



# EXECUTIVE SUMMARY



## Key Action Steps for Implementation

Challenges facing the Town in the establishment of better bicycling routes include the lack of available right-of-way on state roads with swale drainage, declining state and federal funding, and the irregular configuration of the Town’s municipal boundaries. To address these challenges, the plan recommends the following key action steps and implementation resources.

**1. ADOPT THIS PLAN** By doing so, Swansboro will be better able to shape transportation and development decisions so they fit with the recommendations of this plan, and will be better positioned to secure outside funding. Adoption indicates the intent to implement this plan over time.

**2. DESIGNATE STAFF** It is recommended that a combination of existing Town staff be designated to oversee the day-to-day implementation of this plan.

**3. CREATE A BIKE/PED COORDINATING COMMITTEE** This committee could include representatives of the Parks and Recreation Board, the Planning Board, and the Bicycle Plan Steering Committee. They could meet on a schedule (to be determined) that allows them to support and oversee the implementation of programs and projects related to walking, bicycling, and trails.

**4. BEGIN MEETING W/ KEY PROJECT PARTNERS** Coordination between key partners will establish a system of checks and balances, provide a level of accountability, and ensure that recommendations are implemented. This annual meeting should be organized by the Town Manager, and should include representatives from the Organizational Framework shown on page 4-3 of the Plan.

**5. SEEK FUNDING SOURCES & DEVELOPMENT OPTIONS** Most potential improvements for bicycling in Swansboro are on or along roadways owned and maintained by NCDOT, and will therefore require close coordination with local division offices and the other regional transportation agencies. Local funding for bicycle projects should be set aside annually (even if only for small amounts) to be matched by outside funding sources.

**6. IMPROVE BICYCLE POLICIES** Ensure that future development allows for bicycle and trail facilities as identified in adopted plans.

**7. DEVELOP TRAIL CONSTRUCTION DOCUMENTS** Use Chapter 3 and the Design Toolbox as starting points for drafting such documents. Look to NCDOT for examples of where swale drainage has been piped for pathway construction (see page 3-15 of the plan).

**8. LAUNCH PROGRAMS AS NEW PROJECTS ARE BUILT** Bicycle education, encouragement, and enforcement programs could occur through cooperation with the key project partners.

**9. OFFER TRAINING FOR ENFORCEMENT** Training on this topic can lead to additional education and enforcement programs that promote safety. Free training is available to Swansboro’s officers through online resources (see links at [www.bicyclinginfo.org/enforcement/training.cfm](http://www.bicyclinginfo.org/enforcement/training.cfm)).

**10. BECOME A BICYCLE FRIENDLY COMMUNITY (BFC)** The BFC Campaign is a national awards program that recognizes municipalities that actively support bicycling. Swansboro has a long way to go before applying for this designation, but it should remain a goal to work towards.

## Implementation Resources

A series of supplemental implementation ‘toolboxes’ are available through Town staff as a separate part of this plan. They are not included in the plan itself for the purposes of limiting the document to a reasonable size, and for ease of reproduction and use. These ‘toolboxes’ include the following:

### DESIGN TOOLBOX

This toolbox provides design guidelines for bicycle, pedestrian and trail-related facilities that are used in various locations across the United States. These guidelines can be used to determine a comprehensive bike-ped network throughout Swansboro, while still providing for flexibility on a project by-project basis.

### BICYCLE PROGRAM TOOLBOX

This toolbox outlines programs to meet the needs of bicyclists that cannot be met through facility construction, such as lessons for riding safely and special events geared towards bicycling.

### BICYCLE POLICY TOOLBOX

This toolbox provides a reference point for local, state, and federal policies that relate to bicycle transportation. Full language for most key state and federal policies that support bicycling and bicycle implementation is provided.

### TRAIL DEVELOPMENT TOOLBOX

There are many different ways to secure trail right-of-way for greenway systems. It will be necessary to work with some landowners to secure trail right-of-way when it does not exist. This toolbox provides a list of options that should be considered.

### FUNDING TOOLBOX

When considering possible funding sources for the Town of Swansboro’s bicycle projects, it is important to remember that not all construction activities will be accomplished with a single funding source. It will be necessary to consider several sources of funding, that when combined, would support full project construction. This toolbox outlines sources of funding for the projects at the federal, state, and local government levels, and from the private sector.

## PROJECT VISION

This Bicycle Plan will guide the Town of Swansboro, NCDOT, and other key stakeholders in creating a community network of bicycle trails, connecting the Historic District with parks, schools, and residents. This contiguous network of bicycle trails will not only serve local residents’ needs for recreation and transportation, but will also help promote Swansboro as a destination for bicycling - a draw for tourists from which many coastal communities in North Carolina already benefit.

## PROJECT BACKGROUND

In 2010, the Town of Swansboro was awarded a matching grant from the North Carolina Department of Transportation (NCDOT) Bicycle and Pedestrian Planning Grant Initiative. The purpose of the grant is to encourage municipalities to develop comprehensive bicycle plans and pedestrian plans. This program has assisted more than 100 North Carolina communities and is administered through NCDOT’s Division of Bicycle and Pedestrian Transportation (DBPT).

## PROJECT CONSULTANTS & STEERING COMMITTEE

Planning and design consultants, Alta/Greenways, led the process with direction from Town staff and the Bicycle Plan Steering Committee. This Steering Committee is made up of citizen advocates and representatives from multiple stakeholder organizations, such as the Swansboro Chamber of Commerce, NCDOT, and the Eastern Carolina Council (see Acknowledgements section of the plan). The Steering Committee met several times throughout the process and provided guidance on the overall vision, facility recommendations, programs, policies, and draft plan development.

## DATA COLLECTION AND ANALYSIS

After collecting baseline information about the study area from the Steering Committee, the consultants began analyzing existing conditions, which is the subject of Chapter 2. Consultants used aerial photography and geographic information systems (GIS) data, to identify opportunities and constraints for bicycle facility development. These findings were then tested for applicability and appropriateness through on-the-ground field research. Field research also included examining portions of proposed trails, verifying certain road widths, studying lane configurations, and preparing a photographic inventory.

## PUBLIC INVOLVEMENT

The Town of Swansboro collected public input through public comment forms, the project web site, and public workshops. In February 2011, more than twenty people attended the first public workshop at the Town Hall Annex. The next public input opportunity was in March 2011, at the Swansboro Area Chamber of Commerce Business Expo, where 83 people visited the Bicycle Plan’s table to provide input and/or learn more about the plan. Input from the public was very positive and supportive, with many expressing a desire to be able to bicycle safely from their neighborhoods to parks, Downtown Swansboro, and across NC 24. Based on public input, primary factors that are preventing residents from taking trips by bicycle are narrow roadways, crossing busy roads, and the lack of bicycle lanes, paved shoulders, or paths.



Left: The first public workshop on February 7, 2011.



Right: The second public workshop at the Swansboro Business Expo on March 28, 2011.

## PLAN DEVELOPMENT & RECOMMENDATIONS

Project consultants developed a draft plan to reflect input from the public, the Steering Committee, Town staff, and NCDOT staff, while taking into account the existing conditions analysis. The plan features recommendations for bicycle facilities (Chapter 3 & pages ES-2/ES-3), as well as program, policy, and administrative action steps for plan implementation (Chapter 4 & page ES-4).



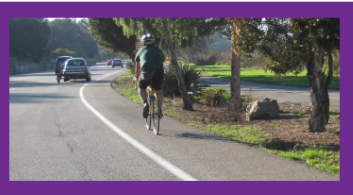
# Recommended Bicycle Network

Bicyclists are allowed to ride on all roads in Swansboro and have the same rights and responsibilities as motorists. Modifications to roadways and the addition of multi-use trails will make bicycling a safer and more viable form of transportation and recreation in Swansboro. Below are brief descriptions of different types of bicycle facilities recommended in Swansboro. For more information, see Chapter 3, which breaks down the recommended network into ten main segments, and provides a planning-level analysis for each.

Colors & symbology correspond to the map



**MULTI-USE TRAILS/GREENWAYS** Multi-use trails are physically separated from motor vehicle traffic and accommodate multiple types of users, most notably, bicyclists and pedestrians. Typically, this plan recommends paved asphalt surface for proposed trails although an alternative type of boardwalk design is required in some areas.



**PAVED SHOULDERS** Paved shoulders are the part of a roadway which is contiguous and on the same level as the regularly traveled portion of the roadway. While there is no minimum width in paved shoulders, a minimum width of four feet is preferred for safe and comfortable bicycling. Ideally, paved shoulders should be included in the construction of new roadways and/or the upgrade of existing roadways.



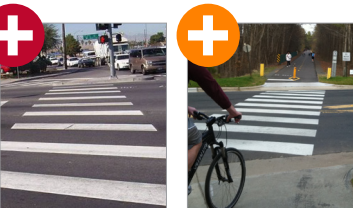
**BICYCLE LANES** A bicycle lane is a portion of the roadway that has been designated by striping, signing, and pavement markings for the preferential and exclusive use of bicyclists. The minimum recommended width for a bicycle lane is four feet; five- and six-foot bike lanes are typical for roads with higher speeds or carrying higher levels of traffic.



**EDGE LINE STRIPES** Edgeline stripes can function similar to bicycle lanes, but they are often narrower and do not have bicycle pavement markings. Edgeline stripes could be added to NC 24 in Swansboro by restriping the currently over-sized travel lanes and extra wide center turn lane. Full bicycle lanes are recommended (rather than edgelines) if it is possible to stripe the line four-feet or more from the edge of the gutterpan.



**SIGNED BICYCLE ROUTES & SHARED-LANE MARKINGS** Signed bicycle routes connect the overall network in areas with lower traffic speeds and volumes. A more comprehensive wayfinding system is recommended after significant portions of the overall network are complete. Shared-lane markings (a.k.a. Sharrows) are on-street pavement markings that could enhance the signed route locations.



**BIKE/PED CROSSING IMPROVEMENTS** This plan recommends crossing improvements for existing intersections and future trail-roadway crossings. Improvements to existing intersections include: high visibility crosswalks, countdown signals, and signage, such as 'No Right on Red When Peds Present'. Trail-roadway crossings include: high visibility crosswalks and signs that alert motorists to the crossing.



**BICYCLE PARKING** This plan recommends adding bicycle racks to destinations throughout town, including Downtown Swansboro, at parks, schools, the library, post office, grocery stores, and other shopping/employment centers.

