



October 15, 2015

To: Urban Design Committee, City of Richmond

RE: Consolidated Stops for GRTC Bus Rapid Transit Project

UDC/PC Comment 12 and 20:

- That the BRT planning team provide a plan showing how the existing bus stops along the BRT route will be impacted and how they connect into the BRT stations
- That the BRT planning team investigate providing better connectivity and service to communities in the east end

Applicant Response: Consolidated stops along the GRTC BRT Project route are essential to the integration and connectivity of the BRT to the existing local bus routes. Four consolidated stops are a minimum requirement of the project's TIGER Grant. A consolidated stop at Willow Lawn Drive will encourage BRT and local bus ridership along the entire corridor and provide transit riders with opportunities to utilize local service connections to Park and Ride facilities in the West End / Henrico County. Consolidated stops at 9th Street and 12th Street will support the high demand of local ridership on many major GRTC local bus routes providing service to and from Downtown. In particular, connections to Routes 41 and 51 at 12th Street will provide access to and from Church Hill in the East End. A consolidated stop at 24th Street will provide eastbound and westbound BRT connectivity to local bus Routes 52 and 53, which serve the Fulton and Montrose Heights neighborhoods also in the City's East End.

The City of Richmond and GRTC will conduct a Comprehensive Operations Analysis (COA) that will evaluate the entire GRTC system. The COA will provide system-wide recommendations that will more fully address the questions and concerns regarding local route connectivity to the BRT system.

SUPPORTING DOCUMENTATION

Route 6 currently has the highest ridership of GRTC local bus routes. This route runs along Broad Street with service from Willow Lawn Drive to 14th Street. Understanding the connections from Route 6 to other existing GRTC local bus routes and the surrounding areas is vital for a successful integration of the GRTC BRT Project with local bus service. Routes 18 and 19 operate along Broad Street connecting Willow Lawn to the West End. Routes 52 and 53 run along Main Street, providing access between Downtown and Fulton and Montrose Heights. Routes 41 and 51 connect along Broad Street and run between Downtown and Church Hill.

A local bus stop and BRT station are considered consolidated when the two facilities are located on the same block or around the corner from each other, and little or no street crossings are required. The proximity and ease of access between the local bus stop and the BRT station serves as a successful tie-in to increase operational efficiency and strong connections to the proposed BRT. Theoretically, a rider can get off a local bus and easily access a BRT bus, or vice versa. At least four

consolidated stops are required along the BRT corridor per the project’s Federal Transit Administration (FTA) awarded TIGER Grant.

When possible, a GRTC local bus stop should be located downstream of the proposed BRT station for the consolidated stop. The BRT buses will have an easier time achieving precision docking of both the front and rear doors at the stations, as opposed to having to maneuver around stopped local buses and then maneuver back to the curb for precision docking. Additionally, consolidated stops in the curb-running and mixed flow sections of the BRT corridor are desired in order to avoid elimination of additional parking. The locations for the four proposed consolidated stops include Willow Lawn Drive, 9th Street, 12th Street, and 24th Street.

Consolidated Stop at Willow Lawn Drive

The proposed BRT station is located on Broad Street at Willow Lawn Drive, and marks the Western Terminus of the GRTC BRT corridor. A consolidated stop at this location encourages increased use of the BRT along the length of the entire corridor. The GRTC local bus stops at Willow Lawn Drive will provide access to Routes 6, 18, 19, and 91. Route 18 provides access to the West End, giving riders the potential option to utilize the Park and Ride facilities at Glenside. A slight modification to Route 19 would allow for an additional Park and Ride connection to Gaskins. A consolidated stop at Willow Lawn Drive will encourage increased ridership of both the GRTC local buses and the BRT by providing a strong connection to the West End. The consolidated stop at Willow Lawn Drive is shown in Figure 1.

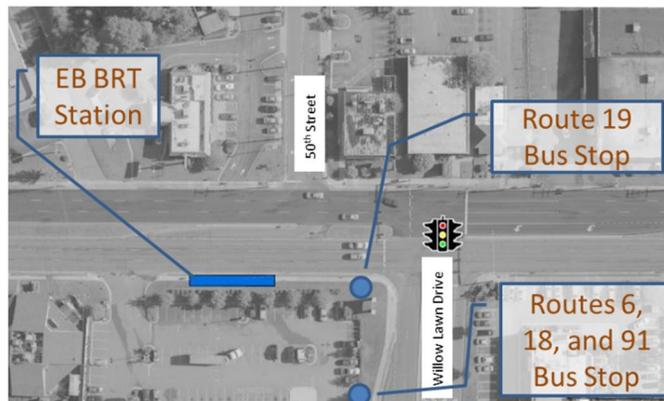


Figure 1. The location of the proposed BRT station and two existing local stops at Willow Lawn Drive.

Consolidated Stop at 9th Street

Eastbound and westbound BRT stations are proposed along Broad Street at 9th Street. A consolidated stop at 9th Street supports the high demand of local ridership of Route 6, and many other major GRTC local bus routes. In particular, Routes 62, 63, 70, 71, 72, and 73 only cross Broad Street at 9th Street and have few convenient opportunities to transfer. Therefore, 9th Street is an appropriate location for a consolidated stop in order to accommodate transfers from multiple local bus routes to the BRT. Additionally, 9th Street is a central location to many Downtown destinations and attractions including the Library of Virginia, City Hall, John Marshall Courts Building, Virginia Capital, General Assembly Building, and Children’s Hospital of Richmond. The consolidated stop at 9th Street is shown in Figure 2.

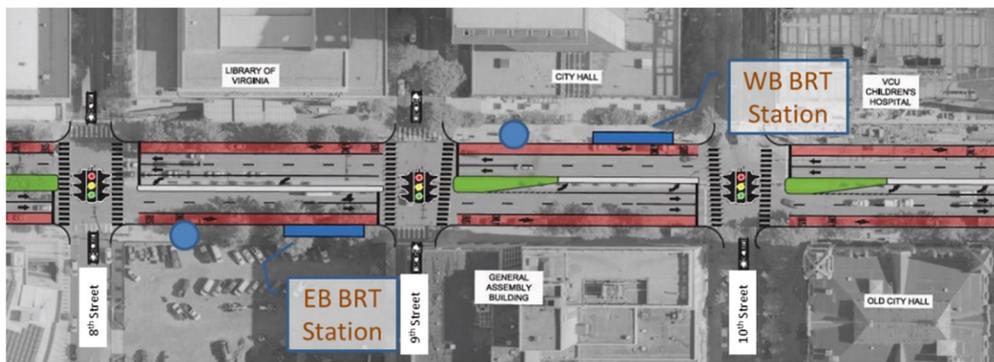


Figure 2. The location of the proposed BRT stations at 9th Street, an existing bus stop, and two proposed bus stops.

Consolidated Stop at 12th Street

Eastbound and westbound BRT stations are proposed along Broad Street at 12th Street. A consolidated stop at 12th Street supports the high demand of local ridership of Route 6, and many other major GRTC local bus routes. In particular, Routes 41 and 51 provide service to Church Hill in the East End. Major employment centers are located near 12th Street including VCU Health System, Commonwealth of Virginia offices, and Virginia Department of Transportation. The consolidated stop at 12th Street is shown in Figure 3.

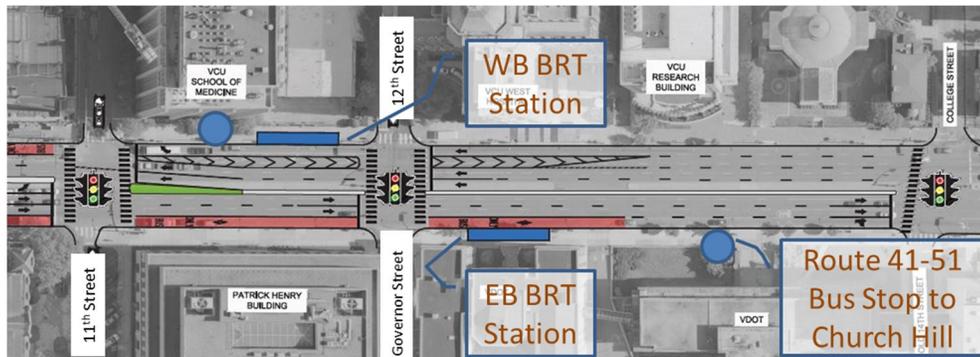


Figure 3. The location of the proposed BRT stations at 12th Street, and existing local bus stops with access to and from Church Hill.

Consolidated Stop at 24th Street

The proposed consolidated stop at 24th Street provides eastbound and westbound BRT connectivity to GRTC local bus Routes 52 and 53. Routes 52 and 53 travel along Main Street and provide access to and from the Fulton and Montrose Heights neighborhoods. The westbound direction involves an existing GRTC local bus stop. The eastbound direction involves relocating an existing GRTC local bus stop to the same block as the proposed BRT station, reducing pedestrian travel time and increasing pedestrian safety as there is no intersection to cross.

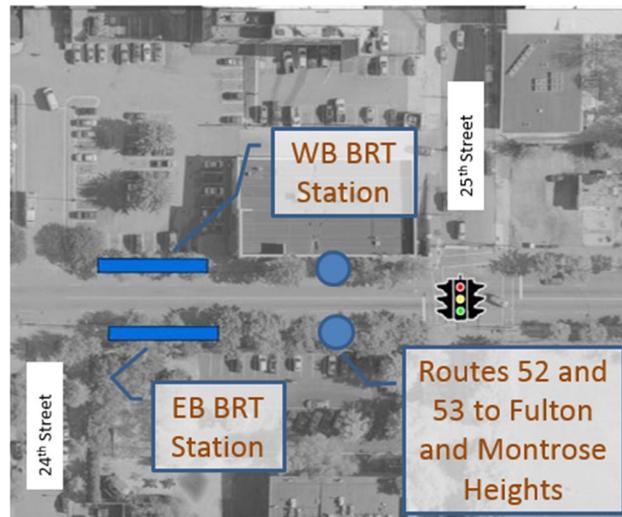


Figure 4. The location of the proposed BRT stations and local bus stops at 24th Street, with access to and from Fulton and Montrose Heights.

In addition to recommendations on consolidated stops, Nelson-Nygaard is working closely with GRTC as part of the GRTC BRT Technical Services study funded by the Mayor’s Commission on Poverty. The goal of the study is to provide recommendations for modifications to existing local bus stops as well as recommendations for slight route modifications considering existing local bus routes including major routes running along portions of the BRT corridor. The study is looking at, based on Title VI of the Civil Rights Act guidance, what existing Broad Street-running local bus routes could be either reduced or eliminated, or re-routed to other areas for service. Each route modification goes through the Title VI process. A Draft Report summarizing recommendations has been prepared showing a plan for local bus stop relocation, elimination, or consolidation. The Technical Services study will evaluate local route revisions that would make connections to Fulton and Church Hill possible from the Rocketts Landing Station and 24th Street Station, respectively. The study recommendations will be presented to the community at upcoming BRT Public Meetings. The Technical Services Report will be released to the public on the week of October 25th, 2015.

Additionally the City of Richmond and GRTC will conduct a Comprehensive Operations Analysis (COA) that will evaluate the entire GRTC system. The COA will provide system-wide recommendations that will more fully address the questions and concerns regarding local route connectivity to the BRT system.