



LOWCOUNTRY RAPID TRANSIT

Planning for Transit Supportive Code

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Document Overview

The Lowcountry Rapid Transit (LCRT) Corridor provides potential for new development along the bus rapid transit (BRT) route. To ensure development is intentional and contributes to the greater corridor vision, this document provides background and structure for a Transit Supportive Code (TSC) that supports transit in the LCRT corridor. This code would help guide new development and protect the unique character of each station area while ensuring BRT is supported by higher density, walkable development patterns. It is intended to integrate land use and transportation planning, fostering sustainable growth and reducing car dependence.

Creating a corridor that supports transit requires a multifaceted approach. The process is guided by transit oriented development (TOD) planning and design principles and objectives applied across multiple scales including the corridor, ½ mile station areas, and core and edge zones within each station area. It requires an integration of function and form, notably organizing development patterns around stations to optimize transit ridership, walking, and biking.

Three chapters detail the process, principles, objectives, and next steps for implementing TOD along the LCRT corridor. Chapter I, **Transit Oriented Development (TOD) Principles and Objectives** and introduces the corridor defining the overarching TOD principles, planning and design objectives, and implementing steps that can help guide the development of the station areas in the LCRT corridor. The second chapter, **TOD Planning and Design Guidance**, presents important high-level TOD development and infrastructure design guidelines. Chapter III, **Transit Supportive Code (TSC)**, presents an overview of the current plans and regulations in the Lowcountry region, a relevant case study code, and an overview of TSC options, including strategies for developing a TSC, coordination and partnership opportunities, and financial considerations.

While the key points are consolidated into these three chapters, an abundance of research and findings are included in the appendices. Appendix A, **Placetype Design Guidelines and Standards**, details the Placetype goals for station areas and provides further information on the guidelines and standards within those areas. Appendix B, **Transition Considerations** covers transition and indicator strategies, then provides a station-by-station review of existing conditions, including current bicycle and pedestrian conditions and recommended improvements. Appendix C, **Framework Plan Example** uses the Dorchester Road and Reynolds Avenue station areas to demonstrate the process of framework planning. Finally, Appendix D, **Summary Of Applicable Codes**, covers the nine key codes that were used to inform and organize recommendations for LCRT.

I. TOD PRINCIPLES AND OBJECTIVES

Introduction

The LCRT project is a 21.3-mile Bus Rapid Transit (BRT) corridor that will connect North Charleston and Charleston. The project is still in the design phase and is scheduled to be operational in 2030. It will operate mostly in dedicated lanes between the Fairgrounds in unincorporated Ladson, serving North Charleston on Rivers Avenue, and connecting to the Medical District and Westedge in Downtown Charleston.

This service will cater to the current population while remaining adaptable to the region's rapid growth. It will connect communities along the corridor to key destinations, including residences, employment hubs, education, medical centers, and historic sites. Operating with 10-minute headways during peak weekday hours, the transit service will unlock new opportunities for residents and visitors alike, invigorating the corridor's economy. 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 Transit Oriented Development (TOD).

This chapter highlights the overarching TOD principles, planning and design objectives, and implementing steps that can help guide the development of the station areas in the LCRT corridor.

The corridor map on the following page provides an overview of the stations that will be served by the rapid transit, spanning from Exchange Park/Fairgrounds in unincorporated Ladson to Line St/Hagood St in Charleston.

Chapter I Overview:

1. Why TOD?
2. Planning and Design Objectives
3. Guiding Principles

Corridor Station Areas

The LRCT bus rapid transit (BRT) corridor route and station locations were determined based on a variety of factors, including regional travel demand patterns, land use and development plans, environmental impacts, engineering feasibility, funding availability and support, future growth and development patterns, and community and stakeholder input. The station areas extend ½-mile from station locations.



LCRT Project Corridor and Station Locations

Why TOD?

Transit Oriented Development (TOD)

TOD is a planning and development strategy that creates mixed-use, walkable communities centered around high-quality public transportation systems. By integrating land use and transportation planning, TOD promotes sustainable urban growth and enhances the quality of life for residents.

Maximizes Benefits:

- Integrates residential, commercial, and open spaces near transit stations.
- Enhances accessibility and fosters vibrant, sustainable communities.
- Supports a range of local and regional goals.

Increases BRT Ridership:

- Locates more people and jobs within walking distance of LCRT stations.

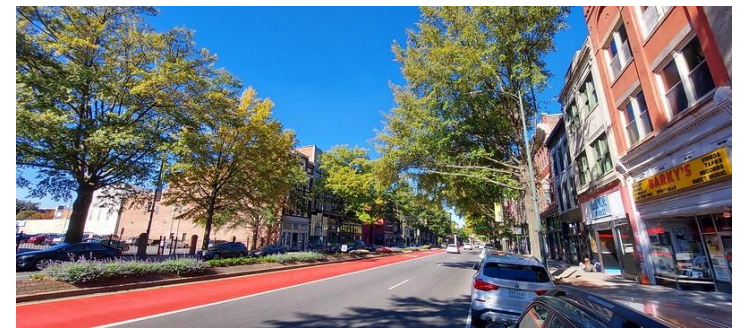
Promotes Growth Management:

- Stimulates the local economy by attracting businesses and investors, leading to job creation and increased property values close to station areas.
- Establishes communities where residents can live, work, and play without car reliance, improving access to services for those without vehicles.

Encourages Partnerships:

- Involves new ways of organizing and regulating private development.
- Emphasizes innovative approaches to planning, designing, and funding infrastructure.

Some proposed station locations, such as those on the Peninsula of Charleston and the Neck area of North Charleston, already have key TOD features. TOD patterns in additional station areas are possible with supportive land use policy and standards.



Greater Richmond Transit Company Pulse BRT
Richmond, VA

Image Credit: Ennis Davis, Modern Cities

Planning and Design Objectives

The following TOD objectives, combined with the guiding principles, ensure functional and holistic development patterns for station areas. These objectives provide a framework to guide planning and design efforts effectively.



Enable higher density development and the vertical and horizontal **mixing of land uses** to bring high concentrations of people and jobs into station areas



Manage parking to reduce land consumption with structured parking and on-street parking closest to stations and surface parking on the periphery



Create a **multimodal gridded street network** with walkable block sizes of 200' to 500'



Locate **high intensity development in close proximity to the stations**, and transition to lower building heights and densities towards the periphery





Encourage buildings that are designed for ease of pedestrian access, minimizing setbacks, and fostering vibrant public spaces nearby to promote pedestrian activity and street life.



Establish a **hierarchy of street types** that enable low speeds, high walkability and multimodal nearest the station.



Create **parks and open spaces that double as stormwater management systems** to increase development footprints and intensities.



Create a **diverse supply of higher density housing** options with affordable housing targets in each station area



Build **bicycle and pedestrian infrastructure**



Guiding Principles

The following TOD principles are intended to provide vision for the planning and design efforts, including the development of a Transit Supportive Code (TSC), that will guide development in the station areas along the 21.3-mile LCRT corridor. The TSC is intended to integrate land use and transportation planning, following these guiding principles and balancing top-down guidance from municipalities and bottom-up considerations of developers.

Sustainable

To ensure that the corridor development aligns with TOD principles, the TSC outlined in Chapter III should establish a long-term vision that guides sustainable growth for the region, addressing today's needs while safeguarding the needs of future generations.

Equitable

For existing communities along the corridor to thrive, the TSC should recognize and address the needs of communities by discouraging displacement, providing adequate affordable housing, supportive community services, and low-cost access to jobs, retail, and services.

Authentic

For sustained impact and community relevance, the TSC should be crafted to harmonize with the present socioeconomic and architectural traits of the region and the communities along the corridor.

Holistic

To create functional and healthy systems and development continuity along the corridor, the TSC should recognize and connect environmental and transportation systems across all scales (regional, corridor, community, station area, block, and lot).

Functional

To encourage transit ridership, optimize access across all modes, and support economic development across the corridor, the TSC should align with designated station area placetypes that guide density, mixed-use, population, and employment targets for each station area.

II. TOD PLANNING AND DESIGN GUIDANCE

Introduction

TOD can support premium transit by organizing development around BRT stations in ways that promote pedestrian access, walkability, and BRT system ridership. The TSC can be an important tool to organize development in this manner, aligning with the region's goals of encouraging efficient growth patterns. TOD will allocate a portion of the region's growth and expansion into dense, mixed-use, and walkable centers, attracting businesses and services into the corridor while providing a variety of housing opportunities for existing and future households.

While some of the LCRT station areas in the corridor exhibit existing development patterns that align with TOD principles and could easily evolve, others will require varying levels of transformation, as detailed in Appendix B.

This chapter presents important high-level TOD development and infrastructure design guidelines, including:

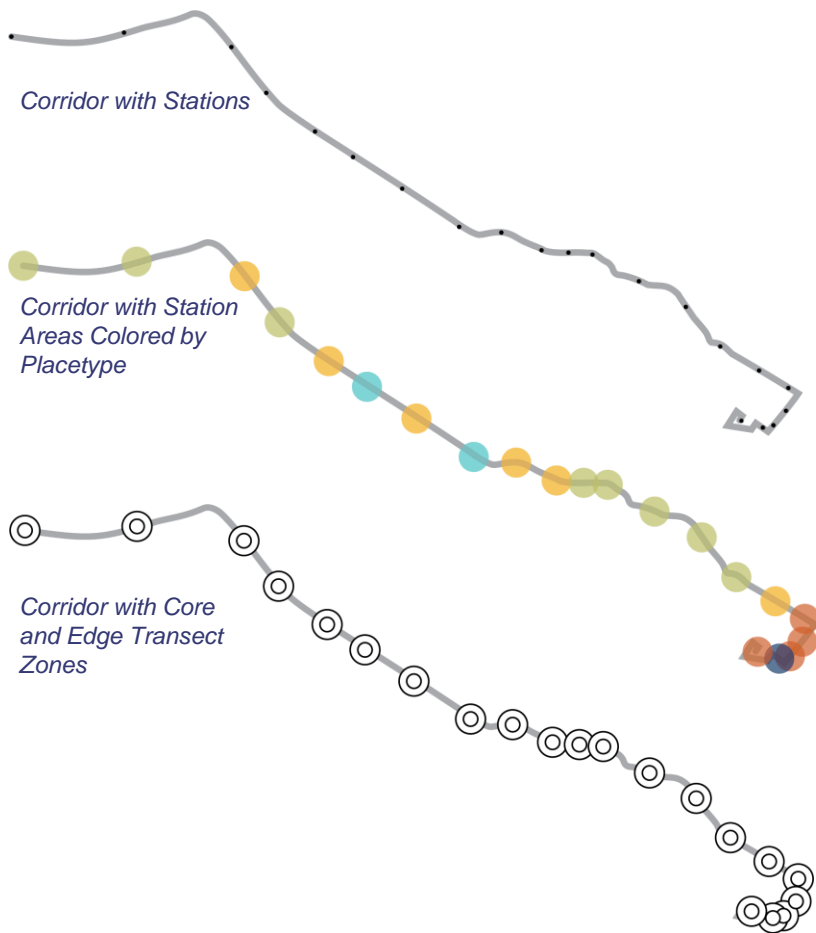
- Incorporating context, notably environmental and transportation systems and market dynamics into plans and designs
- TOD placetype designations for each station area along the LCRT corridor
- The transect zone organization (core zone / edge zone) of station areas
- Key TOD planning and design elements for station area buildings and infrastructure

Chapter II Overview:

1. TOD Planning and Design Scales
2. Market Context
3. TOD Placetypes
4. Station Area Planning Guidelines
5. Station Area Use and Intensity Guidelines
6. Station Area Infrastructure Guidelines

1. TOD Planning and Design Scales

Elements of the model TSC reference different geographic scales, starting with the LCRT Corridor. Stations are planned along the corridor and the larger ½-mile area around each station is referred to as the station area. Each station area has a designated placetype which sets the vision for the area and provides guidance for the associated density and intensity of development. The form of development is defined further by transect zone classifications.



Corridor

Known as the “Lowcountry Rapid Transit (LCRT) Corridor,” is the 21.3-mile long route that the bus rapid transit will traverse. Along the corridor there will be 20 stations, where passengers will have access to the LCRT network.

TOD Station Areas and Placetypes

The area within walking distance of a station, typically a ½-mile radius from the station in all directions, is known as the “station area”. From Phase 1, each station area received a designated placetype, which facilitates development goals consistent with neighborhood contexts and priorities.

Core and Edge Transect Zones

Each placetype is broken down further to core and edge transect zone. These transects guide the regulations for each placetype, applying design guidelines appropriately that support TOD form and function.

2. Market Context

To understand the appropriate degree of regulation for different stations along the corridor, it is important to understand the type of development the market will support in each submarket. Codes with strict regulations, such as minimum density requirements or specific parking strategies, may not be suitable for every station in the corridor. Regulations should be refined to account for the submarket context to ensure optimal development conditions. However, plans and codes should recognize short-term market demand and the possibilities of long-term demand. To this end, plans and designs should be flexible and open ended, allowing for easy transformations, such as converting a surface parking lot to a garage when market conditions demand additional facilities.

The project team conducted a short- and long-term market assessment for the LCRT corridor that can be used as reference. The analysis consisted of five core components including: regional context, demand, supply, interviews and case study research. The combined output of the analysis resulted in a development program with specific projections for the square foot or unit increase by land use (residential, retail, office, hotel) from 2024 – 2045.

Five submarkets overlap within the corridor:

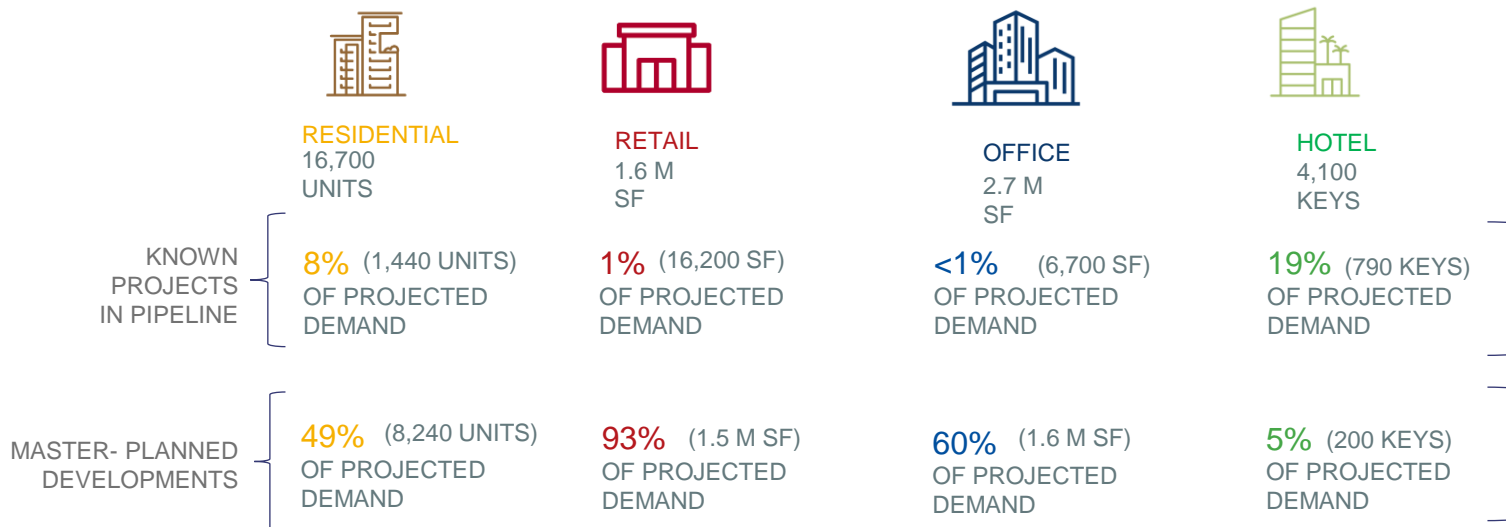
- The Northern Segment
- Upper North Charleston
- Lower North Charleston
- The Neck
- The Peninsula

Five components of the market demand methodology:

- Regional Context
- Demand
- Supply
- Interviews
- Case Study Research

In summary, the market analysis found that the five submarkets in the corridor have different goals and are at different stages progressing towards TOD readiness. The graphic below shows the projected corridor market demand between 2024 - 2045. Most of the projects in the known development pipeline are on the Peninsula and the Neck. However, there is also significant potential for master-planned development throughout the LCRT corridor to absorb substantial shares of retail, office, and residential demand. This known pipeline and estimated demand supports the need for a TSC along the corridor to help guide and shape the coming development. More detailed information regarding market demand for the real estate typologies (office, retail, and hospitality) along the five submarkets in the corridor can be found in the Market Demand Report available from BCDCOG.

Projected Corridor Market Demand (2024 – 2045)



3. TOD Placetypes

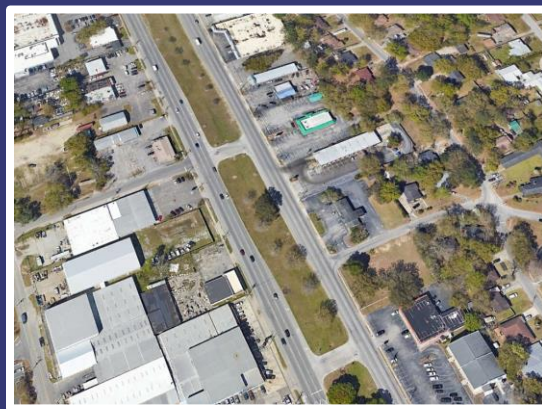
The TOD placetypes emerged from public engagement and an analysis of existing conditions, market considerations and TOD best practices. They have been calibrated to support ridership targets by defining station area development intensities and jobs and housing balances.

The three images below illustrate the range of existing community character types that served as precedent inspiration for the LCRT TOD placetypes shown on the following page. Details on the designs of each type are provided in Appendix A.



**Downtown
Neighborhood Center**

Downtown Charleston



**Employment
Center**

Near Mall Drive



**Neighborhood
Center**

Park Circle in N. Charleston

Placetype Targets

The placetype targets listed below represent a range of outcomes (fully built out conditions) for station areas that vary based on existing conditions and market realities.



Downtown Employment Center

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

Courtenay Dr /
Doughty St



Employment Center

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

Mall Dr
Remount Rd
Mabeline Rd



Downtown Neighborhood Center

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

Line St / Hagood Ave
Lee St
John St Visitor Center
Coming St
Jonathan Lucas St



Town Center

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

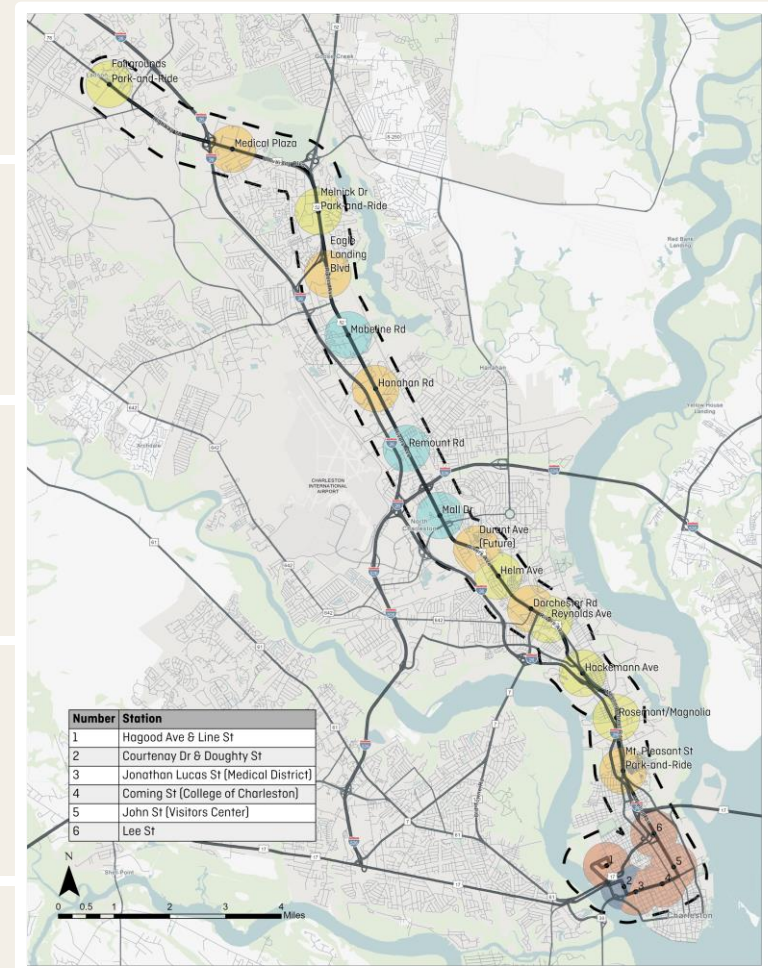
Medical Plaza Dr
Eagle Landing Blvd
Hanahan Rd
Durant Ave (Future)
Dorchester Rd
Mt Pleasant St



Neighborhood Center

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

Rosemont / Magnolia
Hackemann Ave
Reynolds Ave
Helm Ave
Melnick Dr
Exchange Park / Fairgrounds



LCRT Corridor with TOD Placetypes

4. Station Area Planning Guidelines

Design objectives and guidelines should build towards a functional and cohesive station area development pattern. The purpose of the following planning guidelines is to help build cohesion across the various design and implementation efforts. These planning guidelines should be used to develop the TSC. They should also guide the development of station area framework plans.



Market Conditions and Transitions Towards Placetype Targets

Each station area should be planned to accommodate its target for jobs and households. Market demand influences both the intensity and mix of development at any given time. It also impacts the demand for supportive infrastructure, notably parking. Flexible design can accommodate short-term market demand while allowing for easy transitions arising from changing market demand. For example, surface parking lots and surrounding buildings can be designed to allow for an easy transition of the lot into a parking garage and/or building.

Corridor Travel Flow

Transit

Increasing the development intensity near a transit station supports transit ridership (the primary functional expectation) by increasing the number of people who can easily walk to the stations. Station area transect zones influence the multimodal network and infrastructure design. Information on transect design follows, with details provided in Appendix B.

Autos

Even with a shift to transit ridership and walking and biking demand, most people will travel through the corridor by car, which means high traffic volumes on arterials stretching along and across the corridor. High speeds make walking and bike travel unsafe and uncomfortable. Complete Street design treatment can slow traffic and separate pedestrians and cyclists from cars to increase safety and ease discomfort, but they should be accompanied by station area networks that divert walkers and bikers from arterials. Existing and/or new pedestrian-friendly local streets, perpendicular to the LCRT arterial corridor, can divert pedestrians and cyclists away from the arterial and onto the station area street grid.

Station Area Travel Flow

Local street grids define clear and efficient walking paths in station areas that not only promote walk access to transit stations, but to destinations within station areas. Block sizes in the core zone should be around 250 by 500 feet. Blocks can be larger and less uniform in edge zones. They can be up to 600 by 600 feet to accommodate special uses, such as Medical University of South Carolina (MUSC) in the Jonathan Lucas St station area. In many station areas outside the City of Charleston, street grids will need to be created. Parcel sizes and configurations will influence the design and development of local street grids. To the extent possible, new streets should follow parcel boundaries to minimize impacts to property owners. New streets can bisect larger parcels (five acres or more) to form blocks within those parcels. For reference, a 250 by 500-foot block can easily be created within a 3-acre parcel.

Parking Demand and Access

The number of auto trips will remain high in the short-term, and parking requirements should reflect that reality. The portion of corridor travel happening by car will need to be accommodated with parking. This can either be on local streets or in off-street parking garages and surface lots. Parking demand should be continually monitored, and requirements adjusted, as more travelers shift to non-auto travel. To accommodate parking demand, on-street parking should be allowed on all local streets. It may also be allowed on arterials in the core zone. Depending on surrounding uses, even on a tightly gridded street network on-street parking can only accommodate between 10 to 20 percent of parking demand. To the extent possible, surface parking lots should be discouraged as a permanent stand alone use, except where they are set up to transition to structured parking when demand for such facilities exist. Parking structures should be on the lower floors of buildings or wrapped by buildings. Shared parking should be encouraged and possibly incentivized, with adequate off-site parking available within 500 feet of a building (a block's length). Surface lot exceptions can be made if the design of the parking lot and surrounding buildings allow for easy transformation into either a parking garage, a building, or both. Surface parking should be allowed for parcels located on arterials in the edge zone.

Affordable Housing

Successful TOD means an increase in demand for the land surrounding transit which results in a greater rent premium and an increase in housing costs. Proactive planning within the LCRT corridor can address housing affordability pressures with the goal of ensuring that those most in need of transit can benefit from transit proximity in the long-term. Details on housing affordability strategies can be found in the Housing Affordability Briefing Book obtained from the BCDCOG.






Stormwater

Development intensities envisioned by TOD can present challenges to managing stormwater runoff. To the extent possible, on-site retention and treatment should not be allowed on individual parcels within the station area, particularly those in the core zone. Water will need to be conveyed to shared retention facilities in the fringe areas via a combination of improvements, including street and open space treatments that can capture and treat most rainfalls and underground pipes and vaults for intense rainfalls.

Open Space and Parks

Increased development densities should be balanced with easy access to open spaces and parks. Open spaces should be reachable throughout the station area, ideally no more than a block from any station. Parks and plazas should be smaller in core zones (no larger than half of a 250 by 500-foot block) and larger in edge zones (up to four blocks in size). These open spaces should reflect their surroundings, combining programmed, active areas with more natural, serene environments. Whenever possible, they should enhance the surrounding natural systems, such as capturing additional water flow or daylighting paved drainage systems to transform into attractive and connected open space network.

This redesign of Northwoods Mall applied these planning guidelines to produce a potential reimaged area that takes a comprehensive approach to planning and design efforts.

	Employment Mixed Use
	Commercial Mixed Use
	Multi-family Mixed Use
	Single Family Residential
	Structured Parking



Northwoods Mall Redesign, Renaissance Planning

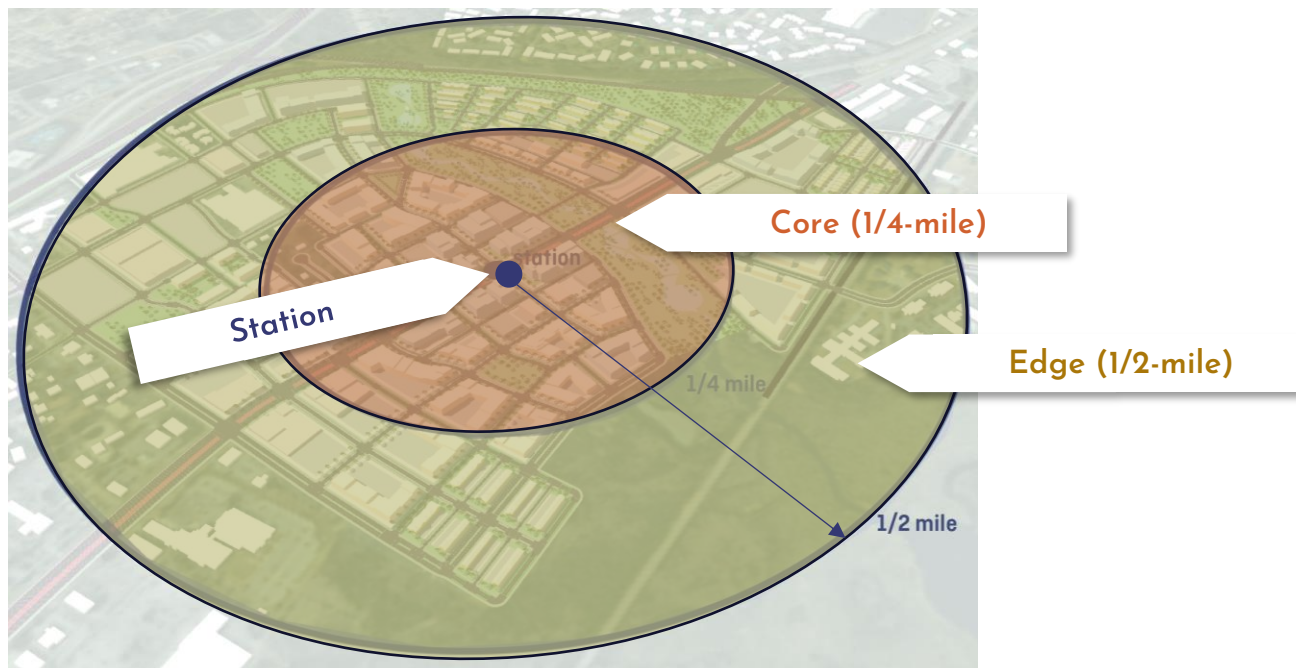
5. Station Area Use and Intensity Guidelines

Station Area Transect Zones

Station area use and intensity should increase closer to the station area with noticeable intensification in the core zone, ¼ mile from the station area. The core and edge zones help organize development and infrastructure intensity within station areas, with the highest development densities occurring within a ¼-mile of the station (the core zone) and dropping off in the second ½-mile (edge zone). As noted earlier, development intensities also vary by TOD place types.

The TSC recommendations in this document focus on two transect zones:

1. The **core zone** within a ¼ mile of the station
2. The **edge zone** lies beyond the core zone and within a ½ mile of the station.



Example Draft Transect Boundaries for 1/4-, and 1/2-Mile Distances Around a Station

Intensity Guidelines

Design guidelines for station area building intensities and mixes, lot configurations, and building massing and orientation are presented below. The goal is to locate much of the station area's development and jobs within the core zone next to the station to optimize walk access and egress from stations. This development intensity should gradually taper from the core to the edge area and beyond. The following guidelines apply across all TOD placetypes.

Building Intensity

Around half (between 40 to 60 percent) of the station area's building area should be in the core to accommodate the targeted jobs and dwelling units. Because the core zone covers one quarter of the total station area, building densities in the core zone will be 2.5 to 3 times higher than those in the edge zone. Floor area ratios (FARs) in the core zone will vary by TOD place type. The highest FARs, (over 1.0) will be in the Employment Center placetype station areas, The lowest FARs (around 0.25 to 0.75) will be in the Neighborhood Center placetype station areas.

Development Mix

Between 50 to 80 percent of the targeted jobs should be in the core zone, conversely 20 to 50 percent of the jobs should be in the edge zone. For dwelling units, between 20 and 50 percent should be in the core zone, and 50 to 80 percent in the edge zone.

Parking

Parking requirements should average around 1 space per 1,000 square feet in the core zone and 1.5 spaces per 1,000 square feet in the edge zone. Additional parking strategies and details can be found in Appendix A.

6. Station Area Infrastructure Guidelines

Well designed infrastructure can help organize and intensify station area development. Key design guidelines for station area street networks, parking, parks and open spaces, and stormwater retention and treatment are listed below by core and edge zones. The guidelines apply across all place types. Additional details can be found in Appendix A.

Core Zone

(within a ¼ mile of the station)

Street Networks:

- Block size – 250 by 500-foot average, with maximum lengths of 600 by 600 feet for unique but compatible development, such as the MUSC in the Jonathan Lucas St station area.
- Number of lanes and posted speeds – no more than two lanes except for the BRT arterial and other existing arterials in the core area. Maximum posted speeds of 35 miles per hour for the BRT and existing arterials, 25 miles per hour for all other streets.
- Pedestrian treatments – sidewalks on both sides of all streets, with additional space for street furniture and outdoor dining allowable along local streets. Curb extensions with streets accommodating on-street parking and pedestrian priorities at traffic signals.
- Bicycle treatments – bike paths on both sides of the BRT thoroughfare and arterials. Bike paths on local streets.
- Shared ride stopping / delivery treatments – not allowed on the BRT arterial.

Edge Zone

(beyond the ¼ mile core zone and within ½ mile of the station)

Street Networks:

- Block size – up to 600 by 600 feet, with larger sizes only for unique developments.
- Number of lanes and posted speeds – no more than two lanes except for the BRT arterial and other existing arterials in the core area. Maximum posted speeds of 35 miles per hour for the BRT arterial and other existing arterials, 25 miles per hour for all other streets.
- Pedestrian treatments – sidewalks on both sides of all streets, with additional space for street furniture and outdoor dining allowable. Curb extensions and pedestrian priorities at traffic signals.
- Bicycle treatments – bike paths required on both sides on all streets.
- Shared ride / delivery treatments allowed on all streets.

Core Zone *(continued)*

(within a ¼ mile of the station)

Parking:

- On-street parking required on all local streets, permitted but not required on BRT arterial and existing arterials.
- Number of off-street spaces based on parking demand requirements (see key development guidelines). Structured parking garages should be placed within buildings, wrapped by buildings, or in stand alone garages at the periphery of the core zone. Retail and / or services should be required on the first floor of garages between entrances and exits.
- Surface parking allowed but must be designed to transition to structured parking or buildings over time as the market demands.

Parks and Civic Spaces:

- Small passive parks (less than a quarter of a block) distributed across the zone (roughly one park per four blocks). Larger public spaces, such as plazas, are allowed adjacent to the station.

Stormwater:

- Underground stormwater retention required for major storm events, with water either stored in vaults below the core zone or piped to surface retention ponds in the edge zone or beyond.
- On street retention and treatment allowed with proper landscaping.
- Surface retention allowed but designed to transition to underground retention.

Edge Zone *(continued)*

(beyond the ¼ mile core zone and within ½ mile of the station)

Parking:

- On-street parking permitted but not required on BRT arterial and existing arterials, permitted on all other streets.
- Quantity of off-street spaces based on parking demand requirements (see key development guidelines). Structured parking garages either within buildings, wrapped by buildings, or in stand-alone garages. Retail and / or services are located on the first floor of garages between garage entrances and exits.
- Surface parking allowed, either wrapped by buildings or behind buildings. Surface lots must have adequate landscaping and lighting.

Parks and Civic Spaces:

- Small to medium sized passive and recreational parks (up to a full block) distributed across the zone.

Stormwater:

- Common underground or surface stormwater retention areas that store water transmitted from the core zone or from adjacent edge zone blocks.
- Surface retention designed to either transition to underground retention or as a permanent public open space with landscaping.
- On-street retention and treatment are allowed with proper landscaping.

III. TRANSIT SUPPORTIVE CODE (TSC)

Introduction

Regulating TOD requires a different approach to traditional land development regulations for two main reasons – first, the focus of TOD should be on the form of development not land uses and second, the focus should be on developing infrastructure at the station area not the site level.

A Transit Supportive Code (TSC) is intended to integrate land use and transportation planning, fostering sustainable growth and reducing vehicle dependence. Its use will specifically regulate planning and development that occurs within the LCRT corridor to encourage and facilitate the use of the LCRT system. This code should follow the TOD principles, design objectives, and design considerations and guidelines presented in the last chapter and the detailed design guidelines provided in the appendices. TSC should find the right balance between top-down guidance administered by localities and bottom-up considerations of developers, balancing design details with administrative simplicity. Finally, the TSC should be consistent and predictable for reviewers and developers.

This chapter presents an overview of the current plans and regulation in the LCRT corridor, a summary of other FBC codes in the country, an overview of TSC options, and implementation steps for developing a TSC. Financial considerations are also discussed briefly, with a focus on identifying and securing funding opportunities to support TOD initiatives. The next steps include coordination and partnership opportunities, emphasizing the importance of collaboration among various stakeholders to achieve the desired TOD outcomes.

Chapter III Overview:

1. Comparing Approaches
2. FBC Case Study
3. TSC Process
4. Example TSC Outline
5. TSC Implementation

1. Comparing Approaches

The project team reviewed TOD related and other Form-Based Codes (FBCs) developed by over 50 jurisdictions around the country. There are similarities among the codes yet there are differences attributable to differing development, political, and administrative contexts.

FBC Similarities

- A definition of the purpose and intent of the FBC
- The creation of a FBC regulating plan to provide clarity on standards for each character area
- A focus on building massing and design within the overlay zone rather than land uses
- The application of transects, whether by zones within the overlay area or by blocks
- A focus on street and parking design and reduced parking requirements

FBC Differences

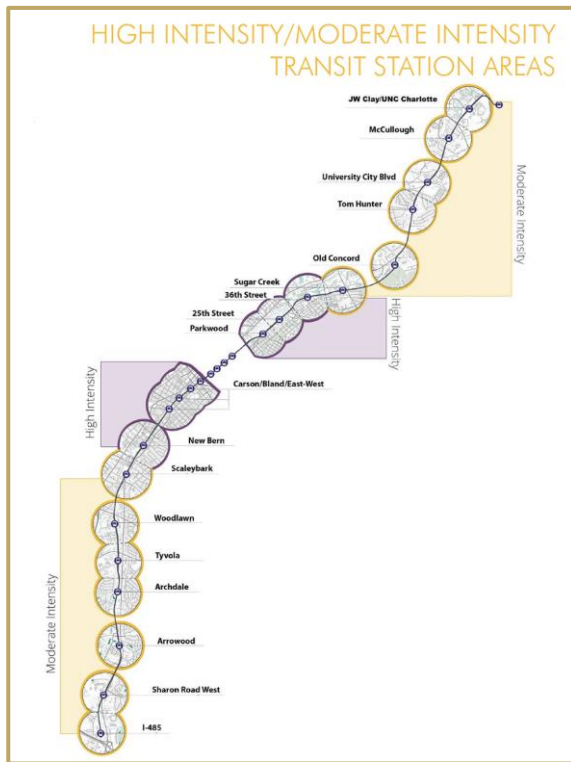
- How TOD concepts and guidelines are incorporated
- Processes and integration with existing code
- Design details and areas of special focus

Most Applicable FBCs

While over 50 FBCs were reviewed, nine were selected as the most applicable precedents for the LCRT area. The nine locations are included below and Appendix D provides an overview and links to these codes. To aid in understanding the full potential of TSC, Charlotte, NC is used as a case study in this chapter. The City of Charlotte's FBC was selected because it focuses on TOD, includes TOD types similar to those defined for LCRT, is comparatively simple to administer, and has relatively simple design guidelines and requirements.

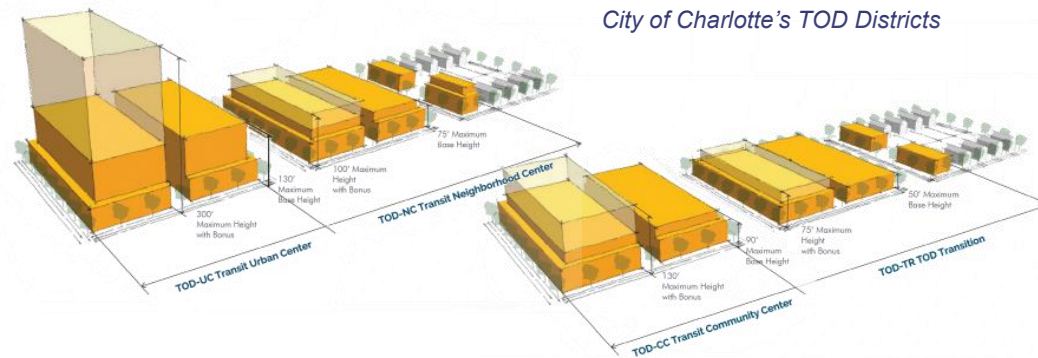


2. FBC Case Study: Charlotte, NC



City of Charlotte's Transit Station Areas

The City of Charlotte in North Carolina first applied TOD Districts in 2014. Five years later in 2019, the Charlotte City Council approved four new TOD zoning districts. These districts aim to promote the development of moderate to high-intensity, mixed-use neighborhoods near rapid transit stations and streetcar stops. These TOD districts are similar to the LCRT Placetypes (TOD-UC: Transit Urban Center, TOD-NC: Transit Neighborhood Center, TOD-CC: Transit Community Center, TOD-TR: Transit Transition) and is a single overlay that defines specific development and planning strategies, such as mix of uses, design criteria, road classifications, etc.



The Code defines the rezoning process, applicability and exceptions. It also lists by-right uses, conditional use requirements, and accessory uses. Development standards are also covered and include:

- Minimum setback
- Minimum side and rear yards
- Maximum height
- Minimum residential density
- Floor area ratio (FAR)
- Parking standards
- Loading standards
- Screening and buffer standards
- Connectivity and circulation standards
- Urban open spaces

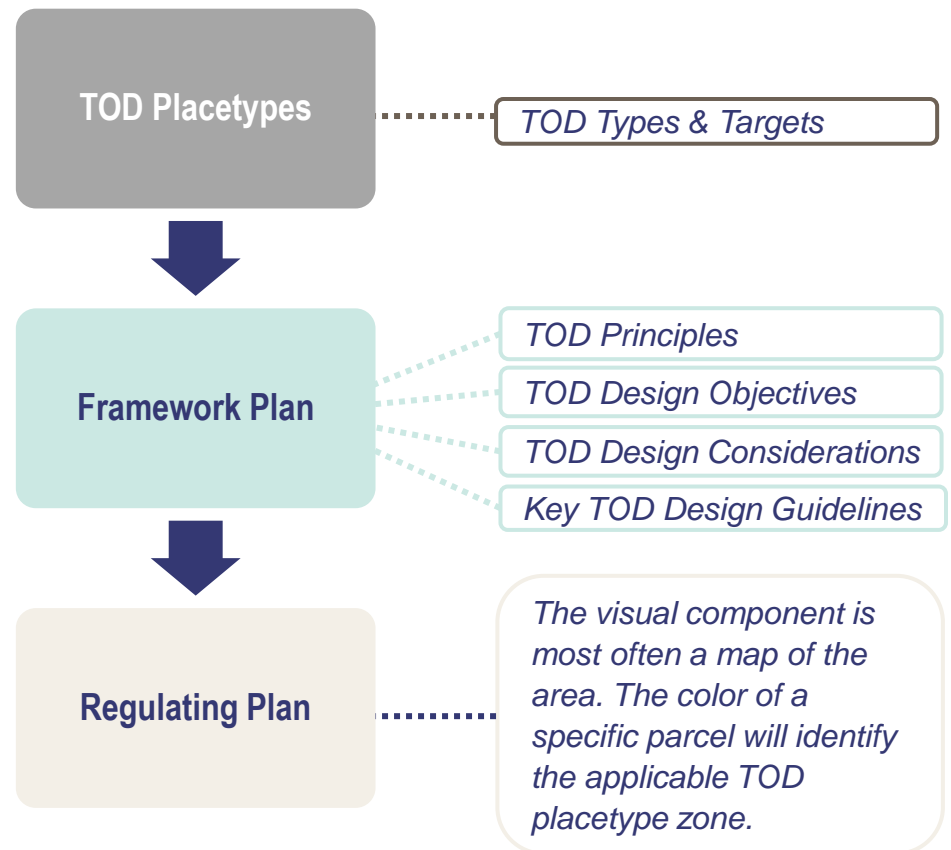
The following section in Charlotte's Code defines urban design standards for street walls, base of high-rise buildings, top of buildings, building entrances, structured parking, canopies, signs, and streetscapes. The final section defines the administrative approval process.

3. TSC Process

The first step in the process of developing a TSC for the LCRT corridor was completed in the development of TOD placetypes and their associated targets. These placetypes serve as the foundation for subsequent station area framework planning endeavors, or can be used as the foundation of a regulating plan.

Completed **station area framework plans** provide a vision for station areas that need a guide for an improved street grid, parking, and other major infrastructure, and for development densities across the station area. They also provide developers with a shared vision for public and private development. These efforts should involve engagement with the public, planning commission, developers and other decision-makers. The emphasis of a framework plan for each station area will vary depending on the designated placetype and the existing building forms and development pattern. Appendix C illustrates an example framework plan.

A **regulating plan** consists of regulations that outline the design and programming parameters for development. These regulations are specified within the boundaries of the Station Area, as well as the core and edge transect zones. Developers and property owners can use the regulating plan map to identify the set of standards that will apply to their parcel. For parcels larger than 2-acres, additional regulations can apply to ensure more predictable urban, and ultimately transit supportive, form. Given the length of the LCRT corridor and the large number of station areas, it is possible to implement a TSC and develop a regulating plan before detailed framework planning efforts have been completed for the entire corridor.



Transit Supportive Code Process

4. Example TSC Outline

The following presents details of a potential outline and organization of a TSC for a municipality in the LCRT corridor. Further detail that can be used in the development of a TSC can be found in Appendices A and B. The example outline includes six elements that are essential to building a code that supports the goals of the LCRT corridor.

All elements of the code are organized by placetype and their core (1/4 mile) and edge (1/2 mile) boundaries. Within this initial section, the general intent and character for each of the placetype core and edge boundaries should be defined. This can also include a description of the desired building heights, uses, and mix of use requirements

Station Area Target Placetypes:



Station Area Transect Zones:



TSC Elements:

- Overlay and Context Zone Boundaries
- Regulating Plan
- Public Space Standards
- Frontage Type Standards
- Site Design Standards
- Building Type Standards

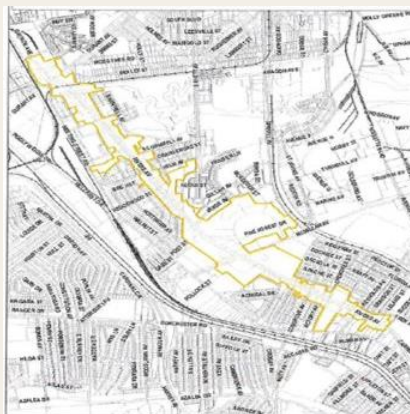
The regulating plan will delineate where standards apply which ultimately relate to the success of the transit line. For the LCRT corridor, there will be different regulations that apply to the core and edge of each station area and to each placetype. Developers can use the regulating plan map to identify the set of standards that will apply to their parcel. For parcels larger than 2-acres, additional regulations can apply to ensure more predictable urban, and ultimately transit supportive form.

5. TSC Implementation

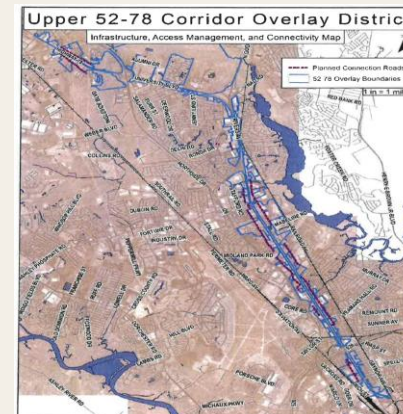
There is a range of development patterns along the LCRT corridor, presenting both challenges and opportunities for developing and implementing TOD regulations. Most of the station areas in the City of Charleston already have TOD patterns. Station areas in North Charleston between Charleston and I-526 have TOD elements, including gridded streets, smaller block sizes, and compact and mixed-use development that can make the transition into TOD relatively straightforward. Station areas north of I-526 have suburban development patterns and will require significant transformations.

There are differences in existing plans and zoning regulations. Charleston's comprehensive plan and development regulations are tailored to its existing development patterns, with a zoning code update beginning in the Spring of 2023. North Charleston adopted a TOD overlay, but improvements are needed to ensure future station area development and infrastructure improvements align with TOD principles and design objectives.

Charleston County, North Charleston, and Charleston's comprehensive plans each establish a development policy framework for TOD in the LCRT corridor, though they do so in different ways. These frameworks should be reviewed and updated to align with each other and with the TOD principles and objectives outlined in this document. Additionally, each jurisdiction has its own zoning codes that regulate land development along the corridor, with varying approaches to TOD. More detailed planning and design guidelines presented in the following chapters and Appendices are available for reference during the updates.



Rivers Avenue OD-South



Rivers Avenue / University Blvd OD-Upper

Future Land Use Map, Charleston



- Rural
- Suburban Edge
- Suburban
- Neighborhood
- Neighborhood Edge
- City Center
- Campus
- Job Center
- Industrial
- Park
- Low Impact
- Natural/Wetland
- Future Planning Area
- Water

Develop and Adopt TCS

Developing and adopting a TSC begins with an assessment of existing zoning codes relative to what is required by a TSC. Each jurisdiction in the corridor has some level of TOD supportive policies and regulations. Those policies were compared against the principles and guidelines presented in this document to determine what additional enhancements are needed to existing plans and regulations. Key questions from this initial assessment were shared with each municipality to determine the desire for enhanced and altered components of the code. The development of the TSC will require engagement and review by staff, planning commissions, and the public. There will be iterations of revisions based on feedback from the reviews. It is recommended that details of how the code will be administered, including staffing and training needs, be vetted during the process. The TSC will ultimately need to be approved by the planning commission.

Add TOD District Section to Existing Codes



Within the next three years

At a minimum, a TOD placetype district, with edge and core transect zones, (similar to the Charlotte code) should be added to existing codes. The section should define the purpose and intent of the district, the overlay boundaries for each station area, design standards for the station areas, and administrative procedures. It is recommended that the section include the TOD placetypes presented in this report and address the need for and use of framework plans and regulating plans.

Future station area planning and design, such as those to be developed by the BCDCOG in Phase 3, should be done as framework plans following the steps and focusing on the process outlined in Chapter III, and the standards and example presented in Appendices A - C. Those completed framework plans can then be incorporated into the TSC.

Expand Staff Capacity

Expand Staff Capacity to Develop and Administer TSC



Within the next five years

Developing and administering the TSC will require training and will likely require the addition of new staff. If more detailed framework planning is desired, consultants can provide additional capacity and expertise. The specific staffing and expertise needs should be defined during the development of the TSC. Funding new staff or consultant assistance would require additional funding. This could come from new sources, such as station area tax increment financing (TIF) programs or outside sources, such as the Federal Transportation Administration's TOD grant program that BCDCOG has used effectively. Jurisdictions may consider developing a "TOD Advocate" role to champion TOD related policies, projects, and implementation within and among different municipal departments and external stakeholders. This position would also have the responsibility to coordinate and direct departmental activities related to station area development and investment, and to liaise with property owners and potential developers.

Ongoing TSC Training



Within the next five years

Providing on going training for staff and elected officials can support the development and implementation of TSC and other TOD initiatives. The information and resources provided in the document are available, as are additional sources such as trainings provided through the Federal Transit Authority (FTA) and the Form-Based Code Institute.

On-going TOD Transformation

The transformation from existing development patterns to TOD supportive patterns of many of the station areas will require continual coordination, planning and investments. Guided by the TSC, developers will be responsible for planning, designing, and investing in station area buildings and infrastructure. Given the need to substantially redevelop infrastructure, such as configuring street grids and underground stormwater systems, localities will likely need to coordinate with developers in designing and funding infrastructure. While surface parking is traditionally funded solely by developers, parking structures may be a joint planning and financing endeavor between localities and developers. On-going public / private planning can help optimally balance station area design, improvement needs, and funding responsibilities. Framework plans can be mechanism for such coordination.

Develop Framework Plans



Ongoing, starting immediately

Station area framework plans can support TSC by adapting the TOD design principles, objectives, and guidelines to the unique context of each station area. Additional funding should be identified and allocated to the creation of additional station area framework plans. These plans are the mechanisms for applying the planning guidelines presented in Chapter II to help ensure overall station area functionality and cohesion including:

- Current private market conditions and transitions towards station area targets
- Corridor auto and transit flow
- Station area travel flow (walking, biking, cars)
- Parking supply and demand
- Station area water management
- Open space and recreation networks

Continue Coordination and Partnerships



Ongoing, starting immediately

Through the process of developing these guidelines and completing an example framework plan, the project team consulted with the TOD Advisory Committee, municipal staff, local developers, and surrounding communities to understand the interest in and vision for framework plans for each station area. In 2023 and 2024, a series of focus group meetings with 2 to 4 developers each, a larger developer roundtable, and community workshops were conducted to facilitate ongoing discussion and coordination. This collaboration is essential for the successful transformation of station areas throughout the LCRT corridor.

The formal establishment of Strategic TOD Action teams for each station area, or group of station areas, would enable this continued collaboration around TOD specifically. These action teams could help to catalyze partnerships between government entities, quasi-governmental organizations, banks, non-profits and other foundations. The exploration of emerging partnerships, and the coordination between existing governmental departments, is necessary to pursue the funding and planning strategies necessary to address the region's challenges through TOD and high-quality transit. Teams could meet on a regular basis, or as needed, to address development and infrastructure projects in station areas and provide support to an appointed TOD staff person.

Develop Corridor Financing Plans



Starting immediately, ongoing

The development of the TSC and framework plans should identify station area private and public investment needs. This information should be used to develop station area funding strategies, which will differ between station areas. While framework plans can provide detail regarding improvement needs and costs, each jurisdiction should develop an overall financing plan for its collection of station areas. The plan should identify appropriate financing mechanisms for station areas, which could include tax increment financing (TIF), special districts, incentives, and creative public-private partnerships. Plans could include an identification of capital improvement needs, assessment of funding responsibilities based on benefit, the creation of a cost allocation matrix, and the creation of possible financing entities (special purpose districts, public service districts, or urban redevelopment areas, for example).

Conduct TOD Progress Tracking



Update Annually

The LCRT and TOD are intended to fundamentally change development and travel patterns in the LCRT corridor, bringing the visions and plans defined for the corridor to life. The equitable TOD tool (eTOD) developed by the BCDCOG is designed to provide feedback on how well the corridor is meeting TOD principles and tracking towards TOD objectives presented in Chapter I. The eTOD tool should be updated annually with corridor data to track development activity (permitted and delivered), infrastructure improvements, demographic trends, housing affordability, transit ridership, and other factors.

APPENDIX A: PLACETYPE DESIGN GUIDELINES AND STANDARDS

Introduction

Chapter III presented a potential outline for a TSC and this appendix presents further detail on the standards that can be considered for inclusion. The example outline includes six elements that are essential to building a code that supports the goals of the LCRT corridor which are all organized by placetype and their core (1/4-mile) and edge (1/2-mile) boundaries. Developers can use the regulating plan map to identify the set of standards that will apply to their parcel.

This appendix begins with a description of each of the placetypes in the LCRT corridor, followed by detailed numeric standards for each placetype core and edge zone. These standards are then supported visual and text descriptions.

Appendix A Overview:

1. Overlay Boundaries and Standards
2. Public Space Standards
3. Frontage Type Standards
4. Development Intensity Guidelines
5. Site Design Standards
6. Building Type Standards
7. Stormwater Standards

1. Overlay Boundaries and Standards

While framework plans provide a vision for each station area, regulating plans provide more detail related to built-form and street activation that ultimately contribute to the unique character and sense of place for each station area. These standards for each placetype were first introduced in Chapter III and are given greater detail in this appendix. Detailed numeric values to accompany these visual and text rich standards have also been provided as an excel based document for use by the municipalities along the LCRT corridor. The standards are tailored to each of the five placetypes, and their core and edge transect zones, as shown in the image below.

Public Space Standards

- A. Street Standards and Guidelines
- B. Park and Civic Space Standards

Frontage Type Standards

Development Intensity Guidelines

- A. Floor Area Ratio
- B. Max Lot Coverage
- C. Building height
- D. Frontage Build Out

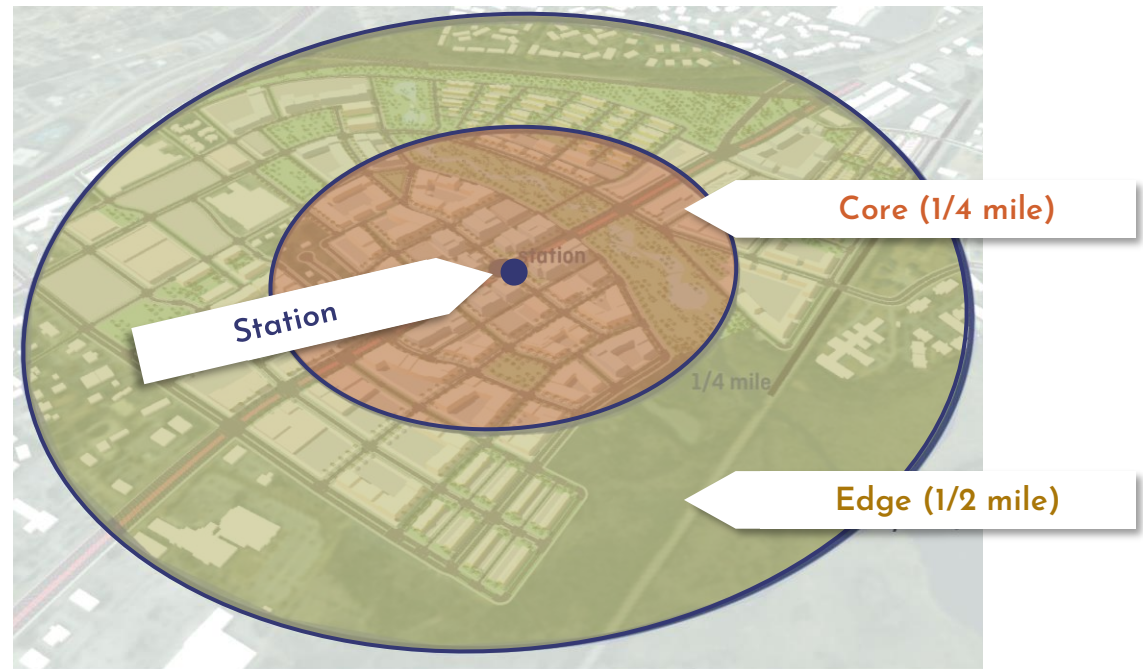
Site Design Standards

- A. Build-to-Lines and Setbacks
- B. Street Activation Standards
- C. Building Envelope and Lot Standards
- D. Parking Standards

Building Type Standards

Additional Standards

- A. Stormwater

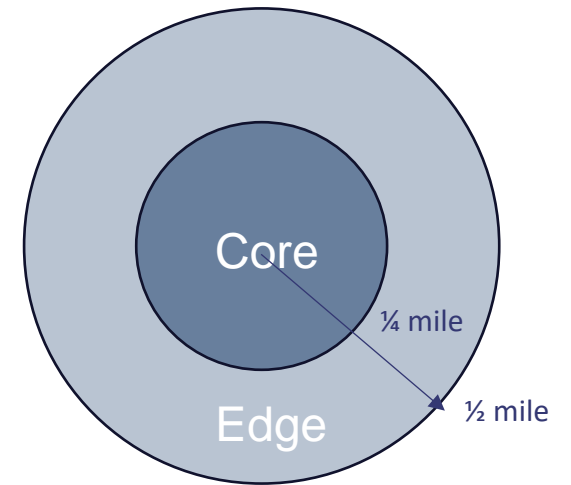


Hypothetical Regulating Plan for a Typical TOD



Downtown Employment Center

The Downtown Employment Center is the most dense of the TOD target placetypes with allowed building heights of 10 or more stories in the core zone, and a high jobs to housing ratio. The only Downtown Employment Center station area is located in downtown Charleston and embraces the older historical context. One third to one half of the total building square footage and 50 to 80 percent of all jobs in the station area should be in the core zone.



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

Station Areas Include:
 1. Courtenay St. / Doughty St.

Detailed Standards: Downtown Employment Center

Indicators		Edge	Core
<p>Transect Zone Descriptions</p> <p>Policy Definitions applicable to the TOD Supportive Code relative to Phase 1 Place Types, Department of Transportation (DOT) Center Types and SmartCode nomenclature for Transect Zones.</p>		<p>A moderate to high intensity urban mixed-use zone (with a broad range of building types) associated with "Downtown Employment & Neighborhood Centers" and "Employment Centers," intended as either a transition between urban cores and their established urban contexts, or intensely urbanizing suburban place types and their established conventional suburban contexts.</p>	<p>A very high intensity mixed-use urban zone (with a bias towards employment and a broad range of building types) associated with "Downtown Employment Centers," intended for local centers within already urban place types surrounded by established urban contexts.</p>
Development Intensity Guidelines			
Floor Area Ratio	Net FAR	1 to 2	1.5 to 3
Max Lot Coverage	% of Lot Area	80%	90%
Building Height	# of Stories	2 to 6	≥10
Frontage Buildout	Minimum % to Maximum %	70% - 80%	80% - 90%
Jobs/Housing Ratio	Jobs to Housing	3 to 1	6 to 1
Mix of Residential and Non Residential	Residential	60%	35%
	Non-Residential	40%	65%
Density-Grid	Minimum # of blocks per square mile	≥150	≥230
Public Space Standards			
Combined Approaches with Key Elements	Wet Retention Pond (as an amenity)	<input type="checkbox"/>	<input type="checkbox"/>
	Extended & Modified Dry Detention Basins	<input type="checkbox"/>	<input type="checkbox"/>
	Infiltration Trench	<input type="checkbox"/>	<input type="checkbox"/>
	Grass Swale with Check Dams	<input type="checkbox"/>	<input type="checkbox"/>
	Biofiltration Swale / Rain Garden	<input type="checkbox"/>	<input type="checkbox"/>
	Bioretention	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Underground Vault / Cistern	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Innovative Technology	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Other BMPs subject to administrator discretion	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Dry Well	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Open Space Types Allowed (1/4 mi walkshed)	Park	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Green Square	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Plaza	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Playground	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Thoroughfare Types Allowed (all multimodal)	Alley	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Road	<input type="checkbox"/>	<input type="checkbox"/>
	Street (Local, Collector, Arterial)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Avenue	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Parkway / Drive	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Highway	<input type="checkbox"/>	<input type="checkbox"/>
	Commercial Street or Avenue	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Boulevard	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Frontage Types Standards			
Frontage Types Allowed	Common Yard	<input type="checkbox"/>	<input type="checkbox"/>
	Porch & Fence	<input type="checkbox"/>	<input type="checkbox"/>
	Terrace or Lightwell	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Forecourt	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Stoop	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Storefront & Awning	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Gallery	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Arcade	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Site Design Standards			
Front Setback	No Front Parking (Feet)	0 to 10'	0 to 10'
	Secondary at "Corner" (Feet)	0 to 10'	0 to 10'
Side Setback	Standard (Feet)	0 to 20'	0 to 20'
Rear Setback	Standard (Feet)	0-5'	≥0'
	Outbuildings (Feet)	≤5'	NA
Alley at Transect Boundary	Minimum Feet	10'	10'

Detailed Standards: Downtown Employment Center

Parking Standards				
Residential Parking Spaces	Maximum per Residential Unit		0.5	0.5
Residential Allowed Strategies	Shared On-Site		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	On-Street		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Remote Structured		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Non-Residential Parking Spaces	Maximum per 1,000 SF		1.5	2
Non-Residential Allowed Strategies	Shared On-Site		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	On-Street		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Remote Structured		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Parking Placement (on-site)	Rear		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Side		<input type="checkbox"/>	<input type="checkbox"/>
Park & Ride	Allowable		<input type="checkbox"/>	<input type="checkbox"/>
Non-Residential Street "Activation"				
Façade Transparency	Ground Floor Minimum (% elev.)		50-60%	60-70%
	Upper Floors Minimum (% elev.)		0.4	40%
Façade Bay Spacing	Prime Street (Maximum LF)		40'	40'
Blank Wall-Ground Floor Prime St.	Maximum Feet		0	0
	No projecting, double-wide front-loaded garage doors		<input type="checkbox"/>	<input type="checkbox"/>
Main Entrance Spacing-Prime St.	Maximum Feet		75'	75'
Residential Street "Activation"				
Façade Transparency	Ground Floor Minimum (% elev.)		40%	40%
	Upper Floors (Minimum % elev.)		20%	20%
Façade Bay Spacing	Prime Street (Maximum LF)		40'	40'
Blank Wall-Ground Floor Prime St.	Maximum Feet		0	0
	No projecting, double-wide front-loaded garage doors		<input type="checkbox"/>	<input type="checkbox"/>
Main Entrance Spacing-Prime St.	Maximum Feet		100'	100'
Building Envelope & Lot Standards				
Building Types Dispositions Allowed	Edgeyard		<input type="checkbox"/>	<input type="checkbox"/>
	Sideyard		<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Rearyard		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Courtyard		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Specialized (i.e., Transit Stations)		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Block Side length	Orthogonal Blocks by Right		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Organic Blocks by Right		<input type="checkbox"/>	<input type="checkbox"/>
	Organic by Warrant		<input type="checkbox"/>	<input type="checkbox"/>
Block Perimeter	Maximum Feet to Centerline of ROW		570	570
Block Perimeter	Maximum		2000'	2,000'
Lot	Area Minimum to Maximum (SF)			5,000-100,000
	Width Minimum to Maximum (Feet)		20'-200'	20'-500'
Frontage Buildout at Setback	Minimum %		80%	80%
Unbroken Façade-Primary St.	Maximum SF		240'	300'

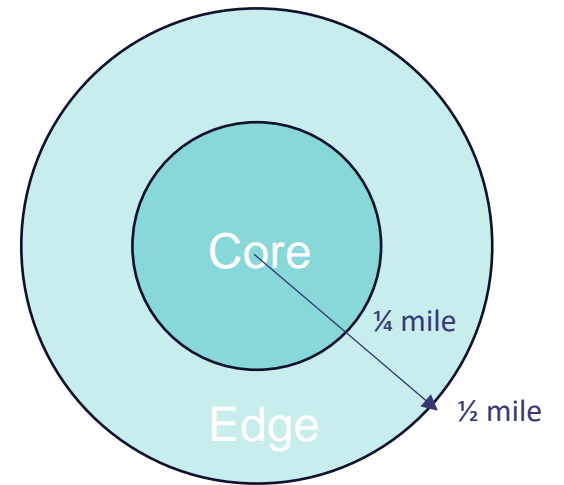
Detailed Standards: Downtown Employment Center

Building Type Standards			
Residential Allowable "By Right"	Single-Family Detached	✓	✓
	Single Family Attached/Rowhouse/Townhouse	✓	✓
	Single-Family Detached House (Sideyard)	✓	○
	Carriage House/Accessory Dwelling Unit	○	○
	Cottage	○	○
	Duplex/Triplex/Quadplex	✓	○
	Apartment House	✓	○
	Live-Work	✓	✓
Non-Residential Allowable "By Right"	Mixed Use/Apartment Block	✓	✓
	B&B	✓	✓
	Live-Work	✓	✓
	Open-Market	✓	✓
	Bus Shelter	✓	✓
	Public Art	✓	✓
	Outdoor Auditorium	✓	✓
	Playground	✓	✓
	Religious Assembly	✓	✓
	Fire Station	○	○
	Elementary School & Childcare Center	✓	✓
	Inn	✓	✓
	Dorm	✓	✓
	Office	✓	✓
	Retail	✓	✓
	Gallery	✓	✓
	Restaurant	✓	✓
	Library	✓	✓
	Fire & Police Stations	✓	✓
	Funeral Home	✓	✓
	Hotel	✓	✓
	Medical Clinic	✓	✓
	Conference Center	○	✓
	Live & Movie Theaters	✓	✓
	Museum	○	✓
	Parking Structures	✓	✓



Employment Center

The Employment Center placetype is high density and jobs oriented, located in regionally accessible locations. These centers currently have suburban contexts and will require significant transformation to support transit. Building heights should be 6- to 10-stories in the core zone of this placetype. Half of the total building square footage and 50 to 80 percent of all jobs in the station area should be in the core zone.



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

- Station Areas Include:**
1. Mall Dr.
 2. Remount Rd.
 3. Mabeline Rd.

Detailed Standards: Employment Center

Indicators		Edge	Core
Transect Zone Descriptions	Policy Definitions applicable to the TOD Supportive Code relative to Phase 1 Place Types, Department of Transportation (DOT) Center Types and SmartCode nomenclature for Transect Zones.	A predominately moderate to high intensity residential zone (with a broad mix of residential building types) associated with "Downtown Employment & Neighborhood Centers" intended as a transition from intensifying urban place types to the edge of established urban contexts.	A high intensity mixed-use urban zone (with a bias towards employment and a limited range of building types) associated with "Employment Centers," intended for local centers within urbanizing suburban place types surrounded by established suburban contexts.
Development Intensity Guidelines			
Floor Area Ratio	Net FAR	.5 to 1	1.5 to 3
Max Lot Coverage	% of Lot Area	70%	90%
Building Height	# of Stories	2 to 4	6 to 10
Frontage Buildout	Minimum % to Maximum %	60% - 70%	80% - 90%
Jobs/Housing Ratio	Jobs to Housing	-	3 to 1
Mix of Residential and Non Residential	Residential	65%	45%
	Non-Residential	35%	55%
Density-Grid	Minimum # of blocks per square mile	≥150	≥190
Public Space Standards			
Stormwater	Wet Retention Pond (as an amenity)	<input type="checkbox"/>	<input type="checkbox"/>
	Extended & Modified Dry Detention Basins	<input type="checkbox"/>	<input type="checkbox"/>
	Infiltration Trench	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Grass Swale with Check Dams	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Biofiltration Swale / Rain Garden	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Bioretention	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Underground Vault / Cistern	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Innovative Technology	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Other BMPs subject to administrator discretion	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Dry Well	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Open Space Standards	Park	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Green	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Square	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Plaza	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Playground	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Thoroughfare Standards	Alley	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Road	<input type="checkbox"/>	<input type="checkbox"/>
	Street (Local, Collector, Arterial)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Avenue	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Parkway / Drive	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Highway	<input type="checkbox"/>	<input type="checkbox"/>
	Commercial Street or Avenue	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Boulevard	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Frontage Types Standards			
Frontage Types Allowed	Common Yard	<input type="checkbox"/>	<input type="checkbox"/>
	Porch & Fence	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Terrace or Lightwell	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Forecourt	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Stoop	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Storefront & Awning	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Gallery	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Arcade	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Site Design Standards			
Front Setback	No Front Parking (Feet)	5 to 20'	0 to 10'
	Secondary at "Corner" (Feet)	5 to 20'	0 to 10'
Side Setback	Standard (Feet)	≥0'	0 to 20'
Rear Setback	Standard (Feet)	≥5'	≥0'
	Outbuildings (Feet)	≥5'	NA
Alley at Transect Boundary	Minimum Feet	15'	10'

Detailed Standards: Employment Center

Parking Standards			
Residential Parking Spaces	Maximum per Residential Unit	1.5	1
Residential Allowed Strategies	Shared On-Site	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	On-Street	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Remote Structured	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Non-Residential Parking Spaces	Maximum per 1,000 SF	3	3
Non-Residential Allowed Strategies	Shared On-Site	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	On-Street	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Remote Structured	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Parking Placement (on-site)	Rear	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Side	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Park & Ride	Allowable	<input type="checkbox"/>	<input type="checkbox"/>
Non-Residential Street "Activation"			
Façade Transparency	Ground Floor Minimum (% elev.)	30-40%	60-70%
	Upper Floors Minimum (% elev.)	25%	40%
Façade Bay Spacing	Prime Street (Maximum LF)	40'	40'
Blank Wall-Ground Floor Prime St.	Maximum Feet	20'	0
	No projecting, double-wide front-loaded garage doors	<input type="checkbox"/>	<input type="checkbox"/>
Main Entrance Spacing-Prime St.	Maximum Feet	60'	75'
Residential Street "Activation"			
Façade Transparency	Ground Floor Minimum (% elev.)	30%	40%
	Upper Floors (Minimum % elev.)	15%	20%
Façade Bay Spacing	Prime Street (Maximum LF)	40'	40'
Blank Wall-Ground Floor Prime St.	Maximum Feet	20'	0
	No projecting, double-wide front-loaded garage doors	<input type="checkbox"/>	<input type="checkbox"/>
Main Entrance Spacing-Prime St.	Maximum Feet	75'	100'
Building Envelope & Lot Standards			
Building Types Dispositions Allowed	Edgeyard	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Sideyard	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Rearyard	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Courtyard	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Specialized (i.e., Transit Stations)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Block Side length	Orthogonal Blocks by Right	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Organic Blocks by Right	<input type="checkbox"/>	<input type="checkbox"/>
	Organic by Warrant	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Block Perimeter	Maximum Feet to Centerline of ROW	570	570
Lot	Maximum	2,400'	2,000'
	Area Minimum to Maximum (SF)	3,000-30,000	5,000-80,000
Frontage Buildout at Setback	Width Minimum to Maximum (Feet)	20'-100'	20'-500'
	Minimum %	60%	80%
Unbroken Façade-Primary St.	Maximum SF	180'	300'

Detailed Standards: Employment Center

Building Type Standards			
Residential Allowable "By Right"	Single-Family Detached	✓	✓
	Single Family Attached/Rowhouse/Townhouse	✓	✓
	Single-Family Detached House (Sideyard)	✓	○
	Carriage House/Accessory Dwelling Unit	✓	○
	Cottage	✓	○
	Duplex/Triplex/Quadplex	✓	○
	Live-Work	✓	✓
	Mixed Use/Apartment Block	✓	✓
Non-Residential Allowable "By Right"	Apartment House	✓	○
	B&B	✓	✓
	Live-Work	✓	✓
	Open-Market	✓	✓
	Bus Shelter	✓	✓
	Public Art	✓	✓
	Outdoor Auditorium	○	✓
	Playground	✓	✓
	Religious Assembly	✓	✓
	Fire Station	○	○
	Elementary School & Childcare Center	✓	✓
	Inn	✓	✓
	Dom	✓	✓
	Office	✓	✓
	Retail	✓	✓
	Gallery	✓	✓
	Restaurant	✓	✓
	Library	✓	✓
	Fire & Police Stations	✓	✓
	Funeral Home	✓	✓
	Hotel	○	✓
	Medical Clinic	○	✓
Conference Center	○	✓	
Live & Movie Theaters	○	✓	
Museum	○	✓	
Parking Structures	○	✓	

Detailed Standards: Downtown Neighborhood Center

Indicators		Edge	Core
<p>Policy Definitions applicable to the TOD Supportive Code relative to Phase 1 Place Types, Department of Transportation (DOT) Center Types and SmartCode nomenclature for Transect Zones.</p>		<p>A moderate intensity mixed-use urban zone (with a limited range of building types) associated with "Neighborhood Centers," intended for local centers within urbanizing suburban place types surrounded by established suburban contexts.</p>	<p>A moderate to high intensity mixed-use urban zone (with a broad range of building types) associated with "Downtown Neighborhood Centers," intended for local centers within already urban place types surrounded by established urban contexts.</p>
Transect Zone Descriptions			
Development Intensity Guidelines			
Floor Area Ratio	Net FAR	.5 to 1	1 to 2
Max Lot Coverage	% of Lot Area	80%	90%
Building Height	# of Stories	2 to 4	2 to 6
Frontage Buildout	Minimum % to Maximum %	70% - 80%	80% - 90%
Jobs/Housing Ratio	Jobs to Housing	1 to 1	3 to 1
Mix of Residential and Non Residential	Residential	75%	55%
	Non-Residential	25%	35%
Density-Grid	Minimum # of blocks per square mile	≥150	≥190
Public Space Standards			
Stormwater	Wet Retention Pond (as an amenity)	○	○
	Extended & Modified Dry Detention Basins	○	○
	Infiltration Trench	○	○
	Grass Swale with Check Dams	○	○
	Biofiltration Swale / Rain Garden	○	○
	Bioretention	✓	✓
	Underground Vault / Cistern	✓	✓
	Innovative Technology	✓	✓
	Other BMPs subject to administrator discretion	✓	✓
	Dry Well	✓	✓
Open Space Standards	Park	✓	✓
	Green Square	✓	○
	Plaza	✓	✓
	Playground	✓	✓
		✓	✓
Thoroughfare Standards	Alley	✓	✓
	Road	○	○
	Street (Local, Collector, Arterial)	○	○
	Avenue	✓	✓
	Parkway / Drive	○	○
	Highway	○	○
	Commercial Street or Avenue	✓	✓
Boulevard	○	○	
Frontage Types Standards			
Frontage Types Allowed	Common Yard	○	○
	Porch & Fence	○	○
	Terrace or Lightwell	✓	○
	Forecourt	✓	✓
	Stoop	✓	✓
	Storefront & Awning	✓	✓
	Gallery	✓	✓
	Arcade	✓	✓
		○	○
Site Design Standards			
Front Setback	No Front Parking (Feet)	0 to 10'	0 to 10'
	Secondary at "Corner" (Feet)	0 to 10'	0 to 10'
Side Setback	Standard (Feet)	0 to 20'	0 to 20'
Rear Setback	Standard (Feet)	0-5'	≥0'
	Outbuildings (Feet)	≤5'	NA
Alley at Transect Boundary	Minimum Feet	10'	10'

Detailed Standards: Downtown Neighborhood Center

Parking Standards			
Residential Parking Spaces	Maximum per Residential Unit	1	0.5
Residential Allowed Strategies	Shared On-Site	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	On-Street	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Remote Structured	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Non-Residential Parking Spaces	Maximum per 1,000 SF	2	1.5
Non-Residential Allowed Strategies	Shared On-Site	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	On-Street	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Remote Structured	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Parking Placement (on-site)	Rear	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Side	<input type="checkbox"/>	<input type="checkbox"/>
Park & Ride	Allowable	<input type="checkbox"/>	<input type="checkbox"/>
Non-Residential Street "Activation"			
Façade Transparency	Ground Floor Minimum (% elev.)	50-60%	60-70%
	Upper Floors Minimum (% elev.)	0.4	40%
Façade Bay Spacing	Prime Street (Maximum LF)	40'	40'
	Maximum Feet	0	0
Blank Wall-Ground Floor Prime St.	No projecting, double-wide front-loaded garage doors	<input type="checkbox"/>	<input type="checkbox"/>
	Maximum Feet	75'	75'
Residential Street "Activation"			
Façade Transparency	Ground Floor Minimum (% elev.)	40%	40%
	Upper Floors (Minimum % elev.)	20%	20%
Façade Bay Spacing	Prime Street (Maximum LF)	40'	40'
	Maximum Feet	0	0
Blank Wall-Ground Floor Prime St.	No projecting, double-wide front-loaded garage doors	<input type="checkbox"/>	<input type="checkbox"/>
	Maximum Feet	100'	100'
Building Envelope & Lot Standards			
Building Types Dispositions Allowed	Edgeyard	<input type="checkbox"/>	<input type="checkbox"/>
	Sideyard	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Rearyard	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Courtyard	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Specialized (i.e., Transit Stations)	<input type="checkbox"/>	<input type="checkbox"/>
Block Side length	Orthogonal Blocks by Right	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Organic Blocks by Right	<input type="checkbox"/>	<input type="checkbox"/>
	Organic by Warrant	<input type="checkbox"/>	<input type="checkbox"/>
Block Perimeter	Maximum Feet to Centerline of ROW	570	570
	Maximum	2,000'	2,000'
Lot	Area Minimum to Maximum (SF)	3,000-30,000	5,000-40,000
	Width Minimum to Maximum (Feet)	20'-200'	20'-500'
Frontage Buildout at Setback	Minimum %	80%	80%
Unbroken Façade-Primary St.	Maximum SF	240'	300'

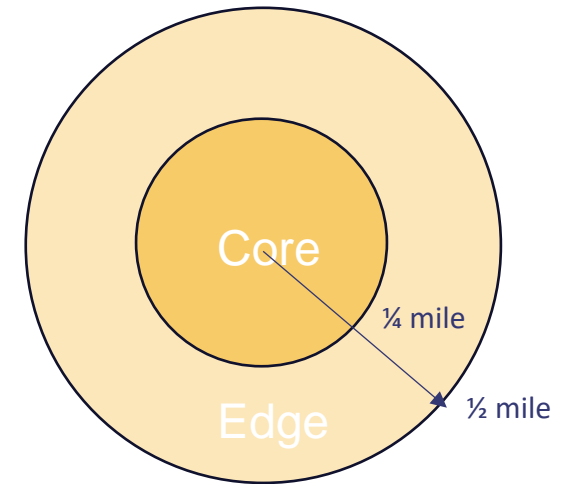
Detailed Standards: Downtown Neighborhood Center

Building Type Standards			
Residential Allowable "By Right"	Single-Family Detached	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Single Family Attached/Rowhouse/Townhouse	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Single-Family Detached House (Sideyard)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Carriage House/Accessory Dwelling Unit	<input type="checkbox"/>	<input type="checkbox"/>
	Cottage	<input type="checkbox"/>	<input type="checkbox"/>
	Duplex/Triplex/Quadplex	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Apartment House	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Live-Work	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Non-Residential Allowable "By Right"	Mixed Use/Apartment Block	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	B&B	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Live-Work	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Open-Market	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Bus Shelter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Public Art	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Outdoor Auditorium	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Playground	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Religious Assembly	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Fire Station	<input type="checkbox"/>	<input type="checkbox"/>
	Elementary School & Childcare Center	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Inn	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Dorm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Office	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Retail	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Gallery	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Restaurant	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Library	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Fire & Police Stations	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Funeral Home	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Hotel	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Medical Clinic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Conference Center	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Live & Movie Theaters	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Museum	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Parking Structures	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	



Town Center

The Town Center placetype should be developed with a balance of residential and non-residential uses with target building heights ranging from 4- to 8-stories in the core zone to 2- to 4-stories in the edge zone. Most are currently in suburban contexts and will require significant transformations. Half of the total building square footage and 50 to 80 percent of all jobs in the station area should be in the core zone.



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

- Station Areas Include:**
1. Mt. Pleasant St.
 2. Dorchester Rd.
 3. Durant Ave. (future)
 4. Hanahan Rd.
 5. Eagle Landing Blvd.
 6. Medical Plaza Dr.

Detailed Standards: Town Center

Indicators		Edge	Center
<p>Policy Definitions applicable to the TOD Supportive Code relative to Phase 1 Place Types, Department of Transportation (DOT) Center Types and SmartCode nomenclature for Transect Zones.</p>		<p>A predominately moderate to low intensity residential zone (with a broad mix of residential building types) associated with "Neighborhood Centers," intended as transition from urbanizing suburban place types to the edge of conventional suburban contexts.</p>	<p>A moderate to high intensity mixed-use urban zone (with a broad range of building types) associated with "Town Centers," intended for local centers within urbanizing suburban place types surrounded by established suburban contexts.</p>
Development Intensity Guidelines			
Floor Area Ratio	Net FAR	.5 to 1	1 to 2
Max Lot Coverage	% of Lot Area	70%	80%
Building Height	# of Stories	≤3	4 to 8
Frontage Buildout	Minimum % to Maximum %	60% - 70%	70% - 80%
Jobs/Housing Ratio	Jobs to Housing	-	3 to 1
Mix of Residential and Non-Residential	Residential	85%	60%
	Non-Residential	15%	40%
Density-Grid	Minimum # of blocks per square mile	NA	≥150
Public Space Standards			
Stormwater	Wet Retention Pond (as an amenity)	<input type="checkbox"/>	<input type="checkbox"/>
	Extended & Modified Dry Detention Basins	<input type="checkbox"/>	<input type="checkbox"/>
	Infiltration Trench	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Grass Swale with Check Dams	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Biofiltration Swale / Rain Garden	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Bioretention	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Underground Vault / Cistern	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Innovative Technology	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Other BMPs subject to administrator discretion	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Open Space Standards	Dry Well	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Park	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Green Square	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Plaza	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Playground	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Thoroughfare Standards	Alley	<input type="checkbox"/>	<input type="checkbox"/>
	Road	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Street (Local, Collector, Arterial)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Avenue	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Parkway / Drive	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Highway	<input type="checkbox"/>	<input type="checkbox"/>
	Commercial Street or Avenue	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Boulevard	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Frontage Types Standards			
Frontage Types Allowed	Common Yard	<input type="checkbox"/>	<input type="checkbox"/>
	Porch & Fence	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Terrace or Lightwell	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Forecourt	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Stoop	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Storefront & Awning	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Gallery	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Arcade	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Site Design Standards			
Front Setback	No Front Parking (Feet)	5 to 20'	0 to 10'
	Secondary at "Corner" (Feet)	5 to 20'	0 to 10'
Side Setback	Standard (Feet)	≥0'	0 to 20'
Rear Setback	Standard (Feet)	≥5'	0-5'
	Outbuildings (Feet)	≥5'	≤5'
Alley at Transect Boundary	Minimum Feet	15'	10'

Detailed Standards: Town Center

Parking Standards			
Residential Parking Spaces	Maximum per Residential Unit	1.5	1
Residential Allowed Strategies	Shared On-Site	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	On-Street	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Remote Structured	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Non-Residential Parking Spaces	Maximum per 1,000 SF	3	2
Non-Residential Allowed Strategies	Shared On-Site	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	On-Street	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Remote Structured	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parking Placement (on-site)	Rear	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Side	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Park & Ride	Allowable	<input type="checkbox"/>	<input type="checkbox"/>
Non-Residential Street "Activation"			
Façade Transparency	Ground Floor Minimum (% elev.)	30-40%	50-60%
	Upper Floors Minimum (% elev.)	25%	40%
Façade Bay Spacing	Prime Street (Maximum LF)	40'	40'
	Maximum Feet	20'	0
Blank Wall-Ground Floor Prime St.	No projecting, double-wide front-loaded garage doors	<input type="checkbox"/>	<input type="checkbox"/>
	Maximum Feet	60'	75'
Main Entrance Spacing-Prime St.	Maximum Feet	60'	75'
Residential Street "Activation"			
Façade Transparency	Ground Floor Minimum (% elev.)	30%	40%
	Upper Floors (Minimum % elev.)	15%	20%
Façade Bay Spacing	Prime Street (Maximum LF)	40'	40'
	Maximum Feet	20'	0
Blank Wall-Ground Floor Prime St.	No projecting, double-wide front-loaded garage doors	<input type="checkbox"/>	<input type="checkbox"/>
	Maximum Feet	75'	100'
Main Entrance Spacing-Prime St.	Maximum Feet	75'	100'
Building Envelope & Lot Standards			
Building Types Dispositions Allowed	Edgeyard	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Sideyard	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Rearyard	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Courtyard	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Specialized (i.e., Transit Stations)	<input type="checkbox"/>	<input type="checkbox"/>
Block Side length	Orthogonal Blocks by Right	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Organic Blocks by Right	<input type="checkbox"/>	<input type="checkbox"/>
	Organic by Warrant	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Maximum Feet to Centerline of ROW	570	570
Block Perimeter	Maximum	2,400'	2,000'
	Area Minimum to Maximum (SF)	3,000-30,000	5,000-40,000
Lot	Width Minimum to Maximum (Feet)	20' to 100'	20'-200'
	Minimum %	60%	80%
Frontage Buildout at Setback	Minimum %	60%	80%
Unbroken Façade-Primary St.	Maximum SF	180'	240'

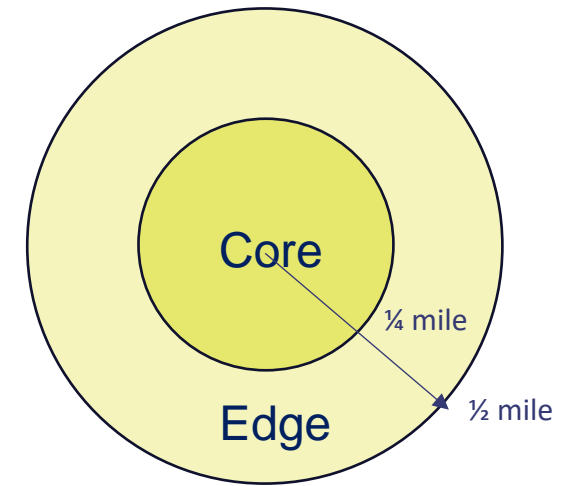
Detailed Standards: Town Center

Building Type Standards			
Residential Allowable "By Right"	Single-Family Detached	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Single Family Attached/Rowhouse/Townhouse	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Single-Family Detached House (Sideyard)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Carriage House/Accessory Dwelling Unit	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Cottage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Duplex/Triplex/Quadplex	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Apartment House	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Live-Work	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Non-Residential Allowable "By Right"	Mixed Use/Apartment Block	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	B&B	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Live-Work	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Open-Market	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Bus Shelter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Public Art	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Outdoor Auditorium	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Playground	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Religious Assembly	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Fire Station	<input type="checkbox"/>	<input type="checkbox"/>
	Elementary School & Childcare Center	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Inn	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Dorm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Office	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Retail	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Gallery	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Restaurant	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Library	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Fire & Police Stations	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Funeral Home	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hotel	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Medical Clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Conference Center	<input type="checkbox"/>	<input type="checkbox"/>	
Live & Movie Theaters	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Museum	<input type="checkbox"/>	<input type="checkbox"/>	
Parking Structures	<input type="checkbox"/>	<input checked="" type="checkbox"/>	



Neighborhood Center

The Neighborhood Center placetype is the least dense of the TOD placetypes with building heights of 2- to 4-stories in the core zone, and 1- to 3-stories in the edge zone. Most are currently located in suburban contexts and will require significant transformation to support transit. These station areas should be predominately residential with small-scale office, retail, and civic uses. Between a third to one half of all building area, and half of non-residential building area should be in the core zone.



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

- Station Areas Include:**
1. Rosemont / Magnolia
 2. Hackemann Ave.
 3. Reynolds Ave.
 4. Helm Ave.
 5. Melnick Dr.
 6. Exchange Park / Fairgrounds

Detailed Standards: Neighborhood Center

Transect Zone Descriptions	Policy Definitions applicable to the TOD Supportive Code relative to Phase 1 Place Types, Department of Transportation (DOT) Center Types and SmartCode nomenclature for Transect Zones.	A predominately low to moderate intensity residential zone (with a limited mix of residential building types) associated with "Town Centers," intended as a transition from urbanizing suburban place types to the edge of rural/agricultural contexts.	A moderate intensity mixed-use urban zone (with a limited range of building types) associated with "Neighborhood Centers," intended for local centers within urbanizing suburban place types surrounded by established suburban contexts.
Development Intensity Guidelines			
Floor Area Ratio	Net FAR	NA	.5 to 1
Max Lot Coverage	% of Lot Area	60%	80%
Building Height	# of Stories	≤3	2 to 4
Frontage Buildout	Minimum % to Maximum %	40% - 60%	70% - 80%
Jobs/Housing Ratio	Jobs to Housing	-	1 to 1
Mix of Residential and Non Residential	Residential	95%	75%
	Non-Residential	5%	25%
Density-Grid	Minimum # of blocks per square mile	NA	≥150
Public Space Standards			
Stormwater	Wet Retention Pond (as an amenity)	✓	○
	Extended & Modified Dry Detention Basins	✓	○
	Infiltration Trench	✓	○
	Grass Swale with Check Dams	✓	○
	Biofiltration Swale / Rain Garden	✓	○
	Bioretention	✓	✓
	Underground Vault / Cistern	✓	✓
	Innovative Technology	✓	✓
	Other BMPs subject to administrator discretion	✓	✓
	Dry Well	○	✓
Open Space Standards	Park	✓	✓
	Green Square	✓	✓
	Plaza	○	✓
	Playground	○	✓
	Alley	✓	✓
Thoroughfare Standards	Road	✓	○
	Street (Local, Collector, Arterial)	✓	✓
	Avenue	✓	✓
	Parkway / Drive	✓	✓
	Highway	✓	○
	Commercial Street or Avenue	○	✓
	Boulevard	○	○
Frontage Types Standards			
Frontage Types Allowed	Common Yard	✓	○
	Porch & Fence	✓	○
	Terrace or Lightwell	○	✓
	Forecourt	○	✓
	Stoop	○	✓
	Storefront & Awning	○	✓
	Gallery	○	✓
	Arcade	○	✓
Site Design Standards			
Front Setback	No Front Parking (Feet)	≥20'	0 to 10'
	Secondary at "Corner" (Feet)	≥10'	0 to 10'
Side Setback	Standard (Feet)	≥10'	0 to 20'
Rear Setback	Standard (Feet)	≥10'	0-5'
	Outbuildings (Feet)	≥5'	≤5'
Alley at Transect Boundary	Minimum Feet	20'	10'

Detailed Standards: Town Center

Parking Standards			
Residential Parking Spaces	Maximum per Residential Unit	2	1
Residential Allowed Strategies	Shared On-Site	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	On-Street	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Remote Structured	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Non-Residential Parking Spaces	Maximum per 1,000 SF	3	2
Non-Residential Allowed Strategies	Shared On-Site	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	On-Street	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Remote Structured	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parking Placement (on-site)	Rear	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Side	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Park & Ride	Allowable	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Non-Residential Street "Activation"			
Façade Transparency	Ground Floor Minimum (% elev.)	NA	50-60%
	Upper Floors Minimum (% elev.)	NA	0.4
Façade Bay Spacing	Prime Street (Maximum LF)	NA	40'
Blank Wall-Ground Floor Prime St.	Maximum Feet	20'	0
	No projecting, double-wide front-loaded garage doors	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Main Entrance Spacing-Prime St.	Maximum Feet	NA	75'
Residential Street "Activation"			
Façade Transparency	Ground Floor Minimum (% elev.)	NA	40%
	Upper Floors (Minimum % elev.)	NA	20%
Façade Bay Spacing	Prime Street (Maximum LF)	NA	40'
Blank Wall-Ground Floor Prime St.	Maximum Feet	20'	0
	No projecting, double-wide front-loaded garage doors	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Main Entrance Spacing-Prime St.	Maximum Feet	NA	100'
Building Envelope & Lot Standards			
Building Types Dispositions Allowed	Edgeyard	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Sideyard	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Rearyard	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Courtyard	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Specialized (i.e., Transit Stations)	<input type="checkbox"/>	<input type="checkbox"/>
Block Side length	Orthogonal Blocks by Right	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Organic Blocks by Right	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Organic by Warrant	<input type="checkbox"/>	<input type="checkbox"/>
	Maximum Feet to Centerline of ROW	570	570
Block Perimeter	Maximum	3,000'	2,000'
Lot	Area Minimum to Maximum (SF)	3,000-40,000	3,000-30,000
	Width Minimum to Maximum (Feet)	50' to 120'	20'-200'
Frontage Buildout at Setback	Minimum %	40%	80%
Unbroken Façade-Primary St.	Maximum SF	NA	240'

Detailed Standards: Town Center

Building Type Standards			
Residential Allowable "By Right"	Single-Family Detached	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Single Family Attached/Rowhouse/Townhouse	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Single-Family Detached House (Sideyard)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Carriage House/Accessory Dwelling Unit	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Cottage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Duplex/Triplex/Quadplex	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Apartment House	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Live-Work	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Mixed Use/Apartment Block	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Non-Residential Allowable "By Right"	B&B	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Live-Work	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Open-Market	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Bus Shelter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Public Art	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Outdoor Auditorium	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Playground	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Religious Assembly	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Fire Station	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Elementary School & Childcare Center	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Inn	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Dorm	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Office	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Retail	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Gallery	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Restaurant	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Library	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Fire & Police Stations	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Funeral Home	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Hotel	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Medical Clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Conference Center	<input type="checkbox"/>	<input type="checkbox"/>
	Live & Movie Theaters	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Museum	<input type="checkbox"/>	<input type="checkbox"/>	
Parking Structures	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

2. Public Space Standards

Public space standards can be adopted as guidelines, or regulations, established by local governments to ensure the quality, accessibility, and functionality of public spaces within a community. These standards encompass various aspects such as design, amenities, safety, accessibility, and maintenance. They play a vital role in creating inclusive, safe, attractive, and sustainable environments where people can interact. Serving as gathering points, these spaces foster a sense of community and enable meaningful interactions among people from diverse backgrounds.

Well-designed public spaces significantly enhance the overall quality of life in a community. They offer places for relaxation, socialization, exercise, and cultural engagement, thereby boosting residents' physical and mental well-being. Public spaces contribute to the visual appeal of urban landscapes and play a crucial role in defining and enhancing the character of a community. Considerations such as aesthetics, functionality, and environmental sustainability guide the design process, incorporating elements like landscaping, urban furniture, public art, and pedestrian-friendly pathways. Visual and text-based descriptions of these elements are presented in the following pages.

A. Thoroughfare Standards

Public thoroughfares play a crucial role in defining the character of a city district. An effective design strategy and hierarchy creates an interconnected network that efficiently serves pedestrians, cyclists, and vehicles while maintaining a balance between function and aesthetics. This integration with the surrounding built environment fosters a pleasant and walkable environment for visitor, residents, and business operators.

Various thoroughfare types, such as alleys, lanes, roads, streets, commercial/main streets, avenues, and boulevards, contribute to the diversity and functionality of urban spaces. Each thoroughfare type can be subject to specific regulations dictating factors like lane width and allocation for vehicular and bicycle traffic, pedestrian space, on-street parking provisions, and the placement and type of street infrastructure like trees and lights.

A. Thoroughfare Standards and Guidelines

- Alley
- Road
- Street (local, collector, arterial)
- Avenue
- Parkway/Drive
- Highway
- Commercial Street
- Boulevard

B. Park and Civic Space Standards

- Park
- Green
- Square
- Plaza
- Playground



Image Credit: City Experiences

Alley

An alley is a narrow lane, often found between or behind buildings in urban areas. Alleys are typically used for access to the back entrances of buildings, for service vehicles, or as shortcuts for pedestrians. They can vary in width, from adequate space for comfortable pedestrian movement up to widths accommodating vehicular access and movements.



Image Credit: Campco Engineering

Road

A road is a type of thoroughfare commonly used to connect rural or less developed regions. Typically, roads lack curbs along their entire length and feature open swales to manage storm water. Where feasible, many roads incorporate sidewalks or a recreational multipurpose path which accommodates both bicycles and pedestrians. Landscaping typically preserves the natural surroundings.



Image Credit: Our Next Adventure

Street (Local, Collector, Arterial)

A street is a public thoroughfare in a built environment, typically lined with buildings and used for transportation, commerce, and social interaction. Streets are often distinguished from roads by their urban setting, narrower width, and continuous presence of sidewalks. They can vary widely in size, from narrow residential streets to broad arterials, and serve as the primary means of access to properties within a neighborhood or city. Streets may also feature amenities such as streetlights, signage, and street furniture to enhance safety and convenience for pedestrians and vehicles alike.



Image Credit: Getty Images

Avenue

An avenue is a broad street in a city or town, often lined with trees or buildings. Avenues typically run perpendicular to streets and are often major thoroughfares with multiple lanes of traffic. Avenues often serve as important commercial or residential corridors, hosting shops, restaurants, offices, and residences along their length. In many cities, avenues are named according to a particular theme or scheme, such as numbers, letters, or the names of historical figures.



Image Credit: Cultural Landscape Foundation

Parkway / Drive

A parkway is a type of landscaped thoroughfare, often a wide road with a green median or divider. Parkway are typically designed for scenic drives or leisurely travel, with landscaping, trees, and sometimes pedestrian paths or recreational areas along the route. They are often associated natural beauty and preserved landscapes meant to blend transportation functionality with aesthetic and recreational purposes.



Image Credit: Chester E. Smolski

Highway

A highway is a main arterial, typically providing connectivity within major cities, nearby towns, or other significant destinations. Highways are designed for high-speed travel and generally have multiple lanes to accommodate a large traffic volume. They are often built to specific standards for safety and efficiency, with features like controlled access points and wide lanes.



Image Credit: Sean Xu / Getty Images

Commercial Street

A commercial street is primarily known for its concentration of commercial activity. These streets are often lined with storefronts, restaurants, cafes, and other establishments catering to consumer necessities. Commercial streets are vital components of urban and suburban areas, serving as economic hubs where people gather to shop, dine, socialize, and conduct business. They can range from bustling main streets in downtown areas to smaller, neighborhood-oriented shopping districts.

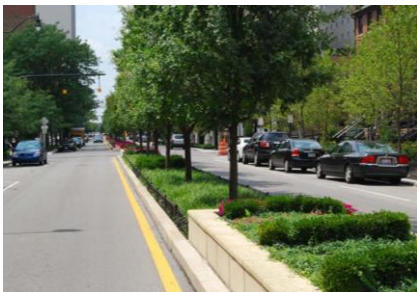


Image Credit: LandscapePros

Boulevard

A boulevard is a wide, multi-lane road, usually with a center running landscaped median and tree lined edges. It's typically found in urban or suburban areas and often serves as a major thoroughfare for vehicular traffic. Boulevards are designed with aesthetics and functionality in mind, often featuring pedestrian walkways, bicycle lanes, and sometimes decorative elements. They can also be hubs of commercial activity, featuring shops, restaurants, and other businesses lining their sides.

B. Park and Civic Space Standards

Carefully planned open spaces are vital for vibrant mixed-use centers and public areas, offering a wide range of recreational and civic options. The type of open space, whether formal or informal, active or passive, is determined by factors like scale and surrounding density. These spaces, including formal civic areas, recreational facilities, and greenways, serve to engage communities and enhance environmental features like wetlands and vegetation. Design elements such as canals, ponds, and shade trees promote gathering and comfort. Open space standards are tailored to each neighborhood's unique needs, with parks, squares, and playgrounds strategically designated based on intensity. This ensures diverse urban needs are met, from passive recreation to bustling social hubs.



Image Credit: Charleston cvb

Park

A park is a type of open space designed as a natural preserve, primarily intended for unstructured recreational activities. Typically independent from surrounding building frontages, parks feature a variety of natural elements such as paths and trails, meadows, water bodies, woodlands, and open shelters, all arranged in a naturalistic manner. These spaces often follow the layout of existing natural corridors, allowing for a linear network of open spaces that integrate with the local environment.



Image Credit: SC Arts Hub

Green

A Green is a designated open space primarily intended for unstructured recreation, characterized by its naturalistic setting. Unlike parks, which may be larger and more varied in features, Greens are specifically designed with simplicity in mind, featuring expanses of lawn interspersed with trees and are typically defined more by landscaping elements than by surrounding. The size of a Green is regulated to ensure manageability and community accessibility. Greens are allowed in lower to moderate intensity zones, where more land is available and a greater emphasis on expansive open space. Higher-intensity transects do not have the space to accommodate such expansive green areas, focusing more on built infrastructure.



Image Credit: Best of Charleston SC

Square

A Square is a versatile open space that supports unstructured recreation and civic purposes, characterized by its formal landscaping including paths, lawns, and trees. Defined by the surrounding building frontages, Squares create a sense of enclosure and enhance urban coherence. These spaces are strategically placed at the intersections of major thoroughfares, making them central points for community interaction and civic engagement. Squares function as formal gathering places suitable for a variety of activities, from casual sitting to large public events. Their size is typically a city block to ensure they are functional and well-proportioned within their urban environment.



Image Credit: Best of Charleston SC

Plaza

A Plaza is an open space designed for civic and commercial activities, typically found in moderate to high-intensity mixed-use urban zones. Defined by building frontages, its landscape primarily consists of pavement, accommodating high pedestrian volumes. Although trees are optional, they can enhance both aesthetics and environmental quality. Located at key street intersections, plazas serve as dynamic hubs for social interaction, outdoor dining, and public events. Their sizes range to provide ample space for diverse uses while fitting urban proportions.



Image Credit: Carolina Parks and Play

Playground

A Playground is an open space specifically designed for children's recreation, typically equipped with play structures and often fenced for safety. These playgrounds can include an open shelter and are strategically interspersed within residential areas or integrated into parks and greens. Universally present across all urban transects, playgrounds fulfill a critical role in urban planning by providing vital recreational and leisure spaces. They facilitate family and community activities essential for fostering social interactions and healthy living in both low and high-density areas.

3. Frontage Type Standards

Frontage Standards encompass various extensions of a structure's primary façade with the primary goal of regulating the character and layout of private frontages as they relate to surrounding neighborhood scale and context. These standards are to be applied to each placetype core and edge zone and establish a specific and suitable transitional connection between private and public spaces. This connection is critical to defining the streetscape character and is facilitated through the appropriate application of frontage types. Visual and text-based descriptions of these frontage types are detailed on the following pages.

- Common Yard
- Porch and Fence
- Terrace
- Lightwell
- Forecourt
- Stoop
- Storefront and Awning
- Gallery
- Arcade



Image Credit: Charleston Plant Works

Common Yard

A Common Yard frontage type features a large planted setback between the main facade of a building and the property line, creating a substantial buffer from nearby streets. This landscaped area is typically left unfenced and seamlessly merges with neighboring front yards to create a unified communal green area. This frontage enhances the aesthetic appeal and residential neighborhood aesthetic which promotes a shared landscape vision. Common Yard frontages are particularly effective in residential zones where they foster a sense of community and collective enjoyment of open, green spaces.



Image Credit: RocketHomes

Porch & Fence

The Porch & Fence frontage type combines a small to medium setback from the frontage line with distinct architectural and landscaping features to define property boundaries and enhance curb appeal. The front yard is usually compact, framed by a fence or hedge that clearly delineates the property's edge from the street, maintaining spatial definition and privacy. A key feature of this frontage type is the projecting porch, which is typically open on three sides, providing a welcoming, semi-enclosed space for relaxation and social interaction. This architectural layout adds architectural interest and extends the living space into the outdoors, reinforcing a connection to the neighborhood.



Image Credit: Charleston Inside Out

Terrace

The Terrace frontage type features the building's main facade situated near or directly on the frontage line, accompanied by an elevated terrace that encourages public circulation along the facade. This design effectively addresses grade changes by incorporating frequent steps leading up to the terrace, ensuring accessible pathways and avoiding isolated sections.



Image Credit: City of Ventura

Lightwell

The Lightwell frontage design presents a building facade that is minimally setback from the property line, often accompanied by either a raised terrace or a recessed lightwell. This architectural layout acts as a barrier, creating a separation between residential, retail, or service spaces and sidewalk activity. The sunken lightwell enables better natural light and airflow to reach lower levels, enhancing interior atmospheres without sacrificing privacy or safety. This frontage also provides a benefit for additional leasable spaces in urban settings.



Image Credit: LoopNet

Forecourt

The Forecourt frontage type involves the main facade of the building being close to, or directly on, the property line, with a small portion set back to create an internal courtyard space. This architectural feature can serve various functional and aesthetic purposes. In residential settings, such as apartment buildings, it can be transformed into an entry court or a shared garden space, enhancing communal living. Conversely, in commercial zones, this space is often utilized as an extension for shopping displays or outdoor seating for restaurants, enriching the retail or dining experience. The forecourt offers a transitional space that connects the public sidewalk to the private interiors while adding value and interaction to the street front.



Image Credit: iStock

Stoop

The Stoop frontage type features the main facade of the building placed near the property line, with a set of stairs that directly engage with the sidewalk. This architectural element is raised above the sidewalk level to enhance privacy within the building, creating a visual buffer between the public space and the private interior. This type of frontage is particularly suited for residential buildings with small setbacks, as it not only maximizes the use of limited space but also fosters a welcoming, accessible entrance that strengthens the connection between residents and street life.



Image Credit: Visit Historic Charleston

Shopfront & Awning

The Shopfront & Awning positions the main building facade directly at, or near, the property line, with entrances that open straight onto the public walkway at grade level, making it ideally suited for retail purposes. This frontage is characterized by extensive glazing at the sidewalk level, enhancing visibility and inviting interaction from pedestrians. An awning is often included, extending over the sidewalk to offer shelter and comfort. This type of frontage can be seamlessly integrated with other frontage styles and is crucial in retail settings to maximize street engagement and promoting a lively and attractive commercial environment.



Image Credit: Dock Street Theatre

Gallery

The Gallery frontage style features a building facade aligned closely to the property line, often with a cantilevered shed or lightweight colonnade extending over the sidewalk. This design, commonly seen in retail areas, enhances storefront visibility and pedestrian comfort while providing shelter. The gallery allows for smooth pedestrian flow and potential retail activity. It extends over the sidewalk, nearly reaching the curb, creating a covered, semi-enclosed area that fosters interaction and engagement, particularly effective in urban commercial zones.



Image Credit: MissingMiddleHousing.com

Arcade

The Arcade frontage style features a colonnade supporting inhabitable space above, with the facade aligned at or behind the frontage line at sidewalk level. Commonly found in retail areas, the arcade must be at least 12-feet wide, accommodating pedestrian flow and potential retail activities under its shelter. It may extend over the sidewalk, nearly reaching the curb, creating a covered pathway that shields pedestrians from the elements and enhances the street's aesthetic and functionality. This frontage design enriches the building's exterior, fostering a lively, interactive public space..

4. Development Intensity Guidelines

The following guidelines for development intensity are meant to help shape future growth in a manner that strategically densifies areas directly around transit stations to support high transit ridership. These guidelines are based on nationally accepted best practices that foster environments conducive to high transit ridership, meant to support current transit systems and pave the way for future growth and sustainability. By aligning the built environment with transit infrastructure, new development will be coordinated to create lively, accessible, and economically vibrant communities that naturally encourage higher transit ridership. General descriptions for each of the development intensity and type indicators are provided in the following pages.

A. Development Intensity

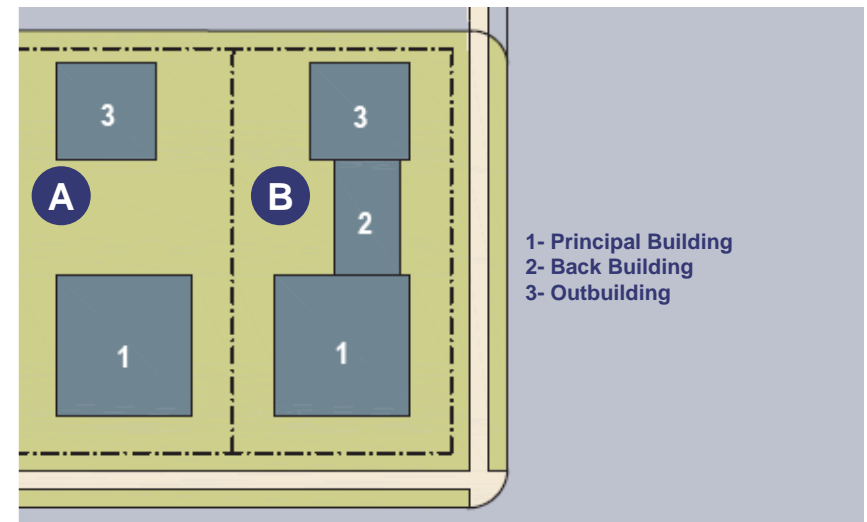
- Floor Area Ratio
- Max Lot Coverage
- Building Height
- Frontage Buildout

Floor Area Ratio (FAR)

FAR is a measurement used to measure floor coverage / area of a building and can be used to regulate the intensity of land use within a specific area. It is calculated by dividing the Gross Floor Area (GFA), the total floor area of a building or buildings on a lot, by the total area of that lot. This ratio indicates how much floor area can be constructed relative to the size of the lot. Higher FAR values typically signify greater development intensity, allowing for taller or denser buildings, while lower values indicate more spacious or less densely built environments. FAR guidelines for the LCRT corridor are based on the placetypes and their core and edge zones and range from 0.5 to 3.0 in the most intensely developed areas.

$$\text{Lot A} = \frac{\text{Building 1 GFA} + \text{Building 3 GFA}}{\text{Total Area of Lot A}}$$

$$\text{Lot B} = \frac{\text{Building 1 GFA} + \text{Building 2 GFA} + \text{Building 3 GFA}}{\text{Total Area of Lot B}}$$



Maximum Lot Coverage

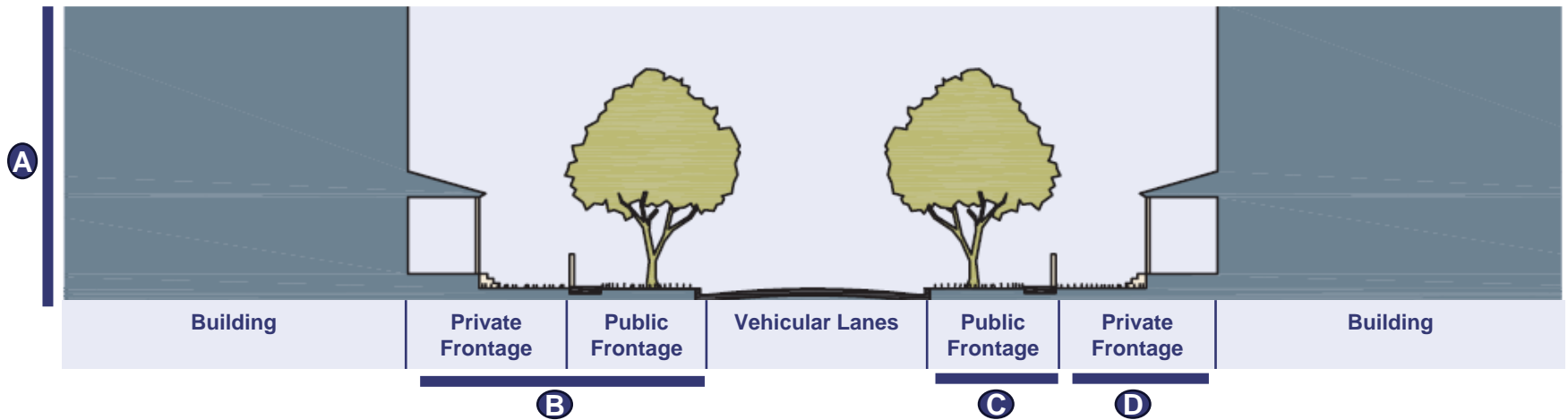
Lot coverage is the proportion of a lot's total area that is covered by buildings or structures, typically expressed as a percentage. It indicates the extent to which a lot is built upon. Above, Lot B has a higher lot coverage value, indicating that more of the lot area is occupied by buildings, leaving less unoccupied space, while a lower value suggests more unoccupied space relative to the lot size. Lot coverage regulations are often used in zoning ordinances to manage the density and character of development within a particular area. Maximum lot coverage guidelines for the LCRT corridor are based on the placetypes and their core and edge zones and range from 60- to 90-percent coverage.

$$\text{Lot A} = \frac{\text{Building 1 Area} + \text{Building 3 Area}}{\text{Total Area of Lot A}}$$

$$\text{Lot B} = \frac{\text{Building 1 Area} + \text{Building 2 Area} + \text{Building 3 Area}}{\text{Total Area of Lot B}}$$

Building Height

Building heights are based on the vertical measurement of a structure from its base to its highest point, typically the roof or parapet. Guidelines for building heights can be also be made into regulations and can set maximums or minimums within specific zones. Building height restrictions are often implemented to maintain architectural character, preserve views, manage sunlight access, and mitigate potential adverse effects on neighboring properties. Building height guidelines for the LCRT corridor are based on the placetypes and their core and edge zones and range from 2-stories in the least intense areas up to 10-stories in the most intensely developed areas.



Frontage Build Out

A lot's frontage build out is measured by the width of the building facade constructed along the primary street of a lot. Frontage build out guidelines can also be made into regulations to ensure consistency in streetscape aesthetics, maintain pedestrian scale, and facilitate appropriate setbacks and building alignments along streets or thoroughfares. There are two types of frontage, public and private. Public frontage (C) refers to buildings directly facing and accessible from public streets or spaces, fostering walkability and community interaction. Private frontage (D), on the other hand, involves buildings oriented towards private spaces like courtyards, parking lots, porches, or driveways reducing interaction with the public realm. Frontage build out guidelines for the LCRT corridor are based on the placetypes and their core and edge zones and range from 40- to 90-percent in the most intensely developed areas.

5. Site Design Standards

Site Design Standards inform where built elements are placed within a lot and can guide physical development to ensure a cohesive and aesthetically pleasing environment. Specific site design standards can include build-to-lines and setbacks to ensure that buildings front a primary street and enhance the pedestrian environment, various street activation standards, building envelope and lot standards, and parking standards. Building envelope and lot standards are most applicable to large lots (2+ acres in size) and may require more detailed framework planning where smaller blocks are not already established. Station areas along the LCRT corridor in need of specific planning for block and lot sizes can be found in Appendix B. Additionally, while parking standards can serve as a useful foundation, strategies to address parking should include various parking demand strategies and relate to both the market and changing patterns. These site design standards can be applied to each placetype core and edge zone. Visual and text-based descriptions of these frontage types are detailed on the following pages.

- A. Build-to-Lines and Setbacks
 - Front Setback
 - Rear Setback
 - Side Setback
- B. Street Activation Standards
 - Façade Transparency and Bay Spacing
 - Blank Wall-Ground Floor Treatment
 - Main Entrance Spacing
- C. Building Envelope and Lot Standards
 - Block Perimeter
 - Block Side Length
 - Frontage Buildout at Setback
 - Mixed Façade Primary St
- D. Parking Standards

A. Build-to-Lines and Setbacks



Base Image Credit: Young House Love

Build-to-Line / Front Setback

Build-to lines dictate where the front facade of a building must be located on a lot, often requiring it to be at or near the property line. They help create a well-defined street edge and can ensure that buildings are aligned, contributing to a coherent and predictable urban form. Additionally, it enhances the public realm to create a more walkable and visually appealing streetscape. By positioning buildings close to the street, build-to lines encourage ground-floor activities that engage pedestrians, such as retail shops, cafes, and other active uses.



Base Image Credit: Google Earth

Rear Setback

Rear setbacks specify the distance a building must be set back from the rear property line. They provide space for private gardens, patios, or other outdoor amenities for residents and can accommodate service areas for waste disposal and deliveries, or other utilities that require access and separation from the main building. The image to the left highlights the variety of rear yard setback and its relationship to the building as well as the outdoor uses.



Base Image Credit: The Locale Palate

Side Setback

Side yard setbacks dictate the distance a building must be set back from the side property lines, ensuring that buildings do not block light and air from reaching neighboring properties. They also reduce the risk of fire spreading between buildings by providing a buffer zone. Side yard setbacks are typically built to the minimum condition, highlighted in dark blue in the left image. However, in some cases, development will exceed the suggested minimum, highlighted in light blue.

B. Street Activation Standards



Base Image Credit: Maison Real Estate

Facade Transparency and Bay Spacing

Facade transparency refers to the amount of a building's facade that is composed of windows or other transparent elements. Bay spacing is the division of a building's facade into regular intervals or sections, often defined by columns or other vertical elements. Higher transparency and well-spaced bays create a visually engaging and dynamic street facade, making the area more attractive and inviting for pedestrians. Transparent facades also enhance safety by providing "eyes on the street," allowing building occupants to observe street activities, adding to a feeling of safety.



Image Credit: Renaissance Planning

Blank Wall-Ground Floor Treatment

Blank wall-ground floor treatment refers to the strategies used to avoid long, uninterrupted stretches of blank walls at the ground level of buildings. These strategies can include windows, doors, architectural details, and other design elements, which can help to create an engaging pedestrian environment.



Base Image Credit: Marshall Walker Real Estate

Main Entrance Spacing

Main entrance spacing refers to the distance between the primary entrances of buildings along a street. This regulation ensures that entrances are regularly spaced to promote accessibility and interaction with the public realm, and that buildings are easily accessible from the street. This can enhance the street's vibrancy and social environment that is also more inclusive and user-friendly.

C. Building Envelope and Lot Standards



Base Image Credit: Google Earth



Base Image Credit: Compass



Base Image Credit: Montford Group

Block Standards

Perimeter

A well-designed block network promotes pedestrian activity over driving for local trips by creating accessible connections between destinations. Compact blocks support mixed-use development and diverse building types nearby. Block perimeter (highlighted in red in the left image) refers to the total length of all the sides of a city block. Regulations for the maximum allowable perimeter for a block can ensure a walkable and connected urban grid as smaller block perimeters provide more frequent intersections and shorter travel distances for pedestrians.

Side Length

Related to the block perimeter, the block side length refers to the maximum length of any side of a block (red dash in the left image). This regulation ensures blocks are not excessively long, which can be a barrier for pedestrian connectivity. Limiting block side lengths ensures that pedestrians have frequent opportunities to cross streets and can also More intersections and shorter block sides can help calm traffic by reducing vehicle speeds.

Frontage Buildout at Setback

Frontage buildout at setback refers to the percentage of a lot's frontage that must be built out to the setback line, ensuring that buildings align with the street and create a consistent street wall. This can help define the street edge and create a strong and continuous street improving the pedestrian experience.

Mixed Façade Primary Street

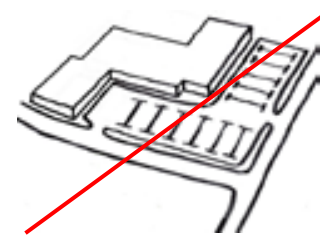
A mixed façade refers to maintaining a diverse and visually appealing set of facades along primary streets. Regulations can limit the length of uninterrupted lengths of similar materials or architectural rhythms to prevent monotony and encouraging an active and contrasting streetscape. This can be done with architectural details, entrances, and windows.

D. Parking Standards

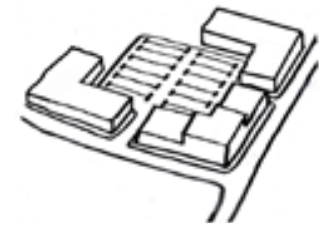
Off-street parking requirements significantly impact a developer's ability to achieve desired density levels and can substantially affect development costs. Reducing the amount of off-street parking required near stations, and regulating where on-site parking is allowed to be sited, supports the success of TOD areas by improving pedestrian circulation and decreasing development costs. There are a variety of strategies that can be used to address parking demand which should be updated as development patterns and the market shifts. Rather than being regulated by use alone, varying parking standards should be applied based on the placetype and for the core and edge zones which have different demand based on proximity to transit. This approach ensures that parking requirements are tailored to the specific urban context to maximize land use efficiency, maintain urban density, and encourage transit use. Framework planning efforts can also help to identify suitable locations for shared parking structures and other circulation and demand management strategies.

Parking Placement

Parking should be placed in a way that minimizes the visual impact on the public realm. For the majority of placetype core and edge zones, parking is required to be located at the rear or side of buildings, facilitating pedestrian-friendly environments. Landscaping or public art can be used to screen parking lots from view, and safe and direct pedestrian pathways should be provided from parking areas to building entrances.



Unacceptable Parking Site Design



Acceptable Parking Site Design

Parking Maximums

As stated above, parking maximums, rather than minimums, should be tied to location rather than solely to building use. Standards for parking maximums are related to each placetype and the core or edge zones within the placetype. If parking minimums (instead of maximums) are retained, additional strategies to allow developers to reach these requirements include counting shared or off-site parking towards the minimums and providing reductions for affordable housing.

Shared Parking

Different uses have different peak parking demand times. These parking peaks may vary for daytime and evening; as well as weekday and weekends. To accommodate those varying peak parking demands, mixed-use developments on one lot can use shared parking infrastructure to meet parking requirements. Promoting shared use parking arrangements can decrease the total amount of required parking. Joint use agreements between property owners can be an additional strategy. Office, residential, places of worship, and schools or daycares are common uses that can have varying peak parking times leading to optimal shared use potential.

Parking Demand Management

While establishing parking maximums, or lower minimums, can be one powerful parking demand management strategy, there are others that can be deployed to further meet station area goals and optimize land use. Where the market supports it, dynamic or market rate pricing for parking can help ensure that parking more appropriately indicates its true cost. Smart parking and automated payment systems can help address perceptions around a lack of sufficient parking. Employers can also offer incentives for alternative modes of transportation, including transit passes.

6. Building Type Standards

Within these standards, various building types are defined based on their form, scale, and architectural characteristics rather than solely on their function. These building types are typically categorized according to their intended use, such as residential, commercial, or mixed-use, but also consider their design features and how they interact with the surrounding urban fabric. These standards specify a variety of different building types such as single-family homes, plex products, or mixed-use buildings. A developer would also apply the frontage type and site design standards with these building type standards to have a full understanding of what is allowable on a parcel in each of the placetype core and edge zones. These other standards regulate setbacks, height, massing, facade design, and can include other architectural features to ensure a cohesive and attractive streetscape. Visual and text-based descriptions of the building types are presented in the following pages.

- Single-Family Detached
- Single-Family Attached / Rowhouse / Townhouse
- Single-Family Detached House (Side Yard)
- Carriage House / Accessory Dwelling Unit
- Cottage
- Duplex / Triplex / Quadplex
- Apartment House
- Live/Work
- Mixed Use/Apartment Block



Image Credit: The Preserve SC

Single-Family Detached

A Single-Family Detached House is a standalone residential structure typically situated on its own private lot, varying widely in size and design. The architectural features, including setbacks and frontage types, can differ significantly depending on the placetype core or edge zone in which the house is located. Single-family homes are best in suburban environments as they encourage lower density.



Image Credit: Midtown Townes

Single-Family Attached / Rowhouse / Townhouse

This is a residential building type where multiple homes are part of continuous row consisting of three or more units sharing common walls. This architectural style is particularly efficient in urban areas, as it maximizes the use of land and promotes a compact living environment. Each townhouse is designed as a separate dwelling unit, often spanning multiple floors, with its own entrance and sometimes small yards or rooftop spaces. This setup combines the independence of single-family living with the density benefits of communal structures, making it a popular choice in crowded cityscapes.



Image Credit: Flickr

Single-Family Detached House (Side Yard)

The Side Yard, is designed to maximize privacy and land use in densely built environments. It is characterized by a narrow width compared to its depth, typically having a depth-to-width ratio of at least two to one. This architectural approach focuses on orienting windows, doors, and other openings predominantly to one side of the house, keeping the opposite side largely closed off. This design strategy not only enhances privacy for both the occupants and their neighbors but also allows for effective use of the building's side yard, turning it into a functional and secluded outdoor space.



Image Credit: Marshall Walker Real Estate

Carriage House / Accessory Dwelling Unit

A Carriage House, also known as an Accessory Dwelling Unit (ADU) or Granny Flat, is a secondary building located on the same property as a main residence. Originally designed to house horse-drawn carriages and related equipment, these structures have evolved into flexible living spaces that can serve various functions, including rental housing or accommodation for extended family. This type of dwelling unit is celebrated for its ability to provide additional living space on existing lots making it a unique way to increase density without completely changing a community's character.



Image Credit: Houzz

Cottage

A Cottage, specifically the Charleston cottage, is a distinctive architectural style native to Charleston, South Carolina. These homes are often asymmetrical and typically feature a modest footprint, usually less than 500 square feet, and are designed with 1 to 1.5 stories under a low-pitched gable roof. Characteristically, these cottages include just two main rooms, with one or both opening onto a private side yard, a key feature that enhances both the charm and functionality of the space. The compact and efficient layout of Charleston cottages, combined with their vernacular charm, makes them a cherished part of the region's architectural heritage.



Image Credit: Compass

Duplex / Triplex / Quadplex

This house-form seamlessly fits into a predominantly single-family neighborhood, but contains multiple dwelling units under a single roof, without the use of dividing parapets. The units within these buildings can be arranged side-by-side or stacked vertically, and typically feature individual entrances off the street, but can share a common entryway. This style allows for efficient use of land and building materials while providing privacy for each unit. Such designs are ideal for residential neighborhoods, offering increased density.



Image Credit: Charleston Real Estate

Apartment House

An Apartment House, also known as a Multi-Family Building, is a larger residential structure that typically contains between 5 and 12 individual dwelling units. These buildings are often strategically placed on corner lots or grouped together to form distinct blocks within urban settings. To enhance resident privacy, the ground floor is usually elevated at least 18 inches above the street level, delineating the residential space from the public realm. Apartment houses are designed to accommodate multiple families or individuals, making efficient use of space in densely populated areas.



Image Credit: Redfin

Live / Work

A Live / Work building is a versatile structure that integrates commercial spaces on the ground floor with residential or office units above. These buildings are designed to accommodate both business operations and daily living, making them highly efficient for professionals looking to consolidate their work and home environments. Commonly, the ground floor features extensive glazing to invite visibility and light, enhancing the commercial appeal with a shopfront facade. While these buildings are often attached to others in dense urban settings, they can also be freestanding, offering flexibility in various landscapes. This building type is ideal for small businesses or artists who can benefit from a functional space that blurs the line between work and home.



Image Credit: McAlister Development Co

Mixed Use / Apartment Block

A Mixed Use / Apartment Block combines commercial space on the ground floor with residential or office spaces above. These structures are designed to foster a vibrant, interactive environment where business and daily life intersect. Typically located on busy streets to maximize visibility and access, the commercial areas often feature significant glazing to enhance openness and attract customers. Above, the residential or office spaces provide convenient living or working conditions. These buildings can be either attached, forming a continuous street front, or freestanding, offering a self-contained community within their walls. This type of development promotes density, diversity, and accessibility in city centers.

7. Stormwater Standards

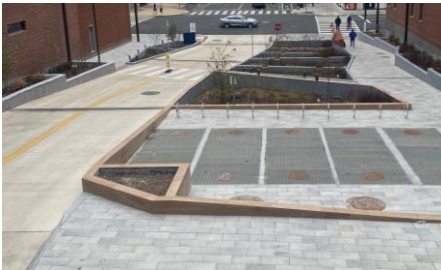
Effective stormwater management reduces the risk of urban flooding by controlling the volume and rate of runoff. This is especially important in the LCRT corridor where extensive challenges with stormwater and high tide flooding already exist. More traditional approaches to stormwater management require that stormwater be treated on-site which limits the amount of usable square footage for development. While retention ponds can offer a short-term low-cost method of accommodating stormwater, they can work to impede a pedestrian friendly environment and in the long-term have a direct impact on revenue and profitability as the land could be developed in a different manner. Strategies for paving, channeling, storage, and filtration are included. The following pages provide an overview of the types of approaches available to address stormwater.

- Paving
- Channeling
- Storage
- Filtration



Paving

Stormwater paving approaches involve using permeable or semi-permeable materials and designs to manage stormwater runoff effectively. These approaches help reduce flooding, improve water quality, and recharge groundwater by allowing water to infiltrate the ground rather than running off into storm drains. Paving materials used may include wood planks, plastic mesh, concrete paver blocks, pervious asphalt, or pea gravel, among others.



Channeling

Stormwater channeling involves designing systems to direct and manage the flow of stormwater, preventing flooding and erosion, and improving water quality. Effective stormwater channeling helps guide water to appropriate areas for infiltration, detention, or discharge.



Storage

Stormwater storage involves capturing and holding stormwater runoff to manage its flow, reduce flooding, and improve water quality. This can be achieved through various types of infrastructure designed to temporarily store water during storm events and release it slowly over time.



Filtration

Stormwater filtration is a critical component of stormwater management aimed at improving water quality by removing pollutants. It typically involves passing water through a system that traps contaminants, discharging cleaner water either to the ground or stormwater systems. These systems can be natural or constructed such as marshland, or surface landscaping and natural vegetation.

All Image Credits: Renaissance Planning

APPENDIX B: TRANSITION CONSIDERATIONS

Introduction

The LCRT BRT will span a diverse 21.3-mile corridor serving 20 station areas that each have a unique identity and will require distinct strategies to advance the future vision. To foster a supportive code environment, it is essential to prioritize and account for the diverse elements needed to facilitate the evolution or transformation of each station area.

This appendix lays out a foundation to assist the municipal prioritization of more detailed framework planning. Many of the future station locations are in areas that are not currently walkable and need targeted public investments to spur catalytic development.

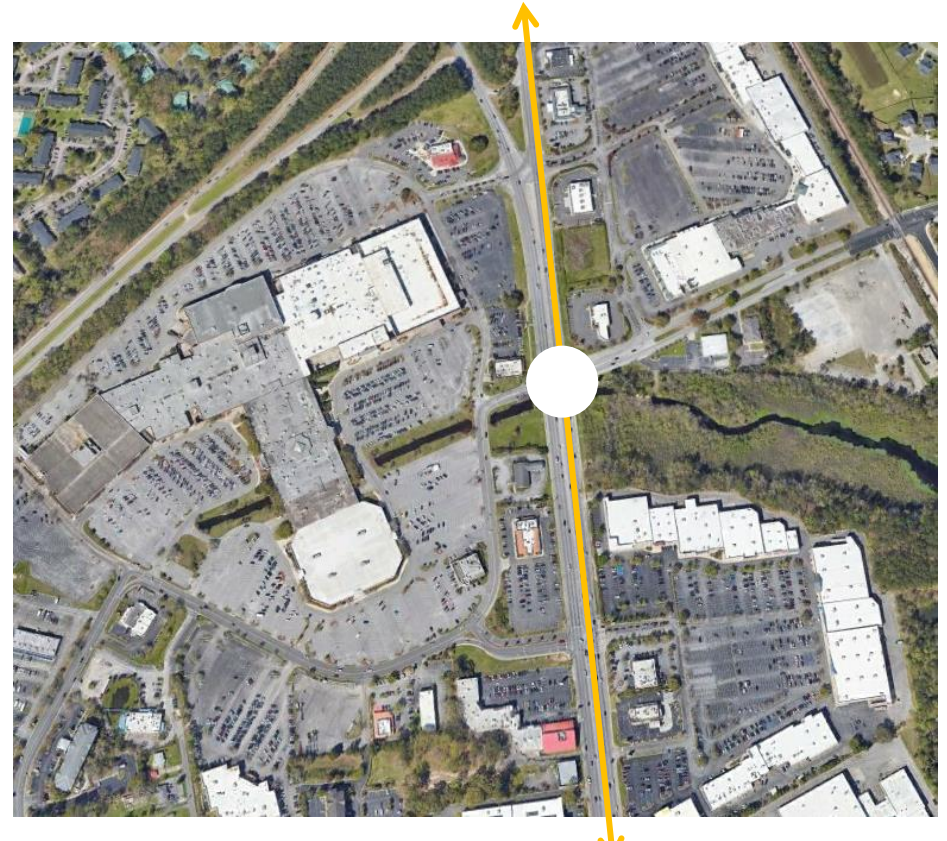
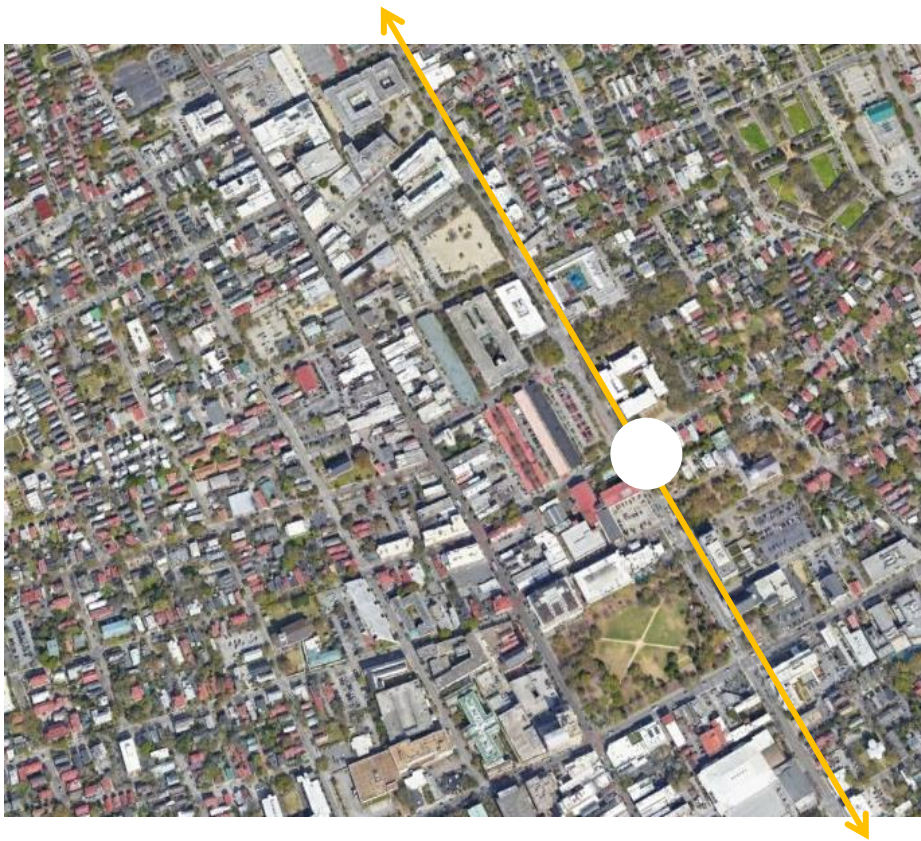
How development occurs is critical to the LCRT corridor becoming a more integrated transit community. Achieving pedestrian friendly design, a mix of uses, a variety of housing and mobility choices, healthy lifestyle options, and an abundance of destinations will take coordinated and sustained efforts. While this chapter details specific station area priorities, corridor wide recommendations and implementation strategies are discussed in Chapter III.

Appendix B Overview:

1. Station Area Profiles
2. Indicator Categories
3. Scoring
4. Station-by-Station Analysis

1. Station Area Profiles

In the following chapter, each station area profile includes a description of the area, attractors and key strengths of each area, and recommendations. Nine unique indicators are classified into four groups and are scored for each station area. The four indicator categories include the Environmental Framework, Economic Dynamics, Transportation Network, and Capacity and Readiness. The scores for each of these indicator categories are meant to assist in the framework planning process by signaling the priority planning areas for each station area.

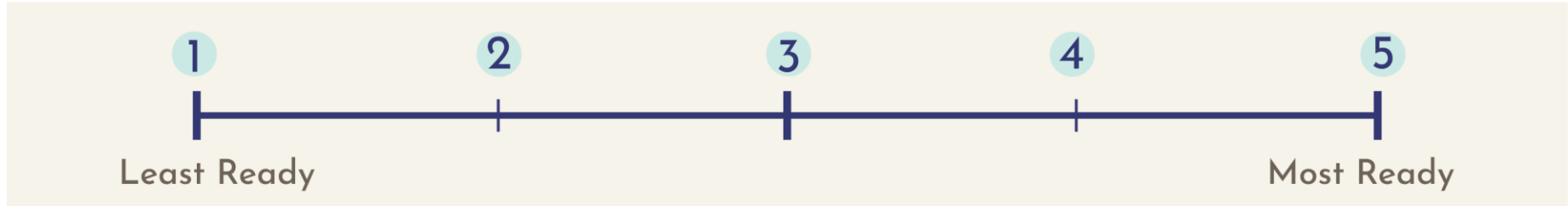


←→ LCRT Alignment

The above images illustrate the vast differences in development patterns and TOD readiness across the LCRT corridor. In light of this, different planning priorities and strategies should be adopted to best facilitate successful TOD in each station area.

2. Indicator Categories

The four indicator categories assist in identifying station area-wide needs, which may also be applicable to parcel level planning and design. These indicators have been scored on a scale of one to five, one (1) indicating the lowest level of TOD readiness (or the highest relative amount of planning work needed) and five (5) indicating the highest readiness for TOD (or the most limited amount of planning work needed) within the 1/2-mile station area walkshed.



Environmental Elements

- Natural resources
- Parks
- Open space
- Stormwater management



Economic Dynamics

- Affordable housing
- Development readiness
- Access to job centers



Transportation Network

- Block structure
- Block size
- Sidewalks and bike lanes
- Thoroughfare types
- On- and off-street parking
- Parking placement standards



Capacity & Readiness

- Community readiness
- Planning efforts
- Carrying capacity

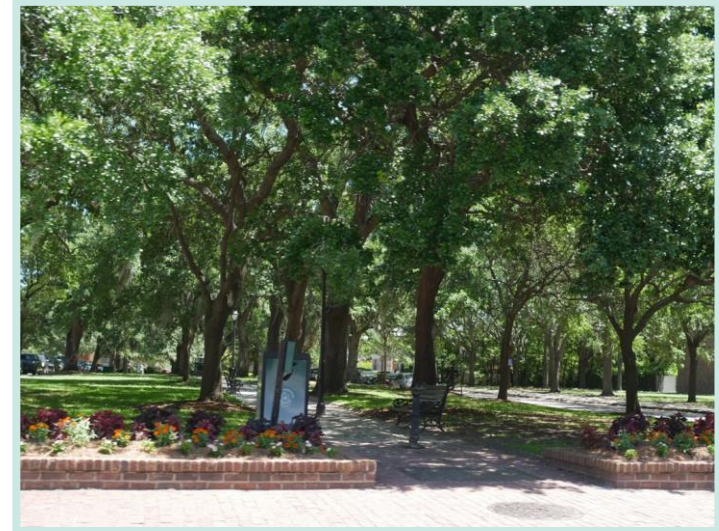
3. Scoring

Environmental Elements



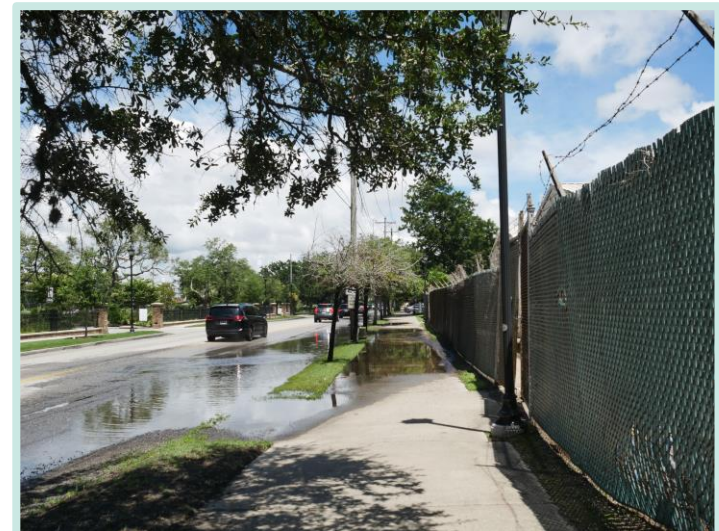
Park / Open Space

A low score (1) indicates there are few parks, difficult or limited access to parks, existing parks do not serve community needs, or is void of landscape. A score between 2 and 4 suggests there are some options for parks, adequate access, and serve some but not all of the community needs. The highest score (5) is reserved for an area with many options for parks, easy access, adequate service to community needs, and a substantial urban tree canopy coverage. Scores for this indicator were based on a site visit visual survey and visual imagery analysis.



Stormwater

Areas with low scores (1) lack sufficient stormwater mitigation strategies, leading to significant and frequent flooding issues, posing potential hazards to residents and property. A medium score indicates the area has infrastructure that meets some of the demand, but there are still lingering issues with occasional flooding. High-scoring areas (5) have already implemented effective strategies for stormwater mitigation that meet or exceed demand, resulting in minimal to no flooding issues. Scores for this indicator were based on a site visit visual survey and stakeholder feedback.





Affordable Housing

A low score indicates housing affordability is a pronounced concern, indicated by unmet demand and challenges for individuals seeking affordable living arrangements. Medium scores are given to areas where housing affordability is still a priority, but resources have been channeled to address the challenge. High-scoring areas exhibit a healthy mix of affordable and market-rate housing options, providing a diverse range of choices for residents. Scores for this indicator were supported by the affordable housing strategy and program development from the strategies recommended as part of other Phase 2 deliverables.



Development Readiness

Areas with scores of 1 or 2 are those where the market is ready for redevelopment which is indicated in part by the current pipeline of projects which have already been planned or begun construction. Medium scores are given to areas where the market is beginning to reach readiness to develop, and where street grids and lot sizes could help support mixed-use development. In low-scoring areas, there may be sites identified as appropriate for redevelopment however the market may not yet be supportive of TOD patterns. Scores for this indicator were supported by the market assessment findings, and input from subject matter experts.



Transportation Network

Parking

In low scoring areas (1-2), the majority of parking is concentrated in large surface lots located in front of buildings, negatively impacting the overall aesthetics and walkability of the area, rather than in smaller lots behind buildings or in shared garages. Medium-scoring areas feature some parking in the rear of lots and some parking located in front of buildings, striking a balance between convenience and visual appeal. High-scoring areas prioritize a majority of parking located in the rear of lots, employing shared parking strategies, and implementing lower parking requirements. Scores for this indicator were based on a site visit visual survey and visual imagery analysis.



Block Structure

A low score (1-2) indicates the area exhibits an unorganized street grid and block sizes with no consistent pattern. A medium score indicates that the area maintains some level of organization in its street grids and block sizes, but there are instances of non-conforming areas that introduce a degree of inconsistency. High scores are reserved for areas that have implemented an organized and logical street grid with well-defined walkable block sizes. This level of organization contributes to a seamless and efficient urban environment, facilitating ease of movement and a sense of order. Scores for this indicator were based on a site visit visual survey and GIS analysis of block sizes.



Capacity & Readiness



Community Readiness

Areas with a low community readiness score indicate a need for greater community engagement, or areas which may need more support for TOD patterns. Medium scoring areas indicate some readiness from the community for TOD related change and the highest scoring areas have a greater level of support for the envisioned change to support LCRT. Scores for this indicator were based community and stakeholder engagement and input.

Carrying Capacity

Areas with a carrying capacity score of 1 or 2 are those with the greatest carrying capacity, while areas with scores of 5 are those with the fewest identified sites (and smallest acreage) available for redevelopment. Scores for this indicator were based on stakeholder input and market research. The acreage of parcels identified as having potential to redevelop in the next 20 years was summed: areas with 10 or fewer acres were given a score of 5, 11 – 20 acres a score of 3 or 4, and 20 or more acres a score of 1 or 2.

Planning Efforts

A low score means there are many sites identified that can facilitate development in the area, but the community has no completed plans for redevelopment, indicating need for a comprehensive vision for future development. Areas with a medium rank have a few completed plans for redevelopment, providing a foundation that can be expanded upon. The highest-ranking areas have some completed plans for redevelopment, showcasing a proactive approach to urban planning and enhancing the feasibility of future projects.



4. Station-by-Station Analysis

The following section applies the scoring process to the four indicator categories for each station area and looks at the bicycle/pedestrian existing conditions and needs. The bicycle/ pedestrian conditions are analyzed based on safety, equity, connectivity + access, and local economy. as well as recommendations and cost estimates for the proposed changes.

Existing Conditions

Environmental Framework	Park / Open Structure	1 to 5
	Stormwater	1 to 5
Economic Dynamics	Affordable Housing	1 to 5
	Development Readiness	1 to 5
Transportation Network	Parking	1 to 5
	Block Structure	1 to 5
Capacity & Readiness	Community Readiness	1 to 5
	Carrying Capacity	1 to 5
	Planning Efforts	1 to 5

Existing Conditions Indicator Scoring

The station area’s existing conditions include scores for the indicators within the four classifications. In addition to scoring the classifications from 1 (least ready) to 5 (most ready), the existing conditions also include a profile of the station area, attractors, and recommendations.

Bicycle / Pedestrian

Safety	0 to 6
Equity	0 to 6
Connectivity + Access	0 to 10
Local Economy	0 to 10
TOTAL	0 to 27

Proposed Bicycle & Pedestrian Projects	
Proposed Bicycle Projects by Prioritization	
High	Red line
Medium	Yellow line
Low	Green line
Proposed Pedestrian Projects	
LCRT Alignment	Blue line
LCRT Station	Blue circle
Station Half-mile Buffer	Grey square

Bicycle / Pedestrian Indicator Scoring (left); Sample Map Legend (right)

The bicycle/pedestrian analysis includes two parts for each station area*.

- Part 1 - Station areas are described and scored on four bicycle/pedestrian indicators, and the costs of the proposed projects for the area are estimated. The following page details how the cost assumptions were determined, and further information on the indicator scores can be found in the Station Access Capital Improvement Plan Memorandum.
- Part 2 - Includes a map detailing the proposed projects and their priorities around the station area.

*Charleston stations are mapped together because of the station area overlap.

Cost Assumptions

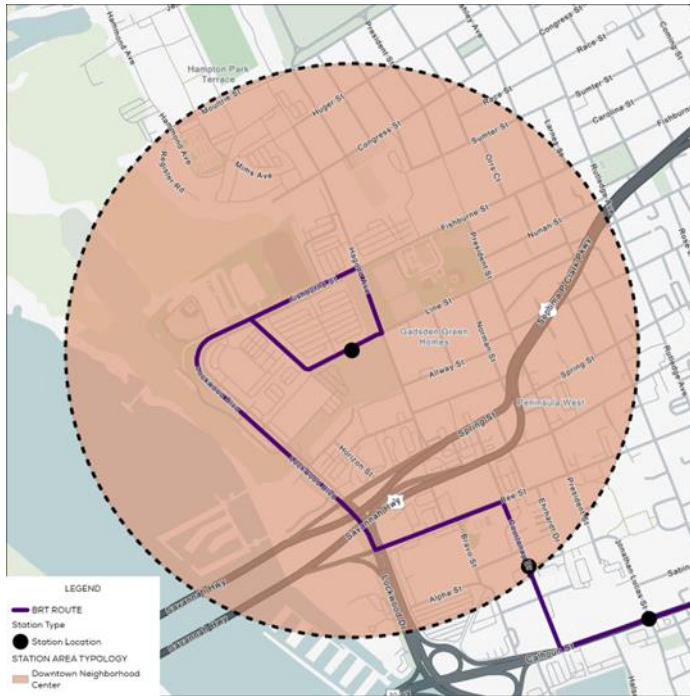
To determine financial expectations for the recommended bicycle and pedestrian improvements in the station areas, the price of the improvements are estimated by linear foot. This section multiplies these cost assumptions by the suggested number of feet in the station area to estimate the financial investment. While most station areas are assessed individually, the bicycle pedestrian networks in the five Downtown Charleston stations overlap so the cost estimate provided includes the entire area of stations.

Item	Cost* (linear foot)	Description
New Sidewalk	\$275-325	Construction of a 6-foot wide sidewalk with an 18-inch curb and gutter, and minimal landscaping.
Update Existing Sidewalk	\$375-425	Demo of existing 6-foot wide sidewalk and construction of a new 6-foot wide sidewalk with 18-inch curb and gutter, and minimal landscaping.
Shared Use Path	\$250-425	Construction of a 12-foot wide asphalt path with minimal landscaping and earthwork and wayfinding.
Bike Boulevard/ Shared Lanes	\$150-200	Use on a two-way street with speeds less than 35 mph. Includes sharrows in both directions placed at a 250-foot offset interval, along with bicycle wayfinding signage at a similar interval.
Bike Lanes	\$170-200	Includes a mill and overlay of two-lane roadway, 32-foot overall width, and striping for bike lanes without a buffer in both directions.
Separated Bike Lanes	\$675-800	Use of landscaped curb islands to create a 3-foot buffer along the length of a bike lane. Cost assumes a bike lane in both directions. Includes a mill and overlay of two-lane roadway, 40-foot overall width, and striping for 5-foot bike lanes with a 3-foot buffer in both directions.
Traffic Calming	\$50-100	Measures to slow speed. Typical examples could include; speed humps, curb extensions, and / or chicanes.

*The linear foot cost assumptions use 2023 dollars and include the basic construction-related expenses, a 30% contingency, and 10% utility relocation allowances. The following are excluded from the estimates: environmental permitting, structural, stormwater treatment, permitting, construction administration, inspection services, public outreach, funding planning, client management services, and engineering or design costs.

Line St. / Hagood Ave.

Downtown Neighborhood Center



Station Area Profile

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 (a 13 acre recreational park), Arthur W. Christopher Community Center, Gadsden Green affordable housing community and Westedge mixed-use development. Priority TOD goals include the infill of vacant land and surface parking areas 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.

Environmental Framework	Park / Open Structure	5
	Stormwater	1
Economic Dynamics	Affordable Housing	2
	Development Readiness	5
Transportation Network	Parking	1
	Block Structure	3
Capacity & Readiness	Community Readiness	3
	Carrying Capacity	1
	Planning Efforts	4

Points of Interest

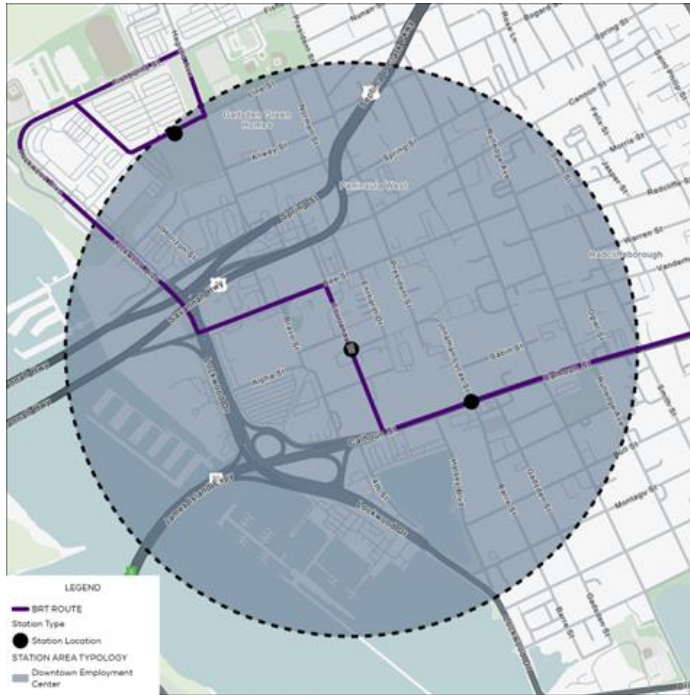
Joseph P. Riley Jr. Park minor league baseball stadium, Johnson Hagood Stadium and nearby campus uses, and the station's proximity to the Medical District jobs center.

Recommendations

- Transition surface parking to structured parking, establish shared parking policies, and add on-street parking where feasible.
- Pursue Joint Development 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.

Courtenay Dr / Doughty St

Downtown Employment Center



Station Area Profile

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. 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.

Environmental Framework	Park / Open Structure	3
	Stormwater	2
Economic Dynamics	Affordable Housing	2
	Development Readiness	2
Transportation Network	Parking	2
	Block Structure	4
Capacity & Readiness	Community Readiness	4
	Carrying Capacity	5
	Planning Efforts	5

Points of Interest

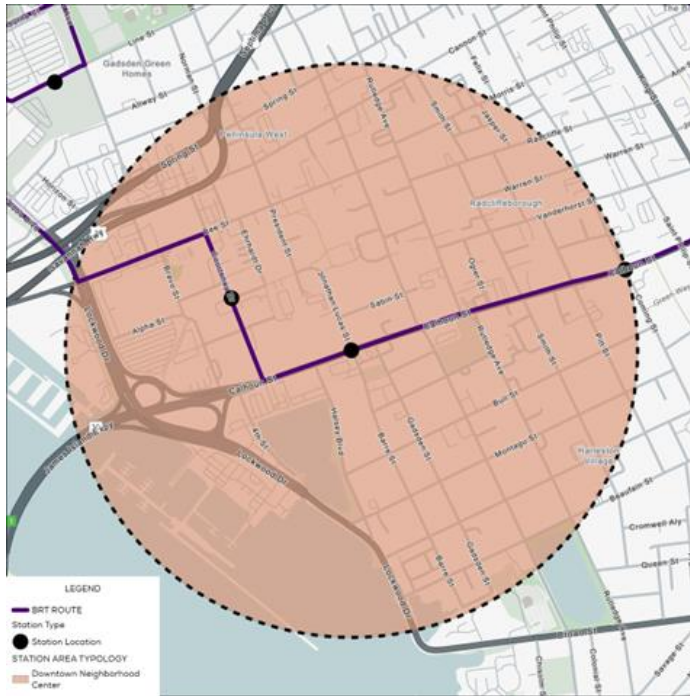
Ralph H. Johnson Veteran Affairs (VA) Medical Center, the Medical University of South Carolina (MUSC), and the Roper St. Francis Healthcare System.

Recommendations

- Strengthen the employer-based Transportation Demand Management (TDM) for the area to encourage non-auto travel options for employees and visitors.
- Continue to invest in flood mitigation and stormwater management strategies and incorporate strong urban landscaping elements inclusive of a strong street tree canopy.
- Explore 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 housing supply to the area.

Jonathan Lucas St

Downtown Neighborhood Center



Station Area Profile

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. 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.

Environmental Framework	Park / Open Structure	3
	Stormwater	2
Economic Dynamics	Affordable Housing	2
	Development Readiness	2
Transportation Network	Parking	2
	Block Structure	4
Capacity & Readiness	Community Readiness	4
	Carrying Capacity	4
	Planning Efforts	5

Points of Interest

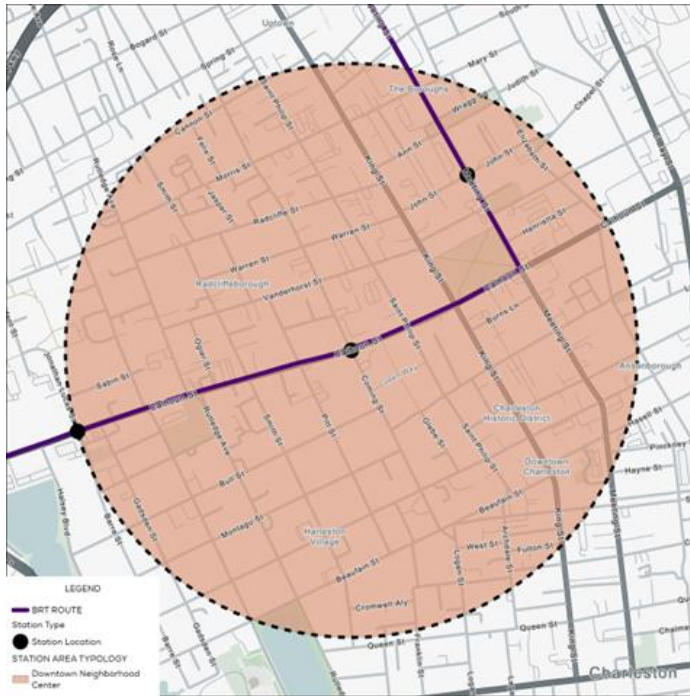
Alberta Sottile Lake and the marina facilities and parking south of the station.

Recommendations

- Support redevelopment of existing surface parking and other underutilized land into structured parking and residential uses.
- Explore 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 percent affordable housing units within the walkshed.

Coming St

Downtown Neighborhood Center



Station Area Profile

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. 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. This area has little room for infill and redevelopment and is therefore not expected to substantially change over in the next 20 years.

Environmental Framework	Park / Open Structure	3
	Stormwater	3
Economic Dynamics	Affordable Housing	1
	Development Readiness	3
Transportation Network	Parking	3
	Block Structure	5
Capacity & Readiness	Community Readiness	3
	Carrying Capacity	4
	Planning Efforts	4

Points of Interest

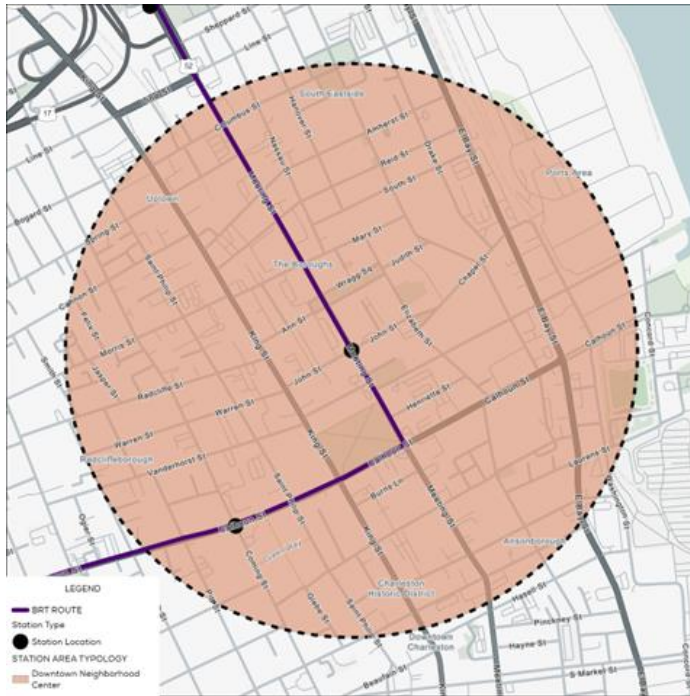
College of Charleston, Marion Square and the King Street shopping district.

Recommendations

- Encourage workforce housing production within the smaller scale residential infill locations; ensure long-term preservation of existing legally restricted affordable housing.
- Continued improvements to walking and biking infrastructure to connect with Marion Square, which will serve as the southern terminus of the Lowline linear park.

John St

Downtown Neighborhood Center



Station Area Profile

The John Street station area is in the existing dense, historic urban area of the lower Peninsula and has an overlapping walkshed with Coming Street. 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 be directly connected to the Lowline linear park and multi-use trail system.

Environmental Framework	Park / Open Structure	5
	Stormwater	5
Economic Dynamics	Affordable Housing	3
	Development Readiness	2
Transportation Network	Parking	3
	Block Structure	3
Capacity & Readiness	Community Readiness	4
	Carrying Capacity	3
	Planning Efforts	5

Points of Interest

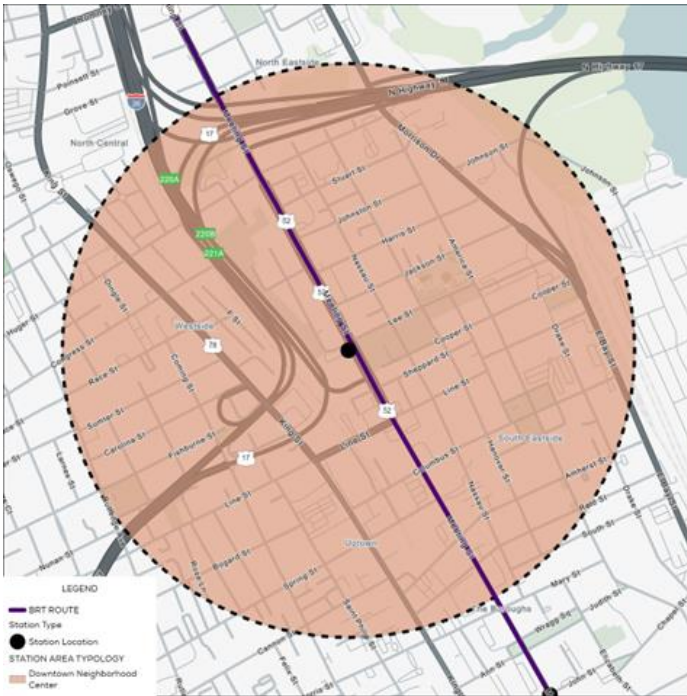
Adjacent to the Charleston Visitor’s Center, home of the Charleston Area Regional Transportation Authority (CARTA) Transfer Center, and close proximity of the planned Lowline linear park system.

Recommendations

- Increase the supply of mixed-income housing in the area, retaining existing affordable units and working towards affordable and workforce housing production to achieve 20 percent affordability within the station area.
- Focus on pedestrian and bicycle improvements to feed into the Lowline linear park and trail.

Lee St

Downtown Neighborhood Center



Station Area Profile

The Lee Street station is within the Cooper River Bridge Redevelopment Area, which is one of the City’s priority areas for redevelopment and reinvestment. 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.

Environmental Framework	Park / Open Structure	3
	Stormwater	4
Economic Dynamics	Affordable Housing	4
	Development Readiness	4
Transportation Network	Parking	3
	Block Structure	2
Capacity & Readiness	Community Readiness	4
	Carrying Capacity	2
	Planning Efforts	4

Points of Interest

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.

Recommendations

- Prioritize infill and redevelopment of existing vacant and underutilized properties as enabled by existing zoning.
- Improve walking and bicycle access through more detailed urban design and transportation studies to reduce auto and pedestrian conflict areas.
- Preserve and upgrade the existing number of legally restricted affordable housing units and attracting additional market rate housing.

Downtown Charleston



Bicycle/Pedestrian

These bicycle/pedestrian improvements were determined for the six Downtown Charleston Stations.

Item	Length (ft.)	Probable Cost*
New Sidewalk	10,118	\$2,782,329
Bike Lanes	23,003	\$1,955,283
Buffered Bike Lanes	8,378	\$1,256,763
Separated Bike Lanes	21,098	\$7,120,564
Shared Lane Markings	62,234	\$622,344
Shared Use Path	33,138	\$8,284,437
Traffic Calming	19,036	\$951,783
TOTAL	177,005	\$22,973,503

The following table shows the distribution of bicycle/pedestrian recommendations across priority levels.

Priority	Length (ft.)	Probable Cost*
High	77,865	\$13,525,733
Medium	38,675	\$2,713,143
Low	60,464	\$6,734,628

*The cost assumptions use 2023 dollars and include the basic construction-related expenses, a 30% contingency, and 10% utility relocation allowances. Opinions of probable costs are subject to change while details are finalized for this study. The following are excluded from the estimates: environmental permitting, structural, stormwater treatment, permitting, construction administration, inspection services, public outreach, funding planning, client management services, and engineering or design costs.

Highlights:

- Connect sidewalk gaps or provide new sidewalks in certain areas.
- Provide a well-connected network of bicycle facilities throughout of the peninsula.
- Improve key crossings to promote safety and access.

Analysis of Stations:

Each Station Area was designated scores for the four bicycle/pedestrian areas of analysis. The total scores and key themes are identified below.

Lee St	21
John St	22
Coming St	19
Jonathan Lucas St	23
Courtenay Dr / Doughty St	24
Line St / Hagood Ave	27

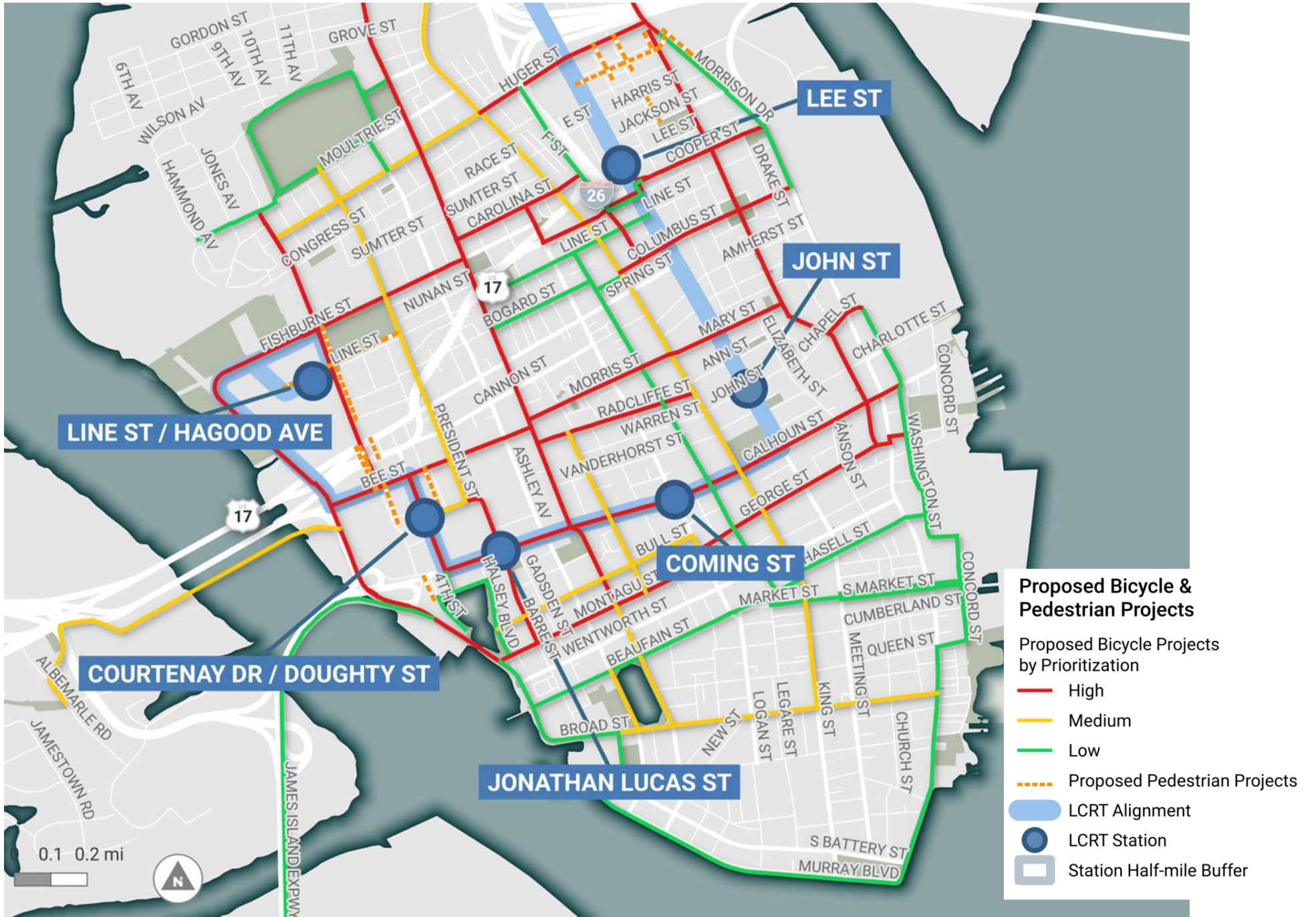
Safety: Low to high level of traffic stress; High crash history; No to limited barriers

Equity: High concentration of vulnerable population; High demand for walking and biking

Connectivity + Access: Residential, commercial, employment, schools, major healthcare

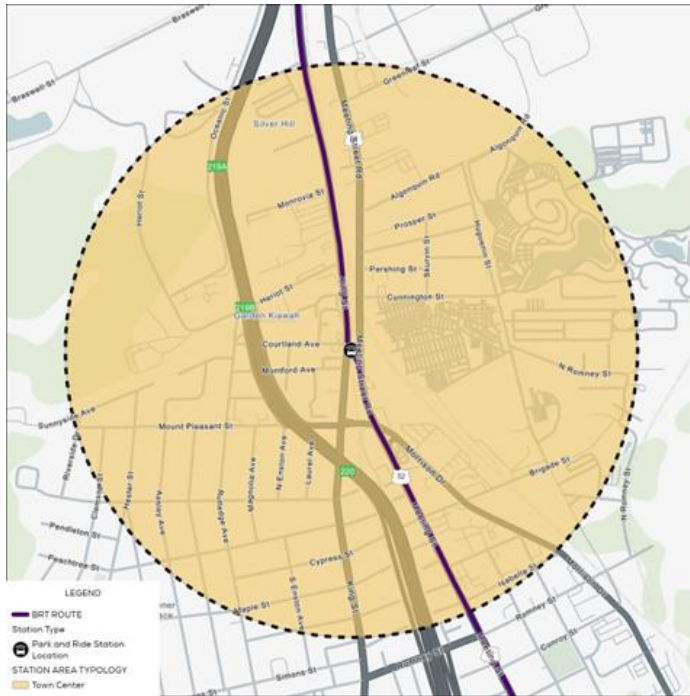
Local Economy: Proximity to historic downtown and sports facilities; Multimodal hub with key bicycle/pedestrian thoroughfare

Downtown Charleston



Mt Pleasant St

Town Center



Station Area Profile

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. 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. This area is challenged by the breakdown of the urban grid and the convergence of the I-26 corridor and a lacking bicycle and pedestrian realm. The Lowline linear park will terminate at this station.

Environmental Framework	Park / Open Structure	3
	Stormwater	3
Economic Dynamics	Affordable Housing	3
	Development Readiness	5
Transportation Network	Parking	2
	Block Structure	2
Capacity & Readiness	Community Readiness	3
	Carrying Capacity	1
	Planning Efforts	2

Points of Interest

Historic cemetery, single-family residential, a gas station, and the Joseph Floyd Manor affordable housing community. The proposed Lowline linear park will terminate at this station.

Recommendations

- Conduct additional neighborhood-level planning and visioning to engage residents and other property owners in advancing TOD urban patterns of infill in the area.
- Prioritize and encourage transformational development opportunities presented by large parcels to re-establish the grid of streets to the north.
- Pursue public-private joint development opportunity at the Hop Lot site to include mixed-use development and structured parking.

Mt Pleasant St

These bicycle/pedestrian improvements were determined for the Mt. Pleasant St Station Area.

Item	Length (ft.)	Probable Cost*
New Sidewalk	5,143	\$1,414,316
Bike Lanes	14,950	\$1,270,716
Buffered Bike Lanes	852	\$127,795
Separated Bike Lanes	12,948	\$4,369,825
Shared Lane Markings	7,811	\$78,114
Shared Use Path	10,930	\$2,732,421
Traffic Calming	435	\$21,735
TOTAL	53,068	\$10,014,923

The following table shows the distribution of bicycle/pedestrian recommendations across priority levels.

Priority	Length (ft.)	Probable Cost*
High	31,550	\$7,011,493
Medium	11,874	\$1,959,941
Low	9,644	\$1,043,489

*The cost assumptions use 2023 dollars and include the basic construction-related expenses, a 30% contingency, and 10% utility relocation allowances. Opinions of probable costs are subject to change while details are finalized for this study. The following are excluded from the estimates: environmental permitting, structural, stormwater treatment, permitting, construction administration, inspection services, public outreach, funding planning, client management services, and engineering or design costs.



Bicycle/Pedestrian

Highlights:

- Sidewalks connecting beyond I-26 to the residential area
- Bike lanes are proposed on Mt. Pleasant St and King St
- Separated bike lanes are proposed on Brigade St and Morrison St

Analysis of Stations:

The Station Area was scored using four bicycle/ pedestrian areas of analysis. The scores and key themes are identified below.

Safety (0-6 points)	4
Equity (0-6 points)	6
Connectivity + Access (0-10 points)	6
Local Economy (0-10 points)	3
TOTAL (0-27 points)	19

Safety: Moderate level of traffic stress; Moderate crash history; Major barriers (highways)

Equity: High concentration of vulnerable population; High demand for walking and biking

Connectivity + Access: Residential, commercial, schools

Local Economy: Mix of industrial development; some transition

Mt Pleasant St



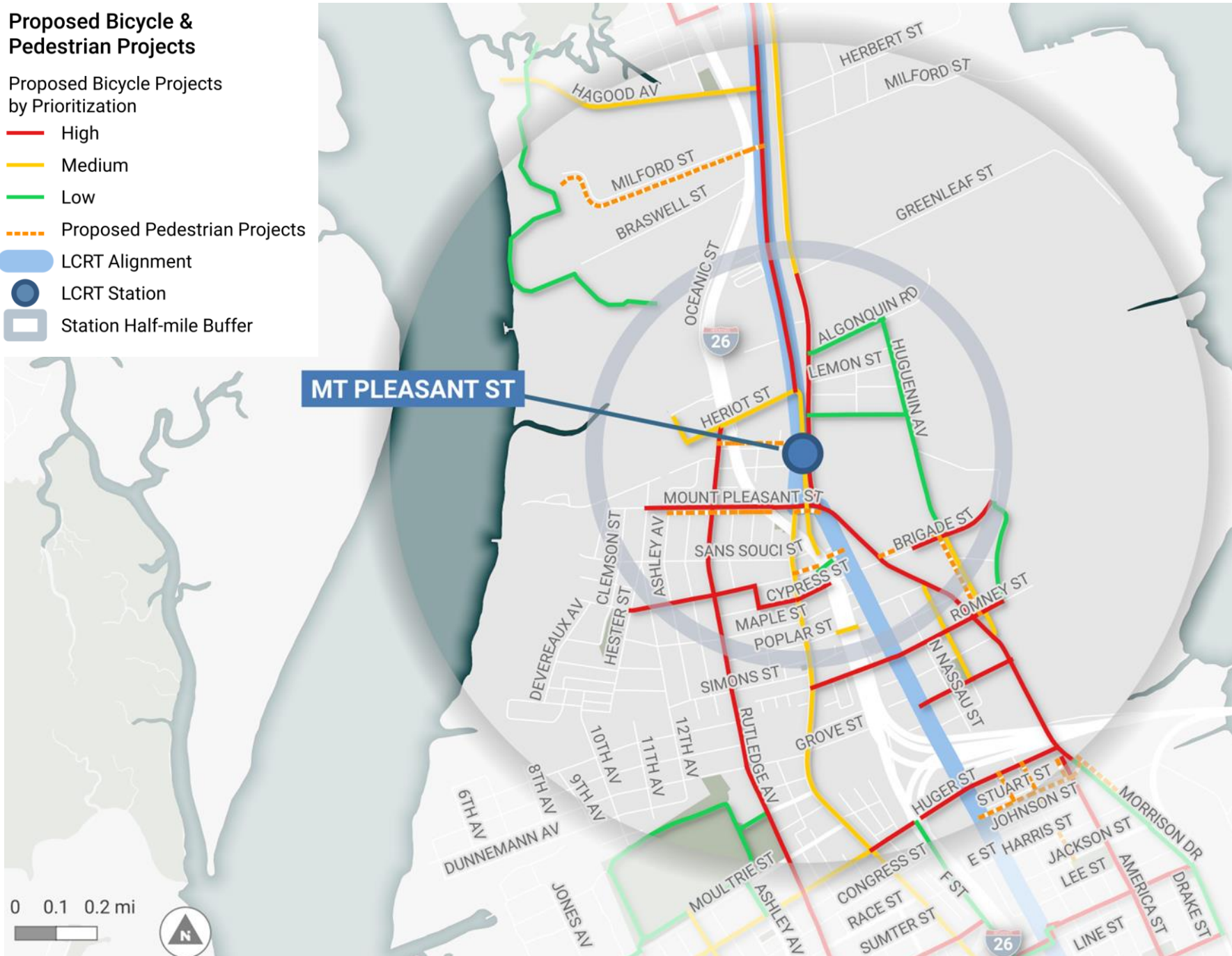
Bicycle/Pedestrian

Proposed Bicycle & Pedestrian Projects

Proposed Bicycle Projects by Prioritization

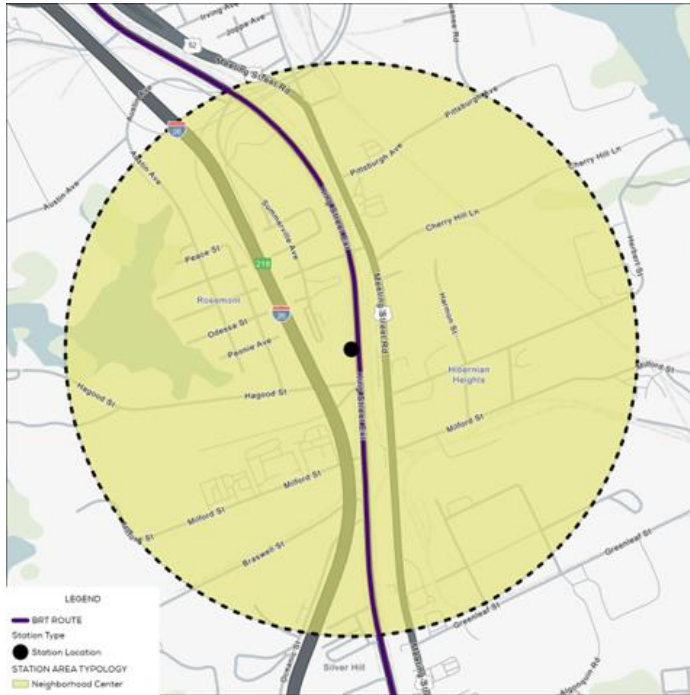
- High
- Medium
- Low
- Proposed Pedestrian Projects
- LCRT Alignment
- LCRT Station
- Station Half-mile Buffer

MT PLEASANT ST



Rosemont/Magnolia

Neighborhood Center



Station Area Profile

The Rosemont / Magnolia Station is located south of the historic Rosemont neighborhood and adjacent to the proposed 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.

Environmental Framework	Park / Open Structure	2
	Stormwater	2
Economic Dynamics	Affordable Housing	2
	Development Readiness	4
Transportation Network	Parking	2
	Block Structure	2
Capacity & Readiness	Community Readiness	3
	Carrying Capacity	2
	Planning Efforts	2

Points of Interest

Rosemont Neighborhood, Magnolia mixed-use development.

Recommendations

- Prioritize expansion of the street grid and connectivity for bicycles and pedestrians to better connect the Rosemont neighborhood, the LCRT station, and the Magnolia site.
- Work with local non-profits to advance neighborhood preservation strategies and continue supporting new affordable housing production.

Rosemont/Magnolia

These bicycle/pedestrian improvements were determined for the Rosemont/Magnolia Station Area.

Item	Length (ft.)	Probable Cost*
New Sidewalk	2,986	\$821,243
Buffered Bike Lanes	2,884	\$432,605
Shared Lane Markings	6,080	\$60,799
Shared Use Path	15,489	\$3,872,261
TOTAL	27,439	\$5,186,909

The following table shows the distribution of bicycle/pedestrian recommendations across priority levels.

Priority	Length (ft.)	Probable Cost*
High	11,271	\$2,660,900
Medium	8,597	\$1,043,708
Low	7,572	\$1,482,301

*The cost assumptions use 2023 dollars and include the basic construction-related expenses, a 30% contingency, and 10% utility relocation allowances. Opinions of probable costs are subject to change while details are finalized for this study. The following are excluded from the estimates: environmental permitting, structural, stormwater treatment, permitting, construction administration, inspection services, public outreach, funding planning, client management services, and engineering or design costs.



Bicycle/Pedestrian

Highlights:

- Shared use path along Meeting Street Rd and King St
- Shared lane markings on Hagood Ave and sidewalks on Milford St to connect to Ashley River shared use path

Analysis of Stations:

The Station Area was scored using four bicycle/ pedestrian areas of analysis. The scores and key themes are identified below.

Safety (0-6 points)	4
Equity (0-6 points)	6
Connectivity + Access (0-10 points)	5
Local Economy (0-10 points)	2
TOTAL (0-27 points)	17

Safety: Moderate level of traffic stress; Moderate crash history; Major barriers (railroad, highways)

Equity: High concentration of vulnerable population; High demand for walking and biking

Connectivity + Access: Residential, commercial, employment

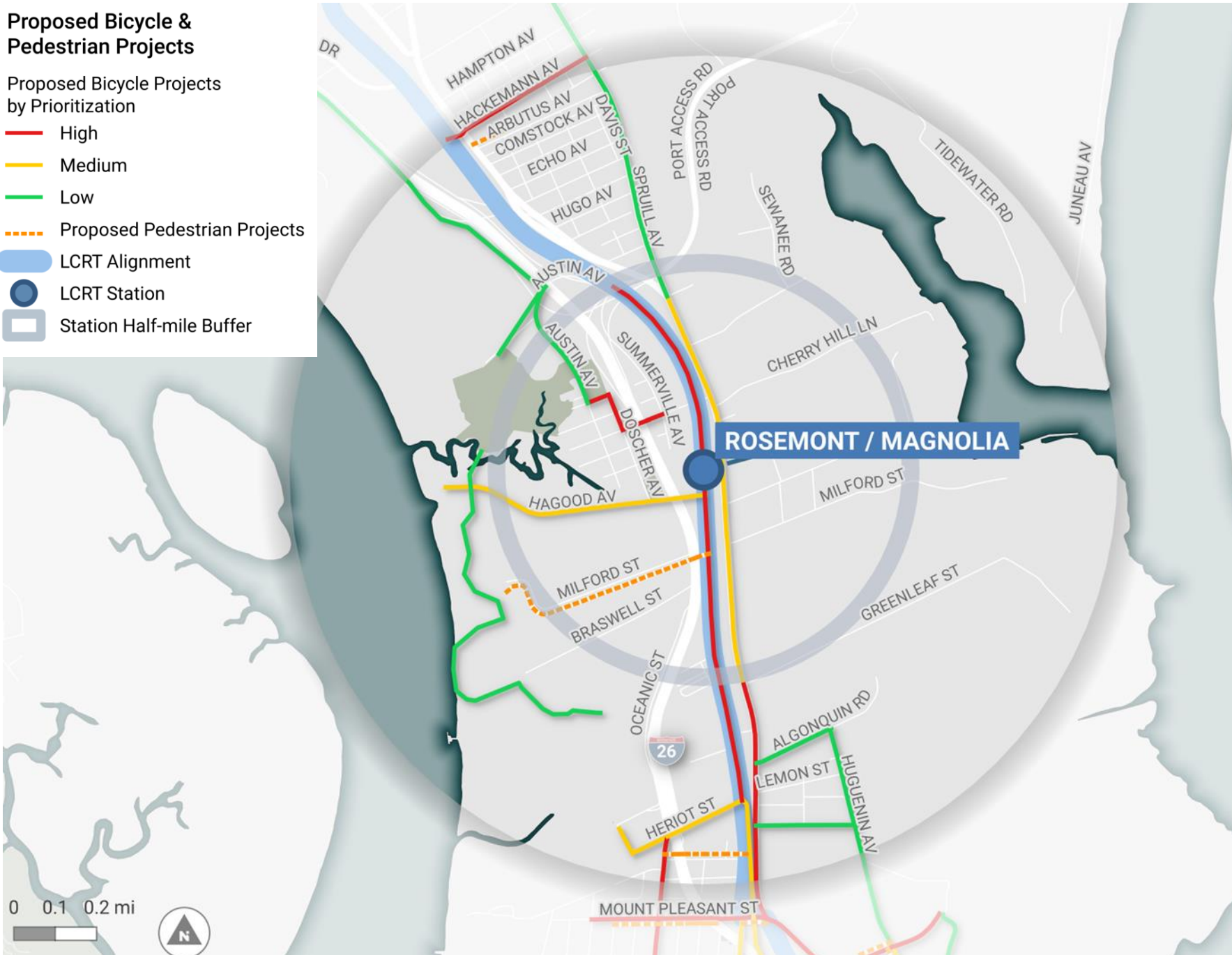
Local Economy: Largely industrial development; some potential for transition

Rosemont/Magnolia

Proposed Bicycle & Pedestrian Projects

Proposed Bicycle Projects by Prioritization

- High
- Medium
- Low
- - - Proposed Pedestrian Projects
- LCRT Alignment
- LCRT Station
- Station Half-mile Buffer



Hackemann Ave

Neighborhood Center



Station Area Profile

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. There area is also home to port related uses associated with the redevelopment of the former Navy base to the east. The station area has light industrial, commercial and office uses which create a mix of small walkable blocks and large blocks with warehouse and big box building footprints. The I-26 highway corridor is a major barrier to east-west connectivity.

Environmental Framework	Park / Open Structure	2
	Stormwater	2
Economic Dynamics	Affordable Housing	2
	Development Readiness	4
Transportation Network	Parking	2
	Block Structure	1
Capacity & Readiness	Community Readiness	2
	Carrying Capacity	1
	Planning Efforts	1

Points of Interest

The station is adjacent to the historic African American communities of Union Heights, Windsor Place, and Howard Heights.

Recommendations

- Discuss long-term redevelopment options with private property owners of large tracts of non-residential land west of Rivers and I-26.
- Work with local housing authority to explore redevelopment options and other strategies to create a stronger neighborhood grid and mixed income housing.
- Identify needed flood mitigation and green infrastructure strategies to support infill and redevelopment of properties to the west of Rivers Avenue.
- Preserve naturally occurring affordable housing and neighborhood character.

Hackemann Ave

These bicycle/pedestrian improvements were determined for the Hackemann Ave Station Area.

Item	Length (ft.)	Probable Cost*
New Sidewalk	399	\$109,793
Bike Lanes	2,056	\$174,729
Shared Use Path	979	\$244,765
TOTAL	3,434	\$529,287

The following table shows the distribution of bicycle/pedestrian recommendations across priority levels.

Priority	Length (ft.)	Probable Cost*
High	2,455	\$284,523
Medium	-	-
Low	979	\$244,765

**The cost assumptions use 2023 dollars and include the basic construction-related expenses, a 30% contingency, and 10% utility relocation allowances. Opinions of probable costs are subject to change while details are finalized for this study. The following are excluded from the estimates: environmental permitting, structural, stormwater treatment, permitting, construction administration, inspection services, public outreach, funding planning, client management services, and engineering or design costs.*



Bicycle/Pedestrian

Highlights:

- Sidewalks and bikeway to connect the residential neighborhoods to the east
- Shared use path along Spruill Ave

Analysis of Stations:

The Station Area was scored using four bicycle/ pedestrian areas of analysis. The scores and key themes are identified below.

Safety (0-6 points)	6
Equity (0-6 points)	6
Connectivity + Access (0-10 points)	4
Local Economy (0-10 points)	3
TOTAL (0-27 points)	19

Safety: High level of traffic stress; High crash history; Major barriers

Equity: High concentration of vulnerable population; High demand for walking and biking

Connectivity + Access: Residential, schools

Local Economy: Desire for greater densities

Hackmann Ave



Bicycle/Pedestrian

Proposed Bicycle & Pedestrian Projects

Proposed Bicycle Projects by Prioritization

- High
- Medium
- Low
- - - Proposed Pedestrian Projects
- LCRT Alignment
- LCRT Station
- Station Half-mile Buffer

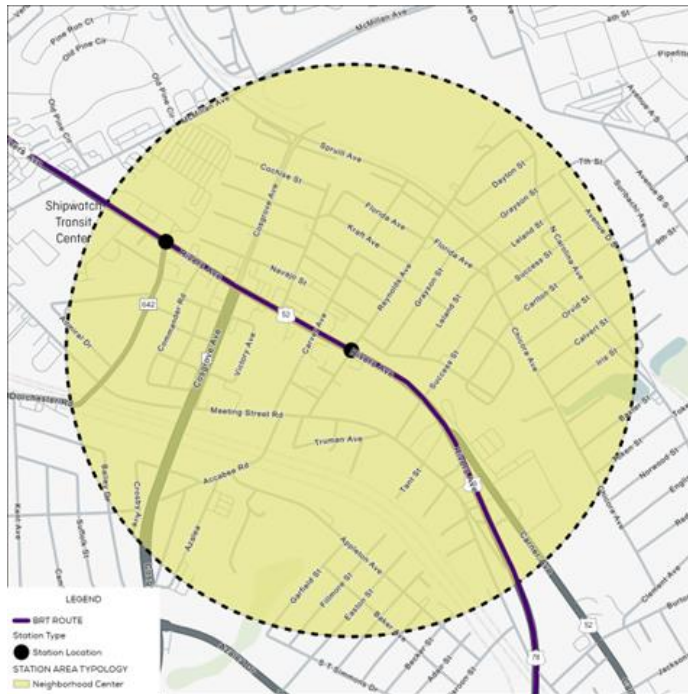


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Reynolds Ave

Neighborhood Center



Station Area Profile

The Reynolds Avenue station is located at the terminus of the Reynolds Avenue Main Street. This station is comprised a mix of housing types to the north and south of the station with suburban commercial uses along Rivers Avenue. 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.

Environmental Framework	Park / Open Structure	2
	Stormwater	1
Economic Dynamics	Affordable Housing	1
	Development Readiness	2
Transportation Network	Parking	2
	Block Structure	3
Capacity & Readiness	Community Readiness	2
	Carrying Capacity	1
	Planning Efforts	4

Points of Interest

This station is comprised predominately of single-family housing neighborhoods and suburban commercial uses; there are also several social, civic, and religious assets like the Chicora School of Communications and Charleston County Social Services.

Recommendations

- Pursue funding for shared parking structures to address a larger station-wide parking management plan to alleviate needs for site-by-site parking and encourage more infill and small lot redevelopment.
- Reinforce TOD patterns with infill while continuing efforts to retain existing historical and cultural assets.
- Continue to engage with 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.
- Incorporate stormwater management and mitigation strategies with new development and any bicycle or pedestrian infrastructure improvements.

Reynolds Ave

These bicycle/pedestrian improvements were determined for the Reynolds Ave Station Area.

Item	Length (ft.)	Probable Cost*
New Sidewalk	7,636	\$2,099,820
Bike Lanes	8,319	\$707,131
Shared Use Path	3,556	\$889,007
Bike Boulevard	2,306	\$172,983
TOTAL	21,817	\$3,868,941

The following table shows the distribution of bicycle/pedestrian recommendations across priority levels.

Priority	Length (ft.)	Probable Cost*
High	13,420	\$2,953,437
Medium	6,051	\$720,376
Low	2,346	\$195,128

**The cost assumptions use 2023 dollars and include the basic construction-related expenses, a 30% contingency, and 10% utility relocation allowances. Opinions of probable costs are subject to change while details are finalized for this study. The following are excluded from the estimates: environmental permitting, structural, stormwater treatment, permitting, construction administration, inspection services, public outreach, funding planning, client management services, and engineering or design costs.*



Bicycle/Pedestrian

Highlights:

- Pedestrian and bicycle enhancements on high-use corridors including Reynolds, Meeting Street Rd, Carver Ave, and Azalea Dr

Analysis of Stations:

The Station Area was scored using four bicycle/ pedestrian areas of analysis. The scores and key themes are identified below.

Safety (0-6 points)	6
Equity (0-6 points)	6
Connectivity + Access (0-10 points)	6
Local Economy (0-10 points)	4
TOTAL (0-27 points)	22

Safety: High level of traffic stress; High crash history; Major barriers (railroad)

Equity: High concentration of vulnerable population; High demand for walking and biking

Connectivity + Access: Residential, commercials, schools

Local Economy: Reynolds Avenue Area Merchants Association (RAAMA); interest in historic designation and preservation/upkeep

Reynolds Ave



Bicycle/Pedestrian

Proposed Bicycle & Pedestrian Projects

Proposed Bicycle Projects by Prioritization

- High
- Medium
- Low
- Proposed Pedestrian Projects
- LCRT Alignment
- LCRT Station
- Station Half-mile Buffer



Dorchester Rd

Town Center



Station Area Profile

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 Charleston County’s new Civic Hub 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.

Environmental Framework	Park / Open Structure	1
	Stormwater	2
Economic Dynamics	Affordable Housing	2
	Development Readiness	1
Transportation Network	Parking	3
	Block Structure	2
Capacity & Readiness	Community Readiness	2
	Carrying Capacity	2
	Planning Efforts	3

Points of Interest

Larger scale aging commercial properties, affordable housing community, and port-related activities.

Recommendations

- Continue conversations with property owners of aging commercial properties to explore redevelopment and infill opportunities identified in framework planning process.
- Pursue redevelopment and traffic calming opportunities to transform McMillian Avenue to a pedestrian oriented Main Street.
- Pursue funding and partnerships for shared parking and stormwater structures to address a larger station wide parking and stormwater management plan to alleviate site-by-site needs.
- Support 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.

Dorchester Rd

These bicycle/pedestrian improvements were determined for the Dorchester Rd Station Area.

Item	Length (ft.)	Probable Cost*
New Sidewalk	5,916	\$1,626,938
Bike Lanes	9,161	\$778,689
Buffered Bike Lanes	5,200	\$779,989
Shared Use Path	216	\$54,106
TOTAL	20,494	\$3,239,721

The following table shows the distribution of bicycle/pedestrian recommendations across priority levels.

Priority	Length (ft.)	Probable Cost*
High	14,230	\$2,671,600
Medium	6,264	\$568,121
Low	-	-

**The cost assumptions use 2023 dollars and include the basic construction-related expenses, a 30% contingency, and 10% utility relocation allowances. Opinions of probable costs are subject to change while details are finalized for this study. The following are excluded from the estimates: environmental permitting, structural, stormwater treatment, permitting, construction administration, inspection services, public outreach, funding planning, client management services, and engineering or design costs.*



Bicycle/Pedestrian

Highlights:

- Sidewalks along Meeting St., McMillan Ave.
- Buffered and separated bicycle lanes along Meeting St., McMillan Ave., and Dorchester Rd.

Analysis of Stations:

The Station Area was scored using four bicycle/ pedestrian areas of analysis. The scores and key themes are identified below.

Safety (0-6 points)	6
Equity (0-6 points)	6
Connectivity + Access (0-10 points)	10
Local Economy (0-10 points)	5
TOTAL (0-27 points)	27

Safety: High level of traffic stress; High crash history; Major barriers (railroad)

Equity: High concentration of vulnerable population; High demand for walking and biking

Connectivity + Access: Residential, commercial, social service, library

Local Economy: RAAMA; interest in historic designation and preservation/upkeep

Dorchester Rd



Bicycle/Pedestrian

Proposed Bicycle & Pedestrian Projects

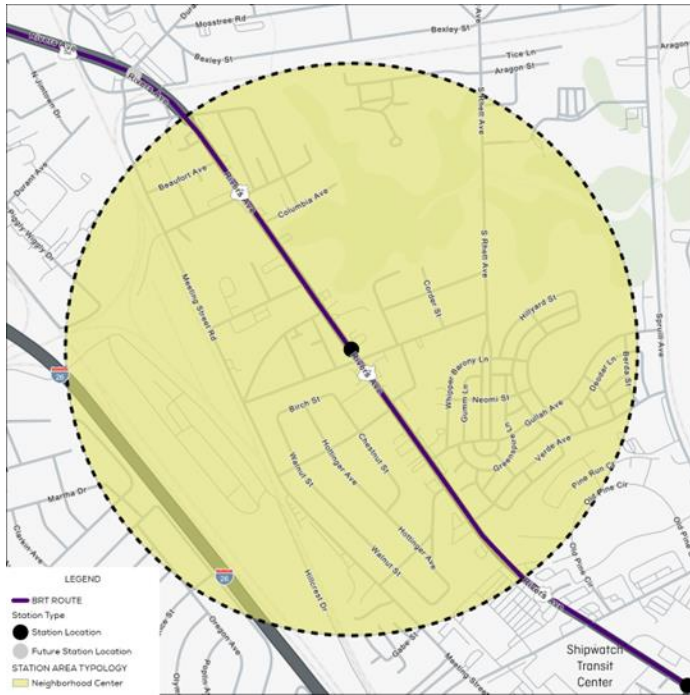
Proposed Bicycle Projects by Prioritization

- High
- Medium
- Low
- Proposed Pedestrian Projects
- LCRT Alignment
- LCRT Station
- Station Half-mile Buffer



Helm Ave

Neighborhood Center



Station Area Profile

The Helm Ave Station is located on Rivers Avenue directly adjacent to smaller lot commercial and retail uses and some residential uses including the Whipper Barony and Horizon Village neighborhoods. The CSX railroad tracks, industrial land uses, and I-26 all separate the residential area located within the half-mile walking radius to the west. There is an incomplete street grid in the station due to marshlands around Noisette Creek.

Environmental Framework	Park / Open Structure	2
	Stormwater	2
Economic Dynamics	Affordable Housing	3
	Development Readiness	5
Transportation Network	Parking	2
	Block Structure	2
Capacity & Readiness	Community Readiness	2
	Carrying Capacity	3
	Planning Efforts	2

Points of Interest

Horizon Village Apartments, community resource center, single family housing, and auto oriented commercial properties predominantly fronting Rivers Avenue with redevelopment potential to TOD form.

Recommendations

- Advance efforts to fund and develop the Noisette Creek Preserve Greenway and prioritize pedestrian and bike connectivity from the station area and surrounding developments to the Greenway.
- Identify private landowners interested in redeveloping existing sites adjacent to the station location into higher density mixed-uses reflective of TOD.
- Provide incentives to produce new dedicated affordable housing and preserve existing naturally occurring affordable housing.

Helm Ave

These bicycle/pedestrian improvements were determined for the Helm Ave Station Area.

Item	Length (ft.)	Probable Cost*
New Sidewalk	5,149	\$1,415,941
Bike Lanes	17,860	\$1,518,070
Bike Boulevard	4,471	\$335,349
TOTAL	27,480	\$3,269,361

The following table shows the distribution of bicycle/pedestrian recommendations across priority levels.

Priority	Length (ft.)	Probable Cost*
High	15,623	\$2,306,229
Medium	11,857	\$963,132
Low	-	-

**The cost assumptions use 2023 dollars and include the basic construction-related expenses, a 30% contingency, and 10% utility relocation allowances. Opinions of probable costs are subject to change while details are finalized for this study. The following are excluded from the estimates: environmental permitting, structural, stormwater treatment, permitting, construction administration, inspection services, public outreach, funding planning, client management services, and engineering or design costs.*



Bicycle/Pedestrian

Highlights:

- Sidewalks on Helm between Meeting Street Rd and S. Rhett Ave
- Bicycle connections and enhancements on Meeting Street Rd

Analysis of Stations:

The Station Area was scored using four bicycle/ pedestrian areas of analysis. The scores and key themes are identified below.

Safety (0-6 points)	4
Equity (0-6 points)	4
Connectivity + Access (0-10 points)	4
Local Economy (0-10 points)	2
TOTAL (0-27 points)	14

Safety: Moderate level of traffic stress; High crash history

Equity: Moderate concentration of vulnerable population; High demand for walking and biking

Connectivity + Access: Residential, commercial

Local Economy: Neighborhood center

Helm Ave

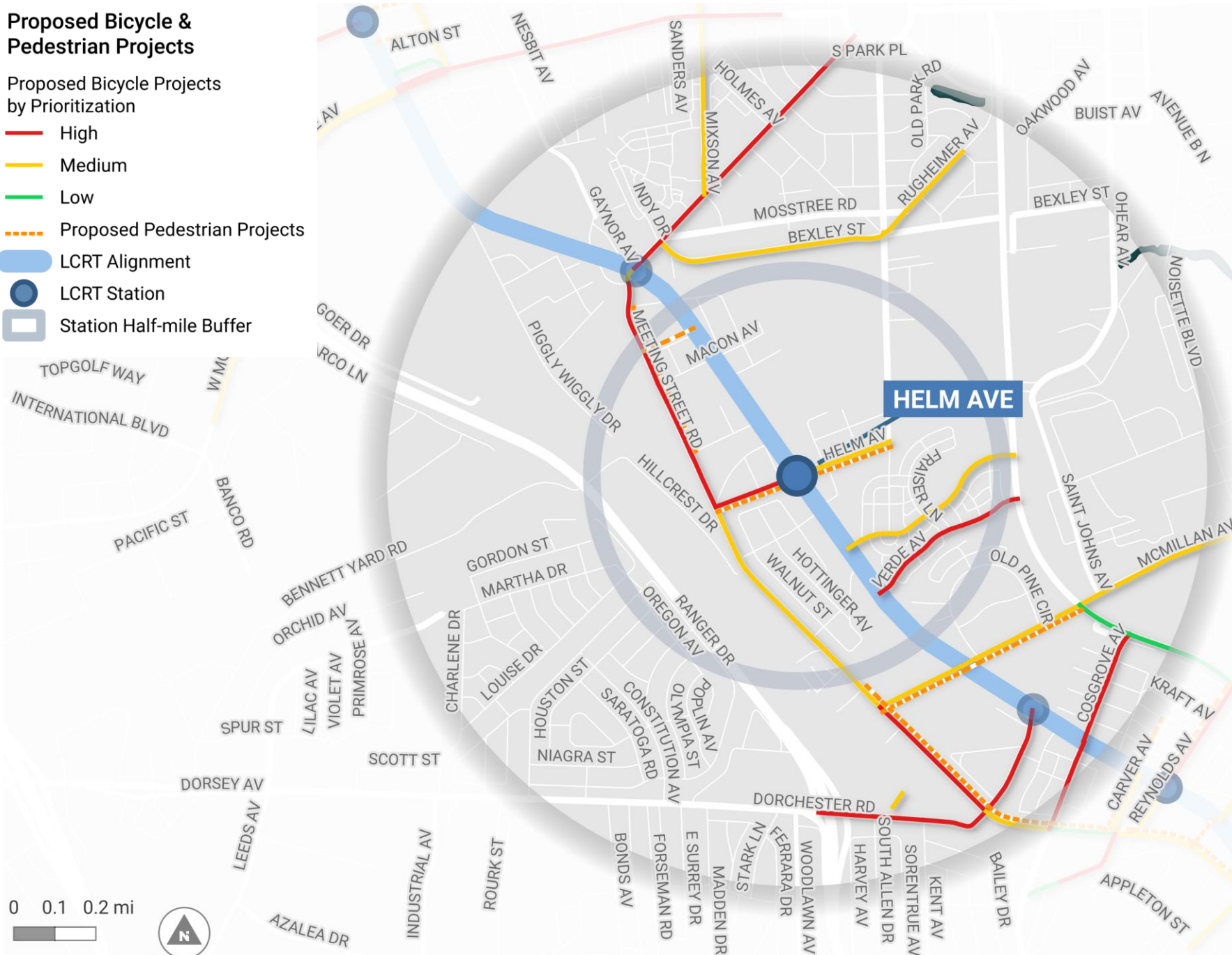


Bicycle/Pedestrian

Proposed Bicycle & Pedestrian Projects

Proposed Bicycle Projects by Prioritization

- High
- Medium
- Low
- Proposed Pedestrian Projects
- LCRT Alignment
- LCRT Station
- Station Half-mile Buffer



Durant Ave (Future)

Neighborhood Center



Station Area Profile

The future 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 corridors.

Environmental Framework	Park / Open Structure	3
	Stormwater	2
Economic Dynamics	Affordable Housing	1
	Development Readiness	4
Transportation Network	Parking	2
	Block Structure	1
Capacity & Readiness	Community Readiness	2
	Carrying Capacity	2
	Planning Efforts	2

Points of Interest

Historic Liberty Hill Neighborhood, Mixon new urbanist community, North Charleston Transit Center.

Recommendations

- Invest in roadway infrastructure improvements to reconfigure the streets around the station area and reduce overall access conflicts to simplify the intersection.
- Provide incentives to produce new dedicated affordable housing and preserve existing naturally occurring affordable housing.
- Engage community members for more detailed TOD planning to further refine ideas for commercial redevelopment.

Mall Dr

Employment Center



Station Area Profile

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 close to Charleston International Airport and the convention center and future Roper Hospital complex.

Environmental Framework	Park / Open Structure	2
	Stormwater	2
Economic Dynamics	Affordable Housing	1
	Development Readiness	1
Transportation Network	Parking	2
	Block Structure	3
Capacity & Readiness	Community Readiness	3
	Carrying Capacity	2
	Planning Efforts	3

Points of Interest

To the east there is single-family residential, multiple schools and civic assets. To the west there is mixed-use office, commercial, multifamily developments, MUSC Children’s Health After Care Hours, and government offices including North Charleston City Hall.

Recommendations

- Identify private landowners interested in redeveloping existing suburban uses into a higher density mixed-use pattern reflective of TOD.

Mall Dr

These bicycle/pedestrian improvements were determined for the Mall Dr Station Area.

Item	Length (ft.)	Probable Cost*
New Sidewalk	4,706	\$1,294,080
Bike Lanes	2,743	\$233,182
Buffered Bike Lanes	14,235	\$2,135,223
Separated Bike Lanes	5,062	\$1,708,386
Shared Lane Markings	3,903	\$39,034
Shared Use Path	1,503	\$375,814
Traffic Calming	2,298	\$172,317
TOTAL	34,450	\$5,958,037

The following table shows the distribution of bicycle/pedestrian recommendations across priority levels.

Priority	Length (ft.)	Probable Cost*
High	14,780	\$3,585,886
Medium	18,920	\$2,119,267
Low	749	\$252,883

*The cost assumptions use 2023 dollars and include the basic construction-related expenses, a 30% contingency, and 10% utility relocation allowances. Opinions of probable costs are subject to change while details are finalized for this study. The following are excluded from the estimates: environmental permitting, structural, stormwater treatment, permitting, construction administration, inspection services, public outreach, funding planning, client management services, and engineering or design costs.



Bicycle/Pedestrian

Highlights:

- Shared use path and sidewalk connections along Mall Dr
- Buffered and separated bicycle lanes along Montague Ave

Analysis of Stations:

The Station Area was scored using four bicycle/ pedestrian areas of analysis. The scores and key themes are identified below.

Safety (0-6 points)	6
Equity (0-6 points)	6
Connectivity + Access (0-10 points)	10
Local Economy (0-10 points)	5
TOTAL (0-27 points)	27

Safety: High level of traffic stress (especially at crossings); High crash history; Major barriers (railroad, highways)

Equity: High concentration of vulnerable population; High demand for walking and biking

Connectivity + Access: Residential, commercial, City Hall, American Red Cross Community Resource and Referral Center

Local Economy: Major development coming in the form of relocation of major hospital (big employment draw, big public use draw)

Mall Dr

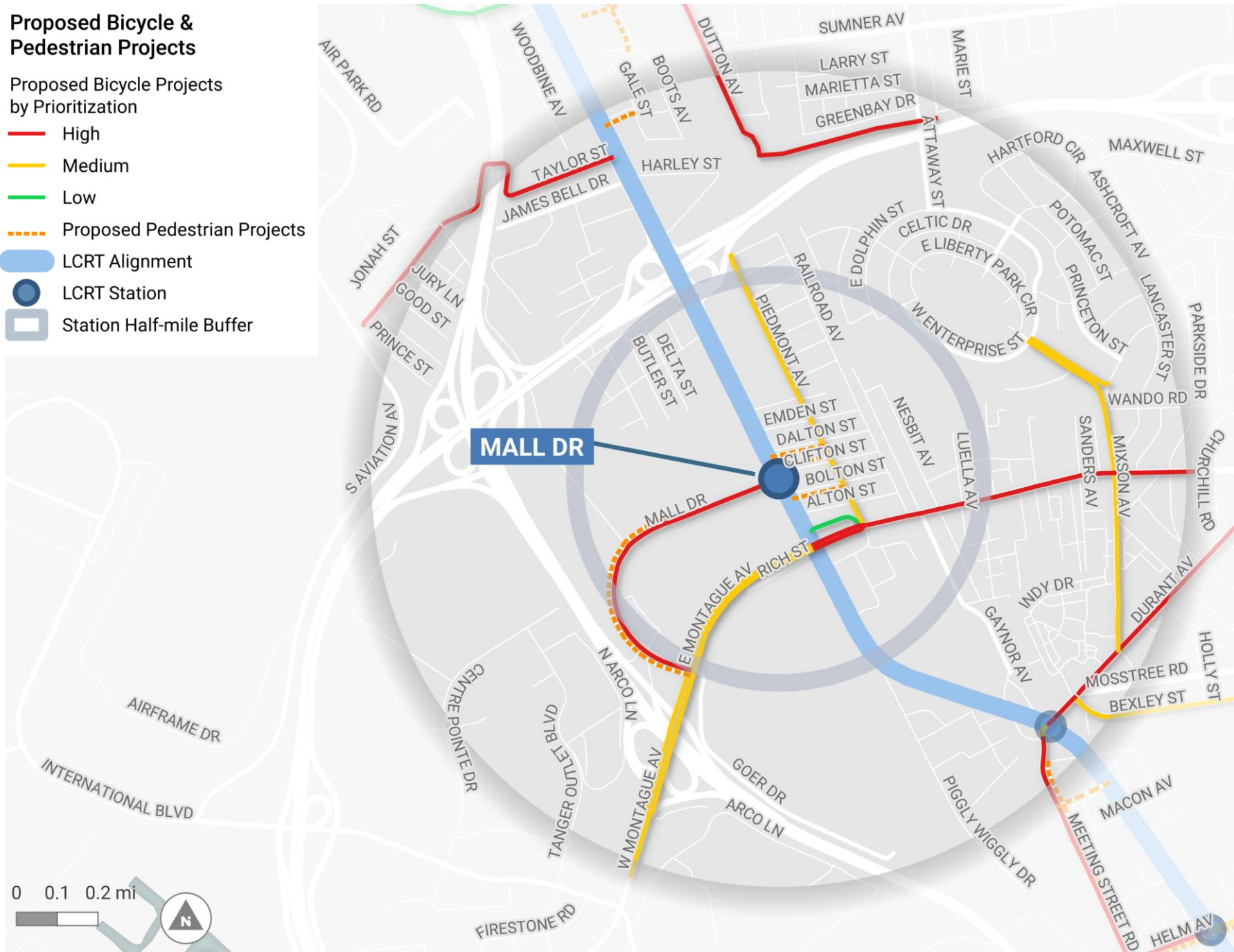
Proposed Bicycle & Pedestrian Projects

Proposed Bicycle Projects by Prioritization

- High
- Medium
- Low
- - - Proposed Pedestrian Projects
- ▬ LCRT Alignment
- LCRT Station
- Station Half-mile Buffer

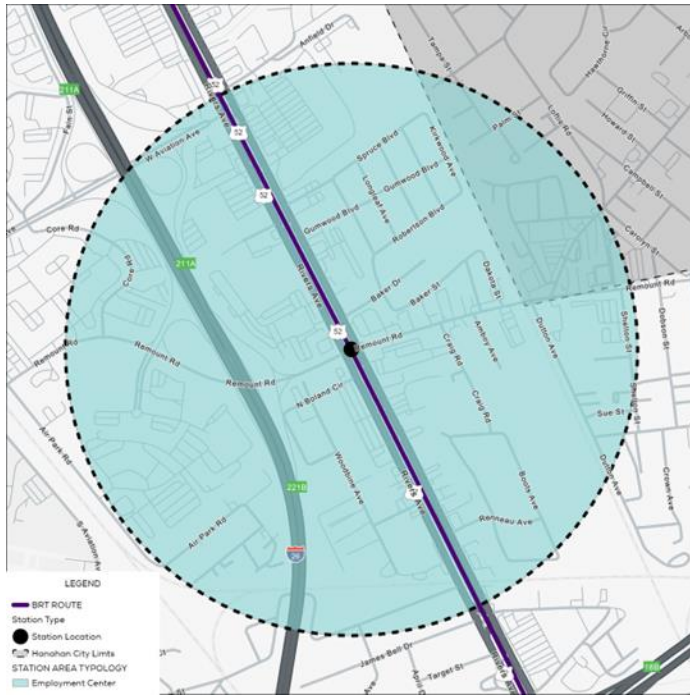


Bicycle/Pedestrian



Remount Rd

Employment Center



Station Area Profile

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 station. Mixed-use business parks located to the west include hotels, restaurants, the BCDCOG offices, and North Charleston Public Works. Singing Pines and Oak Grove represent examples of naturally occurring affordable housing, offering accessible living options within their respective communities.

Environmental Framework	Park / Open Structure	1
	Stormwater	1
Economic Dynamics	Affordable Housing	1
	Development Readiness	4
Transportation Network	Parking	1
	Block Structure	2
Capacity & Readiness	Community Readiness	3
	Carrying Capacity	1
	Planning Efforts	3

Points of Interest

Mixed-use business parks including hotels, restaurants, the BCDCOG offices, and North Charleston Public Works.

Recommendations

- Advance efforts to create inter-parcel connectivity and strong bicycle and pedestrian connections over time.
- Continue pursuing smaller area neighborhood planning to further refine the long-term vision for TOD at the station area to identify opportunities for improved parks and open space and shared parking.
- Preserve naturally occurring affordable housing in Oak Grove

Remount Rd

These bicycle/pedestrian improvements were determined for the Remount Rd Station Area.

Item	Length (ft.)	Probable Cost*
New Sidewalk	1,960	\$539,053
Bike Lanes	4,220	\$358,737
Separated Bike Lanes	8,214	\$2,772,150
Shared Lane Markings	4,764	\$47,643
TOTAL	19,159	\$3,717,583

The following table shows the distribution of bicycle/pedestrian recommendations across priority levels.

Priority	Length (ft.)	Probable Cost*
High	11,311	\$2,134,658
Medium	4,220	\$358,737
Low	3,627	\$1,224,189

**The cost assumptions use 2023 dollars and include the basic construction-related expenses, a 30% contingency, and 10% utility relocation allowances. Opinions of probable costs are subject to change while details are finalized for this study. The following are excluded from the estimates: environmental permitting, structural, stormwater treatment, permitting, construction administration, inspection services, public outreach, funding planning, client management services, and engineering or design costs.*



Bicycle/Pedestrian

Highlights:

- Complete sidewalk connections
- Separated bicycle lanes along Remount Rd from S. Aviation Rd
- Shared lane markings throughout

Analysis of Stations:

The Station Area was scored using four bicycle/ pedestrian areas of analysis. The scores and key themes are identified below.

Safety (0-6 points)	6
Equity (0-6 points)	6
Connectivity + Access (0-10 points)	8
Local Economy (0-10 points)	5
TOTAL (0-27 points)	25

Safety: High level of traffic stress (especially at crossings); High crash history; Major barriers (railroad, highways)

Equity: High concentration of vulnerable population; High demand for walking and biking

Connectivity + Access: Residential, commercial, employment, healthcare

Local Economy: 220 new townhomes and other near-term redevelopment opportunities

Remount Rd



Bicycle/Pedestrian

Proposed Bicycle & Pedestrian Projects

Proposed Bicycle Projects by Prioritization

- High
- Medium
- Low
- Proposed Pedestrian Projects
- LCRT Alignment
- LCRT Station
- Station Half-mile Buffer



Hanahan Rd

Town Center



Station Area Profile

The Hanahan Station is located directly adjacent to the Veterans Affairs (VA) North Charleston Outpatient Clinic and a new multi-family housing development with direct connections to large single-family neighborhoods to the north and east. The half mile station area is primarily in the City of North Charleston, with a portion intersecting with the City of Hanahan. Suburban, commercial land uses are predominant to the west of the station. The mixed-use community of Midland Park is also to the west of the station.

Environmental Framework	Park / Open Structure	2
	Stormwater	2
Economic Dynamics	Affordable Housing	1
	Development Readiness	4
Transportation Network	Parking	3
	Block Structure	2
Capacity & Readiness	Community Readiness	3
	Carrying Capacity	2
	Planning Efforts	2

Points of Interest

Veterans Affairs North Charleston Outpatient Clinic, new multi-family development, existing single-family neighborhoods.

Recommendations

- Identify landowners of large parcels along Rivers Avenue for redevelopment, emphasizing the opportunity for inter-parcel connectivity.
- Focus framework plan development on cohesive urban design and planning strategies and improved bicycle and pedestrian infrastructure to the western Midland Park community over time.
- Pursue partnerships with the VA Outpatient Clinic to develop the parking lot fronting Rivers Avenue.

Hanahan Rd

These bicycle/pedestrian improvements were determined for the Hanahan Rd Station Area.

Item	Length (ft.)	Probable Cost*
New Sidewalk	6,642	\$1,826,463
Shared Use Path	2,128	\$532,075
Bike Boulevard	4,107	\$308,031
TOTAL	12,877	\$2,666,568

The following table shows the distribution of bicycle/pedestrian recommendations across priority levels.

Priority	Length (ft.)	Probable Cost*
High	10,749	\$2,134,493
Medium	2,128	\$532,075
Low	-	-

**The cost assumptions use 2023 dollars and include the basic construction-related expenses, a 30% contingency, and 10% utility relocation allowances. Opinions of probable costs are subject to change while details are finalized for this study. The following are excluded from the estimates: environmental permitting, structural, stormwater treatment, permitting, construction administration, inspection services, public outreach, funding planning, client management services, and engineering or design costs.*



Bicycle/Pedestrian

Highlights:

- Completing sidewalk network within a ½-mile radius
- Shared use path along Hanahan Rd
- Bicycle boulevard along Eagle Dr

Analysis of Stations:

The Station Area was scored using four bicycle/ pedestrian areas of analysis. The scores and key themes are identified below.

Safety (0-6 points)	4
Equity (0-6 points)	6
Connectivity + Access (0-10 points)	8
Local Economy (0-10 points)	3
TOTAL (0-27 points)	21

Safety: High level of traffic stress; High crash history (especially along Rivers Ave)

Equity: High concentration of vulnerable population; High demand for walking and biking

Connectivity + Access: Residential, commercial, social services, post office, library

Local Economy: VA primary care, however, form is suburban. Possible draw as Town Center or Employment Center but likely not near term

Hanahan Rd



Bicycle/Pedestrian

Proposed Bicycle & Pedestrian Projects

Proposed Bicycle Projects by Prioritization

- High
- Medium
- Low
- Proposed Pedestrian Projects
- LCRT Alignment
- LCRT Station
- Station Half-mile Buffer



Mabeline Rd

Employment Center



Station Area Profile

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 half mile station area is primarily in the City of North Charleston, with a portion intersecting with the City of Hanahan. 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 has 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.

Environmental Framework	Park / Open Structure	3
	Stormwater	2
Economic Dynamics	Affordable Housing	2
	Development Readiness	4
Transportation Network	Parking	1
	Block Structure	1
Capacity & Readiness	Community Readiness	4
	Carrying Capacity	2
	Planning Efforts	2

Points of Interest

Within the station area, attractors include Trident Technical College and Carolina Gardens Cemetery; outside the walkshed are Hanahan Recreational Center and Amphitheater, and Goose Creek Reservoir

Recommendations

- Advance efforts to create inter-parcel connectivity and stronger bicycle and pedestrian connections over time
- Identify one of the larger parcel private landowners within the station area to partner in the advancing of major mixed-use development
- Pursue partnerships with existing employers and property owners in the station area to target infill and redevelopment of larger parcels to support continued job growth, with an emphasis on creative parking solutions

Mabeline Rd

These bicycle/pedestrian improvements were determined for the Mabeline Rd Station Area.

Item	Length (ft.)	Probable Cost*
New Sidewalk	7,156	\$1,967,869
Buffered Bike Lanes	1,632	\$244,776
Shared Use Path	7,331	\$1,832,733
TOTAL	16,119	\$4,045,378

The following table shows the distribution of bicycle/pedestrian recommendations across priority levels.

Priority	Length (ft.)	Probable Cost*
High	10,796	\$2,877,781
Medium	1,442	\$360,525
Low	3,881	\$807,072

**The cost assumptions use 2023 dollars and include the basic construction-related expenses, a 30% contingency, and 10% utility relocation allowances. Opinions of probable costs are subject to change while details are finalized for this study. The following are excluded from the estimates: environmental permitting, structural, stormwater treatment, permitting, construction administration, inspection services, public outreach, funding planning, client management services, and engineering or design costs.*



Bicycle/Pedestrian

Highlights:

- Sidewalk along Mabeline Rd, Hayne St, and Home Ave
- Shared use path along Midland Park Rd, Victory Lane

Analysis of Stations:

The Station Area was scored using four bicycle/ pedestrian areas of analysis. The scores and key themes are identified below.

Safety (0-6 points)	4
Equity (0-6 points)	6
Connectivity + Access (0-10 points)	4
Local Economy (0-10 points)	3
TOTAL (0-27 points)	17

Safety: Moderate level of traffic stress (especially at crossings); High crash history; Major barriers

Equity: Moderate concentration of vulnerable population; High demand for walking and biking

Connectivity + Access: Residential, schools

Local Economy: Trident Tech opportunity. Possible draw as Town Center or Employment Center but appears beyond near term

Mabeline Rd



Bicycle/Pedestrian

Proposed Bicycle & Pedestrian Projects

Proposed Bicycle Projects by Prioritization

- High
- Medium
- Low
- Proposed Pedestrian Projects
- LCRT Alignment
- LCRT Station
- Station Half-mile Buffer

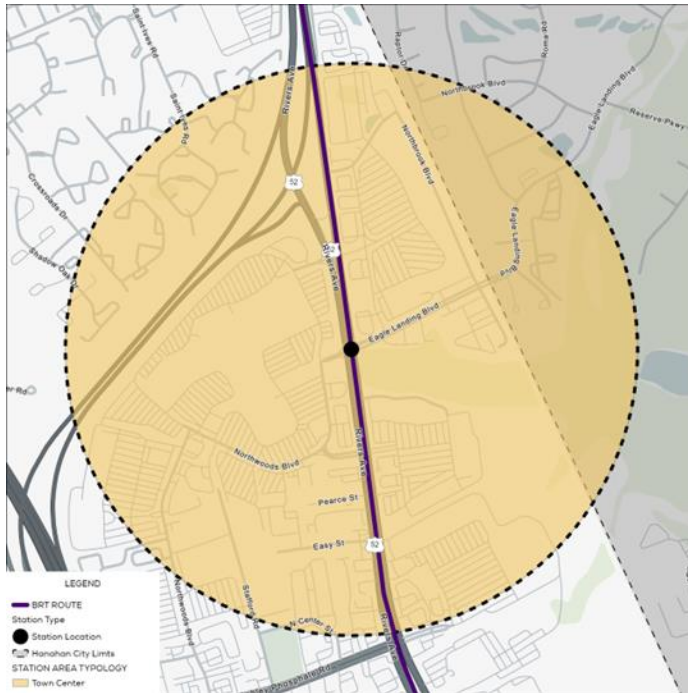


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Eagle Landing Blvd

Town Center



Station Area Profile

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. The area is auto-dominated with a high level of regional vehicular access provided by I-26 and Ashley Phosphate drive. The half mile station area is primarily in the City of North Charleston, with a portion to the east of Railroad Avenue intersecting with the City of Hanahan.

Environmental Framework	Park / Open Structure	1
	Stormwater	3
Economic Dynamics	Affordable Housing	2
	Development Readiness	3
Transportation Network	Parking	1
	Block Structure	1
Capacity & Readiness	Community Readiness	4
	Carrying Capacity	3
	Planning Efforts	2

Points of Interest

Northwoods Mall which has served as a regional retail center.

Recommendations

- Study the feasibility of 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. This strategy was explored in Phase 1 by daylighting existing drainage systems for a public amenity.
- Identify 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 .
- Identify suitable properties and work with affordable housing developers to create new units of permanently affordable housing.

Eagle Landing Blvd



Bicycle/Pedestrian

These bicycle/pedestrian improvements were determined for the Eagle Landing Blvd Station Area.

Item	Length (ft.)	Probable Cost*
Add New Sidewalk	15,393	\$4,233,171
Buffered Bike Lanes	1,460	\$219,068
Shared Use Path	7,616	\$1,904,042
Bike Boulevard	4,392	\$329,428
TOTAL	28,862	\$6,685,709

The following table shows the distribution of bicycle/pedestrian recommendations across priority levels.

Priority	Length (ft.)	Probable Cost*
High	20,589	\$5,386,146
Medium	8,273	\$1,299,563
Low	-	-

**The cost assumptions use 2023 dollars and include the basic construction-related expenses, a 30% contingency, and 10% utility relocation allowances. Opinions of probable costs are subject to change while details are finalized for this study. The following are excluded from the estimates: environmental permitting, structural, stormwater treatment, permitting, construction administration, inspection services, public outreach, funding planning, client management services, and engineering or design costs.*

Highlights:

- Sidewalk connections to commercial and employment
- Buffered bike lane
- Shared use path along Ashley Phosphate Rd. and to the north of the mall

Analysis of Stations:

The Station Area was scored using four bicycle/ pedestrian areas of analysis. The scores and key themes are identified below.

Safety (0-6 points)	6
Equity (0-6 points)	6
Connectivity + Access (0-10 points)	6
Local Economy (0-10 points)	5
TOTAL (0-27 points)	23

Safety: High level of traffic stress; High crash history; Major barriers (railroad, I-26)

Equity: High concentration of vulnerable population; High demand for walking and biking

Connectivity + Access: Residential, commercial, employment

Local Economy: Northwoods Mall, Wal-Mart

Eagle Landing Blvd



Bicycle/Pedestrian

Proposed Bicycle & Pedestrian Projects

Proposed Bicycle Projects by Prioritization

- High
- Medium
- Low
- Proposed Pedestrian Projects
- LCRT Alignment
- LCRT Station
- Station Half-mile Buffer



Melnick Dr

Neighborhood Center



Station Area Profile

The Melnick Drive station area is predominantly characterized by large lot, suburban-style commercial uses and single-family residential neighborhoods. The half mile station area has significant portions in both the City of North Charleston and the City of Hanahan. Access to the portion of the station area in Hanahan is more limited with the only access across the railroad tracks located in the north of the station on Otranto Road. This station serves as an important transit node today and is home to the existing CARTA park-and-ride lot. The primary TOD opportunities in this station area are the redevelopment of the existing suburban-style retail properties to the west of Rivers Avenue.

Environmental Framework	Park / Open Structure	1
	Stormwater	2
Economic Dynamics	Affordable Housing	1
	Development Readiness	4
Transportation Network	Parking	1
	Block Structure	1
Capacity & Readiness	Community Readiness	2
	Carrying Capacity	3
	Planning Efforts	2

Points of Interest

Existing retail and car sales locations, CARTA park-and-ride lot.

Recommendations

- Continue pursuing more detailed station area planning to further refine the long-term vision for TOD at the station area to address existing bicycle, pedestrian, transit and traffic concerns.
- Explore 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 and advance inter-parcel connectivity.

Melnick Dr

These bicycle/pedestrian improvements were determined for the Melnick Dr Station Area.

Item	Length (ft.)	Probable Cost*
Add New Sidewalk	10,141	\$2,788,740
Bike Lanes	1,607	\$136,583
Separated Bike Lanes	4,070	\$1,373,604
Shared Use Path	15,195	\$3,798,854
Bike Boulevard	558	\$41,868
TOTAL	31,571	\$8,139,648

The following table shows the distribution of bicycle/pedestrian recommendations across priority levels.

Priority	Length (ft.)	Probable Cost*
High	27,479	\$7,116,497
Medium	3,716	\$929,037
Low	376	\$94,115

*The cost assumptions use 2023 dollars and include the basic construction-related expenses, a 30% contingency, and 10% utility relocation allowances. Opinions of probable costs are subject to change while details are finalized for this study. The following are excluded from the estimates: environmental permitting, structural, stormwater treatment, permitting, construction administration, inspection services, public outreach, funding planning, client management services, and engineering or design costs.



Bicycle/Pedestrian

Highlights:

- Sidewalks on Melnick Dr and Basilica Ave
- Shared use path parallel to railroad, and along Melnick and S. Antler Dr
- Separated bicycle lanes on Otranto Blvd
- Bicycle boulevard along Lombardi

Analysis of Stations:

The Station Area was scored using four bicycle/ pedestrian areas of analysis. The scores and key themes are identified below.

Safety (0-6 points)	4
Equity (0-6 points)	5
Connectivity + Access (0-10 points)	8
Local Economy (0-10 points)	1
TOTAL (0-27 points)	18

Safety: Low level of traffic stress (moderate at crossings); Low crash history)

Equity: Moderate concentration of vulnerable population; High demand for walking and biking

Connectivity + Access: Residential, schools, commercial, employment

Local Economy: Multiple car dealerships and other auto oriented retail.

Melnick Dr



Bicycle/Pedestrian

Proposed Bicycle & Pedestrian Projects

Proposed Bicycle Projects by Prioritization

- High
- Medium
- Low
- - - Proposed Pedestrian Projects
- LCRT Alignment
- LCRT Station
- Station Half-mile Buffer



Medical Plaza Dr

Town Center



Station Area Profile

The Medical Plaza Drive Station serves an existing employment hub that includes Trident Medical Center and Charleston Southern University. The Rivers Avenue (US 78) 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.

Environmental Framework	Park / Open Structure	4
	Stormwater	3
Economic Dynamics	Affordable Housing	1
	Development Readiness	3
Transportation Network	Parking	2
	Block Structure	2
Capacity & Readiness	Community Readiness	3
	Carrying Capacity	4
	Planning Efforts	3

Points of Interest

Trident Medical Center and Charleston Southern University.

Recommendations

- Pursue partnerships with Charleston Southern University and Trident Medical in the station area to advance parking management and transportation demand management strategies and potential infill opportunities.
- Target more infill housing in the station area specifically to serve nearby medical-related workforce and potentially increase student housing options.

Medical Plaza Dr

These bicycle/pedestrian improvements were determined for the Medical Plaza Dr Station Area.

Item	Length (ft.)	Probable Cost*
New Sidewalk	17,588	\$4,836,591
Improve Existing Sidewalk	408	\$152,934
Bike Lanes	3,587	\$304,896
Buffered Bike Lanes	4,482	\$672,277
Shared Use Path	2,301	\$575,176
Bike Boulevard	3,558	\$266,830
TOTAL	31,923	\$6,808,705

The following table shows the distribution of bicycle/pedestrian recommendations across priority levels.

Priority	Length (ft.)	Probable Cost*
High	24,137	\$6,076,809
Medium	7,145	\$571,726
Low	641	\$160,170

*The cost assumptions use 2023 dollars and include the basic construction-related expenses, a 30% contingency, and 10% utility relocation allowances. Opinions of probable costs are subject to change while details are finalized for this study. The following are excluded from the estimates: environmental permitting, structural, stormwater treatment, permitting, construction administration, inspection services, public outreach, funding planning, client management services, and engineering or design costs.



Bicycle/Pedestrian

Highlights:

- Bicycle boulevard on Medical Plaza Dr
- Bicycle lanes on Deerwood and Dantzler Dr

Analysis of Stations:

The Station Area was scored using four bicycle/ pedestrian areas of analysis. The scores and key themes are identified below.

Safety (0-6 points)	1
Equity (0-6 points)	5
Connectivity + Access (0-10 points)	8
Local Economy (0-10 points)	5
TOTAL (0-27 points)	19

Safety: Low level of traffic stress; Low to moderate crash history)

Equity: Moderate concentration of vulnerable population; High demand for walking and biking

Connectivity + Access: Residential, employment, major healthcare

Local Economy: Charleston Southern University. Healthcare center. Designated as a Town Center place type

Medical Plaza Dr



Bicycle/Pedestrian

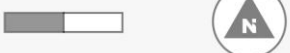
Proposed Bicycle & Pedestrian Projects

Proposed Bicycle Projects
by Prioritization

- High
- Medium
- Low
- - - Proposed Pedestrian Projects
- LCRT Alignment
- LCRT Station
- Station Half-mile Buffer



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Exchange Park / Fairgrounds

Neighborhood Center



Station Area Profile

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.

Environmental Framework	Park / Open Structure	3
	Stormwater	2
Economic Dynamics	Affordable Housing	1
	Development Readiness	4
Transportation Network	Parking	2
	Block Structure	2
Capacity & Readiness	Community Readiness	4
	Carrying Capacity	4
	Planning Efforts	1

Points of Interest

180-acre Exchange Park, home to the Carolina Coastal Fair and other events, planned park-and-ride lot.

Recommendations

- Establish Transportation Demand Management (TDM) strategies encouraging transit for major events with Fairgrounds ownership.
- Encourage inter-parcel street network connectivity with strong pedestrian connections off US 78 and the establishment of new grid like street patterns as properties redevelopment .
- Work with regional housing advocates to support preservation of existing naturally occurring affordable housing.

Exchange Park / Fairgrounds

These bicycle/pedestrian improvements were determined for the Exchange Park / Fairgrounds Station Area.

Item	Length (ft.)	Probable Cost*
Add New Sidewalk	14,051	\$3,863,908
Shared Lane Markings	7,244	\$72,439
Shared Use Path	10,737	\$2,684,238
Bike Boulevard	13,065	\$979,910
TOTAL	45,097	\$7,600,495

The following table shows the distribution of bicycle/pedestrian recommendations across priority levels.

Priority	Length (ft.)	Probable Cost*
High	21,367	\$5,183,393
Medium	16,844	\$1,882,793
Low	6,885	\$534,309



Bicycle/Pedestrian

Highlights:

- New sidewalk connections throughout, including connections to Fairgrounds and light industrial to the south
- Shared use path along Ladson Rd
- Bike boulevard connecting to Fairgrounds (Perimeter Rd)

Analysis of Stations:

The Station Area was scored using four bicycle/ pedestrian areas of analysis. The scores and key themes are identified below.

Safety (0-6 points)	5
Equity (0-6 points)	5
Connectivity + Access (0-10 points)	4
Local Economy (0-10 points)	3
TOTAL (0-27 points)	17

Safety: High level of traffic stress; High crash history

Equity: High concentration of vulnerable population; Moderate demand for walking and biking

Connectivity + Access: Residential, commercial, employment

Local Economy: Fairgrounds and light industrial dominates

Exchange Park / Fairgrounds

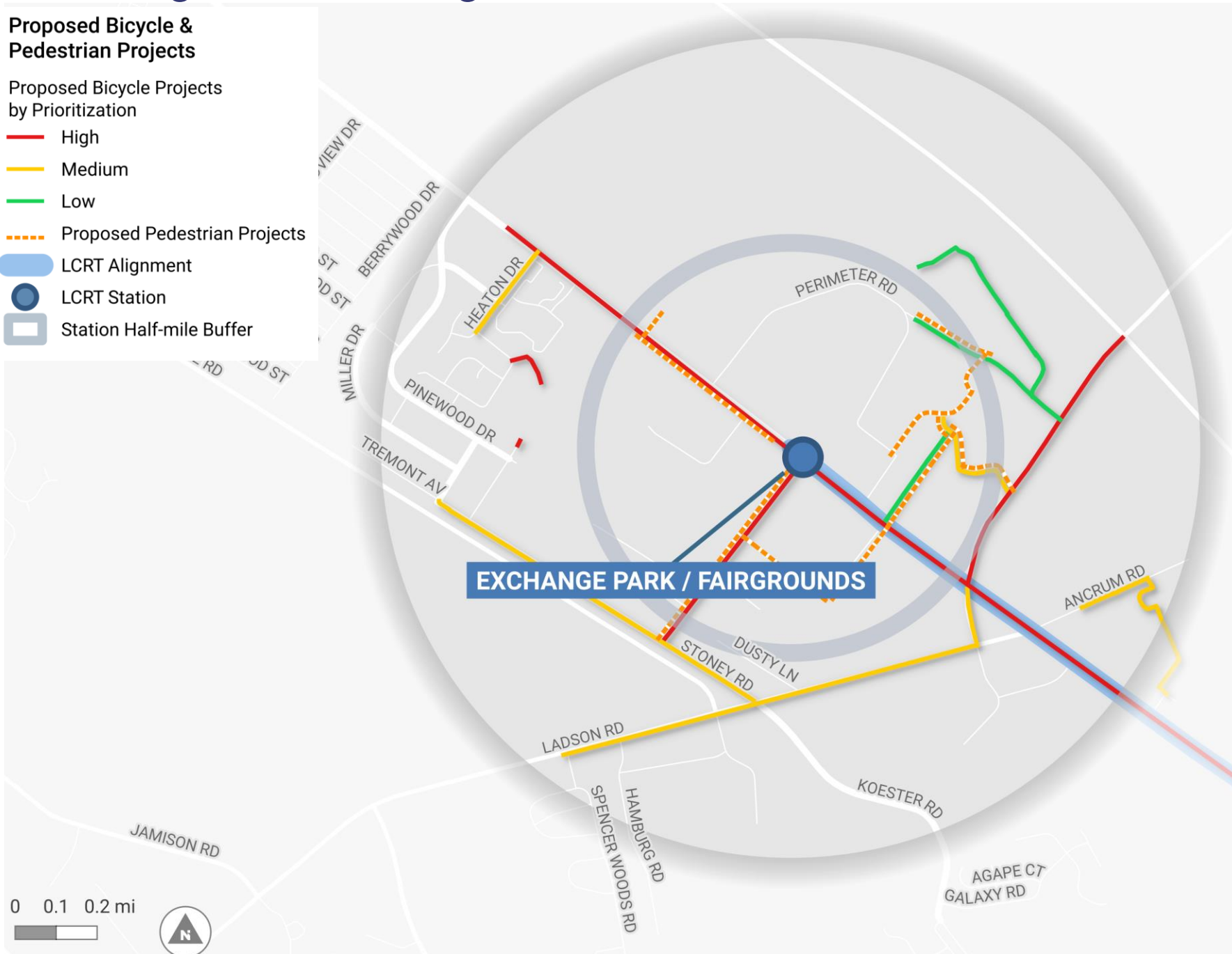


Bicycle/Pedestrian

Proposed Bicycle & Pedestrian Projects

Proposed Bicycle Projects by Prioritization

- High
- Medium
- Low
- - - Proposed Pedestrian Projects
- LCRT Alignment
- LCRT Station
- Station Half-mile Buffer



APPENDIX C: FRAMEWORK PLAN EXAMPLE

Introduction

To illustrate the process of developing a framework plan, the project team consulted with stakeholders to determine station areas that would be most beneficial to focus on. The Reynolds Avenue and Dorchester Road station areas were selected due to the market readiness in the area, increasing displacement pressures, an active group of stakeholders with interest in the area, and opportunity recognized in potentially developable sites.

The Dorchester Road and Reynolds Avenue station areas have overlapping walksheds and therefore many of the same issues and opportunities. However, there are a handful of larger scale aging commercial properties along Rivers Avenue in the Dorchester Road station area which serve as important opportunity areas. The Reynolds Avenue station area is comprised predominantly of single-family housing and represents important naturally occurring affordable housing. This area has been the focus of various planning efforts to strengthen the existing neighborhood and bring new people and jobs to the neighborhood, while retaining existing residents and businesses.



Rivers Avenue Existing Conditions

Appendix C Overview:

1. Scoping and Assessing Existing Conditions
2. Creating a Design Vision

1. Scoping and Assessing Existing Conditions

To begin the process, the project team began with a scoping exercise to determine the focus area, identify key stakeholders and partners, understand relationships with existing regulations, and determine the organizing principles for the work. This exercise was conducted for the example but was relevant to the larger process that led to the creation of this resource. The project team consulted with the municipalities, developers, non-profits and community groups, and other interested stakeholders to determine the focus area and understand the existing conditions and regulations. Key principles for a TSC are included in Chapter I.

To understand existing conditions several key stakeholder interviews were held, as well as a developer round table and independent developer convenings and feedback. Stakeholders expressed commitment to striking a balance between development and the preservation of distinctive character. Community members also provided feedback regarding the desired degree of change from preservation and enhancement to evolution and transformation.

This information enabled the team to understand and propose design alternatives and regulations that build on the unique characteristics of each station area. The team also conducted a walk audit of the corridor and each station area to document macro elements like neighborhoods, districts, and corridors, and analyzed micro elements including the public right of way, lot lines, building footprints, curbs and sidewalk locations, river and creek corridors, and other natural features that impact development.



Images of Developer Focus Group meeting (Left), Community Workshop (Middle), and TOD Advisory Committee Meeting (Right)

Planning Documents and Guiding Questions

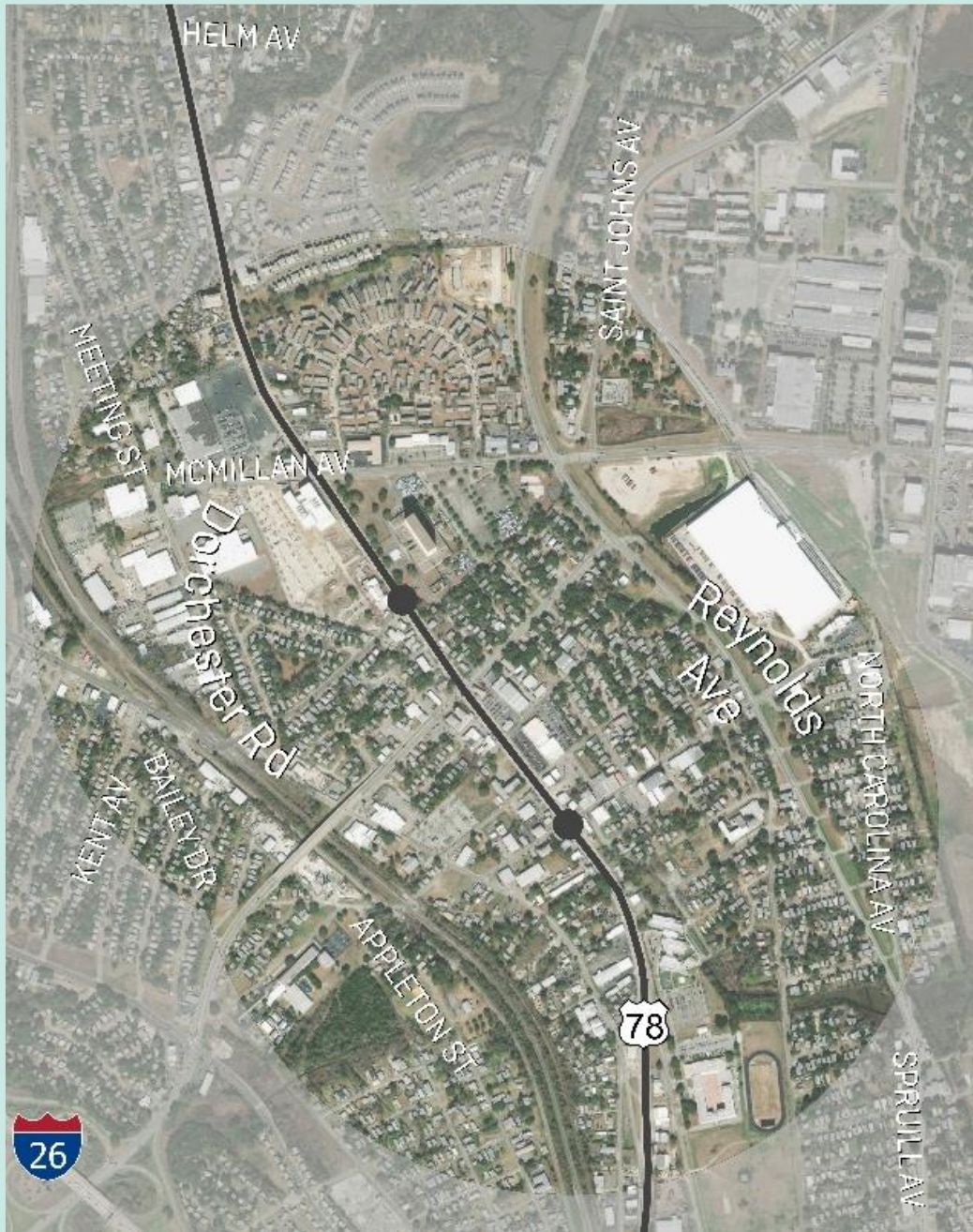
FBCs are intended to ensure predictable outcomes for the built environment which requires the vision (or desired outcome) to be clearly defined by the community. This vision was already defined through several existing planning documents and supplemented through community and stakeholder engagement efforts to understand the range of answers to the following key questions.

1. Where are the centers or focal points?
2. Which streets and roadways are regional connectors?
3. Which are local connectors?
4. Where are the green or pedestrian corridors?
5. Which areas are currently slated for major changes in scale and/or use?
6. Which places define the community's identity?
7. Are historic developmental patterns intact in any of these places?
8. Where do building and street patterns change and what might be the reason?
9. Which neighborhoods would benefit from the preservation of their existing character?
10. Are there any districts that are expressly zoned for a particular use or activity, such as light industry?
11. Are there clear edges and transitions between neighborhoods?
12. Which transect levels exist within the community?

The following pages are a compilation of information collected from the plans listed below, and the additional community and stakeholder engagement efforts.

- North Charleston, South Carolina: ULI Advisory Services Panel Report
- Brownfield Area-wide Planning Initiative
- Partnership for Prosperity: A Master Plan for the Neck Area Charleston and North Charleston
- Phase 2 Community Engagement for Dorchester and Reynolds stations

Existing Conditions



Center Transect Zone



General Transect Zone



Edge Transect Zone-Institutional



TOD-wide-Industrial



Community Engagement Synthesis

Seven key issues from existing conditions materials and engagement were identified and seven specific design focus areas were extracted from these key issue areas. The design focus areas were then used to translate the community desires into a physical representation for development in the framework plan.

Attendees of the workshop held at Metanoia expressed deep commitment to the neighborhood and identified many existing community assets within the two station areas. Improved and additional spaces for community gathering, safer pedestrian environments, protections against displacement, supportive services, and job opportunities were identified as critical needs for the community.

Key Issues

1. Housing
2. Connectivity
3. Identity
4. Safety
5. Community Vitality
6. Public Realm Conditions
7. Private Development

Translates to



Specific Design Focus

1. Complete Streets
2. Connectivity
3. Private Development
4. Open Spaces
5. Economic Vitality
6. Community Vitality
7. Environmental Sustainability

Key Issues

1. Housing

- Lack of affordable housing stock and what does exist there is a limited variety of housing typologies within the community to cater to different sized families and single occupants.
- Rents, vacancies, home ownership are well below the Charleston region's metrics. With additional interest there is room for growth in these two station areas.
- There is low homeownership within these two stations. Any new investment has an inherent risk to displace current renters and community members.
- The area does not currently offer quality market rate housing.
- Lack of affordable senior housing opportunities.
- The area exhibits a high parcel vacancy rate and a substantial quantity of residential properties in disrepair.
- Most homes are more than 50 years old.

2. Connectivity

- Lack of east-west connections specifically a lack of connection to both Cooper River and Ashley River
- Lack of natural land, park and open space connectivity throughout.
- Existing neighborhoods are not interconnected within the walkshed. Connectivity also lacks between other communities / neighborhoods along main roadway spines.
- Naval Base is disconnected from the community.
- The area does not provide frequent recreation opportunities.

3. Identity

- No defined civic central area.

4. Safety

- High traffic crashes and fatalities along Rivers Avenue between the stations.
- Crime is an issue within the area and creates a perceived lack of safety and security.

5. Community Vitality

- Incomes are below the region's metrics.
- Clear need for better policies for public programs of affordability, home ownership, job training, etc.
- Better education and job training opportunities. More job placement within the community.
- Residents generally do not work in the area and typically travel to neighboring communities.
- Residents from other communities, travel in to work at job centers around the community.
- Currently the area does not provide options for goods and services that satisfy the needs of the community. Most travel out of the neighborhood to satisfy their needs.
- Lack of physical and mental health care options.

6. Public Realm Conditions

- Utilities and infrastructure are reaching the end of their designed life.
- Lack of Bicycle and Pedestrian infrastructure.
- Too much freight and personal vehicle traffic.
- Streets and intersections are not safe.
- Lack of landscape.

7. Private Development

- “Food away from home” spending is below the region’s metrics.
- Reynolds Avenue is a shell of its once self and needs to be revitalized.
- The area is a food desert and lacks equitable access for most residents.
- Childcare opportunities are infrequent.
- Too much industry within the community.

Specific Design Focus

1. Complete Streets

- Walking and Transit is the preferred method of travel so streets should represent pedestrian priority.
- Blue and Green Infrastructure should be present in the framework plan
- Traffic calming techniques should be present from intersection treatments, bulb outs, painted crosswalks, roundabouts, etc.
- High quality intersections that are safe for pedestrians, cyclists, transit users and drivers.
- Dedicated off road bicycle infrastructure.

2. Connectivity

- Transit
 - Provide multimodal opportunities.
 - Larger and high functioning CARTA transfer center.
 - Shuttle loop to Naval Base.
- Robust bicycle and pedestrian connections.
- Framework
 - Extend streets, when possible, to create gridded network.
 - Eliminate / infill within coarse grain street network. Prioritize a fine grain and interconnected grid of streets to disperse traffic.
 - Prioritize a connection to Accabee Neighborhood.
 - Spruill Avenue should act as a connector for bikes and pedestrians between Park Circle and other residential / entertainment districts.
 - Cosgrove Avenue is planned as a through route for freight.
 - McMillan should be redesigned to be perpendicular at Meeting Street.
- New infrastructure should be designed as a holistic system that builds off regional efforts not just local. (i.e. bike infrastructure that connects to downtown).

3. Private Development

- Establish catalyst development centers that have a diversity of land uses and mixed-uses.
- Zoning and Rivers Avenue should adapt to the market.
- Advent Lutheran Church is a possible housing opportunity.
- Dorchester Road should act as a gateway to the community.
- Rivers Avenue
 - High quality and dense linear spine which should be transit district for the entire length.
 - Focus on mixed-use with typically 4 story infill development but could go to 7 stories when appropriate.
- Reynolds Avenue
 - Reynolds Avenue to be a neighborhood scale retail street with the potential to close down street to vehicular traffic.
 - 1 to 2-story infill development. Preserve and adapt what is already there.
 - Focus efforts on the surrounding neighborhood as its vitality is critical for commercial and retail survival.
- Housing
 - Mid Rise Density / Mixed Income / Maximum Parking requirements.
 - Mix of market rate and affordable housing.
 - Land Trust potential or affordable purchasing programs.
 - Range of Housing Options
 - Accessory dwelling units.
 - Multifamily mix achieving near 40-50 du/ac.
 - Mix of housing types Single to Quad.
 - Independent Senior apartments.
 - Incremental stability through preservation and infill.
- Commercial
 - Good office use location due to the BRT station proximity.
 - Compact building design.
 - Typical 3-4 story mixed-use buildings up to 7 stories in targeted areas.
 - Attract Grocery(s): Neighborhood Scale Market / Mixed Use Corner Store, Food Coop or Farmers Market Adaptive Reuse when possible.
 - Flexible Development and potential interim uses.

4. Open Spaces

- Interconnected recreation opportunities. Regional Parks, Plazas, Athletic fields, small parks, greenways, etc.
- More recreational trail opportunities.
- Preserve and expand upon the natural spaces that exist today.
- Flexible open spaces that can accommodate multiple uses and needs.
- Create additional public spaces along Rivers Avenue, McMillan, Navy Hospital and Reynolds.

4. Open Spaces *(continued)*

- Create a consolidated community gathering space and/or destination.
- Buffering of residential to commercial and industrial uses.
- Preservation and restoration of wetland habitats.
- Better access to and between Cooper and Ashley Rivers.
- More open space in Accabee with a focus around Mary Ford area.

5. Economic Vitality

- Attract New Development and new businesses that accommodate the needs of the community. Focus on small businesses.
- Reduce industrial uses. Allowing Large industrial or disparate low density uses adjacent development sits would dilute its value and the goals of stakeholders.
- Provided diverse economic and job opportunities.

6. Community Vitality

- Create equitable communities with significant and recognizable investment to current and future residents/businesses.
- Protect and strengthen existing neighborhoods.
- Create a Sense of Place and a neighborhood branding/identity that is unique to this community.
- Ensure Neighborhood compatibility.
- Promote and facilitate social interaction.
- Balance neighborhood needs with business and industry.
- Provide healthy, safe, lifelong communities and neighborhoods.
- Community center, arts center and youth at risk community center are needs.

7. Environmental Sustainability

- Create an integrated stormwater strategy that focuses on blue and green Infrastructure within streetscape, private development and open spaces.
- Maximize the use of LID techniques when possible.
- Prioritize climate change opportunities.
- Maintain air quality and environmental sustainability.
- Transform brownfield sites.

2. Creating a Design Vision

The following pages and diagrams depict an example of a potential framework and development program strategy applied to the Reynolds and Dorchester station areas. These diagrams were used for discussion purposes only and to inform how the process of a framework and regulating plan might operate at a station area level. The following vision statement, stemming from the existing conditions and engagement, served as the foundation for all design elements.

Station Area Vision

The Reynolds and Dorchester combined station area is surrounded by a strong resilient community that is welcoming and growing with housing, transportation, and economic opportunities. It is known as a desirable place to live with good access and ability for residents and visitors to reach their desired destinations, socialize, and enjoy a livable community. Existing residents and businesses are able to make a living wage and pursue their aspirations through access to education and training, transportation choices and affordable housing options. Exposure to environmental and noise pollutants is reduced by new investment and development so that neighborhoods in the area can prosper while retaining their close-knit character.

Design Process

1. Identify opportunity areas
2. Design new roadway network to fill in gaps and address connectivity issue areas
3. Design potential infill strategies for opportunity areas in line with specific design focus areas
4. Design open space overlay element
5. Share with select stakeholders for feedback
6. Iterate on above steps 1 – 4
7. Create specific detailed design scenarios for a few catalytic sites

Opportunity Areas

This diagram illustrates areas and parcels that may be underutilized within these station areas. They were used as a basis for inserting an overall vision and framework strategy.

1. Navy Hospital Parking Areas
2. McMillan Existing Commercial Areas
3. Kmart
4. Restaurant Depot
5. River Avenue abutting uses
6. Spruill Avenue “abandoned” rail ROW
7. Undeveloped land north of Cosgrove Bridge
8. Reynolds Avenue abutting uses
9. Chicora Elementary School and abutting community garden
10. Meeting Street Road Industrial
11. Mary Ford Child and Family Development Center
12. Accabee industrial
13. Dorchester Road east of I-26
14. Existing Neighborhood infill opportunities



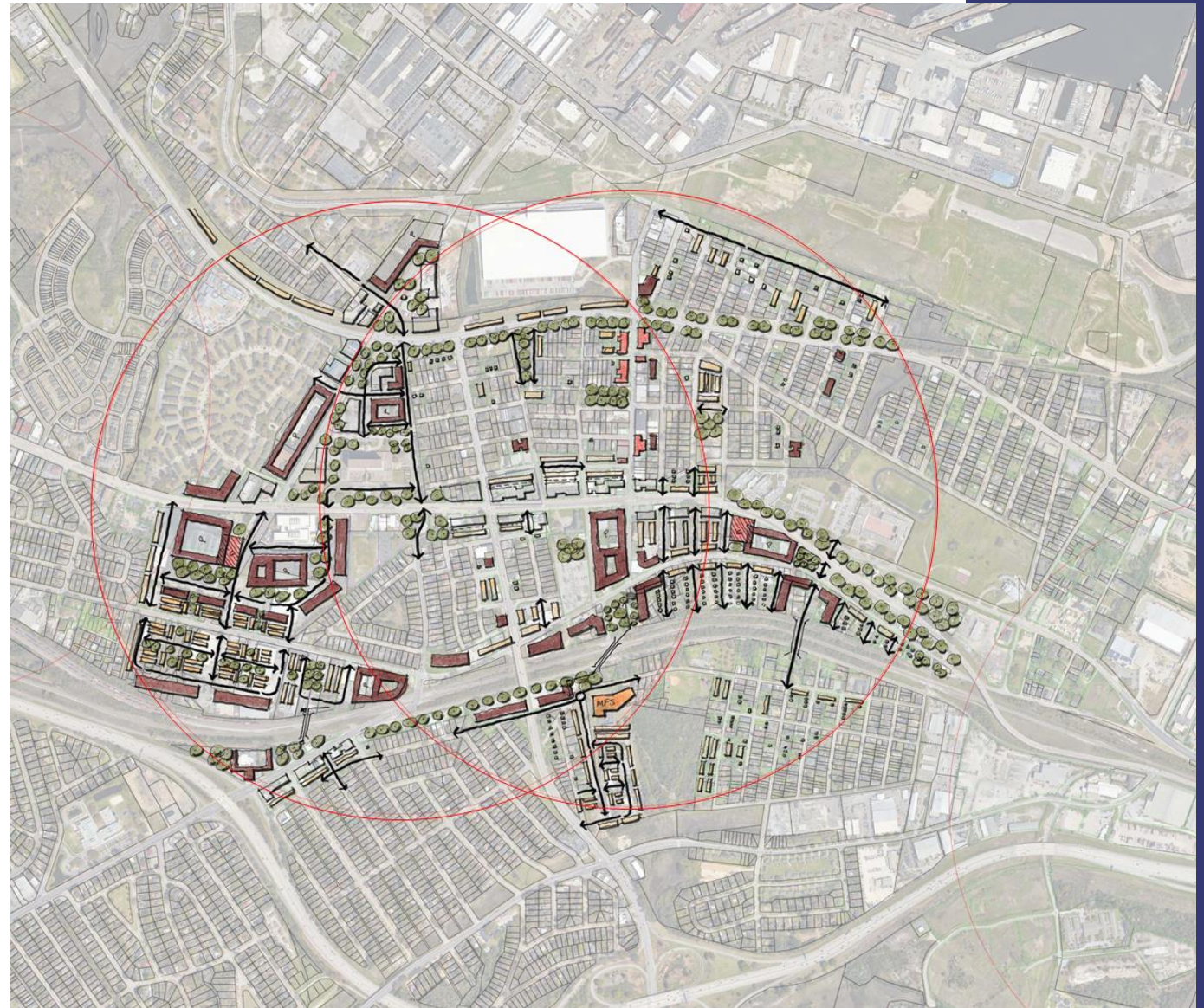
Potential Roadway Network

- Realign Dorchester Road to a new access road east of the Naval Hospital.
- Naval Hospital parking lot to align with Old Pine Circle and create connections to adjacent neighborhood.
- KMart, Restaurant Depot, and Meeting Street to have a network of residential streets to facilitate more walkable blocks.
- Neighborhood between rail development and Spruill Avenue to eliminate North Atlantic Avenue in favor of an upper street to connect cul-de-sacs.
- Neighborhood between Rivers Avenue and rail to extend grid from north of Rivers Avenue.
- Carner Avenue, Rivers Avenue, Meeting Street intersection to be a realigned and signalized.
- Accabee Neighborhood is to have small investments to create connections that make sense. Consider a relocated and consolidated Mary Ford Center for increased development.
- Create two new pedestrian bridges aligned with a removed Accabee Road and north of Dorchester Road.



Potential Infill Development

- Mixed-use infill at Naval Hospital, Cosgrove Bridge, Kmart, Restaurant Depot, Industrial areas along Meeting Street.
- Mixed-use along Rivers Avenue. Create an alleyway to address rear streets.
- Residential infill at industrial properties between Rail and Rivers.
- Enhance Reynolds Avenue
- Residential infill as possible throughout the neighborhoods.
 - Single lots rebuilt to single-family
 - Multiple lots adjacent redeveloped to townhomes, duplex, triplex, quadplex, etc
 - Larger parcels redeveloped to multifamily housing up to 12 units
- Two grocery stores built into multifamily developments with shared parking. Located at:
 - McMillan and Rivers
 - New Chicora Elementary
- Shared Garages (P)
- Spruill Avenue to be developed as able.



Open Space Overlay

- Spruill Avenue
 - Greenway connection
 - South anchor greenspaces
 - Triangle park
- Reynolds Avenue
 - Repurpose opportunity parcels to central green
- McMillan Avenue
 - Closure of north connection and repurpose to open space
 - East-West green connection towards Restaurant Depot, Kmart, and Industrial areas.
- Rivers Avenue
 - Southern anchor of greenspaces previously one-sided industrial
 - Plazas and open spaces spotted along the infill development
 - Larger parks focused near the Naval Hospital
- Accabee
 - Repurpose industrial to greenway
 - New parks for bridges
 - Larger focus on park at Mary Ford as a connector
- Utilize the neighborhood streetscapes to provide the connection between parks.



Revised Opportunity Areas

The opportunity areas were revised from the initial iteration to reflect all previously identified opportunities areas as well as potential parcels that could feasibly redevelop in the mid- to long-term. These collective parcels were used to define the next iteration of the potential framework and built form on the subsequent pages.

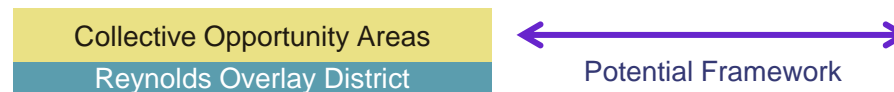
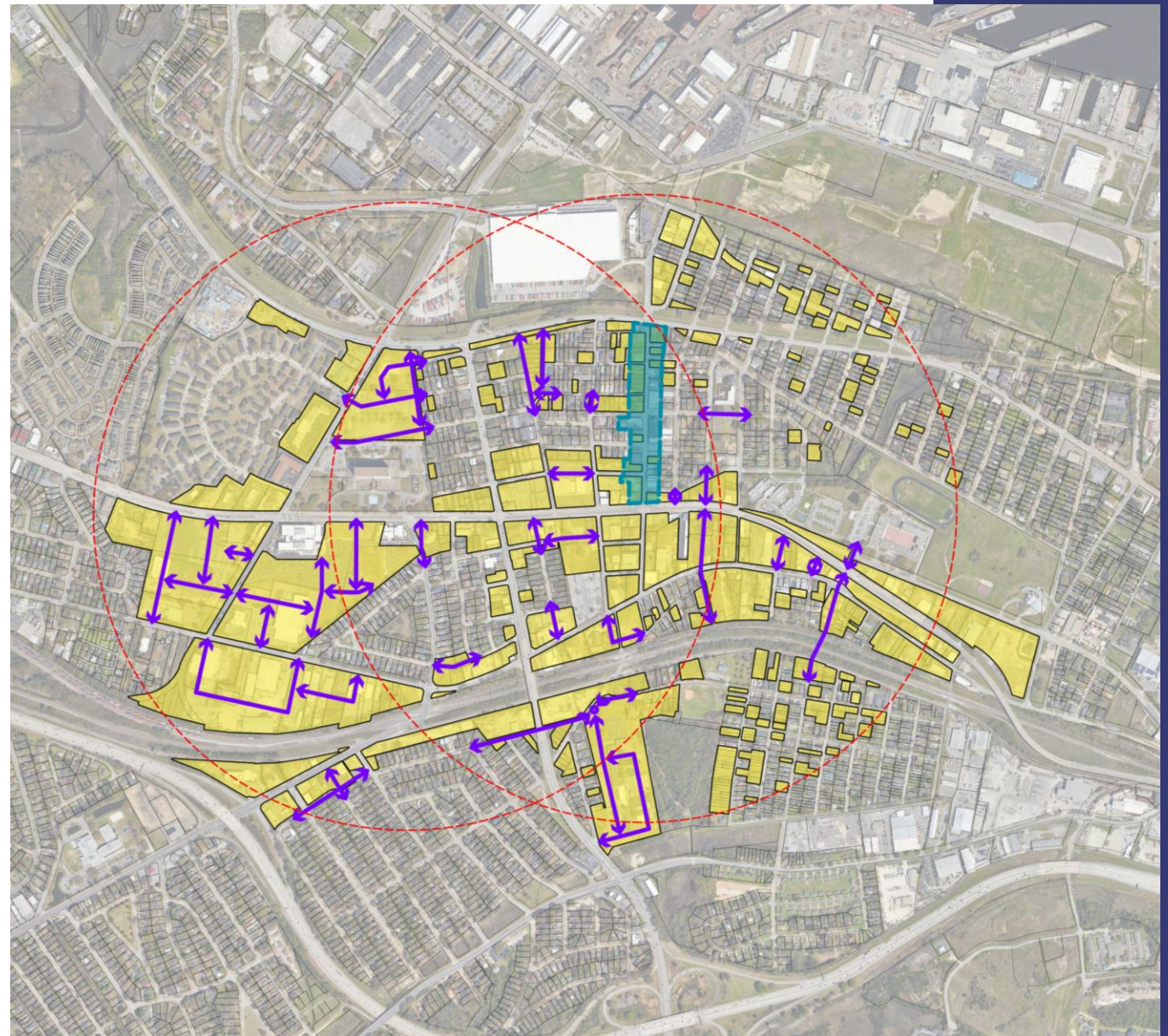


Initial project team opportunity areas with stakeholder feedback

Additional long-term areas for improved development opportunities and connectivity

Revised Potential Roadway Network

The proposed framework advocates for linking adjacent city grids while also establishing a pedestrian-friendly network of streets. Although street grids may end in certain areas, pedestrian connections will persist to ensure the creation of a walkable network encompassing streets and open spaces.

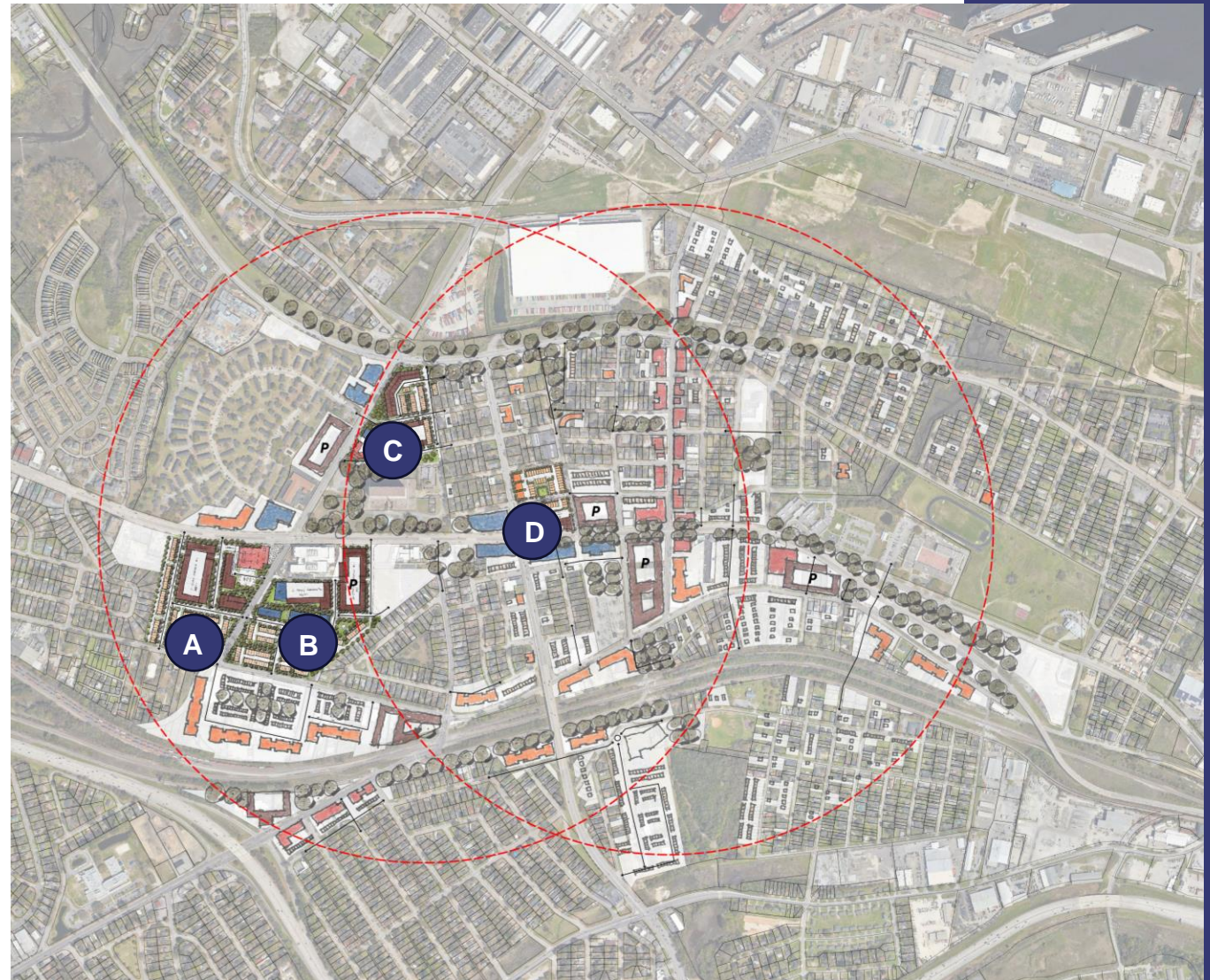


Revised Potential Infill Development

- As the lot allows, infill existing residential lots with a variety of home types ranging from single-family, townhomes, du/tri/quadplex, and 5-12 unit apartment houses.
- Larger development parcels should integrate several uses. Prioritizing ground floor commercial uses along heavily used roadways.
- Shared Garages (P) should be located within walking distance to the station stops.
- Reynolds Avenue should be prioritized as a Main Street corridor. New development should align with the character of the existing context.

Catalyst Developments

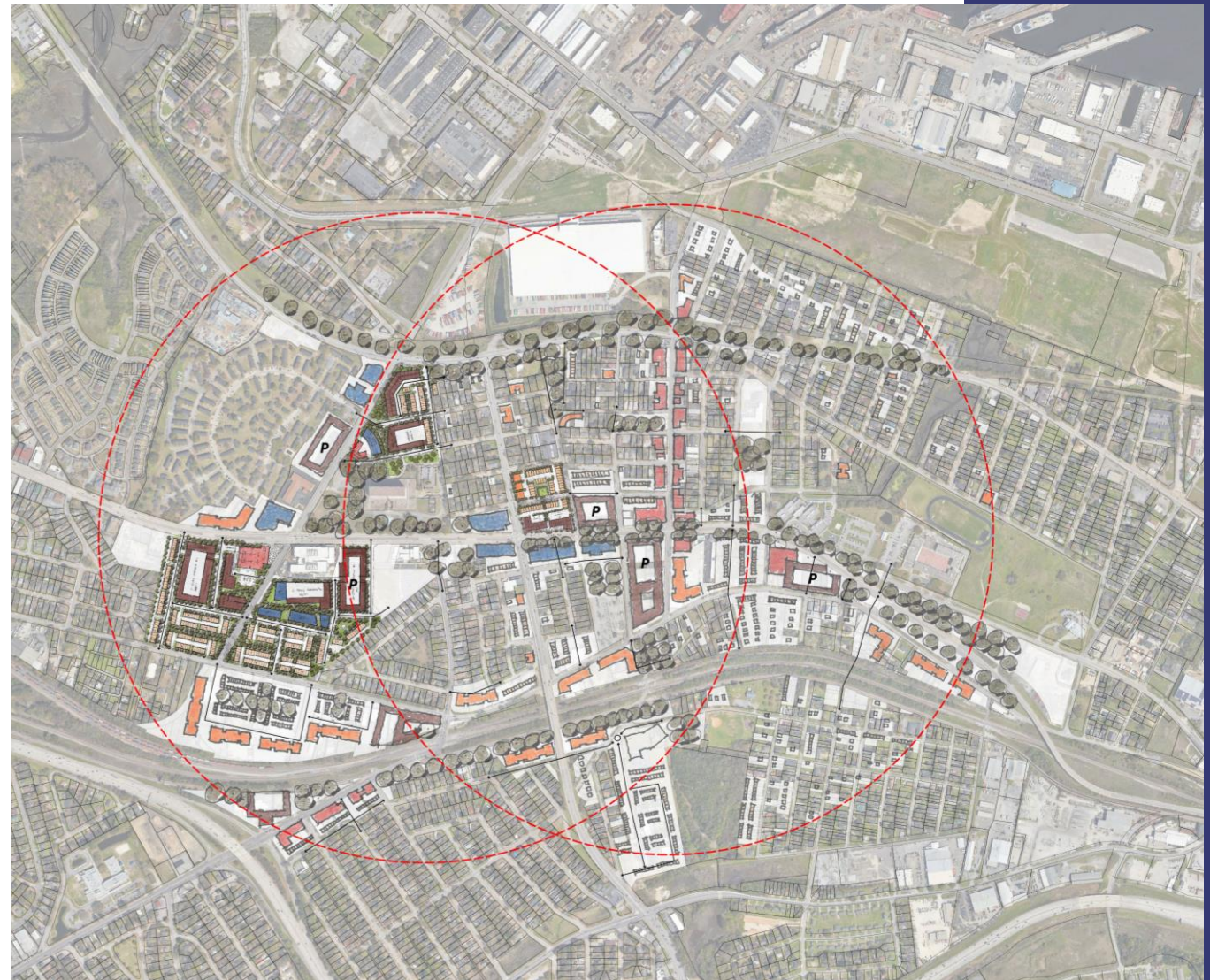
- A** KMart Site
- B** Teddy E. Pryor Social Services Building
- C** Navy Hospital
- D** Carta Superstop



Mixed Use	Retail	Townhomes	Shared Parking (P)
Office	Multifamily	Single Family	

Overall Catalyst Development Potential

- 42,000 sf Grocery Store
- 472,000 sf Commercial Space (Retail and Office)
- 1,389 Residential Units (Apartments and Townhomes)
- 3,262 Parking Spaces



Mixed Use	Retail	Townhomes	Shared Parking (P)
Office	Multifamily	Single Family	

Catalyst Sites

A KMart Site

~16 acres

~33 du/ac or 0.97 FAR

1. 42,000 sf Grocery Store
2. 536 Total Residential Units (mixture of townhomes and apartments)
3. 45,000 sf Commercial
4. 760 Parking Spaces

B Teddy E. Pryor Social Services Building

~16 acres

~24 du/ac or 1.07 FAR

1. 393 Total Residential Units (mixture of townhomes and apartments)
2. 268,000 sf Commercial
3. 1,683 Parking Spaces 15% shared) (~600 included to replace existing parking area)



Catalyst Sites

C Navy Hospital

~8.5 acres

~35 du/ac or 0.65 FAR

1. 295 Total Residential Units (mixture of townhomes and apartments)
2. 133,000 sf Commercial / Office
3. 673 Parking Spaces (15% Shared)



Catalyst Sites

D CARTA Superstop

~4.6 acres
~35 du/ac or 0.32 FAR

1. 165 Total Residential Units (mixture of townhomes and apartments)
2. 26,000 sf Commercial
3. 146 Parking Spaces (15% Shared)



- Mixed Use
- Apartments
- Townhomes

APPENDIX D: SUMMARY OF APPLICABLE CODES

Introduction

In March 2023, a review of 50+ Form-Based and Transit Oriented Codes from across the United States and abroad was conducted to determine best practice. Codes related to the LCRT Corridor due to Physical Context, Organizing Principle; Implementation Method, Development Type, and/or Special Features. Once codes were deemed particularly relevant due to one or more of these elements, the codes were further examined for the following features:

1. Block and Street Network

2. Parcel/Lot Size & Buildings

3. Parking

4. Stormwater & Open Space

Through the throughout review, nine codes were determined as especially relevant to the LCRT Corridor and are covered in this Appendix.

The Driehaus Award annually honors communities that have successfully adopted and executed outstanding form-based zoning codes. Preservation of unique character and codes that support daily life needs are two elements that are seen in award recipients and are goals of the LCRT TSC. Multiple of these codes received the Driehaus Award or an honorable mention for the award.

Appendix D Overview:

1. Beaufort City, SC
2. Charlotte, NC
3. Charlottesville, VA
4. Cincinnati, OH
5. Leander, TX
6. Marin County, CA
7. Miami, FL
8. Nashville, TN
9. Town of Orange, VA

1. Beaufort City, SC

Beaufort’s code is a highly readable FBC with compelling graphics. Clear transect-based approaches to the four key areas outlined above, but most especially regarding parking and stormwater. As a coastal South Carolina city, their stormwater approach is especially relevant. The Table of “Applicability on shared BMPs” by Transect-district, type (Infill, Greenfield, Redevelopment), size and percent impervious surface should be considered for the LCRT corridor (p. 171.) Notably the entire city is encompassed by a regulating plan.

2. Charlotte, NC

This text-dominant, TOD Zoning Ordinance is tied to a TOD District Plan that is part of the city’s Comprehensive Plan. The TOD District Plan identifies six districts and is as graphically detailed as a form-based code. Most of the four key areas outlined above are covered, but the Parcel/Lot & Buildings and Parking Standards & Placement are especially detailed. The TOD Zoning Ordinance and TOD District Plan, however, are vague on blocks and silent on stormwater. Notably, these standards apply only to the TOD walksheds (not city-wide.)

3. Charlottesville, VA

The Charlottesville code for the Strategic Investment Area is a concise FBC with clear diagrams and tables throughout, despite being a word document. All four key areas are covered, however, as this was applicable to a small area plan in a city with municipal stormwater service and a stormwater utility fee, there is no discussion about stormwater management practices. Its salient “equity” innovation is the incorporation of height bonuses tied both to affordable housing and the transect to be context-sensitive to the physical scale and pedestrian orientation of adjacent neighborhoods. Notably, this code provides a framework plan for a portion of a small area plan that fits within a ¼-mile walkshed and requires developers to submit a regulating plan for 2 or more acres.

4. Cincinnati, OH

Cincinnati’s code establishes principles (at the city, neighborhood, and block scale) and three contexts (Natural, Walkable, and Drivable.) Clear graphics and tables accompany each context, but the code is long and at times difficult to read. This incremental approach is intended to enable a FBC to “grow” organically over time. The Walkable Context is the most relevant to TODs, centered on the ¼-mile pedestrian shed and is required for development sites greater than 2-acres under common ownership. How to create a Regulating Plan for Development Sites is specified in Section 1703-8.20.

5. Leander, TX

Leander has a strong Smart Code transect-based FBC that clearly visualizes regulations by transect zone (p.64). It also establishes a Regional Transect for the entire city delineated by Sectors (p.2.) categorized as either new or existing development. Sector 2 for new development is centered around the Leander Transit Station. All four key areas are covered, but as this applies to a city with municipal stormwater service, there is no discussion about surface-based stormwater management practices.

6. Marin County, CA

Like Cincinnati, this FBC establishes Natural, Walkable, and Auto-Oriented Suburban context types each with transect-based regulations that reinforce their form & function. This Framework Plan distinguishes between areas less than 3 acres and areas greater than 3 acres that require a developer-crafted Walkable Neighborhood Plan- WNP (which acts as a Regulating Plan) but unlike Cincinnati, this WNP requires an integrated storm-water management design. Chapter 8 outlines this 2-tiered process, sets standards by transect zone and encourages dual-functioning landscapes in all transects.

7. Miami, FL

Miami's code provides clear organization for a very large code in a complex city. Its applicability is due to its range of throughfare, and open space types governed by transect in a diverse urban setting. For that reason, it is a beneficial "manual" for making a Smart Code based FBC inclusive of clear, graphic strategies, tables, and narratives with form-based content.

8. Nashville, TN

Like Miami, this is a highly readable Smart Code based FBC for a large city. It is a good reference for a Smart Code approach to an FBC.

9. Town of Orange, VA

This FBC for a neighborhood within a ¼-mile watershed was the Code of Development for a greenfield Planned Unit Development (PUD). It is clearly organized with Regulating Plans and Tables tied to thoroughfare, parking and open space types and building envelope standards governed by a transect zone map. It is relevant to LCRT due to its scale and ability to clearly and graphically address all of the four key areas identified above.