





Richmond Highway Bus Rapid Transit

Executive Committee Meeting #8 May 29, 2020



The Richmond Highway BRT project is funded in part by the Northern Virginia Transportation Authority.







Agenda

- Project Status
 - FTA Status
 - Environmental Study (NEPA)
 - 30% Design
 - Hybla Valley Station
 Configuration
 - Stormwater Management Approach
- Public Engagement Outlook
- Project Schedule Refinement
- BRT Station Architecture
- Discussion







FTA Funding

- **BRT** project accepted in FTA "Project Development (PD)" phase
 - First step of application process
 - Accepted March 13, 2020
 - Program requirements must be completed within two years
 - Includes NEPA, preliminary engineering, management plans
- BRT project anticipated to advance to FTA "Engineering" phase in fall 2021

The FTA will be in contact to discuss its technical assistance and project oversight plans as the Project moves through Project Development. The FTA would appreciate periodic updates from FCDOT on the status of completion of Project Development act ies. The ECDOT must

the Engineering ke the steps

U.S. Department Of Transportation Federal Transit Administration

Headquarters

1200 New Jersey Avenue S.E. Washington DC 20590

MAR 1 3 2020

Tom Biesiadny Fairfax County Department of Transportation 4050 Legato Road, Suite 400 Fairfax, VA 22033

Re: Project Development Initiation - Richmond Highway BRT Project

Thank you for your letter, dated December 16, 2019, requesting entry into the Project Development (PD) phase under the Federal Transit Administration's (FTA) Capital Investment Grants (CIG) New Starts program for the Fairfax County Department of Transportation's (FCDOT) Richmond Highway BRT project (the Project). After reviewing your initial letter, FTA requested additional information including Project features, updated map, and supporting documentation for available funding on December 26, 2019, and received response on January 22, 2020. On January 29, 2020, FTA requested follow up clarification on funding sources which was provided on February 4, 2020. At that time, FTA determined that the information provided

Please note that FCDOT undertakes the PD work at its own risk, and that the Project must still progress through further steps in the CIG program to be eligible for consideration to receive CIG

Per the requirements of the Fixing America's Surface Transportation (FAST) Act, the following activities must be completed during PD:

- Select a locally preferred alternative;
- Have the locally preferred alternative adopted into the fiscally constrained long range Complete the environmental review process; and
- Complete the activities required to develop sufficient information for evaluation and rating under the CIG criteria.

The FTA encourages you to familiarize yourself with the information found on the CIG program webpage at https://www.transit.dot.gov/funding/grant-programs/capital-investments/aboutprogram. There you will find more details and information on the activities mentioned above including answers to frequently asked questions and the information that must be provided to FTA for eventual project evaluation and rating.

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e additional work

letter forward to hose activities for flete the FCDOT believes msors in PD to nable cost associated sture Federal funds rity, relevant ligibility of the

2.366.9679 or









NEPA Categorical Exclusion



*Timing contingent on the Section 106 Process

Section 106 Progress since February:

- Submitted second Addendum to the Historic Architectural Identifications Survey, Phase I Archaeology Survey, and Section 106 Consultation Summary to the Dept. of Historic Resources and Consulting Parties
- Held second Consulting Parties meeting on April 16, 2020
- Provided support for FTA DHR discussions regarding the eligibility status of Gum Springs

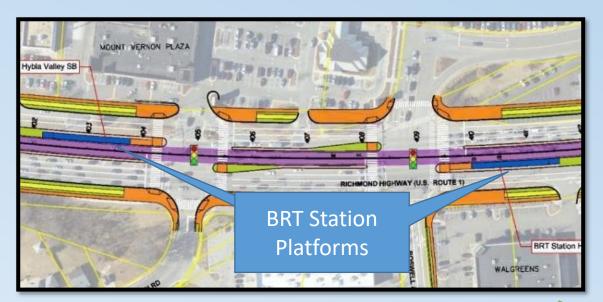






Design Progress

- Anticipate completion of 30% design plans in July 2020
- Selection of Hybla Valley Station Option B announced to public;
 Fordson Road will remain open and operate as it does today











Stormwater Management Approach

- Following County standards
- Includes
 - 63 dry swales and bioretention areas
 - 11 wet ponds
 - 3 underground storage tanks
- Facility locations shared during September 2019 meeting
- BRT Team working with VDOT on SWM design, in coordination with other County agencies (DPWES, DPD)











Stormwater Management Approach

- Design Elements Include:
 - Naturalistic shapes
 - Enhanced tree canopy
 - Ornamental plantings
 - Use of natural elements for soil stabilization





 Passive recreational features such as paths around facilities, seating, etc



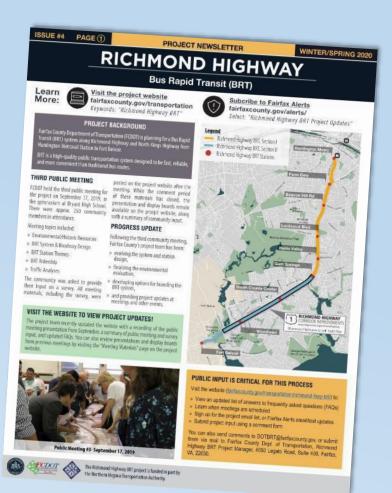






Public Engagement

- E-newsletter sent to project mailing list April 1
- Deferred Richmond Highway Community Discussion due to pandemic; topics included BRT, VDOT widening project & DPD urban design guidelines
- Team working on other opportunities for virtual meeting with a live or recorded presentation, and materials/survey on the website











Options for Engagement Moving Forward

- Key topics we need to discuss with the community
 - Confirmation of the revised configuration for the Fordson/Boswell area
 - Shared with the community in an email newsletter
 - Station architecture preferences
 - NEPA progress/completion
 - Project schedule
- In-person meetings are our preference; virtual meetings are a fallback
- Timing
 - If in-person, would not plan to hold before September
 - If virtual, could hold as soon as July
- Working with Neighborhood and Community Services on timing of public engagement events



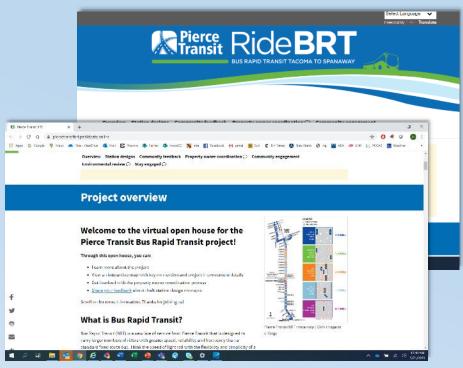






Virtual Meetings

- Goal is to provide the same experience of seeing a presentation and "walking through" exhibits
- Live webinar-style presentation with Q&A, or recorded presentation with subsequent Q&A session
- Website that walks attendees through a "meeting" – including a short video, project materials, survey questions



Example from Seattle region







Considerations for Outreach

Challenge

 We could likely reach many people using virtual meetings, but would need to include a thoughtful and focused effort to share information with people who are not already tracking this project

Potential Strategies

- Project email list (870 people)
- Radio outreach, TV (Channel 16)
- Social media ads
- Flyers distributed in partnership with NCS and corridor community services
- Potential postcard mailing
- Media/press release







Re-Baseline

- May 2020 is first major re-baseline since DRPT study(2013-2015-
- Reflects decisions about project delivery, right-of-way needs
 & relationship to VDOT project
- Activity durations & dependencies further developed based on more detailed project information available today.
- Going forward, schedule will be regularly updated to reflect
 - Coordination with adjacent projects, e.g., VDOT widening, Huntington redevelopment
 - External events, e.g., FTA funding
 - Scope modifications, if any









Project Delivery

Huntington Daw Beacon Hill Lockheed Hybla Valley

Gu'n Springs South County Center

Moodlawn

Ft. Belvoir

1

Design-Build

- Transfer design and construction risk, potential achieving cost and schedule certainty
- Transfer ROW risk to contractor
- Minimize ROW needed for utility relocation

2

Design-Bid-Build

- Reduced schedule compared to DB
- Opportunity to complete design during VDOT project construction
- No ROW risk to transfer
- Facilitates coordination with VDOT

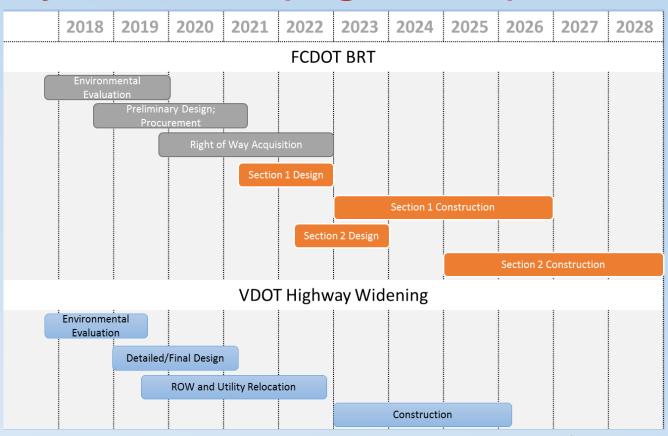








Legacy Schedule (High Level)











Major Factors Contributing to Change

- NEPA (12+ months)
 - Unanticipated time for federally mandated consultation process; FTA shutdown delayed document review
- Utilities (12+ months)
 - Additional time allowed for utility relocations (Dominion, Cox, Verizon, AT&T, Washington Gas, Level 3, Sprint, Fairfax Water)
 - Significant underground telecommunications infrastructure between Boswell Ave and N. Kings Highway; requires Verizon design and approval
 - Large gravity sewer mains require complex design to ensure adequate flow







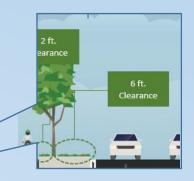




Major Factors Contributing to Change

- Design Changes & Enhancements (12 months)
 - Development of minimization options to reduce impacts to sensitive resources, e.g., homes along Collard St, Groveton Baptist Church, historic fire station
 - Huntington bus loop redesign
 - Intersection reconfigurations in response to public input
 - Accommodation of Embark landscaping and pedestrian features around station
 - Corridor-wide lighting upgrade
 - Enhanced stormwater management approach











Major Factors Contributing to Change

- Right of Way (15 months)
 - Design development resulted in additional full and partial acquisitions
 - To reduce risk and minimize acquisitions, partial acquisitions shifted to contractor
- Construction Sequencing (30 months)
 - Activity durations and dependencies have since been developed further which resulted in a more realistic total schedule durations, milestones, and end date



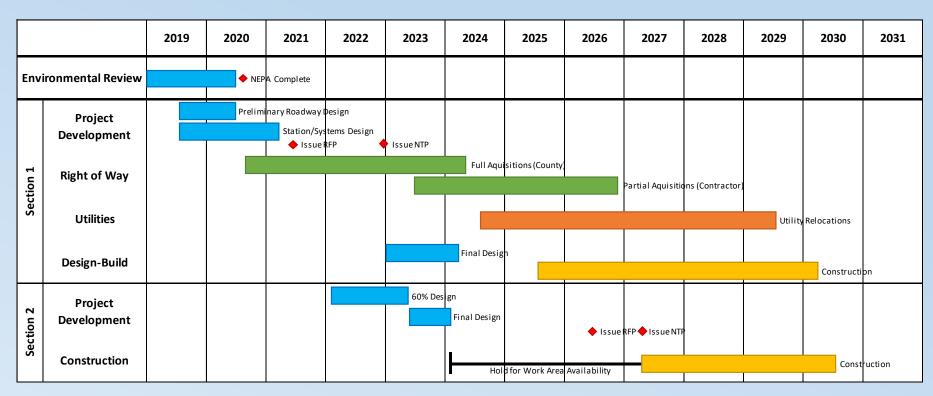








Schedule Refinement Detailed BRT Project Schedule (NEW)



Note: Reflects VDOT's public schedule; BRT Team anticipates adjustment to reflect VDOT latest updated schedule



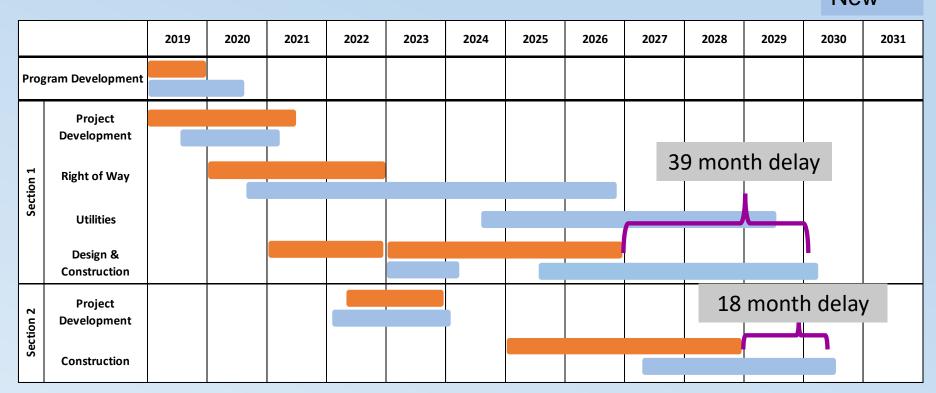






Comparison of Legacy & New

Legacy New



Note: Utilities combined with Construction in Legacy schedule









Opportunities to Reduce Schedule

- Start partial property acquisitions prior to completion of final plans
 - ! Risk is right of way needs could change, requiring a second acquisition from the same owner
- Seek input from contractors through industry review of schedule
- Advertise Section 2 contract prior to completion of VDOT work
 - ! Risk is if VDOT is delayed we would be forced to delay notice to proceed or re-advertise
- Include contract provisions to incentivize compressed schedule
 - ! Risk is higher project costs to cover incentives









On-Going Schedule Risks

- Right-of-way acquisition and relocation
- Utility relocation
- Schedules for adjacent projects (VDOT widening, Huntington Station redevelopment)
- Hazardous materials mitigation
- Agency coordination and permits (VDOT, Ft. Belvoir, US Army Corps of Engineers, VA Department of Historic Resources)
- Accommodation of private development





BRT Station Architecture

- Initial design development
 - Influenced by
 - Embark
 - Richmond Highway Urban Design Guidelines
 - Local historical, cultural, institutional & natural resources
 - Refined by Stations Working Group comprised of county agency staff(DPD, TSD, CPTED)
- Executive Committee (2/21/20)
 - Six designs shared
 - Direction to advance Concept B
 - Direction to explore revised concept incorporating aspects of Option C and Option E
 - Direction to explore opportunities for community-specific identity, including art, within standard design









Approved Concept B Design















Approved Concept B Design















Concept E Design Study



Original Concept Design





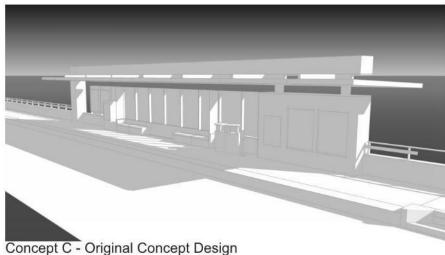






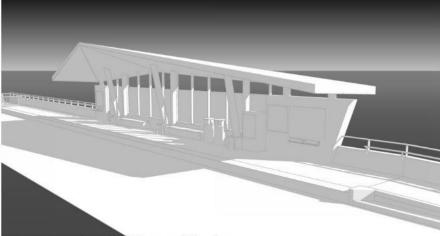


Original Concepts C & E Comparison



Features:

- Clean lines
- Modern Feel
- Interior Layout



Concept E - Original Concept Design

Features:

- · Distinctive Roof Line
- Connection to Tourism Themes
- Asymmetry





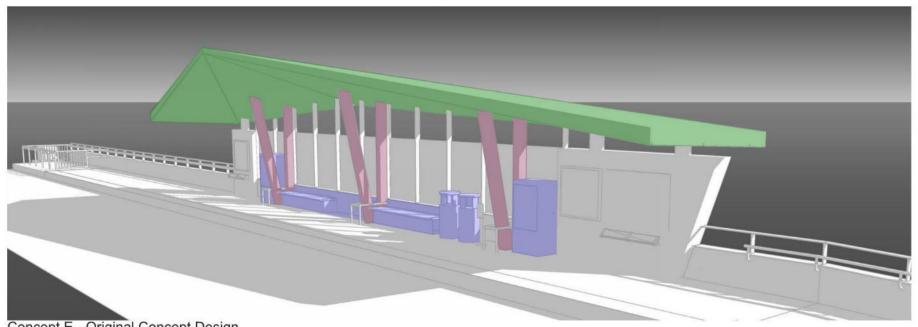








Concept E Design Study Requests



Concept E - Original Concept Design

Design Study Requests:

- Reduce Roof Pitch and Maximize Rain Coverage
- Explore Different Column Approaches to Address Projection Clearance without Railing
- Simplify/Declutter Interior Layout and Integrate Fare Vending Machine into End Piece
- Introduce more Modern Color/Material Palette













- Roof: Pitch Reduced, Increased Depth for Rain Coverage, Increased Height for Road Clearance
- No Change to Columns
- Interior Layout Simplified Similar to Concept C with Integrated Fare Vending Machine













Concept E Design Frogression Approx

- All Changes from Approach 1
- "Y" Column Addresses Projection Clearance Requirements













- All Changes from Approach 1
- Revised "V" Column and Base Addresses Projection Clearance Requirements
- Windscreen Structure Cantilevered from Wall without Roof Attachment













- All Changes from Approach 3
- Revised Straight Column With Deeper Roof Structure Avoids Projection Clearance Issue
- Perpindicular Windbreaks Added to Seating Area













Revised Rain Coverage Concepts C & E Comparison



Concept C - Rain Coverage Roof Concept Design



Concept E - Design Progression Study 4















Concept E - Approach 4 - Front Perspective from Roadway













Concept E - Approach 4 - Front View from Roadway















Concept E - Approach 4 - Approach to Canopy from Entry















Concept E - Approach 4 - Interior View from Near End















Concept E - Approach 4 - Interior View from Far End

















Concept E - Approach 4 - Approach to Canopy from Far End





















Concept E - Approach 4 - Rear View from Roadway/Sidewalk















Concept E - Approach 4 - Bird's-Eye View



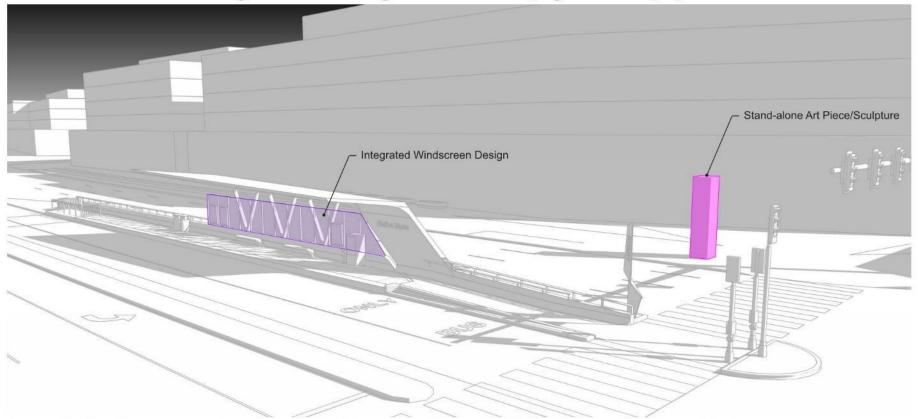








Community Identity - Canopy B Opportunities



Concept B - Identity Approach 1 - Supervisor Preferred Approach with Strong Vertical Element and Windscreen Interlayer

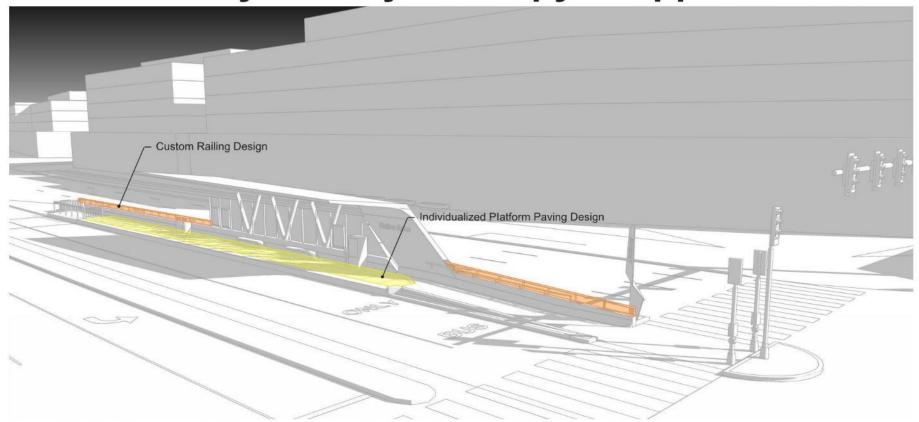








Community Identity - Canopy B Opportunities



Concept B - Identity Approach 2 - Alternative Approach with Custom Railing and Platform Paving Designs



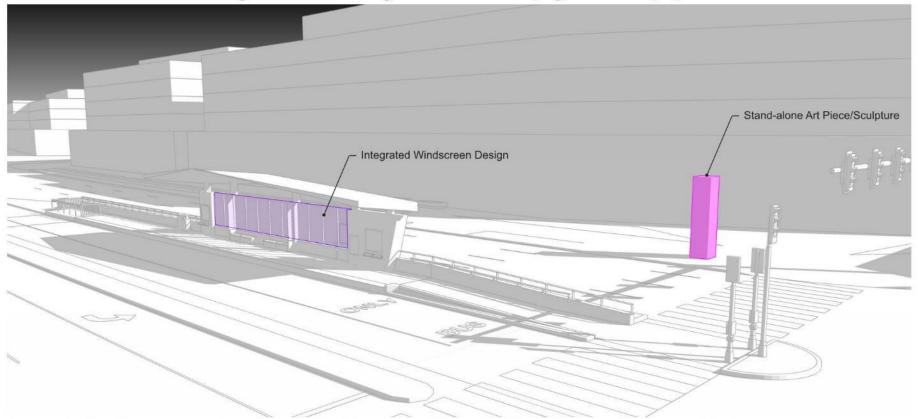








Community Identity - Canopy E Opportunities



Concept E - Identity Approach 1 - Supervisor Preferred Approach with Strong Vertical Element and Windscreen Interlayer

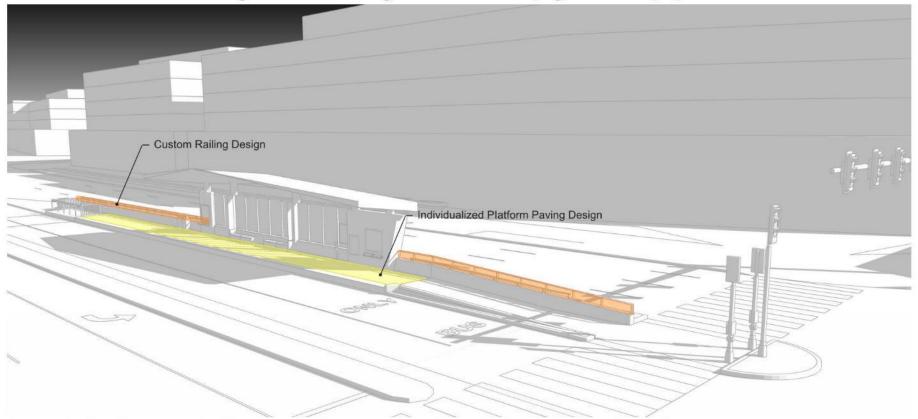




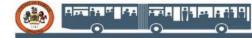




Community Identity - Canopy E Opportunities



Concept E - Identity Approach 2 - Alternative Identity Approach with Custom Railing and Platform Paving Designs













Next Steps for Station Architecture

Summer 2020

- Station design advances to 30%
- Input from Executive Committee on design progress, materials & colors
- Develop materials for public input, e.g., animated "fly through," scale models, multiple renderings

Fall 2020

- Seek public input on canopy design, community identity features, windscreen graphics, materials & colors
- Executive Committee selects preferred design

Winter 2021

- Progress design of preferred concept to 60%
- Issue construction RFP









Discussion



