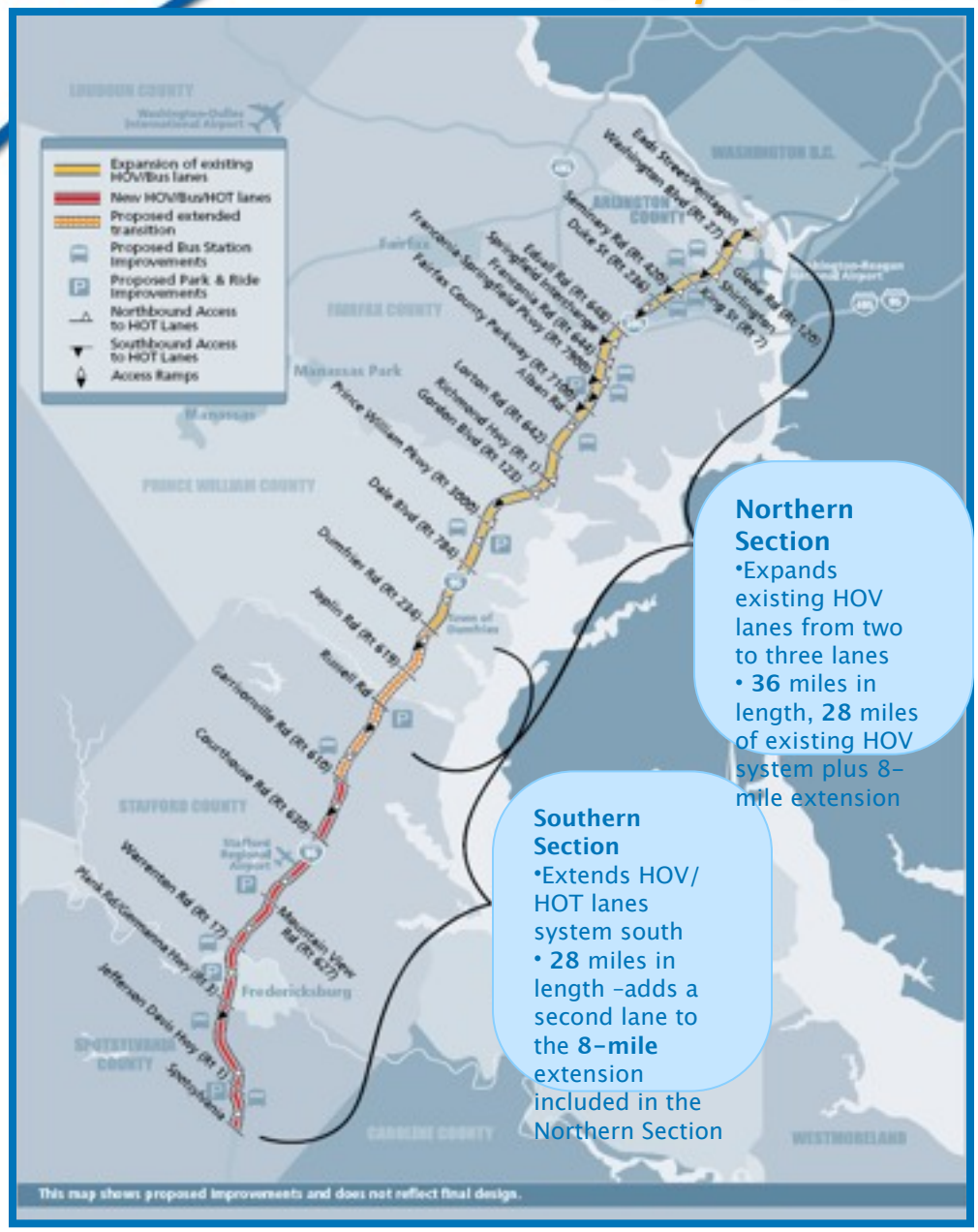
# I-95/395 HOT Lanes Project Update

## Fairfax County Board of Supervisors

## Transportation Subcommittee

# I-95/395 HOV/Bus/HOT Lanes



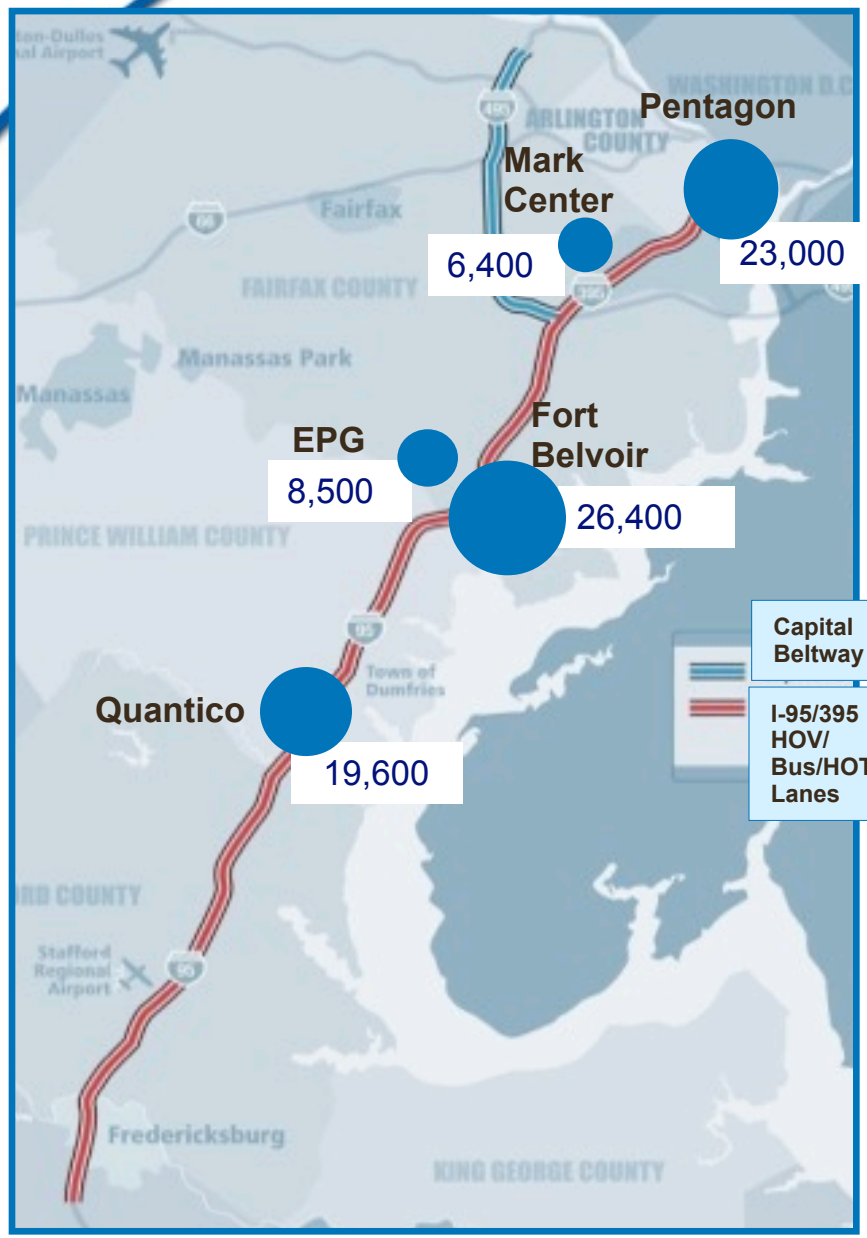

## Northern Section

- Expands existing High Occupancy Vehicle (HOV) lanes from 2 to 3 lanes
- Existing HOV system plus 8 mile extension – Eads Street to Garrisonville Road
- Network of HOV/Transit Corridors

## Southern Section

- New 2 lane reversible extension
- 28 miles in length – adds a second lane to the 8-mile extension included in the Northern Section
- Extends HOV/HOT system south to Massaponax, Spotsylvania County

# I-95/395 HOT Lanes serve current




The I-95/395 is an important and unique corridor because it serves current and future military bases.

It serves five military bases:

- Pentagon
- Mark Center at Seminary Road
- Fort Belvoir
- Engineer Proving Ground
- Quantico

Combined they employee **84,000** people.

# Features of the I-95/395 HOT Lanes

## Key Features

- Offers new travel options

- Increases transit and HOV options and capacity
  - 3,000 new Park-and-Ride spaces – 3,750 more recommended
  - Potential BRT operations and stations
  - Improvements to VRE and transit stations
  - New transit routes and buses

- New and improved access points
  - 8 new access points
  - 7 improved access points

# Features of the I-95/395 HOT Lanes

- Reduces current bottlenecks at both termini
  - Pentagon at Eads Street
  - Dumfries
- No right of way needed – only minor temporary easements
- Actively managed facility via congestion pricing – most efficient way to get the most out of infrastructure
- Advance project quicker through private financing and partnership

# Study Background

- Transit/Transportation Demand Management (TDM) Study conducted by DRPT with the Technical Advisory Committee to recommend improvements above and beyond the HOT Lanes scope

- Funding for improvements:
  - **Fluor/Transurban contribution – $195 million**

- Revenue dedicated to Transit/TDM improvements is subject to final negotiation by VDOT, Fluor/Transurban and allocation by the CTB

# Framework for Analysis

- **More than 60 Alternatives suggested by the Technical Advisory Committee and the study team for testing**
- **Alternatives combined into three tiers of investment for evaluation**
- **Methodology for Evaluating Alternatives**
  - Public and Stakeholder Input
  - Market analysis survey (3,300 respondents)
  - Current and forecast travel demand in the study area

# Recommendations

- **Service Modifications**
  - Bus frequency increases
  - Bus service extensions
  - Increase VRE train length on three trains to 8 cars, and four trains to six cars.
- **New Services**
- **Facility Improvements**
  - New and Improved Transit Centers
  - Four in-line BRT stations along HOT lane corridor
  - VRE Fredericksburg Line platform extensions – 4 stations
  - Increased overnight parking for VRE trains in Fredericksburg
  - Additional 3,750 park-and-ride spaces

# BRT Operational Analysis

# BRT Operational Study Scope Includes:

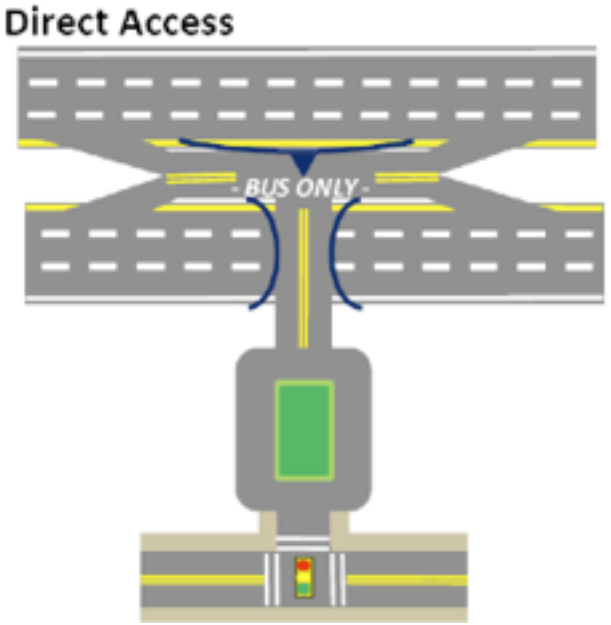
- BRT Station concepts and location studies;
- BRT system regional performance modeling;
- Parking support modeling and studies;
- Fatal flaw analysis for stations and parking facilities;
- Station area plans for five stations on the I-95/395 corridor and for station in Tysons Corner (location to be determined);
- VISSIM simulations for all station areas to determine operations; and

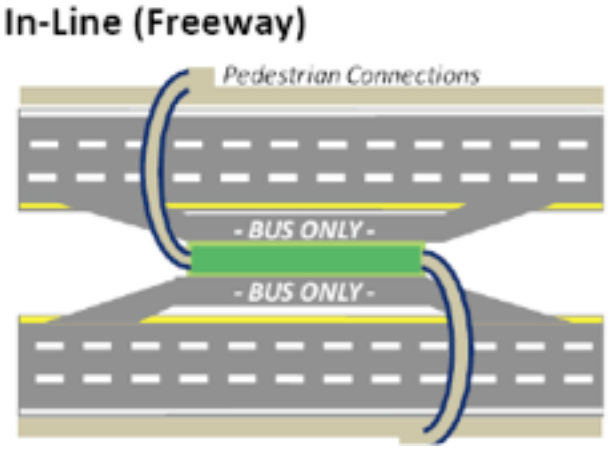
# How does BRT fit into the public transportation system in Northern

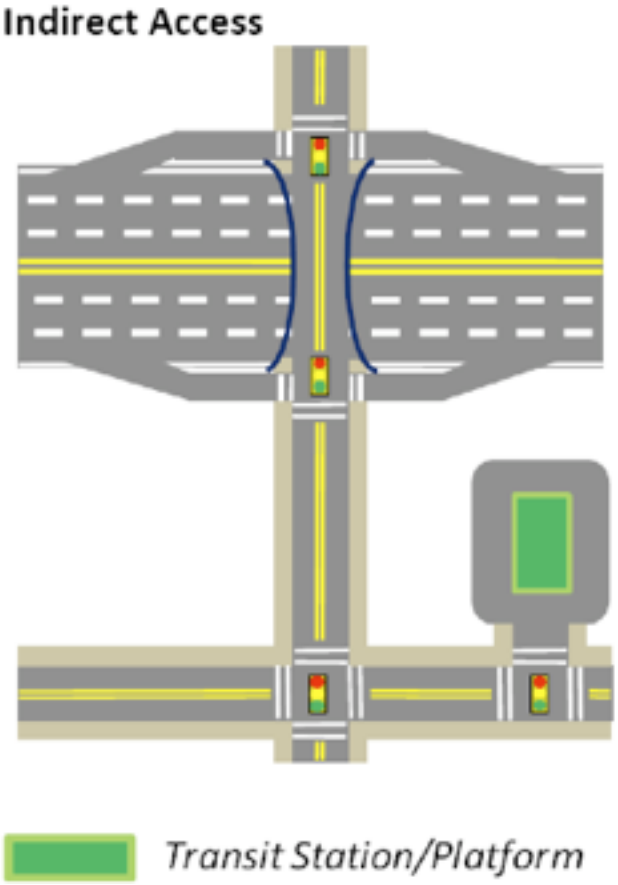
| | MODE | | Description | Example |
|---|---|---|---|---|
| | Heavy Rail |  | High-speed, passenger cars on fixed rails in separate rights-of-way from which all other vehicular and foot traffic are excluded. | Metrorail (WMATA) |
| | Commuter Rail |  | Long-haul rail passenger service operating between metropolitan and suburban areas, usually characterized by reduced fares for multiple rides. Typically peak hours and weekday only operations. | Virginia Railway Express<br>MARC (MTA) |
| | Light Rail/ Streetcar |  | Lightweight passenger rail cars operating singly (or in short, usually two-car, trains) on fixed rails in right-of-way that is not separated from other traffic for much of the way. | New Carrolton to Silver Spring Purple Line – proposed, Anacostia, H Street Streetcar |
| ENVISIONED FIT FOR BRT | Express Bus |  | Buses operating on a faster schedule by not making as many stops as normal bus services and often taking quicker routes, that other buses usually do not, such as along freeways. | Richmond Highway Express (WMATA)<br>Franconia-Springfield/Pentagon Express – RT 380 (Fairfax Connector) |
| ENVISIONED FIT FOR BRT | Commuter Bus |  | Motor coach featuring comfortable all seated interior with inter-urban or suburban service to major employment centers. Typically peak hours and weekday only operations. | Loudoun Transit<br>OmniRide (PRTC) |
| | Local Bus |  | Bus serving an area confined to a specific locale, such as a downtown area or suburban neighborhood with connections to major activity centers or traffic corridors. | Arlington Transit<br>DASH<br>Fairfax Connector<br>PRTC<br>WMATA<br>Private Shuttles |

# I-95/I-395 Transit/TDM Study

# What are the types of stations?



# Station Location Studies


# LORTON – VRE STATION

## AM PEAK

I-95 Peak Direction

Route **TO** Station

Route **FROM** Stati

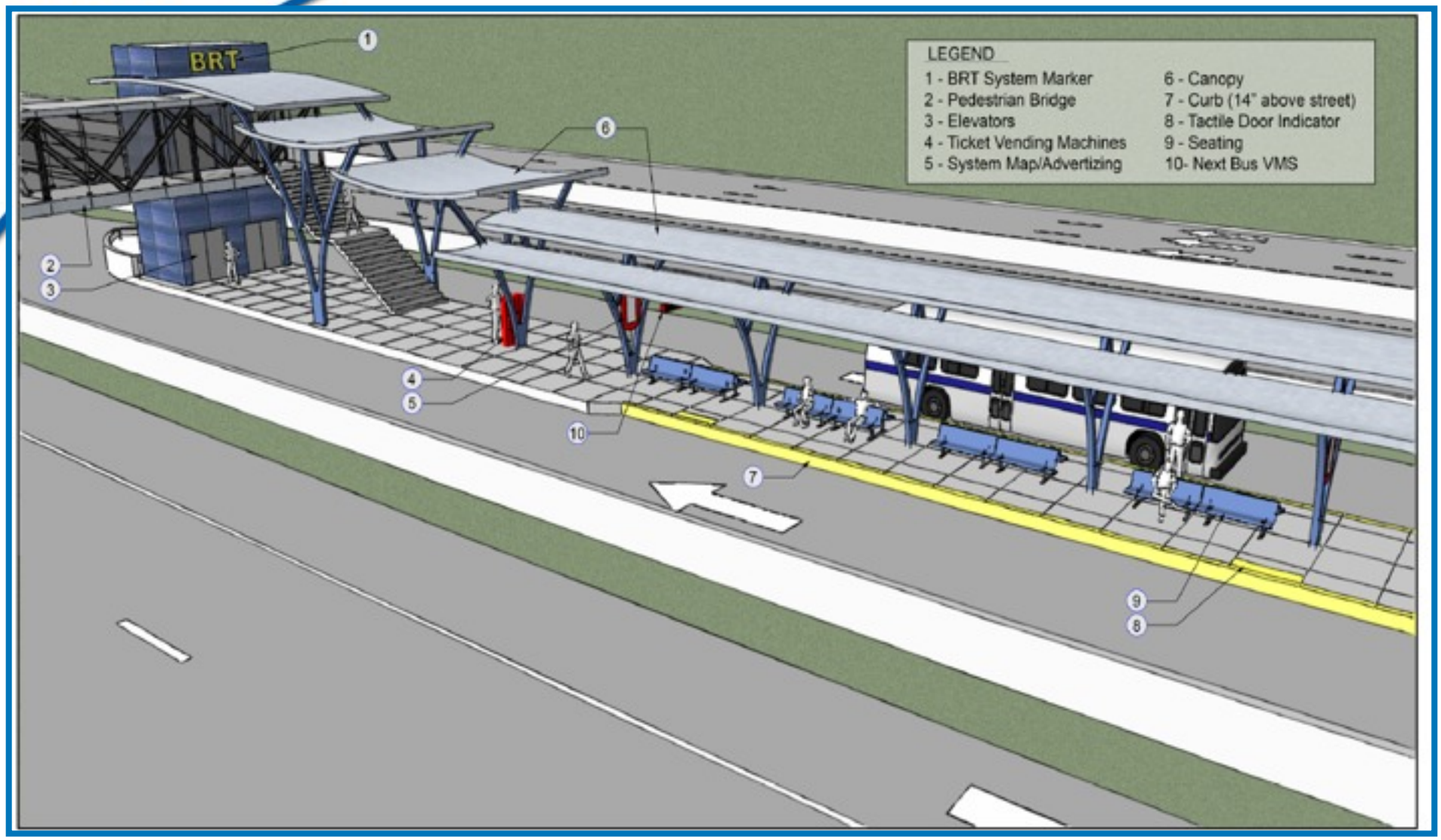
Station Facility

New Pedestrian Connection

# Preliminary Lorton In-line Bus Transfer Station

# Prototypical In-Line Station Features

## BRT Lorton Station Concept

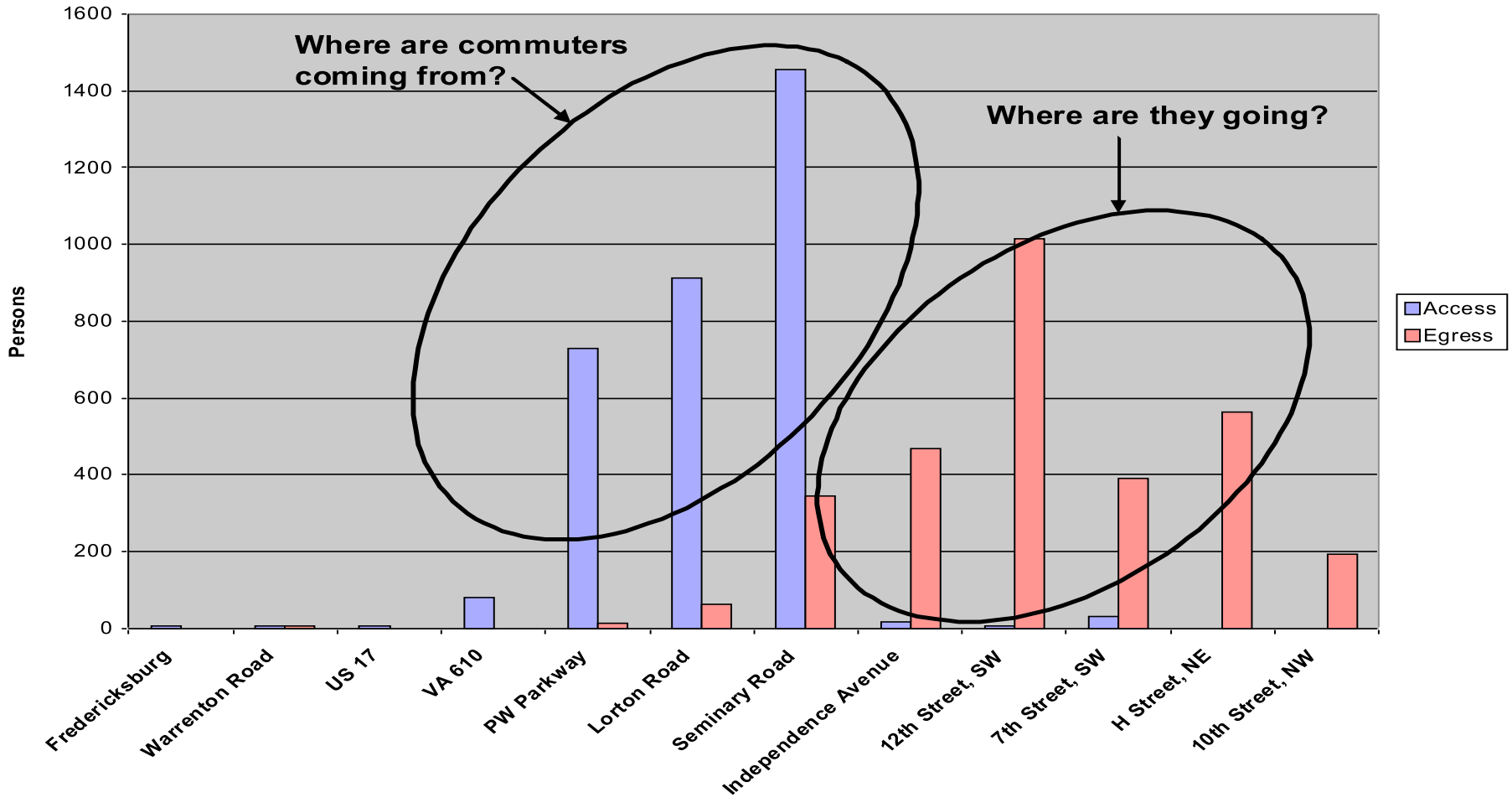



# BRT Lorton Station Concept

# Preliminary Forecast Overview
# Primary Observations

- More than 12,000 average weekday BRT daily boardings access at least one BRT station in corridor
- Principle BRT commuter peak period market is to/from downtown Washington D.C.
- Approx. 80% of BRT patrons in D.C. commuter market were traveling by automobile
- Lower BRT demand from Massaponax and Fredericksburg station areas – demand being evaluated
- Very little BRT demand for Fort Belvoir or Crystal City service
- Highest demand for access to BRT at Seminary Road and Lorton Road stations
- Highest demand for egress from BRT at 12th Street, SW

# Preliminary Forecast Overview Corridor Station Activity Summary –



# Schedule

- Data Collection – January / February 2009
- Station Area Location Planning – March 2009
- Operational Modeling – April – May 2009

www.vamegaprojects.com

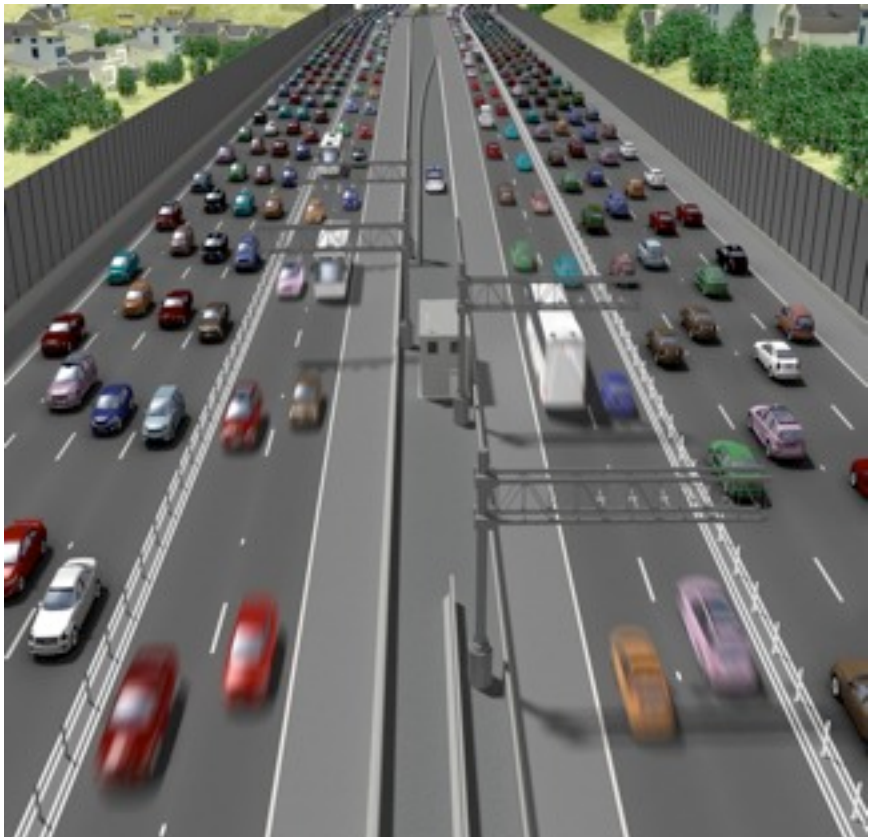
1-877-395-95VA

# Capital Beltway HOT Lanes Project

## *Fairfax County Board of Supervisors*

# AGENDA

- Project Update
- Construction Activities 2009
- Local Network Operations
- Communications Update



# Project Corridor Update

- Clearing will continue at a reduced rate throughout the project corridor, most areas cleared.
- Bridge and retaining wall construction underway.
- Ongoing construction of bridge piers and abutments.
- Bridge girder installation will occur starting in late June 2009.
- Noise barrier post installation started, some panels installed.
- Utility and ground work ongoing throughout the project corridor.

# Construction Update

## Little River Turnpike

Bridge construction continues off the current alignment, steel girder installation July 2009.

## Arlington Boulevard

Bridge construction continues off the current alignment with concrete girder installation to occur in late June/July 2009. 24/7 left lane closures in place.

## Interstate 66

Phase One of two bridges on eastbound I-66 underway; steel beam removal completed on two bridges on I-66 east. Bridge construction continues off the current alignment. Steel girder installation at I-66 west over I-495 south to occur to late June/July 2009.

# Construction Update

## Chain Bridge Road

24/7 left lane closures in place until November 2009 for I-495 south bridge construction. The lanes will reopen for the 2009 holiday shopping season and close again in early 2010 for 18-24 months. Bridge construction will continue along with coordination with the Dulles Metrorail Project.

## Dulles Toll Road

Design/Construction continues on work throughout the interchange. Proposed improvements to MWAA ramps (improving existing weave/merge ramp conditions) remain under design/development in coordination with MWAA and the Concessionaire.

# Local Network Operations

- 80 traffic counts conducted along the I-495 project corridor
  - 69 tube counts
  - 11 Turning Movement Counts
- Additional counts will be taken this week
- Project team has recounted 10 locations since the traffic shifts occurred and none of the recounted streets have activated the tiered approach.

# Communications Update

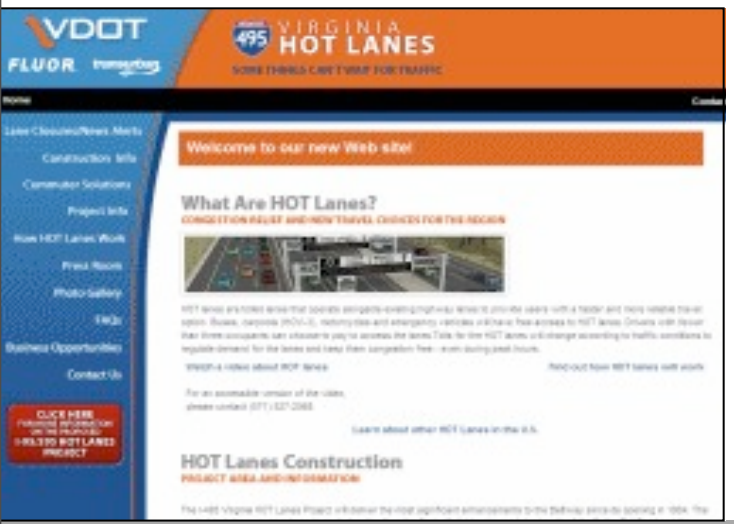
- Held over 260 outreach meetings with elected officials, communities and businesses.
- Continue one-on-one elected official outreach with the Board of Supervisors and General Assembly Members.
- Continue door-to-door and mailing notifications to impacted communities.
- Continue outreach with updated information on the project web site, monthly project newsletter, weekly emails on construction activities/ lane closures and media advertisements.

# STAY INFORMED

## www.VAmegaprojects.com


***Provides information on:***

lane closures, travel advisories, email alert sign-up, multiple project links




## www.virginiahotlanes.com

Provides information on:

*project details/benefits, detailed construction info/timeline, sign up for progress updates and look ahead at future work*

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