

BCDCOG

Transit and Bus Stop Design Guidelines



October 2021

4 BUS STOP TYPOLOGIES

This chapter groups all CARTA and TCL bus stops into six “types” according to their context and usage. These types reflect the diversity of bus stops in the region, from standard stops to major urban transit centers.

One of the unique factors of the BCD region is the diversity of communities—rural, suburban, urban, and historic—creating a range of transit operating environments for both CARTA and TCL.

Together, the six types below form a bus stop “typology”, which categorizes bus stops based on their operational characteristics, service levels, ridership, and surrounding land use contexts.

1. Transit Centers
2. Transfer Stops
3. Park & Rides
4. LCRT Stations
5. High Activity Stops
6. Standard Stops

These categories help determine which amenities are suitable at different stops. All stops will have required, preferred, and optional amenities based on their type:

Figure 4-1 provides a description of each bus stop type, examples for each, and how the types differ in terms of weekday ridership and frequency.

Figure 4-1 BCDCOG Typology Descriptions, Examples, and Characteristics

Stop Type	Description	Examples	CARTA Buses per Weekday
Transit Centers	Official CARTA transit centers	<ul style="list-style-type: none"> ▪ N. Charleston Super Stop/Shipwatch Sq. ▪ Downtown Transit Center (including Transit Mall, Mary St. @ Meeting St., Visitors Center) ▪ Citadel Mall 	<p>~100</p> <p>Buses every 6 min</p>
Transfer Stops	Stops with transfer activity but are not official transit centers	<ul style="list-style-type: none"> ▪ Calhoun St / Jonathan Lucas St (far side) ▪ Hungry Neck Blvd / Theater Dr (Mt. Pleasant Towne Centre) ▪ Calhoun St / St Philip St 	<p>60-90</p> <p>Buses every 10 min</p>
Park & Rides	Parking lots with connecting services to major activity centers	<ul style="list-style-type: none"> ▪ Citadel Mall P&R ▪ Melnick P&R ▪ Wando Crossing P&R ▪ Walmart-Market at Oakland ▪ James Island Walmart ▪ Dorchester Village Shopping Center 	<p>15-60</p> <p>Buses every 15-60 min</p>
LCRT Stations	Future Lowcountry Rapid Transit Stations	<ul style="list-style-type: none"> ▪ LCRT stations at Mall Drive, Hanahan Road, John Street, and others 	<p>Buses every 10 min</p>
High Activity Stops	Stops where ridership, transfer activity, and/or proximity to a major activity center merit higher investment	<ul style="list-style-type: none"> ▪ Medcom St/Trident Medical Center ▪ Waterfront Park ▪ King St/Mt Pleasant St (Joseph Floyd Manor) 	<p>30-50</p> <p>Buses every 30 min</p>
Standard Stops	The most typical stops often served by 1 route		<p><30</p> <p>Buses every 30-60 min</p>

TRANSIT CENTERS

Transit Centers are transit stops that experience very high ridership and a high number of transfers. They usually serve the system’s most frequent bus routes. Since these stops have the region’s highest level of ridership and service, they should provide a wide range of information and passenger amenities.



CARTA maintains 3 official transit centers: the North Charleston Super Stop, the Downtown Transit Center (including Transit Mall, Mary Street at Meeting Street, Visitors Center), and the Citadel Mall. The Shipwatch Square Center is planned to replace the North Charleston Super Stop.

Examples



Bus stop at Citadel Mall.



Mary Street Transit Center (Downtown Charleston).



North Charleston Super Stop.

Amenities

Required	Preferred	Optional
<ul style="list-style-type: none"> ▪ Landing Pad ▪ Bus Stop Sign ▪ Shelter ▪ Lighting ▪ Real Time Information ▪ Enhanced Passenger Information ▪ Trash Can ▪ Bench 	<ul style="list-style-type: none"> ▪ Bike Rack 	<ul style="list-style-type: none"> ▪ Electric Bus Charger ▪ Fare Machine ▪ Car Parking



▪ Safety and Security Elements

TRANSFER STOPS

Transfer Stops have higher ridership and levels of bus service than most CARTA stops. They are characterized by serving more than 1 bus route. Transfer stops should provide high levels of passenger amenities and information to help riders navigate the bus system. Transfer stops can have extended boarding areas to accommodate multiple buses at the same time.

Transfer stops such as Calhoun Street at Jonathan Lucas Street (far side) and Hungry Neck Boulevard at Theater Drive (Mount Pleasant Towne Center) have significant transfer activity but are not official transit centers.

Example



Bus stop at Calhoun St / Jonathan Lucas St.

Amenities



Required	Preferred	Optional
<ul style="list-style-type: none"> ▪ Landing Pad ▪ Bus Stop Sign ▪ Shelter ▪ Lighting ▪ Real Time Information ▪ Enhanced Passenger Information ▪ Trash Can ▪ Bench 	<ul style="list-style-type: none"> ▪ Bike Rack 	<ul style="list-style-type: none"> ▪ Fare Machine ▪ Safety and Security Elements

PARK & RIDES

Park & Ride stops are parking lots with connecting transit services that allow commuters heading to major activity centers to leave their vehicles and transfer to a bus for the remainder of their journey. CARTA and TriCounty Link operate 19 Park & Ride lots. Park & Ride stops have special amenity needs, such as the provision of parking and additional passenger information. The North Charleston Rivers Avenue Park & Ride is one example of the region’s Park & Ride stops.

Example



North Charleston Rivers Avenue Park & Ride (2150 Melnick Dr, North Charleston, SC 29406)

Amenities

Required	Preferred	Optional
<ul style="list-style-type: none"> ▪ Landing Pad ▪ Bus Stop Sign ▪ Shelter ▪ Lighting ▪ Real Time Information ▪ Enhanced Passenger Information ▪ Trash Can ▪ Bench ▪ Safety and Security Elements ▪ Bike Rack ▪ Car Parking 		<ul style="list-style-type: none"> ▪ Fare Machine ▪ Electric Bus Chargers

LCRT STATIONS

The Lowcountry Rapid Transit is a programmed Bus Rapid Transit line that will connect North Charleston and Charleston via US 78/US 52 (the Rivers Avenue corridor) from the Exchange Park Fairgrounds to the Charleston Peninsula/Medical District. LCRT stations will have special branding and many amenities. These station design guidelines are being developed as part of the separate LCRT study, and they will occupy their own bus stop type within the design guidelines. There are 20 LCRT stations planned for the corridor.



LCRT Station Architecture



LCRT Station Amenities

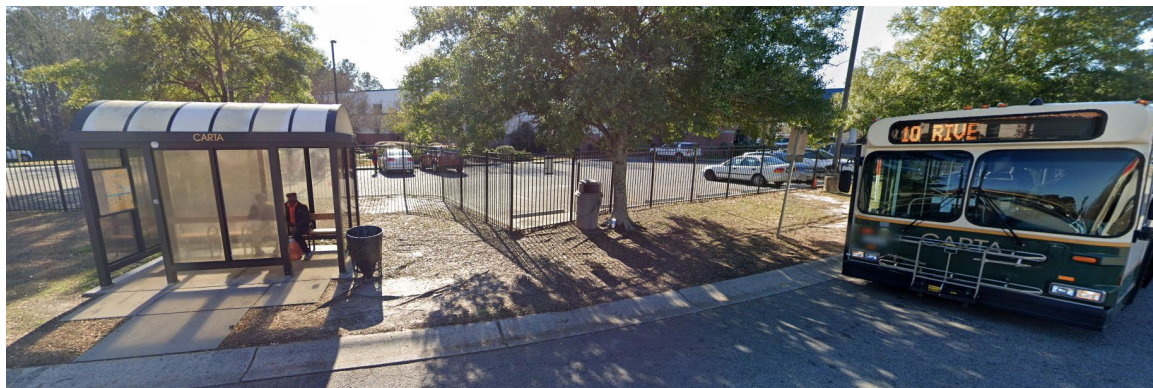
HIGH ACTIVITY STOPS

High activity stops have high existing or potential ridership due to proximity to major or transit-critical destinations. These include but are not limited to hospitals, transportation facilities, large residential developments, low-income housing, shopping centers, government buildings, colleges, and universities. Roughly 25 CARTA stops fall into the High Activity Stops type.

High activity stops have more minimum amenities due to their high ridership.



Example



Bus stop at Medcom St / Trident Medical Center.

Amenities

Required	Preferred	Optional
<ul style="list-style-type: none"> ▪ Landing Pad ▪ Bus Stop Sign ▪ Lighting ▪ Real Time Information ▪ Enhanced Passenger Information ▪ Trash Can ▪ Bench 	<ul style="list-style-type: none"> ▪ Shelter ▪ Bike Rack 	<ul style="list-style-type: none"> ▪ Fare Machine ▪ Safety and Security Elements

STANDARD STOPS

The vast majority of CARTA stops (about 750) fall into the Standard Stops type. These stops, typically served by only 1 route, experience relatively lower ridership and bus service. Because they range widely in terms of curb condition, ADA compliance, and room available for investment, these stops have minimum requirements that require only ADA compliance and a bus stop sign. These stops have a longer list of preferred amenities that are recommended to be included where space and funding allow.



Example



Standard Stops with a variety of curb conditions, room available for improvements and investment, as well as ADA compliance.



















Amenities

Required	Preferred	Optional
<ul style="list-style-type: none"> ▪ Landing Pad ▪ Bus Stop Sign 	<ul style="list-style-type: none"> ▪ Shelter ▪ Lighting ▪ Enhanced Passenger Information ▪ Trash Can ▪ Bench 	<ul style="list-style-type: none"> ▪ Real Time Information ▪ Bike Rack ▪ Safety and Security Elements ▪ Fare Machine

SUMMARY OF BUS STOP AMENITIES BY TYPOLOGY

Figure 4-2 shows the required, preferred, and optional amenities for all bus stop types. Good faith efforts should be made to meet these requirements. Beyond **required** amenities, every effort should be made to include **preferred** amenities at stops, but they may not be feasible because of physical constraints or other factors. **Optional** amenities are the remaining amenities that may feasibly be included at a bus stop.

Figure 4-2 BCDCOG Bus Stop Types and Minimum, Preferred, and Optional Amenities

Amenity	 Transit Centers	 Transfer Stops	 Park & Rides	LCRT Stations	 High Activity Stops	 Standard Stops
 ADA compliance	Required	Required	Required	*	Required	Required
 Bus stop sign	Required	Required	Required	*	Required	Required
 Lighting	Required	Required	Required	*	Required	Preferred
 Real-time information	Required	Required	Required	*	Preferred	<i>Optional</i>
 Enhanced passenger information	Required	Required	Required	*	Required	Preferred
 Trash can	Required	Required	Required	*	Required	Preferred
 Bench	Required	Required	Required	*	Required	Preferred
 Shelter	Required	Preferred	Required	*	Preferred	Preferred
 Bike rack	Preferred	Preferred	Required	*	Preferred	<i>Optional</i>
 Fare machine	<i>Optional</i>	<i>Optional</i>	<i>Optional</i>	*	<i>Optional</i>	<i>Optional</i>
 Electric bus charger	<i>Optional</i>		<i>Optional</i>	*		
 Safety and Security Elements	Required	<i>Optional</i>	Required	*	<i>Optional</i>	<i>Optional</i>
 Car Parking	<i>Optional</i>		Required	*		

*LCRT station amenities are being determined through a separate study.