

## **“GRTC Pulse” Broad Street Bus Rapid Transit (BRT) Frequently Asked Questions (Rev 04/2015)**

### **What is Bus Rapid Transit (BRT)?**

Bus Rapid Transit is a high quality, high capacity rapid transit system that offers many of the advantages of rail transit but at a lower and more affordable cost. Instead of trains and tracks, BRT invests in improvements to vehicles, stations, operations, roadways, rights-of-way, intersections and traffic signals to speed up bus transit service. BRT is not a uniform, turn-key transit technology, but represents a spectrum of service enhancements. BRT systems are constructed by choosing and integrating among various BRT elements, such as dedicated lanes, signal priority for buses, branded vehicles and enhanced station amenities. The integration of these elements improves system performance and the experience for customers, with the overall goal of making the BRT line accessible, attractive, reliable and, above all, rapid.

### **How is BRT different from a local bus?**

Standard GRTC local bus service runs on-street, stopping every few blocks, with only a sign marking a stop location. Stops with heavier usage may feature a bench or a shelter. A few, very heavily used stops may have information kiosks with bus arrival information. The frequency of local bus service and the time of day that local bus service is available can vary substantially by route. With these features, local bus service typically serves local riders who are not traveling far. BRT buses typically operate on regular streets, with stops about every half-mile, run every 10 to 15 minutes and serve both local and regional riders. BRT buses may travel in dedicated lanes and often use signal priority systems to reduce delays from traffic congestion. In typical BRT systems, passengers wait for the bus at higher-quality stations with shelters and pay before they board using ticket machines at the station. These qualities add up to an efficient, reliable, frequent and convenient transit service that meets the needs of many types of travelers.

### **How is BRT different from an Express Bus?**

GRTC express buses generally pick up passengers at one or multiple park and ride locations in suburban communities and then travel, non-stop, via freeways or other high speed corridors to the central business district where passengers will disembark. These buses tend to operate only during peak commute times and mainly serve regional riders. BRT buses typically operate on regular streets, with stops about every half-mile, run every 10 to 15 minutes and serve both local and regional riders. BRT buses may travel in dedicated lanes and often use signal priority systems to reduce delays from traffic congestion. In typical BRT systems, passengers wait for the bus at higher-quality stations with shelters and pay before they board using ticket machines located at the station.

### **What is the GRTC Broad Street BRT project?**

The GRTC Broad Street BRT project is a regional collaboration between Greater Richmond Transit Company (GRTC), the Virginia Department of Rail and Public Transportation (DRPT), the City of Richmond and Henrico County. It will improve transit service, increase quality of life, enhance economic opportunity, revitalize commercial properties, improve environmental sustainability and stimulate economic development in the city, county and the greater Richmond region.

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The GRTC Broad Street BRT will be 7.6 miles long and constructed in a busy transportation corridor, which connects greater Richmond to growth areas in surrounding areas in Henrico County. The project, as proposed, will provide service from Willow Lawn in the west through downtown Richmond to Rocketts Landing in the east, including 14 stations and more than 3 miles of dedicated travel lanes.

### **Why is the project needed?**

As development has occurred along Broad Street historically and in recent years, the corridor has become more important as an activity center and economic engine for the region. Over 33,000 people live and over 77,000 jobs are located within a half-mile of the project stations. Importantly, GRTC Broad Street BRT will create economic opportunity in a city with the highest poverty rate in Virginia.

Currently, the Broad Street corridor does not adequately accommodate the needs of the region’s residents and workers. The corridor currently faces many challenges, including:

- Long travel times for bus riders.
- Service delays due to bunching.
- Substandard bus lane widths.
- Lack of bus lane exclusivity in off-peak times.
- Reduced level of service for motor vehicles and buses.
- Congested regional interstates increasing travel time delay and costly commutes for vehicular traffic accessing the corridor.
- Limited and unreliable local access to employment, retail, educational institutions and health care services for transit-dependent populations.
- Lack of permanent infrastructure investment to support development and redevelopment initiatives that would stimulate the economy of the metropolitan area.

BRT, if implemented effectively, can address these challenges and provide substantial benefits to the corridor’s residents, commuters, businesses and institutions. Some of these benefits are identified under the next question of this FAQ.

### **What are the some of the expected benefits of the GRTC Broad Street BRT?**

- Increase bus speeds by approximately 65%.
- Attract new riders by providing a service with travel times that are competitive with the automobile.
- Provide a permanent transit investment in the Broad Street corridor that will encourage economic development and stimulate property values.
- Expand the range of job opportunities for transit- dependent populations by increasing the areas accessible within a reasonable commute time.
- Leverage opportunities for mixed-use, transit-oriented development that will revitalize an economically distressed corridor and improve jobs-housing balance.

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- Improve pedestrian safety at station areas with improved crosswalks and pedestrian refuge areas at station platforms.
- Improve the reliability of transit operations on Broad Street by providing a dedicated lane for BRT vehicles from Thompson to Adams Streets and by improving the dedicated bus lane between 4th and 14th Streets.
- Reduce travel time for riders on BRT by approximately 33%.
- Create additional opportunities to increase system-wide efficiency for GRTC and further improve service on local routes.

### **What is the status of the GRTC Broad Street BRT project?**

After completion of the Broad Street Rapid Transit Study in Spring 2014 and with endorsements and assistance from the Virginia DRPT, the City of Richmond and Henrico County, GRTC Transit System applied for a TIGER (Transportation Investment Generating Economy Recovery) grant from the U.S. Department of Transportation (DOT). On September 13, 2014 DOT Secretary, Anthony Foxx awarded GRTC a TIGER grant in the amount of \$24.9M. Overall cost of the GRTC BRT Project will be supported with matching funds from the Commonwealth of Virginia, the City of Richmond and Henrico County. The project team is currently working in the Preliminary Engineering Phase which will be completed by July 31, 2015. The team is also working to contract with a Construction Manager at Risk (CMAR) construction firm who will work hand-in-hand with architectural designers to finalize the design of the project. That project delivery method will allow GRTC to begin early construction commitments by June of 2016, approximately three to four months prior to design completion. Construction will last until August 2017. Between September 2017 and October 2017, BRT operations will be tested and accepted. Final BRT operations will begin by October 2017.

### **How much will it cost and who will pay for it?**

The project as proposed, with service from Willow Lawn in the west to Rocketts Landing in the east, includes 14 stations and over 3 miles of dedicated travel lanes, has total estimated cost of \$53.8 million. The preliminary engineering phase will cost \$4 million and funding is already secured for this phase. Final design and construction is expected to cost of \$49.8 million. Half of the final design and construction costs (\$24.9 million) come from federal funding (TIGER). The remaining funding will come from state and local matching funds from project sponsors: DRPT will provide 34% (\$16.9 million) with the remaining 16% provided by the City of Richmond (\$7.6 million) and Henrico County (\$400,000).

Once the project is completed, the estimated cost of annual operation will be \$2.7 million.

### **How will BRT construction affect local businesses?**

GRTC expects that the project will be constructed entirely within existing roadway right of way and therefore does not anticipate any acquisition of property. While BRT construction is expected to produce some noise impacts and marginal traffic delays, the impacts are not expected to substantially affect the local economy. Once preliminary engineering is complete, GRTC will have more information to share regarding the specific impacts to individual blocks, buildings and businesses. Once construction is complete, the BRT can help stimulate additional investment along the Broad Street corridor. In the case of the Euclid Avenue BRT in Cleveland,

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Ohio, business owners recognized BRT’s long-term value and ultimately demanded additional stations be added to deliver more shoppers to the corridor. Though some businesses suffered in Cleveland, to date the corridor has seen \$5.8 billion in new investment.

## How will the project affect parking?

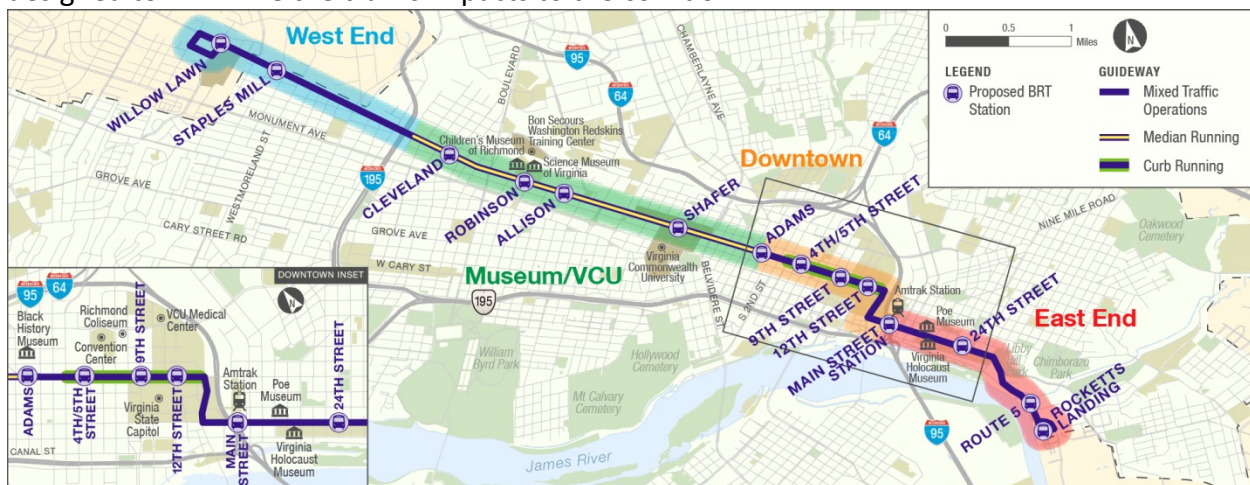
GRTC along with our project partners Henrico County, City of Richmond and DRPT are working with City staff from Parking, Planning and Development Review, Public Works, and Economic and Community Development to develop options for mitigating the loss of on-street parking. Those options will address considerations for safety of operations, lane widths and median width, and accommodations of bicycle and pedestrian movements and seek to preserve approximately 60% of the on-street parking along Broad Street. This will preserve approximately 450 parking spaces on Broad Street between Thompson Street and 4<sup>th</sup> Street that were initially projected to be lost. All on-street parking will be removed between 4<sup>th</sup> Street and 14<sup>th</sup> Street to accommodate curb-running BRT lanes. Currently, parking is prohibited in this section between 4<sup>th</sup> and 14<sup>th</sup> Street during peak hours (7-9AM and 4-6PM).

There are approximately 1,015 existing on-street parking spaces on the side streets within one block of Broad Street between Thompson Street and 14<sup>th</sup> that will neither be changed nor affected. In the same section, there are approximately 9,800 off-street parking spaces within one block of Broad Street between Meadow Street and 14<sup>th</sup> Street. Implementation of BRT will neither change nor affect these parking spaces, either.

Once options have been vetted through a public input process, final revisions will be completed and posted to this FAQ.

## How will the project affect general traffic?

The Broad Street Bus Rapid Transit corridor (also known as the “locally preferred alternative”) is designed to minimize the traffic impacts to the corridor.



In the east and west ends (blue and red on the map), the bus will travel in general traffic lanes and will have no impacts to general traffic. Between Thompson Street and Adams Street (green on the map), the buses will travel in a dedicated lane in the median. Construction of these

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median bus lanes will reduce the number of general travel lanes from three in each direction to two. Currently, left turns are restricted at a number of intersections along Broad Street to manage traffic flow and delays. Left-turn restrictions may continue and additional restrictions may be proposed during the preliminary engineering phase. However, at appropriate intersections, general traffic will be allowed to enter the bus lane to turn left, which will increase safety by removing turning vehicles from the general traffic flow. GRTC will have more information regarding specific changes to left-turn restrictions once preliminary engineering is complete.

In the downtown section of the corridor, from 4th Street to 14th Street (orange on the map), the BRT and local buses will operate in a dedicated lane along the curb. Currently, this lane is restricted to buses and turning vehicles during peak hours (7-9AM and 4-6PM). Implementation of the BRT service will require that this lane will be restricted to buses and turning vehicles at all times. The study team analyzed impacts to general traffic conditions such as increased delay at intersections. The analysis showed that only three intersections would see increases in delay of any significance (Broad/Boulevard, Broad/Bowe, Broad/Belvidere). In all three cases, there are numerous options to maintain adequate general traffic flow and these options will be further refined and analyzed during preliminary engineering and final design to come.

Lastly, in the long-term, GRTC Broad Street BRT will help manage traffic congestion by providing a high-quality transit service that is competitive with the automobile, thereby capturing a higher proportion of commuters and other travelers. This will allow the corridor to incorporate higher densities, provide more housing and jobs, in addition to more activity that will allow the corridor to transition to a more pedestrian-friendly corridor, while maintaining acceptable traffic conditions.

### **Why Willow Lawn to Rocketts Landing? What about Short Pump?**

Bus rapid transit is a new concept in Richmond and requires careful consideration and prudent planning. The Richmond Area Metropolitan Planning Organization (RAMPO) Regional Mass Transit Study, completed in 2008, explored options for improved transit service along nine area corridors. Through a screening process that analyzed demographic, land use and travel demand data, the study identified transit upgrades that could benefit each corridor. The study proposed BRT from Rocketts Landing to Willow Lawn with a feasibility for implementation before 2016. The study recommended extending the BRT line to Short Pump, nine miles west of Willow Lawn, by 2031. The Broad Street corridor was recommended for transit improvements because it has the highest existing and projected population and employment densities and the most transit supportive land use in the Richmond region. It is understood that not all activity centers in the Richmond region are present along this corridor. This project is meant to serve as a starting point for regional improvements to the transit system, which can expand in future years to serve other major activity centers in the region. In addition, the GRTC Broad Street BRT project is competing for federal funding with hundreds of other U.S. applicants and it was determined that the corridor from Willow Lawn through downtown Richmond to Rocketts Landing would give the GRTC, the City and the County the best chance for Federal funding

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support. Although BRT expansion to Short Pump is not financially feasible or realistic at this time, the expansion to Short Pump or other activity centers may be considered in the future.

**Did you consider light rail transit (LRT)?**

The Richmond Area Metropolitan Planning Organization (RAMPO) Regional Mass Transit Study, completed in 2008, explored options for improved transit service along nine area corridors. Through a screening process that analyzed demographics, specifically land use and travel demand data, the study identified transit upgrades that could benefit each corridor. The study determined that LRT implementation was not feasible before 2031. The study proposed BRT from Rocketts Landing to Willow Lawn with a feasibility for implementation before 2016. Light rail transit in Richmond area is not considered financially feasible at this time. The GRTC Broad Street BRT has many of the same qualities as light rail, but at a fraction of the cost.