carta

Downtown Charleston Transit Study

First/Last Mile Transit Access Analysis

What are First and Last Mile Connections?

The first- and last-mile connections to bus stops have major influence on the transit system's ability to get transit users where they need to go. Every transit trip involves some amount of walking or bicycling access to transit either at the start or end of the trip. For that reason, **maintaining an accessible walking and bicycling network surrounding bus stops** is vitally important to make trips safe and functional for everyone.

First and Last Mile Transit Access Analysis

1

Review **existing and proposed** pedestrian and bicycle facility network

2

Identify key **pedestrian facility gaps** within ½-mile of bus stops

3

Identify **bicycle facility gaps** within 1 mile of bus stops

**See the State of the System Report (January 2024) for more detailed information about existing and proposed pedestrian and bicycle facilities.*

Changes to the Downtown Transit Network

Changes to the proposed transit network in Downtown Charleston will impact where walking and bicycling access to transit will be most needed in the future. Factors like the locations of future bus stops, future transfer locations, and how future bus routes and future bicycle facilities will jointly fit into the street network are key considerations.

Initial Downtown Network Concepts - Routes

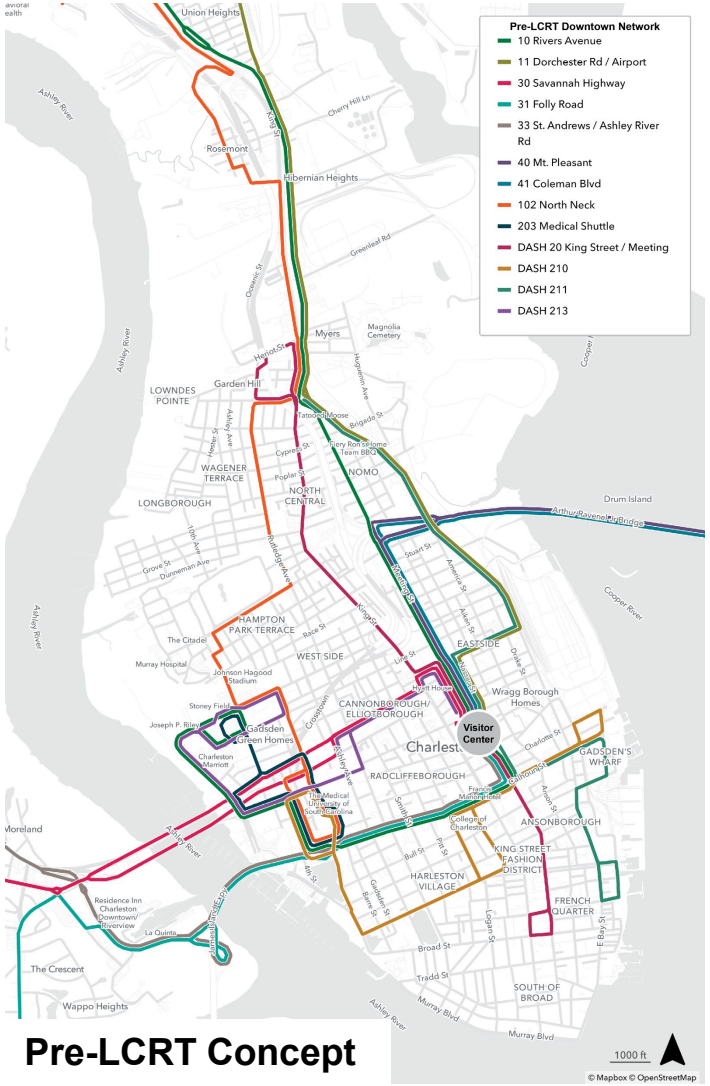
Lowcountry Rapid Transit (LCRT)

CARTA and BCDCOG are also working on the Lowcountry Rapid Transit (LCRT) project, a bus rapid transit route that will connect from Ladson to the Peninsula, with branded. articulated buses coming every 10 minutes during peak hours. As the LCRT begins operating, it will impact other routes on the Peninsula. In anticipation of the LCRT service, two network concepts were developed. In this document, you will see two versions of proposed service:

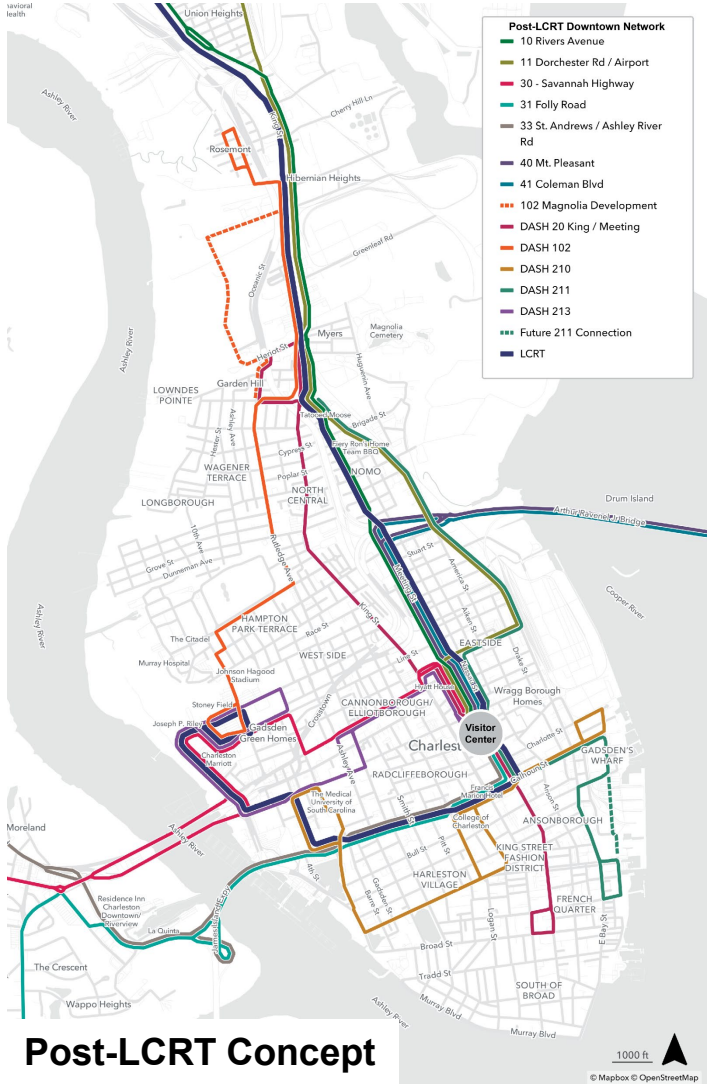
- “Pre-LCRT" (short-term changes before LCRT begins operating) and
- “Post-LCRT" (updates once it is running).

Proposed Downtown Transit Network

The maps to the right show the proposed network before and after the LCRT is operating, as presented to the public in February/March 2024. Pre-LCRT changes are proposed for Routes 10, 11, 30, 41, and 102. A few local bus routes would change again after the LCRT begins operating. Post-LCRT changes are proposed for Routes 10, 30, 102, and Route 203 (Medical Shuttle).



Pre-LCRT Concept



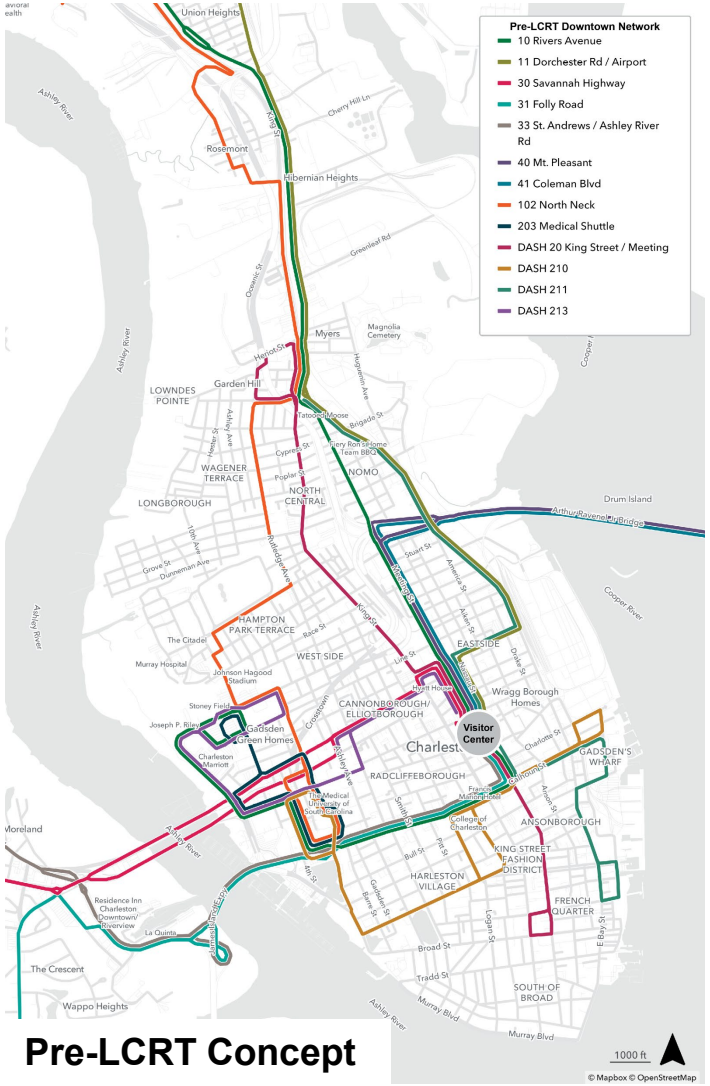
Post-LCRT Concept

Initial Downtown Network Concepts - Routes

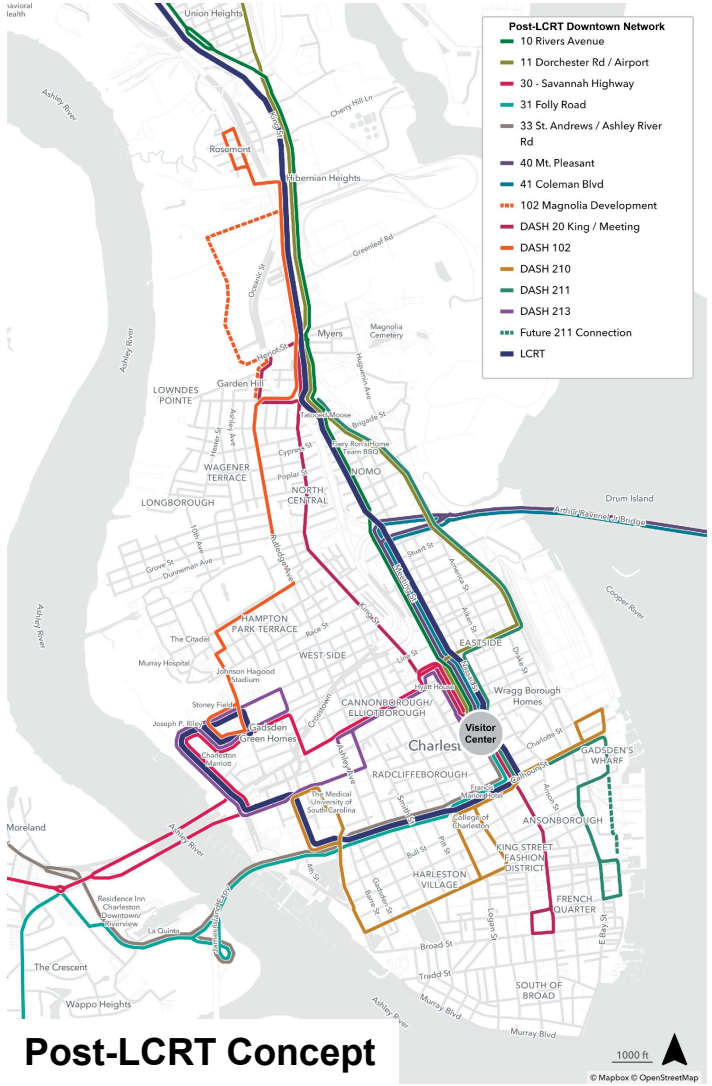
Proposed Downtown Transit Network (Continued)

In general, the proposed networks attempt to provide as much bi-directional services on corridors as possible and consolidate more services onto Meeting Street and Calhoun Street. These guiding principles are based on public feedback noting the desire for more frequent service and transfer opportunities on a few corridors downtown.

The proposed changes will not affect where buses run beyond the Study Area. When bus frequency (how often the bus comes) or service span (hours of operation) changes are proposed, those would be made for the entire route, including the portion beyond the Peninsula. Route frequency and service span changes are noted in the final concepts section.



Pre-LCRT Concept



Post-LCRT Concept

Initial Downtown Network Concepts – Bus Stops

For people walking and biking to transit, access to bus stops – rather than the full length of the route – is what matters to access service. As future transit service changes, so will the locations of future bus stops. Proposed future bus stop locations have not been finalized; anticipated changes to bus stops that would align with the proposed transit network are summarized below to help evaluate future pedestrian and bicycle infrastructure needs.

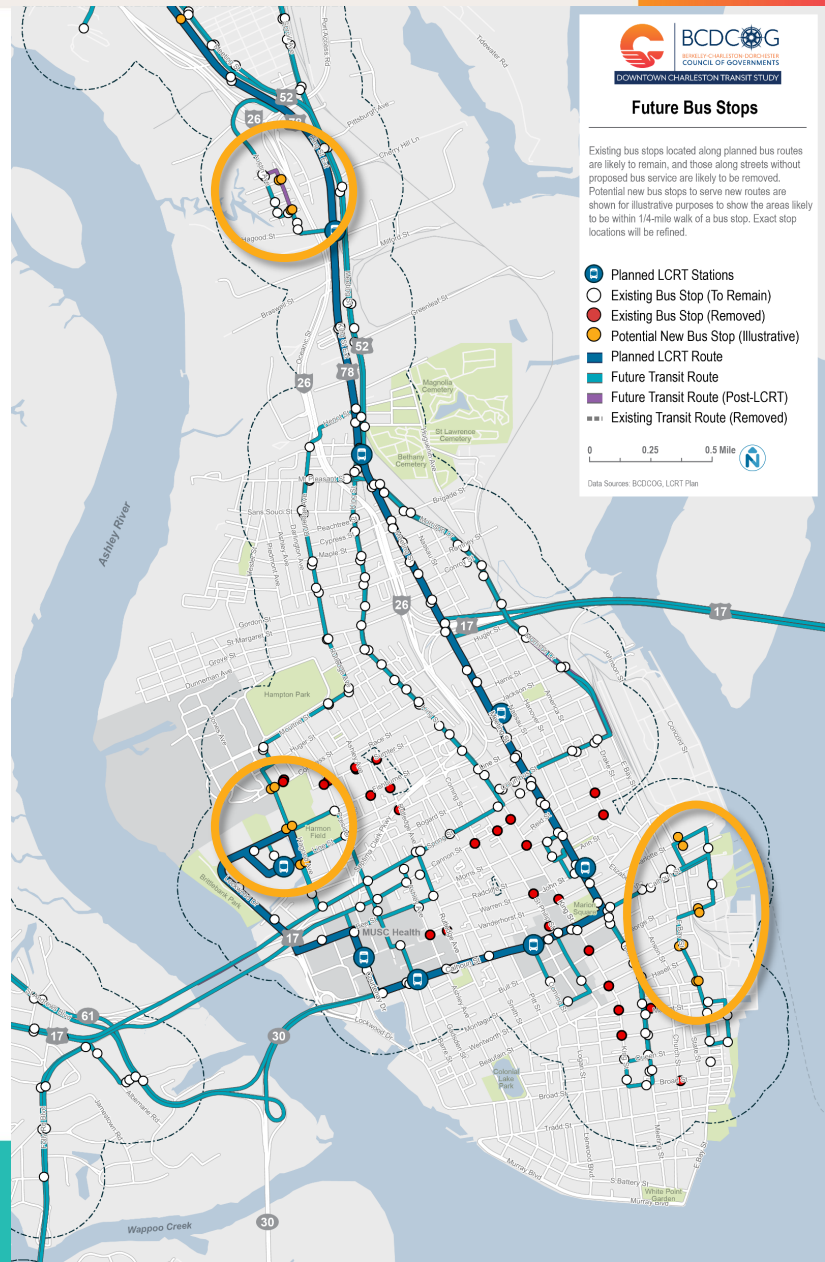
Eliminated Bus Stops*

- Hampton Park Terrace/Westside Neighborhoods
  - Congress Street
  - Sumter Street
  - Ashley Avenue (select stops)
  - Rutledge Avenue (select stops)
- Radcliffeborough Neighborhood
  - Cannon Street (select stops)
  - King Street (select stops)
  - Ashley Avenue (select stops)
  - Rutledge Avenue (select stops)
  - St. Phillip Street
- Southside Neighborhoods
  - S King Street
  - S Market Street
  - Exchange Street (select stops)
- Eastside Neighborhoods
  - America Street

New Bus Stops*

- Hampton Park Terrace/Westside Neighborhoods
  - Hagood Avenue at Congress Street
  - Hagood Avenue at Line Street
- Southside Neighborhoods
  - East Bay Street at Hasell Street (Harris Teeter)
- Charlotte Street at Washington Street
- North Neck Neighborhoods
  - Doscher Avenue (Post-LCRT)

*Proposed bus stop locations have *not* been finalized and are only illustrative to consider pedestrian access



carta

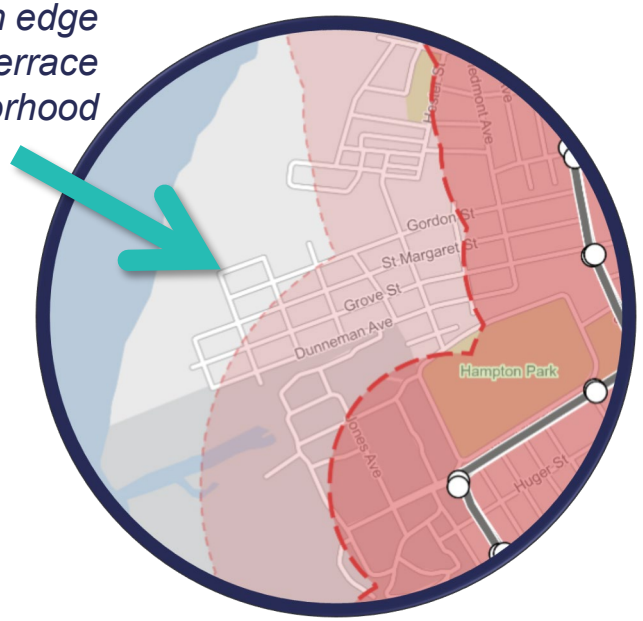
Initial Downtown Network Concepts – Bus Stops

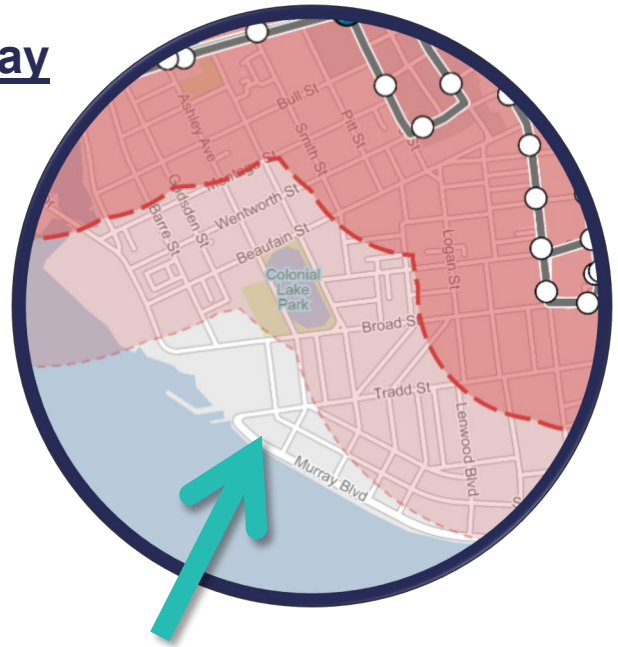
The Peninsula's compact size means all but a few blocks of Downtown Charleston is within ½-mile of a transit stop (about a 10-minute walk) today. To take a closer look at access, ¼-mile (about a 5-minute walk) was also considered, shown in the map at right for existing bus stops.

Today, most of the Peninsula is within ¼-mile of a transit stop. The only areas slightly more than ½-mile from a transit stop today are the blocks around Lowndes Grove in the Hampton Park Terrace neighborhood and the southwestern edge of the South of Broad neighborhood, shown in the close-ups below.

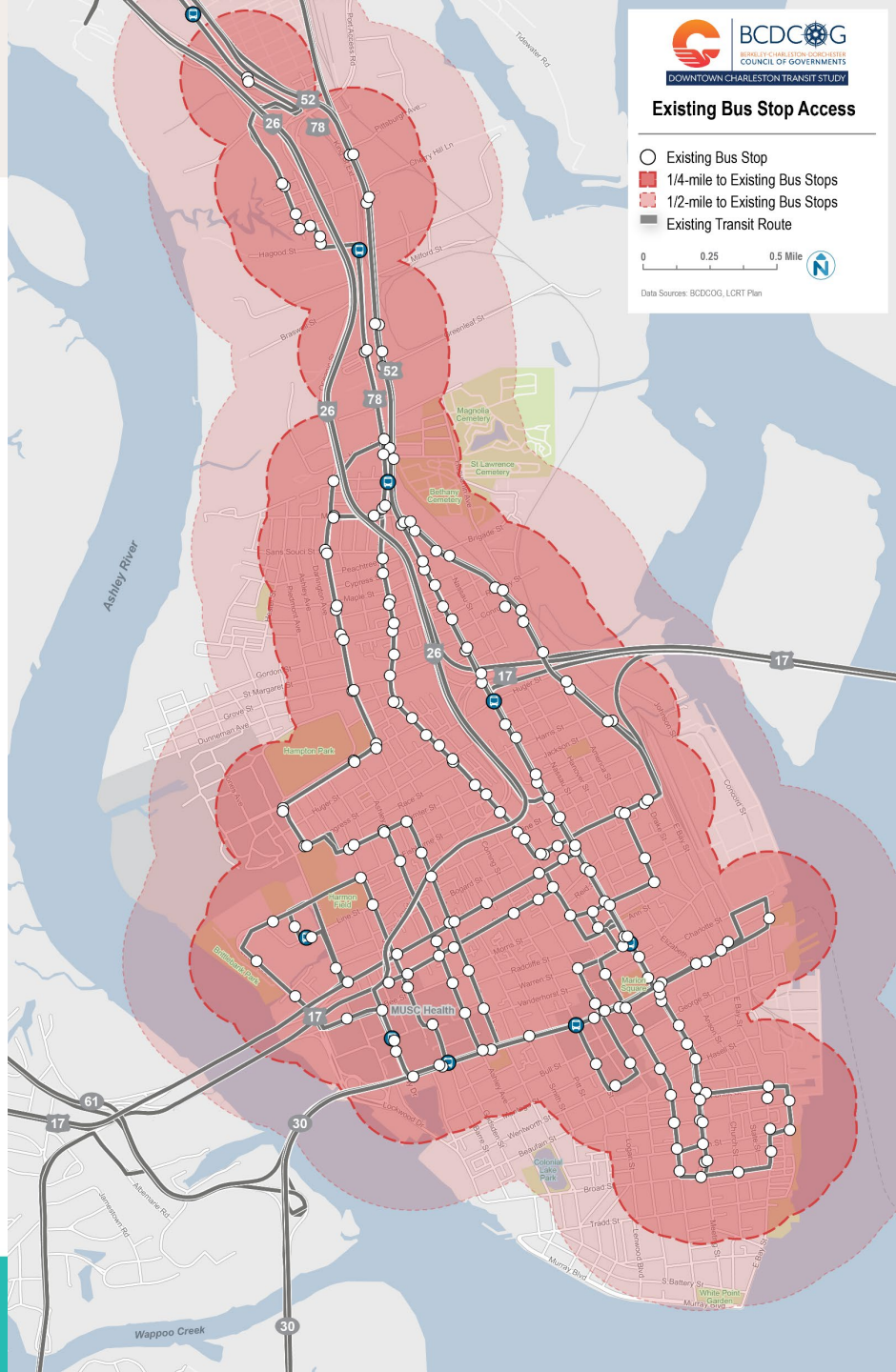
Areas more than ½-mile to stops today

Northwestern edge of Hampton Terrace neighborhood





Southwestern edge of South of Broad neighborhood



carta

Initial Downtown Network Concepts – Bus Stops

The ½-mile and ¼-mile distances to potential future bus stops are shown in the map at right, considering where stops are likely to be removed or added. New stops are shown in yellow (●).

The changes to bus routes and likely stop locations **do not have a significant effect on the areas of the Peninsula that are within ¼-mile or ½-mile of a transit stop**, about a 5-to 10-minute walk. All but a few blocks continue to be within ½-mile of a stop and most of the peninsula continues to be within ¼-mile of a stop. In the future scenario, a small area in the center of the Hampton Park Terrace neighborhood becomes just over ¼-mile from a stop as routes shift from narrow neighborhood streets to Hagood Avenue and President Street.

Areas more than ½-mile to future stops

Northwestern edge of Hampton Terrace neighborhood

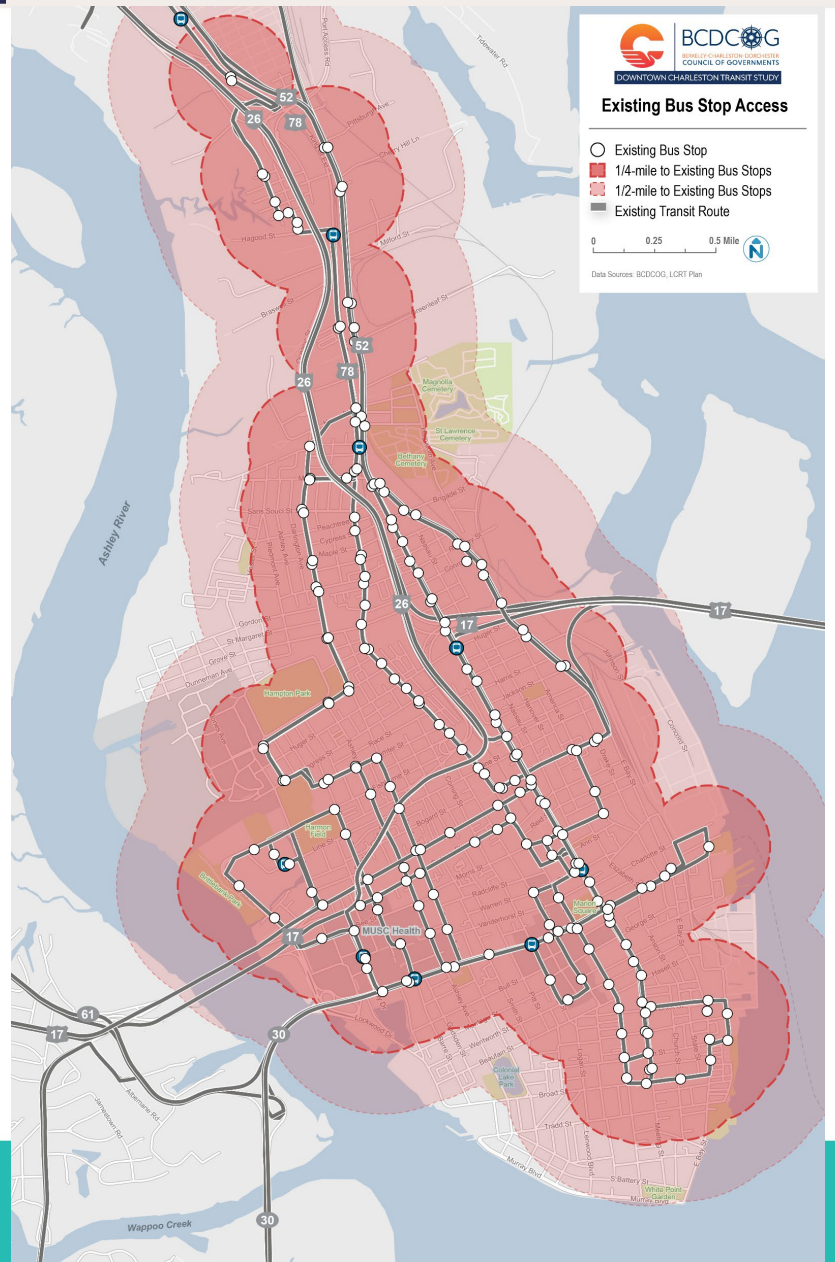
Southwestern edge of South of Broad neighborhood

*Proposed bus stop locations have *not* been finalized and are only illustrative

carta

Initial Downtown Network Concepts – Bus Stops

Although the proposed plan keeps transit within a short walk of all neighborhoods on the Peninsula, in some cases routes are shifted from smaller neighborhood streets to larger streets nearby that can better fit 40’ buses. For example, people in the Hampton Park Terrace neighborhood would walk a few blocks to get on a bus at President Street or Hagood Street.



*Proposed bus stop locations have *not* been finalized and are only illustrative

Initial Downtown Network Concepts - Transfers

In the near term, transfers will continue to be concentrated around the Visitor Center, with multiple transfer points within a few blocks of each other. Once the LCRT is operating, there will be a new LCRT stop on Meeting Street at John Street and the existing local bus stop will shift slightly north on the same block. This means passengers would continue to need to walk up to 5 minutes between several stops to make some of their connections, which is not ideal.

A consolidated transfer location that can accommodate up to 8 buses is needed to better support current operations and future system expansion. Two possible location options examined during the study include the Bus Shed next to the Visitor Center or at the Transit Mall.

Benefits of a consolidated transfer location for first/last-mile access include:

- Reduce the walking distances between transfer points
- Offer a higher quality, covered waiting area for passengers
- Simplify wayfinding and navigation for pedestrians looking for transit access
- Streamline the transfer process for passengers

Downtown Transfer Locations – Future (Near Term)

Existing Pedestrian and Bicycle Facilities

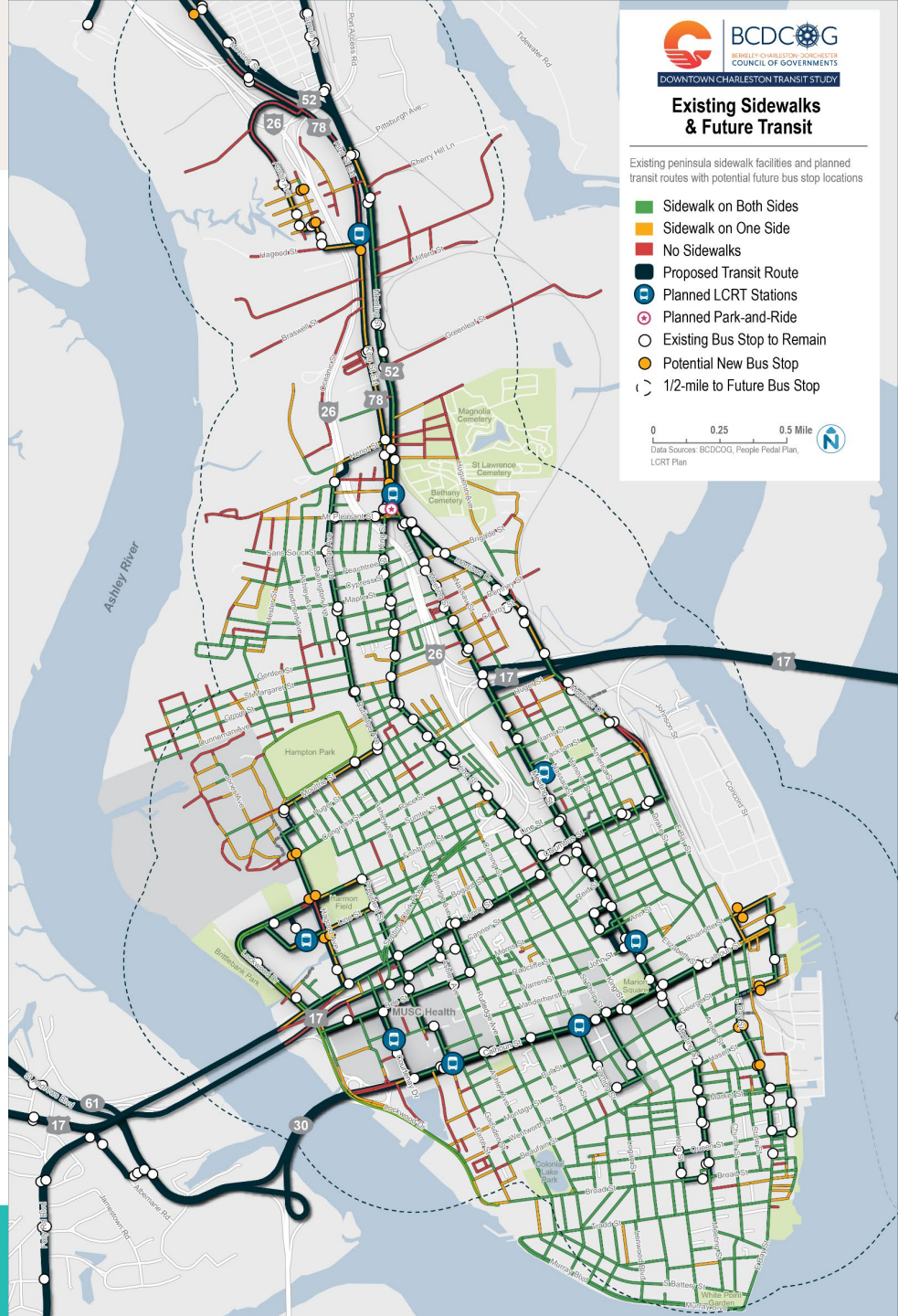
Existing Pedestrian Facilities

The map at right shows the existing sidewalks on the Charleston Peninsula as of July 2023 compared to the proposed transit routes. Please note that:

- The original dataset was revised to categorize streets with landscaped medians (like parts of Market Street and Lockwood Drive) that have a sidewalk on each side of the median as having sidewalks on both sides rather than on one.
- Highways and the elevated portion of Septima Clark Parkway (US-17) do not have sidewalks and are not shown. (See Existing Bicycle Facilities for Wonders' Way.)
- Alleyways typically do not have sidewalks and are not shown.

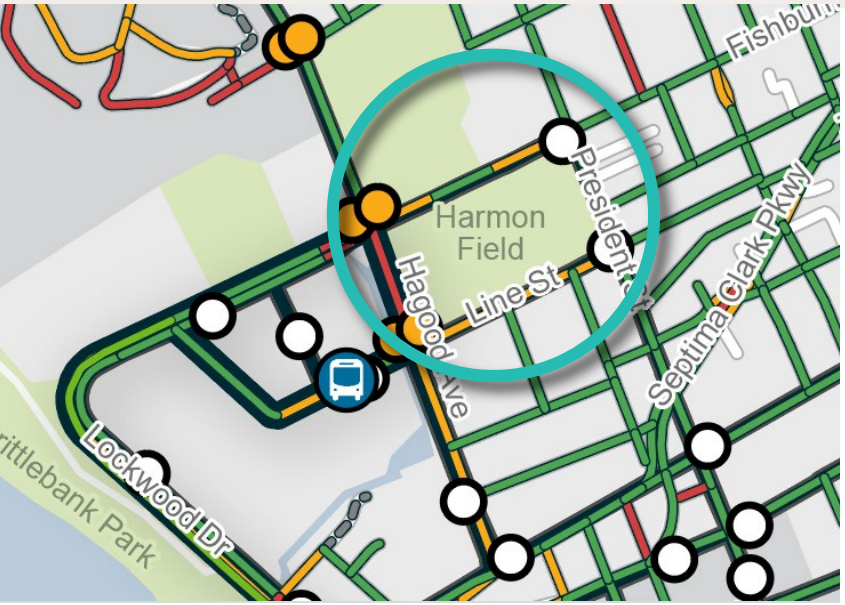
Streets with future bus routes and stops that **do not have sidewalks or have sidewalks only on one side** in some areas include:

- Fishburne Street/Lockwood Drive
- Hagood Avenue
- The Citadel campus
- Harleston Village
- Northern Peninsula Routes
- Morrison Drive/East Bay Street



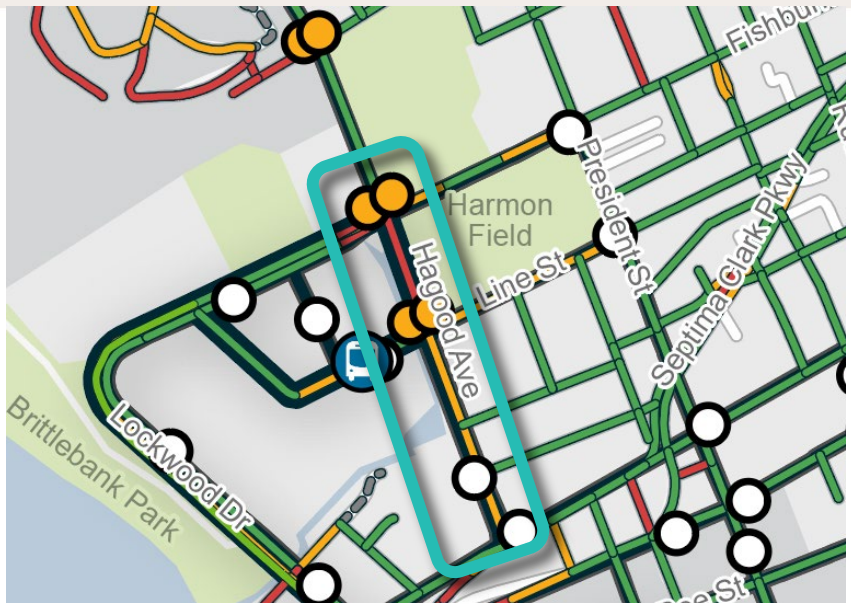
carta

Existing Pedestrian Facilities



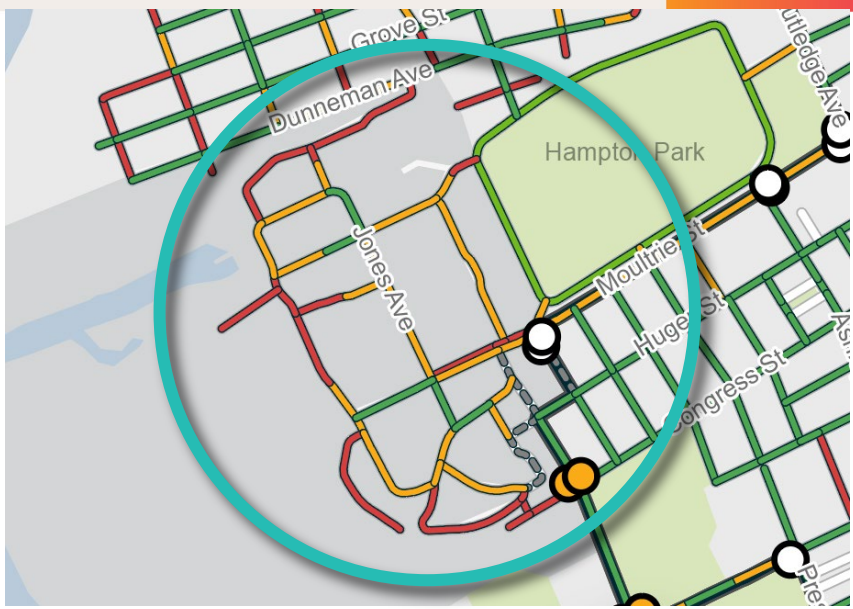
Fishburne Street & Line Street

Portions of this street have missing sidewalks, including near destinations like community parks and shopping centers, bus stops with more than 100 average weekday riders, and a planned LCRT station.



Hagood Avenue

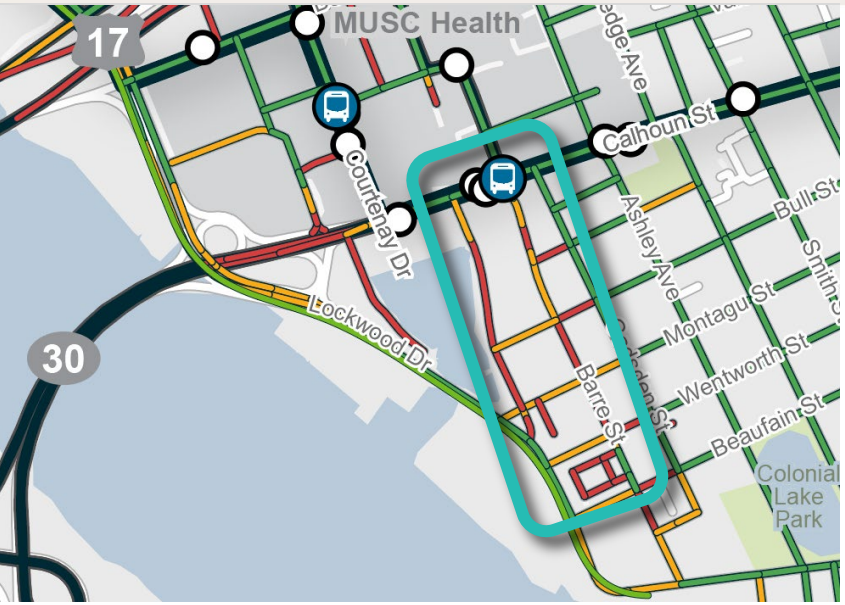
Sections of this street have no sidewalks or sidewalks on only one side next to affordable housing, bus stops with more than 100 average weekday riders, and a planned LCRT station. Flooding is also a known issue in this area that impacts pedestrian access.

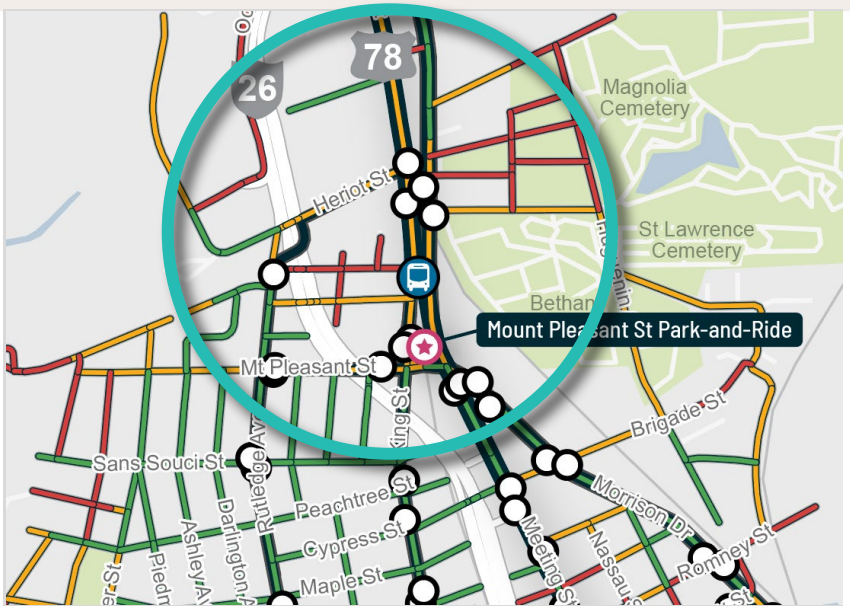


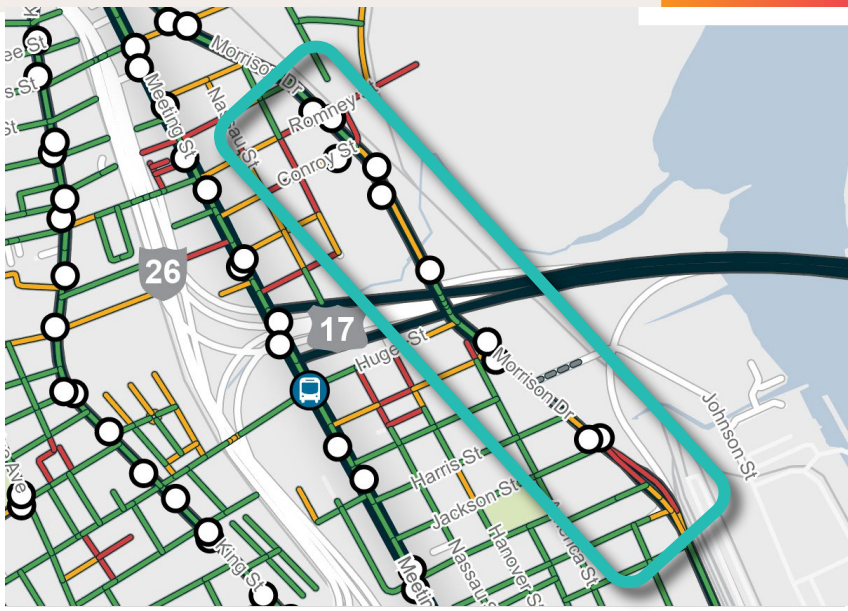
The Citadel

Several streets on The Citadel campus have missing sidewalks and are near bus routes that run along the edge of the campus; however, those streets are controlled by the college and vehicular access is restricted, with low volumes and speeds.

Existing Pedestrian Facilities







Harleston Village

This neighborhood south of the Medical District and Calhoun Street has narrow, older streets, many of which are missing sidewalks, including much of Halsey Boulevard and Barre Street that connect to MUSC and a future LCRT stop.

Northern Peninsula Routes

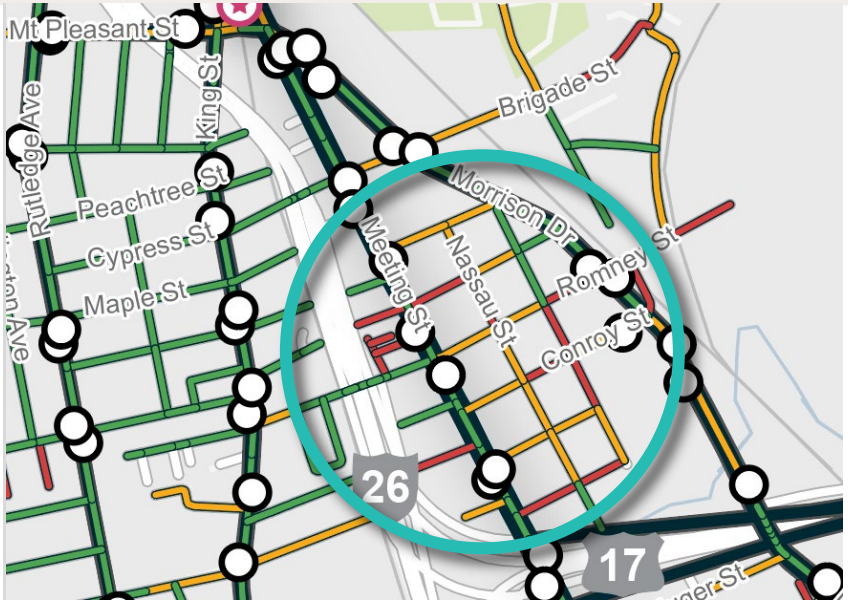
Several streets with bus routes in this area have sidewalks only on one side of the street, including Mt Pleasant Street, King Street, Meeting Street, Heriot Street, and Austin Avenue. This includes the area where the new Mt. Pleasant Street park-and-ride lot and an LCRT station are planned. The planned shared-use path on King Street Extension north of Mt Pleasant Street as part of the LCRT project will help address some of the issues in this area.

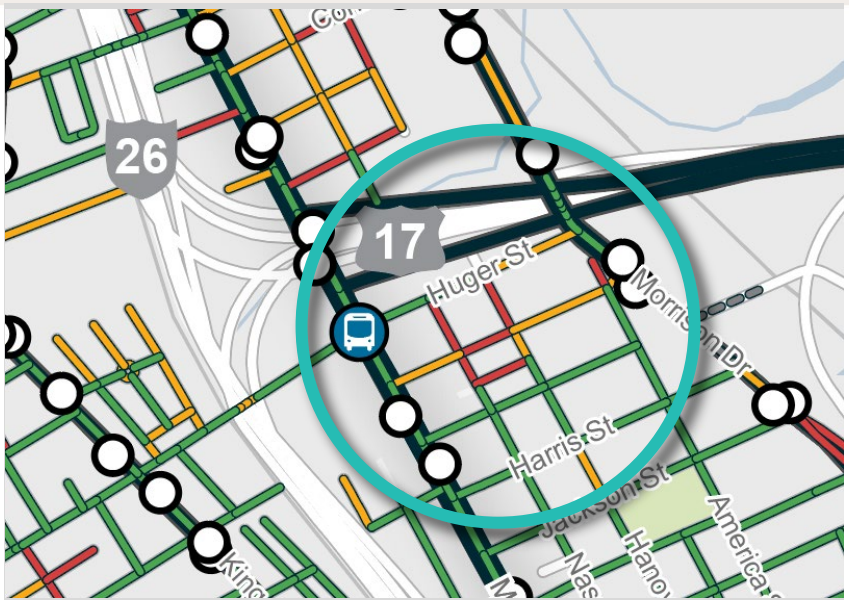
Morrison Drive/East Bay Street

Portions of Morrison Drive/East Bay Street have no sidewalks or a sidewalk on one side. There are also few crossings, even with bus stops on both sides. New development to the east will increase the number of pedestrians in this area. Some of these missing sidewalks will be installed with the Morrison Yard project.

- Sidewalks on Both Sides
- Sidewalk on One Side
- No Sidewalks

Existing Pedestrian Facilities





East Central

Many of the streets in this neighborhood are missing sidewalks or only have sidewalks on one side of the street. This includes parts of Romney Street and Brigade Street, among the few streets that crosses under I-26. These residents will need to walk to transit stops on Meeting Street or Morrison Drive and need better pedestrian facilities.

Stuart Street/Huger Street

Several streets just south of the US-17 bridge lack sidewalks on one or both sides of the street, including parts of Huger Street, one of few streets that crosses under I-26 and provides access to transit routes on both sides of the highway.

Sidewalks on Both Sides
Sidewalk on One Side
No Sidewalks

Existing Bicycle Facilities

The maps at right shows the existing bicycle facilities on the peninsula. There are **few existing bicycle facilities of any kind**. Those that do exist **do not form a connected network** and do not help many people access bus stops. They include:

- A recreational bike loop within Hampton Park;
- A bike/pedestrian path track on US-17/Septima Clark Parkway over the Cooper River between Charleston and Mount Pleasant (Wonders' Way);
- The Brigade Street buffered and protected bike lane;
- A short cycle track on the Petty Street bridge over a marsh to access the planned Magnolia development;
- A mix of unbuffered bicycle lanes and sharrows (paint markings telling drivers to share the lane with cyclists) on Morrison Drive; and
- A waterfront shared use path along Lockwood Drive.

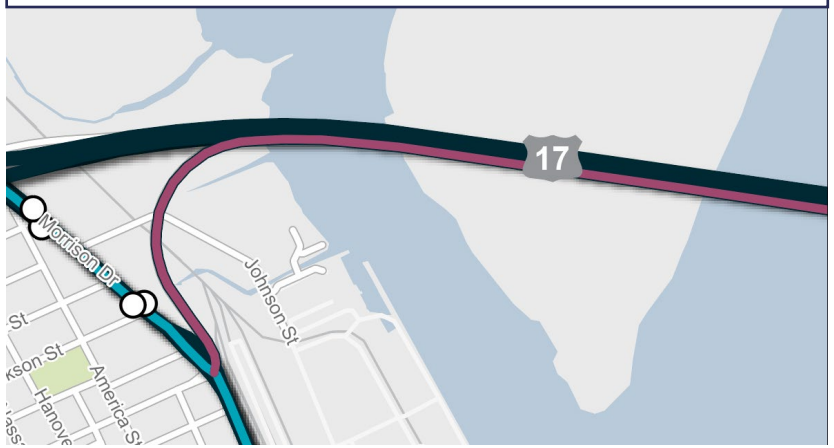
carta

Existing Bicycle Facilities

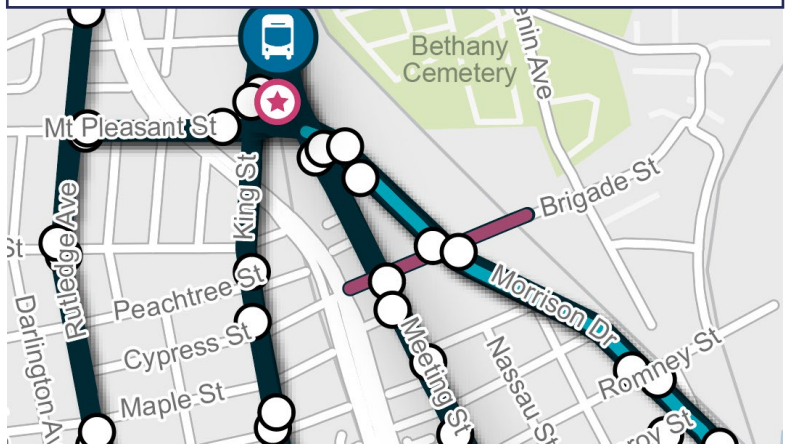
- Existing Shared Use Path
- Existing Separated Cycle Track
- Existing Unbuffered Bicycle Lanes
- Existing Sharrows
- Planned LCRT Stations
- Park-and-Ride
- Proposed Transit Route
- Existing Bus Stop to Remain
- Potential New Bus Stop

Hampton Park Path

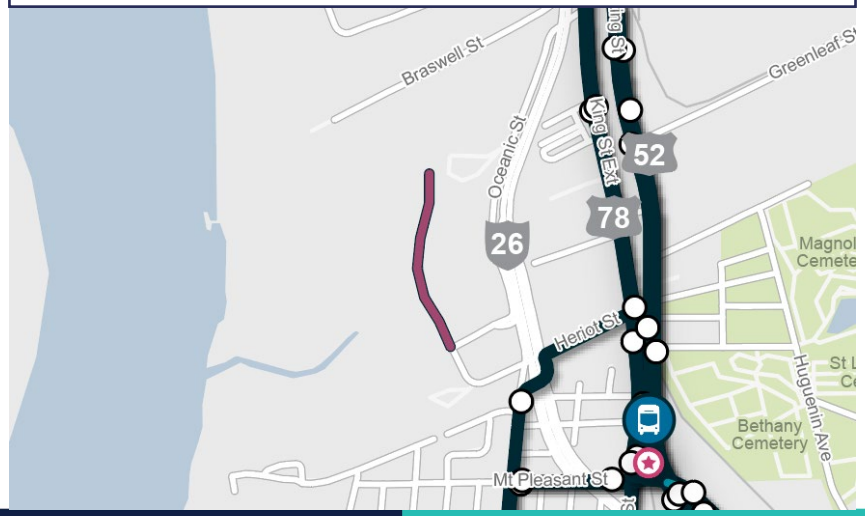
US-17 Bridge Path (Wonders' Way)



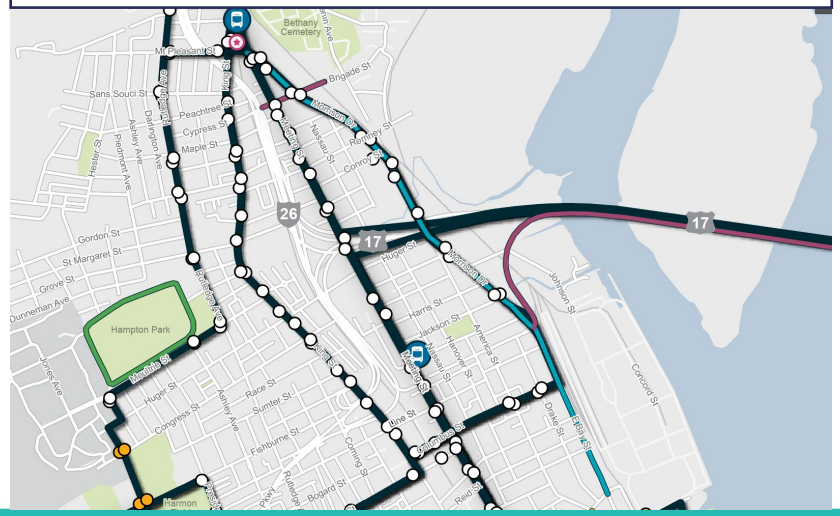
Brigade Street Protected Bike Lanes



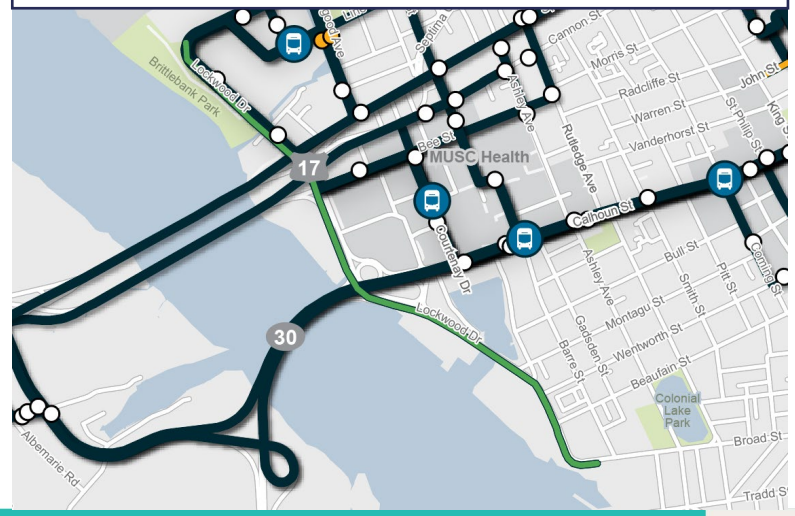
Petty Street bridge cycle track



Morrison Drive/E Bay Street Bike Lane



Lockwood Drive Shared Use Path



Building on Work to Date

BCDCOG/CARTA and its partners at the City of Charleston have been working on plans to enhance pedestrian and bicycling access throughout the Peninsula as part of the Lowcountry Rapid Transit (LCRT) Transit Oriented Development Study and other projects. Work to date has focused on identifying pedestrian and bicycle infrastructure needs for the Peninsula to support the planned Lowcountry Rapid Transit (LCRT) route. This work provides a strong foundation for first- and last-mile recommendations of this plan, which will:

- Identify projects included in other plans that would best support the proposed Downtown Transit Network concepts.
- Identify gaps in the previously recommended pedestrian and bicycle plans, if they do not provide coverage to access all proposed bus routes.

Building on Work to Date

The following previous and ongoing plans to improve local walking and biking infrastructure complement CARTA's goal of ensuring safe and comfortable last-mile connections to transit. Many of the recommended projects and strategies support this goal and overlap with this study. However, these plans did not specifically focus on supporting access to the new Downtown Charleston transit network. As the newest plan with the most similar study area, the **recommendations of the ongoing LCRT TOD Plan were most closely evaluated** as an opportunity to implement recommendations that will also benefit access to the proposed bus routes in this plan.

	Walk Bike BCD	People Pedal Plan	Lowcountry Lowline Plan	LCRT Walking and Bicycling Access to Stations Memo	LCRT Transit-Oriented Development Plan
Date	2017	2018	2020	2021	Ongoing
Area	Berkeley, Charleston, and Dorchester Counties	City of Charleston	Lowline corridor on the peninsula	LCRT Corridor	LCRT Corridor

LCRT Transit-Oriented Development Plan
Proposed Pedestrian Facilities

As part of this ongoing plan, pedestrian infrastructure improvements have been identified to support walking to the planned LCRT route as part of the **LCRT TOD Study**. These include new sidewalks (▬ ▪) and new shared use paths (▬ ▪). These recommendations will also make it easier to walk to future bus service. They include:

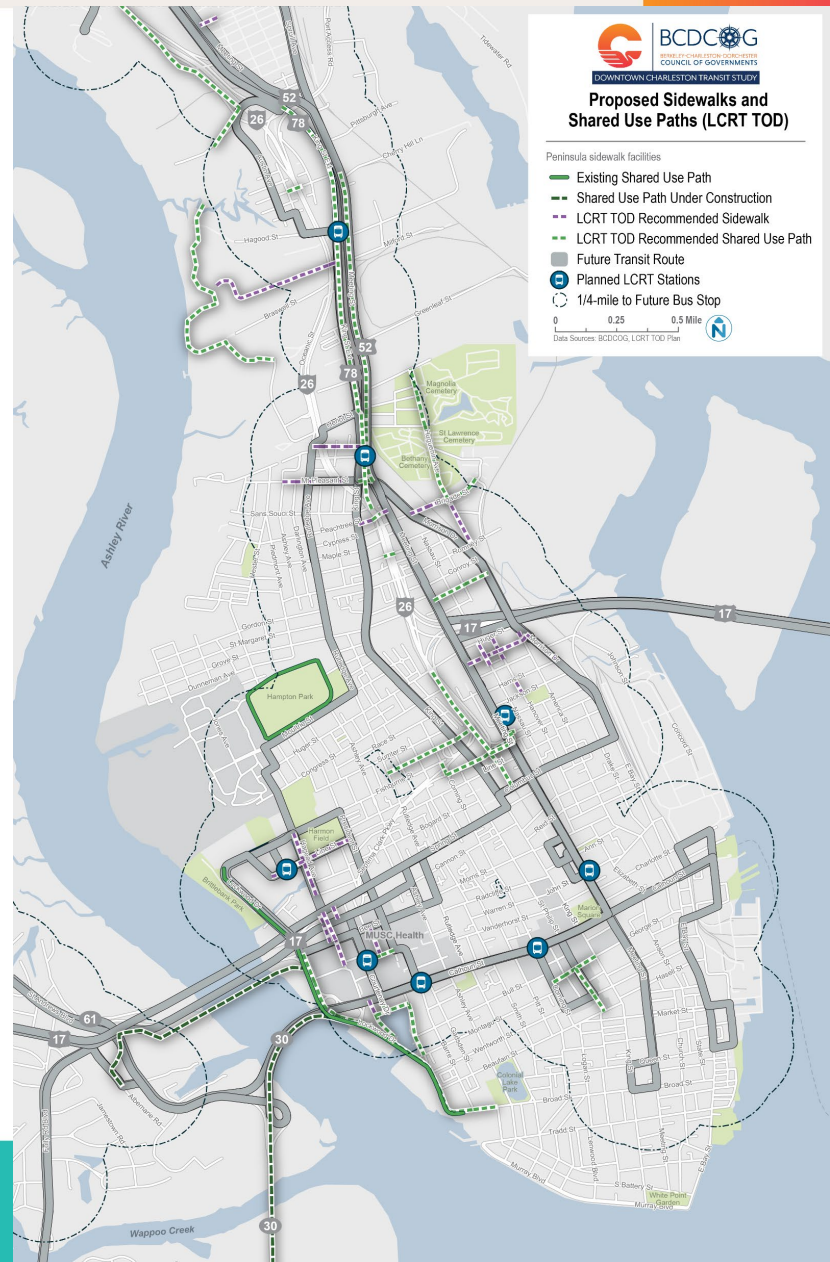
Sidewalks

- ***Hagood Avenue*** (Fishburne Street to Alpha Drive)
- 4th Street (
- ***East Bay Street*** (Stuart Street to Harris Street)
- Stuart Street
- Nassau Street (Huger Street to Johnson Street)
- Hanover Street (Huger Street to Johnson Street)

Shared Use Paths

- ***Lockwood Drive***
- ***Halsey Boulevard***
- James Island Expressway Bridge
- Bridge parallel to US-17 (to West Ashley)
- Congress Street (Rutledge Avenue to I-26)
- ***King Street*** (north of Mt Pleasant Street)
- ***Meeting Street*** (north of Mt Pleasant Street)
- Off-street path along the Ashley River
- Huguenin Avenue
- Conroy Street

Of these, proposed pedestrian facilities near high ridership stops or along higher speed streets with bus stops are higher priorities for supporting local transit service. They are shown in ***bold italics***.



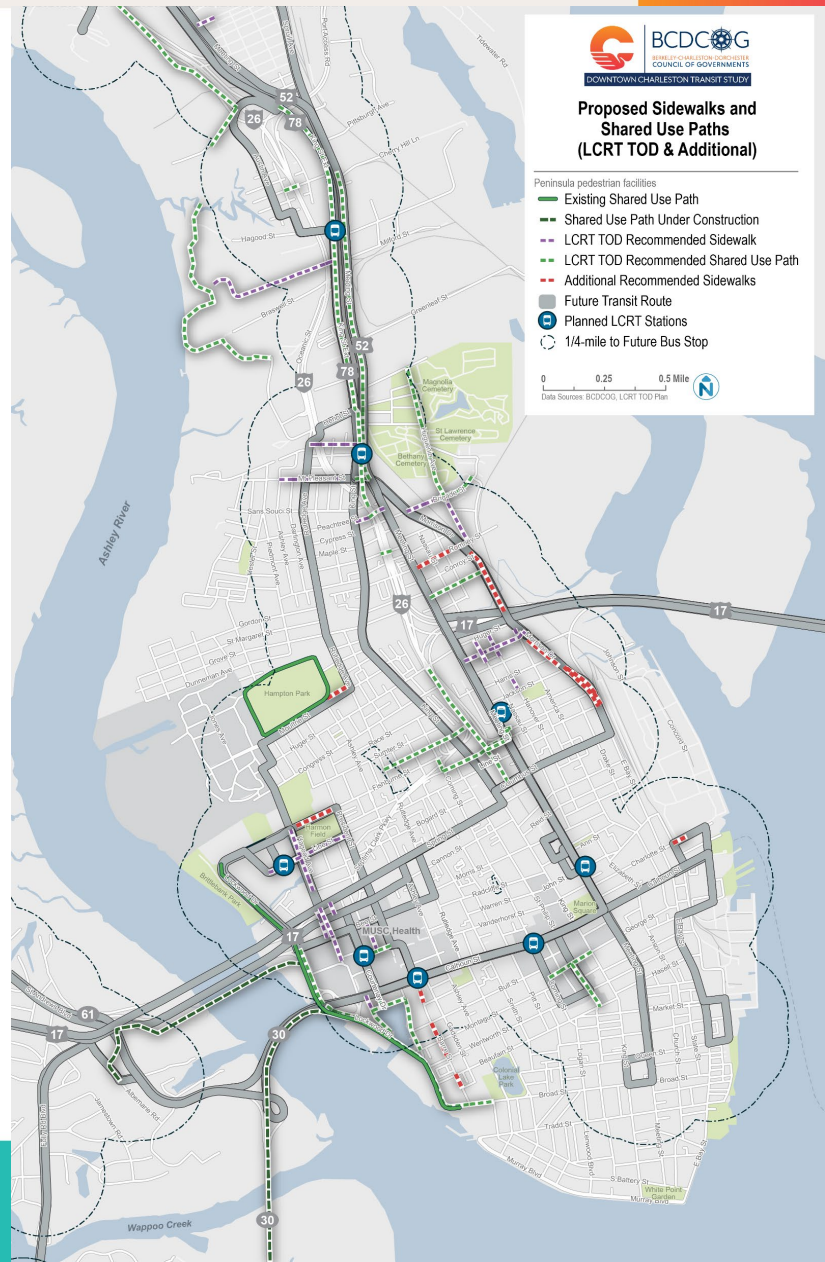
carta

LCRT Transit-Oriented Development Plan
Proposed Pedestrian Facilities

In addition to the recommended additional and improved sidewalks from the LCRT TOD Plan, key additional sidewalks (— —) that would **support walking to high ridership bus stops and new stops, as well as enhance access from neighborhoods where routes were shifted to nearby streets,** beyond the LCRT area include:

- Morrison Drive/East Bay Street (fill in gaps)
- Romney Street (Meeting Street to Morrison Drive)
- Fishburne Street (Hagood Avenue to President Street)
- Moultrie Street (by bus stops + add marked crossings and ramps to existing sidewalk on south side)
- Barre Street (fill in gaps)
- Charlotte Street (near new stop at Washington Street)

Note: Alleys were not considered and for low-speed, low-volume streets, getting sidewalks on at least one side of the street is the priority. For higher speed and higher volume streets, getting sidewalks on both sides of the street is a priority. Sidewalks should also be present on both sides of the street for streets with bus stops on both side, with a safe pedestrian crossing to switch over to a single-sided sidewalk when needed.



carta

Building on Work to Date – Bicycle Facilities

Although new, dedicated bicycle facilities on the peninsula will provide better ways for people to bike to transit or complete entire trips by bike, they will also present some future design challenges where buses and bikes may compete for limited space.

Where dedicated bicycle lanes or shared use paths are recommended, street space would need to be reallocated. At minimum, a bicycle lane requires 5’ in each direction, and an additional 1’ to 2’ is preferred. This means 10’ to 14’ may be needed for bidirectional bicycle facilities. In some cases, these are recommended on streets where bus routes are planned, which **may result in competing needs for space**. At least 11’ lanes are preferred for bus operations. The design of these facilities should also consider reducing conflicts where they will interact with transit, particularly at bus stops and intersections.

For example, separated bicycle facilities are proposed on Rutledge Avenue, which would need a minimum of 12’. The existing curb-to-curb width on part of that street is approximately 32’. That may mean that the travel lanes would need to be reduced to 10’ to accommodate separated bicycle facilities, which would fit a standard vehicle but would present a challenge for bus operations.

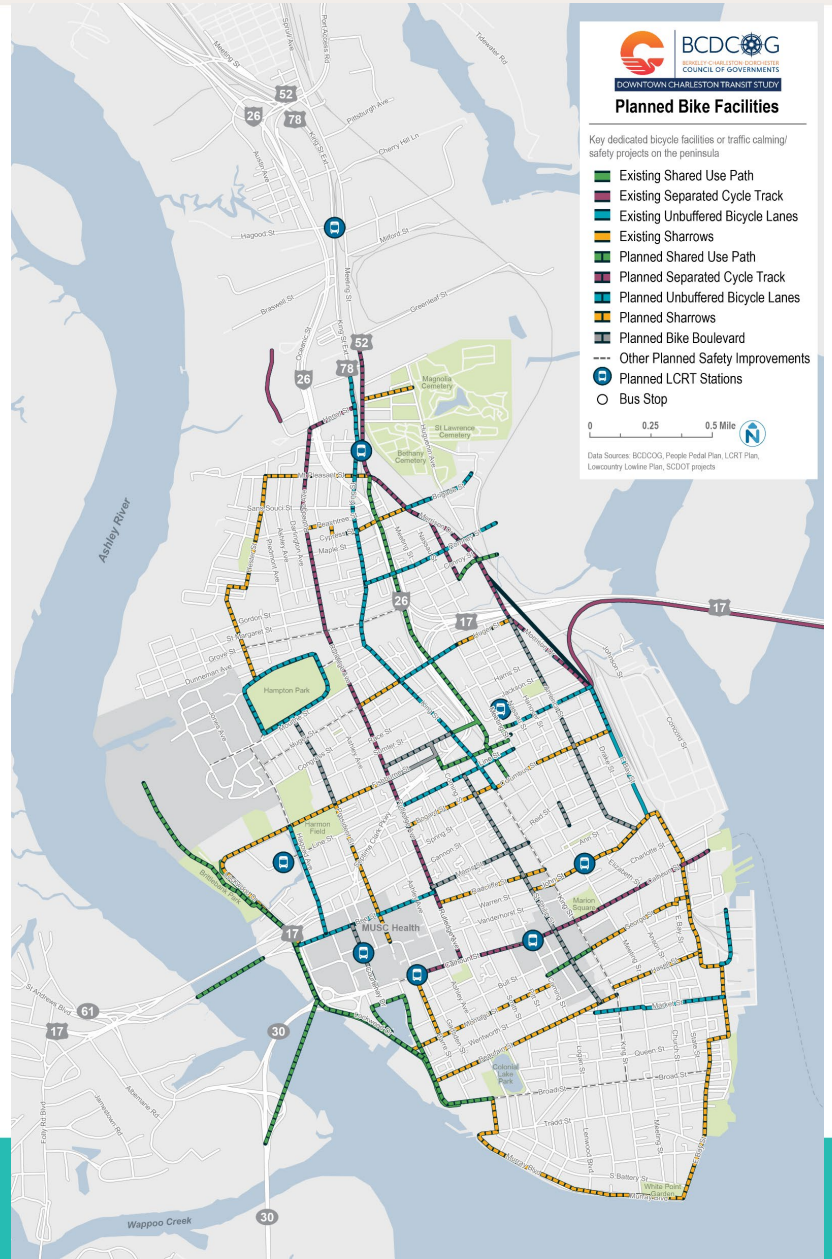
Over the years, different bicycle facilities have been recommended on the peninsula by different plans. Depending on which plan(s) move forward, the impacts on transit may differ. Potential conflicts and considerations for bicycle facilities recommended by previously adopted plans (People Pedal Plan, LCRT Plan, and Lowcountry Lowline Plan) and the recently adopted LCRT TOD plan are both shown in this section. BCDCOG/CARTA should work with the City to refine which of these recommendations will move forward and which of these potential conflicts are likely to occur.

Previously Planned Bicycle Facilities

The first map shows the planned bicycle facilities according to previously adopted plans like the **People Pedal Plan, LCRT Plan, and Lowcountry Lowline Plan**.

The proposed bicycle routes would be a mix of facility types, including shared use paths, separated cycle tracks, unbuffered bicycle lanes, sharrows, bike boulevards, and other safety improvements like traffic calming.

The second map shows how these planned bicycle facilities align with the proposed transit network and where **there may be conflicting needs for space between buses and bicycle facilities.**

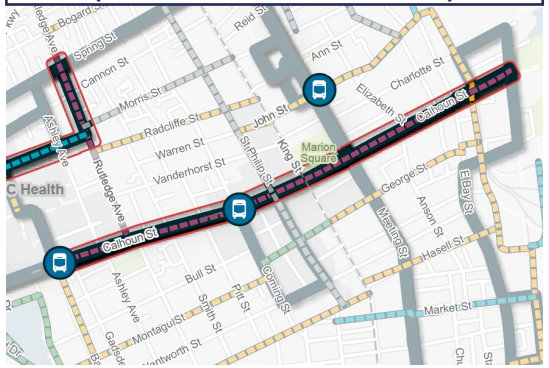


Previously Planned Bicycle Facilities – Potential Conflicts

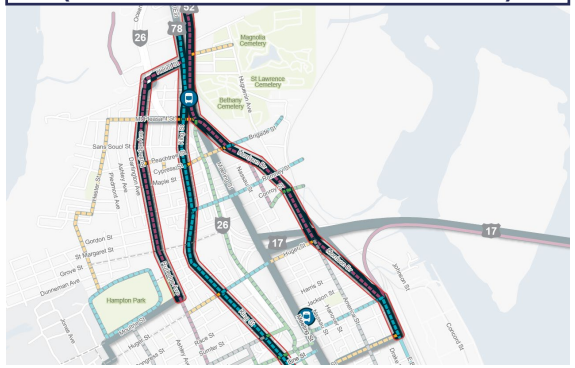
There may be conflicting needs for right-of-way on blocks where both dedicated bicycle facilities (unbuffered bicycle lanes, protected bicycle lanes, or shared use paths) are planned, particularly on streets with narrow right-of-way. In some cases, this may mean designing bicycle facilities in a way that is compatible with bus movements and access to bus stops; in cases with very narrow right-of-way, alternative parallel routes may need to be considered. Potential conflicting locations include:

King Street (Monrovia St to Columbus St)

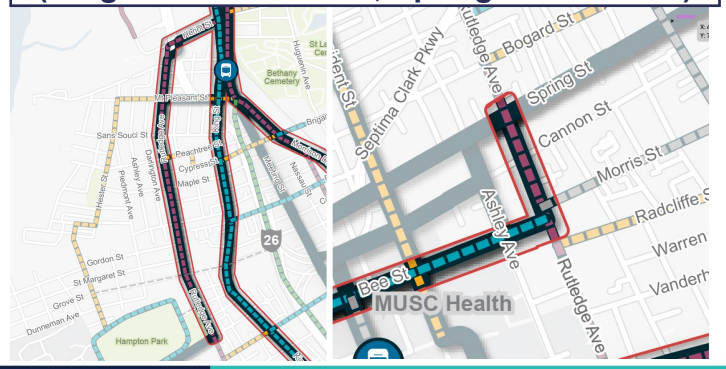
Calhoun Street (Barre St to Concord St)



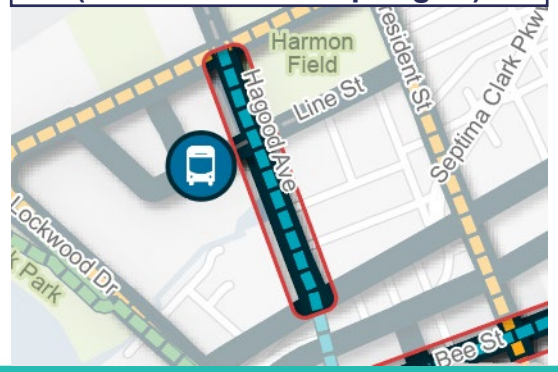
Morrison Drive/East Bay Street (Greenleaf St to Columbus St)



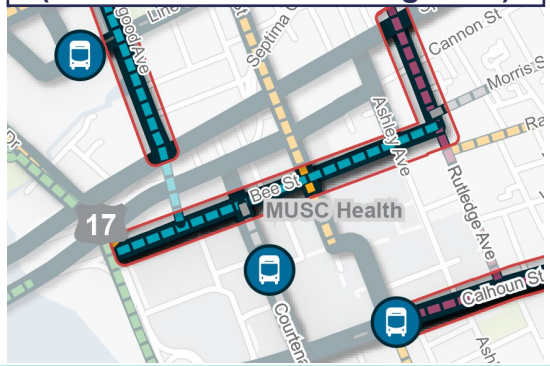
Rutledge Avenue (King St to Moultrie St, Spring St to Bee St)



Hagood Avenue (Fishburne St to Spring St)



Bee Street (Lockwood Dr to Rutledge Ave)



LCRT Transit-Oriented Development Plan
Proposed Dedicated Bicycle Facilities

As part of the ongoing LCRT TOD plan, bicycle infrastructure improvements have been identified to support biking to the planned LCRT route. Because most people are willing to bike a longer distance than they will walk, the planned bicycle facilities to connect to the LCRT cover the entire Peninsula and would also provide access to future local bus stops.

Some of the planned bicycle facilities in this plan differ from previously adopted pedestrian and bicycle plans. For example, this plan does not propose upgrading the bicycle lanes on Morrison Drive to protected facilities.

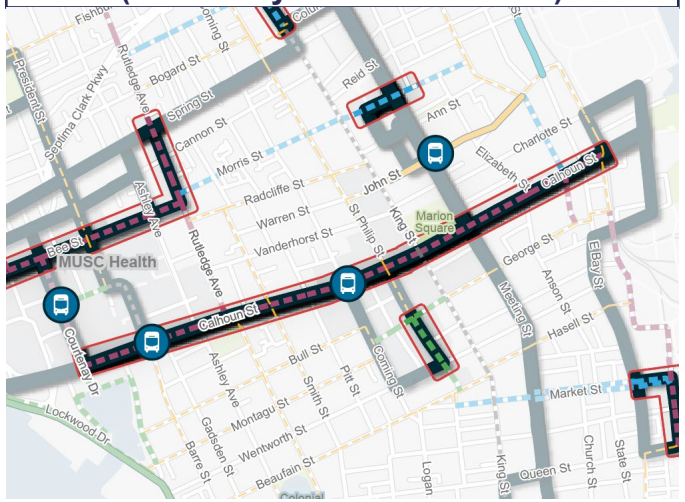
The first map shows the planned bicycle facilities in the LCRT TOD Plan. The second map highlights locations where these recommendations are on streets where transit is also proposed, places where potential conflicting needs for space may occur.

As these bicycle projects move toward design, conflicts for competing space must be resolved and designs should accommodate 40’ bus movements.

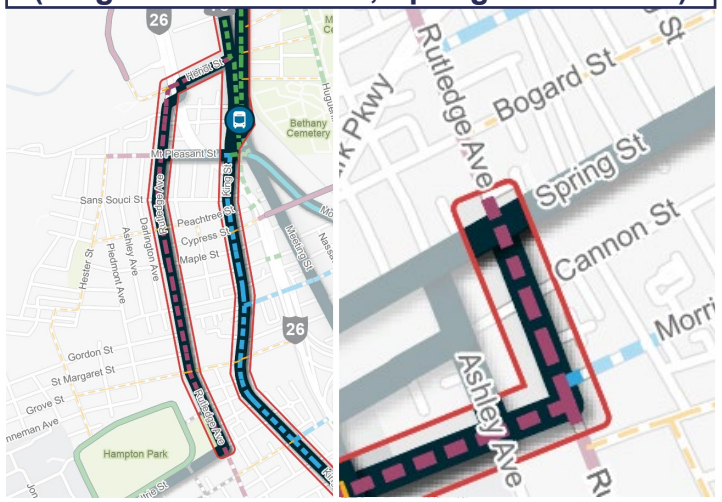
carta

LCRT Transit-Oriented Development Plan
Proposed Dedicated Bicycle Facilities – Potential Conflicts

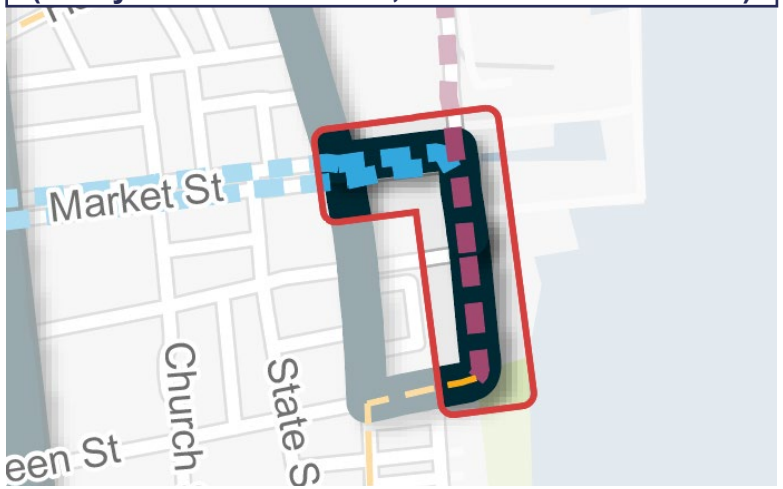
Calhoun Street
(Courtenay Dr to Concord St)



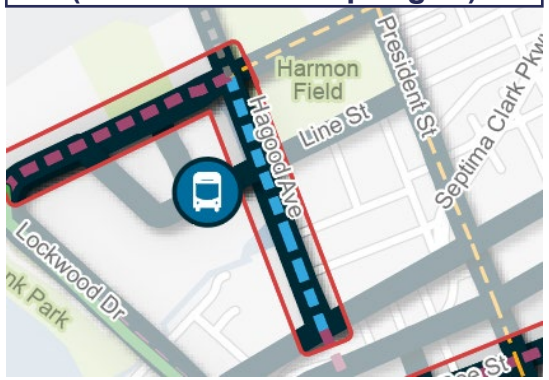
Rutledge Avenue
(King St to Moultrie St, Spring St to Bee St)



Market Street/Concord Street
(E Bay St to Concord St, Market St to Queen St)

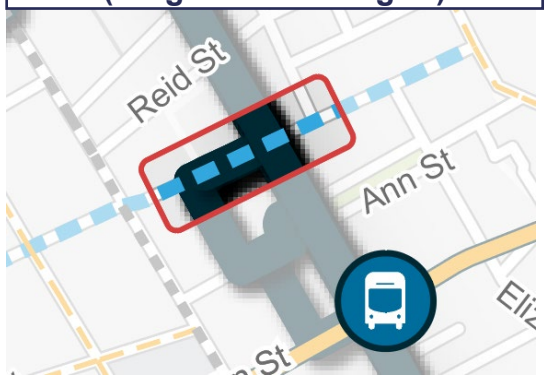


Hagood Avenue
(Fishburne St to Spring St)

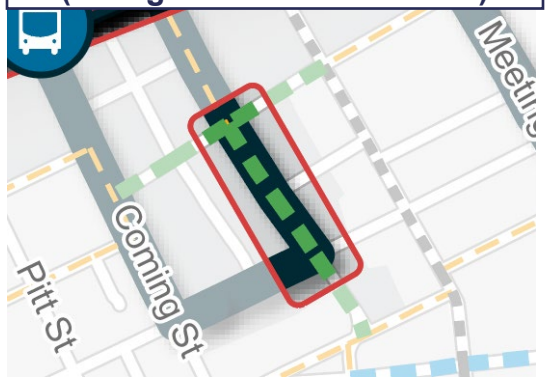


Bee Street
(Lockwood Dr to Rutledge Ave)

Morris Street
(King St to Meeting St)



St. Philip Street
(George St to Wentworth St)



LCRT Transit-Oriented Development Plan
Proposed Traffic Calming, Bike Boulevards, & Sharrows

This plan also identified streets where traffic calming, bike boulevards, or sharrows are recommended to support walking and biking to LCRT stations. These features do not require separate space for dedicated bicycle lanes, but their **designs could impact bus operations** on streets where future buses will operate, such as by tightening turn radii at intersections.

As traffic calming and bike boulevard designs are developed, they **should be designed to accommodate 40' buses** and their turn movements. Streets where these have been recommended that also have future bus routes include portions of:

- Hagood Avenue (Huger Street to Fishburne Street)
- President Street (Fishburne Street to Moultrie Street)
- Jonathan Lucas Street (Doughty Street to Calhoun Street)
- Coming Street (Bull Street to Montagu Street)
- King Street (Queen Street to Broad Street)
- Broad Street (King Street to Meeting Street)
- Queen Street (East Bay Street to Concord Street)
- Several streets through the Magnolia area

Recommendations

Recommendations for First/Last Mile Connections

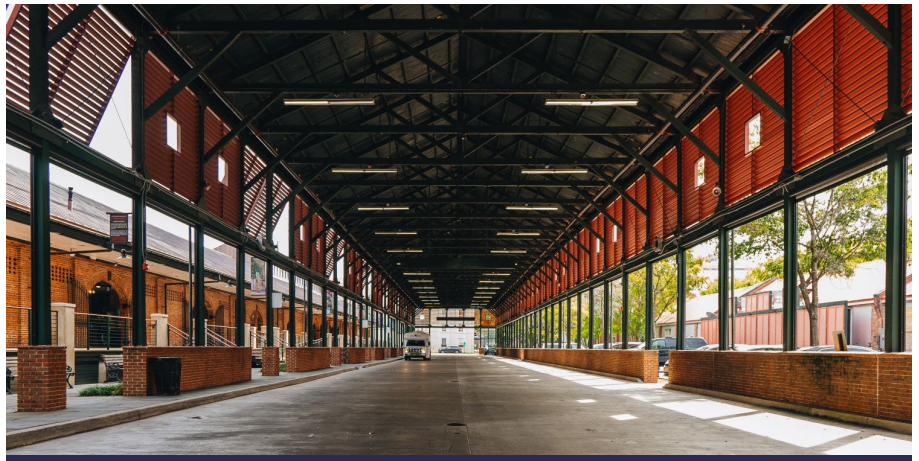
Add bus stops in locations to minimize walking distances to stops for neighborhoods where bus routes have been shifted to nearby main streets. Exact stop locations should be refined.

- **Hampton Park Terrace/Westside Neighborhoods**
  - Hagood Avenue at Congress Street
  - Hagood Avenue at Line Street
- **Southside Neighborhoods**
  - East Bay Street at Hasell Street (Harris Teeter)
- **Charlotte Street at Washington Street**
- **North Neck Neighborhoods**
  - Doscher Avenue (Post-LCRT)

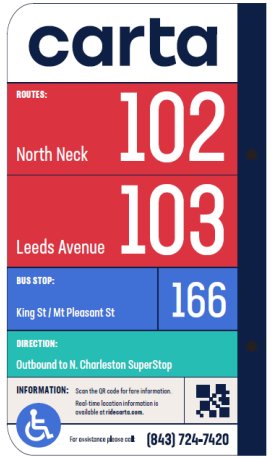
Recommendations for First/Last Mile Connections

Facilitate an easy walk to transfers around the Visitors Center.

- Additional pedestrian wayfinding to stop locations.
- Update signs at stops to match the CARTA brand standards.
- Additional pedestrian lighting through the Visitors Center Garage courtyard.
- Evaluate signal timing at Meeting Street and John Street to confirm pedestrians are prioritized and can easily cross to access bus stops on either side of Meeting Street.
- Consider adding shared bicycle docking station at Meeting Street/Mary Street transfer location.
- **Consider using the Bus Shed as a consolidated transfer point** to minimize walking distances and transfer times or reconstructing the Transit Mall to accommodate transfer needs.



Potential consolidated transfer location at the Bus Shed



CARTA bus stop sign standard (left) vs existing bus stop signs (right)

Recommendations for First/Last Mile Connections

As planned bicycle facilities and traffic calming features from the LCRT TOD Plan are designed, ensure they accommodate 40’ bus movements on streets with future bus routes. In some cases, that may mean adjusting the recommended facility type.

- Hagood Avenue (Huger Street to Fishburne Street)
- President Street (Fishburne Street to Doughty Street)
- Jonathan Lucas Street (Doughty Street to Calhoun Street)
- Coming Street (Bull Street to Montagu Street)
- King Street (Queen Street to Broad Street)
- Broad Street (King Street to Meeting Street)
- Queen Street (East Bay Street to Concord Street)
- Several streets through the Magnolia area

Recommendations for First/Last Mile Connections

Resolve competing needs for space where dedicated bicycle facilities are planned on narrow streets that will also serve future bus routes.

- Calhoun Street (Courtenay Drive to Washington Street) ***(may conflict with future signed peak hour bus lanes)***
- Morrison Drive/East Bay Street (Greenleaf Street to Columbus Street)
- King Street (Columbus Street to Mount Pleasant Street)
- Rutledge Avenue (Spring Street to Bee Street)
- Rutledge Avenue (Heriot Street to Moultrie Street)
- Courtenay Drive (Calhoun Street to Bee Street)
- Bee Street (Lockwood Drive to Rutledge Avenue)
- Lockwood Drive (Fishburne Street to Bee Street)
- Fishburne Street (Lockwood Drive to Hagood Avenue)
- Concord Street (Market Street to Queen Street)
- East Bay Street/Morrison Drive (Columbus Street to Meeting Street)
- Heriot Street (Rutledge Avenue to King Street)

Potential Strategies

- Floating bus stops
- Conflict markings
- Sidewalk level bicycle lanes at bus stops
- Modify planned bikeway/buffer type/width to maintain 11’ travel lanes
- Shift bicycle facilities to nearby parallel street

Floating bus stop boarding island (Source: NACTO)

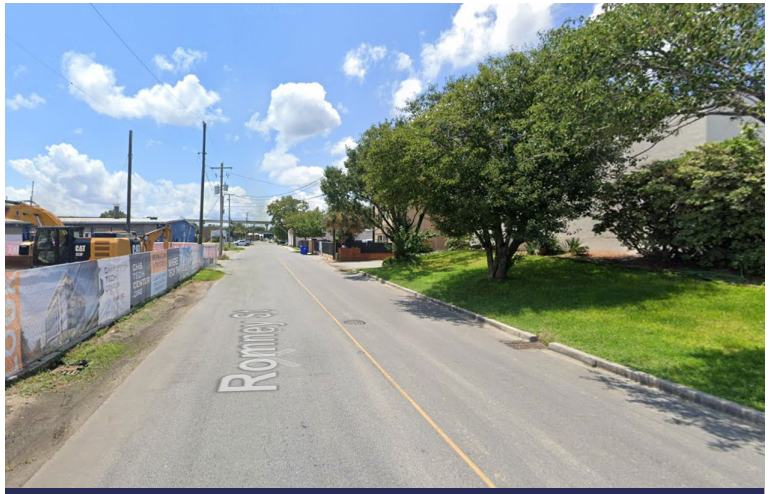
Sidewalk level bicycle lane with bus boarding area (Source: Decaturish)

Recommendations for First/Last Mile Connections

Add new sidewalks identified as part of the LCRT TOD Plan, along with additional sidewalks to support bus stops beyond the LCRT corridor, including:

- Sidewalks identified in LCRT TOD Plan
- Morrison Drive/East Bay Street (fill in gaps and add marked crosswalks)
- Romney Street (King Street to Morrison Drive gaps)
- Fishburne Street (Hagood Avenue to President Street)
- Moultrie Street (by bus stops + add marked crossings and ramps to existing sidewalk on south side)
- Barre Street (fill in gaps)
- Charlotte Street (near new stop at Washington Street)
- Evaluate the condition of surrounding sidewalks as new bus stops are installed to determine if repairs are needed.

Missing sidewalks on Morrison Drive



Missing sidewalks on Romney Street

Recommendations for First/Last Mile Connections

Add or enhance crosswalks (all directions) and sidewalk ramps where needed at new bus stops *(stop locations to be refined)* and evaluate potential Rectangular Rapid Flashing Beacons (RRFB) or flooding solutions as needed.

- Hagood Avenue and Fishburne Street
- Hagood Avenue and Line Street
- Hagood Avenue and Congress Street
- Charlotte Street and Washington Street
- East Bay Street and Wentworth Avenue
- East Bay Street and Pinckney Street

Sidewalk ramp at East Bay St and Wentworth Ave

Missing sidewalk, crosswalks, and flooding issues on Hagood Avenue

Recommendations for First/Last Mile Connections

Consider adding more frequent mid-block pedestrian crossings on streets with long distances between marked crossings, especially near bus stops.

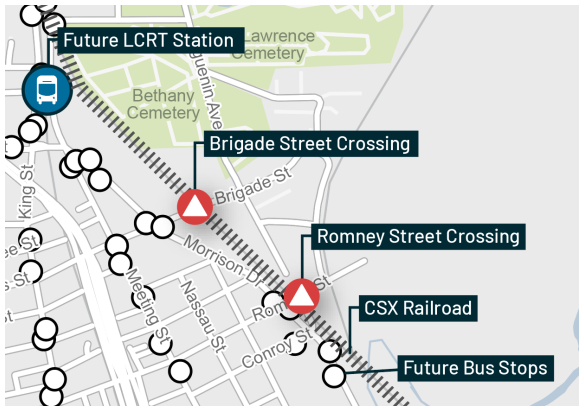
- East Bay/Morrison Drive
  - Romney Street
  - Stuart Street
  - Jackson Street

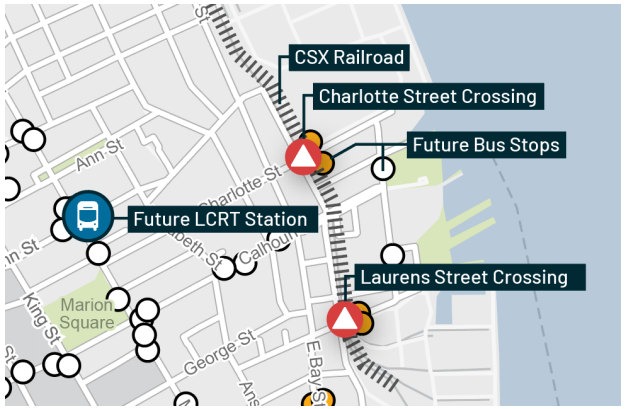
Bus stop on Morrison Drive at Romney Street is ¼-mile to the nearest marked pedestrian crossing today

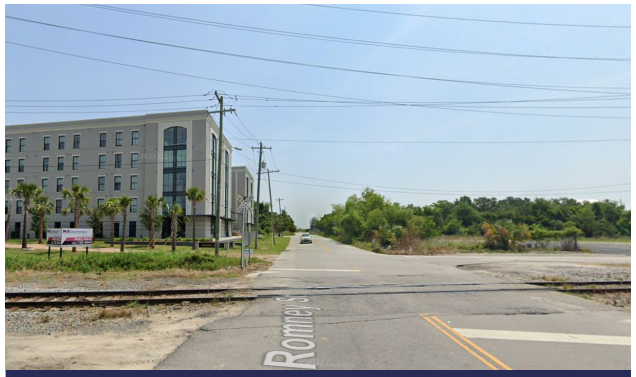
Recommendations for First/Last Mile Connections

Work with CSX to install ADA accessible pedestrian crossings over the railroad and improve access to transit for Bridgeview Village and a growing number of developments on the east side of Morrison Drive.

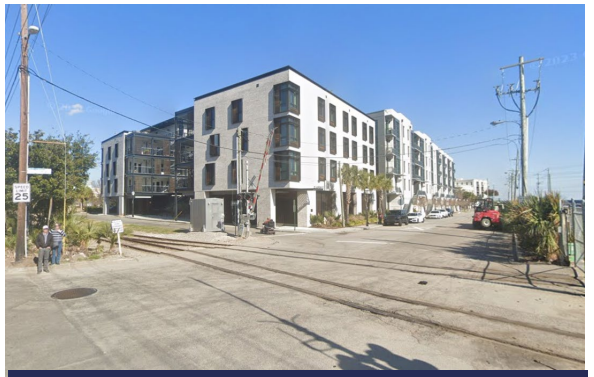
- Brigade Street crossing
- Romney Street crossing
- Laurens Street crossing
- Charlotte Street crossing







Romney Street Railroad Crossing



Laurens Street Railroad Crossing

Brigade Street Railroad Crossing

Charlotte Street crossing