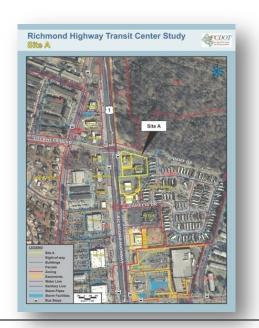
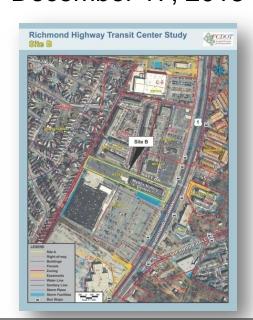
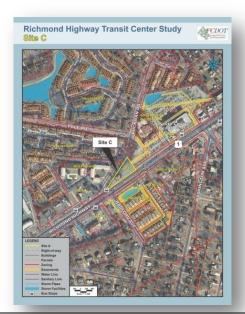
# Richmond Highway Transit Center Feasibility Study

Briefing with the Fairfax County
Transportation Advisory Commission
December 17, 2013















### **Outline**

- General overview of project
- Conceptual layouts of three transit center sites
- Question and answer









## **Project Purpose**

- To support revitalization and transportation goals for the Richmond Highway corridor
- Richmond Highway is an important arterial that provides connectivity between major commercial, residential, and recreational points in northern Virginia and Fairfax County.
- The efficient operation of Richmond Highway is critical to the regional roadway network, and good quality bus service will be more important as traffic grows in the corridor.
- Enhance existing bus services provided by Fairfax County
- Trigger economic development along the Richmond Highway Corridor









# Study Goals & Objectives

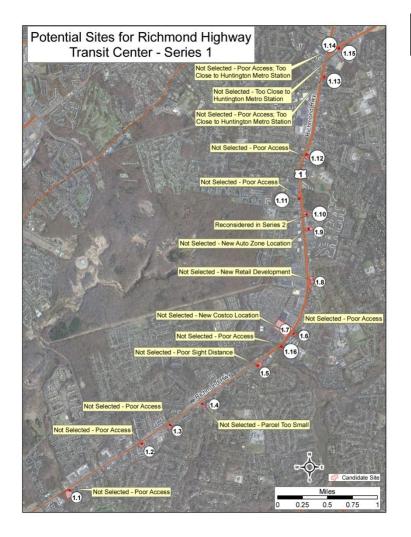
- Plan and design a facility that creates an attractive environment for transit riders and is seamlessly integrated into local communities
- Develop a functional, practicable, and cost-effective design concepts for the new facility
- Focus on site program and traffic impacts to meet future needs for year 2030
- To provide a conceptual layout design and access plan for each of the three proposed transit center sites
- To evaluate the pros and cons of each site
- To assist in final site selection











# **Project Overview**

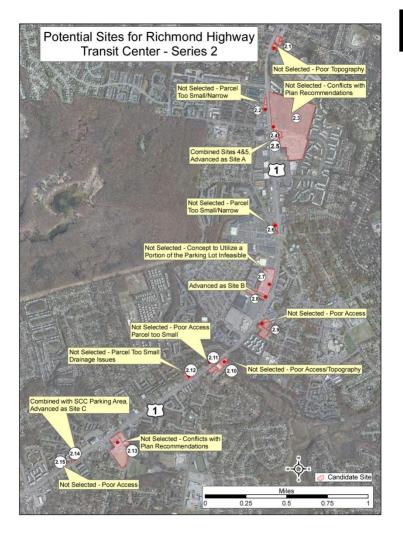
In 2011, a total of 16 candidate sites were selected for evaluation based on proximity to the Route 1 corridor and land availability. The site at Fordson Rd. was selected for further analysis, but was not advanced due to new retail development.











## **Project Overview**

In 2013, a total of 15 candidate sites were selected for evaluation based on community input, proximity to the Route 1 corridor and functionality. Three sites were selected for further analysis.









# Evaluation & Screening Criteria

- Location
- On-site Bus Circulation
- Cost Effectiveness
- Amenities
- Bus Access
- Traffic

- Intermodality
- Neighborhood Development
- Right-of-Way/Relocations
- Environmental Impacts
- Land Use Compatibility











# Site Program

Site	Site Area (acres)	No. of Bus Routes	No. of Bus Bays		9	Building/ Community Center	Bus (2 spaces)	Employee Parking (4 spaces)	Shuttle Bus (4 spaces at 30")	Police/Emergency Parking (1 space)	Bu	Bus	ities	Sea
			2020	2030	Kiss & Ride	Building/	Layover	Employe	Shuttle B	Police/Er	Bike Parking	Tourist F	ADA Facilities	Green Areas
Site A	2.20	9	9	12	4	<b>√</b>	1	¥	¥	4	4		¥	~
Site B	2.89	12	12	16	~	1	1	1	1	1	<b>V</b>		✓.	~
Site C	0.74*	6	6	8	<b>V</b>	·	4	V	V	<b>V</b>	1	¥	¥	¥

<sup>\*</sup>This area does not include parking area for the adjacent Fairfax South County Health Center.











#### County of Fairfax, Virginia

Bike Facilities

Transit Center
Building

FCDOT Sidewalk

**Improvements** 

Potential for Recreational Amenity

Green Space/ Trees

On-site Pedestrian Paths & Crossings

Improved
Pedestrian Access





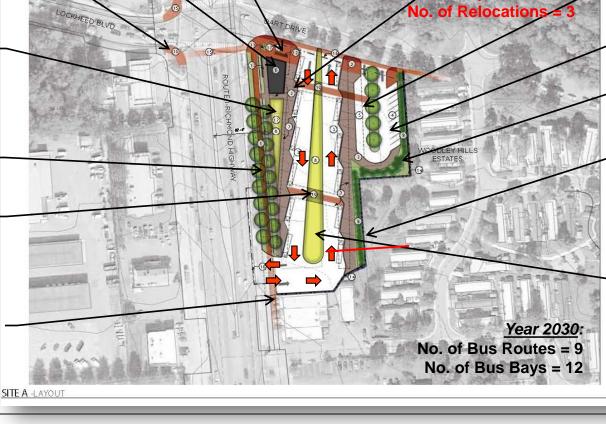
Kiss & Ride Area

Visitor/Staff Parking

12' – wide Vegetated Buffer

7' Tall Brick or Block Fence Wall

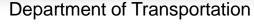
Stormwater
Management/
Planting Areas











Right-of-W

No. of Acquisitions = 3



## Site A

#### **Pros**

- Allows for 12 bus bays to accommodate forecasted 2030 growth
- Easily accessible & visible from Richmond Highway
- Multiple bus access points
- Potential for future neighborhood development

#### Cons

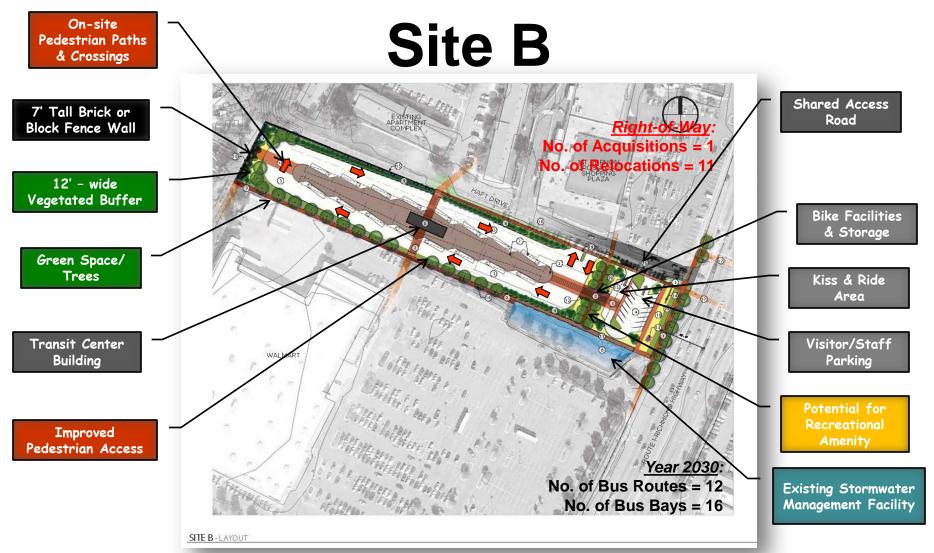
- On-site bus circulation; buses cross each other
- Requires acquisition and relocation of 3 properties (including gas station and video store)
- Potential HAZMAT site
- Adjacent to residential use
- Limited pedestrian and bike access
- Deficient traffic operations
- Only small area available for amenities







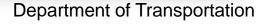














## Site B

#### **Pros**

- Allows for 16 bus bays to accommodate forecasted 2030 growth; highest of all sites
- Efficient on-site bus circulation; loop design
- High potential for future neighborhood development
- Adjacent to busy commercial developments

#### Cons

- Limited bus access from service road; shared with highly used commercial site and apartment complex
- Only one bus access point
- Requires acquisition of 1 property and 11 business relocations; highest cost
- Limited pedestrian and bike access
- Only small area available for amenities

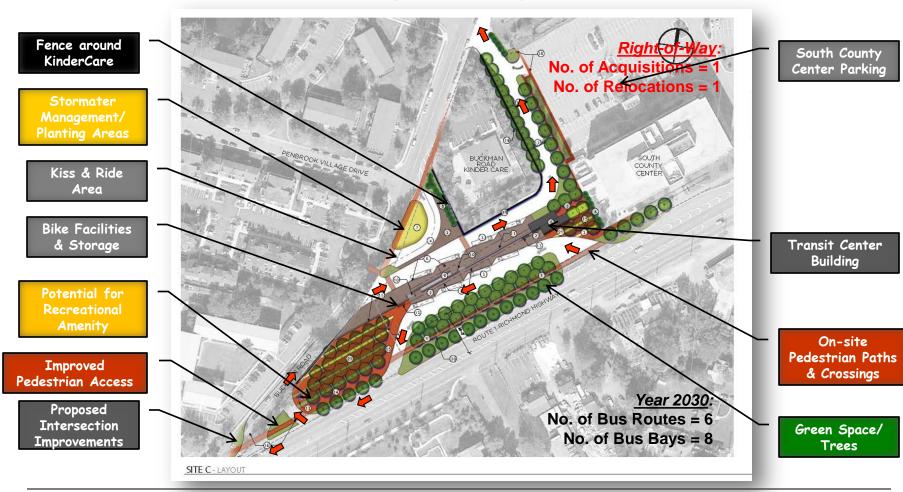








## Site C











## Site C

#### **Pros**

- Allows for 8 bus bays to accommodate forecasted 2030 growth
- Efficient on-site bus circulation; multi-level design
- Potential for future neighborhood development
- Relatively large area available for amenities
- Requires acquisition and relocation of 1 property only; lowest cost

#### Cons

- Limited bus access/egress;
   requires intersection improvements
   at Buckman Rd (South) & Route 1
- Limited pedestrian and bike access
- Site elevation difference requires earthwork and retaining wall
- 167 parking spaces required to be taken from South County Center
- Adjacent to Kinder Care facility









# Site C Intersection Improvements

- Buckman Road/Richmond Highway Intersection problems
  - Difficult access to transit center
  - No right turn onto Buckman Road allowed
  - Insufficient queueing length for SB buses onto Richmond Highway
  - Current intersection configuration not aligned with Radford Ave.
  - Improve pedestrian safety

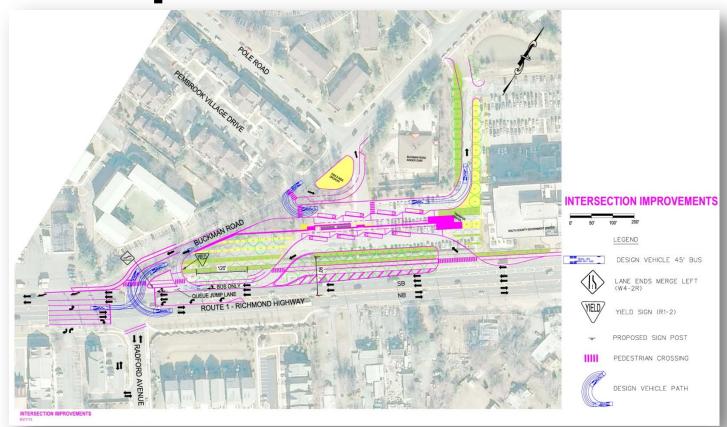








# Site C Intersection Improvements Plans



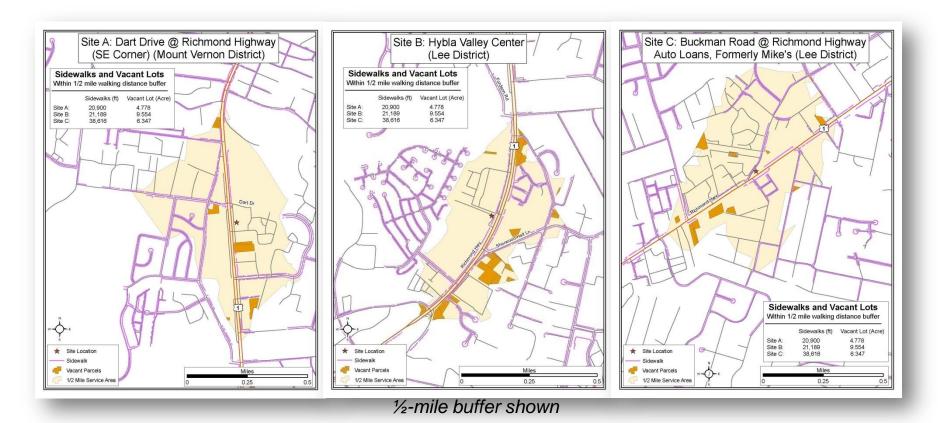








# Neighborhood Development











# **Traffic Impacts**

 Projected Level of Service (LOS) indicate traffic operations at sites A, B and C will be marginally affected when compared against the No-Build alternative



Site A **Dart Drive & Richmond Highway Intersection** 



Site B **Haft Drive / Richmond Highway Intersection** 

18



Site C **Buckman Road (South) / Richmond Highway Intersection** 









# **Environmental Impacts**

- Expect no significant environmental impacts associated with the proposed improvements, including: Stormwater Management, noise and visual intrusion
- Expect to have appropriate mitigation for all potential environmental impacts
- May be required to perform further environmental investigation on Site A









## **Site B Revisions**



- Provide recreational facility
- Explore using part of Mt.
   Vernon
   Crossroad
   Shopping Plaza
- Reduce number of bus bays and move towards Route 1

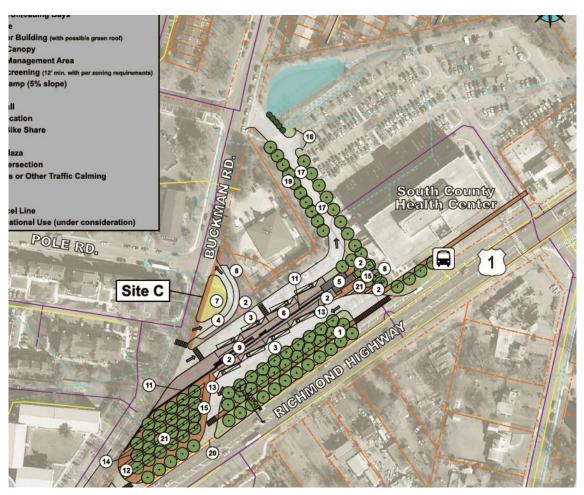








## Site C Revisions



- Include parking structure
- Reevaluate design looking at entire South County Center site
- Consider access options at South County Center entrance at Mohawk Lane









# **Next Steps**

- Design Revisions
- Stakeholder and Community Outreach
- Site Selection
- Preliminary Engineering and NEPA Analysis of selected site
- Branding & Cultural Resources









### **Questions and Answers**



### **THANK YOU!**







