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## 4 Transit Service

The LCRT study area is served by a variety of transit modes and service providers, offering convenient connections to destinations throughout the region. This chapter identifies the transit services currently operating in the study area, documents their operating characteristics, summarizes their performance and efficiency, and identifies planned and programmed service improvements.

### 4.1 Transit Services and Facilities

The Berkley-Charleston-Dorchester region is served by two primary transit providers, the Charleston Area Regional Transportation Authority (CARTA) and TriCounty Link (TCL). Passenger rail and intercity bus service is also provided by Amtrak, Southeastern Stages, Inc. and Greyhound respectively, with connections to several major cities throughout the country.

This section documents the transit services and support facilities currently operating in the LCRT study area. The existing transit service in the study area is illustrated on Figure 4.1.



CARTA service operating in downtown Charleston

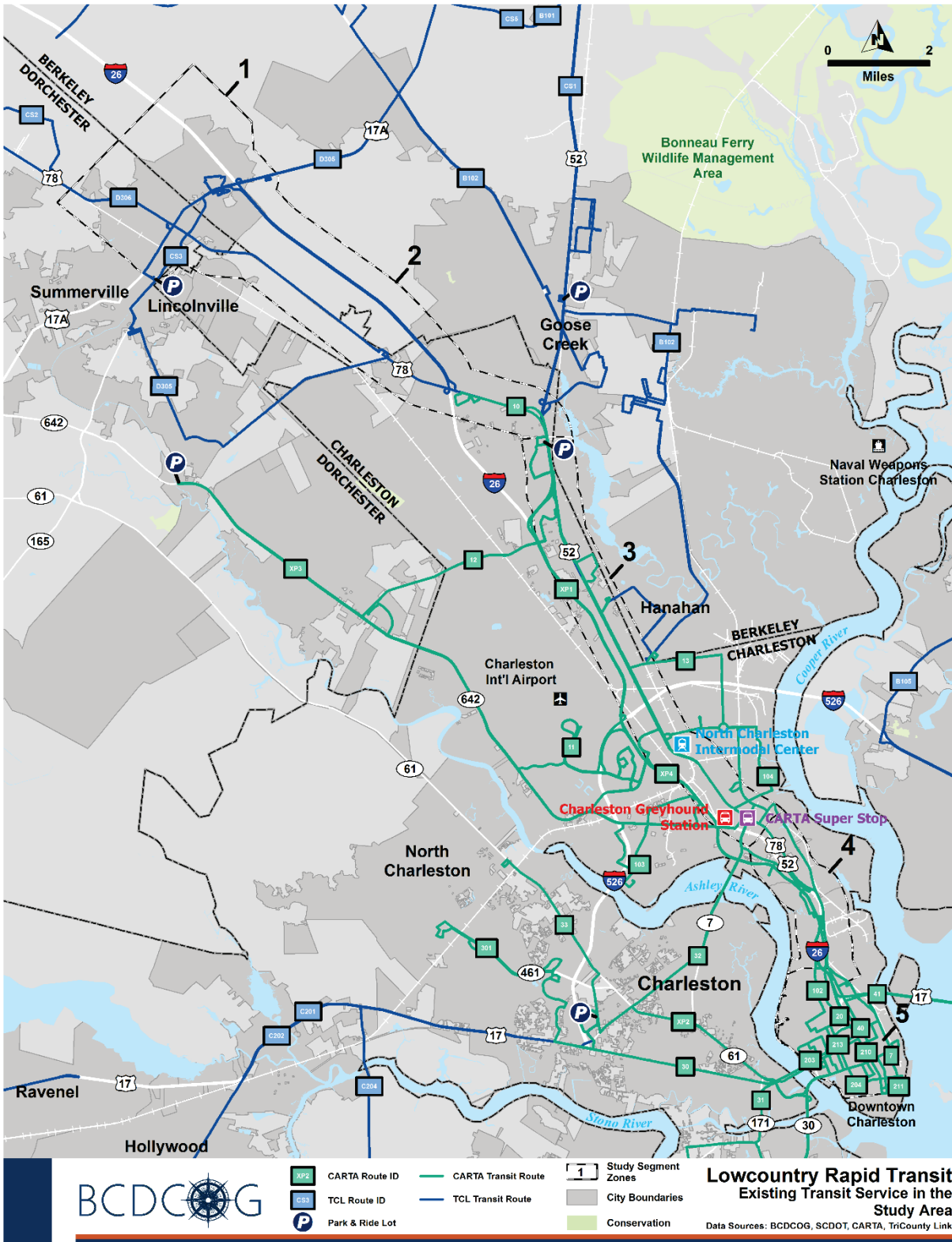


Figure 4.1 Existing Transit Service in the Study Area

#### 4.1.1 CARTA

CARTA is the primary transit service provider for the urbanized areas in the Berkley-Charleston-Dorchester region, offering a variety of transit services including local bus, commuter express bus, shuttles, and Tel-A-Ride paratransit services. CARTA is the state of South Carolina's largest public transportation provider, with 2017 ridership exceeding 3.5 million.<sup>1</sup> A majority of CARTA's transit services operate within the LCRT study area. The routes that operate in the LCRT study area are identified and briefly described below.

##### 4.1.1.1 Regular Routes

- **Route 10 (Rivers Avenue):** Operates between Trident Medical Center and the Charleston Visitor Center in downtown Charleston, primarily via Rivers Avenue.
- **Route 11 (Dorchester/Airport):** Operates between the Tanger Outlets and the Charleston Visitor Center in downtown Charleston, via Charleston International Airport, Dorchester Road, Spruill Avenue, and Morrison Drive.
- **Route 12 (Upper Dorchester/Air Force Base):** Operates between the Rivers Avenue Park-and-Ride and the North Charleston SuperStop at Rivers Avenue and Cosgrove Avenue primarily via Ashley Phosphate Road and Dorchester Road.
- **Route 13 (Montague/Remount/Spruill Road):** Operates between the North Charleston SuperStop at Rivers Avenue and Cosgrove Avenue, and the Tanger Outlets, primarily via Montague Avenue, Rivers Avenue, Remount Road, Rhett Avenue, and Spruill Avenue.
- **Route 20 (King Street):** Operates between the Joseph Floyd Manor at Mt. Pleasant and King Street, and the US Post Office at Broad Street and Meeting Street, primarily via King Street, and Meeting Street.
- **Route 30 (Savannah Highway):** Operates between the Citadel Mall Park-and-Ride and the Charleston Visitor Center in downtown Charleston, primarily via Savannah Highway and Spring/Cannon Street.
- **Route 31 (Folly Road):** Operates between the Charleston Visitor Center in downtown Charleston and Battery Island Drive in south Charleston, primarily via Folly Road and Calhoun Street. The route also serves Maybank Highway, Fleming Road, and Central Park Road on outbound trips only.
- **Route 32 (North Bridge):** Operates between the North Charleston SuperStop at Rivers Avenue and Cosgrove Avenue, and the Citadel Mall Park-and-Ride, primarily via Cosgrove Avenue and Sam Rittenburg Boulevard. On Sundays, the route extends northwest along the regular Route 301 alignment to serve Roper St. Francis Hospital and Wal-Mart on Ashley Circle.
- **Route 33 (St. Andrews/Ashley River Road):** Operates between the Charleston Visitor Center in downtown Charleston and BI-LO on Bees Ferry Road, primarily via Calhoun Street, St. Andrews Boulevard, and Ashley River Road. The route also serves Citadel Mall.

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<sup>1</sup> Source: National Transit Database, all modes.



- **Route 40 (Mt. Pleasant):** Operates between the Charleston Visitor Center in downtown Charleston and Mt. Pleasant Towne Center, primarily via Meeting Street, Johnnie Dodds Boulevard, and US 17. On weekday evenings, the last trip extends further northeast along the regular Route XP2 alignment to serve the Wal-Mart Park-and-Ride in Mt. Pleasant.
- **Route 102 (North Neck/Rutledge):** Operates between MUSC and the North Charleston SuperStop at Rivers Avenue and Cosgrove Avenue, primarily via Ashley Avenue, Rutledge Avenue, King Street, Azalea Drive, and Cosgrove Avenue. The route also serves the Citadel, and on inbound trips only, serves Baker Hospital Boulevard.
- **Route 103 (Leeds Avenue):** Operates between the North Charleston SuperStop at Rivers Avenue and Cosgrove Avenue, and the intersection of Paramount Drive and Dorchester Road, near I-526. The route also serves the Lonnie Hamilton Charleston County Office Building and primarily runs along Dorchester Road, Leeds Avenue, and Faber Place Drive.
- **Route 104 (Montague Avenue):** Operates between the North Charleston SuperStop at Rivers Avenue and Cosgrove Avenue, and the Tanger Outlets, primarily via McMillan Avenue, Noisette Boulevard, and Montague Avenue. The route also serves the Danny Jones Center and North Charleston City Hall.

#### 4.1.1.2 Shuttle / Circulator / DASH

- **Route 7 (HOP Shuttle):** Launched in April 2018, the HOP is a shuttle service connecting the park-and-ride lot in the Upper Peninsula at Morrison Drive and Conroy Street to key downtown destinations along Calhoun Street, Market Street, Broad Street, and the Charleston Visitor Center via East Bay Street and King Street.
- **Route 203 (Medical Shuttle):** Circulator service linking parking lots to hospital facilities including MUSC, Ralph H. Johnson VA Medical Center, and Roper Hospital. The route also serves the South Carolina DMV and Employment Security Commission.
- **Route 204 (MUSC/Calhoun Circulator):** Circulator service linking key downtown destinations such as the Canterbury House, Harris Teeter, Charleston City Market, Charleston County Library, Charleston Visitor Center with medical facilities including MUSC and the Ralph H. Johnson VA Medical Center.
- **Route 210 (Aquarium/College of Charleston DASH Shuttle):** Circulator service linking key downtown destinations such as Marion Square and the Charleston Visitor Center with the College of Charleston and the South Carolina Aquarium. The route operates seven days a week, but the College of Charleston is served on weekdays only.
- **Route 211 (Meeting/King DASH Shuttle):** Circulator service linking key downtown destinations including Marion Square, the Charleston Visitor Center, Charleston City Hall, Waterfront Park, and Charleston Market.
- **Route 213 (Meeting/King DASH Shuttle):** Circulator service linking key downtown destinations including the Charleston Visitor Center, Trident Technical College Palmer Campus, Marion Square, College of Charleston, South Carolina DMV, and MUSC.

#### 4.1.1.3 Express Routes

- **Route XP1 (North/South Express [North Charleston/James Island]):** Operates between the Walmart Park-and-Ride in James Island and the North Charleston Park-and-Ride on Rivers Avenue, via downtown Charleston.
- **Route XP2 (East West Express [Mt. Pleasant/West Ashley]):** Operates between the Citadel Mall Park-and-Ride in Charleston and the Walmart Park-and-Ride in Mt. Pleasant, via downtown Charleston.
- **Route XP3 (Dorchester Road/Downtown):** Operates between the Dorchester Village Shopping Center Park-and-Ride and downtown Charleston. Select trips also serve the Boeing plant at Charleston International Airport.
- **Route XP4 (Airport Express (North Charleston/Airport/Visitor Center/Tanger Outlets/Downtown):** Operates between Charleston International Airport and Broad Street in downtown Charleston. Outbound trips also serve the North Charleston Visitor Center and the Tanger Outlets.

#### 4.1.1.4 Tel-A-Ride

CARTA also provides Tel-A-Ride service for mobility-impaired residents who are unable to use standard public transit vehicles. Based on eligibility, Tel-A-Ride riders must have a specific impairment that restricts mobility. The Tel-A-Ride service area is designed to meet Americans with Disabilities Act (ADA)-mandated requirements. The service is available during the same hours as current CARTA fixed-route bus lines, and within a 3/4 mile corridor on either side of system routes. Tel-A-Ride services all of the Charleston peninsula, as well as portions of James Island, West Ashley, Mount Pleasant, Sullivan's Island, Isle of Palms, and North Charleston. Additional information on eligibility and service characteristics are available on the Tel-A-Ride website.

#### 4.1.2 TriCounty Link

TCL is a transit service provider that operates in the rural areas of Berkeley, Charleston, and Dorchester Counties as well as the urbanized towns of Summerville, Lincolnton, and Goose Creek. TCL operates deviated local and commuter routes on a flag stop basis, allowing for passenger boarding and alighting outside of fixed bus stop locations. TCL routes often connect with CARTA service at bus stops and park-and-ride facilities, enabling seamless transfer opportunities for passengers. There are several TCL routes that operate in the LCRT study area including:

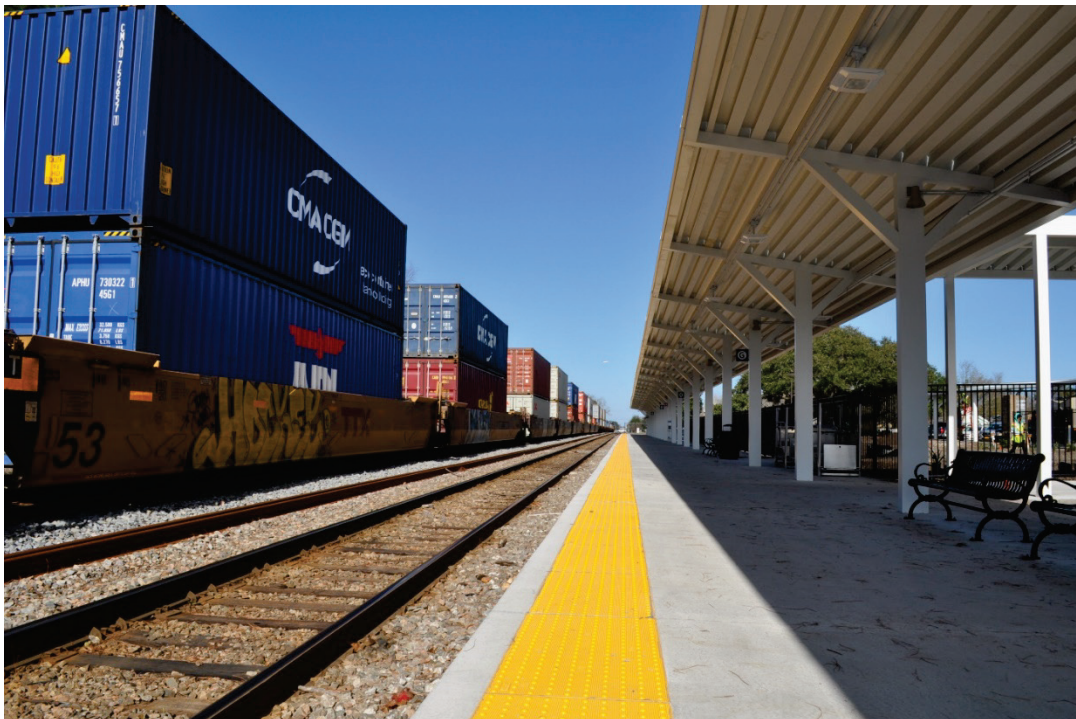
- **B102 (Moncks Corner/Goose Creek):** One-way loop route connecting Moncks Corner, Hanahan, and Goose Creek via US 52, Cooper Store Road, Jedburg Road & I-26, St. James Avenue, and Rivers Avenue.
- **CS1 (Moncks Corner/North Charleston):** Commuter route that connects Moncks Corner and North Charleston via US 52.
- **CS2 (Summerville/North Charleston):** Commuter route that connects Summerville and North Charleston via US 78.

- **CS3 (Summerville/Moncks Corner):** Commuter route that connects Summerville to Moncks Corner via US 52 and US 17A.
- **D305 (Summerville Connector):** Connector route that connects Moncks Corner, Summerville, and North Charleston (at Trident Medical Center) via US 17ALT, Old Trolley Road, Ladson Road, and US 78.
- **D306 (Summerville/St. George):** Connector route that connects St. George and Summerville via US 78.

**4.1.3 Other Transportation Services**

**4.1.3.1 Amtrak**

Amtrak provides daily intercity passenger rail service from Charleston to major cities throughout the country. The Amtrak station is located at the new North Charleston Intermodal Center, allowing for connections to CARTA local bus service and Southeastern Stages Inc. intercity bus service. The facility is served by several Amtrak lines. The first, the Silver Service/Palmetto line, provides daily service from New York City to Miami with destinations including, but not limited to, Philadelphia, Washington DC, Richmond, Raleigh, Charlotte, Savannah, Jacksonville, Orlando, Tampa, St. Petersburg, and Ft. Lauderdale. The Carolinian and Piedmont lines also provide service to the facility, with both lines operating between Charlotte and Raleigh, and the Carolinian extending up the east coast to New York City. Additional information on passenger rail service in Charleston is available on the Amtrak website.



New Amtrak passenger platform



#### **4.1.3.2 Southeastern Stages, Inc.**

As noted above, Southeastern Stages, Inc. will serve the North Charleston Intermodal Center. Southeastern Stages, Inc., located at 3610 Dorchester Road, offers daily bus service to destinations in the South Atlantic Area (Georgia, South Carolina, and North Carolina). Additional information on intercity bus service is available on the Southeastern Stages, Inc. website.<sup>2</sup>

#### **4.1.3.3 Greyhound**

Greyhound also provides intercity bus service in the Charleston area. Also located at 3610 Dorchester Road, the Charleston Greyhound Station offers daily bus service to destinations throughout the country. Additional information on intercity bus service is available on the Greyhound website.<sup>3</sup>

#### **4.1.3.4 Lowcountry Go**

Lowcountry Go is a regional partnership of the BCDCOG, the South Carolina Department of Transportation (SCDOT), the Federal Highway Administration (FHWA) and employers and stakeholders in the tri-county region. Lowcountry Go is an app that promotes sustainable commuting options by matching users with carpools, vanpools, public transit, walking, biking, and emergency ride home solutions. Lowcountry Go also works with employers in the region to develop and promote commute solutions in the workplace. Such solutions include flextime, staggered shifts, and incentive programs. Additional information on Lowcountry Go can be found on the project website.<sup>4</sup>

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<sup>2</sup> <https://southeasternstages.com/>

<sup>3</sup> <https://www.greyhound.com/en/explore-places/charleston>

<sup>4</sup> <http://www.lowcountrygo.com/>

## 4.2 Passenger Transit Facilities in the Study Area

There are several transit facilities in the LCRT study area that support the operation of CARTA and TCL services.

### 4.2.1 North Charleston Intermodal Center

The new North Charleston Intermodal Center at Rivers Avenue and Hock Avenue is a facility that provides connections to CARTA's local routes as well as Amtrak rail service and intercity bus service. The facility features four bus bays for CARTA routes and office space for CARTA. Additional features of the facility include a location for kiss-and-ride and taxi/Uber service. The



North Charleston Intermodal Center

facility replaced the previous Amtrak Station and provides an efficient means to transfer from one mode to another through enhanced connectivity.

### 4.2.2 Rivers Avenue Park-and-Ride

The Rivers Avenue Park-and-Ride is another transit facility in the LCRT study area. Located at 8751 Rivers Avenue, the Rivers Avenue Park-and-Ride is a surface parking lot served by several CARTA and TCL routes including:

- 10 - Rivers Avenue
- XP1 - James Island/North Charleston
- B102 - Moncks Corner/Goose Creek
- CS1 - Moncks Corner/North Charleston
- CS2 - Summerville/North Charleston

#### 4.2.3 Dorchester County Park-and-Ride

The Dorchester County Park-and-Ride is also in the LCRT study area. Located at E 6th South Street Summerville, the Dorchester County Park-and-Ride is a surface parking lot served by the following TCL routes:

- CS2 – Summerville-North Charleston
- CS3 – Summerville-Moncks Corner
- D305 – Summerville Connector
- D306 – Summerville-St. George

#### 4.2.4 Rivers Avenue/Cosgrove Avenue SuperStop

Lastly, the Rivers Avenue/Cosgrove Avenue SuperStop is a bus facility that offers convenient connections to several CARTA routes including:

- 10 - Rivers Avenue,
- 11 - Dorchester Rd/Airport,
- 12 - Upper Dorchester/Ashley Phosphate Rd,
- 13 - Remount Rd
- 102 - North Neck
- 103 - Leeds Avenue
- 104 - Montague Avenue



Rivers Avenue/Cosgrove Avenue SuperStop

### 4.3 Operating Characteristics

The operating characteristics of the transit routes in the study area vary by service type and provider. As the primary service provider in the region, CARTA provides the most robust service, with most local and shuttle/circulator/DASH routes operating for 15 hours on weekdays, and some operating as long as 19 hours (e.g., 10-Rivers Avenue). Peak weekday frequencies range from 5 minutes to 85 minutes, with the shuttle/circular/DASH routes generally operating at the highest frequencies. Most routes, with the exception of the express services, operate on the weekends, though with shorter service spans and less frequent service. Service span and frequencies of CARTA services in the study area are summarized in Table 4.1.

As TCL routes operate in more rural areas with less transit demand, they provide less frequent service. As illustrated in Table 4.2, the TCL routes in the study area primarily operate during peak periods, with only routes D305 and D306 providing midday service.



**Table 4.1 CARTA Service Hours and Frequencies**

Route	Weekday			Saturday		Sunday	
	Service span	Peak frequency	Off-peak frequency	Service span	Frequency	Service span	Frequency
<b>Local</b>							
10 - Rivers Avenue	6:00 am - 12:45 am	20	30-60	6:45 am - 12:15 am	20-60	8:30 am - 9:30 pm	30-60
11 - Dorchester Rd/Airport	5:45 am - 9:30 pm	40	40-45	7:00 am - 9:15 pm	40	8:15 am - 8:00 pm	60
12 - Upper Dorchester/Ashley Phosphate Road	5:45 am - 10:30 pm	40-60	40-60	6:15 am - 10:30 pm	60	9:30 am - 8:30 pm	60
13 - Remount Road	6:15 am - 9:00 pm	60	60	7:15 am - 9:00 pm	60	9:00 am - 7:15 pm	120
20 - King Street/Meeting	6:00 am - 9:00 pm	25	25-50	7:00 am - 9:15 pm	50	9:00 am - 7:45 pm	50
30 - Savannah Highway	6:00 am - 9:30 pm	60	60	6:45 am - 12:15 am	60	8:00 am - 7:00 pm	60
31 - Folly Road	5:30 am - 9:15 pm	80-85	80-85	7:30 am - 8:00 pm	80	8:30 am - 7:00 pm	80
32 - North Bridge	6:00 am - 9:00 pm	60	60	7:00 am - 9:00 pm	60	8:45 am - 8:15 pm	120
33 - St. Andrews/Ashley Rivers Rd	6:00 am - 9:00 pm	60	60	8:15 am - 7:00 pm	90	9:15 am - 6:30 pm	90
40 - Mt. Pleasant	6:15 am - 9:45 pm	60	60	7:15 am - 11:45 pm	60	9:00 am - 7:15 pm	60
102 - North Neck	6:00 am - 8:30 pm	60	60	8:15 am - 9:00 pm	60	No service	
103 - Leeds Avenue	6:15 am - 6:00 pm	60	60	No service		No service	
104 - Montague Avenue	6:00 am - 9:15 pm	60	60	8:00 am - 9:15 pm	60	No service	
<b>Shuttle/Circulator/DASH</b>							
7 - HOP Shuttle	6:00 am - 1:00 am	15	15-30	6:00 am - 2:00 am	15-30	6:00 am - 1:00 am	30
203 - Medical Shuttle	5:00 am - 8:30 am 3:00 pm - 12:30 am	5-15	20	No service		No service	
204 - MUSC/Calhoun Circulator	9:00 am - 3:00 pm	40	40	No service		No service	
210 - College of Charleston/Aquarium	6:30 am - 10:15 pm	15	10-30	9:00 am - 8:15 pm	20	9:00 am - 8:00 pm	20



Route	Weekday			Saturday		Sunday	
	Service span	Peak frequency	Off-peak frequency	Service span	Frequency	Service span	Frequency
211 - Meeting/King	7:15 am - 9:15 pm	15-20	15-45	8:15 am - 9:15 pm	15-45	8:15 am - 9:15 pm	15-45
213 - Lockwood/Calhoun	6:15 am - 9:15 pm	45	45	8:15 am - 9:00 pm	45	9:15 am - 7:00 pm	45
<b>Express</b>							
XP1 - James Island - North Charleston	NB: 6 am peak trips / 10 pm peak trips SB: 7 am peak trips / 8 pm peak trips			No service		No service	
XP2 - Mt. Pleasant - West Ashley	EB: 7 am peak trips / 7 pm peak trips WB: 6 am peak trips / 7 pm peak trips			No service		No service	
XP3 - Dorchester Rd/Summerville	NB: 6 am peak trips / 6 pm peak trips SB: 6 am peak trips / 10 pm peak trips			No service		No service	
XP4 - Airport Express	8:00 am - 8:45 pm	60-70	60-70	8:00 am - 8:45 pm	60-70	12:00 pm - 7:00 pm	70

Source: CARTA website, accessed January 2019

**Table 4.2 TCL Operating Characteristics**

Route	Operating Plan
B102 - Moncks Corner-Goose Creek	1 am peak trip; 1 pm peak trip
CS1 - Moncks Corner-North Charleston	Inbound: 5 am peak trips / 6 pm peak trips Outbound: 4 am peak trips / 4 pm peak trips
CS2 - Summerville-North Charleston	Inbound: 5 am peak trips / 6 pm peak trips Outbound: 5 am peak trips / 6 pm peak trips
CS3 - Summerville-Moncks Corner	Inbound: 2 am peak trips / 2 pm peak trips Outbound: 2 am peak trips / 3 pm peak trips <sup>1</sup>
D305 - Summerville Connector	Inbound: 8 all day trips - 90 minute frequency Outbound: 8 all day trips 80 - 100 minute frequency Inbound: 2 inbound trips between Moncks Corner and Summerville (6 am and 12 pm) Outbound: 2 outbound trips between Summerville and Moncks Corner (12:30 PM and 6:40 PM)
D306 - Summerville-St. George	Inbound: 4 am peak trips / 1 midday trip / 4 pm peak trips Outbound: 4 am peak trips / 1 midday trip / 4 pm peak trips

Source: TriCounty Link website, accessed January 2019.

<sup>1</sup>One of the three trips serves the Vocational Rehabilitation Office.

## 4.4 Transit Performance

### 4.4.1 CARTA

Ridership data for CARTA services is reported in the agency’s monthly and annual ridership reports. Total monthly passengers, total revenue hours, boardings per revenue hour, farebox recovery rate, cost per passenger, and on-time performance for April 2018 are summarized in Table 4.3.

**Table 4.3 CARTA Transit Performance**

Route	Total monthly passengers	Total revenue hours	Boardings per revenue hour	Farebox recovery rate	Cost per Passenger	On-time performance <sup>1</sup>
<b>Local</b>						
10 - Rivers Avenue	53,164	2,700.9	20	40.7%	\$1.92	55.3%
11 - Dorchester Rd/Airport	18,578	1,182.4	16	31.1%	\$2.83	60.3%
12 - Upper Dorchester/Ashley Phosphate Road	18,625	1,280.1	15	31.0%	\$3.06	67.5%
13 - Remount Road	7,356	590.5	12	24.7%	\$3.97	75.5%
20 - King Street/Meeting	17,698	657.3	27	0.2%	\$2.43	68.2%
30 - Savannah Highway	8,136	645.1	13	22.0%	\$4.05	69.6%
31 - Folly Road	3,399	443.7	8	13.9%	\$7.48	60.6%
32 - North Bridge	7,576	426.6	18	31.4%	\$2.58	86.8%
33 - St. Andrews/Ashley Rivers Rd	11,073	720.2	15	24.8%	\$3.19	62.0%
40 - Mt. Pleasant	6,272	656.4	10	17.7%	\$5.64	72.2%
102 - North Neck	2,901	486.2	6	7.2%	\$10.30	77.6%
103 - Leeds Avenue	1,787	171.6	10	14.1%	\$5.89	73.4%
104 - Montague Avenue	2,975	551.0	5	9.8%	\$11.01	74.8%
<b>Shuttle/Circulator/DASH</b>						
7 - HOP Shuttle	2,242	685.9	3	2.0%	\$19.60	61.8%
203 - Medical Shuttle	8,499	495.6	17	117.9%	-\$0.69	63.9%
204 - MUSC/Calhoun Circulator	263	137.3	2	2.2%	\$37.53	65.7%
210 - College of Charleston/Aquarium	15,570	801.2	19	87.4%	\$0.42	61.0%
211 - Meeting/King	33,679	1,040.7	32	26.7%	\$1.47	71.4%
213 - Lockwood/Calhoun	11,123	432.2	26	34.6%	\$1.69	69.4%
<b>Express</b>						
XP1 - James Island - North Charleston	13,345	905.5	15	31.1%	\$3.20	84.5%

Route	Total monthly passengers	Total revenue hours	Boardings per revenue hour	Farebox recovery rate	Cost per Passenger	On-time performance <sup>1</sup>
XP2 - Mt. Pleasant - West Ashley	8,017	678.2	12	34.8%	\$3.55	77.7%
XP3 - Dorchester Rd/Summerville	5,126	486.9	11	31.3%	\$4.11	59.8%
XP4 - Airport Express	1,372	369.0	4	11.1%	\$16.05	61.2%

Source: CARTA Ridership Summary, April 2018.

<sup>1</sup> CARTA Swiftly Transit Performance Dashboard, April 2018. On-time performance query, zero minutes early to five minutes late of posted time point arrival time. Swiftly was in the early deployment stages that faced calibration issues through the queried period such as proper vehicle location assignment.

In terms of ridership, Route 10-Rivers Avenue is the highest volume route with 53,164 monthly boardings, followed by Route 211-Meeting/King (33,679) and Route 12-Upper Dorchester/Ashley Phosphate Road (18,625). Together, these top three routes account for 41 percent of total ridership in the study area. Total monthly boardings by route are illustrated in Figure 4.2.

Route 211-Meeting/King also features the highest boardings per revenue hour at 32, followed by Route 20-King Street/Meeting (27) and Route 213-Lockwood/Calhoun (26). In terms of farebox recovery, Route 203-Medical Shuttle has the highest recovery rate at 117.9 percent, essentially bringing in more revenue than it costs to operate. As such, it also has the lowest cost per passenger at -\$0.69.

CARTA stop-level ridership was also reviewed to identify locations in the study area with particularly high boarding activity. The ridership information presented is based on weekday Automated Passenger Counter (APC) data for the time period of October 1 through November 15, 2017.<sup>5</sup> All values presented in the analyses are averaged over the time period. As illustrated on Figure 4.3, the stops with the highest average daily boardings are generally in downtown Charleston where several routes converge, including such stops as Mary Street/Meeting Street, the Charleston Visitor Center, and the Transit Mall. High volume stops outside of downtown include the Rivers Avenue/Cosgrove Avenue SuperStop and the Rivers Avenue Park-and-Ride in North Charleston. (Note: boardings by stop data is not available for TCL routes; as such, the boardings data illustrated in Figure 4.3 is for CARTA services only.)

<sup>5</sup> Note that the APC data used for this analysis was still in the testing phases, so trips and routes may be missing data or reporting data on the wrong route(s).

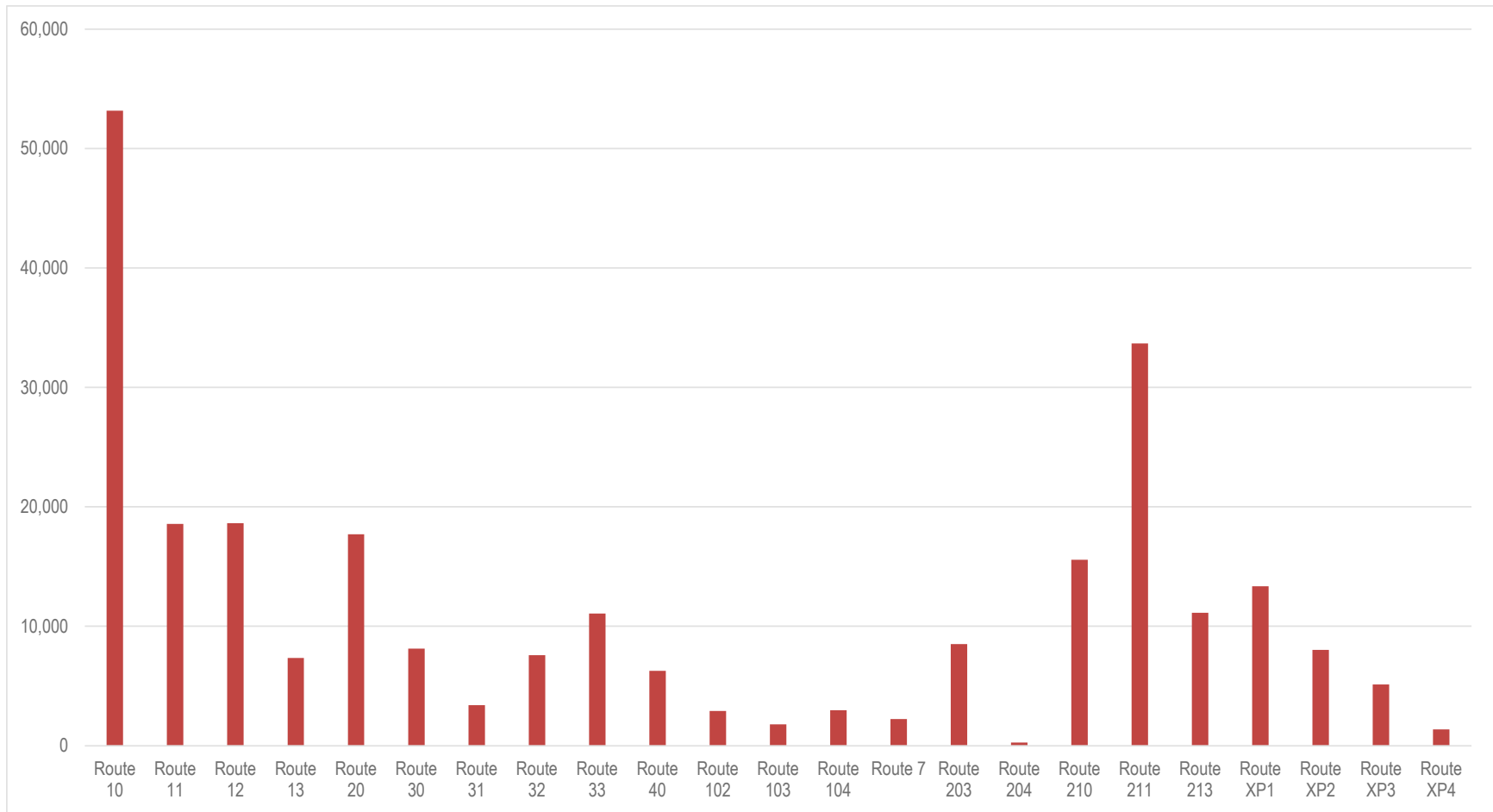


Figure 4.2 Total monthly boardings in April 2018



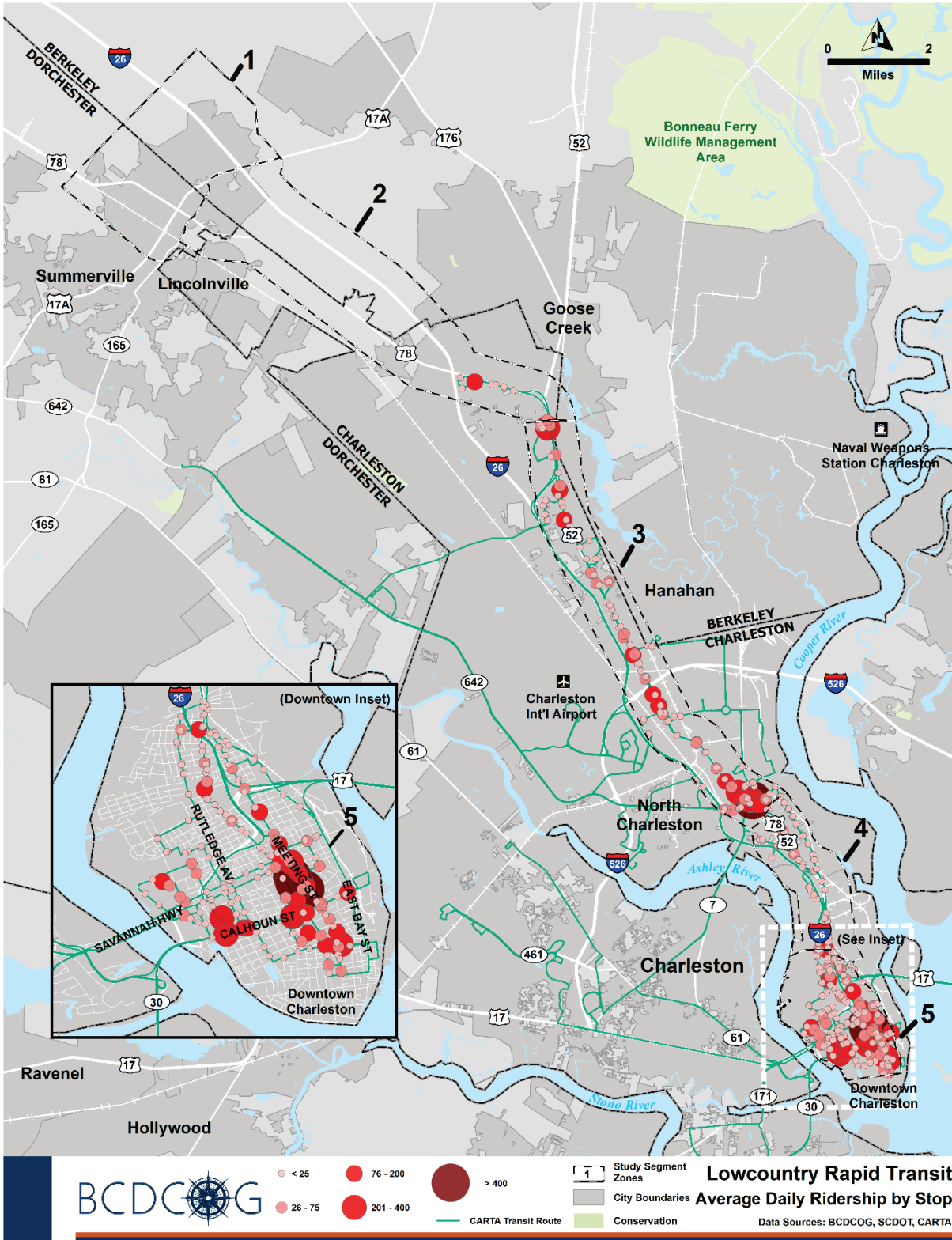


Figure 4.3 Average Daily Ridership by Stop

### 4.5 TriCounty Link

Performance data for TCL services are reported in the agency’s monthly and annual summary reports. Total monthly passengers, total revenue hours, and boardings per revenue hour for April 2018 are summarized in Table 4.4. The highest volume TCL route in the study area is D306-Summerville-St. George, with 984 total monthly boardings, followed by CS1-Moncks Corner-North Charleston (838). In terms of service efficiency, B102-Moncks Corner-Goose Creek has the most boardings per revenue hour with 3.0.

**Table 4.4 Transit Performance**

Route	Total monthly passengers	Total revenue hours	Boardings per revenue hour
B102 - Moncks Corner-Goose Creek	501	169.8	3.0
CS1 - Moncks Corner-North Charleston	838	360.5	2.3
CS2 - Summerville-North Charleston	228	6,469.0	0.04
CS3 - Summerville-Moncks Corner	444	4,095.0	0.1
D305 - Summerville Connector	149	1,244.0	0.1
D306 - Summerville-St. George	984	16,492.0	0.1

Source: TriCounty Link, April 2018

### 4.6 LRTP Transit Recommendations

The LRTP, completed in 2018, established priorities for transportation projects in the region through the horizon year 2040. The transit component of the LRTP recommends service improvements, new modes and technologies / corridor expansion projects and policy strategies, and transit vision projects. A summary of those recommendations is included below.

#### 4.6.1 Service improvements

Service improvements include improved transit access to major employment centers, enhance local service to provide improved frequency and travel times, build upon success of DASH circulator service to expand activity center circulators into new markets, continue investment in fleet modernization and state-of-good-repair needs, and enhance bus stop amenities and pedestrian access to transit network.

Improved transit access to major employment centers can be achieved through enhanced local and express service, including the development of park-and-ride lots throughout the region. Improvements in local service frequency should be prioritized along with technology enhancements to the roadway network to reduce delay such as signal timing modifications and transit signal priority on key routes.

Expansion of circulator services could be expanded to neighborhoods in the Upper Peninsula, Neck Area, and West Ashley, just to name a few, as they continue to develop and densify. In terms of fleet modernization and state-of-good-repair needs, as rolling stock is replaced and the system expands emphasize active asset management and fleet replacement program in accordance with FTA regulations and industry standards to ensure system safety and reliability. Given that a small percentage of bus stops throughout the region are equipped with shelters

and many are lacking in adequate pedestrian access facilities, enhancing bus stop amenities and pedestrian access to transit network should be prioritized, especially at high-volume ridership stops.

Additional recommended future actions include making the “LowGotober” event annual; identifying additional, permanent sources of financial support for the LowCountry Go programs; continuing to build upon and enhance the [ww.ridegolow.com](http://ww.ridegolow.com) app resource; and consider partnering with private peer-to-peer rideshare companies to integrate public and private sector ridesharing efforts.

#### **4.6.2 New modes and technologies / corridor expansion projects**

In terms of implementing new modes, implementing the LCRT is an important first step in developing a network of high capacity public transportation lines in the Charleston region. As for corridor expansion projects, the identification of expanded high capacity transit corridors were part of BCDCOG Regional Transit Framework Plan (see Transit Vision Projects section below).

Beyond land-based transit service, the LRTP recommend the exploration of commuter ferry as a transportation. BCDCOG is currently studying the viability of commuter ferry between various points throughout the region, including downtown Charleston, North Charleston, West Ashley, Mount Pleasant, James Island, and Daniel Island. The study will inform the identification and programming of new commuter ferry routes, as well as the supporting local service improvements (see Transit Vision Projects section below).

#### **4.6.3 Policy Strategies**

The LRTP also recommends policy strategies to expand public transit in the Charleston area. Those strategies include public outreach and marketing, strengthening the coordination between CARTA and TCL, and coordinate land use and transportation policy at the regional and local levels.

In terms of public outreach and marketing recommended strategies, CARTA and TCL and other regional stakeholders should explore opportunities to expand marketing and public outreach efforts to promote the various benefits of public transportation, especially to niche markets such as commuters, universities, and visitors, as well as elected and key stakeholders.

To strengthen coordination between CARTA and TCL, in the near-term, CARTA and TCL should seek to identify further opportunities for service coordination to enhance mobility throughout the region. In the long-term CARTA and TCL should continue analyzing full consolidation as discussed in the 2013 Transit Consolidation Feasibility Analysis.

In order to coordinate land use and transportation policy at the regional and local levels, the LRTP recommends local zoning regulations be reviewed and updated as necessary to incorporate TOD design principles around station-area nodes to the extent possible within the local planning context. Other land use and transportation policy coordination recommendations include further incorporating transit-supportive amenities such as set-asides for bus stops or shelters, park-and-ride lots, and pedestrian access facilities into site plan review processes in jurisdictions throughout the entire service area.

**4.6.4 Transit Vision Projects**

A series of transit projects and developed order-of-magnitude cost estimates and implementation horizons for each. As summarized in Table 4.5, the recommended projects encompass a variety of modes including high capacity rapid transit (e.g. BRT – high frequency bus service operating in exclusive or semi-exclusive lanes with enhanced stations and extensive use of transit signal priority treatments), medium capacity transit (e.g. BRT lite - generally defined as mixing some of the priority treatments and operating characteristics of BRT service with traditional local bus service), commuter express bus (e.g. bus service typically operating in general purpose or high-occupancy vehicle lane (HOV)/managed travel lanes on limited access highway facilities and provide service between park-and-ride lots and major employment and activity centers), and commuter ferry (e.g. ferry service with dock locations throughout the region using pedestrian-only vessels).

Each of the vision projects identified would operate within or interface with the LCRT study area. All of the projects have the same implementation horizon, between 2030 and 2040. Other service adjustments not identified in the LRTP may occur over time based on route performance evaluation and public request.

**Table 4.5 Transit Vision Projects**

Project	Transit mode	Implementation horizon
Lowcountry Rapid Transit Project	BRT	2020 - 2030
Peninsula/Summerville - Dorchester Road Corridor	BRT	2030 - 2040
Peninsula/West Ashley/Folly Beach - Folly Road Corridor	BRT Lite	2030 - 2040
Peninsula/Moncks Corner - US 52 Corridor	BRT Lite	2030 - 2040
West Ashley/Peninsula/Mount Pleasant/East Cooper - US 17 Corridor	BRT Lite	2030 - 2040
Moncks Corner/Summerville/East Edisto - US 17 Alt Corridor	Commuter express bus	2030 - 2040
West Ashley/Peninsula/Daniel Island/East Cooper - I-526 Corridor	Commuter express bus	2030 - 2040
Ridgeville/Summerville/North Charleston/Downtown - I-26 Corridor	Commuter express bus	2030 - 2040
West Ashley Express	Commuter express bus	2030 - 2040
Cooper River Commuter Ferry	Commuter Ferry	2030 - 2040
Ashley River Commuter Ferry	Commuter Ferry	2030 - 2040
Charleston Harbor Commuter Ferry	Commuter Ferry	2030 - 2040

Source: CHATS LRTP, 2018

In 2018, BCDCOG conducted a park-and-ride study to both evaluate the region’s existing park-and-ride facilities and identify locations where demand for new facilities existed. The project recommended 13 new park-and-ride facilities, seven of which are located in the LCRT study area. Recommendations were broken into short-term (1-2 years) mid-term (3-5 years), and long-term (>5 years) planning horizons. The recommended park-and-ride facilities in the LCRT study area are identified in Table 4.6.

**Table 4.6 Park-and-Ride Facility Locations**

Site	Recommendation	Implementation horizon
I-26 WB Abandoned Rest Area	Approach SCDOT about repurposing rest area	Short-term
North Charleston Center	Approach landowner for lease agreement	Mid-term
I-26 at US 78 site #1	Approach public works about using public property for park-and-ride site	Mid-term
Nexton Site	Partner with Nexton to identify and develop site for park-and-ride and Transportation Hub	Mid-term
US 78 at Royle Road	Advance with LCRT project development	Long-term
East 5th North Street at Berlin G Myers	Advance with LCRT project development	Long-term
Exchange Park Fairgrounds	Advance with LCRT project development	Long-term

Source: BCDCOG Park-and-Ride Study (September 2018) and Staff Recommended Phasing Approach (March 2019)



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