# Washington-Western Bus Rapid Transit Project Summary

The Capital District Transportation Authority (CDTA) is committed to providing cost effective and flexible transit services across the Capital Region. The implementation of a 40-mile Bus Rapid Transit (BRT) network along three high ridership corridors is the centerpiece of these efforts. The BusPlus Red Line runs along NY Route 5 connecting Albany and Schenectady and resulted in a 20 percent ridership increase since its April 2011 implementation. CDTA has developed plans to expand BRT service along the Washington/Western Corridor (Purple Line) between Downtown Albany and Crossgates Mall and the River Corridor (Blue Line), between Albany, Troy, and a number of Hudson River communities.

This study supports the Simplified Alternatives Analysis (AA) that will evaluate feasible alternatives and identify the Locally Preferred Alternative (LPA) for implementing BRT along the Washington/Western corridor. Once the LPA has been adopted, the Region's Long Range Plan will be amended. This will facilitate consideration of financing from the Federal Transit Administration (FTA) and move the project toward implementation.





## A. Project Identification

The project calls for Bus Rapid Transit service between Downtown Albany and Crossgates Mall along Washington and Western Avenues in New York's Capital Region. The route is 8 miles in length, includes 15 stations and would operate seven days a week with a peak frequency of 7 minutes. Notable system enhancements include a transit center at Crossgates Mall (CDTA's busiest stop) and an exclusive busway through the Harriman State Office Campus and the University at Albany Uptown Campus. Additional service features include queue jump lanes, and transit signal priority. Each BRT station will include real time passenger displays, distinctive branding, security cameras, bicycle racks, and improved customer amenities.

The capital investment needed to implement BRT along the preferred alternative is estimated at \$48 million. CDTA's annual operating costs are expected to increase by approximately \$2.4 million. Some existing transit routes on the corridor will have reductions in service due to the anticipated use of the bus rapid transit service.

Figure ES.1 shows the proposed Washington-Western BRT route in purple. The eastern end of the corridor overlaps with the NY5 Route BusPlus service shown in red.



## B. Setting

The corridor includes major ridership generators in the form of colleges, office buildings, retail, and urban residential areas. Downtown Albany is the region's largest central business district, characterized by high employment density at locations like the New York State Capitol and Empire State Plaza. The area includes the two largest transfer stops in the region – State/Pearl Street and Lark Street, where WWBRT will join the existing BusPlus Red line and future River Corridor BusPlus Blue line.



Travelling west along the corridor, land use transitions to medium-density residential neighborhoods and a number of educational institutions including The College of Saint Rose, UAlbany's Alumni Quad dormitory and the Downtown Campus.

The Harriman State Office Campus, the UAlbany Uptown Campus, the College of Nanoscale Science and Engineering Campus, and Crossgates Mall comprise the western end of the corridor. The 330-acre Harriman Campus is undergoing renovations as part of Governor Cuomo's initiative to pursue redevelopment, which was recently strengthened by the reassignment of 1,400 public employees. The University at Albany enrolls 17,300 students with more than 1,000 faculty members. The SUNY College of Nanoscale Science and Engineering is a rapidly growing technology campus with over 3,000 employees. The western terminus is the commercial centers of Crossgates Mall and Crossgates Commons, which are responsible for over a half million rides per year.

### C. Current Conditions

There are six (6) primary transit routes that operate in the corridor – Route #'s 10, 11, 12, 114, 763, and UAlbany Alumni-Western Shuttle. The corridor is also partially served by other routes including the #190 and #712.

Roughly 25% of Albany's population has no car, while some sections of the corridor are closer to 35%.

Weekday ridership along the corridor was nearly 11,000 customers during the spring of 2012. Demand has increased and a September, 2013 query showed more than 14,000 daily riders. Service enhancements are planned for January 2014, while BRT planning continues.

Table ES.1: Average Daily Ridership				
Route	Weekday			
10: Western Avenue	2,982			
11: SUNY Shuttle	1,847			
12: Washington Avenue	3,534			
763: Albany-Schenectady	284			
114: Madison-Washington	930			
UAlbany: Alumni-Western	1,272			
Total	10,849			

Existing service operates along busy urban arterials, with running times on the order of 45 minutes depending on the route and time of day. The mixed traffic scenario affects travel time and reliability, making transit a less attractive option.

The ring road system at the Harriman State Office Campus, UAlbany Uptown Campus, and Crossgates Mall confuses motorists and increases bus runtime by requiring detours to serve built-in locations. CDTA, in coordination with UAlbany, has plans to construct a transit spine through the center of the Uptown Campus. While plans for the Harriman Campus focus on creating a transit-supportive, land use plan to complement transit development at the Uptown Campus, the current roadway configuration is time consuming. Similarly, the outer ring road at Crossgates Mall and the current location of the bus stop, increase travel times.

The City of Albany is working to alleviate parking problems and reduce costs associated with public parking. A residential parking permit system was implemented in January 2013 which resulted in increased transit ridership from Downtown Albany employees. The City along with the various educational institutions continue to minimize the cost and impacts of parking, but the corridor's current level of transit service cannot further mitigate the situation.



![](_page_3_Figure_0.jpeg)

## D. Conditions in the Horizon Year

Without the implementation of BRT service, demand will continue to increase based on growth at the Harriman Campus, CNSE and the two UAlbany campuses. CDTA is responding by reducing headways of major routes along the corridor. Existing transit systems are less able to affect change, enable TOD-development and alleviate parking concerns. Without BRT, the State Campus redevelopment will be passenger vehicle-centric with related traffic congestion.

## E. Project Purpose

The goal of the WWBRT project is to provide faster, direct, and more reliable east-west transit service connecting major activity centers on the corridor. Additional goals to improve mobility and access between these emerging major activity centers will be addressed by:

- Linking key activity centers with residential areas
- Creating a limited stop service with frequent and consistent service to reduce travel time and improve reliability
- Construction of a dedicated busway to connect the UAlbany Uptown Campus and the redeveloped Harriman State Office Campus
- Providing a new transit center with direct access to Crossgates Mall.
- Constructing specific BRT treatments at intersections to improve travel time and maximize reliability

![](_page_3_Picture_10.jpeg)

The project purpose is consistent with the Albany 2030 Comprehensive Plan which was adopted by the City of Albany Common Council on April 2, 2012, the regional planning document – New Visions, and UAlbany's Facilities Master Plan.

![](_page_4_Picture_1.jpeg)

Potential redesign of southern ring-road of Harriman State Office Campus with busway

### F. Alternative Service Plans

Several alternative routes and service plans were examined, building from the 2011 *Conceptual Design Study*, with three BRT routes emerging for more detailed alternatives analysis. The three alternative routes include:

- Alternative 1 Washington Avenue
- Alternative 2 Western Avenue via busway
- Alternative 3 Western to Washington via Brevator

Capital and operating costs were developed for each alternative as summarized in Table 2.

Alternative	Peak Vehicles	Annual Revenue Hours	Annual Revenue Miles	Annual Operating Cost	Operating Cost Increase	Capital Cost	Capital Region Share**
Existing*	19	83,200	872,000	\$6.32 million	-	-	
Alternative 1: Washington Avenue	24	113,200	1,245,000	\$8.73 million	\$2.41 million	\$27.2 million	\$5.5 million
Alternative 2: Western Avenue via Harriman / UAlbany Busway	24	113,400	1,174,000	\$8.56 million	\$2.24 million	\$47.9 million	\$9.6 million
Alternative 3: Washington & Western Avenues via Brevator Street	24	111,740	1,186,000	\$8.51 million	\$2.19 million	\$27.3 million	\$5.5 million

#### Table 2: Summary of Costs for Service Plan Alternatives

\*Based on planned service increases to #12 in January 2014

\*\* Project funded 80% by federal government and 20% by the Capital Region

![](_page_4_Picture_13.jpeg)

#### G. Project Merits

The provision of Bus Rapid Transit service on the Washington/Western Corridor is the most cost effective method to satisfy the project goals. The combination of current trunk, neighborhood, and commuter routes does not effectively capture all riders and connect them to the major activity centers. Light Rail Transit (Alternative 4) was dismissed during the *Conceptual Design Study* phase due to anticipated ridership levels, lack of dedicated right-of-way, and lack of local capital funds. Providing Bus Rapid Transit service is the most cost effective way to address existing deficiencies on the corridor while accommodating demand.

Based on the comparative evaluation shown in Table 3, Alternative 2 (Western Avenue via Busway) has been identified as the Locally Preferred Alternative (LPA). This alternative best meets the objectives of supporting economic development, ridership growth, and improved travel-time reliability. Alternative 2 provides direct, supporting connections between the UAlbany campuses as well as central access to the Harriman State Office Campus and access on Fuller Road for a potential connection to CNSE.

Evaluation Criteria	Alternative 1	Alternative 2	Alternative 3
Economic Development Potential	1	3	1
Impact to Local Services	3	2	2
Capital Cost – Local Share	3	1	3
Operating Cost	2	3	3
Connection of Major Destinations	1	3	2
Ridership Growth Potential	1	3	2
Reduced Travel Time	2	2	2
Improved Reliability	1	3	1
Cumulative Ranking	14	20	16

Table 3: Evaluation Matrix for Locally Preferred Alternative

#### H. Summary

Providing Bus Rapid Transit service along the Washington/Western corridor will connect key destinations while improving reliability, reducing travel times and mitigating growing traffic concerns. BRT will also improve the transit system for captive riders by expanding the service network. This type of transit service offers flexibility for expansion as economic development and ridership increases.

Future conditions assume completion of an efficient and attractive BRT service along the corridor connecting people and destinations, while helping to guide regional and local land use patterns and policies.

![](_page_5_Picture_8.jpeg)