



County of Fairfax, Virginia

DRPT Route 1 Multimodal Alternatives Analysis and Other Background Information

Embark Richmond Highway Advisory Group
August 3, 2015

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Fairfax County Department of Transportation



Presentation Outline

- Introduction
- Route 1 Corridor Study (1994-1998)
- Route 1 Centerline Study (1998-2004)
- Route 1 Multimodal Alternatives Analysis (2013-2015)
- Executive Steering Committee Resolution
- Fairfax County Board of Supervisors Action
- Fairfax County Comprehensive Plan



Introduction

- Today's meeting of the Embark Richmond Highway Advisory Group is intended to provide background and history of some of the transportation planning efforts that have occurred over the past 20+ years in the Richmond Highway corridor
- Areas where this Advisory Group can lend its help in making change will be highlighted through the presentation.

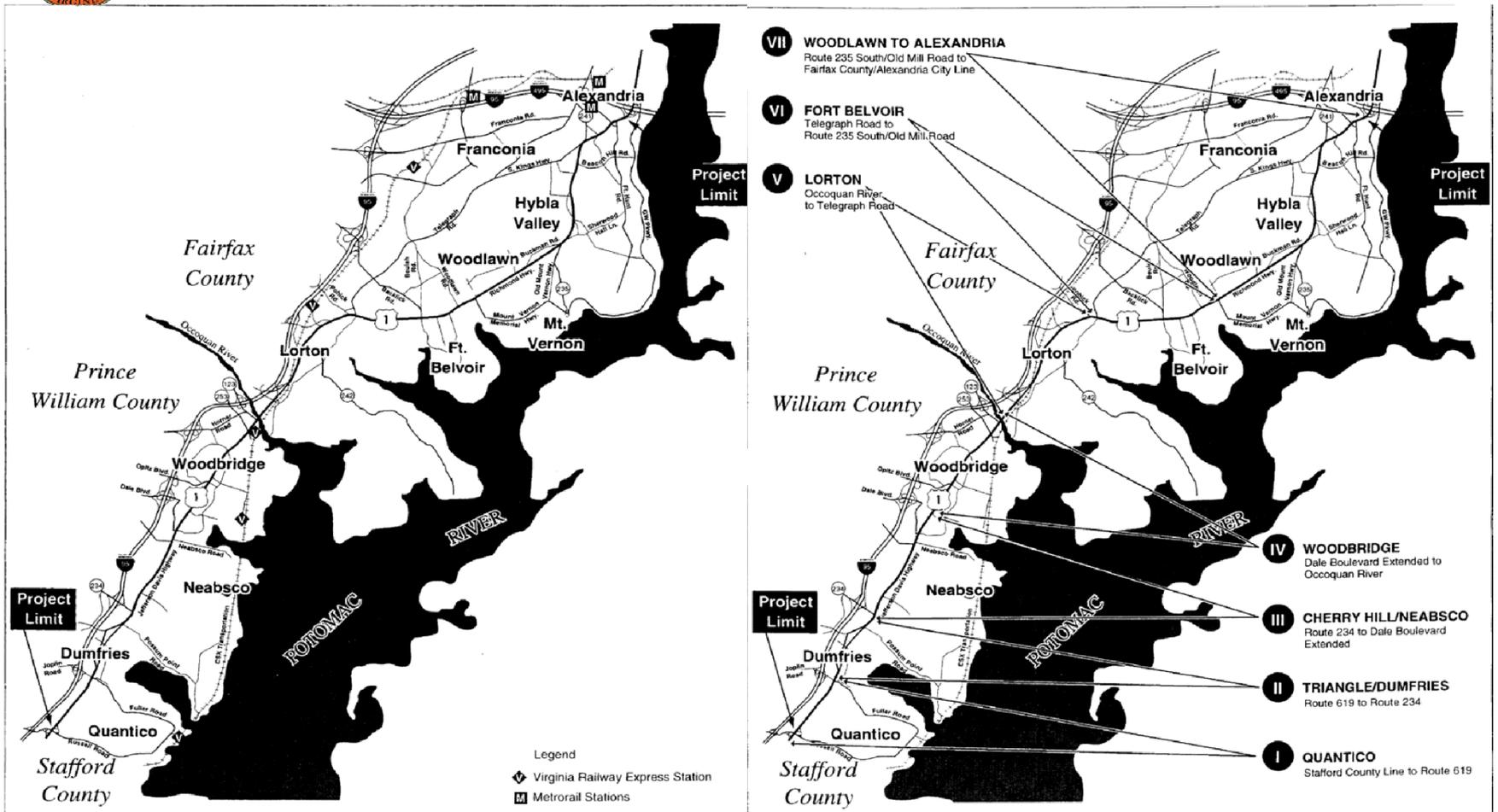


Route 1 Corridor Study (1994-1998)

- In 1994, the General Assembly directed VDOT to study Route 1 corridor in Fairfax and Prince William Counties to address growing travel demand and to ensure coordinated revitalization efforts in corridor
- Intended to help the VDOT, Fairfax and Prince William Counties guide project development and implementation efforts in the corridor
- Identified current and future transportation needs through the year 2020, developed a reasonable program of solutions to meet those needs while accommodating county specific economic development goals
- Character varies, so corridor divided into 7 segments
- Completed in 1998



County of Fairfax, Virginia



Route 1 Corridor Study
Study Area

VIIT
scale 0 5
Figure 1

Route 1 Corridor Study
Corridor Segments

VIIT
scale 0 5
Figure 2



Route 1 Corridor Study

- Plan is a package of improvements, including key features, such as:
 - 6-lane boulevard with streetscaping throughout, **except** for an 8-lane boulevard (including 2 HOV lanes) between Buckman Road and I-495
 - Raised median for landscaping, left turns, min 700-1000 foot spacing between breaks
 - Quality inter-parcel access and public access easements through integrated site plans (preferred rather than service roads)
 - Continuous sidewalks/trail connecting businesses, neighborhoods and transit stops
 - Accommodation for on-street bicycle usage
 - Improved roadway lighting and signing
 - “Smart Travel” Systems including coordinated traffic signals, variable message signs, real time traveler information displays at transit centers, and standard transit fare media for the region
 - Enhanced local and express bus service oriented to existing and new transit centers, feeder bus service to commuter rail stations, coordinated schedules, and transit route maps and timetables at all bus stops
 - Shelters, benches, and electronic displays at more heavily used bus stops



Route 1 Centerline Study (1998-2004)

- Continuation of earlier Corridor Study
- Developed recommendations for prioritization and funding of improvements
- Goals of the study were to:
 - Increase safety;
 - Increase traffic capacity;
 - Facilitate bicycle and pedestrian movement;
 - Improve aesthetics;
 - Increase transit usage; and
 - Promote economic redevelopment



Route 1 Centerline Study

- Identified problems in the corridor, including:
 - discontinuous service roads;
 - roadside traffic hazards;
 - non-standard design features;
 - traffic bottlenecks; and
 - an undesirable image of the corridor, due to poor appearance and obsolete development patterns.
- Identified low cost recommendations to improve conditions, such as:
 - improvements to traffic signals;
 - bus and pedestrian services; and
 - implementing enhanced maintenance and paving programs



Route 1 Centerline Study

- Identified transportation system improvements deemed necessary to address capacity and safety problems, meet future travel demands, and help revitalize the corridor
- Corridor Study goals addressed with recommended physical features:
 - **One additional through lane in each direction, and additional turn lanes** at intersections where required to increase traffic capacity;
 - An **added median** where one currently does not exist to improve safety and **provide a green area** to improve aesthetics; and
 - A **continuous multi-purpose trail** constructed to facilitate bicycle and pedestrian movement. **Supplemental sidewalks** constructed in residential and commercial areas to further facilitate pedestrian movements. Improved pedestrian movement would also help increase transit usage

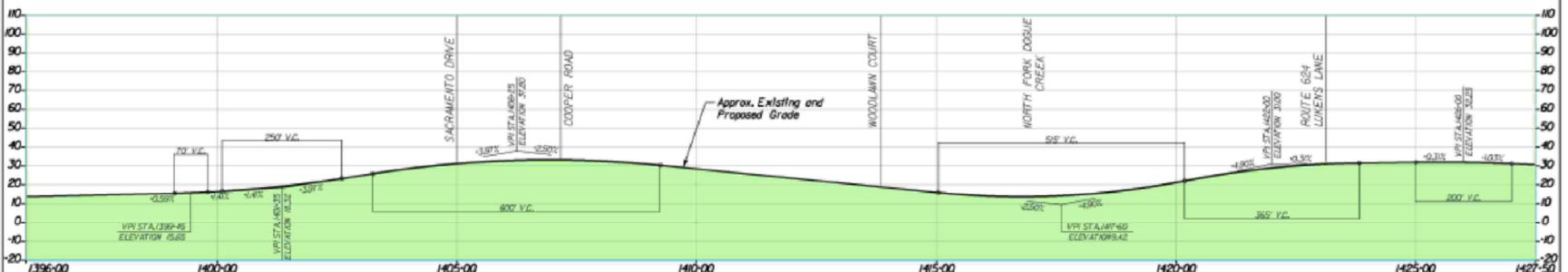


Route 1 Location Study

0001-96A-103, PE-100
 From: Prince William / Stafford County Line
 To: I-495, Capital Beltway
 Prince William County
 Fairfax County



ROUTE 1 / SACRAMENTO DRIVE



LEGEND	Proposed Pavement	Proposed Raised Median	Work Proposed By Others	Temporary Construction Easement	Out	Limit of Construction	SCALE 1" = 200' Horizontal / 1" = 50' Vertical	Project C	FX-36
	Proposed Bridge	Recent Improvements	Traffic Signal	Proposed Right-of-Way (R/W)	Fill	Existing Parcel Line			



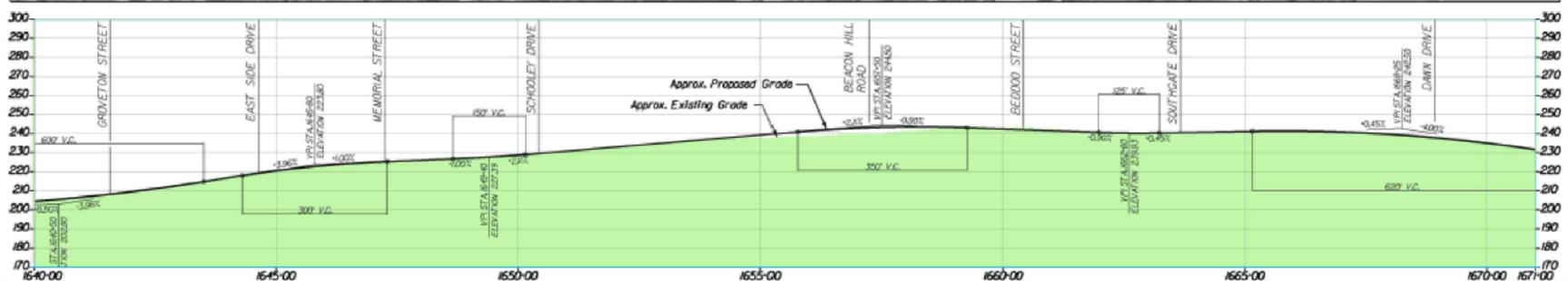


Route 1 Location Study

0001-964-103, PE-100
 From: Prince William / Stafford County Line
 To: I-495, Capital Beltway
 Prince William County
 Fairfax County



ROUTE 1 / BEACON HILL ROAD

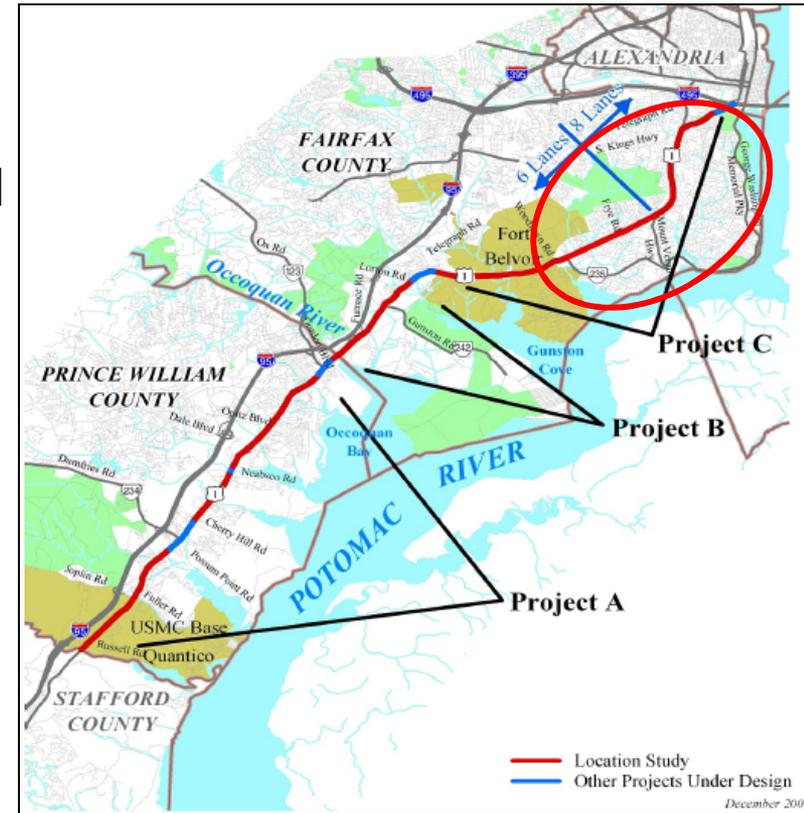


LEGEND	Proposed Pavement	Proposed Raised Median	Work Proposed By Others	Temporary Construction Easement	Out	Fill	Limits of Construction	SCALE 1" = 200' Horizontal / 1" = 50' Vertical	Project C	FX-44
	Proposed Bridge	Recent Improvements	Traffic Signal	Proposed Right-of-Way (R/W)	Existing Parcel Line					



Route 1 Centerline Study

- **Project A:** Stafford County to Route 123
 - CTB Selected Centerline July 15, 2004
- **Project B:** Route 123 to Armistead Road
 - CTB Selected Centerline April 15, 2004
- **Project C:** Belvoir Woods Parkway to National Capital Beltway
 - CTB took no action
 - Steering Committee **deferred further action until transit study completed.**
 - **No Typical Section or Alignment Recommendations** were made
 - **Decided against widening** north of Mount Vernon Memorial Highway to eight lanes





Funding for Transit Study

- Funding was allocated in 2006 (\$1M) from remaining Route 1 Centerline Study budget
- State revenues decline (~2007)
- VDOT forced to make budget cuts, including the \$1M
- County had requested that the Commonwealth fund transit study in this corridor for many years
- Transit Study Funded by General Assembly in 2013
 - Evaluate the level of study necessary to identify and advance potential public transportation services to Fort Belvoir in Fairfax County and the Marine Corps Base at Quantico in Prince William and Stafford Counties



Route 1 Multimodal Alternatives Analysis

- Virginia Department of Rail & Public Transportation (DRPT) managed study
- Study initiation: June 2013
- Study completion: January 2015
- Study Limits: I-95/495 to Woodbridge (15 miles)





Route 1 Multimodal Alternatives Analysis

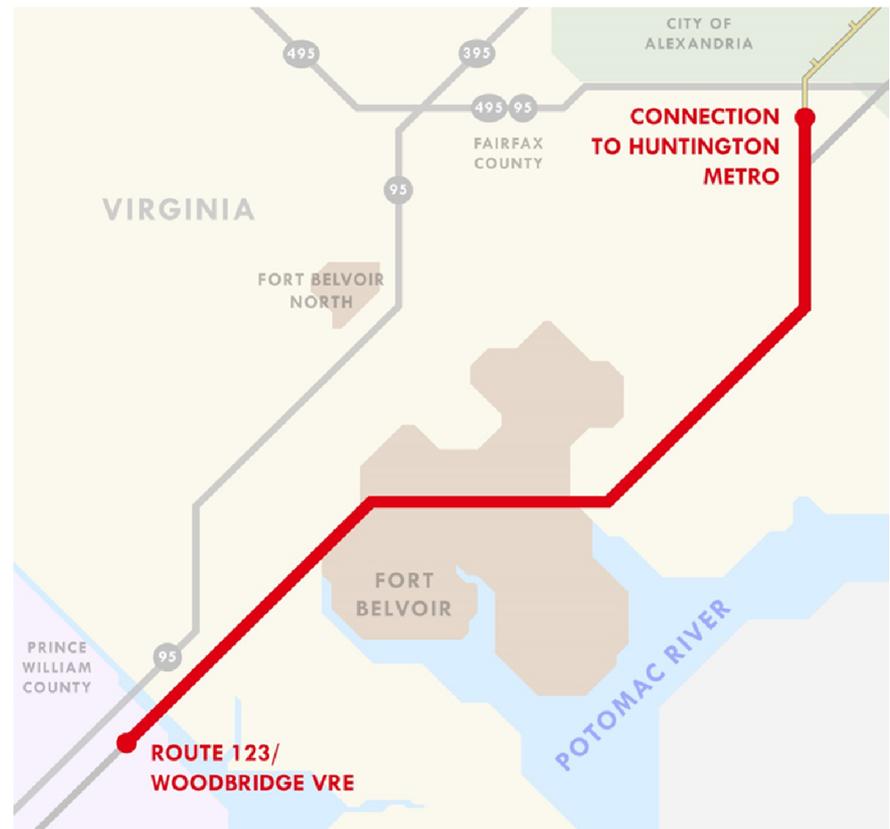
- 15 mile section of Route 1
- Extends from **National Capital Beltway (I-95/I-495)**, through Fairfax County, to **Route 123 at Woodbridge** in Prince William County
- Funded with \$2 million from Virginia Office of Intermodal Planning and Investment (OIPI)
- Conducted by Virginia Department of Rail and Public Transportation (DRPT)





Route 1 Multimodal Study Objectives

- Recommend a program of **multimodal transportation improvements** for adoption by Fairfax County and Prince William County
- Define **transit, roadway, and bicycle/pedestrian** projects that could be advanced for implementation.





Existing Conditions





Purpose & Need

Needs:

- Attractive and competitive transit service
- Safe, accessible bicycle/pedestrian access
- Appropriate level of vehicle accommodation
- Support and accommodate more robust economic development

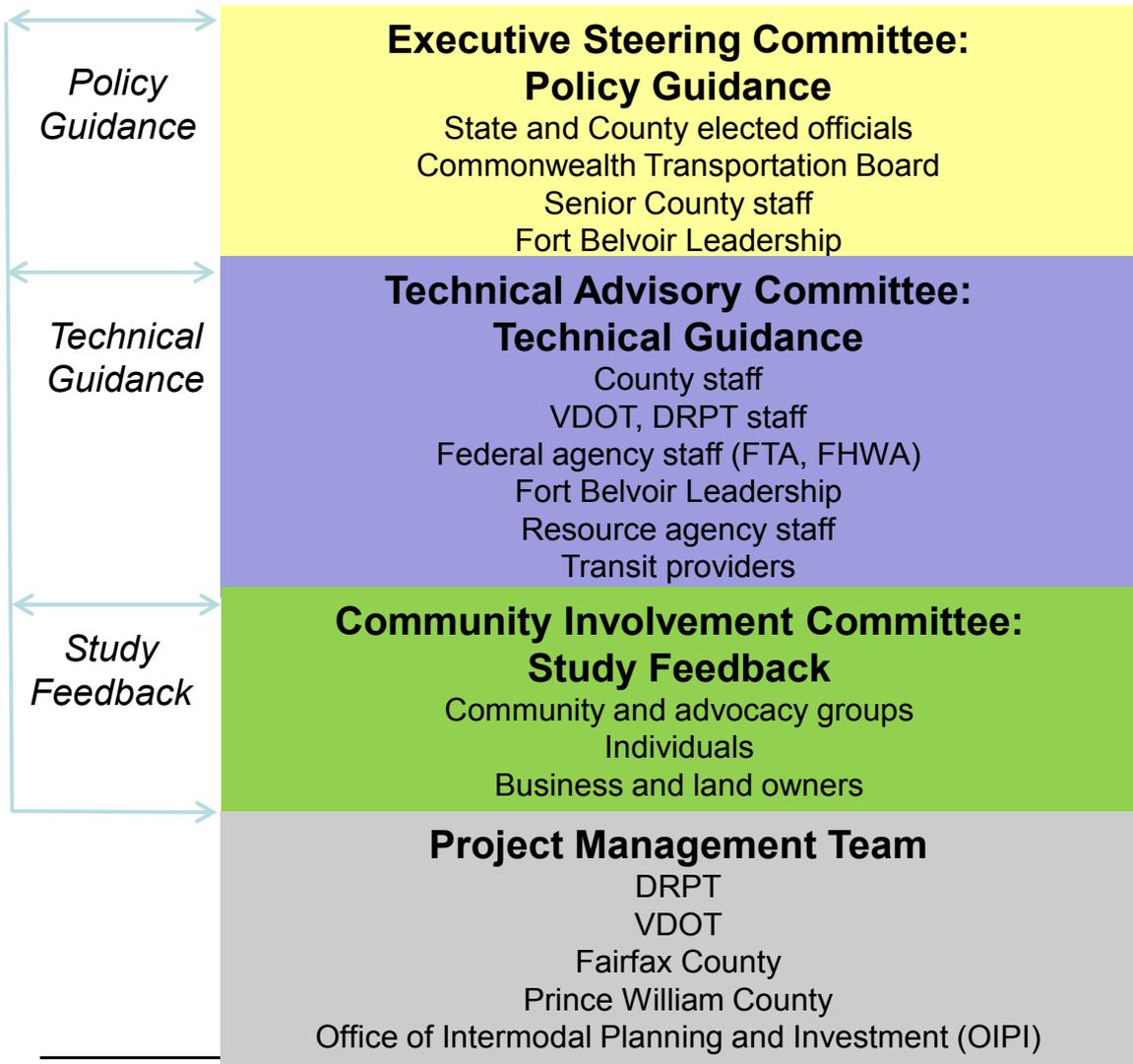
Goals:

- Expand attractive multimodal travel options to improve mobility
- Improve safety; increase accessibility
- Increase economic viability and vitality of the corridor
- Support community health and minimize impacts on community resources





County of Fairfax, Virginia





Outreach

- Committee Meetings (technical, elected, community)
- Public Meetings
- Social Media
- News Ads and Press Release
- Flyers and Fact Sheets
- Metro Station and Bus Ads
- Community Event Booths
- Bilingual
- On-Line and On-Corridor
- Targeted Efforts to Engage Diverse Populations

Route 1

Multimodal Alternatives Analysis

¡ACOMPÁÑENOS A LA TERCERA REUNIÓN PÚBLICA!

Route 1

Multimodal Alternatives Analysis

JOIN US FOR OUR THIRD PUBLIC MEETING!

MEETING 1: PRINCE WILLIAM COUNTY
Wednesday, October 8
6:00 p.m. – 8:00 p.m. (Presentation at 7:00)
Belmont Elementary School
751 Norwood Lane, Woodbridge
Public Transit: OmniLink's Route One bus will travel off-route to serve the elementary school that evening.

MEETING 2: FAIRFAX COUNTY
Thursday, October 9
6:00 p.m. – 8:00 p.m. (Presentation at 6:30)
South County Center
8350 Richmond Hwy, Alexandria
Public Transit: Fairfax Connector Route 171 and the REX.

El Análisis de Alternativas de Movilidad a lo largo de la Ruta 1 en Woodbridge y la zona de conexión a la estación de Metro en Huntington para mejorar el transporte público.

route1multimodalaa.com
Department of Rail and Public Transportation
para personas que desean participar en dichos servicios por motivo de su raza, del Título VII de la Ley de Derechos Civiles, procedimientos de no discriminación o de otro de interés www.dprpt.virginia.gov
Linda Balderson, 600 E. Main Street, 5

route1multimodalaa.com **route1multimodalaa** **@rt1multimodalaa**

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DRPT **VDOT**

Office of **INTRACORPORAL** Planning & Innovation



Public Meetings

Public Meeting #1 (Fall 2013)

- Study introduction
- Existing conditions
- Goals and objectives

Public Meeting #2 (Spring 2014)

- Initial alternatives
- Evaluation measures
- Land use analysis

Public Meeting #3 (Fall 2014)

- Evaluation of alternatives
- Study recommendations
- Phasing and implementation





Evaluation Process



Screen 1: Initial Alternatives



Screen 2: Refined Alternatives



Screen 3: Detailed Evaluation



Recommendations



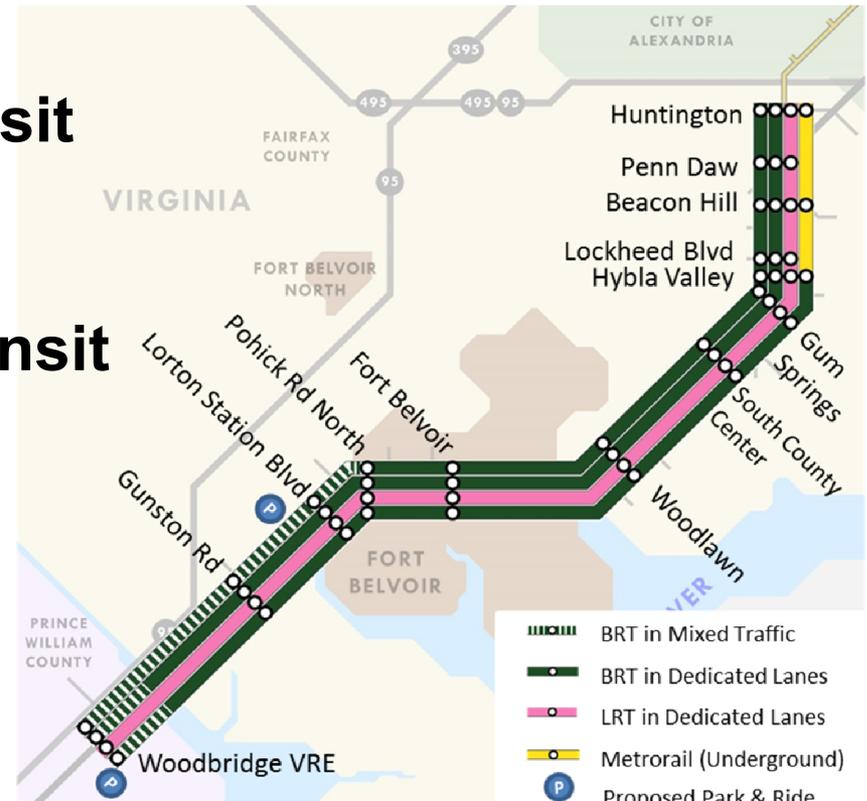
Four Refined Transit Alternatives Evaluated

Alternative 1:
Curb-Running Bus Rapid Transit

Alternative 2:
Median-Running Bus Rapid Transit

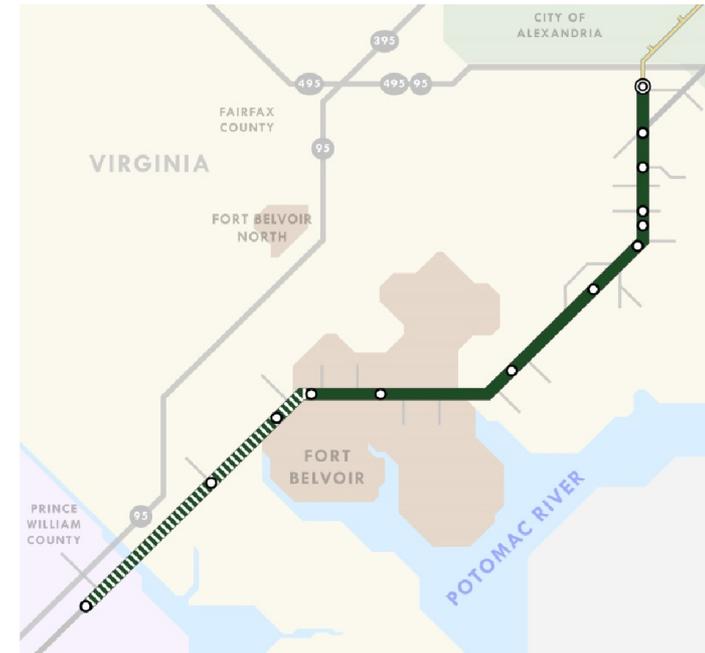
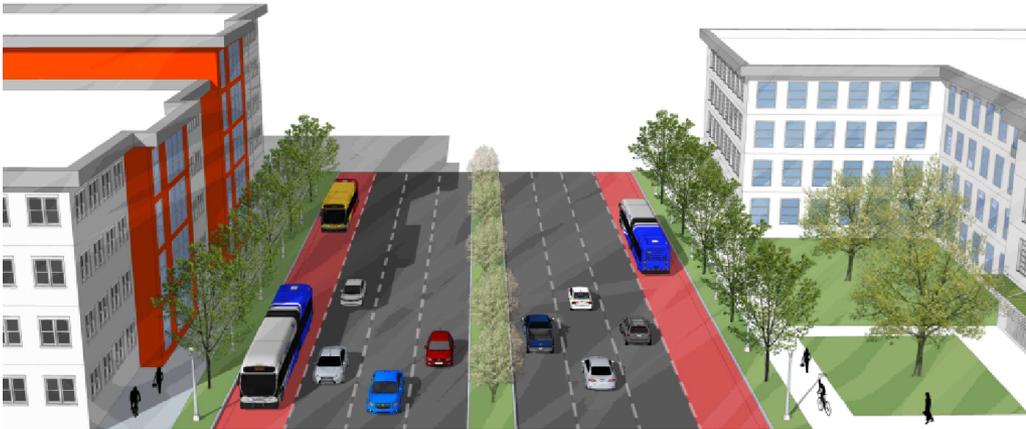
Alternative 3:
Light Rail Transit

Alternative 4:
Metrorail - BRT Hybrid



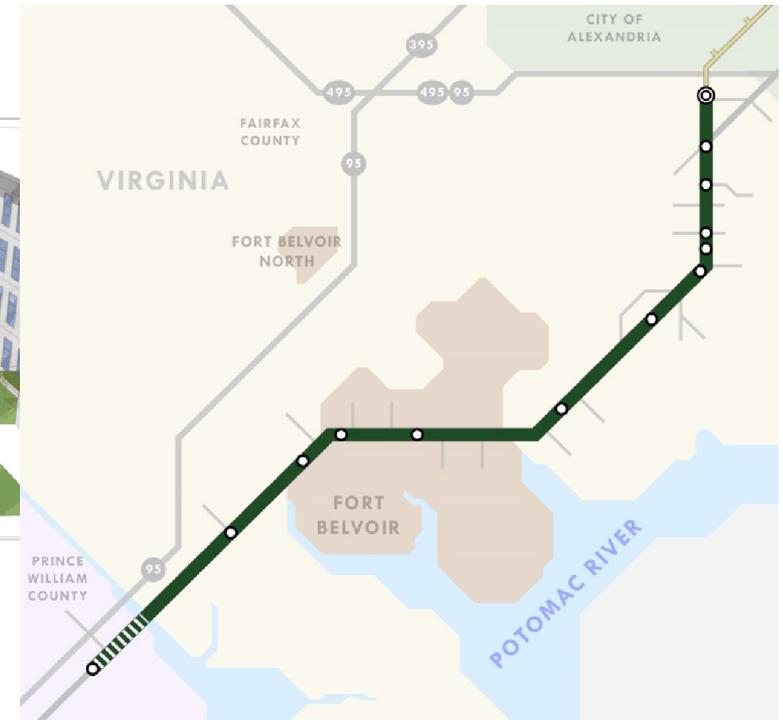
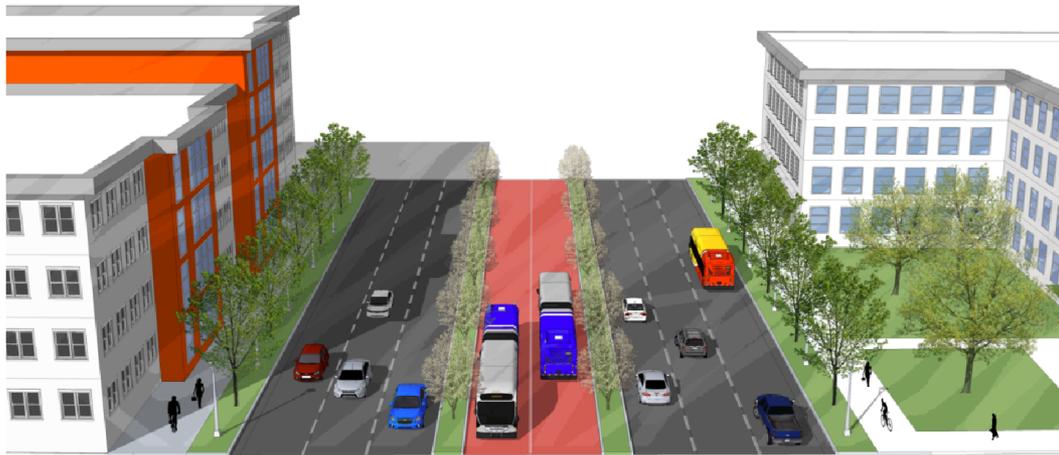


Alternative 1: Curb-Running BRT



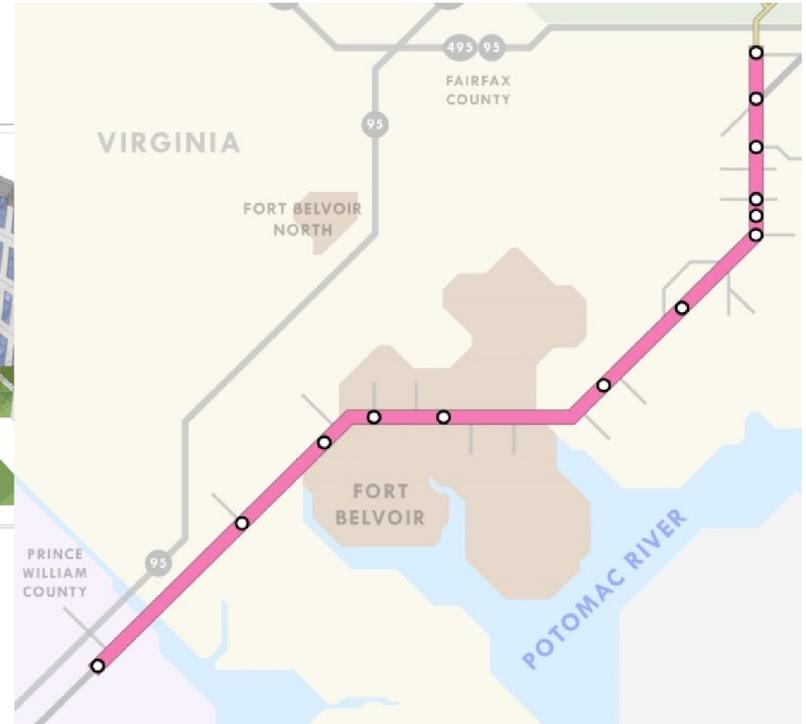
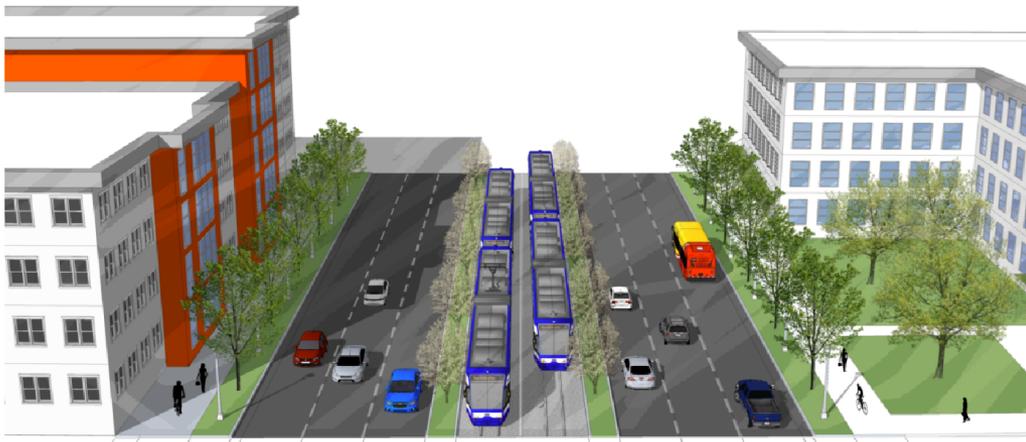


Alternative 2: Median-Running BRT



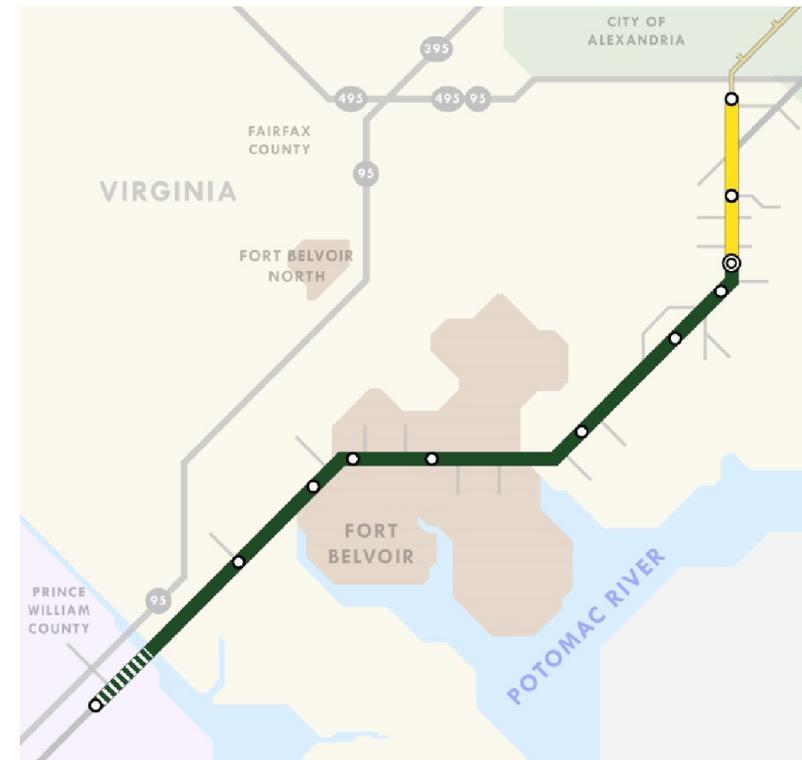
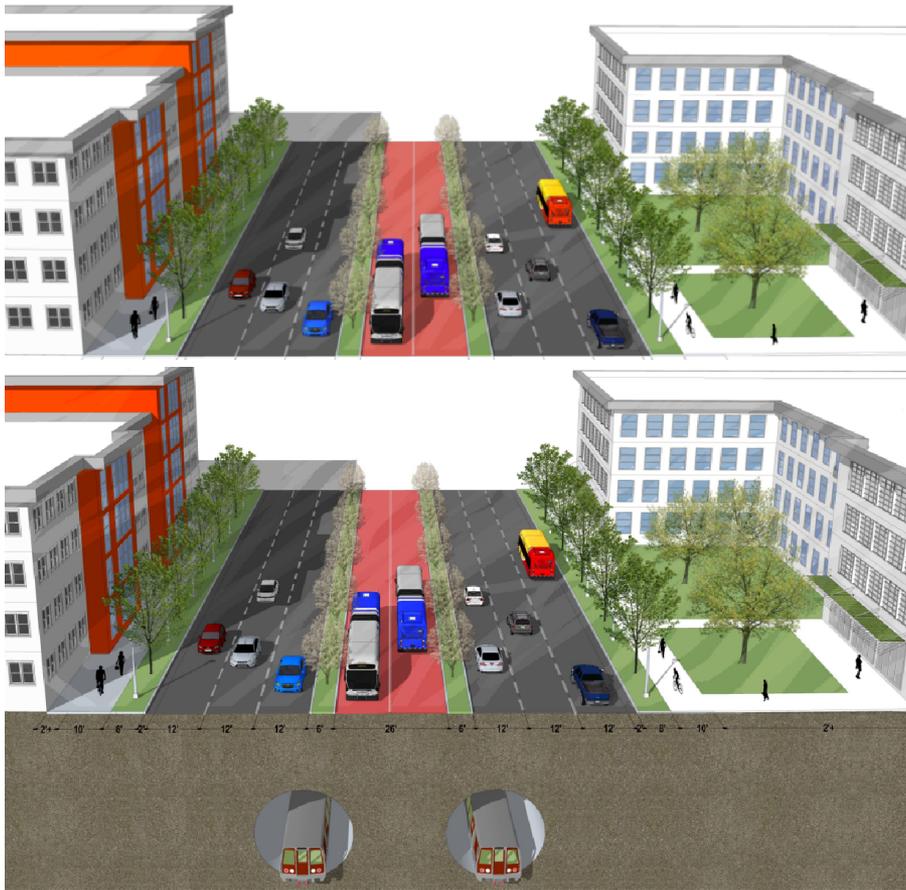


Alternative 3: Light Rail Transit





Alternative 4: Metrorail - BRT Hybrid





Evaluation of Alternatives

Goals	Example Measures
Goal 1: Local and Regional Mobility	<ul style="list-style-type: none">• Ridership• Travel time savings
Goal 2: Safety and Accessibility	<ul style="list-style-type: none">• Traffic• Pedestrian access
Goal 3A: Economic Development	<ul style="list-style-type: none">• Economic development effects• Implementation
Goal 3B: Cost Effectiveness	<ul style="list-style-type: none">• Capital costs• Operating costs
Goal 4: Community Health and Resources	<ul style="list-style-type: none">• Environmental impacts• Change in Vehicle Miles Traveled (VMT)



Summary of Key Indicators

	Alt 1: BRT- Curb	Alt 2: BRT- Median	Alt 3: LRT	Alt 4: Metro/BRT Hybrid
Average Weekday Ridership (2035)	15,200	16,600	18,400	26,500 (BRT 10,600; Metro 22,900)
Conceptual Capital Cost	\$832 M	\$1.01 B	\$1.56 B	\$2.46 B* (Metro \$1.46B; BRT \$1 B)
Annual O&M Cost (Each Alternative includes \$5 M annual cost for Ft. Belvoir shuttle service)	\$18 M (BRT \$13M; Ft Belvoir Shuttle \$5M)	\$17 M (BRT \$12M; Ft Belvoir Shuttle \$5M)	\$24 M (LRT \$19M; Ft Belvoir Shuttle \$5M)	\$31 M** (Metro \$17M; BRT \$8M; Ft Belvoir Shuttle \$5M)
Cost Effectiveness (Annualized capital + operating cost per rider)	\$19	\$20	\$27	\$28** (Metrorail: \$28; BRT: \$29)

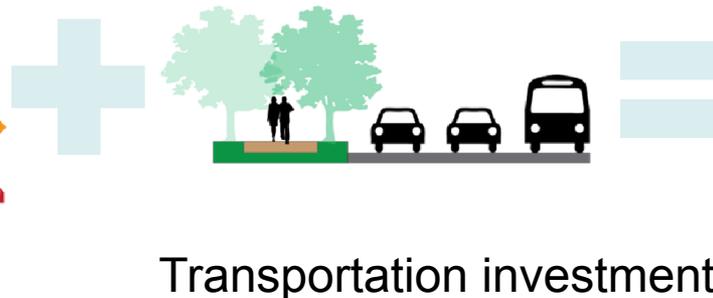
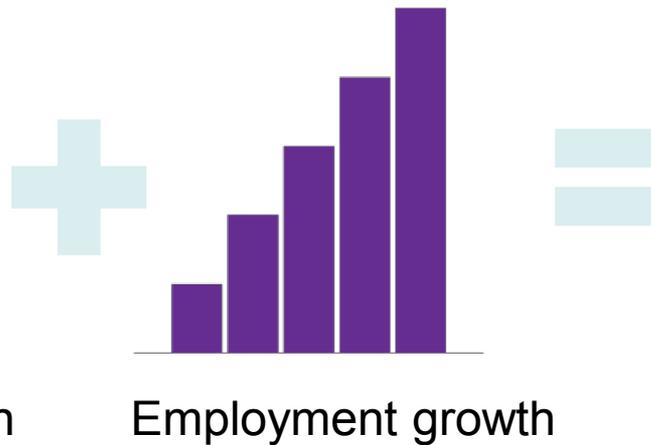


Land Use & Transportation

- Sustainability of higher quality transit within the Route 1 corridor will depend partly on associated land use changes
- Place-making within the station areas/activity centers will play a key role in the overall success of high quality transit
- Transit Oriented Development (TOD) to be planned within a ½ mile radii of each station
- Enhanced access and connectivity for all modes, including bicycle, pedestrian, etc. should be provided at each station
- With high quality transit comes the potential for economic viability and vitality

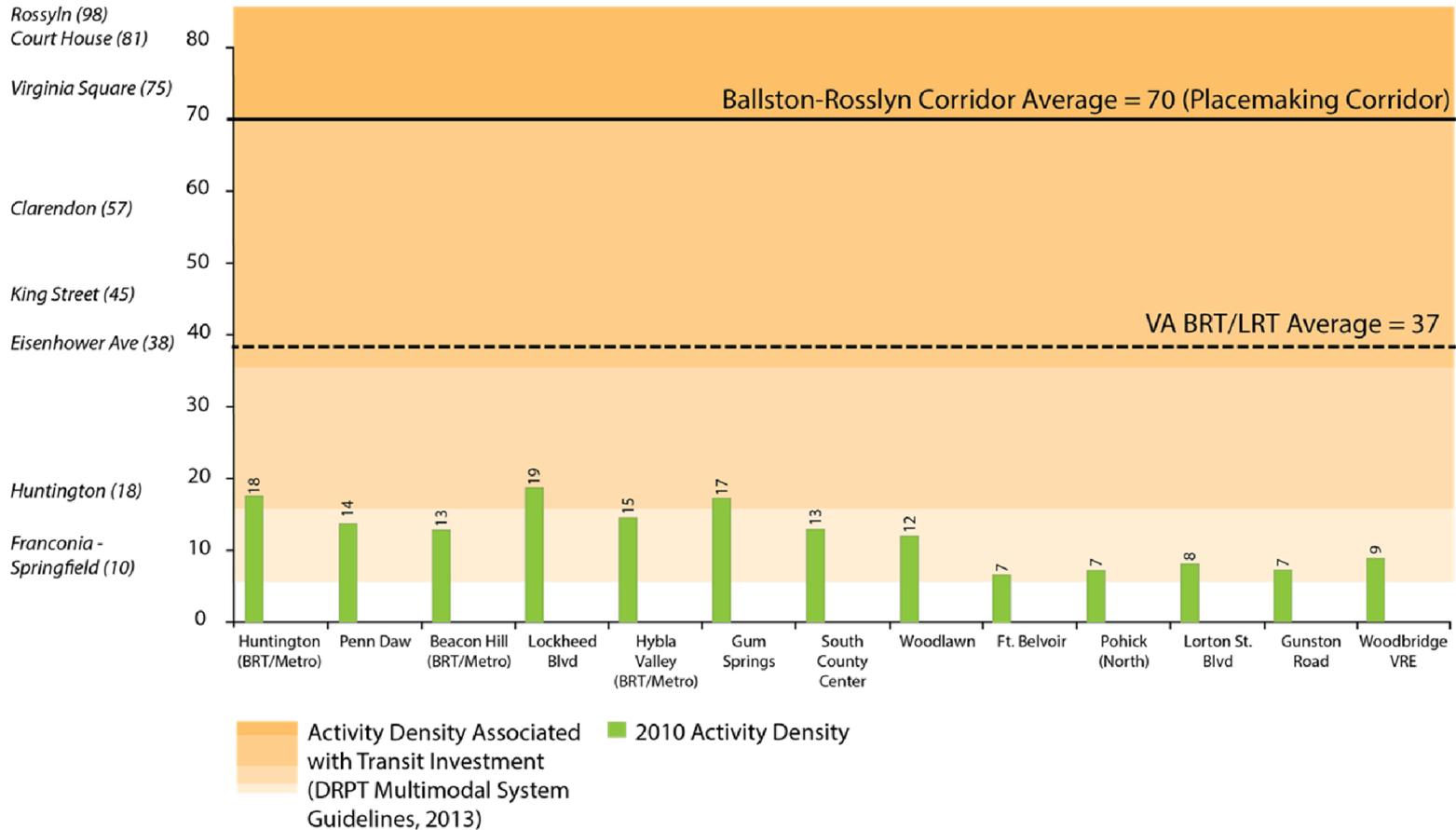


Transportation Investment Economic Viability & Vitality



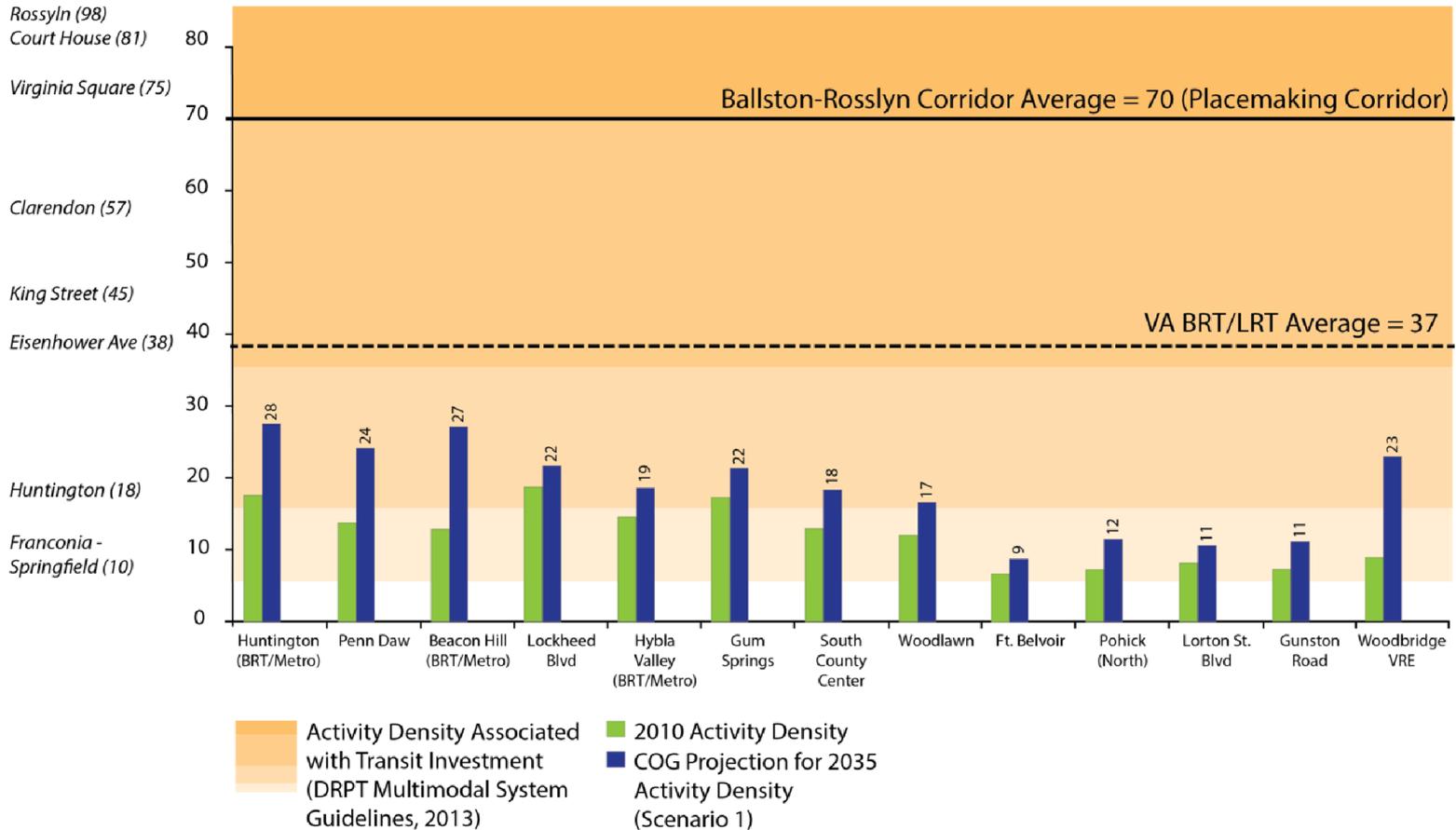


Land Use Today (2010)



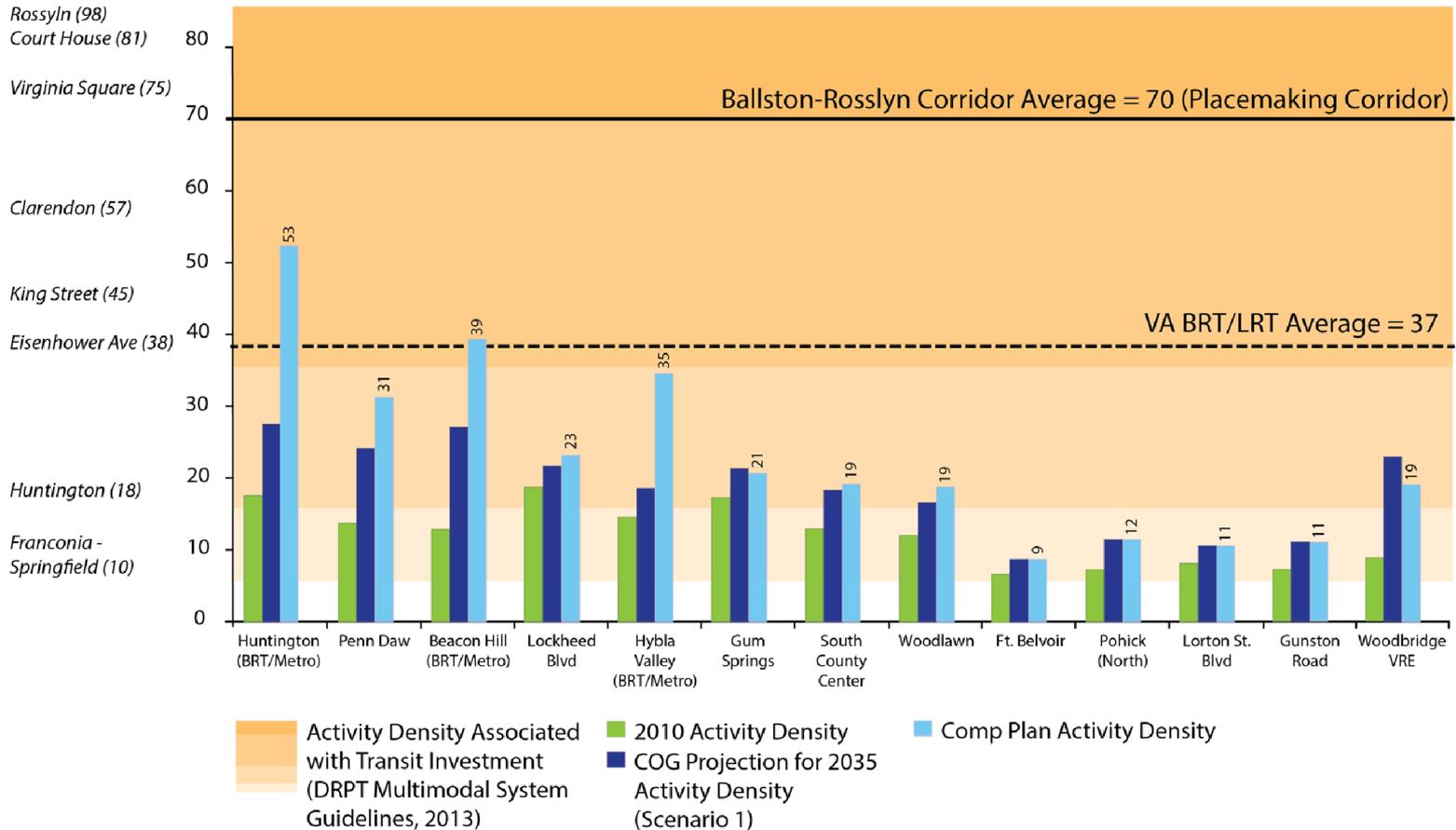


Land Use Forecast (2035)



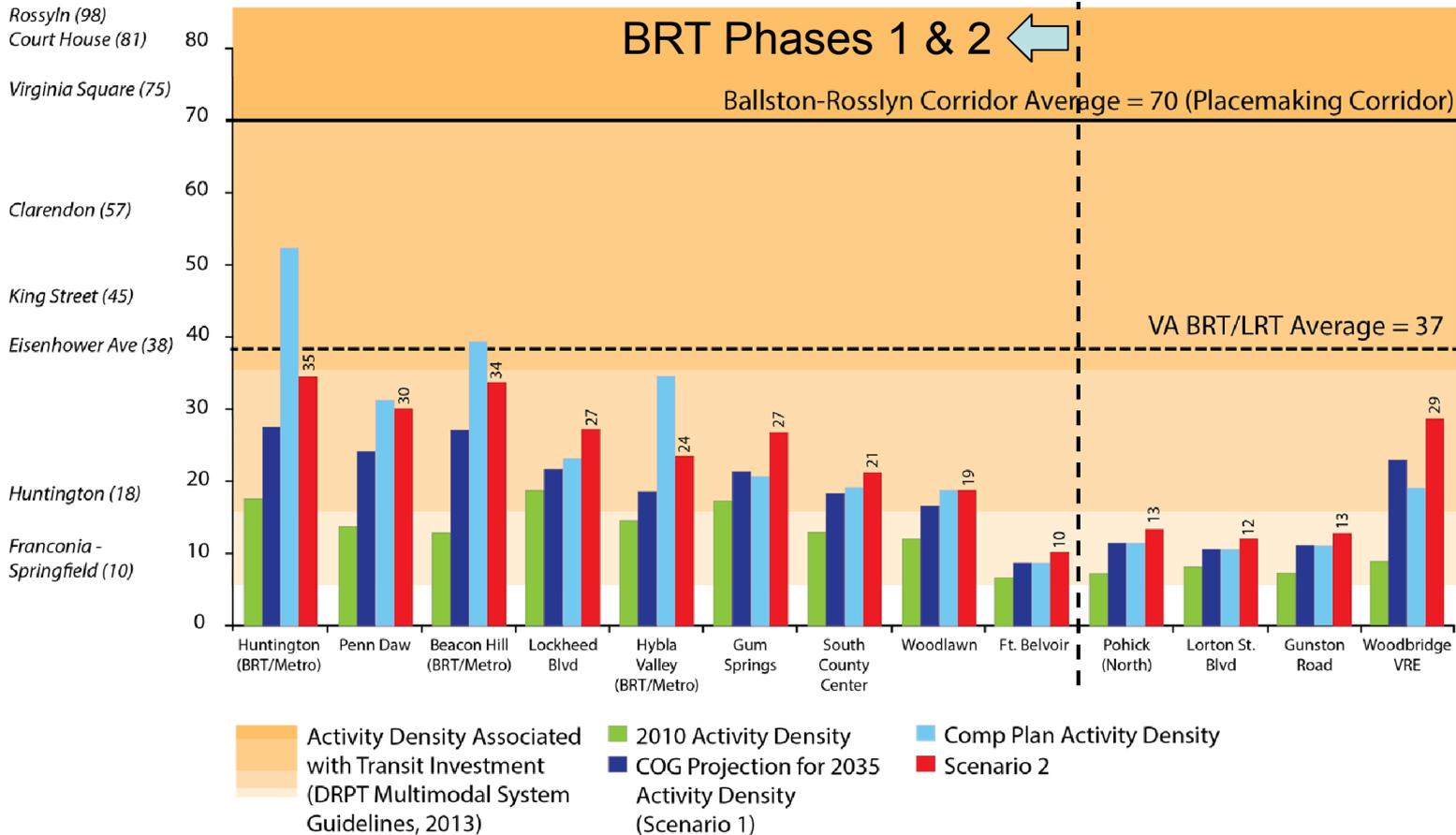


Comp Plan (2035)



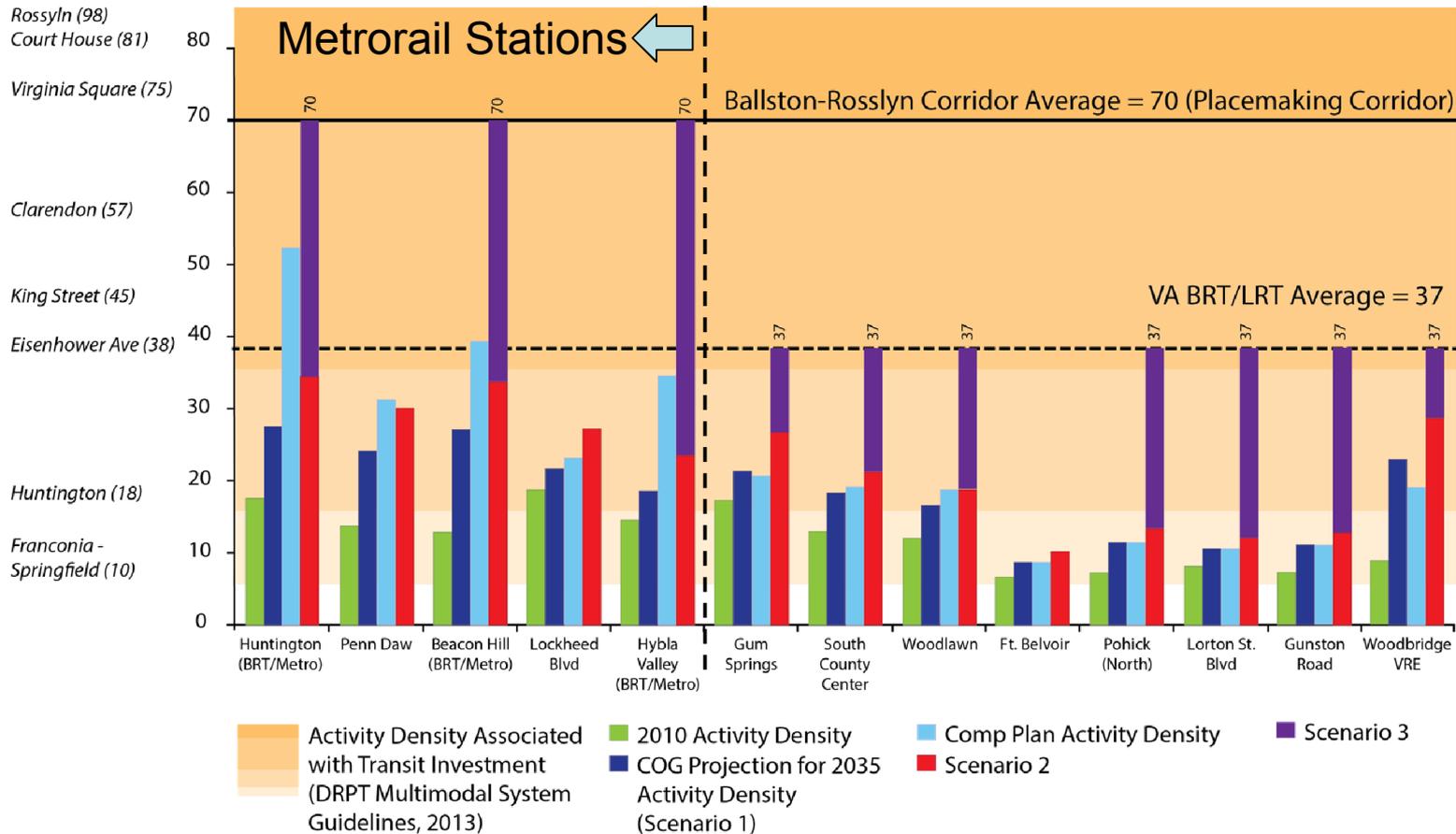


BRT Land Uses (2035)





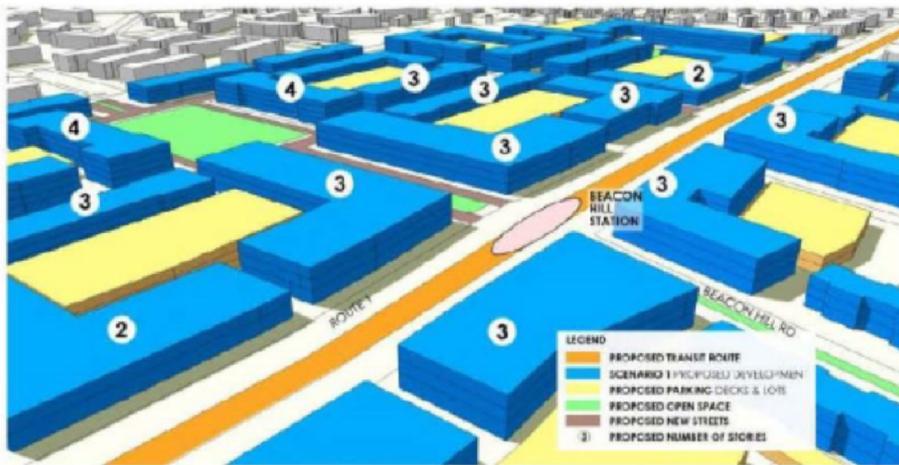
Metrorail Land Uses (2035)





Beacon Hill Land Use Scenarios

Scenario 1 (2035 COG Projection)



BEACON HILL STATION SCENARIO 1

Scenario 2 (Potential 2035 growth level with transit investment)



BEACON HILL STATION SCENARIO 2



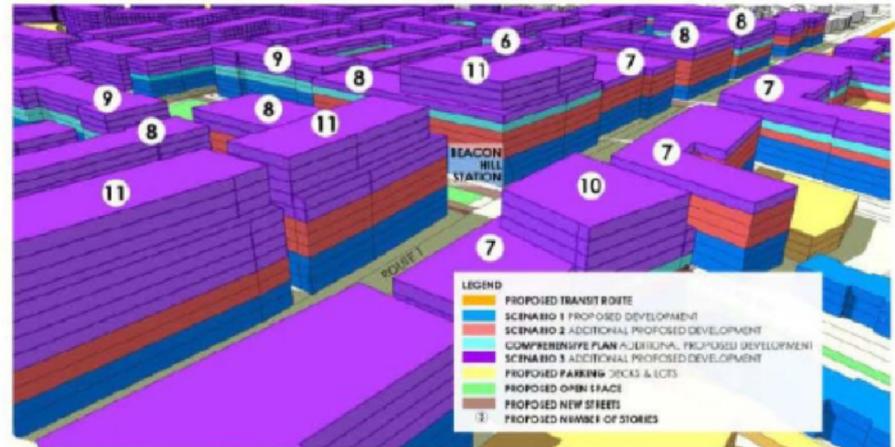
Beacon Hill Land Use Scenarios

County Comprehensive Plan
(Current envisioned "build out" level of development)



BEACON HILL STATION SCENARIO COMPREHENSIVE PLAN

Scenario 3 (Growth and development that would support Metrorail)



BEACON HILL STATION SCENARIO 3



Beacon Hill TOD - BRT





Beacon Hill TOD - Metrorail





Hybla Valley TOD - BRT





Hybla Valley TOD - Metrorail





Woodlawn TOD - BRT





Alexandria, VA



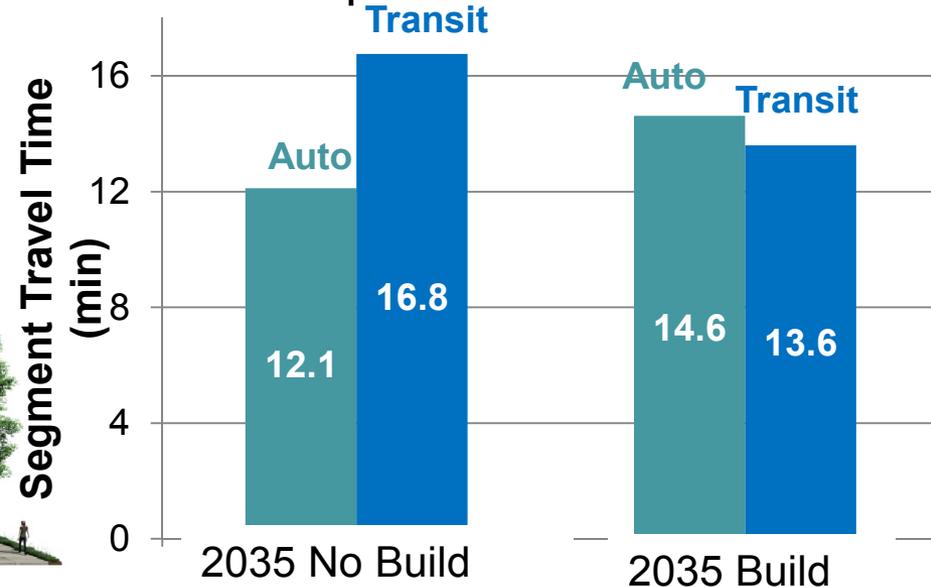
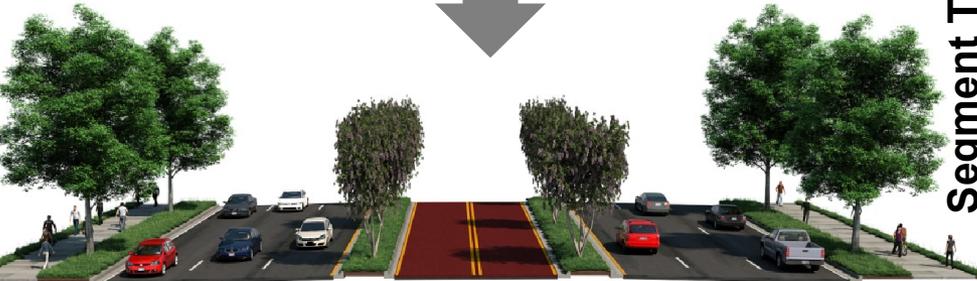
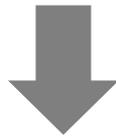


Traffic Analysis

Study found that addition of median transit lanes:

- Improves transit travel time
- Incrementally increases automobile travel time
- Left turns impacted
- Does not significantly degrade overall intersection performance

FCDOT Note:
A higher level of detail and refinement will be provided as part of the comprehensive plan amendment process





Traffic Analysis Conclusions

- Major growth is anticipated
- With project investment, we need:
 - Network of local streets
 - Parallel roadway capacity
 - Schools
 - Parks
 - Public safety
- Metrorail growth levels require significantly more infrastructure investment than BRT levels

Note:

These issues will be evaluated during the Comprehensive Plan Amendment Process



Final Study Recommendations

- **Recommends phased implementation of the multimodal investments of “Alternative 4 - BRT/Metrorail Hybrid,” including:**
 - **Roadway Widening:** Widen roadway from four lanes to six lanes where necessary to create a consistent, six-lane cross section along the corridor;
 - **Bicycle and Pedestrian Facilities:** Create a continuous facility for pedestrians and bicyclists along the 15 mile corridor; the configuration will vary depending upon urban design, right-of-way availability, and other local considerations;
 - **Transit:** Contingent upon increased land use density and project funding, implement a median-running-Bus Rapid Transit (BRT) system from Huntington to Route 123 in Woodbridge (curb-running BRT in mixed traffic within the Prince William County portion) and a 3-mile Metrorail Yellow Line extension from Huntington to Hybla Valley as expeditiously as possible;



Executive Steering Committee Resolution

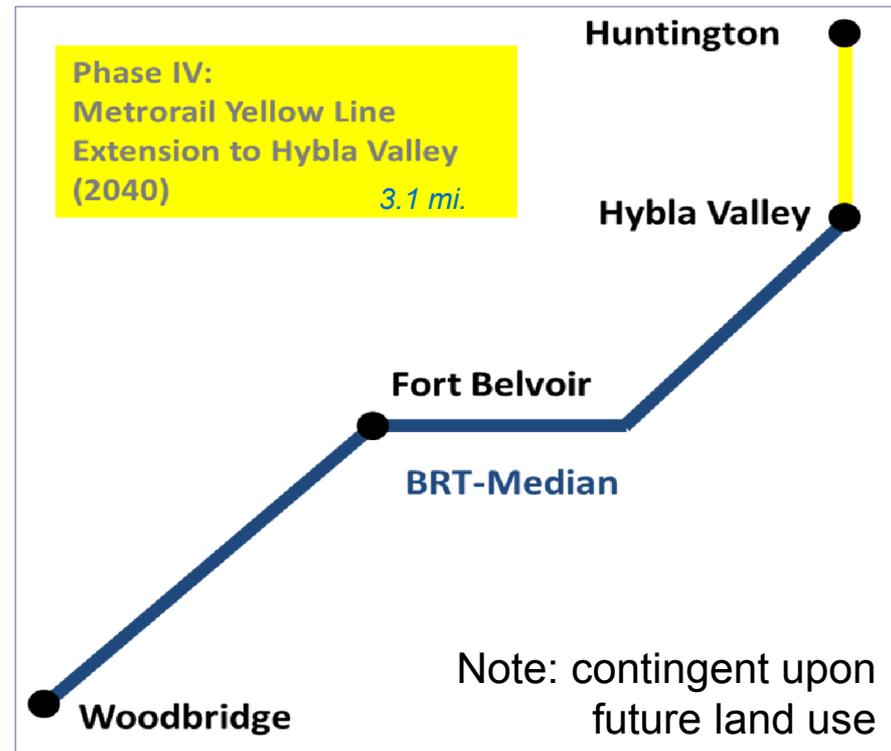
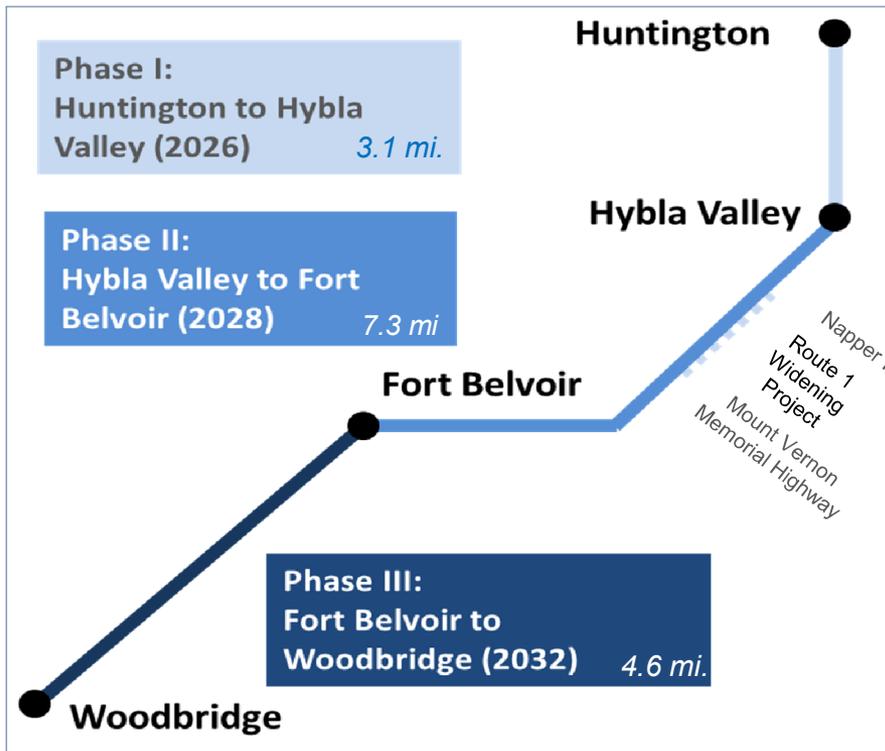
- Supports the project recommendations for a phased implementation of the multimodal (roadway, bicycle/pedestrian, and transit) improvements
- Supports incorporating the recommendations in local, regional, and statewide plans so the projects will be positioned for funding
- Recognizes that supportive land uses, along with supporting infrastructure, may be incorporated in local plans and regional forecasts in conjunction with the transit improvement;
- Supports “Alternative 4 BRT/Metrorail Hybrid” contingent upon supportive land use and funding plan



Study Phasing Approach

Phases I-III: Implement Multimodal Improvements and BRT (Median Running)

Phase IV: Extend Metrorail to Hybla Valley, contingent upon future land use





Board of Supervisors Action

- May 12 Board of Supervisors Meeting:
 1. **Endorse the recommendations** of the multimodal (roadway, bicycle/pedestrian and transit) improvements of “Alternative 4, Bus Rapid Transit (BRT)/Metrorail Hybrid,” for implementation, contingent upon supportive land use and an achievable funding plan, as contained in the Resolution adopted by the Route 1 Multimodal Alternatives Analysis Executive Steering Committee in October 2014.





Board of Supervisors Action

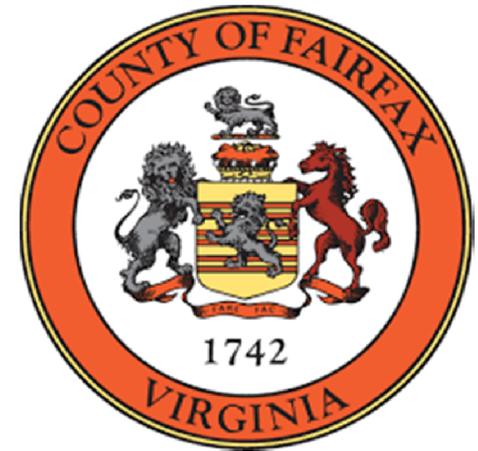
- May 12 Board of Supervisors Meeting:
 2. **Authorize amendment to the Comprehensive Plan** to assess and refine the recommendations of the Route 1 Multimodal Alternatives Analysis for the corridor from Huntington to Accotink Village, Fort Belvoir. The Plan amendment will consider:
 - **Land use density and mix** for the areas within a one-half mile radius of proposed stations in the corridor from Huntington to Accotink Village, Fort Belvoir;
 - **Corridor wide transportation** including transit, pedestrian and bicycle systems; urban design, public facilities, and other elements supportive of BRT; and
 - **Policy guidance in support of the future extension of Metrorail** from the Huntington Metrorail Station to the Hybla Valley Community Business Center including broad Comprehensive Plan language that supports Metrorail in terms of urban design and grid of streets, and anticipates future planning for Metrorail stations.





Board of Supervisors Action

- May 12 Board of Supervisors Meeting:
 3. **Direct staff** to proceed with actions necessary to conduct an **EA for BRT, and the associated road widening** of Route 1, from the Huntington Metrorail Station to Accotink Village, in conjunction with the Virginia Department of Transportation (VDOT) and other appropriate entities; and to initiate design for the road improvement and BRT projects.





Next Steps

- Amend Comprehensive Plan for the Richmond Highway corridor
- Work with Embark Richmond Highway Advisory Group
- Engage in significant public outreach effort
- Coordinate with the environmental documentation processes for the Route 1 roadway widening and the BRT projects



Comprehensive Plan

Key Issues:

- **Metrorail/BRT Policy** guidance
- **Land use** levels at stations
- Refining **BRT Station Locations**
- Station Templates
- Grids of Streets, Transportation Connections, Accessibility
- Cross Section/**ROW Impacts**



Process:

- Advisory Group
- Public Outreach

Timeline:

- 4-Year Timeline Proposed (Start July 2015)



Comprehensive Plan

- The following objectives are intended to guide general transportation decisions in the Richmond Highway Corridor:
 - Provide improved traffic circulation and traffic safety during both peak and non-peak hours;
 - Maximize the efficiency of existing highway facilities to move people and goods;
 - Promote the increased use of ridesharing and public transportation to reduce reliance on automobiles; and
 - Minimize the impact of highway widenings, new roadway alignments, and new development projects on adjacent residential communities and the water quality and ecological conditions of streams within the district.



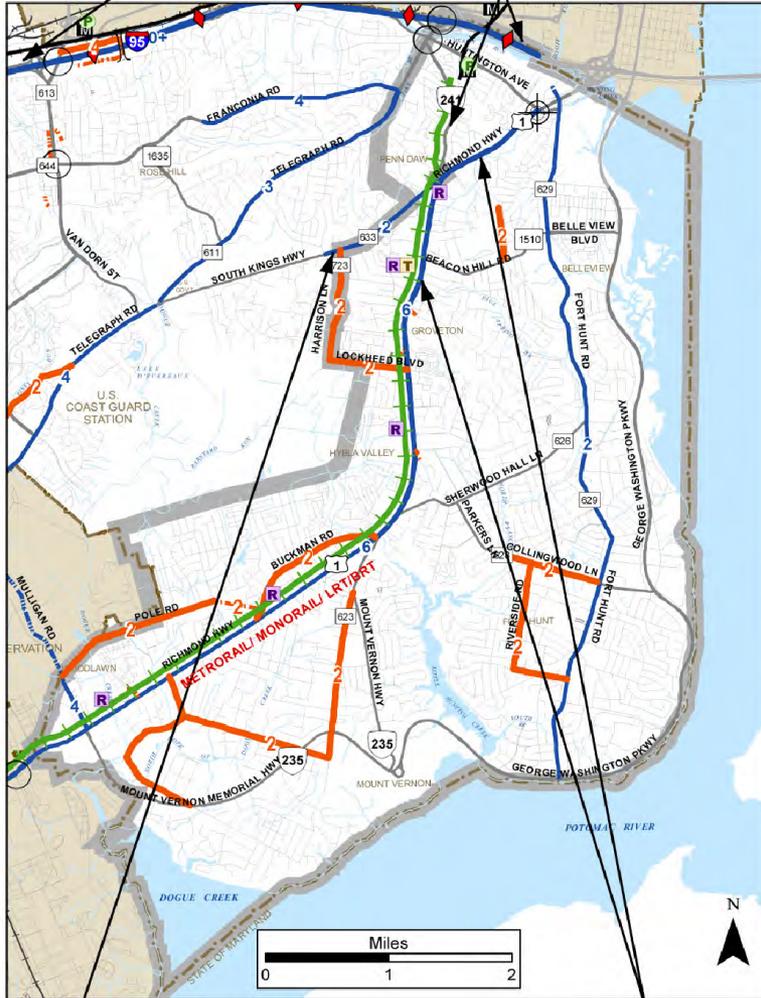
County of Fairfax, Virginia

MOUNT VERNON PLANNING DISTRICT

OVERVIEW

THE CAPITAL BELTWAY IS PLANNED FOR 10+ LANES INCLUDING HOV FROM THE SPRINGFIELD INTERCHANGE TO THE ALEXANDRIA CITY LINE

ENHANCED PUBLIC TRANSPORTATION CORRIDOR (SEE AREA PLAN OVERVIEW TEXT)



A NO-BUILD OPTION SHOULD BE CONSIDERED DURING THE CORRIDOR STUDY

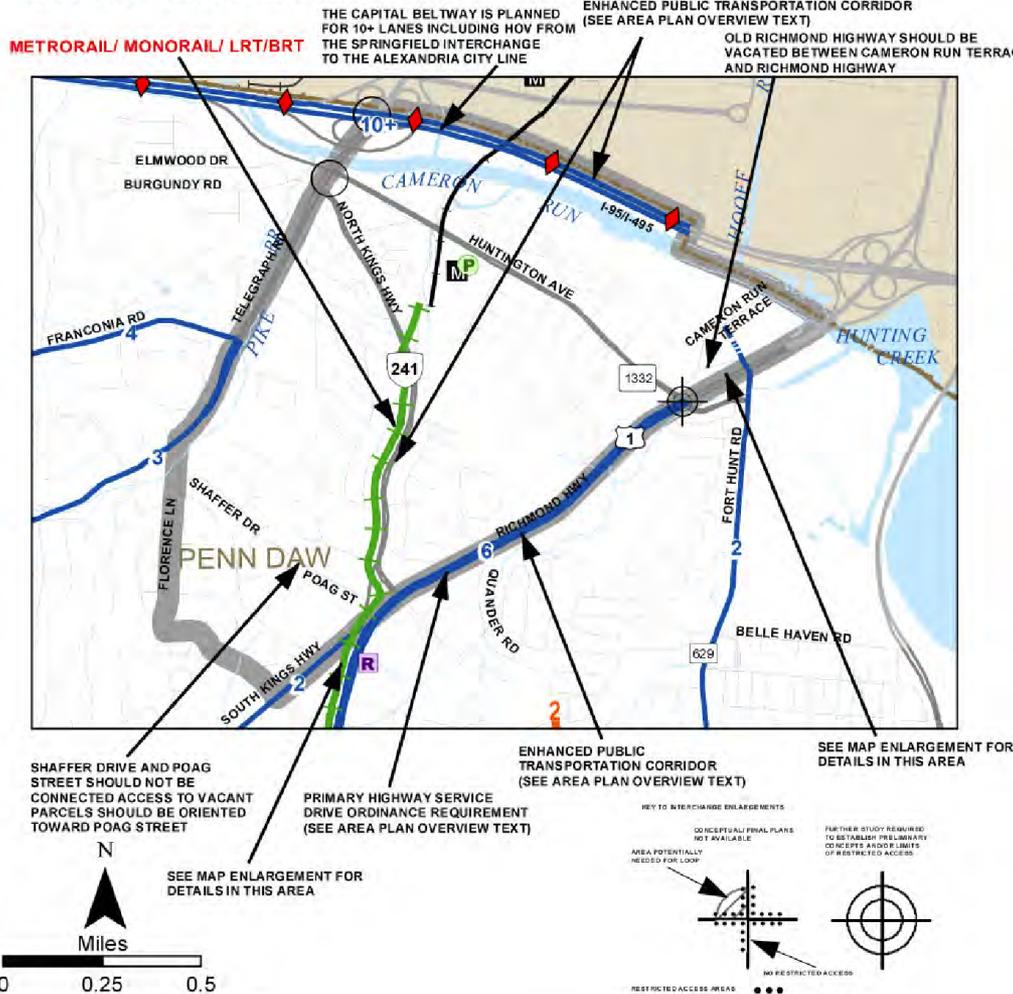
ENHANCED PUBLIC TRANSPORTATION CORRIDOR (SEE AREA PLAN OVERVIEW TEXT)

TRANSPORTATION RECOMMENDATIONS LEGEND

ARTERIAL	COLLECTOR LOCAL	
		WIDEN OR IMPROVE EXISTING ROADWAY
		CONSTRUCT ROADWAY ON NEW LOCATION
	2 4 6 8 10 12	TOTAL NUMBER OF LANES, INCLUDING HOV LANES (COLLECTOR/LOCAL CROSS SECTIONS TO BE FINALIZED DURING PROCESS OF REVIEWING PLANS FOR PROPOSED DEVELOPMENT)
EXISTING	PROPOSED	
		METRORAIL STATION
		COMMUTER PARKING LOT
		TRANSIT TRANSFER CENTER (NO PARKING)
		COMMUTER RAIL STATION
		RAIL STATION
		HIGH OCCUPANCY VEHICLE LANES
		PLANNING SECTOR OR DISTRICT
		CONSTRUCT FULL GRADE-SEPARATED INTERCHANGE OR INTERCHANGE IMPROVEMENTS
		CONSTRUCT PARTIAL GRADE-SEPARATED INTERCHANGE OR INTERCHANGE IMPROVEMENTS
		HIGH OCCUPANCY TOLL LANES
		HIGHWAY OVERPASS
		CUL-DE-SAC
		RAIL TRANSIT OR BUS RAPID TRANSIT (BRT)



MV1 - HUNTINGTON COMMUNITY PLANNING SECTOR



TRANSPORTATION RECOMMENDATIONS LEGEND

ARTERIAL	COLLECTOR LOCAL	
		WIDEN OR IMPROVE EXISTING ROADWAY
		CONSTRUCT ROADWAY ON NEW LOCATION
	2 4 6 8 10 12	TOTAL NUMBER OF LANES, INCLUDING HOV LANES (COLLECTOR/LOCAL CROSS SECTIONS TO BE FINALIZED DURING PROCESS OF REVIEWING PLANS FOR PROPOSED DEVELOPMENT)
EXISTING	PROPOSED	
		METRORAIL STATION
		COMMUTER PARKING LOT
		TRANSIT TRANSFER CENTER (NO PARKING)
		COMMUTER RAIL STATION
		RAIL STATION
		HIGH OCCUPANCY VEHICLE LANES
		PLANNING SECTOR OR DISTRICT
		CONSTRUCT FULL GRADE-SEPARATED INTERCHANGE OR INTERCHANGE IMPROVEMENTS
		CONSTRUCT PARTIAL GRADE-SEPARATED INTERCHANGE OR INTERCHANGE IMPROVEMENTS
		HIGH OCCUPANCY TOLL LANES
		HIGHWAY OVERPASS
		CUL-DE-SAC
		RAIL TRANSIT OR BUS RAPID TRANSIT (BRT)



County of Fairfax, Virginia

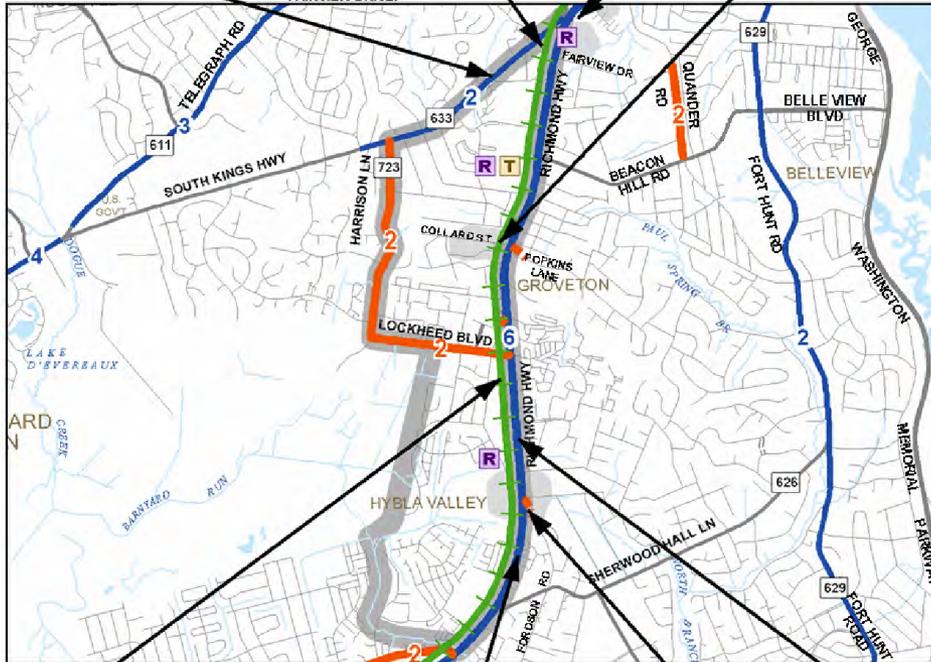
MV2 - HYBLA VALLEY COMMUNITY PLANNING SECTOR

NOTE: SOUTH KINGS HIGHWAY TO BE CONSTRUCTED TO INCLUDE FULL WIDTH TURN LANES

PROVIDE A NEW ROAD CONNECTION BETWEEN RICHMOND HIGHWAY AND SOUTH KINGS HIGHWAY IN THE GENERAL AREA, AS REDEVELOPMENT OCCURS, NOT AS AN EXTENSION OF FAIRVIEW DRIVE.

SEE MAP ENLARGEMENT FOR DETAILS IN THIS AREA

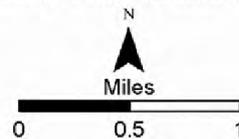
ALIGN POPKINS LANE AND COLLARD STREET AT COLLARD STREET'S CURRENT LOCATION



METRORAIL/ MONORAIL/ LRT/BRT

PRIMARY HIGHWAY SERVICE DRIVE ORDINANCE REQUIREMENT (SEE AREA PLAN OVERVIEW TEXT)

ENHANCED PUBLIC TRANSPORTATION CORRIDOR (SEE AREA PLAN OVERVIEW)



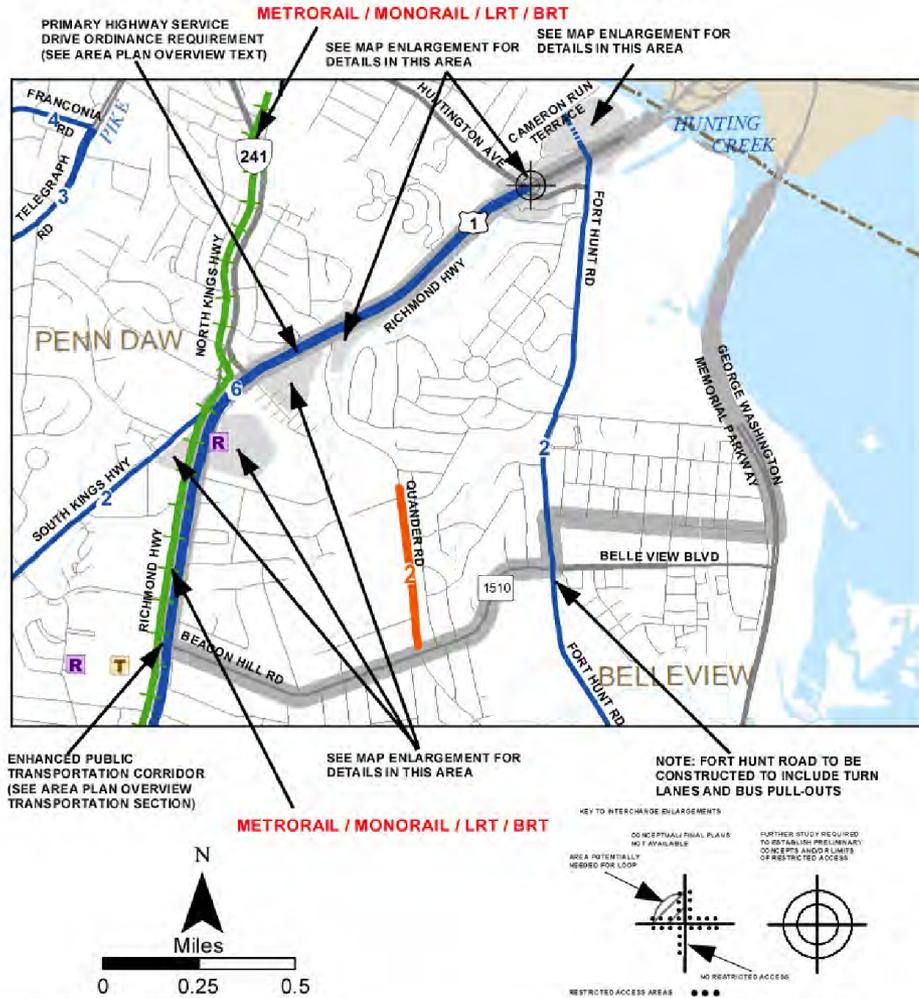
TRANSPORTATION RECOMMENDATIONS LEGEND

- | | | |
|-----------------|------------------------|---|
| ARTERIAL | COLLECTOR LOCAL | |
| | | WIDEN OR IMPROVE EXISTING ROADWAY |
| | | CONSTRUCT ROADWAY ON NEW LOCATION |
| | | TOTAL NUMBER OF LANES, INCLUDING HOV LANES (COLLECTOR/LOCAL CROSS SECTIONS TO BE FINALIZED DURING PROCESS OF REVIEWING PLANS FOR PROPOSED DEVELOPMENT) |
| | | 2 4 6 8
10 12 |
| EXISTING | PROPOSED | |
| | | METRORAIL STATION |
| | | COMMUTER PARKING LOT |
| | | TRANSIT TRANSFER CENTER (NO PARKING) |
| | | COMMUTER RAIL STATION |
| | | RAIL STATION |
| | | HIGH OCCUPANCY VEHICLE LANES |
| | | PLANNING SECTOR OR DISTRICT |
| | | CONSTRUCT FULL GRADE-SEPARATED INTERCHANGE OR INTERCHANGE IMPROVEMENTS |
| | | CONSTRUCT PARTIAL GRADE-SEPARATED INTERCHANGE OR INTERCHANGE IMPROVEMENTS |
| | | HIGH OCCUPANCY TOLL LANES |
| | | HIGHWAY OVERPASS |
| | | CUL-DE-SAC |
| | | RAIL TRANSIT OR BUS RAPID TRANSIT (BRT) |



County of Fairfax, Virginia

MV3 - BELLE HAVEN COMMUNITY PLANNING SECTOR



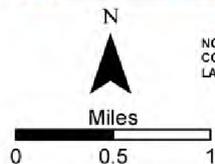
TRANSPORTATION RECOMMENDATIONS LEGEND

ARTERIAL	COLLECTOR LOCAL	
		WIDEN OR IMPROVE EXISTING ROADWAY
		CONSTRUCT ROADWAY ON NEW LOCATION
	2 4 6 8	TOTAL NUMBER OF LANES, INCLUDING HOV LANES (COLLECTOR/LOCAL CROSS SECTIONS TO BE FINALIZED DURING PROCESS OF REVIEWING PLANS FOR PROPOSED DEVELOPMENT)
	10 12	
EXISTING	PROPOSED	
		METRORAIL STATION
		COMMUTER PARKING LOT
		TRANSIT TRANSFER CENTER (NO PARKING)
		COMMUTER RAIL STATION
		RAIL STATION
		HIGH OCCUPANCY VEHICLE LANES
		PLANNING SECTOR OR DISTRICT
		CONSTRUCT FULL GRADE-SEPARATED INTERCHANGE OR INTERCHANGE IMPROVEMENTS
		CONSTRUCT PARTIAL GRADE-SEPARATED INTERCHANGE OR INTERCHANGE IMPROVEMENTS
		HIGH OCCUPANCY TOLL LANES
		HIGHWAY OVERPASS
		CUL-DE-SAC
		RAIL TRANSIT OR BUS RAPID TRANSIT (BRT)

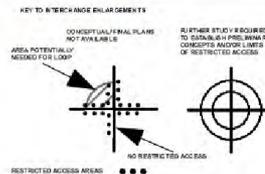


County of Fairfax, Virginia

MV4 - WELLINGTON COMMUNITY PLANNING SECTOR



NOTE: FORT HUNT ROAD TO BE CONSTRUCTED TO INCLUDE TURN LANES AND BUS PULL-OUTS



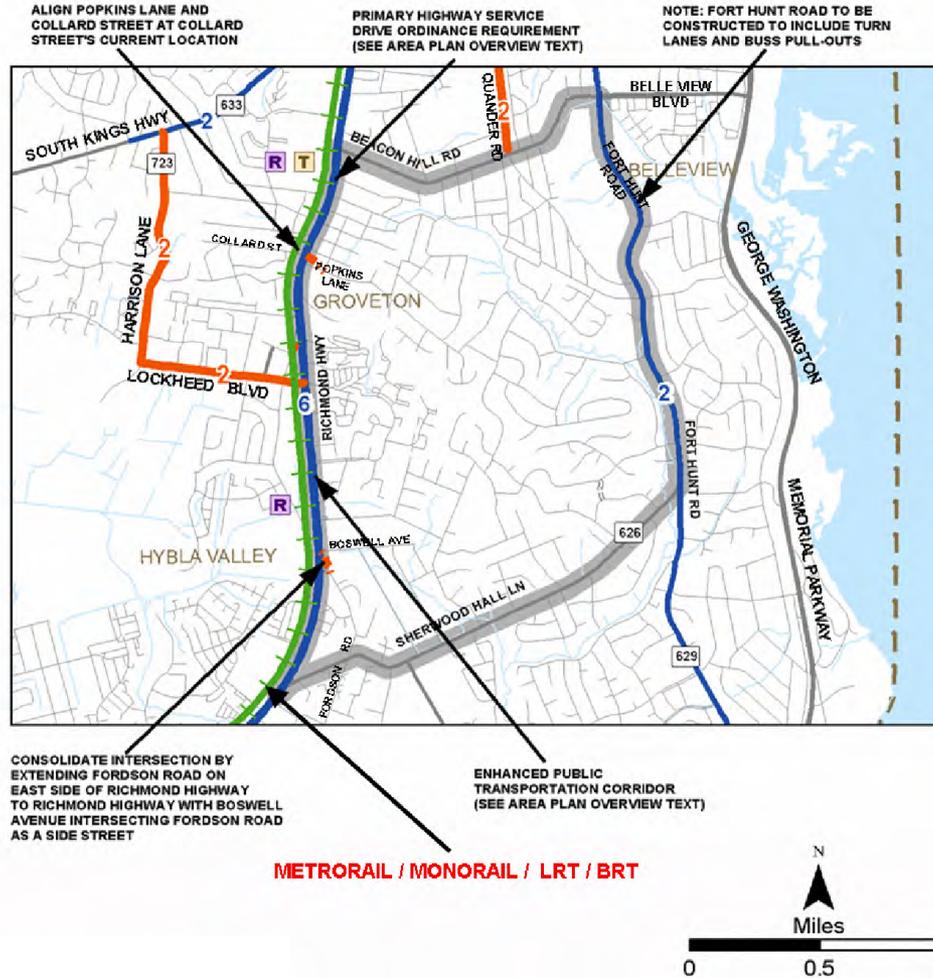
TRANSPORTATION RECOMMENDATIONS LEGEND

- | | | |
|-----------------|------------------------|---|
| ARTERIAL | COLLECTOR LOCAL | |
| | | WIDEN OR IMPROVE EXISTING ROADWAY |
| | | CONSTRUCT ROADWAY ON NEW LOCATION |
| | | TOTAL NUMBER OF LANES, INCLUDING HOV LANES (COLLECTOR/LOCAL CROSS SECTIONS TO BE FINALIZED DURING PROCESS OF REVIEWING PLANS FOR PROPOSED DEVELOPMENT) |
| | | 2 4 6 8
10 12 |
| EXISTING | PROPOSED | |
| | | METRORAIL STATION |
| | | COMMUTER PARKING LOT |
| | | TRANSIT TRANSFER CENTER (NO PARKING) |
| | | COMMUTER RAIL STATION |
| | | RAIL STATION |
| | | HIGH OCCUPANCY VEHICLE LANES |
| | | PLANNING SECTOR OR DISTRICT |
| | | CONSTRUCT FULL GRADE-SEPARATED INTERCHANGE OR INTERCHANGE IMPROVEMENTS |
| | | CONSTRUCT PARTIAL GRADE-SEPARATED INTERCHANGE OR INTERCHANGE IMPROVEMENTS |
| | | HIGH OCCUPANCY TOLL LANES |
| | | HIGHWAY OVERPASS |
| | | CUL-DE-SAC |
| | | RAIL TRANSIT OR BUS RAPID TRANSIT (BRT) |



County of Fairfax, Virginia

MV5 - GROVETON COMMUNITY PLANNING SECTOR



METRORAIL / MONORAIL / LRT / BRT

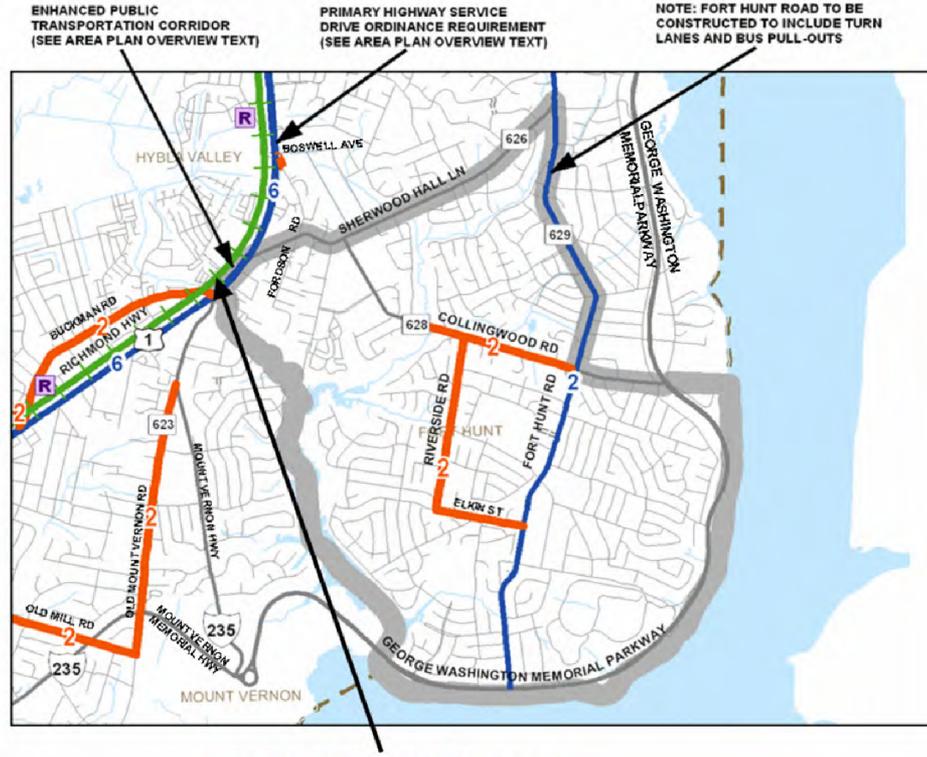
TRANSPORTATION RECOMMENDATIONS LEGEND

- | | | |
|-----------------|------------------------|---|
| ARTERIAL | COLLECTOR LOCAL | |
| | | WIDEN OR IMPROVE EXISTING ROADWAY |
| | | CONSTRUCT ROADWAY ON NEW LOCATION |
| | | TOTAL NUMBER OF LANES, INCLUDING HOV LANES (COLLECTOR/LOCAL CROSS SECTIONS TO BE FINALIZED DURING PROCESS OF REVIEWING PLANS FOR PROPOSED DEVELOPMENT) |
| | 2 4 6 8 | |
| | 10 12 | |
| EXISTING | PROPOSED | |
| | | METRORAIL STATION |
| | | COMMUTER PARKING LOT |
| | | TRANSIT TRANSFER CENTER (NO PARKING) |
| | | COMMUTER RAIL STATION |
| | | RAIL STATION |
| | | HIGH OCCUPANCY VEHICLE LANES |
| | | PLANNING SECTOR OR DISTRICT |
| | | CONSTRUCT FULL GRADE-SEPARATED INTERCHANGE OR INTERCHANGE IMPROVEMENTS |
| | | CONSTRUCT PARTIAL GRADE-SEPARATED INTERCHANGE OR INTERCHANGE IMPROVEMENTS |
| | | HIGH OCCUPANCY TOLL LANES |
| | | HIGHWAY OVERPASS |
| | | CUL-DE-SAC |
| | | RAIL TRANSIT OR BUS RAPID TRANSIT (BRT) |



County of Fairfax, Virginia

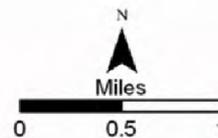
MV6 - FORT HUNT COMMUNITY PLANNING SECTOR



METRORAIL / MONORAIL / LRT / BRT

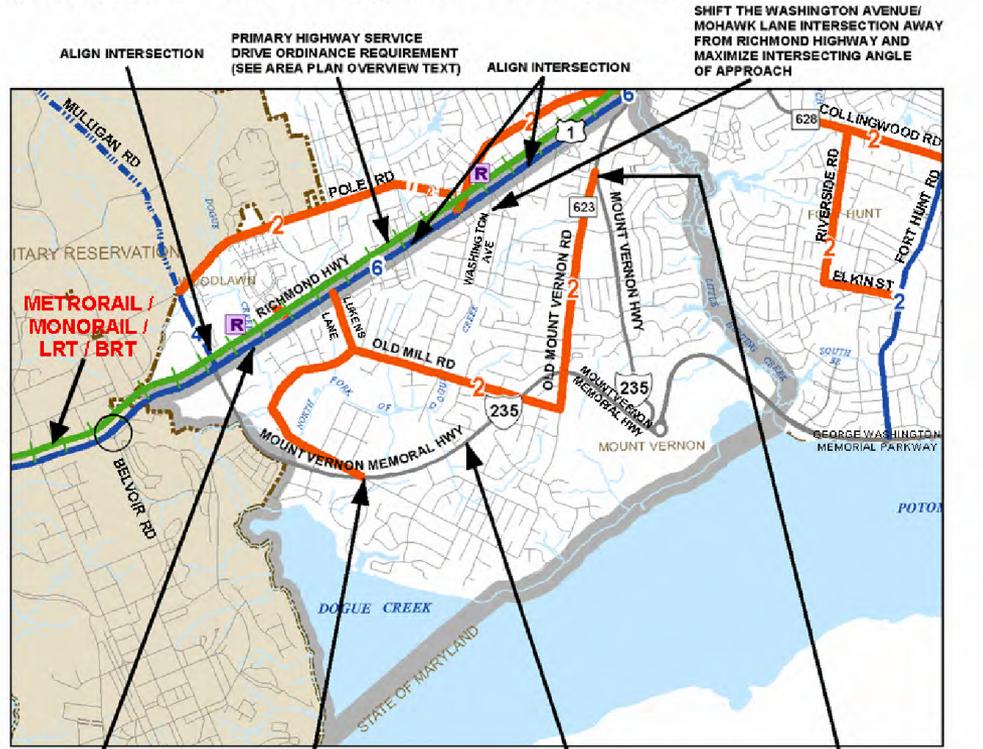
TRANSPORTATION RECOMMENDATIONS LEGEND

ARTERIAL	COLLECTOR LOCAL	
		WIDEN OR IMPROVE EXISTING ROADWAY
		CONSTRUCT ROADWAY ON NEW LOCATION
	2 4 6 8	TOTAL NUMBER OF LANES, INCLUDING HOV LANES
	10 12	(COLLECTOR/LOCAL CROSS SECTIONS TO BE FINALIZED DURING PROCESS OF REVIEWING PLANS FOR PROPOSED DEVELOPMENT)
EXISTING	PROPOSED	
		METRORAIL STATION
		COMMUTER PARKING LOT
		TRANSIT TRANSFER CENTER (NO PARKING)
		COMMUTER RAIL STATION
		RAIL STATION
		HIGH OCCUPANCY VEHICLE LANES
		PLANNING SECTOR OR DISTRICT
		CONSTRUCT FULL GRADE-SEPARATED INTERCHANGE OR INTERCHANGE IMPROVEMENTS
		CONSTRUCT PARTIAL GRADE-SEPARATED INTERCHANGE OR INTERCHANGE IMPROVEMENTS
		HIGH OCCUPANCY TOLL LANES
		HIGHWAY OVERPASS
		CUL-DE-SAC
		RAIL TRANSIT OR BUS RAPID TRANSIT (BRT)





MV7 - MOUNT VERNON COMMUNITY PLANNING SECTOR

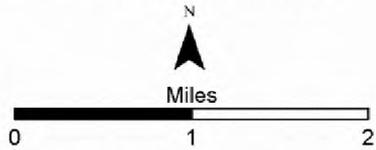


ENHANCED PUBLIC TRANSPORTATION CORRIDOR (SEE AREA PLAN OVERVIEW TEXT)

IMPROVE INTERSECTION ALIGNMENTS AND SPACING

PRIMARY HIGHWAY SERVICE DRIVE ORDINANCE REQUIREMENT (SEE AREA PLAN OVERVIEW TEXT)

IMPROVE INTERSECTION ALIGNMENT SO THAT NORTHBOUND OLD MOUNT VERNON ROAD TRAFFIC WILL TURN ONTO MOUNT VERNON HIGHWAY



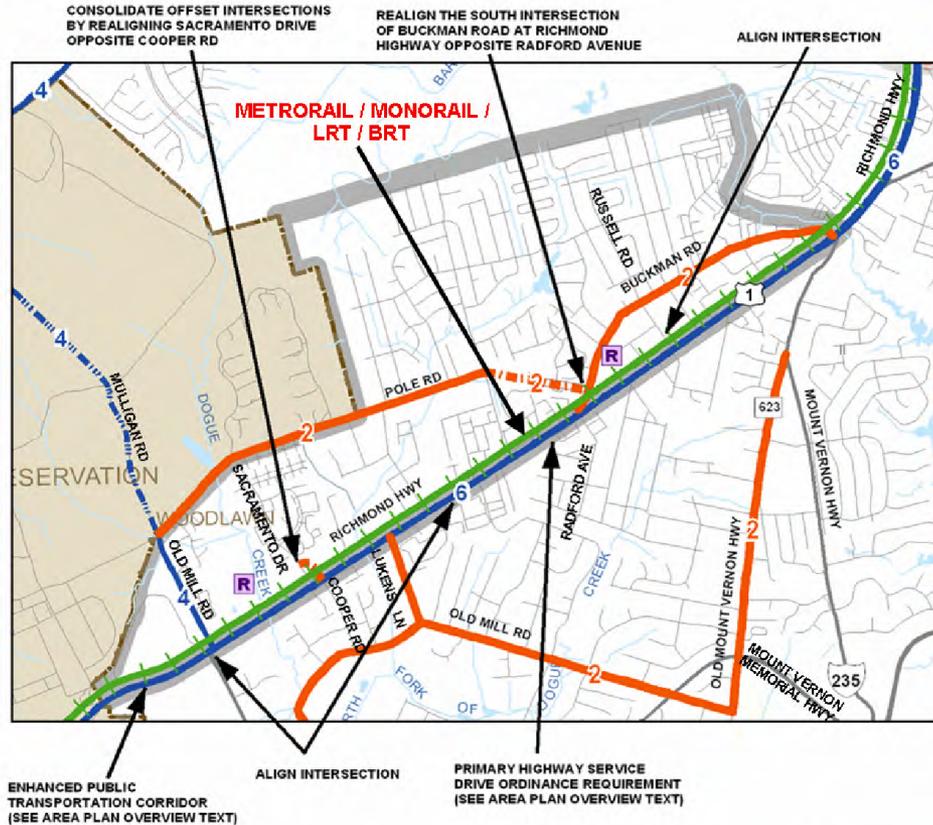
TRANSPORTATION RECOMMENDATIONS LEGEND

ARTERIAL	COLLECTOR LOCAL	
		WIDEN OR IMPROVE EXISTING ROADWAY
		CONSTRUCT ROADWAY ON NEW LOCATION
		TOTAL NUMBER OF LANES, INCLUDING HOV LANES (COLLECTOR/LOCAL CROSS SECTIONS TO BE FINALIZED DURING PROCESS OF REVIEWING PLANS FOR PROPOSED DEVELOPMENT)
		2 4 6 8
		10 12
EXISTING	PROPOSED	
		METRORAIL STATION
		COMMUTER PARKING LOT
		TRANSIT TRANSFER CENTER (NO PARKING)
		COMMUTER RAIL STATION
		RAIL STATION
		HIGH OCCUPANCY VEHICLE LANES
		PLANNING SECTOR OR DISTRICT
		CONSTRUCT FULL GRADE-SEPARATED INTERCHANGE OR INTERCHANGE IMPROVEMENTS
		CONSTRUCT PARTIAL GRADE-SEPARATED INTERCHANGE OR INTERCHANGE IMPROVEMENTS
		HIGH OCCUPANCY TOLL LANES
		HIGHWAY OVERPASS
		CUL-DE-SAC
		RAIL TRANSIT OR BUS RAPID TRANSIT (BRT)



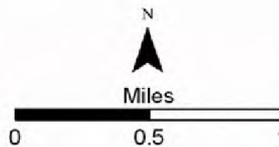
County of Fairfax, Virginia

MV8 - WOODLAWN COMMUNITY PLANNING SECTOR



TRANSPORTATION RECOMMENDATIONS LEGEND

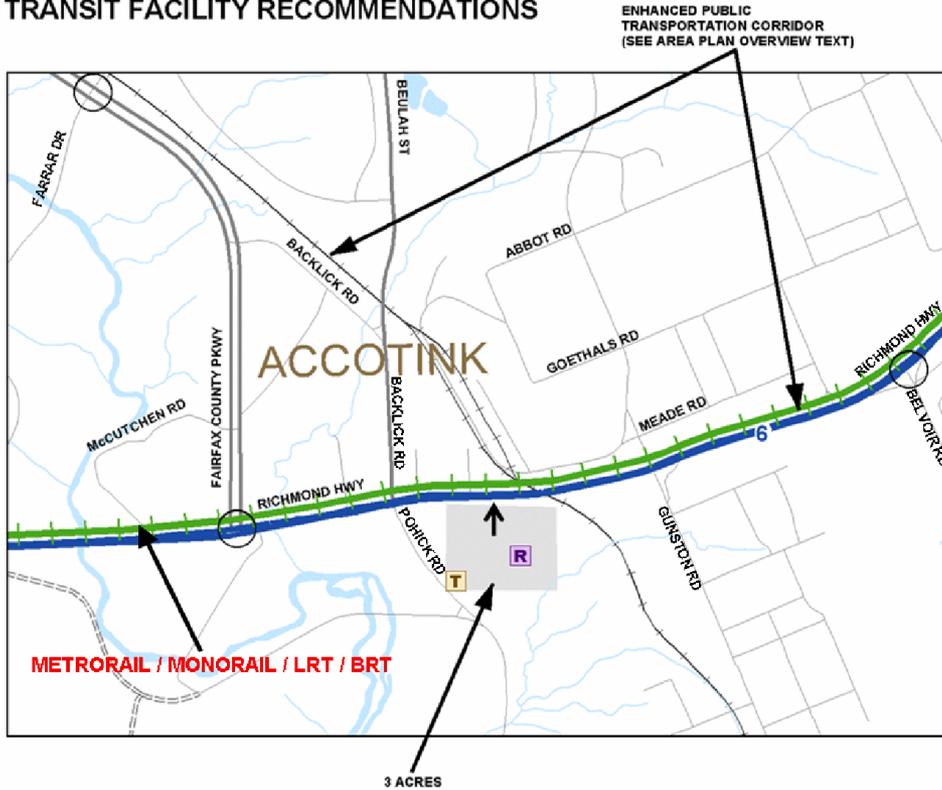
ARTERIAL	COLLECTOR LOCAL	
		WIDEN OR IMPROVE EXISTING ROADWAY
		CONSTRUCT ROADWAY ON NEW LOCATION
		TOTAL NUMBER OF LANES, INCLUDING HOV LANES (COLLECTOR/LOCAL CROSS SECTIONS TO BE FINALIZED DURING PROCESS OF REVIEWING PLANS FOR PROPOSED DEVELOPMENT)
		2 4 6 8 10 12
EXISTING	PROPOSED	
		METRORAIL STATION
		COMMUTER PARKING LOT
		TRANSIT TRANSFER CENTER (NO PARKING)
		COMMUTER RAIL STATION
		RAIL STATION
		HIGH OCCUPANCY VEHICLE LANES
		PLANNING SECTOR OR DISTRICT
		CONSTRUCT FULL GRADE-SEPARATED INTERCHANGE OR INTERCHANGE IMPROVEMENTS
		CONSTRUCT PARTIAL GRADE-SEPARATED INTERCHANGE OR INTERCHANGE IMPROVEMENTS
		HIGH OCCUPANCY TOLL LANES
		HIGHWAY OVERPASS
		CUL-DE-SAC
		RAIL TRANSIT OR BUS RAPID TRANSIT (BRT)





County of Fairfax, Virginia

LP4 - FORT BELVOIR COMMUNITY PLANNING SECTOR TRANSIT FACILITY RECOMMENDATIONS



TRANSPORTATION RECOMMENDATIONS LEGEND

ARTERIAL	COLLECTOR LOCAL	
		WIDEN OR IMPROVE EXISTING ROADWAY
		CONSTRUCT ROADWAY ON NEW LOCATION
	2 4 6 8	TOTAL NUMBER OF LANES, INCLUDING HOV LANES (COLLECTOR/LOCAL CROSS SECTIONS TO BE FINALIZED DURING PROCESS OF REVIEWING PLANS FOR PROPOSED DEVELOPMENT)
	10 12	
EXISTING	PROPOSED	
		METRORAIL STATION
		COMMUTER PARKING LOT
		TRANSIT TRANSFER CENTER (NO PARKING)
		COMMUTER RAIL STATION
		RAIL STATION
		HIGH OCCUPANCY VEHICLE LANES
		PLANNING SECTOR OR DISTRICT
		CONSTRUCT FULL GRADE-SEPARATED INTERCHANGE OR INTERCHANGE IMPROVEMENTS
		CONSTRUCT PARTIAL GRADE-SEPARATED INTERCHANGE OR INTERCHANGE IMPROVEMENTS
		HIGH OCCUPANCY TOLL LANES
		HIGHWAY OVERPASS
		CUL-DE-SAC
		RAIL TRANSIT OR BUS RAPID TRANSIT (BRT)

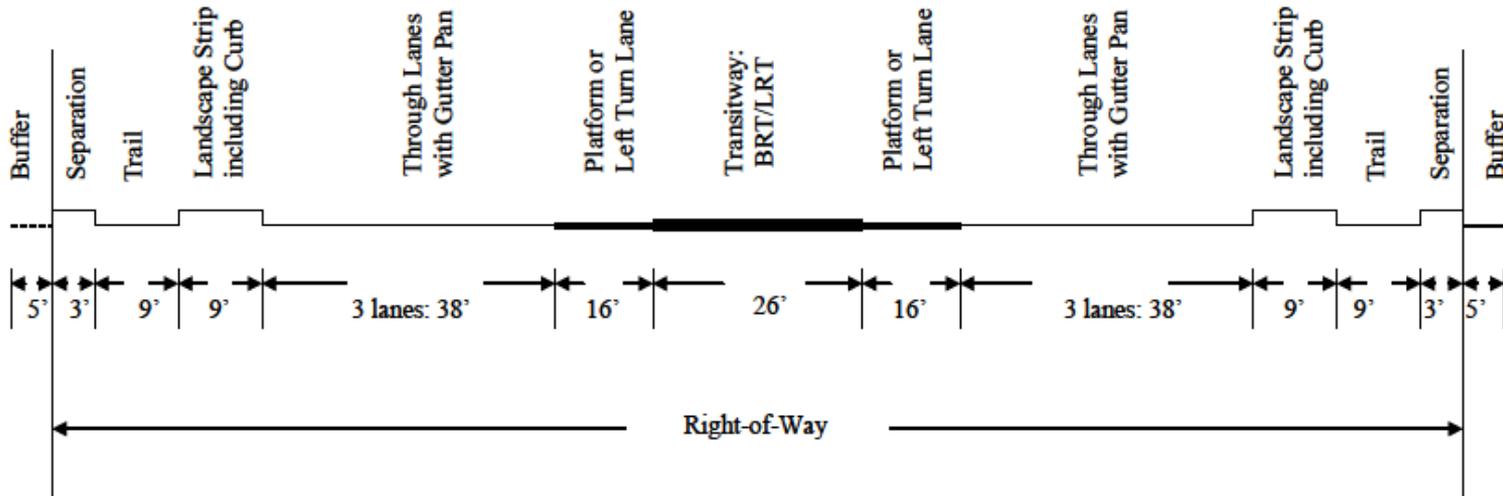




Comprehensive Plan Cross-Section Transportation Policy Plan

FIGURE 7

Richmond Highway Cross Section
Including At-Grade Transitway in Center
(Measurement in Feet)



Cross-Section will be evaluated as part of Comprehensive Plan Amendment



Questions and Discussion