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# Appendix C

## Funding Resources



## Overview

When considering possible funding sources for pedestrian projects, it is important to remember that not all construction activities or programs will be accomplished with a single funding source. It will be necessary to use several sources of funding that together will support full project completion. Funding sources can be used for a variety of activities, including: programs, planning,

design, implementation, and maintenance. This appendix outlines the most likely sources of funding from the federal, state, and local government levels as well as from the private and nonprofit sectors. Note that this reflects the funding available at the time of writing. Funding amounts, cycles, and the programs themselves may change over time.

## Federal Funding Sources

Federal funding is typically directed through state agencies to local governments either in the form of formula funds or discretionary grants. Federal funding typically requires a local match of five percent to 50 percent, but there are sometimes exceptions. The following is a list of possible Federal funding sources that could be used to support the construction of pedestrian facilities.

### **Federal STBGP-DA & TASA-DA Funds**

The Surface Transportation Block Grant Program Direct Attributable (STBGP-DA) and Transportation Alternative Set Aside Direct Attributable (TASA-DA) are federal funding sources distributed by the WMPO. Member jurisdictions of the WMPO are eligible to apply for these funds through a competitive funding process that prioritizes locally administered projects in the Region. These projects are funded using the federal funding sources directly attributed to the region with a minimum 20% local match.

For more information:

<https://www.wmpo.org/stp-datap-da/>

### **Transportation Alternatives Program (TAP) Bike/Ped Scoping Guide**

In January 2020, NCDOT released the Transportation Alternatives Program (TAP) Bike/Ped Scoping Guide. This document provides detail and guidance on the Project Delivery Process and important elements to consider in bike/ped project development.

For more information: <https://connect.ncdot.gov/projects/BikePed/Documents/BikePed%20Project%20Scoping%20Guidance%20for%20Local%20Governments.pdf>

### **Carbon Reduction Program (CRP) Funds**

The CRP provides funds for projects designed to reduce transportation emissions, such as those that shift travel mode from vehicles to walking. The WMPO administers funds for the Wilmington area. Projects require a minimum 20% local match to the federal funds.

For more information: [https://www.fhwa.dot.gov/bipartisan-infrastructure-law/crp\\_fact\\_sheet.cfm](https://www.fhwa.dot.gov/bipartisan-infrastructure-law/crp_fact_sheet.cfm)



## The Infrastructure Investment and Jobs Act (IIJA)

The following is a preliminary summary of how IIJA may affect funding sources related to pedestrian infrastructure based on what is known at the time this plan was written (Q3 2022).

### FORMULA FUNDS (STATE DOTs ADMINISTER TO LOCALS)

#### *Transportation Alternatives Program (TAP)*

TAP will increase from \$850 million to \$1.44 billion per year. This is the largest dedicated source of funds for walking and biking projects in the US and it just got 70% bigger. The North Carolina Department of Transportation (NCDOT) administers this funding for rural areas of the state that do not have a metropolitan planning organization. The Wilmington Urban Area Metropolitan Planning Organization (WMPO) administers Transportation Alternatives Program funding on a competitive basis to local jurisdictions in its region.

#### *Highway Safety Improvement Program (HSIP)*

States where more than 15% of all fatalities involve cyclists or pedestrians (Vulnerable Road Users or VRU), will be required to spend 15% of their HSIP funding on bicycle/pedestrian projects. This includes North Carolina, where about 15% of all fatalities involve VRUs. Projects are evaluated, prioritized, and selected at the NCDOT district level based on three years of crash data (targeted funds) or systemic approved projects as outlined in the HSIP guidance.

Every state and MPO will be required to use at least 2.5% of its apportioned funding to develop planning documents that can include but are not limited to: Complete Streets standards, a Complete Streets prioritization plan, multimodal corridor studies, or active transportation plans (among other uses).

### DISCRETIONARY GRANTS (US DOT ADMINISTERS TO LOCALS)

#### *Rebuilding American Infrastructure with Sustainability and Equity (RAISE)*

In the first RAISE grant cycle, nearly one in five funded grant applications involved trail development. In addition, the selection committee awarded another 21% of funding to projects focused on making roads safer for vulnerable road users like cyclists and pedestrians. Many trail and greenway projects have a chance to compete well for the RAISE program when they focus on connecting people to local and regional destinations.

Under the IIJA, the RAISE grant program will have \$7.5 billion available over the next five years. Competitive applications to this program have the following in common:

1. The project can demonstrate broad community support and is a recognized local or regional priority.
2. The project explicitly considers how it will address climate change and racial equity.
3. The project documents direct and significantly favorable local or regional impact relative to the scoring criteria:



- » Safety
- » Environmental Sustainability
- » Quality of Life
- » Economic Competitiveness
- » State of Good Repair
- » Innovation
- » Partnership

4. The project has a high benefit to cost ratio.

5. The project demonstrates readiness by providing a detailed scope of work and budget, a realistic project delivery schedule, an understanding of the environmental risks, permit requirements, and mitigation measures, and is within the public right-of-way.

6. A United States Senator or Congress member actively champions the project.

For more information on RAISE program guidelines and upcoming Notice of Funding Opportunities, see:

[www.transportation.gov/RAISEgrants](https://www.transportation.gov/RAISEgrants)

#### **NEW: Safe Streets for All (SS4A)**

SS4A is a new federal grant program that will award up to \$5 billion over the next five years to support the US DOT's goal of zero deaths and serious injuries on our nation's roadways. Grants are available for developing safety action plans, implementing projects or programs identified in an action plan, and conducting supplemental planning activities to support or enhance an existing action plan.

MPOs, municipalities, and Tribal governments are eligible to apply. The program requires a 20% non-federal match.

Successful grant applications will demonstrate engagement with public and private stakeholders and seek to adopt innovative technologies and strategies to promote safety, including: low-cost/high-impact systemic safety improvements, equitable investment, and evidenced-based strategies. Applications should also show how proposed projects align with USDOT's mission and priorities such as equity, climate and sustainability, quality job creation, and economic strength and global competitiveness.

For more information:

<https://www.transportation.gov/grants/SS4A>

#### **NEW: Reconnecting Communities Pilot Program**

This new program is the first-ever Federal program dedicated to reconnecting communities that were previously cut off from economic opportunities by transportation infrastructure. Funding supports planning grants and capital construction grants, as well as technical assistance, to restore community connectivity through the removal, retrofit, mitigation, or replacement of eligible transportation infrastructure facilities. The program is funded at ~\$200 million per year through 2026.

For more information:

<https://www.transportation.gov/grants/reconnecting-communities>

Two other new programs, the *Healthy Streets Program* and the *Active Transportation Infrastructure Investment Program*, are still subject to appropriations and may become available in 2023.

## Other Federal Funding Sources

### ***Safe Routes to School (SRTS) Program***

SRTS enables and encourages children to walk and bike to school. The program helps make walking and bicycling to school a safe and more appealing method of transportation for children. SRTS facilitates the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools. Most of the types of eligible SRTS projects include sidewalks or shared-use paths. However, intersection improvements (i.e. signalization, marking/upgrading crosswalks, etc.) or off-street shared-use paths are also eligible for SRTS funds.

The North Carolina Department of Transportation's Safe Routes to School (SRTS) Program was established in 2005 through SAFETEA-LU as a federally funded program to provide an opportunity for communities to improve conditions for bicycling and walking to school. It is currently supported with Transportation Alternatives federal funding through the Surface Transportation Block Grant program established under the FAST Act. The SRTS Program has set aside \$1,500,000 per year of Transportation Alternative Program (TAP) funds for non-infrastructure programs and activities over a three-year period. Funding requests may range from a yearly amount of \$50,000 to \$100,000 per project. Projects can be one to three years in

length. Funding may be requested to support activities for community-wide, regional or statewide programs. Check the link below for information on the current funding cycle.

For more information: <https://connect.ncdot.gov/projects/BikePed/Pages/Non-Infrastructure-Alternatives-Program.aspx>

### ***Federal Transit Administration Enhanced Mobility of Seniors and Individuals with Disabilities***

This program can be used for capital expenses that support transportation to meet the special needs of older adults and persons with disabilities, including providing access to an eligible public transportation facility when the transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs.

For more information: <https://www.transit.dot.gov/funding/grants/enhanced-mobility-seniors-individuals-disabilities-section-5310>

### ***Federal Lands Transportation Program (FLTP)***

The FLTP funds projects that improve transportation infrastructure owned and maintained by the following Federal Lands Management Agencies: National Park Service (NPS), U.S. Fish and Wildlife Service (FWS), USDA Forest Service, Bureau of Land Management (BLM), U.S. Army Corps of Engineers, Bureau of Reclamation, and independent Federal agencies with land and natural resource management responsibilities. FLTP funds are available for program administration, transportation

planning, research, engineering, rehabilitation, construction, and restoration of Federal Lands Transportation Facilities. Transportation projects that are on the public network that provide access to, adjacent to, or through Federal lands are also eligible for funding. Under the IIJA, \$2.2 billion has been allocated to the program for FY 2022-2026.

For more information: <https://flh.fhwa.dot.gov/programs/fltp/documents/FAST%20FLTP%20fact%20sheet.pdf>

### **Federal Land and Water Conservation Fund**

The Land and Water Conservation Fund (LWCF) has historically been a primary funding source of the U.S. Department of the Interior for outdoor recreation development and land acquisition by local governments and state agencies. In North Carolina, the program is administered by the Department of Environment and Natural Resources.

Since 1965, the LWCF program has built a park legacy for present and future generations. In North Carolina alone, the LWCF program has provided more than \$75 million in matching grants to protect land and support more than 875 state and local park projects. More than 38,500 acres have been acquired with LWCF assistance to establish a park legacy in our state. As of August 2020, the LWCF is now permanently funded by the federal government for \$900 million every year. This is hundreds of millions more per year than the fund typically receives.

For more information: <https://www.ncparks.gov/more-about-us/grants/lwcf-grants>

### **Rivers, Trails, and Conservation Assistance Program**

The Rivers, Trails, and Conservation Assistance Program (RTCA) is a National Parks Service (NPS) program that provides technical assistance via direct NPS staff involvement to establish and restore greenways, rivers, trails, watersheds and open space. The RTCA program only provides planning assistance; there are no implementation funds 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. Project applicants may be state and local agencies, tribes, nonprofit organizations, or citizen groups. National parks and other federal agencies may apply in partnership with other local organizations. This program may benefit trail development in North Carolina indirectly through technical assistance, particularly for community organizations, but is not a capital funding source.

For more information: <https://www.nps.gov/orgs/rtca/index.htm>

### **Environmental Contamination Cleanup Funding Sources**

EPA's Brownfields Program provides direct funding for brownfields assessment, cleanup, revolving loans, and environmental job training. EPA's Brownfields Program



collaborates with other EPA programs, other federal partners, and state agencies to identify and leverage more resources for brownfields activities. The EPA provides assessment grants to recipients to characterize, assess, and conduct community involvement related to brownfields sites. They also provide area-wide planning grants (AWP) which provides communities with funds to research, plan, and develop implementation strategies for areas affected by one or more brownfields.

For more information: <https://www.epa.gov/brownfields/types-brownfields-grant-funding>

***National Fish and Wildlife Foundation: Five Star & Urban Waters Restoration Grant Program***

The Five Star & Urban Waters Restoration Grant Program seeks to develop community capacity to sustain local natural resources

for future generations by providing modest financial assistance to diverse local partnerships for wetland, riparian, forest and coastal habitat restoration, urban wildlife conservation, stormwater management as well as outreach, education and stewardship. Projects should focus on water quality, watersheds and the habitats they support. The program focuses on five priorities: on-the-ground restoration, community partnerships, environmental outreach, education and training, measurable results, and sustainability. Eligible applicants include nonprofit organizations, state government agencies, local governments, municipal governments, tribes, and educational institutions. Projects are required to meet or exceed a 1:1 match to be competitive.

For more information: <http://www.nfwf.org/fivestar/Pages/home.aspx>

## State and State-Administered Funding Sources

There are multiple sources for state funding of pedestrian transportation projects. However, state transportation funds cannot be used to match federally funded transportation projects, according to a law passed by the North Carolina Legislature.

***NCDOT Strategic Transportation Investments (STI)***

Passed in 2013, the Strategic Transportation Investments law (STI) allows NCDOT to use

its funding more efficiently and effectively to enhance the state's infrastructure, while supporting economic growth, job creation and a higher quality of life. This process encourages thinking from a statewide and regional perspective while also providing flexibility to address local needs. STI also establishes a way of allocating available revenues based on data-driven scoring and local input. It is used for the State Transportation Improvement Program

(STIP), which identifies the transportation projects that will receive funding during a 10-year period. STIP is a state and federal requirement, which NCDOT updates it every two years.

### **STI's Quantitative Scoring Process**

All independent bicycle and pedestrian projects are ranked based on a quantitative scoring process, with the following main steps:

- ▶ Initial Project Review (NCDOT Strategic Prioritization Office (SPOT))
- ▶ Review Projects and Data (NCDOT Integrated Mobility Division (IMD))
- ▶ Review Data (MPOs, RPOs, Divisions)
- ▶ Review Updates and Calculate Measures (NCDOT IMD)
- ▶ Score Projects (NCDOT SPOT)

### **Bicycle and Pedestrian Project Eligibility Requirements**

- ▶ Minimum total project cost = \$100,000.
- ▶ Eligible costs include right-of-way, preliminary engineering, and construction.
- ▶ Bicycle and pedestrian and public transportation facilities that appear in a state, regional or locally adopted transportation plan will be included as part of the proposed roadway project. NCDOT will fully fund the cost of designing, acquiring right of way, and constructing the identified facilities.

### **Specific Improvement Types**

- ▶ Grade-Separated Bicycle Facility (Bicycle)
- ▶ Off-Road/Separated Linear Bicycle Facility (Bicycle)
- ▶ On-Road; Designated Bicycle Facility (Bicycle)
- ▶ On-Road Bicycle Facility (Bicycle)
- ▶ Multi-Site Bicycle Facility (Bicycle)
- ▶ Grade-Separated Pedestrian Facility (Pedestrian)
- ▶ Protected Linear Pedestrian Facility (Pedestrian)
- ▶ Multi-Site Pedestrian Facility (Pedestrian)
- ▶ Improved Pedestrian Facility (Pedestrian)

### **Bundling Projects**

- ▶ Allowed across geographies and across varying project types.
- ▶ Bundling will be limited by project management requirements rather than geographic limitations.
- ▶ Any bundled project must be expected to be under one project manager/administrative unit (must be a TAP-eligible entity).
- ▶ Makes projects more attractive for LIPs and easier to manage/let.

### **More Information on Prioritization 6.0**

NCDOT's Prioritization Data page has training slides that explain the prioritization process:

<https://connect.ncdot.gov/projects/planning/Prioritization%20Data/Forms/AllItems.aspx>



See the “Prioritization Training” folder and the following session information within:

- ▶ Session 3: Detailed information on overall scoring components, including local input points.
- ▶ Session 4: Features relevant project funding information.
- ▶ Session 7: Detailed slides explaining the bicycle and pedestrian project scoring.

### **High Impact/Low Cost Funds**

Established by NCDOT in 2017 to provide funds to complete low-cost projects with high impacts to the transportation system including intersection improvement projects, minor widening projects, and operational improvement projects. Funds are allocated equally to each Division.

### **Project Selection Criteria**

Each Division is responsible for selecting their own scoring criteria for determining projects funded in this program. At a minimum, Divisions must consider all of the following in developing scoring formulas:

- ▶ The average daily traffic volume of a roadway and whether the proposed project will generate additional traffic.
- ▶ Any restrictions on a roadway.
- ▶ Any safety issues with a roadway.
- ▶ The condition of the lanes, shoulders, and pavement on a roadway.
- ▶ The site distance and radius of any intersection on a roadway.
- ▶ \$1.5M max per project unless

otherwise approved by the Secretary of Transportation.

- ▶ Projects are expected to be under contract within 12 months of funding approval by BOT.

### **NCDOT Technical Review & Approval**

- ▶ Division Engineer completes project scoring and determines eligibility.
- ▶ Division Engineer determines projects to be funded and requests approval of funding from the Chief Engineer. Division Engineer shall supply all necessary project information including funding request forms, project designs and cost estimates.
- ▶ The Project Review Committee will make a recommendation for further investigation or to include on the Board Agenda for action by the Secretary, NCDOT.

### ***Incidental Projects***

Bicycle and Pedestrian accommodations such as; bike lanes, wide paved shoulders, sidewalks, intersection improvements, bicycle and pedestrian safe bridge design, etc. are frequently included as “incidental” features of larger highway/roadway projects.

In addition, bicycle safe drainage grates and handicapped accessible sidewalk ramps are now a standard feature of all NCDOT highway construction. Most pedestrian safety accommodations built by NCDOT are included as part of scheduled highway improvement projects funded with a combination of federal and state roadway construction funds.

“Incidental Projects” are often constructed as part of a larger transportation project, when they are justified by local plans that show these improvements as part of a larger, multi-modal transportation system. Having a local bicycle or pedestrian plan is important, because it allows NCDOT to identify where bike and pedestrian improvements are needed, and can be included as part of highway or street improvement projects. It also helps local government identify what their priorities are and how they might be able to pay for these projects. Under the updated NCDOT Complete Streets Policy, NCDOT pays the full cost for incidental projects if the project is proposed in a locally adopted plan (see link to updated NCDOT Complete Streets Policy below).

For more information: <https://connect.ncdot.gov/projects/BikePed/Documents/Complete%20Streets%20Implementation%20Guide.pdf>

### ***NCDOT Complete Streets Policy***

There are opportunities to incorporate pedestrian improvements into STIP Projects due to the Complete Streets Policy. See Chapter 4 of this plan for more details about the policy.

### ***NC Highway Safety Improvement Program***

The purpose of the North Carolina Highway Safety Improvement Program (HSIP) is to provide a continuous and systematic process that identifies reviews and addresses specific traffic safety concerns throughout the state. The program is structured in several distinct phases:

- ▶ A system of safety warrants is developed to identify locations that are possibly deficient.
- ▶ Locations that meet warrant criteria are categorized as potentially hazardous (PH) locations.
- ▶ Detailed crash analyses are performed on the PH locations with the more severe and correctable crash patterns.
- ▶ The Regional Traffic Engineering staff performs engineering field investigations.
- ▶ The Regional Traffic Engineering staff utilizes Benefit: Cost studies and other tools to develop safety recommendations.

Depending on the cost and nature of the countermeasures, the investigations may result in requesting Division maintenance forces to make adjustments or repairs, developing Spot Safety projects, developing Hazard Elimination projects, making adjustments to current TIP project plans or utilizing other funding sources to initiate countermeasures. Selected projects are evaluated to determine the effectiveness of countermeasures.

The ultimate goal of the HSIP is to reduce the number of traffic crashes, injuries and fatalities by reducing the potential for and the severity of these incidents on public roadways.

For more information: <https://connect.ncdot.gov/resources/safety/Pages/NC-Highway-Safety-program-and-Projects.aspx>

### **Highway Hazard Elimination Program**

The Hazard Elimination Program is used to develop larger improvement projects to address safety and potential safety issues. The program is funded with 90 percent federal funds and 10 percent state funds. The cost of Hazard Elimination Program projects typically ranges between \$400,000 and \$1 million. A Safety Oversight Committee (SOC) reviews and recommends Hazard Elimination projects to the Board of Transportation (BOT) for approval and funding. These projects are prioritized for funding according to a safety benefit to cost (B/C) ratio, with the safety benefit being based on crash reduction. Once approved and funded by the BOT, these projects become part of the department's State Transportation Improvement Program (STIP).

### **Governor's Highway Safety Program**

The Governor's Highway Safety Program (GHSP) funds safety improvement projects on state highways throughout North Carolina. All funding is performance-based. Substantial progress in reducing crashes, injuries, and fatalities is required as a condition of continued funding. Permitted safety projects include checking station equipment, traffic safety equipment, and BikeSafe NC equipment. However, funding is not allowed for speed display signs. This funding source is considered to be "seed money" to get programs started. The grantee is expected to provide a portion of the project costs and is expected to continue the program after GHSP funding ends. Applications must include county level crash data. Local governments are eligible to apply.

For more information: <https://www.ncdot.gov/initiatives-policies/safety/ghsp/Pages/default.aspx>

### **The North Carolina Division of Parks and Recreation - Recreational Trails Program Grant**

Funding from the federal Recreational Trails Program (RTP), which is used for renovating or constructing trails and greenways, is allocated to states. The North Carolina Division of Parks and Recreation and the State Trails Program manages these funds with a goal of helping citizens, organizations and agencies plan, develop and manage all types of trails ranging from greenways and trails for hiking, biking, and horseback riding to river trails and off-highway vehicle trails. Grants are available to governmental agencies and nonprofit organizations. The maximum grant amount is \$250,000 and requires a 25% match of RTP funds received. Permissible uses include:

- ▶ New trail or greenway construction
- ▶ Trail or greenway renovation
- ▶ Approved trail or greenway facilities
- ▶ Trail head/ trail markers
- ▶ Purchase of tools to construct and/or renovate trails/greenways
- ▶ Land acquisition for trail purposes
- ▶ Planning, legal, environmental, and permitting costs - up to 10% of grant amount
- ▶ Combination of the above

For more information: <http://www.ncparks.gov/more-about-us/grants/trail-grants/recreational-trails-program>



### ***NC Parks and Recreation Trust Fund (PARTF)***

The Parks and Recreation Trust Fund (PARTF) provides dollar-for-dollar matching grants to local governments for parks and recreational projects to serve the general public. Counties, incorporated municipalities, and public authorities, as defined by G.S. 159-7, are eligible applicants. A local government can request a maximum of \$500,000 with each application. An applicant must match the grant dollar-for-dollar, 50 percent of the total cost of the project, and may contribute more than 50 percent. The appraised value of land to be donated to the applicant can be used as part of the match. The value of in-kind services, such as volunteer work, cannot be used as part of the match. Property acquired with PARTF funds must be dedicated for public recreational use.

For more information: <https://www.ncparks.gov/more-about-us/parks-recreation-trust-fund/parks-and-recreation-trust-fund>

### ***Clean Water Management Trust Fund***

The Clean Water Management Trust Fund (CWMTF) is available to any state agency, local government, or non-profit organization whose primary purpose is the conservation, preservation, and restoration of North Carolina's environmental and natural resources. Grant assistance is provided to conservation projects that:

- ▶ enhance or restore degraded waters;
- ▶ protect unpolluted waters, and/or
- ▶ contribute toward a network of riparian

buffers and greenways for environmental, educational, and recreational benefits;

- ▶ provide buffers around military bases to protect the military mission;
- ▶ acquire land that represents the ecological diversity of North Carolina; and
- ▶ acquire land that contributes to the development of a balanced State program of historic properties.

For more information: <http://www.cwmtf.net/#appmain.htm>

### ***Urban and Community Forestry Grant***

The North Carolina Division of Forest Resources Urban and Community Forestry grant can provide funding for a variety of projects that will help plan and establish street trees as well as trees for urban open space. The goal is to improve public understanding of the benefits of preserving existing tree cover in communities and assist local governments with projects which will lead to more effective and efficient management of urban and community forests.

For more information: [https://www.ncforestservice.gov/Urban/urban\\_grant\\_program.htm](https://www.ncforestservice.gov/Urban/urban_grant_program.htm)

## Local Funding Sources

Local governments often plan for the funding of pedestrian infrastructure or improvements through development of Capital Improvement Projects (CIP) or occasionally, through their annual Operating Budgets. CIPs should include all types of capital improvements (water, sewer, buildings, streets, etc.) versus

programs for single purposes. This allows decision-makers to balance all capital needs. Typical capital funding mechanisms include the capital reserve fund, taxes, fees, and bonds. However, many will require specific local action as a means of establishing a program if it is not already in place.

## Private and Nonprofit Funding Sources

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

### ***Rails-To-Trails Conservancy***

Under the Doppelt Family Trail Development Fund, RTC will award approximately \$85,000 per year, distributed among several qualifying projects, through a competitive process. Eligible applicants include nonprofit organizations and state, regional, and local government agencies. Two types of grants are available - community support grants and project transformation grants. Around three to four community support grants are awarded each year, ranging from \$5,000-\$10,000 each. Community Support Grants support nonprofit organizations or “Friends of the Trail” groups that need funding to get trail development or trail improvement efforts off the ground. Each year, 1-2 Project Transformation Grants are awarded that range from \$15,000-\$50,000. The intention of these grants is to enable an organization to complete a significant trail development or improvement project. For

both types of grants, applications for projects on rail-trails and rails-with-trails are given preference, but rail-trail designation is not a requirement. The trail must serve multiple user types, such as bicycling, walking, and hiking, and must be considered a trail, greenway, or shared-use path.

For more information: <http://www.railstotrails.org/our-work/doppelt-family-trail-development-fund/>

### ***National Fish and Wildlife Foundation (NFWF)***

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 provides grants through more than 70 diverse conservation grant programs. One of the most relevant programs for pedestrian projects is Acres for America. Funding priorities include conservation of bird, fish, plants and wildlife habitats, providing access for people to enjoy outdoors, and connecting existing protected lands. Federal, state, and local government agencies, educational institutions, Native American tribes, and non-profit organizations may apply twice annually for matching grants. Due to the competitive nature of grant funding for Acres for America, all awarded grants require a minimum 1:1 match.

For more information: <http://www.nfwf.org/whatwedo/grants/Pages/home.aspx>

### ***The Trust for Public Land***

Land conservation is central to the mission of the Trust for Public Land (TPL). Founded in 1972, the TPL is the only national non-profit working exclusively to protect land for human enjoyment and well-being. TPL helps acquire land and transfer it to public agencies, land trusts, or other groups that intend to conserve land for recreation and spiritual nourishment and to improve the health and quality of life of American communities.

For more information: <http://www.tpl.org>

### ***Land for Tomorrow Campaign***

Land for Tomorrow is a diverse partnership of businesses, conservationists, farmers, environmental groups, health professionals, and community groups committed to securing support from the public and General

Assembly for protecting land, water, and historic places. Land for Tomorrow works to enable North Carolina to reach a goal of ensuring that working farms and forests, sanctuaries for wildlife, land bordering streams, parks, and greenways, land that helps strengthen communities and promotes job growth, and historic downtowns and neighborhoods will be there to enhance the quality of life for generations to come.

For more information: <http://www.land4tomorrow.org/>

### ***The Conservation Alliance***

The Conservation Alliance is a nonprofit organization of outdoor businesses whose collective annual membership dues support grassroots citizen-action groups and their efforts to protect wild and natural areas. Grants are typically about \$35,000 each. Funding criteria states that:

- ▶ The project should seek to secure lasting and quantifiable protection of a specific wild land or waterway. We prioritize landscape-scale projects that have a clear benefit for habitat.
- ▶ The campaign should engage grassroots citizen action in support of the conservation effort. We do not fund general education, restoration, stewardship, or scientific research projects.
- ▶ All projects must have a clear recreational benefit.

For more information: <http://www.conservationalliance.com/grants/?yearly=2020>



### **Blue Cross Blue Shield (BCBS) of North Carolina Foundation**

BCBS does not have a traditional grant cycle and announces grant opportunities on a periodic basis. Grants can range from small-dollar equipment grants to large, multi-year partnerships.

For more information: <http://www.bcbsncfoundation.org/grants-programs/grantmaking-overview/>

### **Duke Energy Foundation**

Funded by Duke Energy shareholders, this foundation makes charitable grants to nonprofit organizations and government agencies. Grant applicants must serve communities that are also served by Duke Energy. The grant program has several investment priorities that could potentially fund pedestrian projects. The Duke Energy Foundation is committed to making strategic investments to build powerful communities where nature and wildlife thrive, students can excel and a talented workforce drives economic prosperity for all.

For more information: <https://www.duke-energy.com/community/duke-energy-foundation>

### **Z. Smith Reynolds Foundation**

This Winston-Salem-based Foundation is committed to improving the quality of life for all North Carolinians. The Z. Smith Reynolds Foundation is a statewide, private, family foundation that has been a catalyst for positive change in North Carolina for more than 80 years. A variety of grant programs are available.

For more information: <http://www.zsr.org/grants-programs>

### **Bank of America Charitable Foundation**

The Bank of America Charitable Foundation supports a wide range of activities, including a focus on community greening efforts that create healthy neighborhoods and environmental sustainability through the preservation, creation or restoration of open space, parks and community gardens.

For more information: <https://about.bankofamerica.com/en-us/global-impact/charitable-foundation-funding.html>

### **Local Trail Sponsors**

A sponsorship program for trail amenities allows smaller donations to be received from both individuals and businesses. Cash donations could be placed into a trust fund to be accessed for certain construction or acquisition projects associated with the greenways and open space system. Some recognition of the donors is appropriate and can be accomplished through the placement of a plaque, the naming of a trail segment, and/or special recognition at an opening ceremony. Types of gifts other than cash could include donations of services, equipment, labor, or reduced costs for supplies.

### **Corporate Donations**

Corporate donations are often received in the form of liquid investments (i.e. cash, stock, bonds) and in the form of land. Local governments typically create funds to facilitate and simplify a transaction from a corporation's donation to the given locality.

Donations are mainly received when a widely supported capital improvement program is implemented.

### ***Private Individual Donations***

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

### ***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. Often times fundraising satisfies the need for public awareness, public education, and financial support.

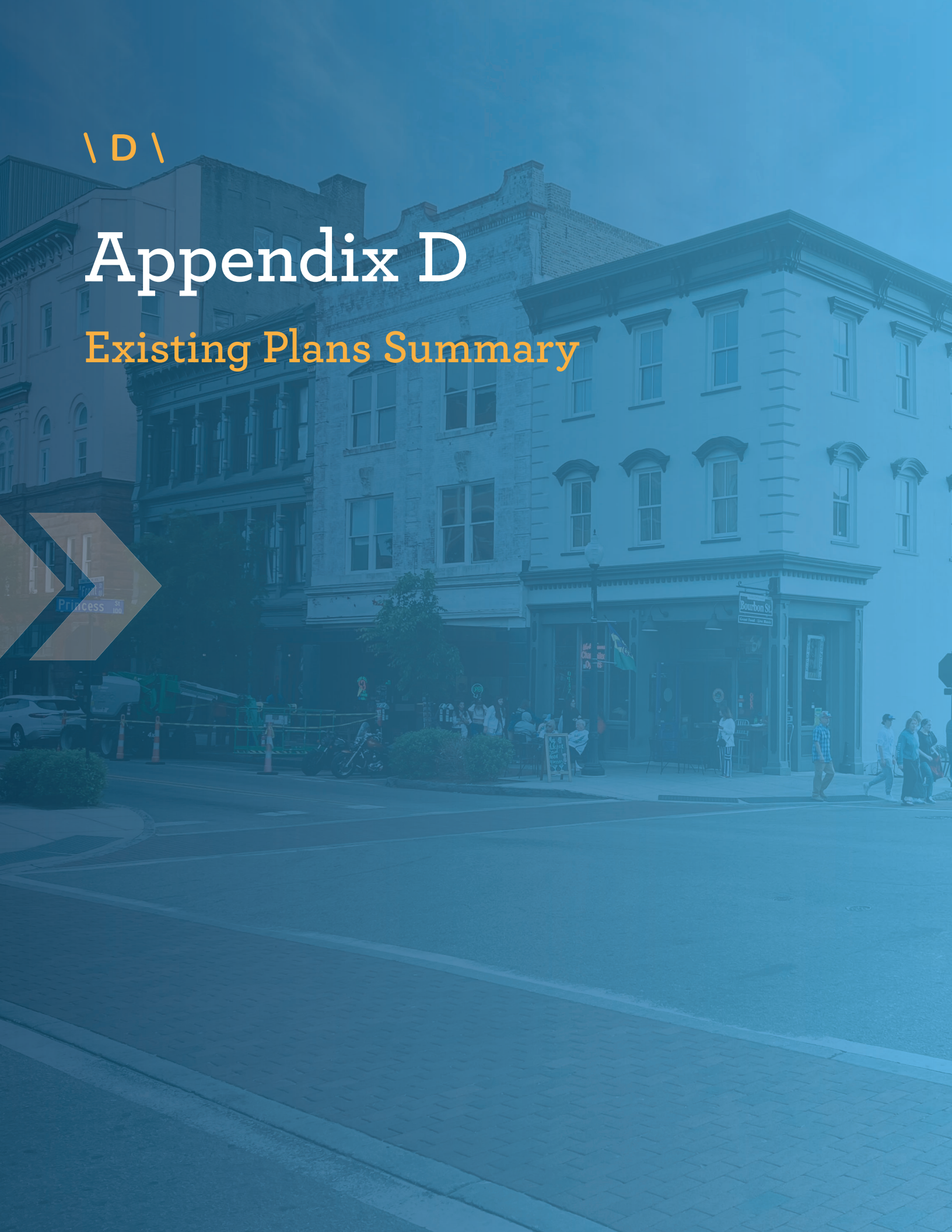
### ***Volunteer Work***

It is expected that many citizens will be excited about the development of pedestrian projects. 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.

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# Appendix D

## Existing Plans Summary





# Overview

This memo provides a summary of local and regional planning documents that directly or indirectly address active transportation and public right of way planning and design in

the City of Wilmington. The purpose of this memo is to provide a summary of relevant goals and recommendations that may influence the Wilmington Pedestrian Plan.

## Planning Documents Reviewed

- ▶ Cape Fear Moving Forward (2020)
- ▶ Cape Fear Change in Motion (2020)
- ▶ Congestion Management Process (CMP) (2020)
- ▶ Comprehensive Transportation Plan (2016)
- ▶ Wilmington-New Hanover County Comprehensive Greenway Plan (2013)
- ▶ Walk Wilmington: A Comprehensive Pedestrian Plan (2009)
- ▶ Create Wilmington Comprehensive Plan (2016)
- ▶ Cross-City Trail Master Plan (2012)
- ▶ River to Sea Bikeway Master Plan (2013)
- ▶ Wilmington Vision 2020: A Waterfront Downtown (2004)
- ▶ Wrightsville Sound Small Area Plan (2011)
- ▶ Southside Small Area Plan (2009)
- ▶ Seagate Neighborhood Plan (2007)
- ▶ Northside Community Plan (2003)
- ▶ US 17 Business (Market St) Corridor Study (2016)
- ▶ Cape Fear Historic Byway Corridor Management Plan (2008)
- ▶ Dawson & Wooster Corridor Plan (2007)
- ▶ Wilmington Rail Trail Master Plan (2020)
- ▶ Wrightsville Avenue 2030 (2010)
- ▶ Carolina Beach Road Corridor Plan (2004)
- ▶ College Road Corridor Plan (2004)
- ▶ Oleander Drive Corridor Plan (2004)
- ▶ Rail Realignment Plan (2017)
- ▶ LDC Update (2021)
- ▶ Market Street Corridor Plan (2011)

# Previous Policy and Planning Efforts

## Cape Fear Moving Forward (2020)

### STUDY AREA

- ▶ Cape Fear

### PLAN GOALS

- ▶ Efficient: Transportation network allows for time savings, interconnected across all modes of transport.
- ▶ Multimodal: Alternative modes of transportation available for most trip types
- ▶ Safe: Promotes transportation projects that increase the safety of all users by decreasing injury and increasing user awareness.
- ▶ Environmentally and Socially Responsible: Accessible, sustainable, and equitable transportation solutions actively communicated to increase public awareness and collaboration

### KEY RECOMMENDATIONS AND STRATEGIES

#### *Resiliency Recommendations*

- ▶ Identify sustainable and resilient transportation project criteria that can be used as part of the prioritization/programming process

#### *Transportation Systems Management and Operations*

- ▶ Streetscape Improvements

#### *Transportation Demand Management Strategies*

- ▶ Bicycle and Pedestrian Infrastructure
- ▶ Transit Amenities

# Cape Fear Moving Forward (2020) Appendices G, L, & M

## STUDY AREA

- ▶ Cape Fear

## PLAN GOALS

### ***Appendix G: Bicycle and Pedestrian Element***

- ▶ Bicycle Facilities
  - » Safety, Education, and Enforcement
  - » Multimodal Connectivity
  - » Built Environment, Land Use, and Connectivity
  - » Health
  - » Economic Development
- ▶ Pedestrian Facilities
  - » Safety, Education, and Enforcement
  - » Transportation Choice
  - » Built Environment, Land Use, and Connectivity
  - » Health
  - » Economic Development

### ***Appendix L: Transportation Systems Management and Operations Element***

- ▶ Improve the safety, security, and reliability of the system by enhancing existing infrastructure to increase roadway capacity, reducing congestion, and integrating transportation and land use planning

### ***Appendix M: Transportation Demand Management Element***

- ▶ Promote more efficient travel modes in order to move more people with the same amount of roadway infrastructure.
- ▶ Spread travel demand over a longer portion of the day to better utilize available space and capacity.



## KEY RECOMMENDATIONS AND STRATEGIES

### ***Bicycle and Pedestrian Element***

- ▶ Develop and maintain a safety campaign for drivers, cyclists, and pedestrians.
- ▶ Focus on improving bicycle and pedestrian safety at intersections using best practices and emerging tools.
- ▶ Give high priority to safety improvements in the vicinity of schools, public transit, commercial corridors, and other high-use bicycle and pedestrian destinations.
- ▶ Work toward addressing and improving challenging intersections and physical barriers, and consider pedestrian and bicycle movement in the planning stages for new or reconstructed facilities.
- ▶ Proactively seek new opportunities for acquisition of abandoned rights-of-way, natural waterways, utility rights-of-way, and other lands for the development of new facilities that integrate with the planned system.
- ▶ Encourage events that introduce residents to walking and bicycling, such as Walk/Bike to Work, Walk/ Bike to School, the River to Sea Bike Ride, and charity or fundraising events.
- ▶ Accommodate all types, ages, and abilities of users in a comfortable manner throughout the system, while recognizing that all modes of travel and/or level of user ability may not necessarily be accommodated on every road or path.
- ▶ Support the development and adoption of local bicycle and pedestrian plans that identify projects to create an integrated and multimodal transportation system for the region.
- ▶ Express interest in an increased availability of regional, state, and federal funding sources for bicycle and pedestrian transportation projects.
- ▶ Utilize the WMPO TDM Committee (Go Coast Committee), when appropriate, to develop projects, programs, initiatives, and events that support active transportation choices.
- ▶ Continue to support the recommendations of the WMPO BPAC.
- ▶ Seek all possible funding sources to implement programs and projects. Work with federal, state, regional, and local agencies as well as any other available public or private funding sources to secure funding for the bicycle and pedestrian system.
- ▶ Support the incentivization of public/private partnership development of bicycle and pedestrian facilities.

### ***Transportation Systems Management and Operations Element***

- ▶ Access Management
- ▶ Additional Turn Lanes

- ▶ Bus Pullouts
- ▶ Emergency Vehicle Preemption and Transit Signal Priority
- ▶ Improved Signage and Lighting
- ▶ Intersection Modifications and Geometric Design Improvements
- ▶ Motorist Assistance Program
- ▶ Pavement Markings
- ▶ Social Media and Smart Apps
- ▶ Streetscape Improvements
- ▶ Traffic Signal Timing Optimization
- ▶ Vehicle Detectors Repair/Replacement
- ▶ Traveler Information Systems and Dynamic Message Signs

### ***Transportation Demand Management Element***

- ▶ Short-Range Strategies (0-5 Years)
  - » Alternative Work Schedules
  - » Bicycle and Pedestrian Infrastructure
  - » Bike Share
  - » Carpool and Van Pool
  - » Consulting for Telecommuting Opportunities
  - » Development Review
  - » Continued Employment of Full-Time TDM Staff
  - » Personalized Commuter Plans
- ▶ Medium-Range Strategies (5-15 Years)
  - » Bicycle and Pedestrian Infrastructure
  - » Bus Rapid Transit (BRT)
  - » Car Share
  - » Employer Shuttles
  - » Park and Ride Lots
  - » Transit Amenities

- ▶ Long-Range Strategies (15-20 Years)
  - » Bicycle and Pedestrian Infrastructure
  - » Fixed Rail Transit
  - » High-Occupancy Vehicle (HOV) Lanes
  - » High-Occupancy Toll (HOT) Lanes
  - » Water Taxi Service

## Cape Fear Change in Motion (2020)

### STUDY AREA

- ▶ Cape Fear

### PLAN GOALS

#### ***Vision and Desired Outcomes***

- ▶ Reduce time spent in traffic
- ▶ Improved health and safety
- ▶ Equitable mobility solutions
- ▶ Improved quality of life through a walkable and bikeable community
- ▶ Decrease the need for major spending on capital projects

### KEY STRATEGIES

#### ***Strategy 5: Fostering a Bicycle and Pedestrian Friendly Culture***

- ▶ Create a culture that recognizes bicycling and walking as legitimate forms of transportation and prioritizes the safety of cyclists and pedestrians.

#### ***Strategy 6: Improved TDM-Focused Collaboration***

- ▶ Utilize more opportunities for the TDM Coordinator to further the influence of the Go Coast program.

#### ***Strategy 7: Personalized Commuter Plans***

- ▶ Assist individuals in discovering options they have to commute outside of a single occupancy vehicle.



## Congestion Management Process (CMP) (2020)

### STUDY AREA

- ▶ Cape Fear

### PLAN GOALS

#### *Safe*

- ▶ Reduce bicycle and pedestrian crashes along congested corridors.

#### *Efficient*

- ▶ Prioritize accommodations of all modes over motorized vehicular travel time along corridors that have potential for heavy multimodal usage.
- ▶ Prioritize accommodations of all modes over reduction in delay at congested intersections where those intersections have potential for heavy multimodal usage.

#### *Multi-Modal*

- ▶ Prioritize multimodal congestion management strategies first.

### KEY STRATEGIES

#### *Reduce Demand*

- ▶ The purpose of this strategy is to reduce congestion through lessening the demand for motorized vehicular capacity on the congested corridors.

#### *Shift Mode of Trip*

- ▶ The purpose of this strategy is to reduce congestion by shifting usage of the congested corridor from single-occupant vehicles to more capacity-efficient modes.

## Comprehensive Transportation Plan (2016)

### STUDY AREA

- ▶ Cape Fear

### PLAN CONTENTS

- ▶ Contains the map for existing, needs improvement, and recommended on-road, off-road, and multi-use paths

# Wilmington-New Hanover County Comprehensive Greenway Plan (2013)

## STUDY AREA

- ▶ New Hanover County

## PLAN GOALS

- ▶ Develop new trails that complement and expand upon existing trails.
- ▶ Create safe connections for bicycling and walking between existing and planned parks, schools, commercial and employment centers, and neighborhoods.
- ▶ Improve health and wellness of residents by offering more opportunities for physical activity through recreation and active transportation.
- ▶ Improve transportation options by offering safe and connected bicycle and pedestrian facilities; increase overall mode-share for walking and bicycling.

## KEY PRINCIPLES AND ACTION STEPS

### *Guiding Principles*

- ▶ THE WALKING AND BICYCLING ENVIRONMENT SHOULD BE SAFE.
  - » All bicycling and walking routes should be physically safe and perceived as safe by all users. Safe means minimal conflicts with external factors, such as noise, vehicular traffic and protruding architectural elements. Safe also means routes are clear and well-marked with appropriate pavement markings and directional signage.
- ▶ THE PEDESTRIAN AND BICYCLE NETWORK SHOULD BE ACCESSIBLE.
  - » Sidewalks, shared-use paths, bike routes and crosswalks should permit the mobility of residents of all ages and abilities. The pedestrian and bicycle network should employ principles of universal design. Bicyclists have a range of skill levels, and facilities should be designed with a goal of providing for inexperienced/recreational bicyclists (especially children and seniors) to the greatest extent possible.
- ▶ PEDESTRIAN AND BICYCLE NETWORK IMPROVEMENTS SHOULD BE ECONOMICAL.
  - » Pedestrian and bicycle improvements should achieve the maximum benefit for their cost, including initial cost and maintenance cost, as well as a reduced reliance on more expensive modes of transportation. Where possible, improvements in the right-of-way should stimulate, reinforce and connect with adjacent private improvements.

- ▶ THE PEDESTRIAN AND BICYCLE NETWORK SHOULD CONNECT TO PLACES PEOPLE WANT TO GO.
  - » The pedestrian and bicycle network should provide continuous direct routes and convenient connections between destinations such as homes, schools, shopping areas, public services, recreational opportunities and transit. A complete network of on-street bicycling facilities should connect seamlessly to existing and proposed multi-use trails to complete recreational and commuting routes.
- ▶ THE WALKING AND BICYCLING ENVIRONMENT SHOULD BE CLEAR AND EASY TO USE.
  - » Shared-use paths and crossings should allow all people to easily find a direct route to a destination with minimal delays, regardless of whether these persons have mobility, sensory, or cognitive disability impairments. All roads are legal for the use of pedestrians and bicyclists (except freeways, from which each is prohibited unless a separate facility on that right of way is provided). This means that most streets are bicycle facilities and should be designed, marked and maintained accordingly.
- ▶ THE WALKING AND BICYCLING ENVIRONMENT SHOULD BE ATTRACTIVE AND ENHANCE COMMUNITY LIVABILITY.
  - » The walking and bicycling facilities should be compatible with the nature, history and character of the environment. Context and scale should be given thoughtful consideration. Good design should integrate with and support the development of complementary uses and should encourage preservation and construction of art, landscaping and other items that add value to communities. These components might include open spaces such as plazas, courtyards and squares, and amenities like street furniture, banners, art, plantings and special paving. These along with historical elements and cultural references, should promote a sense of place. Public activities should be encouraged and the municipal code should permit commercial activities such as dining, vending and advertising when they do not interfere with safety and accessibility.
- ▶ DESIGN GUIDELINES ARE FLEXIBLE AND SHOULD BE APPLIED USING PROFESSIONAL JUDGMENT.
  - » This document references specific national guidelines for bicycle and pedestrian facility design, as well as a number of design treatments not specifically covered under current guidelines. Statutory and regulatory guidance may change. For this reason, the guidance and recommendations in this document function to complement other resources considered during a design process, and in all cases sound engineering judgment should be used.



- ▶ BLUEWAYS AND BLUEWAY ACCESS POINTS (FOR CANOEING AND KAYAKING) SHOULD FEATURE WAYFINDING, SAFETY AND ENVIRONMENTAL EDUCATIONAL INFORMATION.
  - » This document contains recommendations for new non-motorized water access points, including best practices for designing such sites. Further, this plan recommends wayfinding for blueway routes, and safety information for how to use blueways and monitor changing tides. Access sites should be constructed in a manner that minimizes environmental impact, and local programs should continue to focus on water quality and river clean-up outings.

### ***Program Action Steps***

- ▶ Appoint a Regional Bicycle, Pedestrian, and Trails Coordinator.
- ▶ Form a Greenways Advisory Committee
- ▶ Support establishment of a Friends of Blueways and Greenways Group
- ▶ Continue and expand the 'See Share Be Aware' campaign or other safety campaign
- ▶ Safe Routes to School Regional Plan (Connecting Schools Initiative)
- ▶ Develop Walking Maps and plan Weekend Walkabouts
- ▶ Schedule Open Street Events
- ▶ Establish a bicycle and pedestrian wayfinding system for trails and other points of interest throughout the region

### ***Infrastructure Action Steps***

- ▶ Establish Identify and secure specific funding sources for priority trail corridors
- ▶ Establish an Adopt-a-Greenway Program and an Adopt-a-Blueway Program
- ▶ Use consistent trail design standards and guidelines
- ▶ Begin priority trail and blueway projects
- ▶ Develop a long term funding strategy
- ▶ Maintain greenway and blueway facilities

# Walk Wilmington: A Comprehensive Pedestrian Plan (2009)

## STUDY AREA

- ▶ Wilmington

## PLAN GOALS

### ***Goal 1: Safety***

- ▶ Residents and visitors of all physical abilities will be able to travel safely on foot along and across the city's roadways, trails, and sidewalks.

### ***Goal 2: Transportation Choice***

- ▶ Pedestrians, regardless of location, mobility level, age or socioeconomic status, will be able to choose a convenient and comfortable mode of travel to reach their desired destination. Pedestrians will be a strong presence on the streets of Wilmington.

### ***Goal 3: Built Environment, Land Use, and Connectivity***

- ▶ Land uses in Wilmington will provide pedestrians with walkable destinations and the built environment will enhance the pedestrian experience and encourage walking. Adjacent land uses will be connected by pedestrian facilities such as sidewalks and crosswalks so that pedestrians can safely and conveniently make trips on foot.

### ***Goal 4: Education, Awareness and Enforcement***

- ▶ People will have access to educational opportunities to learn about the benefits of walking as well as access to walking resources. Wilmington will raise awareness and enforcement of safe walking and driving practices and pedestrian and motorist rights and responsibilities.

### ***Goal 5: Health***

- ▶ Citizens will be more physically active by walking on a regular basis. Improving their health and reducing their health care costs. Creating more walking opportunities will also improve air quality, which will improve the outdoor environment.

### ***Goal 6: Economic Development***

- ▶ Tourists will be drawn to Wilmington for its comfortable walking environment. Among southern coastal cities, Wilmington will stand out because its walking routes are safe and convenient, as well as aesthetically pleasing.

## KEY OBJECTIVES

### **Goal 1: Safety**

- ▶ Objective 1.1 All transportation projects should incorporate complete streets design elements. “Complete streets” are roadways designed and operated to enable safe, attractive, and comfortable access and travel for all users. Pedestrians, bicyclists, motorists and public transport users of all ages and abilities are able to safely and comfortably move along and across a complete street. All new traffic signals should include pedestrian signal heads and marked crosswalks.
- ▶ Objective 1.2 The city will develop countermeasures to reduce the number of pedestrian crashes at identified locations. This will include using traffic calming as a tool to increase pedestrian safety and comfort.
- ▶ Objective 1.3 The city will install three or more new signalized pedestrian crossings per year. (about \$150,000/year in 2008 dollars)
- ▶ Objective 1.4 The city will conduct education and enforcement campaigns and will design streets to reduce motor vehicle speeds and increase safe driving and walking behaviors.
- ▶ Objective 1.5 The city will encourage schools to apply for Safe Routes to School Grants and also to participate in other Safe Routes to School programs and events.
- ▶ Objective 1.6 Provide greater awareness of pedestrian laws, rights and responsibilities to affected groups, including but not limited to law enforcement, court officials, and the general public.
- ▶ Objective 1.7 Provide a higher level of enforcement to increase pedestrian safety.

### **Goal 2: Transportation Choice**

- ▶ Objective 2.1 The city will construct two miles (10,560 feet) of new sidewalk per year (about \$422,000 in 2008 dollars).
- ▶ Objective 2.2 The city will develop strategies and design solutions to overcome barriers to pedestrian travel in Wilmington, such as arterials, bridges and missing linkages.
- ▶ Objective 2.3 Streets in Wilmington will be designed as multi-modal facilities, providing access to destinations by motor vehicle, on foot, by bicycle and by transit.
- ▶ Objective 2.4 The city will increase the provision of off-road pedestrian paths and improve connectivity to existing paths and greenways.
- ▶ Objective 2.5 The city will ensure that pedestrian facilities are maintained and repaired and are accessible for all users. This includes requiring property owners to maintain vegetation adjacent to sidewalks on a regular basis.

**Goal 3: Built Environment, Land Use, and Connectivity**

- ▶ Objective 3.1 Modify the city's codes, policies and ordinances to include requirements ensuring that new development is scaled and oriented to pedestrian travel, and that logical connections are provided internally and externally for pedestrians and bicyclists.

**Goal 4: Education, Awareness and Enforcement**

- ▶ Objective 4.1 The city will encourage more citizens to travel as pedestrians for all types of trips, including work, errands, exercise and recreation.
- ▶ Objective 4.2 The city will increase citizen participation in educational and encouragement programs and promotions.
- ▶ Objective 4.3 The city will increase awareness and understanding of pedestrian laws, rights and responsibilities by affected groups, including but not limited to law enforcement, court officials, and the general public.
- ▶ Objective 4.4 The city will conduct education and enforcement campaigns to increase safe driving and walking behaviors.
- ▶ Objective 4.5 The city will encourage more students to walk to school and other destinations, either alone or with a parent or caregiver.
- ▶ Objective 4.6 The city will encourage schools to apply for Safe Routes to School grants and also to participate in other Safe Routes to School programs and other events.

**Goal 5: Health**

- ▶ Objective 5.1 Increase awareness of the recommended levels of daily physical activity and the health benefits of walking.

**Goal 6: Economic Development**

- ▶ Objective 6.1 New streets in the Central Business District Zone and Urban Core Zone will incorporate pedestrian lighting along with vehicular lighting.
- ▶ Objective 6.2 Existing corridors and thoroughfares will be retrofitted with pedestrian lighting.
- ▶ Objective 6.3 Wilmington will continue to support the missions of Wilmington Downtown, Inc., as it aims to revitalize the historic downtown.
- ▶ Objective 6.4 Encourage the inclusion of amenities, plantings and art in pedestrian improvement projects.
- ▶ Objective 6.5 The city will produce brochures and other materials to be distributed at events in order to encourage walking and to provide information about Transportation Demand Management services.



- ▶ Objective 6.6 The city will work with the Wilmington Tree Commission to ensure that trees are included in the pedestrian environment while maintaining the pedestrian path of travel.

## Create Wilmington Comprehensive Plan (2016)

### STUDY AREA

- ▶ Wilmington

### PLAN THEMES

#### *Getting Around*

- ▶ Diverse modes of transportation are needed for an inclusive, connected community. Regional partnerships can link greenways and other amenities. Options for pedestrian and bicycle transportation, along with other modes of transportation, should be explored as valid alternatives to automobile transportation, as well as other options for local and regional mass transit.

#### *Unique Places, Captivating Spaces*

- ▶ The built environment encompasses places and spaces created or modified by people, including buildings, parks, land use patterns, and transportation systems. Since the built environment has profound consequences for individual and community well-being, all elements of our built environment should enhance the character of our community, being functional and aesthetically appropriate, enriching the lives of visitors and residents alike.

### KEY POLICIES

#### **1.2 CITYWIDE GROWTH**

- ▶ 1.2.4 Development and infrastructure investments should promote healthy communities and active lifestyles by providing enhanced bicycle and pedestrian circulation, access, and safety.

#### **1.3 LAND USE AND TRANSPORTATION**

- ▶ 1.3.3 Development should provide pedestrian and vehicular connections between and within individual development sites to provide alternative means of access along corridors.
- ▶ 1.3.4 Mixed-use development that provides a range of services within walking distance of integrated residential development should be promoted as a way to help reduce motor vehicle trips. Developments that reduce reliance on single-occupancy motor vehicles should be supported.
- ▶ 1.3.6 Transit-oriented and transit-ready development should be promoted around existing

and planned transit stations and stops.

- ▶ 1.3.8 Pedestrian-friendly and transit-supportive development patterns should be promoted along multimodal corridors and areas identified for intensive transit investments.

### **1.5 MIXED-USE DEVELOPMENT**

- ▶ 1.5.1 Mixed-use centers should be made up of a diverse mix of uses and integrated design that avoids segregation of uses. Centers should have well-planned public spaces that bring people together and provide opportunities for active living and social interactions.
- ▶ 1.5.2 Integration and mix of uses should be provided within all “Areas of Opportunity” and “Mixed-use Centers” identified in the Growth Strategies Maps. These developments may vary in scale and intensity, but should all contribute to the city’s livability, manage future growth, and provide bike, pedestrian, and transit-accessible destinations.
- ▶ 1.5.3 The development of mixed-use activity centers with multimodal transportation connections should be promoted. Convenient and accessible residential and employment should be a part of mixed-use centers.
- ▶ 1.5.4 The dedication of land for the construction of transit stations and stops within mixed-use centers should be coordinated as part of the development review and zoning process.

### **1.6 COMMERCIAL DISTRICTS, CORRIDORS, AND NODES**

- ▶ 1.6.1 Pedestrian-oriented centers of commercial development should be encouraged at key locations along major corridors, such as the “Main Streets” identified on the Growth Strategies Maps. Auto-oriented strip commercial development should be discouraged.
- ▶ 1.6.6 Commercial infill and redevelopment should be bicycle- and pedestrian-friendly.

### **1.7 NEIGHBORHOOD CONSERVATION AND REVITALIZATION**

- ▶ 1.7.7 Large, oversized blocks in neighborhoods and subdivisions should be avoided in favor of smaller, walkable blocks and enhanced networks that create better connections and help facilitate walking and reduce the need to drive.

### **2.1 LAND USE AND TRANSPORTATION COORDINATION**

- ▶ 2.1.2 Safe and attractive transportation choices among all modes should be encouraged through street patterns that consider multimodal transportation alternatives and access to and circulation between adjacent neighborhoods, parks, and commercial and employment centers.
- ▶ 2.1.4 Comprehensive transportation impacts, including parking and impacts on all modes of transportation should be identified and addressed before a development or redevelopment is

implemented.

## **2.2 STREET SYSTEMS**

- ▶ 2.2.2 New residential, commercial, and mixed-use developments that require construction or extension of roadways should include a multimodal network. The use of cul-de-sacs and dead-end streets should be minimized.
- ▶ 2.2.5 When considering closure of public streets, alleys, and other rights of way, affected city departments and utility providers should consider the integrity of the city's street network, pedestrian and vehicular safety, emergency access, the ability to provide utility services, impacts on health and safety, and the welfare of the community.

## **2.3 TRANSPORTATION DEMAND MANAGEMENT**

- ▶ 2.3.2 An integrated, multimodal transportation system that offers safe and attractive choices among travel modes should be promoted.

## **2.4 STREET DESIGN, COMPLETE STREETS, AND AGE-FRIENDLY DESIGN**

- ▶ 2.4.1 The majority of the city's streets should be designed as public spaces that are scaled for pedestrians and should be enhanced with appropriate street trees and landscaping.
- ▶ 2.4.2 Complete street design standards that provide mobility for all types of transportation modes and users should be promoted on all streets.
- ▶ 2.4.3 New roadway projects and major reconstruction projects should provide appropriate and adequate right-of-way for safe and convenient movement and amenities for all users, including bicyclists, pedestrians, transit riders, and motorists.
- ▶ 2.4.4 When reviewing traffic impact analyses for infill and redevelopment, level of service measurements should include all modes of transportation, including bicycles, pedestrians, and transit, in addition to automobile level of service.
- ▶ 2.4.5 Complete street amenities should be designed with all users in mind, with multimodal amenities appropriate for the type of roadway. The use of undivided multi-lane streets should be limited; raised and/or landscaped medians should be used where feasible, to provide safe landings for pedestrians and vehicle travel.

## **2.5 PUBLIC TRANSPORTATION**

- ▶ 2.5.1 Quality transit services that enhance mobility options, meet the needs of city residents and visitors, focus on transit-dependent households, and incorporate age-friendly elements should be promoted.
- ▶ 2.5.3 The possibility of returning a vehicular/pedestrian ferry to the Wilmington region

should be explored.

- ▶ 2.5.7 The use of transit facilities should be encouraged through enhancing the bike and pedestrian network near transit stops and sufficient sidewalk infrastructure should be installed near all transit stops. Where necessary, enhancements to make sidewalks compliant with the Americans with Disabilities Act (ADA) should be prioritized.
- ▶ 2.5.9 Transit-oriented development should be encouraged. Planning for transportation, transit stop locations, public spaces, density, and land use should be coordinated, and high-density, mixed-use development patterns should be encouraged around express bus lines, the planned multimodal transportation center downtown, and any future transit stations.

## **2.6 BICYCLE AND PEDESTRIAN CIRCULATION**

- ▶ 2.6.1 Bicycle and pedestrian circulation, access, and safety should be enhanced, especially along corridors, downtown, in activity and employment centers, within densely-developed areas, at transit stations, and near schools, libraries, and parks.
- ▶ 2.6.2 A continuous bicycle and pedestrian network should be provided within and between existing and new developments to facilitate safe and convenient travel. New subdivisions, mixed-use developments, and large-scale commercial developments should include safe pedestrian walkways or multiuse paths that allow direct links between roadways and major destinations, transit stops, and schools.
- ▶ 2.6.3 New development, redevelopment, street reconstruction, and resurfacing projects should include bicycle and pedestrian facilities as appropriate for the roadway character. Existing development should be retrofitted with connections where possible.
- ▶ 2.6.4 Where possible, and especially along identified pedestrian priority streets, tools such as protected left turns, pedestrian head start, raised crosswalks, curb extensions, medians, pedestrian refuge islands or mid-block crossings, and restricted right turns on red should be used to improve pedestrian and bicycle movements and safety.
- ▶ 2.6.5 Safe and convenient pedestrian and bicycle facilities should be maintained and should be universally accessible, adequately lit, and properly designed to reduce conflicts between motor vehicles, bicycles, and pedestrians.
- ▶ 2.6.6 Pedestrians and bicyclists should be accommodated on bridges, interchanges, and over and underpasses, where permitted by law. Bicycle lanes and wide sidewalks should be included in all new bridges and over and underpasses.
- ▶ 2.6.7 The city's greenways, blueways, and trails network should be treated as part of the city's transportation network and connections should be planned for accordingly.
- ▶ 2.6.8 Bicycle facilities such as secure racks, personal lockers, and showers should be encouraged in new and redeveloped office and employment centers to facilitate bicycling and



walking as viable alternative modes for commuting to work.

- ▶ 2.6.9 Infrastructure that encourages students to walk or bike safely to school should be supported. The city should continue to coordinate with the WMPO to partner with New Hanover County Schools, the Wilmington Police Department, and the North Carolina Department of Transportation to identify funding and opportunities to enhance walking routes to school.
- ▶ 2.6.10 Where appropriate, primary building entrances should front onto publicly accessible, easily discernible, and Americans with Disabilities Act-compliant sidewalks that lead directly from the street to the building entrance.
- ▶ 2.6.11 Wherever appropriate, roadways and rail corridors should be retrofitted with bicycle and pedestrian facilities such as multi-use paths, cycle tracks or bike lanes, bike boxes, and bike detectors.
- ▶ 2.6.12 The city should continue to coordinate with the WMPO to work with partners to identify creative funding solutions for bike and pedestrian infrastructure, including partnerships with the Cape Fear Public Utility Authority, the North Carolina Department of Transportation, parks and recreation partnerships, and public-private partnerships.

## **2.7 PARKING MANAGEMENT**

- ▶ 2.7.2 Parking and development that encourages multiple destinations within pedestrian-connected areas should be encouraged.
- ▶ 2.7.3 A parking program and management strategies should be established at existing and planned transit stations.
- ▶ 2.7.6 Parking lots should include vehicular and pedestrian connections between and through lots. Parking facility quality should be considered equally with quantity of parking spaces. Parking lot design should minimize pedestrian conflicts, make use of appropriate landscaping, and properly manage stormwater.

## **2.8 TRANSPORTATION SAFETY, TRAFFIC CALMING, AND NEIGHBORHOOD TRAFFIC**

- ▶ 2.8.1 Safe routes for motorists, transit riders, bicyclists, and pedestrians should be provided. The city should work with its partners to improve the multimodal system to enhance safe transportation options across modes.
- ▶ 2.8.2 Traffic calming measures should be incorporated into the design of new or retrofitted local and neighborhood streets, within schools and parks, and around pedestrian-oriented business areas. Pedestrian and bicyclists should have safe, convenient, well-marked means to cross streets.

- ▶ 2.8.3 The data necessary to assess transportation network safety performance should be collected and maintained. Ongoing education and enforcement should be supported. The safety impacts of proposed roadway capacity projects, including impacts to bicycle and pedestrian safety, should be evaluated and documented.

## **4.2 GREENWAYS, BLUEWAYS, TRAILS, AND CONNECTIVITY**

- ▶ 4.2.1 Safety, security, ease of use, sustainability, and equity should be considered when planning, designing, and constructing new and maintaining existing greenways, blueways, and trails.
- ▶ 4.2.2 Neighborhood connectivity to trails and greenways should be facilitated. Connections between neighborhoods, shopping centers, schools, transit stops, and employment centers should function as transportation alternatives in addition to recreational amenities.
- ▶ 4.2.3 Partnerships with New Hanover County and New Hanover County Schools, health care providers, nonprofit groups, and others should be enhanced to create or improve greenways and trails in the city and the region.
- ▶ 4.2.5 Wilmington's greenway/trail network should include multi-use paths that connect other greenways, parks, and schools. New greenways should be designed to serve both recreational and transportation needs.
- ▶ 4.2.7 Public awareness of the trails/greenway network should be promoted, including an ongoing educational campaign on bike and pedestrian safety, driver awareness, bike and pedestrian rights and regulations, and the benefits of greenways, blueways, and trails as related to increased property values and health and environmental benefits.

## **5.1 COMMERCIAL CORRIDOR REINVESTMENT**

- ▶ 5.1.2 Mixed-use redevelopment should be promoted as a means of revitalizing and enhancing economic development in commercial corridors and creating transit- and pedestrian-oriented development patterns.

## **5.2 NEIGHBORHOOD REINVESTMENT**

- ▶ 5.2.1 In partnership with neighborhood groups, focused reinvestments to make safe, attractive, and walkable neighborhoods and attract skilled workers to Wilmington should be encouraged. A mix of housing types and price points should be encouraged to diversify neighborhoods, particularly around business clusters and schools.
- ▶ 5.2.5 Investments in public infrastructure, such as parks, schools, sidewalks, and streetscapes, should be done in a targeted manner in the neighborhoods of greatest need.

## **5.5 ECONOMIC DEVELOPMENT AND LAND USE**

- ▶ 5.5.2 Appropriate intensification and retrofitting of existing office and retail clusters with new, interconnected, pedestrian- and bike-friendly residential and retail uses should be encouraged to provide attractive and competitive live-work designations.

## **6.4 AIR QUALITY**

- ▶ 6.4.1 Walkable and bikeable communities, public transit, and integrated land use and transportation planning should be promoted and encouraged to help reduce motor vehicle emissions.
- ▶ 6.4.3 State, regional, and local resources should be applied to encourage clean transportation choices through a transportation demand management program.

## **7.1 PUBLIC ART**

- ▶ 7.1.1 Public art should help create and foster community and neighborhood identity and should be part of public projects, community facilities, greenspace, and along greenways. Public art should be part of the planning process for all municipal projects.

## **8.1 INFRASTRUCTURE**

- ▶ 8.1.2 Maintenance, repair, and enhancements of streets and sidewalks should be undertaken in an equitable manner as well as an objective evaluation of condition and need. Funding and physical maintenance should be distributed equally throughout the city and in a way that benefits all neighborhoods and parts of town and all residents and visitors.
- ▶ 8.1.4 Coordination with utilities and infrastructure partners to ensure that construction, design, and improvements to streets and sidewalks are carried out in an efficient and coordinated manner should be maintained.
- ▶ 8.1.16 The city's parking program should support alternative means of transportation, encouraging alternative energy sources, promoting downtown as a regional destination, and maximizing transportation demand management. The pedestrian experience should be considered in parking planning, siting, and design and new and existing parking decks should provide for adequate pedestrian access the parking areas.

## **8.4 EDUCATION**

- ▶ 8.4.6 School siting and assignment policies that work to achieve diverse, walkable schools should be developed. All health impacts should be taken into account, including a health impact assessment or another methodical analysis of health impacts, when considering new locations and rehabilitation of existing school facilities.

- ▶ 8.4.7 Programs to maximize opportunities for schools that are an integral part of the surrounding neighborhood and that promote walking and biking to school should be supported. Safety and convenience of travel by foot, bike, and public transportation to and near schools should be improved by providing safe infrastructure.

## **9.1 UNIQUE WILMINGTON**

- ▶ 9.1.4 A unified system of vehicular and pedestrian wayfinding signs, kiosks, and other environmental graphics should be created to provide directions for bicyclists, pedestrians, and vehicular travelers. Wayfinding systems should link physical and digital elements.

## **9.2 PUBLIC SPACE NETWORK**

- ▶ 9.2.3 The appearance, identity, and safety of streets should be prioritized through the appropriate use of pedestrian elements such as sidewalks, crosswalks, street lights, landscaped areas, street furnishings, signage, and traffic signals and signals management.
- ▶ 9.2.4 Bus shelters, seating, and related elements should be provided at transit stop locations, where appropriate.
- ▶ 9.2.5 Along pedestrian priority streets, sidewalks should be designed and managed in a way that promotes pedestrian safety, efficiency, and comfort, providing adequate space for street trees, pedestrian traffic, and social activities such as sidewalk cafes.
- ▶ 9.2.6 Streets should be designed as public spaces that are scaled for pedestrians, especially along corridors designated as special character streets and pedestrian priority streets in the Growth Strategies Maps.
- ▶ 9.2.8 The design of alleys should reflect their best potential use, whether service-oriented, pedestrian pathways, or gathering places and venues. Alleys used as pathways should provide pedestrian elements, such as street lights, quality paving materials, and street furnishings (trash bins, bollards, signs, etc.).
- ▶ 9.2.9 Appropriate street tree plantings should be chosen for the function of the street and distinctive parts of the city. Trees in high pedestrian traffic areas and the Greater Downtown should be planted in tree wells with grates to protect the roots and allow safe pedestrian passage. Xeriscaping and native plants should be used where appropriate.

## **9.3 PEDESTRIAN-ORIENTED PLACEMAKING**

- ▶ 9.3.1 Mixed-use buildings and multi-use development sites should be encouraged where appropriate. Infill development that creates a destination for existing land uses should include opportunities for cross-site pedestrian connections, shared parking arrangements and other strategies to enhance mixed-use environments.



- ▶ 9.3.2 Comfortable, safe, and convenient pedestrian places should be promoted through buildings that face the street, avoidance of deep front setbacks, and providing direct pedestrian connections and entries along the public space network.
- ▶ 9.3.3 New development should promote pedestrian-oriented uses, especially those within Mixed-use Centers delineated in the Growth Strategies Maps. Automobile-oriented uses and designs such as drive-through windows should be discouraged in these areas.
- ▶ 9.3.4 Attractive and interesting commercial streetscapes should be created by promoting active ground-floor uses, creating desirable street activities, minimizing curb cuts and driveways, and avoiding windowless facades and large gaps in the street wall.
- ▶ 9.3.5 Where appropriate, indoor uses moved outdoors, such as dining areas and small merchandise displays on walkways and plazas, should be employed to activate the streetscape, while outdoor spaces moved indoors, such as atriums and courtyards, may also be used to improve views, exposure to light, and encourage social interaction.
- ▶ 9.3.6 Pedestrian-scaled lighting should be provided to encourage a safe walking environment while providing unified character elements for pedestrian oriented streets, centers, and neighborhoods.
- ▶ 9.3.7 On-street parking should be provided along pedestrian-oriented streets to act as a buffer from vehicular traffic. Surface parking should be confined to the rear or side of buildings.
- ▶ 9.3.8 Parking decks should be encouraged in Urban Centers as identified on the Growth Strategies Maps and, where feasible, should be wrapped with active uses for the entire frontage along public streets, especially on pedestrian-priority streets. Where wrapped parking is not feasible, decks should be screened and should not be visibly distinct from the building(s) they serve.

## **9.5 NEIGHBORHOODS**

- ▶ 9.5.2 Clear and safe pedestrian networks within, through, and between neighborhoods should be enhanced. Opportunities to connect existing neighborhoods to adjacent commercial centers and community facilities and services should be explored.

## **10.2 TRANSPORTATION**

- ▶ 10.2.1 Downtown should be well served by the broadest range of transportation options, including bikeways, sidewalks, greenways, roadways, streetcars, and buses. Enhanced transit service, including circulators, which may be buses, rubber-tire trolleys, or modern streetcars, and car and bike sharing programs should be encouraged.
- ▶ 10.2.2 The construction of a mixed-use, multimodal transit center downtown, with bike

and pedestrian connections, should be encouraged to provide a transit hub accommodating service for passenger rail, public transit, and private transit providers.

- ▶ 10.2.3 Non-automotive circulation among downtown activities and employment centers should be encouraged and pedestrian safety should be promoted.
- ▶ 10.2.7 As redevelopment occurs throughout downtown, sidewalks should be widened, where appropriate, to enhance the downtown pedestrian experience. Along identified priority pedestrian streets, new development and infrastructure projects should enhance pedestrian and bicycle safety and such elements should be given equal priority to vehicular traffic flow.
- ▶ 10.2.8 Opportunities to extend the urban greenway system should be examined and implemented concurrent with infill and redevelopment.
- ▶ 10.2.11 Transportation demand management strategies, such as carpooling, park and ride services, and staggered work hours, should especially be encouraged and supported to downtown locations.

## **10.6 URBAN DESIGN**

- ▶ 10.6.2 The public realm should be reinforced through the placement of main building entrances along public streets, the creation of a continuous street wall and the use of wide sidewalks and streetscape plantings. Parks, plazas, and public spaces should be surrounded by activity such as ground-floor retail and other active uses and upper-floor balconies and terraces.
- ▶ 10.6.3 Pedestrian engagement should be enhanced through the ground-floor design of all new infill and redevelopment. Such street-level enhancements may include the use of multiple building entrances, large, transparent windows, creative signage, lighting, protection from the elements via canopies, awnings, and arcades, and a high level of architectural articulation and pedestrian-scale element on all facades.

# **Cross-City Trail Master Plan (2012)**

## **STUDY AREA**

- ▶ Wilmington

## **PLAN GOALS**

- ▶ The goal of the Gary Shell Cross-City Trail is to provide residents and visitors with an amenity that provides opportunities for recreational use, physical activity and alternative transportation.

## River to Sea Bikeway Master Plan (2013)

### STUDY AREA

- ▶ River to Sea Bikeway from Wilmington to Wrightsville Beach

### PLAN GOALS

- ▶ The goal of The River to the Sea Bikeway is to provide visitors and residents with a facility that creates opportunities for basic transportation, recreational use and physical activity while connecting downtown Wilmington to Wrightsville Beach.

### KEY PRINCIPLES

- ▶ Provide connectivity to established destinations;
- ▶ Provide a safe route with the least amount of conflicts;
- ▶ Minimize property impacts;
- ▶ Provide consistency with Wilmington, WMPO, Wrightsville Beach, and NCDOT planning practices and policies;
- ▶ ADA Accessible;
- ▶ In harmony with existing infrastructure;
- ▶ Represent good stewardship of the environment;
- ▶ Create a sense of place; and
- ▶ Meet all of the above criteria in a way that is politically acceptable.

## Wilmington Vision 2020: A Waterfront Downtown (2004)

### STUDY AREA

- ▶ Downtown Wilmington

### PLAN GOALS/OBJECTIVES

- ▶ Encourages a friendly streetscape environment— Since successful American cities accommodate many modes of travel, the street network should be easily navigated by pedestrians, bicyclists and automobiles. The streetscape should provide a scale and quality of design that is interesting to the pedestrian, amenities to provide comfort, and adequate signage for locating cultural attractions, historic landmarks, and parking garages. This Plan considers the physical character of streets for their walkability and wayfinding purposes.

## KEY ACTIONS

### **STRATEGY 1: ACTIVATE THE WATER'S EDGE**

- ▶ C. Enhance Water Street as an attractive walking experience

### **STRATEGY 2: CONNECT PEOPLE TO THE RIVER**

- ▶ A. Improve access to the Riverwalk along key pedestrian routes

### **STRATEGY 7: ADDRESS QUALITY OF LIFE CONCERNS**

- ▶ B. Maintain adequate sidewalk clearance of at least 4 feet.

## Wrightsville Sound Small Area Plan (2011)

### STUDY AREA

- ▶ The planning area generally includes all properties from Bradley Creek north to the Landfall subdivision, and from the Atlantic Intracoastal Waterway (AIW) to just west of Oleander Drive and Military Cutoff Road. The area includes the Landfall Center shopping center, the nonresidential properties on the west side of Military Cutoff Road, and the residential areas between Rogers Avenue and Eastwood Road on the west side of Military Cutoff Road.

### PLAN GOALS

- ▶ To provide safe and viable bicycle and pedestrian facilities throughout the area.
- ▶ To provide a convenient mix of land uses that offers options for residents while ensuring new development is compatible with the surrounding area.
- ▶ To provide a safe and efficient transportation network for all modes of travel (auto, mass transit, bike, pedestrian).

### KEY STRATEGIES

#### **3.4 BICYCLE AND PEDESTRIAN FACILITIES**

- ▶ 3.4.1 Provide signalized pedestrian crossings and high-visibility crosswalks at all major intersections
- ▶ 3.4.2 Evaluate potential for sidewalks and/or a bike path along Airlie Road. Minimize tree disturbance with any future bicycle and/or pedestrian improvements.
- ▶ 3.4.3 Support the completion of the Gary Shell Cross-City Trail.
- ▶ 3.4.4 Construct sidewalks throughout the area in accordance with Walk Wilmington: A Comprehensive Pedestrian Plan.



- ▶ 3.4.5 Provide bicycle and pedestrian connections between existing residential and commercial areas
- ▶ 3.4.6 Provide a bicycle and pedestrian connection between the Gary Shell Cross-City Trail and Airlie Gardens
- ▶ 3.4.7 Support efforts to improve the safety and function of bicycle and pedestrian access to Wrightsville Beach.
- ▶ 3.4.8 Support the construction of a public walkway/pier underneath the Heidi Trask Drawbridge to provide a safe alternative for cyclists and pedestrians wishing to cross Wrightsville Avenue.
- ▶ 3.4.9 Explore the potential to acquire additional right-of-way, while protecting existing trees, along Airlie Road for bicycle and pedestrian improvements.
- ▶ 3.4.10 Implement bicycle and pedestrian improvements in accordance with the Recommended Transportation Improvements Map.

### **3.6 MIX OF USES**

- ▶ 3.6.2 Ensure commercial uses are accessible from surrounding residential areas by establishing a network of interconnected sidewalks, foot paths and bike paths.

### **3.7 TRAFFIC & TRANSPORTATION**

- ▶ 3.7.4 Improve transit service to other areas of the county by increasing access and making bus stop improvements.
- ▶ 3.7.6 Support the construction of a public walkway/pier underneath the Heidi Trask Drawbridge to provide a safe alternative for cyclists and pedestrians wishing to cross Wrightsville Avenue.
- ▶ 3.7.8 Support and promote interconnectivity for automobiles, cyclists and pedestrians between developments.
- ▶ 3.7.9 Address off-street parking along Airlie Road to improve safety for cyclists and pedestrians and prevent environmental impacts.

### **3.10 DEVELOPMENT & REDEVELOPMENT**

- ▶ 3.10.7.1 Commercial Redevelopment: Landfall Center. Require bicycle and pedestrian access.
- ▶ 3.10.7.2 Commercial Redevelopment: Galleria Mall. Require bicycle and pedestrian connections to adjacent residential areas.
- ▶ 3.10.7.3 Commercial Waterfront: Airlie Road. Provide sidewalk/walkway along the east side

of Airlie Road, connecting and providing access to the existing commercial establishments. Improve safety for pedestrians crossing Airlie Road with context- sensitive signage and/or pavement markings.

- ▶ 3.10.7.4 Transition Area: Allens Lane. Encourage bicycle and pedestrian access and connections to surrounding uses.
- ▶ 3.10.8.1 —Residential Redevelopment: Westbrook Avenue & Allens Lane. Require bicycle and pedestrian access and connections to surrounding uses.
- ▶ 3.10.8.2 Residential Redevelopment: Airlie Road. Encourage bicycle and pedestrian access and connections to surrounding uses.

## Southside Small Area Plan (2009)

### STUDY AREA

- ▶ Stakeholder-identified area including The Bottom, Dry Pond, and Lake Forest.

### PLAN OBJECTIVES

- ▶ Objective 3 – Environmental Design – Ensure development is designed in such a way that residents feel connected to and therefore safe within the community regardless of race, income, or other factors.
- ▶ Objective 14 – Transportation Infrastructure – Improve the transportation infrastructure to accommodate safe vehicular travel, access to public transit, and non-vehicular alternatives.

### KEY STRATEGIES

#### **OBJECTIVE 3 ENVIRONMENTAL DESIGN**

- ▶ 3.1 Include architectural and design elements in new construction, renovation, and redevelopment projects that connect people to the community. These elements include, but are not limited to, porches, sidewalks, pedestrian-scale street lighting, and building fenestration (the arrangement of windows and doors).
- ▶ 3.2 Eliminate barriers to walking, biking, and recreating in the physical environment. Assess and inventory sidewalks, trails, street furniture, shade, commercial parking access, street connectivity, parks, and transit access. Work with the city, WAVE Transit, and other appropriate agencies to improve the quality of these resources.

#### **OBJECTIVE 14 TRANSPORTATION INFRASTRUCTURE**

- ▶ 14.1 New multi-family and mixed-use projects should be located convenient to public transit and encourage transit-oriented development (TOD) projects.

- ▶ 14.2 Install sidewalks where sufficient right-of-way exists. Sidewalks should be constructed in accordance with the Walk Wilmington Comprehensive Pedestrian Plan.

## Seagate Neighborhood Plan (2007)

### STUDY AREA

- ▶ Stakeholder-identified area between Oleander Drive, Wrightsville Avenue and Bradley Creek

### PLAN GOALS

- ▶ To promote safer, better-maintained travel routes that accommodate vehicular and non-vehicular modes of transportation.
- ▶ To maintain adequate infrastructure to support the needs of the area while proactively addressing future needs and resources.

### KEY ACTIONS

#### **OBJECTIVE 1: REDUCE VEHICLE TRIPS**

- ▶ 1.1 Incorporate sidewalks and bike paths where possible to minimize vehicle trips
- ▶ 1.2 Support developments that are designed to accommodate convenient access to public transit (there is currently a WAVE Transit bus stop on Oleander at the arboretum).
- ▶ 1.5 Install sidewalks and bike paths where sufficient right-of-way exists.

#### **OBJECTIVE 3: SIDEWALKS AND BIKEPATHS**

- ▶ 3.1 Install sidewalks and bikepaths where sufficient right-of-way exists.
- ▶ 3.2 Include sufficient pedestrian circulation to facilitate community interaction.

## Northside Community Plan (2003)

### STUDY AREA

- ▶ The plan area is bounded by Smith Creek to the north, Burnt Mill Creek and N. 17th Street to the east, Market Street to the south and the Cape Fear River to the west.

### PLAN GOALS

- ▶ Create an attractive NorthSide community that residents and visitors can enjoy while preserving the history, character and beauty of its residential and commercial neighborhoods.
- ▶ Provide recreational, educational, vocational, cultural opportunities and community meeting space to meet the needs of everyone in the NorthSide community.

- ▶ To provide safe and efficient traffic flow and public transportation for the NorthSide community.

## KEY ACTIONS

### **OBJECTIVE 4- STREETScape ENHANCEMENT**

- ▶ Implement streetscapes, landscapes and other measures on public property including signage, pedestrian-scale lighting and other amenities (curb and gutters, trash cans, bus shelters and benches) in the Northside community.

### **OBJECTIVE 2- EXISTING FACILITIES**

- ▶ 2.5. Redevelop the Love Grove landfill into a usable public greenspace that includes reuses such as open space, habitat restoration, parks, gardens, fishing, playgrounds, and trails for pedestrians, horseback riding and bicycles.

### **OBJECTIVE 1- TRAFFIC CALMING**

- ▶ 1.1. Provide input to Neighborhood Traffic Studies on areas in need of traffic-calming devices to slow traffic (especially between N. 8th and N. 11th Streets). Also consider installing pedestrian safety amenities.

### **OBJECTIVE 2- ENHANCED TRANSIT SERVICE**

- ▶ Increase convenience of public transportation by adding bus stops in strategic locations and extending bus and trolley service to and from strategic locations.

### **OBJECTIVE 5- SIDEWALKS**

- ▶ Provide sidewalks in identified priority areas

## US 17 Business (Market St) Corridor Study (2016)

### STUDY AREA

- ▶ Corridor (Market St)

### PLAN GOALS

- ▶ Implement a road diet by reducing the travel lanes to one in each direction, thus creating space to add planted median, channelized left-turn lanes and bike lanes. The road diet project is not recommended for the proposed limits of this study due to the negative impacts to Market Street. Based on the results of this study, the road diet could successfully be implemented between 3rd Street and 16th Street, with a transition to current geometry west of 16th Street.

## Market Street Corridor Study (2010)

### STUDY AREA

- ▶ Corridor (Market St)

### PLAN GOALS

- ▶ Integrate pedestrian and bicyclist amenities along Market Street during construction of the proposed median treatments.
- ▶ Provide an alternate network of pedestrian and cyclist amenities through neighborhoods and collector streets.

### KEY POLICIES

- ▶ "Complete street" elements should be included in collector street design standards, including streets trees, sidewalks, and bicycle amenities.

## Cape Fear Historic Byway Corridor Management Plan (2008)

### STUDY AREA

- ▶ Corridor (Cape Fear Historic Byway)

### PLAN GOALS

- ▶ Goal #1: Encourage visitors to get out of their cars and safely explore the corridor by alternative means of transportation such as on foot, bike, trolley, horse carriage and even boat.
- ▶ Goal #11: Increase pedestrian and biking safety along the byway corridor, particularly on 3rd Street.

### KEY RECOMMENDATIONS

- ▶ This plan offers a number of pedestrian related recommendations meant to encourage multi-modal transportation use, including installation of crosswalks, expansion of transit services, and upgrading of sidewalks and pedestrian scale lighting.



## Dawson & Wooster Corridor Plan (2007)

### STUDY AREA

- ▶ Corridor (Dawson St, Wooster St)

### PLAN GOALS

- ▶ Address corridor safety.

### KEY RECOMMENDATIONS

- ▶ This plan includes a series of recommendations for pedestrian improvements in the short, medium, and long term. These recommendations include high visibility crosswalks, pedestrian signal heads, and bulb-outs.

## Wilmington Rail Trail Master Plan (2020)

### STUDY AREA

- ▶ The Wilmington and Weldon Railroad Corridor

### PLAN GOALS

- ▶ Connect Wilmington Northside neighborhood to Downtown, area amenities, and other parts of Wilmington.
- ▶ Create a unique space for art, exercise, and community engagement.

### KEY RECOMMENDATIONS

- ▶ The Rail Trail provides a critical link in a multimodal system that the City of Wilmington is trying to implement.
- ▶ The visual elements of a trail can considerably reshape the experience for the user. Encouraging people to use active modes of transportation is not solely accomplished by providing a physical path but by ensuring that the trail has a purpose in how it provides the connection to a given destination.
- ▶ The amenities the Rail Trail provides can transform the level of enjoyment and comfort that people experience while they are using the trail.

# Wrightsville Avenue 2030 (2010)

## STUDY AREA

- ▶ Corridor (Wrightsville Ave)

## PLAN GOALS

- ▶ To provide a safe and efficient travel route for all users that accommodates all modes of transportation (auto, bicycle, pedestrian, public transit).

## KEY STRATEGIES

### ***OBJECTIVE: MAINTAIN ROAD FUNCTIONALITY BY IMPROVING SAFETY AND TRAFFIC FLOW ALONG THE CORRIDOR.***

- ▶ Strategy 3.2.2 Minimize conflict points between vehicles and bicycles/pedestrians to improve safety for all modes of travel.

### ***OBJECTIVE: IMPROVE THE EFFECTIVENESS OF ALTERNATIVE MODES OF TRANSPORTATION INCLUDING BICYCLE, PEDESTRIAN, AND PUBLIC TRANSIT.***

- ▶ Strategy 3.2.6 Include pedestrian and bicycle facilities as a component of all transportation-related capital projects and programs when feasible.
- ▶ Strategy 3.2.7 Construct sidewalks throughout the corridor in accordance with Walk Wilmington: A Comprehensive Pedestrian Plan.
- ▶ Strategy 3.2.8 Continue to improve the River to the Sea Bikeway and Cross-City Trail bicycle and pedestrian facilities.
- ▶ Strategy 3.2.9 Install wayfinding signage along Wrightsville Avenue to direct bicyclists and pedestrians to the River to the Sea Bikeway and Cross-City Trail.
- ▶ Strategy 3.2.10 Install benches, shelters and bus pull-outs at high-volume transit stops along the corridor.
- ▶ Strategy 3.2.11 Provide half-hour bus service along the entire length of the corridor
- ▶ Strategy 3.2.12 Implements bicycle and pedestrian improvements along the corridor in accordance with the Recommended Transportation Improvements Map.

## Carolina Beach Road Corridor Plan (2004)

### STUDY AREA

- ▶ Corridor (Carolina Beach Rd)

### KEY STRATEGIES

#### **STRATEGIES FOR CAPITAL IMPROVEMENTS**

- ▶ Secondary to the sidewalk priority areas in the Future Land Use Plan, sidewalk priority areas on Carolina Beach Road should focus on the area between Bordeaux Avenue and Independence Boulevard and at bus stops.

#### **STRATEGIES FOR REGULATORY CHANGES**

- ▶ Create a neighborhood commercial overlay district between South 3rd Street and Southern Boulevard. The purpose of the district is to return this area to its original function as a neighborhood commercial center. The emphasis will be on improving the overall aesthetics through enhanced landscaping and site and building design and on improving pedestrian amenities such as sidewalks and crosswalks. Public and private investment is necessary to be successful.

## College Road Corridor Plan (2004)

### STUDY AREA

- ▶ Corridor (College Rd)

### KEY STRATEGIES

#### **STRATEGIES FOR CAPITAL IMPROVEMENTS**

- ▶ Create and fund a redevelopment incentive program that focuses on the Future Land Use Plan priority redevelopment areas but is also applicable to other areas. This program will provide specific standards for desired redevelopment (mix and type of uses, signage, architecture, landscaping, site design) and establish cost-sharing levels for infrastructure improvements such as deceleration lanes, traffic signals, turn lanes, medians, alleys, frontage roads, sidewalks/multi-use paths and other access management improvements that would be required for development approval. Priority redevelopment areas for College Road include the Marketplace Mall near the Market Street overpass, the commercial areas between Wilshire Boulevard and Lake Avenue, and Long Leaf Mall at the Shipyard Boulevard intersection. The commercial areas between Wilshire Boulevard and Peachtree Avenue should be the top priority.

- ▶ Secondary to the sidewalk priority areas in the Future Land Use Plan, sidewalk priority areas on College Road should be focused around shopping areas and UNCW, through new development, redevelopment, and City capital projects.
- ▶ Crosswalk priority intersections along College Road are Randall Parkway, New Centre Drive, and Lake Avenue. Enhancements to pedestrian crossings will be based on site specific engineering analysis and will potentially include:
  - » Raised medians
  - » Illuminated crosswalks and median refuges
  - » Special markings such as striped, or “zebra,” longitudinal lines or diagonal cross-hatching to increase visibility and emphasize a crossing
  - » Textured crossings, using non-slip bricks or colored pavers, to increase a driver’s awareness through increased noise and vibration
  - » Visible signage
  - » Flashing beacons

## Oleander Drive Corridor Plan (2004)

### STUDY AREA

- ▶ Corridor (Oleander Dr)

### KEY STRATEGIES

#### **STRATEGIES FOR CAPITAL IMPROVEMENTS**

- ▶ Create and fund a redevelopment incentive program that focuses on the Future Land Use Plan priority redevelopment areas but is also applicable to other areas. This program will provide specific standards for desired redevelopment (mix and type of uses, signage, architecture, landscaping, site design) and establish cost-sharing levels for infrastructure improvements such as deceleration lanes, traffic signals, turn lanes, medians, alleys, frontage roads, sidewalks/multi-use paths and other access management improvements that would be required for development approval. Priority redevelopment areas for Oleander Drive include the Dawson/Wooster intersection, and the areas generally located around the intersections with 42nd Street, 51st Street and Hinton Avenue. The node at Hinton Avenue should be the top priority.
- ▶ Work with NCDOT to construct a separate multi-use bicycle/pedestrian crossing at the Bradley Creek Bridge. Seek grants with NCDOT when possible.

- ▶ Secondary to the sidewalk priority areas in the Future Land Use Plan, sidewalk priority areas on Oleander Drive should focus on major commercial centers (nodes) and at bus stops. When bus service is extended east of College Road, sidewalks should be prioritized to provide access from Oleander Drive to the Cape Fear Hospital and planned nodes near Hinton Avenue and Greenville Loop Road.

## Rail Realignment Plan (2017)

### STUDY AREA

- ▶ CSX Rail Corridor between Navassa and the Port of Wilmington

### KEY GOALS

- ▶ Replace and improve the existing freight rail route between Navassa (Davis) Yard and the Port of Wilmington by creating a new, shorter route that bypasses busy streets and densely populated areas
- ▶ Post-realignment, the city will work to repurpose the existing route for public use in order to accommodate growth in both population and commercial freight activity

### PROJECT STATUS

- ▶ The realignment project has three phases: 1) a screening assessment, identifying feasible alternatives to be considered in the study, 2) alternatives analysis with identification of a preferred alternative, 3) environmental review and preliminary engineering activities pursuant to NEPA.
- ▶ As of Q4 of 2020, work had begun on the economic feasibility study, which is occurring in conjunction with the ongoing environmental and engineering studies.

## Wilmington Land Development Code Update (2021)

### STUDY AREA

- ▶ Wilmington

### PLAN GOALS

- ▶ Improve traffic conditions
- ▶ Preserve and grow the city's tree canopy
- ▶ Better manage stormwater
- ▶ Develop a more convenient, compact, and connected future city with a smarter approach to land use



## KEY UPDATES

- ▶ Eliminations of parking minimums for most non-residential uses, with exceptions.
- ▶ Incentivizes the preservation & expansion of the urban tree canopy in Wilmington.
- ▶ Encourages construction of affordable housing.
- ▶ “Urban,” “semi-urban,” and “suburban” designations with different parking, landscaping, and setback/building requirements.
- ▶ Corridor-specific design standards on major thoroughfares.
- ▶ Incentivizes infill development & redevelopment of vacant/decaying parcels.
- ▶ Permits the construction of “middle” housing such as townhomes & duplexes in residential areas previously limited to single-family housing.

## Market Street Corridor Plan (2011)

### STUDY AREA

- ▶ Corridor (Market St)

### KEY STRATEGIES

#### CONNECTIVITY

- ▶ Strategic network of connector streets (lower design speeds and multimodal amenities)
- ▶ Encourages future development to create a closely spaced/denser street network
- ▶ Encourage Complete Streets elements

#### ACCESS MANAGEMENT

- ▶ Limit number of driveways where possible

#### LANDSCAPING

- ▶ Provisions for street trees

#### ROADWAY IMPROVEMENTS

- ▶ Pedestrian-level improvements at all full median opening signalized intersections and at certain mid-block areas

**MULTIMODAL CONSIDERATIONS**

- ▶ Integrate pedestrian and bicyclist amenities along Market Street during construction of the proposed median treatments
- ▶ Provide an alternate network of pedestrian and cyclist amenities through neighborhoods and collector streets



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