

**Lowcountry Rapid Transit Project**  
**Charleston, South Carolina**  
**New Starts Engineering**  
**Information Prepared July 2022**

Summary Description	
<b>Proposed Project:</b>	Bus Rapid Transit 21.3 Miles, 20 Stations
<b>Total Capital Cost (\$YOE):</b>	\$625.10 Million (Includes \$31.6 million in finance charges)
<b>Section 5309 CIG Share (\$YOE):</b>	\$375.06 Million (60.0%)
<b>Annual Operating Cost (opening year 2030):</b>	\$5.67 Million
<b>Current Year Ridership Forecast (2019):</b>	4,500 Daily Linked Trips 1,335,900 Annual Linked Trips
<b>Horizon Year Ridership Forecast (2040):</b>	7,600 Daily Linked Trips 2,255,300 Annual Linked Trips
<b>Overall Project Rating:</b>	Medium-High
<b>Project Justification Rating:</b>	Medium
<b>Local Financial Commitment Rating:</b>	Medium-High

**Project Description:** BCDCOG proposes to implement a bus rapid transit (BRT) service connecting North Charleston and Charleston. The Project is planned to operate in a dedicated guideway for 11.7 miles (55 percent of the route) in a combination of median-running and side-running exclusive lanes. The Project includes 19 60-foot articulated electric buses with doors on both sides, two non-revenue vehicles, four electric bus opportunity chargers, traffic signal priority, upgrades to the existing operations and maintenance facility, and a park-and-ride facility with space for approximately 140 vehicles. Stations are planned to feature dedicated shelters with ticket vending machines to enable off-board fare collection, as well as consistent branding and signage. Service is expected to be operated by the Charleston Area Regional Transportation Authority (CARTA), the urban transportation services operator administered by BCDCOG.

In the opening year and horizon year, service is planned from 4:00 AM to 1:00 AM on weekdays, with service every 10 minutes during the 15 hours between 6:00 AM to 9:00 PM, and every 30 minutes in the remainder of the service day. On Saturdays, service is planned from 6:00 AM to 12:00 AM, with service every 20 minutes all day until 9:00 PM, and every 30 minutes thereafter. Sunday service is planned from 7:00 AM to 11:00 PM every 30 minutes all day.

**Project Purpose:** The project is intended to improve connectivity and mobility and link the residential areas east and west of downtown with the employment centers, medical facilities, colleges and commercial activities downtown and elsewhere along the corridor. The project corridor contains a wide variety of activity centers and destinations including: Exchange Park Fairgrounds which hosts a variety of events throughout the year; Charleston Southern University; Trident Medical Center; North Charleston Wannamaker County Park; Northwoods Mall; Trident Technical College; the College of Charleston; the Medical District; and historic downtown Charleston.

**Project Development History, Status and Next Steps:** The project was adopted into the region's fiscally constrained long range transportation plan on January 28, 2019 and entered the CIG Program Project Development phase on September 27, 2019. BCDCOG selected and adopted the locally preferred alternative on May 24, 2021. The environmental review was completed on July 19, 2021, with the issuance of a Documented Categorical Exclusion. BCDCOG anticipates receiving a Full Funding Grant Agreement by December 2024, with revenue service beginning in 2030.

## Locally Proposed Financial Plan

<u>Source of Funds</u>	<u>Total Funds (\$million)</u>	<u>Percent of Total</u>
<b>Federal:</b> Section 5309 CIG	\$375.06	60.0%
<b>Local:</b> Charleston County Sales Tax #2 – BRT (Bond Proceeds)	\$129.74	20.8%
Charleston County Sales Tax #2 – BRT (Cash – Project Costs)	\$107.64	17.2%
Charleston County Sales Tax #2 – Debt Service (Cash – Finance Costs)	\$12.66	2.0%
<b>Total:</b>	<b>\$625.10</b>	<b>100.0%</b>

**NOTE:** The financial plan reflected in this table has been developed by the project sponsor and does not reflect a commitment by DOT or FTA. The sum of the figures may differ from the total as listed due to rounding.

**SC, Charleston, Lowcountry Rapid Transit  
(Rating Assigned March 2022)**

<b>Factor</b>	<b>Rating</b>	<b>Comments</b>
<b>Local Financial Commitment Rating</b>	<b>Medium-High</b>	
<b>Non-Section 5309 CIG Share</b>	<b>N/A</b>	The CIG share of the project is 60 percent.
<b>Summary Financial Plan Rating</b>	<b>Medium-High</b>	
Current Capital and Operating Condition (25% of local financial commitment rating)	High	<ul style="list-style-type: none"> <li>• The average age of the bus fleet is 3.3 years, which is younger than the industry average.</li> <li>• Neither the project sponsor (BCDCOG) nor the operator (CARTA) issue bonds, thus there are no bond ratings.</li> <li>• CARTA's current ratio of assets to liabilities as reported in its most recent audited financial statement is 5.09 (FY 2020).</li> <li>• There have been no cash flow shortfalls or major service cutbacks in recent years.</li> </ul>
Commitment of Capital and Operating Funds (25% of local financial commitment rating)	High	<ul style="list-style-type: none"> <li>• All of the non-Section 5309 CIG capital funds are committed or budgeted. Sources of funds include Charleston County Transportation Sales Tax (TST) #2 revenue and Charleston County general obligation bond proceeds (source of repayment is Charleston County TST #2 revenue).</li> <li>• Approximately 99 percent of the funds needed to operate and maintain the transit system in the first full year of operation are committed or budgeted, and the rest are considered planned. Sources of funds include FTA Section 5307 Urbanized Formula funds, FTA Section 5310 Enhanced Mobility of Seniors &amp; Individuals with Disabilities funds, State Mass Transit Funds, Charleston County TST #2 revenue, contract route revenue, farebox revenue, and other CARTA local funds including advertising and interest income.</li> </ul>

Reasonableness of Capital and Operating Cost Estimates and Planning Assumptions/Capital Funding Capacity (50% of local financial commitment rating)	Medium-Low	<ul style="list-style-type: none"> <li>• Assumed growth in capital revenue is reasonable compared to recent historical experience.</li> <li>• The capital cost estimate is reasonable. Growth in operating revenue assumptions, farebox collections and TST revenues are reasonable compared to recent historical experience. Growth in FTA Section 5310, State Mass Transit Funds, and other local funds is conservative compared to recent historical experience. Contract route revenue and advertising is optimistic compared to recent historical experience.</li> <li>• Operating cost estimates are reasonable compared to recent historical experience.</li> <li>• BCDCOG has access to funds via additional debt capacity, cash reserves, or other committed funds to cover unexpected cost increases or funding shortfalls equal to at least 17 percent of the estimated CIG capital cost and 9 percent of annual system wide operating expense.</li> </ul>
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**Lowcountry Rapid Transit  
Charleston, South Carolina  
New Starts Project Development  
(Rating Assigned May 2022)**

***LAND USE RATING: Medium***

The land use rating reflects population density within one-half mile of proposed stations, employment served by the line, and the share of legally binding affordability restricted (LBAR) housing in the station areas compared to the share in the surrounding county.

- The average population density in station areas is about 3,700 persons per square mile, corresponding to a Medium-Low rating. Total employment served is about 80,000 jobs, corresponding to a Medium rating. On-street parking in the central business district costs up to \$18 per day, corresponding to a High rating. The ratio of station area to county LBAR housing is 5.04, corresponding to a High rating.
- The proposed project includes 12 stops in North Charleston and eight stops in Charleston. Charleston has denser development and greater walkability, particularly in the downtown area. North Charleston is more suburban in character with low-density, auto-oriented development.
- Pedestrian connectivity outside of downtown is limited by a lack of sidewalks along roadways and other barriers such as railroad and highway infrastructure in some locations.

***ECONOMIC DEVELOPMENT RATING: Medium***

**Transit-Supportive Plans and Policies: Medium**

- *Growth Management:* Regional plans rely on municipal cooperation to carry out their proposed vision for compact, mixed-use development and preservation of natural resources. Berkeley and Charleston Counties identify an urban growth boundary. Significant amounts of land in the region are protected by forest or wildlife refuge designations or are otherwise undevelopable.
- *Transit-Supportive Corridor Policies:* Municipal comprehensive plans generally call for concentrating higher-density, mixed use development in the corridor and improving pedestrian facilities, but provide few details on planned densities or implementation steps. More detailed studies address development concepts and pedestrian improvements in portions of the corridor. Berkeley-Charleston-Dorchester Council of Governments (BCDCOG) is leading additional efforts to advance transit-oriented development (TOD) planning in the corridor.
- *Supportive Zoning Regulations Near Transit Stations:* Zoning is relatively permissive, with no height limits in many districts and no floor area ratios specified. Residential densities range from eight dwelling units per acre (du/ac) in single-family neighborhoods to 36 du/ac in multifamily zones. Overlay districts establish two-story height minimums and pedestrian-friendly design requirements along the proposed alignment in North Charleston. Some Charleston zones require minimal setbacks and transit-supportive features. Parking is generally more restricted in Charleston and designed Neighborhood Districts.
- *Tools to Implement Land Use Policies:* BCDCOG recently conducted community and developer outreach on land use planning as part of a TOD strategy study. The corridor runs through eight tax increment financing (TIF) districts.

**Performance and Impacts of Policies: Medium**

- *Performance of Land Use Policies:* Nearly three million square feet of mixed-use development projects were affected by transit-supportive policies, all in or near downtown Charleston. 1,800 residential or hotel units and 304,000 square feet of commercial or office space are slated for construction in downtown Charleston. No examples of TOD were identified in other station areas.
- *Potential Impact of Transit Investment on Regional Land Use:* Both the corridor and region are experiencing rapid growth. BCDCOG identifies over 2,400 acres as “areas of potential change” that could develop at higher densities, including 650 acres of undeveloped land; and estimates that these areas of change could accommodate about 20,000 new housing units and over 40,000 new jobs.

**Tools to Maintain or Increase Share of Affordable Housing: Medium**

- An affordable housing assessment and strategies report conducted for the corridor found a significant number of cost burdened households and a substantial supply of legally restricted and naturally occurring affordable housing. Charleston has applied tools and incentives to support affordable housing, resulting in 700 affordable units since 2018. Most units are not affordable to households earning 60 percent of area median income or less. North Charleston lacks policies and tools to support affordable housing.

