

Transit Oriented Development (TOD) Strategy Report and Policy Toolkit

February 2022

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Chapter One

Introduction

The Lowcountry Rapid Transit (LCRT) Transit Oriented Development (TOD) Strategy Report and Policy Toolkit presents both corridor-wide and station area approaches to create transit supportive development patterns at each of the LCRT station areas. Advancing TOD at station locations within the proposed LCRT transit system is critical to ensuring strong ridership, positive economic impacts, equitable development, and regional growth management goals. The TOD planning process occurred in conjunction with the Berkeley Charleston Dorchester Council of Government's (BCDCOG) New Starts Capital Investment Grant (CIG) program.

The benefits of TOD in the LCRT corridor reinforce several stated community goals and build on many of the existing plans and policies already in place by the City of Charleston, Charleston County, City of North Charleston, Town of Summerville, and the BCDCOG. The LCRT TOD strategy recommendations also reinforce the tri-county regional vision, OurRegion OurPlan, adopted more than a decade ago, which supports targeting future growth into centers and multi-modal transportation corridors; as well as recommendations from the BCDCOG's Regional Transit Framework Plan that call for a High-Capacity Transit (HCT) network to advance the region's vision.

This report provides guidance for local governments, the private sector, community groups, BCDCOG, and other stakeholders to support the implementation of TOD in the LCRT corridor over time. The report includes:

- TOD design principles and TOD Placetypes
- Station area profiles
- TOD implementation strategies

The recommendations in this report reflect technical and design analysis as well as feedback and insights gleaned from engagement with the public, local government staff, members of the development community, and the LCRT TOD Steering Committee from the fall of 2019 to the spring of 2021.



Illustrative of LCRT corridor and TOD station areas color coded by TOD Placetype

Lowcountry Rapid Transit

The LCRT is being designed as a modern bus rapid transit system to serve the greater Berkeley-Charleston-Dorchester region. It will operate mostly in dedicated lanes between the Fairgrounds in Ladson, serving North Charleston on Rivers Avenue and connecting to the WestEdge in Downtown Charleston. A future connection to Summerville is also planned. The LCRT will offer a safe, reliable, low-cost, and new transportation option to tens of thousands of people. The system will operate with a frequency of 10-minute headways during peak hours and serve 20 different station areas. Each station will have permanent shelters, seating, wayfinding, electronic ticketing, and other amenities. The provision of permanent high-quality station amenities, fast and high frequency service, and future branding of the line will reinforce the market attractiveness for TOD. The schedule for the LCRT project anticipates completion of FTA's New Starts Capital Improvement Grant (CIG) process by the end of 2023, beginning of construction in 2024, and an opening day by 2026.



LCRT Project definition map



Illustration of proposed station architecture

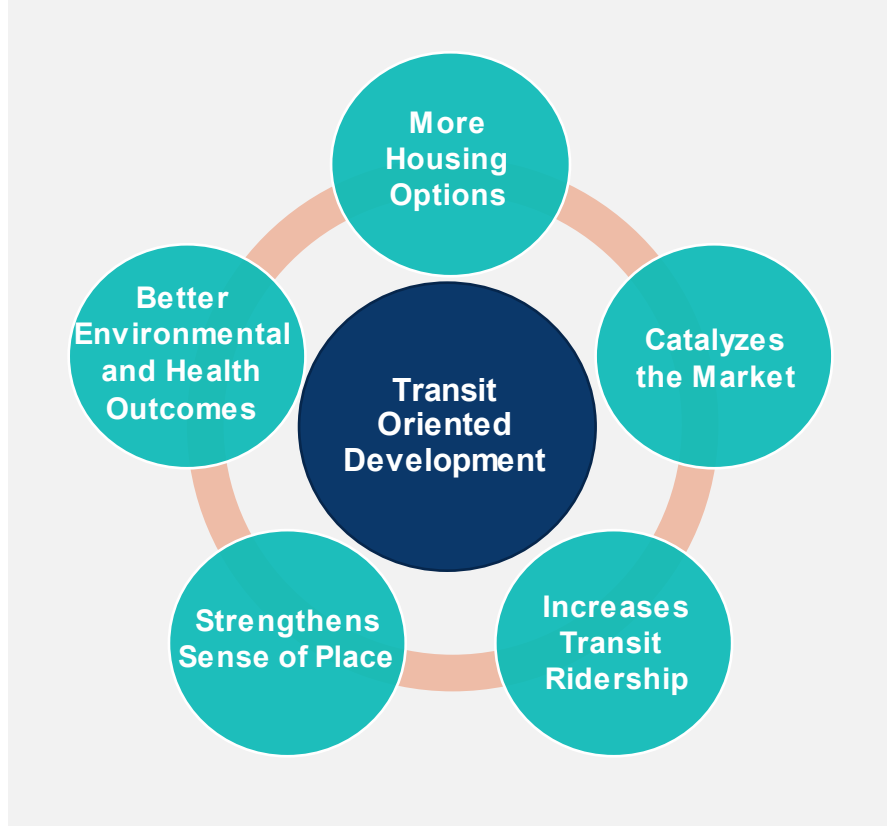
Goals and Benefits of TOD

The Federal Transit Administration (FTA) awarded the BCDCOG grant funding to support the development of the LCRT TOD Strategy. FTA defines TOD and its benefits as follows:

Transit-oriented development includes a mix of commercial, residential, office and entertainment centered around or located near a transit station. Dense, walkable, mixed-use development near transit attracts people and adds to vibrant, connected communities. Successful TOD depends on access and density around the transit station. Convenient access to transit fosters development, while density encourages people to use the transit system. Focusing growth around transit stations capitalizes on public investments in transit and provides many benefits including:

- *increased ridership and associated revenue gains for transit systems*
- *incorporation of public and private sector engagement and investment*
- *revitalization of neighborhoods*
- *a larger supply of affordable housing*
- *economic returns to surrounding landowners and businesses*
- *congestion relief and associated environmental benefits*
- *improved safety for pedestrians and cyclists through non-motorized infrastructure*

*Federal Transit Administration
Transit-Oriented Development | FTA
(dot.gov)*

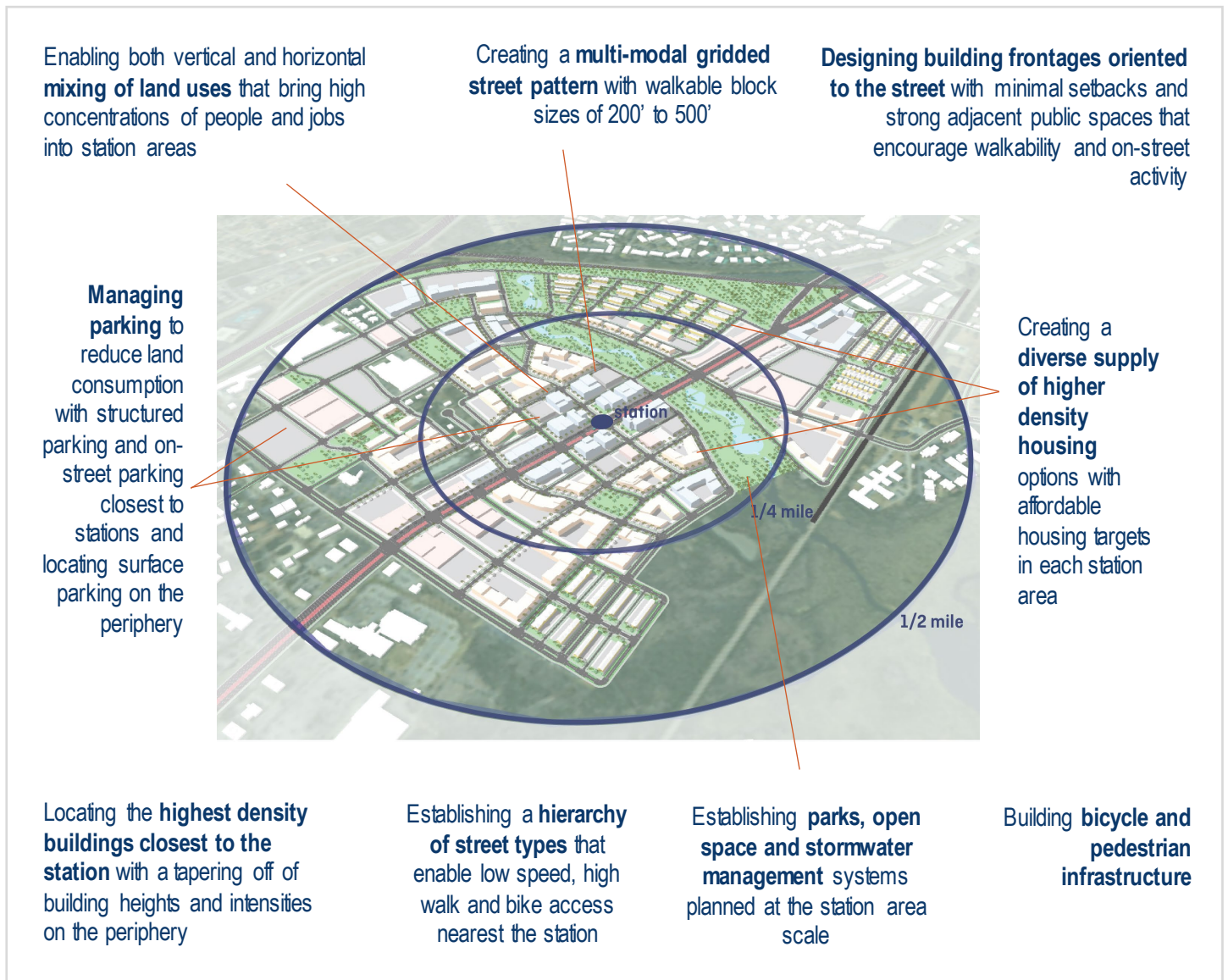


Benefits of TOD

Key Features of TOD

Creating TOD around each LCRT station area is critical for the region to maximize the benefits of the transit investment in support of local and regional community goals. At some station locations, notably many on the Peninsula in Charleston and the Neck Area of North Charleston, several key features of TOD exist today. Stations located in more suburban areas of the corridor can evolve into TOD patterns over time.

Getting TOD right means creating a built environment within the walkshed of each station area (one-quarter to one-half mile) that includes the key features of TOD illustrated below. Doing so requires both the public and private sector to support and advance these foundational ingredients as each station area evolves over time.



Key features of TOD illustration

LC
RT

Chapter Two

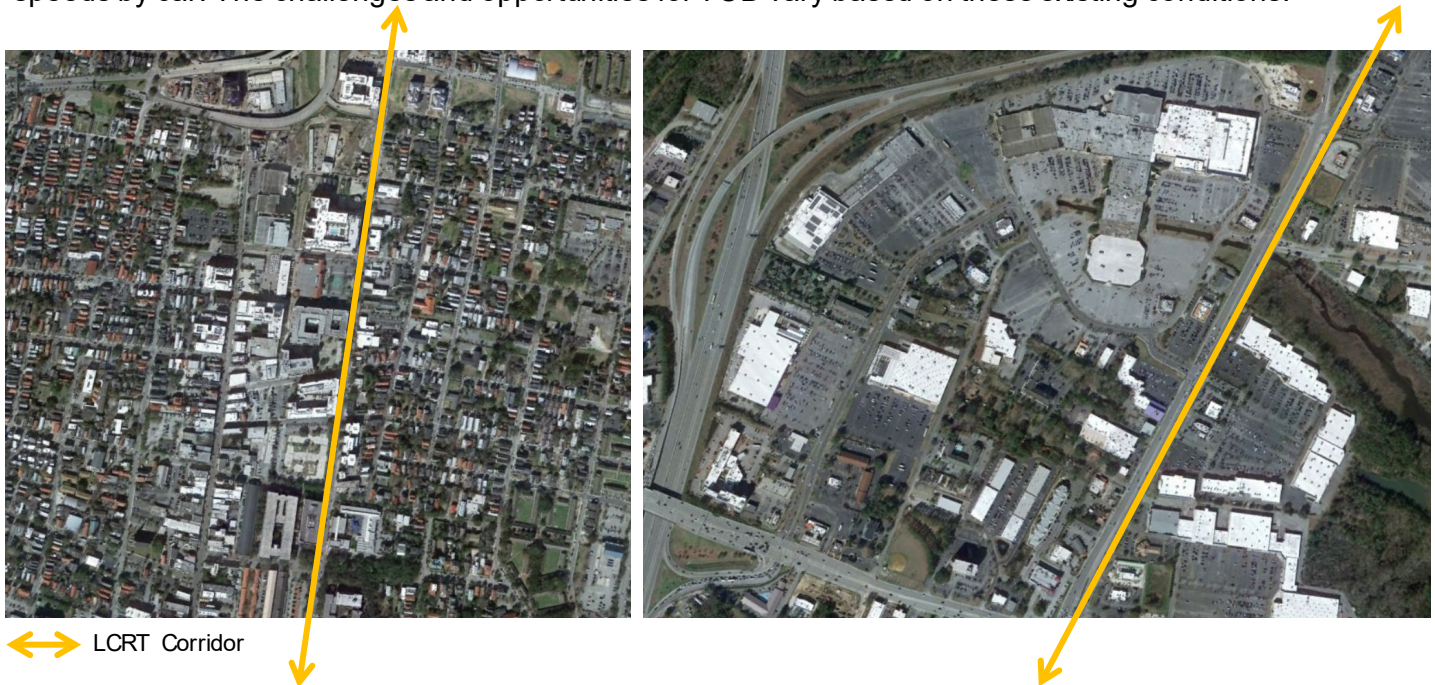
The LCRT Corridor and TOD

Existing Conditions

Some of the key factors influencing TOD potential for the LCRT corridor include the existing conditions within one-quarter to one-half mile of each station area walkshed. The key attributes analyzed early in the TOD study included:

- Street connectivity and block sizes
- Land use mix and urban form
- Density of population and employment
- Vacant or underutilized land susceptible to change (redevelopment or infill)

With the nearly 22-mile length of the corridor, a range of existing development patterns exist. Some areas developed before the advent of automobiles – when walk access was paramount – which resulted in smaller-sized, walkable blocks and grided streets; more vertical mixing of uses; higher densities; and building frontages and public realm features oriented to pedestrians. If walking was the only means of transportation, these historic centers enabled people to reach multiple destinations for daily living within short distance on foot. Suburban areas that developed after the proliferation of the automobile, meanwhile, reflect more spread-out development patterns. These areas are characterized by more single-story, single use buildings; building frontages with ample parking; and larger and faster roadways. In these locations, it is easy to reach multiple destinations located farther apart in a reasonable amount of time traveling at higher speeds by car. The challenges and opportunities for TOD vary based on these existing conditions.



Aerial images above showing examples of the diversity of existing land patterns. The left image shows the dense mixed-use patterns of the Peninsula in the City of Charleston and right image showing the lower density, single use patterns at the Northwoods Mall area of North Charleston.

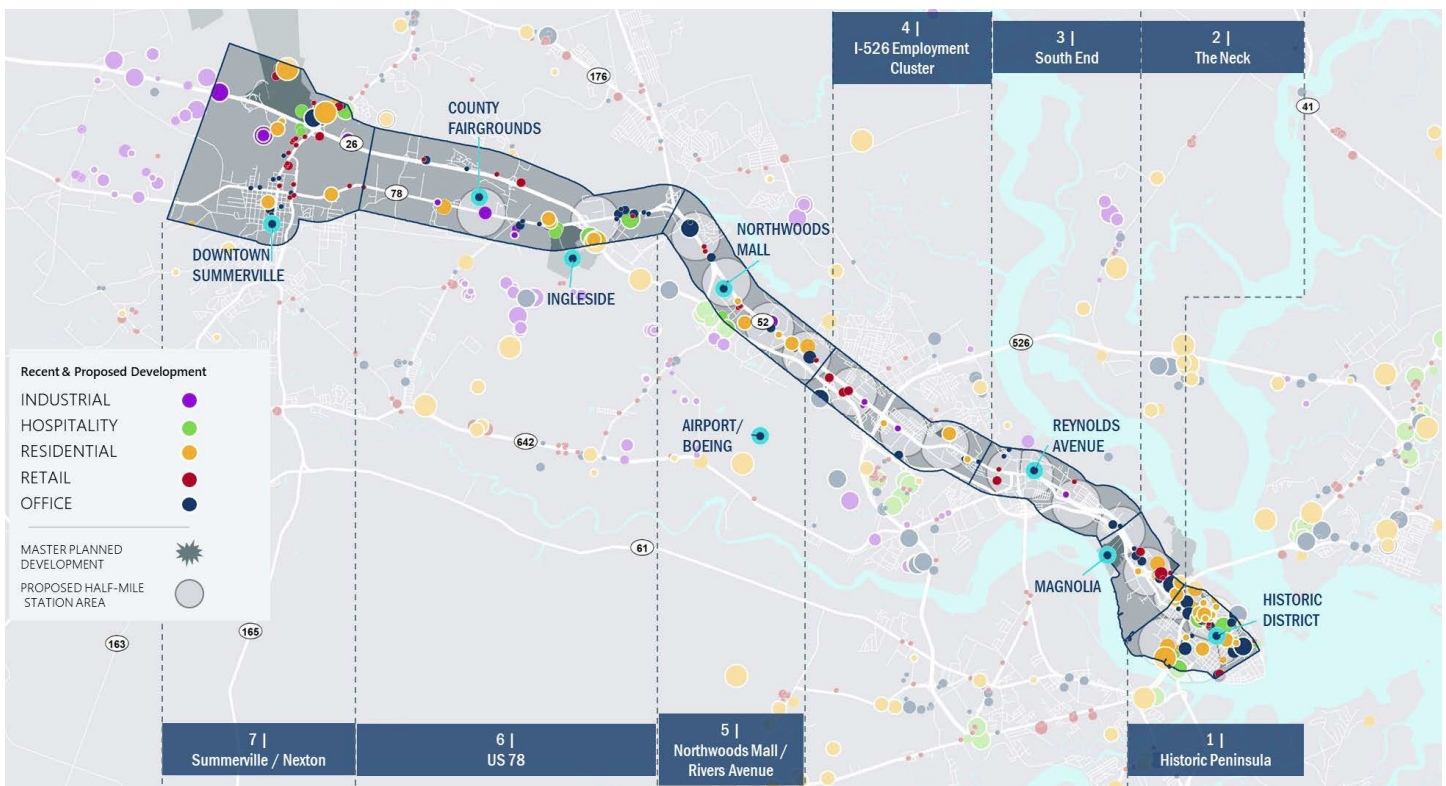
LCRT | The LCRT Corridor and TOD

Market Demand

The BCDCOG region is projected to attract another half-million people and more than 200,000 jobs to the area by the year 2040. Of that future demand, the LCRT corridor has the potential to capture approximately 23% percent of that growth as summarized below.

- 43,000 new residential units are projected for the corridor by 2040, an estimated 20% of the overall regional growth. Most units are expected to be multi-family.
- 4.1M square feet of retail is anticipated within the corridor by 2040. Growth is projected to cluster around existing retail centers (e.g. Northwoods Mall) and in new walkable mixed-use destinations closer to Summerville and the Peninsula.
- 6.9M square feet of office space is projected in the corridor. Finance, insurance, and real estate jobs have the highest projected growth rates between 2020 and 2040.
- 5,400 new hotel keys are projected for the corridor by 2040. Approximately 50% of all hotel growth in the region is projected to take place along the corridor.

If that growth can be attracted into the LCRT station areas and served by high quality transit, almost a quarter of the region's future growth by 2040 can be accommodated without worsening congestion. While not every trip taken will be a transit trip in TOD areas, jobs and households located in TOD areas and served by high quality transit show lower rates of car dependence and higher rates of walking, biking, transit, and shorter car trips.



Map of projected corridor market demand (SB Friedman Development Advisors, LCRT Real Estate Market Findings, April 2020)

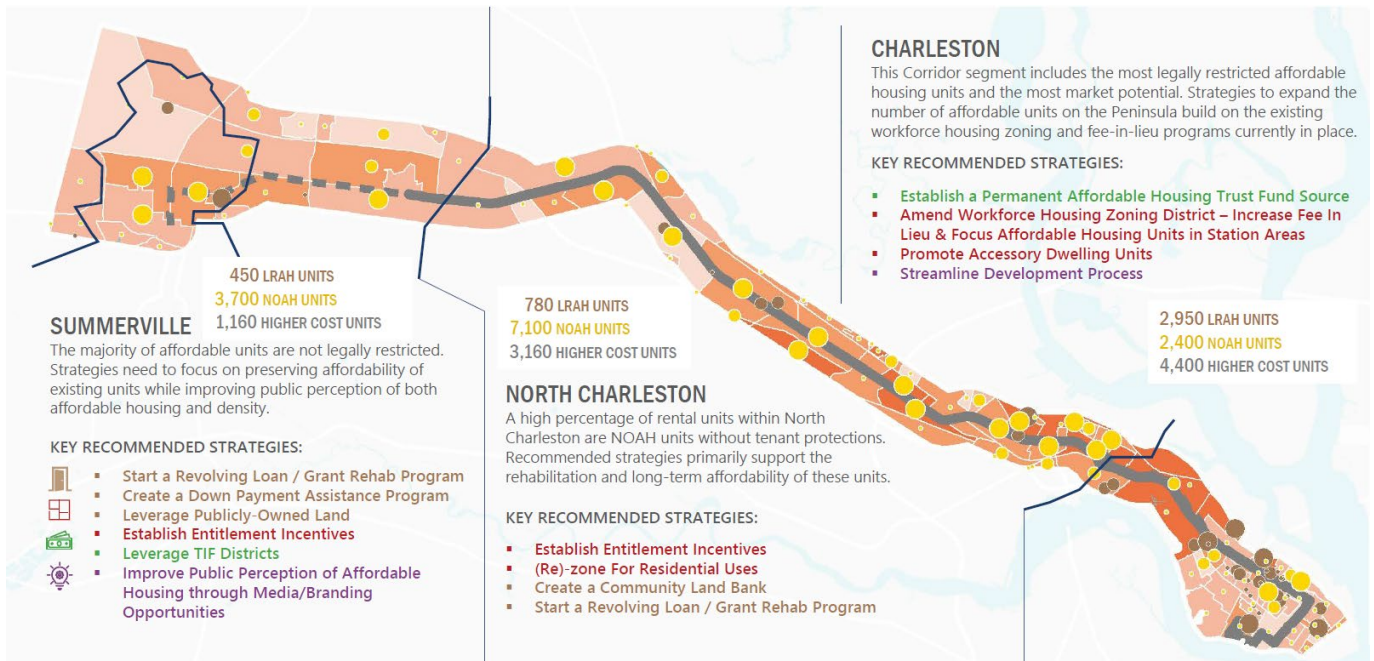
Housing Affordability and Equitable TOD

Like many regions across the country, the greater Charleston region is challenged by an affordable housing crisis. As detailed in the LCRT’s Affordable Housing Assessment & Strategies report in February 2021:

“The number of cost burdened households -those paying more than 30% of their income towards housing costs -has increased by 42,000 since 2000 in the region, growing at a faster rate than population. Today, the Corridor has a higher share of housing cost burdened households than the BCD region. While 25% of owner households are housing cost burdened in the region, 27% of owner households are housing cost burdened in the Corridor. The renter household difference is more drastic –with 46% of renter households in the region housing cost burdened compared to 52% in the Corridor.

Without appropriate planning, the introduction of a BRT could exacerbate the affordability challenges in the Corridor by increasing market demand along the line. However, the introduction of the BRT line can also help lower household transportation costs by giving residents more transportation choices, reducing commute times and connecting people to more jobs. With a strategic policy framework in place, the BRT line can and should be a part of the solution to the affordability crisis in the Corridor.”

Given this context, the overarching strategy for Equitable TOD along the LCRT corridor is to work with the private sector and regional housing advocates to increase the overall supply of housing, preserve existing naturally occurring affordable units, renovate existing and increase the total number of legally restricted units to achieve an overall housing affordability goal of 20% for each station area. The above noted reports recommend a host of strategies to support these goals.

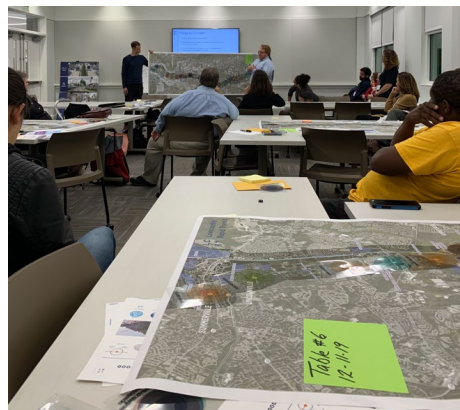


Excerpt illustration of existing housing dynamics and recommended strategies for the LCRT corridor (SB Friedman Development Advisors, LCRT Affordable Housing Assessment & Strategies Report February 2021)

TOD Placetypes

There is not a one-size-fits-all approach to TOD. While the foundational TOD design principles must be present, the mix of uses and the overall density can vary across the LCRT corridor. Some station areas will be more jobs-rich, others may be more housing-rich, and some might have an equal balance of both. The TOD Placetypes reflects a range of densities in terms of total jobs and employment, building heights, and residential dwelling units per acre.

The TOD station area planning process began with the designation of TOD Placetypes for each station area. One of the goals of the TOD Placetype allocation process was to ensure that there would be a strong balance of both jobs and housing across the corridor in support of corridor-wide ridership goals. Doing so can help to create bi-directional transit travel flows and ensure a strong mix of uses to promote walkability within each station area.



Compilation of photos from December 2019 LCRT public workshops in Summerville, North Charleston and Charleston where participants located stations and designated TOD Placetypes along the corridor

The images to the right illustrate the range of existing community character types that served as precedent inspiration for the LCRT TOD Placetypes shown below.



Downtown Charleston



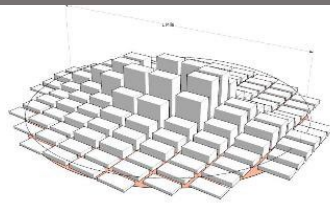
Downtown Summerville



Park Circle in North Charleston

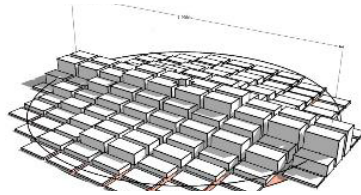
LCRT TOD Placetypes and Targets

**Downtown
Employment
Center**



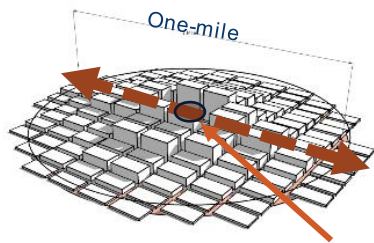
**10+ stories
30 du/acre (min)
18,000 jobs
4,000 households**

**Downtown
Neighborhood
Center**



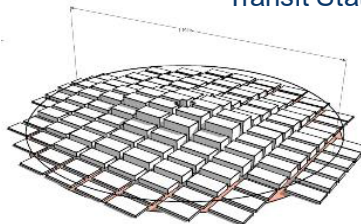
**2-6 stories
25 du/acre (min)
4,000 jobs
8,000 households**

**Employment
Center**



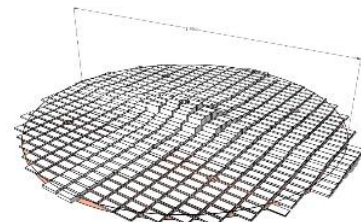
**6-10 stories
20 du/acre (min)
12,000 jobs
3,000 households**

Town Center



**4-8 stories
20 du/acre (min)
4,000 jobs
4,000 households**

**Neighborhood
Center**

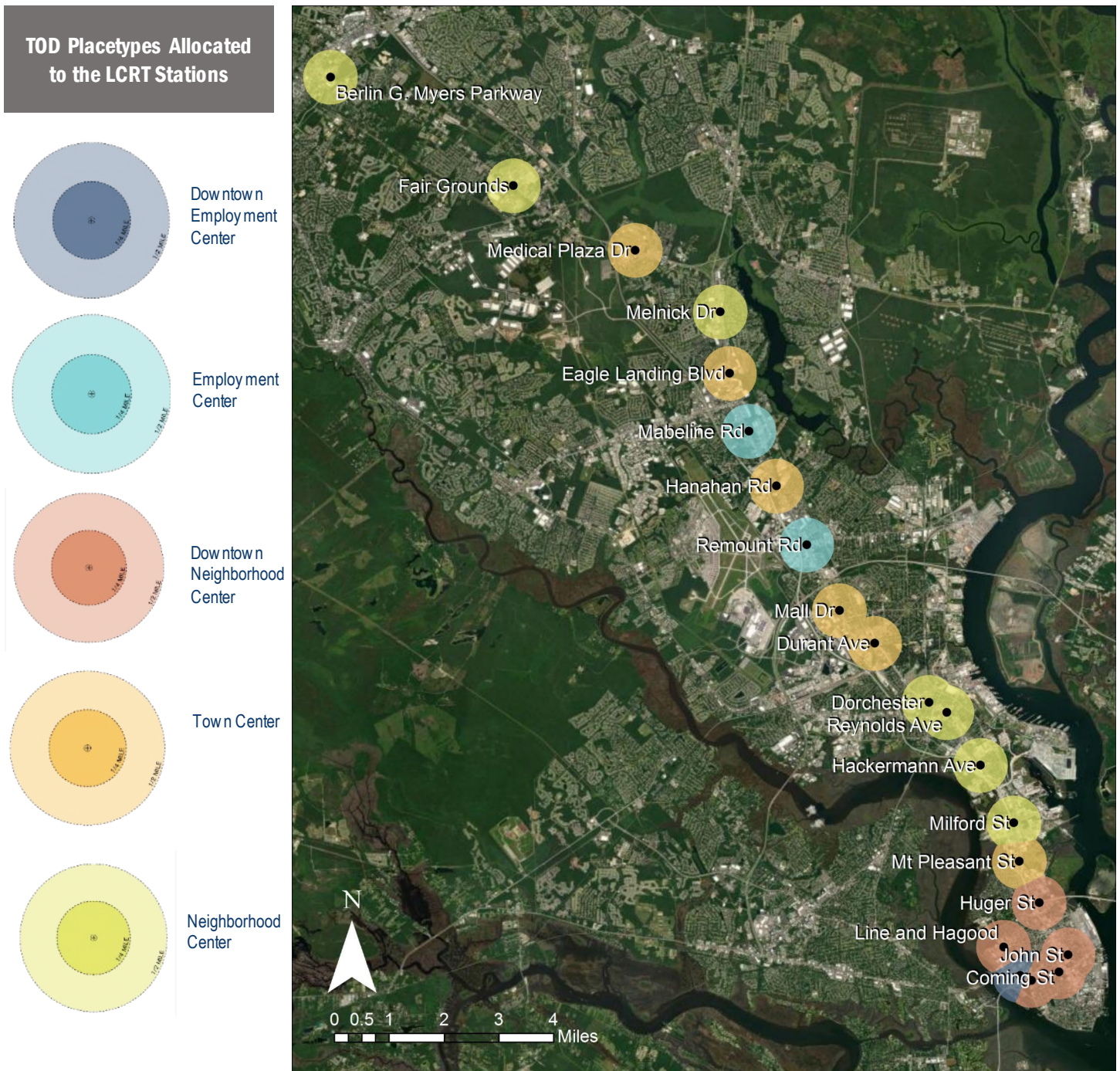


**2-4 stories
15 du/acre (min)
1,500 jobs
3,500 households**

LCRT TOD Placetypes and targets

LCRT | The LCRT Corridor and TOD

The map below shows the allocation of the different TOD Placetypes to each station area.



Corridor-wide allocation of TOD Placetypes to LCRT station areas

TOD Design Principles

The following pages highlight the key design principles of effective TOD.

GRID-STREETS AND WALKABLE BLOCK SIZES

A well-connected street grid with smaller block sizes can more efficiently accommodate all modes of transportation (walking, biking, autos and transit) at slower speeds. The slower speeds create more walkable conditions, and the improved connectivity disperses vehicular traffic. Blocks that are approximately 250' to 500' in length also encourage building forms that promote a higher concentration of "front-doors" along a given block, which helps create stronger pedestrian foot traffic and activity in turn.

Park Circle, North Charleston

Lower peninsula Charleston

Street design guidelines, Town of Summerville Unified Development Ordinance (UDO)

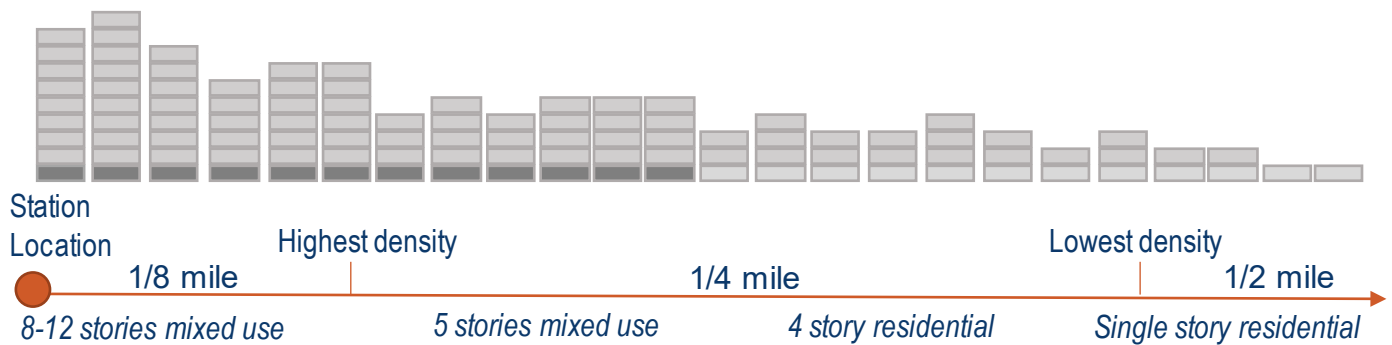
Examples of grided streets, smaller block sizes and pedestrian oriented street design guidelines

MAXIMIZE BUILDING HEIGHTS AND DENSITY NEAR STATIONS

Successful TOD encourages higher density and a mix of uses within walking distance of a station. Density and intensity of buildings should be at their highest within the first one-eighth to one-quarter mile of the station, allowing for a gradual transition to lower densities further away from the station, especially when near existing neighborhoods. Vertically integrated, mixed-use, higher density uses immediately adjacent to transit stations foster stronger transit ridership and promote active streetscapes with ground floor retail, cafes and restaurants, and public spaces.



Buildings with varying heights and mix of uses transitioning into lower density residential buildings



Examples and illustrations of higher density buildings and density gradients in station areas

BUILDINGS FRONTING THE STREET WITH STRONG PEDESTRIAN REALM

The primary building façades and building “front doors” should be oriented to the street with ample sidewalks and other streetscape features that encourage pedestrian use and activity. Building frontages should have minimal setbacks and transparent first floors with architectural and signage details scaled to the pedestrian. The spaces between the building frontages and the street should include design elements and amenities that reinforce community character and create a safe, attractive place for pedestrians. This can include wide sidewalks, landscaping and street trees, outdoor café space, pedestrian scaled lighting, public art, seating, and trash receptacles.



Examples showing minimal building setbacks and pedestrian oriented streetscapes

BICYCLE AND PEDESTRIAN INFRASTRUCTURE AND AMENITIES

Strong bicycle and pedestrian infrastructure and amenities near transit encourages non-auto access within station areas. The focus for pedestrian amenities should be targeted within the one-quarter to one-half mile radius of a station, as this is roughly the distance a person can comfortably walk in 15 minutes. However, bicycle accommodations should be encouraged up to three miles away from station platforms, as this is about the distance a person can bike in 15 minutes. Examples of strong bicycle and pedestrian infrastructure and amenities include bicycle parking, dedicated bike lanes, off-road multi-use trails, signalized pedestrian crossings, wide sidewalks, curb extensions, etc. Employers located in station areas can also encourage transit, bicycle, and pedestrian use by incorporating secured bicycle parking on-site and providing on-site showers and locker facilities in buildings.



Examples of bicycle and pedestrian friendly streetscapes and amenities

VERTICAL AND HORIZONTAL MIXED USE

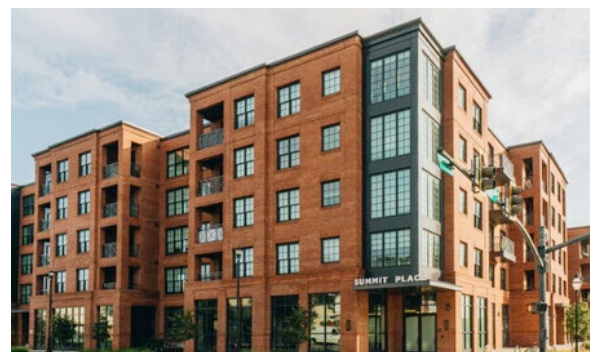
Compact vertical and horizontal mixed use in station areas provides easy access to multiple destinations (retail, restaurants, residential, offices, and civic and social services) within walking distance for transit users. The concentration of different uses near stations also creates vibrancy and activity throughout the day and evening, as people can conveniently live, work, and play without needing a car for every trip. TOD encourages the mixing of residential and non-residential uses on a single site, or along a single block. One of the most common approaches to vertical mixed use is to use the upper floors of buildings for residential and employment uses with retail and restaurants on the ground floors. Doing so can also enable more efficient provision of parking and shared parking options.



Examples of vertical and horizontal mixed use

HOUSING DIVERSITY

Creating a high supply of diverse housing options within station areas is a key strategy for TOD and helps address housing affordability challenges. Equitable TOD is characterized by creating mixed-income housing that is available to a range of households and for people at all stages of life. Mixed-income, mixed use TOD neighborhoods create easy, car-free access to opportunity and stabilize transit ridership. Housing strategies for TOD should seek to create a mix of rental and owner-occupied units as well as market rate, naturally affordable and legally restricted affordable housing. Locating housing near stations for low and moderate-income households and transit dependent populations also helps reduce the overall housing and transportation cost burdens.



Examples of diverse housing options

MANAGE PARKING AND REDUCE LAND DEDICATED TO PARKING

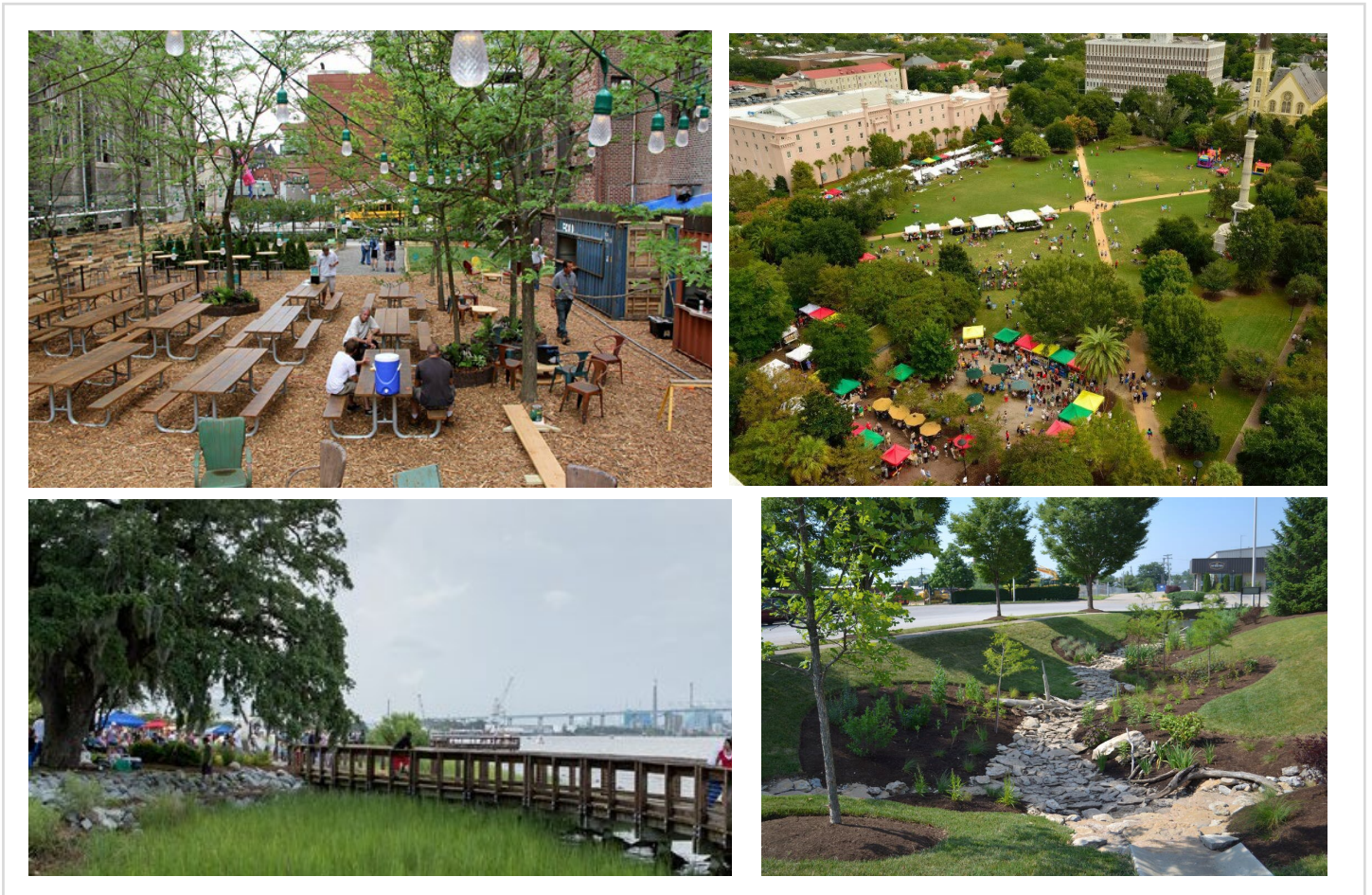
Successful TOD optimizes and manages parking to reduce overall land needed to accommodate parking uses. Higher density, mixed use station areas with strong walking and biking conditions reduce car trips and thereby reduce parking demand. With less land dedicated to parking, station areas can maximize development potential and opportunities for residential and non-residential uses, pedestrian amenities, parks, and open space. While parking is still essential to serve development in station areas, large surface lots should be minimized in the station area core, and structured parking should be encouraged. Shared parking facilities and the establishment of station area parking management are also viable options. Other parking recommendations include strategies such as locating parking behind or on the side of building frontage, in structured garages, on-street, and in shared facilities. The location and position of parking areas must not impede efficient, direct walk access to transit and surrounding destinations.



Examples of creative parking solutions

STATION AREA SCALE PARKS, OPEN SPACE, AND STORMWATER MANAGEMENT

An interconnected, green network of parks and open space, green infrastructure, district-level stormwater management, and natural areas throughout station areas can provide environmental, social, and economic benefits. Right-sized smaller parks and civic spaces with strong landscaping elements in the station area core provide respite and activate the pedestrian realm against the backdrop of higher density buildings. Large community parks and open spaces can become central gathering places, provide passive recreation, and support stormwater management. Natural areas with native landscapes can support resiliency goals and reinforce a community's sense of place.



Examples of urban parks and green infrastructure

REINFORCE EXISTING SENSE OF PLACE AND COMMUNITY CHARACTER

Creating strong TOD involves the thoughtful introduction of infill and redevelopment into existing areas. Doing so should involve intentional strategies to incorporate new development that reinforces and celebrates the existing sense of place. This means focusing not only on how new buildings and streetscapes look, but how they function and connect people to the unique culture and history of existing places. This can include retaining existing historic buildings, facades, and other cultural assets. As new development occurs, it can provide opportunities to incorporate pedestrian-scaled design elements such as distinctive architectural features, murals, signage, lighting, sidewalk art, and other enhancements to the existing community character.



Examples of design features that contribute to a strong sense of place

LC
RT

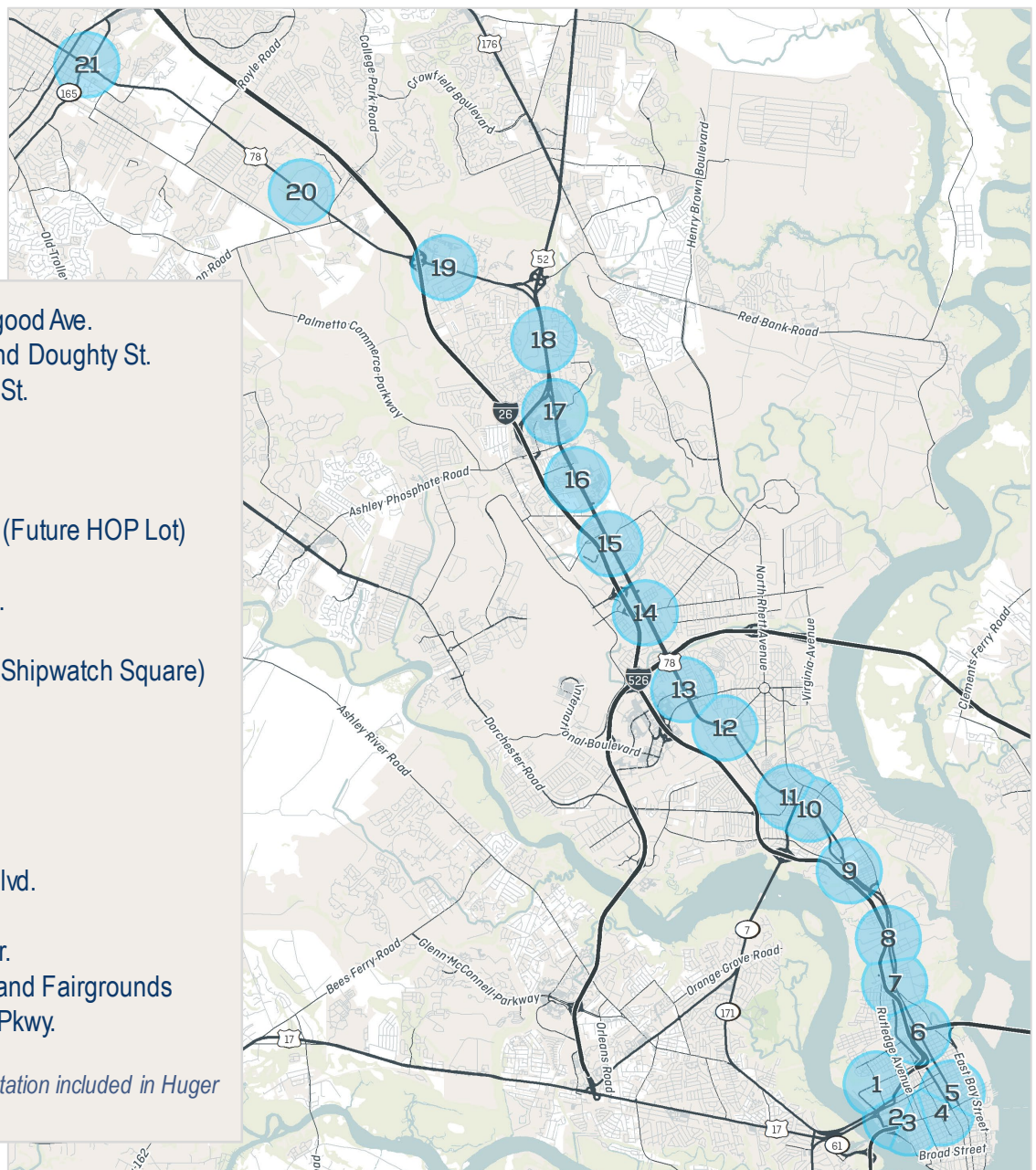
Chapter Three

Station Area Profiles

LCRT | Station Area Profiles

Introduction

This chapter provides an overview of TOD opportunities for the 20 LCRT station areas and the Berlin G. Myers potential station area in the town of Summerville. A future proposed extension of LCRT will serve Summerville. For each station area, the profile includes a snapshot of current conditions and highlights TOD goals and opportunities. For a subset of station areas, the profiles also include a hypothetical design concept showing the potential for long-term TOD development. Each concept includes building massing (height and setbacks), mix of uses, the street and block structure, and open spaces that reflect the design principles of TOD. These concepts are purposefully visionary in nature to illustrate how TOD could be realized over time and to serve as aspirational examples to inform policy recommendations and public sector investments.



- 1 Line St. and Hagood Ave.
 - 2 Courtenay Dr. and Doughty St.
 - 3 Jonathan Lucas St.
 - 4 Coming St.
 - 5 John St.
 - 6 Huger St.*
 - 7 Mt. Pleasant St. (Future HOP Lot)
 - 8 Milford St.
 - 9 Hackemann Ave.
 - 10 Reynolds Ave.
 - 11 Dorchester Rd. (Shipwatch Square)
 - 12 Durant Ave.
 - 13 Mall Dr.
 - 14 Remount Rd.
 - 15 Hanahan Rd.
 - 16 Mabeline Rd.
 - 17 Eagle Landing Blvd.
 - 18 Melnick Dr.
 - 19 Medical Plaza Dr.
 - 20 Exchange Park and Fairgrounds
 - 21 Berlin G. Myers Pkwy.
- * Future Cooper Street Station included in Huger Street Profile

Map of LCRT station areas

Capturing Market Demand

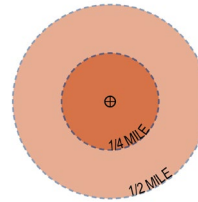
The table below quantifies TOD development potential for each station area by the year 2040. These estimates are based on a coarse assessment of existing conditions, TOD Placetype targets, market demand, and acreage available for redevelopment. This allocation of future jobs and employment demonstrates how the projected market demand could be absorbed in each station area. The corridor-wide estimates also correlate to goals regarding the total number of jobs and households needed to support strong transit ridership over time. The 2040 allocation assumes the LCRT corridor remains jobs-rich, but also doubles the number of households. This allocation also assumes about half of the residential demand estimated for the LCRT corridor could locate into station areas.

Station No.	Station Area Name	Existing Conditions Estimate			Year 2040 Estimate	
		Households	Jobs	Acreage of Potential Change	Households	Jobs
1	Line St. and Hagood Ave.	2,000	2,200	40	3,000	7,800
2	Courtenay Dr. and Doughty St.	1,200	23,600	40	1,200	25,700
3	Jonathan Lucas St.	1,100	11,100	30	1,900	11,100
4	Coming St.	2,500	10,900	20	2,500	11,200
5	John St.	2,200	4,900	30	2,500	5,400
6	Huger St.	2,200	2,700	40	5,600	4,900
7	Mt. Pleasant St.	900	1,900	70	1,900	6,700
8	Milford St.	200	1,200	90	4,000	8,700
9	Hackemann Ave.	500	1,100	130	1,300	2,700
10	Reynolds Ave.	900	1,100	140	1,100	1,100
11	Dorchester Rd.	1,200	3,400	120	1,900	3,500
12	Durant Ave.	700	2,500	150	1,600	3,100
13	Mall Dr.	900	3,600	170	2,100	3,700
14	Remount Rd.	600	3,200	190	1,000	4,200
15	Hanahan Rd.	1,100	3,400	180	1,500	5,000
16	Mabeline Rd.	600	3,000	180	900	4,600
17	Eagle Landing Blvd.	800	5,300	260	1,300	7,000
18	Melnick Dr.	900	2,500	160	1,100	2,600
19	Medical Plaza Dr.	600	6,100	140	2,300	13,700
20	Exchange Park and Fairgrounds	300	700	220	1,300	900
21	Berlin G. Myers Pkwy.	1,400	4,000	40	2,600	6,400
Corridor-wide Totals		22,800	98,400	2,440	42,600	140,000

Table illustrating estimated station area market share by 2040



General Downtown Neighborhood Center Place Type Targets



- 2-6 stories
- 25 du/acre (min)
- 4,000 jobs
- 8,000 households

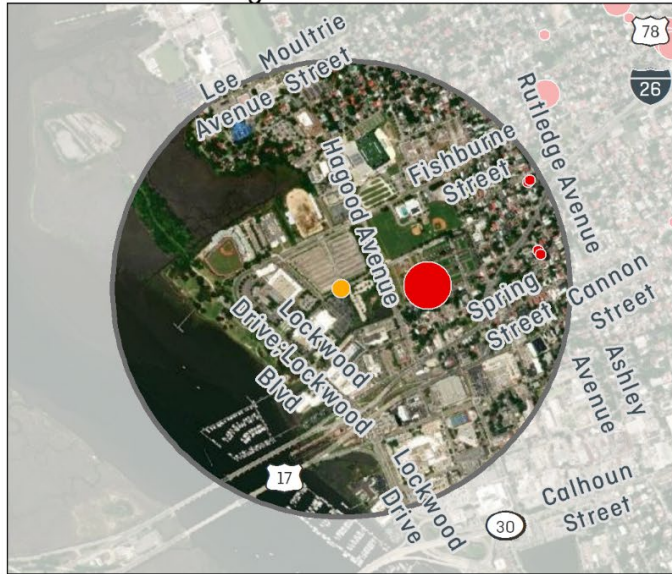


Introduction

The Line Street and Hagood Avenue station will serve as the LCRT terminus station. Land immediately adjacent to the station is currently used for surface parking, Harmon field, Gadsden Green affordable housing community and the WestEdge mixed-use development. A new hotel is planned for the site adjacent to the LCRT station. Additional assets in the area include Joseph P. Riley Jr. Park minor league baseball stadium, the Citadel stadium and nearby campus uses, and the station's proximity to the Medical District jobs center. The City of Charleston's Downtown Plan and the WestEdge Masterplan call for TOD patterns. This includes infill of vacant lands and surface parking lots to create high intensity, mixed-use development along with structured parking, a strong street grid with ample sidewalks, tree canopies and other enhancements to the public realm.

	Existing Conditions
Affordable Units (legally restricted)	566
Office	6.7 M sf
Retail	534,000 sf
Hotel	0 sf
Other Uses	0 sf
Building Heights	2-10 Stories
Estimated Households	2,000
Estimated Jobs	2,200
Acreage of Potential Change	40

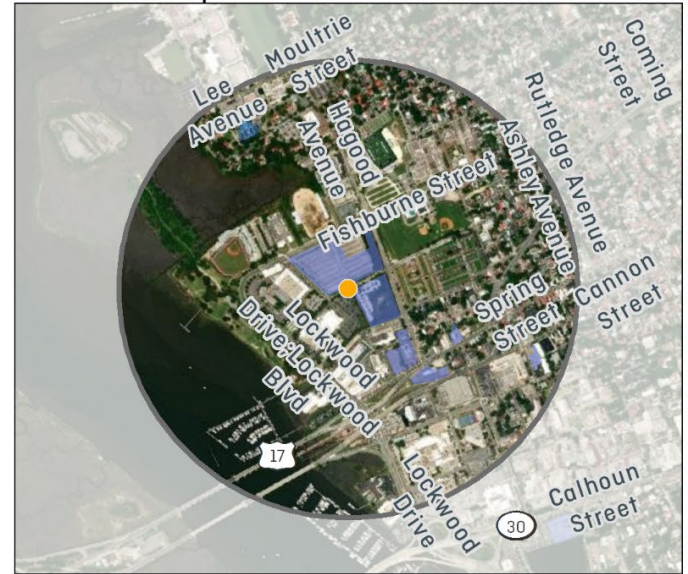
Affordable Housing



Legally Restricted Affordable Housing Units

- 0 - 35
- 36 - 156
- 157 - 501

Known Development Sites



Known Development

Housing, Development Activity, and Areas of Potential Change

The LCRT TOD Placetype targets for this station call for more infill housing to achieve the goal of reaching 8,000 units long-term. The station area is currently about 28% affordable with over 550 legally restricted affordable housing units, many of which are in the Gadsden Green community. The City of Charleston’s Public Housing Authority has plans to retain and improve this property through the Rental Assistance Demonstration (RAD) program. The WestEdge masterplan and other nearby development is estimated to bring another 1,000 units of market-rate residential to the area in the near term and neighborhood serving retail, however more housing supply is desirable long term. Additional mixed-use development could be encouraged along Fishburne Street to include housing, hospitality and entertainment uses that would synergize with the event-based activity at the minor league baseball park and the Citadel stadium.

Areas of Potential Change



Area of Potential Change

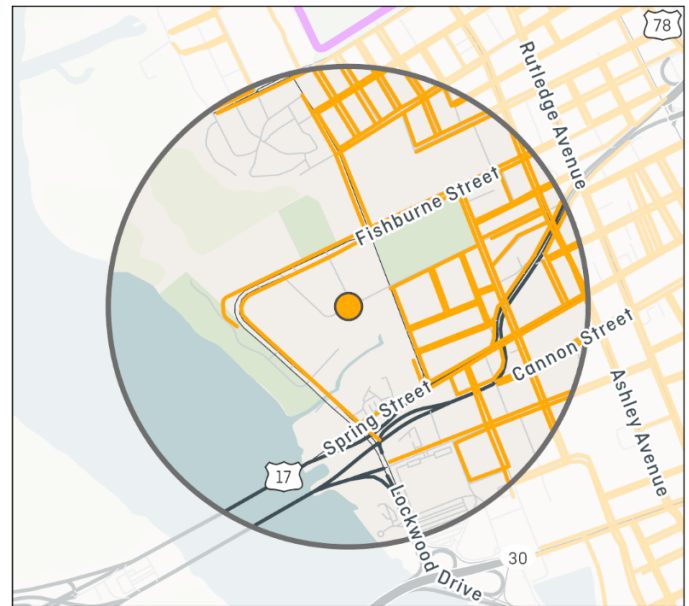
Multimodal Transportation

The existing walkability and pedestrian realm are still progressing in this station area. There is a strong pedestrian streetscape associated with the WestEdge development with plans to continue these treatments as this private development continues to buildout, including extending the street grid between Lockwood Drive, Fishburne Street and Hagood Avenue. A new multi-use path is funded along Lockwood Drive and there are several bikeshare stations nearby. The new Ashley River Bridge Bicycle Crossing will connect this station to points west of the Ashley River. The City of Charleston would like to see continued bicycle and pedestrian improvements in this area including a roundabout at Hagood Avenue and Fishburne Street, traffic calming and a cycle track along Lockwood Drive, the extension of Hagood Avenue across Spring and Cannon Streets, and the expansion of the sidewalk network across the entire station area to include crosswalks, curb ramps, flashing beacons and mid-block crossings, street trees and other shading options. Priorities in the near term should focus on enhancing safe walking and biking connections between the Gadsden Green community, the new LCRT station and the jobs-rich Medical District.



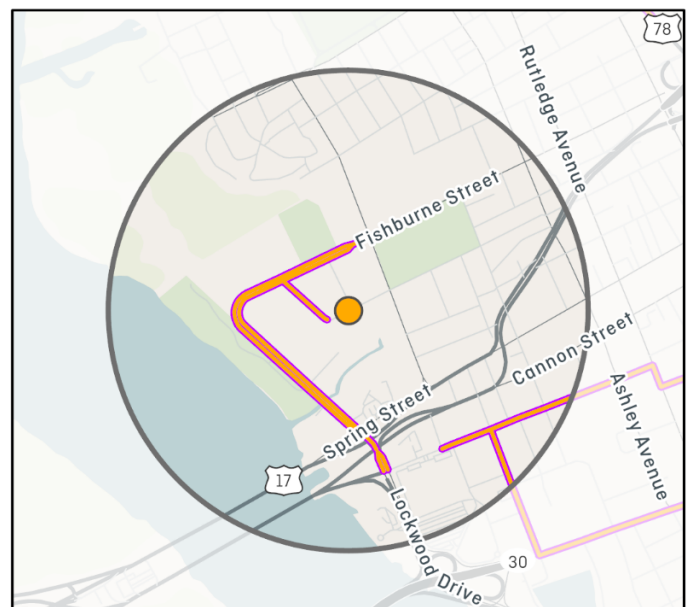
Existing Holy Spokes bikeshare station

Existing Bike and Pedestrian Facilities



— Bike Facility — Pedestrian Facility

Planned Bike and Pedestrian Facilities



— Planned Bike — Planned Pedestrian

Goals and Strategies for TOD

The City of Charleston’s Downtown Plan and associated policies along with the WestEdge Masterplan call for TOD patterns of development in this station area. Market demand for higher density mixed-use is also strong in this part of the city. Therefore, the primary focus for ongoing implementation of TOD in this station area includes:

- Continuing to invest in and fund bicycle and pedestrian infrastructure and traffic calming measures
- Increasing the overall housing supply with market rate, moderately priced *and* legally restricted affordable housing production while maintaining a minimum of 20% dedicated affordable housing in the station area long term
- Transitioning surface parking to structured parking, establishing shared parking policies, and adding on-street parking where feasible
- Conducting a feasibility study to examine Joint Development potential or other public-private partnering options at LCRT station to build structured parking
- Continuing to invest in flood mitigation and stormwater management strategies and incorporate strong urban landscaping elements inclusive of a strong street tree canopy
- Funding and approval for the Hagood Avenue roadway extension to create a more direct transit, walk and bicycle route between the LCRT station, the Citadel, and the Medical District
- Working with the Citadel to encourage redevelopment and infill of their edge properties to align with key TOD goals and principles



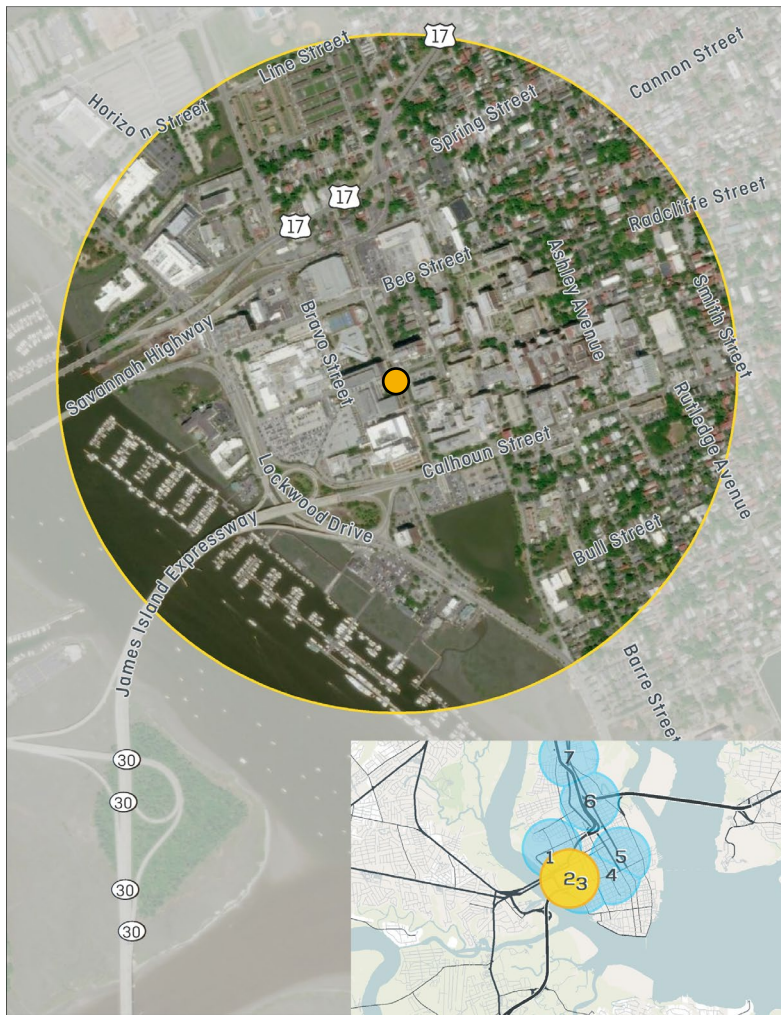
Existing massing with areas of future potential infill and redevelopment



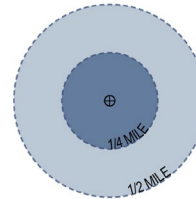
WestEdge Masterplan

	Existing Conditions	2040 TOD Allocation
Affordable Units (legally restricted)	566	20%
Office	4.29 M sf	5.47 M sf
Retail	437,000 sf	461,000 sf
Hotel	0 sf	650,000
Other Uses	0 sf	0 sf
Building Heights	2-10 Stories	2-10 Stories
Estimated Households	2,000	3,000
Estimated Jobs	2,200	7,800
Acres of Potential Change	40	TBD

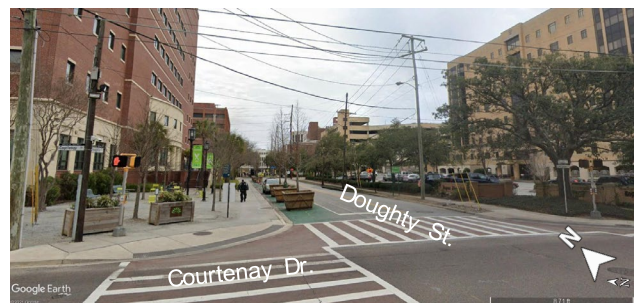
Courtenay Drive and Doughty Street Station Area



General Downtown Employment Center Place Type Targets



- 10+ stories
- 30 du/acre (min)
- 18,000 jobs
- 8,000 households

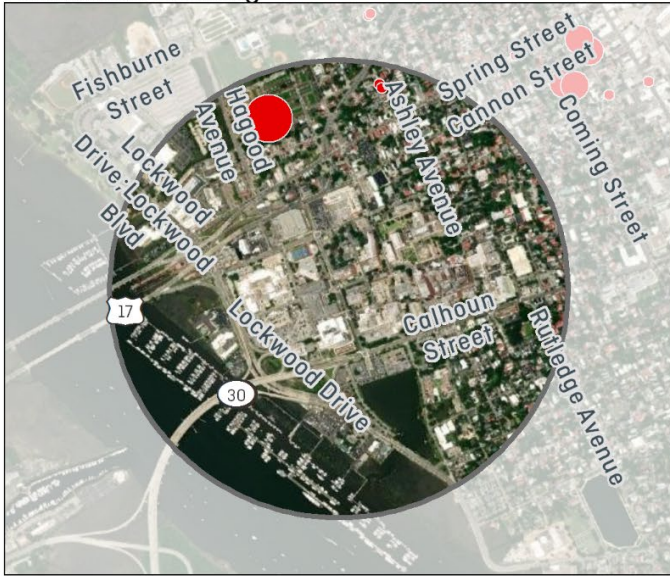


Introduction

The Courtenay Drive and Doughty Street station area is in the heart of the Charleston Medical District. The Medical District is the largest employment hub in the region and is home to major employers including the Ralph H. Johnson Veteran Affairs (VA) Medical Center, the Medical University of South Carolina (MUSC), and the Roper St. Francis Healthcare System. The employment-rich station area already has more than 20,000 jobs. This station area has an overlapping walkshed with the Line Street and Hagood Avenue and Johnathan Lucas Street stations and already exhibits a strong urban pattern of development supportive of transit. The Medical District Masterplan and the City of Charleston Downtown Plan and future land use designation call for a dense, urban campus pattern of medical and office-based employment uses with strong pedestrian-oriented streetscapes.

	Existing Conditions
Affordable Units (legally restricted)	566
Office	6.7 M sf
Retail	534,000 sf
Hotel	0 sf
Other Uses	0 sf
Building Heights	2-10 Stories
Estimated Households	1,200
Estimated Jobs	23,900
Acres of Potential Change	40

Affordable Housing



Known Development Sites



Legally Restricted Affordable Housing Units

- 0 - 35
- 36 - 156
- 157 - 501

■ Known Development

Housing, Development Activity, and Areas of Potential Change

The predominant land use in this area is non-residential, and the station area already exceeds the LCRT TOD Placetype target for employment with more jobs anticipated long term. The station area walkshed includes 566 legally restricted affordable housing units at Gadsden Green and along Ashley Avenue, making the area approximately 50% affordable. However, with only an estimated 1,200 housing units located nearby, the area is well below the 8,000-unit long-term housing target. Therefore, a key TOD strategy moving forward is to increase the overall housing supply of market rate, workforce and affordable housing. While this need is not currently identified in the Medical District Masterplan, there is an opportunity to revisit this plan and explore public-private partnerships between local housing advocates and major employers to support workforce housing needs.

Areas of Potential Change



■ Area of Potential Change

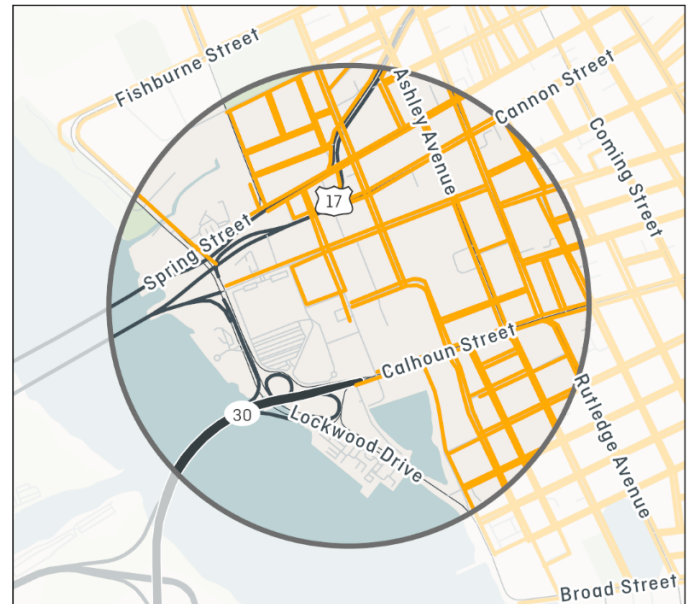
Multimodal Transportation

This station area has a strong grid of streets east of Lockwood Drive and urban patterns of development to support walkability. The City of Charleston and the key stakeholders of the Medical District support the LCRT and continue to advocate for safer walking, biking and transit use, while also acknowledging the need for continued auto-access to the area given the significant visitor and employee transportation needs. The Medical District Masterplan calls for improvements to the public realm to support improved walking and biking conditions, including plans for the Medical District Greenway, which will serve as a major outdoor green space in the heart of the station area. The new Ashley River Bridge Bicycle Crossing will also improve access to the District by connecting cyclists directly onto Bee Street. Additional intersection improvements are also proposed to enhance bicycle and pedestrian safety throughout the area.

The Hagood Avenue Extension is a critical project for this station area to strengthen bicycle and pedestrian connectivity across Spring and Cannon Streets. There remains a need for a strong east-west bicycle connection in the station area in lieu of a proposed cycle-track along Calhoun Street which could occur along the Bee Street, Radcliffe Street and John Street corridors. Additionally, intersection improvements will be needed to create a safe, pedestrian and bicycle prioritized connection to the Ashley River Bridge Bicycle Crossing at Lockwood Drive.

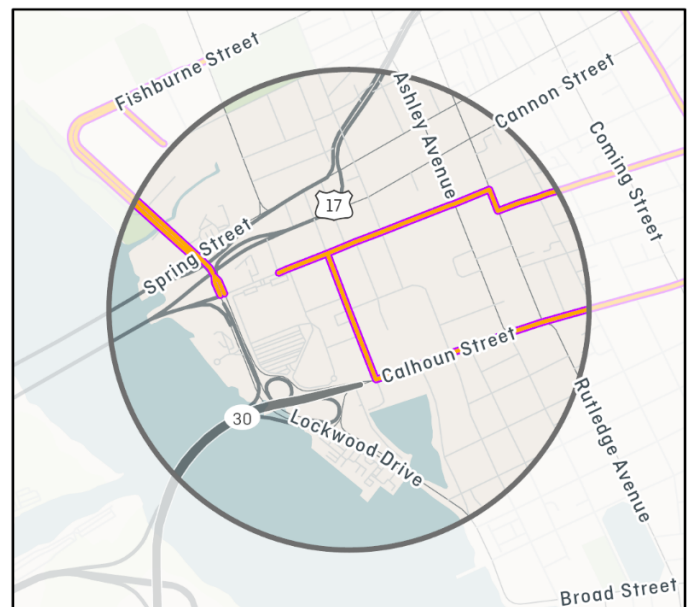
Given the auto access demands of the Medical District, adequate levels of parking will also need to be maintained over time. Strategies that limit land needed for parking (such as providing more structured parking) shared parking agreements between public and private users should be encouraged. Additional urban design and transportation studies are likely needed to address vehicular, bicycle and pedestrian conflict points.

Existing Bike and Pedestrian Facilities



— Bike Facility — Pedestrian Facility

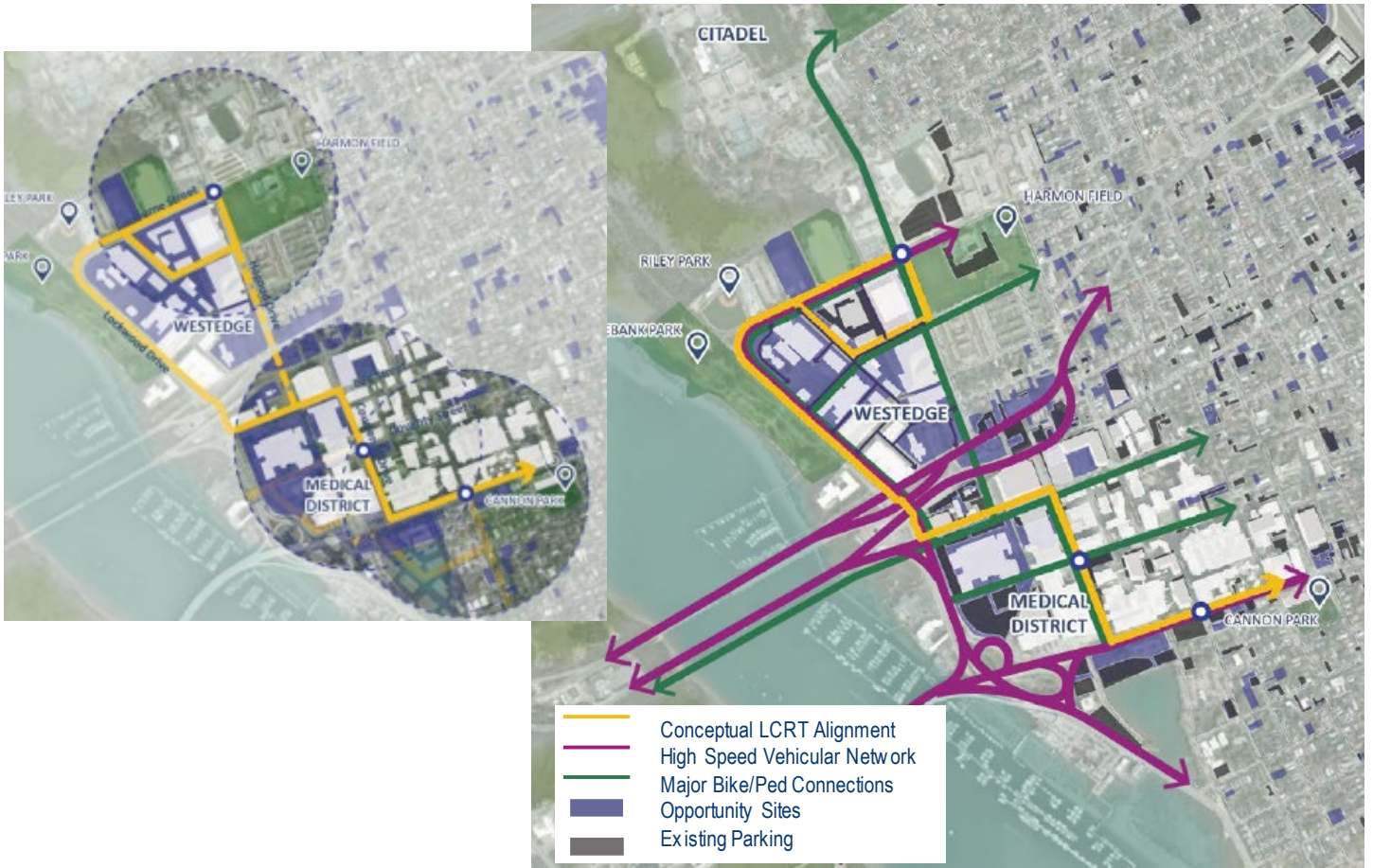
Planned Bike and Pedestrian Facilities



— Planned Bike — Planned Pedestrian

LCRT TOD Design Charette

The LCRT TOD Design Charette examined issues and opportunities for the three stations (Line Street and Hagood Avenue, Courtenay Drive and Doughty Street and Jonathan Lucas Street) serving both WestEdge and the Medical District. The charette resulted in recommendations for a future realignment of the LCRT in conjunction with a proposed Hagood Avenue extension and support for continued implementation of the WestEdge and Medical District masterplans. The maps on this page illustrate some of the key design concepts explored during the charette.



Goals and Strategies for TOD

The LCRT TOD Design charrette helped to reinforce and clarify goals for the entire Medical District in support of TOD. The City of Charleston’s Downtown Plan and associated policies along with the Medical District Masterplan call for TOD patterns of development in this station area. The primary TOD strategies for this station area include:

- Supporting redevelopment and infill of vacant lands and existing surface parking lots to create more structured parking, infill housing and other Medical District related uses
- Conducting more detailed urban design and transportation studies to better address conflicts between high-speed vehicular traffic and bicycle and pedestrian safety and access. This could also include spot enhancements at key intersections or other areas where pedestrian and auto conflicts exist
- Exploring public-private partnerships between the major employers, private developers, and housing advocates to increase housing production of market rate, moderately priced, and legally restricted affordable housing to add more supply of housing to the area
- Continuing to invest in flood mitigation and stormwater management strategies and incorporate strong urban landscaping elements inclusive of a strong street tree canopy
- Securing funding and approval for the Hagood Avenue roadway extension to create a more direct transit, walk and bicycle route between WestEdge and the Medical District and explore long-term options for the eventual realignment of the LCRT along the Hagood Avenue extension.
- Strengthening the employer-based Transportation Demand Management (TDM) for the entire area that encourages non-auto travel options for employees and visitors

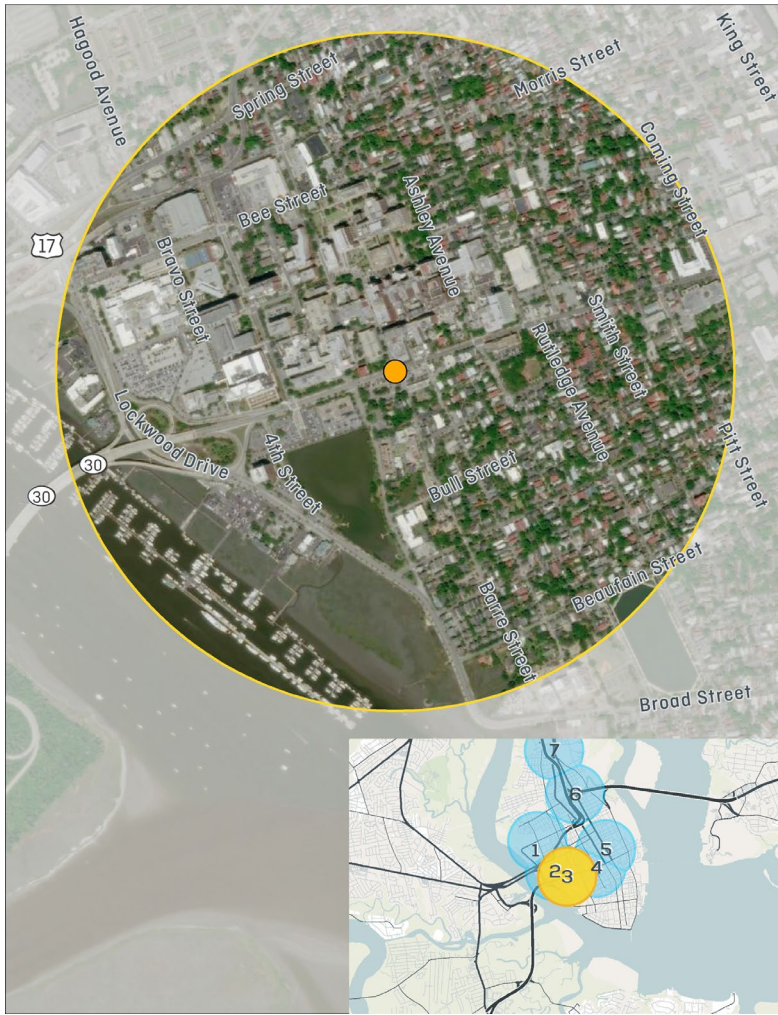


Existing massing with areas of future potential infill and redevelopment

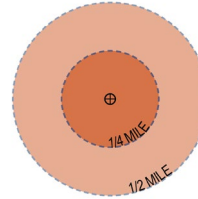


MUSC Masterplan

	Existing Conditions	2040 TOD Allocation
Affordable Units (legally restricted)	566	20%
Office	6.7 M sf	6.7 M sf
Retail	534,000 sf	600,000 sf
Hotel	0 sf	250,000 sf
Other Uses	0 sf	0 sf
Building Heights	2-10 Stories	2-10 Stories
Estimated Households	1,200	1,200
Estimated Jobs	23,900	25,700
Acres of Potential Change	40	TBD



General Downtown Neighborhood Center Place Type Targets



- 2-6 stories
- 25 du/acre (min)
- 4,000 jobs
- 8,000 households

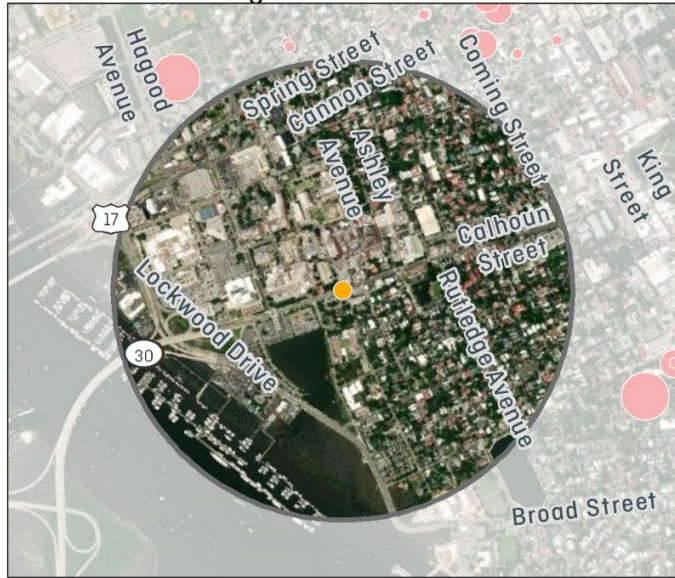


Introduction

The Jonathan Lucas Street station area is located on the southern edge of the Medical District, north of the historic Jonathan Lucas House. This station area overlaps with the Courtenay Drive and Doughty Street station area walksheds and is part of the jobs-rich Medical District employment area. A large portion of the walkshed area includes Alberta Sottile Lake and the marina facilities and parking south of Lockwood Drive. This station also serves the residential neighborhoods to the south of Calhoun Street and the entire area is characterized by a dense, walkable pattern of small blocks and gridded streets.

	Existing Conditions
Affordable Units (legally restricted)	none
Office	12.9 M sf
Retail	2.82 M sf
Hotel	0 sf
Other Uses	0 sf
Building Heights	2-10 Stories
Estimated Households	1,100
Estimated Jobs	11,100
Acres of Potential Change	30

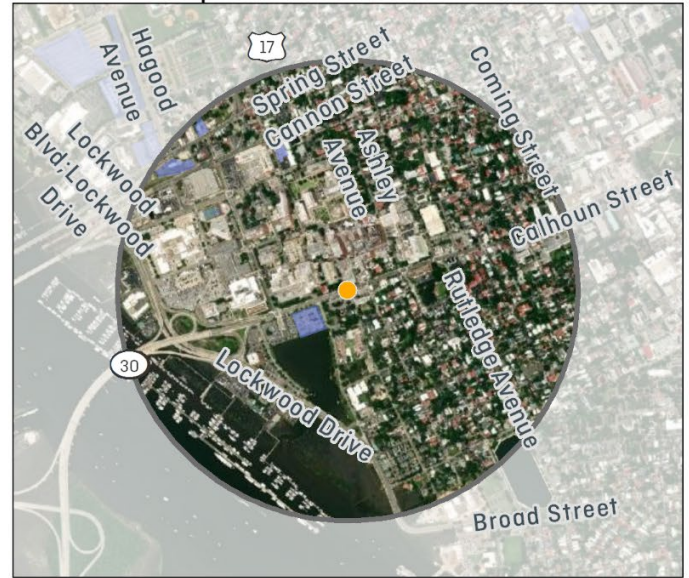
Affordable Housing



Legally Restricted Affordable Housing Units

- 0 - 35
- 36 - 156
- 157 - 501

Known Development Sites

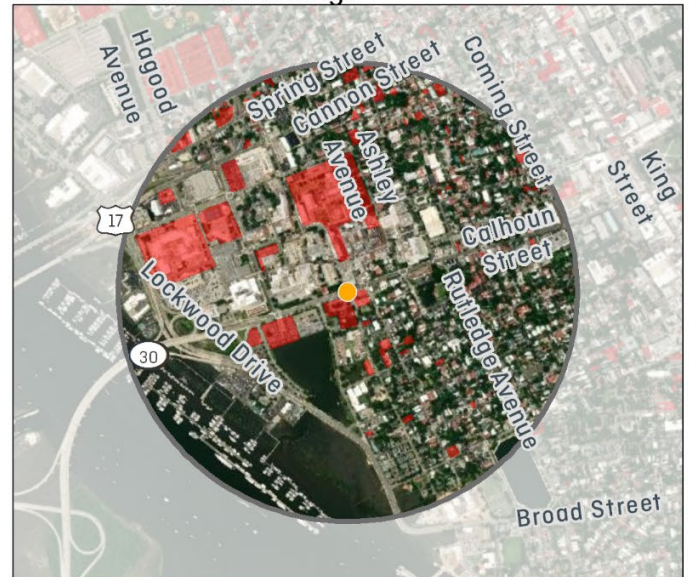


Known Development

Housing, Development Activity, and Areas of Potential Change

This station area would benefit from infill residential of market rate, workforce, and permanently affordable housing. There are currently no legally restricted affordable housing units in the station area and the surrounding neighborhood consists of market rate single family detached units and townhomes. The area already exceeds the TOD Placetype targets for employment, so the priority development strategy is to target redevelopment and infill projects that will increase the supply of housing and meet a 20% target for housing affordability. While there is limited land for larger scale housing development, several lots within existing neighborhoods could be targeted for higher density housing that is compatible with the existing community character. Additionally, larger scale redevelopment of non-residential properties into residential uses could be explored.

Areas of Potential Change

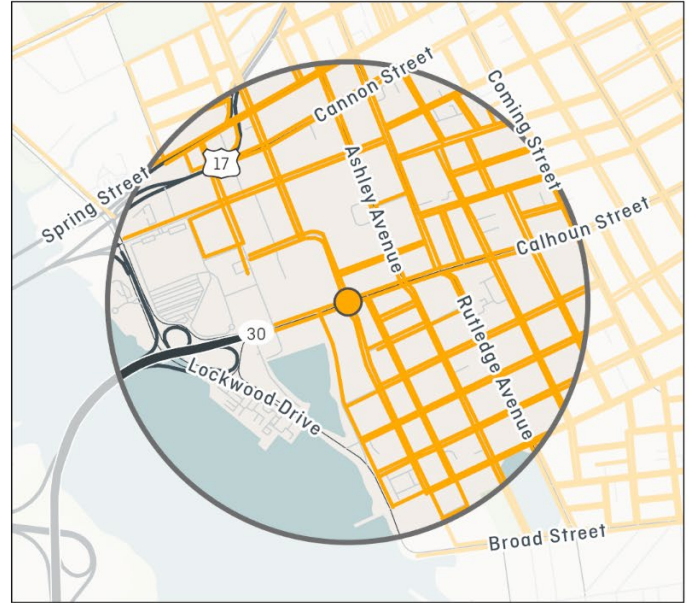


Area of Potential Change

Multimodal Transportation

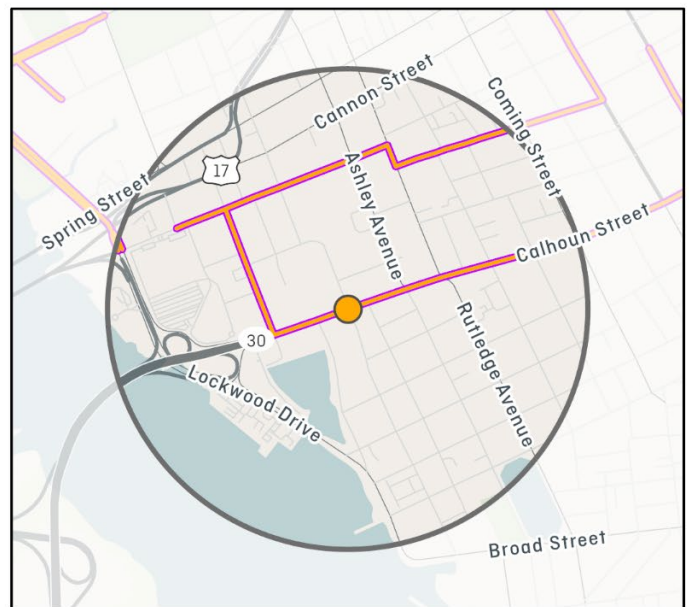
This station area is already well connected by the existing dense urban grid. There is an existing shared use path along Lockwood Drive and a proposed loop path around Alberta Sottile Lake. However, there are several needed improvements at key intersections along Calhoun Street, which serves as the LCRT route, to enhance pedestrian safety and create better walk access between the neighborhoods to the south and the Medical District to the north. There remains a need for a strong east-west bicycle connection in the station area in lieu of a proposed cycle-track along Calhoun Street which could occur along the Bee Street, Radcliffe Street and John Street corridors. Additionally, there is a need for bicycle and pedestrian improvements at Rutledge Avenue and Radcliffe Street, Ashley Avenue and Calhoun Street.

Existing Bike and Pedestrian Facilities



— Bike Facility — Pedestrian Facility

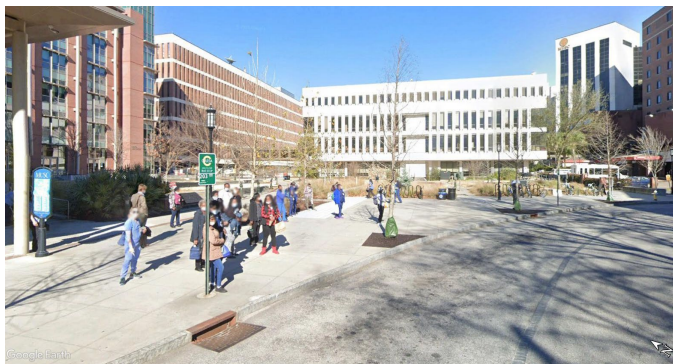
Planned Bike and Pedestrian Facilities



— Planned Bike — Planned Pedestrian



Employees walking to and from the Medical District in front of the Jonathan Lucas House

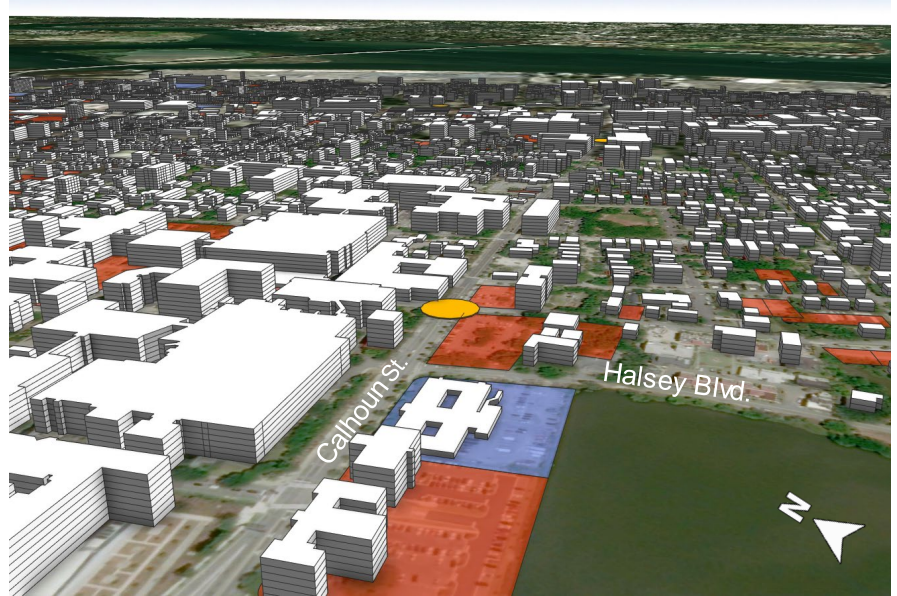


CARTA stop in activated public plaza on the MUSC campus

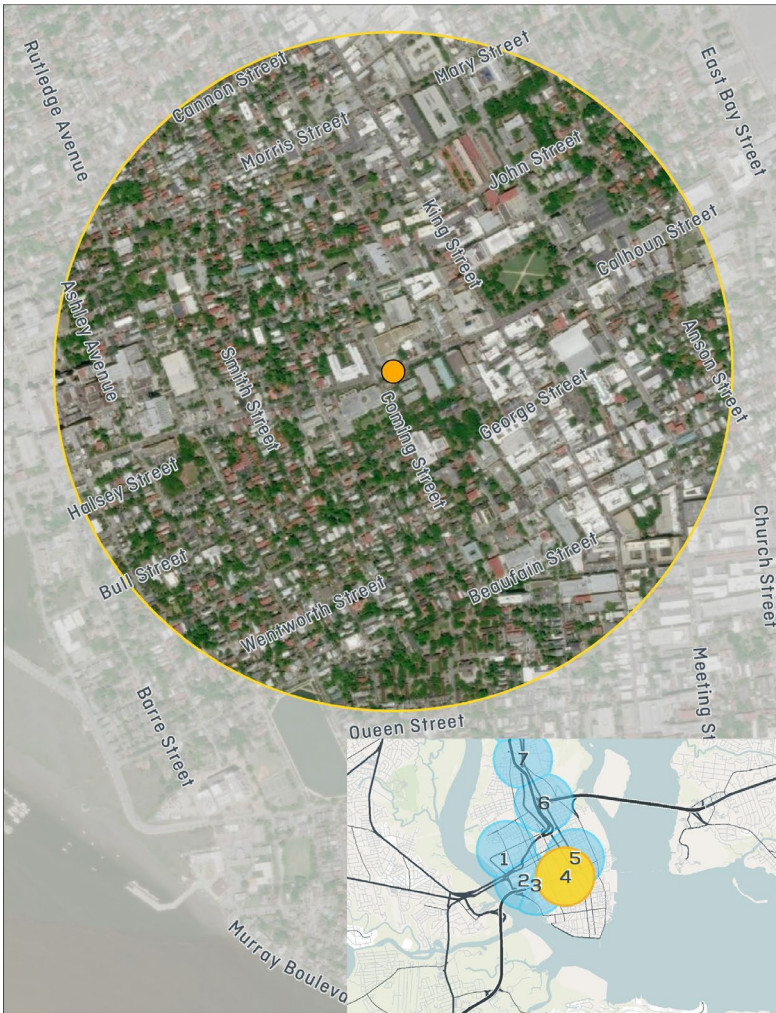
Goals and Strategies for TOD

The LCRT TOD Design charrette helped to reinforce and clarify goals for this station area and the entire Medical District in support of TOD. The City of Charleston’s Downtown Plan and associated policies along with the Medical District Masterplan call for TOD patterns of development in this station area. This station is not anticipated to absorb much new development given existing conditions and limited land available. However, ongoing efforts to increase the overall supply of housing should be encouraged. There may be an opportunity for multifamily infill development onto underutilized surface parking areas directly across the street from the station or on other nearby sites. The primary TOD goals and strategies for this station area include:

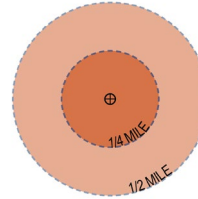
- Supporting redevelopment of existing surface parking and other underutilized land into structured parking and residential uses
- Continuing investments and funding of bicycle and pedestrian infrastructure and traffic calming measures with a particular emphasis on north south connectivity across Calhoun Street and connections to nearby neighborhoods
- Exploring public-private partnerships between the major employers, private developers, and housing advocates to increase housing production of market rate, moderately priced, and legally restricted affordable housing to add more supply of housing to the area and create a minimum of 20% affordable housing units within the walkshed



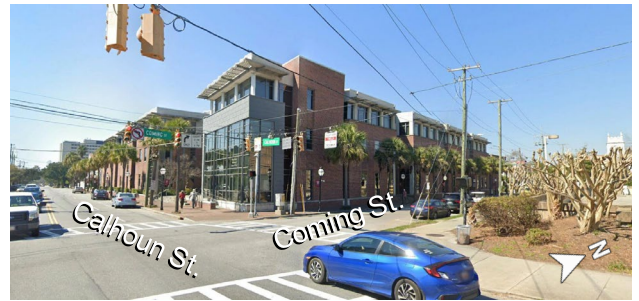
	Existing Conditions	2040 Allocation
Affordable Units (legally restricted)	none	20%
Office	12.9 M sf	12.9 M
Retail	2.82 M sf	2.82 sf
Hotel	0 sf	0 sf
Other Uses	0 sf	0 sf
Building Heights	2-10 Stories	2-10 Stories
Estimated Households	1,100	1,900
Estimated Employment	11,100	11,000
Acres of Potential Change	30	TBD



General Downtown Neighborhood Center Place Type Targets



- 2-6 stories
- 25 du/acre (min)
- 4,000 jobs
- 8,000 households



Introduction

Coming Street station is located on the northern edge of the College of Charleston campus, directly adjacent to the School of Science and Mathematics and the Addlestone Library. The station is sited in an existing dense, urban historic grid. This station will serve the academic campus, newly constructed residence hall and surrounding neighborhoods. It is also located two blocks west from Marion Square and the King Street shopping district. This station's walkshed overlaps with the Jonathan Lucas Street station area and the John Street station areas. These stations serve the major commercial assets in the historic Charleston shopping and entertaining district.

	Existing Conditions
Affordable Units (legally restricted)	787
Office	9.1 M sf
Retail	5.86 M sf
Hotel	0 sf
Other Uses	0 sf
Building Heights	2-6 stories
Estimated Households	2,500
Estimated Employment	10,900
Acres of Potential Change	20

Affordable Housing



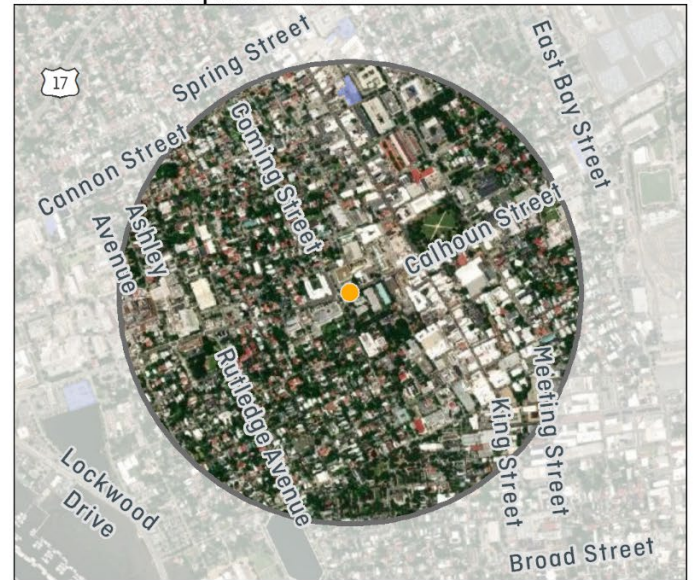
Legally Restricted Affordable Housing Units

- 0 - 35
- 36 - 156
- 157 - 501

Housing, Development Activity, and Areas of Potential Change

This station area is designated as a Downtown Neighborhood Center to encourage more infill housing. It is currently home 800 legally restricted affordable units and has approximately 2,500 households within the walkshed, making it 30% affordable. This area has very little room for infill and redevelopment and is therefore not expected to change much in the next 20 years, nor is it likely to achieve the TOD Placetype target for 8,000 households. However, there are approximately 20 acres of small lot infill properties in the area and market conditions could lead to the eventual conversion of some existing commercial buildings to residential over time.

Known Development Sites



■ Known Development

Areas of Potential Change



■ Area of Potential Change

LCRT | Coming Street Station Area

Multimodal Transportation

The station area is connected by a strong existing network of sidewalks along the historic grid street pattern. Streetscape conditions and green space within the College of Charleston create a comfortable pedestrian experience. This station area walkshed connects with Marion Square, which will also serve as the southern terminus of the proposed Lowline linear park. This station area will benefit from improved bicycle accommodations, including separated bike lanes on Calhoun Street and traffic calming along King Street.

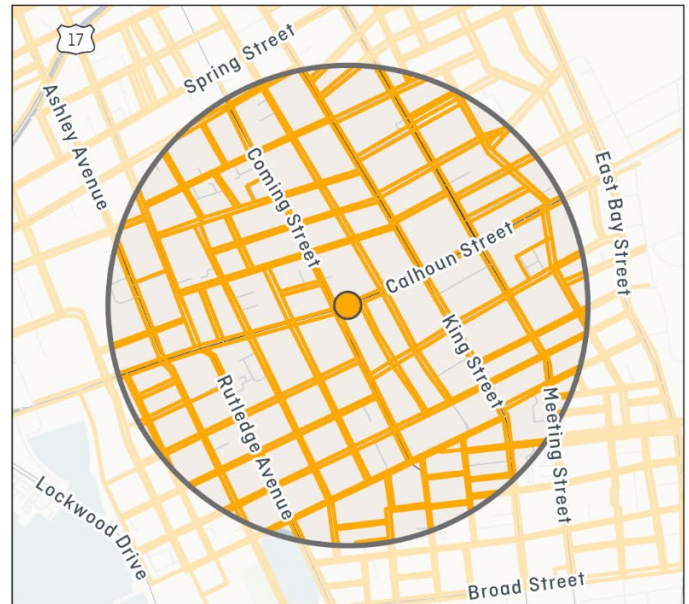


College of Charleston



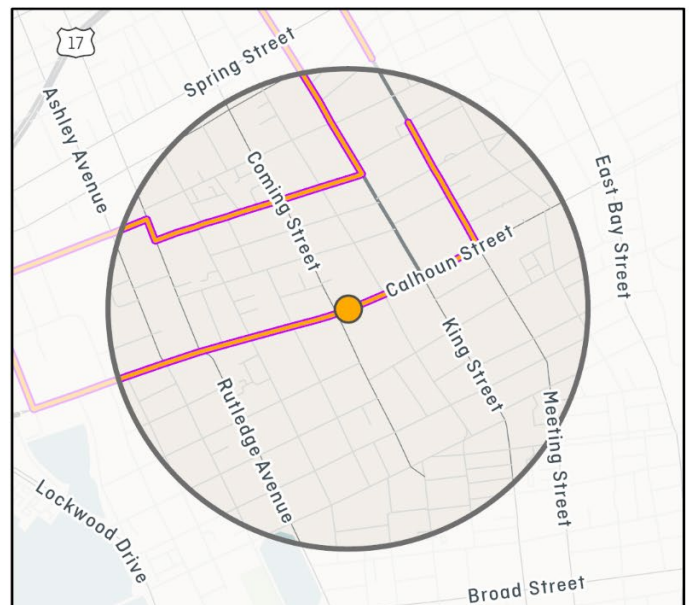
Proximity to Marion Square

Existing Bike and Pedestrian Facilities



— Bike Facility — Pedestrian Facility

Planned Bike and Pedestrian Facilities



— Planned Bike — Planned Pedestrian

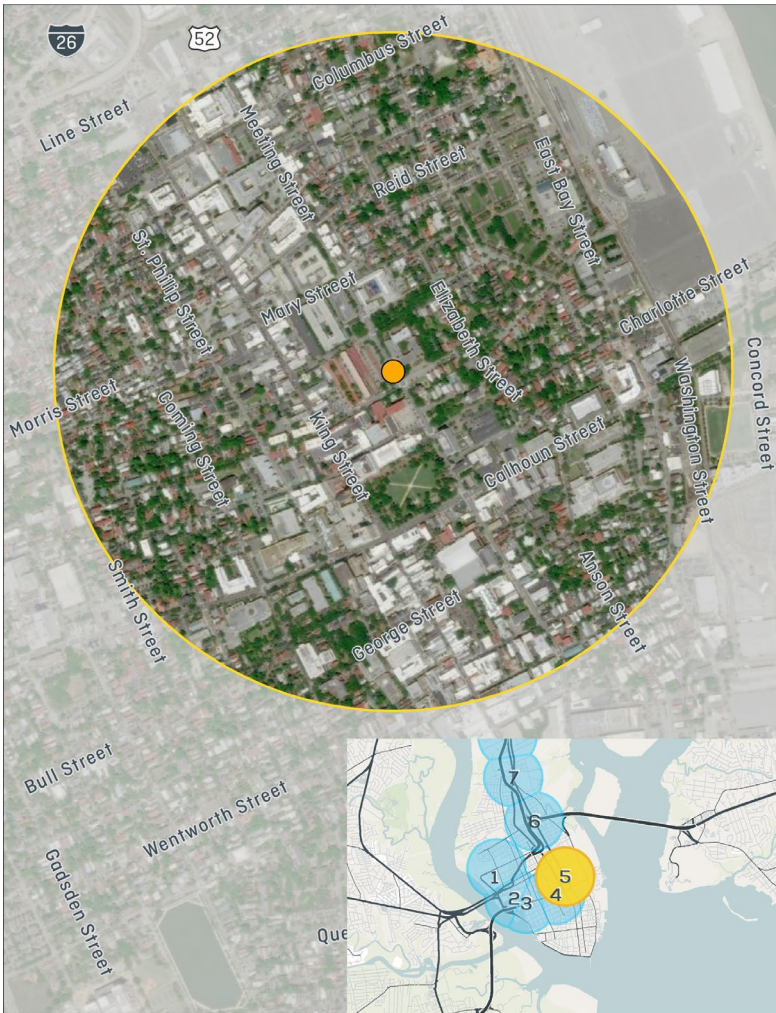
Goals and Strategies for TOD

As a nearly built out station area, the TOD strategies for the Coming Street station should focus on the following:

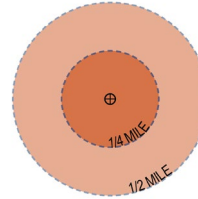
- Continued improvements to the walking and biking infrastructure and amenities in and around the station area
- Encouragement of workforce housing production within the smaller scale residential infill locations; ensure long term preservation of existing legally restricted affordable housing
- New partnerships with the College of Charleston (similar to employers in the Medical District) to encourage Transportation Demand Management (TDM) strategies that encourage both students and employees to use non-auto travel options (walk, bike, and transit) and reduce overall vehicular travel demands over time



	Existing Conditions	2040 Allocation
Affordable Units (legally restricted)	787	30%
Office	9.1 M sf	9.1 M sf
Retail	5.86 M sf	5.86 M sf
Hotel	0 sf	20,000 sf
Other Uses	0 sf	0 sf
Building Heights	2-6 stories	2-6 Stories
Estimated Households	2,500	2,500
Estimated Employment	10,900	11,200
Acres of Potential Change	20	TBD



General Downtown Neighborhood Center Place Type Targets



- 2-6 stories
- 25 du/acre (min)
- 4,000 jobs
- 8,000 households

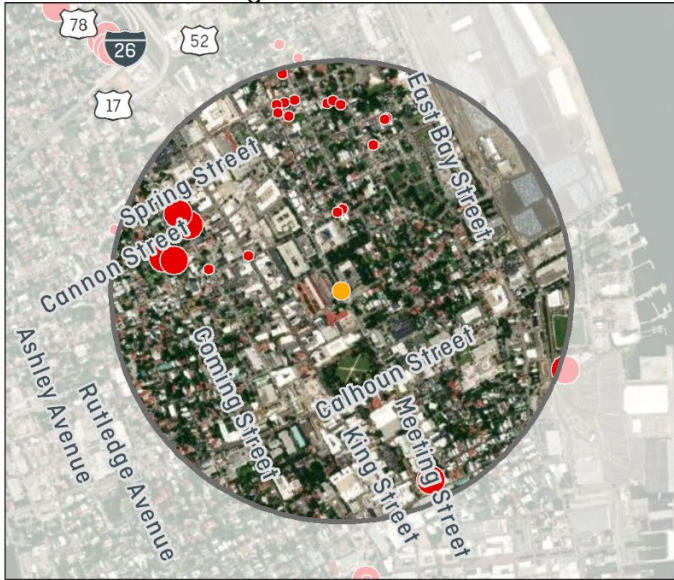


Introduction

The John Street station area is in the existing dense, historic urban area of the lower Peninsula. It has an overlapping walkshed with the Coming Street station area and is centrally located in the Charleston shopping and entertainment district. The station will be adjacent to the Charleston Visitor's Center, where the Charleston Area Regional Transportation Authority (CARTA) Transfer Center is located and serves as the primary transit hub for downtown. This station will likely serve both tourists and workers commuting into their service-oriented hospitality related jobs. This station is also located within proximity of the planned Lowline, a linear park and multi-use trail system running parallel and in between Meeting and King Streets.

	Existing Conditions
Affordable Units (legally restricted)	393
Office	5.63 M sf
Retail	4.27 M sf
Hotel	0 sf
Other Uses	211,000 sf
Building Heights	2-6 stories
Estimated Households	2,200
Estimated Employment	4,900
Acres of Potential Change	30

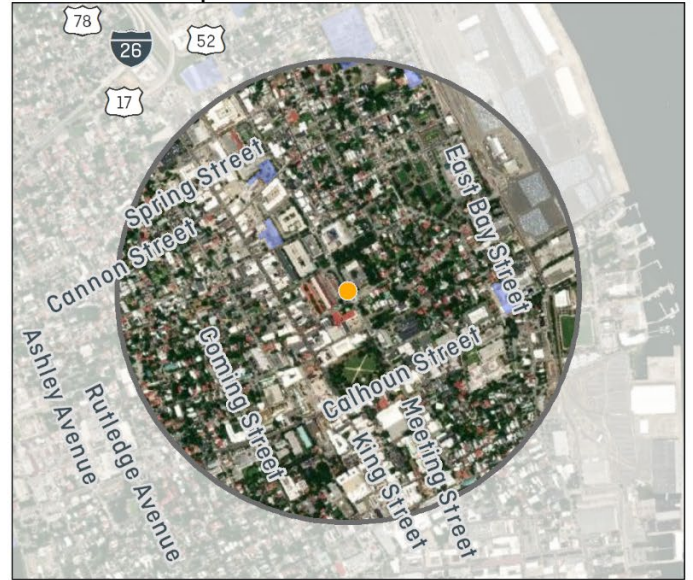
Affordable Housing



Legally Restricted Affordable Housing Units

- 0 - 35
- 36 - 156
- 157 - 501

Known Development Sites

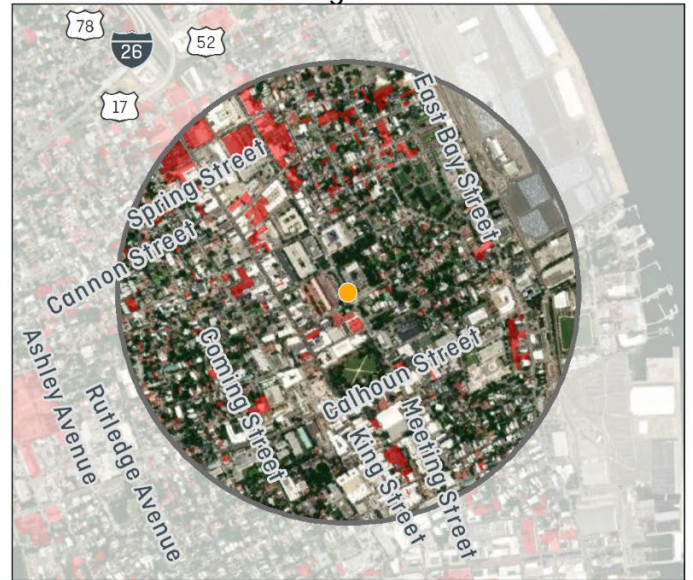


■ Known Development

Housing, Development Activity, and Areas of Potential Change

This station area is designated as a Downtown Neighborhood Center to encourage additional infill of residential development. There are just under 400 existing affordable units within walking distance, which makes the area about 8% affordable. The station is retail and office-heavy, and it includes other hospitality related land uses. With only 30 acres of potential change with larger parcels to the north, these areas could be targeted for residential and neighborhood serving services to support increases in the overall affordable housing supply and options within the walkshed.

Areas of Potential Change

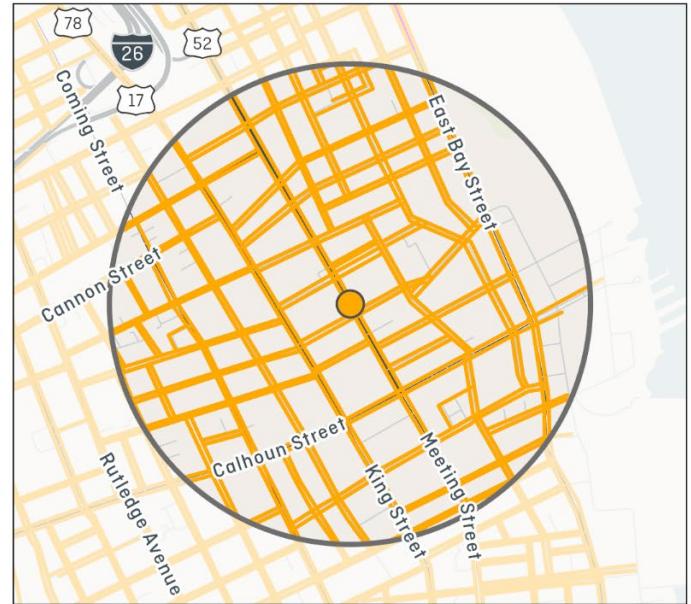


■ Area of Potential Change

Multimodal Transportation

The station is currently connected by a dense network of existing sidewalks, and the Visitor's Center also includes a bikeshare station. Additional traffic calming measures inclusive of bike sharrows are also planned for King Street. This station will be directly connected to proposed Lowline, which will be developed along an abandoned rail line and include an off-road multi-use trail and linear park, offering a parallel alternative north-south walking and bicycle route to Meeting Street. This area will benefit from numerous crosswalk enhancements, pedestrian safety intersection improvements, sidewalk upgrades, and bicycle infrastructure additions. The John Street axis is designated as an east-west bike route with connections to the Ashley River Bridge Bicycle Crossing along Bee Street and Radcliffe.

Existing Bike and Pedestrian Facilities



— Bike Facility — Pedestrian Facility

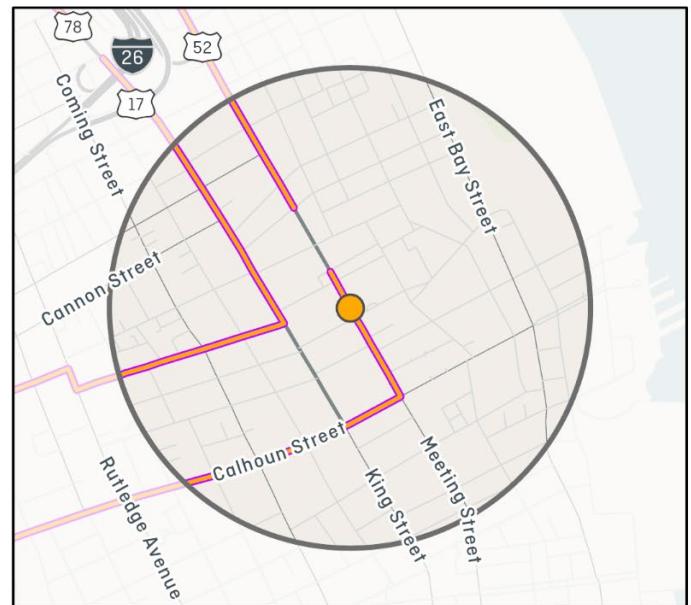


Charleston Visitor's Center



Lowline concept plans

Planned Bike and Pedestrian Facilities



— Planned Bike — Planned Pedestrian

Goals and Strategies for TOD

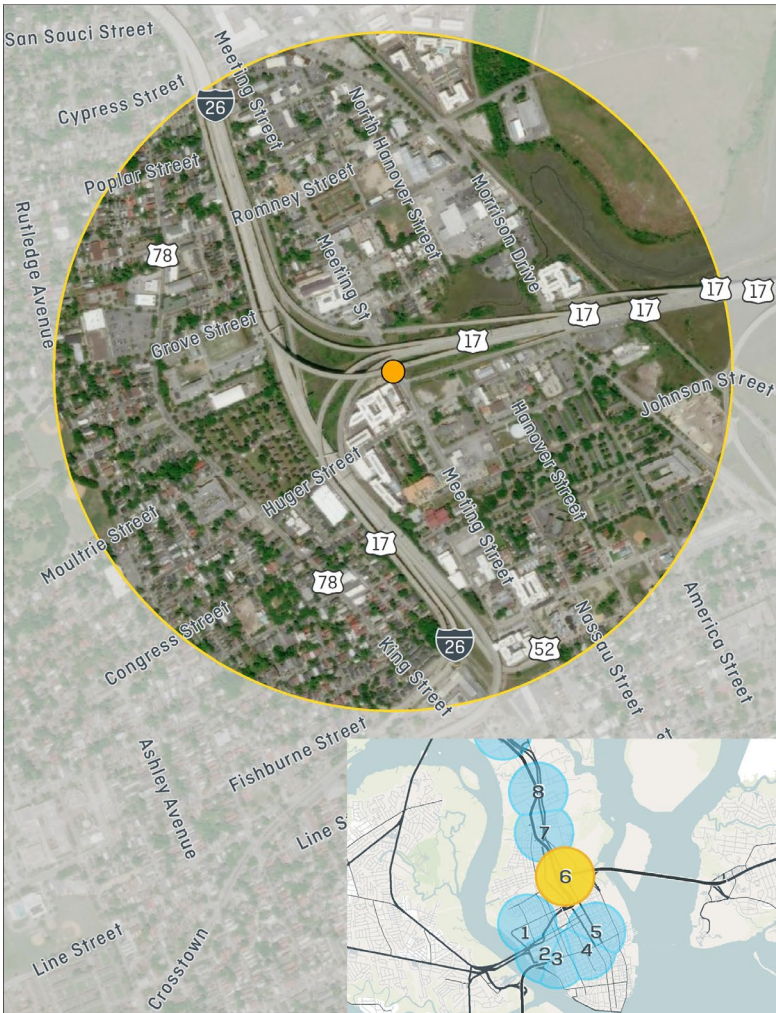
The John Street Station Area will serve as a multimodal transportation hub for workers and visitors alike. Future development nearby will follow the existing character of higher density mixed use as enabled by the existing zoning. This area is not likely to see significant infill or redevelopment given existing patterns and limited land availability.

Therefore, the primary strategies to further TOD in this area include:

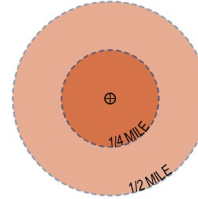
- Advancing the Lowline linear park and multi-use trail and focus on multiple pedestrian and bicycle improvements
- Increasing the supply of mixed income housing in the area, retaining existing affordable units and working towards affordable and workforce housing production to achieve 20% affordability within the station area



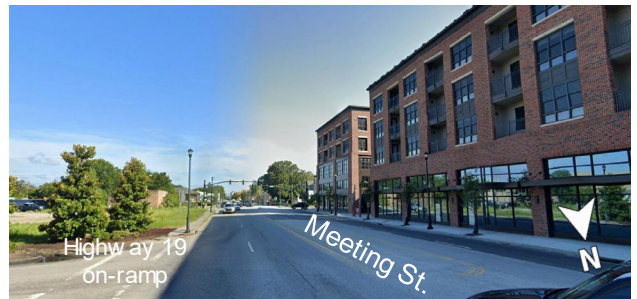
	Existing Conditions	2040 Allocation
Affordable Units (legally restricted)	393	20%
Office	5.63 M sf	5.63 M sf
Retail	4.27 M sf	4.27 M sf
Hotel	0 sf	300,000 sf
Other Uses	211,000 sf	211,000 sf
Building Heights	2-6 stories	2-6 Stories
Estimated Households	2,200	2,500
Estimated Employment	4,900	5,400
Acres of Potential Change	30	TBD



General Downtown Neighborhood Center Place Type Targets



- 2-6 stories
- 25 du/acre (min)
- 4,000 jobs
- 8,000 households



Introduction

The Huger Street station will be located on Meeting Street below the major highway bridge and interchange infrastructure at the boundary of the lower and upper Peninsula. The area is home to a mix of office and mixed income residential. This area is currently undergoing substantial development activity as larger sized parcels of underutilized, vacant, and aging properties are reimagined for office and residential. The historic grid and neighborhood connectivity in this area was severed by the elevated highways and therefore reconnecting this part of the city with strong bicycle and pedestrian pathways is a key goal. The Lowline linear park and multi-use trail system, along with the green infrastructure plans identified in the concept plan, will notably contribute to improving these conditions.

	Existing Conditions
Affordable Units (legally restricted)	1,124
Office	2.92 M sf
Retail	1.64 M sf
Hotel	0 sf
Other Uses	485,000 sf
Building Heights	2-5 Stories
Estimated Households	2,200
Estimated Employment	2,700
Acres of Potential Change	40

Affordable Housing



Legally Restricted Affordable Housing Units

- 0 - 35
- 36 - 156
- 157 - 501

Housing, Development Activity, and Areas of Potential Change

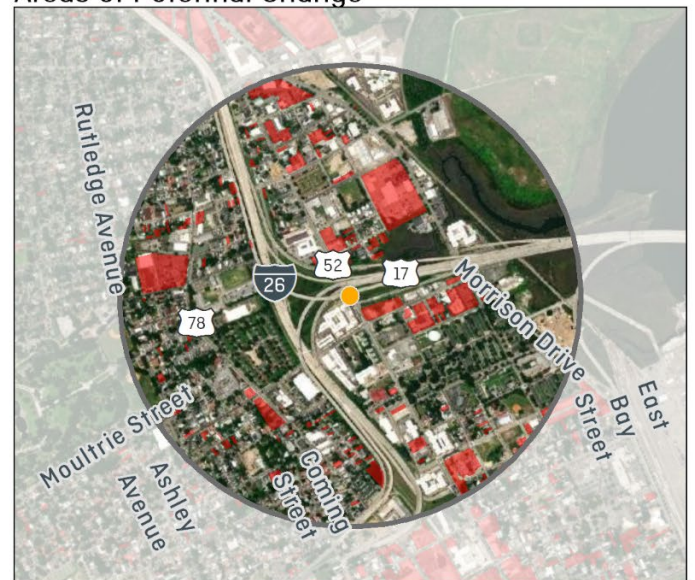
This station area has the highest concentration of existing affordable housing with more than 1,100 legally restricted units within the walkshed. The City of Charleston’s Public Housing Authority has plans to retain and improve its properties through the Rental Assistance Demonstration (RAD) program. This station is approximately 30% affordable given existing conditions. With an estimated 40 acres of potential land available for infill and redevelopment, this station area could be targeted for additional market rate residential, office, and retail.

Known Development Sites



- Known Development

Areas of Potential Change



- Area of Potential Change

LCRT | Huger Street Station Area

Multimodal Transportation

The existing walkability in this station area is challenged by the breakdown of the historic grid of streets, higher speed auto traffic on Meeting Street, and the land consumptive highway infrastructure, including entry and exit ramps and the elevated bridge directly adjacent to the proposed station location. Some bicycle and pedestrian enhancements are proposed to create safer conditions along Huger Street, Romney Street, Morrison Drive, and Cool Blow Street, which will enhance access to Laurel Island. This section of the Lowline linear park and trail system would provide significant improvements to the walkability and bikeability of the area, providing strong north-south connections, strengthening east west reconnections of existing neighborhoods, and providing notable greenspace.

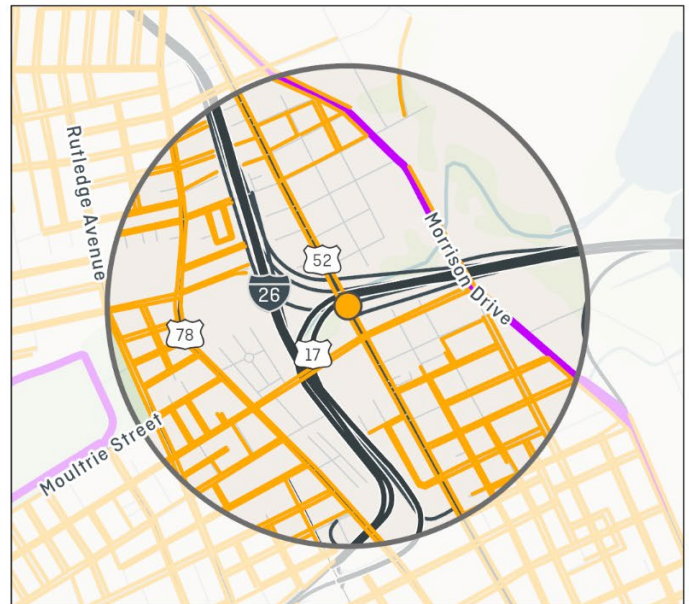


Existing sidewalks and walkable streets in nearby neighborhoods



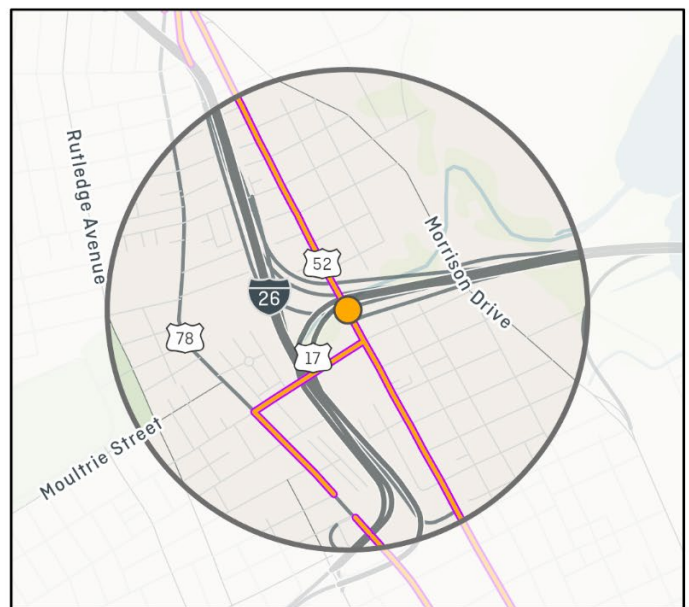
Lowline concept plans

Existing Bike and Pedestrian Facilities



— Bike Facility — Pedestrian Facility

Planned Bike and Pedestrian Facilities

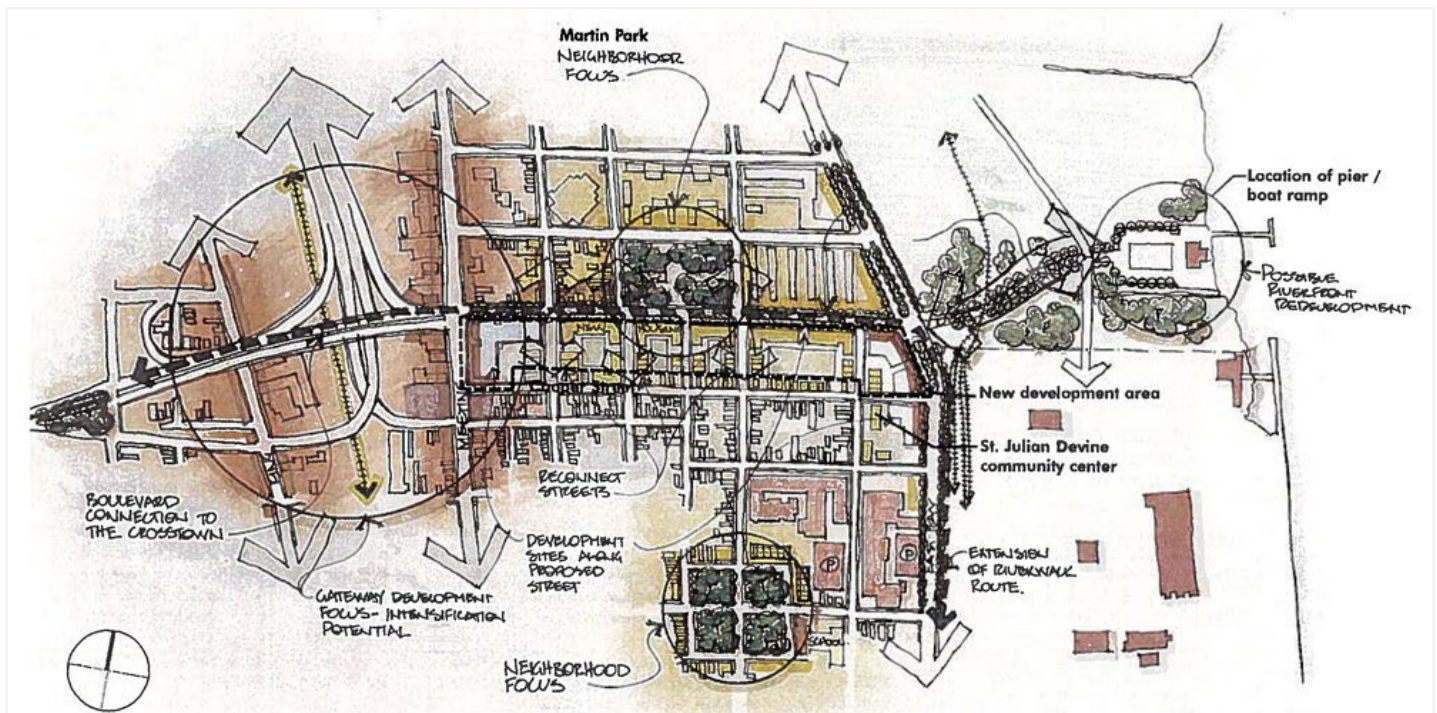
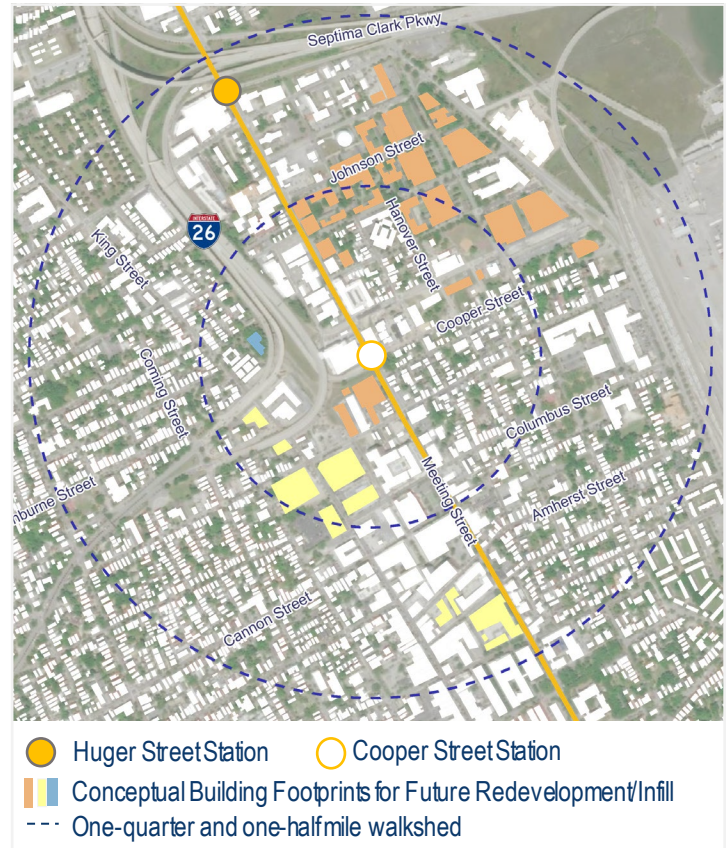


— Planned Bike — Planned Pedestrian

LCRT | Future Cooper Street Station Area

Cooper Street Station

The future Cooper Street Station area is located about one-half mile south of the proposed Huger Street Station along Meeting Street. This proposed station is within the Cooper River Bridge Redevelopment Area, which is one of the City's priority areas for redevelopment and reinvestment. Since 1999, the City has undertaken several planning initiatives to identify needed public investments to improve conditions within the East Side Neighborhood. These efforts have identified needs and improvements for public space design, affordable housing, drainage, street network connectivity, streetscapes, bicycle and pedestrian infrastructure and other enhancements. While the Cooper Street Station was not included in the LCRT preliminary design efforts in 2021, the station area will be evaluated during subsequent phases. The Cooper Street station area already has many of the key ingredients of TOD and presents an opportunity to provide a critical new transportation connection within this neighborhood and spark additional infill and redevelopment.



City of Charleston's early plans and vision for the Cooper River Bridge Redevelopment Area

Future Station Area Vision

The map to the right depicts the City’s vision for future bicycle and pedestrian improvements and future infill and redevelopment opportunity areas. This vision illustrates locations where additional residential and mixed-use development is anticipated which can further improve transit ridership potential,



- ① COOPER STREET BIKEWAY
- ② COOPER STREET EXTENSION TO CONNECT TO MEETING STREET
- ③ AMERICA STREET BIKE BOULEVARD
- ④ MEETING STREET RAISED MEDIAN FROM COLUMBUS STREET THROUGH SPRING STREET FOR ACCESS MANAGEMENT
- ⑤ LOWLINE LINK BIKE AND PEDESTRIAN CONNECTION FROM MEETING STREET TO THE LOWCOUNTRY LOWLINE
- ① ADDITIONAL STATION AREA AT COOPER STREET
- ② SIGNAL REALIGNMENT OF INTERSECTION TO INCLUDE COOPER STREET EXTENSION; LANE RECONFIRMATION, RESTRIPING, ALTERATION OF EXISTING MEDIAN, CROSSWALKS, MAST ARMS, ETC.

Goals and Strategies for TOD

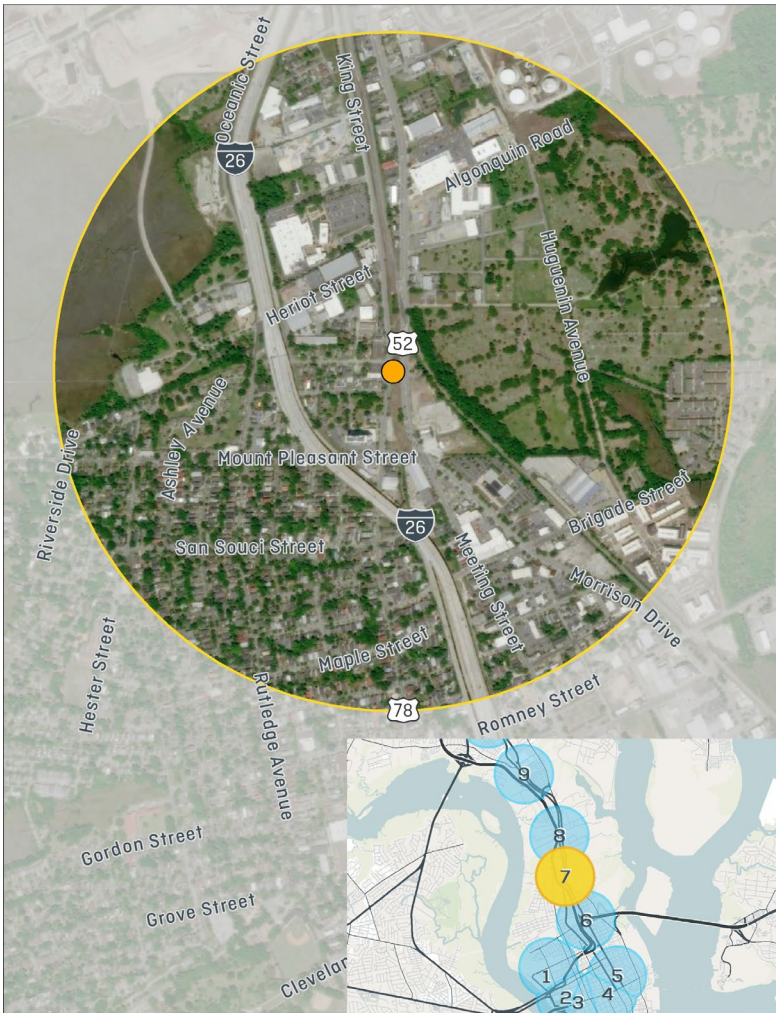
This area will benefit from continued infill and redevelopment of existing vacant and underutilized properties as enabled by existing zoning and notable bicycle and pedestrian enhancements. Additionally, the City of Charleston has identified the intersection of Cooper Street and Meeting Street as another potential LCRT station area. The primary focus for TOD in this station area includes:

- Advancing the Lowline linear park improvements
- Improving walking and bicycle access through more detailed urban design and transportation studies to reduce auto and pedestrian conflict areas
- Preserving and upgrading the existing number of legally restricted affordable housing units and attracting additional market rate housing
- Exploring the feasibility of an additional LCRT station at Cooper Street inclusive of major bicycle and pedestrian enhancements

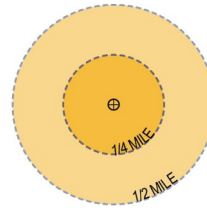


	Existing Conditions	2040 Allocation
Affordable Units (legally restricted)	1,124	20%
Office	2.92 M sf	3.0 M sf
Retail	1.64 M sf	1.64 M sf
Hotel	0 sf	125,000 sf
Other Uses	485,000 sf	485,000 sf
Building Heights	2-5 Stories	2-5 Stories
Estimated Households	2,200*	5,600
Estimated Employment	2,700	4,900
Acres of Potential Change	40	TBD

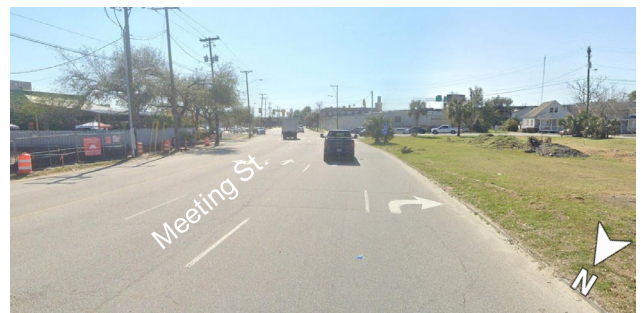
**does not account for recent development activity that has produced significant new job-related uses*



General Town Center Place Type Targets



- 4-8 stories
- 20 du/acre (min)
- 4,000 jobs
- 4,000 households

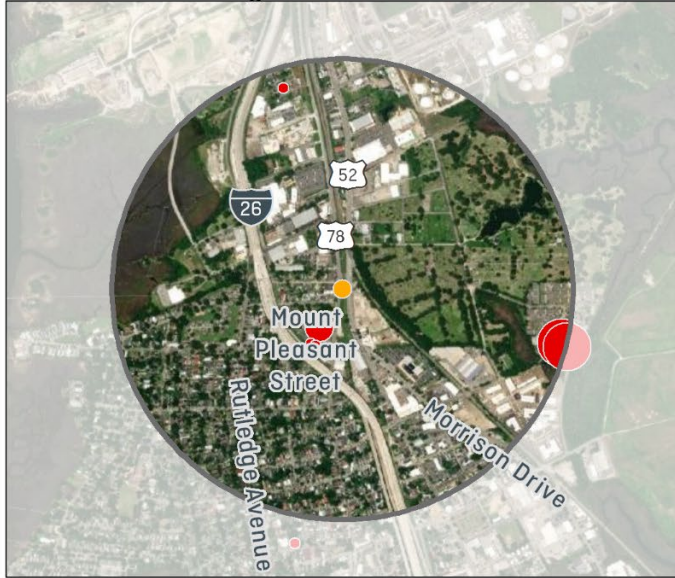


Introduction

The Mt. Pleasant Street station is located on the edge of the urban core and at the crossroads of Meeting, King, and Mt. Pleasant Streets. It is also the location of the proposed Hop Lot, which will serve as a park and ride facility to support hospitality service on the Peninsula – which will also serve the LCRT station. Existing land uses include the historic cemetery, single family residential, a gas station, and the Joseph Floyd Manor affordable housing community. The elevated I-26 corridor also traverses the area and includes on and off vehicular access ramps nearby. Areas to the north are industrial in nature. The proposed Lowline linear park will terminate at this station.

	Existing Conditions
Affordable Units (legally restricted)	485
Office	271,000 sf
Retail	1.74 M sf
Hotel	0 sf
Other Uses	1.3M sf
Building Heights	10+ stories
Estimated Households	900
Estimated Employment	1,900
Acres of Potential Change	70

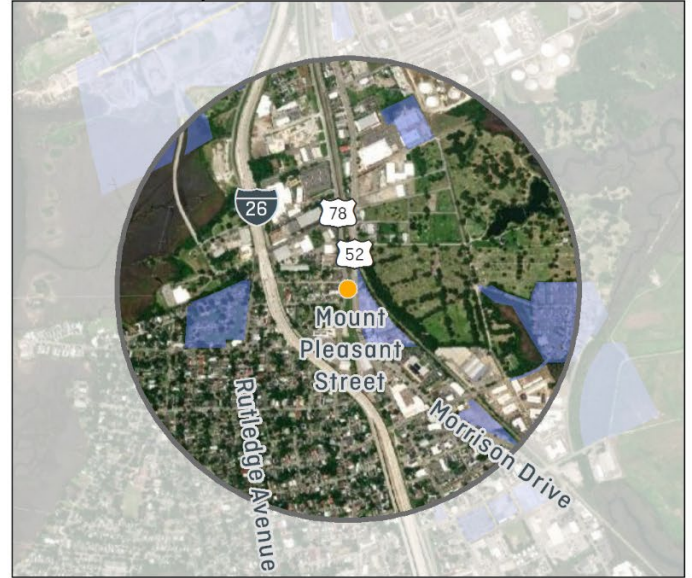
Affordable Housing



Legally Restricted Affordable Housing Units

- 0 - 35
- 36 - 156
- 157 - 501

Known Development Sites

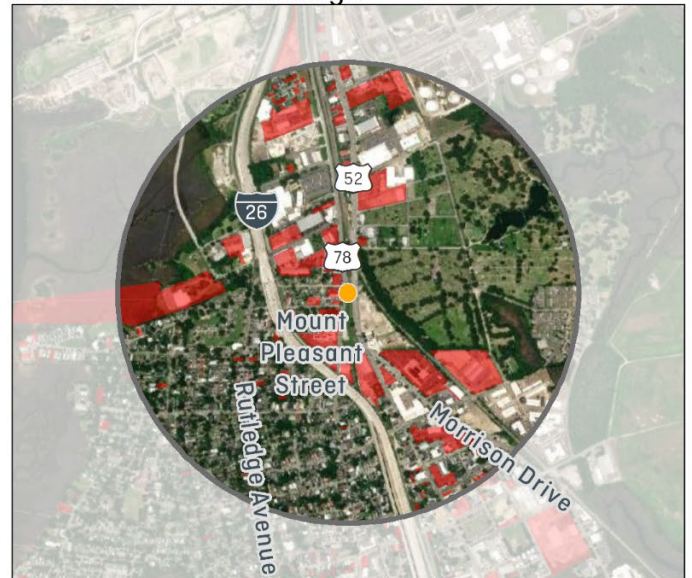


■ Known Development

Housing, Development Activity, and Areas of Potential Change

The station area is designated as a Town Center. It has just under 500 units of existing affordable housing units, making it almost 20% affordable. Recent development in the area includes higher density residential and additional non-residential infill to the south. The publicly owned property where the station and Hop Lot will be located presents an opportunity for Joint Development, and more than 200 acres of land are also available to the north. While this area is challenged by the breakdown of the urban grid, the larger sized parcels do present transformational opportunities for the long-term transition into a more walkable, mixed-use, and higher density node.

Areas of Potential Change

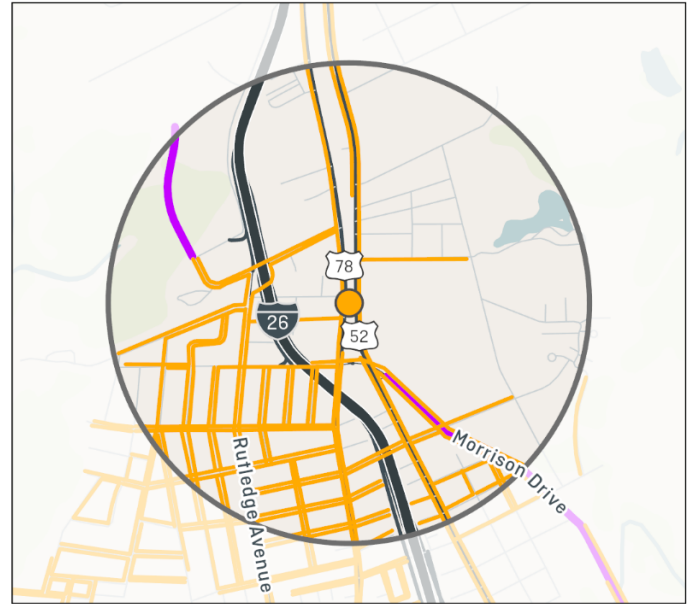


■ Area of Potential Change

Multimodal Transportation

The existing bicycle and pedestrian realm within this station area is lacking and challenged by the convergence of the I-26 corridor, local streets, and the breakdown of the historic street grid. As redevelopment and infill occurs, there is an opportunity to re-establish the grid of streets to the north, significantly calming the intersection of Meeting, King, and Mt. Pleasant street as the terminus of the Lowline linear park and multi-use trail. This is also an opportunity to rethink King Street as a more urban place through improving connections between the station and residential areas in the west and continuing streetscape enhancements along the Heriot Street corridor, which will connect the station area to the proposed Magnolia development project just outside of the walkshed. The City of Charleston would like to advance a more detailed station area study to focus on the urban design elements most critical to creating a strong walking and biking environment and connections to the Lowline.

Existing Bike and Pedestrian Facilities



— Bike Facility — Pedestrian Facility

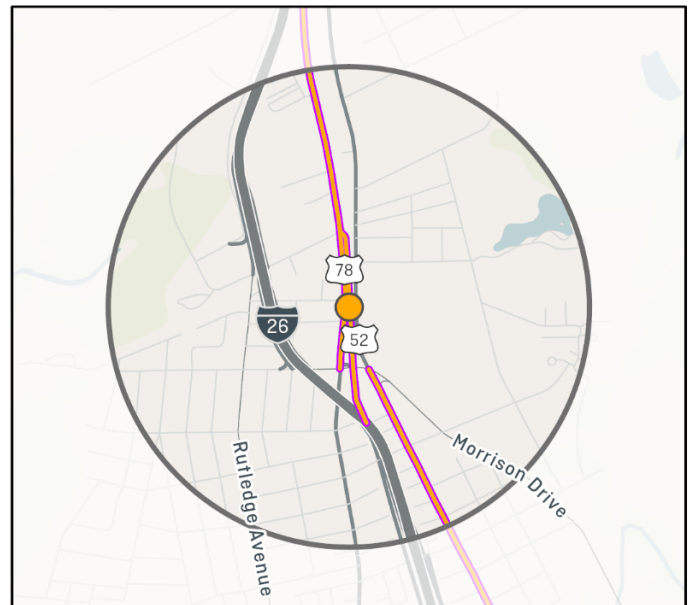


Intersection of Meeting and King Street which is challenged for pedestrian and bicycle connectivity



Existing sidewalks and walkable streets in nearby neighborhoods

Planned Bike and Pedestrian Facilities



— Planned Bike — Planned Pedestrian

Hypothetical Station Area Design Concepts

The Mt. Pleasant Station concept plan explored redevelopment and infill potential immediately adjacent to the station and to points north. This includes notable infill along Heriot Street, including the potential redevelopment of the Charleston Rifle Club property. These illustrations also show the potential phasing out of the proposed Hop Lot for infill of mixed-use over time.



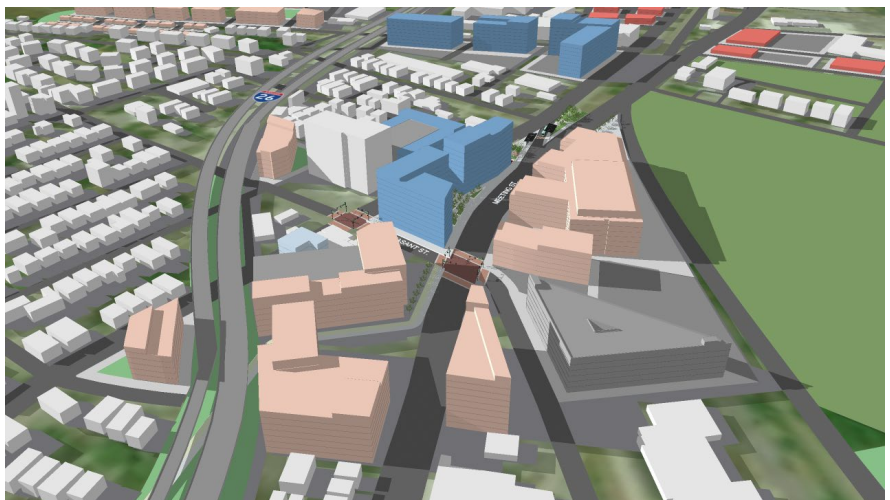
Mt. Pleasant Station Area Concept Plan



Potential LCRT Transit Plaza



Near term development of LCRT Station, Hop Lot and intersection improvements



Long term development and buildout of station area including the development of the Hop Lot with the conversion of existing parking into structured parking

- Employment mixed use
- Commercial mixed use
- Multifamily residential
- Existing buildings

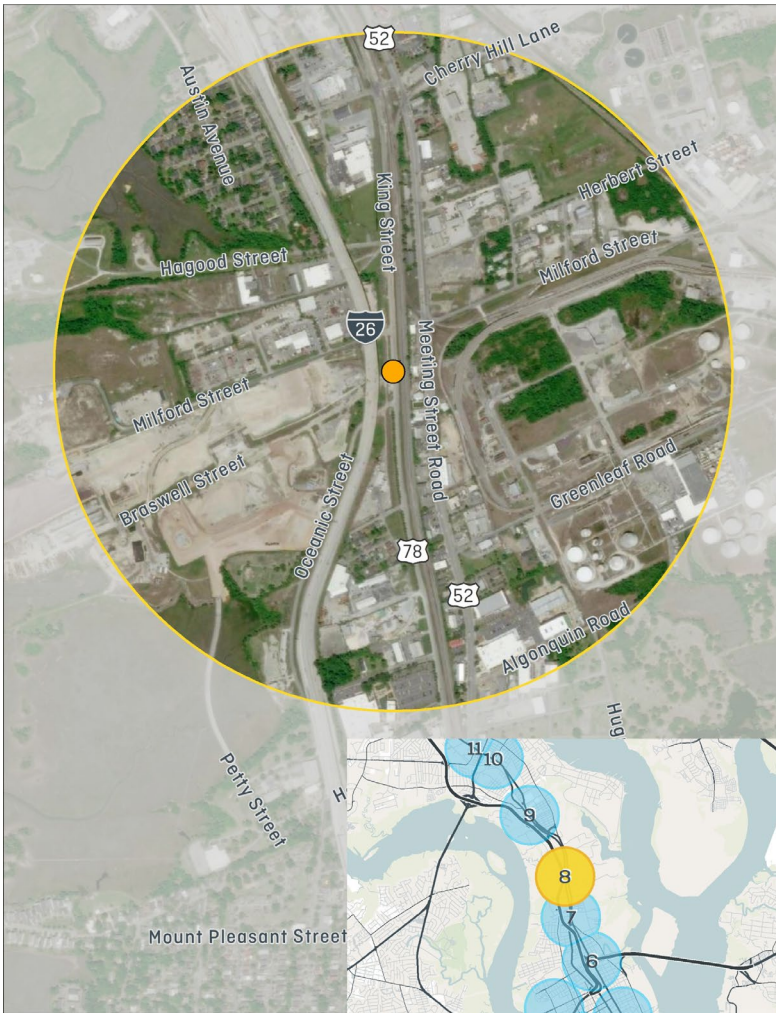
Goals and Strategies for TOD

The Mt. Pleasant Station presents an opportunity to advance TOD and notably improve the bicycle and pedestrian conditions within the area. The station area concept plans illustrate some of these key design concepts. Moving forward, the priority TOD strategies at Mt. Pleasant include:

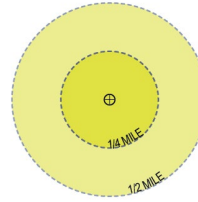
- Conducting a more detailed station area planning process to identify key opportunities for improvements to the bicycle and pedestrian conditions to better connect with the Lowline and altogether improve walk access to nearby neighborhoods
- Continued infill of housing while maintaining a ratio of 20% affordable units
- Further study to assess the public-private Joint Development opportunity at the Hop Lot site to include mixed-use development and structured parking
- Significant traffic calming of King Street and major improvements to the Mt. Pleasant Street intersection to better connect the station area 'island' to points south, east, and west
- Additional neighborhood level planning and visioning to engage local residents and other property owners in advancing TOD urban patterns of infill in the area



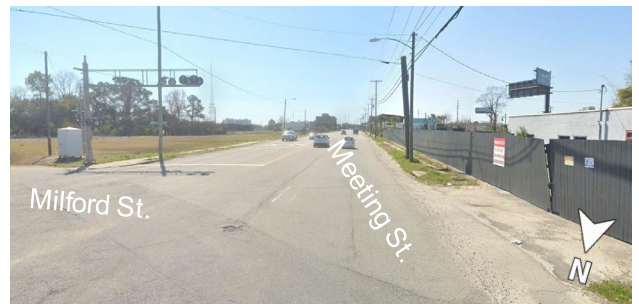
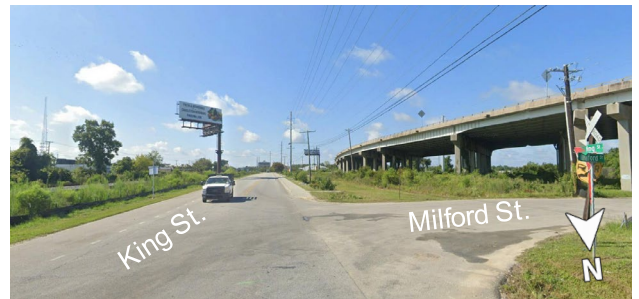
	Existing Conditions	2040 Allocation
Affordable Units (legally restricted)	485	20%
Office	271,000 sf	1.20 M sf
Retail	1.74 M sf	1.74 M sf
Hotel	0 sf	58,000 sf
Other Uses	1.3M sf	1.3M sf
Building Heights	10+ stories	10+ stories
Estimated Households	900	1,900
Estimated Employment	1,900	6,700
Acres of Potential Change	70	TBD



General Neighborhood Center Place Type Targets



- 2-4 stories
- 15 du/acre (min)
- 1,500 jobs
- 3,500 households

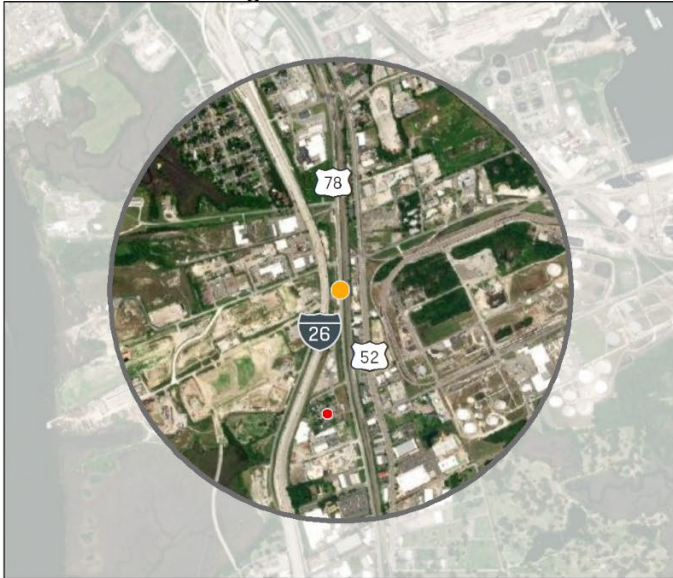


Introduction

The Milford Street station is located on Meeting Street south of the historic Rosemont neighborhood and adjacent to the now under construction Magnolia mixed-use development. Outside of the Rosemont neighborhood, industrial uses dominate the area and have created a pattern of larger sized parcels and vacant lands with oversized sized blocks. The active railroad running parallel and in between Meeting and King Streets presents a walkability barrier between the east and west sides of the station. Many of the existing industrial properties to the east will remain industrial. The Magnolia mixed-use planned development on the west side of the railroad tracks will transform the area, adding more than 1.7M square feet of non-residential, 4,000 units of residential, a walkable street grid, parks, and open space.

	Existing Conditions
Affordable Units (legally restricted)	less than 40
Office	95,000 sf
Retail	1.94 M sf
Hotel	0 sf
Other Uses	884,000 sf
Building Heights	1-2 stories
Estimated Households	200
Estimated Employment	1,200
Acres of Potential Change	90

Affordable Housing



Legally Restricted Affordable Housing Units

- 0 - 35
- 36 - 156
- 157 - 501

Housing, Development Activity, and Areas of Potential Change

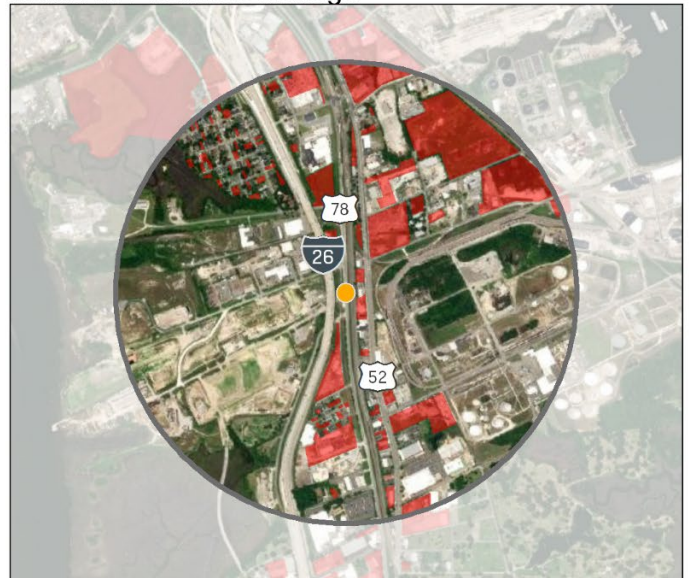
This station area is designated as a Neighborhood Center to support additional residential infill opportunities beyond the Magnolia property and to reinforce neighborhood preservation. The City of Charleston Housing Authority is building new legally restricted affordable housing adjacent to the Magnolia development. The Rosemont neighborhood has some naturally occurring affordable housing and some single vacant lots available for residential infill. The increase of real estate values over time – catalyzed by the Magnolia project and other market pressures – will put this neighborhood at high risk for future displacement of existing residents. Additional housing preservation strategies are needed for the area while supporting the additional infill of residential and establishing a 20% target for overall housing affordability.

Known Development Sites



■ Known Development

Areas of Potential Change



■ Area of Potential Change

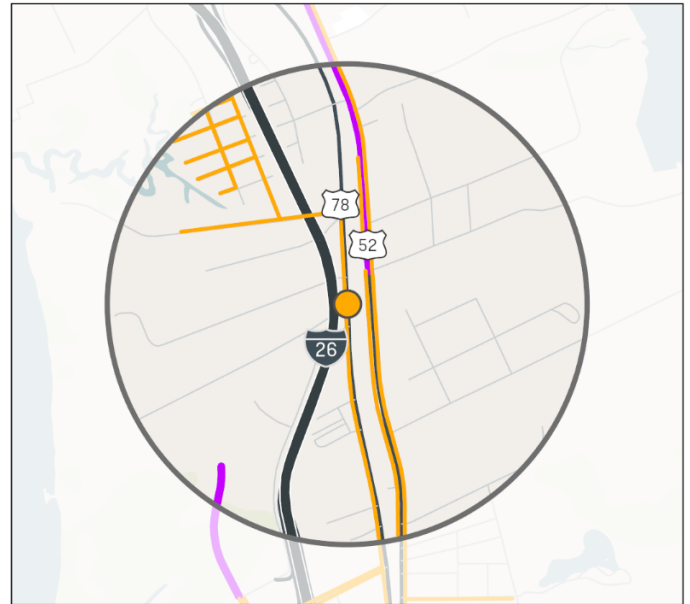
Multimodal Transportation

The station area is challenged from a walkability perspective given the existing roadway, railroad infrastructure, and breakdown of the walkable grid. There are some existing and planned shared use paths on Meeting and King Streets to support north-south movements. The proposed Magnolia development will significantly improve walkability to the area and create the potential to further expand the street grid to the north and connect with the Rosemont neighborhood. Additionally, traffic calming efforts on King Street and major intersection improvements at Milford Street will be needed to make the LCRT station safe and accessible.



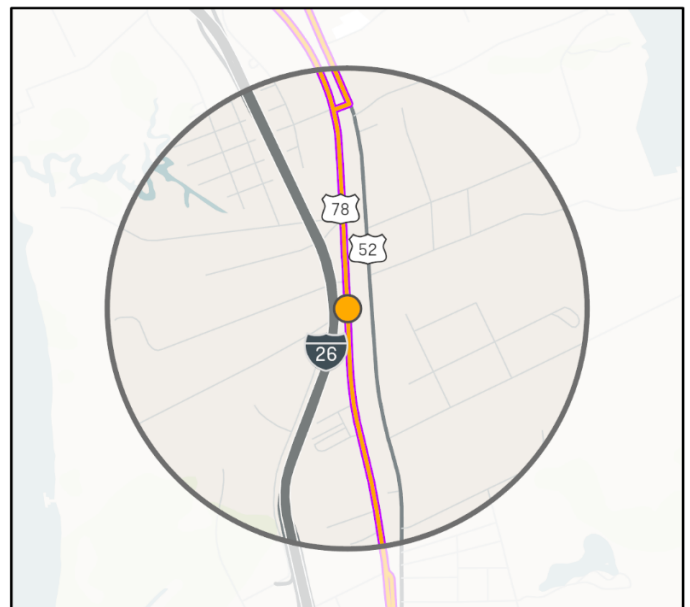
Proposed Magnolia Development concept plan, Ashley Rivers Investors, LLC

Existing Bike and Pedestrian Facilities



— Bike Facility — Pedestrian Facility

Planned Bike and Pedestrian Facilities



— Planned Bike — Planned Pedestrian

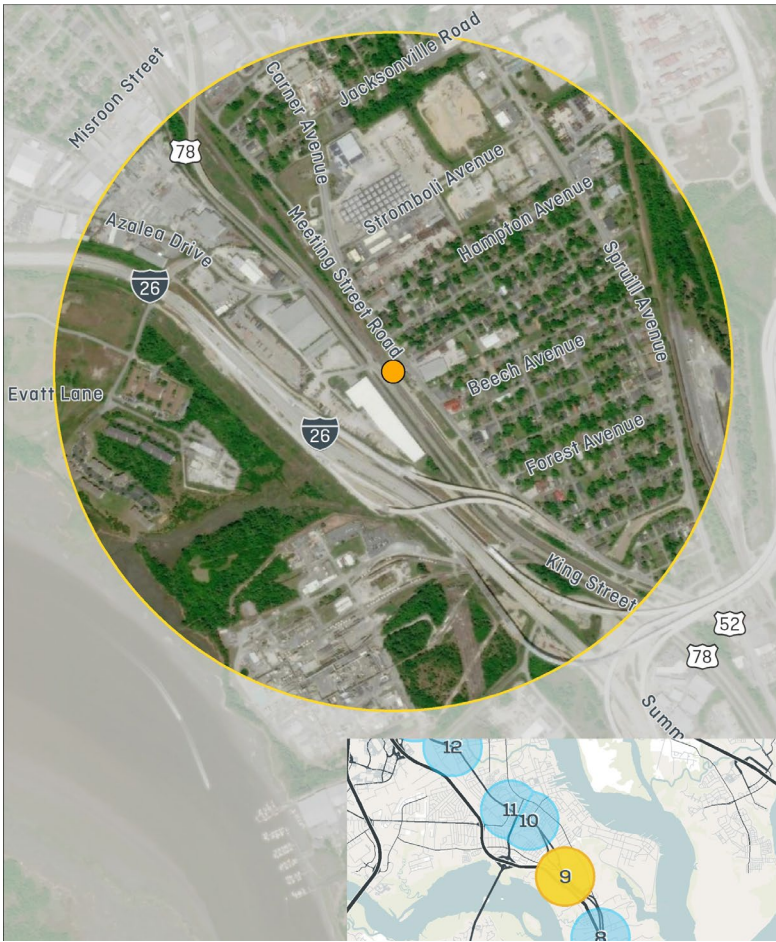
Goals and Strategies for TOD

The Magnolia development represents a significant step towards transforming this area into more transit supportive conditions. Additionally, the City of Charleston envisions TOD patterns and the long-term potential for an LCRT station at Discher Street. The City will be creating a future complex of city services at a major property along Cherry Hill lane which will benefit from transit access. Additional strategies for TOD in this station area include:

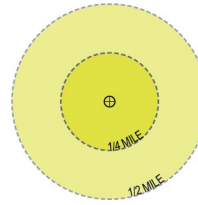
- Focusing on bicycle and pedestrian improvements and street connectivity to better connect the Rosemont neighborhood, the LCRT station, and the Magnolia site
- Working with local non-profits to advance neighborhood preservation strategies and continue supporting new affordable housing production
- Partnering with the major non-residential tenants within the Magnolia development to advance Transportation Demand Management (TDM) strategies that will encourage employees and visitors to use transit and other modes of transportation



	Existing Conditions	2040 Allocation
Affordable Units (legally restricted)	1 - 40	20%
Office	95,000 sf	985,000 sf
Retail	1.94 M sf	2.36 M sf
Hotel	0 sf	0 sf
Other Uses	884,000 sf	884,000 sf
Building Heights	1-2 stories	2-6 stories
Estimated Households	200	4,000
Estimated Employment	1,200	8,700
Acres of Potential Change	90	TBD



General Neighborhood Center Place Type Targets



- 2-4 stories
- 15 du/acre (min)
- 1,500 jobs
- 3,500 households



Introduction

The Hackemann Avenue Station is in the city of North Charleston and sited directly adjacent to the historic African American communities of Union Heights, Windsor Place, and Howard Heights which have strong faith-based centers and cultural assets. This area is also home to port related uses associated with the redevelopment of the former Navy base to the east. The station area also envelops light industrial, commercial and office uses resulting in multiple land use patterns where a neighborhood street grid of small walkable blocks meets large blocks with warehouse and big box building footprints. The I-26 highway corridor is a major barrier to east-west connectivity in the station area.

	Existing Conditions
Affordable Units (legally restricted)	256
Office	659,000 sf
Retail	705,000 sf
Hotel	0 sf
Other Uses	1.33 M sf
Building Heights	1-2 stories
Estimated Households	500
Estimated Employment	1,100
Acres of Potential Change	130

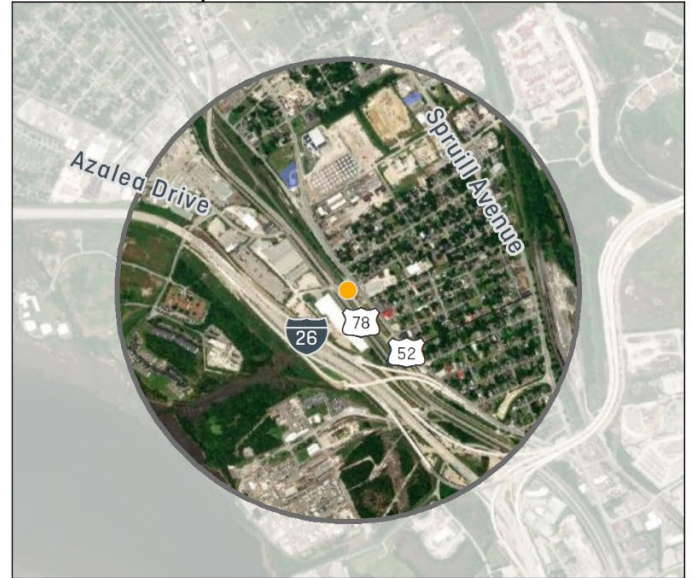
Affordable Housing



Legally Restricted Affordable Housing Units

- 0 - 35
- 36 - 156
- 157 - 501

Known Development Sites



Known Development

Housing, Development Activity, and Areas of Potential Change

This station is designated as a Neighborhood Center to encourage neighborhood preservation and strategic infill of residential lots and neighborhood scale non-residential uses. Currently there are several naturally occurring affordable and workforce housing units in the area and just over 250 units permanently affordable units located to the west of the I-26 corridor off of Baker Hospital Boulevard making the area more than 50% affordable. The areas to the east of Rivers Avenue could benefit from infill residential that complements the existing single-family housing with townhomes as well as four- and eight-unit two-story multifamily complexes. Non-residential uses should be oriented to neighborhood services and retail. There are approximately 180 acres of land that could potentially change outside of the historic neighborhoods to the west of Rivers Avenue and the I-26 corridor.

Areas of Potential Change



Area of Potential Change

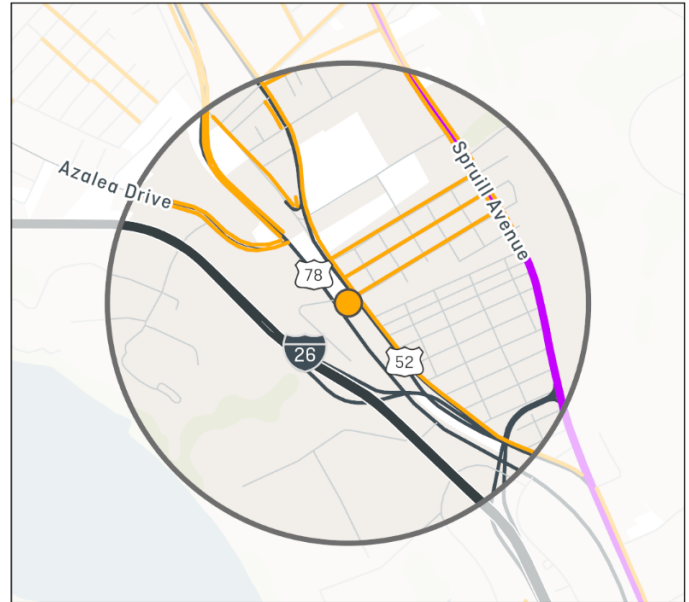
Multimodal Transportation

Today, there is little to no bicycle and pedestrian connectivity within the Hackemann station area outside of east-west sidewalks within the existing historic neighborhood to the east. Where facilities do exist, there are gaps or unsafe conditions. Within the station core, there are several planned improvements, including a new sidewalk and a proposed shared use path along Rivers Avenue, which will improve north south connections. Additional considerations should be given to slowing down traffic along Rivers Avenue and continuing to implement intersection improvements to support safer east-west walkability. Should the large areas of vacant land to the west of Rivers and I-26 redevelop, these areas should establish a new street grid and identify safe pedestrian pathways between these sites and the station location on Rivers Avenue. Additional improvements to walkability and bikeability should be considered to better connect the residential properties off Azalea Avenue to the new station.



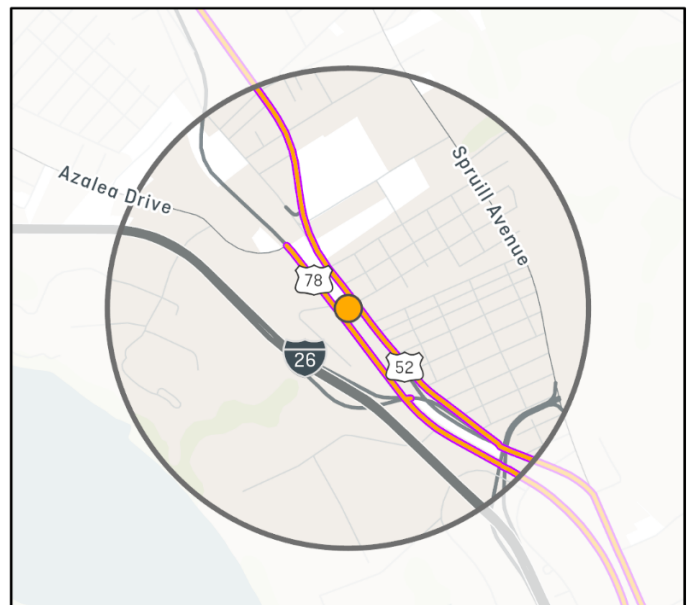
Existing conditions at the intersection of Hackemann Avenue and Meeting Street

Existing Bike and Pedestrian Facilities



— Bike Facility — Pedestrian Facility

Planned Bike and Pedestrian Facilities



— Planned Bike — Planned Pedestrian

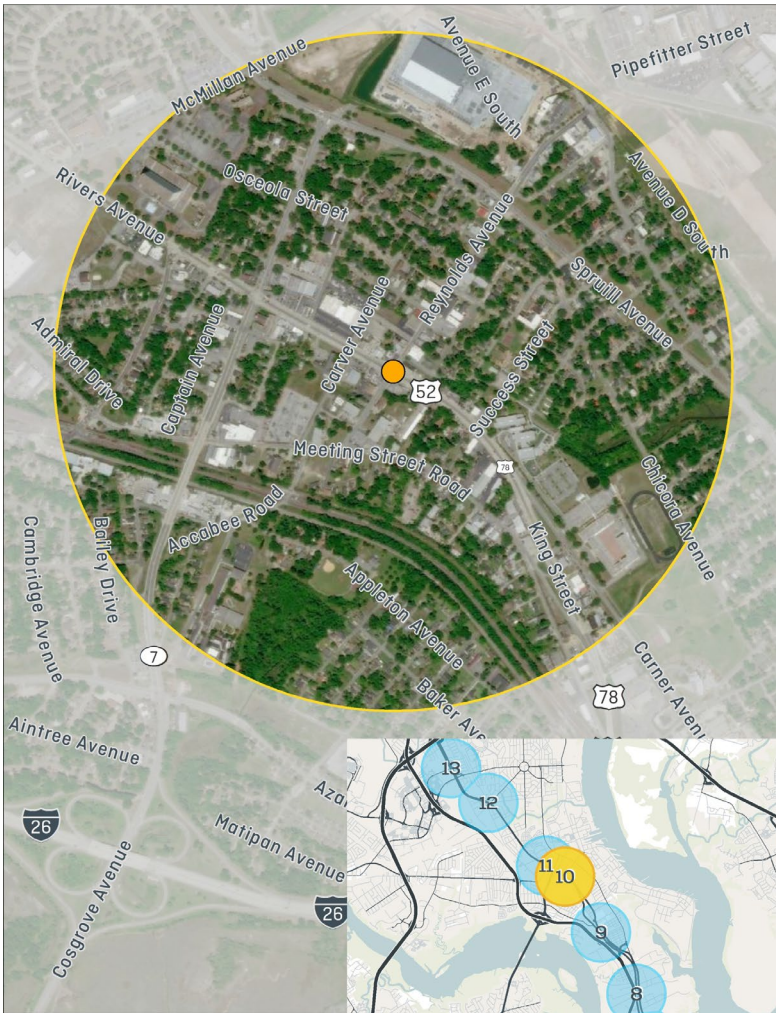
Goals and Strategies for TOD

While there is considerable acreage available for potential infill and redevelopment, the primary focus of this station area is to retain and reinvest in the neighborhood residential areas to preserve naturally occurring affordable housing and retain long-term residents while also adding in some new residential. Additionally, the area will benefit from improved bicycle and pedestrian infrastructure and traffic calming measures along Rivers Avenue. Additional strategies include:

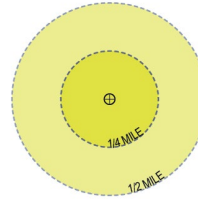
- Continuing to work with local non-profits on key neighborhood preservation strategies to stabilize neighborhoods to the east and encourage strategic infill of residential while maintaining affordability options within the station area as described in the Lowcountry Alliance for Model Communities (LAMC) revitalization plan
- Reach out to private property owners of large tracts of non-residential land west of Rivers and I-26 to discuss long-term redevelopment options
- Work with local housing authority to explore redevelopment options and other strategies to create a stronger neighborhood grid and mixed income housing on residential areas located off Azalea Avenue where several units of subsidized housing already exist
- Identify needed flood mitigation and green infrastructure strategies to support infill and redevelopment of properties to the west of Rivers Avenue



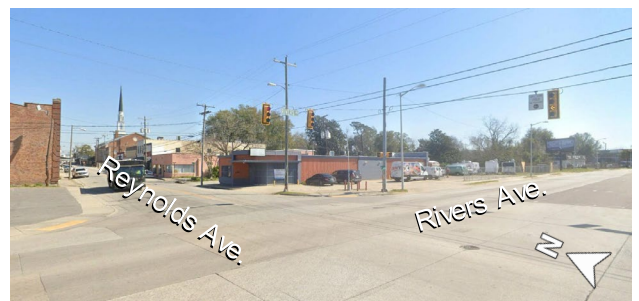
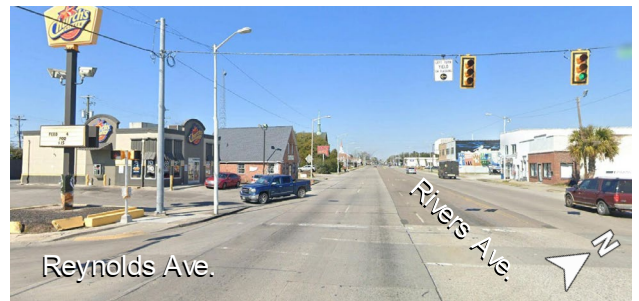
	Existing Conditions	2040 Allocation
Affordable Units (legally restricted)	256	20%
Office	659,000 sf	659,000 sf
Retail	705,000 sf	705,000 sf
Hotel	0 sf	0 sf
Other Uses	1.33 M sf	1.33 M sf
Building Heights	1-2 stories	2-4 stories
Estimated Households	500	1,300
Estimated Employment	1,100	2,700
Acres of Potential Change	130	TBD



General Neighborhood Center Place Type Targets



- 2-4 stories
- 15 du/acre (min)
- 1,500 jobs
- 3,500 households

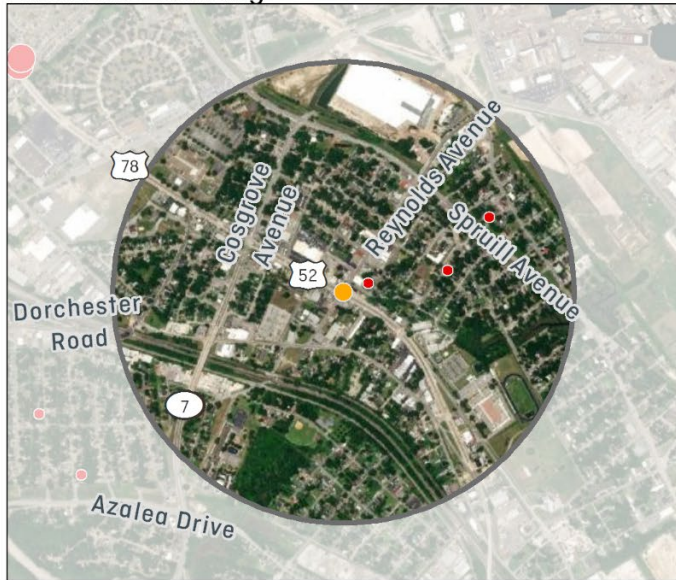


Introduction

The Reynolds Avenue station is located on the southwest terminus of revitalizing Reynolds Avenue Main Street. Reynolds Avenue is currently experiencing a resurgence in efforts to bring businesses, retail, and restaurants to this historically black neighborhood. This station is comprised predominately of single-family housing neighborhoods to the north and south of the station with suburban commercial uses along Rivers Avenue. The Reynolds Avenue station area also encompasses several social, civic, and religious assets like the Chicora School of Communications and Charleston County Social Services. The Reynolds Avenue station has an overlapping walkshed with the Dorchester Road station. Additional economic activity is likely in the area given the port uses to the east and the designation of Cosgrove Avenue as a major trucking route.

	Existing Conditions
Affordable Units (legally restricted)	1 - 40
Office	1.58 M sf
Retail	1.54 M sf
Hotel	0 sf
Other Uses	198,000 sf
Building Heights	1-3 stories
Estimated Households	900
Estimated Employment	1,100
Acres of Potential Change	140

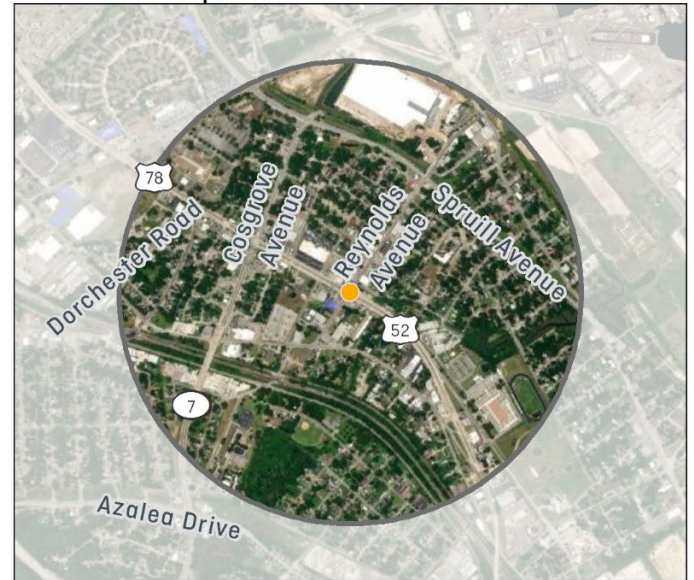
Affordable Housing



Legally Restricted Affordable Housing Units

- 0 - 35
- 36 - 156
- 157 - 501

Known Development Sites



- Known Development

Housing, Development Activity, and Areas of Potential Change

The Reynolds Station area is designated as a Neighborhood Center Place Type. The station area has less than 40 legally restricted affordable housing units, but several naturally occurring affordable housing units. This area has several smaller scale lots prime for redevelopment and infill with new mixed income housing to ensure long term affordability in the area. Currently, the major development activity in the area includes the redevelopment of the former Naval Hospital site into market rate residential and the creation of a new 175,000 square foot Civic Hub with social services and the relocated Charleston Area Regional Transit Authority (CARTA) Super Stop intermodal transit hub.

Areas of Potential Change



- Area of Potential Change

Multimodal Transportation

Within the station area there currently exists a disconnected sidewalk network within the existing neighborhoods and safety concerns for pedestrians crossing Rivers Avenue. There are plans for a new shared use path and sidewalk on Rivers Avenue and improved sidewalk coverage throughout the station area. Additional consideration should be given to improving the safety and access to and from the LCRT station to existing neighborhoods and at the relocated CARTA Super Stop transit center at the Civic Hub.

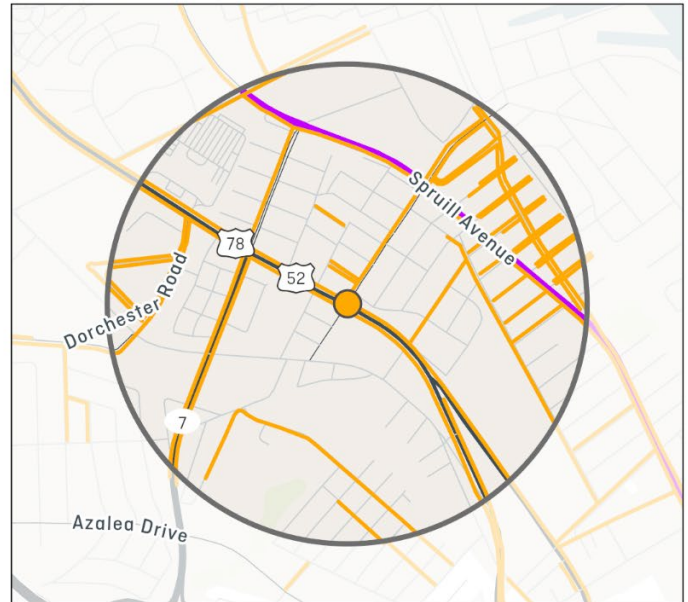


Rivers Ave. looking north at Reynolds Ave.



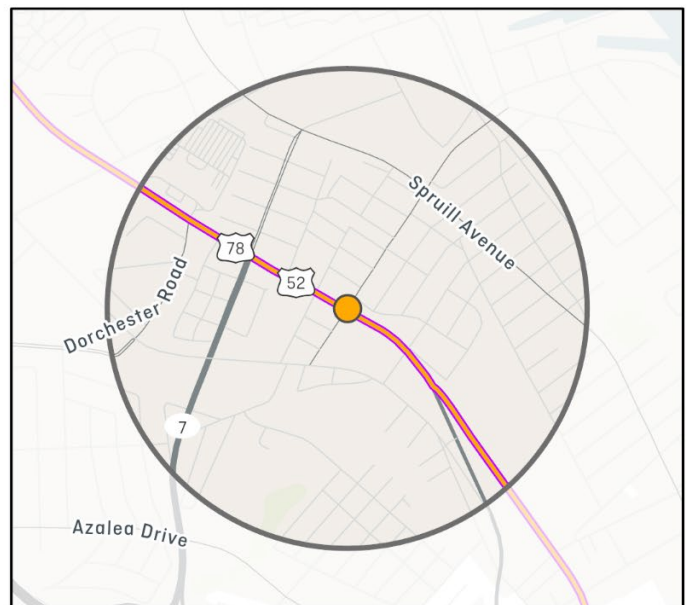
Reynolds Ave. Mainstreet looking east.

Existing Bike and Pedestrian Facilities



— Bike Facility — Pedestrian Facility

Planned Bike and Pedestrian Facilities



— Planned Bike — Planned Pedestrian

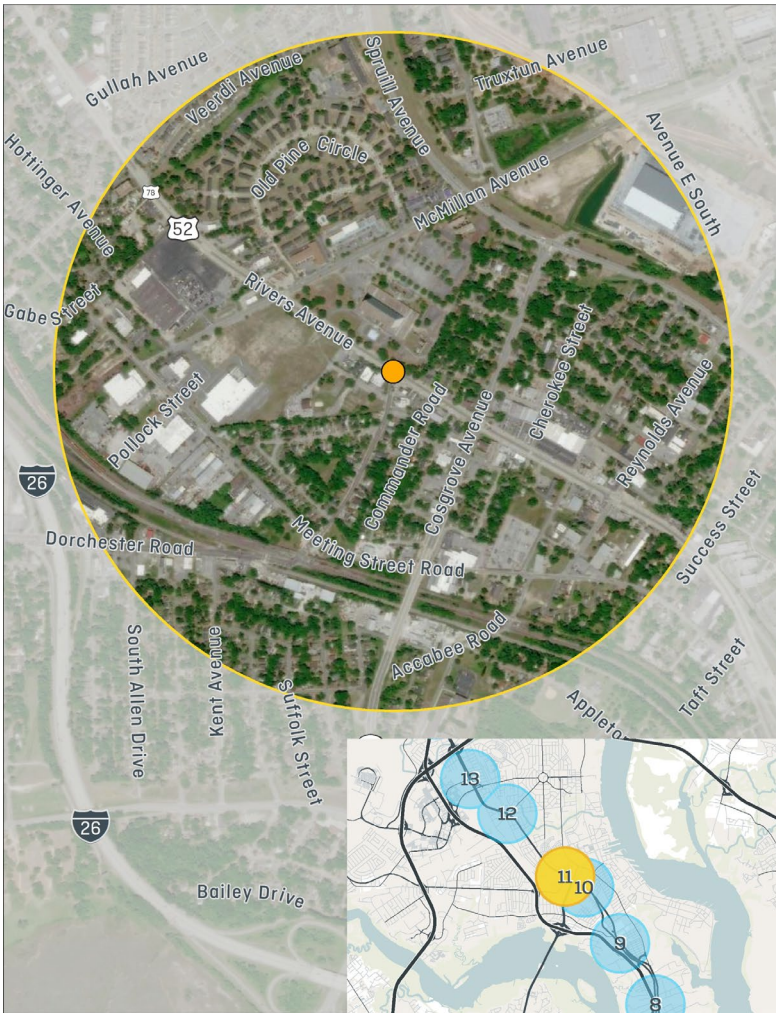
Goals and Strategies for TOD

This area has been the focus of both previous and ongoing planning efforts to strengthen the existing neighborhood, bring in new people and jobs to the area, while also retaining existing long-term residents and businesses. Additionally, this station included a hypothetical LCRT station area concept plan in concert with the Dorchester Road TOD planning as described in the following pages. The primary TOD strategies within this station area are to reinforce TOD patterns with infill while continuing efforts to retain existing historical and cultural assets as well as advancing community building goals. Additional considerations for TOD include:

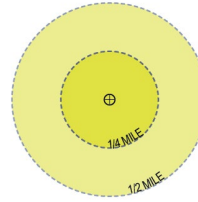
- Expanding the Rivers Avenue Overlay District to the full one-quarter mile extent around the LCRT station area
- Creating a larger station wide parking management plan to alleviate site by site needs for parking accommodation to encourage more infill and redevelopment on smaller lots
- Continuing efforts of local non-profits, businesses, and community members focused on neighborhood preservation and revitalization of the area to better coordinate planning efforts around TOD



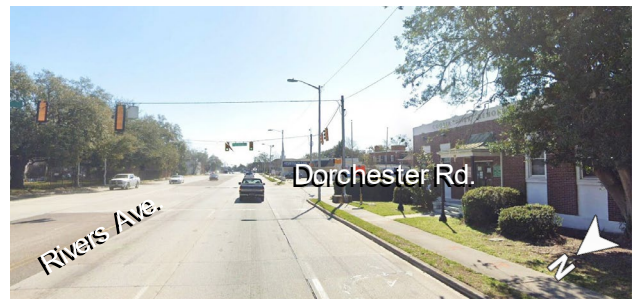
	Existing Conditions	2040 Allocation
Affordable Units (legally restricted)	1 - 40	20%
Office	1.58 M sf	1.58 M sf
Retail	1.54 M sf	1.54 M sf
Hotel	0 sf	0 sf
Other Uses	198,000 sf	198,000 sf
Building Heights	1-3 stories	2-4 stories
Estimated Households	900	1,100
Estimated Employment	1,100	1,100
Acres of Potential Change	140	TBD



General Neighborhood Center Place Type Targets



- 2-4 stories
- 15 du/acre (min)
- 1,500 jobs
- 3,500 households

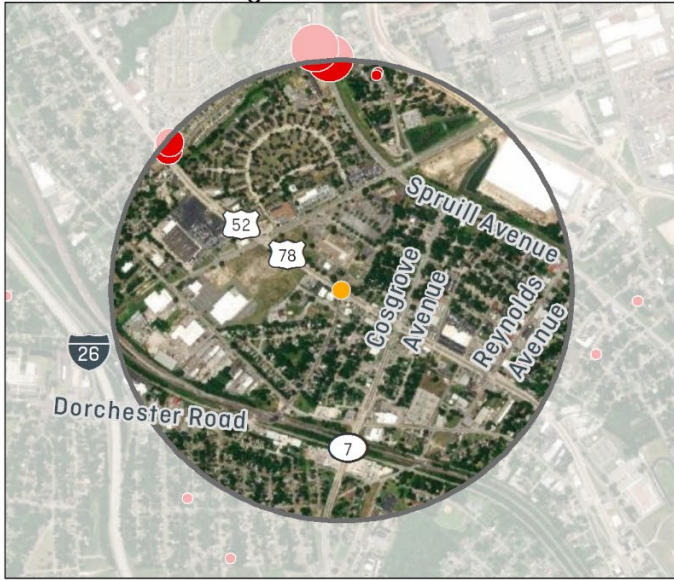


Introduction

The Dorchester Road Station has an overlapping walkshed with the Reynolds Avenue station and therefore many of the same issues and opportunities; however, there are a handful of larger scale aging commercial properties along Rivers Avenue in this station area. The Naval Hospital site redevelopment into market rate residential and the construction of the Charleston County’s new Civic Hub and relocated CARTA Super Stop represent notable investments in the area. The station’s walkshed also encompasses the Port related activities east of Spruill Avenue and a significant affordable housing community on the north side of McMillian Avenue. There is an existing grid pattern of residential streets on either side of Rivers Avenue with naturally occurring affordable and workforce housing throughout the area.

	Existing Conditions
Affordable Units (legally restricted)	175
Office	1.6 M sf
Retail	1.2 M sf
Hotel	0 sf
Other Uses	679,000 sf
Building Heights	2-8+ stories
Estimated Households	1,200
Estimated Employment	3,400
Acres of Potential Change	120

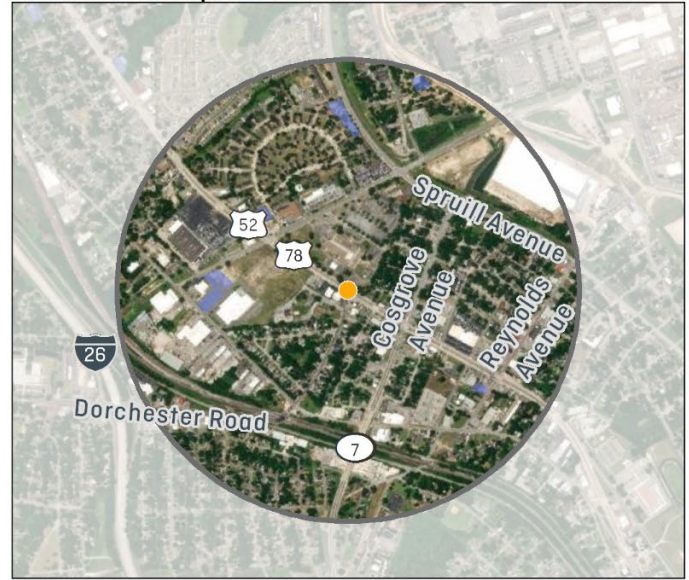
Affordable Housing



Legally Restricted Affordable Housing Units

- 0 - 35
- 36 - 156
- 157 - 501

Known Development Sites

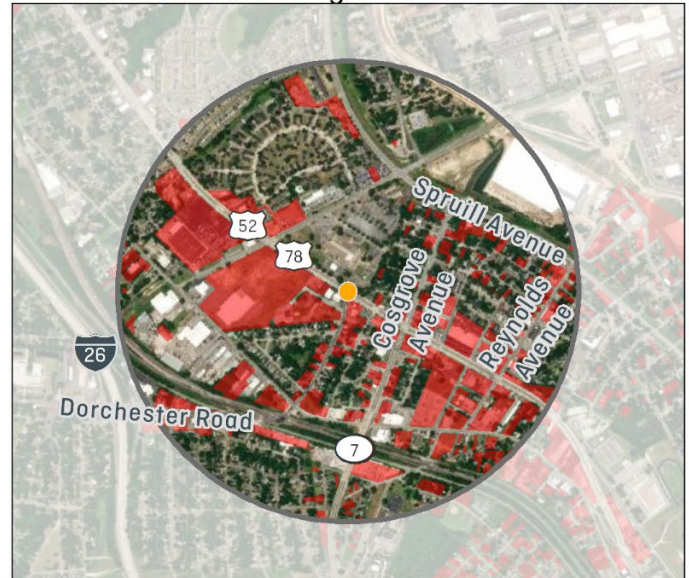


- Known Development

Housing, Development Activity, and Areas of Potential Change

The Dorchester Road station area is designated as a Neighborhood Center Place Type. With 1,900 housing units, the station area is about 10% affordable given the presence of the Pinecrest affordable housing community on the north side of McMillian Avenue. Known development will bring more retail into the station area and the addition of higher end housing on the former Naval Hospital site. With 120 acres of properties of potential change, the area can accommodate additional infill of mixed-use development in TOD-like patterns while seeking to achieve a 20% housing affordability goal for the entire station area.

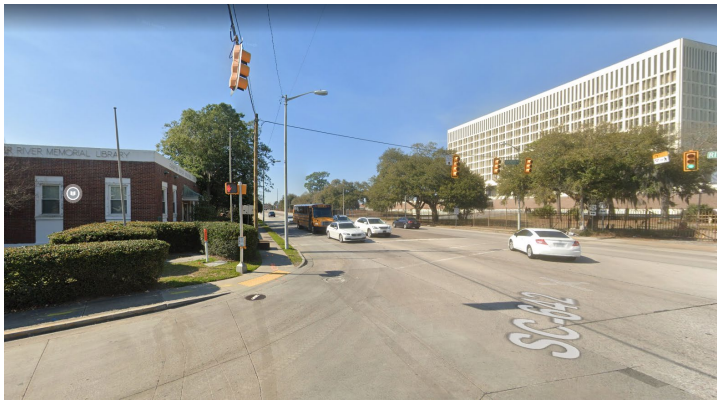
Areas of Potential Change



- Area of Potential Change

Multimodal Transportation

The existing network of sidewalks is disconnected, with gaps along Dorchester Road and Rivers, as well as the adjacent primary and neighborhood streets. There is a shared use path and improved sidewalk on Rivers Avenue planned in conjunction with the LCRT. The proposed long-term bicycle and pedestrian network goals should prioritize safe, comfortable bike lanes, sidewalks, and crossings on McMillan, Cosgrove, and Carner Avenues connecting surrounding neighborhoods to the station along Rivers Avenue. Special attention should be paid to the southern neighborhood access and safe railroad crossings along Dorchester Road. Additional strategies may be needed to monitor and mitigate the potential pedestrian and bicycle conflicts along Cosgrove Avenue with the anticipated increases in freight traffic associated with port-related activities.

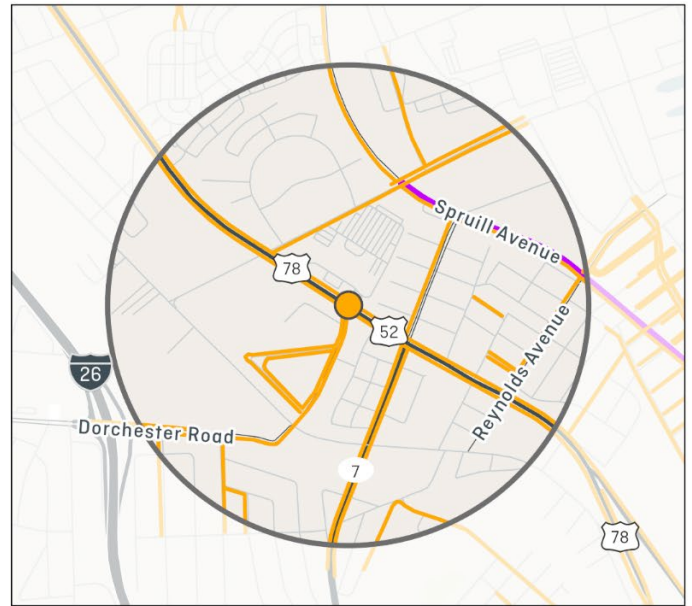


Rivers Ave. looking north at Dorchester Rd.



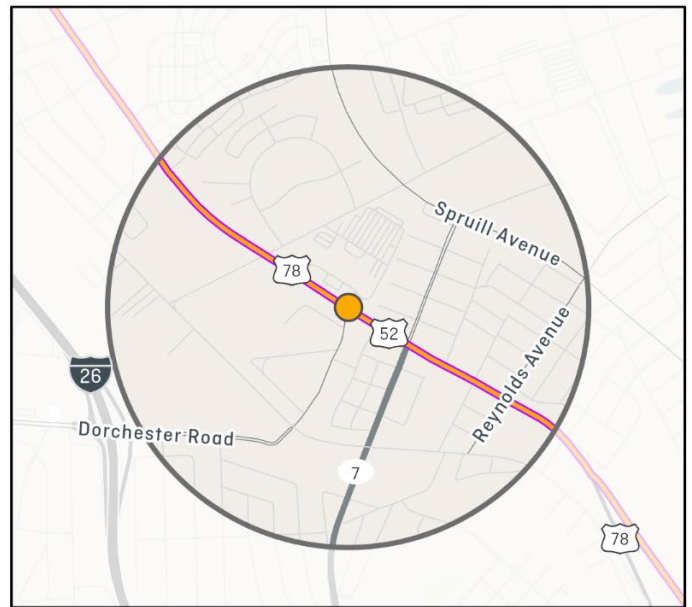
Dorchester Rd. at rail line crossing looking north

Existing Bike and Pedestrian Facilities



— Bike Facility — Pedestrian Facility

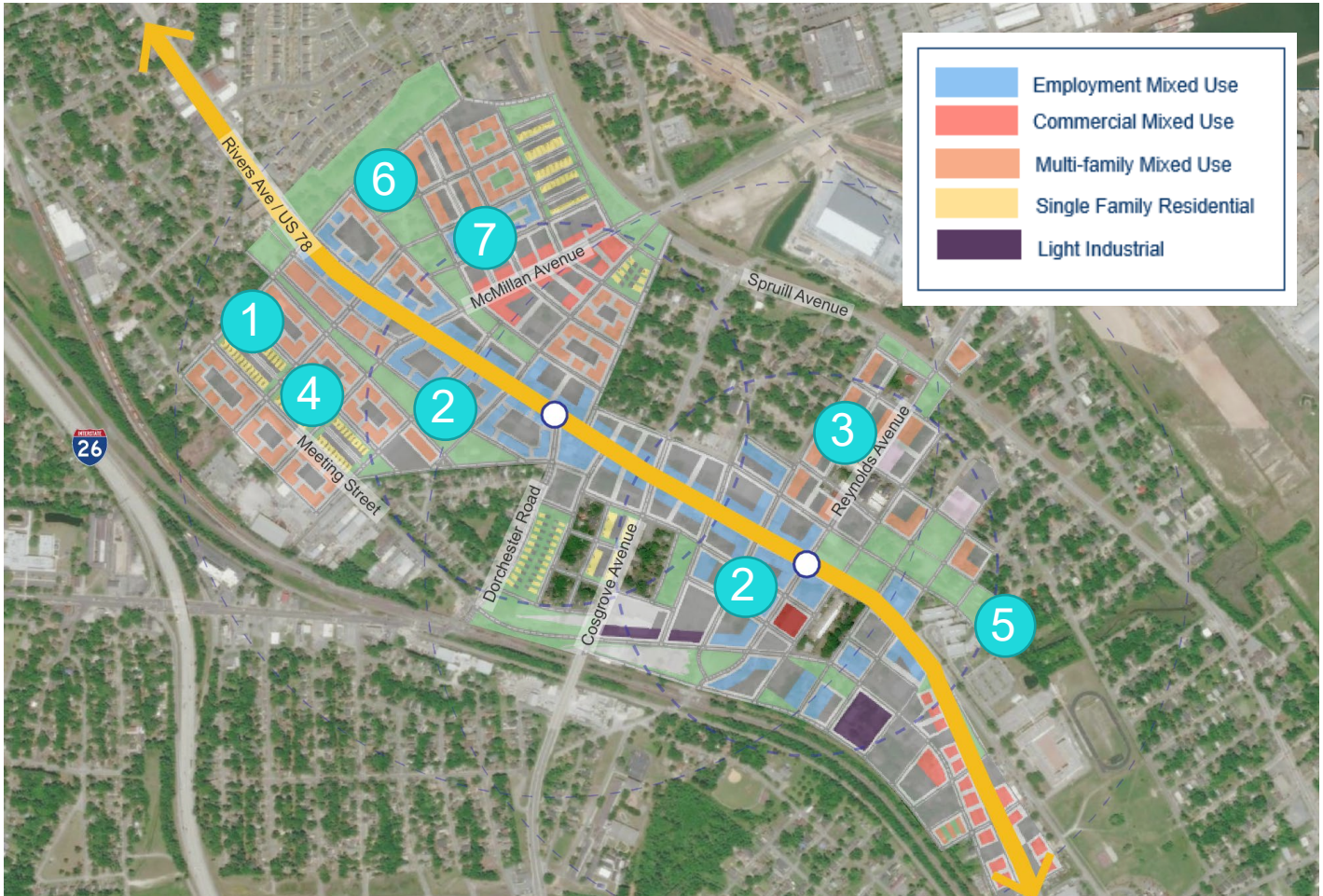
Planned Bike and Pedestrian Facilities



— Planned Bike — Planned Pedestrian

Hypothetical Station Area Design Concepts

The Reynolds Avenue and Dorchester Road station conceptual plans explored the potential for notable increases in infill residential, the long-term reimagining of the former Naval Hospital site, the redevelopment of existing affordable housing into new affordable and mixed-income housing, and the establishment of a strong main street character along McMillian Avenue.



- 1 Reconnect and expand the grid when possible

2 Infill employment with public/private uses

3 Reinforce Main Street on Reynolds

4 Infill with higher density residential to enable more housing supply and affordability
- 5 Create new upland open space and green infrastructure networks to connect with lowland environmental uses

6 Improve and retain existing affordable housing and add additional mixed income infill with residential

7 Establish new main street edge of commercial and retail uses along McMillian Avenue

Hypothetical Station Area Design Concepts

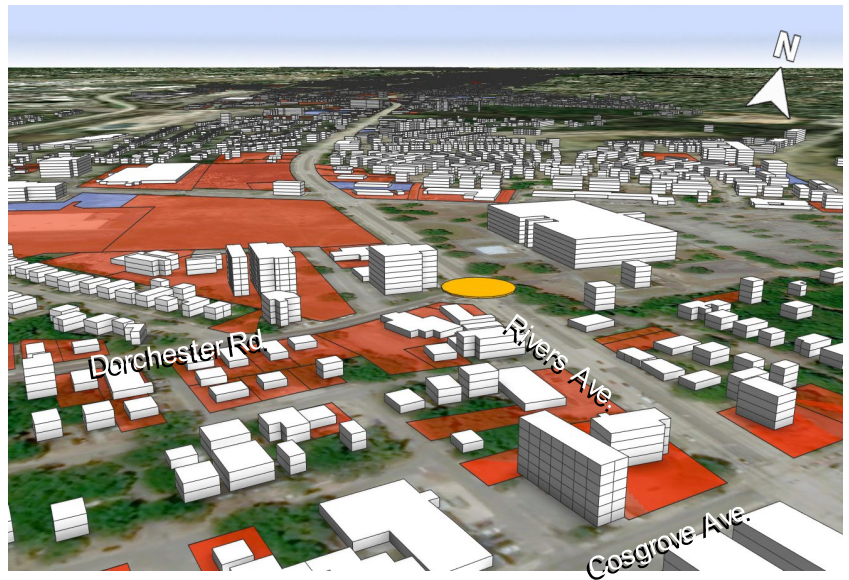
The illustrations below show proposed building massing associated with the TOD concept plan to create a strong urban condition throughout the two station areas. The concept plans are conceptual in nature and do not account for current plans of the former Naval Hospital Site or the County's new Civic Hub.



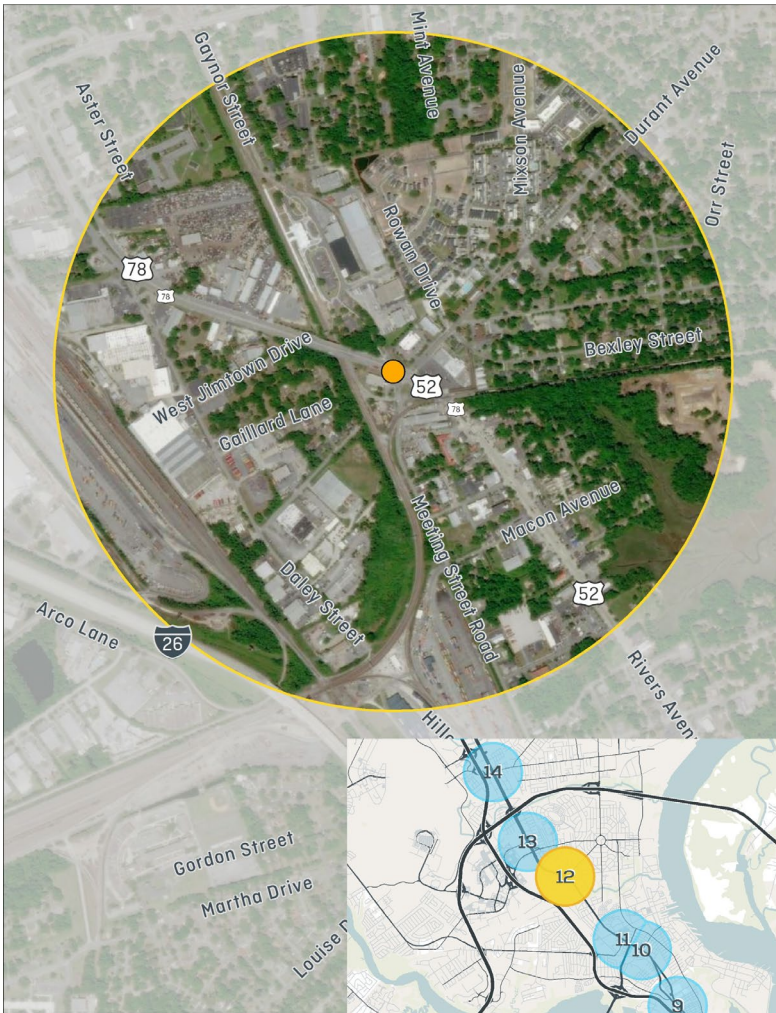
Goals and Strategies for TOD

This station area is currently seeing infill and redevelopment with the major private sector investment in the former Naval Hospital site and the new county Civic Hub. Additional plans are underway for the vacant lands at the McMillian and Rivers Avenue intersections. Therefore, the TOD strategies within this station area include:

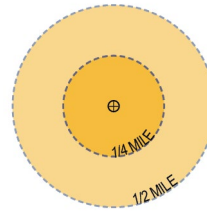
- Expanding the Rivers Avenue Overlay District to the full one-quarter mile extent around the station area to influence the form and character of near-term projects
- Adding additional traffic calming and other infrastructure enhancements to transform McMillian Avenue pedestrian oriented Main Street
- Working with the local housing authority to explore options for renovation and redevelopment existing properties to improve conditions and increase supply of permanently affordable units
- Creating station areawide parking management plan to alleviate site by site needs for parking accommodation to encourage more infill and redevelopment of smaller lots
- Continuing efforts of local non-profits, businesses, and community members focused on neighborhood preservation and revitalization of the area to better coordinate planning efforts around TOD
- Reach out to nearby property owners of aging commercial properties to explore redevelopment and infill opportunities
- Continue partnerships with CARTA and the County to encourage transit use and other multimodal transportation options for employees and residents coming to the social services hub



	Existing Conditions	2040 Allocation
Affordable Units (legally restricted)	175	20%
Office	1.6 M sf	1.6 M sf
Retail	1.2 M sf	1.2 M sf
Hotel	0 sf	0 sf
Other Uses	679,000 sf	679,000 sf
Building Heights	2-8+ stories	2-8+ stories
Estimated Households	1,200	1,900
Estimated Employment	3,400	3,500
Acres of Potential Change	120	TBD



General Town Center Place Type Targets



- 4-8 stories
- 20 du/acre (min)
- 4,000 jobs
- 4,000 households

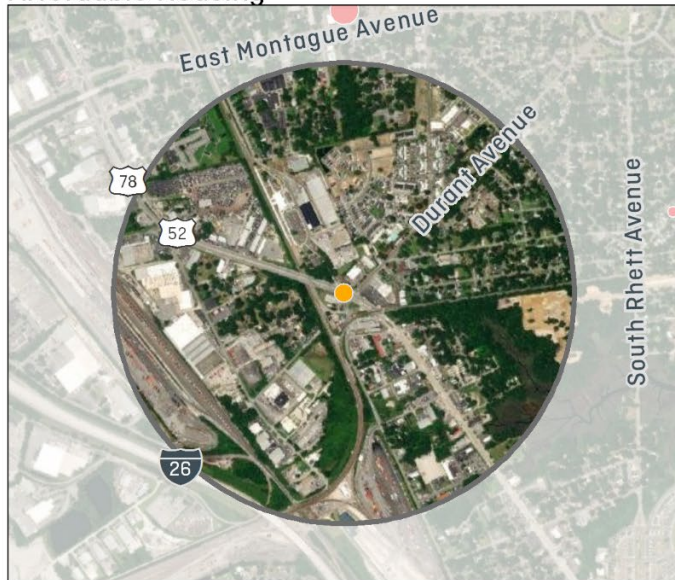


Introduction

The Durant Avenue Station is located on Rivers Avenue adjacent to existing industrial lands, suburban style retail and multifamily and single family residential to the north and east including the historic Liberty Hill Neighborhood, one of the North Charleston’s oldest African American communities, and the recently developed Mixon new urbanist community. This station is also within walking distance of the North Charleston Transit Center which includes Amtrak services. The existing roadway infrastructure of Rivers Avenue through this station includes a grade separated overpass of the active railroad corridor.

	Existing Conditions
Affordable Units (legally restricted)	none
Office	792,000 sf
Retail	1.48 M sf
Hotel	0 sf
Other Uses	1.9 M sf
Building Heights	1-4 stories
Estimated Households	700
Estimated Employment	2,500
Acres of Potential Change	150

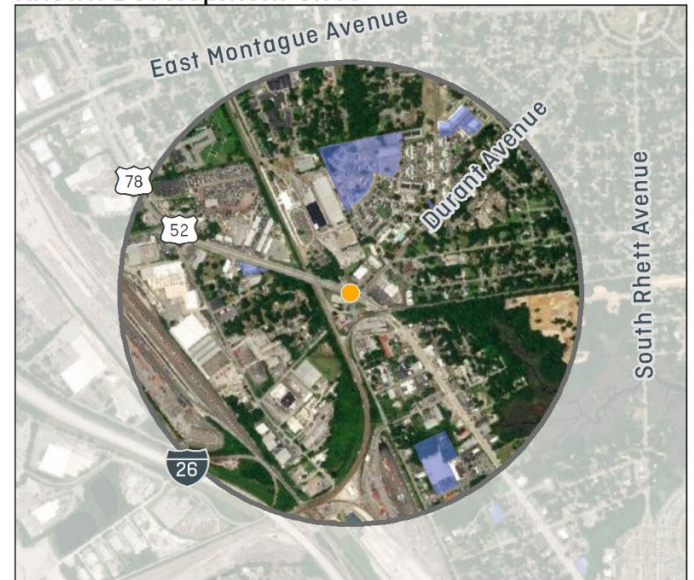
Affordable Housing



Legally Restricted Affordable Housing Units

- 0 - 35
- 36 - 156
- 157 - 501

Known Development Sites

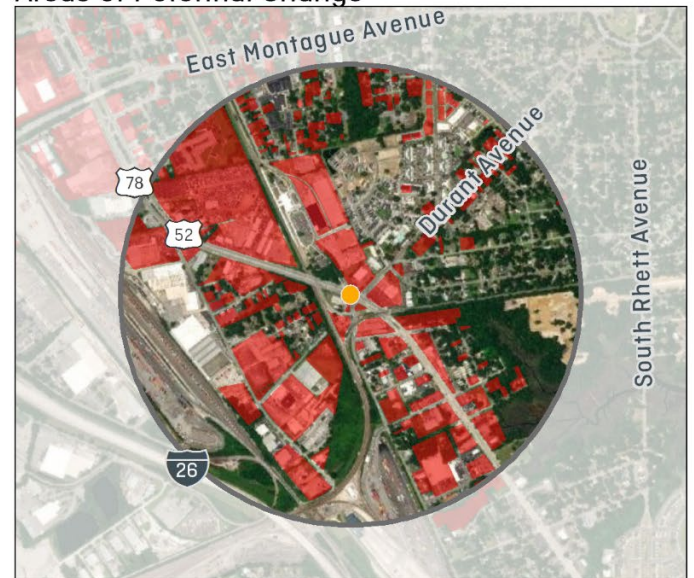


■ Known Development

Housing, Development Activity, and Areas of Potential Change

This station area is designated as a Town Center Place Type. The area has about 1,100 households within walking distance to the station, some of which is naturally occurring affordable. There are no subsidized affordable housing units in the area. Just under 150 acres have been identified as areas of potential change, and the area has demands for mixed-use multifamily development. Known developments will bring more multifamily housing and office space to the station area. The long-term redevelopment of large industrial parcels and residential infill in the existing neighborhoods east of the station provides opportunity to gain affordable units over time with a 20% affordability goal.

Areas of Potential Change



■ Area of Potential Change

Multimodal Transportation

The station area has little bicycle and pedestrian connectivity outside of disconnected sidewalks on Durant east of the station and within the adjacent neighborhoods. The active rail lines, I-26 corridor, and the Rivers Avenue overpass conditions create significant barriers for connectivity south and southwest of the station. But there are longer term goals to reconfigure this roadway interchange. There are plans for a shared use path and sidewalk on Rivers Avenue to improve connectivity along the LCRT route. Proposed bicycle lanes on Durant Drive and Meeting Street will connect the station to neighborhoods beyond the 1/2 mile radius. Long-term consideration should be given to providing a pedestrian overpass or bridge between the North Charleston Transit Center (Amtrak station) and redevelopment parcels to the west of the rail line.

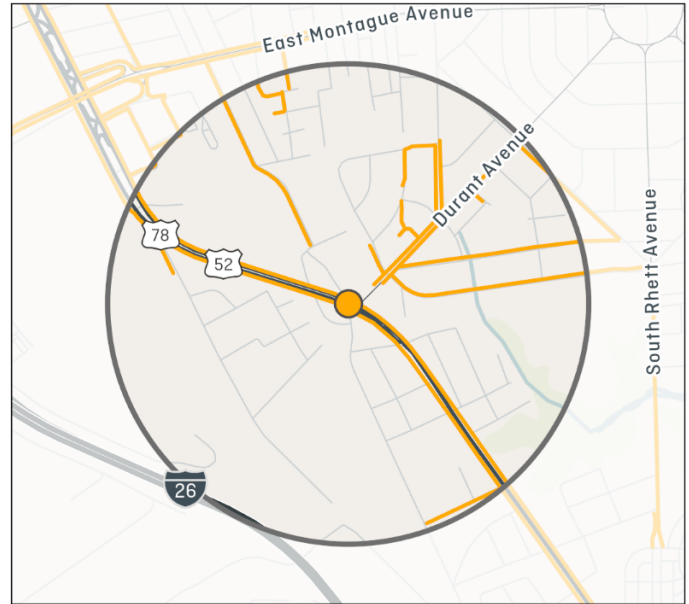


North Charleston train and bus station



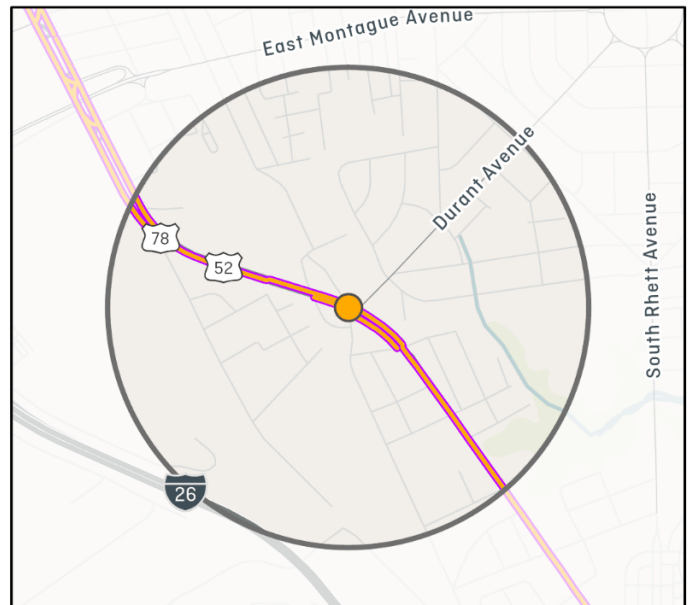
Mixson new urbanist market rate residential development

Existing Bike and Pedestrian Facilities



— Bike Facility — Pedestrian Facility

Planned Bike and Pedestrian Facilities



— Planned Bike — Planned Pedestrian

LCRT | Durant Avenue Station Area

Hypothetical Station Area Design Concepts

The Durant Avenue is envisioned for long term redevelopment into TOD like patterns with notable multifamily housing, employment uses and neighborhood scale retail. A new pedestrian bridge is envisioned over the railroad corridor to strengthen walk access between the North Charleston Transit Center (Amtrak Station) and nearby neighborhoods with redevelopment potential along Rivers Avenue. And eventual relocation of the LCRT station could also be beneficial if the long-term redevelopment of properties to the west of the railroad is realized and the establishment of a new greenspace and green infrastructure system could provide amenities and serve drainage needs in the area.



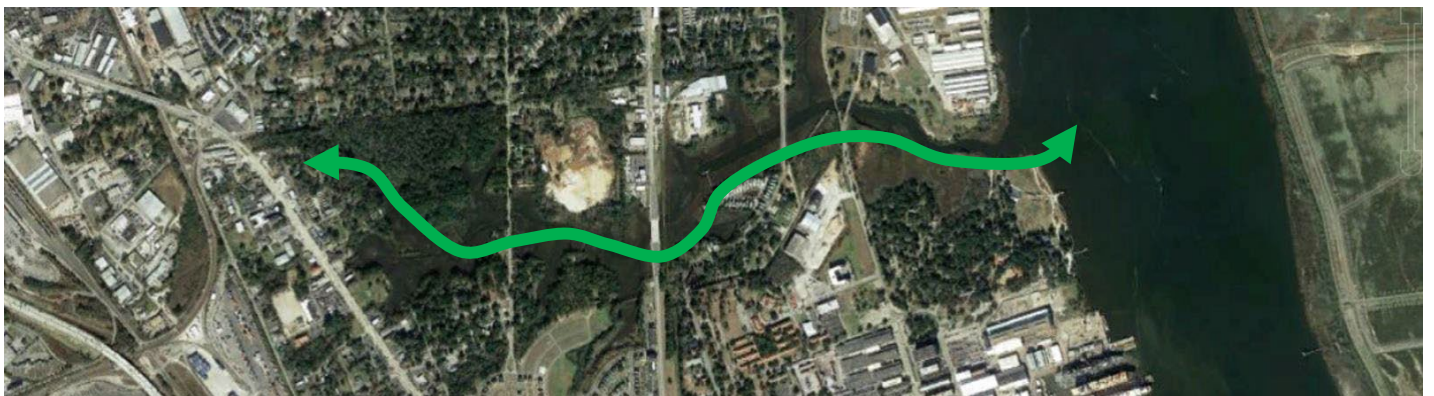
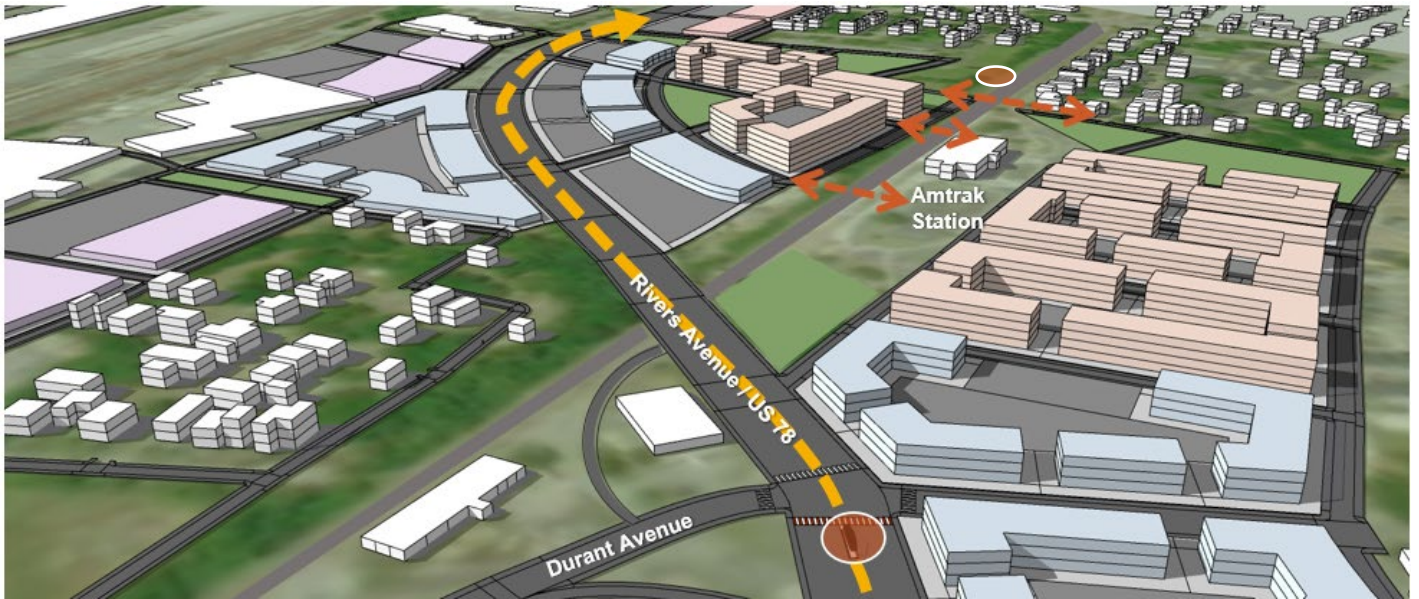
- 1 Walkable gridded street network
- 2 Employment infill
- 3 Mixed use multi-family neighborhoods

- 4 Infill small lot commercial with building edges to street
- 5 Connected green network
- 6 Maintain / infill industrial

↔ Pedestrian bridge connection

Hypothetical Station Area Design Concepts

The illustrations below show potential 3D massing of the station area redevelopment, concepts for a major pedestrian bridge and long-term green space and improved natural drainage connections.



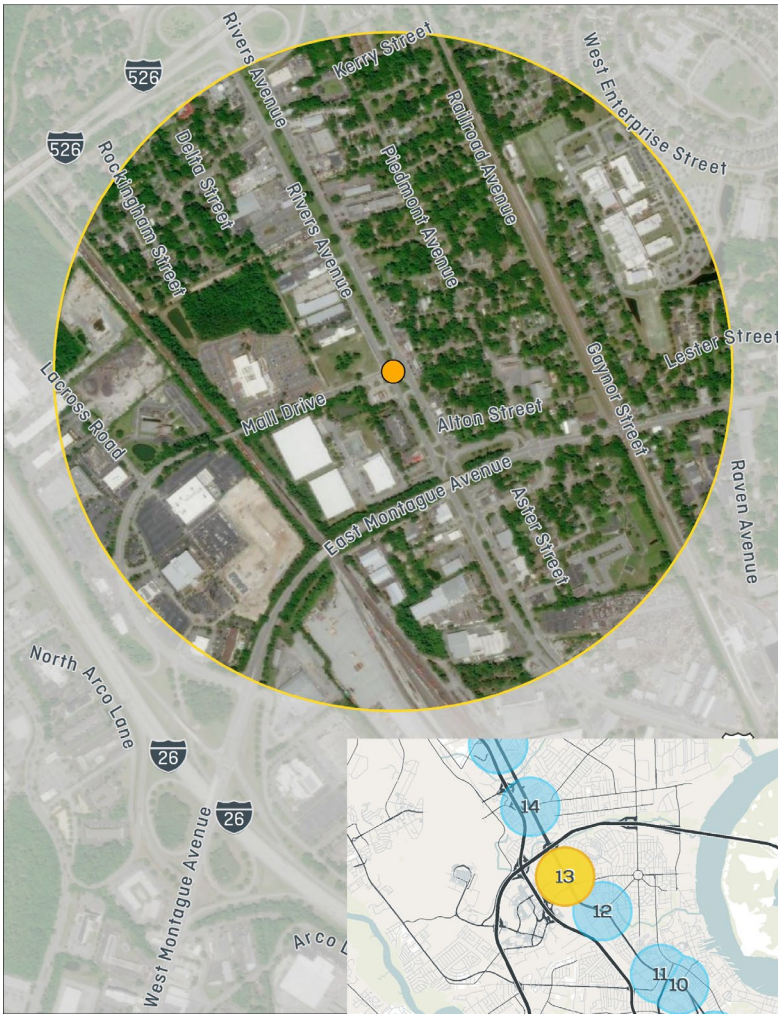
Goals and Strategies for TOD

This station has some existing elements of TOD already present, notably the existing residential areas and increasing residential densities. However, transforming the non-residential properties into more mixed-use TOD patterns will require additional efforts and strategies beyond the establishment of the Rivers Avenue Overlay District. Specifically, advancing TOD in this station area could benefit from:

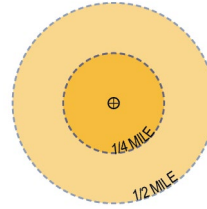
- Public private partnership to redevelop the industrial property just west of the North Charleston Transit Center (Amtrak Station) and building a new pedestrian bridge
- Roadway infrastructure improvements to reconfigure the streets around the station area and reduce overall access conflicts to simplify the intersection
- Incentives to produce new dedicated affordable housing and preserve existing naturally occurring affordable housing
- Engagement and organization of community members for more detailed TOD planning to further refine ideas for commercial redevelopment adjacent to the North Charleston Transit Center (Amtrak Station) and along Rivers Avenue



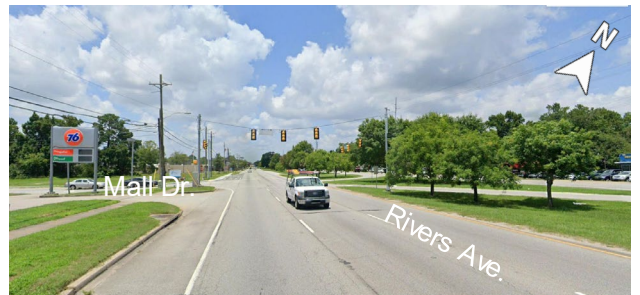
	Existing Conditions	2040 Allocation
Affordable Units (legally restricted)	none	20%
Office	792,000 sf	797,000 sf
Retail	1.48 M sf	1.48 M sf
Hotel	0 sf	0 sf
Other Uses	1.9 M sf	1.9 M sf
Building Heights	1-4 stories	4-8 stories
Estimated Households	700	1,600
Estimated Employment	2,500	3,100
Acres of Potential Change	150	N/A



General Town Center Place Type Targets



- 4-8 stories
- 20 du/acre (min)
- 4,000 jobs
- 4,000 households

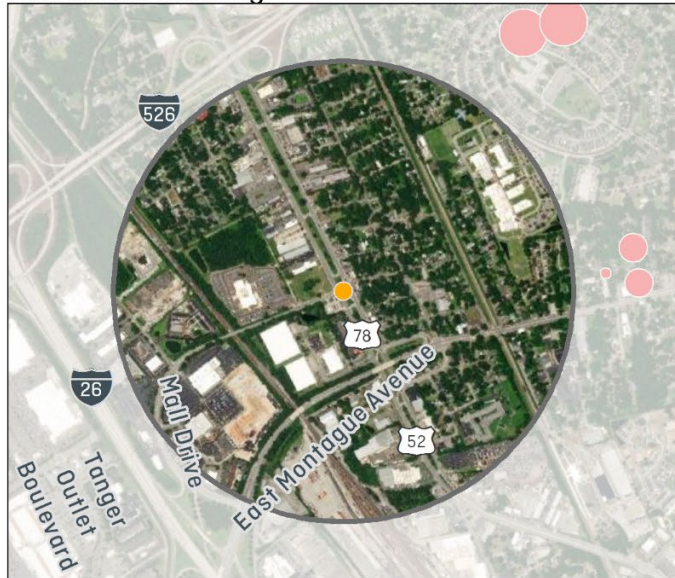


Introduction

The Mall Drive Station is located on Rivers Avenue with single family residential to the east including multiple schools and civic assets. To the west, mixed-use office, commercial, and multifamily developments include the MUSC Children’s Health After Care Hours, North Charleston City Hall, and other government offices. The Mall Drive station will also serve the hotels and retail with its proximity to Charleston International Airport and the convention center.

	Existing Conditions
Affordable Units (legally restricted)	none
Office	3.5 M sf
Retail	1.9 M sf
Hotel	0 sf
Other Uses	696,000 sf
Building Heights	2-4 stories
Estimated Households	900
Estimated Employment	3,600
Acres of Potential Change	170

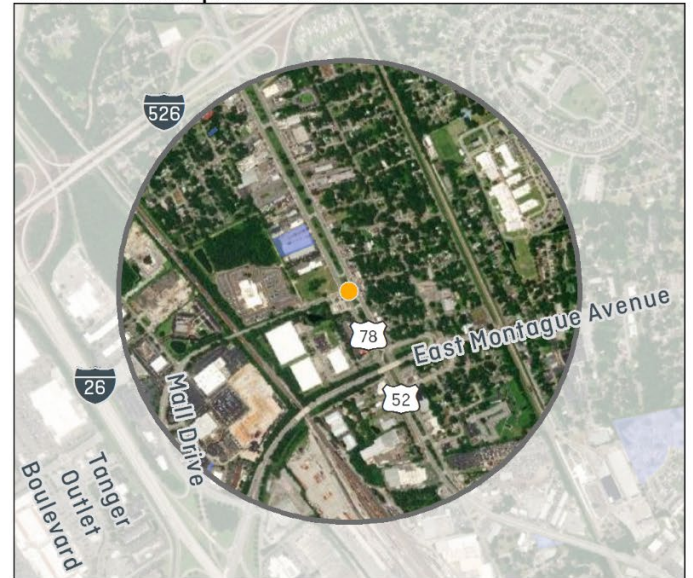
Affordable Housing



Legally Restricted Affordable Housing Units

- 0 - 35
- 36 - 156
- 157 - 501

Known Development Sites

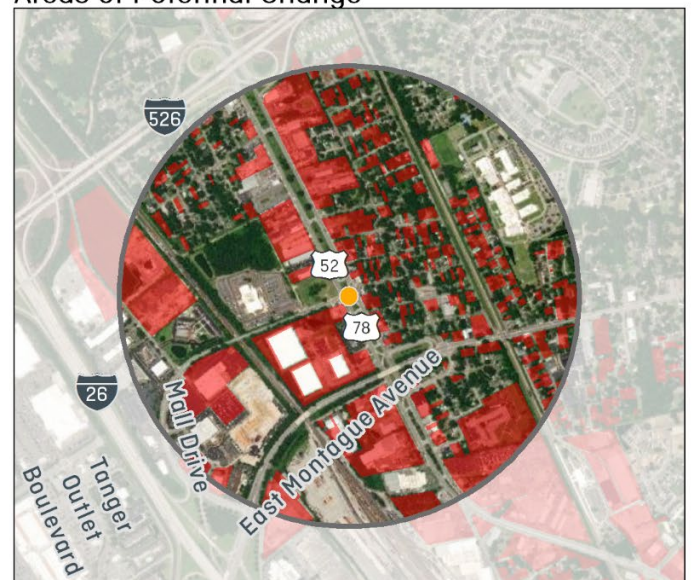


- Known Development

Housing, Development Activity, and Areas of Potential Change

This station is designated as a Town Center Place Type. This is a jobs-heavy station with about 3,560 jobs within the walkshed of the station and more medical uses planned adjacent to the MUSC facilities. Future demand of available underutilized land can support doubling the number of households in the station area by 2040. There are currently no dedicated affordable housing units within the station area but given redevelopment potential there is ample opportunity for market rate and affordable multifamily infill development to accommodate the future growth and move the station area closer to a 20% affordability target.

Areas of Potential Change

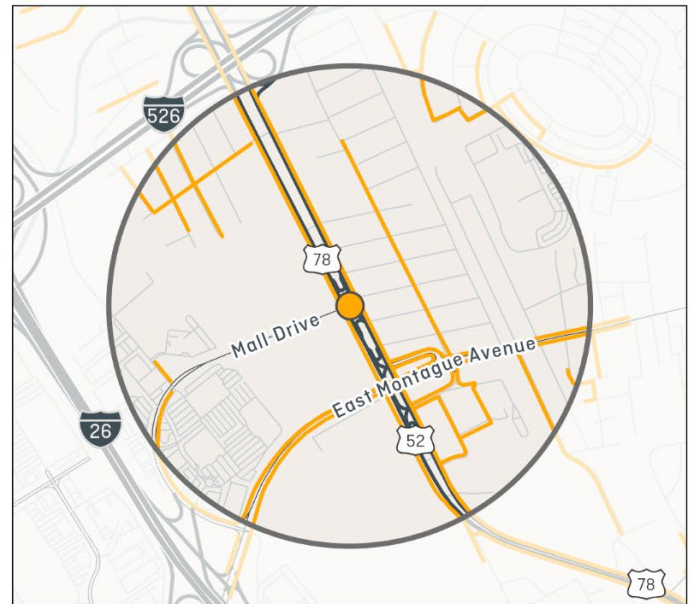


- Area of Potential Change

Multimodal Transportation

The Mall Drive station is constrained by several rail lines and highways that have created barriers to bicycle and pedestrian connectivity. There is a multiuse path planned along Rivers Avenue and more improvements on Mall Drive, to provide better bicycle and pedestrian access to the station are desired. The East Montague Avenue connection will become an important east-west connector to the station, however the grade separated intersection presents challenges for bicycle and pedestrian connectivity. Advancing bicycle and pedestrian infrastructure connections along Alton Street and Railroad Avenue could provide an alternative.

Existing Bike and Pedestrian Facilities



— Bike Facility — Pedestrian Facility

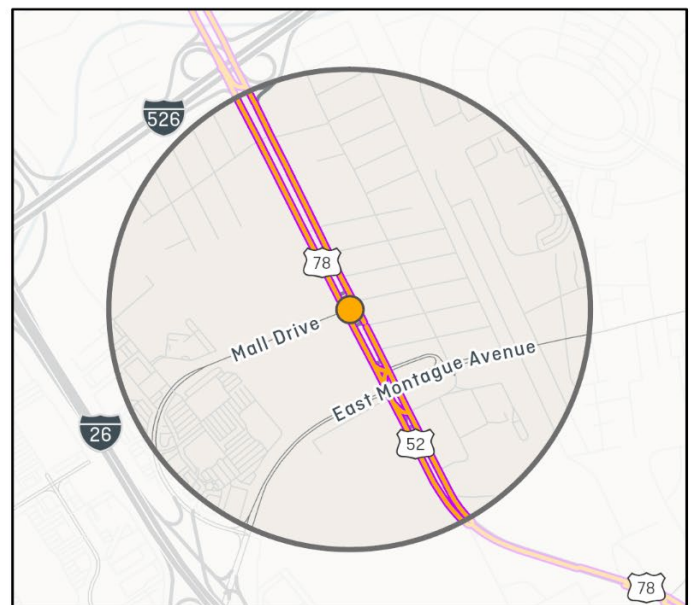


View looking north at the intersection of Mall Drive and Rivers Avenue



View looking south at the East Montague overpass and Rivers Avenue

Planned Bike and Pedestrian Facilities

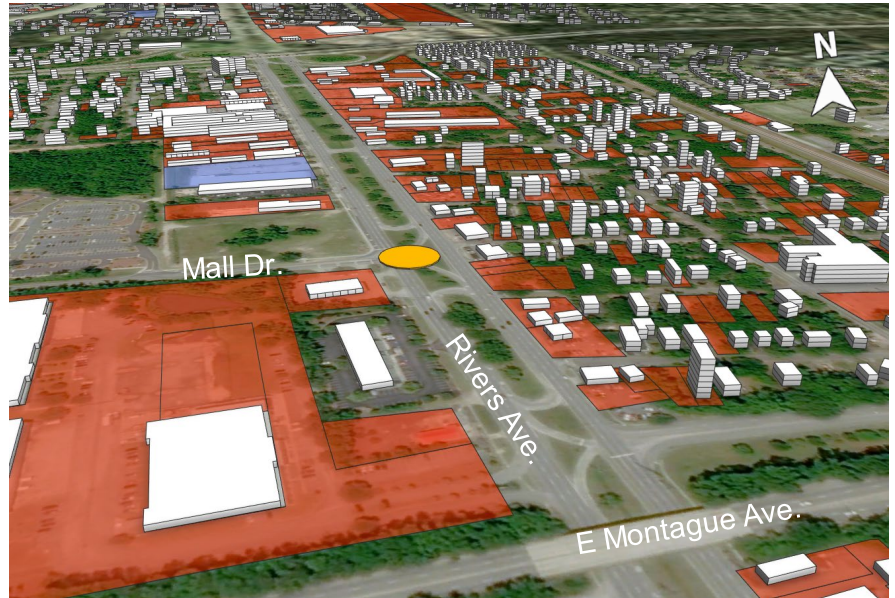


— Planned Bike — Planned Pedestrian

Goals and Strategies for TOD

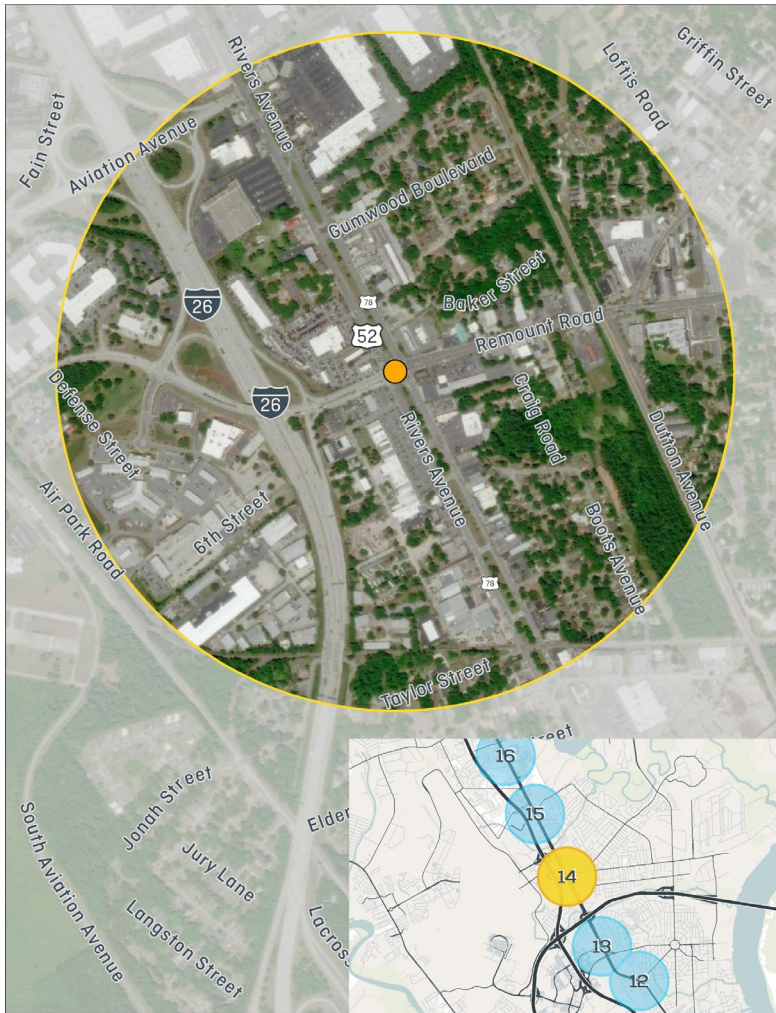
This area has several larger-sized properties that can redevelop into a pattern more conducive to TOD over time. However, the market demand may not yet support higher densities and structured parking in the long-term TOD buildout. As such, in addition to the implementation of the Rivers Avenue Overlay District, additional strategies for TOD could include:

- Advancing efforts to create inter-parcel connectivity and strong bicycle and pedestrian connections over time
- Creating additional transit connections between the station area and job-related uses to the west including a direct shuttle to the airport
- Identifying a private landowner interested in redeveloping existing suburban uses into a higher density mixed use pattern reflective of TOD

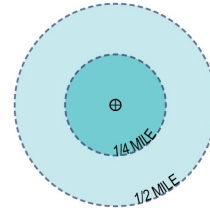


	Existing Conditions	2040 Allocation
Affordable Units (legally restricted)	none	20%
Office	3.5 M sf	3.5 M sf
Retail	1.9 M sf	1.9 M sf
Hotel	0 sf	45,000 sf
Other Uses	696,000 sf	696,000 sf
Building Heights	2-4 stories	4-8 stories
Estimated Households	900	2,100
Estimated Employment	3,600	3,700
Acreage of Potential Change	170	N/A

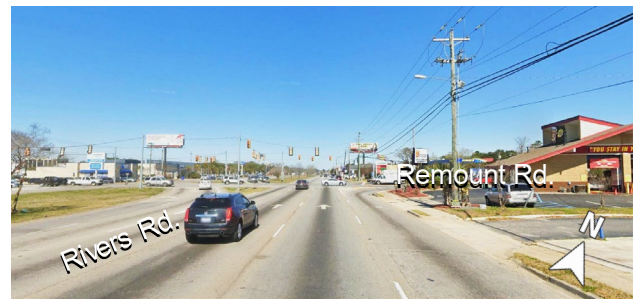
LCRT | Remount Road Station Area



General Employment Center Place Type Targets



- 6-10 stories
- 20 du/acre (min)
- 12,000 jobs
- 3,000 households

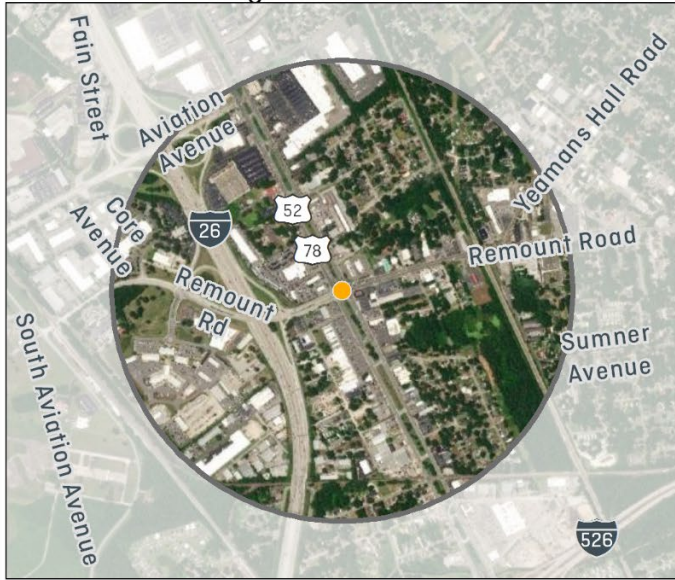


Introduction

The Remount Road Station area is predominantly characterized by suburban commercial along the crossroads of Remount Road and Rivers Avenue. Remount road provides an important east-west link connecting single family residential to the northeast and southeast to the LCRT station. Mixed-use business parks located to the west include hotels, restaurants, the BCDCOG offices, and North Charleston Public Works.

	Existing Conditions
Affordable Units (legally restricted)	none
Office	1.41 M sf
Retail	2.98 M sf
Hotel	0 sf
Other Uses	1.1 M sf
Building Heights	1-2 stories
Estimated Households	600
Estimated Employment	3,200
Acres of Potential Change	190

Affordable Housing



Legally Restricted Affordable Housing Units

- 0 - 35
- 36 - 156
- 157 - 501

Known Development Sites

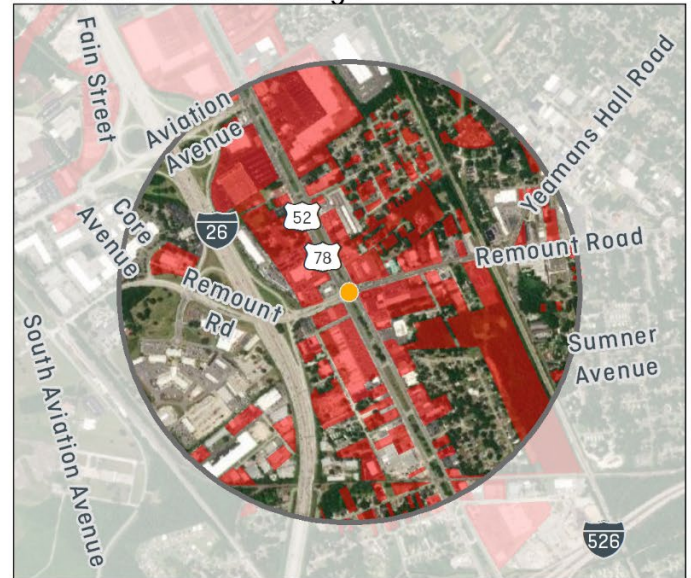


■ Known Development

Housing, Development Activity, and Areas of Potential Change

This station area is designated as an Employment Center Place Type. There are approximately 3,200 jobs within walking distance of the station, but the area is very auto centric. Given the existing aging commercial uses, there are more than 190 acres identified as areas of potential change. The area is seeing current development activity to bring additional retail to the station area. Currently, there are no legally restricted affordable units. The station is positioned to absorb approximately 1,000 jobs and 400 housing units. Additional measures will be needed to promote mixed-income TOD to achieve a target of at least 20% permanent (i.e., not intended for short-term or temporary residency) affordable units in the station area long-term.

Areas of Potential Change

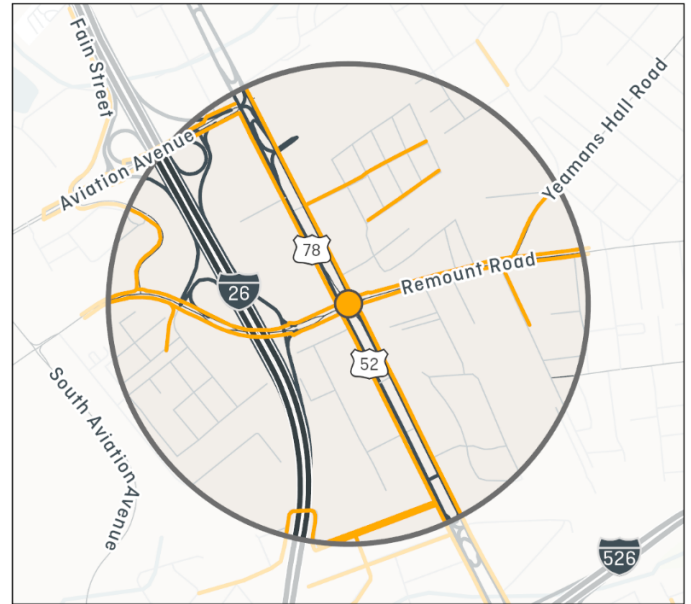


■ Area of Potential Change

Multimodal Transportation

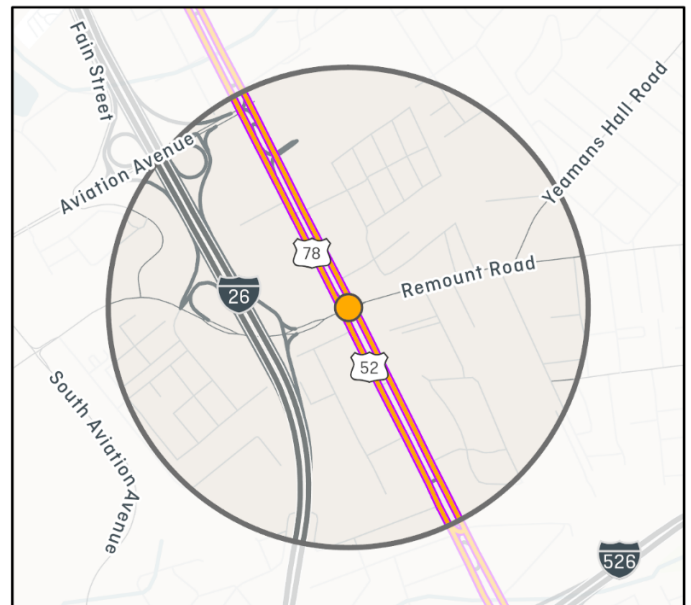
Currently, the Remount Road station area has a disconnected network of existing sidewalks along Remount Road and in the existing neighborhoods. There is a planned multiuse trail along Rivers Avenue that will strengthen north-south connectivity. Bicycle and pedestrian network goals should prioritize safe crossings at the rail lines and major arterial crossings. Additionally, providing a local circulator may better connect employment rich uses on the west side of I-26 to the LCRT station.

Existing Bike and Pedestrian Facilities



— Bike Facility — Pedestrian Facility

Planned Bike and Pedestrian Facilities



— Planned Bike — Planned Pedestrian



Existing conditions at Rivers Avenue and Remount Road require retrofits for safe bicycle and pedestrian crossing

LCRT | Remount Road Station Area

Hypothetical Station Area Design Concepts

The concept plan below illustrates one way the Remount Road station area could redevelop into TOD patterns over time. This station has several larger sized commercial properties that could be transitioned into higher density mixed-use developments with a new grid network of streets. The concept includes the establishment of new higher density housing and an employment hub adjacent to the LCRT station. Additionally, the area can support continued light industrial uses, particularly along the edges of the I-26 corridor right of way.



- 1 Expand the grided street network
- 2 Neighborhood infill with higher density residential
- 3 Employment / commercial infill in station core
- 4 Commercial edge connecting to points east
- 5 Smaller blocks and liner commercial buildings along LCRT corridor



Goals and Strategies for TOD

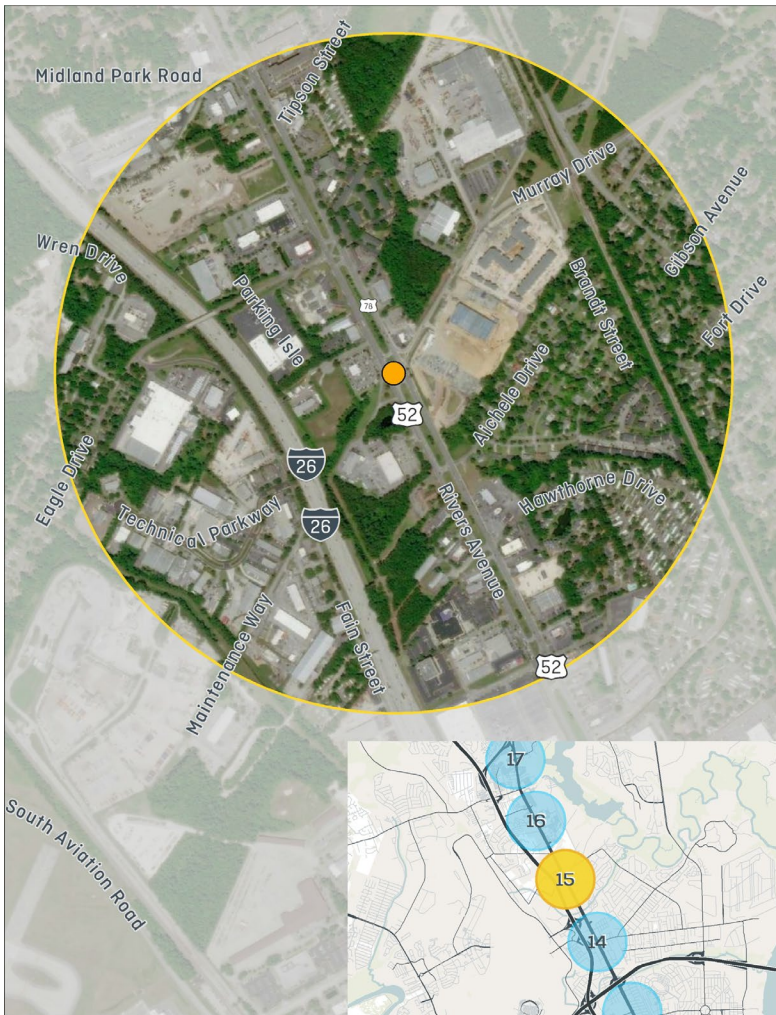
The Remount Road area has notable areas of potential transformation from lower density suburban commercial into higher density mixed-use nodes as illustrated in the concept plans. Additionally, there is a need to better connect the station area to job related uses on the west side of I-26. Therefore, the strategies for this station area include:

- Utilizing the TOD concept plans to create more defined design guidelines for the station area
- Identifying a private landowner within the station area to partner with and advance a catalyst TOD-like mixed-use project
- Advancing efforts to create inter-parcel connectivity and strong bicycle and pedestrian connections over time
- Creating additional transit connections between the station area and job-related uses to the west

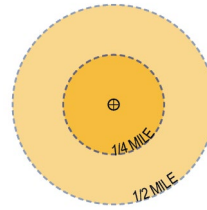


	Existing Conditions	2040 Allocation
Affordable Units (legally restricted)	none	20%
Office	1.41 M sf	1.62 M sf
Retail	2.98 M sf	2.98 M sf
Hotel	0 sf	13,000 sf
Other Uses	1.1 M sf	1.1M sf
Building Heights	1-2 stories	1-2 stories
Estimated Households	600	1,000
Estimated Employment	3,200	4,200
Acres of Potential Change	190	TBD

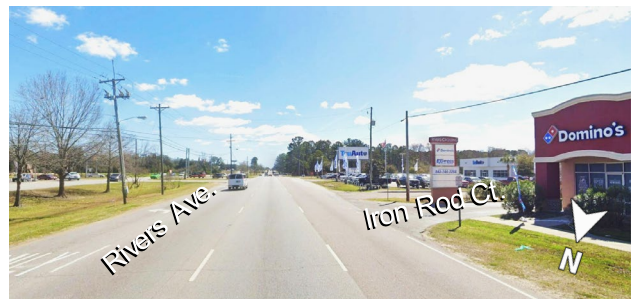
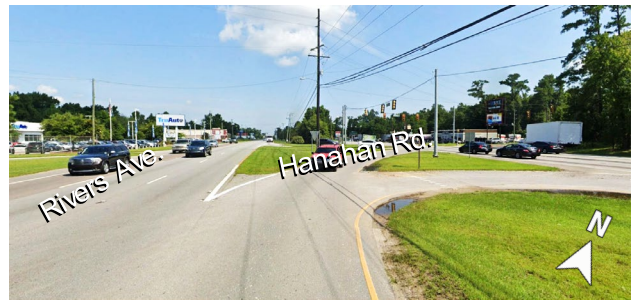
LCRT | Hanahan Road Station Area



General Town Center Place Type Targets



- 4-8 stories
- 20 du/acre (min)
- 4,000 jobs
- 4,000 households

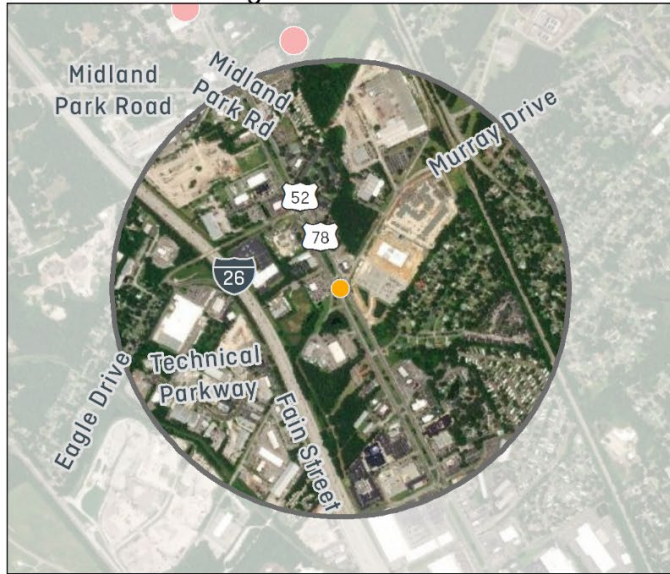


Introduction

The Hanahan Station is located directly adjacent to the Veterans Affairs North Charleston Outpatient Clinic and a new multi-family housing development with direct connections to large single-family neighborhoods to the north and east. Suburban, commercial land uses are predominant on the west of the station.

	Existing Conditions
Affordable Units (legally restricted)	none
Office	1.56 M sf
Retail	1.14 M sf
Hotel	0 sf
Other Uses	1.51 M sf
Building Heights	1-4 stories
Estimated Households	1,100
Estimated Employment	3,400
Acres of Potential Change	180

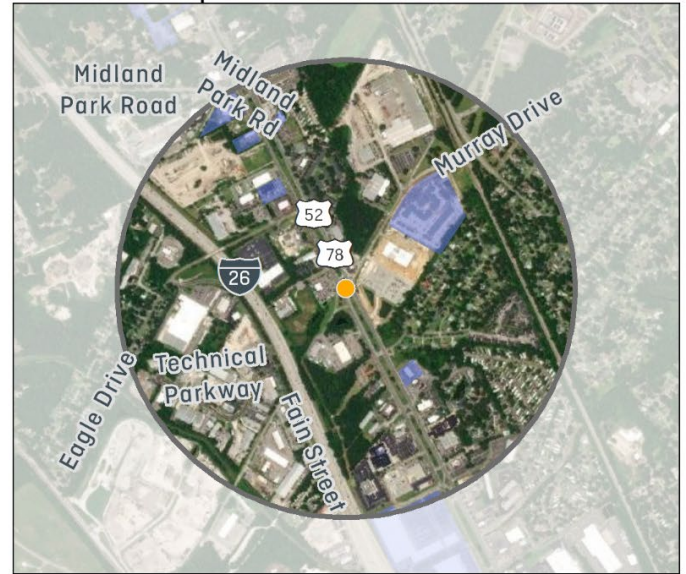
Affordable Housing



Legally Restricted Affordable Housing Units

- 0 - 35
- 36 - 156
- 157 - 501

Known Development Sites

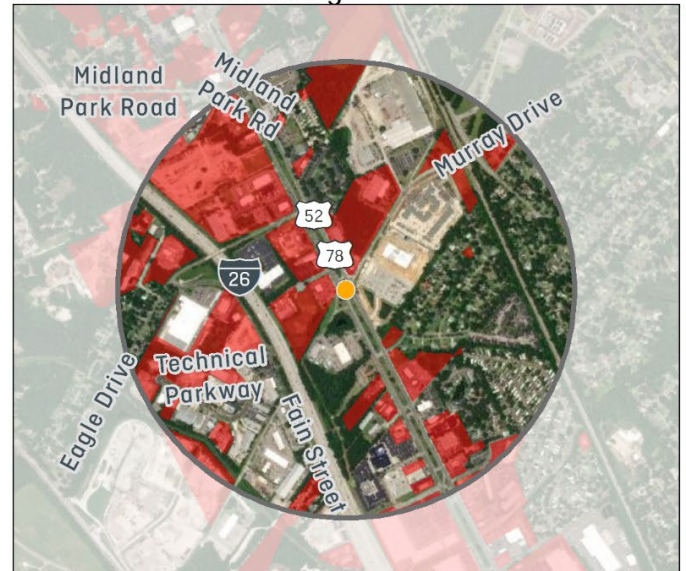


■ Known Development

Housing, Development Activity, and Areas of Potential Change

This station has been designated a Town Center Place Type. Known development will bring more retail into the station area adjacent to the LCRT route. There is a demand for more housing in the station area, and currently no affordable units. There are more than 187 acres of potential areas of change given aging commercial and surface parking lots, giving ample opportunity for long-term transformation into more TOD patterns of development. There are currently no legally restricted affordable housing units in the area, but future production of mixed-income housing could help advance affordability goals long term.

Areas of Potential Change

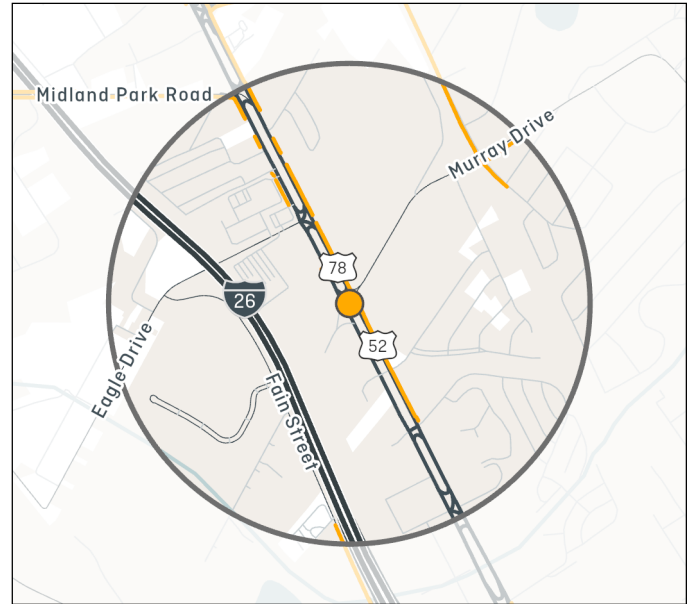


■ Area of Potential Change

Multimodal Transportation

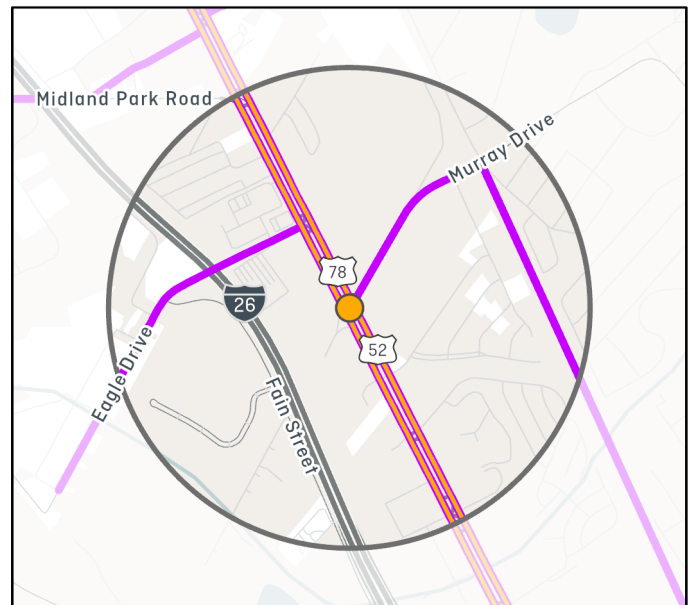
The Hanahan Road station bicycle and pedestrian connections should focus on strengthening access between the neighborhoods to the east and west of the station. The I-26 corridor is a major barrier for bicycle and pedestrian connections, but the proposed bike boulevard on the Eagle Drive overpass will help strengthen east-west connectivity to neighborhoods west of the station. Future redevelopment of large commercial parcels gives the opportunity to create more grid connections and a walkable environment.

Existing Bike and Pedestrian Facilities

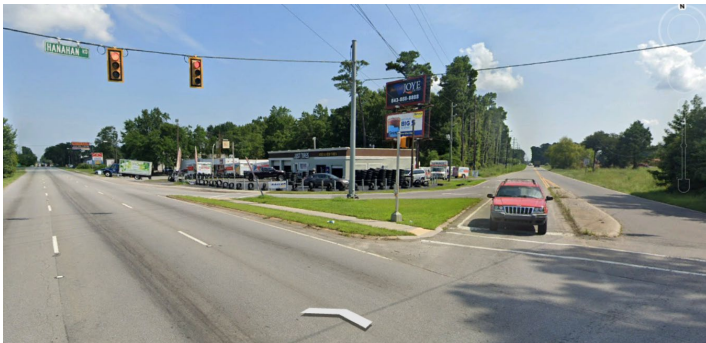


— Bike Facility — Pedestrian Facility

Planned Bike and Pedestrian Facilities



— Planned Bike — Planned Pedestrian



Existing conditions at Rivers Avenue and Hanahan Road looking north

Goals and Strategies for TOD

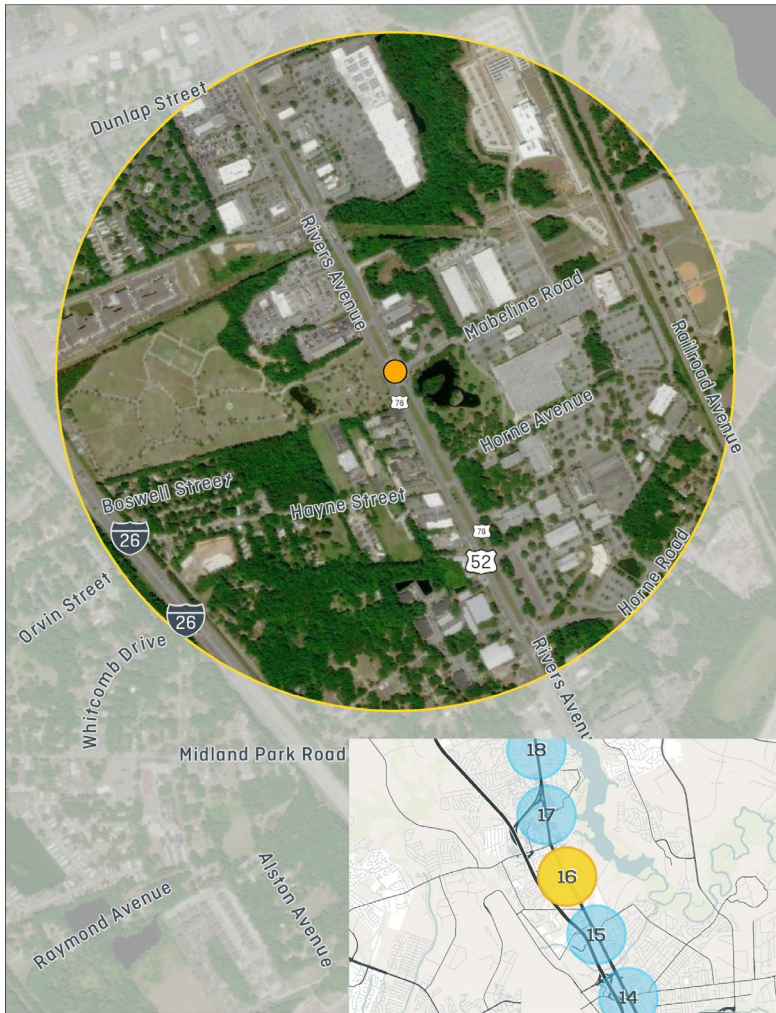
There are several large areas of potential redevelopment within this station area. Given the walk access constraints created by I-26 to the west and the railroad to the east, redevelopment potential is highest within immediate proximity to the station along Rivers Avenue. These areas can accommodate infill and redevelopment into a Town Center type of station. The TOD Strategies include:

- Identifying private landowners of a large parcel near the station to advance a catalytic mixed-use development project
- Advancing efforts to create inter-parcel connectivity and stronger bicycle and pedestrian connections over time
- Continuing smaller area neighborhood planning to further refine the long-term vision for TOD at the station area

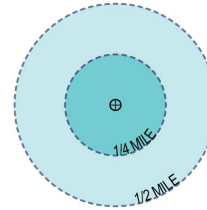


	Existing Conditions	2040 Allocation
Affordable Units (legally restricted)	non	20%
Office	1.56 M sf	1.56 M sf
Retail	1.14 M sf	1.14 M sf
Hotel	0 sf	73,000 sf
Other Uses	1.51 M sf	1.51 M sf
Building Heights	1-4 stories	4-8 stories
Estimated Households	1,100	1,500
Estimated Employment	3,400	5,000
Acres of Potential Change	180	TBD

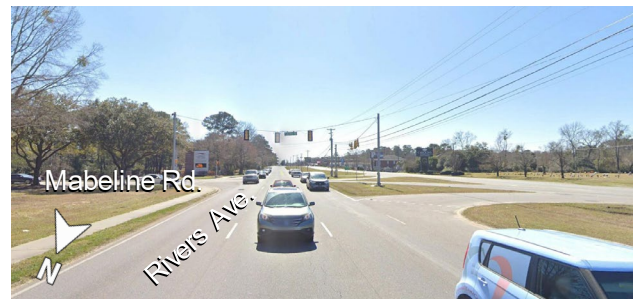
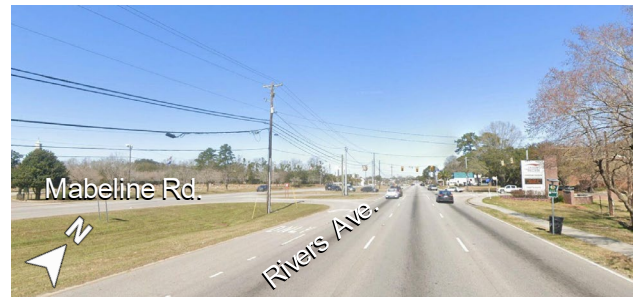
LCRT | Mabeline Road Station Area



General Employment Center Place Type Targets



- 6-10 stories
- 20 du/acre (min)
- 12,000 jobs
- 3,000 households



Introduction

The Mabeline Road Station area is located at the gateway to Trident Technical College, which takes up a large portion of the station area on the east side of Rivers Avenue. The Carolina Gardens Cemetery takes up another large portion of the station area located on the west side of Rivers Avenue. The existing character of the area is reflecting a suburban, auto-oriented pattern of development with single story commercial buildings set back from the roadway and residential located behind commercial. Just beyond the walkshed to the east are major community recreational assets, including the Hanahan Recreational Center and Amphitheater, as well as boat access to the Goose Creek Reservoir.

	Existing Conditions
Affordable Units (legally restricted)	112
Office	2.32 M sf
Retail	1.03 M sf
Hotel	0 sf
Other Uses	1.03 M sf
Building Heights	1-2 stories
Estimated Households	600
Estimated Employment	3,000
Acres of Potential Change	180

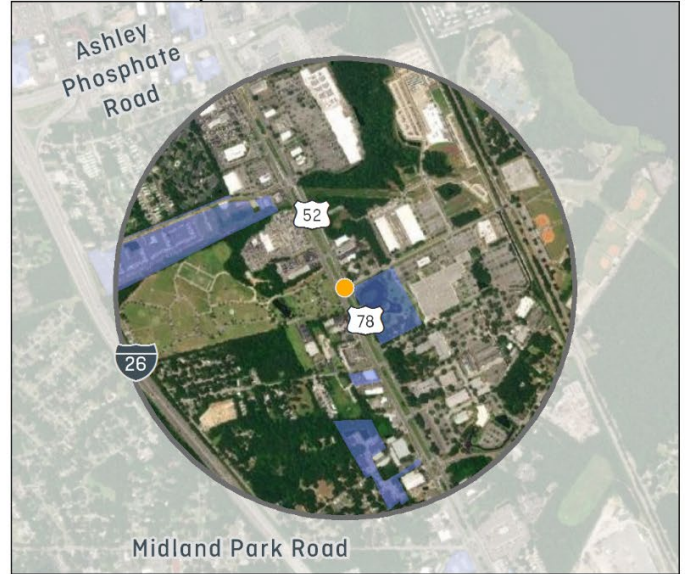
Affordable Housing



Legally Restricted Affordable Housing Units

- 0 - 35
- 36 - 156
- 157 - 501

Known Development Sites



■ Known Development

Housing, Development Activity, and Areas of Potential Change

There are a limited number of households in the area, but more than 100 units – approximately 18% – are legally restricted affordable housing. There are several acres of redevelopment and infill potential on existing suburban-style commercial properties and potentially within the Trident Technical College property given the low-density patterns of development and ample surface parking. This area is designated as an Employment Center TOD Placetype, which calls for continued job-oriented uses. Some additional infill of housing should also be pursued to potentially provide nearby student housing.

Areas of Potential Change

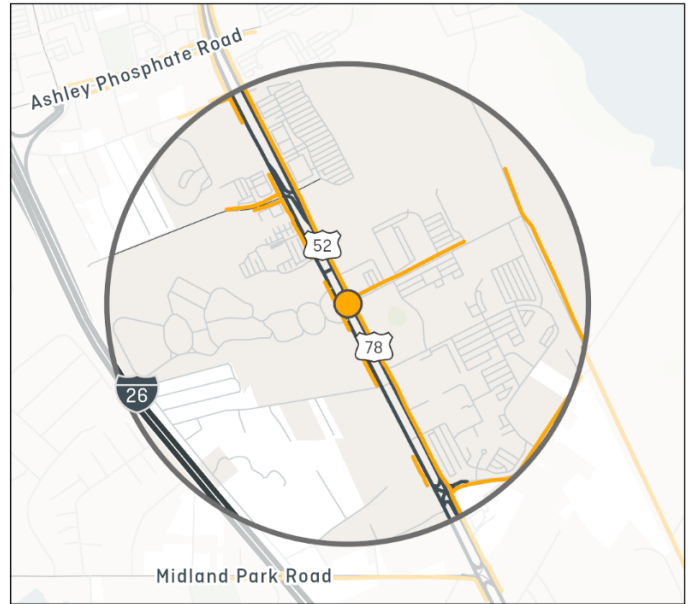


■ Area of Potential Change

Multimodal Transportation

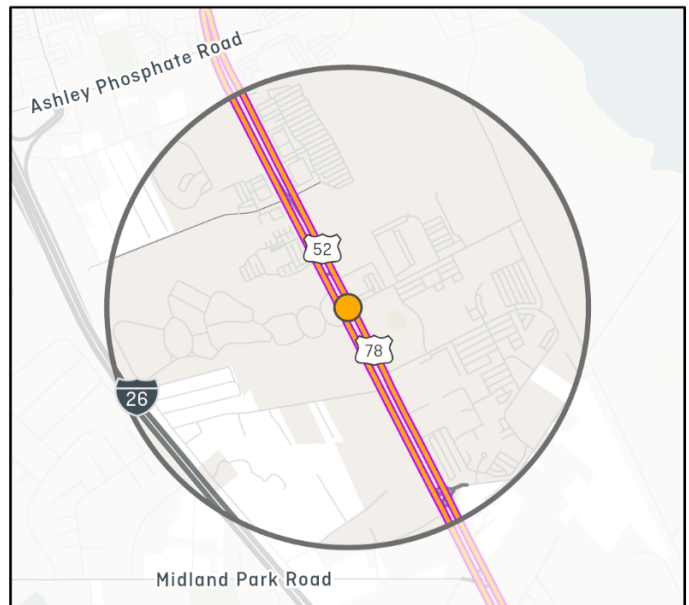
This station area is very auto-oriented with few pedestrian amenities. Within this station area, Rivers Avenue is a six-lane, divided roadway with a large median, which makes it difficult to cross as a pedestrian. Given the location of the cemetery to the west, the priority bicycle and pedestrian enhancements and connectivity should be focused on creating a complete sidewalk network on the Trident Technical College campus and strengthening biking and walking conditions along Mabeline Road. Long term, the area would benefit from encouraging inter-parcel connections between properties on either side of Rivers Avenue to enable easy pedestrian, bike, and auto access off Rivers Avenue. There is a planned multiuse trail along Rivers Avenue within this station area.

Existing Bike and Pedestrian Facilities

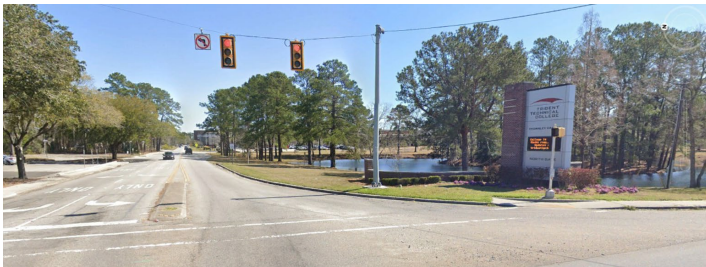


— Bike Facility — Pedestrian Facility

Planned Bike and Pedestrian Facilities



— Planned Bike — Planned Pedestrian

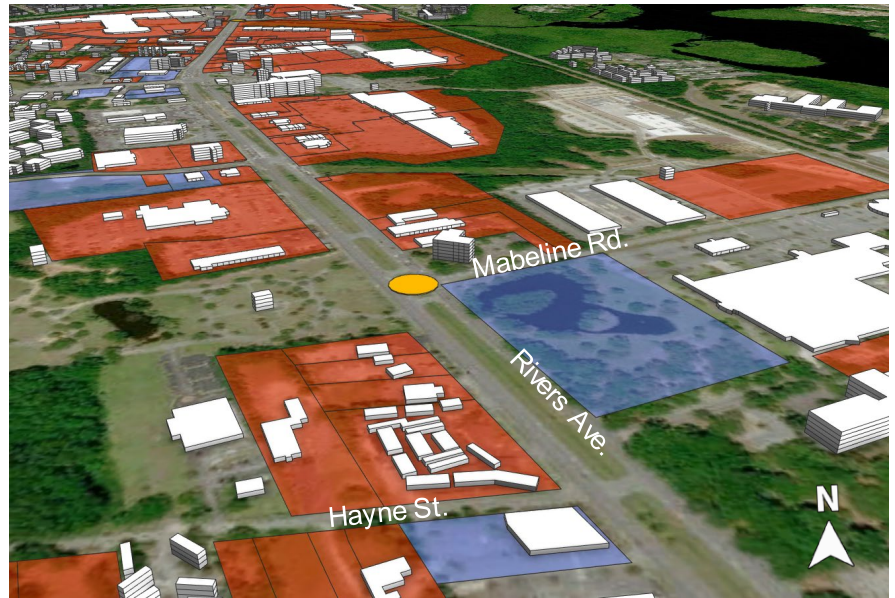


Entrance to Trident Technical College from Rivers Avenue where additional sidewalks and pedestrian amenities are recommended

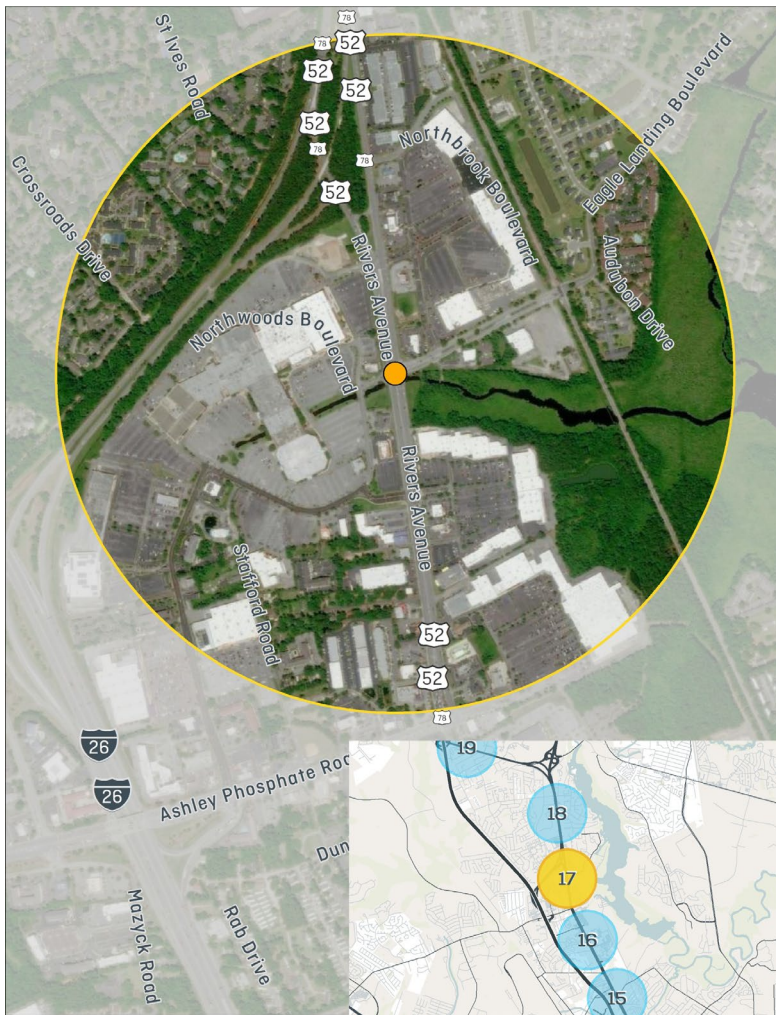
Goals and Strategies for TOD

There are several large areas of potential redevelopment and infill within this station area that can be repositioned for employment uses complementary to Trident Technical College. Additional infill of higher density, mixed-income housing to provide workforce housing for this emerging employment hub would also be beneficial. Some key strategies for the area include:

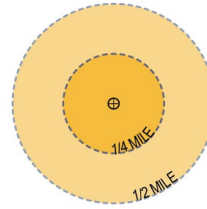
- Explore partnering with existing employers and property owners in the station area to target infill and redevelopment of larger parcels to support continued job growth
- Identify one of the larger parcel private landowners within the station area to partner in the advancing of major mixed-use development
- Advancing efforts to create inter-parcel connectivity and stronger bicycle and pedestrian connections over time



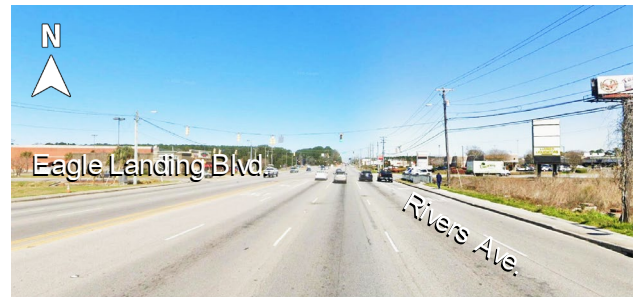
	Existing Conditions	2040 Allocation
Affordable Units (legally restricted)	112	20%
Office	2.32 M sf	2.60 M sf
Retail	1.03 M sf	1.13 M sf
Hotel	0 sf	15,000 sf
Other Uses	1.0 M sf	1.1 M sf
Building Heights	1-2 stories	6-10 stories
Estimated Households	600	900
Estimated Employment	3,000	4,600
Acres of Potential Change	180	TBD



General Town Center Place Type Targets



- 4-8 stories
- 20 du/acre (min)
- 4,000 jobs
- 4,000 households

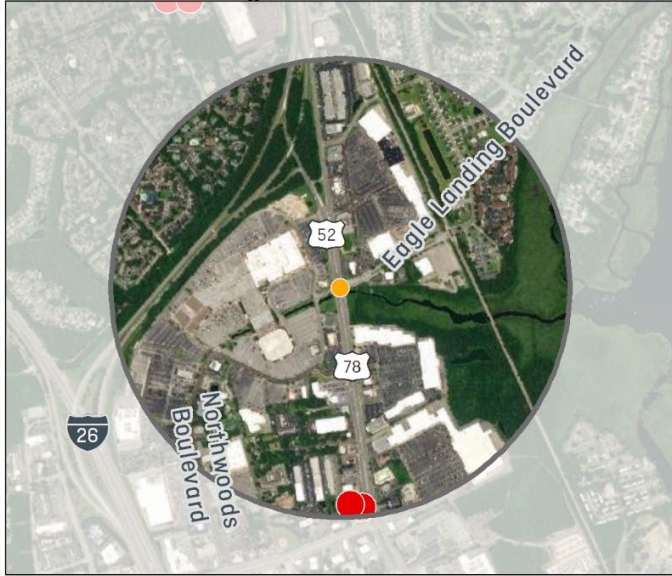


Introduction

The Eagle Landing Boulevard Station area serves as a regional retail hub. The land patterns are dominated by big box and smaller strip-style retail, large areas of surface parking, and some nearby multifamily and single family residential. There is a mix of high performing retail stores and lower performing shopping centers with vacancies. There is a large natural area to the east of Rivers Avenue providing drainage into nearby Goose Creek Reservoir. To the west, this drainage is accommodated in ditches and underground facilities within the commercially developed areas. The area is auto-dominated with a high level of regional vehicular access provided by I-26 and Ashley Phosphate Road. Given national trends in retail decline and large properties, this area is prime for transformation into more mixed-use patterns of development over time.

	Existing Conditions
Affordable Units (legally restricted)	96
Office	387,000 sf
Retail	9.68 M sf
Hotel	0 sf
Other Uses	0 sf
Building Heights	2-6 stories
Estimated Households	800
Estimated Employment	5,300
Acres of Potential Change	260

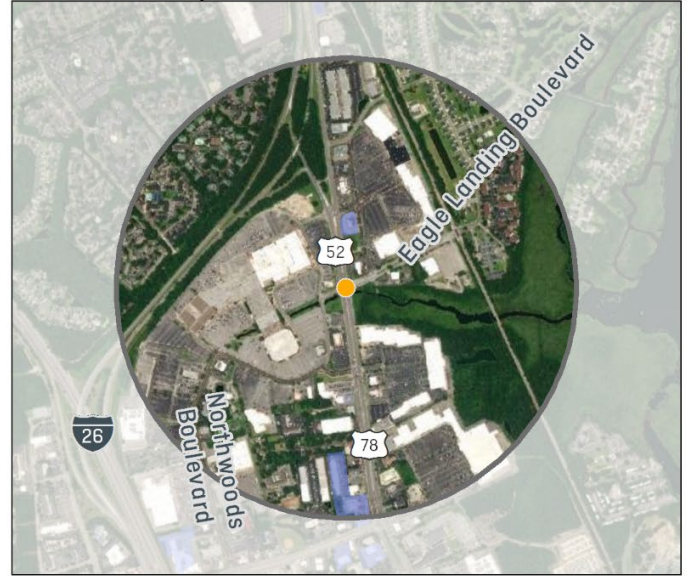
Affordable Housing



Legally Restricted Affordable Housing Units

- 0 - 35
- 36 - 156
- 157 - 501

Known Development Sites

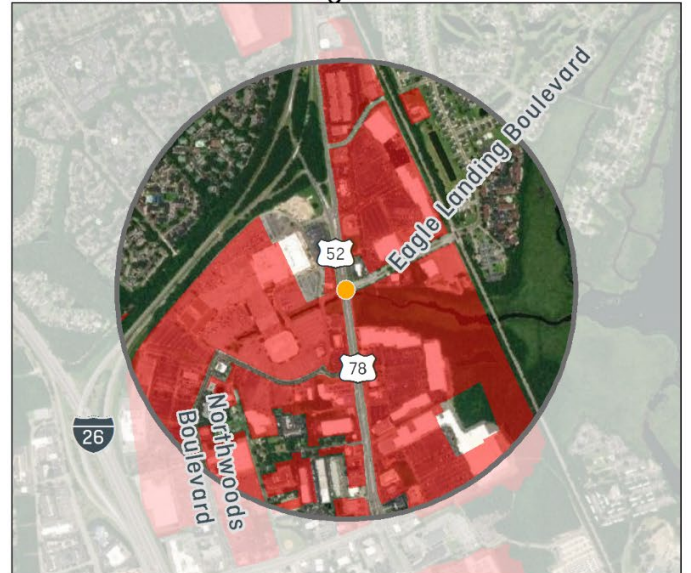


- Known Development

Housing, Development Activity, and Areas of Potential Change

While most of the station area is dominated by retail and commercial uses, there are some existing residential areas and one community of legally restricted affordable housing units within the walkshed, making the station area approximately 10%. This area represents significant acreage of opportunity for infill and redevelopment. Given some of the current development activity and the ongoing challenges associated with a declining retail market overall, a large portion of the existing retail and its associated parking areas could redevelop over the next several decades.

Areas of Potential Change



- Area of Potential Change

Multimodal Transportation

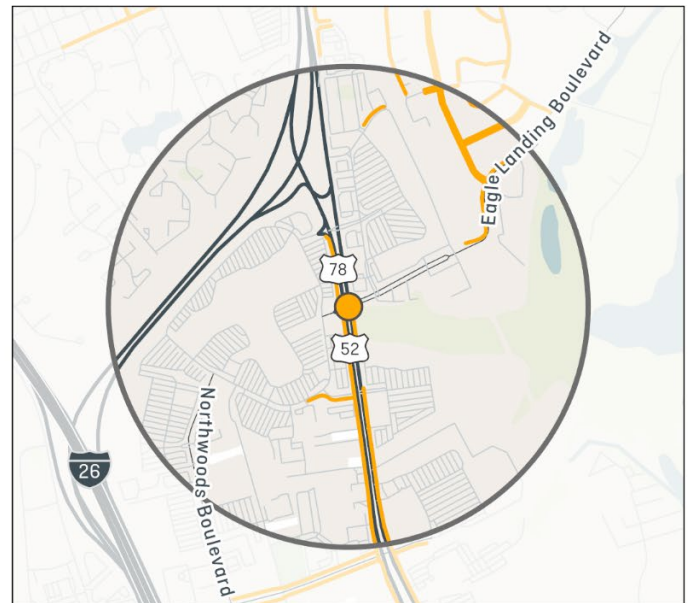
This station area lacks a strong bicycle and pedestrian connection due primarily to the large size blocks and parcels associated with the land development patterns of big-box retail. The I-26 right of way also creates bicycle and pedestrian connectivity barriers between the retail centers and neighborhoods located to the north and west. There is a proposed shared use path along Rivers Avenue and some additional north-south bicycle connections proposed.

The greatest improvements to walking and biking conditions will come with the redevelopment of existing retail areas into more mixed-use, compact patterns. This area can support the creation of a new grid of streets, as major parcels are repositioned for infill and redevelopment. While safe pedestrian crossings of Rivers Avenue will be critical at the major intersections, the priority walkability strategies should be pursued on the existing and future slower speed roads off Rivers Avenue.



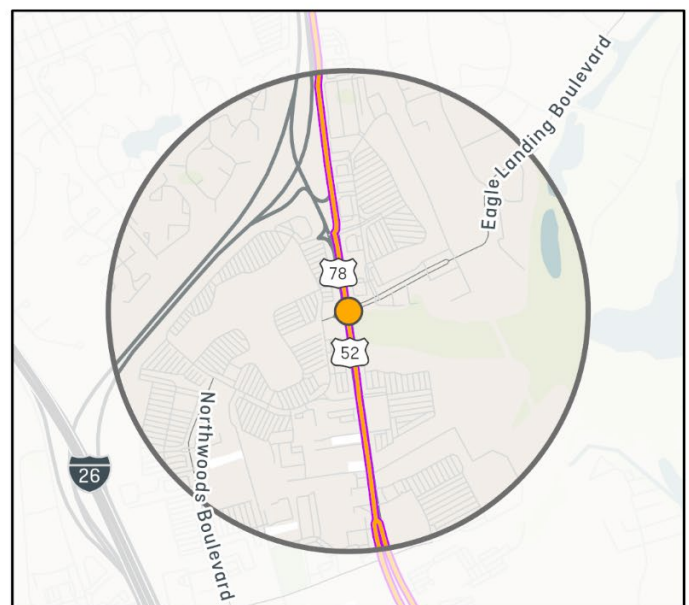
Existing conditions on Northwoods Boulevard lack sidewalks or inter-parcel connectivity

Existing Bike and Pedestrian Facilities



— Bike Facility — Pedestrian Facility

Planned Bike and Pedestrian Facilities



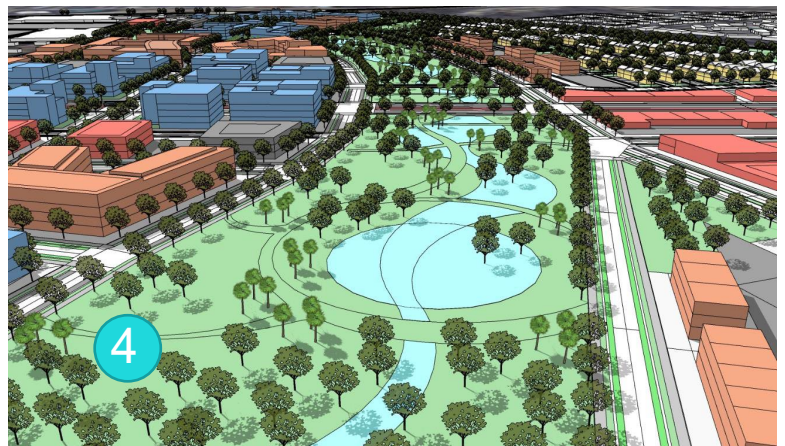
— Planned Bike — Planned Pedestrian

Hypothetical Station Area Design Concepts

The concept plan below illustrates one way the Eagle Landing Boulevard station area could redevelop into TOD patterns over time. This station area represents one of the largest potential areas of transformation along the entire LCRT corridor. The concept calls for the area to be reimagined as a major town center with a new gridded street network, a major regional greenspace with green infrastructure drainage to Goose Creek, new higher density office and residential uses while maintaining some of the existing big-box areas along Northwoods Boulevard closest to the I-26 and Ashley Phosphate interchange.



- 1 New employment-based uses with higher density buildings fronting Rivers Avenue
- 2 Establishment of a new Main Street with a mix of uses, structure parking and strong pedestrian-oriented streetscapes
- 3 New multifamily housing
- 4 Regional park, open space, stormwater mitigation park and green infrastructure drainage to Goose Creek Reservoir



Hypothetical Station Area Design Concepts

The images below show 3D massing and streetscape level renderings of the new Main Street area with a strong pedestrian-oriented streetscape. The images to the right illustrate how the area could transform in phases over time.



Phase I infill of out parcels along Rivers Avenue



Longer term phases, creation of major regional park and green infrastructure along with parcel redevelopment of Northwoods Mall and the establishment of the new Main Street with infill

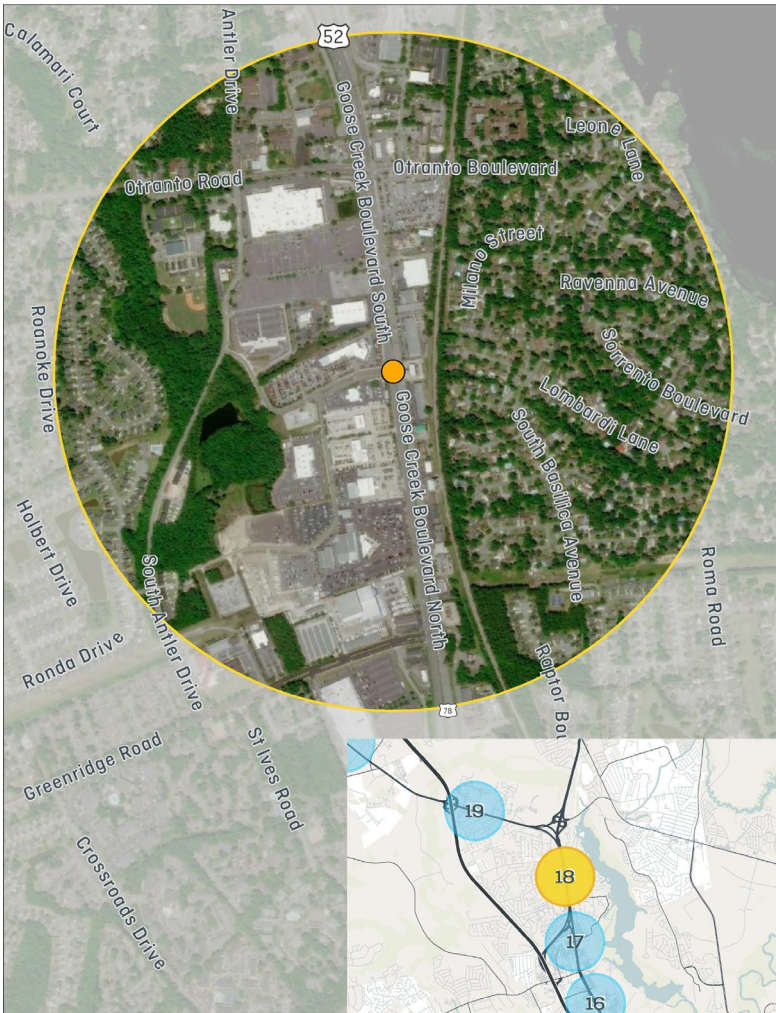
Goals and Strategies for TOD

This station area represents one of the largest redevelopment opportunities within the entire corridor. The size of the non-residential, lower-performing retail properties is highly conducive to larger-scale master developer infill and redevelopment. Additionally, this station area has a notable naturally occurring drainage and stormwater management system that can also serve as the basis for creating a station area green infrastructure plan and regional public park. Key TOD strategies include:

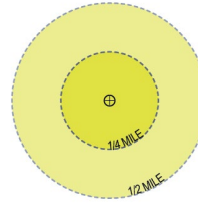
- Studying the feasibility of a public sector investment to build a major public park and green infrastructure system to serve as an incentive for redevelopment within the area and to provide a catalytic amenity for this station area
- Finding an existing property owner willing to explore a public-private redevelopment project that could entail soliciting proposals from the development community for a larger-scale project
- Identifying property and working with affordable housing developers to create new units of permanently affordable housing
- Advancing a TOD overlay district with specific form-based criteria and design guidelines for the creation of the grid-street pattern, shared and structured parking, district level greenspace, and stormwater management and urban patterns of building forms
- Planning for the potential of a long-term relocation of the LCRT station further south on Rivers Avenue should a new Main Street and new nodal patterns of development warrant it over time



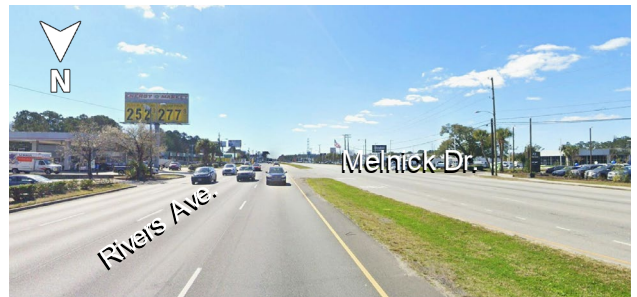
	Existing Conditions	2040 Allocation
Affordable Units (legally restricted)	96	20%
Office	387,000 sf	729,000 sf
Retail	9.68 M sf	9.68 M sf
Hotel	0 sf	28,000 sf
Other Uses	0 sf	27,000 sf
Building Heights	2-6 stories	4-8 stories
Estimated Households	800	1,300
Estimated Employment	5,300	7,000
Acres of Potential Change	260	TBD



General Neighborhood Center Place Type Targets



- 2-4 stories
- 15 du/acre (min)
- 1,500 jobs
- 3,500 households



Introduction

The Melnick Drive station area is predominantly characterized by large lot, suburban-style commercial uses and single-family residential neighborhoods. This station serves as an important transit node today and is home to the existing CARTA park-and-ride lot.

	Existing Conditions
Affordable Units (legally restricted)	0
Office	980,000 sf
Retail	1.64 M sf
Hotel	0 sf
Other Uses	100,000 sf
Building Heights	1-2 stories
Estimated Households	900
Estimated Employment	2,500
Acreage of Potential Change	160

Affordable Housing



Legally Restricted Affordable Housing Units

- 0 - 35
- 36 - 156
- 157 - 501

Known Development Sites

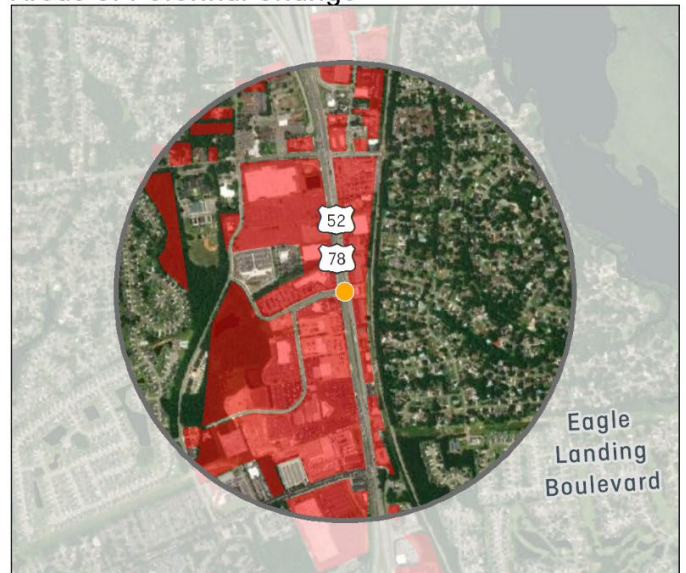


- Known Development

Housing, Development Activity, and Areas of Potential Change

This station area is designated as a Neighborhood Center TOD Place Type. The primary redevelopment and infill opportunities include the transformation of existing suburban style retail into more compact, higher density neighborhood serving retail, restaurants, and office uses. Some additional higher density housing can also be accommodated. Currently there are no legally restricted affordable units in the station area. As commercial parcels redevelop over time, 2-4 story mixed-use residential infill should be considered to reinforce the station area housing targets, including the production of new legally restricted affordable units to achieve a minimum of 20% affordable over time.

Areas of Potential Change



- Area of Potential Change

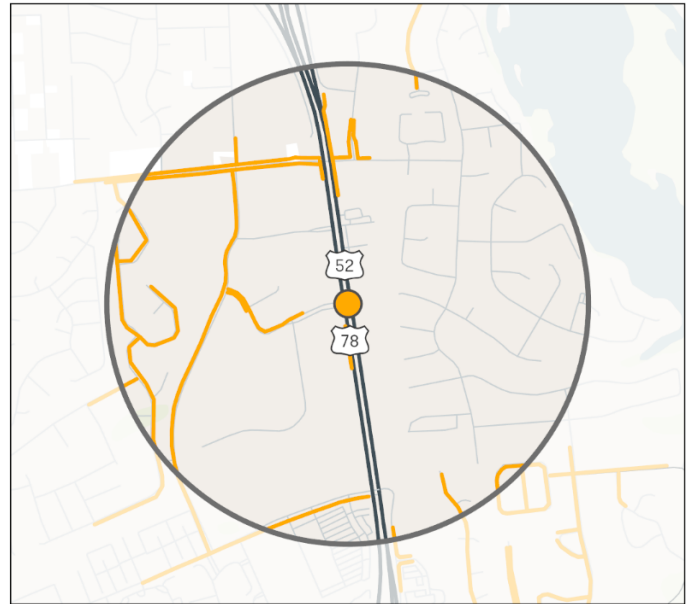
Multimodal Transportation

This area is currently auto-dominated with some existing sidewalks connecting nearby neighborhoods with the commercial areas. The existing park and ride lot encourages drive access to transit. However, given the nearby residential areas and the future potential for infill housing, additional enhancements in walking and biking accommodations should be encouraged. A new shared use path is planned to run parallel to Rivers Avenue and additional north-south connections for bicycles are envisioned along Antler Road and Basilica Avenue. Otranto Road is another important east-west connector where additional bicycle and pedestrian enhancements are encouraged. As the commercial properties transform into more mixed-use centers, there is an opportunity to establish a new walkable street grid and a strong pedestrian realm just off the Rivers Avenue corridor. Inter-parcel connectivity between redeveloping parcels should be encouraged over time.



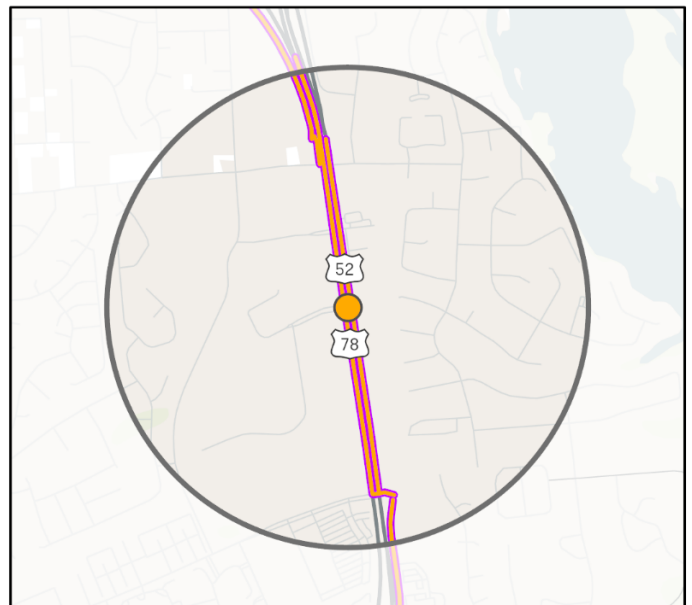
Antler Avenue provides a slower speed parallel route to Rivers Avenue for bicyclists and pedestrians

Existing Bike and Pedestrian Facilities



— Bike Facility — Pedestrian Facility

Planned Bike and Pedestrian Facilities



— Planned Bike — Planned Pedestrian

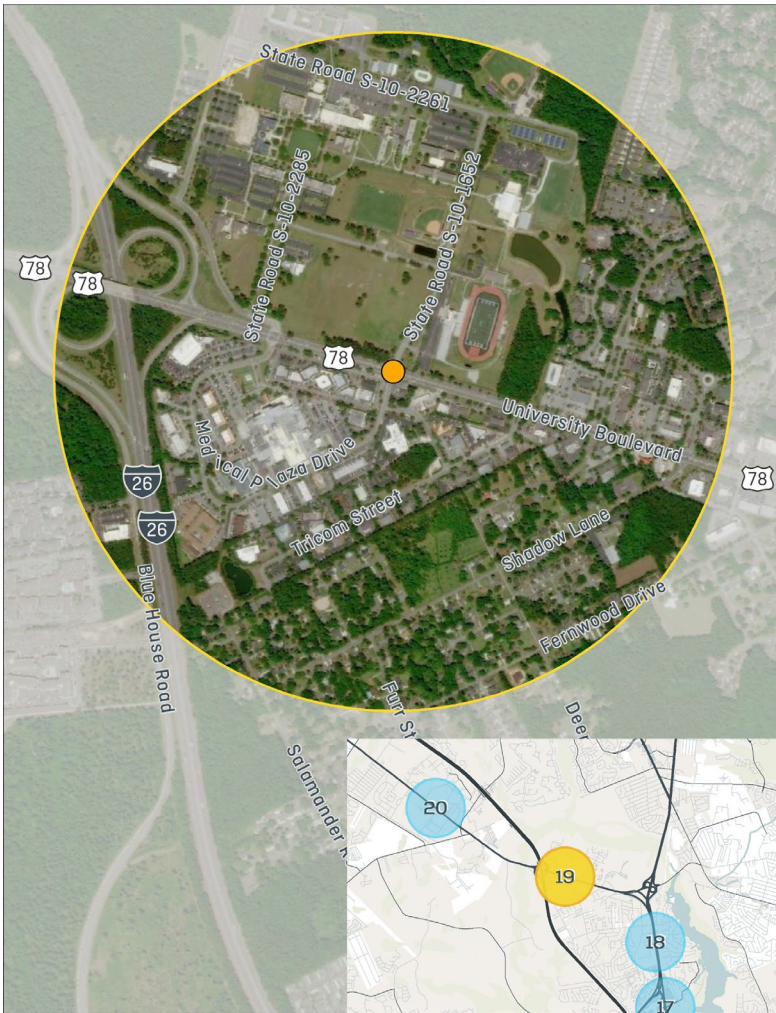
Goals and Strategies for TOD

The primary TOD opportunities in this station area are the redevelopment of the existing suburban-style retail properties to the west of Rivers Avenue. Key TOD strategies include:

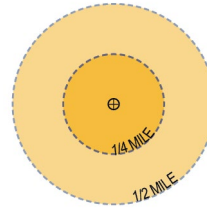
- Conducting more detailed station area planning with the nearby residents to reimagine the station area redevelopment potential and address existing bicycle, pedestrian, transit, and traffic concerns
- Partnering with a private landowner within the station area to advance a smaller scale mixed-use development
- Exploring the option of a public-private partnership or joint development of the publicly owned land in the station area to support and catalyze private sector development around the park and ride station
- Advancing efforts to create inter-parcel connectivity and stronger bicycle and pedestrian connections over time



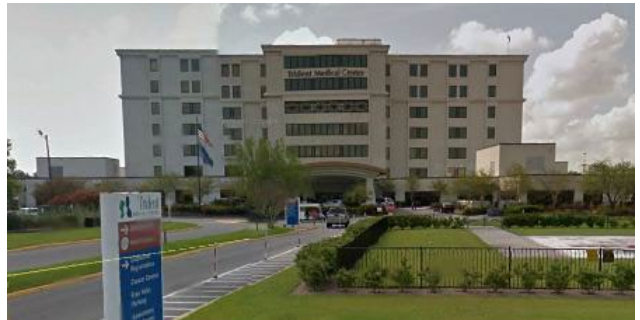
	Existing Conditions	2040 Allocation
Affordable Units (legally restricted)	none	20%
Office	980,000 sf	980,000 sf
Retail	1.64 M sf	1.65 M sf
Hotel	0 sf	0 sf
Other Uses	100,000 sf	100,000 sf
Building Heights	1-2 stories	2-4 stories
Estimated Households	900	1,100
Estimated Employment	2,500	2,600
Acres of Potential Change	160	N/A



General Town Center Place Type Targets



- 4-8 stories
- 20 du/acre (min)
- 4,000 jobs
- 4,000 households



Trident Medical Center

Introduction

The Medical Plaza Drive station area serves an existing employment hub that includes Trident Medical Center and Charleston Southern University. The University Boulevard and I-26 interchange is located within the walkshed and the area has a predominantly suburban, auto-oriented land development pattern. There are lower density single-family residential neighborhoods located to the northeast and southeast of the station.

	Existing Conditions
Affordable Units (legally restricted)	none
Office	7.61 M sf
Retail	198,000 sf
Hotel	154,000 sf
Other Uses	0 sf
Building Heights	2-6 stories
Estimated Households	600
Estimated Employment	6,100
Acreage of Potential Change	140

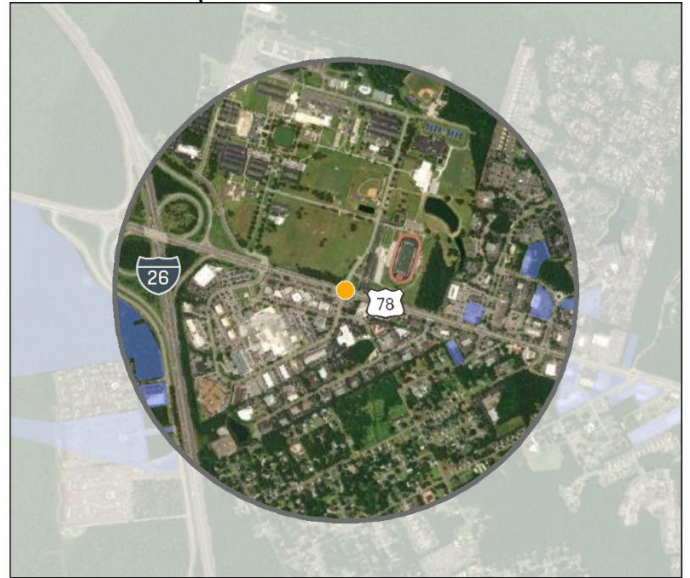
Affordable Housing



Legally Restricted Affordable Housing Units

- 0 - 35
- 36 - 156
- 157 - 501

Known Development Sites

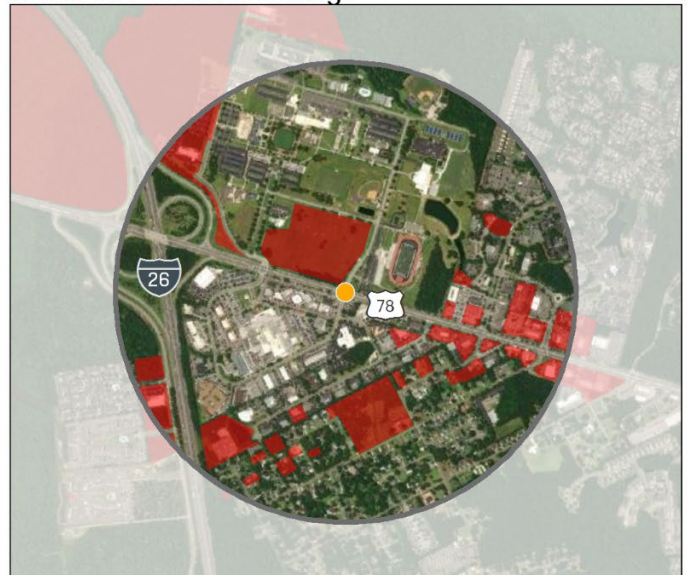


■ Known Development

Housing, Development Activity, and Areas of Potential Change

This Medical Plaza Drive station area is designated as a Town Center TOD Place Type. Given the economic activity already present and the land available for potential infill and redevelopment, this station area has the potential to add significant new employment and residential uses by 2040. There are no legally restricted affordable units in the area and existing housing is moderately priced and naturally occurring affordable. As new development occurs, there will be a need for local policies to encourage mixed-income housing and set targets for ensuring 20% of households are dedicated to permanent affordable housing over time.

Areas of Potential Change



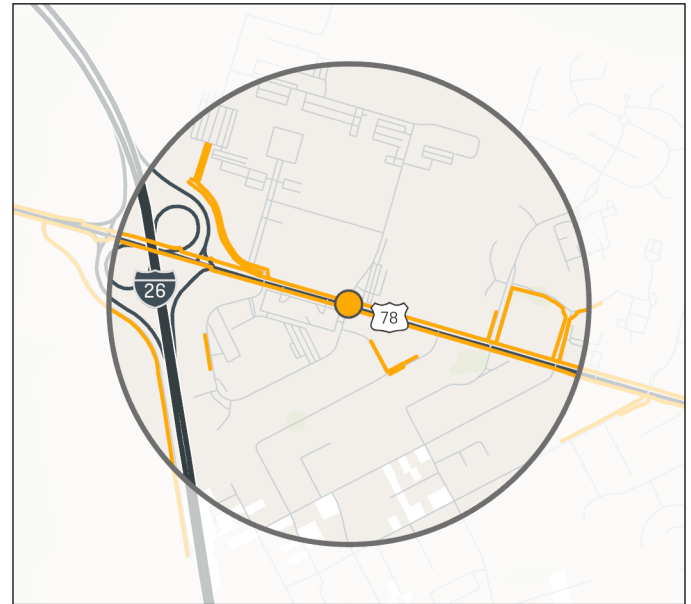
■ Area of Potential Change

LC | Medical Plaza Drive Station Area

Multimodal Transportation

This area is auto-oriented with higher speed traffic flowing along US 78 and larger areas dedicated to structured and surface parking. There are sidewalks on both sides of the US 78 roadway and an existing shared use path. Future enhancements to bicycle and pedestrian conditions should include enhancements at the major intersections to improve safe crossing of US 78. Additional efforts will be needed to establish a new grided street pattern as this area transitions from suburban to more urban patterns over time. South of the station, there is opportunity to connect to the existing neighborhoods with new bicycle facilities connecting to the station.

Existing Bike and Pedestrian Facilities



— Bike Facility — Pedestrian Facility

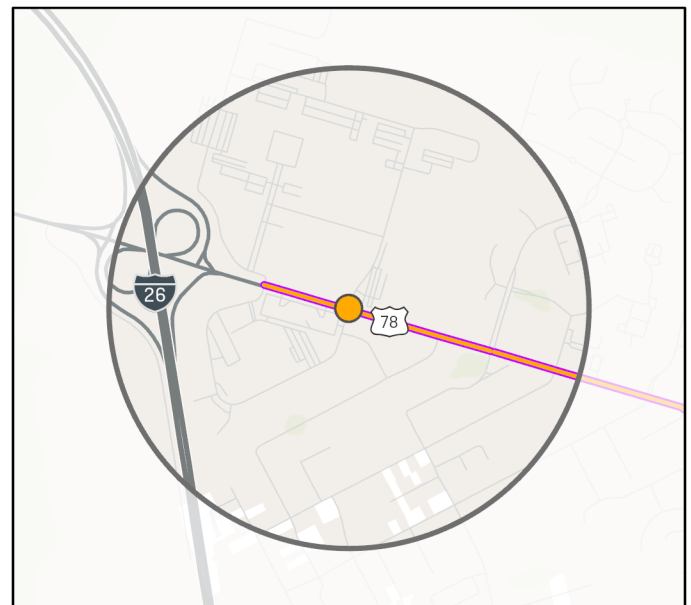


Existing sidewalks along Rivers Avenue (US 78)



Charleston Southern University campus and surface parking

Planned Bike and Pedestrian Facilities

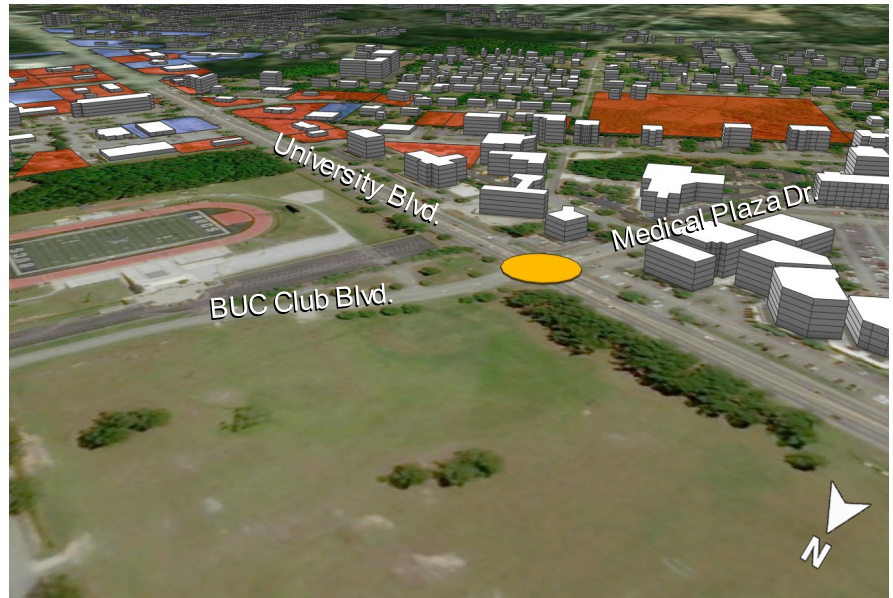


— Planned Pedestrian — Planned Bike

Goals and Strategies for TOD

Transitioning this station area to TOD patterns will require partnerships with the major landowners, including Trident Medical and Charleston Southern University to reimagine their long-term plans to accommodate more mixed use, urban patterns of development. Some infill of parcels to the south could help infill with additional mixed income housing, medical serving offices, and consolidated parking facilities. TOD strategies include:

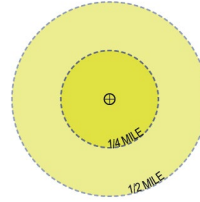
- Initiate a station area planning charrette with Charleston Southern University and Trident Medical to examine long-term buildout potential for their campuses relative to TOD patterns, particularly the greenspace frontage along University Boulevard
- Target more infill housing in the station area specifically to serve nearby medical related workforce and potentially increase student housing options
- Establish new partnerships with the Charleston Southern University and Trident Medical to advance Transportation Demand Management (TDM) strategies that encourage both students and employees to use non-auto travel options (walk, bike, and transit) and reduce overall vehicular travel demands over time



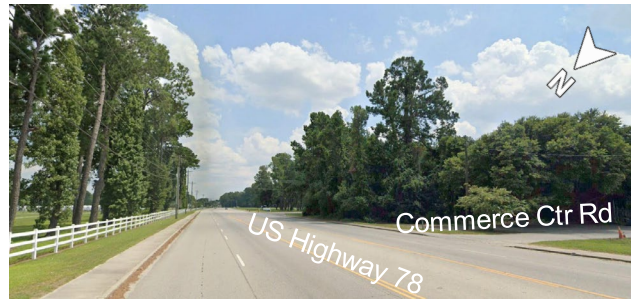
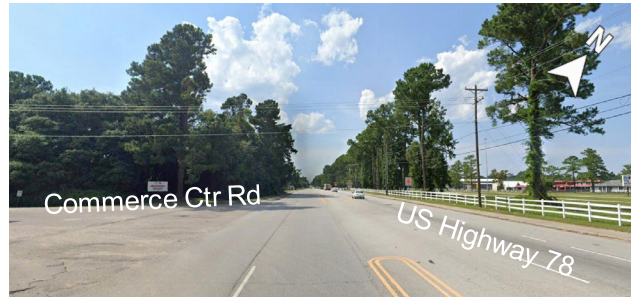
	Existing Conditions	2040 Allocation
Affordable Units (legally restricted)	none	20%
Office	7.61 M sf	7.61 M sf
Retail	198,000 sf	198,000 sf
Hotel	154,000 sf	198,000 sf
Other Uses	0 sf	1.14 M sf
Building Heights	2-6 stories	4-8 stories
Estimated Households	600	2,300
Estimated Employment	6,100	13,700
Acreage of Potential Change	140	TBD



General Neighborhood Center Place Type Targets



- 2-4 stories
- 15 du/acre (min)
- 1,500 jobs
- 3,500 households

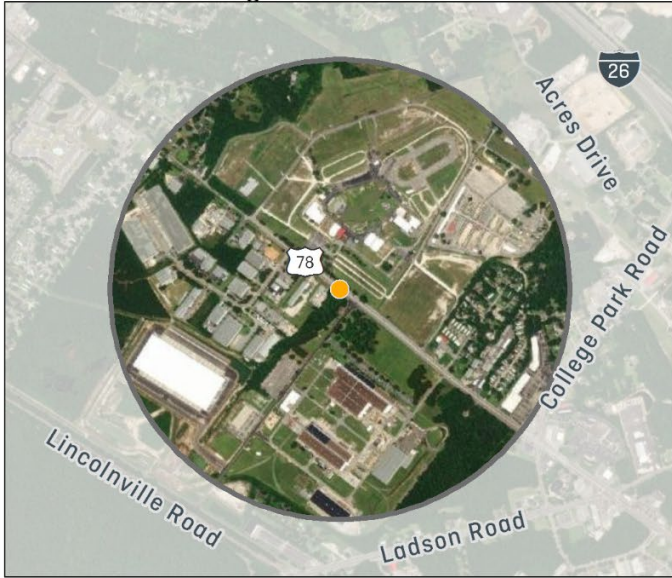


Introduction

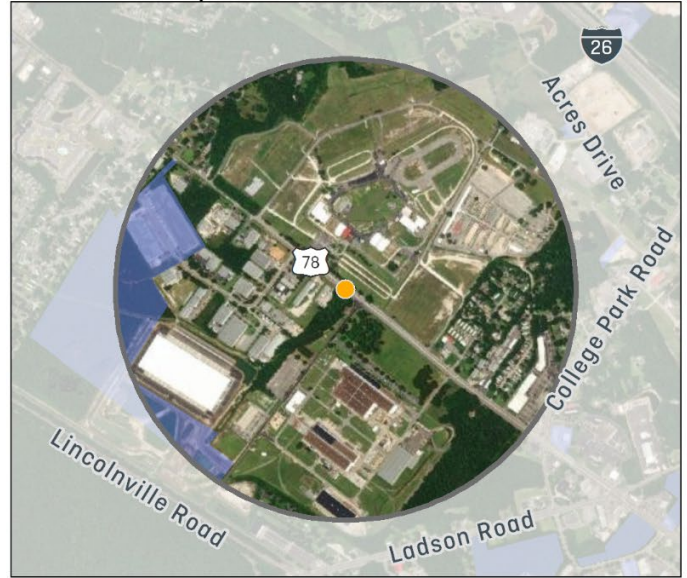
The Exchange and Fairgrounds station will serve as the northern terminus for the new LCRT line. This station area is dominated by the 180-acre Exchange Park, home to the Carolina Coastal Fair and other events, and a mixture of light industrial uses. This is the most rural station along the LCRT line and will include a major park-and-ride lot. As the end of the line station, this area will initially draw transit riders to the LCRT by car. Longer term, this station has the potential to become a more intensified TOD node supporting a stronger mix of uses and walk access to the station.

	Existing Conditions
Affordable Units (legally restricted)	none
Office	163,000 sf
Retail	809,000 sf
Hotel	0
Other Uses	2.3 M sf
Building Heights	1-2 Stories
Estimated Households	300
Estimated Employment	700
Acres of Potential Change	220

Affordable Housing



Known Development Sites



Legally Restricted Affordable Housing Units

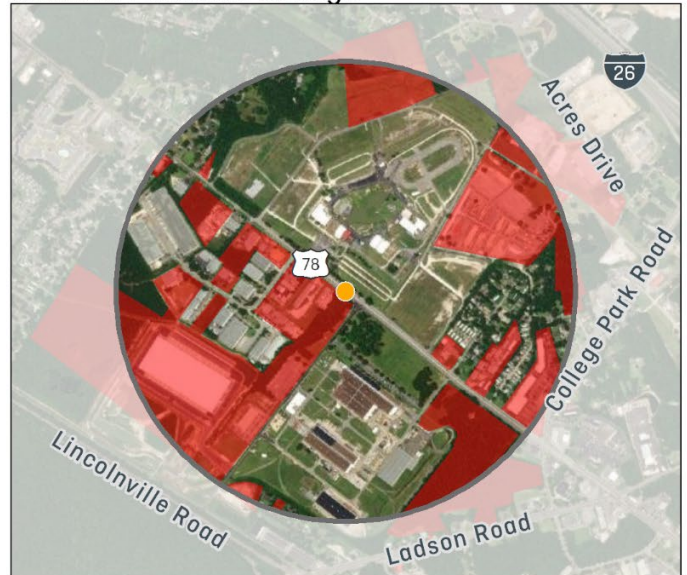
- 0 - 35
- 36 - 156
- 157 - 501

■ Known Development

Housing, Development Activity, and Areas of Potential Change

This station is designated as a Neighborhood Center TOD Place Type. There are very few residential properties in the area, but several existing units are mobile homes serving as naturally occurring affordable housing. There are no legally restricted affordable units nearby; however, just north of the station area are new multifamily units under construction. This area is poised to continue attracting market rate, but moderately priced, housing. Given this demand, additional mixed income housing should be targeted for the area to add another 1,000 households, neighborhood serving retail and other employment uses by the year 2040. Specific efforts should be made to target 20% of that future housing for low-income households and preserve existing naturally occurring affordable housing.

Areas of Potential Change

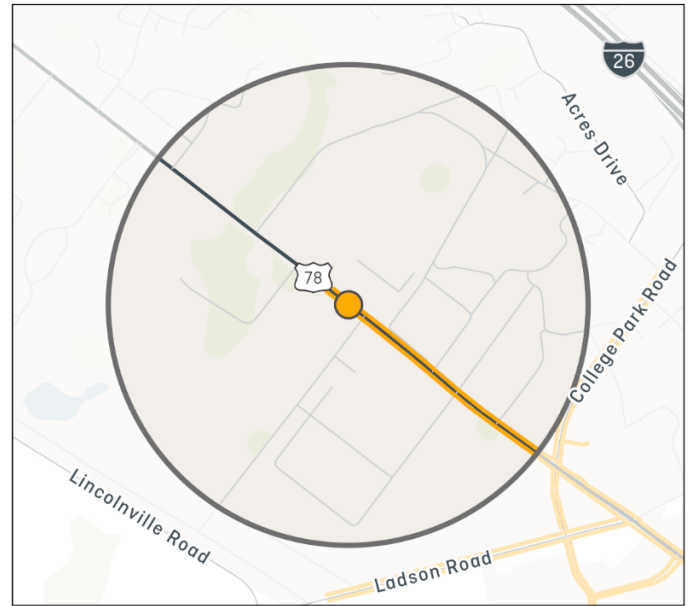


■ Area of Potential Change

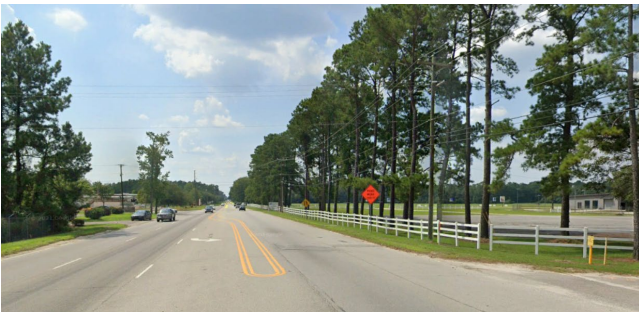
Multimodal Transportation

This part of the LCRT corridor is dominated by large lots with buildings set back from the US 78 right of way and minimal sidewalks. Given the near-term focus of the station as a park and ride facility, the bicycle and pedestrian investments may need to be long term in nature. A shared use path exists along the east side of US 78 and can serve to connect the station with some of the nearby residential and employment uses.

Existing Bike and Pedestrian Facilities

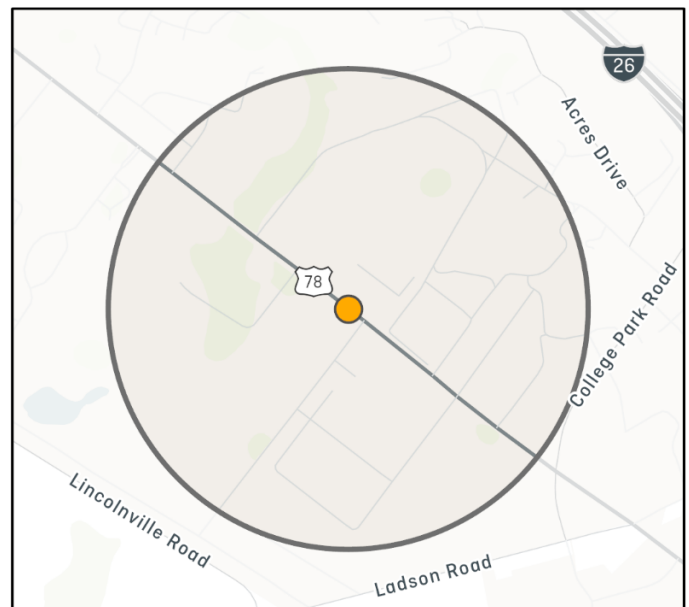


— Bike Facility — Pedestrian Facility



Existing rural cross-section of the US 78 roadway near the proposed LCRT station

Planned Bike and Pedestrian Facilities



— Planned Pedestrian

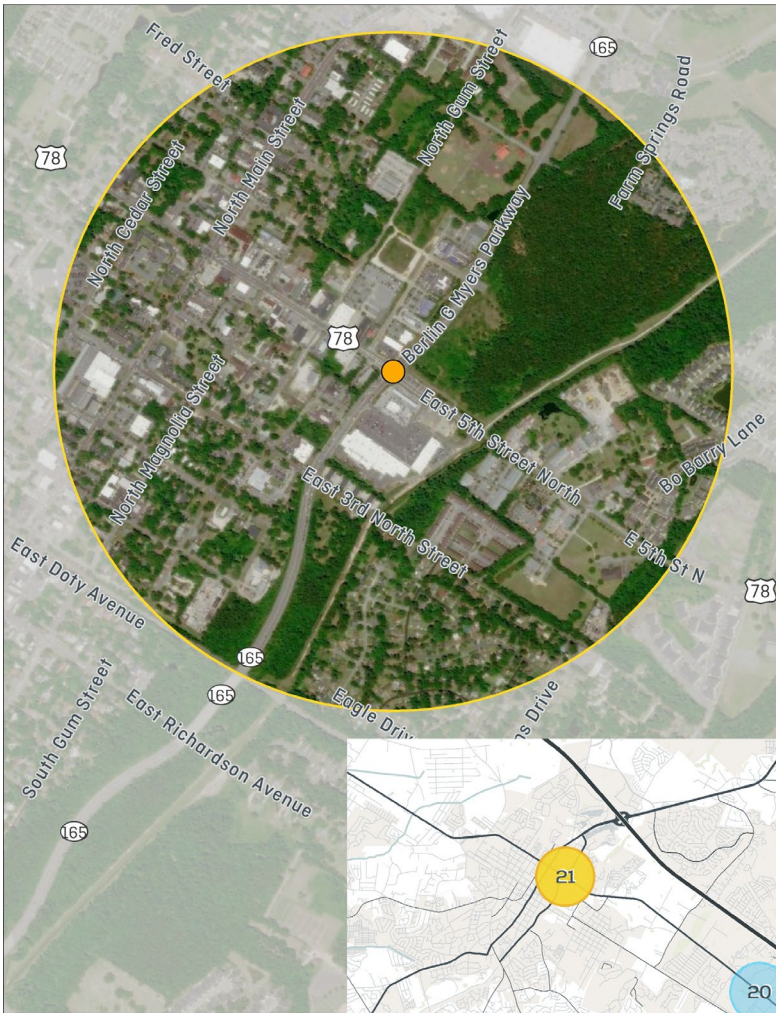
Goals and Strategies for TOD

The primary opportunity for TOD in this station area is the redevelopment and infill of properties on the southwest side of US 78. As the end of the line station, this area is currently well suited for park-and-ride but can be targeted as a new TOD node with infill housing, neighborhood serving retail, and other employment uses. TOD strategies include:

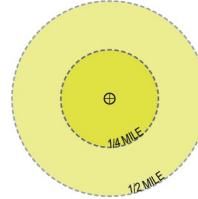
- Working with the Fairgrounds ownership to establish Transportation Demand Management (TDM) strategies that would encourage transit use for major events
- Establishing a TOD overlay district to enable the infill and redevelopment of existing industrial uses into higher density mixed-use patterns
- Working with regional housing advocates to support preservation of existing naturally occurring affordable housing and production of new legally restricted affordable housing
- Encouraging inter-parcel street network connectivity with strong pedestrian connections off US 78 and the establishment of new grid like street patterns as properties redevelopment



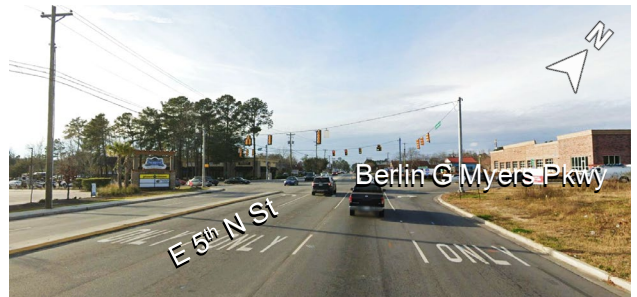
	Existing Conditions	2040 Allocation
Affordable Units (legally restricted)	none	20%
Office	163,000 sf	163,000 sf
Retail	809,000 sf	829,000 sf
Hotel	0	13,000 sf
Other Uses	2.3 M sf	2.3 M sf
Building Heights	1-2 Stories	2-4 Stories
Estimated Households	300	1,300
Estimated Employment	700	900
Acreage of Potential Change	220	TBD



General Neighborhood Center Place Type Targets



- 2-4 stories
- 15 du/acre (min)
- 1,500 jobs
- 3,500 households

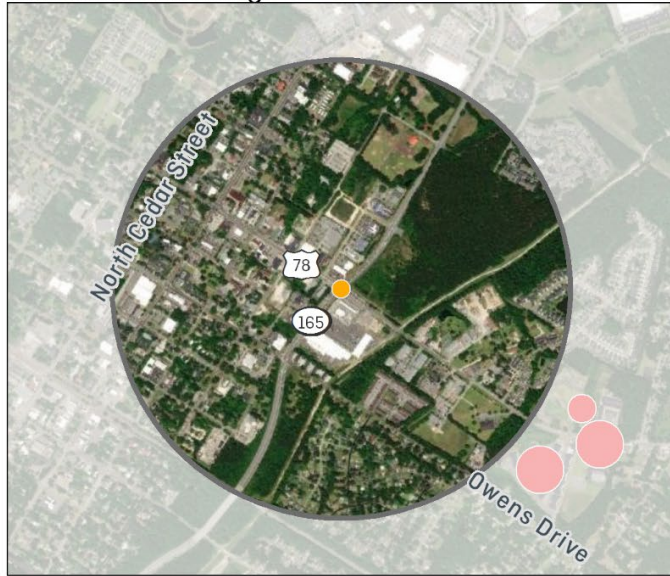


Introduction

The Berlin G. Myers station area could serve as a key node for TOD with an extension of LCRT. It sits at the crossroads of US 78 and Berlin G. Myers Parkway at the edge of historic Downtown Summerville. The area includes notable green space, undeveloped land, and a large parcel currently planned for mixed use. There is a school and smaller scale suburban style retail nearby, as well as a trail connection. This area represents one of the largest opportunities for transformative TOD development in the Town of Summerville. The following pages include illustrations of a potential station area concept for the area that reflects key TOD design principles.

	Existing Conditions
Affordable Units	0
Office	87,000 sf
Retail	1.53 M sf
Hotel	0 sf
Other Uses	126,000 sf
Building Heights	1-2 stories
Estimated Households	1,400
Estimated Employment	4,000
Acres of Potential Change	40

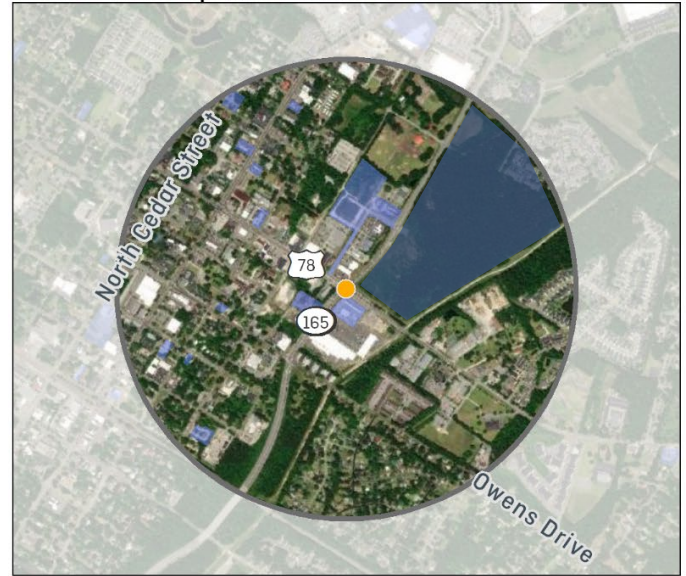
Affordable Housing



Legally Restricted Affordable Housing Units

- 0 - 35
- 36 - 156
- 157 - 501

Known Development Sites

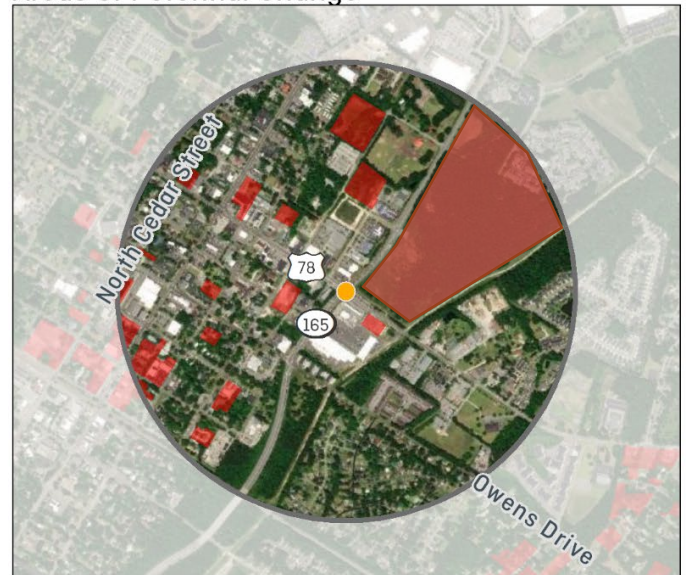


■ Known Development

Housing, Development Activity, and Areas of Potential Change

The area has no legally restricted affordable housing within the walkshed, but much of the housing nearby is naturally occurring affordable. There are smaller sized lots of redevelopment and infill potential within the historic grided parts of town, but the largest opportunity is the parcel at the northeast corner of the Berlin G. Myers Parkway and the US 78 intersection. This area is already planned for mixed use with retail, hotel and residential, however, to become more transit supportive it should develop into a more urban pattern and reflect the Neighborhood Center TOD Placetype targets. This includes a focus on higher density housing to achieve 3,500 households and building heights at 2-4 stories. The station area concept plan included on the following pages provides an example of how this area could transform into TOD over time.

Areas of Potential Change



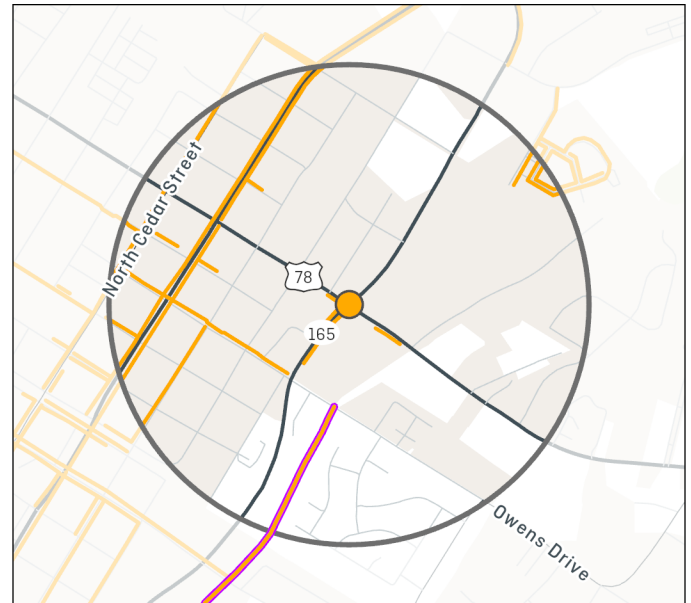
■ Area of Potential Change

LC | Berlin G. Myers Parkway Station Area

Multimodal Transportation

Currently this area is auto oriented with limited sidewalks. The strong grid of streets and walkable blocks associated with the historic town center are located to the west of Berlin G. Myers Parkway. Making this station area more transit supportive could include adding additional sidewalks within the walkshed and prioritizing those investments along US 78 and its parallel streets as well as on both sides of Berlin G. Myers Parkway. The Sawbranch Mill trail currently runs parallel to Berlin G. Myers Parkway to the south and terminates at Owens Drive. This could be extended along the entire length of the Sawbranch Mill drainage way, which runs through the entire station area, to provide an additional north-south route running parallel to Berlin G. Myers Parkway to create a safe biking and walking route.

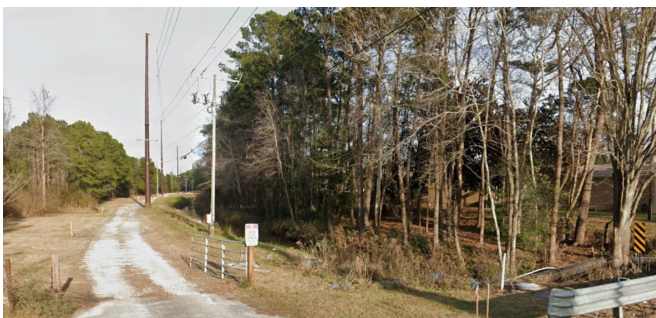
Existing Bike and Pedestrian Facilities



— Bike Facility — Pedestrian Facility

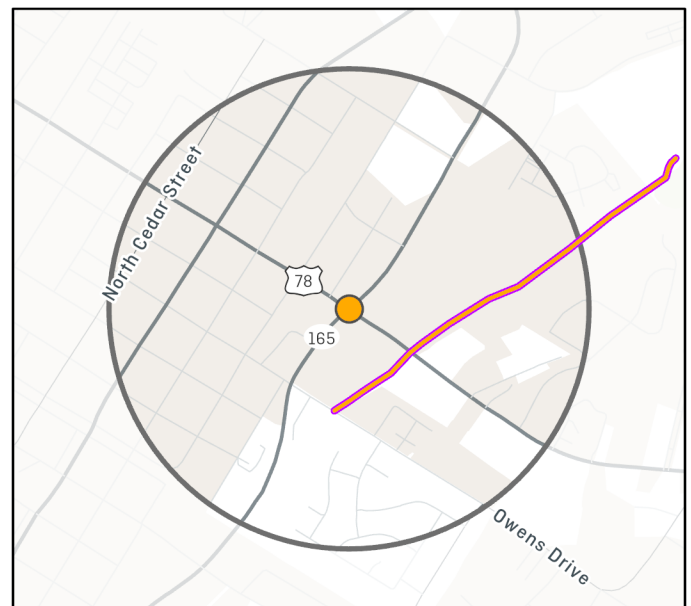


Existing Sawbranch Mill multi-use trail south of Owens Drive



Potential alignment for Sawbranch Mill multi-use trail extension north of US 78

Planned Bike and Pedestrian Facilities



— Planned Pedestrian — Planned Bike

Hypothetical Station Area Design Concepts



The concept plan above illustrates one way the Berlin G. Myers station area could buildout to create an optimal node of TOD centered on the future LCRT station just south of Berlin G. Myers Parkway on the US 78 corridor. This area has several larger scale vacant properties, single use commercial buildings, and underutilized parking areas that could be developed and redeveloped long term. The area also has several existing natural areas and drainage features that could be combined to create active recreation spaces and a larger network of green infrastructure.

- 1 Employment and commercial node at future station location
- 2 Connected trail and green space network expanding the Sawbranch Mill Trail
- 3 Connected, walkable gridded street network with contiguous sidewalks
- 4 Single-family residential and townhomes
- 5 Multi-family residential with ground floor retail
- 6 Commercial uses along US 78 with buildings fronting the street

Hypothetical Station Area Design Concepts

The images below show 3D massing of 3-4 story buildings and a strong pedestrian-oriented streetscape. The images to the right illustrate how the area could transform in phases over time.



Phase 1



Phase 2



Phase 3



Buildout

Concepts and Strategies for TOD

The major concept for this future LCRT extension station area is to create a new Neighborhood Center at this location that would provide complementary uses to downtown. The existing undeveloped land is well suited for mixed use development and multi-family housing. The key strategies for TOD at this station include:

- Expansion of the sidewalk network along US 78 to connect with a new station area, and seek off road trail connections within the area
- Work with the existing property owner at the key development site to advance key TOD concepts
- Consider a special TOD overlay district for this area that incorporates many of the design principles already in the Town of Summerville’s Unified Development Ordinance (UDO) that supports infill and redevelopment in a compact, mixed-use, and walkable urban form
- Advance strategies to preserve existing naturally occurring affordable housing and work with local housing developers to produce new legally restricted affordable housing to support the target of 20% affordable units in the LCRT station area long term



	Existing Conditions	2040 Allocation
Affordable Units (legally restricted)	none	20%
Office	87,000 sf	188,000 sf
Retail	1.53 M sf	1.57 M sf
Hotel	0 sf	40,000 sf
Other Uses	126,000 sf	126,000 sf
Building Heights	1-2 stories	2-4 stories
Estimated Households	1,400	2,600
Estimated Employment	4,000	6,400
Acreage of Potential Change	40	TBD

L C
R T



Chapter Three

TOD Implementation and Policy Tools

The implementation of TOD within the LCRT corridor will require ongoing alignment of local land development regulations, multi-modal transportation infrastructure investments, affordable housing preservation and production, and participation of the private sector in redevelopment and infill of vacant and underutilized land around each station area. While implementation of multimodal transportation investments requires state and local support, most of the regulatory land use framework needed to guide development decisions rests with the local governments. As such, this chapter addresses policy recommendations for the City of Charleston, City of North Charleston and the Town of Summerville that build on currently adopted plans. Additional strategies are also identified for the BCDCOG and other regional stakeholders to encourage ongoing corridor wide coordination of TOD implementation over time.

The LCRT TOD strategies reflects a typology-based approach to station area planning. The TOD Placetypes reflect a range of densities, mixed-use targets and goals for population and employment within each station area. The designation of typologies by station area and the TOD opportunity summaries presented in the previous chapter can be used to refine the policies over time and provide the foundation for more detailed station area planning in the future.

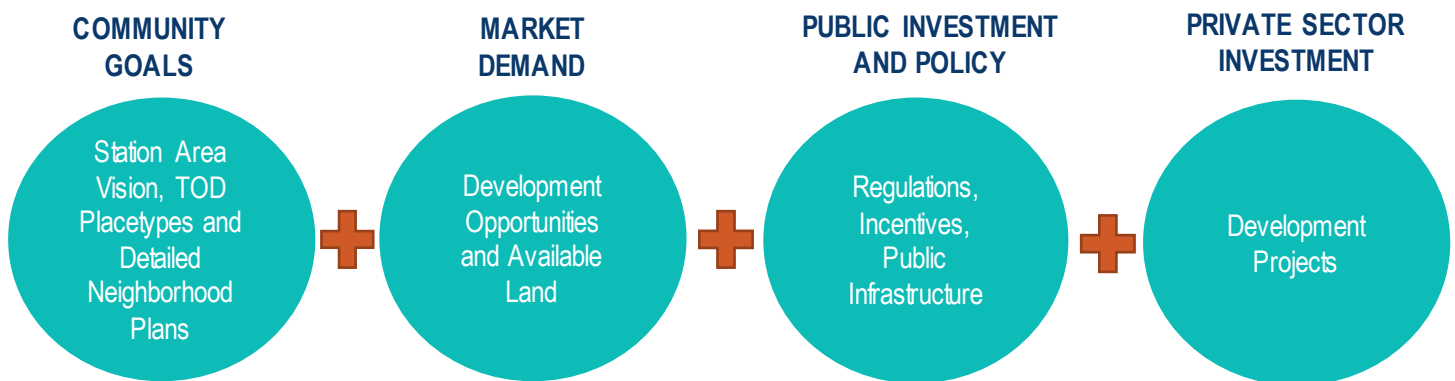


Figure illustrating key ingredients for successful TOD implementation

The table below highlights the key policy tools and other strategies to support TOD implementation. Many of these policies and strategies are already in place within the BCDCOG region. The goal moving forward is to continue to strengthen the consistency in applying these strategies to all the LCRT station areas. The pages following this table identify some of the existing best practices by jurisdiction and additional opportunities to further support TOD implementation by lead entity.

TOD Policy/Strategy	Lead Organization		
	North Charleston, Charleston and Summerville	BCDOG and SCDOT	Other Entities and Private Sector
1 - TOD Overlay Districts. A zoning regulation that applies to the one-quarter to one-half mile walkshed of a transit station to encourage a mix of uses and minimum levels of density. Overlay districts can be applied on top of existing zoning standards.	X		
2 - Street Connectivity and Complete Street Standards. Street connectivity and street design standards can be applied to encourage the establishment of a street grid (walkable blocks) and the prioritization of street features that prioritize walking, biking and slower moving traffic within station areas.	X	X	
3 - Parking Management. Regulations that reduce the amount of land dedicated to parking uses within the station areas. Includes creation of parking maximums, shared parking, on-street parking and parking pricing policies. Additionally, surface parking can be utilized as a strategy to land bank parcels in advance of market feasibility. Doing so at the site scale would include regulations that allow for surface parking that would eventually be converted to building uses over time.	X		
4 - Form-Based Codes. An alternative to traditional zoning that focuses on creating strong urban forms. Regulations emphasize the relationship between building frontages and the public pedestrian realm and how those relate to the scale and types of streets and blocks.	X		
5 - District Level Stormwater Management and Open Space. Regulations and public sector investments that shift the creation, provision and management of stormwater and passive/active open space from a site-by-site approach to a larger subarea or district level approach. Results in more contiguous and efficient use of scarce land resources within station areas and can help to encourage green infrastructure features that support stormwater management, provide amenities and create a sense of place.	X	X	

TOD Policy/Strategy	Lead Organization		
	North Charleston, Charleston and Summerville	BCDOG and SCDOT	Other Entities and Private Sector
<p>6 - Creating A Sense of Place. Regulations, public sector and private sector investments that establish and reinforce a unique and authentic sense of place. Can include requirements for distinguishable signage, public art, landscaping features, architectural standards, and other features of the built environment. Also includes a strong community-informed visioning and planning at the station area scale to articulate sense of place goals.</p>	X	X	X
<p>7- Multimodal Performance Measures. Encouraging alternatives to auto-oriented measures such as congestion (e.g. Levels of Service (LOS)) to determine transportation needs and management strategies. Can include innovative measures such as people throughput, multimodal accessibility, bicycle comfort, etc. to help elevate the role of transit, walkability and biking in the movement of people within a region. Often results in elevating alternative modes of transportation and traffic calming measures.</p>	X	X	
<p>8 - Catalyst Joint Development. Catalyst projects can create new momentum for TOD within station areas. A key strategy for doing so is to leverage public land assets within each station area to encourage new private sector investment that reflects the fundamentals of TOD. This strategy can help create momentum for TOD in locations where the market for density has yet to materialize.</p>	X	X	X

TOD Policy/Strategy	Lead Organization		
	North Charleston, Charleston and Summerville	BCDOG and SCDOT	Other Entities and Private Sector
<p>9 - Equitable TOD. Ensuring that existing long-term businesses and residents' benefit from LCRT and the eventual increase in real estate values within station areas is one goal of Equitable TOD. A secondary goal is to ensure affordability of housing within the station area walkshed. Accomplishing all the above requires a range of policies and strategies as described in the LCRT's Affordable Housing Assessment & Strategies Report and highlighted in Chapter 1 of this report.</p>	X	X	X
<p>10 - Monitoring Success and Best Practices. Successful TOD implementation at the corridor and regional scale benefits from regularly monitoring implementation and refining/adapting implementation strategies. Doing so requires the establishment of a GIS-based data tracking platform to annually report on development activity and transit ridership within each station area. Doing so can also serve to foster inter-jurisdictional and public-private sector discussions to determine what specific TOD policies and strategies are working well and where. It can also reinforce and elevate success that can be used by the region in advancing TOD in other corridors around premium transit.</p>	X	X	

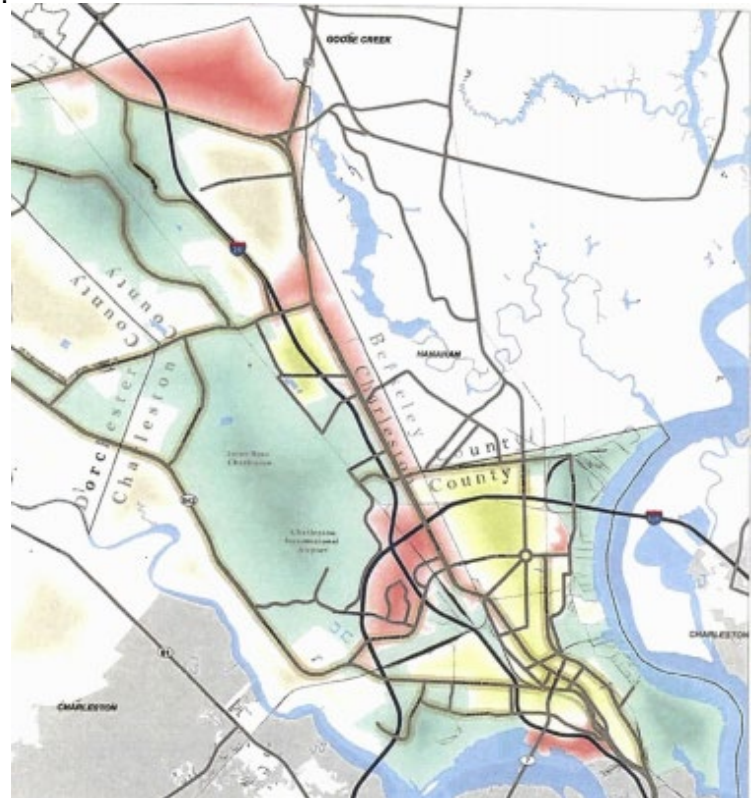
Introduction

The City of North Charleston encompasses a wide range of development patterns along the LCRT corridor, which presents both challenges and opportunities for implementing TOD over time. For stations located at the southern end of Rivers Avenue, there are existing elements of the built form with smaller block sizes, grided streets, compact, and mixed-use development, whereby the focus for future development is on smaller scale infill development and multimodal infrastructure improvements. Further to the north the land patterns change into more suburban, lower density form, which creates opportunities for significant transformation into more urban patterns. Additionally, larger parcels also exist in this area for redevelopment potential. The following highlights some of the existing policies already in place by the City and additional policy enhancements to support TOD.

The Comprehensive Plan

The City’s comprehensive plan was updated in June of 2020. It includes several policies that align with the fundamentals of TOD, notably the following:

- Accommodate and incentivize higher density housing
- Improve the overall pedestrian environment to promote walkability
- Adopt a green infrastructure plan to support resiliency goals and creative open space/stormwater management
- Increase housing supply and create incentives for affordable housing
- Reduce overall parking requirements
- Establish mixed-use zoning along transit boulevards like Rivers Avenue
- Foster infill development of commercial properties along major transportation corridors like Rivers Avenue
- Encourage public art at LCRT transit stations
- Promote transit, bicycle, and pedestrian modes of transportation
- Implement Complete Streets and traffic calming measures
- Implement the City’s proposed multimodal Street Typologies
- Encourage Traditional Neighborhood design with connected streets, compact patterns, and pedestrian orientation



- Suburban Residential
- Traditional Neighborhoods
- Employment Center
- Mixed-Use
- Mixed Use Corridor

The image above shows the City of North Charleston’s Future Land Use Map designating the entire LCRT corridor as a Mixed-Use Corridor. This designation has supporting policies to encourage TOD.

The Comprehensive Plan’s Mixed Use and Mixed-Use Corridor designation includes direct reference to TOD as a key strategy to support the LCRT including the following excerpts:

Mixed-Use (MU)

The Mixed-Use designation is established to sustain a mixture of commercial and residential land uses located within close proximity to one another. Uses may be combined within a parcel and/or stacked within a structure. New development in the Mixed-Use areas should be designed to be compact, incorporating a system of open space including interconnected trails or sidewalks that provide access to parks, recreation, and open space areas as well as commercial services. Appropriate uses include office, retail, multi-family, and light industry (manufacturing and assembly).

Mixed-Use Corridor (MUC)

The Mixed-Use Corridor designation is to provide for commercial, retail, office and higher-density housing adjacent to principal transportation corridors throughout the City. These areas are intended to promote development of mixed-uses that will enhance access to a wider range of services for nearby neighborhoods. Appropriate uses include office, retail, multi-family and light industry (manufacturing and assembly).

Development within the MU and MUC designations may be intensified within areas identified around transit centers. Intensified development in these areas is referred to as Transit-Oriented Development (TOD).

KEY DEVELOPMENT OBJECTIVES

1. *Provision of a complementary mix of land uses and project designs to create pedestrian friendly, self-sustaining developments.*
2. *Managed accessibility to the regional transportation network through a hierarchy of internal facilities for vehicular, transit, cycling and pedestrian mobility.*
3. *An improved built environment through wider sidewalks, better wayfinding and lighting, and uses close to each other for pedestrians to/from destinations.*
4. *Inter-connectivity with abutting residential communities.*

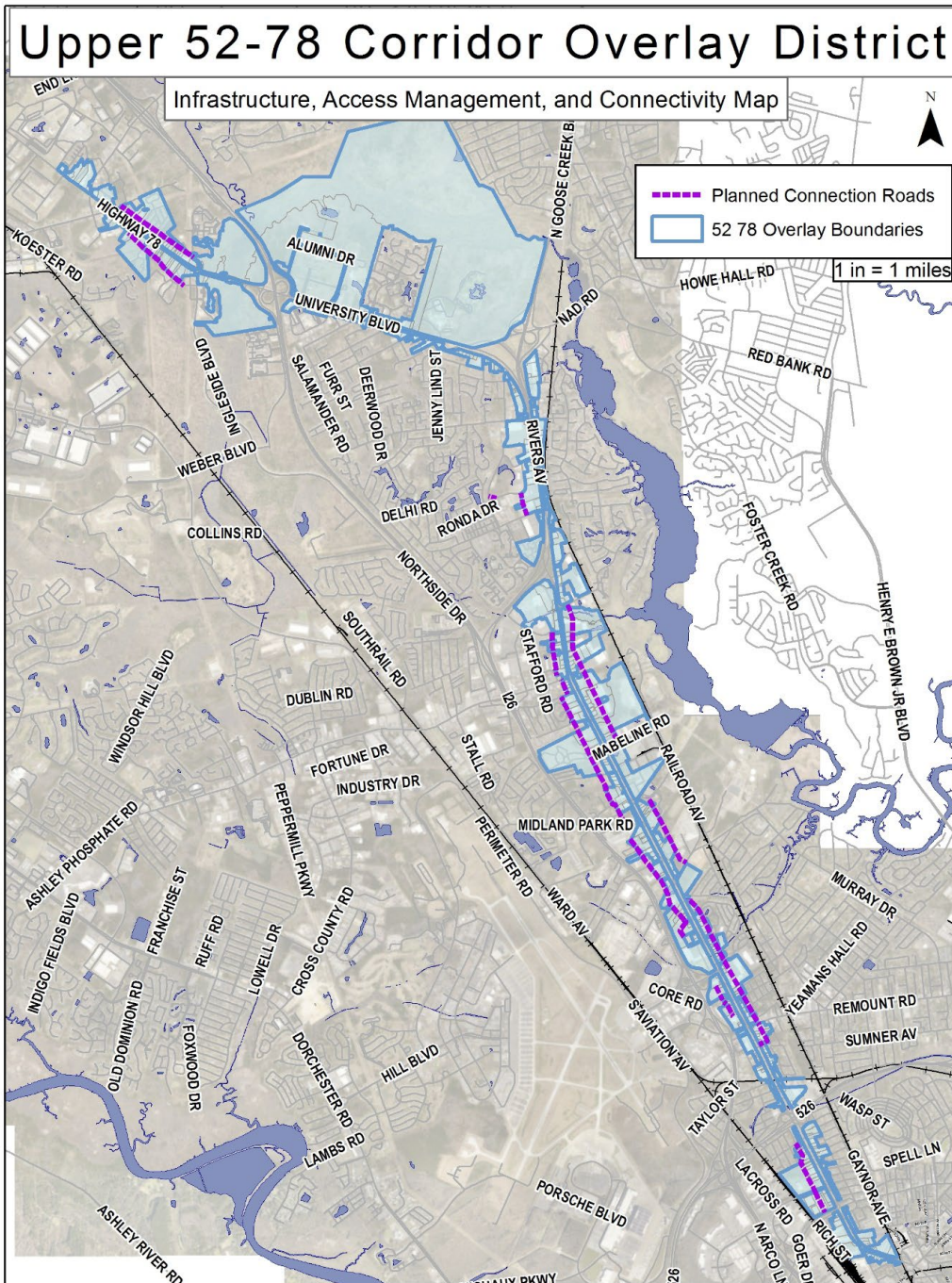
5. *Deliberate configuration of streets and landmark parcels along a pedestrian network within each development.*
6. *Interspersion of on-street and centralized parking facilities to facilitate non-motorist mobility.*
7. *Adequate buffering and landscaping to minimize impact on natural resources.*
8. *Use of open spaces and natural areas to manage stormwater.*
9. *Application of form-based codes is encouraged.*

Upper 52-78 Corridor Overlay District

Since adoption of the City of North Charleston’s Comprehensive Plan in June of 2020, the City has advanced policy implementation of the Mixed-Use Corridor designation on Rivers Avenue to support TOD. In the spring of 2021, the City established the Upper 52-78 Corridor Overlay District for parcels fronting Rivers Avenue to encourage redevelopment and infill in a more urban condition. This overlay district almost cover the entire length of the proposed LCRT station areas but should be extended to Exchange and Fairgrounds station area and expanded to ensure coverage of the full one-quarter mile station area boundaries. The provisions within these overlay districts have some of the foundational elements of TOD including the following:

Key elements of Overlay Districts	Rivers Avenue South Overlay	Upper 52-78 Overlay District
Building frontages with minimal setbacks oriented to the street and active uses on ground floor	X	X
Minimum two-story building heights	X	
Establishment of pedestrian-oriented Activity Zones	X	
Waiver of minimum lot size requirements for higher density residential inclusive of 20% affordable housing	X	X
Requirement for 5-12’ sidewalks	X	X
Enabling structured parking and encouraging shared parking; allowing for 10% reduction in parking requirements for mixed use	X	
Requiring the establishment of a “backage road” off of Rivers Avenue to encourage more street connectivity and grid-like patterns		X
Discouraging lower density incompatible land uses	X	X

This overlay district was adopted upon the completion of the Phase 1 concept development for this plan and will be incorporated into future planning efforts. A map on the following page provides the 52-78 Corridor Overlay District, and planned roadway connections



To further support TOD implementation, the City of North Charleston is considering additional enhancements to the Overlay Districts, which could include the following:

TOD Mixed-Use Overlay District – Expanding the TOD Overlay District for each LCRT station area covering the full one quarter to one half mile walkshed. Additionally, consideration should be given to changing the underlying zoning for each station area to support both vertical and horizontal mixed use and working with employers within station areas and regional transportation partners to encourage more Transportation Demand Management (TDM) strategies in partnership with major employers.

Walkable Blocks, Connectivity and Street Hierarchy - Compact blocks facilitate an interconnected street network and provide the framework to locate mixed-use development with a greater diversity of building types within proximity of each other. The establishment of maximum block sizes of 200-600 ft and requirements for street connectivity standards can help accomplish these goals. Additionally, the interconnected street network should clearly identify which roadways and streets will be prioritized as pedestrian-oriented, high walk access streets and which streets and roadways will need to maintain higher speed mobility and through traffic. The city's existing Street Typologies included in the Comprehensive Plan and guidance on Complete Streets implementation can serve as the basis for the establishment of the station area street typologies. Additionally, the city should prioritize the bicycle and pedestrian enhancements as described in the LCRT station area profiles to encourage safe access to stations.

Parking – Generally, the total land area dedicated to parking closest to the station should be minimized and parking requirements reduced. This can enable the land most directly accessible to the station to be used for development and encourage more walking, biking, and transit modes of transportation. Off-street parking should be provided behind or beside buildings, and structured and shared parking should be encouraged.

Building Form and Massing – the goal of TOD is to maximize mixed use density within walking distance of the station. Therefore, in addition to encouraging building orientation to the pedestrian realm, the establishment of minimum building heights of two-stories (as already described in the Overlay District) should be extended to entirety of the ¼ mile walkshed of the LCRT station areas as market conditions allow. Maximum building heights that align with the TOD Placetype targets (4-10+ stories) can also be explored, as well as building height transitions, whereby the highest densities are located within the first one-eighth mile distance of the station and taper off to lower densities further away from the station.

Open Space and Green Infrastructure – TOD presents an urban condition that requires thoughtful use of space to incorporate areas for open space and natural features that can provide pedestrian respite and enables stormwater management. The city can develop policies beyond the establishment of Activity Zones to encourage these features at the station area scale, not only on a site-by-site basis. Public sector investment in open space, parks, and green infrastructure can help create incentives to infill and redevelopment in addition to the individual private development requirements. Strategies should be explored that help to preserve or re-establish existing drainageways, channels, wetlands, floodplains, tree canopy, and vegetative buffers and co-locate these elements with areas of open space. Additionally, the City could invest in the purchase of key properties within station areas to create the initial green infrastructure/urban park feature that could provide additional amenities and incentives for private sector development.

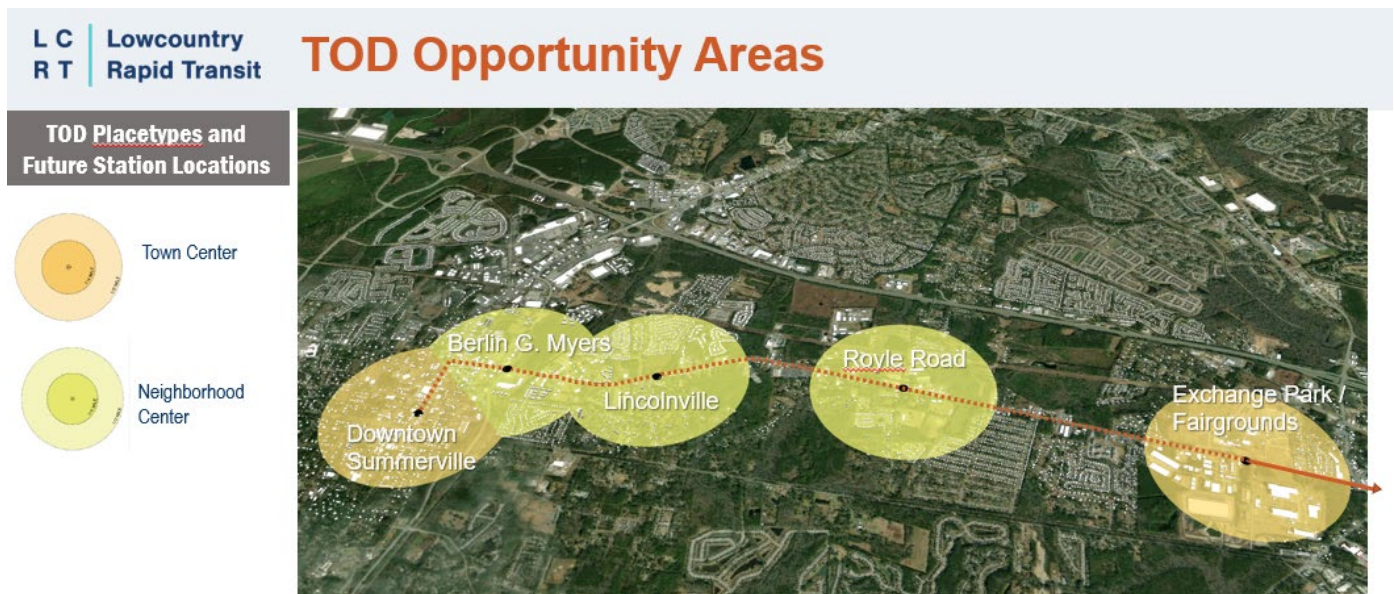
Sense of Place and Community Character – Each station area presents an opportunity to reinforce the existing assets and culture of the existing neighborhood, but also to establish a distinct sense of place or neighborhood brand as new development comes online. Public sector investments in branding the station areas should be combined with community driven and private sector creation of public art or other features that celebrate the unique identity or history of a given station area.

Catalyst Joint Development Projects – the City of North Charleston and other public sector entities have land holdings within the station areas. A first step for the City could be to conduct a land inventory to identify all parcels within the station areas that are in some form of public ownership to determine best and highest use relative to sparking TOD and housing production. Viable sites within station areas could then be repositioned for private sector investment. This could include the issuance of developer “request for proposals” or similar mechanisms to create public-private partnerships.

Introduction

The Town of Summerville is anchored by a traditional historic downtown with walkable block sizes and a mixed-use main street. Surrounding this historic core are areas of suburban style residential and commercial patterns of land development. The primary areas of focus for TOD are on the heart of downtown and at the intersection of Berlin G. Myers and US 78. The downtown area already meets many of the design attributes of TOD. There are also ample areas of vacant and underutilized land within downtown conducive to infill development that complements the existing historic character. The Berlin G. Myers station area is located just outside of the historic downtown and has significant development potential given the large parcel of undeveloped land at the key intersection and lower density uses nearby.

The Town of Summerville is growing, and that growth is anticipated to continue through the year 2040. Where new people and jobs locate in the Town – and the urban form that growth takes – will influence the opportunities for people to walk, bike, and take transit. Specifically, the land use mix and the density located within the walkshed of each station area has a direct impact on the potential for transit ridership. Therefore, the attractiveness and viability of extending premium transit along the US 78 corridor and into downtown is in part related to the land patterns that evolve over time. The following highlights existing and future policy considerations the Town can take to further support TOD over time in support of advocating for expansion of the LCRT.



The Comprehensive Plan

The Town's Comprehensive Plan, updated in 2020, supports the expansion of LCRT into downtown and calls for enabling higher-density, mixed-use development within a half-mile of the proposed station areas and continuing to invest in strong bicycle and pedestrian infrastructure within the walkshed. The plan also emphasizes the need for directing growth into infill areas that are already served by infrastructure before enabling greenfield development and continued annexation. These overarching policies provide some of the foundational language to support TOD.

The Unified Development Ordinance (UDO)

While the Comprehensive Plan identifies the broad policies concerning development, transportation, and land use, the UDO provides the regulatory framework that influences the site level development in terms of form, scale, mix of uses, and the public and private sector roles in providing amenities. The Town’s UDO is Form Based, which is generally the most desirable type of regulating plan to support the creation of a walkable, higher density, mixed use urban form. The UDO includes core design principles that are in direct alignment with TOD.

Key Elements of TOD	Existing UDO
Buildings oriented to the street with minimal setbacks	X
Buildings with active ground floor uses and transparent facades along the street	X
Minimize land dedicated for parking generally; locate in areas that don’t disrupt pedestrian/bike access; utilize structured, on-street and shared parking; reduced parking minimums and maximums at 200% minimums; no minimum parking required in downtown; requirement for bike parking	X
Provision of sidewalks and street trees when not already present; minimum sidewalk widths of 5’ but 6-8’ in more urban areas	X
Street Design Guidelines from urban to rural that dictates lane widths, pedestrian and bicycle infrastructure, auto speeds, street landscaping, etc. aligned with land use and urban form context	X
Street connectivity requirements and maximum block sizes of 250-500’	X
Bicycle lanes and/or off-road multiuse trails and greenway requirements	X
Provision of bus shelters for public transit when project has 200 or more residential units or 100,000 square feet of non-residential space	
Minimum parks and open space requirements or payment in lieu	X

Additional policy considerations include:

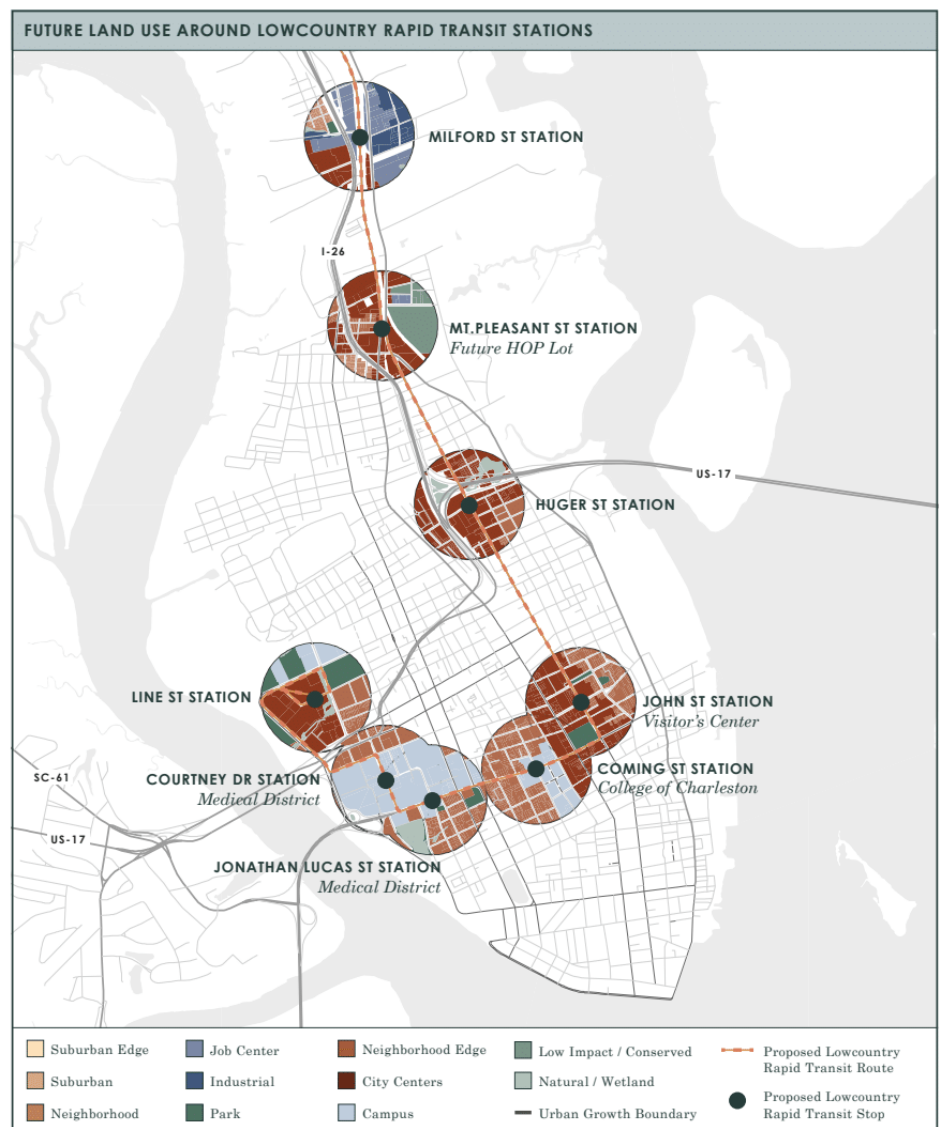
- Incorporation of Transit Oriented Development (TOD) definition, goals, and key features as part of comprehensive plan policies
- Establishment of a specific TOD zoning district or overlay that aligns with the one-quarter to one-half mile walkshed of LCRT stations
- Creating incentives for affordable and workforce housing of 20% within TOD overlay districts
- Identifying a catalyst project for downtown or the Berlin G. Myers station area to encourage a public-private partnership that results in a TOD-like development project, new attainable housing or public open space with stormwater management to further spark TOD investments within the Town.

Introduction

The LCRT will traverse the City of Charleston within the Peninsula which serves as the urban center of the region and has some of the highest existing residential and non-residential development patterns. The Peninsula also continues to see a healthy real estate market for infill housing and other uses. This part of the region already has many of the key attributes of TOD and existing City policies support continued infill development to match these patterns. Several of the station areas within the city are close to accommodating the desired population and employment targets associated with the LCRT TOD Placetypes. Therefore, the key TOD strategies of focus moving forward include focusing on the planning, design and funding of interventions to create safer and more attractive bicycling and walking conditions as documented in the LCRT Walking & Bicycling Access to Stations report (Draft, 2021) that incorporated 30% design comments received from the City of Charleston.

The Comprehensive Plan

In the summer of 2021, the City of Charleston published a draft update to its comprehensive plan, known as the City Plan. Within this plan, there are a host of policies that reinforce the fundamentals of TOD along the LCRT corridor as it relates to the higher density and mixed uses, multimodal transportation improvements, affordable housing and resiliency strategies. The areas of the city to be served by LCRT represent “the urban center of Charleston (both the city and region) and contains the widest diversity of land uses and highest residential densities of anywhere in the city. Additional language in the plan supports major equity goals and continued infill and redevelopment of underutilized and vacant properties within the station area walksheds while preserving the existing character of the surrounding business districts and neighborhoods including retaining existing residents of all income levels.



Map above from the City of Charleston's draft 2021 update to its City Plan inclusive of the proposed LCRT route and designated stations. The station areas primarily include land use designations of City Centers, Neighborhood Edge, Neighborhoods, Campuses and Industrial, which are TOD design principles and aspirations for station areas as described in the previous chapter.

The Lowline

The Lowline is a proposed major public-private project for the City of Charleston to reclaim 1.7 miles of abandoned railway track running parallel to the LCRT corridor between King and Meeting Streets from Marion Square to the Mt. Pleasant Street station. It will include a linear park and multi-use trail establishing notable green infrastructure that will provide enhanced east-west neighborhood connections and provide an alternative off-road walking and biking route through the center of the Peninsula. As of 2021, the project remains in the planning and funding stages. In addition to the linear park amenities and improved bicycle and pedestrian connections, Lowline has the potential to further catalyze infill and redevelopment, along this stretch of the LCRT corridor.

Bicycle and Pedestrian

The city has made bicycle and pedestrian safety, convenience and accommodation a major priority. The City's Transportation Plan, the People Pedal Plan and a recent downtown Parking Study all promote more non-auto use. A key goal of the People Pedal Plan is to utilize bicycles as a fundamental part of the transportation system on the Peninsula with stated goals: "to alleviate traffic congestion, 12% of all trips downtown should be made by bicycle - a big change from our current "mode share" of only 2.5%." To accomplish this goal, the plan calls for the establishment of a robust network of urban bikeways throughout the Peninsula. As part of the LCRT planning effort, detailed recommendations for specific improvement projects include notable enhancements along the LCRT route as documented in the LCRT Walking & Bicycling Access to Stations report (Draft, 2021).



Conceptual rendering of the Lowline (www.lowcountrylowline.org)

Lowline conceptual plan

Parking Strategies

The City of Charleston completed a comprehensive parking study for the Peninsula in 2018. The study identified a series of parking strategies to better manage parking and reduce land consumption for parking uses. These strategies are like best practices in parking management and TOD as shown below.

Policies for Consideration

Consolidation of Parking Management	Consider Shared Parking with Private Assets
Improve Transit Access to Peninsula	Leverage and Enhance Parking Technology
Improve Transit Services on the Peninsula	Dynamic Curb Lane Management Policies
Improve Bike/Ped Services and Facilities	Enhance Residential Parking Practices
Consider MaaS/Personal Transportation Options	Right-Size Parking Codes/Ordinances/Policies
Improve Wayfinding, Branding, and Messaging	Parking Investment Strategy
Data-Driven Policies to Support Balanced Utilization	

Excerpt from City of Charleston's 2018 downtown parking study

Mixed Use Zoning

The city has several mixed-use zoning designations that are aligned with a large portion of land area within each LCRT station. Depending on the neighborhoods and commercial areas served, the major elements of the Mixed-Use Zoning designation include the following:

- **Mixed Use, MU-1 District:** The MU-1 district is intended to permit high density residential uses along with a limited variety of neighborhood commercial uses and services in urban areas of the city.
- **Mixed Use, MU-2 District:** The MU-2 district is intended to permit high density residential uses along with a broad range of commercial uses and activities in urban areas of the city.
- **Mixed Use 1, Workforce Housing, MU-1/WH District:** The MU-1/WH district is incentive based and is intended to permit high density residential uses with a mixture of housing opportunities, along with limited neighborhood nonresidential uses and services in urban areas of the city.
- **Mixed Use 2, Workforce Housing, MU-2/WH District:** The MU-2/WH district is incentive based and is intended to permit high density residential uses with a mixture of housing opportunities, along with a broad range of nonresidential uses in urban areas of the city.
- **Upper Peninsula District, UP (east of I-26 and north of Huger Street):** Within the UP district, new development with more than 50,000 gross square feet of space shall contain at least two (2) different land use categories. Maximum densities are set at 26+ dwelling units per acre with no minimum heights, but a maximum height of four stories.

In the mixed-use districts, bonus densities, and parking reductions are offered to encourage 20% workforce housing proportional in quality and intermixed with market-rate housing. Affordability requirements must be retained for 25 years. Developers can also obtain these incentives by paying a fee in lieu of or donating land to the city for affordable housing uses.

Additional Policy Considerations

Given the Comprehensive Plan policies and Mixed-Use Zoning, additional TOD Strategies the City can consider include:

- Creating a specific TOD Overlay District for each LCRT station area covering the full one quarter to one half mile walkshed
- Encourage more Transportation Demand Management (TDM) strategies in partnership with major employers
- Implement additional housing affordability strategies, as described in the LCRT Affordable Housing Assessment & Strategies report (February 2021), and seek opportunities to maintain a 20% workforce and affordable target within station areas
- Implementing the recommendations of the City of Charleston Parking Study (2018)
- Expanding creative funding options to support desired bicycle and pedestrian infrastructure citywide and conducting more detailed urban design studies and interventions at key station locations to create the optimal conditions for safety and non-auto access to stations.
- Identifying catalysts projects to encourage a public-private partnership that results in a TOD-like development project, new attainable housing or public open space with stormwater management to further spark TOD investments. Continued coordination with the WestEdge development project at the Line Street and Hagood Avenue Station is a strong example of this approach.

TOD Strategies for Regional and State Partners

While the implementation of local land use policies for TOD are primarily the purview of local governments, entities like the BCDCOG and the South Carolina Department of Transportation (SCDOT) can also support implementation of TOD in the following ways:

Regional Affordable Housing

Recognizing the importance of continuing to preserve and produce more affordable, attainable workforce housing in the region, the BCDCOG can serve as a convener of regional stakeholders to support the advancement of housing affordability within the LCRT station areas in support of creating a minimum target of 20% permanently affordable units within each station's walkshed. Doing so will help to ensure long term implementation of equitable TOD and facilitate cross-jurisdictional knowledge sharing and continued coalition building for the strategies described in the LCRT Affordable Housing Assessment & Strategies report (February 2021).

TOD Working Group

As each local government continues to refine and enhance local policies and zoning codes to support the implementation of TOD, there may be benefit in establishing an ongoing TOD working group to share model policies, lessons learned, and other insights across jurisdictions. The BCDCOG and partners like the Urban Land Institute (ULI) could create a new knowledge network of continuing education and implementation planning support for TOD that could include biannual meetings to share local and national best practices, model codes, and other implementation mechanisms.

TOD Implementation Monitoring

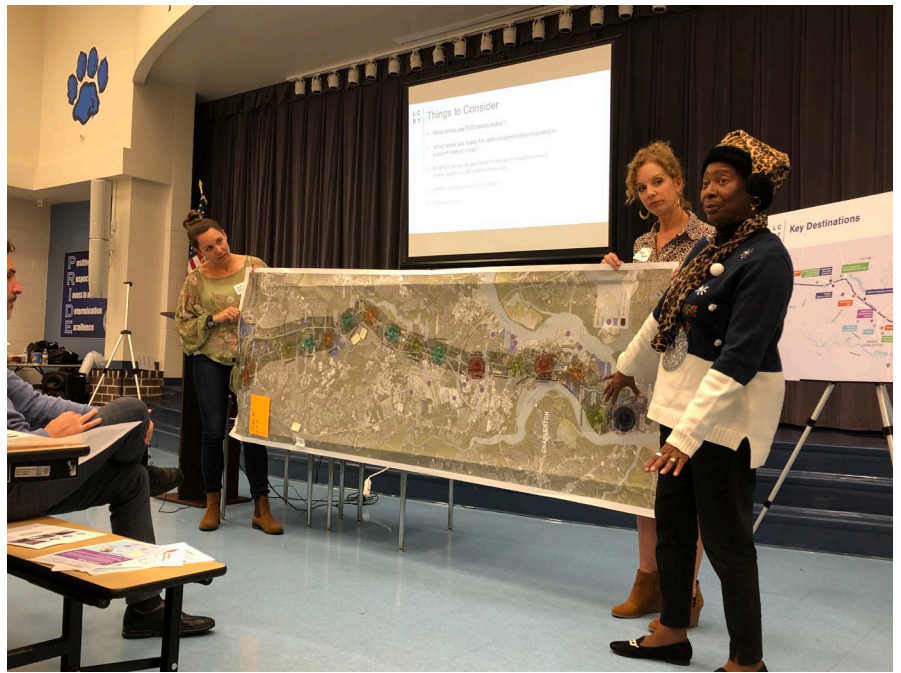
The TOD Strategy report identifies a framework for each station area to advance TOD. However, there may be benefits to quantifying the implementation of TOD annually to better track the market impacts of the LCRT investment and associated ridership improvements. Cities like Denver and Miami have both established TOD monitoring systems whereby corridor wide statistics on affordability, quantity and mix of development, ridership, and other key factors can be quantified and tracked against targets. Doing so in an illustrative, web-based format can provide insights to help identify policy modifications or new strategic needs, as well as provide the private sector development community with tangible examples of TOD success.

Multimodal Transportation Policy Innovations

As the region moves towards a transportation strategy that relies more heavily on transit and other non-auto modes of transportation and described in the region's Long Range Transportation Plan, there is an opportunity for the BCDCOG, local governments, and SCDOT to work more collaboratively in identifying funding for needed improvements and more innovative ways of measuring success of the multimodal transportation system. Transportation system performance standards that only focus on congestion (like Levels of Service) can often work counterproductive to achieving goals across modes that focus on improving accessibility, not just mobility. Additionally, a move towards supporting slower speed traffic, more transit, walking and biking may also require more innovative roadway design standards, such as Complete Streets and standards described in the National Association of City Transportation Officials (NACTO) guidance. The BCDCOG can serve in a leadership role to facilitate these discussions and identify pilot projects or other innovative solutions to advancing a more robust multimodal transportation network along the LCRT corridor over time.

**LC
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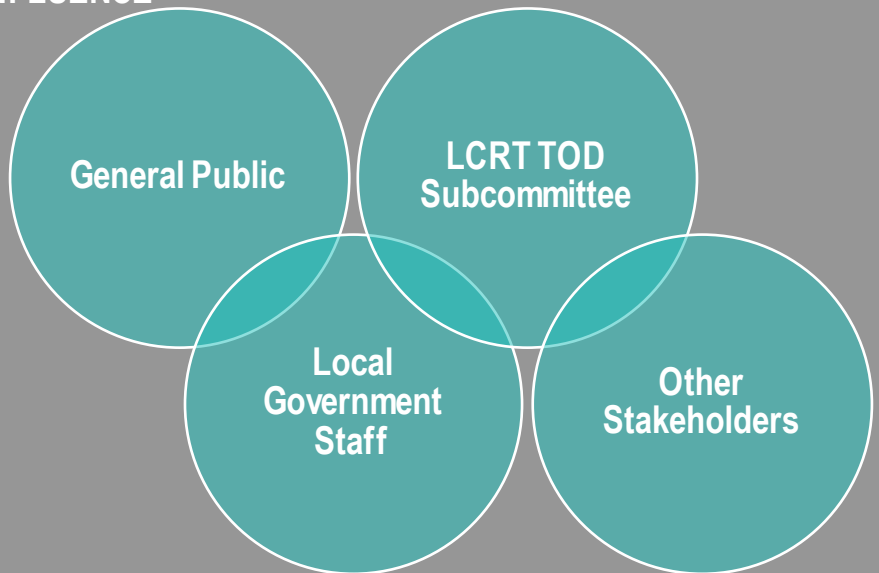
The Transit Oriented Development (TOD) Strategy Report and Policy Toolkit reflects the culmination of planning efforts from September 2019 through April 2021 inclusive of strong public engagement. Despite the schedule and technique refinements sparked by the impacts of the COVID-19 pandemic, the engagement efforts remained constant throughout the planning process. The following pages highlight the overall schedule of events, key insights gathered and demonstrate how those insights influenced the final plan recommendations. In addition to engagement efforts conducted by the study team, individual briefings and engagement events were also held by local government staff as part of standing meetings and public events.



Round 1 Public Workshop in Summerville, December 2019

ENGAGEMENT SPHERES OF INFLUENCE

Transit oriented development requires the combination of public sector policy making, private sector investments and public buy-in to support changes to existing places. The engagement strategy for the LCRT TOD Planning Study included targeted discussions with the general public in neighborhoods near station areas, local government staff representing the different jurisdictions along the LCRT route, local developers, and other key stakeholders with an interest in both the LCRT and the potential for TOD within each station area.



STUDY INFORMATION
SHARED

FEEDBACK HIGHLIGHTS

ROUND 1 ENGAGEMENT

*What is TOD?
Existing Conditions
TOD Placetypes and
Station Locations*

*TOD not market ready in all locations
Maximum of 6-12 stories for our region
Need for consistency in policies along LCRT corridor and
across jurisdictions
Preserving existing neighborhoods is key
Maintaining and locating affordable housing near transit
needs to be a priority goal*

ROUND 2 ENGAGEMENT

*TOD Opportunities
Placetype Refinements*

*Market is already producing TOD in the City of Charleston,
focus needs to be on public space and multimodal
transportation investments to support it
Major opportunity at Northwoods Mall, but will need a
master developer ‘
The five TOD Placetypes provide a reasonable framework
for additional TOD planning and policy making
While there are many acres of redevelopment identified,
smaller parcels will be harder to convert to higher density
uses
Our region is still auto-dominated, we will need to keep
parking supplies high and get creative with location and
use of space*

ROUND 3 ENGAGEMENT

*Station Area Plans
Policy
Recommendations*

*Visuals of future TOD align with local preferences for
density and intensity, but some residents will still push
back on density
Policies need to have more carrots than sticks to make
TOD attractive to developers
We must include housing affordability strategies for every
station area
Will need to have policy flexibility to support market
reluctance to density
Need stronger bicycle and pedestrian policies and
investments in station areas*

The final TOD strategies recommended at the station area, jurisdictional and corridor-wide scales reflects the insights gathered from community members at each step of the planning process. The following highlights the full listing of engagement touchpoints over the course of the two-year planning efforts.

<u>Date</u>	<u>Event</u>	<u>Participants</u>
8/26/2019	Project Kick off and bus tour	Municipal staff and other stakeholders
9/27/2019	Listening Sessions	Non-profits and other stakeholders
10/9/2019	Listening Sessions	Non-profits and other stakeholders
12/10/2019	TOD Corridor Workshop Summerville	Summerville Community
12/11/2019	TOD Corridor Workshop Summerville	North Charleston Community
12/12/2019	TOD Corridor Workshop Summerville	Charleston Community
5/14/2020	Affordability Roundtable	Municipal staff and Non-Profit Leaders
5/15/2020	Affordability Roundtable	Municipal staff and Non-Profit Leaders
5/20/2020	Affordability Roundtable	Municipal staff and Non-Profit Leaders
5/27/2020	Affordability Roundtable	Municipal staff and Non-Profit Leaders
5/28/2020	Affordability Roundtable	Municipal staff and Non-Profit Leaders
6/3/2020	TOD Subcommittee	Subcommittee Members
6/25/2020	TOD Station Area Workshop	City of North Charleston
6/26/2020	TOD Station Area Workshop	Town of Summerville
6/30/2020	TOD Station Area Workshop	City of Charleston
7/1/2020	ULI Forum	Urban Land Institute Members
9/1/2020	ULI Webinar	Urban Land Institute Members
9/16/2020	Development Opportunity Sites	City of Charleston
9/17/2020	Development Opportunity Sites	City of Charleston
9/30/2020	TOD Planning Workshop	City of North Charleston
10/5/2020	Town of Summerville Update	Town of Summerville
10/6/2020	Town of Summerville Update	Town of Summerville
10/26/2020	Elected Official Briefing	Sen. Marlon Kimpson
11/16/2020	TOD Meeting	Town of Summerville
11/20/2020	TOD Meeting	City of Charleston
12/3/2020	TOD Meeting	City of Charleston
12/17/2020	TOD Meeting	Charleston Housing Authority
12/21/2020	TOD Meeting	City of Charleston
1/19/2021	TOD Subcommittee	Subcommittee Members
2/5/2020	TOD Pre-Workshop Meeting	City of North Charleston
2/5/2020	TOD Pre-Workshop Meeting	Town of Summerville
2/10/2020	TOD Pre-Workshop Meeting	City of Charleston
2/22/2020	TOD Pre-Workshop Meeting	City of Charleston
3/22/2021	Berlin G. Myers Workshop	Station Area Representatives
3/23/2021	Remount Rd Workshop	Station Area Representatives
3/23/2021	Northwoods Mall Workshops	Station Area Representatives
4/9/2021	TOD Subcommittee	Subcommittee Members
4/13/2021	Reynolds Ave Workshop	Station Area Representatives
4/13/2021	Durant Ave Workshop	Station Area Representatives
4/19/2021	Summerville Virtual Workshop	Summerville Community
4/20/2021	North Charleston Virtual Workshop	North Charleston Community
5/27/2021	TOD Meeting	City of North Charleston
7/17/2021	Charleston Metro Chamber of Commerce TOD Panel	Charleston Metro Chamber of Commerce
8/31/2021	Bus Tour	Charleston Metro Chamber of Commerce