



CHARLESTON COUNTY

PEOPLE 2 PARKS

IMPLEMENTATION STUDY

JANUARY 2016

ACKNOWLEDGEMENTS

PUBLIC PARTICIPANTS

Thank you to the 3,100+ people who participated in this planning process through the online survey and the online input map. Thanks also to the many individuals of the press and those engaged in social media throughout the process.

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CCPRC's Mission

Charleston County Park and Recreation Commission (CCPRC) will improve the quality of life in Charleston County by offering a diverse system of park facilities, programs, and services.

CCPRC's Vision

CCPRC continues their legacy of preservation for the public through responsible stewardship, management, and improvement of the current public entrusted infrastructure; and through the balance of passive, active, and entrepreneurial planning and development for the undeveloped properties acquired through the 1992 bond program.



CCPRC Core Values

CCPRC is making a commitment to a new set of core values. This effort will ensure that we leave some blue up above and some green on the ground. Adopting these important values ensures a thriving park system for our children and grandchildren.

Community Enrichment - enriching lives through education and programs

Leadership - providing professional staff development
Fun - delivering fun to customers

Exceptional Customer Service - always focusing on you

Health and Wellness - providing and promoting healthy lifestyle opportunities

Quality - striving for quality throughout the park system

Diversity - fostering diverse populations of vendors, employees, and customers

Safety - ensuring safe and secure environments

Accessibility - providing accessibility through affordable options and a variety of offerings

Stewardship - preserving and conserving cultural, natural, and historical resources

Building a Legacy - maintaining a vision for the future while sustaining a healthy park system

The staff and commission of the Charleston County Park and Recreation Commission are committed to maintaining high standards in the delivery of leisure services and facilities to the citizens of Charleston County.

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This plan is organized according to the following four sections:

- **Introduction** establishes the enduring vision and goals of this plan, as well as project background information and project purpose which are the foundation for this vision.
- **Data Collection & Public Input** presents an overview of previous planning efforts and public needs that were used as a basis for this Plan’s recommendations.
- **Project Prioritization** utilizes advanced GIS analysis to objectively prioritize all bicycle and pedestrian projects within Charleston County’s recommended network.
- **Implementation Plan** provides possible implementation strategies and planning-level cost estimates, both are tools for budgeting these projects and establishing scopes of work for their implementation.

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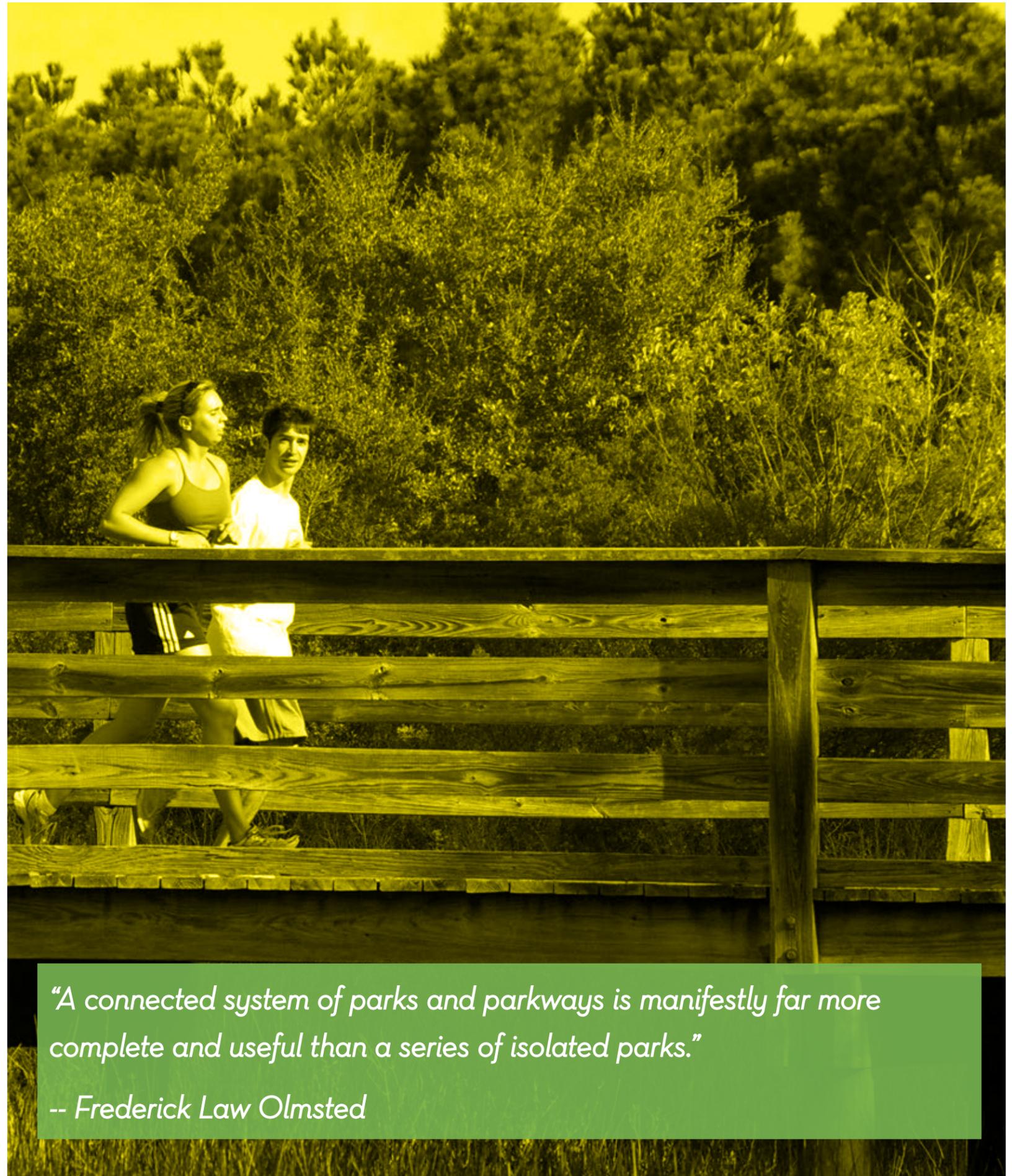
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CHAPTER 1

INTRODUCTION



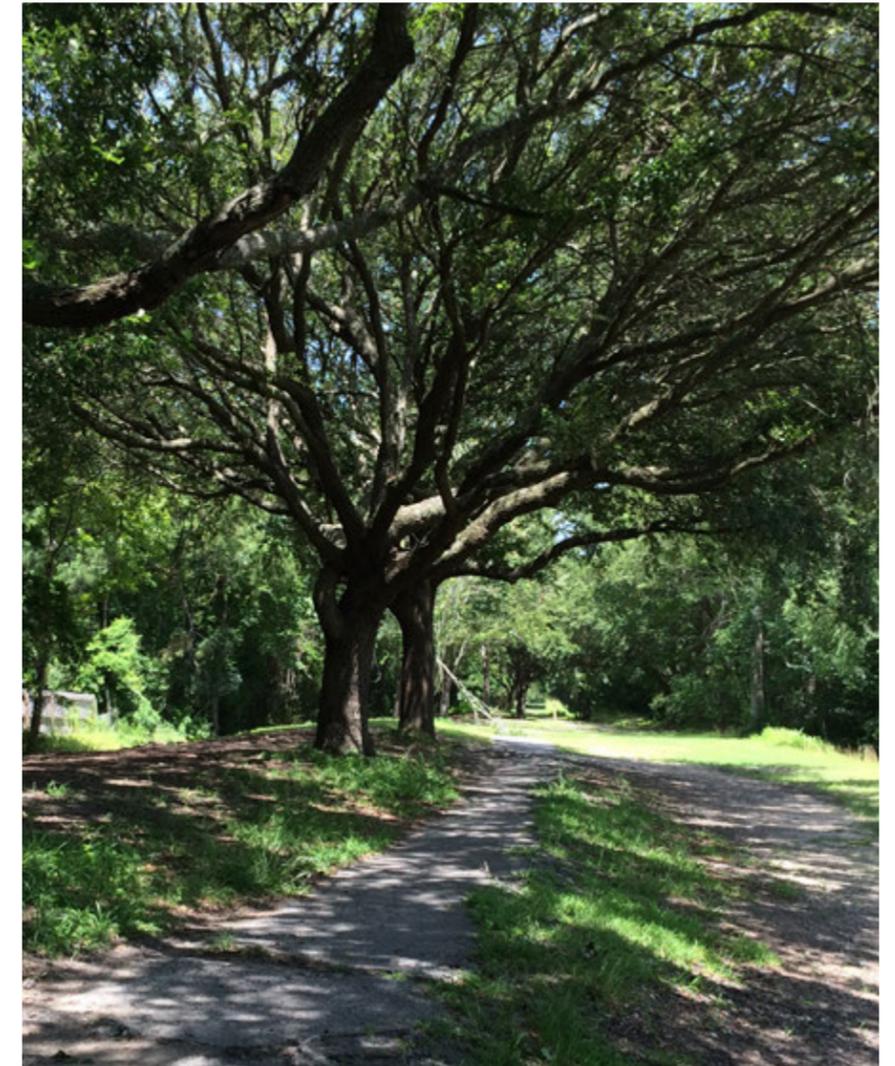
“A connected system of parks and parkways is manifestly far more complete and useful than a series of isolated parks.”

-- Frederick Law Olmsted

PROJECT VISION, GOALS, AND PURPOSE

Project Vision

The Charleston County People 2 Parks Plan envisions a future for Charleston County where all residents are connected to parks, schools, and other important destinations via an interconnected network of safe, comfortable, and convenient walking and bicycling infrastructure. The walking and bicycling network will create healthy, enjoyable, equitable, and cost-effective transportation and recreation options for County residents and visitors, ensuring that Charleston County remains an attractive place to live, work, play, and learn for current and future generations. These bicycling and walking improvements will also help increase and preserve accessible greenspace in Charleston County, reflecting the Charleston County Park and Recreation Commission's goal of providing park and recreation opportunities that promote healthy, active lifestyles and connect people to nature.



Project Goals

- Establish a long-term vision for an **interconnected walking and bicycling network** that provides healthy, safe, convenient, and fun transportation and recreation opportunities throughout Charleston County.
- Use walking and bicycling connections as a means to **connect and preserve greenspace** throughout Charleston County, **ensuring equitable accessibility to nature** for generations to come
- Provide a roadmap for Charleston County and its implementing partners to follow in realizing this **long-term vision for active transportation and recreation** throughout the region
- Ensure that the long-range vision for bicycling and walking in Charleston County **reflects the needs and aspirations of its residents**



Project Purpose

Charleston County Park and Recreation commissioned this People 2 Parks plan to refine and update previous walking and bicycling infrastructure recommendations throughout the County to better reflect current walking and bicycling needs of County residents. Another primary purpose of this plan is to **objectively prioritize bicycle and pedestrian network recommendations throughout the County**, provide cost estimates, and recommend project implementation strategies. This will assist County Council and other agencies in **implementing projects that will provide the greatest benefit in an equitable manner throughout Charleston County.**



PROJECT BACKGROUND

The vision and goals established in this plan were derived from previous Charleston County planning efforts and refined through input from project stakeholders. At the center of this study is the County’s proposed bicycle and pedestrian network. This greenway network has been in development for several years and consists of an extensive recommended system of interconnected greenways throughout the urban, suburban, and rural areas of the county.

Maps of the proposed greenway network are included on pages 14 - 17.

Previous and On-going Greenway Planning Efforts

The planning for a county-wide greenway system began with the Comprehensive Greenbelt Plan adopted in June 2006. This plan proposed a base network of greenways connecting greenspace and urban areas throughout the County. The 2013 Charleston County Parks, Recreation, Open Space, and Trails (PROST) Comprehensive Plan looked at the long-range park and recreation needs of the County, and built upon the base network of greenways proposed in 2006 to propose bicycle and pedestrian linkages to existing and planned parks throughout the County.

Through these planning efforts and continued collaboration with local and regional partner agencies, Charleston County Park & Recreation Commission (CCPRC) established a vision for pedestrian and bicycle connections to parks, greenspace, and other important destinations such as schools, employment centers, restaurants, and retail throughout the County.

During the three years following CCPRC’s adoption of the PROST Plan, CCPRC Planning staff continued to track local bike and pedestrian transportation projects and plans and held additional coordination meeting with local municipalities and planning agencies. In an effort to expand the parks connectivity vision to as many parks and recreation destinations in the region as practicable, CCPRC also engaged local conservation partners and state and federal agencies.

The results of the coordination meetings was a map indicating existing bike/pedestrian routes, planned bike/pedestrian routes, and new routes proposed as part of this plan, attempting to fill gaps in existing bike/pedestrian infrastructure. People 2 Parks (P2P) is the culmination of preceding plans, coordination meetings, and the extensive GIS-based prioritization analysis detailed throughout this report.

Partners who attended coordination meeting included:

Municipality	Agency	Land Trust
<ul style="list-style-type: none"> Awendaw, Town of Charleston, City of Hollywood, Town of James Island, Town of Mount Pleasant Town of North Charleston, City of Ravenel, Town of Summerville Parks and Recreation*, Town of 	<ul style="list-style-type: none"> Berkeley, Charleston, Dorchester Council of Governments Charleston County Transportation Development Department of Natural Resources, South Carolina Department of Transportation, South Carolina Forest Service, South Carolina State Parks, South Carolina 	<ul style="list-style-type: none"> Ducks Unlimited East Cooper Land Trust Edisto Island Open Land Trust Lowcountry Open Land Trust The Nature Conservancy

*Non-Charleston County representation.
This list does not intentionally exclude certain entities, but reflects which parties were able to meet during the times/dates of coordination meetings.

GREENWAY FACILITY TYPES

For the purposes of this plan, ‘greenway’ refers to a variety of on-street and off-street bicycle and pedestrian facility types. The various bicycle facility types recommended in the county-wide network include shared use paths, separated bike lanes, bike lanes, paved shoulders, neighborhood connectors, and bicycle routes. The public outreach element of this plan identified a disproportionate need for bike facilities. However, where proposed facilities are specific to bicycle use only and where pedestrian needs are not currently being met, it is implied that parallel sidewalks should also be provided.

The following section presents a brief summary description of each facility type. These facility types are ordered hierarchically from most to least degree of bicycle/motor vehicle separation. In general, higher order facilities are preferable on higher-order roadways and vice versa.

SHARED USE PATH



A shared use path allows for two-way, off-street bicycle use and also may be used by pedestrians, skaters, wheelchair users, joggers and other non-motorized users. These facilities are frequently found in parks, along rivers, beaches, and in greenbelts or utility corridors where there are few conflicts with motorized vehicles. Path facilities can also include amenities such as lighting, benches, and fencing (where appropriate). Key features of shared use paths include:

- Frequent access points from the local road network
- Directional signs to direct users to and from the path
- A limited number of at-grade crossings with streets or driveways
- Terminating the path where it is easily accessible to and from the street system
- Separate treads for pedestrians and bicyclists when heavy use is expected

SEPARATED BIKE LANE



Also called “cycle track” or “protected bike lane,” a separated bike lane is a bike facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. Separated bike lanes come in different forms but all share common elements—they provide space that is intended to be exclusively used by bicycles, they are separated from parking lanes and sidewalks, and they are separated from motor vehicle travel lanes with a vertical element. In situations where on-street parking is allowed, separated bike lanes are located to the curb-side of the parking (in contrast to bike lanes).

Separated bicycle lanes may be one-way or two-way, and may be at street level, sidewalk level, or at an intermediate level. If at sidewalk level, a curb or median separates them from motor traffic, while different pavement color/texture separates the separated bike lane from the sidewalk. If at street level, they can be separated from motor traffic by raised medians, on-street parking, planters, or bollards.

By partitioning bicyclists from motor traffic, separated bike lanes can offer a higher level of comfort than bike lanes and are attractive to a wider spectrum of the public. Intersections and approaches must be carefully designed to promote safety and facilitate left-turns from the right side of the street.

BIKE LANE



A bicycle lane is a portion of the roadway that has been designated by striping, signing, and pavement markings for the preferential and exclusive use of bicyclists. Bicycle lanes are always located on both sides of the road (except one way streets), and carry bicyclists in the same direction as adjacent motor vehicle traffic. The minimum width for a bicycle lane is four feet; five- and six-foot bike lanes are typical and preferable for collector and arterial roads.

Where bicycle lanes are recommended in this plan, speed limit reduction should be strongly considered.

PAVED SHOULDER



Typically found in less dense areas, shoulder bikeways are roadways with paved, striped shoulders. While there is no minimum width for paved shoulders, 4' or greater is preferred for cyclists. In addition to the safety and comfort benefits for cyclists, paved shoulders also reduce roadway maintenance, improve roadway drainage, provide a stable walking surface for pedestrians when sidewalks cannot be provided, reduce vehicular crashes, and provide emergency stopping space for broken-down vehicles.

Shoulder bikeways often, but not always, include signage alerting motorists to expect bicycle travel along the roadway. Shoulder bikeways should be considered a temporary or rural treatment, with full bike lanes planned for construction if the roadway is widened or completed with curb and gutter.

NEIGHBORHOOD CONNECTOR



Neighborhood connectors, also called bicycle boulevards, are low-volume, low-speed neighborhood streets modified to enhance bicyclist comfort and safety by using treatments such as signage, pavement markings, traffic calming and/or traffic reduction, and intersection modifications. Pedestrian and bicycle cut-throughs can also be integrated into the neighborhood connector network to allow for continuous bike travel off of major corridors. These treatments allow through bicycle movements while discouraging motorized through-traffic.

Jurisdictions throughout the country use a wide variety of strategies to determine where specific treatments are applied. While no federal guidelines exist, several best practices have emerged. At a minimum, neighborhood connectors should include distinctive pavement markings and wayfinding signs. They can also use combinations of traffic calming, traffic diversion, and intersection treatments to improve the bicycling environment. The appropriate level of treatment to apply is dependent on roadway conditions, particularly motor vehicle speeds and volumes.

Traffic conditions on neighborhood connectors should be monitored to provide guidance on when and where treatments should be implemented. When motor vehicle speeds and volumes or bicyclist delay exceed the preferred limits, additional treatments should be considered.

BICYCLE ROUTE



Bike routes employ bikeway signage, and may also use pavement markings, to guide bicyclists to popular destinations on low-volume, bike-friendly roadways. Bike routes are distinct from bicycle boulevards in that they are mostly recommended as a rural roadway treatment. Like bicycle boulevards, bike routes serve as an alternative to roads that are less comfortable for cycling due to higher motor vehicle volumes and/or speeds.

Bike routes were chosen as part of the network because of the importance of overall system connectivity and connectivity to destinations such as parks, neighborhoods, and schools.

Design Considerations

Charleston County and its implementing partners should consider the following nationally accepted bikeway standards and design guidelines when implementing the recommendations in this Plan: the Manual of Uniform Traffic Control Devices (MUTCD), the Federal Highway Administration (FHWA) Separated Bike Lane Planning and Design Guide, the American Association of State Highway Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities, and the National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide.



CHARLESTON COUNTY GREENWAY NETWORK MAPS

PROPOSED NETWORK COUNTY OVERVIEW

- Network Recommendations**
- Shared Use Path
 - Separated Bike Lane
 - Paved Shoulder/Bike Lane
 - Neighborhood Connector
 - Bicycle Route
 - Sidewalk
- Existing Walk/Bike Connections**
- Neighborhood Connector
 - Paved Shoulders/Bike Lanes
 - Shared Use Path
 - East Coast Greenway
 - Palmetto Trail
 - Statewide Bike Tour Route
 - Saltwater Trails
 - Existing and Proposed Parks
- Roads**
- Interstate
 - US Highway
 - SC Highway
 - Local Streets (white)
 - Charleston County
 - County Boundaries
 - Water Bodies



PROPOSED NETWORK

CITY OF CHARLESTON
OVERVIEW

Network Recommendations

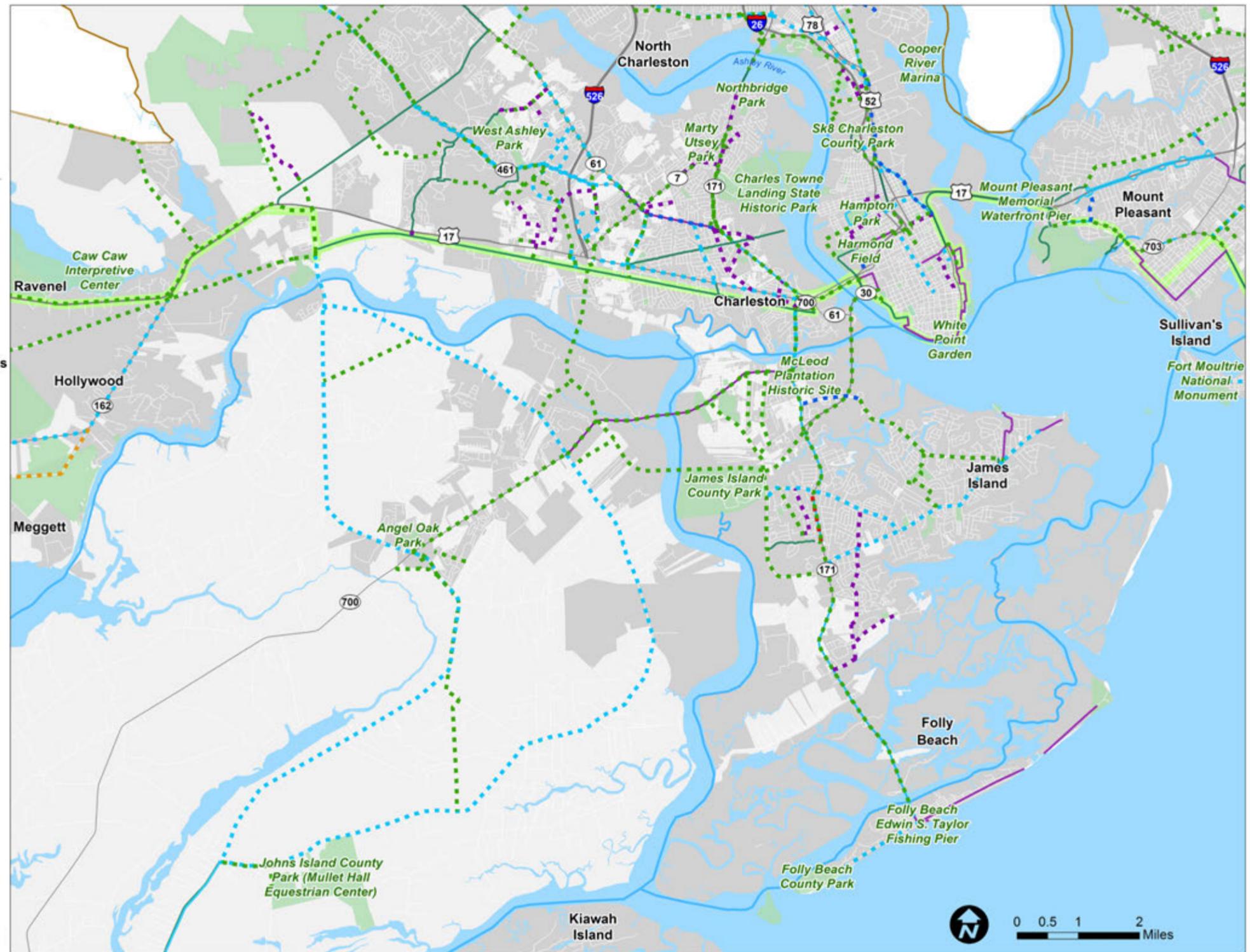
- Shared Use Path
- Separated Bike Lane
- Paved Shoulder/Bike Lane
- Neighborhood Connector
- Bicycle Route
- Sidewalk

Existing Walk/Bike Connections

- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
- East Coast Greenway
- Palmetto Trail
- Statewide Bike Tour Route
- Saltwater Trails
- Existing and Proposed Parks

Roads

- Interstate
- US Highway
- SC Highway
- Local Streets (white)
- Charleston County
- County Boundaries
- Water Bodies



PROPOSED NETWORK

MOUNT PLEASANT OVERVIEW

Network Recommendations

- ⋯ Shared Use Path
- ⋯ Separated Bike Lane
- ⋯ Paved Shoulder/Bike Lane
- ⋯ Neighborhood Connector
- ⋯ Bicycle Route
- ⋯ Sidewalk

Existing Walk/Bike Connections

- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
- East Coast Greenway
- Palmetto Trail
- Statewide Bike Tour Route
- Saltwater Trails
- Existing and Proposed Parks

Roads

- Interstate
- US Highway
- SC Highway
- Local Streets (white)
- Charleston County
- County Boundaries
- Water Bodies



PROPOSED NETWORK

NORTH CHARLESTON OVERVIEW

Network Recommendations

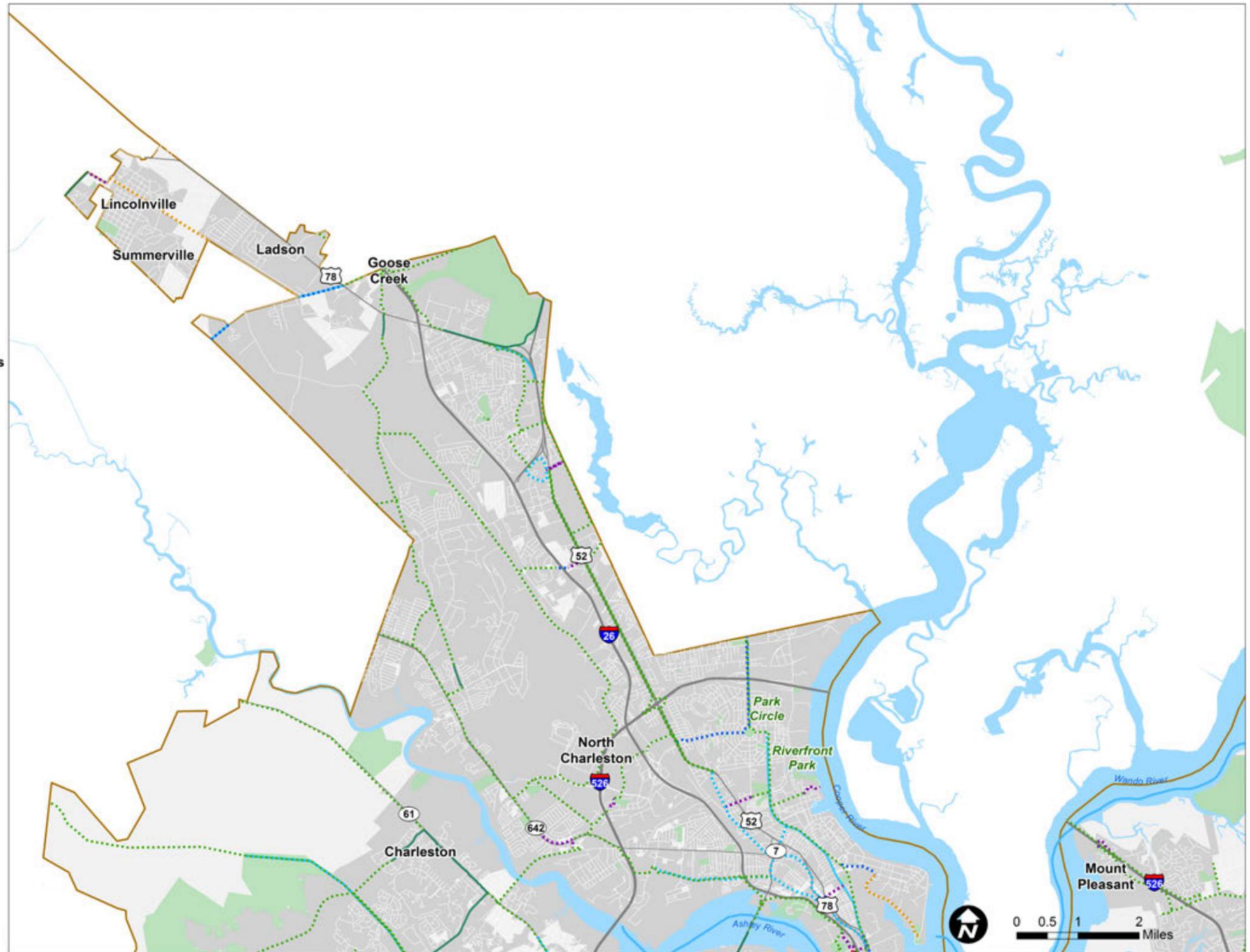
- Shared Use Path
- Separated Bike Lane
- Paved Shoulder/Bike Lane
- Neighborhood Connector
- Bicycle Route
- Sidewalk

Existing Walk/Bike Connections

- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
- East Coast Greenway
- Palmetto Trail
- Statewide Bike Tour Route
- Saltwater Trails
- Existing and Proposed Parks

Roads

- Interstate
- US Highway
- SC Highway
- Local Streets (white)
- Charleston County
- County Boundaries
- Water Bodies



WHY PLAN FOR PEDESTRIANS AND BICYCLISTS?

Imagine Charleston County in 20 years...

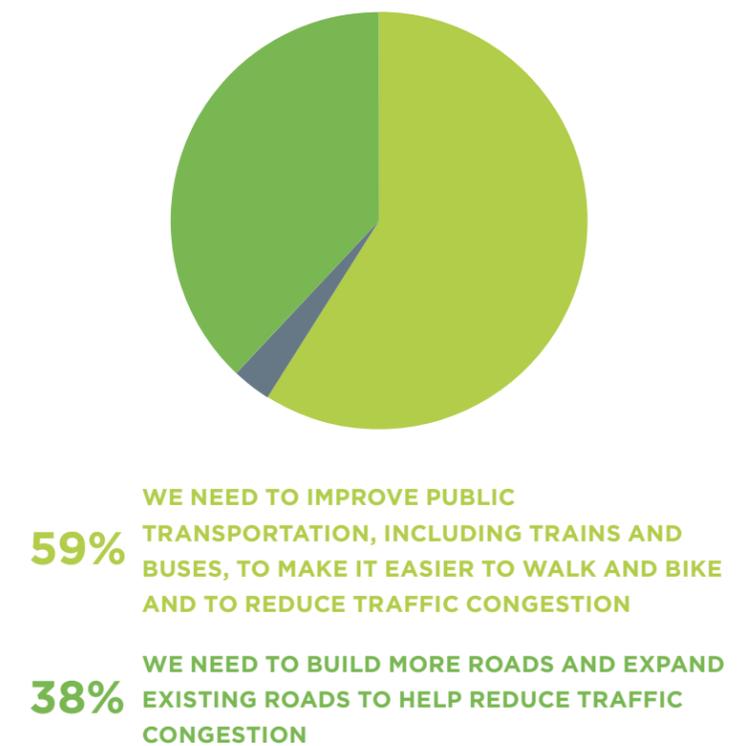
... as a place where people choose to walk, bike, and/or take transit for some trips - not out of necessity, but because it is a convenient and enjoyable transportation choice. Development is dense and well-designed so that people have many of their everyday needs accessible by a short walk, bike ride, or transit trip. Walk, bike, and transit-friendly streets are prevalent throughout the County. Parents feel perfectly safe letting their children walk or bike to and from school, parks, or other destinations by themselves, or as part of an enjoyable and healthy family outing. Because of the expanding greenway network and streets that are friendly for active transportation, people are bicycling and walking in record numbers. Serious pedestrian and bicycle collisions have dropped substantially. This in-turn has contributed to reduced congestion and curtailed the need for roadway expansion in spite of rapid population growth in the region. The cumulative result of this environment has resulted in substantial savings for the County and taxpayers.

An increasing number of communities and their leadership are seeing the potential of a future like this one; a future where better walking, bicycling and transit are critical parts of transforming and revitalizing our communities, making them more desirable places to live and visit. This movement is a direct result of the nationwide demand for more livable communities and transportation options.

In 2010, Transportation for America conducted a nationwide survey that showed 59% of Americans in rural and urban areas preferred a transportation future that “[improves] public transportation and making it easier to walk and bike over building more roads and expanding existing roads.” See Figure 1.1 below.

In addition, “66% [of respondents said] that they ‘would like more transportation options so they have the freedom to choose how to get where they need to go.’ And 73% [of respondents felt] they ‘have no choice but to drive as much as they do’, with 57% desiring to spend less time in the car.”

Figure 1.1 Preference to Reduce Traffic Congestion
Transportation for America - Future of Transportation
National Survey



* Source: Transportation for America: <http://t4america.org/maps-tools/polling/2010survey/>

BENEFITS OF BICYCLING AND WALKING

Communities across the U.S. and throughout the world are investing in walking and bicycling infrastructure as a way to improve their quality of life. They do this to improve transportation options and recreation opportunities, as well as to capture the health, safety, social, economic and environmental benefits.

In Charleston County, the number of local and regional greenways such as the Battery2Beach route, the East Coast Greenway, and the Palmetto Trail are important amenities within the tourism industry and a popular asset for residents and visitors seeking opportunities for outdoor recreation and active transportation.

This section provides a summary of bicycle and walking benefits and a summary of the advantages of having a well-connected, accessible greenway.

Trails are becoming the new town squares where people bump into their neighbors, sparking conversations and friendships... Americans are not content to simply pedal or stroll along a trail; they want places to go and things to do.

*-- Jay Walljasper
Senior Fellow,
Project for Public Spaces*



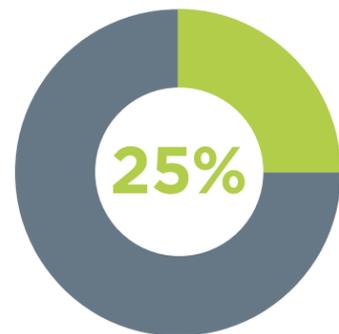
SHARED USE PATH AT JAMES ISLAND COUNTY PARK

Health Benefits

According to the Centers for Disease Control and Prevention (CDC), “Physical inactivity causes numerous physical and mental health problems, is responsible for an estimated 200,000 deaths per year, and contributes to the obesity epidemic”. Despite the potential to avoid these physical and mental health problems, “only one-half of U.S. adults reported levels of physical activity consistent with the guideline for aerobic physical activity in 2013.”

In identifying a solution to obesity problems, the CDC determined that by creating and improving places in our communities to be physically active, there could be a 25 percent increase in the number of people who exercise at least three times a week. This is significant considering that for people who are inactive, even small increases in physical activity can bring measurable health benefits.

Additionally, the CDC recognizes that walking and wheelchair rolling are rights, not luxuries, that each person should have. As such, communities should be designed to encourage safe pedestrian activity, and walking should be an integral part of daily life for people of all ages and abilities. Greenways provide healthy recreation and transportation opportunities by offering attractive and accessible places to bike and walk, and encourage people to engage in physical activity.



CREATING ACCESS TO ATTRACTIVE, SAFE, AND ACCESSIBLE PLACES FOR PHYSICAL ACTIVITY, SUCH AS GREENWAYS, COULD ENCOURAGE A 25% INCREASE IN THE NUMBER OF PEOPLE EXERCISING REGULARLY THROUGHOUT THE WEEK

Access & Mobility Benefits

A national transportation poll found that Americans would like to see 22% of transportation funding invested in walking and bicycling facilities, but current budget allocation sets aside only 1% of all transportation funding to walking and bicycling.

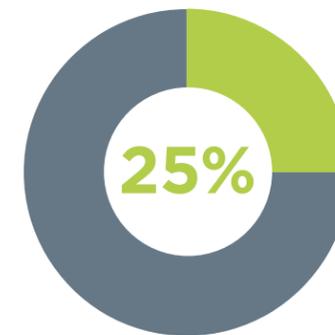
More than one quarter of all trips (commuting and non-commuting) taken by Americans every day are less than one mile - equivalent to a walking trip of 15 minutes or a 6-minute bike ride; however, just 13% of all trips are made by walking or bicycling nationwide. South Carolina ranked 39th in commuter biking and walking levels, and 48th in per capita spending on bicycle/pedestrian projects. Investing in bicycle and pedestrian facilities can divert these driving miles and mitigate traffic by encouraging people to use greenways and sidewalks to reach their destinations.

Considering that almost 9% of Charleston County households lack access to a vehicle, and nearly 38% of households have access to only one vehicle, a well-connected pedestrian and bicycle network will provide safe, convenient transportation options for those who are unable or unwilling to drive and will minimize the disadvantage of lacking access to a motor vehicle.

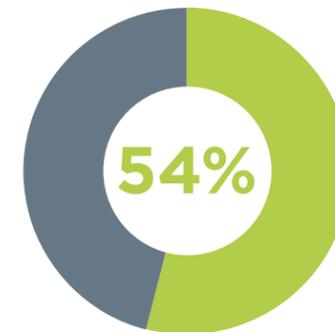
Financial Benefits

According to the Outdoor Industry Association, outdoor recreation generates nationally more annual consumer spending than motor vehicles and parts, pharmaceuticals, and household utilities, and creates more jobs than the construction industry.

South Carolina’s outdoor recreation generates \$18 billion in consumer spending, 201,000 directly related jobs, \$4.7 billion in wages and salaries, and \$1.0 billion in state and local tax revenue. Bicycle and pedestrian facilities also raise property values and reduce individual transportation costs. The development and expansion of a greenway system in Charleston County will only add to these figures.



25% OF IN-STATE LEISURE TRIPS BY SOUTH CAROLINA RESIDENTS WERE FOR OUTDOOR RECREATION



54% OF SOUTH CAROLINA RESIDENTS PARTICIPATE IN OUTDOOR RECREATION EACH YEAR

Safety Benefits

A lack of pedestrian and bicycle facilities, such as sidewalks, greenways, and safe crossings, lead to unsafe walking and bicycling conditions.

Studies by the Federal Highway Administration and the University of North Carolina Highway Safety Research Center have shown that installing pedestrian and bicycle facilities directly improves safety by reducing the risk and severity of pedestrian-automobile and bicycle-automobile crashes.

Currently, South Carolina ranks 47th in terms of pedestrian and cycling fatalities. As more people move to dense, urban environments like Charleston - areas ripe for bicycling and walking - investment in transportation options should follow.



Environmental Benefits

Trails and greenways can be useful not only as a tool for conservation, but also as a tool for improving air quality, protecting habitats and water sources, mitigating flood disasters, and protecting rural legacies.

Trails and greenways improve air quality conditions in two ways. Despite the fact that two-thirds of all trips are five miles or less, residents and visitors are often held captive by land development patterns and have no choice but to drive. A trail or greenway network provides a safe, efficient, and fun way to make these short trips while reducing carbon emissions and our reliance on fossil fuels. Trails and greenways also protect plants which produce oxygen and filter out pollutants like carbon monoxide and sulfur dioxide.

The linear nature of trails and greenways also links pockets of fragmented, sensitive habitats, increasing the land available to the species which live there. Greenways also create a buffer zone between built and natural environments. They protect rivers, streams, and lakes, prevent soil erosion, and filter runoff pollutants.

Greenways are also associated with protecting floodplains adjacent to these rivers, streams, and lakes. The restoration of floodplains near greenways means excess water during periods of flooding will be absorbed, preventing potential flood damage and the associated costs.

Another environmental benefit offered by greenways is their ability to preserve rural legacies through the protection of ridge lines, river corridors, scenic resources, farmlands, and open space. Greenways provide visual relief from sprawling developments, framing neighborhoods as distinguished and unique places.

Community Benefits

Trails and greenways often provide a window into our history and culture by providing access to historic places and features. Through recognition of the cultural, historical, and natural assets of places, greenways enhance a sense of community identity. The sense of identity surrounding local greenways bolsters quality of life, and is a valuable tool to attract visitors and residents.

Greenways also provide an informal opportunity to interact with neighbors, acting as the “community front porch.” Everyone is welcome on the trail, and diversity in trail uses and users promotes tolerance. The shared positive interest in the welfare of the trail among trail users fosters a sense of community pride and interdependence.

Greenways can often be a catalyst for community revitalization too - transforming a previously disconnected or underdeveloped place into a new community hub. By incorporating transportation, recreation, education, and interaction into a single user-experience, greenway systems raise a community to a level greater than the sum of its parts.

Greenways have the power to connect us to our heritage... They give people a sense of place and an understanding of the enormity of past events.

*-- Planning Commission,
Southwest Michigan*

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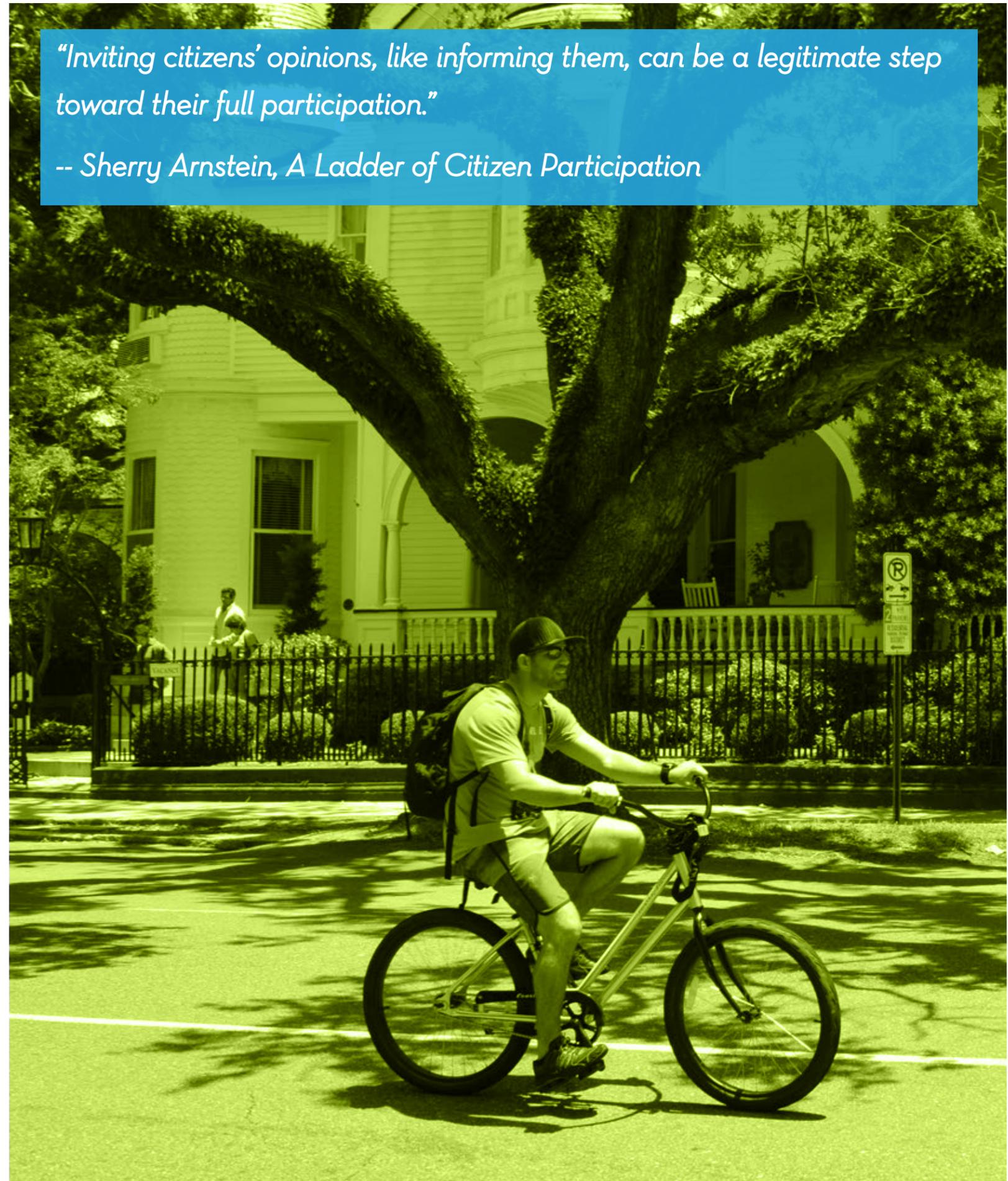


CHAPTER 2

DATA COLLECTION & PUBLIC INPUT

“Inviting citizens’ opinions, like informing them, can be a legitimate step toward their full participation.”

-- Sherry Arnstein, A Ladder of Citizen Participation



OVERVIEW OF DATA SOURCES

The Charleston County People 2 Parks Plan combines, updates, and refines previous recommendations for sidewalk, bikeways, and greenways to present the proposed walking and bicycling network herein. It builds upon recommendations for walking and bicycling connections made in the 2006 Charleston County Comprehensive Greenbelt Plan, the 2013 Charleston County Parks, Recreation, Trails, and Open Space Comprehensive Plan, and other localized walking and bicycling planning efforts by reevaluating these previously identified connections and infrastructure recommendations as constituting best practices, and refining these existing connections based on input from project stakeholders including County representatives, representatives from County jurisdictions, and the public. A summary of these input sources is provided in this chapter.



A BICYCLIST TAKING IN THE VIEW FROM THE RAVENEL BRIDGE

REVIEW OF PREVIOUS PLANNING EFFORTS

Introduction

This section provides a summary of recent bicycle, pedestrian, and trail planning-related efforts in Charleston, South Carolina. Nine relevant plans exist. The nine plans reviewed are listed in the table below and are described in further detail on the following pages.

As a whole, Charleston County has qualities naturally suited for bicycling, walking, and trail activity and for trail and greenway development.

*-- Executive Summary
Parks, Recreation, Open Space and Trails Master Plan, CCPRC*

Table 2.1

Summary table of local and regional planning-related efforts

Plan	Agency	Year
East Coast Greenway	ECG Alliance	Ongoing since 1991
Battery2Beach	Charleston Moves	Ongoing
Folly Road Corridor Study	Berkeley-Charleston-Dorchester Council of Government (BCD COG)	2015
ACE Basin Greenway	South Carolina Department of Natural Resources (SC DNR)	2014
Parks, Recreation, Open Space and Trails Master Plan	Charleston County Park and Recreation Commission (CCPRC)	2013
2035 Charleston Area Transportation Study Long Range Transportation Plans (CHATS LRTP)	Berkeley-Charleston-Dorchester Council of Government (BCD COG)	2010
Century V Plan	City of Charleston	2010
Johns Island Community Greenways Plan	City of Charleston	2010
West Ashley Master Plan	City of Charleston	2009
Regional Bike and Pedestrian Action Plan	Berkeley-Charleston-Dorchester Council of Government (BCD COG)	2005
Bicycle and Pedestrian Master Plan	Town of Mount Pleasant	2013
Comprehensive Greenbelt Plan	Charleston County	2006

EAST COAST GREENWAY

Year: Ongoing since 1991

Description

The East Coast Greenway is a long-distance urban trail that connects existing and planned shared-use trails, to create a continuous 2,900 mile traffic-free route from Calais, Maine to Key West, Florida. To plan and implement the trail, the ECG Alliance works closely with municipalities, agencies, and organizations within the state.

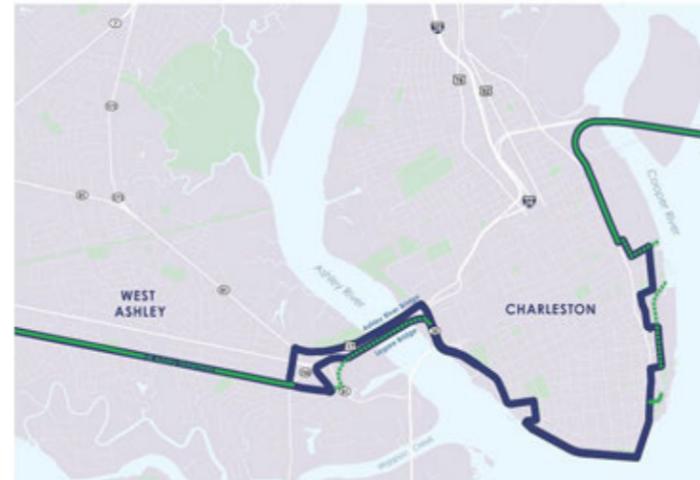
In South Carolina the route runs along the state's coast, through Myrtle Beach, Georgetown, Charleston, and Beaufort. Of the 254 planned miles of trail in South Carolina, 30.5 miles exist and 51 miles are under development. In the Charleston metro area the ECG travels through Mount Pleasant and passes over the Ravenel Bridge to connect to Charleston's West Ashley Greenway.

Recommendations

- Explore a rails-with-trails opportunity from the southern end of the West Ashley Greenway to Beaufort
- Create a bicycle and pedestrian bridge over the Ashley River



THE CHARLESTON REGION'S EAST COAST GREENWAY



BATTERY2BEACH

Year: Ongoing

Description

The purpose of the Battery2Beach route is to “increase Charleston area livability, as well as contribute to better health and economy through increasing pathways and connectivity.” The route is currently 32 miles of signed/branded shared use pathways, bike lanes, shared lanes, and sidewalks connecting five municipalities and three beach access points. The route travels from Folly Beach, up and around Charleston's Battery, crosses to Mount Pleasant, then travels back down to the beaches of Sullivan's Island and the Isle of Palms. The Charleston Moves Task Force and a group of volunteers collaborate with the County and Municipalities, hold public meetings and events to provide initiative for the implementation of safer bicycle and pedestrian facilities.

Recommendations

- Follow the AASHTO Guide for the Development of Bicycle Facilities, and the Manual on Uniform Traffic Control Devices
- Battery2Beach signage placed every 1/4 mile and at every turn
- Bicycle lanes should flow with traffic and have a 4 to 5 foot minimum lane width
 - For areas with high concentrations of pedestrians, substantial parking volumes and turnover rates, or areas in proximity to schools, transit stops, or downtown, an additional bicycle lane width of 1 to 2 feet is desirable

FOLLY ROAD CORRIDOR STUDY

Year: Ongoing since 2015

Description

The Berkeley-Charleston-Dorchester Council of Governments, along with the City of Charleston, the South Carolina Department of Transportation, the Charleston Area Regional Transit Authority, the Town of James Island, the City of Folly Beach, and Charleston County, have undertaken this Complete Streets study as a means to recognize the potential of Folly Road. These entities recognize that Folly Road can be remade into a more sustainable, multimodal corridor, setting a precedent for the Charleston region.

Recommendations

As of Spring 2015, leaders of the corridor study were working to incorporate public input into their vision and plan for the corridor through design charrettes, virtual town halls, and design studios. Thus, firmly established priorities for Folly Road have not yet been finalized and publicly shared. However, the following recommendations are overarching themes which have guided the development of this study:

- Integrate green infrastructure within the corridor while preserving community character
- Incorporate bicycle and pedestrian infrastructure using current Complete Streets and sustainable town and transportation planning best practices



PARKS, RECREATION, OPEN SPACE AND TRAILS MASTER PLAN (PROST)

Year: 2013

Description

CCPRC's PROST Master Plan provides a 10 year growth plan that focuses on immediate, short-term, and long-term capital development and improvement strategies that correspond to the needs of communities throughout the County. The vision of the plan is to identify and serve current and future parks, provide recreational diversity, establish updated greenways/trails within park facilities and County-wide greenway corridors, and develop an action plan for implementation.

Recommendations

- Provide 92.7 miles of priority trails
 - 28.5 miles in the West County Sub-Area
 - 12.7 miles in the Charleston Center Sub-Area
 - 37.5 miles in the North County Sub-Area
 - 14.0 miles in the East County Sub-Area
- Provide wayfinding signage to park and trail facilities
- Improve access to trails in urbanized areas
- Connect multi-use trails to municipal and county parks
- Expand trail network to include connections with new properties, parks, mountain bike trails, the East Coast Greenway, and the existing trail/greenway network
- Trails should be designed to protect natural areas but also allow greater access to natural settings and experiences

2035 CHARLESTON AREA TRANSPORTATION STUDY (CHATS) LONG RANGE TRANSPORTATION PLAN (LRTP)

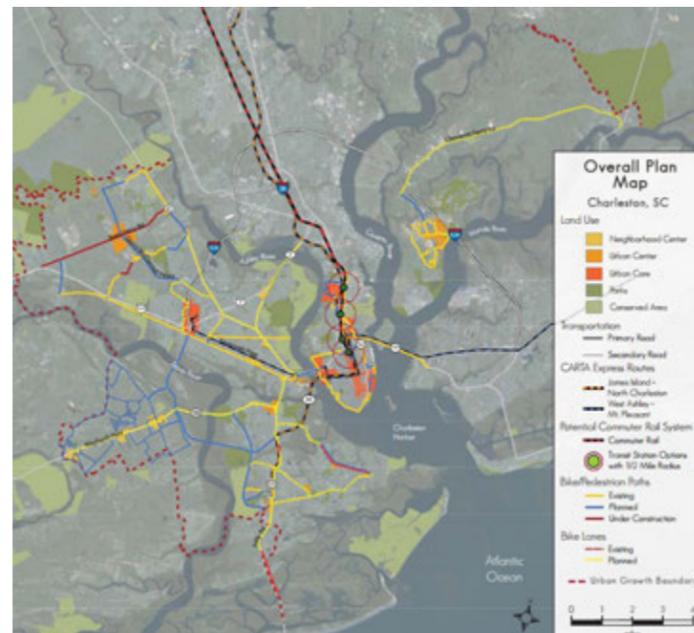
Year: 2010

Description

The CHATS LRTP recognizes that the accommodation of pedestrians and cyclists is imperative to the livability and quality of life of the community. The lack of bicycle and pedestrian facilities surfaced as an issue in many of the LRTP public meeting, with a number of residents expressing a strong desire for improvements. The LRTP is typically updated every 5 years.

Recommendations

- Adopt pedestrian and bicycle friendly development standards
- Look to downtown Charleston as a model for walkable communities
- Promote walking and bicycling in employer incentives and driver education programs
- Provide connectivity between important activity centers within each jurisdiction and within the region
- Provide service to existing areas of the greatest population and employment density, as well as areas of expected growth
- Provide key crossings of major highways, rivers, and railroad barriers that make regional bicycling and pedestrian connectivity challenging
- Take on projects that address social equity and environmental justice
- Expand bicycle and pedestrian access beyond downtown



CENTURY V PLAN

Year: 2010

Description

Also known as the City of Charleston's Comprehensive Plan, the Century V Plan is a long-range plan that articulates the vision, goals, and development of the city over the span of 10 years. The transportation element of the plan emphasizes alternative forms of transportation, such as walking and biking, to reduce traffic congestion.

Recommendations

- Over 90% of residents agreed that streets need to have more pedestrian connectivity and lowered traffic speeds
- Improve streets, sidewalks, street lighting, and street trees to revitalize the character and quality of the city
- Monitor streets with decreasing traffic load for potential "road diets" and conversion of vehicle space to pedestrian, bicycle, and/or transit space
- Establish an agreement with local utilities for the use of utility corridors as walking and bicycling paths
- Work to ensure that every resident in the City is within a half-mile of a dedicated bicycle or bicycle/pedestrian facility

JOHNS ISLAND COMMUNITY GREENWAYS PLAN

Year: 2010

Description

The purpose of the Johns Island Community Greenway Plan is to contribute to the preservation of the urban forest within the urban growth boundary, by identifying ways to interconnect green corridors throughout Johns Island using trails and tree conservation areas. The City of Charleston is to use this plan as a guide for future development and connected green spaces.

Recommendations

- Use greenway development to connect historic places, scenic routes, neighborhoods, shopping areas, parks, gathering places, and habitats
- Implement the community-wide proposed greenway trail network
- Provide 47 miles of identified trail network and trail connections, especially around Johns Island Park



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WEST ASHLEY GREENWAY MASTER PLAN

Year: 2009

Description

The West Ashley Greenway runs along a former railroad bed between Albemarle Road and Main Road in West Ashley. The greenway connects to the City's bicycle and pedestrian network, creating over 42 miles of interconnected paths once fully implemented. The West Ashley Greenway Master Plan focuses on the issues of neighborhood context, accessibility, amenities, and overall connectivity

Recommendations

- Create more accessibility and amenities to enhance the quality of life for surrounding neighborhoods
- Create a greenway that is a linear park with a series of nodes that provide diverse recreational and scenic opportunities
- Establish the greenway as an alternative transportation connection
- Strengthen connections to neighborhoods, leisure, and retail while minimizing environmental impacts and designing with equity in mind - environmental, economic, and social
- Increase safety along the corridor

REGIONAL BIKE AND PEDESTRIAN ACTION PLAN

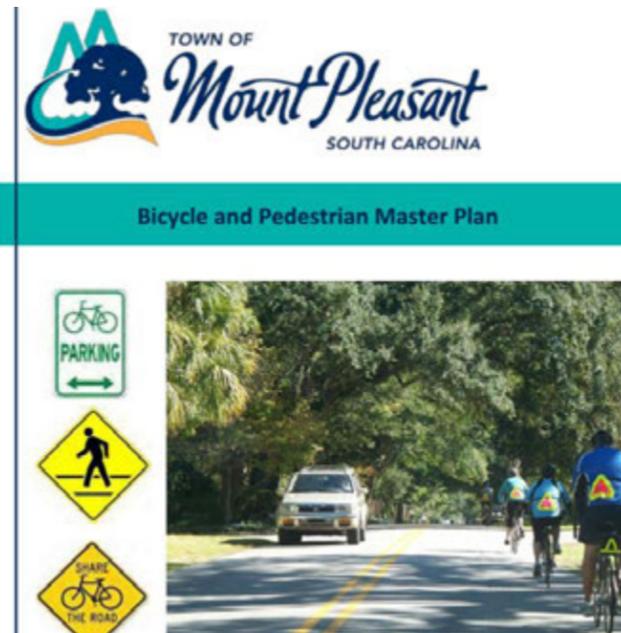
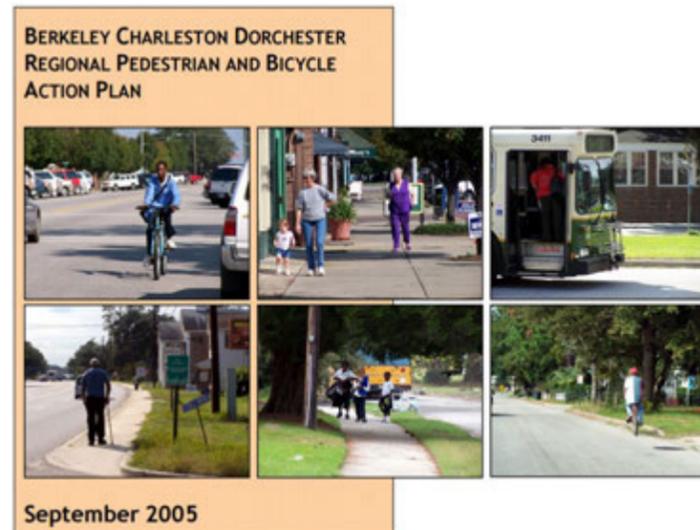
Year: 2005

Description

The goal of the Berkeley-Charleston-Dorchester Regional Bicycle and Pedestrian Action Plan was to create a comprehensive plan that connects neighborhoods and communities. This plan is based on the principals that (1) the ability for children to walk or bike to/from school (2) the equal accommodation of pedestrians, bicyclist, and motorists (3) transforming bicycling and walking into a daily activity.

Recommendations

- Develop Safe Routes to School Programs to encourage children to become more physically active and to reduce traffic congestion around schools
- Develop and adopt Complete Streets policies and practices
- Promote community interventions to encourage people to walk or bike for health, recreation, and transportation



BICYCLE AND PEDESTRIAN MASTER PLAN TOWN OF MOUNT PLEASANT

Year: 2013

Description

The bicycle and pedestrian master plan sets out to address one target strategy identified in the Town's Comprehensive Plan for 2009-2019 - to develop a pedestrian and bicycle connectivity plan that links to all of the Town's existing and planned nodes as well as parks and schools. Considerations when drafting a complete network included types of users, safety and perception of safety, facility types, ordinance updates, community support, and funding availability.

Recommendations

- Enhance connections to the urban corridor via the installation of new sidewalks, closing gaps in the sidewalk network, and widening existing sidewalks
- Improve bicycle and pedestrian safety especially along arterial roads like Mathis Ferry and Rifle Range Road
- Increase the use of bicycle and pedestrian routes, as well as public transportation use, by installing bicycle and pedestrian furniture (bike racks, benches, water fountains, shade trees), create readable route maps, work with schools to encourage biking and walking options, and establish an annual event like Walk/Bike to School or Work Day to promote walking and biking

COMPREHENSIVE GREENBELT PLAN

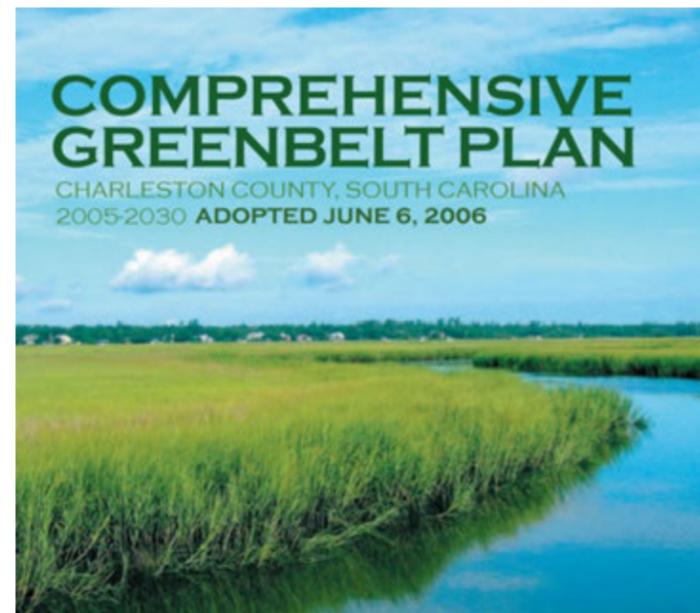
Year: 2006

Description

Following a 2004 referendum for a one-half of one percent Sales and Use Tax, Charleston County and key stakeholders developed this Plan to address the major elements required by the voter-approved ordinance. The funds resulting from the Sales and Use Tax are identified as the Greenbelt Fund and are capped at just over \$221 million over the 25 year maximum life span. The Plan's vision is "to grow the economy of Charleston County while conserving and protecting the Lowcountry resources that make the County a wonderful place to live." The Plan addresses both non-programmed natural open space (such as wetlands) and programmed open space (such as parks and trails).

Recommendations

- Protect at least 30 percent of land and water resources in Charleston County as future green space
- Chapter 5 Implementation identifies allocation formula for Greenbelt Funds as 70 percent of proceeds for the rural area and 30 percent for the rural area
- The Greenbelt Advisory Board should continue to serve as principal advisor to County Council and continue to solicit public input
- Specific next steps which address short-term, mid-term, and long-term implementation recommendations
- The Plan should be periodically revisited and reviewed by Charleston County to ensure vision, goals, and objectives are being actively implemented



Few actions can do more to make urban areas safer, healthier, prettier, and more environmentally balanced than setting aside corridors or trails for walking, biking, wildlife watching, and just plain breaking up the monotony of cars and concrete.

*-- James Snyder
Publisher, Environment Today*

PROJECT STEERING COMMITTEE

Steering Committee members represent broad areas of interest and perspective, including local and regional staff, transportation agencies, and community leaders. The Steering Committee provided detailed input and feedback on components of this Implementation Plan.

Tom O'Rourke, CCPRC

Julie Hensley, CCPRC

Matthew Moldenhauer, CCPRC

Vonie Gilreath, BCDCOG

Eric Adams, Charleston County Transportation

Thomas Bradford, Charleston Moves/LLL

Kurt Cavanaugh, Charleston Moves

Philip Overcash, City of Charleston

Charles Drayton, City of North Charleston

Brian Holt, SCDOT

Josh Johnson, SCDOT

Chris Luly, Town of Mount Pleasant

Kevin Mitchell, Town of Mount Pleasant

Tyler Newman, Town of Mount Pleasant



RESIDENTS ENJOY A RIDE ON THE WEST ASHLEY GREENWAY

SUMMARY OF WIKIMAP RESULTS

An online interactive wikimap and survey were major components of the public engagement process for the People 2 Parks Bike-Walk Plan. The wikimap provided citizens with the opportunity to draw points and lines indicating walking and bicycling priorities in real time. Upon entry to the wikimap website, users were prompted to complete a brief survey. The survey collected information about the respondents themselves. Residency and self-described experience level are summarized in the graphics below.

Figure 2.1 What county do you live in?

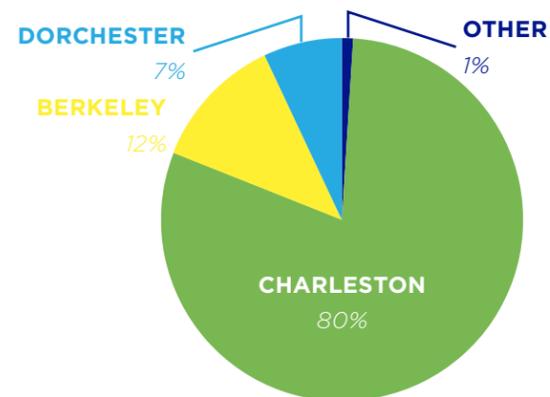
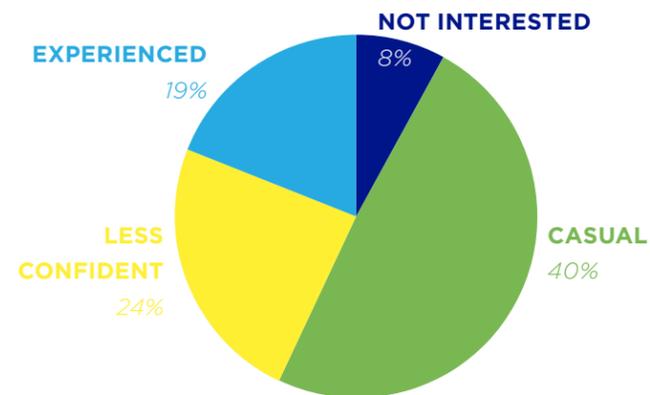


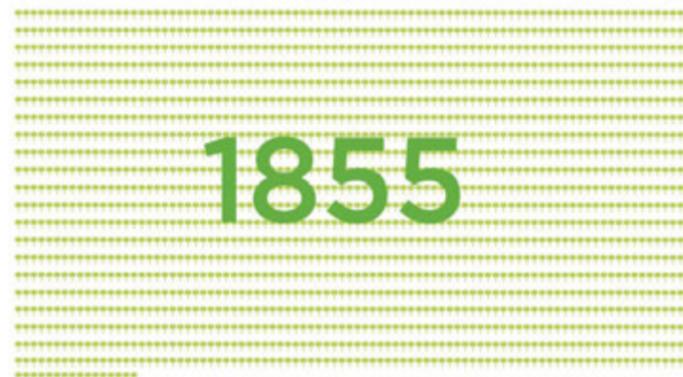
Figure 2.2 What type of bicyclist do you describe yourself as?



“Experienced riders” consider themselves confident and comfortable riding with traffic on the road in most traffic situations. “Casual riders” prefer separated paths but are willing to ride on some roads where space is available and vehicular traffic is manageable. “Less confident riders” identified as feeling safe only on separated paths with limited traffic crossings and on local streets. The “not interested” category of bicyclists do not ride bikes and have no plans to start.

This diverse set of over 1800 unique users then shared their local expertise and knowledge of the walking and bicycling climate in Charleston County which informed the recommendations of this plan.

TOTAL NUMBER OF UNIQUE USERS*

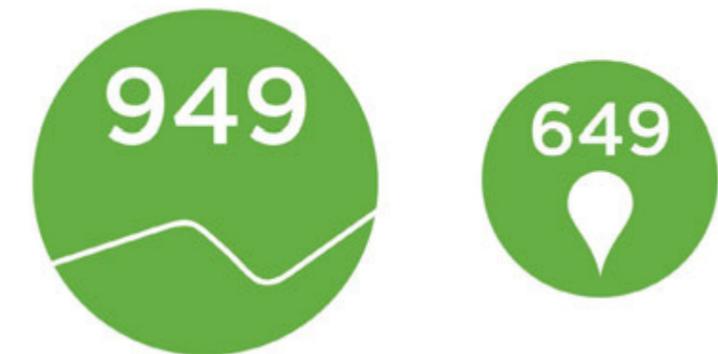


*Unique IP Addresses: If the same computer was used more than once to interact with the map, it would count as 1 user.

Users could provide input on the map in three different ways. They could draw new points and lines, leave a comment on an existing point or line, or simply “like” or “dislike” a point or line already drawn on the map.

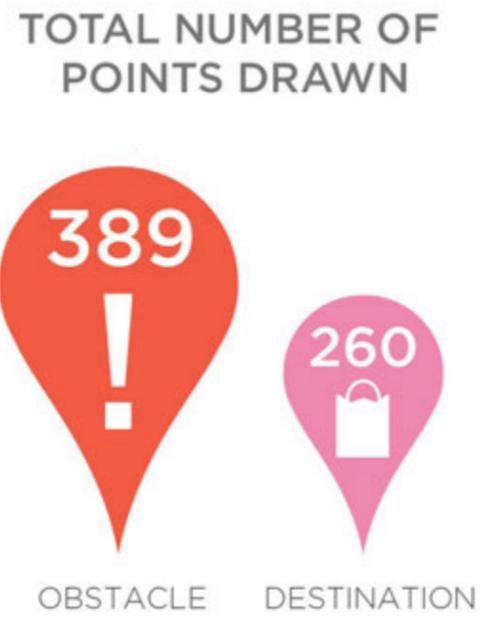
The points and lines input features made available on the map were developed through a collaborative process with the Charleston County Park and Recreation Commission and are described in the following sections. The objective in developing the point and line designations was to provide the public with specific features to gather key information. In total, 1598 point and line features were drawn on the map. A summary of point and line features drawn on the map by the public is below.

TOTAL # OF LINES AND POINTS DRAWN



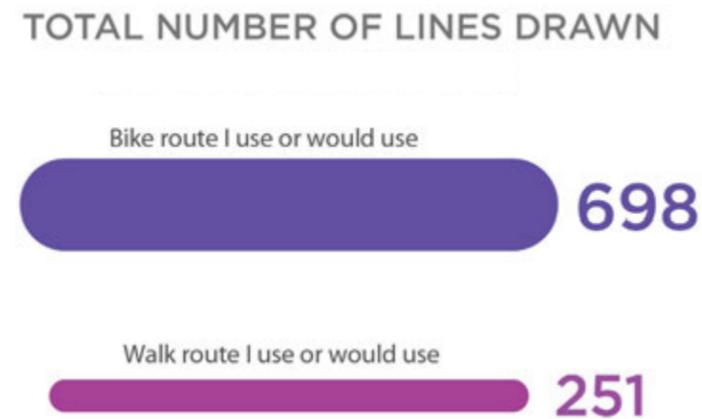
POINT FEATURES

Two point classes could be drawn on the map - “obstacles” and “key destinations”. Obstacles are spot locations where a barrier may exist or where a pedestrian/bicyclist feels unsafe. Key destinations include locations that citizens currently walk or bike to as well as places they would like to walk or bike to. Destinations along roadways can be used to inform the desirability of a given road segment in that a roadway with more destinations is more desirable and will generate more trips than a stretch of road that has few destinations.

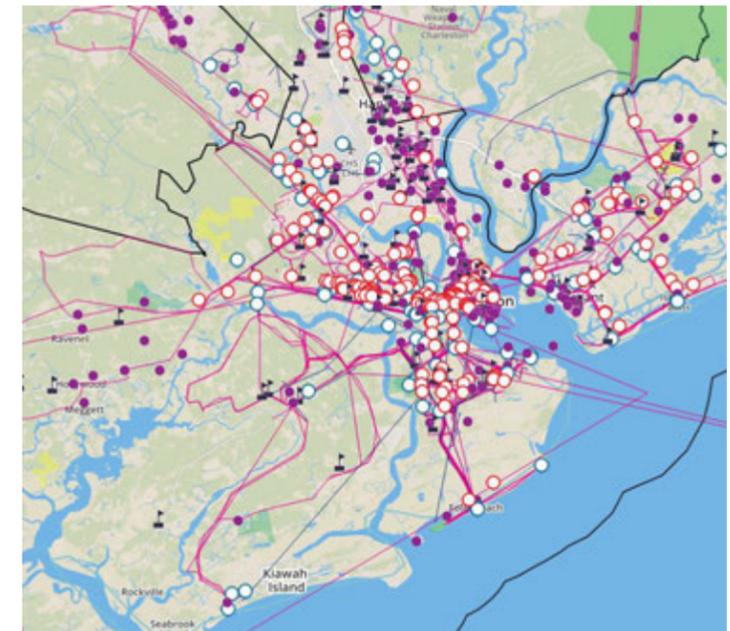


LINE FEATURES

Two line types could be drawn on the map - “bike routes I use or would use” and “walk routes I use or would use”. The following graphic demonstrates a proportional breakdown of the two line types drawn on the map by the public. Together, these features provided information about the desirability of walking and biking throughout Charleston County.



Below, a snapshot of the wikimap shows a portion of all points and lines drawn by members of the public.



Obstacles

The majority of obstacles identified by wikimap users occurred in two main areas: the City of Charleston urban core (south of Savannah Highway on the peninsula) and West Ashley (surrounding the intersection of Interstate 526 and Highway 17). The most commonly identified general issues were:

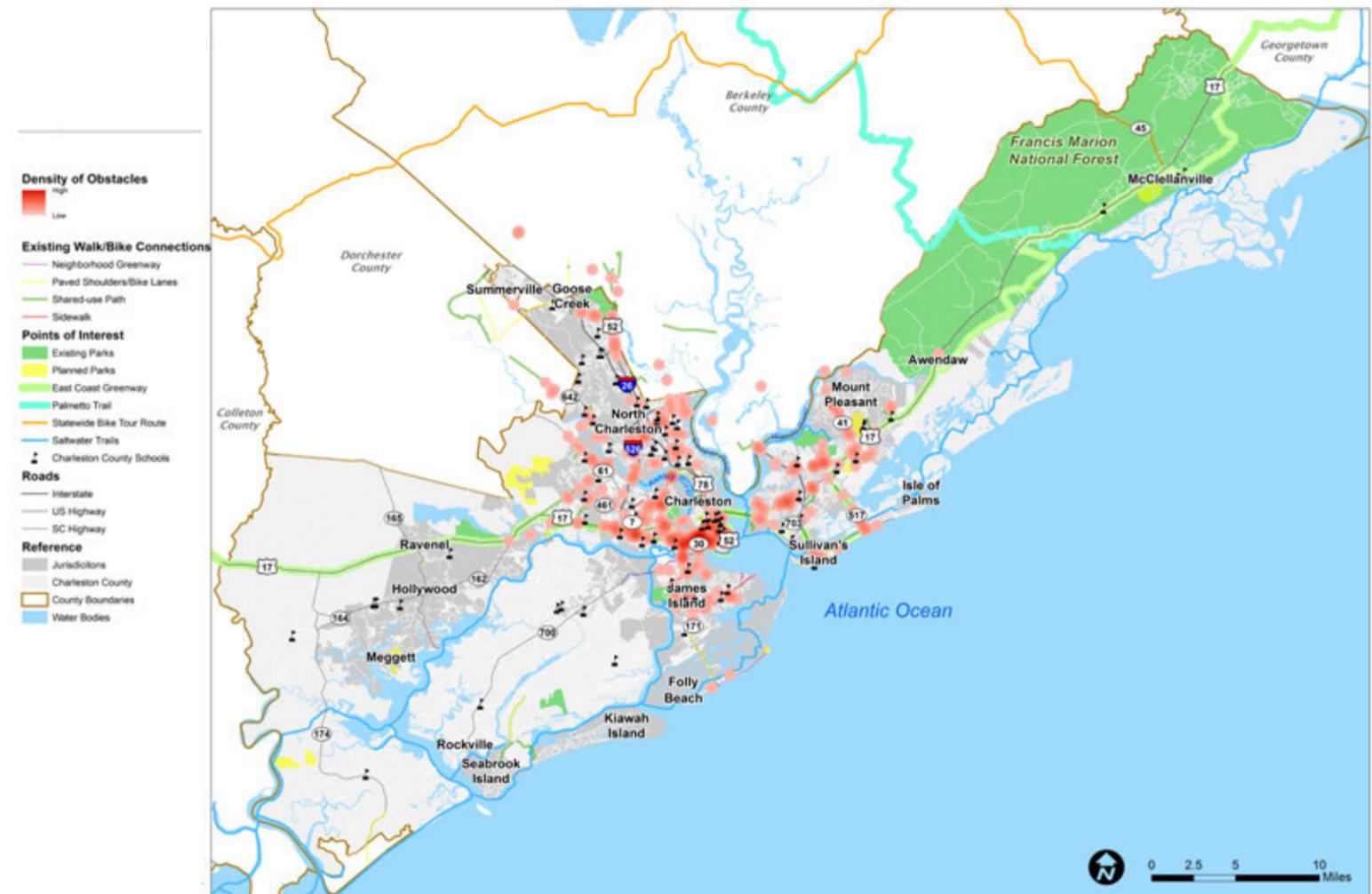
- lack of crosswalks and safe intersection crossings for pedestrians
- lack of sidewalk connectivity and maintenance
- lack of or unresponsive pedestrian push buttons
- lack of pedestrian signal heads
- dangerous intersections and road segments which lack dedicated bicycle facilities
- difficult bridge crossings
- driver behavior - especially speeding, aggression, and an unwillingness to share the road with cyclists

Specific recurrent issues identified were:

- lack of dedicated bicycle facilities across the Ashley River Memorial Bridge
- greater greenway access and maintenance in West Ashley
- lack of pedestrian amenities (or faulty amenities where they do exist) along Folly Road, particularly at the intersection with Windermere Boulevard
- lack of bicycle or pedestrian connectivity to areas outside downtown - particularly James Island and West Ashley
- lack of directional signage after the West Ashley Greenway ends
- St. Andrews Boulevard is a barrier, especially for pedestrians



CROSSWALKS AND INTERSECTIONS MUST BE DESIGNED FOR USERS OF ALL AGES AND ABILITIES



Destinations

Top destinations identified on the wikimap included access to:

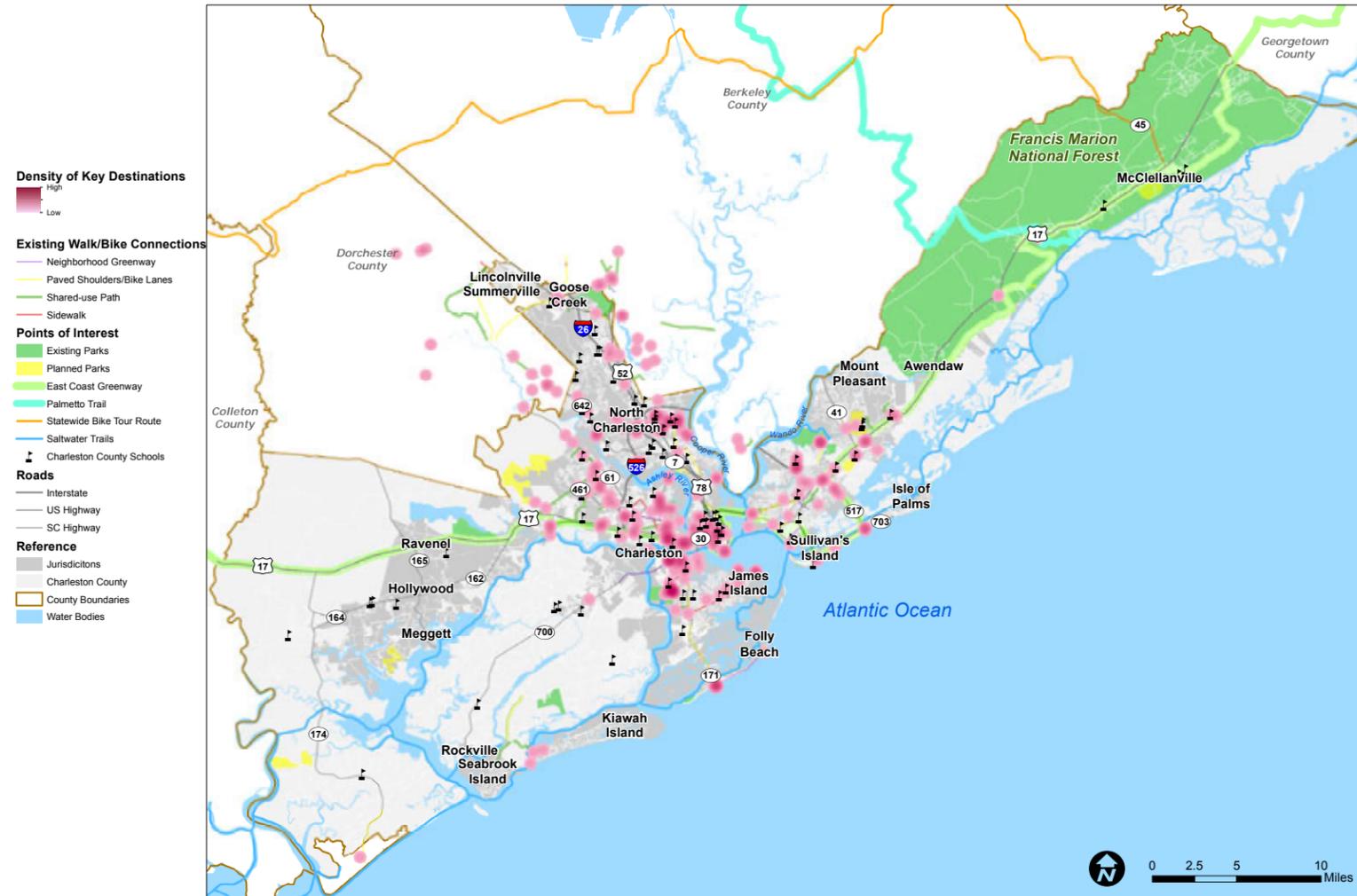
- beaches
- retail
- parks and recreational facilities
- schools
- grocery stores and farmers markets

A number of users indicated a willingness to commute to work via bicycle if adequate infrastructure existed.

Popular waterfront destinations identified include Folly Beach, Folly Beach Fishing Pier, Isle of Palms County Park, Melton Peter Demetre Park/Sunrise Park, Riverfront Park, Cooper River Marina, and Mount Pleasant Pier.

Recurrent destinations identified in North Charleston were Park Circle, the Oak Terrace Preserve neighborhood, Mission Farmers Market, the Charleston RiverDogs Stadium at Joseph P. Riley Jr. Park, and Old Village.

In downtown Charleston, wikimap users indicated a desire to walk or bike to the movie theatre, South Windmere Shopping Center, Meyer Park Plaza Shopping Center, White Point Garden, and James Island Farmers Market.



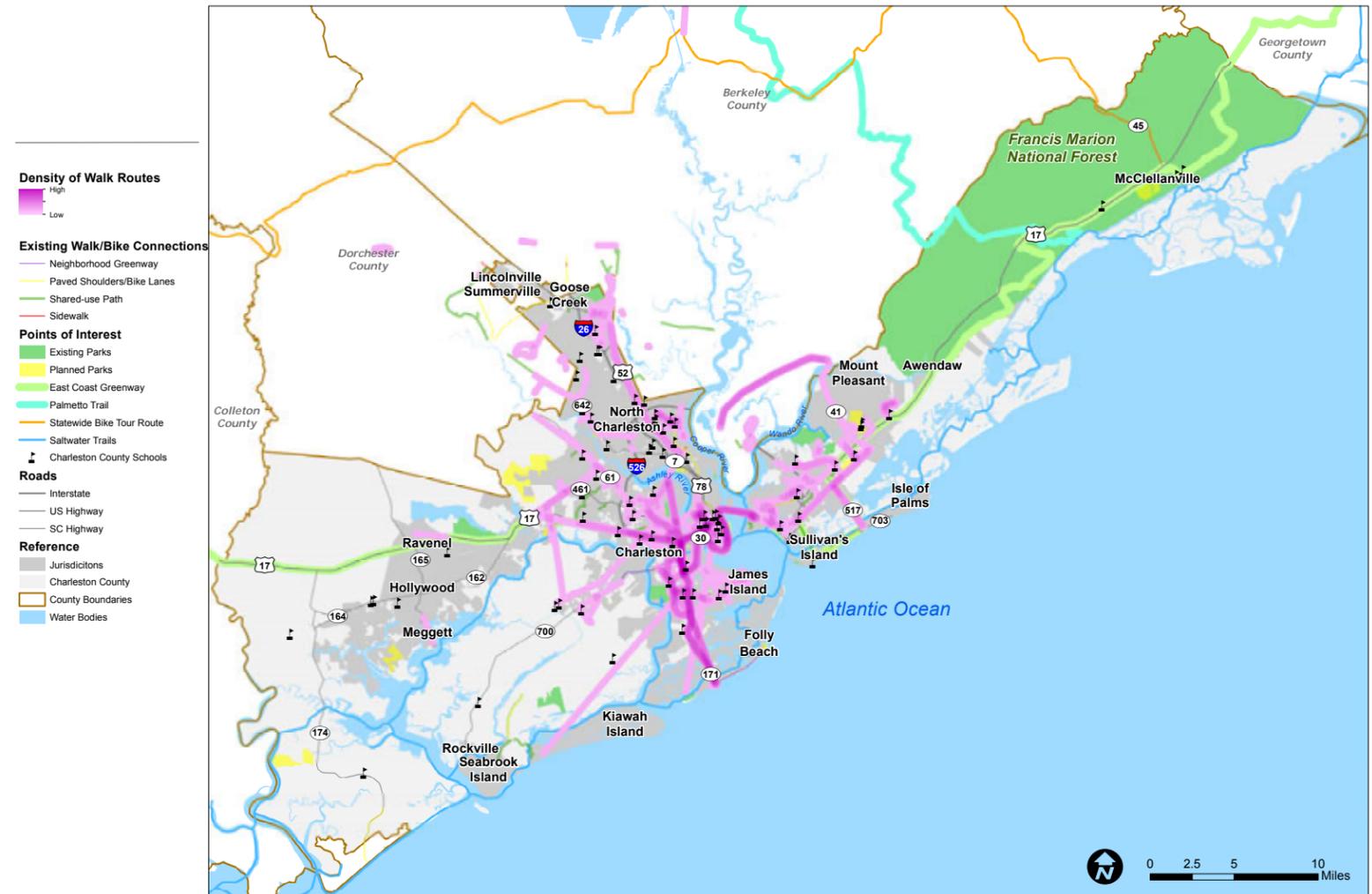
OFFERING BICYCLE PARKING AT POPULAR DESTINATIONS LIKE BEACH ACCESS POINTS ENCOURAGES RESIDENTS AND VISITORS TO BIKE TO THEIR FAVORITE LOCAL SPOTS

Walk Routes

The greatest concentration of desired walking routes on the wikimap occurred within the urban core, emanating out along Folly Road to forge a crucial connection to Folly Beach.

Other desired or currently used routes include:

- Clements Ferry Road from Reflectance Road to Interstate 526 (in Berkeley County)
- A continuous route from West Ashley and James Island to Mount Pleasant
- Rivers Avenue from McMillan Avenue to Northwoods Mall/North Rivers Marketplace



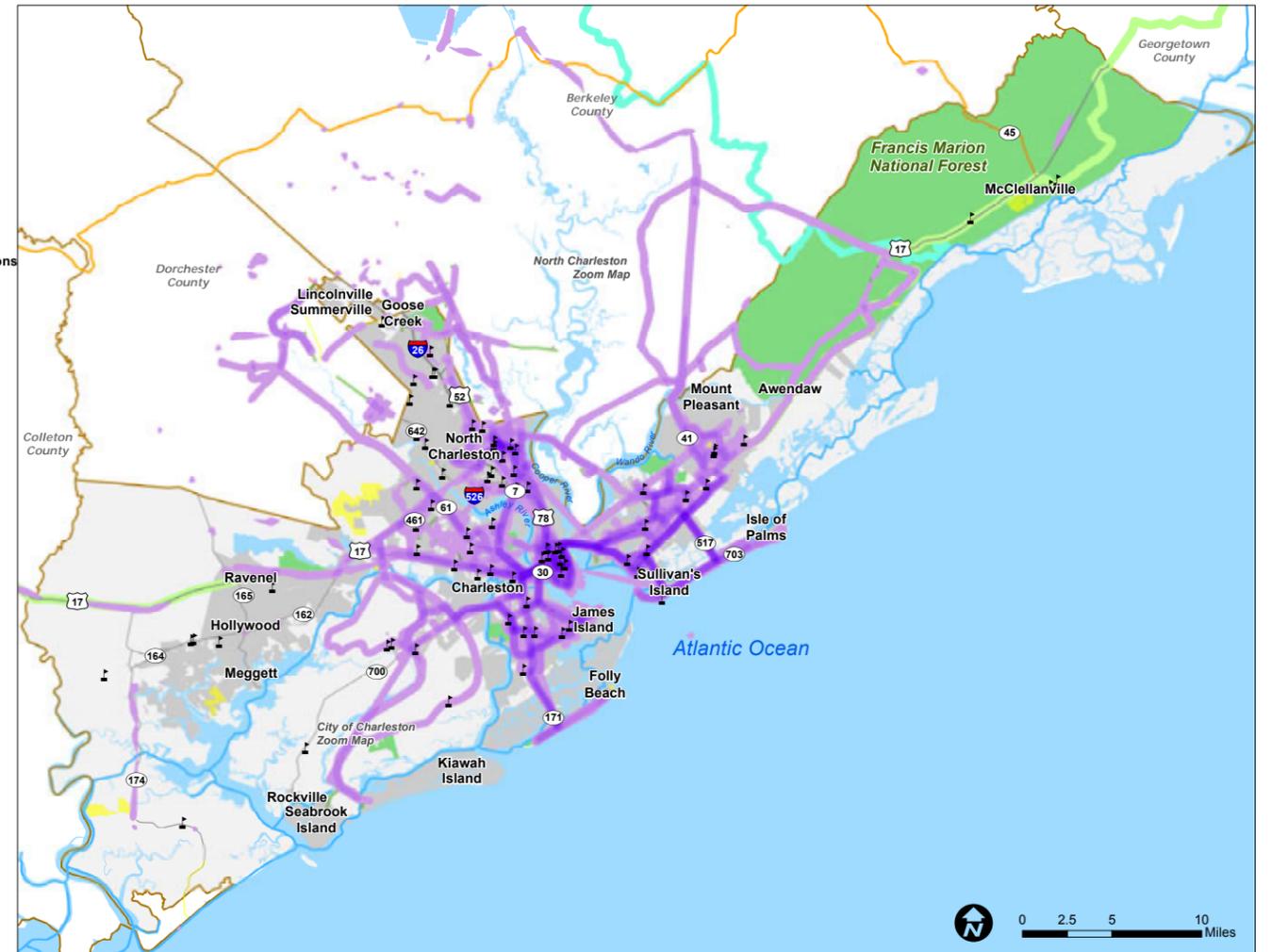
THE STREETSCAPES OF
DOWNTOWN CHARLESTON
MAKE FOR A FRIENDLY,
INVITING WALKING
ENVIRONMENT

Bike Routes

As with walking routes, a density of biking routes occurred in downtown Charleston and radiated out. User input on downtown routes stress **a preference for riding on low-speed, low-traffic, residential streets, a desire for connectivity between parks and a need for connections over the Ashley River Memorial Bridge to the West Ashley Greenway.**

The bicycling connections most commonly identified as desired or currently used included:

- Sullivan’s Island by way of Coleman Boulevard/Ben Sawyer Boulevard and Isle of Palms Connector
- Folly Beach via Folly Road
- West Ashley via Savannah Highway and Folly Road



NEIGHBORHOOD STREETS OFFER SOME OF THE GREATEST POTENTIAL FOR LOW-STRESS BICYCLE ROUTES

P2P SURVEY MAJOR FINDINGS

As part of the People 2 Parks Bike-Walk Plan, CCPRC administered a public survey. As with the wikimap, the survey was open for two weeks and garnered an outpouring of responses. The survey was CCPRC's first attempt at a county-wide public survey regarding walking and bicycling improvements. The results of the survey will inform decision-makers with the public's perspective on need, demand, and safety concerns as a pedestrian and bicyclist.

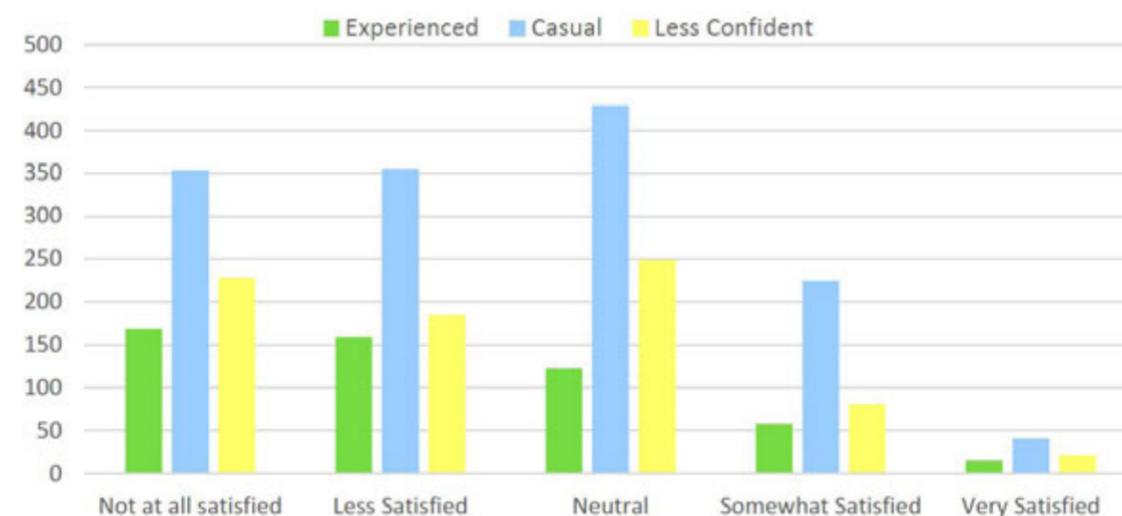
The complete survey report can be found in Chapter 5.

Top 5 Routes in Need of Improvements

When prompted to identify routes within Charleston County that are in the greatest need of walking and bicycling improvements residents indicated the following:

- Folly Road
- Ashley River Bridge
- Rifle Range Road
- Riverland Drive
- James Island Connector

Figure 2.3 How satisfied are you with bike facilities in your area? (According to experience level)



Sense of Safety

Figure 2.4 Do you feel safe walking in your community?

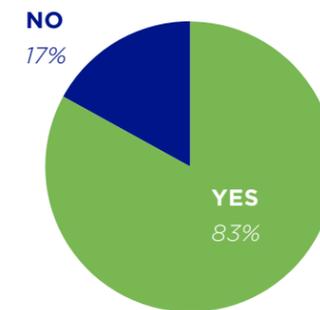


Figure 2.4a [Of those who felt safe walking in their community] Do you feel safe walking or riding a bike to desired destinations?

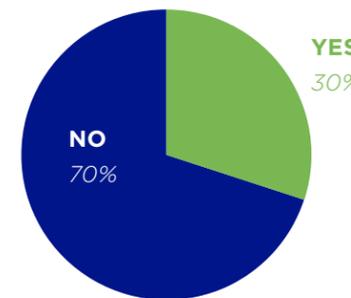


Figure 2.5 Do you feel safe riding a bike in your community?

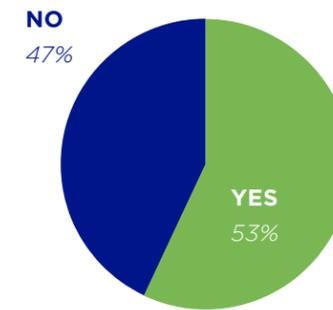
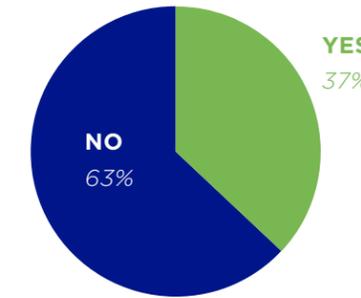


Figure 2.5a [Of those who felt safe biking in their community] Do you feel safe walking or riding a bike to desired destinations?



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CHAPTER 3

PROJECT PRIORITIZATION



In general, there need to be more greenways... so runners and cyclists can easily access downtown, parks, and other areas of the city.

-- Public Comment, CCPRC Community Survey

PRIORITIZATION METHODOLOGY

This chapter is divided into two primary parts:

- Prioritization Criteria explains why each criteria is an important factor to consider in creating a priority-based network, highlighting assumptions made in the analysis process
- Map of Prioritization Results presents a series of maps that reflect high, medium, and low priority network recommendations

How do we prioritize walking and bicycling infrastructure recommendations?

The project team developed a prioritization criteria scoring program for Charleston County’s proposed greenways to address this question. The purpose of this specialized scoring criteria is to build off of the existing Charleston County Objective Ranking System for Bike/Pedestrian Enhancement Projects with additional criteria and through criteria refinement. This process allows the county and its partners to objectively evaluate a project’s significance.

The results of the prioritization scoring process are a dynamic starting point in the decision making process for creating strategic bicycle and pedestrian network improvements. **All projects within the proposed network have merit and should be implemented as timely and cost-effective opportunities arise.** The results of the prioritization process are not intended to preclude projects from receiving funding or from being incorporated into a new development or other roadway project. **The prioritization framework is a flexible approach, intended to provide clear direction for proactively seeking project funds and completing design and engineering of the most critical projects, while still allowing for opportunistic implementation of the entire network.** This framework recognizes that grant funding, roadway reconstruction projects, and other implementation factors may influence a more nuanced final prioritization list.

With key projects identified, Charleston County and its partners can then pursue important next steps like identifying project-specific funding, land acquisition, and communicating with other partners along proposed alignments (such as utility companies, impacted neighborhoods, and large tract property owners).



Prioritization Criteria

Following refinement of the proposed countywide network of bikeways, walkways, and greenways, projects were prioritized based on quantitative analyses with the following twelve factors all contributing to a final score.



TYPE OF PROJECT

Type of project considers whether the recommended facility connects existing facilities, creating a seamless route for bicyclists and pedestrians. Projects ranked highest if they closed a gap. Fewer points were awarded if a project will be entirely new construction that does not necessarily close a gap.

PROMOTES SAFETY

Promotes safety evaluates the prevalence of crashes involving bicyclists and pedestrians over the past five years. This criteria also considers the severity of each crash, awarding additional points to project segments based on their severest crashes. The assumption here is that corridors with extensive crash histories likely prioritize the car and throughput to the detriment of a pedestrian or cyclist's safety. Roadway changes aimed at improving the walking and bicycling environment along these corridors will increase a driver's awareness of these road users.

ROAD TYPE

Road type acknowledges that some roads may be more difficult for cyclists and pedestrians to cross given their geometry, speed limit, and traffic volume. For this reason, recommended facilities which intersect major roads are awarded the most points possible. Collector and neighborhood streets are successively awarded fewer points.

ACCESS TO SCHOOLS

Access to school rerecognizes that commuting to school by walking or bicycling encourages physical activity, combats childhood obesity, supports sustainable transportation choices, and offers social wellbeing benefits. In turn, these benefits foster community connections and stir a community identity.

ACCESS TO PUBLIC PARKS

Access to public parks recognizes that a community's physical environment plays a vital role in its sustainability and the health of its residents. Promoting connections to these features can facilitate healthier lifestyles and reduce carbon emissions. Recommended facilities were awarded the most points possible if they fell within a half mile radius of existing parks. Planned but undeveloped parks were also awarded points since they will become key destinations for pedestrians and bicyclists once constructed.

ACCESS TO GREENBELTS

The term greenbelts is synonymous with greenways. The access to greenbelts criteria considers the regional trail system within and surrounding Charleston County. Regional trail systems factored into this analysis were the Palmetto Trail, the Battery 2 Beach Trail, Statewide Tour Route, East Coast Greenway, and the Southeast Coast Saltwater Paddling Trails. A proposed system was also included - Charleston County's Greenways - the alignment and extents of which were derived from the Greenbelt System Component map of the Comprehensive Greenbelt Plan.

SUPPORT FOR PROJECT

Support for project utilizes data collected from a survey promoted by CCPRC, as well as data collected from a wikimap. See Chapter 2 for a summary of the public input process. The recurrence of a desired walking and bicycling route identified by the public in these two platforms informed the prioritization analysis. Routes with the most support were awarded the most points possible. The intent of this criteria is to shape priority recommendations to be representative of community needs based on their direct input.

COMPATIBLE LAND USE

Compatible land use evaluates what percentage of the recommended facility is within a quarter mile of residential and commercial uses. While a land use layer was not available, the project team made use of the county's zoning layer. For the purpose of this analysis, zoning for mobile homes was included as part of residential zoning. Commercial and residential land use adjacent to bicycle and pedestrian facilities indicate how connected Charleston residents are from their homes to desired key destinations like the downtown area and other retail corridors.

PRESENCE OF TRANSIT

Presence of transit recognizes that bicycle and pedestrian facilities often provide crucial first and last mile connections to transit stops. Prioritizing recommendations that are within a reasonable distance of transit is an effective way to encourage transit use, as well as an effective way to tie residents and neighborhoods to desired destinations and employment opportunities.

ACCESS TO EMPLOYMENT

Access to employment considers the potential walking and cycling facilities have to link previously disconnected residents and neighborhoods with employment opportunities. A secondary benefit of increasing walking and bicycling to employment centers is the ability to draw employees out of their cars for their commute.

POPULATION DENSITY

Population density acknowledges that recommended facilities in areas where residents are densely concentrated have the potential to make the greatest impact. Thus, projects within a quarter mile of specified population densities – top 25, 50, and 75 percent – earn corresponding points.

EQUITY

Equity places importance on recommended facilities where at least half of the corridor traverses a tract where more than 5 percent of households do not have access to a car, where the prevalence of poverty exceeds the county average, where the proportion of non-white residents is above the county average, and where the proportion of residents under the age of 18 or over the age of 65 is greater than the county average. The integration of an equity metric reflects the County's commitment to serve these vulnerable populations. These populations are often dispersed outside of core activity areas so prioritizing facilities that connect them to work and play destinations is crucial.



Table 3.1

Summary table of prioritization scoring values and weights

Criteria	Definition	Rank	Measurement	Points	Maximum Influence
Type of Project	Does the project offer connections to existing bike/ped facilities?	High	Project closes gap between existing facilities	10	40
		Medium	Project does not close a gap between existing facilities	5	
Promotes Safety	To what extent does the project provide an immediate safety improvement at a location with a history of crashes involving cyclists or pedestrians?	N/A	>10 crashes	8	35
			7-10 crashes	6	
			4-6 crashes	4	
			1-3 crashes	2	
			0 crashes	0	
Road Type	Does the project cross more challenging roads?	High	Major Road (>18,000 AADT)	8	15
		Medium	Collector (3,000 - 18,000 AADT)	4	
		Low	Neighborhood Street (<3,000 AADT)	2	
Access to Schools	To what extent does this project improve bike/ped access to schools?	High	Project is within 1/4 mile of school	10	20
		Medium	Project is within 1/2 mile of school	5	
		Low	Project is not near school	0	
Access to Public Parks	Does this project offer connections to parks?	High	Project is within 1/2 mile of existing park	10	20
		Medium	Project is within 1/2 mile of proposed park	5	
		Low	Project is not near park	0	
Access to Greenbelts*	To what extent does this project improve bike/ped access to greenbelts?	High	Project is within 1/8 mile of regional greenbelt	10	15
		Medium	Project intersects existing or proposed greenbelt	5	
		Low	Project is not near greenbelt	0	
Support for Project	Does the project have the direct support of the public? Measurement values reflect a composite index for both the Wikimapping and SurveyMonkey results	High	>10	8	20
		Medium High	7-10	6	
		Medium	4-6	4	
		Medium Low	1-3	2	
		Low	0	0	

*The term greenbelts is synonymous with greenways



Criteria	Definition	Rank	Measurement	Points	Maximum Influence
Compatible Land Use	To what extent does this project improve access to compatible land uses?	High	>66% of corridor within 1/4 mile of residential or commercial zone	10	20
		Medium	33-66% of corridor within 1/4 mile of residential or commercial zone	6	
		Low	<33% of corridor within 1/4 mile of residential or commercial zone	2	
Presence of Transit	Does the project improve bicycle or pedestrian access to the transit network?	High	Project is within 1/16 mi of a transit stop	5	20
		Low	Project is not near transit stop	0	
Employment	To what extent does this project improve access to employment opportunities?	High	>66% of corridor segment within 1/4 mile of high employment area	9	15
		Medium	33-66% of corridor segment within 1/4 mile of medium employment area	6	
		Low	6-33% of corridor segment within 1/4 mile of low employment area	3	
Population Density	Does this project reach the most people possible?	High	Project within 1/4 mile of top 25% most densely populated census blocks	9	15
		Medium	Project within 1/4 mile of top 50% most densely populated census blocks	6	
		Low	Project within 1/4 mile of top 75% most densely populated census blocks	3	
Equity	Does the project improve bicycle and pedestrian access for the County's vulnerable populations?	N/A	>50% of corridor is in tract where >5% of households own zero automobiles	5	20
			>50% of corridor is in tract where the population in poverty is above county average	5	
			>50% of corridor is in tract where the population of non-white ethnicity is above county average	5	
			>50% of corridor is in tract where population under 18 and over 65 years old is greater than county average	5	

PRIORITIZATION SUMMARY RESULTS

The following maps display the objective results of the GIS-based prioritization scoring program for all projects within Charleston County. Projects were grouped into three categories - first, second, and third tier priority ranking - based on their cumulative scores with the maximum influence value applied.

A table of all Charleston County projects organized by their respective phase can be found in Chapter 4.

Details to Keep in Mind When Interpreting Prioritization Results

It is important to keep in mind that the prioritization matrix is just one tool, and that adjustments should be expected based on best judgement fine-tuning. Particular characteristics of the prioritization process to keep in mind:

- The process is based on need and demand
- Results are not intended to supersede opportunistic implementation
- Prioritization must balance competing needs for network expansion and upgrading existing facilities to increase safety standards, allow for greater comfort, or allow for greater capacity

This flexible approach allows for opportunistic action which can accelerate the pace of implementation and also reduce implementation costs.



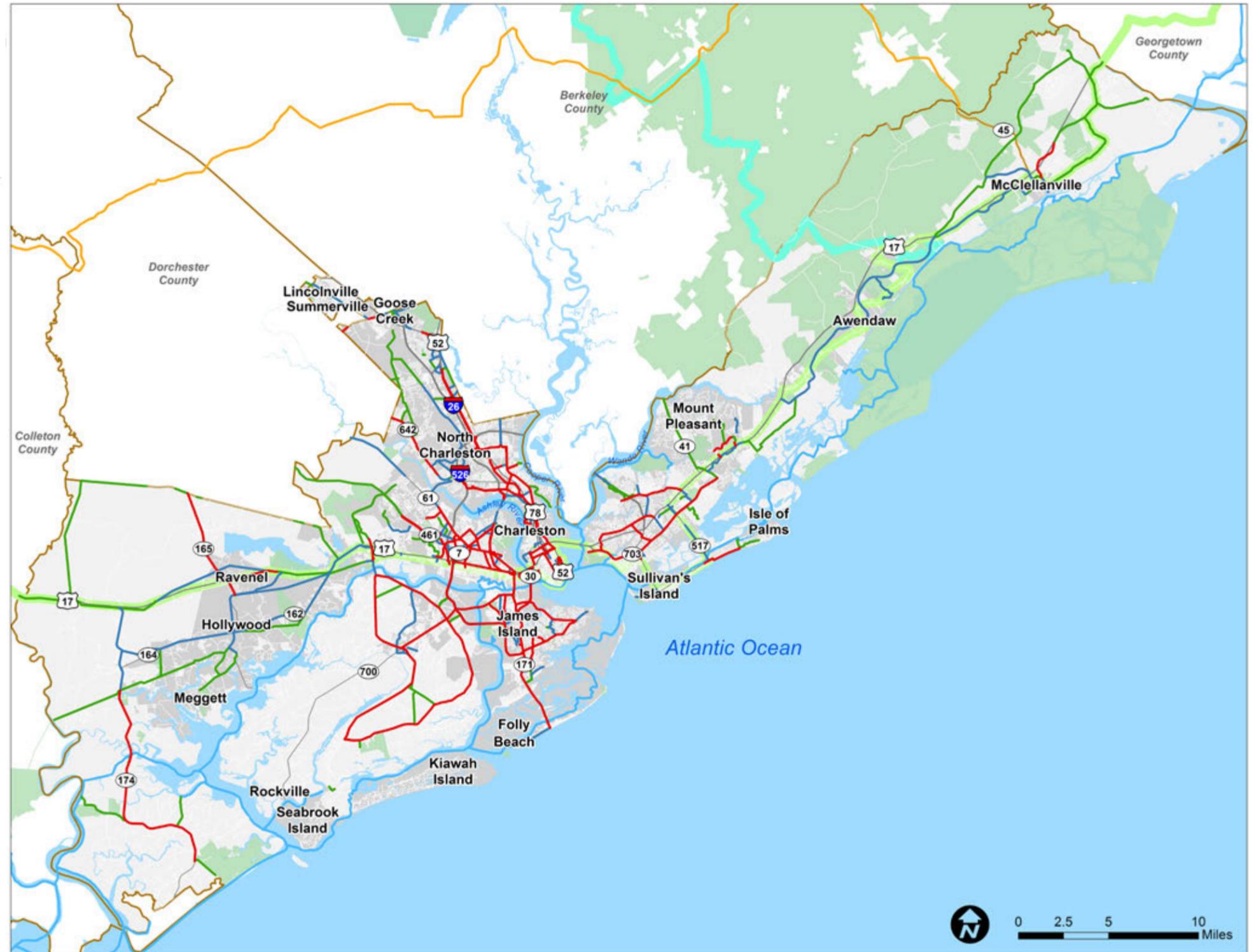
Table 3.2
Summary table of prioritization results by tier

	First Tier	Second Tier	Third Tier
Facility Type Mileage	Bicycle Route: 2.4	Bicycle Route: 9.5	Bicycle Route: 47.9
	Neighborhood Connector: 12.8	Neighborhood Connector: 9.0	Neighborhood Connector: 10.5
	Paved Shoulders/Bike Lanes: 78.8	Paved Shoulders/Bike Lanes: 45.2	Paved Shoulders/Bike Lanes: 9.9
	Separated Bike Lane: 13.9	Separated Bike Lane: 2.8	Separated Bike Lane: 0.6
	Shared Use Path: 118.8	Shared Use Path: 107.3	Shared Use Path: 136.3
	Sidewalk: 2.5	Sidewalk: 0.7	
Total Mileage	235.8	175.6	206.7

PRIORITIZATION RESULTS MAPS

TIER RESULTS COUNTY OVERVIEW

- First Tier Priority
 - Second Tier Priority
 - Third Tier Priority
 - East Coast Greenway
 - Palmetto Trail
 - Statewide Bike Tour Route
 - Saltwater Trails
 - Existing and Proposed Parks
- Roads**
- Interstate
 - US Highway
 - SC Highway
 - Local Streets (white)
 - Charleston County
 - County Boundaries
 - Water Bodies



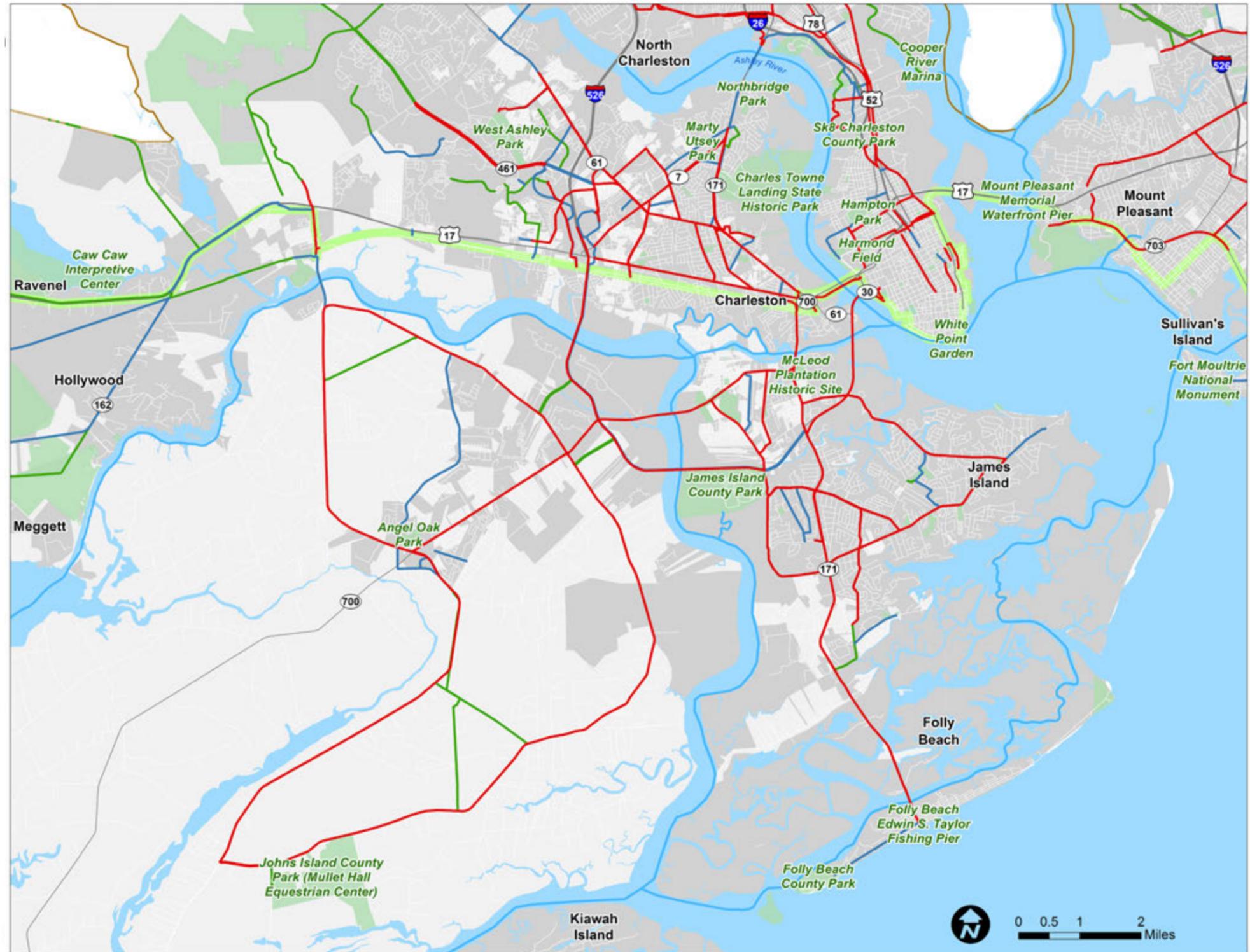
TIER RESULTS

CITY OF CHARLESTON
OVERVIEW

- First Tier Priority
- Second Tier Priority
- Third Tier Priority

- East Coast Greenway
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- Statewide Bike Tour Route
- Saltwater Trails
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TIER RESULTS

MOUNT PLEASANT OVERVIEW

- First Tier Priority
- Second Tier Priority
- Third Tier Priority
- East Coast Greenway
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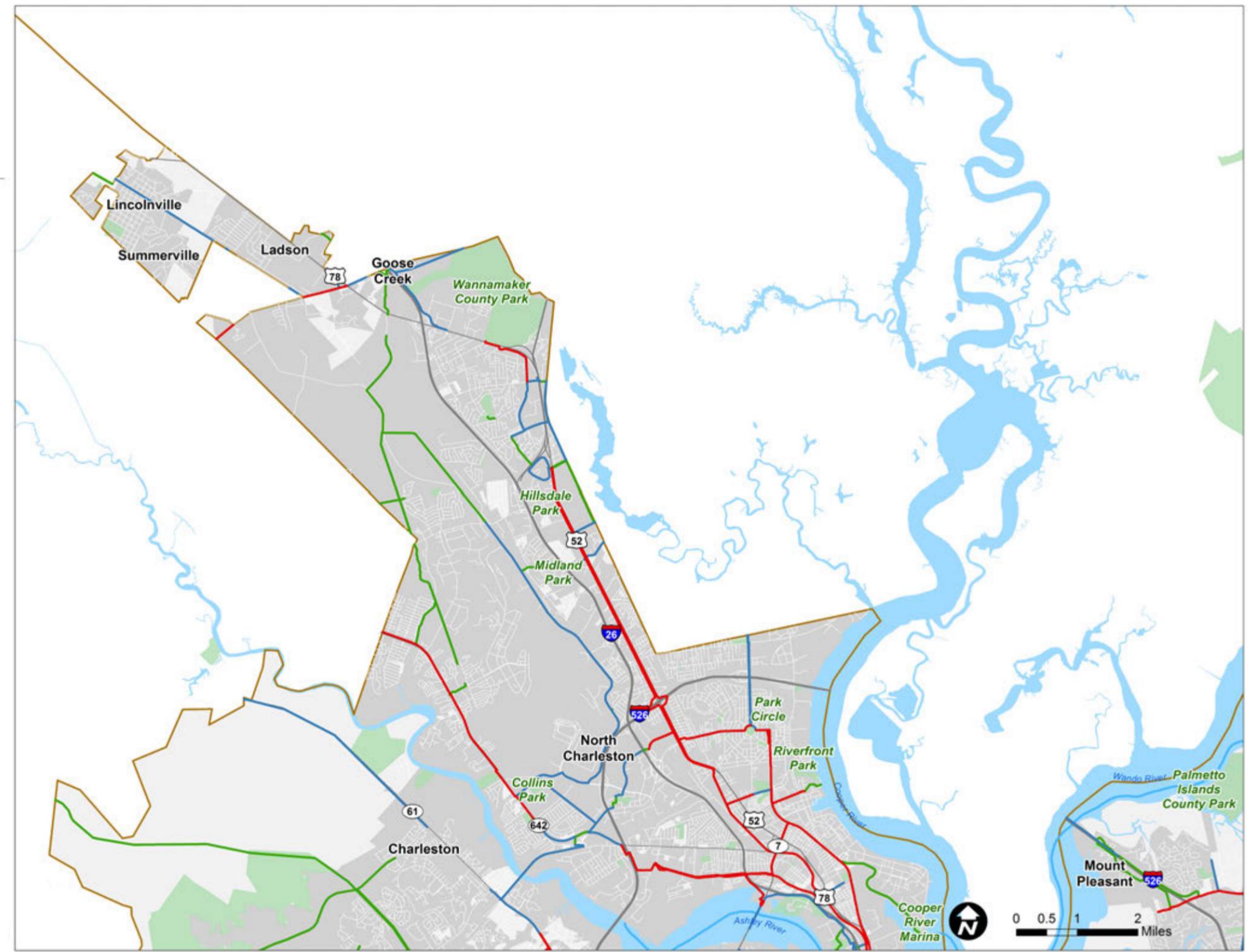
TIER RESULTS

NORTH CHARLESTON OVERVIEW

- First Tier Priority
- Second Tier Priority
- Third Tier Priority

- East Coast Greenway
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CHAPTER 4

IMPLEMENTATION PLAN

“Planners have long held up the idea of connectivity – links between people and places that tie everything together... Using the many different forms of connections can give great value to residents – in pleasure, recreation, health and lessened carbon output – and help create excellent park systems.”

- Ben Welle, City Parks Blog



IMPLEMENTATION PLAN OVERVIEW

Now that priority projects have been identified, where do we start with implementation?

The Implementation Plan answers this question and presents project feasibility methodology and results, a phasing and capital improvements plan for all recommendations, and identifies project funding needs.

CCPRC and its partners should use this section as a guide for achieving the vision and goals established in the beginning of this Plan. As a general strategy, CCPRC and its partners should regularly evaluate how well recommendations are being met and whether these recommendations still meet the needs of County residents and visitors. Additionally, as best-practices in bicycling facility design is a rapidly-evolving field, the recommendations in this plan should be re-evaluated at least every five years to ensure that these still constitute best-practices and still reflect Charleston County's long-term vision for connecting people to parks.



SPINE CONCEPT

The spine concept grew out of a need for establishing a primary cross-county route that would seamlessly connect the county's urban and rural areas, link municipalities to one another, and capitalize on existing facilities and community destinations.

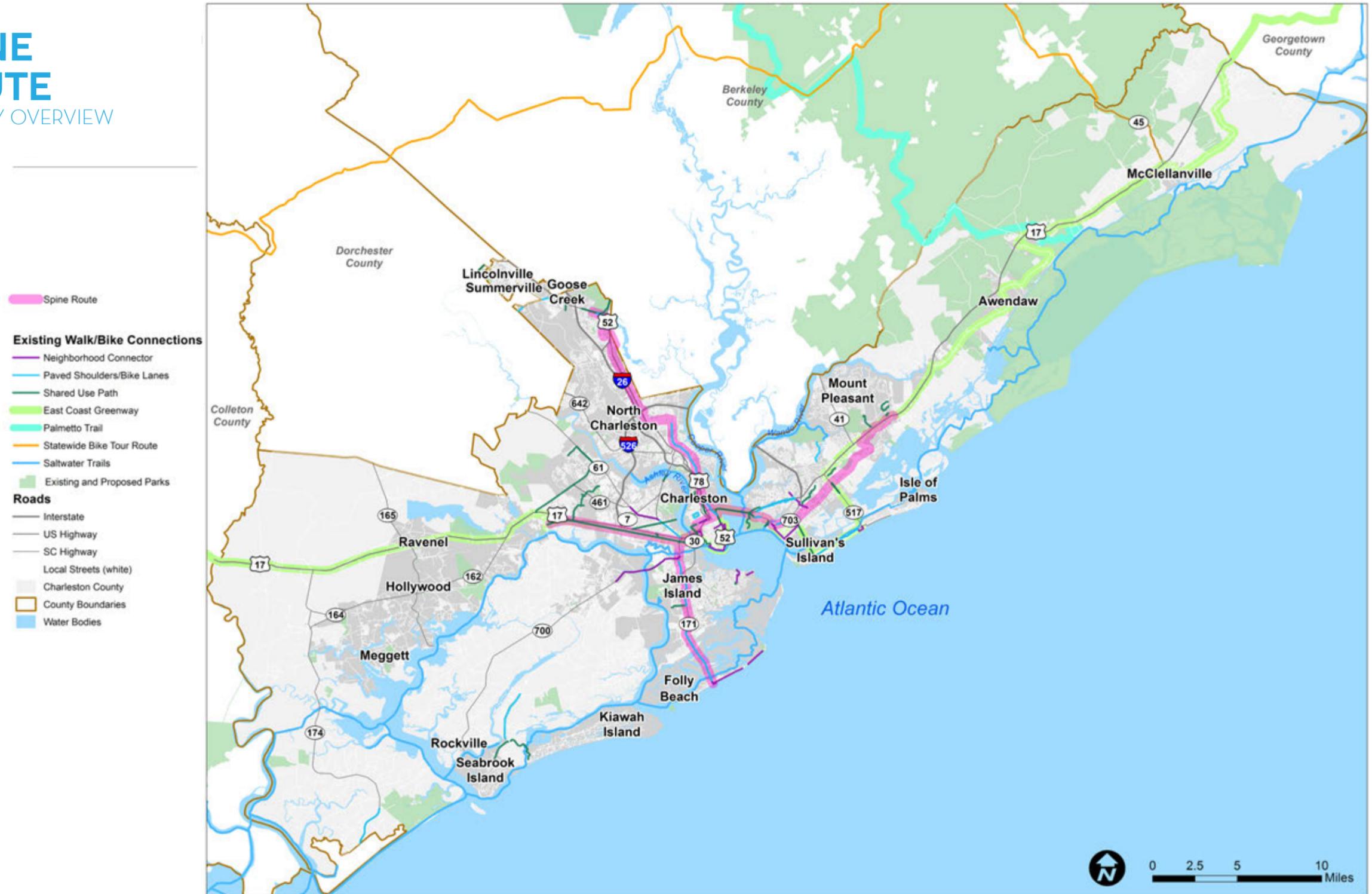
The spine is intended to serve as the core cohort of greenway projects. Subsequent projects will spur off of the spine, making logical connections to the next untouched tier of parks and other destinations.

CHARLESTON COUNTY & MUNICIPAL PARKS



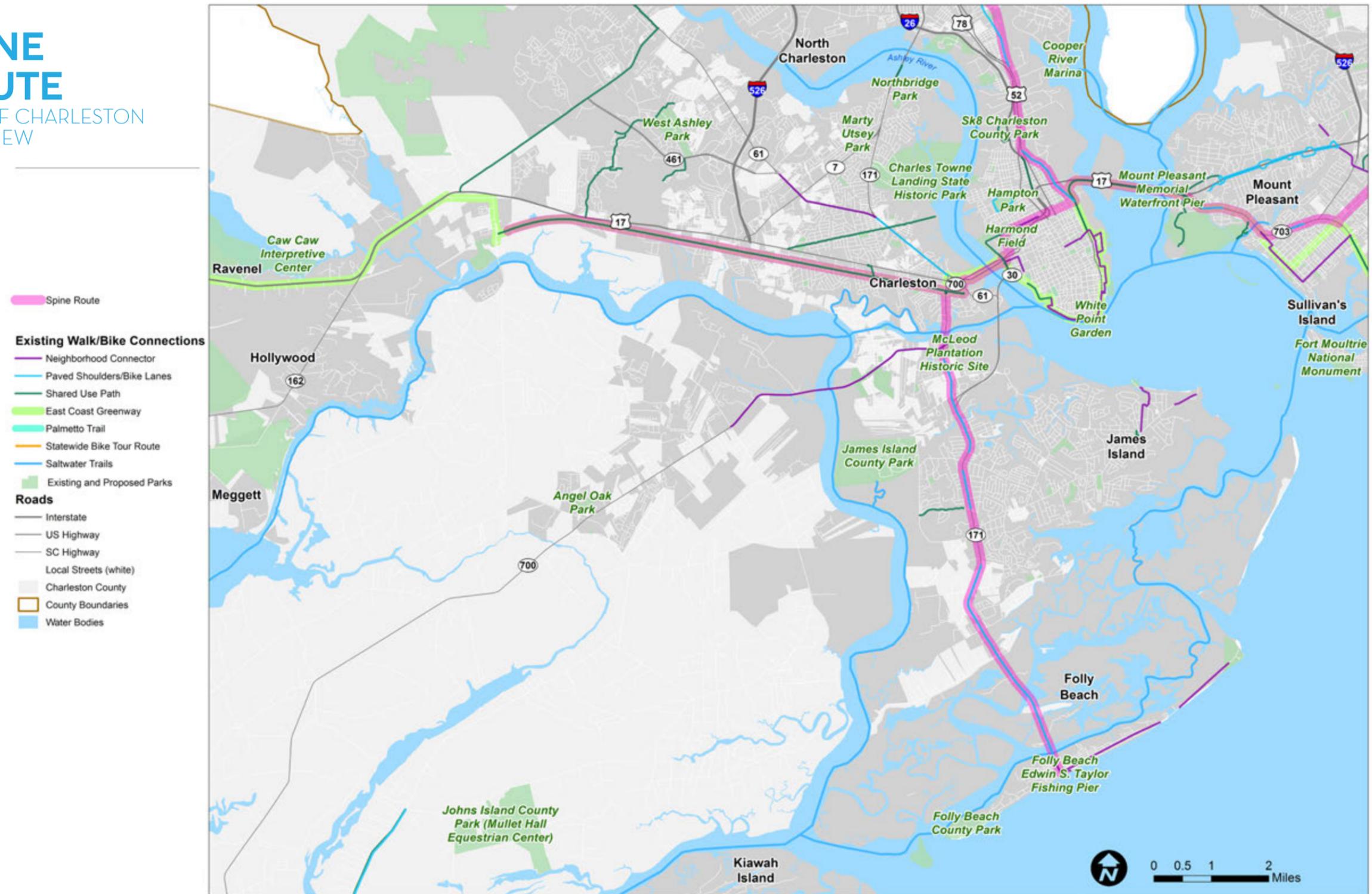
SPINE ROUTE

COUNTY OVERVIEW



SPINE ROUTE

CITY OF CHARLESTON
OVERVIEW



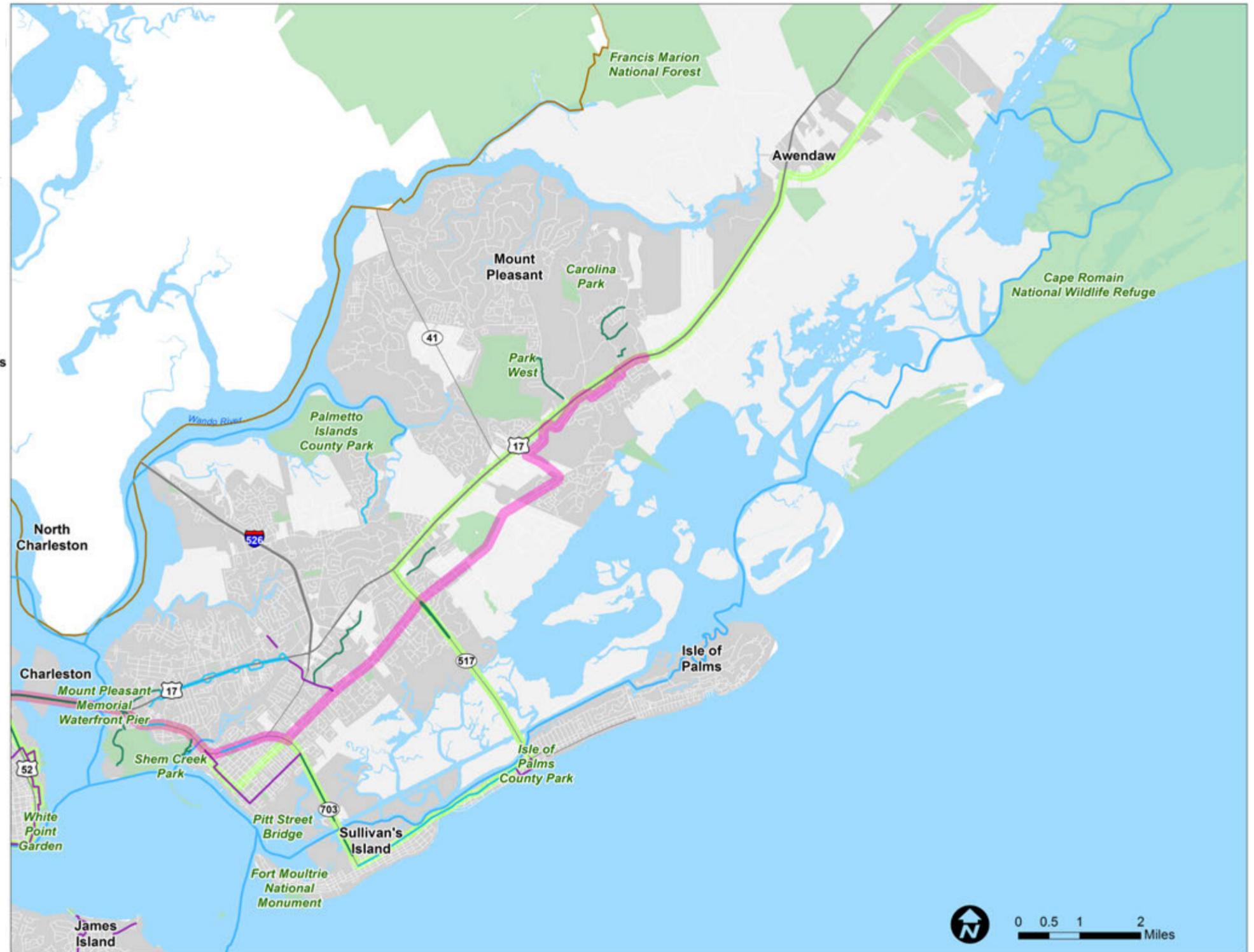
SPINE ROUTE

MOUNT PLEASANT OVERVIEW

- Spine Route

- Existing Walk/Bike Connections**
- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
- East Coast Greenway
- Palmetto Trail
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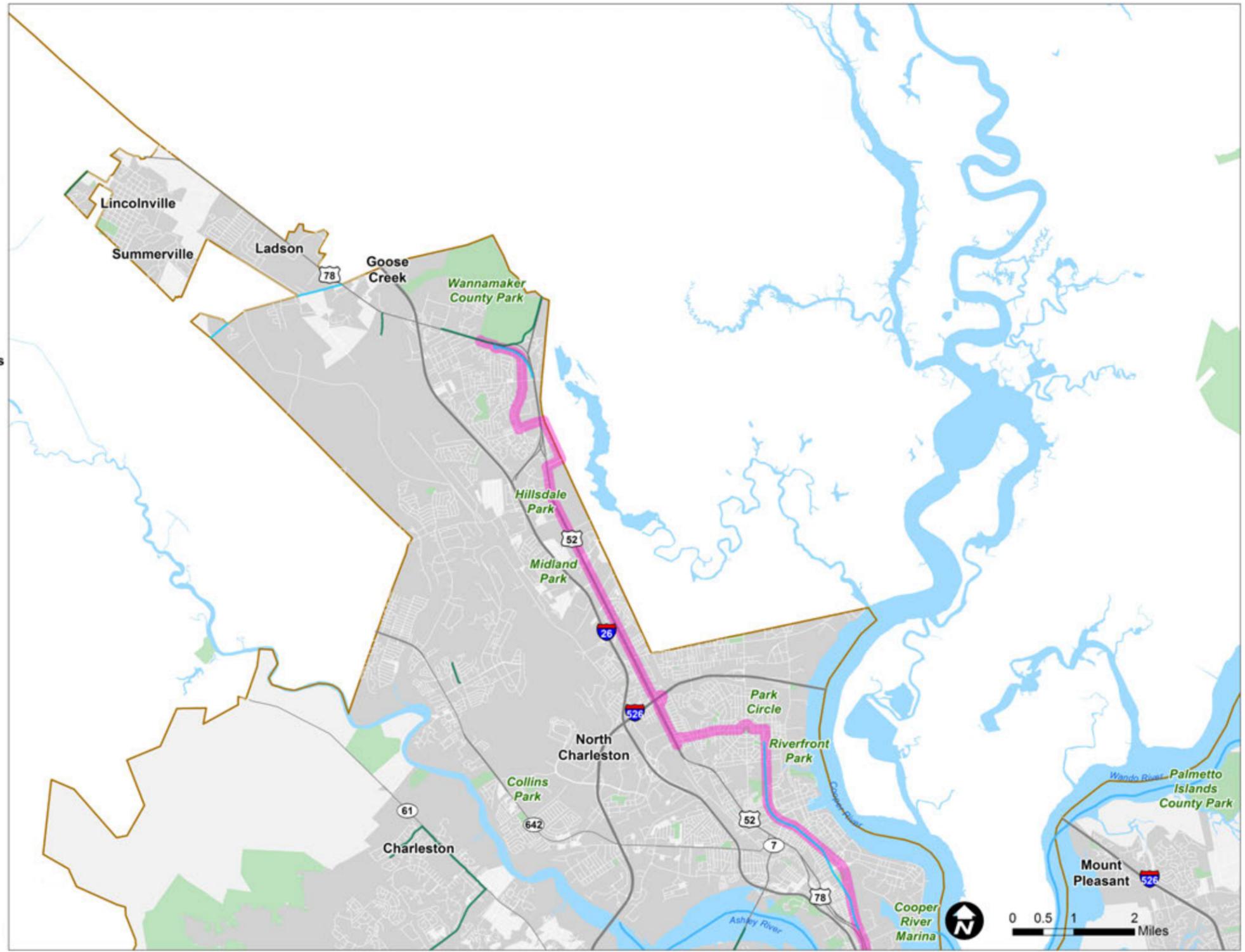
SPINE ROUTE

NORTH CHARLESTON
OVERVIEW

- Spine Route

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SPINE FEASIBILITY METHODOLOGY

Overview

In addition to the data-driven prioritization criteria, the project team devised a number of additional criteria for the spine route, intended to further refine a spine project's feasibility and significance. The additional criteria are intended to ensure that the People 2 Parks Plan provides practical guidance for implementing feasible and fundable projects while also meeting the needs of county residents and visitors.

These criteria support the objective that recommended projects should be implemented opportunistically - where feasibility is high due to corridor characteristics but also with evolving political will and funding opportunities. These additional criteria are considered to the extent existing data are available.



Spine Feasibility Criteria

Following the establishment of a primary cross-county spine route, each project that made up the spine received a score based on quantitative analysis with the following nine factors all contributing to a final feasibility score.

Where multiple bicycle facility recommendations exist on the same corridor, the spine route feasibility process scored the highest-order facility. For instance, if both bike lanes and a shared use path were recommended on a single road, the spine contains and assigned a score for the shared use path recommendation.

WETLANDS

As some of the most productive but fragile ecosystems in the world, this criteria considers to what extent the spine route interfaces with wetland areas. Descending values were assigned for three possibilities - route does not intersect wetlands, route impacts less than 10,000 square feet of wetlands, and route impacts more than 10,000 square feet of wetlands.

FLOODPLAINS

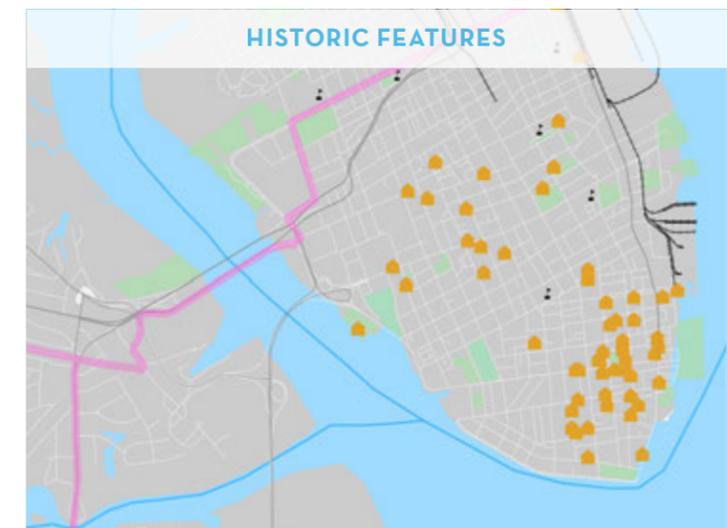
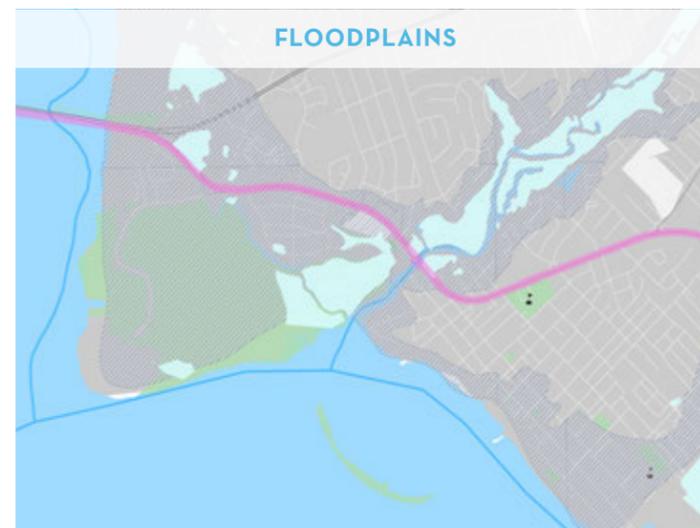
This criteria considers the function of floodplains as protectors of natural resources, as well as their vulnerability to flooding. Thus, values were assigned as a binary classification - recommendation does not intersect floodplain and recommendation intersects floodplain. This analysis used 100-year floodplains from FEMA's National Flood Hazard digital database. For spine segments that cross through these sensitive areas, there should be special consideration for trail surface material and drainage.

CRITICAL HABITAT

This criteria considers that facility development can disturb and diminish especially valuable and rare animal habitats. The habitats of these animals have been designated as critical because the species may be threatened or endangered, or may require special management and protection. This analysis includes all available digitized critical habitat information for Charleston County from the U.S. Fish & Wildlife Service. Two species were considered as having critical habitats - the loggerhead sea turtle and the frosted flatwoods salamander. An area designated as a critical habitat does not necessarily restrict development, but there should be special efforts made to limit disruptions to the respective protected species.

HISTORIC FEATURES

Historic features acknowledges that historic sites and districts may require additional coordination when a recommendation intersects historic property. Historic features that exist as points were buffered by 100 feet. Values were assigned as a binary classification - spine does not intersect historic feature and spine intersects historic feature.



RAILROAD CROSSINGS

Recommendations that intersect at grade rail lines will require additional coordination with the respective railroad company. This criteria recognizes this added challenge and assigns values accordingly. The binary classification system was based on whether a spine recommendation crosses railroad tracks at an existing at grade crossing or whether a spine recommendation will require a new at grade crossing.

BRIDGE CROSSINGS

Charleston County's coastal setting offers unrivaled access to a host of scenic water features. However, traversing a landscape with a number of water bodies presents the need for bridges. This criteria considers three possibilities and related feasibility values for each spine segment - the route does not require a bridge, the route requires a freespan bridge of up to 125 feet, and the route requires a bridge longer than 125 feet. These long bridges will require intermediate piles, thus construction time and costs are the most burdensome.



COST

Including cost as a feasibility criteria recognizes that monetary resources for the implementing body may be limited. Additionally, implementing the least expensive spine segments may garner political will, public support, and funding for more expensive projects. Cost estimates for each spine segment produced a range of costs for the entire spine. This range was divided into three categories with corresponding descending values - least expensive project, moderately expensive project, and most expensive project.

RIGHT OF WAY AVAILABILITY

Right of way availability acknowledges that different facility types require variable right of way acquisition. This criteria assigns values to spine segments based on three overarching factors - the recommended facility is an on-street facility, the recommended facility is a shared use path along a road corridor, or the recommended facility is a shared use path not along a road corridor. In the third criteria, the shared use path may follow a natural corridor like a stream or a man-made corridor like a railroad or utility corridor.



SLOPE

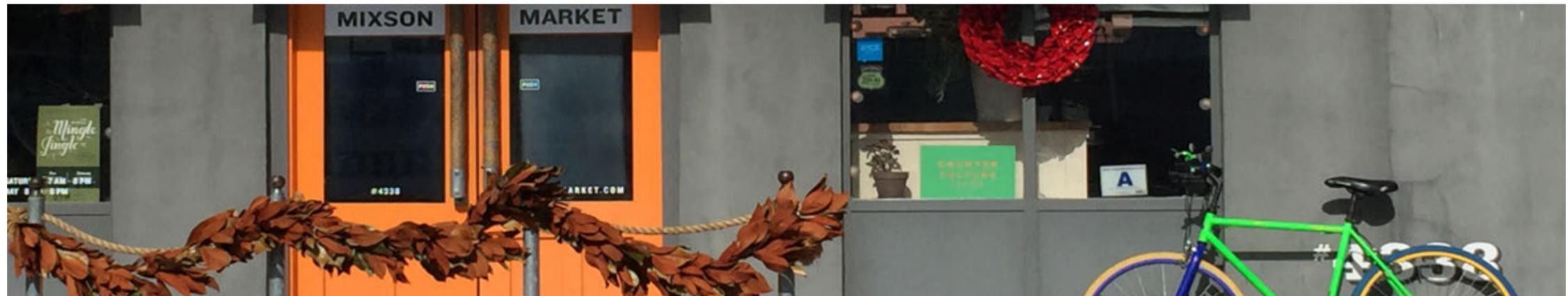
Slope evaluates the prevalence of areas that exceed the ADA Standards for Accessible Design. Values were assigned to spine segments based on a binary classification - spine does not intersect area of greater than 5% grade and spine intersects area with greater than 5% grade. The prevalence of a slope exceeding 5% does not override a project's feasibility but implies that alterations to existing grades may have to be made.



Table 4.1
Summary table of feasibility scoring values

Criteria	Definition	Rank	Measurement	Points
Wetlands	Does the project impact wetlands?	High	Project does not impact wetlands	10
		Medium	Project impacts < 10,000 square feet of wetlands	5
		Low	Project impacts > 10,000 square feet of wetlands	0
Floodplains	Is the project within the 100-year floodplain?	Medium	Project is not within floodplain	5
		Low	Project is within floodplain	0
Critical Habitat	Is the project within a known critical habitat?	High	Project is not within known critical habitat	10
		Low	Project is within known critical habitat	0
Historic Features	Does the project intersect property of historic significance?	High	Project does not intersect within 100 feet of historic property	10
		Low	Project intersects within 100 feet of historic property	0
Railroad Crossings	Does the project intersect railroad corridors?	High	Project does not intersect railroad corridor	10
		Medium	Project intersects railroad corridor at existing at-grade crossing	5
		Low	Project requires new at-grade crossing at intersection with railroad corridor	0
Bridge Crossings	Does the project require bridge construction?	High	Project does not require bridge construction	10
		Medium	Project requires a freespan bridge of no more than 125 feet	5
		Low	Project requires bridge with intermediate piles	0

Criteria	Definition	Rank	Measurement	Points
Cost		High	Project costs up to \$149,999	10
		Medium High	Project costs between \$150,000 - 399,999	7
		Medium	Project costs between \$400,000 - 999,999	5
		Medium Low	Project costs between \$1,000,000 - 2,000,000	2
		Low	Project costs between \$2,000,001 - \$5,000,000	0
Right of Way			On-Street Facilities	
		High	Project fits within existing pavement width (may require restriping only)	10
		Medium	Project fits within existing pavement width and requires road diet and/or lane reconfiguration	5
		Low	Project requires road widening	0
			Shared Use Path Along Road Corridor	
		High	Project fits within right of way	10
		Medium	Project fits within right of way but is constrained (may require limited right of way acquisition, expanding existing sidewalk, etc.)	5
		Low	Project requires significant right of way acquisition	0
Slope	Does the project exceed current ADA grades?	High	Topography along project extent remains at grades of > 5%	10
		Medium	Topography along project extent exceeds 5% grade	5



SPINE FEASIBILITY RESULTS

The following maps display the defensible results of the GIS-based feasibility scoring program for all projects within Charleston County. Spine projects were grouped into three bins - “least challenging to implement,” “moderately challenging to implement,” and “challenging to implement” - based on their cumulative feasibility scores.

Table 4.2

Summary table of feasibility results

	Least Challenging to Implement	Moderately Challenging to Implement	Challenging to Implement
Cost Estimate	\$12,177,270	\$14,322,000	\$9,536,000
Facility Type Mileage	Neighborhood Connector: 1.08 Paved Shoulder/Bike Lane: 2.11 Separated Bike Lane: 0.35 Shared Use Path: 14.52	Separated Bike Lane: 1.29 Shared Use Path: 16.29	Shared Use Path: 11.92
Total Mileage	18.06	17.58	11.92



SPINE FEASIBILITY

COUNTY OVERVIEW

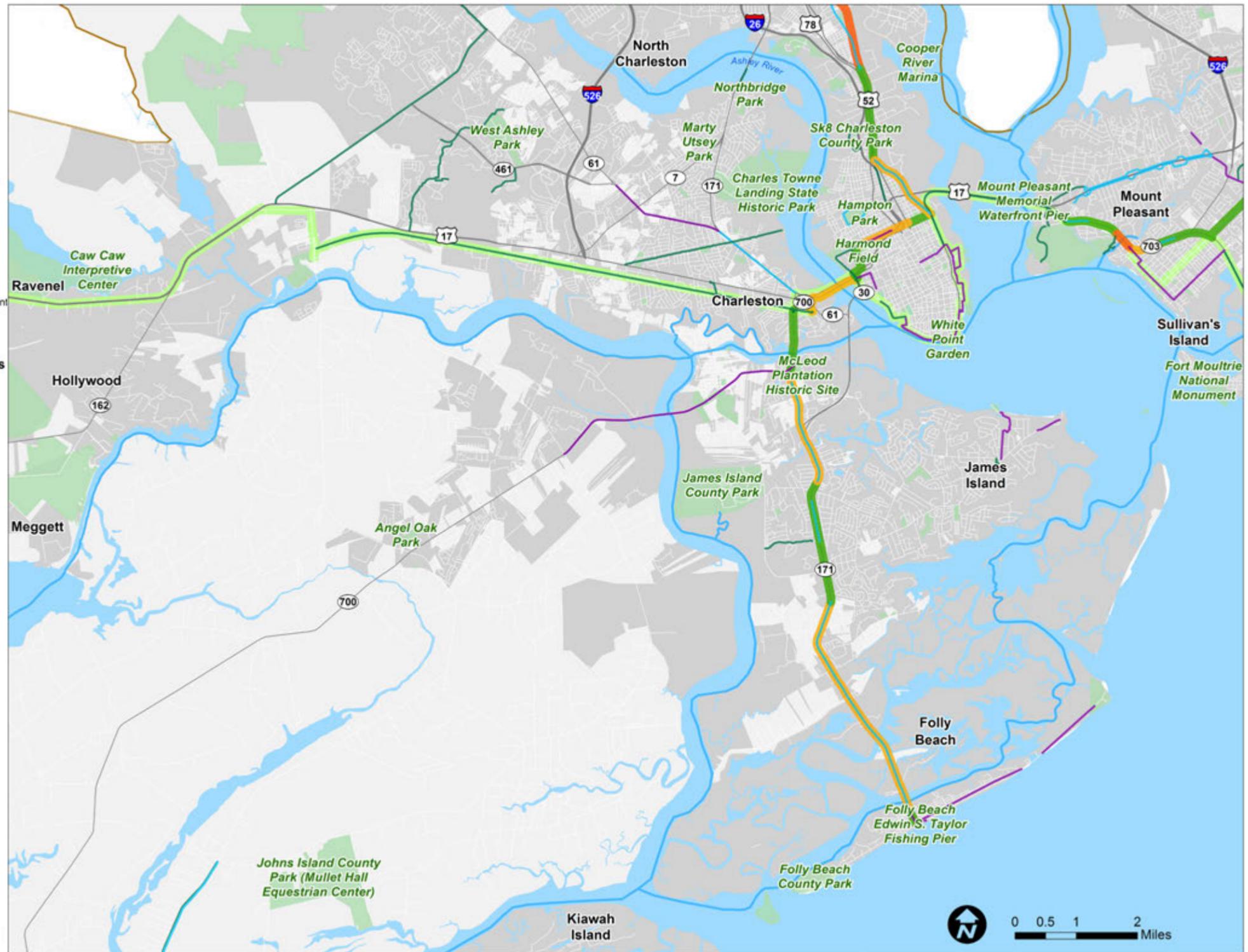
- Spine Feasibility**
- Least Challenging to Implement
 - Moderately Challenging to Implement
 - Challenging to Implement
- Existing Walk/Bike Connections**
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 - Water Bodies



SPINE FEASIBILITY

CITY OF CHARLESTON
OVERVIEW

- Spine Feasibility**
- Least Challenging to Implement
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SPINE FEASIBILITY

MOUNT PLEASANT OVERVIEW

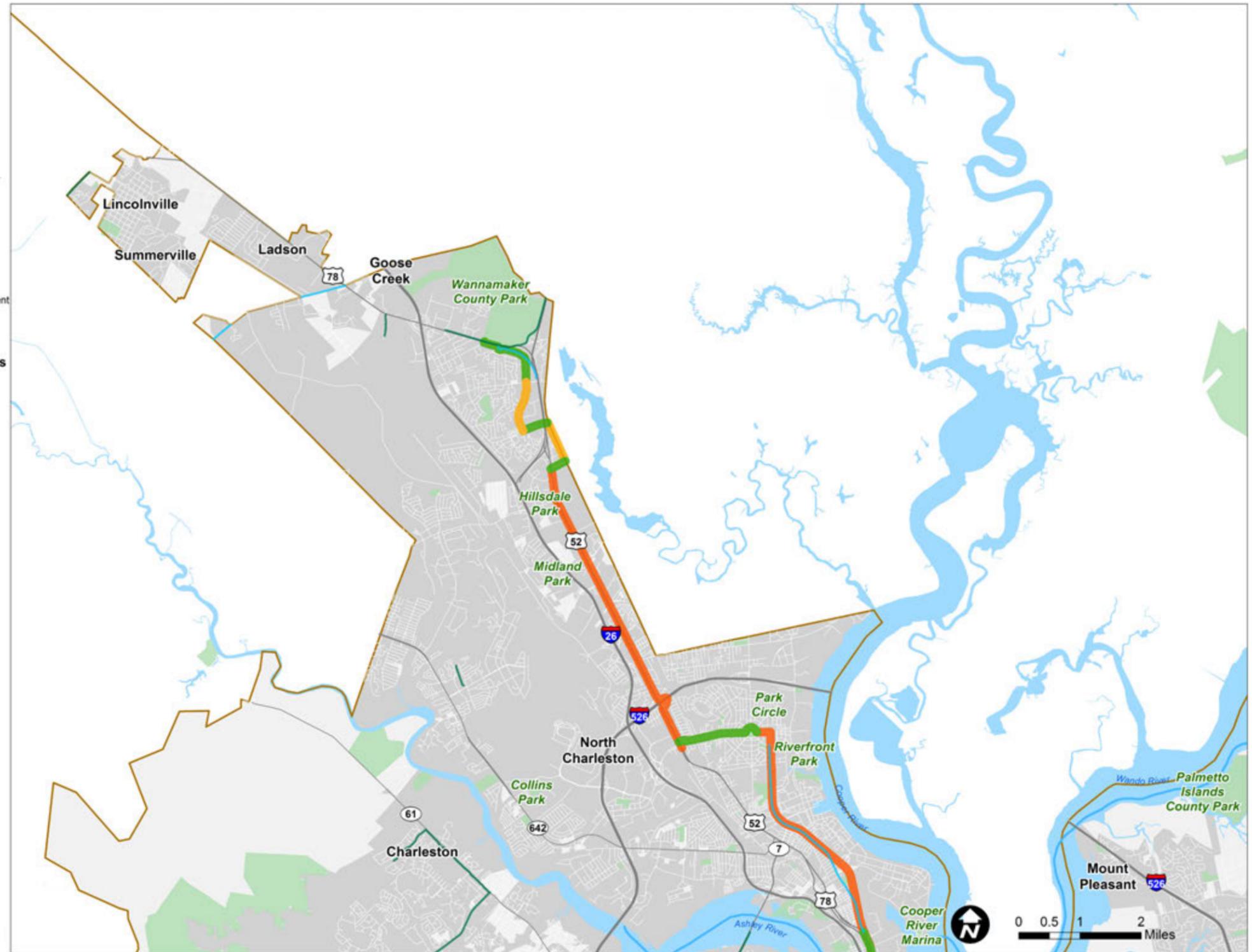
- Spine Feasibility**
- █ Least Challenging to Implement
 - █ Moderately Challenging to Implement
 - █ Challenging to Implement
- Existing Walk/Bike Connections**
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SPINE FEASIBILITY

NORTH CHARLESTON
OVERVIEW

- Spine Feasibility**
- Least Challenging to Implement
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 - Challenging to Implement
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PROJECT COST ESTIMATES AND ASSUMPTIONS

Cost Estimate Methodology

Cost estimates for projects were derived from current, typical construction costs in the southeast region. While these costs represent averages for bicycle and pedestrian projects, note that individual project costs can vary widely based on a number of conditions including but not limited to:

- Facility design (width, frequency of material placement, demolition)
- Temporary traffic control requirements
- Environmental requirements
- Utility relocation
- Contractor experience and material availability
- Physical project length (projects of longer length are typically less expensive than short projects)

Project cost estimates consider the facility type, implementation strategy, and include soft costs such as traffic control, design, and construction management. Project cost estimates do not include long-term maintenance. As the greenway network grows and ages in Charleston County, the County will need to dedicate funds for regular greenway maintenance activities such as restriping and sweeping.

A breakdown of these complete cost estimate components and assumptions are included in this chapter. A table of all Charleston County projects and their associated scores can be found in Chapter 5 - Appendices.



Table 4.3

Summary table of cost estimates and assumptions

	Bicycle Route	Neighborhood Connector	Paved Shoulder/ Bicycle Lane	Separated Bike Lane (Cycle Track)	Shared Use Path	Sidewalk	Intersection Improvements
Cost per Unit	\$625 per sign	\$53,000/mi	\$73,000/mi	\$500,000 - \$1,000,000/mi	\$800,000/mi	\$150 - \$250/LF	\$50,000 - \$150,000
Assumptions	Wayfinding signage only	Includes per-mile signage and pavement markings for both sides of road. Does not include intersection treatments.	Includes per-mile signage, pavement markings, and striping for both sides of road. Does not include intersection treatments.	<p>Cycle track may be two-way on one side of road or one-way on both sides of road.</p> <p>Low estimate: pavement markings, striping, flexible delineators, and bicycle signalization at intersections.</p> <p>High estimate: pavement markings, striping, bicycle signalization at intersections, and raised curb with landscaping as delineator.</p>	Assumes 10' wide asphalt path with no right of way acquisition required. Assumes no physical barriers and no bridges required. Does not include utility relocation.	Assumes 5' wide concrete sidewalk with curb and drainage. Does not include removal of old sidewalk or utility relocation. Assumes no right of way acquisition required.	<p>Low estimate: Includes crosswalks, ADA compliant ramps, and pedestrian signalization</p> <p>High estimate: Includes raised crosswalks, ADA compliant ramps, pedestrian signalization, vehicular signal synching, and mast arm signals.</p>





CAPITAL IMPROVEMENT PLAN

Overview

The implementation of the People 2 Parks network recommendations will require a comprehensive approach that includes multiple sources of funding, partnerships, design, construction, and management. It will also require the dedication of County staff and a commitment to the vision established by the steering committee and this plan.

Identifying Additional Funding

Achieving the vision that is defined within this plan requires, among other things, a stable and recurring source of funding. Communities across the country that have successfully engaged in bicycle, pedestrian, and trail development programs have relied on multiple funding sources to achieve their goals. No single source of funding will meet the recommendations identified in this plan. Stakeholders will need to work cooperatively across a range of private sector, municipality, state, and federal partners to generate funds sufficient to implement this network.

A descriptive list of potential funding sources can be found in Chapter 5 - Appendices.

The three ingredients: plan, action, and money are essential to the success of any trails program.

*-- G. Douglas Hofe
Author, American Trails - Rediscovered*

Table 4.4
Summary table of phasing plan

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Cost	\$38,128,820	\$40,008,309	\$74,212,270	\$66,223,610	\$105,546,184
Facility Type Mileage	Bicycle Route: 0.0 Neighborhood Connector: 1.4 Paved Shoulder/Bike Lane: 7.8 Separated Bike Lane: 4.4 Shared Use Path: 39.5 Sidewalk: 0.9 Intersection Improvements: 2	Bicycle Route: 31.3 Neighborhood Connector: 27.7 Paved Shoulder/Bike Lane: 16.5 Separated Bike Lane: 3.9 Shared Use Path: 41.3 Sidewalk: 0.0 Intersection Improvements: 1	Bicycle Route: 4.6 Neighborhood Connector: 1.8 Paved Shoulder/Bike Lane: 47.2 Separated Bike Lane: 7.7 Shared Use Path: 84.8 Sidewalk: 1.7	Bicycle Route: 18.3 Neighborhood Connector: 1.2 Paved Shoulder/Bike Lane: 50.3 Separated Bike Lane: 1.2 Shared Use Path: 75.2 Sidewalk: 0.7	Bicycle Route: 4.1 Neighborhood Connector: 0.2 Paved Shoulder/Bike Lane: 12.2 Separated Bike Lane: 0.0 Shared Use Path: 130.8 Sidewalk: 0.0
Total Mileage	54.0	122.3	147.8	146.9	147.2
Fiscal Years	2017 - 2021	2022 - 2025	2026 - 2031	2032 - 2036	2037 - 2042

PHASE 1

COUNTY OVERVIEW

Key Features

- Contains all spine projects, creating a seamless cross-county connection
- Includes two intersection improvements to improve safety and increase access to the West Ashley Greenway
- Links to existing bicycle and pedestrian infrastructure

Network Recommendations

- Intersection Improvement
- Shared Use Path
- Separated Bike Lane
- Paved Shoulder/Bike Lane
- Neighborhood Connector
- Bicycle Route
- Sidewalk
- Phase Addition

Existing Walk/Bike Connections

- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
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- County Boundaries
- Water Bodies



PHASE 1

CITY OF CHARLESTON OVERVIEW

Network Recommendations

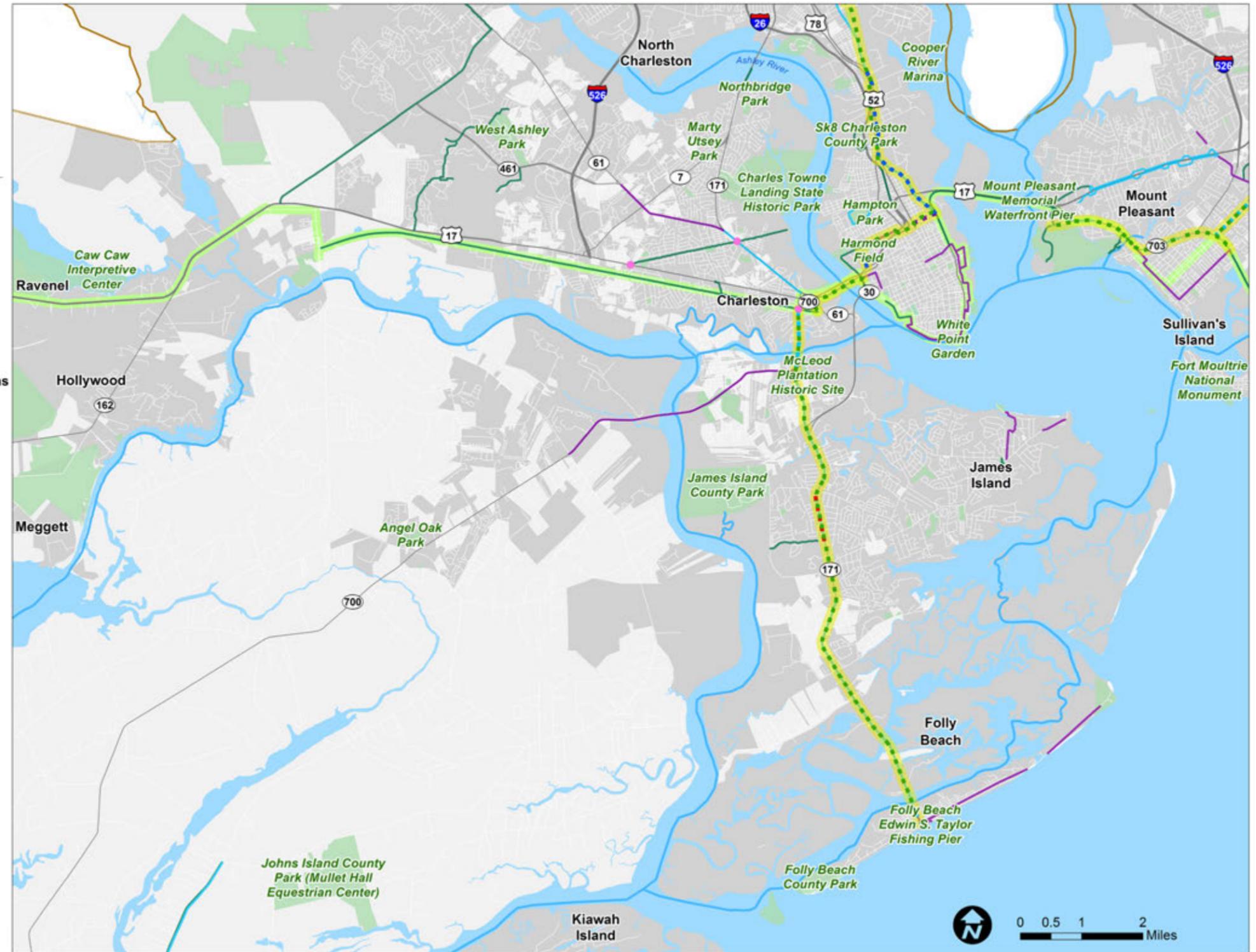
- Intersection Improvement
- Shared Use Path
- Separated Bike Lane
- Paved Shoulder/Bike Lane
- Neighborhood Connector
- Bicycle Route
- Sidewalk
- Phase Addition

Existing Walk/Bike Connections

- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
- East Coast Greenway
- Palmetto Trail
- Statewide Bike Tour Route
- Saltwater Trails
- Existing and Proposed Parks

Roads

- Interstate
- US Highway
- SC Highway
- Local Streets (white)
- Charleston County
- County Boundaries
- Water Bodies



PHASE 1

MOUNT PLEASANT
OVERVIEW

Network Recommendations

- Intersection Improvement
- Shared Use Path
- Separated Bike Lane
- Paved Shoulder/Bike Lane
- Neighborhood Connector
- Bicycle Route
- Sidewalk
- Phase Addition

Existing Walk/Bike Connections

- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
- East Coast Greenway
- Palmetto Trail
- Statewide Bike Tour Route
- Saltwater Trails
- Existing and Proposed Parks

Roads

- Interstate
- US Highway
- SC Highway
- Local Streets (white)
- Charleston County
- County Boundaries
- Water Bodies



PHASE 1

NORTH CHARLESTON OVERVIEW

Network Recommendations

- Intersection Improvement
- Shared Use Path
- Separated Bike Lane
- Paved Shoulder/Bike Lane
- Neighborhood Connector
- Bicycle Route
- Sidewalk
- Phase Addition

Existing Walk/Bike Connections

- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
- East Coast Greenway
- Palmetto Trail
- Statewide Bike Tour Route
- Saltwater Trails
- Existing and Proposed Parks

Roads

- Interstate
- US Highway
- SC Highway
- Local Streets (white)
- Charleston County
- County Boundaries
- Water Bodies

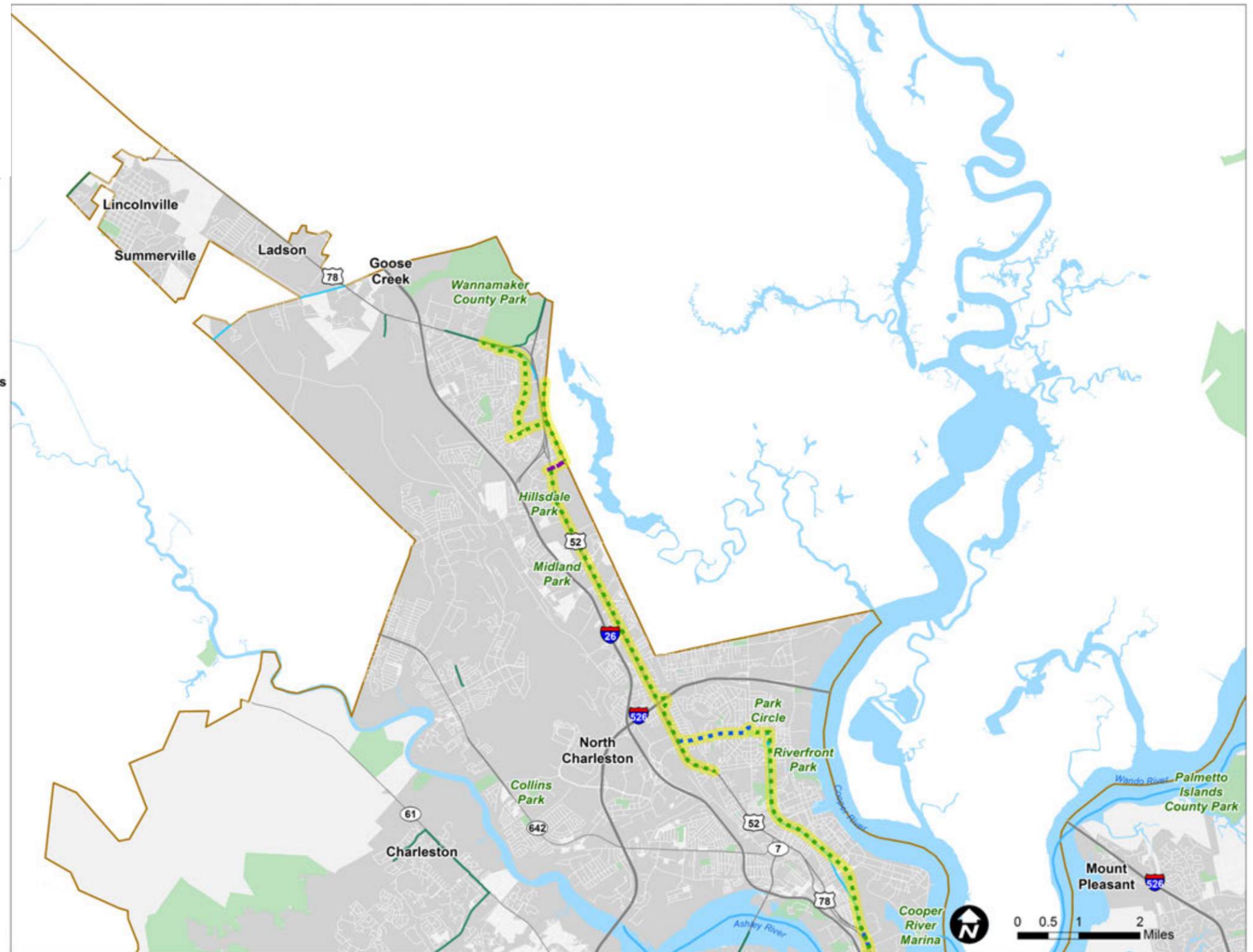


Table 4.4
Phase 1 Projects with Priority Phasing Packages

UID	Phasing Package	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
1	A	City of Charleston	Intersection of Wappoo Road and Savannah Highway	-	-	Intersection Improvement	-	\$150,000
2	A	City of Charleston	Intersection of West Ashley Greenway and Folly Rd.	-	-	Intersection Improvement	-	\$150,000
452	A	Mount Pleasant	Coleman Blvd.	Houston Northcutt Blvd.	Shrimp Boat Ln.	Shared Use Path	0.36	\$287,020
370	A	Mount Pleasant	Coleman Blvd.	Shrimp Boat Ln.	Simmons St.	Shared Use Path	0.30	\$241,026
369	A	Mount Pleasant	Coleman Blvd.	Pherigo St	Center St	Shared Use Path	0.94	\$748,591
451	A	Mount Pleasant	Coleman Blvd.	Simmons St.	Pherigo St.	Shared Use Path	0.50	\$396,634
26	A	Mount Pleasant	Coleman Blvd.	Houston Northcutt Blvd.	Pelzer Dr.	Shared Use Path	0.53	\$420,201
428	A	Mount Pleasant	Coleman Blvd.	Shrimp Boat Ln.	Simmons St.	Shared Use Path	0.28	\$225,881
201	A	City of Charleston	Cooper St, US 17, Coming St	Fishburne St	East Bay St	Shared Use Path	0.81	\$644,610
21	A	City of Charleston	Cooper St.	Meeting St.	East Bay St.	Neighborhood Connector	0.40	\$21,238
361	A	City of Charleston	Fishburne St.	Hagood Av.	President St.	Shared Use Path	0.21	\$167,110
57	A	City of Charleston	Folly Rd.	Windermere Blvd.	Crosscreek Dr.	Shared Use Path	1.19	\$953,686
426	A	City of Charleston	Hagood Ave.	Moultrie St	Savannah Hwy	Separated Bike Lane	0.35	\$346,076
179	A	Mount Pleasant	Patriots Point Blvd.	Harry Hallman Jr. Blvd.	Coleman Blvd.	Shared Use Path	0.36	\$286,551
35	A	Mount Pleasant Charleston County	Rifle Range Rd	Six Mile Rd	Porchers Bluff Rd	Shared Use Path	2.37	\$1,897,805
52	A	Mount Pleasant	Rifle Range Rd.	Ben Sawyer Blvd.	Six Mile Rd.	Shared Use Path	3.90	\$3,123,462
257	A	Mount Pleasant	Rifle Range Rd.	Bowman Rd.	Venning Rd.	Paved Shoulders/Bike Lanes	0.89	\$66,686



UID	Phasing Package	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
255	A	Mount Pleasant	Rifle Range Rd.	Ben Sawyer Blvd.	Bowman Rd.	Paved Shoulders/Bike Lanes	1.07	\$80,578
256	A	Mount Pleasant	Rifle Range Rd.	Venning Rd.	Porchers Bluff Rd.	Paved Shoulders/Bike Lanes	4.19	\$314,552
20	A	City of Charleston	Savannah Hwy, Albemarle Rd	Croghan Spur Rd	Lockwood Blvd.	Shared Use Path	1.10	\$877,739
4	B	North Charleston	Antler Dr.	Otranto Rd.	Old University Blvd.	Shared Use Path	1.17	\$933,925
245	B	North Charleston	Eagle Landing Blvd.	Railroad tracks	Hwy 52	Neighborhood Connector	0.27	\$14,382
244	B	North Charleston	Eagle Landing Blvd.	Railroad tracks	Northwoods Mall	Neighborhood Connector	0.32	\$17,192
3	B	North Charleston	Eagle Landing to Otranto	Otranto Rd	Eagle Landing Blvd	Shared Use Path	1.36	\$1,085,253
22	B	North Charleston	Greenridge Rd.	Crossroads Dr.	Rivers Av.	Shared Use Path	0.72	\$576,572
209	B	North Charleston	South Antler Dr.	Greenridge Rd.	Otranto Rd.	Shared Use Path	0.84	\$670,122
446	C	City of Charleston	Morrison Dr.	Meeting Street Rd.	Cooper St.	Separated Bike Lane	1.29	\$1,288,270
423	C	North Charleston City of Charleston	Spruill Av./Meeting Street Rd.	Buist Av.	Morrison Dr.	Separated Bike Lane	1.53	\$1,525,830
352	D	North Charleston	Montague Av.	Park Circle	Rivers Av.	Separated Bike Lane	1.26	\$1,262,491
103	E	City of Charleston	Folly Rd., Maybank Hwy. to Wesley Dr.	Windermere Blvd	Tatum St	Paved Shoulders/Bike Lanes	1.19	\$89,375
440	E	James Island City of Charleston	Folly Rd.	Camp Rd	George L Griffith Blvd	Shared Use Path	0.67	\$538,306
441	E	City of Charleston James Island Charleston County	Folly Rd.	Tatum St	Rivers Point Row	Shared Use Path	1.70	\$1,358,078

UID	Phasing Package	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
59	E	James Island	Folly Rd.	South of Camp Rd.	Rivers Pt.	Shared Use Path	0.35	\$281,526
98	E	James Island City of Charleston	Folly Rd.	George Griffith Blvd.	Camp Rd.	Sidewalk	0.85	\$1,122,000
58	E	City of Charleston James Island	Folly Rd.	Burclare Dr.	George Griffith Blvd.	Shared Use Path	1.00	\$801,732
212	F	Mount Pleasant	Greenway/Sidepath	National Dr	Carolina Park Blvd	Shared Use Path	0.87	\$692,205
213	F	Mount Pleasant	Marginal Rd	Hwy 17	Lieben Rd	Neighborhood Connector	0.41	\$21,632
36	F	Charleston County Mount Pleasant	Porchers Bluff Rd.	Hwy 17	Rifle Range Rd	Shared Use Path	0.84	\$670,034
397	F	Mount Pleasant	South Morgans Point Rd.	Porchers Bluff Rd.	National Dr.	Shared Use Path	1.61	\$1,285,465
445	G	Folly Beach	Center St	Indian Ave	Ashley Ave	Paved Shoulders/Bike Lanes	0.19	\$14,177
439	G	Folly Beach	Folly Rd	Burclare Rd	Indian Ave	Shared Use Path	3.90	\$3,119,315
1	H	North Charleston	Spruill	Mount Pleasant St.	Park Circle	Shared Use Path	5.71	\$4,564,946
243	I	North Charleston	Rivers Av. (north)	Durant Av.	Eagle Landing Blvd.	Shared Use Path	5.93	\$4,743,872
254	J	Mount Pleasant	Shem Creek Crossing	Coleman Blvd Bridge	Coleman Blvd Bridge	Shared Use Path	.05	\$36,850



PHASE 2

COUNTY OVERVIEW

Key Features

- Creates natural spurs from the spine to a number of priority destinations, including parks like James Island County Park, Collins Park, and Riverfront Park.
- Includes one intersection improvement at the West Ashley Bikeway and St. Andrews Boulevard to increase safety and access to the Bikeway

Network Recommendations

- Intersection Improvement
- Shared Use Path
- Separated Bike Lane
- Paved Shoulder/Bike Lane
- Neighborhood Connector
- Bicycle Route
- Sidewalk
- Phase Addition

Existing Walk/Bike Connections

- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
- East Coast Greenway
- Palmetto Trail
- Statewide Bike Tour Route
- Saltwater Trails
- Existing and Proposed Parks

Roads

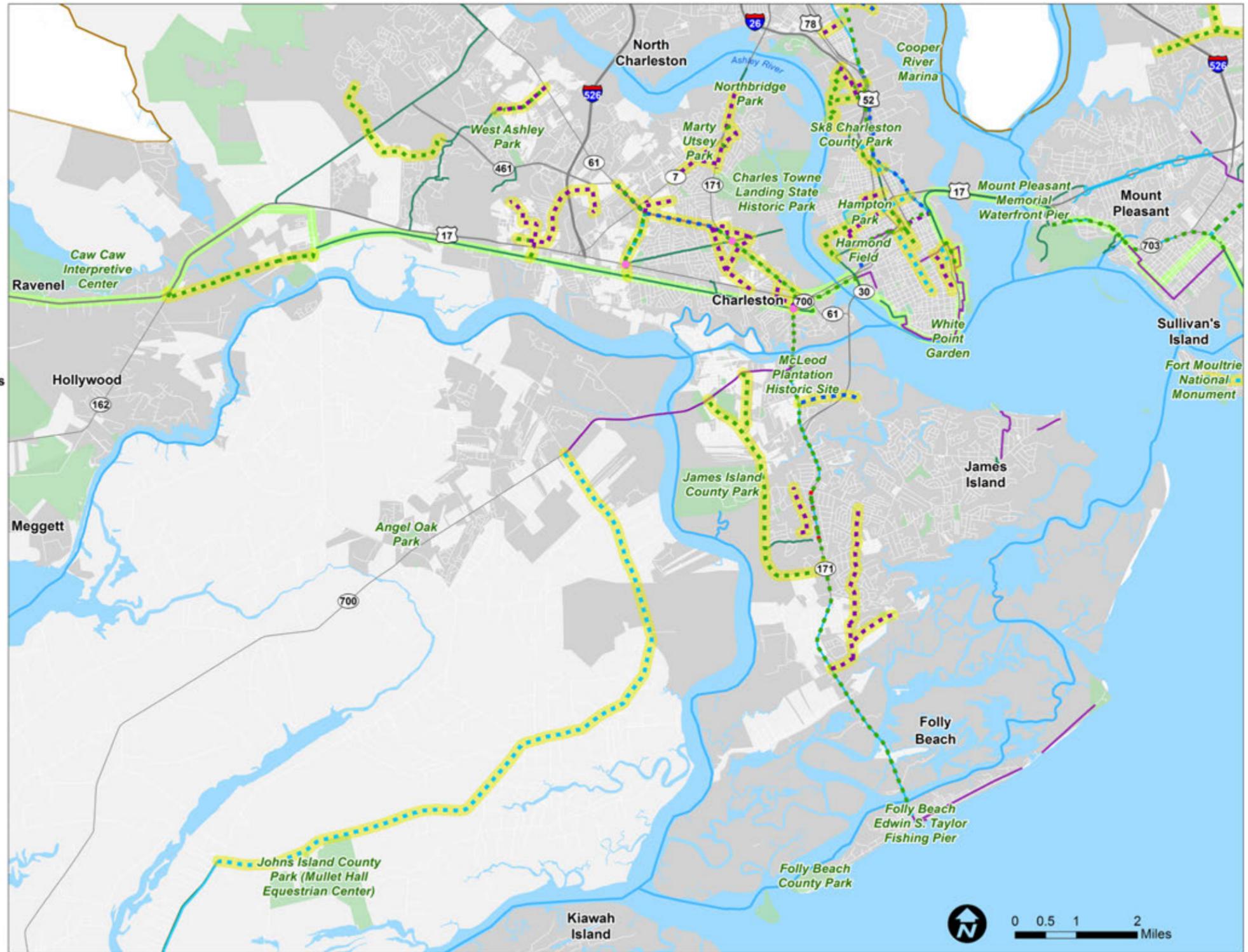
- Interstate
- US Highway
- SC Highway
- Local Streets (white)
- Charleston County
- County Boundaries
- Water Bodies



PHASE 2

CITY OF CHARLESTON
OVERVIEW

- Network Recommendations**
- Intersection Improvement
 - Shared Use Path
 - Separated Bike Lane
 - Paved Shoulder/Bike Lane
 - Neighborhood Connector
 - Bicycle Route
 - Sidewalk
 - Phase Addition
- Existing Walk/Bike Connections**
- Neighborhood Connector
 - Paved Shoulders/Bike Lanes
 - Shared Use Path
 - East Coast Greenway
 - Palmetto Trail
 - Statewide Bike Tour Route
 - Saltwater Trails
 - Existing and Proposed Parks
- Roads**
- Interstate
 - US Highway
 - SC Highway
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 - Charleston County
 - County Boundaries
 - Water Bodies



PHASE 2

MOUNT PLEASANT OVERVIEW

Network Recommendations

- Intersection Improvement
- Shared Use Path
- Separated Bike Lane
- Paved Shoulder/Bike Lane
- Neighborhood Connector
- Bicycle Route
- Sidewalk
- Phase Addition

Existing Walk/Bike Connections

- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
- East Coast Greenway
- Palmetto Trail
- Statewide Bike Tour Route
- Saltwater Trails
- Existing and Proposed Parks

Roads

- Interstate
- US Highway
- SC Highway
- Local Streets (white)
- Charleston County
- County Boundaries
- Water Bodies



PHASE 2

NORTH CHARLESTON
OVERVIEW

Network Recommendations

- Intersection Improvement
- Shared Use Path
- Separated Bike Lane
- Paved Shoulder/Bike Lane
- Neighborhood Connector
- Bicycle Route
- Sidewalk
- Phase Addition

Existing Walk/Bike Connections

- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
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- Palmetto Trail
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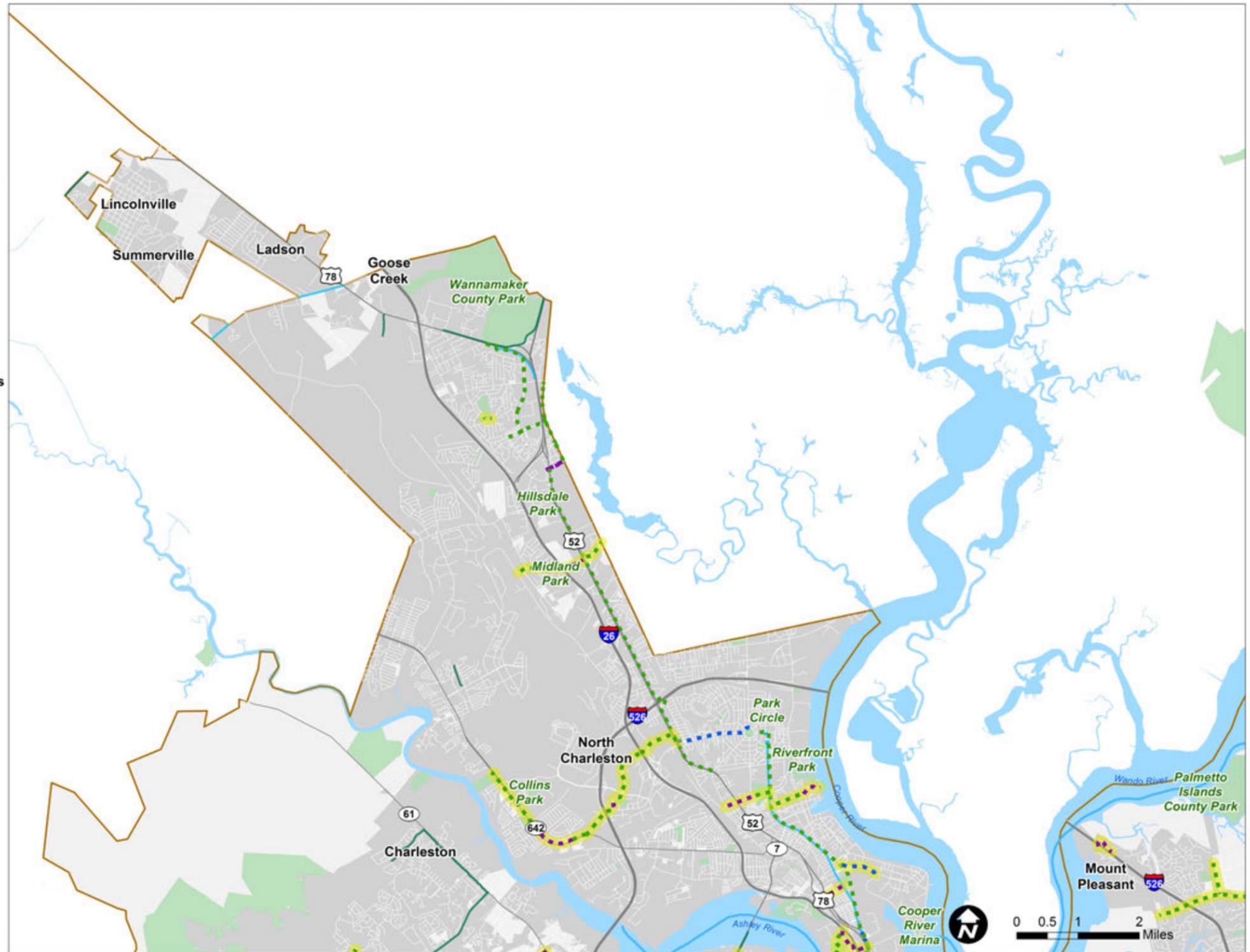




Table 4.5
Phase 2 Projects

UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
3	City of Charleston	Intersection of West Ashey Bikeway and St. Andrews Blvd.	-	-	Intersection Improvement	-	\$150,000
184	Sullivan's Island	41st Av.	Palm Blvd.	Isle of Palms Marina	Neighborhood Connector	0.50	\$26,378
280	City of Charleston	Alexander St.	Chapel St	Calhoun St	Paved Shoulders/Bike Lanes	0.22	\$16,450
442	Mount Pleasant Charleston County	Ashley River Rd.	Savage Rd	Gunn Ave	Separated Bike Lane	1.89	\$1,890,376
165	Isle of Palms	Ashley River Rd.	Wappoo Rd.	Savage Rd.	Shared Use Path	0.65	\$517,325
366	Charleston County	Awendaw powerline	Theodore Rd	Greenway Connection	Shared Use Path	3.28	\$2,622,389
393	Charleston County	Bainbridge Av.	Naval Air Base Rd	Tidewater Rd.	Separated Bike Lane	0.62	\$617,423
415	City of Charleston	Battery Island Dr.	Folly Rd.	Old Military Rd.	Neighborhood Connector	0.41	\$21,754
351	City of Charleston	Birdie Garrett St. to Discher St.	Doscher Ave	Discher St	Shared Use Path	0.07	\$55,819
275	City of Charleston	Brigade St.	I-26	Morrison Dr	Paved Shoulders/Bike Lanes	0.12	\$9,328
271	City of Charleston	Brittlebank Park to Hampton Park	Mark Murray Dr	Lookwood Blvd	Shared Use Path	0.89	\$712,651
241	City of Charleston	Centrepont Dr.	Mall Dr.	Coliseum Dr.	Shared Use Path	1.00	\$802,835
242	Charleston County City of Charleston	Centrepont Dr. Ext.	I-26	Mall Dr	Shared Use Path	0.13	\$106,643
272	Mount Pleasant Charleston County	Cleveland St.	Rutledge Ave	Mary Murray Dr	Paved Shoulders/Bike Lanes	0.08	\$6,223
284	City of Charleston	Dickens St./Charlestowne Dr.	Orange Grove Rd	Ingram Rd	Neighborhood Connector	0.54	\$28,442
195	City of Charleston	Discher St.	Meeting St	West of Summerville Ave	Neighborhood Connector	0.16	\$8,364

UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
357	City of Charleston Charleston County	Dorchester Rd.	Montague Av.	Dorchester Rd. Frontage Road	Shared Use Path	0.26	\$206,824
238	Mount Pleasant	Dorchester Rd.	Marilyn Dr.	Fellowship Rd.	Shared Use Path	0.55	\$437,720
239	North Charleston	Dorchester Road	Fellowship Rd.	Ashley River County Park (at Fire Station)	Shared Use Path	0.56	\$445,824
148	City of Charleston James Island	Dosher Av. to Austin Av.	I-26 Overpass	Hwy 78	Neighborhood Connector	0.77	\$40,569
113	Charleston County	Dupre Rd.	Tupelo Rd.	South Santee Rd.	Bicycle Route	3.91	\$21,972
297	North Charleston	East Estates Blvd.	Menola Ave	End East Estates Blvd	Neighborhood Connector	0.44	\$23,443
174	Charleston County	Edenvale Rd.	Bohicket Rd	River Rd	Bicycle Route	1.81	\$10,156
49	City of Charleston	Egypt Rd.	Long Point Rd	End of Egypt Rd	Shared Use Path	0.52	\$414,114
267	McClellanville	Elizabeth St.	Calhoun St	Market St	Neighborhood Connector	0.50	\$26,460
268	Charleston County	Elizabeth St.	John St	Calhoun St	Neighborhood Connector	0.20	\$10,654
61	Charleston County City of Charleston	Etiwan Av.	West of Melrose Dr	Dobbin Rd	Shared Use Path	0.21	\$166,135
62	City of Charleston Charleston County	Etiwan Ave, Savage Rd, Orleans Rd	West of Milrose Dr	Hazelwood Dr	Neighborhood Connector	2.05	\$108,754
384	City of Charleston Charleston County	Etiwan Pointe Dr.	Kearns Park	I-526	Neighborhood Connector	0.43	\$22,871
416	Charleston County	Fort Lamar Rd.	Secessionville Rd.	Fort Lamar Heritage Preserve	Neighborhood Connector	0.83	\$44,028
132	City of Charleston	Four Poles Park	South Rhett Av. @ Helm Av.	Spruill Av.	Shared Use Path	0.32	\$254,266



UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
363	City of Charleston	Gadsenville Rd.	Hwy 17	Seafood Rd	Neighborhood Connector	0.76	\$40,251
269	City of Charleston Charleston County	Greenway/Side Path between Hwy 78 and Hwy 52	Reid St.	Line St.	Shared Use Path	0.31	\$246,183
203	North Charleston	Greenway/Sidepath	Hunger St	Line St	Shared Use Path	0.48	\$386,389
206	Charleston County	Greenway/Sidepath	Austin Ave	Hagood Ave	Shared Use Path	0.66	\$524,954
404	Charleston County	Grove St.	Rutledge Av.	Lowcountry Low Line	Neighborhood Connector	0.34	\$17,822
279	City of Charleston Charleston County	Gunn Av. to 5th Av.	San Juan Ave	Sycamore Ave	Neighborhood Connector	0.78	\$41,212
270	Charleston County	Hagood Ave.	Moultrie St	Savannah Hwy	Neighborhood Connector	0.36	\$19,129
422	North Charleston Charleston County	Harbor View Rd	Madison Ave	Fort Johnson Rd	Separated Bike Lane	0.96	\$956,041
247	City of Charleston Charleston County	Helm Av.	South Rhett Av.	Meeting Street Rd.	Neighborhood Connector	0.46	\$24,356
128	City of Charleston	Heriot St.	Rutledge Av.	King St. Ext.	Paved Shoulders/Bike Lanes	0.19	\$14,104
273	City of Charleston Charleston County	Huger St.	King St	Hagood Ave	Neighborhood Connector	0.66	\$35,197
274	City of Charleston	Huger St.	King St	Morrison Dr	Paved Shoulders/Bike Lanes	0.52	\$38,930
362	City of Charleston	Hwy. 17	Lieben Rd	Gadsenville Rd	Shared Use Path	0.36	\$285,971
45	Charleston County	Hwy. 41	West of Hwy 17	North of Harpers Ferry Way	Shared Use Path	4.53	\$3,622,504
204	City of Charleston	I-26	Heriot St	San Souci St	Shared Use Path	0.40	\$316,388

UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
350	City of Charleston	Ingram Rd.	South of Southgate Dr	North of Old Town Plantation Rd	Neighborhood Connector	0.35	\$18,410
431	City of Charleston	Kit Hall Rd, Pinckney St	Lofton Ct	End Kitt Hall Rd	Neighborhood Connector	0.93	\$49,071
44	City of Charleston	Laurel Hill South Parcel (Wells Fargo)/Greenway/Sidepath	Gregorie Ferry Rd	Hwy 41	Shared Use Path	0.08	\$60,929
33	City of Charleston	Long Point Rd.	Hidden Blvd.	Hwy. 17	Shared Use Path	3.54	\$2,830,261
365	North Charleston Charleston County	Lucian St.	Beehive Rd	Theodore Rd	Neighborhood Connector	0.27	\$14,562
205	Charleston County	Magnolia Path	Hwy 78	Magnolia Bridge Path	Shared Use Path	1.50	\$1,200,747
167	North Charleston	Magnolia Rd.	Ashley River Rd	Savannah Hwy	Neighborhood Connector	1.25	\$66,494
353	Hollywood Ravenel	Mall Dr.	Rivers Av.	Centrepoint Dr.	Shared Use Path	0.69	\$548,032
161	City of Charleston Charleston County	Manor Blvd.	Amberly Rd.	Downing St.	Neighborhood Connector	0.75	\$39,732
66	City of Charleston Charleston County	Marginal St.	Marilyn Dr	Scarsdale Ave	Neighborhood Connector	0.77	\$40,819
295	City of Charleston	Melrose Dr	Savannah Hwy	Menola Ave	Neighborhood Connector	0.38	\$20,092
296	Mount Pleasant	Menola Av.	Melrose Dr	Trent St	Neighborhood Connector	0.24	\$12,457
187	Charleston County City of Charleston	Middle St.	Osceola Ave	Station 22 1/2 St	Paved Shoulders/Bike Lanes	1.34	\$100,541
433	Charleston County	Midland Park Rd.	South Aviation Av.	Railroad Av.	Shared Use Path	0.64	\$14,732
435	North Charleston	Midland Park Rd.	South Aviation Av.	Railroad Av.	Neighborhood Connector	0.28	\$187,196



UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
218	City of Charleston	Midland Park Rd.	South Aviation Av.	Railroad Av.	Shared Use Path	0.46	\$512,495
434	City of Charleston	Midland Park Rd.	South Aviation Av.	Railroad Av.	Separated Bike Lane	0.19	\$364,647
294	City of Charleston	Mutual Dr.	Savannah Hwy	West Ashley Greenway	Shared Use Path	0.20	\$158,571
214	City of Charleston Charleston County	Old Georgetown Rd.	Hwy 17	Rutledge Rd.	Bicycle Route	13.35	\$75,066
414	James Island	Old Military Rd.	Battery Island Dr.	Secessionville Rd.	Neighborhood Connector	0.56	\$29,644
347	County	Orange Grove Rd.	Sam Rittenberg Blvd.	Woodhaven Dr.	Shared Use Path	0.09	\$71,006
348	City of Charleston	Orange Grove Rd. to Southgate Dr.	Southgate Dr.	Orange Grove Rd.	Neighborhood Connector	0.44	\$23,462
355	City of Charleston Charleston County	Ozark St, Firestone Rd.	Coliseum Dr.	Montague Av.	Neighborhood Connector	0.24	\$12,562
182	North Charleston	Palm Blvd.	10th Ave.	14th Ave.	Separated Bike Lane	0.29	\$104,554
183	North Charleston	Palm Blvd.	14th Ave.	41st Ave.	Neighborhood Connector	1.97	\$14,453
186	City of Charleston	Palm Blvd.	41st Ave.	Sundial Cir.	Neighborhood Connector	0.27	\$285,886
185	North Charleston	Palmetto Dr.	Sundial Cir.	Raquet Club Rd.	Neighborhood Connector	0.93	\$49,165
345	City of Charleston	Parish Rd.	Saint Andrews Blvd	Savannah Hwy	Neighborhood Connector	0.24	\$12,872
312	City of Charleston	Planters Dr./ Woodland Rd.	Vespers Dr.	Ashley River Rd.	Shared Use Path	0.80	\$50,969
158	Charleston County	Planters Dr./ Woodland Rd.	Arthur Gaillard Ln.	Ashley River Rd.	Neighborhood Connector	0.96	\$642,934
308	Isle of Palms	Proximity Dr.	Ashley Gardens Blvd	Bees Ferry Rd.	Shared Use Path	0.93	\$744,657

UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
8	Kiawah Island	Railroad Av.	McLeod Mill Rd	Savannah Hwy	Shared Use Path	1.13	\$900,863
367	City of Charleston Charleston County	Randall Rd.	Old Georgetown Rd.	Hwy. 17	Bicycle Route	3.00	\$16,879
7	North Charleston	Rantowles Creek trestle	McLeod Mill Rd	Savannah Hwy	Shared Use Path	0.93	\$746,034
31	City of Charleston	Rifle Range Road to Hwy 17/ Greenway/Sidepath	Hwy 17	Rifle Range Rd	Shared Use Path	1.02	\$814,131
169	North Charleston Charleston County	River Rd.	Maybank Hwy	Betsy Kerrison Pkwy.	Paved Shoulders/Bike Lanes	12.02	\$901,130
315	City of Charleston	Riverland Dr.	Maybank Hwy	Grimball Rd	Shared Use Path	4.12	\$3,298,474
53	City of Charleston Charleston County	Riverland Terrace	Maybank Hwy	Riverland Dr.	Shared Use Path	1.04	\$835,243
403	Charleston County	Rutledge Av.	Cleveland St.	Grove St.	Neighborhood Connector	0.12	\$6,451
411	Charleston County City of Charleston	Rutledge Rd.	Hwy 17	Hampton Plantation State Historic Site	Bicycle Route	2.01	\$11,302
438	North Charleston	Saint Andrews Blvd.	Wesley Dr.	Ashley River Rd. / Old Towne Rd.	Shared Use Path	1.62	\$1,292,661
346	City of Charleston	Sam Rittenburg Frontage Rd.	Poston Rd	Orange Grove Rd	Neighborhood Connector	0.65	\$34,239
307	North Charleston	Sanders Rd. Path	Bees Ferry Rd	Wildcat Blvd	Shared Use Path	1.53	\$1,222,899
410	North Charleston	Santee Gun Club Rd.	South Santee Rd.	Santee Coastal Reserve (SCDNR)	Bicycle Route	3.06	\$17,212
364	City of Charleston	Seafood Rd, Beehive Rd	Gadsenville Rd	Lucian St	Neighborhood Connector	0.51	\$27,226
417	City of Charleston	Secessionville Rd.	Old Military Rd.	Camp Rd.	Neighborhood Connector	1.98	\$104,724
334	City of Charleston	Sewee Shell Ring	Greenway Connection	East of Doar Rd	Shared Use Path	1.39	\$1,112,952



UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
409	North Charleston	South Santee Rd.	Hwy. 17	Hwy. 17	Bicycle Route	4.20	\$23,653
349	Isle of Palms	Southgate Dr. to Ingram Rd.	Ingram Rd.	Weston Ave	Shared Use Path	0.12	\$96,754
264	City of Charleston	St. Philip St.	Line St.	Beaufain St	Paved Shoulders/Bike Lanes	1.09	\$81,583
188	City of Charleston	Stocker Dr.	Savannah Hwy	Beverly Rd	Neighborhood Connector	0.34	\$18,118
5	North Charleston	Stono River County Park	McLeod Mill Rd	Savannah Hwy	Shared Use Path	0.42	\$335,580
194	Isle of Palms	Stromboli Av.	Meeting St	Spruill Av.	Neighborhood Connector	0.35	\$18,558
277	City of Charleston Charleston County	Sycamore Ave.	5th Ave	Magnolia Rd	Neighborhood Connector	0.71	\$37,887
145	City of Charleston	Tidewater Rd, Least Tern Ln	Bainbridge Av.	Cooper River Marina	Bicycle Route	1.49	\$8,404
24	Mount Pleasant	Turnbull Av.	Spruill Av./ Lowcountry Low Line Ext.	N. Hobson Av.	Shared Use Path	0.58	\$18,188
372	Mount Pleasant Charleston County	Turnbull Av.	N. Hobson Av.	Riverfront Park	Neighborhood Connector	0.34	\$465,125
420	North Charleston Charleston County	Village Green Ln to Freshfields Dr	Freshfields Dr	Hedgerow Ln	Neighborhood Connector	0.19	\$10,145
354	City of Charleston	W. Montague Av.	Ozark St.	Airport Connector Road (Future)	Shared Use Path	0.39	\$312,603
336	City of Charleston Hollywood Charleston County	Waltham Rd. to Northwood Comm. Park	Waltham Rd	Northwood Community Park	Shared Use Path	0.13	\$105,528
80	North Charleston Charleston County	Wapoo Rd.	Hwy. 17	Ashley River Rd.	Shared Use Path	0.95	\$759,518
281	North Charleston	Wapoo Rd.	Hwy. 17	West Ashley Greenway	Shared Use Path	0.21	\$164,922

UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
288	North Charleston Charleston County	Wappoo Dr.	Wappoo Rd.	Ashley Hall Rd.	Neighborhood Connector	0.42	\$22,496
282	Charleston County	Wappoo Rd.	Ashley River Rd.	Savannah Hwy	Paved Shoulders/Bike Lanes	0.91	\$10,784
289	City of Charleston	Wappoo Rd.	Sam Rittenberg Blvd	Ashley River Rd.	Neighborhood Connector	0.20	\$67,950
407	City of Charleston	Washington St.	Chapel St.	Laurens St.	Shared Use Path	0.49	\$390,228
189	City of Charleston	Wesley Dr.	Beverly Rd	Windermere Blvd	Shared Use Path	0.05	\$40,523
60	City of Charleston	Wesley Dr.	Folly Rd.	St. Andrews Blvd.	Shared Use Path	0.29	\$228,506
356	Isle of Palms	West Montague Av.	Dorchester Rd.	Airport Connector Rd. (Planned)	Shared Use Path	0.20	\$160,459
6	City of Charleston	West of Stono River CP to Rantowles Creek	McLeod Mill Rd.	Savannah Hwy	Shared Use Path	0.21	\$168,215
43	North Charleston	Winnowing Way	Gregorie Ferry Rd.	Hwy 17	Shared Use Path	0.40	\$320,766
54	Mount Pleasant Charleston County	Yorktown Dr, Ashworth Ln	Camp Rd.	Turkey Pen Rd.	Neighborhood Connector	0.88	\$46,759



PHASE 3

COUNTY OVERVIEW

Key Features

- Supplements Phase 1 and Phase 2, extending in particular to less dense areas of the county
- Creates a connection to Francis Marion National Forest
- Includes segments that present some implementation challenges
- Densifies the greenway network in more urban areas

Network Recommendations

- Intersection Improvement
- Shared Use Path
- Separated Bike Lane
- Paved Shoulder/Bike Lane
- Neighborhood Connector
- Bicycle Route
- Sidewalk
- Phase Addition

Existing Walk/Bike Connections

- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
- East Coast Greenway
- Palmetto Trail
- Statewide Bike Tour Route
- Existing and Proposed Parks
- Existing and Proposed Parks

Roads

- Interstate
- US Highway
- SC Highway
- Local Streets (white)
- Charleston County
- County Boundaries
- Water Bodies



PHASE 3

CITY OF CHARLESTON
OVERVIEW

Network Recommendations

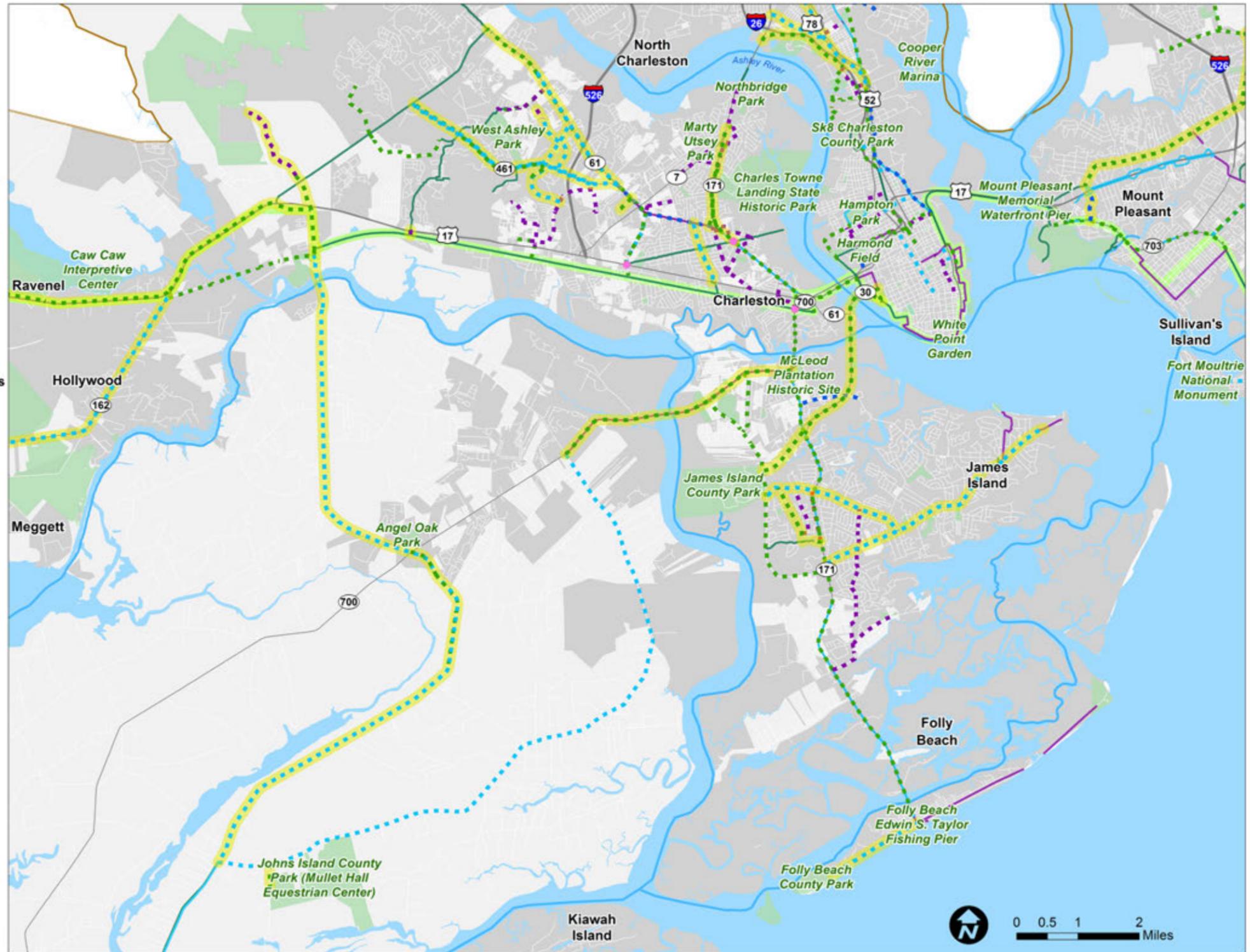
- Intersection Improvement
- Shared Use Path
- Separated Bike Lane
- Paved Shoulder/Bike Lane
- Neighborhood Connector
- Bicycle Route
- Sidewalk
- Phase Addition

Existing Walk/Bike Connections

- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
- East Coast Greenway
- Palmetto Trail
- Statewide Bike Tour Route
- Saltwater Trails
- Existing and Proposed Parks

Roads

- Interstate
- US Highway
- SC Highway
- Local Streets (white)
- Charleston County
- County Boundaries
- Water Bodies



PHASE 3

MOUNT PLEASANT OVERVIEW

Network Recommendations

- Intersection Improvement
- Shared Use Path
- Separated Bike Lane
- Paved Shoulder/Bike Lane
- Neighborhood Connector
- Bicycle Route
- Sidewalk
- Phase Addition

Existing Walk/Bike Connections

- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
- East Coast Greenway
- Palmetto Trail
- Statewide Bike Tour Route
- Saltwater Trails
- Existing and Proposed Parks

Roads

- Interstate
- US Highway
- SC Highway
- Local Streets (white)
- Charleston County
- County Boundaries
- Water Bodies



PHASE 3

NORTH CHARLESTON
OVERVIEW

Network Recommendations

- Intersection Improvement
- Shared Use Path
- Separated Bike Lane
- Paved Shoulder/Bike Lane
- Neighborhood Connector
- Bicycle Route
- Sidewalk
- Phase Addition

Existing Walk/Bike Connections

- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
- East Coast Greenway
- Palmetto Trail
- Statewide Bike Tour Route
- Saltwater Trails
- Existing and Proposed Parks

Roads

- Interstate
- US Highway
- SC Highway
- Local Streets (white)
- Charleston County
- County Boundaries
- Water Bodies

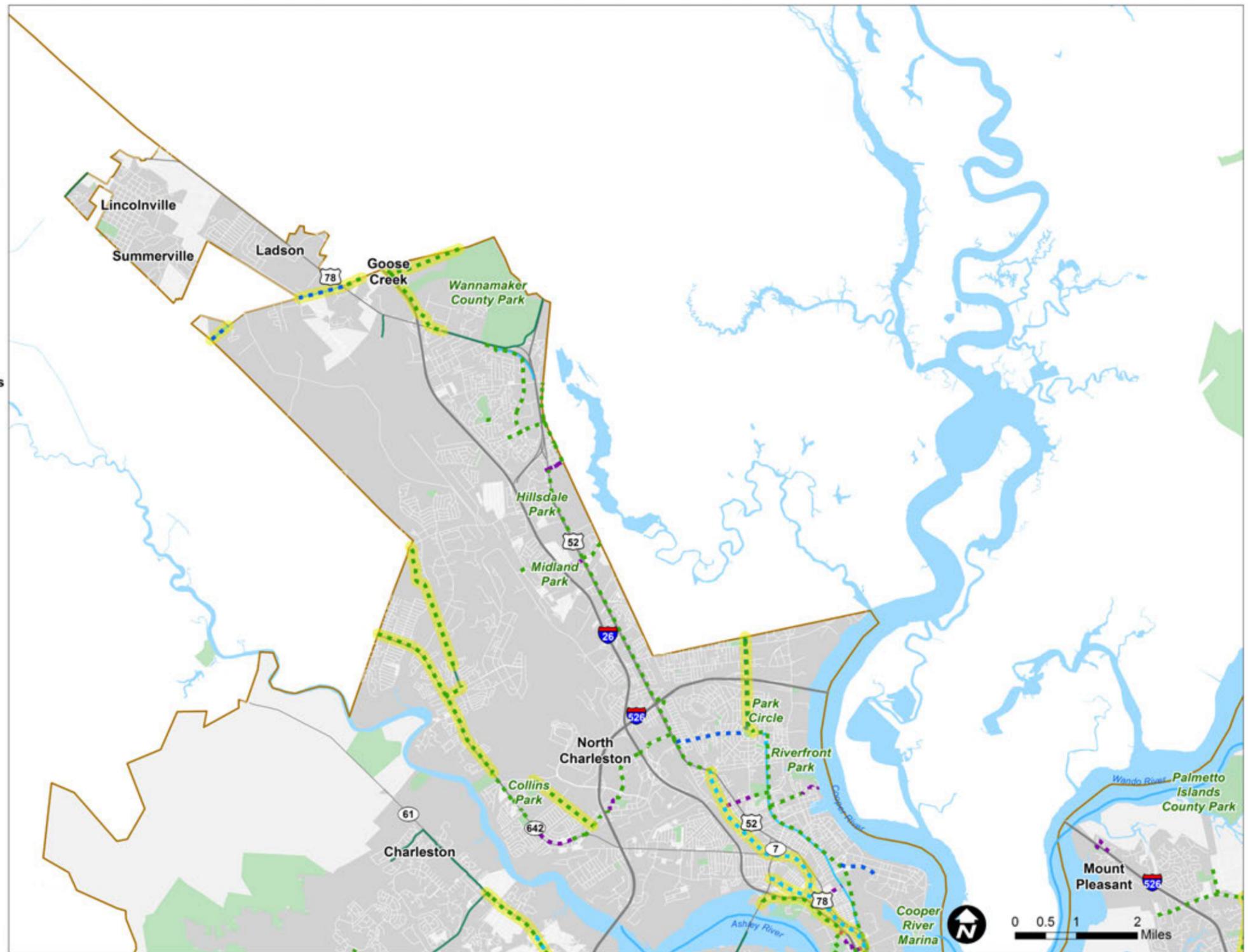




Table 4.6

Phase 3 Projects

UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
265	City of Charleston	4th St, Calhoun St	Courtenay Dr	Lockwood Dr	Shared Use Path	0.25	\$200,545
79	North Charleston Charleston County	Ancrum Rd	Hwy 78	East of Magnolia Cir	Shared Use Path	0.42	\$337,362
302	City of Charleston Charleston County	Arrow Wind Ter	Arrow Wind Ter	Essex Farms Dr	Shared Use Path	0.03	\$26,589
324	City of Charleston	Ashley Crossing Dr	Dogwood Rd	Frontage Rd	Paved Shoulders/Bike Lanes	0.98	\$73,849
316	City of Charleston James Island	Ashley River Rd.	Old Parsonage Rd	Savage Rd	Paved Shoulders/Bike Lanes	2.26	\$169,647
317	City of Charleston	Ashley River Rd.	Liberty Ct	Parsonage Rd	Shared Use Path	1.02	\$815,863
159	City of Charleston	Ashley River Rd.	North Lander's Ln.	Bees Ferry Rd.	Shared Use Path	0.09	\$68,231
160	City of Charleston	Ashley River Rd.	Old Parsonage Rd	Savage Rd	Shared Use Path	2.27	\$1,814,999
196	North Charleston City of Charleston	Azalea Dr.	Cosgrove Av.	King St. Ext.	Paved Shoulders/Bike Lanes	0.99	\$74,220
303	City of Charleston	Bairds Cove	Glenn McConnel Pkwy (crossing)	Glenn McConnel Pkwy (crossing)	Shared Use Path	0.04	\$33,641
55	City of Charleston	Bishop Gadson to George Griffith Blvd.	Camp Rd	George Griffith Blvd	Shared Use Path	0.97	\$776,726
227	City of Charleston	Bohicket Rd	Maybank Hwy	North of Kano St	Shared Use Path	0.25	\$200,884
342	Charleston County	Bohicket Rd.	Edings Ct	N Edenvale Rd	Shared Use Path	1.37	\$1,094,093
226	Charleston County	Bohicket Rd.	East of Maybank Hwy	Edings Ct	Shared Use Path	0.66	\$525,870
262	James Island Ladson	Camp Rd.	Riverland Dr	Fort Johnson Rd	Paved Shoulders/Bike Lanes	2.36	\$177,333

UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
99	James Island	Camp Road	Secessionville Rd.	Riverland Dr.	Sidewalk	1.66	\$2,244,000
56	City of Charleston	Canal/George Griffith Blvd	Walmart	Folly Rd.	Shared Use Path	0.13	\$101,135
400	Mount Pleasant Outside of County	Carolina Park Blvd.	Hwy. 17	Warrior Way	Shared Use Path	0.20	\$163,289
278	City of Charleston	Carriage Ln.	Old Towne Rd	Ashley River Rd	Shared Use Path	0.18	\$147,743
10	Ravenel	Caw Caw Int. Center/Svannah Hwy	Dungannon Plantation	K W M Ln	Shared Use Path	0.94	\$748,734
197	Outside of County	College Park Rd	Gateway Dr	Ladson Rd	Paved Shoulders/Bike Lanes	1.03	\$77,520
311	City of Charleston	Croghan Landing Dr.	Savannah Hwy	West Ashley Greenway	Neighborhood Connector	0.09	\$4,549
310	City of Charleston	Croghan Landing Dr.	Savannah Hwy	West Ashley Greenway	Shared Use Path	0.08	\$67,508
136	North Charleston	Dorchester Rd.	Club Course Dr	SE of Great Oak Dr	Shared Use Path	5.08	\$4,060,621
408	Charleston County	Dupre Rd.	Pinckney St.	Tupelo Rd.	Bicycle Route	2.17	\$12,229
150	North Charleston	Excellence Way/Greenway/ Sidepath	Bucclub Blvd	Gateway Dr	Shared Use Path	1.32	\$1,059,805
399	Mount Pleasant	Faison Rd.	Park Avenue Blvd.	Carolina Park Fields	Shared Use Path	1.19	\$948,673
260	James Island Outside of County Charleston County	Fort Johnson Rd.	Folly Rd.	Harbor View Rd.	Paved Shoulders/Bike Lanes	3.50	\$262,531
261	James Island	Fort Johnson Rd.	Harbor View Rd.	Fort Johnson (SCDNR)	Paved Shoulders/Bike Lanes	0.83	\$61,926
329	City of Charleston	Glenn McConnell (east)	Bees Ferry Rd	Magwood Dr	Paved Shoulders/Bike Lanes	2.50	\$187,332



UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
328	City of Charleston	Glenn McConnell (west)	Bees Ferry Rd	Magwood Dr	Paved Shoulders/Bike Lanes	2.49	\$186,664
306	City of Charleston	Glenn McConnell Pkwy	Magwood Dr	Mary Ader Ave	Shared Use Path	1.59	\$1,273,776
360	City of Charleston	Glenn McConnell Pkwy.	Bees Ferry Rd	Mary Ader Ave	Shared Use Path	0.90	\$716,643
149	North Charleston Goose Creek	Greenway/Sidepath	Gateway Dr	St James Ave	Shared Use Path	1.70	\$1,358,228
292	City of Charleston	Henry Tecklenburg Dr.	Savage Rd	Magwood Dr	Paved Shoulders/Bike Lanes	0.93	\$69,980
304	City of Charleston Charleston County	Henry Tecklenburg Dr.	Magwood Dr	Intersection with Greenway/ Sidepath	Shared Use Path	0.25	\$200,840
237	North Charleston	Hill Blvd.	Dorchester Rd	South of Jackson Dr	Shared Use Path	0.36	\$290,063
178	Mount Pleasant	Houston Northcutt	Johnnie Dodds Blvd. (east frontage)	Coleman Blvd.	Separated Bike Lane	0.46	\$456,134
259	Mount Pleasant	Hubbell Dr. to Carolina Park fields	Hubbell Dr	Recreation Way	Shared Use Path	0.39	\$309,997
175	Mount Pleasant Charleston County	Hungryneck Blvd	Hazan Ct	Isle of Palms Connector	Shared Use Path	0.71	\$564,711
394	Charleston County	Hungryneck Blvd.	Lacannon Ln.	Markets at Oakland	Shared Use Path	0.13	\$100,892
39	Mount Pleasant Hollywood	Hungryneck Extension	Six Mile Rd	Rifle Range Rd to Hwy 17 Greenway	Shared Use Path	0.32	\$254,563
151	Charleston County City of Charleston	Hunt Club Run	Bear Swamp Rd	Bees Ferry Rd	Neighborhood Connector	1.41	\$74,702
16	Charleston County	Hunt Club Run	Bees Ferry Rd	White Tail Path	Shared Use Path	0.12	\$98,809
114	Charleston County	Hwy 17	Rutledge Rd	County Line across bridge	Shared Use Path	1.33	\$1,066,500

UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
125	Hollywood North Charleston	Hwy. 162	Hwy. 165	Hwy. 17	Paved Shoulders/Bike Lanes	6.68	\$501,068
413	Charleston County	Hwy. 17	River Rd.	South Santee Rd.	Shared Use Path	0.73	\$583,350
9	Ravenel	Hwy. 17/Savannah Hwy	Caw Caw Int. Center	Hwy 165	Shared Use Path	2.04	\$1,635,614
147	North Charleston	I-26, Baker Hospital Site Path	Sam Rittenberg Blvd	Austin Ave	Shared Use Path	1.56	\$1,245,378
152	City of Charleston Charleston County	I-526 Ext.	Riverland Dr.	Folly Rd.	Shared Use Path	0.97	\$772,511
263	City of Charleston Charleston County	James Island Connector	Folly Rd	Lockwood Dr	Shared Use Path	2.91	\$2,330,942
444	Outside of County City of Charleston	Ladson Rd	Dorchester Rd	Hwy 78	Separated Bike Lane	4.65	\$4,653,877
266	City of Charleston	Lockwood Dr.	Ashley Riverwalk	James Island Connector Underpath Walkway	Shared Use Path	0.19	\$150,171
322	City of Charleston	Magwood Dr.	Ashley River Rd	Glenn McConnel Pkwy	Paved Shoulders/Bike Lanes	0.77	\$57,969
305	City of Charleston	Magwood Dr.	North of Glenn MConnell Pkwy	Henry Tecklenburg Dr	Shared Use Path	0.10	\$81,159
418	City of Charleston	Main Rd.	River Rd.	McLeod Mill Rd.	Paved Shoulders/Bike Lanes	0.87	\$65,157
17	Charleston County City of Charleston	Main Rd.	McLeod Mill Rd.	Bees Ferry Rd.	Shared Use Path	1.15	\$921,539
170	Charleston County	Main Rd./ Bohicket Rd.	River Rd	River Rd	Paved Shoulders/Bike Lanes	12.16	\$912,062
37	Mount Pleasant	Mathis Ferry Rd.	Hwy 17	Wingo Way	Shared Use Path	3.49	\$2,792,592
447	City of Charleston	Maybank Hwy.	River Rd	Picard Way	Shared Use Path	3.41	\$2,726,779



UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
453	City of Charleston North Charleston	Maybank Hwy.	River Rd	Picard Way	Shared Use Path	0.77	\$612,310
18	City of Charleston	McLeod Mill Rd.	Stono River County Park	West Ashley Greenway	Shared Use Path	0.12	\$93,836
207	North Charleston	Meeting Street Rd.	Durant Ave	Discher St	Paved Shoulders/Bike Lanes	4.08	\$305,694
199	North Charleston	Montague Av. to Airport Connector Rd.	Michaux Pkwy	Montague Ave	Shared Use Path	1.23	\$984,433
421	Charleston County	Mullet Hall Rd	River Rd	Reggie Rd	Shared Use Path	0.38	\$302,521
198	Outside of County	MWV Park to Hanahan HS	North Rhett Av. @ MWV Park	Bishop Rd.	Shared Use Path	1.73	\$1,387,832
424	Outside of County	North Rhett Av.	Park Circle	Redbank Rd.	Separated Bike Lane	2.62	\$2,618,308
320	Charleston County	Old Charleston Rd. Path	Savannah Hwy	Main Rd	Shared Use Path	0.61	\$488,046
181	City of Charleston	Old Folly Rd.	Maybank Hwy	Folly Rd	Neighborhood Connector	0.12	\$6,148
276	City of Charleston	Old Towne Rd.	Orange Grove Rd	Gunn Ave	Shared Use Path	1.72	\$1,375,673
111	City of Charleston Charleston County	Old Towne Rd.	Old Town Plantation Rd	West of Sycamore Ave	Shared Use Path	1.33	\$1,067,664
32	Charleston County	Palmetto Fort / Oyster Point	Rifle Range Rd	end	Shared Use Path	1.31	\$1,046,749
258	Mount Pleasant	Park Avenue Blvd.	Carolina Park Blvd	Park West Blvd	Shared Use Path	1.37	\$1,092,445
28	North Charleston McClellanville	Park Circle to MWV Park/ N Rehtt Ave	Bentley Rd	Montague Ave	Shared Use Path	1.59	\$1,268,969
398	Mount Pleasant City of Charleston	Park West Blvd.	Hwy. 17	Park West Blvd. trail	Shared Use Path	0.20	\$159,900
325	Charleston County	Paul Cantrell Blvd.	Tobias Gadson Blvd	Saint Andrews Blvd	Paved Shoulders/Bike Lanes	0.42	\$31,478

UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
327	City of Charleston	Paul Cantrell Blvd.	Magwood Dr	Tobias Gadson Blvd	Paved Shoulders/Bike Lanes	0.86	\$64,711
326	City of Charleston	Paul Cantrell Blvd. (west)	Magwood Dr	Tobias Gadson Blvd	Paved Shoulders/Bike Lanes	0.86	\$64,615
405	City of Charleston Awendaw	Playground Rd.	Ashley River Rd.	West Ashley Bikeway	Paved Shoulders/Bike Lanes	0.43	\$32,023
412	Charleston County	River Rd.	Hwy. 17 (at Town of McClellanville)	Hwy. 17	Bicycle Route	2.43	\$13,647
63	Hollywood Mount Pleasant Ravenel	Savannah Highway	East of Jacobs Point Blvd	East of Bees Ferry Rd	Shared Use Path	2.38	\$1,900,857
235	North Charleston	Spur St. to Ashley Phosphate Rd.	Ashley Phosphate Rd	Supr St	Shared Use Path	2.13	\$1,706,584
323	City of Charleston	Sunnyvale Rd.	North of Holliday St	Dogwood Rd	Neighborhood Connector	0.17	\$9,189
395	Charleston County	Sweetgrass Basket Pkwy.	Markets at Oakland	Palmetto Plantation Blvd.	Shared Use Path	0.16	\$126,552
332	Charleston County	USFS	Hwy. 17 @ Sewee Rd.	Hwy. 17 @ Old Georgetown Rd.	Shared Use Path	15.14	\$12,111,729
42	Mount Pleasant	Venning Rd	Hwy 17	Hungryneck Blvd	Shared Use Path	0.31	\$244,133
50	Charleston County	Venning Rd.	Hungryneck Blvd.	Rifle Range Rd.	Shared Use Path	0.58	\$466,730
166	City of Charleston	Wallace School Rd.	Ashley River Rd.	Wallace School	Shared Use Path	0.26	\$208,571
401	Mount Pleasant	Wando High School	Park Avenue Blvd.	Wando High School	Shared Use Path	0.36	\$290,914
101	Folly Beach	West Ashley Av.	Center St.	Folly Beach County Park	Paved Shoulders/Bike Lanes	1.63	\$122,339
341	City of Charleston	West Oak Forest Dr.	Savannah Hwy	South of White Dr	Paved Shoulders/Bike Lanes	0.59	\$44,259

PHASE 4

COUNTY OVERVIEW

Key Features

- Further builds out the network in less dense areas especially around Hollywood, Ravenel, McClellanville, and Mount Pleasant
- Creates an important connection to Edisto Beach State Park
- Includes segments that present some implementation challenges
- Densifies the greenway network in more urban areas

Network Recommendations

- Intersection Improvement
- Shared Use Path
- Separated Bike Lane
- Paved Shoulder/Bike Lane
- Neighborhood Connector
- Bicycle Route
- Sidewalk
- Phase Addition

Existing Walk/Bike Connections

- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
- East Coast Greenway
- Palmetto Trail
- Statewide Bike Tour Route
- Existing and Proposed Parks
- Existing and Proposed Parks

Roads

- Interstate
- US Highway
- SC Highway
- Local Streets (white)
- Charleston County
- County Boundaries
- Water Bodies



PHASE 4

CITY OF CHARLESTON
OVERVIEW

Network Recommendations

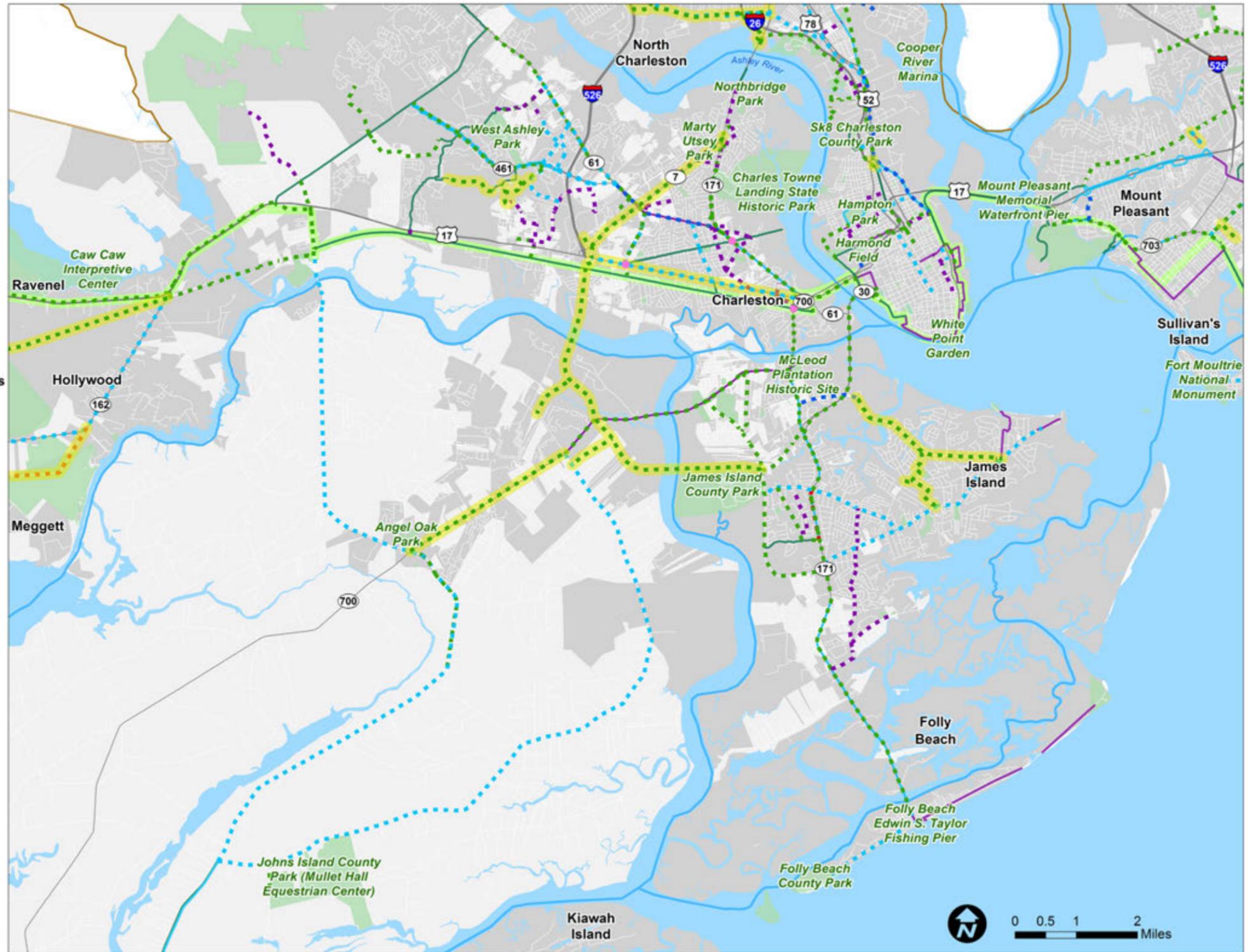
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- Sidewalk
- Phase Addition

Existing Walk/Bike Connections

- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
- East Coast Greenway
- Palmetto Trail
- Statewide Bike Tour Route
- Saltwater Trails
- Existing and Proposed Parks

Roads

- Interstate
- US Highway
- SC Highway
- Local Streets (white)
- Charleston County
- County Boundaries
- Water Bodies



PHASE 4

MOUNT PLEASANT OVERVIEW

Network Recommendations

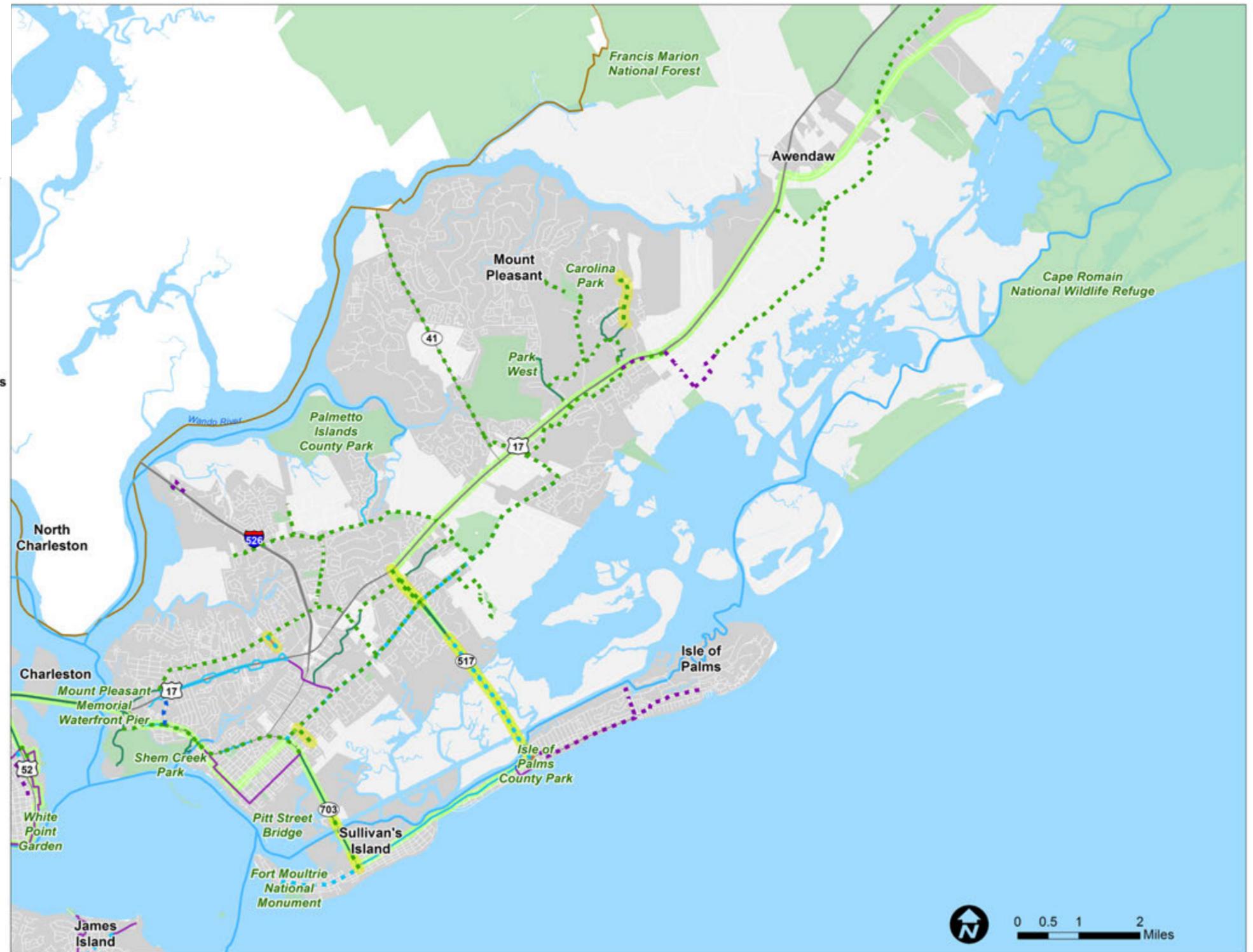
- Intersection Improvement
- Shared Use Path
- Separated Bike Lane
- Paved Shoulder/Bike Lane
- Neighborhood Connector
- Bicycle Route
- Sidewalk
- Phase Addition

Existing Walk/Bike Connections

- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
- East Coast Greenway
- Palmetto Trail
- Statewide Bike Tour Route
- Saltwater Trails
- Existing and Proposed Parks

Roads

- Interstate
- US Highway
- SC Highway
- Local Streets (white)
- Charleston County
- County Boundaries
- Water Bodies



PHASE 4

NORTH CHARLESTON
OVERVIEW

Network Recommendations

- Intersection Improvement
- Shared Use Path
- Separated Bike Lane
- Paved Shoulder/Bike Lane
- Neighborhood Connector
- Bicycle Route
- Sidewalk
- Phase Addition

Existing Walk/Bike Connections

- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
- East Coast Greenway
- Palmetto Trail
- Statewide Bike Tour Route
- Saltwater Trails
- Existing and Proposed Parks

Roads

- Interstate
- US Highway
- SC Highway
- Local Streets (white)
- Charleston County
- County Boundaries
- Water Bodies

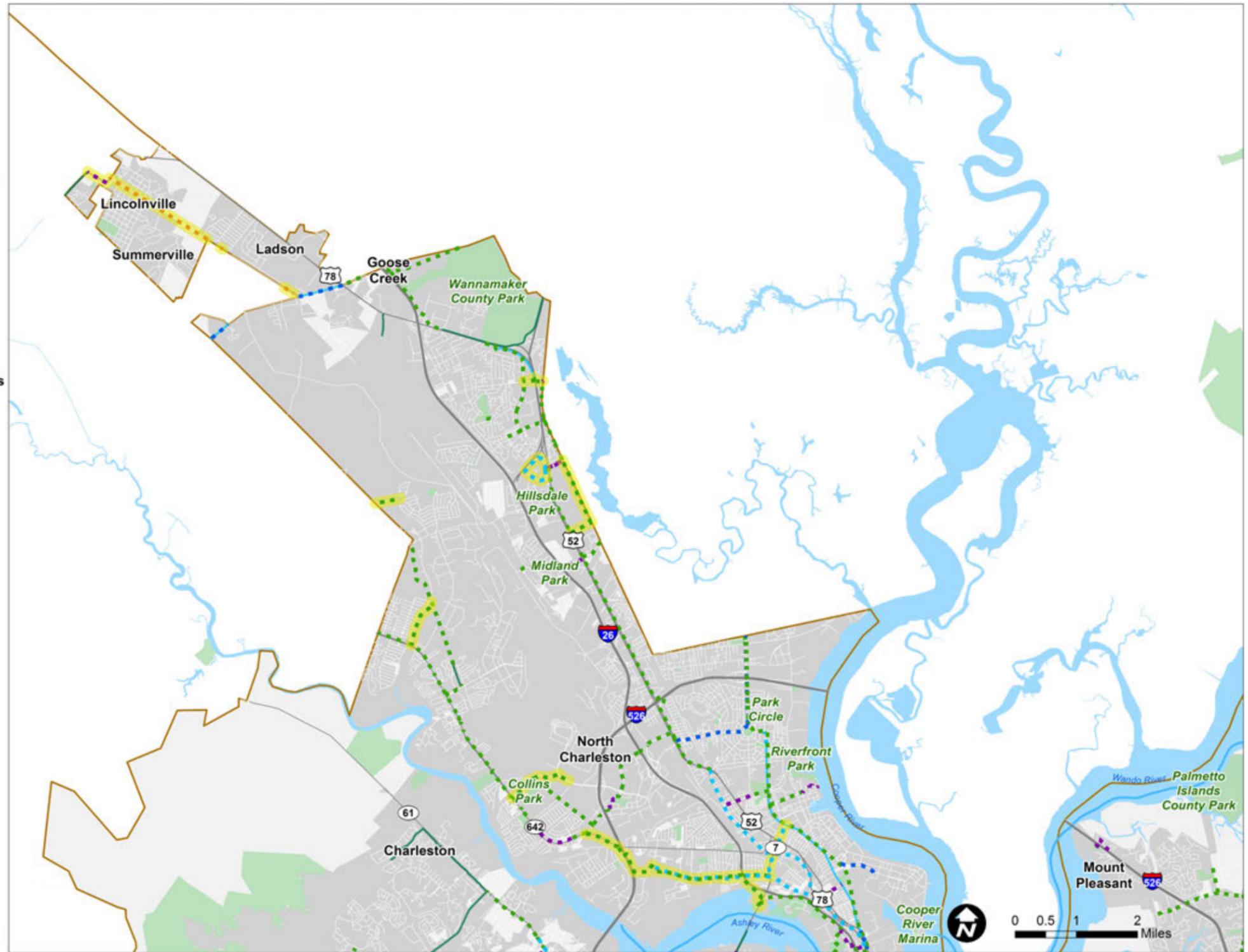




Table 4.7
Phase 4 Projects

UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
285	City of Charleston Charleston County	Ashley Hall Rd.	Raoul Wallenberg Blvd	Ashley River Rd	Paved Shoulders/Bike Lanes	1.31	\$98,618
65	North Charleston	Azalea Dr, Harvey Ave	Leeds Ave	Cosgrove Ave	Shared Use Path	2.32	\$1,857,733
130	North Charleston	Azalea Dr, Woodlawn Ave	South of Harvey Ave	Cosgrove Ave	Shared Use Path	0.57	\$457,462
193	North Charleston	Azalea Dr.	Leeds Ave	Sam Rittenberg Blvd	Paved Shoulders/Bike Lanes	1.98	\$148,717
131	North Charleston	Azalea Dr. to Dorchester Rd.	Dorsey Ave	Azalea Dr	Shared Use Path	0.93	\$743,252
252	Outside of County	Basillica Ave	Otranto Blvd	South of Monte Sano Dr	Neighborhood Connector	0.78	\$41,527
27	Sullivan's Island Mount Pleasant	Ben Sawyer Bridge	Bridge	Bridge	Shared Use Path	0.25	\$199,857
94	Charleston County	Botany Bay Rd.	Hwy. 174	Botany Bay WMA	Bicycle Route	1.48	\$8,320
450	Mount Pleasant	Bowman Rd.	Mathis Ferry Rd	Johnnie Dobbs Blvd	Paved Shoulders/Bike Lanes	0.24	\$18,210
448	Mount Pleasant	Bowman Rd.	Johnnie Dodds Blvd	Rifle Range Rd	Separated Bike Lane	0.97	\$967,141
449	Mount Pleasant	Bowman Rd.	Johnnie Dobbs Blvd	Johnnie Dobbs Blvd	Separated Bike Lane	0.14	\$137,889
427	Mount Pleasant	Bowman Rd.	Mathis Ferry Rd	Johnnie Dobbs Blvd	Separated Bike Lane	0.14	\$135,577
225	Charleston County City of Charleston	Brownswood Rd.	River Rd.	Maybank Hwy.	Paved Shoulders/Bike Lanes	3.98	\$298,506
51	Mount Pleasant	Center Street to Rifle Range Rd.	Rifle Range Rd	Center St Ext	Shared Use Path	0.34	\$268,227
135	North Charleston	Cosgrove Av.	Azalea Dr.	Spruill Av.	Paved Shoulders/Bike Lanes	0.92	\$68,876
46	Mount Pleasant	Darrell Creek Trail	Hwy. 17/Park Avenue Blvd	Commonwealth Rd.	Shared Use Path	0.89	\$715,257

UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
116	Hollywood	Dixie Plantation Rd.	Hwy 162	Hwy162	Bicycle Route	4.04	\$22,701
217	North Charleston	Dorchester Rd.	I-526	W. Montague Rd.	Shared Use Path	0.60	\$476,165
376	Charleston County	East Richardson Av.	Owens Dr.	Sawmill Branch	Neighborhood Connector	0.36	\$19,150
119	Ravenel	Ellington School Rd.	Hwy. 165	Dead End	Bicycle Route	2.07	\$11,663
139	Ravenel	Ellington School Rd. extension	Savannah Hwy	end Ellington School Rd	Shared Use Path	0.93	\$745,784
301	City of Charleston	Essex Farms Connection	Greenway connection	Rutherford Way	Shared Use Path	0.17	\$133,903
117	Meggett Charleston County	Ethel P.O. Rd.	Hwy. 165	Megget County Park	Bicycle Route	2.55	\$14,368
216	North Charleston	Fellowship Rd.	Dorchester Rd	Michaux Pkwy	Shared Use Path	0.49	\$395,679
313	City of Charleston James Island	Fort Johnson to Harborview Rd.	Harborview Rd	Fort Johnson Rd	Shared Use Path	1.28	\$1,027,240
309	City of Charleston	Future Essex Farms Path	Rutherford Way	Floral bank Ln	Shared Use Path	0.80	\$640,622
298	City of Charleston	Greenway/Sidepath	Henry Tecklenburg Dr	End East Estates Blvd	Shared Use Path	0.77	\$615,692
23	North Charleston	Greenway/Sidepath	Eagle Landing Blvd	Mabeline Rd	Shared Use Path	1.43	\$1,146,326
202	City of Charleston	Greenway/Sidepath	Mount Pleasant St	I-26 Overpass	Shared Use Path	0.12	\$94,694
300	City of Charleston	Greenway/Sidepath ext	Greenway connection	Essex Farms Dr	Shared Use Path	0.14	\$113,101
102	City of Charleston James Island	Harbor View Rd	Madison Ave	Fort Johnson Rd	Shared Use Path	2.78	\$2,224,047
121	Hollywood	Hwy. 162	Hwy. 164	Hwy. 165	Paved Shoulders/Bike Lanes	4.20	\$315,156



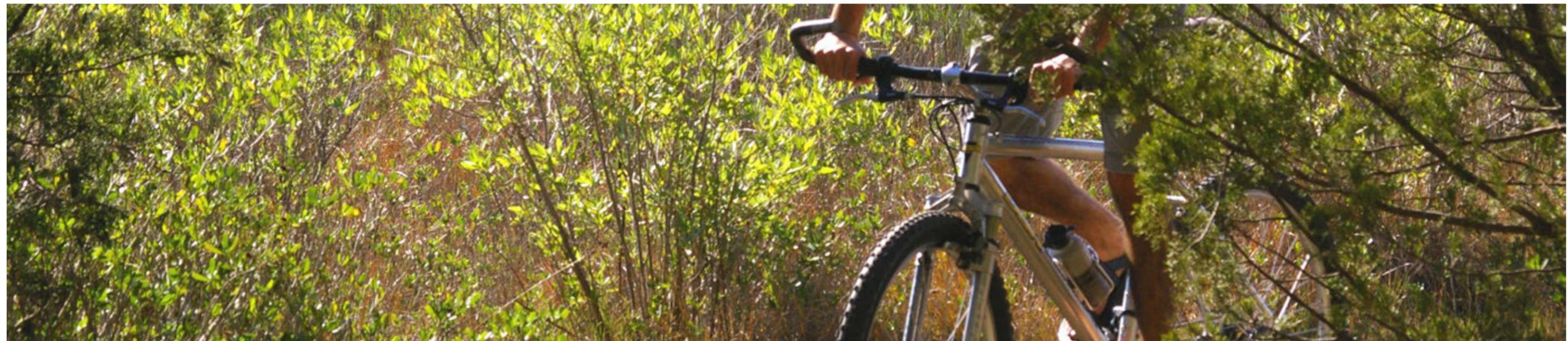
UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
134	Meggett	Hwy. 165	Toogoodoo Rd.	Ethel P.O. Rd.	Bicycle Route	1.07	\$6,000
138	Outside of County Charleston County Ravenel	Hwy. 165	Drayton St.	Branch Creek (past Hwy. 642)	Shared Use Path	17.49	\$13,988,830
15	Ravenel	Hwy. 17/Savannah Hwy	Hwy. 165	Caw Caw Int. Center/ K W M Ln	Shared Use Path	2.86	\$2,290,156
91	Charleston County	Hwy. 174	Toogoodoo Rd.	Palmetto Rd.	Paved Shoulders/Bike Lanes	12.94	\$970,215
122	Charleston County Hollywood	Hwy. 174	Old Jacksonboro Rd.	Toogoodoo Rd.	Paved Shoulders/Bike Lanes	4.89	\$367,054
157	City of Charleston Charleston County	I-526 Ext.	Hwy. 17	Riverland Dr.	Shared Use Path	5.78	\$4,625,362
164	City of Charleston Charleston County	I-526 to River Rd., north	I-526 Ext	River Rd	Shared Use Path	0.79	\$633,985
163	Charleston County	I-526 to River Rd., south	I-526 Ext	River Rd	Shared Use Path	0.79	\$628,994
30	Mount Pleasant Isle of Palms	IOP Connector	Parkfront Dr	Palm Blvd	Paved Shoulders/Bike Lanes	2.38	\$178,667
41	Mount Pleasant	IOP Connector	Hungryneck Blvd	Rifle Range Rd	Shared Use Path	0.51	\$404,706
40	Mount Pleasant	IOP Connector	Hwy 17	Rifle Range Rd	Shared Use Path	0.73	\$587,590
402	City of Charleston	James Island Recreation Complex	Dills Bluff Rd.	James Island Recreation Complex	Shared Use Path	0.14	\$115,278
432	McClellanville	Kit Hall Rd, Pinckney St	Lofton Ct	End Kitt Hall Rd	Shared Use Path	0.63	\$504,867
215	McClellanville	Kit Hall Rd, Pinckney St	Lofton Ct	End Kitt Hall Rd	Shared Use Path	0.96	\$765,909

UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
223	Ladson Lincolville Charleston County	Lincolville Rd.	Ladson Rd.	Owens Dr.	Bicycle Route	3.63	\$20,399
236	North Charleston	Lowell Dr.	Alaska Ave	End Lowell Dr	Shared Use Path	0.81	\$645,988
2	North Charleston	Mabeline Rd.	Rivers Ave.	Railroad Av.	Shared Use Path	0.39	\$311,033
180	City of Charleston Charleston County	Maybank Hwy.	River Rd	Main Rd	Shared Use Path	2.98	\$2,387,543
200	North Charleston	Michaux Parkway to Boeing	Collins Park	International Blvd	Shared Use Path	0.65	\$516,591
208	North Charleston	Northwoods Blvd	Northwoods Blvd (loop)	Northwoods Blvd (loop)	Paved Shoulders/Bike Lanes	1.09	\$81,949
92	Charleston County	Old Bridge R/W	Hwy. 174	Dawhoo Boat Landing	Bicycle Route	0.38	\$2,128
13	Charleston County	Old Jacksonboro Rd.	Savannah Hwy	Savannah Hwy	Paved Shoulders/Bike Lanes	4.44	\$333,351
11	Ravenel Charleston County	Old Jacksonboro Rd.	Savannah Hwy	Savannah Hwy	Paved Shoulders/Bike Lanes	6.51	\$488,204
12	Charleston County	Old Jacksonboro Rd. Connector/Savannah Hwy	Old Jacksonboro Rd	Old Jacksonboro Rd	Shared Use Path	0.22	\$179,944
283	City of Charleston	Orange Grove Rd.	Old Towne Rd	Ashley Hall Rd	Paved Shoulders/Bike Lanes	1.27	\$95,523
337	North Charleston	Otranto	Antler Dr	County Line	Shared Use Path	0.23	\$182,250
437	North Charleston	Otranto	Antler Dr	County Line	Shared Use Path	0.10	\$83,120
253	North Charleston	Otranto to University Blvd.	University Blvd	Otranto Rd	Shared Use Path	0.05	\$40,906
377	Charleston County	Owens Dr.	Lincolville Rd.	East Richardson Av.	Neighborhood Connector	0.10	\$5,066



UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
219	North Charleston Outside of County	Peppercorn Ln. to Dorchester Rd./Greenway/Sidepath	Peppercorn Ln	Dorchester Rd	Shared Use Path	3.24	\$2,593,446
93	Charleston County	Pine Landing Road	Hwy. 174	Canoe/Kayak Launch	Bicycle Route	3.09	\$17,372
286	City of Charleston	Raoul Wallenburg Blvd.	Ashley Hall Rd	Ashley River Rd	Paved Shoulders/Bike Lanes	0.73	\$54,750
64	City of Charleston Charleston County	Sam Rittenberg Blvd	North Bridge Dr	Skylark Rd	Shared Use Path	1.81	\$1,450,427
425	City of Charleston Charleston County	Sam Rittenberg Blvd	North Bridge Dr	Skylark Rd	Shared Use Path	1.01	\$809,713
162	City of Charleston	Sam Rittenburg Blvd.	Downing St.	Ashley Hall Rd.	Shared Use Path	0.12	\$93,833
190	City of Charleston Charleston County	Savannah Hwy.	Skylark Dr	Wesley Dr	Paved Shoulders/Bike Lanes	3.39	\$254,147
14	Charleston County	Savannah Hwy.	Old Jacksonboro Rd	County Line	Shared Use Path	3.44	\$2,751,154
191	City of Charleston Charleston County	Savannah Hwy. to WAG	Savannah Hwy	East Shore Ln	Shared Use Path	0.23	\$186,391
100	City of Charleston	Secessionville Rd.	Camp Rd.	Fort Johnson Rd.	Sidewalk	0.66	\$924,000
335	Charleston County Awendaw	Sewee Shell Ring	Forest Service Rd.	Sewee Shell Ring/ Awendaw County Park	Shared Use Path	0.70	\$558,984
192	City of Charleston	Skylark Rd.	Savannah Hwy	South Park Cir	Shared Use Path	0.40	\$319,348
29	Sullivan's Island	Station 22 1/2	Ben Sawyer Causeway	Middle St.	Shared Use Path	0.24	\$195,791
115	Meggett Charleston County	Toogoodoo Rd	Hwy 174	Oakville Rd	Shared Use Path	1.41	\$1,126,742
95	Charleston County Meggett	Toogoodoo Rd Connector/ Greenway/Sidepath	Toogoodoo Rd	Toogoodoo Rd	Shared Use Path	0.90	\$717,683

UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
120	Meggett Hollywood	Town of Hollywood park	Intersection of Hwy. 162/164	Toogoodoo Rd.	Shared Use Path	1.61	\$1,284,708
124	Ravenel Hollywood	WAG Extension	Hwy. 165	Hwy. 162	Shared Use Path	5.42	\$4,336,191
127	Hollywood Meggett	West County Connector/Hwy 165, Town Council Dr	Church Flats Rd	Drayton St	Shared Use Path	3.68	\$2,945,864



PHASE 5

COUNTY OVERVIEW

Key Features

- Completes the countywide greenway network
- Densifies the greenway network in urban and suburban areas
- Creates connections at the edges of Charleston County to surrounding regions and destinations

Network Recommendations

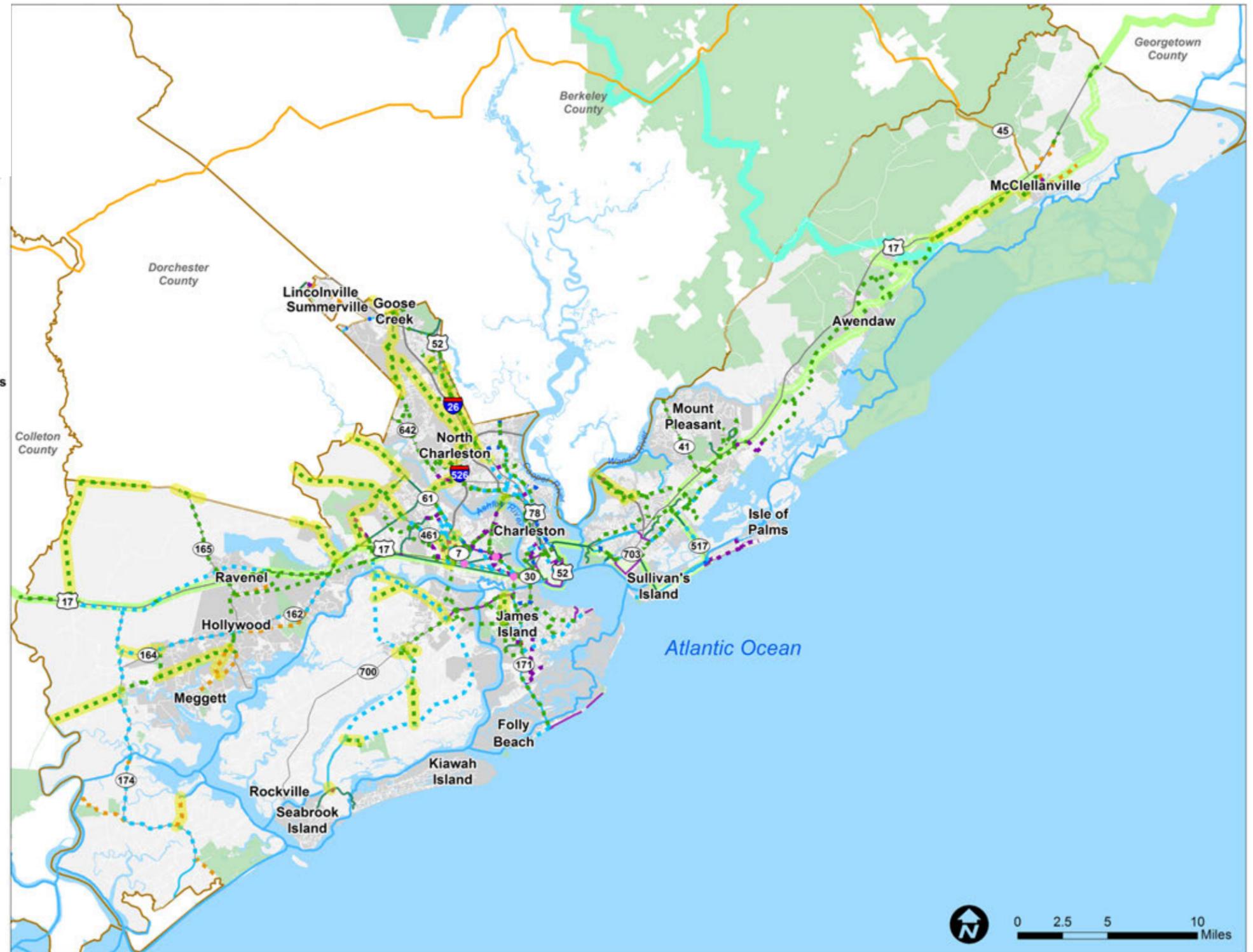
- Intersection Improvement
- Shared Use Path
- Separated Bike Lane
- Paved Shoulder/Bike Lane
- Neighborhood Connector
- Bicycle Route
- Sidewalk
- Phase Addition

Existing Walk/Bike Connections

- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
- East Coast Greenway
- Palmetto Trail
- Statewide Bike Tour Route
- Existing and Proposed Parks
- Existing and Proposed Parks

Roads

- Interstate
- US Highway
- SC Highway
- Local Streets (white)
- Charleston County
- County Boundaries
- Water Bodies



PHASE 5

CITY OF CHARLESTON
OVERVIEW

Network Recommendations

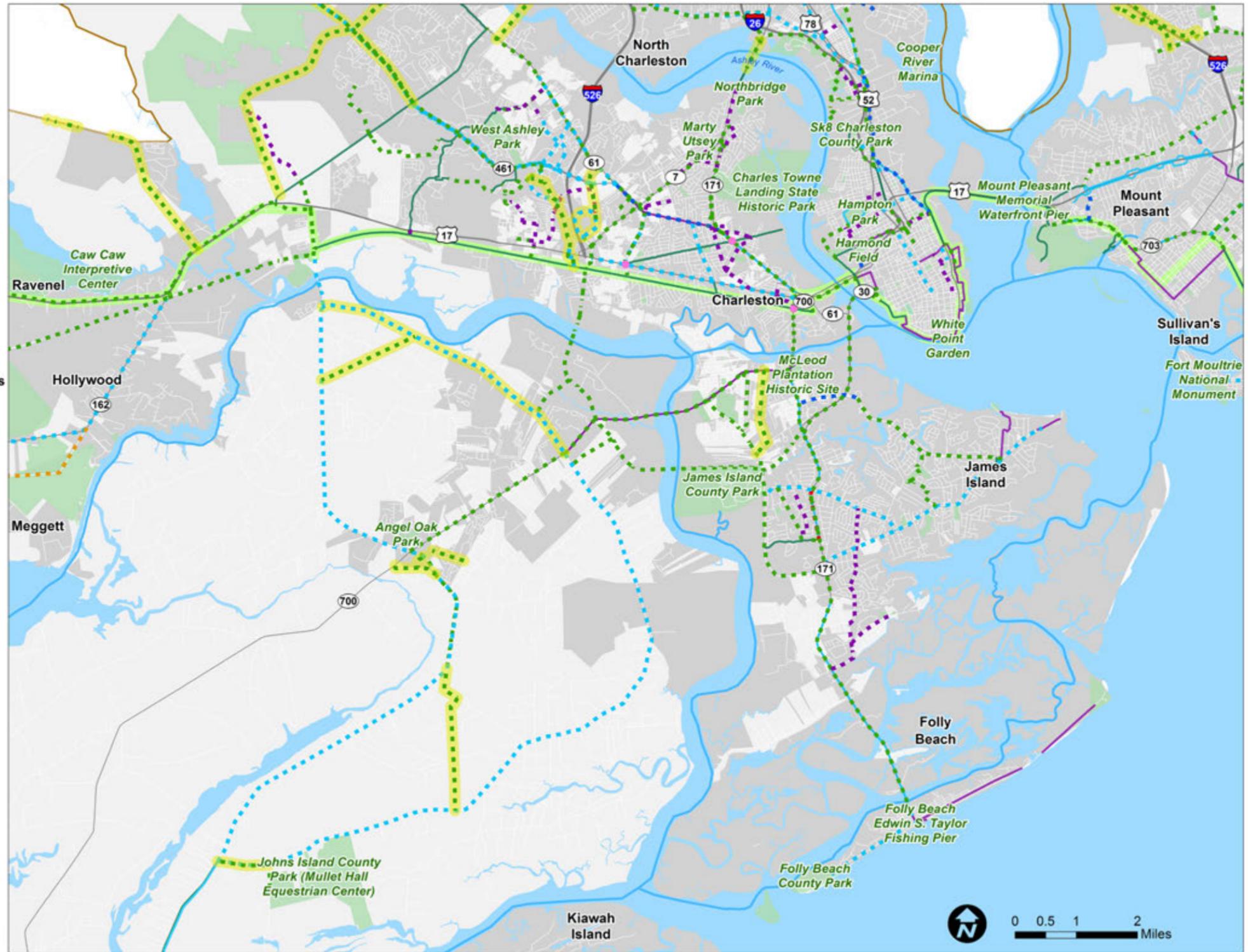
- Intersection Improvement
- Shared Use Path
- Separated Bike Lane
- Paved Shoulder/Bike Lane
- Neighborhood Connector
- Bicycle Route
- Sidewalk
- Phase Addition

Existing Walk/Bike Connections

- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
- East Coast Greenway
- Palmetto Trail
- Statewide Bike Tour Route
- Saltwater Trails
- Existing and Proposed Parks

Roads

- Interstate
- US Highway
- SC Highway
- Local Streets (white)
- Charleston County
- County Boundaries
- Water Bodies



PHASE 5

MOUNT PLEASANT OVERVIEW

- Network Recommendations**
- Intersection Improvement
 - Shared Use Path
 - Separated Bike Lane
 - Paved Shoulder/Bike Lane
 - Neighborhood Connector
 - Bicycle Route
 - Sidewalk
 - Phase Addition
- Existing Walk/Bike Connections**
- Neighborhood Connector
 - Paved Shoulders/Bike Lanes
 - Shared Use Path
 - East Coast Greenway
 - Palmetto Trail
 - Statewide Bike Tour Route
 - Saltwater Trails
 - Existing and Proposed Parks
- Roads**
- Interstate
 - US Highway
 - SC Highway
 - Local Streets (white)
 - Charleston County
 - County Boundaries
 - Water Bodies



PHASE 5

NORTH CHARLESTON
OVERVIEW

Network Recommendations

- Intersection Improvement
- Shared Use Path
- Separated Bike Lane
- Paved Shoulder/Bike Lane
- Neighborhood Connector
- Bicycle Route
- Sidewalk
- Phase Addition

Existing Walk/Bike Connections

- Neighborhood Connector
- Paved Shoulders/Bike Lanes
- Shared Use Path
- East Coast Greenway
- Palmetto Trail
- Statewide Bike Tour Route
- Saltwater Trails
- Existing and Proposed Parks

Roads

- Interstate
- US Highway
- SC Highway
- Local Streets (white)
- Charleston County
- County Boundaries
- Water Bodies

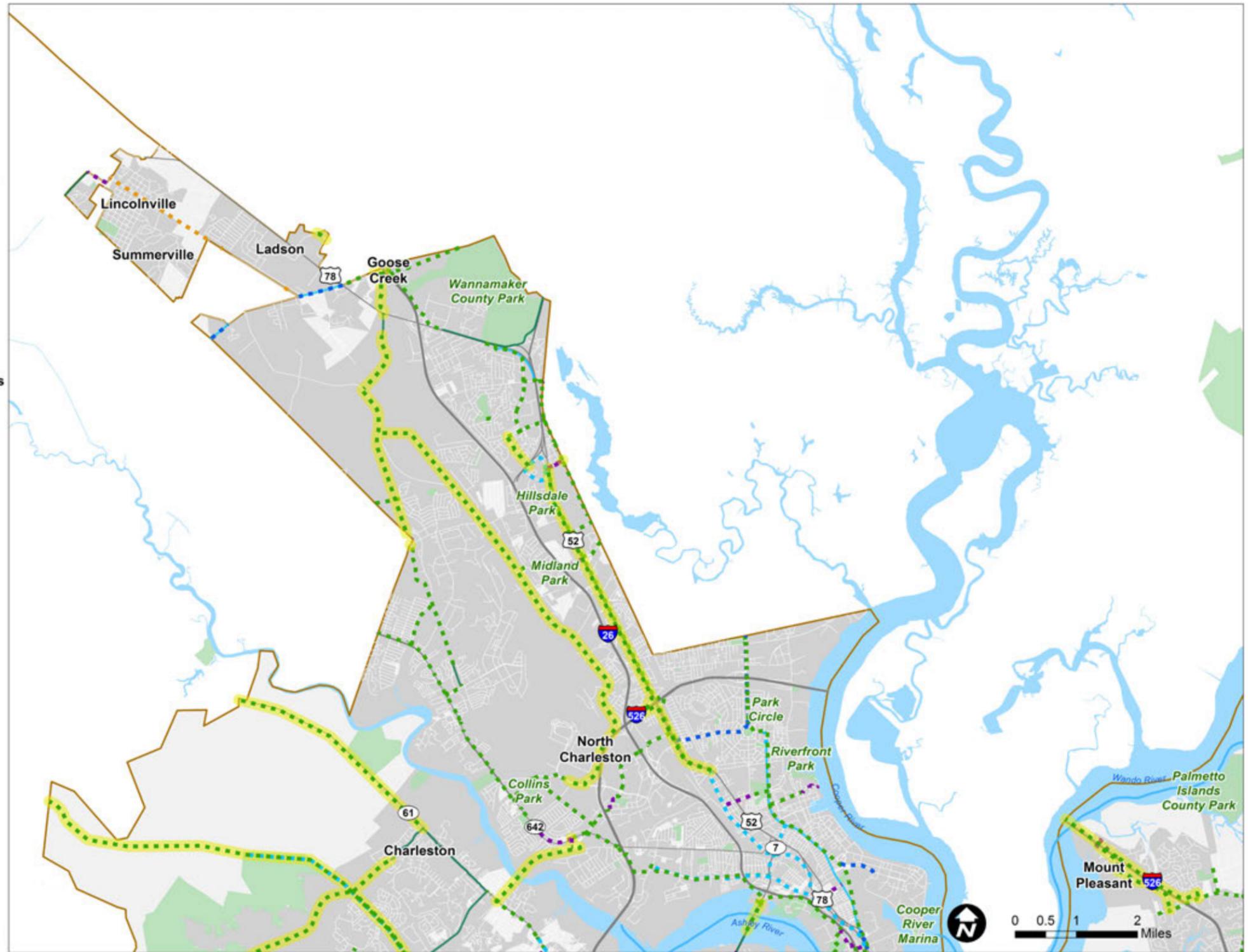




Table 4.8

Phase 5 Projects

UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
210	Charleston County Outside of County	Ancrum Rd. Ext.	Ancrum Rd.	I-26	Shared Use Path	0.29	\$229,841
228	City of Charleston Charleston County	Angel Oak	Haut Gap Middle School	Angel Oak Rd.	Shared Use Path	0.25	\$197,754
406	Charleston County City of Charleston	Angel Oak Rd.	Maybank Hwy.	Bohicket Rd.	Shared Use Path	0.74	\$591,513
290	City of Charleston Charleston County	Arlington Drive to Ashley Town Center Dr.	Savannah Hwy	Oakland Elementary School	Paved Shoulders/Bike Lanes	0.15	\$10,883
429	City of Charleston Charleston County	Arlington Drive to Ashley Town Center Dr.	Savannah Hwy	Oakland Elementary School	Paved Shoulders/Bike Lanes	0.13	\$9,696
137	Outside of County Charleston County City of Charleston	Ashley River Rd, Beech Hill Rd	Hwy 17 A	West Bridge Rd	Shared Use Path	14.61	\$11,687,863
146	North Charleston City of Charleston Charleston County	Ashley River Rd. to W. Montague Av./Greenway/Sidepath	Ashley River Rd	Montague Ave	Shared Use Path	1.88	\$1,501,323
291	City of Charleston	Ashley Town Center Dr.	Savage Rd	Savannah Hwy	Bicycle Route	0.84	\$4,718
436	City of Charleston	Ashley Town Center Dr.	Savage Rd	Savannah Hwy	Paved Shoulders/Bike Lanes	0.16	\$11,872
123	Charleston County	Bareel Factory Rd,	Hwy 174	West of Jehossee Island Rd	Shared Use Path	4.06	\$3,249,917
19	Charleston County City of Charleston	Bear Swamp Rd.	Bees Ferry Rd	End	Shared Use Path	1.44	\$1,151,801
38	Mount Pleasant	Belle Hall	Seacoast Pkwy	Long Point Rd	Shared Use Path	0.08	\$61,383
168	Charleston County Kiawah Island	Betsy Kerrison Pkwy.	Betsy Kerrison Pkwy., west of Kiawah	Seabrook Island Rd.	Shared Use Path	0.20	\$163,147

UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
240	North Charleston	Bon Aire blvd.	Dorchester Rd.	W. Montague Rd.	Neighborhood Connector	0.14	\$7,470
299	City of Charleston	Bon Secours Hospital	Henery Tecklenburg Dr	Cross Bow Ct	Shared Use Path	0.26	\$205,398
293	City of Charleston	Bon Secours Hospital, Ashley Town Center	Marie Sullivan St	South of Rondo St	Shared Use Path	1.60	\$1,277,976
287	City of Charleston	Citadel Mall Loop	Citadel Mall (loop)	Citadel Mall (loop)	Paved Shoulders/Bike Lanes	1.23	\$91,884
140	Charleston County Hollywood	County Line Rd.	Parkers Ferry Rd	Savannah Hwy	Shared Use Path	15.65	\$12,523,256
396	North Charleston	Crossroads Dr.	Greenridge Rd.	Northwoods Mall	Shared Use Path	0.61	\$485,417
383	Mount Pleasant	Etiwan Pointe Dr.	East of Slipper Shell Ct	Mark Clark Expwy	Shared Use Path	0.07	\$55,577
314	City of Charleston Charleston County	Fleming Rd, Central Park Rd	Maybank Hwy	Riverland Dr	Shared Use Path	1.46	\$1,171,788
330	City of Charleston Charleston County	Glenn McConnell	Bees Ferry Rd	Into County	Paved Shoulders/Bike Lanes	3.49	\$262,065
331	City of Charleston	Glenn McConnell Ext.	Bees Ferry Rd	End	Shared Use Path	1.57	\$1,252,104
143	Outside of County Charleston County City of Charleston	Glenn McConnell Extension	Bees Ferry Rd.	Hwy 61	Shared Use Path	23.56	\$18,846,864
318	City of Charleston	Greenway/Side Path	Laurelwood Dr	Glenn McConnell Ext. Greenway connection	Shared Use Path	0.83	\$662,712
224	City of Charleston	Greenway/Sidepath	West of Berry Hill Rd	East of Maybank Hwy	Shared Use Path	0.54	\$434,660
78	Outside of County Ladson	Greenway/Sidepath	Ancrum Rd	East of Berlin G Myers Pkwy	Shared Use Path	4.72	\$3,777,027
319	City of Charleston	Greenway/Sidepath	Bear Swamp Rd	Glenn McConnell Ext. Greenway connection	Shared Use Path	2.45	\$1,959,497



UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
112	Charleston County	Hwy 17	Shellmore Ln	Kit Hall Rd	Shared Use Path	5.96	\$4,765,061
340	Charleston County Hollywood Meggett	Hwy. 162	Hwy. 174	Hwy. 164	Paved Shoulders/Bike Lanes	2.23	\$167,319
333	Charleston County	Hwy. 17	Buck Hall Landing	Shellmore Ln.	Shared Use Path	0.34	\$272,173
69	Charleston County Goose Creek North Charleston	I-26 Overpass	I-26 Rest Area	East of I-26 in Goose Creek	Shared Use Path	0.25	\$197,471
221	North Charleston	Ingleside Blvd.	Palmetto Commerce Pkwy.	Hwy. 178	Shared Use Path	1.02	\$816,341
67	Outside of County	Limehouse Branch	I-26 overpass	Royle Rd.	Shared Use Path	3.68	\$2,943,425
81	Mount Pleasant Outside of County	Mark Clark Expwy Bridge	Exist 24	East of Wando Park Blvd	Shared Use Path	2.34	\$1,871,073
343	Charleston County	N. Edenvale to Edenvale Rd.	Bohicket Rd	West of Handsome Dr	Shared Use Path	0.61	\$484,310
104	City of Charleston North Charleston	Northbridge Path	Sam Rittenberg Blvd Bridge	Sam Rittenberg Blvd Bridge	Shared Use Path	0.51	\$408,262
234	North Charleston	Palmetto Commerce Pkwy.	Ashley Phosphate Rd.	Ingleside Blvd.	Shared Use Path	2.76	\$2,205,008
220	North Charleston	Palmetto Commerce Pkwy.	Ashley Phosphate Rd.	Palmetto Commerce Pkwy.	Shared Use Path	2.41	\$1,927,604
141	Charleston County Outside of County	Parkers Ferry Rd.	Summers Dr	Savannah Hwy	Shared Use Path	8.32	\$6,657,101
344	Charleston County	Powerline R/W	Edenvale Rd.	River Rd.	Shared Use Path	1.88	\$1,503,189
249	Out of County	Raptor Blvd. to Eagle Landing Blvd.	Raptor Dr	Eagle Landing Blvd	Shared Use Path	0.27	\$218,044

UID	Municipality	Segment Name	Start Point	End Point	Facility Type	Mileage	Cost
172	Charleston County City of Charleston	River Rd.	Main Rd.	Maybank Hwy.	Paved Shoulders/Bike Lanes	4.81	\$360,426
171	Charleston County	River Rd.	Betsy Kerrison Pkwy.	Mullet Hall Rd.	Shared Use Path	0.85	\$683,665
246	North Charleston	Rivers Av. (south)	Eagle Landing Blvd.	Durant Av.	Shared Use Path	6.20	\$4,959,227
129	North Charleston	S. Aviation Av, International Blvd	Ashley Phosphate Rd	East of Michaux Pkwy	Shared Use Path	5.55	\$4,439,460
173	Charleston County	Seaboard Coast Line	River Rd.	Main Rd.	Shared Use Path	1.69	\$1,351,397
97	Meggett	Seaboard Coast Line/ Toogoodoo Rd.	Toogoodoo Rd.	Toogoodoo Rd.	Shared Use Path	3.24	\$2,588,738
47	Mount Pleasant	Seacoast Parkway	Shoals Dr	Belle Hall Pkwy	Shared Use Path	0.91	\$728,762
48	Mount Pleasant	Seacoast Pkwy. Ext.	Shoals Dr.	Etiwan Pointe Dr.	Shared Use Path	0.62	\$498,401
222	North Charleston Charleston County	Shipley St.	Hwy. 78	I-26	Shared Use Path	0.70	\$560,934
96	Charleston County	Steamboat Landing Rd.	Hwy. 174	Steamboat Boat Landing	Bicycle Route	1.74	\$9,787
338	North Charleston	Taylor St.	Prince St.	South Aviation Av.	Shared Use Path	0.02	\$15,546
321	City of Charleston Charleston County	Tobias Gadson Blvd./ Orleans Rd.	Ashley River Rd.	Citadel Mall Bus Stop	Shared Use Path	0.94	\$754,561
126	Hollywood Meggett	Toogoodoo Rd	Hwy 165	East of Chapel Rd	Shared Use Path	1.12	\$898,656
177	Mount Pleasant	Wando Park Blvd.	Stonewall Ct.	Kearns Park	Shared Use Path	0.60	\$481,576
176	Mount Pleasant	Wando Park Blvd.	Long Point Rd.	Stonewall Ct.	Shared Use Path	1.11	\$884,611
118	Meggett Hollywood	Wilson Rd.	Toogoodoo Rd.	Ethel P.O. Rd.	Bicycle Route	1.54	\$8,653

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MOVING FORWARD

This Plan is intended to serve as a living document for the Charleston County Park and Recreation Commission to implement the network recommendations carefully crafted over the past decade.

The resources provided herein - prioritization results, spine feasibility results, and capital improvement plan, coupled with the following appendices resources - can serve as a daily reference material for the CCPRC and its implementing partners.

CCPRC and its partners should strive to follow project prioritization recommendations, as each phase was strategically developed to add additional layers to the county-wide network. However, the implementing agency should also look for opportunities to coordinate greenway construction with regularly-programmed maintenance activities, new developments, and large roadway construction projects, even if this results in projects being implemented ahead of their scheduled phasing.

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APPENDICES



“Greenways are ‘the paths to the future’ as they link people to the outdoors. They meet an ever-growing need, a need to leave the hectic city (if only for a moment) and to experience the earth beneath your feet and fresh air in your lungs - to feel life and to feel alive.

*-- Victoria Logue, Author of *Hiking and Backpacking**

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APPENDIX 1

A photograph of a group of children riding bicycles on a dirt path in a wooded area. The children are wearing helmets and casual clothing. The path is surrounded by dense green trees. The image has a greenish tint.

**POTENTIAL
FUNDING SOURCES**

POTENTIAL FUNDING SOURCES

Overview

This Appendix outlines sources of funding for greenway projects in Charleston County. When considering possible funding sources, it is important to understand that not all construction activities will be accomplished with a single funding source. Funding is administered at all levels of government, federal, state, local and through private sources. The following section identifies potential matching and major funding sources, and the criteria for certain projects and programs.



Federal Funding Sources

Federal funding is typically directed through state agencies to local governments either in the form of grants or direct appropriations, independent from state budgets. Federal funding typically requires a local match of 20%, although there are sometimes exceptions, such as the recent American Recovery and Reinvestment Act stimulus funds, which did not require a match.

The following is a list of possible Federal funding sources that could be used to support construction of many pedestrian and bicycle improvements. Most of these are competitive, and involve the completion of extensive applications with clear documentation of the project need, costs, and benefits. It should be noted that the FHWA encourages the construction of pedestrian and bicycle facilities as an incidental element of larger ongoing projects. Examples include providing paved shoulders on new and reconstructed roads, or building sidewalks, on-street bikeways, trails and marked crosswalks as part of new highways.

DEVELOPING A RELIABLE AND INNOVATIVE VISION FOR THE ECONOMY ACT (DRIVE)

The “Developing a Reliable and Innovative Vision for the Economy Act,” or DRIVE Act, which was approved 65 to 34 July 30 by the U.S. Senate, would reauthorize the federal highway and public transportation programs for a six-year period, fiscal years 2016-21. It authorizes a total of \$273.4 billion from the Highway Trust Fund for highway investment, a \$28 billion increase compared to maintaining FY 2015 funding. About half of the increase would support two new proposed initiatives—a National Freight Program and a program of Assistance for Major Projects. The remainder would provide small annual increases in core highway program funding. An additional \$2.7 billion would be authorized from the general fund subject to congressional appropriation.

TRANSPORTATION ALTERNATIVES

MAP-21 collapsed the Transportation Enhancement Program, Safe Routes to School and the Recreational Trails Program into a comprehensive Transportation Alternatives Program. The most significant DRIVE Act modification to this program changes its funding from 2 percent of annual apportionments to a flat \$850 million per year. The DRIVE Act would also expand eligible recipients for funds to include nonprofits responsible for administration of local transportation safety programs and would require annual reports from state and local planning organizations on the number of project applications and awards. Including cost as a feasibility criteria recognizes that monetary resources for the implementing body may be limited. Additionally, implementing the least expensive spine segments may garner political will, public support, and funding for more expensive projects. Cost estimates for each spine segment produced a range of costs for the entire spine. This range was divided into three categories with corresponding descending values - least expensive project, moderately expensive project, and most expensive project.

HIGHWAY SAFETY IMPROVEMENT PROGRAM

MAP-21 doubles the amount of funding available through the Highway Safety Improvement Program (HSIP) relative to SAFETEA-LU. HSIP provides \$2.4 billion nationally for projects and programs that help communities achieve significant reductions in traffic fatalities and serious injuries on all public roads, bikeways, and walkways. MAP-21 preserves the Railway-Highway Crossings Program within HSIP but discontinues the High-Risk Rural roads set-aside unless safety statistics demonstrate that fatalities are increasing on these roads HSIP is a data-driven funding program and eligible projects must be identified through analysis of crash experience, crash potential, crash rate, or other similar metric.

Infrastructure and non-infrastructure projects are eligible for HSIP funds. Bicycle and pedestrian safety improvements, enforcement activities, traffic calming projects, and crossing treatments for active transportation users in school zones are examples of eligible projects. All HSIP projects must be consistent with the state's Strategic Highway Safety Plan.

CONGESTION MITIGATION/AIR QUALITY PROGRAM

The Congestion Mitigation/Air Quality Improvement Program (CMAQ) provides funding for projects and programs in air quality nonattainment and maintenance areas for ozone, carbon monoxide, and particulate matter which reduce transportation related emissions. States with no nonattainment areas may use their CMAQ funds for any CMAQ or STP eligible project. These federal dollars can be used to build bicycle and pedestrian facilities that reduce travel by automobile. Purely recreational facilities generally are not eligible.

NEW FREEDOM INITIATIVE

MAP-21 continues a formula grant program that provides capital and operating costs to provide transportation services and facility improvements that exceed those required by the Americans with Disabilities Act. Examples of pedestrian/accessibility projects funded in other communities through the New Freedom Initiative include installing Accessible Pedestrian Signals (APS), enhancing transit stops to improve accessibility, and establishing a mobility coordinator position.

PILOT TRANSIT-ORIENTED DEVELOPMENT PLANNING

MAP-21 establishes a new pilot program to promote planning for Transit-Oriented Development. At the time of writing the details of this program are not fully clear, although the bill text states that the Secretary of Transportation may make grants available for the planning of projects that seek to "facilitate multimodal connectivity and accessibility," and "increase access to transit hubs for pedestrian and bicycle traffic."

PARTNERSHIP FOR SUSTAINABLE COMMUNITIES

Founded in 2009, the Partnership for Sustainable Communities is a joint project of the Environmental Protection Agency (EPA), the U.S. Department of Housing and Urban Development (HUD), and the U.S. Department of Transportation (USDOT). The partnership aims to "improve access to affordable housing, more transportation options, and lower transportation costs while protecting the environment in communities nationwide." The Partnership is based on five Livability Principles, one of which explicitly addresses the need for bicycle and pedestrian infrastructure ("Provide more transportation choices: Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation's dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health").

The Partnership is not a formal agency with a regular annual grant program. Nevertheless, it is an important effort that has already led to some new grant opportunities (including the TIGER grants). Charleston County should track Partnership communications and be prepared to respond proactively to announcements of new grant programs.

RIVERS, TRAILS, AND CONSERVATION ASSISTANCE PROGRAM

Rivers, Trails, and Conservation Assistance Program (RTCA) is a National Parks Service (NPS) program providing technical assistance via direct NPS staff involvement to establish and restore greenways, rivers, trails, watersheds and open space. The RTCA program provides only for planning assistance—there are no implementation monies available. Projects are prioritized for assistance based on criteria including conserving significant community resources, fostering cooperation between agencies, serving a large number of users, encouraging public involvement in planning and implementation, and focusing on lasting accomplishments. This program may benefit trail development in Charleston County indirectly through technical assistance, particularly for community organizations, but should not be considered a future capital funding source.

COMMUNITY DEVELOPMENT BLOCK GRANT

The Community Development Block Grants (CDBG) program provides money for streetscape revitalization, which may be largely comprised of pedestrian improvements. Federal CDBG grantees may "use Community Development Block Grants funds for activities that include (but are not limited to): acquiring real property; reconstructing or rehabilitating housing and other property; building public facilities and improvements, such as streets, sidewalks, community and senior citizen centers and recreational facilities; paying for planning and administrative expenses, such as costs related to developing a consolidated plan and managing Community Development Block Grants funds; provide public services for youths, seniors, or the disabled; and initiatives such as neighborhood watch programs."

Trails and greenway projects that enhance accessibility are the best fit for this funding source. CDBG funds could also be used to write an ADA Transition Plans.

COMMUNITY TRANSFORMATION GRANTS

Community Transformation Grants administered through the Center for Disease Control support community-level efforts to reduce chronic diseases such as heart disease, cancer, stroke, and diabetes. Active transportation infrastructure and programs that promote healthy lifestyles are a good fit for this program, particularly if the benefits of such improvements accrue to population groups experiencing the greatest burden of chronic disease.

LAND AND WATER CONSERVATION FUND (LWCF)

The Land and Water Conservation Fund (LWCF) provides grants for planning and acquiring outdoor recreation areas and facilities, including trails. Funds can be used for right-of-way acquisition and construction. The program is administered by the South Carolina Department of Parks, Recreation & Tourism as a grant program. Any Trails and Greenways Plan projects located in future parks could benefit from planning and land acquisition funding through the LWCF. Trail corridor acquisition can be funded with LWCF grants as well.

ADDITIONAL FEDERAL FUNDING

The landscape of federal funding opportunities for bicycle and pedestrian programs and projects is always changing. A number of Federal agencies, including the Bureau of Land Management, the Department of Health and Human Services, the Department of Energy, and the Environmental Protection Agency have offered grant programs amenable to bicycle and pedestrian planning and implementation, and may do so again in the future.

State Funding Sources

The following is a list of possible state funding sources that could be used to support construction of network improvements in Charleston County.

SOUTH CAROLINA TRANSPORTATION INFRASTRUCTURE BANK (SCTIB)

The South Carolina Transportation Infrastructure Bank (SCTIB) is a statewide revolving loan fund designed in 1997 to assist major transportation projects in excess of \$100 million in value. The SCTIB has since approved more than \$4.5 billion in financial assistance and is arguably the largest and most active State Infrastructure Bank in the country. SCTIB funded development of the Palmetto Parkway in Aiken County, which included development of a roughly five mile multi-use trail within the parkway's right of way.

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION (SCDOT)

Charleston County should work closely with SCDOT to include bicycle and pedestrian improvements as part of major projects. The two groups should cooperate on a regular basis to identify opportunities for implementation of the greenway network.

- Projects need endorsement of majority weighted vote factor of County Legislative Delegation Members
- This is an 80-20 match program
- Application deadline is the 10th of each month

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM

The Statewide Transportation Improvement Program (STIP) is SCDOT's short-term capital improvement program, providing project funding and scheduling information for the department and South Carolina's metropolitan planning organizations. The program provides guidance for the next six years and is updated every three years. The South Carolina Department of Transportation Commission, as well as the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) approve the STIP.

In developing this funding program, SCDOT must verify that the identified projects comply with existing transportation and comprehensive plans. The STIP must fulfill federal planning requirements for a staged, multi-year, statewide, intermodal program of transportation projects. Specific transportation projects are prioritized based on federal planning requirements and the specific state plans.



Local Funding Sources

Local funding sources that would support bike facility project construction will most likely be limited but should be explored to support Charleston County's active transportation projects.

CHARLESTON COUNTY CAPITAL IMPROVEMENT PLAN

The Charleston County Capital Improvement Plan for fiscal years 2014 through 2018 contain three separately approved plans - the General Capital Improvement Plan, the Environmental Management enterprise Fund Capital Improvement Plan, and the Transportation Sales Tax Comprehensive Plan of Expenditures. The latter of the three allocates 19% of capital expenditures for greenbelt purchases and 8% for parks purchases. Funding allotted for road projects could also support building the greenway network, particularly when construction of on-street facilities and a resurfacing project can occur concurrently.

METROPOLITAN PLANNING ORGANIZATION

Metropolitan Planning Organizations (MPOs) are federally required regional transportation planning organizations. MPOs are responsible for planning and prioritizing all federally funded transportation improvements within an urbanized area.

The Berkeley Charleston Dorchester Council of Governments (BCDCOG) is the Metropolitan Planning Organization for Charleston County. MPOs are a partnership between local and state government that makes decisions about transportation planning in urbanized areas and meets planning requirements established by federally authorizing legislation for transportation funding. BCDCOG works cooperatively with SCDOT to develop transportation plans, travel models, transit plans, and bicycle and pedestrian plans. BCDCOG works with the state on funding issues for transportation improvements, project planning issues, and other issues such as environmental and air quality concerns. BCDCOG

also works with local governments to coordinate land use and transportation planning.

MPOs maintain a long-range transportation plan (LRTP) and develop a transportation improvement program (TIP) to develop a fiscally constrained program based on the long-range transportation plan and designed to serve the region's goals while using spending, regulating, operating, management, and financial tools.

GENERAL FUND

The General Fund is often used to pay for maintenance expenses and limited capital improvement projects. Projects identified for reconstruction or re-pavement as part of the Capital Improvements list should also implement recommendations for bicycle or pedestrian improvements in order to reduce additional costs.

LOCAL BOND MEASURES

Local bond measures, or levies, are usually general obligation bonds for specific projects. Bond measures are typically limited by time based on the debt load of the local government or the project under focus. Funding from bond measures can be used for engineering, design and construction of trails, greenways, and pedestrian and bicycle facilities. A bond issued in Denver, Colorado funded \$5 million for trail development and also funded the City's bike planner for several years. In 2012, voters in Austin, Texas approved a \$143 million bond to fund a variety of mobility and active transportation projects.

STORMWATER UTILITY FEES

Stormwater charges are typically based on an estimate of the amount of impervious surface on a user's property. Impervious surfaces (such as rooftops and paved areas) increase both the amount and rate of stormwater runoff compared to natural conditions. Such surfaces cause runoff that directly or indirectly discharges into public storm drainage facilities and creates a need for stormwater management services. Thus, users with more

impervious surface are charged more for stormwater service than users with less impervious surface.

The rates, fees, and charges collected for stormwater management services may not exceed the costs incurred to provide these services. The costs that may be recovered through the stormwater rates, fees, and charges includes any costs necessary to assure that all aspects of stormwater quality and quantity are managed in accordance with federal and state laws, regulations, and rules. Open space may be purchased with stormwater fees, if the property in question is used to mitigate floodwater or filter pollutants.

SYSTEM DEVELOPMENT CHARGES/ DEVELOPER IMPACT FEES

System Development Charges (SDCs), also known as Developer Impact Fees, represent another potential local funding source. SDCs are typically tied to trip generation rates and traffic impacts produced by a proposed project. A developer may reduce the number of trips (and hence impacts and cost) by paying for on- or off-site pedestrian improvements that will encourage residents to walk (or use transit, if available) rather than drive. In-lieu parking fees may be used to help construct new or improved pedestrian facilities. Establishing a clear nexus or connection between the impact fee and the project's impacts is critical in avoiding a potential lawsuit.

STREET USER FEES

Many cities administer street user fees through residents' monthly water or other utility bills. The revenue generated by the fee can be used for operations and maintenance of the street system, and priorities would be established by the Public Works Department. Revenue from this fund can be used to maintain on-street bicycle and pedestrian facilities, including routine sweeping of bicycle lanes and other designated bicycle routes.

IN LIEU OF FEES

Developers often dedicate open space or greenways in exchange for waiving fees associated with park and open space allocation requirements in respect to proposed development. These types of requirements are presented within local municipal codes and ordinances.

UTILITY LEASE REVENUE

A method to generate revenues from land leased to utilities for locating utility infrastructure on municipally owned parcels. This can improve capital budgets and support financial interest in property that would not otherwise create revenue for the government.

BUSINESS IMPROVEMENT AREA OR DISTRICT

Trail development and pedestrian and bicycle improvements can often be included as part of larger efforts aimed at business improvement and retail district beautification. Business Improvement Areas collect levies on businesses in order to fund area wide improvements that benefit businesses and improve access for customers. These districts may include provisions for pedestrian and bicycle improvements, including wider sidewalks, landscaping and ADA compliance.

TAX INCREMENT FINANCING (TIF)

Tax Increment Financing is a tool to use future gains in taxes to finance the current improvements that will create those gains. When a public project (e.g., shared use trail) is constructed, surrounding property values generally increase and encourage surrounding development or redevelopment. The increased tax revenues are then dedicated to support the debt created by the original public improvement project.

Private Sector Funding Sources

Many communities have solicited greenway funding assistance from private foundations and other conservation-minded benefactors. Below are several examples of private funding opportunities available.

BIKES BELONG GRANT PROGRAM

The Bikes Belong Coalition of bicycle suppliers and retailers has awarded \$1.2 million and leveraged an additional \$470 million since its inception in 1999. The program funds corridor improvements, mountain bike trails, BMX parks, trails, and park access. It is funded by the Bikes Belong Employee Pro Purchase Program.

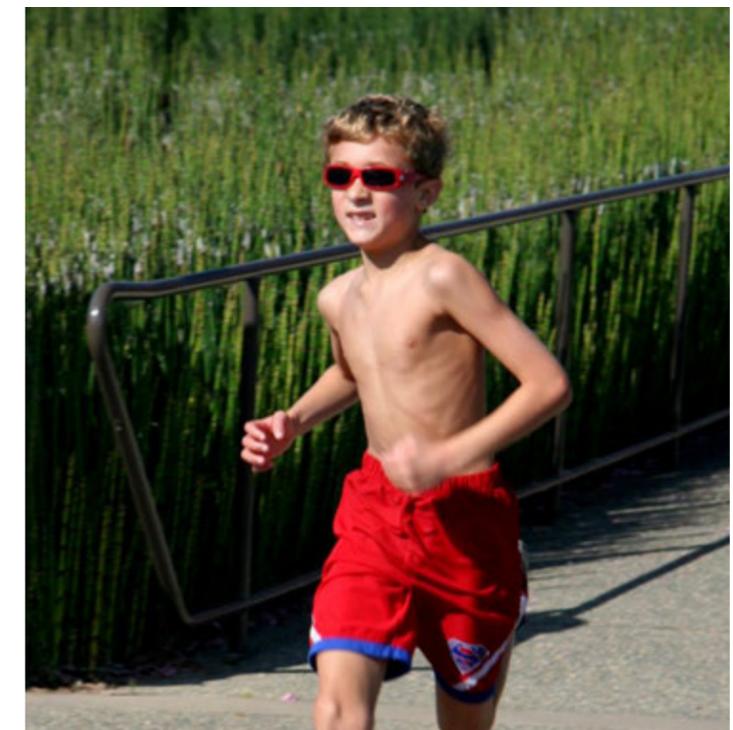
THE ROBERT WOOD JOHNSON FOUNDATION

The Robert Wood Johnson Foundation was established as a national philanthropy in 1972 and today it is the largest U.S. foundation devoted to improving the health and health care of all Americans. Grant making is concentrated in four areas:

- Assure that all Americans have access to basic health care at a reasonable cost
- Improve care and support for people with chronic health conditions
- Promote healthy communities and lifestyles
- Reduce the personal, social and economic harm caused by substance abuse: tobacco, alcohol, and illicit drugs

THE KODAK AMERICAN GREENWAYS PROGRAM

The Conservation Fund's American Greenways Program has teamed with the Eastman Kodak Corporation and the National Geographic Society to award small grants (\$250 to \$2,000) to stimulate the planning, design and development of greenways. These grants can be used for activities such as mapping, conducting ecological assessments, surveying land, holding conferences, developing brochures, producing interpretive displays, incorporating land trusts, and building trails. Grants cannot be used for academic research, institutional support, lobbying or political activities.



NATIONAL TRAILS FOUNDATION

American Hiking Society created the National Trails Fund in 1998, the only privately supported national grants program providing funding to grassroots organizations working toward establishing, protecting and maintaining foot trails in America. 73 million people enjoy foot trails annually, yet many of our favorite trails need major repairs due to a \$200 million backlog of badly needed maintenance. National Trails Fund grants help give local organizations the resources they need to secure access, volunteers, tools and materials to protect America's cherished public trails. To date, American Hiking has granted more than \$240,000 to 56 different trail projects across the U.S. for land acquisition, constituency building campaigns, and traditional trail work projects. Awards range from \$500 to \$10,000 per project.

Projects the American Hiking Society will consider include:

- Securing trail lands, including acquisition of trails and trail corridors, and the costs associated with acquiring conservation easements.
- Building and maintaining trails which will result in visible and substantial ease of access, improved hiker safety, and/or avoidance of environmental damage.
- Constituency building surrounding specific trail projects - including volunteer recruitment and support.

THE CONSERVATION ALLIANCE

The Conservation Alliance is a non-profit organization of outdoor businesses whose collective annual membership dues support grassroots citizen-action groups and their efforts to protect wild and natural areas. One hundred percent of its member companies' dues go directly to diverse, local community groups across the nation—groups like Southern Utah Wilderness Alliance, Alliance for the Wild Rockies, The Greater Yellowstone Coalition, the South Yuba River Citizens' League, RESTORE: The North Woods and the Sinkyone Wilderness Council (a Native American-owned/operated wilderness park). For these groups, who seek to protect the last great wild lands and waterways from resource extraction and commercial development, the Alliance's grants are substantial in size (about \$35,000 each), and have often made the difference between success and defeat. Since its inception in 1989, The Conservation Alliance has contributed \$4,775,059 to grassroots environmental groups across the nation, and its member companies are proud of the results: To date the groups funded have saved over 34 million acres of wild lands and 14 dams have been either prevented or removed—all through grassroots community efforts.

The Conservation Alliance is a unique funding source for grassroots environmental groups. It is the only environmental grant maker whose funds come from a potent yet largely untapped constituency for protection of ecosystems - the active transportation outdoor recreation industry and its customers. This industry has great incentive to protect the places in which people use the clothing, hiking boots, tents and backpacks it sells. The industry is also uniquely positioned to educate outdoor enthusiasts about threats to wild places, and engage them to take action. Finally, when it comes to decision-makers, especially those in the Forest Service, National Park Service, and Bureau of Land Management, this industry has clout - an important tool that small advocacy groups can wield.

The Conservation Alliance Funding Criteria: The Project should be focused primarily on direct citizen action to protect and enhance our natural resources for recreation. The Alliance does not look for mainstream education or scientific research projects, but rather for active campaigns. All projects should be quantifiable, with specific goals, objectives and action plans and should include a measure for evaluating success. The project should have a good chance for closure or significant measurable results over a fairly short term (one to two years). Funding emphasis may not be on general operating expenses or staff payroll.





NATIONAL FISH AND WILDLIFE FOUNDATION

The National Fish and Wildlife Foundation (NFWF) is a private, nonprofit, tax-exempt organization chartered by Congress in 1984. The National Fish and Wildlife Foundation sustains, restores, and enhances the Nation's fish, wildlife, plants and habitats. Through leadership conservation investments with public and private partners, the Foundation is dedicated to achieving maximum conservation impact by developing and applying best practices and innovative methods for measurable outcomes.

The Foundation awards matching grants under its Keystone Initiatives to achieve measurable outcomes in the conservation of fish, wildlife, plants and the habitats on which they depend. Awards are made on a competitive basis to eligible grant recipients, including federal, tribal, state, and local governments, educational institutions, and non-profit conservation organizations. Project proposals are received on a year-round, revolving basis with two decision cycles per year. Grants generally range from \$50,000-\$300,000 and typically require a minimum 2:1 non-federal match.

Funding priorities include bird, fish, marine/coastal, and wildlife and habitat conservation. Other projects that are considered include controlling invasive species, enhancing delivery of ecosystem services in agricultural systems, minimizing the impact on wildlife of emerging energy sources, and developing future conservation leaders and professionals.

THE TRUST FOR PUBLIC LAND

Land conservation is central to the mission of the Trust for Public Land (TPL). Founded in 1972, the Trust for Public Land is the only national nonprofit working exclusively to protect land for human enjoyment and wellbeing. TPL helps conserve land for recreation and spiritual nourishment and to improve the health and quality of life of American communities. Also, TPL is the leading organization helping agencies and communities identify and create funds for conservation from federal, state, local, and philanthropic sources.

Since 1996, TPL has helped states and communities craft and pass over 382 successful ballot measures, generating \$34 billion in new conservation-related funding.

COMMUNITY ACTION FOR A RENEWED ENVIRONMENT (CARE)

CARE is a competitive grant program that offers an innovative way for a community to organize and take action to reduce toxic pollution in its local environment. Through CARE, a community creates a partnership that implements solutions to reduce releases of toxic pollutants and minimize people's exposure to them. By providing financial and technical assistance, EPA helps CARE communities get on the path to a renewed environment. Transportation and "smart-growth" types of projects are eligible. Grants range between \$90,000 and \$275,000.

Other Funding Sources

VOLUNTEER WORK AND PUBLIC-PRIVATE PARTNERSHIPS

Individual volunteers from the community can be brought together with groups of volunteers from church groups, civic groups, scout troops and environmental groups to work on greenway development on special community workdays. Volunteers can also be used for fundraising, maintenance, and programming needs. Local schools or community groups may use the bikeway projects as a project for the year, possibly working with a local designer or engineer. Work parties may be formed to help clear the right-of-way where needed. A local construction company may donate or discount services. A challenge grant program with local businesses may be a good source of local funding, where corporations 'adopt' a bikeway and help construct and maintain the facility.

PRIVATE INDIVIDUAL DONATIONS

Private individual donations can come in the form of liquid investments (i.e. cash, stock, bonds) or land. Municipalities typically create funds to facilitate and simplify a transaction from an individual's donation to the given municipality. Donations are mainly received when a widely supported capital improvement program is implemented. Such donations can improve capital budgets and/ or projects.

FUNDRAISING/CAMPAIGN DRIVES

Organizations and individuals can participate in a fundraiser or a campaign drive. It is essential to market the purpose of a fundraiser to rally support and financial backing. Oftentimes fundraising satisfies the need for public awareness, public education, and financial support.

LAND TRUST ACQUISITION AND DONATION

Land trusts are held by a third party other than the primary holder and the beneficiaries. This land is oftentimes held in a corporation for facilitating the transfer between two parties. For conservation purposes, land is often held in a land trust and received through a land trust. A land trust typically has a specific purpose such as conservation and is used so land will be preserved as the primary holder had originally intended.

ADOPT A TRAIL PROGRAM

A challenge grant program with local businesses may be a good source of local funding, where corporations 'adopt' a trail and help maintain the facility. Foundation grants, volunteer work, and donations of in-kind services, equipment, labor or materials are other sources of support that can play a supporting role in gathering resources to design and build new bicycle and pedestrian facilities.

Residents and other community members are excellent resources for garnering support and enthusiasm for a trail, and Charleston County should work with volunteers to substantially reduce implementation and maintenance costs. Local schools, community groups, or a group of dedicated neighbors may use the project as a goal for the year, possibly working with a local designer or engineer. Work parties can be formed to help clear the right-of-way for a new trail or maintain existing facilities where needed.



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PEOPLE 2 PARKS SURVEY REPORT AND SURVEY INSTRUMENT

APPENDIX 2



People 2 Parks Bike-Walk Plan

Survey Analysis
and Report



Charleston County, South Carolina
September 2015

People 2 Parks Bike-Walk Plan

Survey Analysis and Report

Prepared by:

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FINAL REPORT
PREPARED: September 2015
REVISION DATE: September 2020



PEOPLE2PARKS BIKE-WALK PLAN

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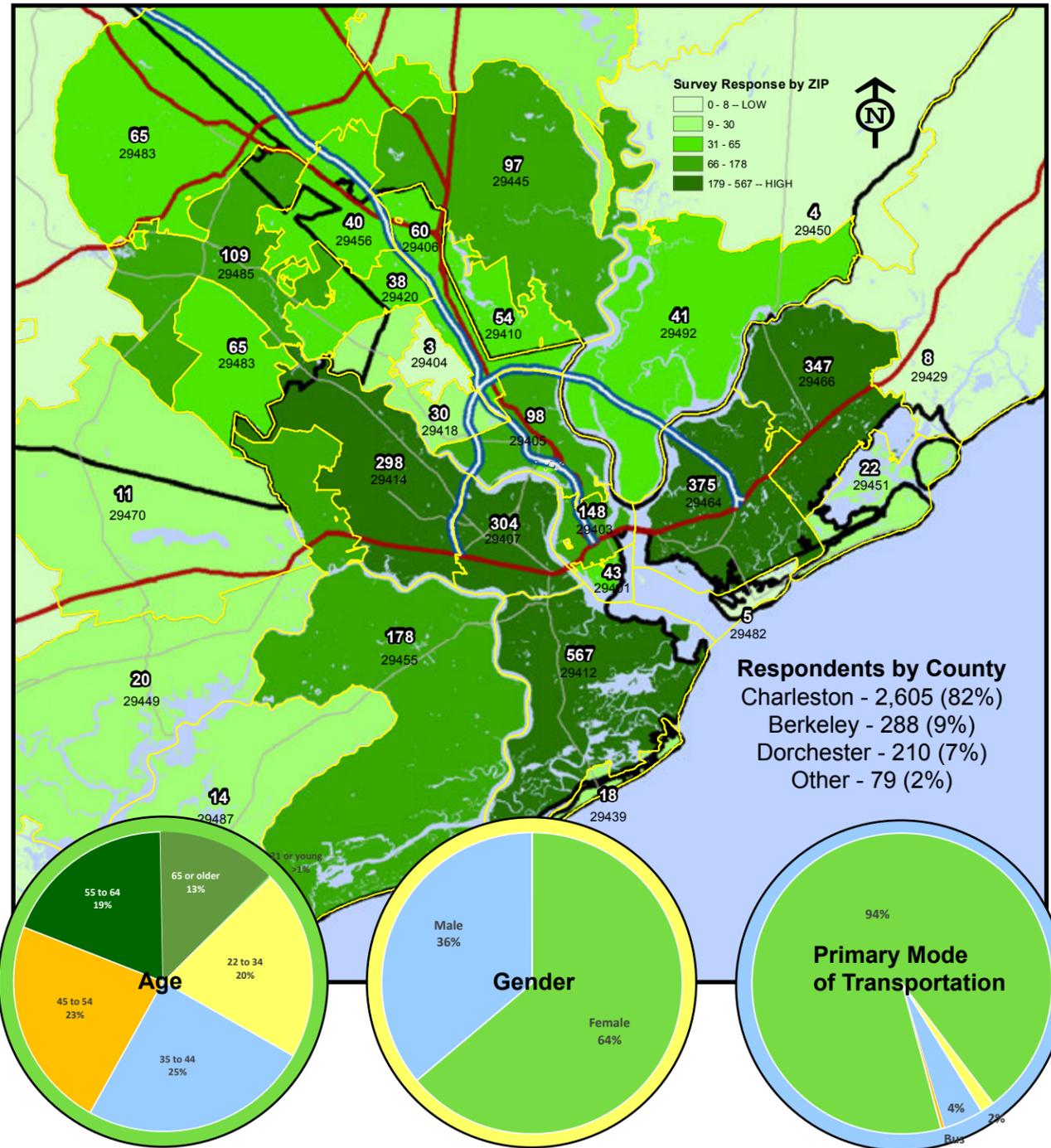
The People 2 Parks Plan (P2P) is the culmination of three years of planning by the Charleston County Park & Recreation Commission (CCPRC). Since 2012 CCPRC Planning staff have been reviewing local bike and pedestrian transportation plans and meeting with local municipalities and planning agencies in an effort to create a unified vision for improving bike and pedestrian access to all local parks. The results of these coordination meetings was a map indicating existing bike and pedestrian routes (not including sidewalks), planned bike and pedestrian routes, and new routes proposed as part of this plan, attempting to fill “gaps” in existing bike/pedestrian infrastructure. P2P is the prioritization phase of CCPRC’s multi-year planning effort.

To ascertain public concerns about local bike and pedestrian facilities, as part of P2P CCPRC issued a web-based survey (using www.surveymonkey.com). Alta Planning, consultants on the project, also issued a corresponding wikimap exercise. Both the survey and wikimap were open to response for the last two weeks of August 2015. The following report is a limited summary and analysis of the web survey responses, meant to provide general contextual information about the comfort and interest level of local cyclists and pedestrians, as well as insight into route priorities from the perspective of the user. The wikimap analysis was performed by Alta Planning, and is provided in the full P2P report.

The 2015 P2P survey is CCPRC’s first attempt at a county-wide public survey for bike and pedestrian improvements. It was based on similar surveys of several municipalities or regions, and attempted to ask pointed questions about perceptions of bike/pedestrian safety, facility quality and abundance, and proximity and accessibility to nearby destinations. CCPRC received a high volume of public feedback (3,182 respondents) on the P2P web survey. Results from the survey will inform local and state transportation departments and decision makers with public perspective on routes and safety concerns.

Upon reviewing respondents’ comments individually and collectively, it is likely that the wording and response options of some questions could have been different than executed. It is not expected that the response options provided (or lack-thereof) available had significant effects on the survey analysis; however, some lessons learned for the next iteration of the survey (ideally on a 5-year revision schedule) may include provisions for the following:

- Improved distribution methods to all age categories, but particularly those 21 or younger (e.g., local colleges and universities).
- Improved distribution to lower income communities.
- Improved distribution to rural residents (e.g., churches and community groups).
- Questions to ascertain respondent satisfaction with progress in bicycle and pedestrian infrastructure since this 2015 version of the survey.
- Greater separation of bike and pedestrian-specific questions, with more opportunities for “Not Applicable”-type answers.



Findings

- 36.4% live within two miles of a park; 77.8% live within five miles of a park
- 59.5% feel comfortable walking two or more miles; 94% feel comfortable bicycling two or more miles
- 73% of respondents are either “casual” or “less confident” cyclists; 18.5% are “experienced”, and 8.8% are “not interested” in bicycling.
- Of the 91% of respondents that use a car for primary transport, have an interest in bicycling.
- 29% of respondents whom commute to work by driving, live within 5 miles from their workplace.
- Respondents generally feel safe walking/bicycling in their neighborhood (or “community”), but 75% do not feel safe walking/bicycling to destinations (e.g., parks, work, school)

FOLLY RD.

100

122

ASHLEY RIVER BR.

77

102

RIFLE RANGE RD.

78

100

RIVERLAND DR.

76

85

JAMES ISLAND CONN.

50

69

Photo Credit: Vanessa.com

The following figures and descriptive text are interpreted directly from the web survey results. Figures showing first-level response analysis are indicated in the figure heading with a single question number shown in gray text (e.g., [Q1]). In some cases, multiple questions were cross-tabulated to yield results reflecting the opinions of specific genders, age groups, experience level, location (by ZIP code), or otherwise. Figures illustrating cross-tabulated responses are indicated in the figure heading with multiple question numbers shown in gray text (e.g., [Q1, Q2]).



FIGURE 1: What is your age? [Q2]

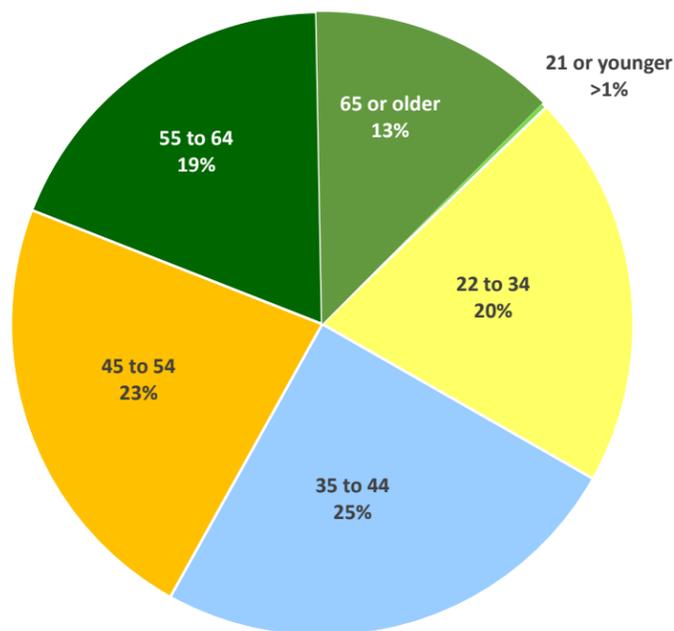


FIGURE 1a: Age by Gender - Male [Q1, Q2]

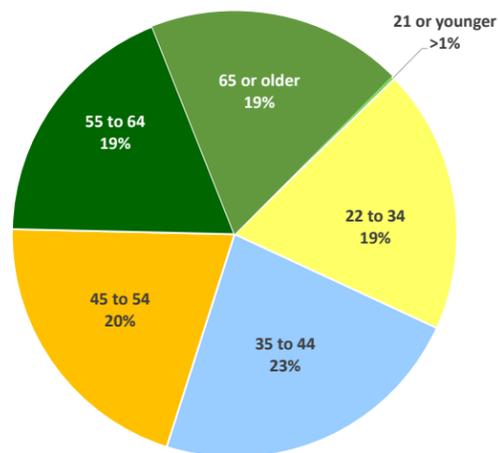


FIGURE 1b: Age by Gender - Female [Q1, Q2]

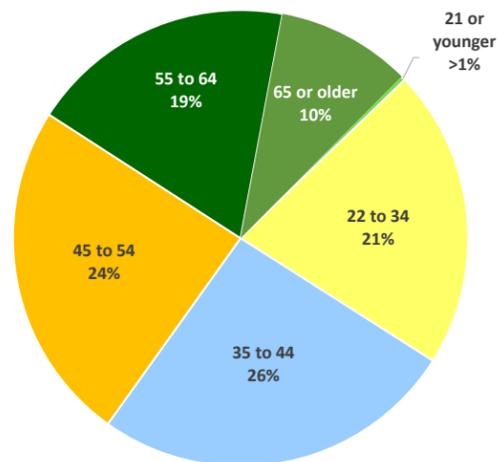


FIGURE 2: Do you feel safe walking in your community*? [Q16]

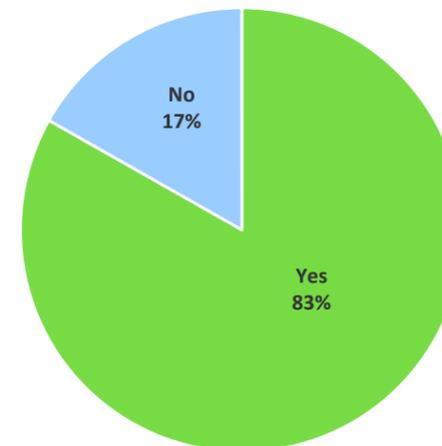


FIGURE 2a: [Of those that feel safe walking in their community] Do you feel safe walking or riding your bike to desired destinations**? [Q16, Q7]

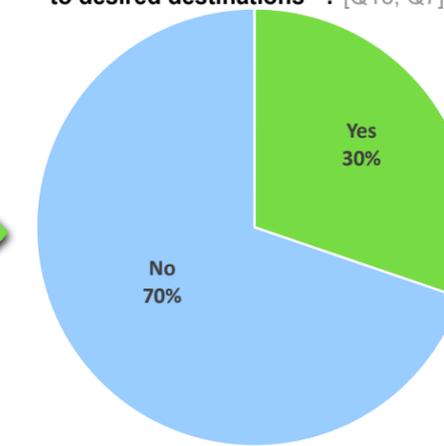


FIGURE 3: Do you feel safe riding a bike in your community*? [Q27]

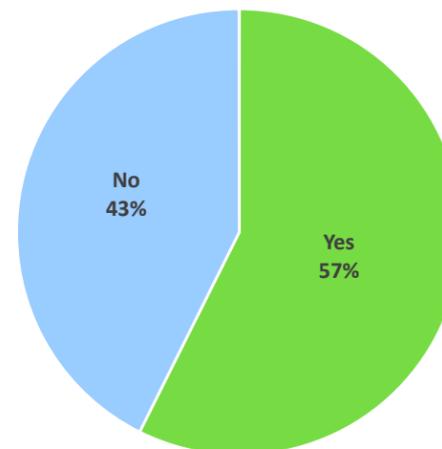
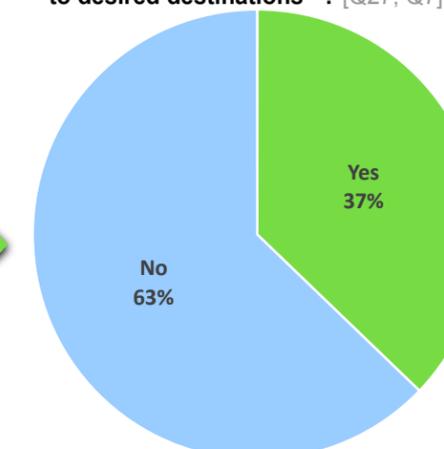


FIGURE 3a: [Of those that feel safe riding a bike in their community] Do you feel safe walking or riding your bike to desired destinations**? [Q27, Q7]



*Respondents inferred that the term “community” to mean their own neighborhood.

Figure 1 illustrates that nearly half of respondents (48%) were between 35 and 54 years of age. The 22 to 34 age category accommodated for 20%, while fewer respondents (19%) were in the 55 to 64 age category. The 65 or older and 21 or younger age groups were less represented with 13% and less than 1%, respectively.

When age was organized by gender, results were slightly different among males (Fig. 1a) and females (Fig. 1b). The ages of males were relatively equally distributed, with the 22 to 34, 55 to 64, and 65 or older age groups each responsible for 19% of male respondents. Male age groups of 45 to 54 (20%) and 35 to 44 (23%) were slightly higher, while less than 1% were represented by males 21 or younger.

Ages of female respondents were more varied than males with the most respondents in the 22 to 34, 35 to 44, and 45 to 54 age groups (21%, 26%, and 24%, respectively), and a lower percentage of respondents in the oldest and youngest age groups of 65 or older (10%) and 21 or younger (>1%).

The majority of respondents seemed to feel very safe walking within their own community [or neighborhood*] with 2,537 (83%) answering that they feel safe, while only 512 respondents (17%) answered that they do not feel safe walking within their community (Fig. 2). Of respondents that do feel safe walking in their own community, more than two-thirds (70%) do not feel safe walking or riding their bikes to desired destinations (Fig. 2a).

The majority of respondents (1,689 or 57%) also felt safe riding their bicycles in their community. Of respondents that feel safe riding their bikes in their communities, only about 37% feel safe walking or riding their bikes to desired destinations (Fig. 3a).

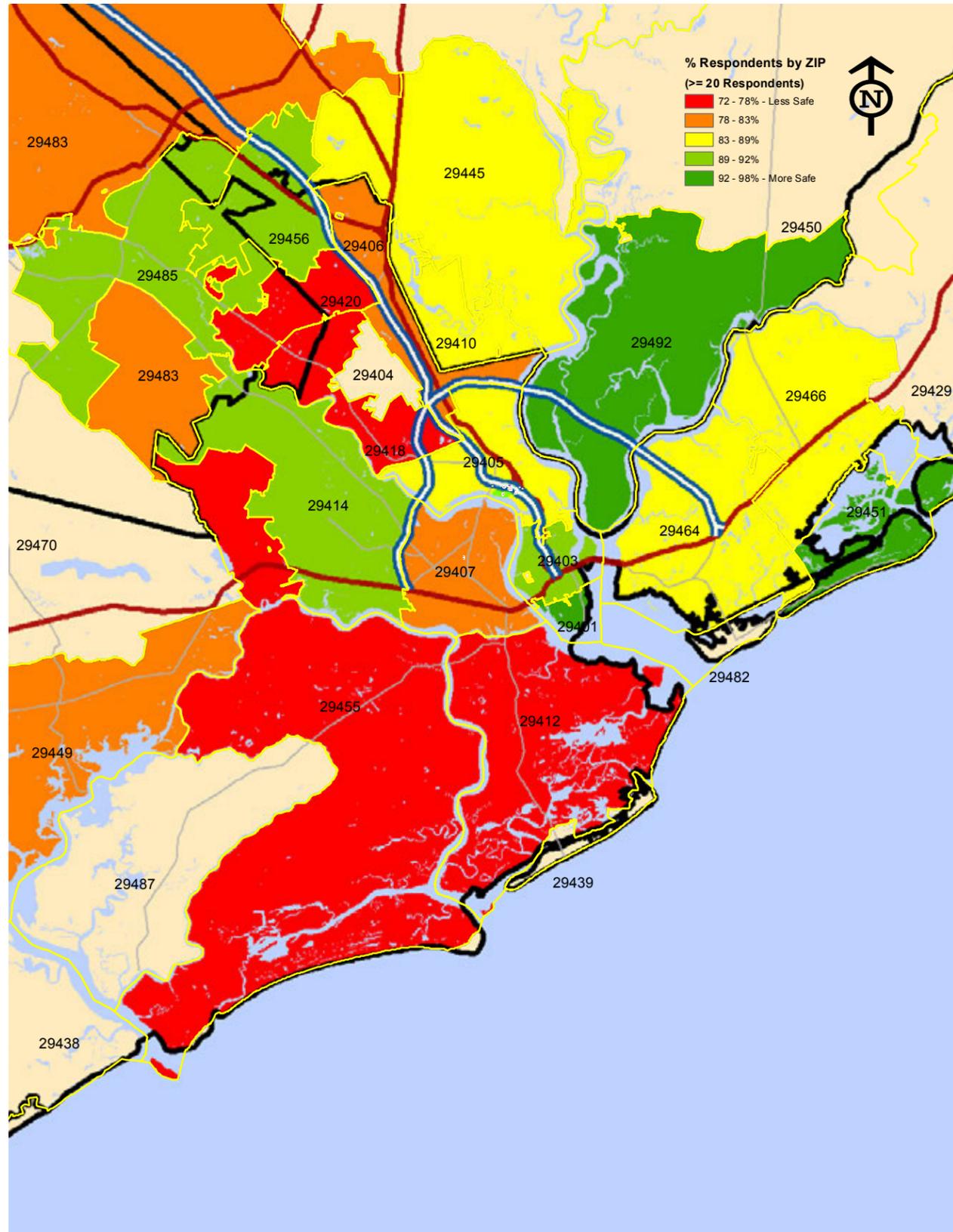


FIGURE 4: Do you feel safe walking in your community [i.e., neighborhood]? [Q4, Q16]

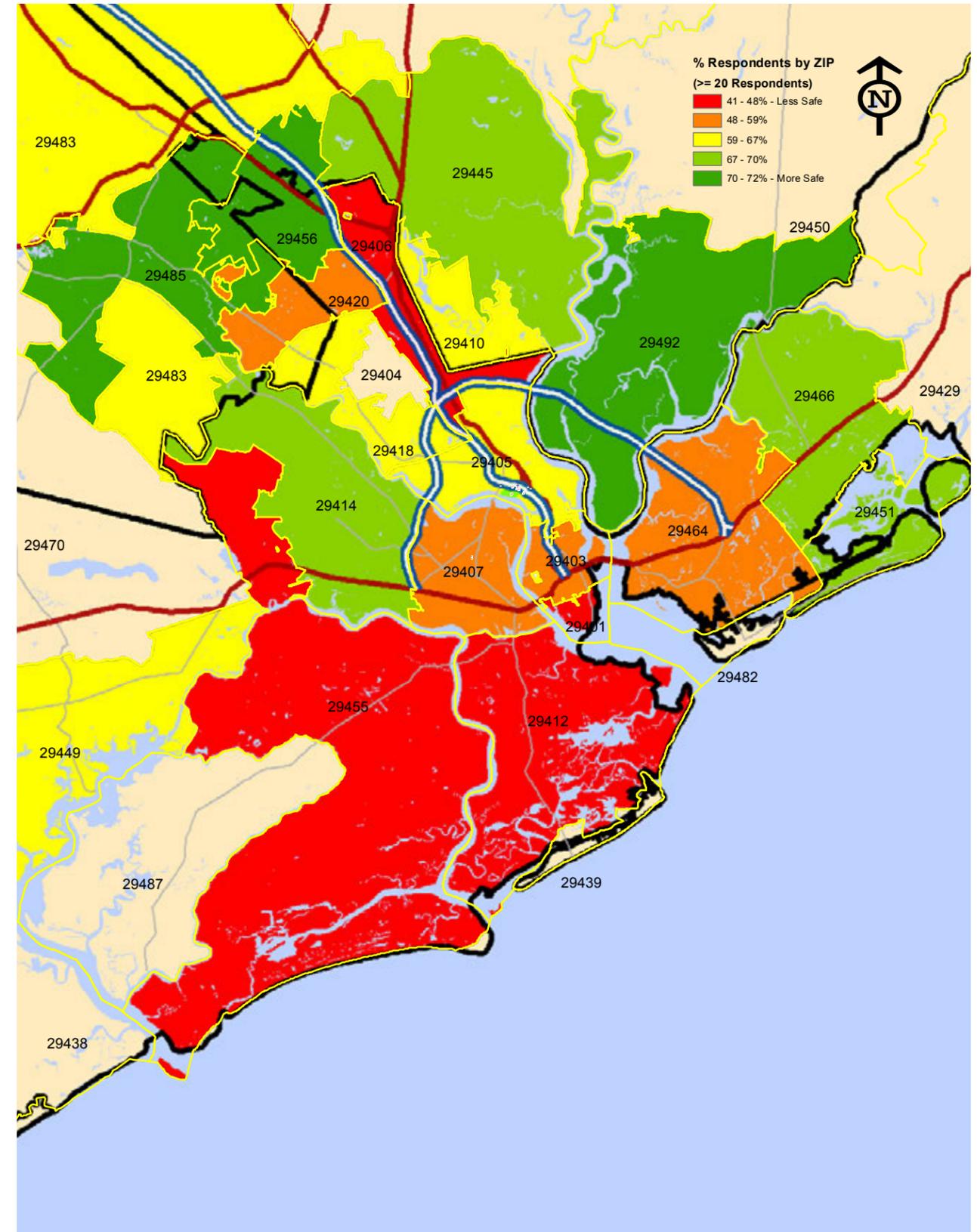


FIGURE 5: Do you feel safe riding a bike in your community [i.e., neighborhood]? [Q4, Q27]

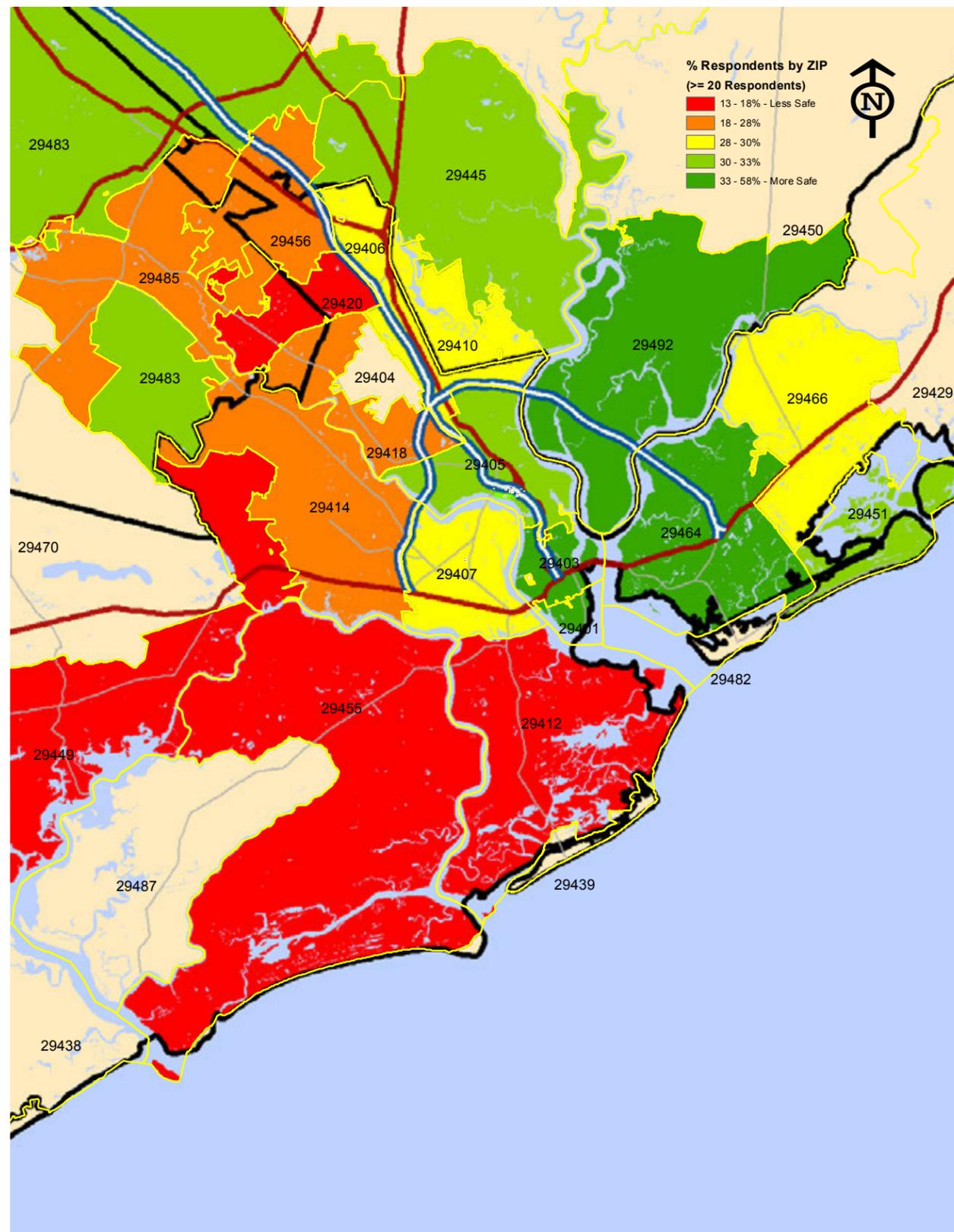


FIGURE 6: Do you feel safe riding a bike or walking to destinations? [Q4, Q7]

Of 3,127 respondents, about one-third (1,059) live less than 2 miles from the nearest park while 41% (1,288) of respondents live 2 to 5 miles away from the nearest park (Fig. 7). Almost a quarter of respondents (664) live as far as 6 to 15 miles from the nearest park.

For a typical walk/bike ride, the majority of respondents for both modes answered that more than 40 minutes is a comfortable length (Fig. 8). More than two-thirds (70%) answered that a walk or a bike ride more than 20 minutes is comfortable for them, while less than one-third (30%) answered that a walk or bike ride less than 20 minutes is comfortable for them (Fig. 8a).

FIGURE 7: How far do you reside from the nearest park?

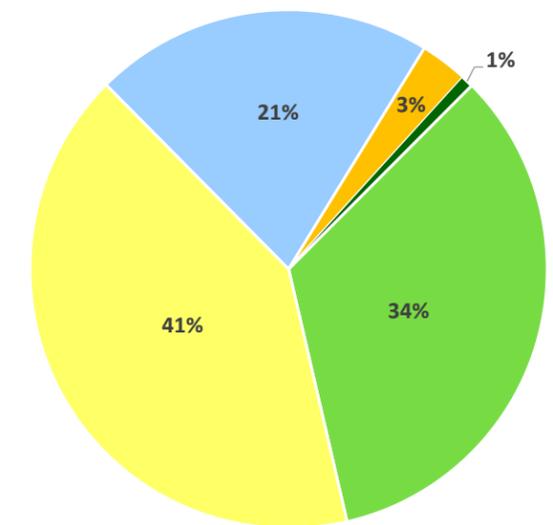


FIGURE 8: For a typical walk/bike ride, what distance is comfortable for you? [Q12, Q23]

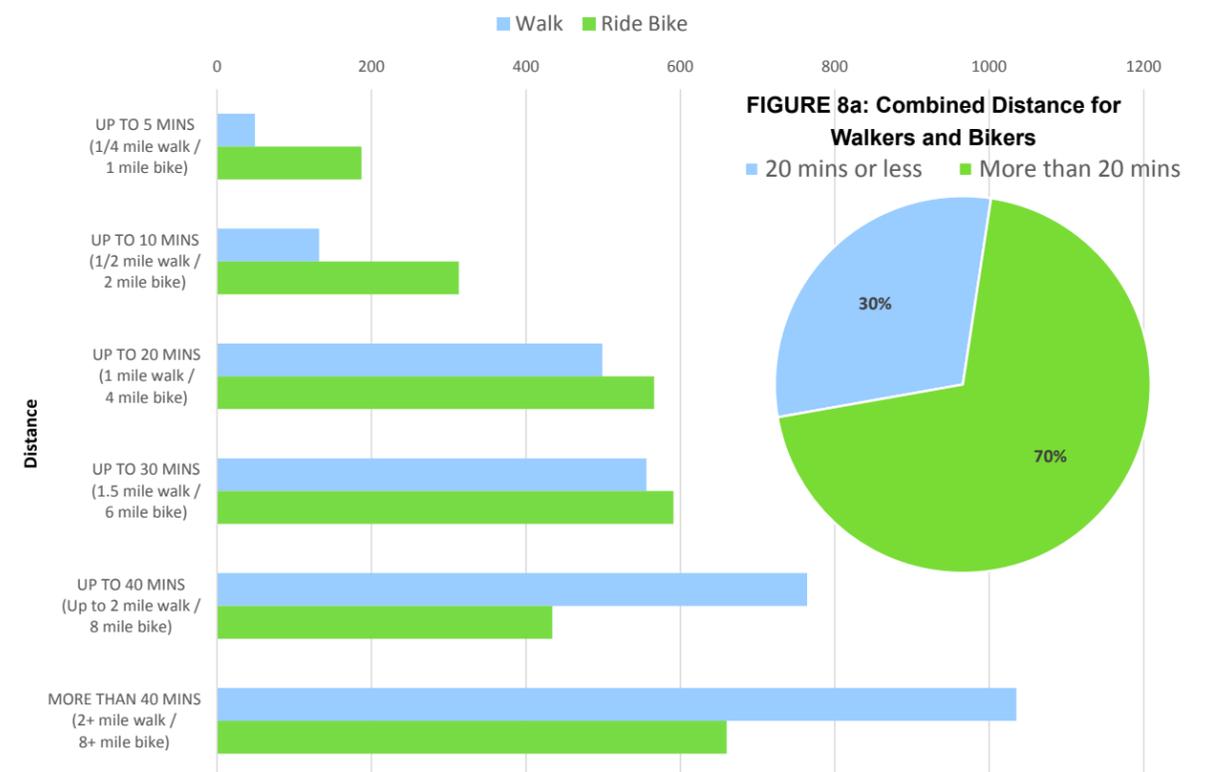


FIGURE 9: What is your primary mode of transportation? [Q5]

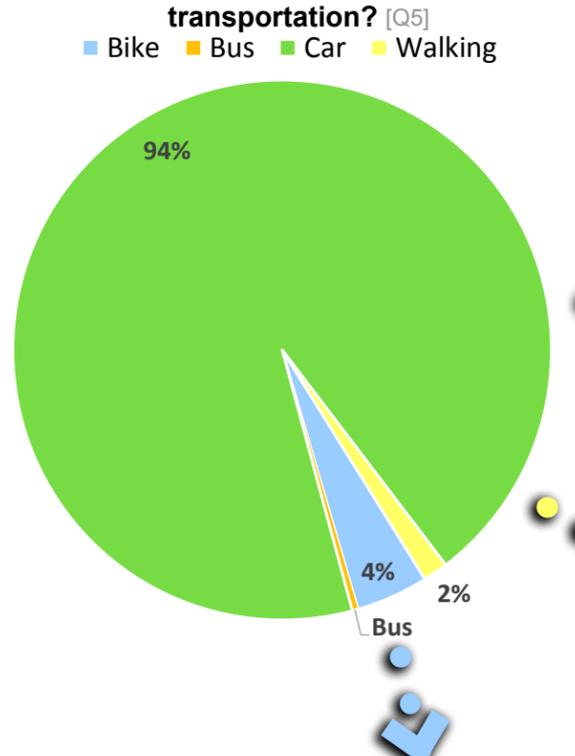


FIGURE 9a: How long is your regular commute to work by CAR? [Q5, Q6]

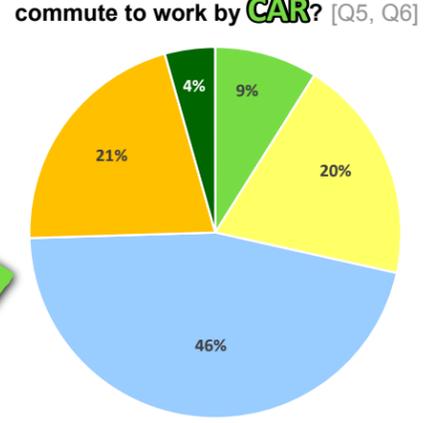


FIGURE 9b: How long is your regular commute to work by WALK? [Q5, Q6]

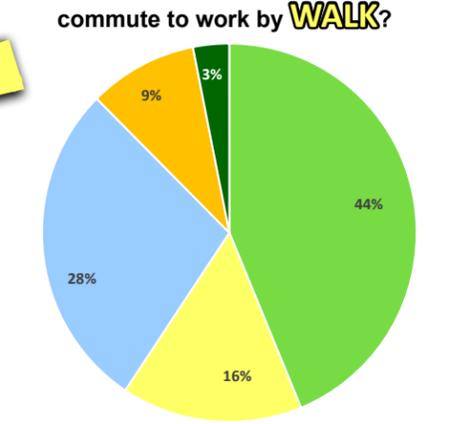


FIGURE 9c: How long is your regular commute to work by BIKE? [Q5, Q6]

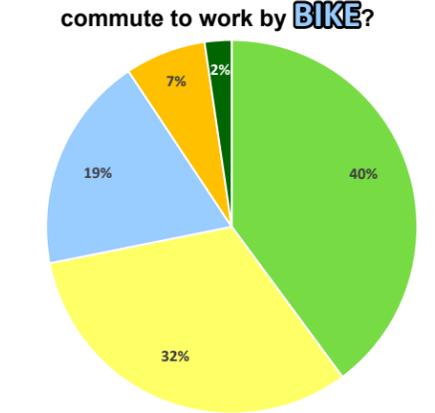


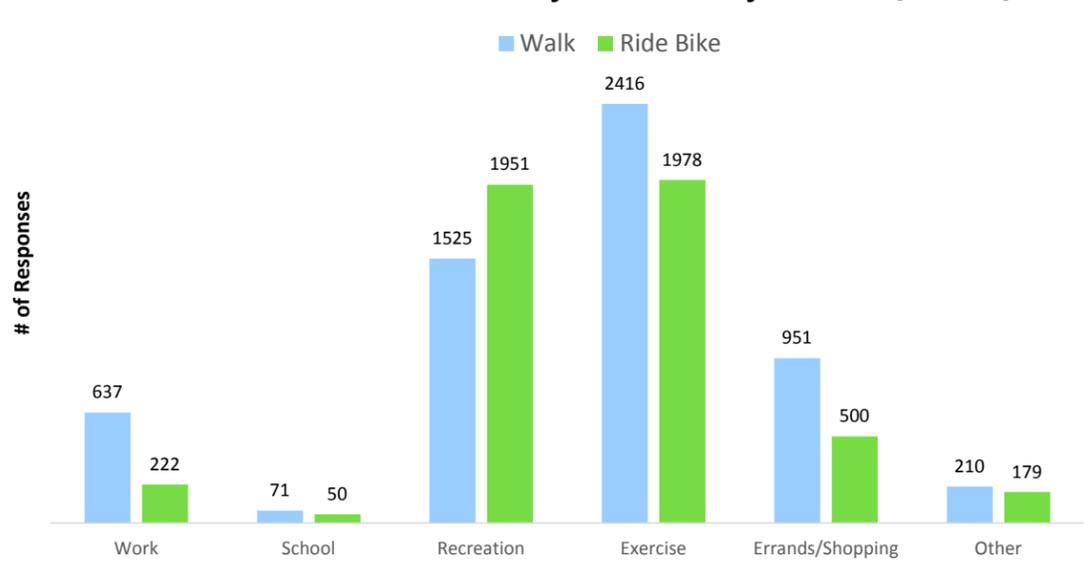
Figure 9a-9c commute times

- Less than 2 miles
- 2 to 5 miles
- 6 to 15 miles
- 16 to 30 miles
- More than 30 miles

Of 3,124 respondents, 2,931 (94%) use a car as their primary mode of transportation. Biking followed with 136 (4%) responses, walking with 46 (2%) responses, and with 11 (0.35%) responses, bus service was the least-utilized primary mode of transportation (Fig. 9).

Illustrated in Figure 9a, respondents who use a car as their primary mode of transportation had longer commutes to work with 46% driving 6 to 15 miles to work and 21% driving 16 to 30 miles. Of those whom drive to work, 29% live within 5 miles of work, accounting for 906 commuters driving bikeable/walkable distances (See Fig. 8). Respondents who walk to work had the shortest commute with 44% walking just 2 miles or less (Fig. 9b). Respondents whom bike as their primary mode of transportation also had shorter commutes than drivers, with the majority of bike commuters living less than 2 miles (40%) and 2 to 5 miles (32%) from work, which when combined demonstrate that 72% of bike commuter respondents live within 5 miles of their workplace (Fig. 9c).

FIGURE 10: Why do walk/ride your bike? [Q10, Q21]



The questions “Why do you walk?” and “Why do you ride your bike?” had 3,044 and 2,750 responses, respectively. Of those, the majority of both walkers and bikers answered that recreation and exercise were their primary reasons; and that they also walk and bike for errands/shopping and work (in descending order) (Fig. 10).

The majority of respondents seem to be “casual” walkers and bicyclists with most responding that they walk or ride between 1 to 5 miles a week (Fig. 11). In general, the number of respondents walking/biking per week decrease as the distances increase, except for some cyclists whom ride over 25 miles.

FIGURE 11: How many miles a week do you walk/ride your bike? [Q9, Q20]



FIGURE 12: Where do you primarily walk/ride your bike? [Q11, Q22]

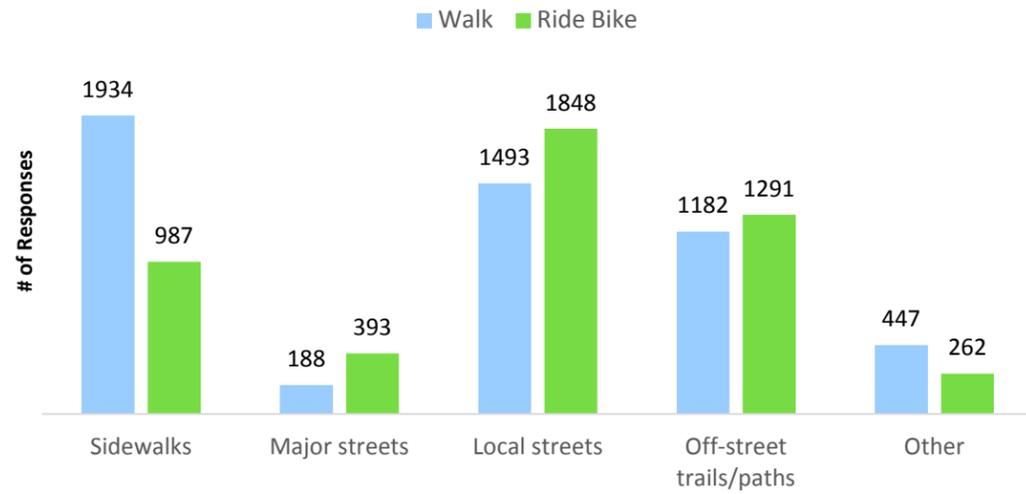


Figure 12 illustrates that of 3,035 pedestrian-specific responses, sidewalks were the most typical place to walk, with local streets and off-street trails/paths being slightly less common. Most respondents do not walk along major streets. Within the open-ended “Other” category, the two most typical responses for places to walk were the beach and the gym. Of the 2,759 bicycling-specific responses, local streets and off-street trails/paths were the most typical places to ride, with sidewalks and major streets being less common.

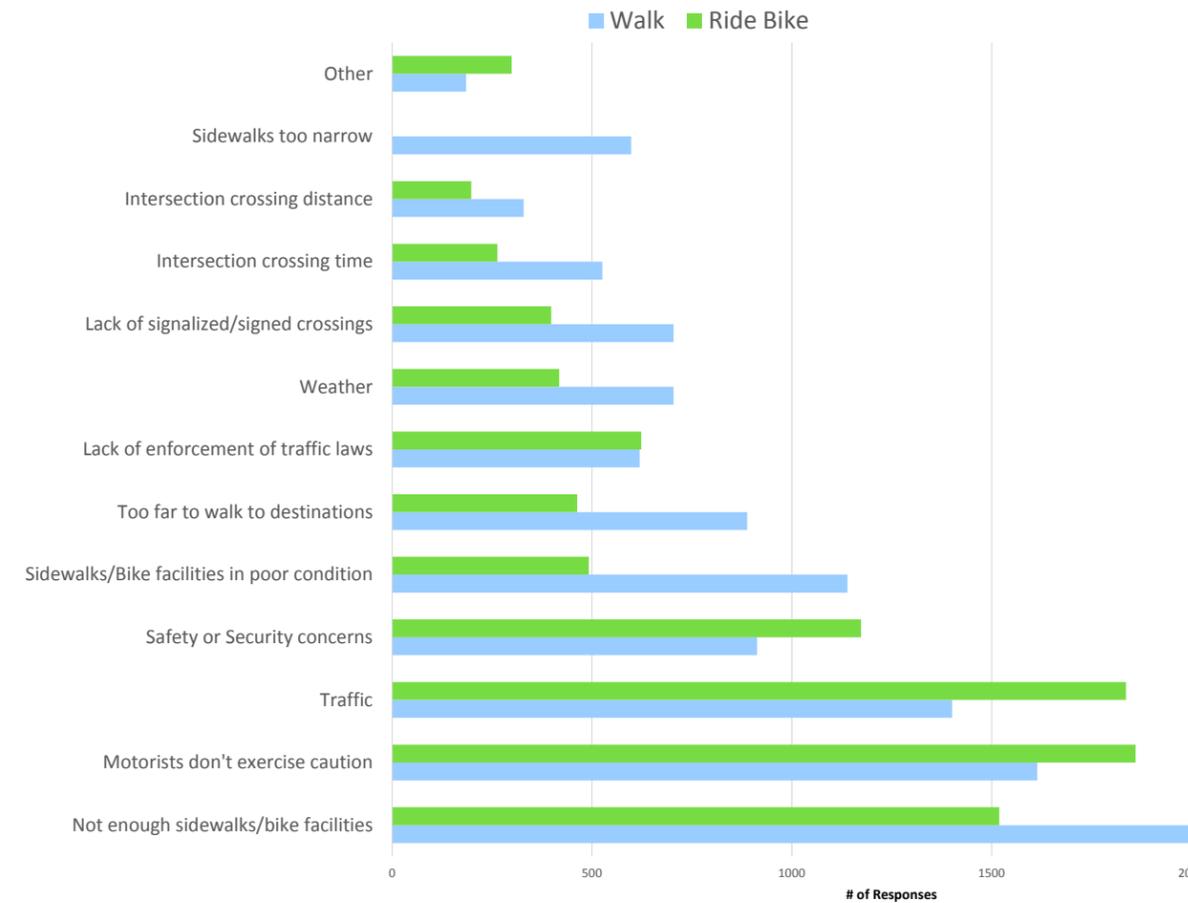
In Figure 13, pedestrian-specific responses shows that the majority of respondents feel unsafe walking on a sidewalk when traffic is 35 mph or faster. The majority of bicycling-specific responses indicate that speeds of 45 mph or faster may be unsafe for biking in mixed traffic.

FIGURE 13: At what traffic speed do you feel unsafe? [Q14, Q25]



* Walking on a sidewalk
* Biking in mixed traffic

FIGURE 14: What do you consider to be the greatest obstacles to walking/riding your bike? [Q15, Q26]



Responses indicate that walkers consider the lack of sidewalks to be the primary obstacle to walking, with motorists not exercising caution and traffic being secondary obstacles (Fig. 14). For bicyclists, the greatest obstacles to biking are that motorists do not exercising caution and traffic. The most typical obstacles to walking and biking provided in the open-ended “Other” category were bridge crossings and lighting.



FIGURE 18: What is your primary mode of transportation? [Q5]

■ Bike ■ Bus ■ Car ■ Walking

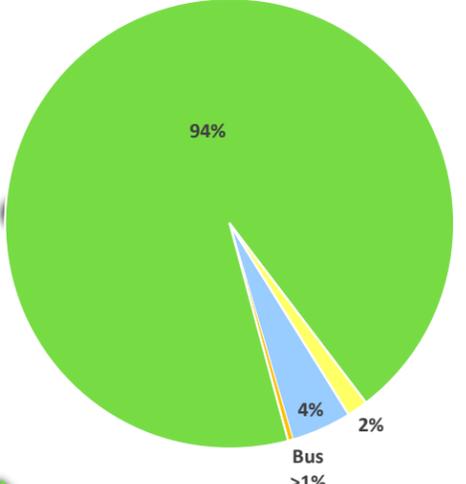


Figure 18 illustrates the primary modes of transportation of 3,124 respondents (as detailed further below).

Figure 18a illustrates that, of those 94% of respondents using a car as their primary mode of transportation (per Fig. 18), 91% expressed interest in biking, where “interest” is the combined total of those who responded that they were ‘less confident’, ‘casual’, and ‘experienced’ bicyclists from Question 19 (Fig. 15). The minority 9% of respondents using a car as their primary mode of transportation express having no interest in biking.

Of the 91% of respondents that use a car for primary transport and have interest in biking, 93% would feel more inclined to ride their bicycles if their safety concerns and facility needs were addressed (Fig. 18b). The other 7% would not feel inclined to ride their bikes more if their safety concerns and facility needs were addressed.

FIGURE 18a: Drivers vs. Interest in Biking [Q5, Q19]

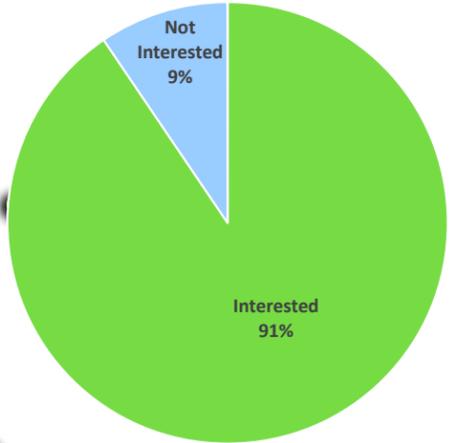
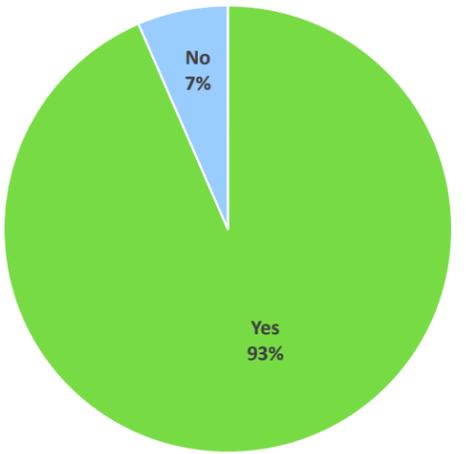


FIGURE 18b: If your safety concerns and facility needs were addressed, would you feel more inclined to ride your bike?* [Q19, Q28]



*[Of those interested in cycling...]

FIGURE 19: At what traffic speed do you feel unsafe? (According to experience level) [Q25, Q19]

■ Experienced ■ Casual ■ Less Confident

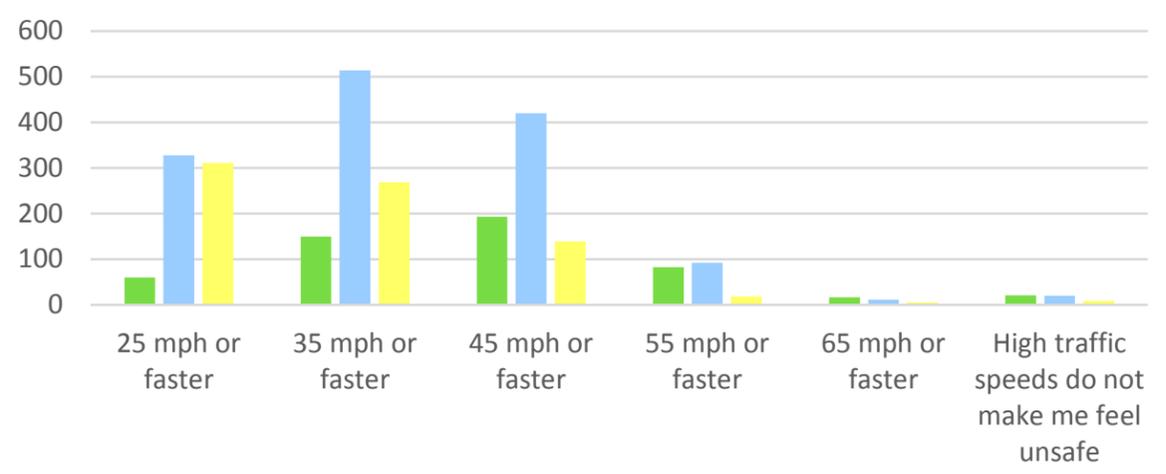


Figure 19 illustrates at what traffic speeds varying experience levels of bicyclists feel unsafe while riding in mixed traffic. The majority of less confident cyclists feel unsafe at 25 mph or faster; the majority of casual cyclists feel unsafe at 35 mph or faster, and the majority of experienced cyclists feel unsafe at speeds of 45 mph or faster.

Satisfaction with bike facilities are shown in Figure 20 according to experience level. The majority of less confident and casual cyclists have ‘neutral’ satisfaction toward the bike facilities in their area. The majority of experienced cyclists are not at all satisfied with the bike facilities in their area.

FIGURE 20: How satisfied are you with bike facilities in your area? (According to experience level) [Q29, Q19]

■ Experienced ■ Casual ■ Less Confident

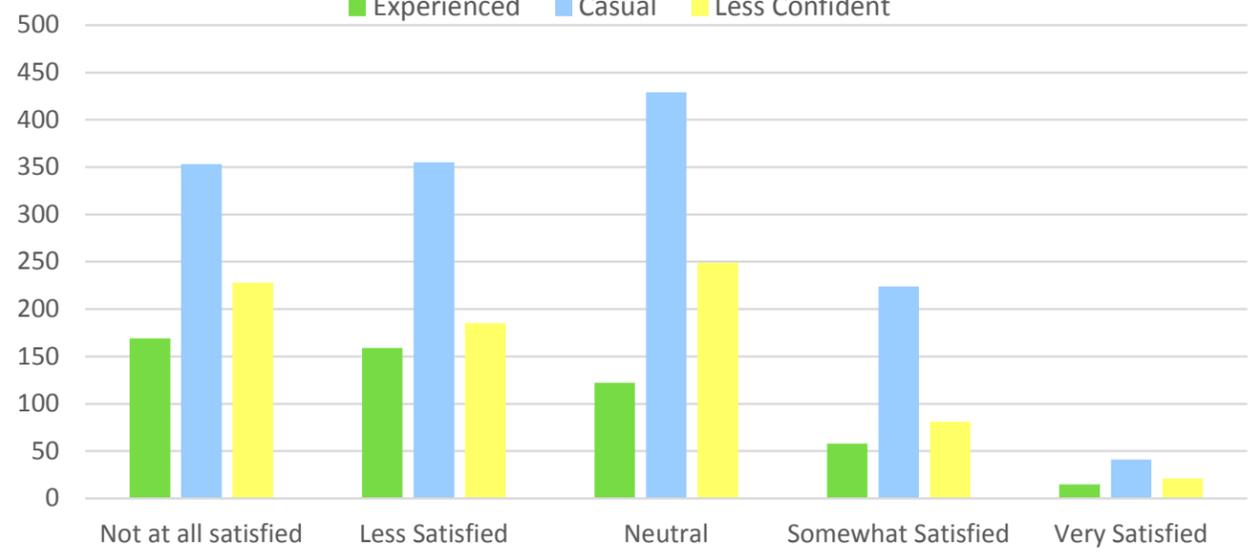
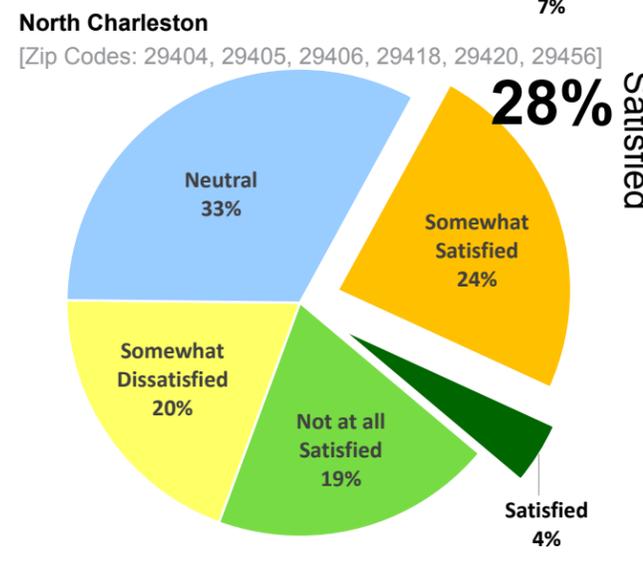
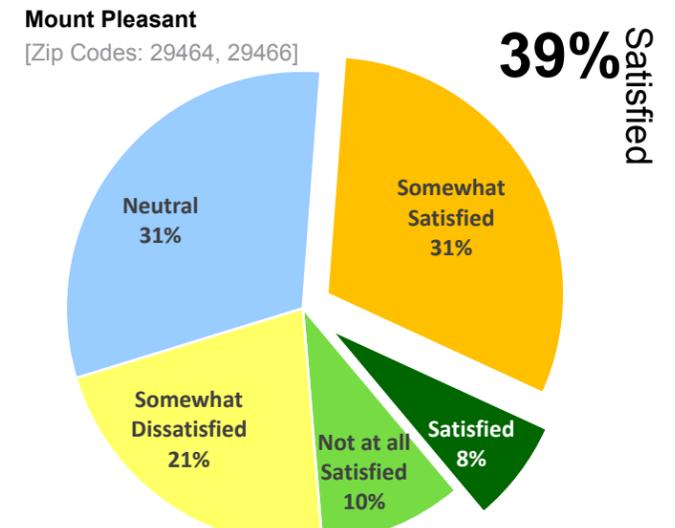
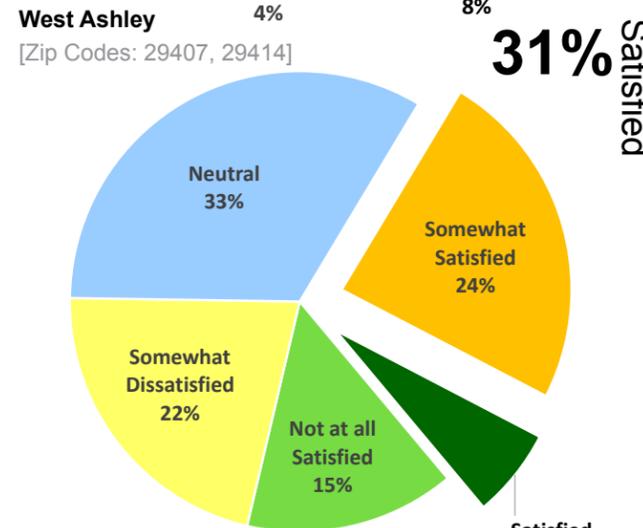
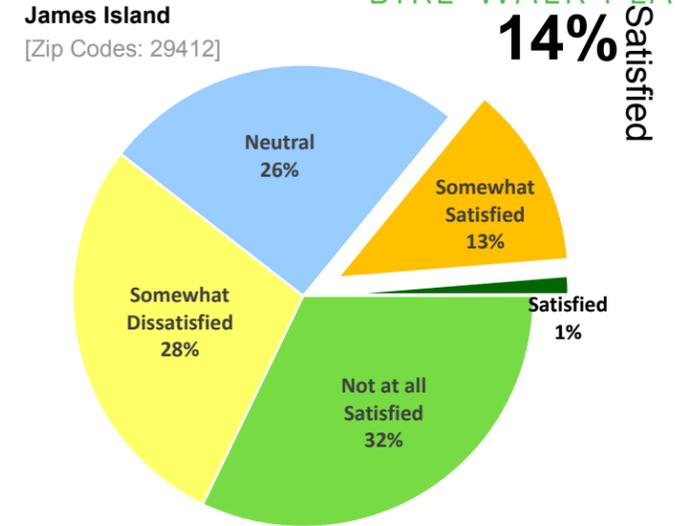
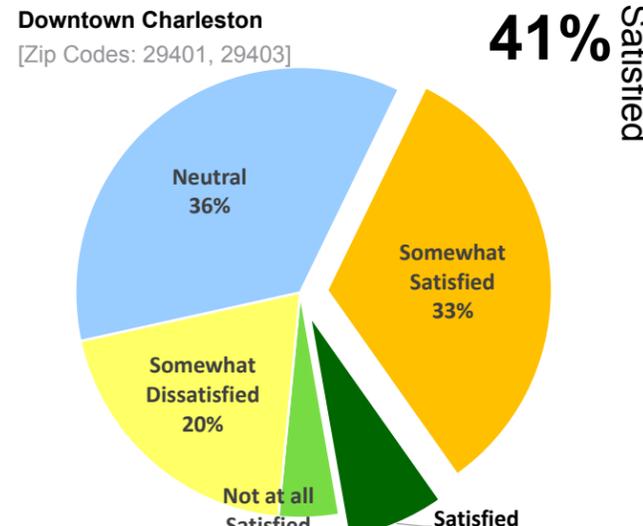
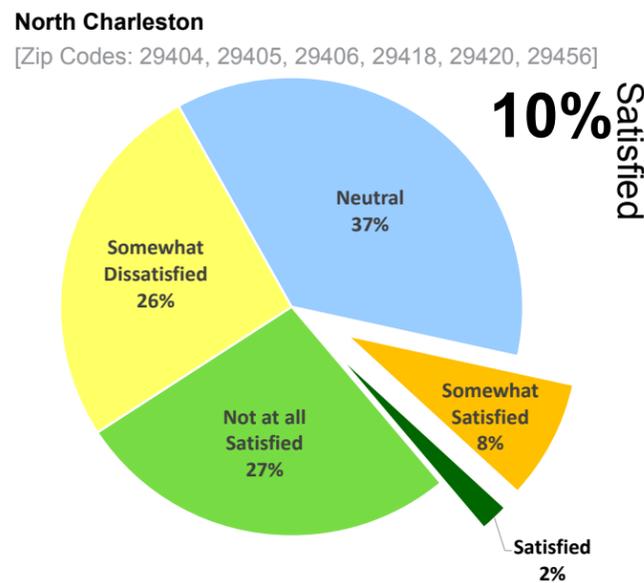
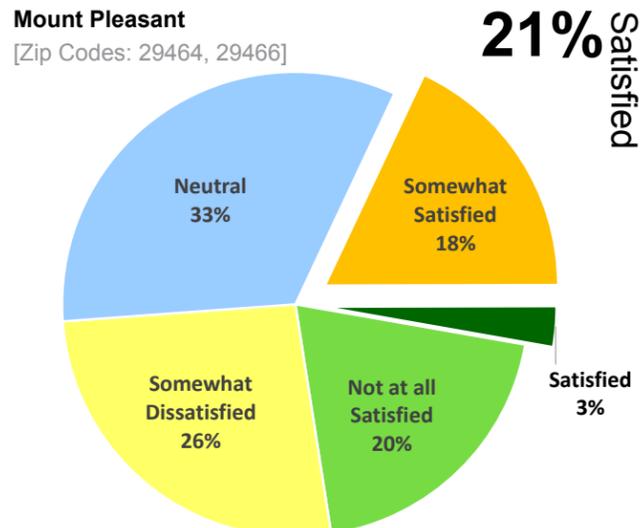
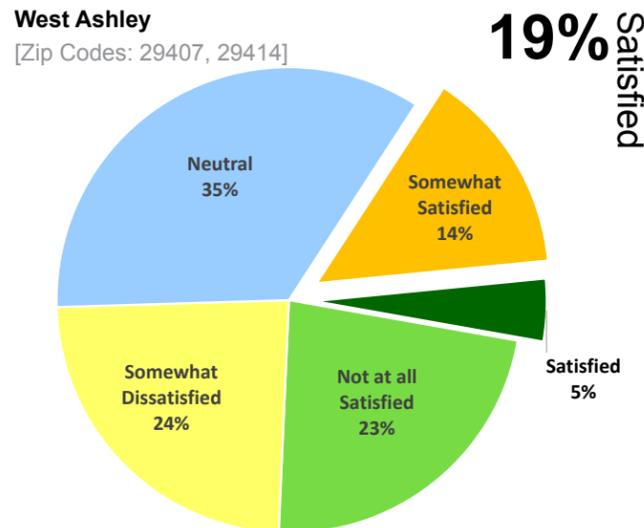
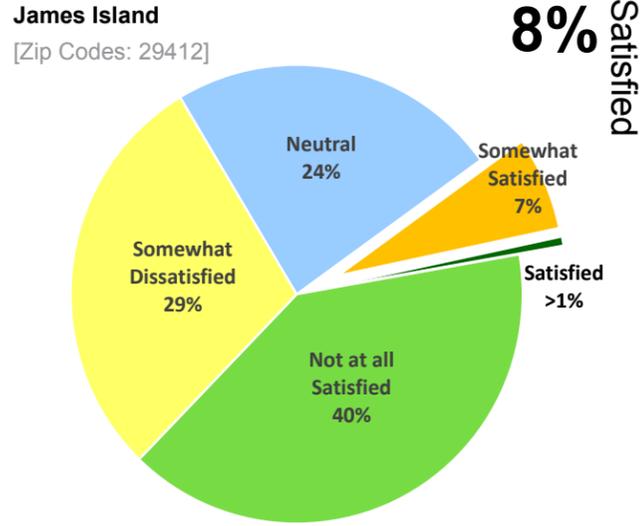
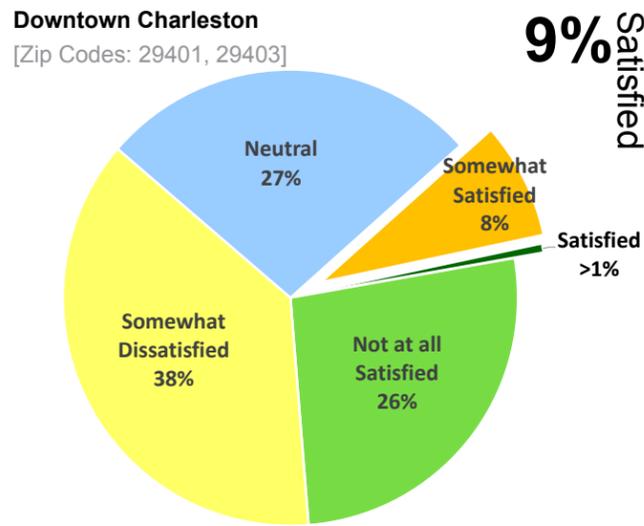


FIGURE 21: How satisfied are you with bike facilities in your area? [Q29]

FIGURE 22: How satisfied are you with pedestrian facilities in your area? [Q29]



ROUTE IMPROVEMENT SUGGESTIONS

Respondents were asked (optionally) to share areas of concern around Charleston County where improvements would be most beneficial. Respondent suggestions for improvement include narrow bridge crossings, absence of bike/pedestrian facilities, and unsafe or absent road crossings. Each suggestion mentioned in a comment was added to the following list to create a top priority list of roads, bridges, and intersections that would be most benefit future improvements. Where respondents did not specify whether their recommendation was for bike improvements or pedestrian improvements, respectively, their comment was counted toward improvements for both uses.



ROUTE IMPROVEMENT SUGGESTIONS

FIGURE 21: Identify and discuss specific roadways and/or intersections where you think bicycle and pedestrian facility improvements would be most beneficial. [Q30]

Overall Rank	Category	Rank in Category	Roadway/Bridge/Trail/Intersection	# Bike Comment*	# Ped Comment*	# Crossing Comment	Total # Comment	Photo #
1	Road	1 of 149	Folly Road	122	100	4	226	9
2	Bridge	1 of 9	Ashley River	102	77		179	37
2	Road	2 of 149	Rifle Range Rd	100	78	1	179	29
4	Road	3 of 149	Riverland Dr	85	76		161	10
5	Bridge	2 of 9	James Island Connector	69	50		119	38
6	Road	4 of 149	Hwy 61/Ashley River Rd	60	48	7	115	5
7	Road	5 of 149	Maybank Hwy	54	48	2	104	11
8	Bridge	3 of 9	Wappoo Cut	52	44		96	39
8	Road	6 of 149	Fort Johnson Rd	52	43	1	96	
10	Road	7 of 149	Camp Rd	47	46	2	95	12
11	Road	8 of 149	Hwy S17 (Savannah Hwy)	38	34	14	86	19
12	Road	9 of 149	Long Point Rd	41	38	2	81	30
13	Road	10 of 149	Hwy N17 (Mt Pleasant/Awendaw)	34	25	5	64	31
14	Road	11 of 149	Harborview Rd	33	26	2	61	
15	Road	12 of 149	Hwy 41	28	23	1	52	32
16	Road	13 of 149	Mathis Ferry Rd	24	23	3	50	33
17	Bridge	4 of 9	Northbridge (Cosgrove)	28	20		48	40
17	Road	14 of 149	Rivers Ave/Hwy 52/Hwy78	28	17	3	48	21
19	Road	15 of 149	Coleman Blvd	23	14	3	40	34
19	Road	15 of 149	Sam Rittenberg Blvd	17	17	6	40	7
21	Road	17 of 149	River Rd	21	17		38	
22	Road	18 of 149	King St	21	13		34	
23	Road	19 of 149	Glenn McConnell Hwy	17	16		33	
24	Bridge	5 of 9	Shem Creek	17	13	1	31	41
25	Road	20 of 149	Rutledge Ave	16	8	6	30	3
26	Bridge	6 of 9	Stono Bridge (Maybank Hwy)	16	13		29	42
27	Road	21 of 149	East Bay St	16	12		28	
28	Road	22 of 149	Dills Bluff Rd	14	13		27	
29	Road	23 of 149	Calhoun St	16	10		26	
30	Road	24 of 149	Dorchester Rd	14	10	1	25	25
30	Road	24 of 149	Seccessionville Rd	13	11	1	25	
32	Bridge	7 of 9	Ben Sawyer Bridge	14	10		24	43
32	Road	26 of 149	Meeting Street	14	10		24	
32	Road	26 of 149	Woodland Shores Rd	10	14		24	
35	Road	28 of 149	Ben Sawyer Hwy	10	9	1	20	
35	Road	28 of 149	Coming St	13	7		20	
37	Road	30 of 149	Clements Ferry Rd	10	9		19	
38	Road	31 of 149	Bees Ferry Rd (connections-to)	10	6	2	18	
39	Road	32 of 149	Porchers Bluff Rd	9	8		17	35
39	Road	32 of 149	Spruill Avenue	12	5		17	

FIGURE 21: Identify and discuss specific roadways and/or intersections where you think bicycle and pedestrian facility improvements would be most beneficial. [Q30]

Overall Rank	Category	Rank in Category	Roadway/Bridge/Trail/Intersection	# Bike Comment*	# Ped Comment*	# Crossing Comment	Total # Comment	Photo #
39	Trail	1 of 4	West Ashley Greenway	6	5	6	17	
42	Road	34 of 149	Montague Ave	9	6	1	16	28
43	Road	35 of 149	Crosstown Connector	6	5	4	15	
44	Bridge	8 of 9	Limehouse Bridge	7	7		14	44
44	Road	36 of 149	Ashley Phosphate Rd	7	7		14	22
44	Road	36 of 149	Spring St	6	6	2	14	
47	Road	38 of 149	Foster Creek Rd	7	6		13	
47	Road	38 of 149	Main Rd	8	5		13	8&16
49	Road	40 of 149	Carolina Bay Dr	5	5	2	12	
49	Road	40 of 149	Central Park Rd	5	7		12	
51	Road	42 of 149	Bohicket Rd	5	4	2	11	
51	Road	42 of 149	Bowman Rd	6	5		11	
51	Road	42 of 149	Cannon St	5	5	1	11	
54	Bridge	9 of 9	Don Holt Bridge	5	5		10	
54	Road	45 of 149	Darrell Creek Rd	4	4	2	10	
54	Road	45 of 149	Hwy 165	5	5		10	17
54	Road	45 of 149	Savage Rd	5	4	1	10	
58	Intersection	1 of 33	Camp and Folly	4	4	1	9	
58	Road	48 of 149	Lockwood Blvd	4	4	1	9	1
58	Road	48 of 149	Orange Grove Rd	3	4	2	9	
58	Road	48 of 149	Royale Rd	4	4	1	9	
62	Road	51 of 149	Berlin G Myers	3	3	2	8	
62	Road	51 of 149	Miles Jamison Rd	4	4		8	
62	Road	51 of 149	Needlerush Rd	5	3		8	
62	Road	51 of 149	Patriots Point Rd	4	4		8	
62	Road	51 of 149	St Philip St	5	3		8	
62	Road	51 of 149	Whipple Rd	4	4		8	
68	Road	57 of 149	Brownswood Rd	4	3		7	15
68	Road	57 of 149	Chisolm Rd	5	2		7	13
68	Road	57 of 149	Hamlin Rd	3	4		7	36
68	Road	57 of 149	Park West Blvd	2	3	2	7	
68	Road	57 of 149	Venning Rd	4	3		7	
73	Road	62 of 149	Chuck Dawley	2	2	2	6	
73	Road	62 of 149	Grimball Rd	3	3		6	
73	Road	62 of 149	Rhett Rd	4	2		6	
76	Road	65 of 149	Ashley Hall Rd	2	3		5	
76	Road	65 of 149	Cottingham Dr	2	3		5	
76	Road	65 of 149	Hungry Neck Rd	3	2		5	
76	Road	65 of 149	Mixson Ave	3	2		5	
76	Road	65 of 149	Palm Blvd	4	1		5	

FIGURE 21: Identify and discuss specific roadways and/or intersections where you think bicycle and pedestrian facility improvements would be most beneficial. [Q30]

Overall Rank	Category	Rank in Category	Roadway/Bridge/Trail/Intersection	# Bike Comment*	# Ped Comment*	# Crossing Comment	Total # Comment	Photo #
76	Road	65 of 149	Redbank Rd	2	2	1	5	
76	Road	65 of 149	Tanner Ford Blvd	3	2		5	
76	Road	65 of 149	Wappoo Rd	2	3		5	
76	Trail	2 of 4	Ashley River (Hwy 61) Path	3	2		5	
85	Intersection	2 of 33	Hwy 61 and Sam Rittenberg	2	2		4	
85	Intersection	2 of 33	Riverland and Camp	2	2		4	
85	Road	73 of 149	Battery Island Dr	2	2		4	
85	Road	73 of 149	Cypress Garden Rd	2	2		4	
85	Road	73 of 149	Durant	3	1		4	
85	Road	73 of 149	Gahagan Rd	2	2		4	
85	Road	73 of 149	Hwy 162	2	2		4	18
85	Road	73 of 149	Old Towne Rd (Hwy 171)	3	1		4	
85	Road	73 of 149	Orleans Ave	2	2		4	
85	Road	73 of 149	Paul Cantrell Blvd	2	2		4	
85	Road	73 of 149	Sanders Rd	2	2		4	
85	Road	73 of 149	Yeamans Hall Rd	2	2		4	
97	Intersection	4 of 33	Folly and Fort Johnson	1	1	1	3	
97	Intersection	4 of 33	Mathis Ferry and Hwy 17	1	1	1	3	
97	Road	83 of 149	Appian Way	2	1		3	
97	Road	83 of 149	Main St (Summerville)	1	1	1	3	
97	Road	83 of 149	North Shore Dr	2	1		3	
97	Road	83 of 149	Pelzer Dr	1	2		3	
97	Road	83 of 149	Remount Rd	1	1	1	3	24
97	Road	83 of 149	Trolley Rd	2	1		3	
97	Road	83 of 149	Wando Park Blvd	1	2		3	
106	Intersection	6 of 33	Ashley Phosphate and Rivers Ave	1	1		2	
106	Intersection	6 of 33	Bessemer and Kilby	1	1		2	
106	Intersection	6 of 33	Bolston Hwy and Hwy 191	1	1		2	
106	Intersection	6 of 33	Brownswood Rd and Murraywood Rd	1	1		2	
106	Intersection	6 of 33	Charlestowne and Old Towne (Hwy 171)	0	0	2	2	
106	Intersection	6 of 33	Coleman and Center St	1	1		2	
106	Intersection	6 of 33	Coleman and Chuck Dawley	1	1		2	
106	Intersection	6 of 33	Cosgrove and Orange Grove	1	1		2	
106	Intersection	6 of 33	Folly and Ellis Oak	1	1		2	
106	Intersection	6 of 33	Folly Rd and Ashley River	1	1		2	
106	Intersection	6 of 33	Fort Johnson and Folly Rd	1	1		2	
106	Intersection	6 of 33	Harborview and Fort Johnson	1	1		2	
106	Intersection	6 of 33	Hwy 17 and Hwy 526	1	1		2	

FIGURE 21: Identify and discuss specific roadways and/or intersections where you think bicycle and pedestrian facility improvements would be most beneficial. [Q30]

Overall Rank	Category	Rank in Category	Roadway/Bridge/Trail/Intersection	# Bike Comment*	# Ped Comment*	# Crossing Comment	Total # Comment	Photo #
106	Intersection	6 of 33	Longpoint and Egypt	1	1		2	
106	Intersection	6 of 33	Longpoint and Whipple	1	1		2	
106	Intersection	6 of 33	Maybank Hwy and Riverland Dr	1	1		2	
106	Intersection	6 of 33	McCants and Hwy 703	1	1		2	
106	Intersection	6 of 33	Remount Rd and Rivers Ave	1	1		2	
106	Intersection	6 of 33	Rifle Range Rd and Ben Sawyer	1	1		2	
106	Intersection	6 of 33	River Rd and Maybank Hwy	1	1		2	
106	Intersection	6 of 33	Riverland and Woodland Shores	1	1		2	
106	Intersection	6 of 33	Riverland Dr and Camp Rd	1	1		2	
106	Intersection	6 of 33	Rivers and Remount	1	1		2	
106	Intersection	6 of 33	Sam Ritt and Hwy 17	1	1		2	
106	Road	90 of 149	Anson St	1	1		2	
106	Road	90 of 149	Azalea Ave	1	1		2	23
106	Road	90 of 149	Bear Swamp Rd	1	1		2	
106	Road	90 of 149	Betsy Kerrison Parkway	1	1		2	14
106	Road	90 of 149	Bushy Park Rd	1	1		2	
106	Road	90 of 149	Charlestowne Rd	1	1		2	
106	Road	90 of 149	Cosgrove	1	0	1	2	
106	Road	90 of 149	Cross County Rd	1	1		2	
106	Road	90 of 149	Ellis Creek	1	1		2	
106	Road	90 of 149	Fishburne Rd	1	1		2	2
106	Road	90 of 149	Fleming Rd	1	1		2	
106	Road	90 of 149	Hanahan Rd	1	1		2	
106	Road	90 of 149	Hwy 402	1	1		2	
106	Road	90 of 149	Hwy 174	1	0	1	2	20
106	Road	90 of 149	Ladson Rd	1	1		2	
106	Road	90 of 149	Longleaf Rd	1	1		2	
106	Road	90 of 149	Longmont Rd	1	1		2	
106	Road	90 of 149	Longstreet Rd	1	1		2	
106	Road	90 of 149	Murray Dr	1	1		2	
106	Road	90 of 149	Myers Rd	1	1		2	
106	Road	90 of 149	National Dr	1	1		2	
106	Road	90 of 149	Old Military Rd	1	1		2	
106	Road	90 of 149	Otranto Rd	1	1		2	26
106	Road	90 of 149	Phillip Simmons	1	1		2	
106	Road	90 of 149	Quail Dr	1	1		2	
106	Road	90 of 149	Rose Dr	1	1		2	
106	Road	90 of 149	S-8-208	1	1		2	
106	Road	90 of 149	Sangaree Parkway	1	1		2	
106	Road	90 of 149	Seewee Rd	2	0		2	

FIGURE 21: Identify and discuss specific roadways and/or intersections where you think bicycle and pedestrian facility improvements would be most beneficial. [Q30]

Overall Rank	Category	Rank in Category	Roadway/Bridge/Trail/Intersection	# Bike Comment*	# Ped Comment*	# Crossing Comment	Total # Comment	Photo #
106	Road	90 of 149	Septima Clark Parkway	0	0	2	2	
106	Road	90 of 149	Snee Farm	1	1		2	
106	Road	90 of 149	Snowden Rd	1	1		2	
106	Road	90 of 149	St James Ave	1	1		2	
106	Road	90 of 149	Steed Creek Rd	1	1		2	
106	Road	90 of 149	W Boundary Rd	1	1		2	
106	Road	90 of 149	Wesley Dr	1	1		2	
106	Road	90 of 149	Wingo Way	1	1		2	
106	Road	90 of 149	Yorktown Rd	1	1		2	
106	Trail	3 of 4	Palmetto Trail	1	1		2	
106	Trail	3 of 4	Sawmill Branch Trail	1	1		2	
170	Intersection	30 of 33	Hwy 17 and Avondale Dr	0	0	1	1	
170	Intersection	30 of 33	Hwy 61 and Hwy 171	0	0	1	1	
170	Intersection	30 of 33	Seccessionville Rd and Fort Johnson Rd	0	0	1	1	
170	Intersection	30 of 33	Whipple and Mathis Ferry	0	0	1	1	
170	Road	128 of 149	Arctic Ave	1	0		1	
170	Road	128 of 149	Ashley Ave (Folly)	1	0		1	
170	Road	128 of 149	Aviation Ave	1	0		1	
170	Road	128 of 149	Bears Bluff	1	0		1	
170	Road	128 of 149	Belle Hall Parkway	1	0		1	
170	Road	128 of 149	Branch Creek	1	0		1	
170	Road	128 of 149	Cloudbreak Ct	0	1		1	
170	Road	128 of 149	Edenvale Rd	0	0	1	1	
170	Road	128 of 149	Fellowship Rd	0	1		1	27
170	Road	128 of 149	Hagood Rd	1	0		1	
170	Road	128 of 149	Halfway Creek Rd	1	0		1	
170	Road	128 of 149	International Blvd	1	0		1	
170	Road	128 of 149	Lighthouse Blvd	0	0	1	1	
170	Road	128 of 149	Lincolnvile Rd	0	1		1	
170	Road	128 of 149	Magnolia Rd	0	1		1	
170	Road	128 of 149	McMillan Rd	1	0		1	
170	Road	128 of 149	Old Moncks Corner Rd	1	0		1	
170	Road	128 of 149	President St	1	0		1	4
170	Road	128 of 149	Reynolds Rd	1	0		1	
170	Road	128 of 149	Simmons St	1	0		1	
170	Road	128 of 149	Washington St	1	0		1	
170	Road	128 of 149	Wildgame Rd	1	0		1	
Total				1629	1327	117	3073	

*Routes where either bike or pedestrian improvements were not discretely specified (e.g., "Woodland Shores Rd." NOT "... sidewalks on Woodland Shores Rd." were counted in both columns.

APPENDIX A:
PEOPLE 2 PARKS WEB-BASED SURVEY INSTRUMENT



PEOPLE2PARKS BIKE-WALK PLAN

The People2Parks Bike-Walk Plan

1. Welcome!

Thanks for your interest in taking this survey. By responding you'll be helping to shape the future of bicycle and pedestrian transportation in the greater Charleston area. This survey will take you less than 10 minutes to complete. Once complete, you will be directed to a "wikimap" -- a web-based mapping tool that allows you to draw your desired biking and walking routes, destinations, and/or needed bike/pedestrian improvements. If you'd like to skip the survey and go straight to the wikimap, just click the gray button in the top right corner of your screen at any time.

Enter your e-mail address at the end of this survey for a chance to win a free Gold Pass, good for free entry to all Charleston County Parks facilities and events for one year!

Please direct questions about the survey and/or mapping tool to Matt Moldenhauer with Charleston County Parks. Reach him by e-mail at mmoldenhauer@ccprc.com or by phone at (843)762-8047.

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The People2Parks Bike-Walk Plan

2. Background

*** 1. Gender (select one)**

- Female
- Male

*** 2. Age Group (select one)**

- 21 or younger
- 22 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 or older

*** 3. What County do you live in? (select one)**

- Charleston
- Berkeley
- Dorchester
- Other (please specify)

*** 4. What is your residential zip code?**

5. What is your primary mode of transportation? (select one)

- Bike
- Bus
- Car
- Walking
- Other (please specify)

6. How long is your regular commute to work or school? (select one)

- Less than 2 miles
- 2 to 5 miles
- 6 to 15 miles
- 16 to 30 miles
- More than 30 miles
- Not Applicable

*** 7. Do you feel safe walking or riding your bike to desired destinations? For example: work, school, parks, restaurants? (select one)**

- Yes
- No

*** 8. How far do you reside from your nearest park? (select one)**

- Less than 2 miles
- 2 to 5 miles
- 6 to 15 miles
- 16 to 30 miles
- More than 30 miles
- Unsure

The People2Parks Bike-Walk Plan

3. WALKING-SPECIFIC QUESTIONS (Also includes running and wheelchair use)

9. How many miles per week do you walk? (select one)

- Less than 1 mile
- 1 to 5 miles
- 6 to 10 miles
- 11 to 15 miles
- 16 to 20 miles
- 20 to 25 miles
- Over 25 miles

10. Why do you walk? (select all that apply)

- Work
- School
- Recreation
- Exercise
- Errands/Shopping
- Other (please specify)

11. Where do you primarily walk? (select all that apply)

- Sidewalks
- Major streets
- Local streets
- Off-street trails/paths
- Other (please specify)

12. For a typical walk, what distance is comfortable to you? (select one)

- Up to 1/4 mile (5 mins)
- Up to 1/2 mile (10 mins)
- Up to 1 mile (20 mins)
- Up to 1.5 miles (30 mins)
- Up to 2 miles (40 mins)
- More than 2 miles

13. When walking along a sidewalk, do you feel safe when... (select all that apply)

- Only a curb separates the sidewalk from the road
- Parking spaces separate the sidewalk from the road
- 3 feet of grass separate the sidewalk from the road
- 5 feet of grass separate the sidewalk from the road
- 10 feet of grass separate the sidewalk from the road
- Trees and/or shrubs separate the sidewalk from the roadway
- Other (please specify)

14. At what traffic speed do you feel unsafe walking on a curbside sidewalk? (select one)

- 25 mph or faster
- 35 mph or faster
- 45 mph or faster
- 55 mph or faster
- 65 mph or faster
- High traffic speeds do not make me feel unsafe

22. Where do you primarily ride your bike? (select all that apply)

- Sidewalks
- Major streets
- Local streets
- Off-street bike trails/paths
- Other (please specify)

23. For a typical bike ride, what distance is comfortable to you?

- Up to 1 mile (5 mins)
- Up to 2 miles (10 mins)
- Up to 4 miles (20 mins)
- Up to 6 miles (30 mins)
- Up to 8 miles (40 mins)
- More than 8 miles

24. What types of bike facilities do you prefer to ride on? (select all that apply)

- Bike lanes
- On the shoulder of a roadway
- On the road, on low-traffic streets
- On the road, even if traffic speeds and volumes are higher
- Greenways/Paths separated from roadways
- Paths and Trails
- Sidewalks
- Other (please specify)

25. At what traffic speed do you feel unsafe riding a bicycle in mixed traffic (ex. "shared road", where bikes and vehicles share a traffic lane)? (select one)

- 25 mph or faster
- 35 mph or faster
- 45 mph or faster
- 55 mph or faster
- 65 mph or faster
- High traffic speeds do not make me feel unsafe

26. What do you consider to be the greatest obstacles to biking in your community? (select one)

- Traffic
- Not enough bike facilities
- Bike facilities in poor condition
- Weather
- Too far to bicycle to destinations
- Safety or Security concerns
- Motorists don't exercise caution
- Lack of enforcement of traffic laws (e.g. at red lights)
- Intersection crossing time
- Intersection crossing distance
- Lack of signalized/signed crossings
- Other (please specify)

27. Do you feel safe riding a bike in your community? (select one)

- Yes
- No

28. If your safety concerns and facility needs were addressed, would you feel more inclined to ride your bike?

- Yes
- No

29. On the following scale, how satisfied are you with bike facilities in your area? Provide additional comments in the box below.

NOT AT ALL SATISFIED NEUTRAL VERY SATISFIED

○ ○ ○ ○ ○

Additional Comments:

The People2Parks Bike-Walk Plan

5. THANK YOU!

30. OPTIONAL: Identify and discuss specific roadways and/or intersections where you think bicycle and pedestrian facility improvements would be most beneficial. You may also choose to draw these features in the wikimap on the next page.

31. Enter your e-mail address in the box below for a chance to win a free Gold Pass (good for free entry to all Charleston County Parks facilities and events for one year), and/or if you are interested in staying updated on this planning effort. Then, click the "Show Us Your Routes!" button below to be re-directed to our web-based mapping tool to show us your desired walking and biking routes.

E-mail Address:

APPENDIX B:
PARTIAL PHOTOGRAPHIC INVENTORY OF ROUTES
SUGGESTED FOR IMPROVEMENT

Charleston Peninsula

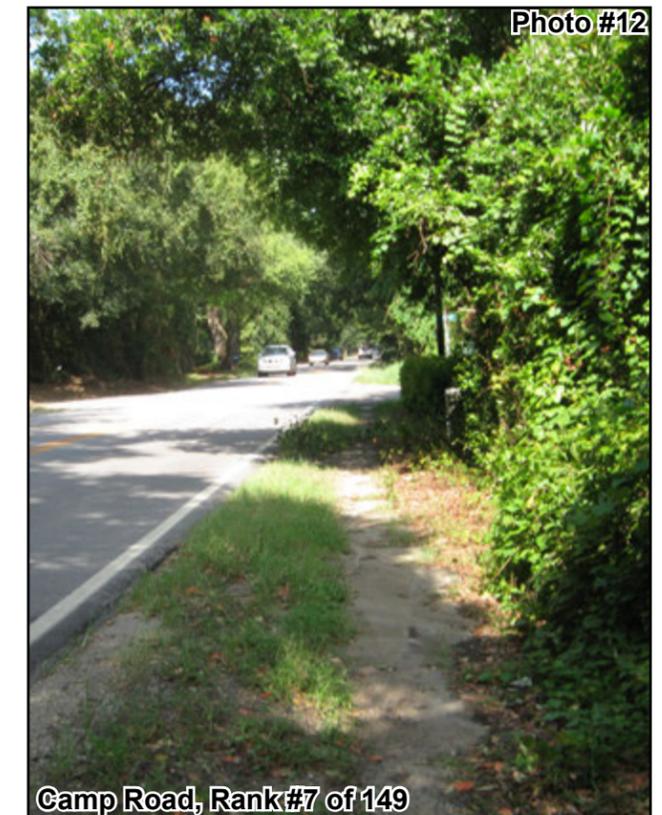
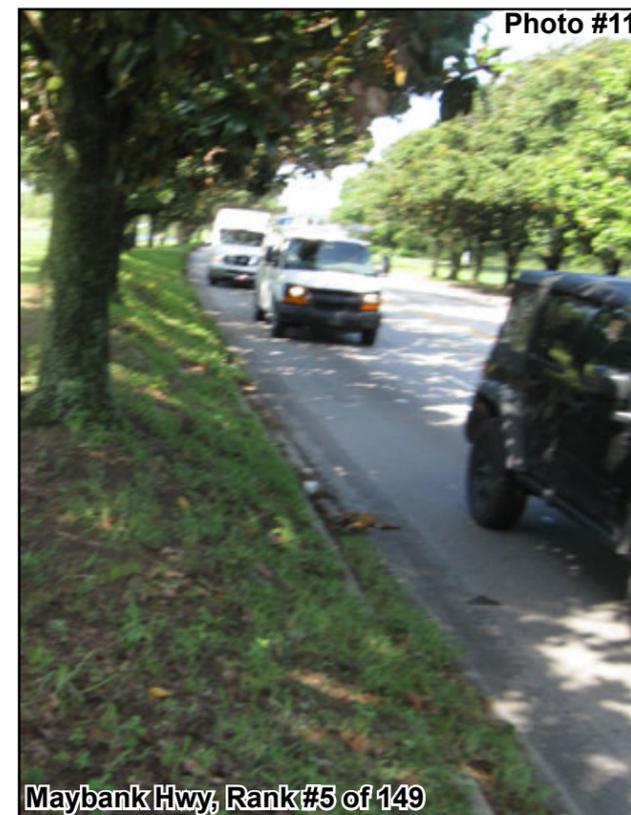
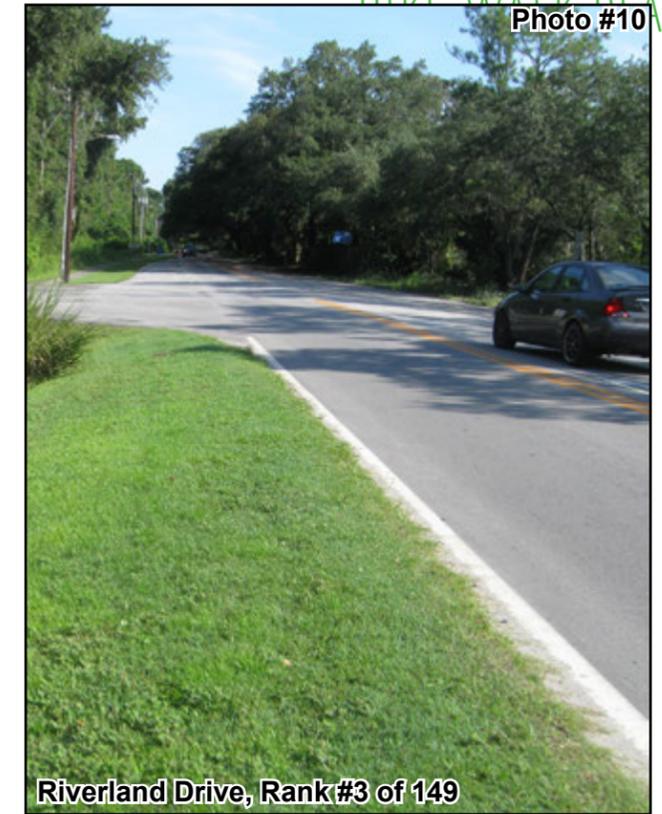
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West Ashley



James Island



Johns Island



West County



North Charleston



Mount Pleasant / East Cooper



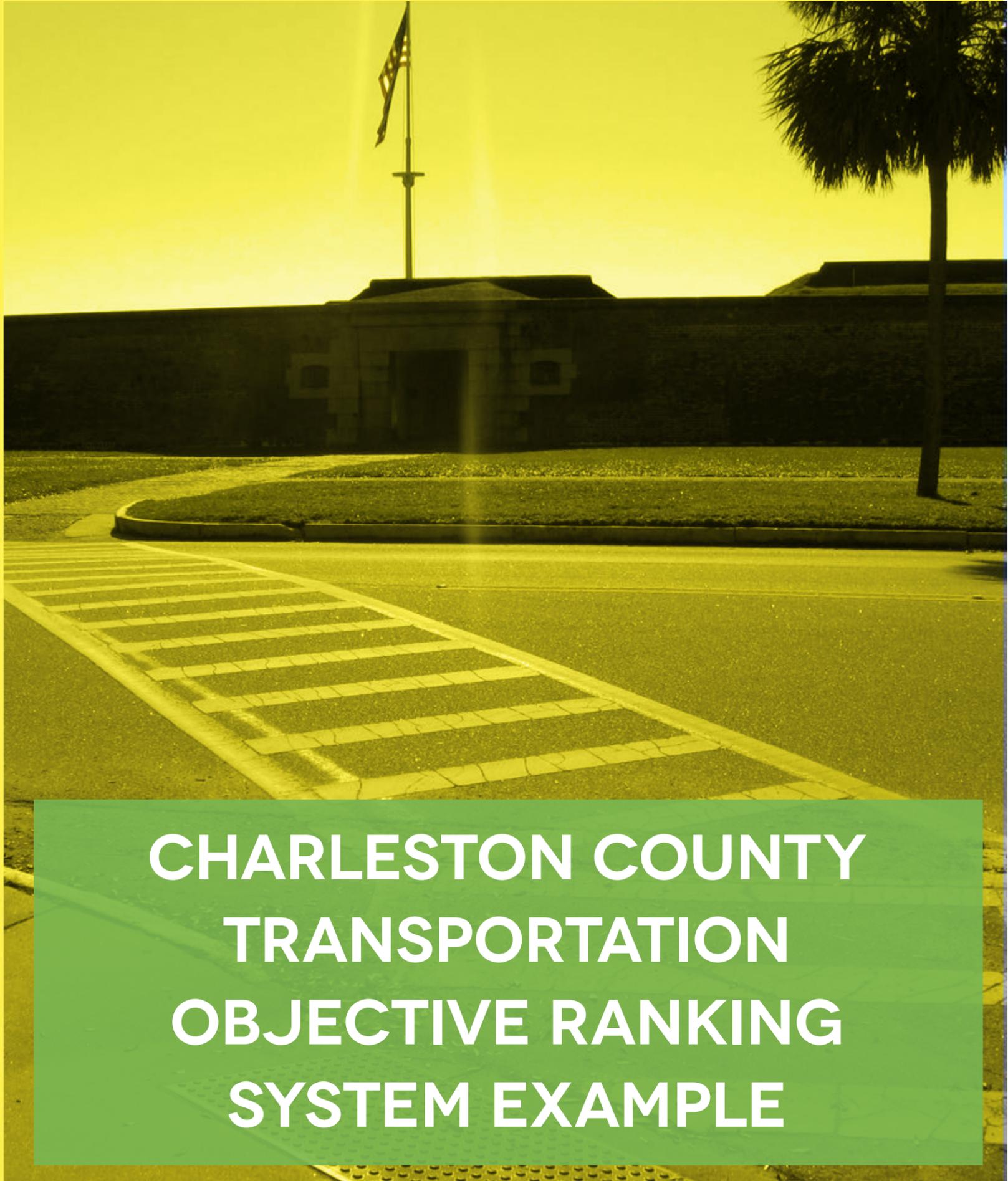
Bridges



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APPENDIX 3



**CHARLESTON COUNTY
TRANSPORTATION
OBJECTIVE RANKING
SYSTEM EXAMPLE**



Charleston County Transportation Sales Tax Program Objective Ranking System for Bike / Pedestrian Enhancement Projects

Project Name:	Croghan Landing Drive Shared Use Path		
Requestor:	City of Charleston	Study <input type="checkbox"/>	Funding Only <input type="checkbox"/>
Project Location:	Charleston	Rank Completion Date:	2/4/2014
Project District:	8	Estimated Project Cost:	\$119,783.00

A. Project Benefits

Type of Project	Value	x	Weight	=	Points
Gap Construction (Value = 10)	10	x	40	=	400
New Construction (Value = 5)					
Existing Bike / Ped Facility on either side of roadway (Value = 0)					

Safety	Value	x	Weight	=	Points
*Defined as the number of accidents in the last five (5) years in the limits of the project.	0	x	35	=	0
More than 10 (Value = 8)					
7 to 10 (Value = 6) 1 to 3 (Value = 2)					
4 to 6 (Value = 4) None (Value = 0)					

Road type	Value	x	Weight	=	Points
Major Road (High volume of traffic) (Value = 8)	4	x	15	=	60
Collector (Moderate volume of traffic) (Value = 4)					
Neighborhood Street (Low volume of traffic) (Value = 2)					

Schools	Value	x	Weight	=	Points
School within limits of project (Value = 5)	0	x	20	=	0
No school (Value = 0)					

Public Parks	Value	x	Weight	=	Points
Park within limits of project (Value = 5)	0	x	20	=	0
No park (Value = 0)					

Greenbelts	Value	x	Weight	=	Points
Existing or proposed Greenbelt in limits of project (Value = 5)	5	x	10	=	50
No Greenbelt (Value = 0)					

Support for Project	Value	x	Weight	=	Points
More than 10 (Value = 8)	2	x	20	=	40
7 to 10 (Value = 6)					
4 to 6 (Value = 4)					
1 to 3 (Value = 2)					
None (Value = 0)					

Note:
Multiply Values by 2 for requests older than 10 years.
Multiply Values by 1.5 for requests between 5 and 10 years old.

Compatible Land Use	Value	x	Weight	=	Points
*Compatible land use consists of residential and commercial, commercial and office and office and residential.	4	x	20	=	80
Very compatible land use (exists throughout the project limits) (Value = 4)					
Minimal throughout compatible land use (Value = 0)					

Presence of Transit	Value	x	Weight	=	Points
Transit Route within project limits (Value = 5)	0	x	20	=	0
None (Value = 0)					

Subtotal Points	=	630
Adjustment Factor	=	1.00
Total Points	=	630.00

Note 1 - Technical Difficulty:
Technical Difficulty consists of an assessment of the issues to be overcome during the design and construction of the project. These items include, but are not limited to, wetlands, grand trees, right of way, drainage and bridges.

B. Cost - Benefit Rating (Cost Divided by Total Points)

Ranking developed by: Eric Adams		Project Cost		Total Points		Project Rating
		\$119,783.00	/	630.00	=	190.13



Presented for



Presented by



Alta Planning + Design
638 East Washington Street
Greenville, SC 29601