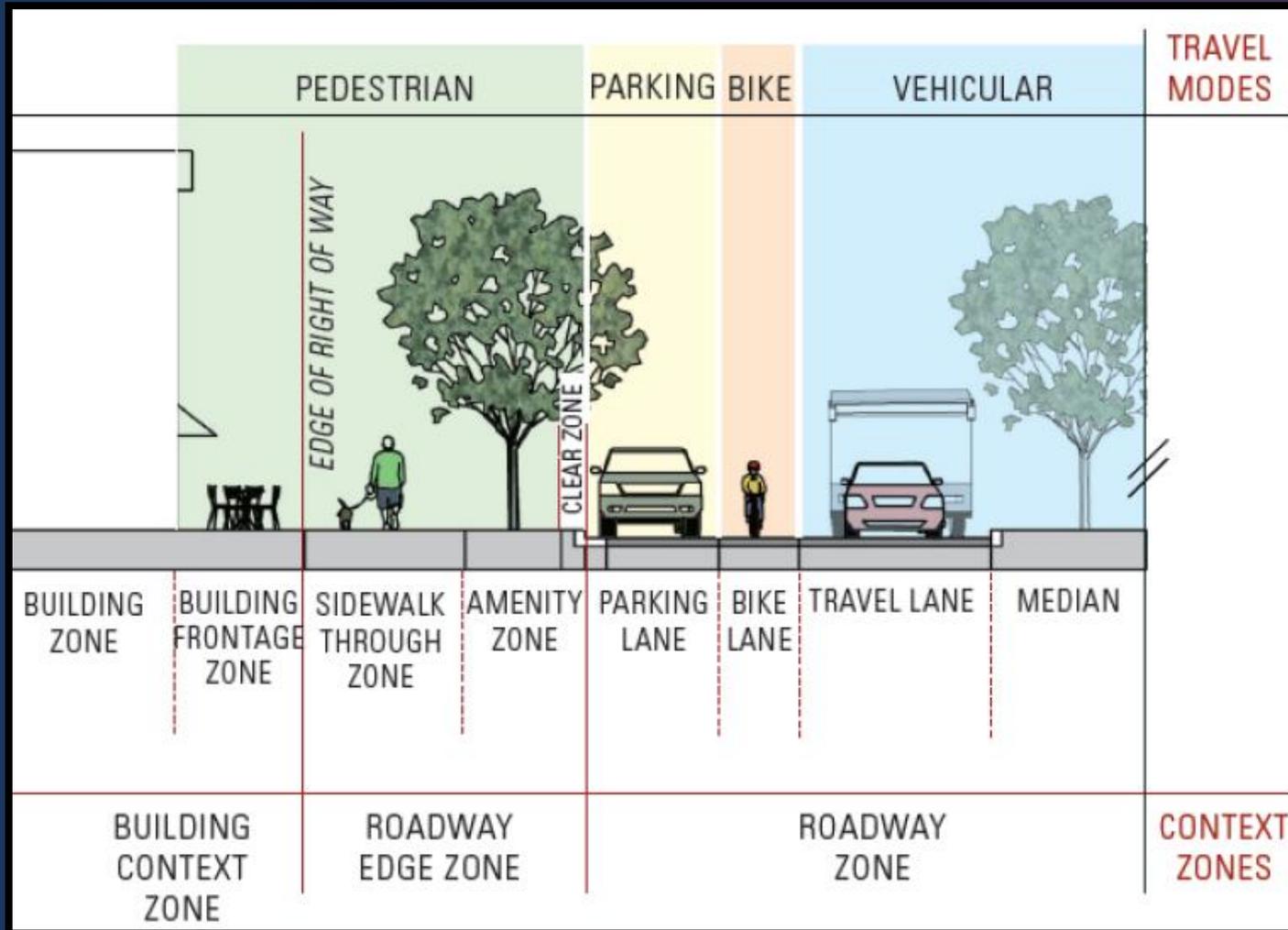


What makes a Complete Street?

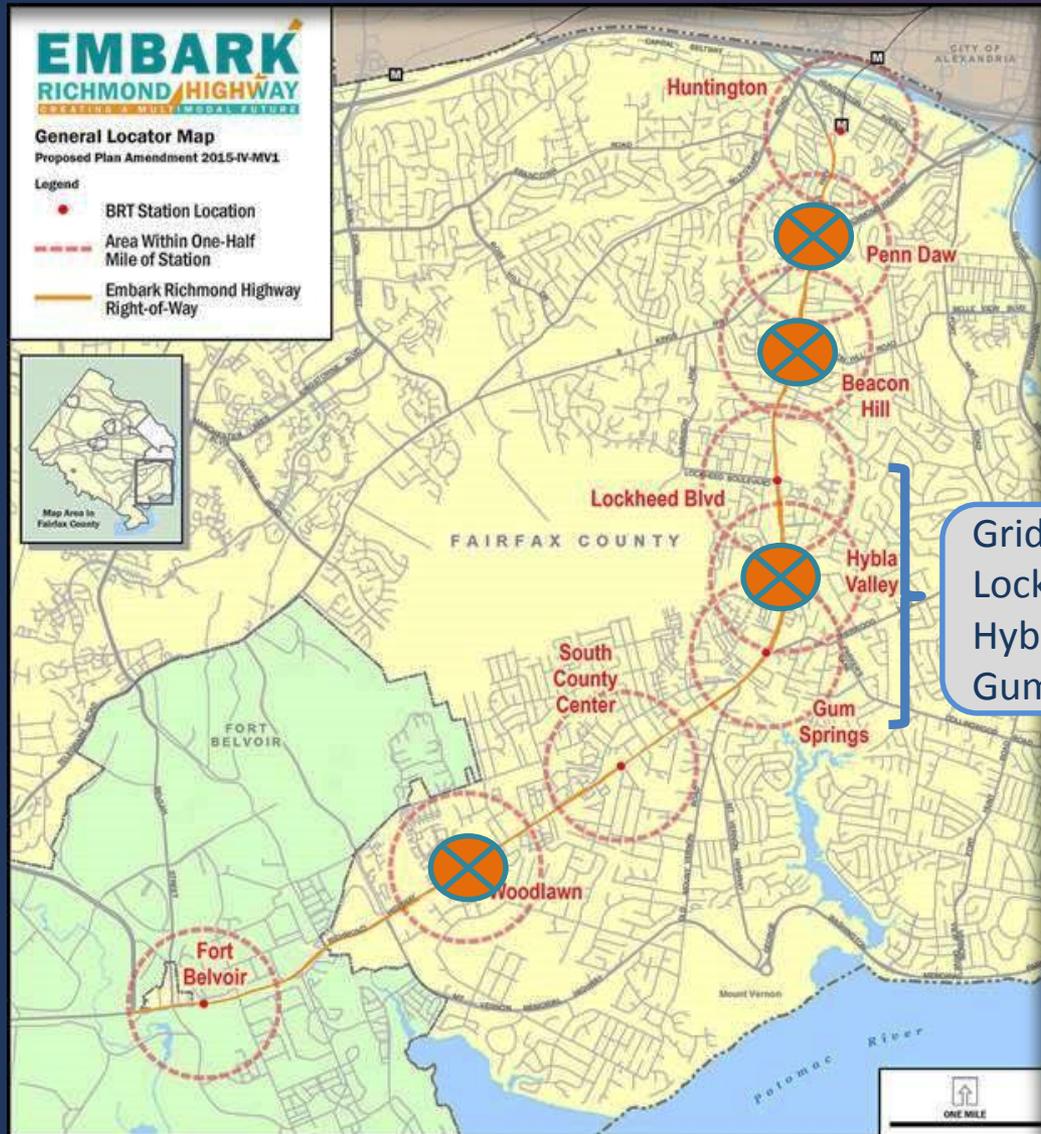
	Modes	Elements
	Auto	<ul style="list-style-type: none"> • Travel Lane Element
	Pedestrian	<ul style="list-style-type: none"> • Building Frontage Element • Sidewalk Through Element • Amenity Element
	Bicycle	<ul style="list-style-type: none"> • Bicycle Element
	Transit	<ul style="list-style-type: none"> • Amenity Element • Travel Lane Element
	Green	<ul style="list-style-type: none"> • Amenity Element • Median Element
	Parking	<ul style="list-style-type: none"> • Parking Element



Complete Street Illustrative Cross-section



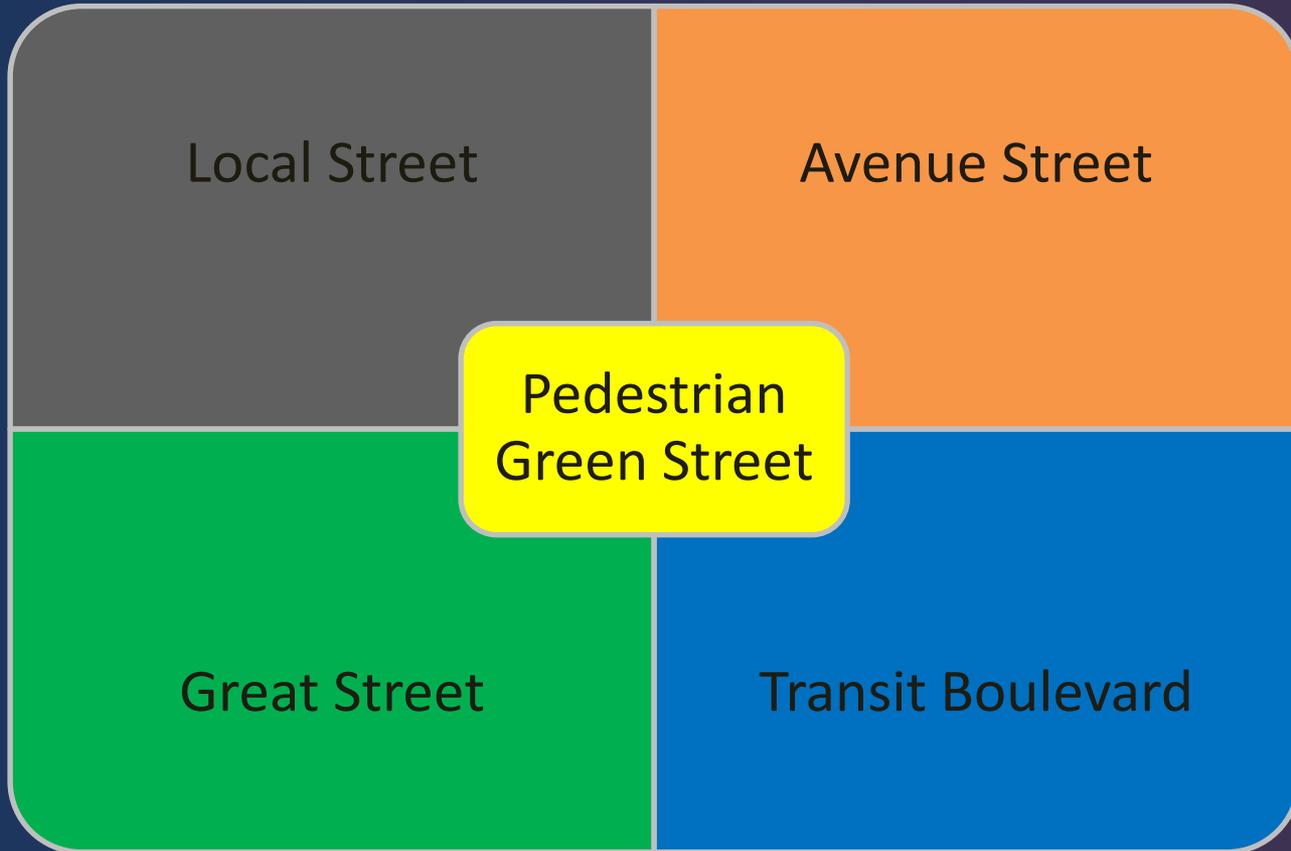
Corridor-wide Concept Of Grid Network



Grid includes Lockheed Blvd, Hybla Valley and Gum Springs

 Indicates General Grid Location

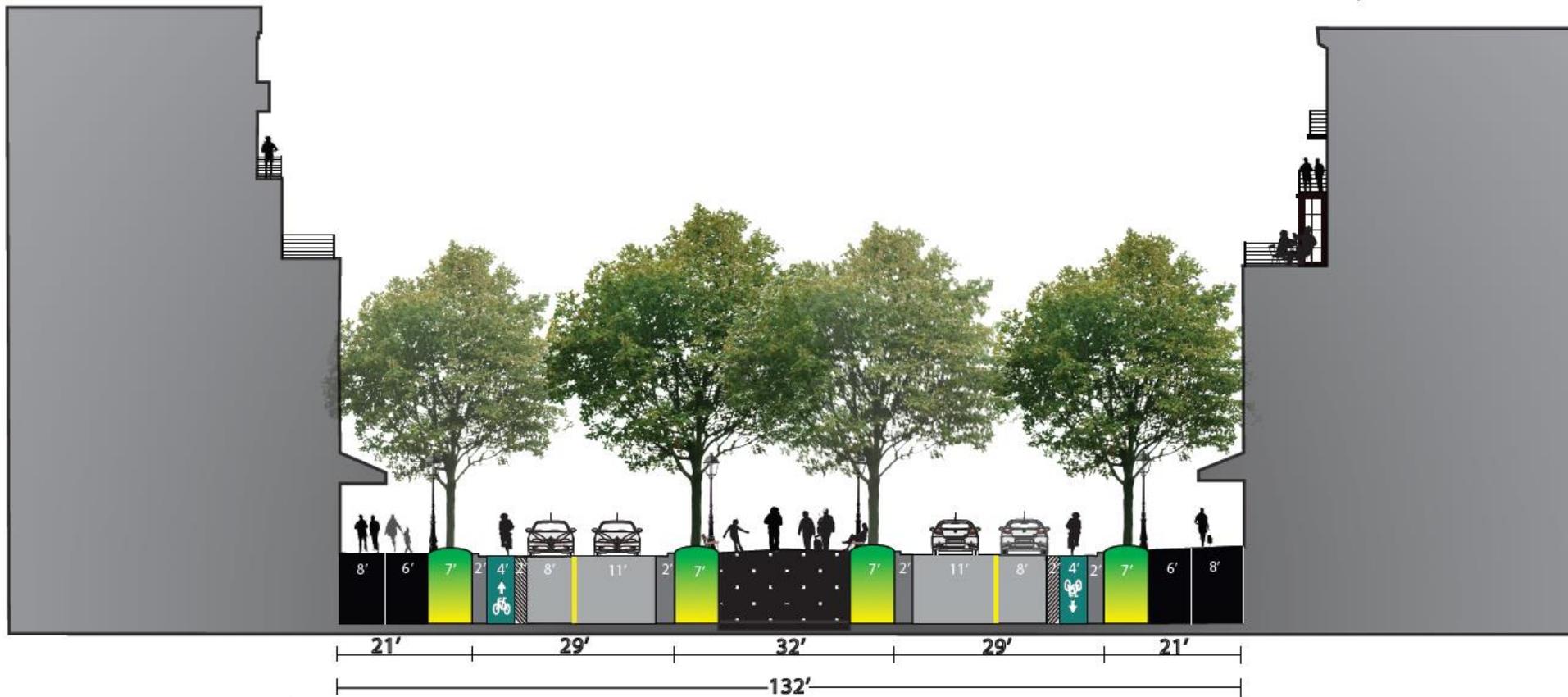
Street Typology



Local Street Precedents



Great Street Section with Linear Plaza



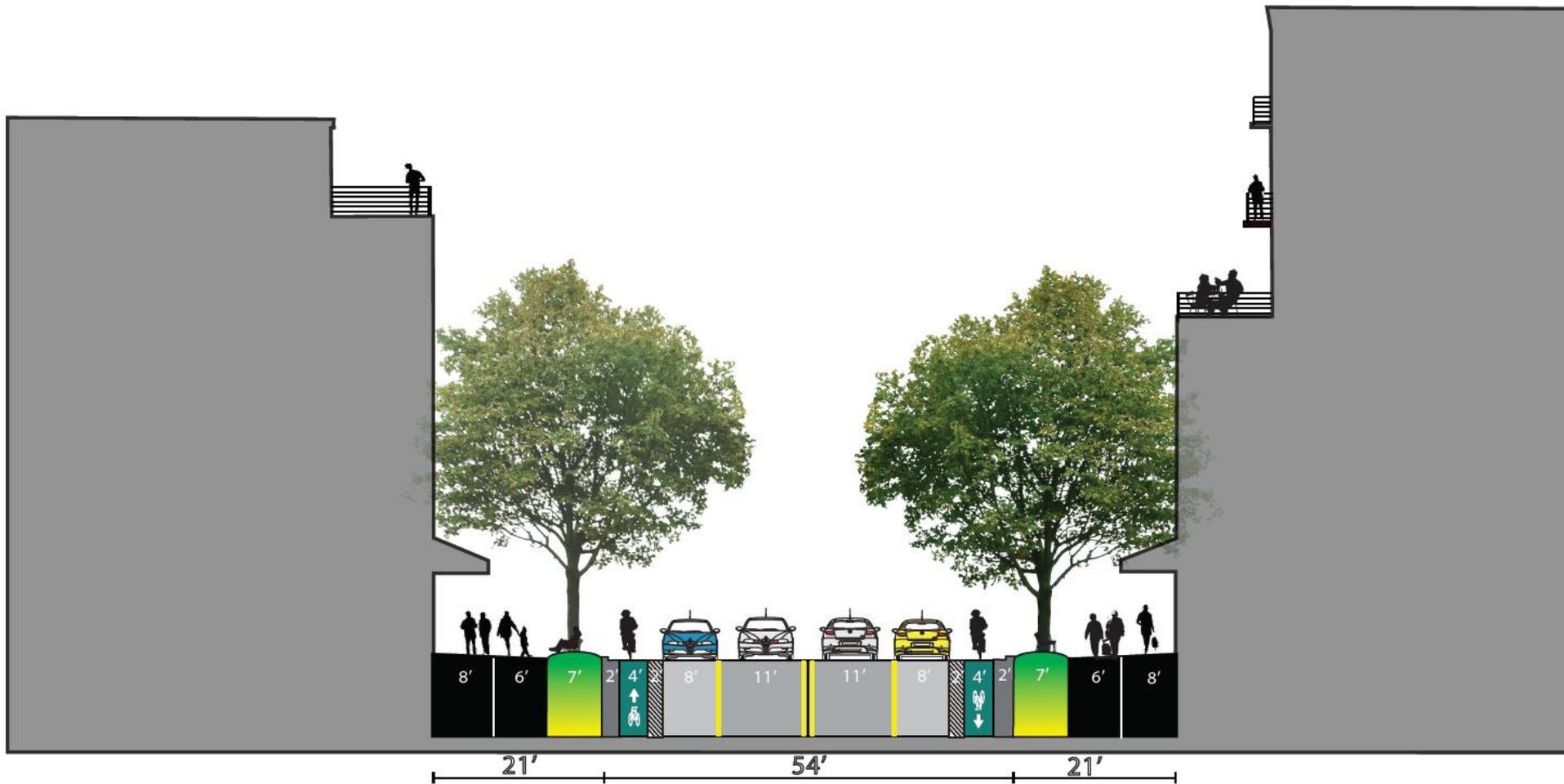
Great Street Precedent Images



Interconnected Pedestrian Network of Streets

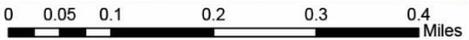


Avenue Street with On Street Bike Lane





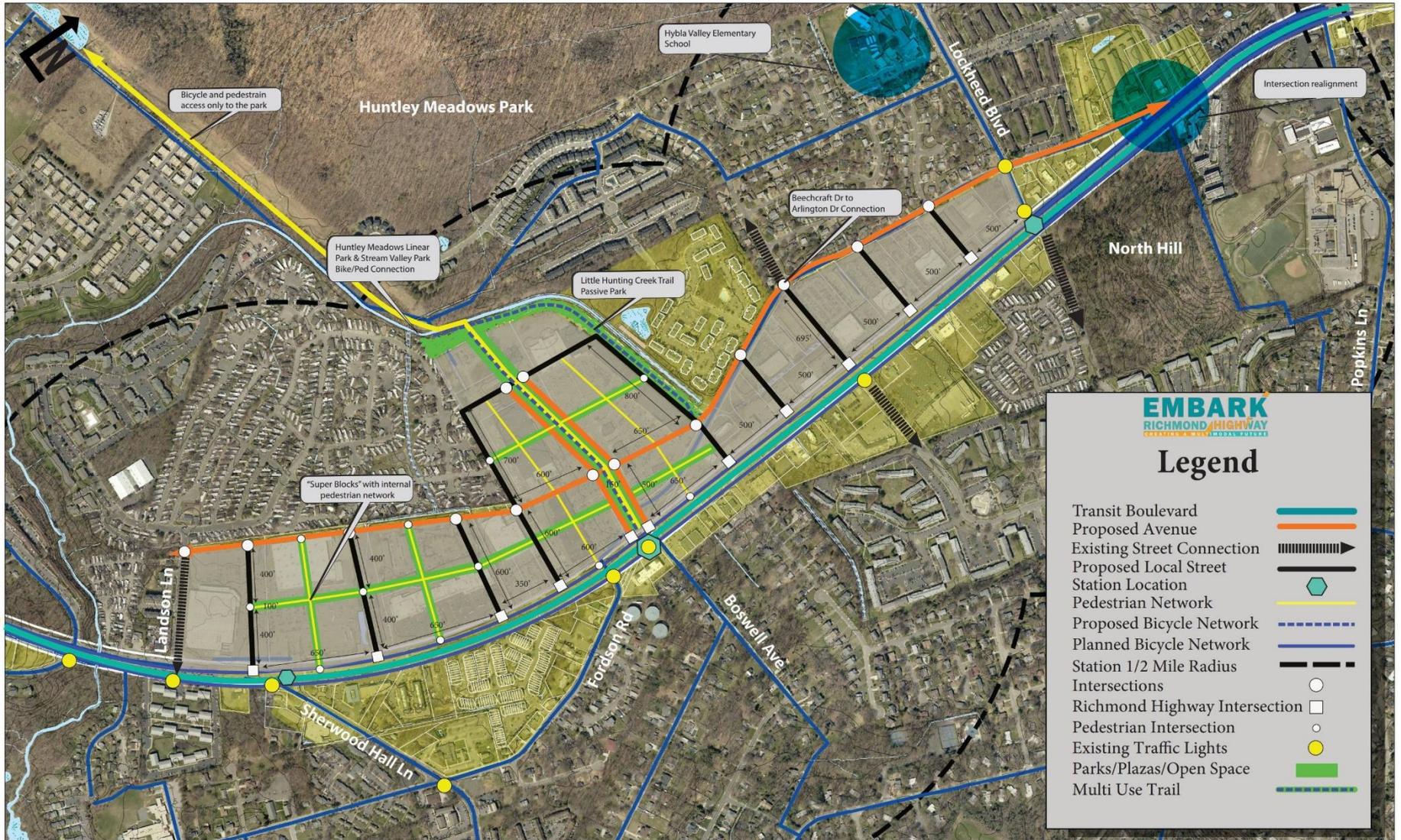
S:\GIS\Project Folders\EMBARC Base Maps\EMBARCPennDaw.mxd





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Questions and Comments?



IV. RICHMOND HIGHWAY DRAFT PROPOSED CROSS SECTION

Current Comprehensive Plan Cross Section

Richmond Highway - 178 feet

Existing Comprehensive Plan

BRT Area - 58 feet



Proposed Cross Section

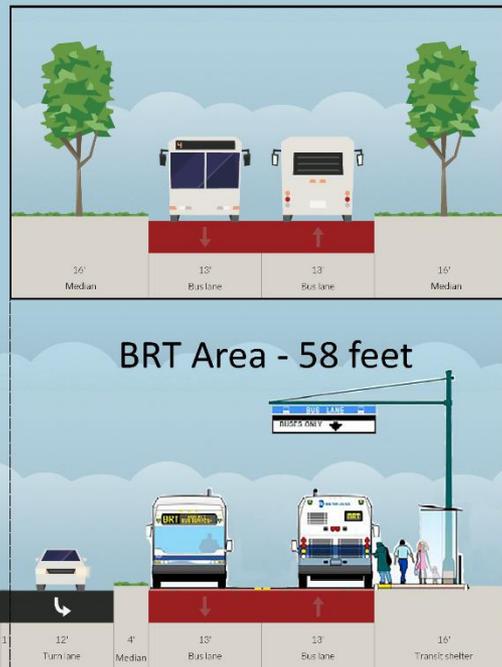
Richmond Highway - 178 feet

DRAFT Proposal

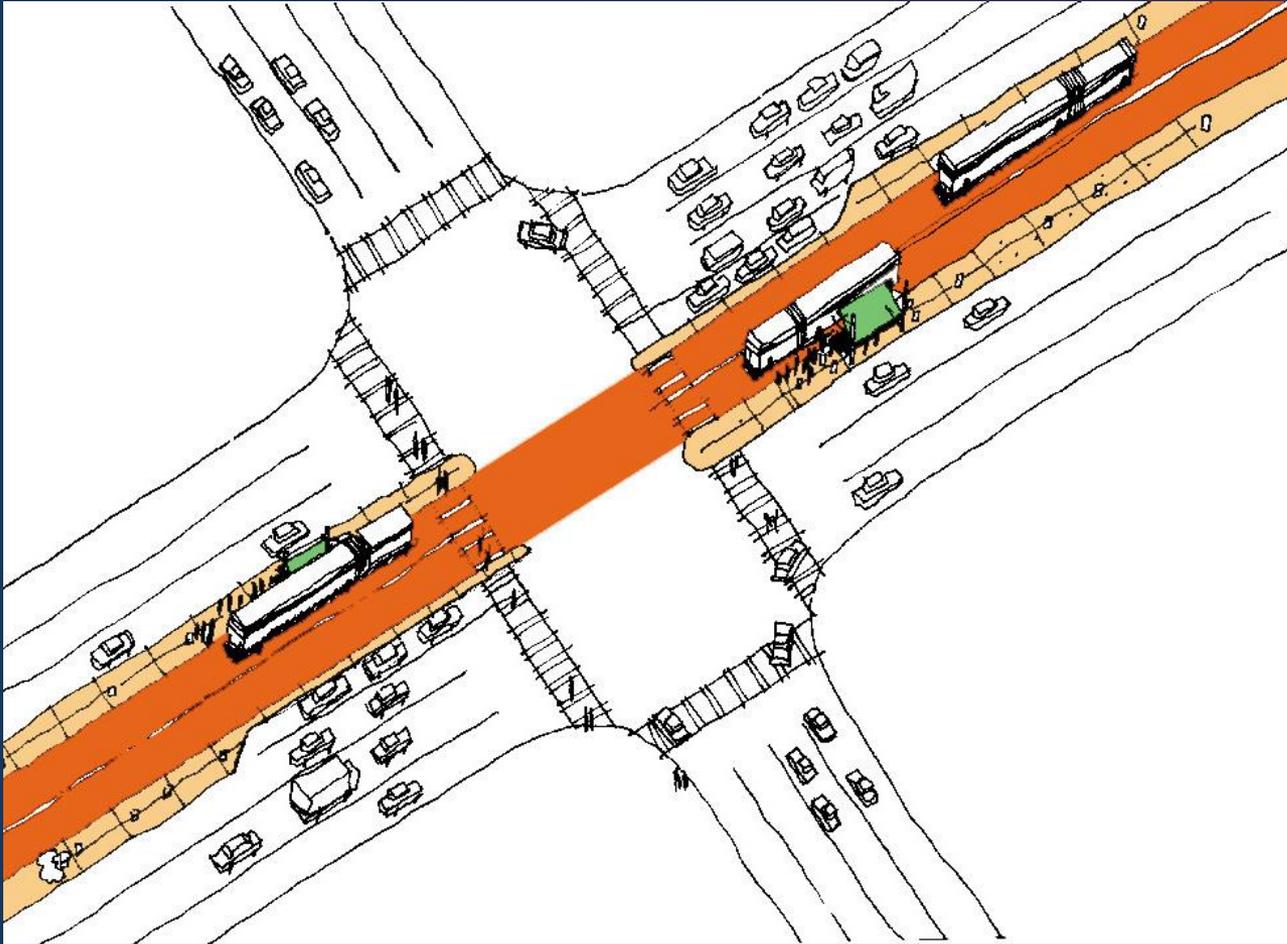
Notes:

This section matches 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.



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

Proposed Cross Section

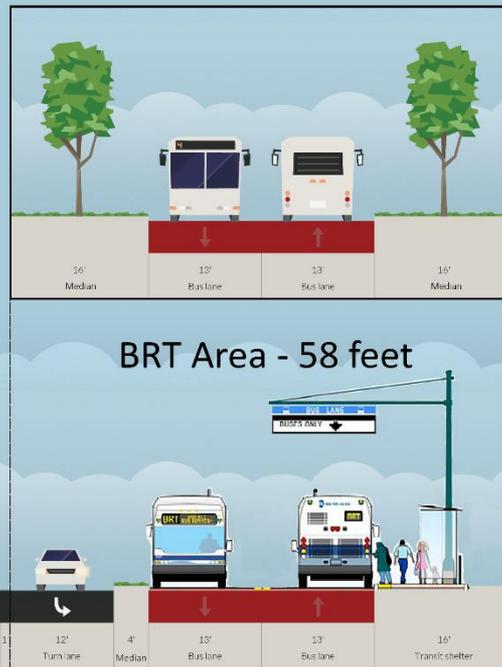
Richmond Highway - 178 feet

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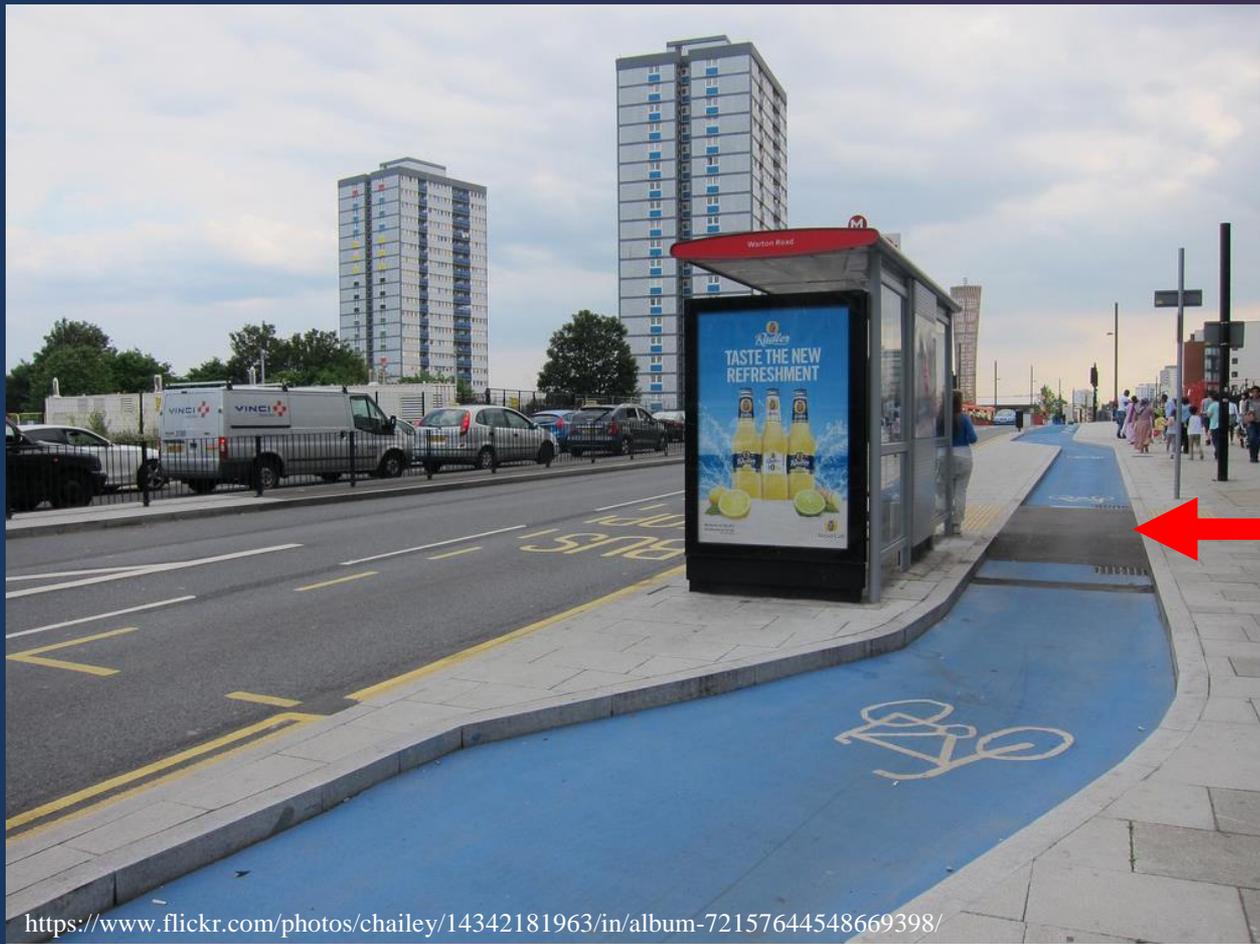
Right-of-way width could change depending upon location of street lights and utilities.



Comp Plan

Proposal





<https://www.flickr.com/photos/chailey/14342181963/in/album-72157644548669398/>

Ramp
between
sidewalk
and bus
shelter for
level ADA
crossing of
bike lane

Separated bike lane treatment at bus shelter



Ramp
between
sidewalk and
bus shelter for
level ADA
crossing of
bike lane

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



<https://www.fhwa.dot.gov/publications/publicroads/15mayjun/01.cfm>

Separated bike lane next to street trees and
with a buffer between the sidewalk

End of Presentation