West Broad Street BRT Corridor Analysis

RRTPPO Policy Board

July 6, 2023
Agenda

• Project Introduction
• Public Survey Results
• Analysis Details
• Recommendations
• Next Steps
• Action Requested
Project Introduction

- Exploring a possible western extension of current Pulse line
  - Bus Rapid Transit (BRT)
  - Initial analysis spring 2023
- Components of project
  - Outreach
  - Transit Propensity
  - Economic Impact
  - Segment Options
  - Final Report
Study Area

• Broad Street from Willow Lawn to West Broad Marketplace (288)
• 10.4 miles in length
• Half-mile buffer
• Primarily within Henrico County
• Community assets
  • 90+ grocery stores
  • 22 schools/educational facilities
  • 4 parks
Public Survey

- Open from 11/15 – 12/16/2022
- 1,378 responses
- Goal
  - Understand priorities, travel behavior, and barriers to travel
- 31k+ data points/1k+ comments
- Project Website – WestBroadBRT.com
Public Survey - Priorities

Ranking Average

- Public transit service
- Corridor safety
- Pedestrian accessibility
- Bicycle accessibility
- Reducing traffic congestion
- Property access
- Parking near transit
Public Survey - Travel

What form of transportation do you currently use? (Select all that apply)

- Walking (including mobility devices): 37.9%
- Bicycle: 20.8%
- Public transit (GRTC): 36.2%
- Taxi/Uber/Lyft: 23.8%
- Personal vehicle: 75.1%
- Carpool/Ride sharing: 7.7%
- Truck/Commercial vehicle: 0.7%

What form of transportation would you use if it was more available? (Select all that apply)

- Walking (including mobility devices): 40.8%
- Bicycle: 34.2%
- Public transit (GRTC): 72.0%
- Taxi/Uber/Lyft: 6.6%
- Personal vehicle: 21.8%
- Carpool/Ride sharing: 5.5%
- Truck/Commercial vehicle: 0.4%
Public Survey - Travel

Has a lack of reliable transportation ever prevented you from finding or keeping a job?

- Yes: 22.1%
- No: 77.9%

Does a lack of reliable transportation prevent you from working now?

- Yes: 6.2%
- No: 93.8%
“Our transportation status quo has worsened social mobility. A long commute is one of the biggest barriers to escaping poverty.”

- Steven Higashide
Transit Propensity

• Examined factors to determine transit propensity, or friendliness
  • Current transit
  • Equity
  • Low vehicle ownership
  • High transit use
  • Walkability
  • Activity centers
  • Parking lots
  • Development in the area

Photo: Richmond Times-Dispatch, Broad Street at Willow Lawn (stop #3628)
Transit Propensity

• BRT Benefit Areas
  • Uses weighted scoring
    • Equity (EEA) – 20%
    • Low Vehicle Ownership – 20%
    • High Transit Use – 20%
    • Activity Center – 15%
    • Worker Population – 15%
    • Transit Supportive Employment – 10%

PlanRSA; Census Tract level
Roadway Analysis

• Crash Data
  • Over 5,000 crashes on corridor from 2018–2022
    • Fatal: 16
    • Severe Injury: 110
    • Visible Injury: 1,168
    • Nonvisible Injury: 103
    • Property Damage: 3,630
    • All Crashes: 5,024

Sources: VDOT
Roadway Analysis

Challenges & Opportunities
1. Improve essential bus stop infrastructure
2. Complete the sidewalk network
3. Ensure all bus stops comply with ADA standards
4. Better integrate the surrounding bicycle network
5. Add pedestrian-scale lighting
6. Make sustained efforts to promote transit
Logical Termini Locations

- Based on transit propensity and traffic analyses
  - Glenside Drive
  - Wistar Road
  - Parham Road
- Turn-around routing was analyzed for potential locations

WestBroadBRT.com
Recommendations

1. Extend the current Pulse BRT to Parham Road
2. Explore an extension to Short Pump as future phase
3. Re-examine alignment of Routes 18 & 19 to better compliment an extended Pulse
4. Further assess opportunities for park & ride
Park & Ride

• Parking lots make up 17.1% of the corridor
  • Corridor with half mile buffer is 11.28 square miles
  • Parking lots in corridor cover **1.93 square miles**

• Opportunity for park & ride and future infill development
Economic Impact Analysis
Findings Summary

- Job growth along the Pulse corridor shifted towards higher-skilled and higher-wage jobs
- Commercial land use and property values increased significantly
- Implementation of BRT can lead to increased building and rehab activities

Photo Source: Richmond Times-Dispatch
Next Steps

• Review Final Report
• Presenting report to GRTC Board of Directors in August
• Stay connected at WestBroadBRT.com
  • Email updates
  • View final report and other resources
Questions/Comments?

WestBroadBRT.com

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Action Requested

**RESOLVED**, that the RRTPO Policy Board adopts the West Broad Street BRT Corridor Analysis as presented.
West Broad Street BRT Corridor Analysis

RRTPC Policy Board

July 6, 2023