GRTC Bus Rapid Transit: Semi-Final Design Phase
Public Meetings: October 26 & 27, 2015
Meeting Agenda

• Welcome!

• Project update presentation

• Up to 15 minutes for Pulse Q&A about project design. (Please reserve questions regarding related City topics or for VDOT construction for the Breakout Sessions).

• Breakout Sessions by the City of Richmond Staff & VDOT Staff

• Meeting Adjourns From Breakout Rooms.
Purpose of the Project

• Improve the mobility of transit users
• Develop a more efficient transit system
• Support existing transit-oriented land use
• Support plans to generate new transit oriented development
• Provide an attractive alternative for east-west travel
Project Description

The Bus Rapid Transit Project, sponsored by GRTC Transit System, is primarily in the City of Richmond with a guideway of dedicated median and curbside bus lanes, with mixed-flow traffic, extending from Willow Lawn in Henrico County to Rocketts Landing.
Service Route: 7.6 Miles

- 14 Station Locations (5 Median, 9 Curbside)
  - 3.2 Miles of Dedicated Bus-Only Lanes
Pulse Service

- Minimum Hours of Operation:
  - Weekdays: 5:30 AM – 11:30 PM
  - Weekends: 6:00 AM – 11:30 PM

- Service Frequency:
  - Every 10 Minutes On-Peak
    (7:00 AM – 9:00 AM and 4:00 PM – 6:00 PM)
  - Every 15 Minutes Off-Peak

- Projected Line Travel Time: 29 to 31 Minutes

- Fare: Same As Local Fare (Currently $1.50)

- Estimated Daily Ridership: 3,500
Project Funding $49.8 Million

Funding Contribution

- FTA / USDOT: $24,900,000 (50%)
- DRPT: $16,900,000 (34%)
- City of Richmond: $7,600,000 (15%)
- Henrico County: $400,000 (1%)

TIGER Grant – Transportation Investment Generating Economic Recovery
Station Design Update

- Thinner Roof
- Track Up-lighting
- More walk-through space
Where We Are Now

- Semi-Final Design Phase Underway
- VDOT Is Project Manager
  - Administers project on behalf of GRTC & partners
  - Performs semi-final & final design
  - Manages construction process: Design-Build
    - Develops & awards contracts
    - Efficient process
    - Provides cost-savings for the project
  - Actively participates in public engagement
Why Design-Build?

• Provides cost-savings
• Mitigates risks
  ▪ Utility work
  ▪ Right-of-way work
• Improves construction efficiency
  ▪ Shorter duration of impact
DB Construction Preview

• Who: Team of Contractors
  ▪ Designers and Builders

• What: Completes Remaining Design Work & Starts Construction

• When: Primarily Summer 2016 – Summer 2017
Construction Timeline

• Early Construction Activities Begin: March 2016
• Construction Complete: August 2017
• Pulse Operations Begin: October 2017
Construction Requirements

• Construction will be sequenced to minimize impacts on businesses and properties

• The Contractor will be required to maintain pedestrian access and access to businesses
Construction Requirements

• During non-working times, the contractor will accommodate safe roadway and pedestrian access.

• Most of the construction will be in the median, with the exception of curb-side stations, ramps improvements and signal upgrades at intersections.
Construction Requirements

- Station construction will be typically 3 to 4 months per station
- The contractor will be required to maintain parking access, except where project will remove spaces
- Construction work will be performed in compliance with City permits and waivers
Coordination with Businesses and Residents

• VDOT & DB Team will oversee all construction activities.
• A **24-hour hotline** will be established.
• Regular public information updates will occur.
• Advance schedule for all particular work will be provided.
• Directional signs (for access through & to businesses) will be posted during construction.
• Safe pedestrian access will be provided at all times.
GRTC Local Bus Routes Study

- Study is on-going. First draft almost ready.
- City of Richmond refining the scope of work.
  - Ladders of Opportunity Grant – East End
  - Routes 52-53: connection to Pulse
  - 4 consolidated stations
- Expected release date: Early 2016.
Proposed Consolidated Stations

- Willow Lawn
Proposed Consolidated Stations

- 9th Street
Proposed Consolidated Stations

- 12th Street
Proposed Consolidated Stations

- 24th Street
40-Foot BRT Plus CNG
More Bike Capacity

• 52 dual bike racks
• 6 additional quad bike racks (station locations to be determined)
• On-bus increased storage (front & interior being explored)
• City of Richmond bike-share locations will be positioned at/near Pulse stations
Public Art

• Allocated space for future public art at stations
• Public Arts Commission process
Investigated Median-Running Downtown (N. Foushee St to N. 9th St)

Two bus lanes Downtown increases general traffic congestion.
Investigated Median-Running Downtown (N. Foushee St to N. 9th St)

- Increased Construction Cost: Approximately $1.8 Million more.
- Downtown Richmond has highest concentration of GRTC’s connections between bus routes.
- Highest vehicular traffic volume in corridor here.
- Want pedestrian cycle length of 90 seconds.
- Loss in left-turn locations.
- Loss in existing median landscaping.
- No negative impact for Future Light-Rail in median.
Investigated Utilizing Governor Street To Make Connection To E. Main Street.

- Commonwealth does not grant access onto Governor St. for safety and security reasons.
Proposed Left-Turns: Update

Legend:
- Existing Median
- Existing Traffic Signal
- Proposed Median Closure
- New Traffic Signal
- Proposed Bicycle/Pedestrian Median Opening
- No Left-Turns/U-Turns
- Left-Turns/U-Turns Allowed
- Existing Left-Turn Restriction
- Restricted by Time of Day

Thompson Street to Hermitage Road

Lodge Street to Foushee Street
Studied Opportunities To Provide Additional Left-Turns From Broad St

- City Traffic Engineer Studied These Requested Turns:
  - EB at Summit St – **not recommended**
    - Station cannot be relocated due to an adjacent high pressure gas line running beneath Broad St.
  - WB at Boulevard – **recommended**, except during peak.
    - Loss of approximately 13 parking spaces
  - WB at Lombardy St – **not recommended**
    - Broad St widening on one side at a cost of approximately $200,000.
    - Reduction of existing sidewalk width by 3-4 feet.
    - Causes poor traffic operations in the short block between Lombardy Street and Bowe Street. More vehicles turning onto Bowe than Lombardy.
Examined Closing/Narrowing Curb Cuts To Allow For More Parking

- Inventoried where unused, redundant, &/or unnecessarily wide curb cuts exist.
  - EB Broad St between Mulberry St & Robinson St
  - EB Broad St between DMV Drive & Strawberry St
  - EB Broad St between Alison St & Meadow St/Hermitage Rd
  - WB Lombardy St to Allen St
  - EB Broad St between Belvidere St & Henry St
Pine Street Conversion SB

- City of Richmond will convert Pine St to a one-way southbound to add another 10 to 12 parking spaces. (6 parking + 3 loading today).
VCU will offer the following for public parking:

- WBSD, 1111 West Broad St - 30 spaces
- HH Lot, 928 West Grace St - 20 spaces
- BB Lot, 925 West Grace St - 25 spaces
- HB Lot, 1201 West Broad St - 27 spaces
- SC Lot, 411 West Broad St - 26 spaces
VCU helping mitigate loss of on-Broad St parking between Harrison & Pine Streets
## East End Parking Plan

### TABLE 3 – SUMMARY OF PROPOSED ON-STREET PARKING IMPACTS IN THE EAST END

<table>
<thead>
<tr>
<th>Subarea</th>
<th>Existing Parking Spaces</th>
<th>Proposed Change in Number of Spaces</th>
<th>Preserved Parking Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>14th Street from Broad Street to Main Street</td>
<td>42</td>
<td>0</td>
<td>42</td>
</tr>
<tr>
<td>Main Street from 14th Street to Williamsburg Avenue</td>
<td>193</td>
<td>-20</td>
<td>173</td>
</tr>
<tr>
<td>Main Street from Williamsburg Avenue to Orleans Street</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Old Main Street from Main Street to Orleans Street</td>
<td>32</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>Orleans Street from Old Main Street to Main Street</td>
<td>17</td>
<td>-10</td>
<td>7</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>284</strong></td>
<td><strong>-30</strong></td>
<td><strong>254</strong></td>
</tr>
</tbody>
</table>
**Figure 2A - East End Parking Impacts Due to BRT Station Platforms**

- Loss of 4 spaces westbound
- Loss of 3 spaces eastbound

**Figure 2B - East End Parking Impacts Due to BRT Station Platforms**

- Loss of 6 spaces westbound
- Addition of 2 spaces eastbound
- Loss of 12 spaces eastbound
- Addition of 3 spaces eastbound
FIGURE 2C – EAST END PARKING IMPACTS DUE TO BRT STATION PLATFORM

Loss of 7 spaces southbound

Loss of 2 spaces northbound

Loss of 1 space northbound
Enhance Pedestrian Streetscape

- City of Richmond will address buffer areas through separate streetscape projects.
- Inventory of streetscape trees already in place where parking is proposed to be removed.
ARRIVING OCTOBER 2017!

GRTC pulse
Website Guide

Click Here!
Public Meetings:
Flyers, Display Boards, PowerPoint Presentation

Documents & Reports:
Technical Reports, UDC & PC Documents
Save the Dates!

- Richmond Regional Transit Vision Plan
  - DRPT Public Meetings
    - November 4th 6-8PM at Main Street Station
    - November 5th 6-8PM at New Bridge Baptist Church
    - November 9th 6-8PM at John Tyler Community College
  - City of Richmond Working Groups
    - Economic & Parking support during construction
      - November 17th Breakfast (TBA)
  - Department of Planning & Development Review
    - Long-range plan for corridor
      - November 19th 5:30-7:30PM at DMV Broad St Building
Jurisdictional Breakout Session: Q&A

• Commonwealth:
  ▪ VDOT: Design-Build

• City of Richmond:
  ▪ Economic and parking support during construction
  ▪ Long-range plan for corridor
  ▪ Traffic engineering (left-turns, neighborhood circulation and access)
  ▪ Streetscape improvement plans
  ▪ Wayfinding signage project
  ▪ Bike-share program
Pulse Public Engagement & Questions

- Each person/entity has 2 minutes to complete asking a Pulse design question.
- All questions are being documented.
- *Please reserve VDOT or City questions for the Breakout Sessions next.*
- Thank you for your engagement!
- Please submit written feedback in the box before you exit.
Jurisdictional Breakout Session: Q&A

- Commonwealth:
  - VDOT: Design-Build

- City of Richmond:
  - Economic and parking support during construction
  - Long-range plan for corridor
  - Traffic engineering (left-turns, neighborhood circulation and access)
  - Streetscape improvement plans
  - Wayfinding signage project
  - Bike-share program