NEWPORT, NCBICYCLE & PEDESTRIAN PLAN











Prepared for the Town of Newport & NCDOT
Prepared by Alta Planning + Design

ACKNOWLEDGEMENTS

Thanks to the more than 200 local residents, community leaders, and government staff that participated in the development of this plan through meetings, events, comment forms, and plan review. Special thanks to those who participated as steering committee members, listed below.

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The Steering Committee is made up of local residents, government staff, and community leaders.

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This project was made possible with a matching grant from the North Carolina Department of Transportation (NCDOT) Division of Bicycle and Pedestrian Transportation (DBPT).

Cover Image: Proposed conceptual improvements on the southern part of Chatham Street heading towards Newport Middle School, including a boardwalk, bridge, and a shared-use path. The actual project will look different of the ground, including a greater separation between the roadway and the path/boardwalk.

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EXECUTIVE SUMMARY for the NEWPORT BICYCLE & PEDESTRIAN PLAN

BACKGROUND: In January 2016, the Town of Newport began the planning process for this Bicycle and Pedestrian Plan. The development of this plan was made possible by a North Carolina Department of Transportation (NCDOT) Planning Grant. Recognizing the importance of connectivity to major destinations in the town, such as Fort Benjamin Park and Newport Middle School, the Town embarked on its first comprehensive plan to improve walking and biking conditions for its residents. See the vision for the plan below, and learn more about the benefits of planning for a walkable and bicycle-friendly community in Chapter 1.

PLANNING PROCESS: The planning process consisted of ongoing public engagement, steering committee meetings, and development of a draft network. Local residents were encouraged to provide input through a public survey where they identified major opportunities and constraints for walking and biking in Newport. Survey results indicated that the top locations in need of improvement were Chatham Street, Church Street, and connections to Fort Benjamin Park. Throughout the planning process, the Steering Committee provided input on existing conditions, proposed projects, and implementation of the pedestrian and bicycle network.

"The Town of Newport will be a safe place for walking and bicycling, with trails, sidewalks, crosswalks, and bicycle routes that connect our neighborhoods, parks, schools, shopping centers, and other key destinations. These investments in our community will provide greater opportunities for transportation, recreation, economic development, and health and wellness."

- Vision Statement



KEY RECOMMENDATIONS for the NEWPORT BICYCLE & PEDESTRIAN PLAN

KEY FINDINGS: Existing conditions are examined in Chapter 2. Some findings that support the need for this Plan include:

- » A lack of dedicated space for bicyclists and pedestrians along many streets in Newport.
- » Between 2007 and 2012, there were eight pedestrian crashes and seven bicycle crashes within the Newport ETJ, and five of them were fatal.
- » A desire among residents to see a walking and biking connection between the north and south sides of the river (along Chatham St), as evidenced by past efforts for a "Safe Routes to School" grant, and by public comment form results.
- » There is an opportunity for connecting many town destinations in a relatively short distance (about a mile from the center of Newport to Newport Middle School, for

POLICY REVIEW: The Town of Newport's zoning ordinance and subdivision regulations were reviewed in order to understand how they influence the planning of pedestrian and bicycle enhancements. One of the most costeffective strategies for implementing this plan is to establish land development regulations and street design policies that promote walkable and bikeable new development and capital projects. See Chapter 2 for details related to this policy review and suggested policy changes.

INFRASTRUCTURE RECOMMENDATIONS:

A few top priority projects were identified through the planning process and are highlighted in Chapter 3. Rather than recommending an extensive network of infrastructure, the Steering Committee and project consultants determined that a better approach for the Town was to identify priority projects that connect to major points of interest, as supported

by feedback through the public comment form. The priority infrastructure projects are:

- Chatham Street sidepath, bridge, &
- » Chatham Street sidewalk & shared-lane markings
- Church Street sidewalk

The top project (Chatham Street Sidepath) is shown on the following page. Other top infrastructure recommendations include improvements to the crossings of US 70 at Howard Boulevard and of Railroad Boulevard at Chatham Street.

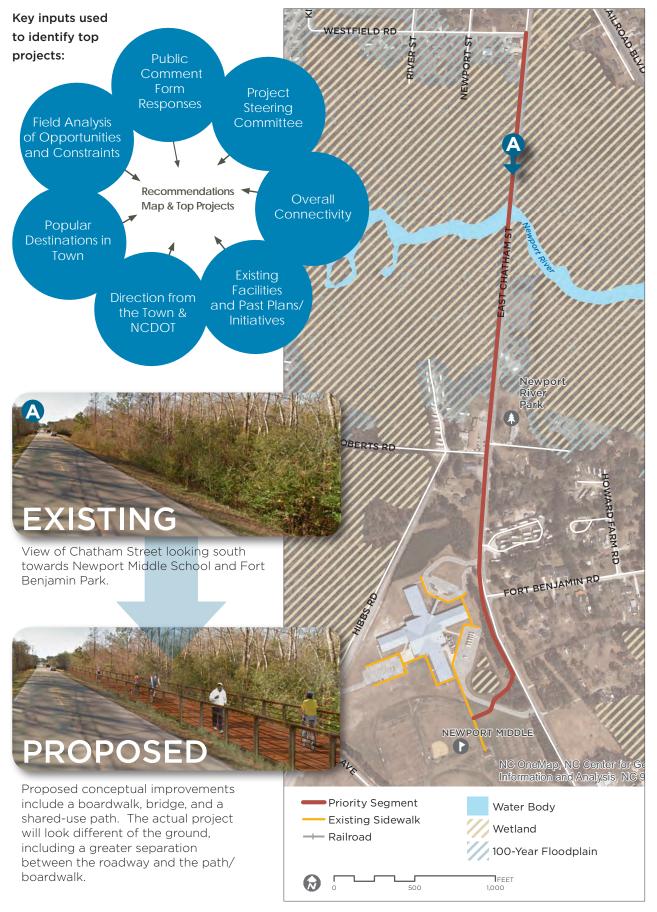
PROGRAM RECOMMENDATIONS:

Chapter 3 also features program recommendations that are essential and complementary to improvements in infrastructure, including:

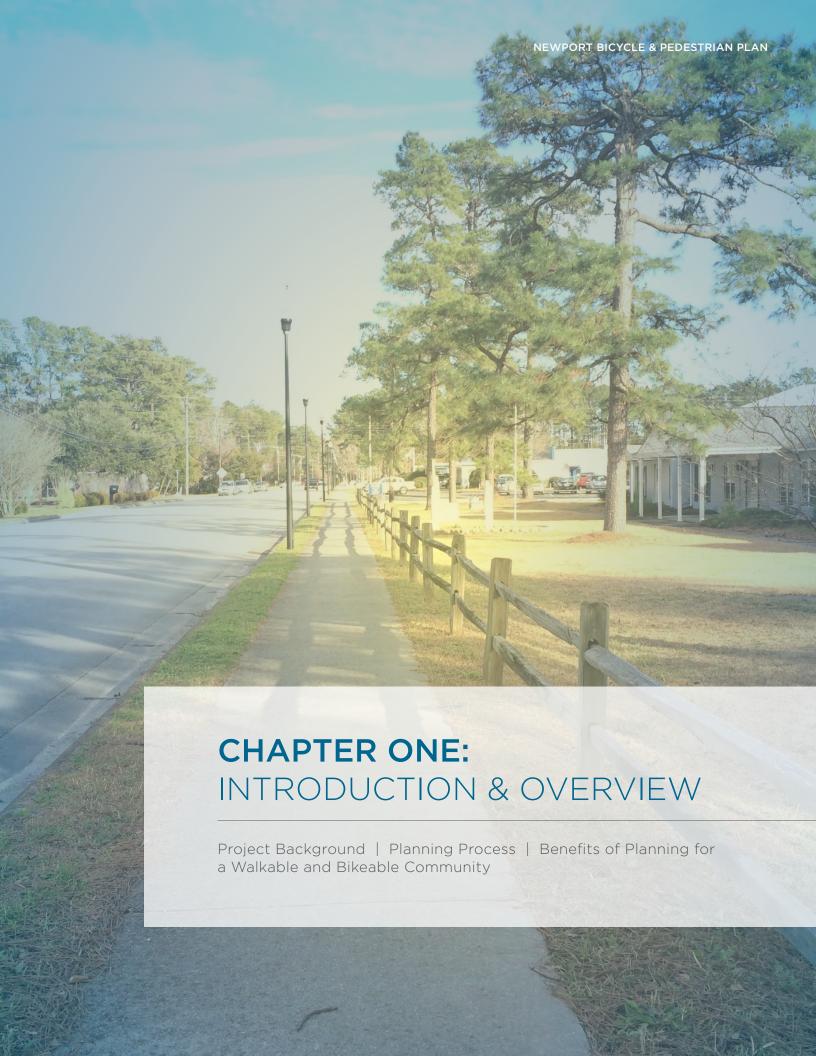
- » A media campaign to educate motorists, bicyclists, and pedestrians
- An "Open Streets" event to encourage walking and bicycling
- A "Hike & Bike" map showing where people can walk and bike in Town today
- » A public bicycle maintenance stand with basic equipment for maintaining bicycles

NEXT STEPS: Chapter 4 defines a structure for managing the implementation of the Plan. with the Town Manager as the lead coordinator, to be supported by a Town of Newport Bicycle & Pedestrian Advisory Committee (BPAC), or a subcommittee of the Town's existing Recreation Advisory Committee. The chapter outlines nearly 30 specific action steps for implementation, and Appendix A outlines potential funding sources for the plan. It is recommended that multiple funding sources be pursued simultaneously, and that the Town consider setting aside CIP funding to use as a match to outside funding as the plan is implemented over time.

TOP PRIORITY PROJECT: CHATHAM STREET SIDEPATH







PROJECT BACKGROUND

The Newport Bicycle & Pedestrian Plan was made possible by joint funding from the Town of Newport and the North Carolina Department of Transportation (NCDOT). In 2015, Newport 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 and pedestrian plans. To date, the initiative has funded planning efforts in more than 164 municipalities across the state. The program is administered through NCDOT's Division of Bicycle and Pedestrian Transportation.

Through the development of this Plan, the Town aims to build upon past plans and initiatives (such as the 2008 Safe Routes to School grant application and the 2014 Carteret County Comprehensive Transportation Plan), prioritize future transportation decisions, and identify funding to improve these facilities. By doing this, the Town aims to improve connectivity, safety to schools, recreation opportunities, and healthy living opportunities. In addition, the Town aims to better accommodate future growth and an aging populations by focusing on bicycle and pedestrian improvements.

PLANNING PROCESS

The planning process began with a Kickoff Meeting in February 2016, which was the first of four project Steering Committee meetings. The Steering Committee was made up of a combination of local residents, Town staff and representatives, educators, health department staff, and regional transportation planners. This Steering



Above: Steering Committee members mark up base maps at the project Kick-Off Meeting.

Committee guided the plan's development throughout the planning process. Key steps included communicating their overall vision for the plan, identifying opportunities and constraints for walking and bicycling, and providing feedback on plan recommendations.

The planning process included several other important methods of public outreach and involvement. The project website, public comment form, outreach events, and public workshops were all used to gather input for the plan and ask for feedback on the draft plan. The plan and planning process were also promoted through the Town's website.

Figure 1.1 Key Steps in the Planning Process

FEBRUARY 2016 1st Steering Committee Meeting (plan vision) & **Field Review APRIL 2016** 2nd Steering Committee Meeting (opportunities & constraints) & Field Review **JUNE - JULY 2016** 3rd Steering Committee (draft plan recommendations) & Full Draft Plan **AUGUST-SEPTEMBER 2016** Draft Plan Review by Town, Committee, NCDOT and Public **OCTOBER 2016** 4th Steering Committee Meeting (final plan feedback) & Public Hearing **NOV 2016 -JAN 2017** Complete Final Plan/ **Public Hearing for Plan** Adoption

BENEFITS OF PLANNING FOR A WALKABLE AND BIKEABLE COMMUNITY

Newport's current walking and bicycling network is fragmented, as direct pedestrian and bicyclist connections to key destinations do not yet exist. Bicycle and pedestrian planning will be critical to the enhancement of the overall quality of life.

Through this plan, the Town of Newport aims to:

- Improve pedestrian and bicyclist safety;
- Improve accessibility and connectivity to community destinations;
- Stimulate economic development;
- Create opportunities for active and healthy lifestyles; and
- Enhance the environment and overall quality



Above: A sign in Newport sums up one of the key reasons this plan is important: Improving bicycle and pedestrian safety, particularly for children.

This Vision Statement was developed with input from the Steering Committee, outlining the overall vision for the outcomes of this plan.

VISION STATEMENT

The Town of Newport will be a safe place for walking and bicycling, with trails, sidewalks, crosswalks, and bicycle routes that connect our neighborhoods, parks, schools, shopping centers, and other key destinations. These investments in our community will provide greater opportunities for transportation, recreation, economic development, and health and wellness.

SAFETY FOR PEDESTRIANS & BICYCLISTS

TRENDS AND CHALLENGES

According to a survey of 16,000 North Carolina residents for the 2011 North Carolina Bicycle and Pedestrian Safety Summit, the most commonly reported safety issue for walking and bicycling was inadequate infrastructure (75%).1 A lack of bicycle and pedestrian facilities, such as sidewalks, bike lanes, trails, and safe crossings, lead to unsafe conditions for bicyclists and pedestrians:

Each year on average (2008-2012), 168 pedestrians and 22 bicyclists are killed in collisions with motor vehicles on North Carolina roads, while many more are seriously injured.2

- North Carolina is ranked as one of the least safe states for walking (41st) and bicycling $(44th).^{3}$
- 13% of all traffic fatalities in North Carolina are bicyclists and pedestrians.
- During the five-year period from 2008 to 2012, a total of 4,889 bicycle-motor vehicle crashes and 13,186 pedestrian-motor vehicle crashes were reported to North Carolina authorities.2
- From 2007-2012, there were eight pedestrian collisions and seven bicycle collisions within the Town of Newport and ETJ boundaries (See Map 2.2 Bicycle and Pedestrian Crashes, on page 25).

IMPROVING SAFETY

Separate studies conducted by the Federal Highway Administration and the University of North Carolina Highway Safety Research Center demonstrate that installing pedestrian and bicycle facilities directly improves safety by reducing the risk and severity of pedestrian-automobile and bicycle-automobile crashes. For example, installing a sidewalk along a roadway reduces the risk of a pedestrian "walking along roadway" crash by 88 percent. Furthermore, according to the aforementioned survey, 70% of respondents said they would walk or bicycle more if safety issues were addressed, citing a lack of bicycle and pedestrian facilities as the top issues (see Pedestrian Crash Countermeasures below).

The following web addresses link to more comprehensive research on safety.

- http://www.walkbikenc.com/
- http://www.pedbikeinfo.org/data/ factsheet_crash.cfm

HEALTH IMPACTS OF ACTIVE **TRANSPORTATION**

TRENDS AND CHALLENGES

North Carolina's transportation system is one of the most important elements of our public environment. Unfortunately, it includes many streets that are unsafe for walking and bicycling, posing barriers to healthy living and active transportation. In the next column are some key trends and challenges related to health and transportation in North Carolina:

66% of adults in North Carolina are either overweight or obese.⁵ The state is also

- ranked 5th worst in the nation for childhood obesity.6
- In a 2012 survey, 88% of North Carolinians responded that they spend no time walking or biking as a means of transportation.⁵
- Recent reports have estimated the annual direct medical cost of physical inactivity in North Carolina at \$3.67 billion, plus an additional \$4.71 billion in lost productivity.7 However, every dollar invested in pedestrian and bicycle trails can result in a savings of nearly \$3 in direct medical expenses.8
- Of North Carolinians surveyed, 60% would increase their level of physical activity if they had better access to sidewalks and trails.5
- According to the 2013 Carteret County Community Health Assessment, 41% of respondents indicated that they were overweight or obese. Fortunately, active transportation (i.e., biking and walking) can dramatically improve health by reducing and preventing not only incidences of obesity, but community levels of diabetes, stroke, and heart disease, as noted below.

BETTER HEALTH THROUGH ACTIVE TRANSPORTATION

Using active transportation to and from school, work, parks, restaurants, and other routine destinations is one of the best ways that children and adults can lead measurably healthier lives. Increasing one's level of physical activity through walking and bicycling reduces the risk and impact of cardiovascular disease, diabetes, chronic disease, and some cancers. It also helps to control weight, improves mood, and reduces the risk of premature death.¹⁰

Figure 1.2 Pedestrian Crash Countermeasures

PEDESTRIAN CRASH	PEDESTRIAN CRASH
COUNTERMEASURES	REDUCTION FACTOR
nstall pedestrian overpass/underpass	90%
nstall sidewalk (to avoid walking along roadway)	88%
Provide paved shoulder (of at least 4 feet)	71%
nstall raised median at unsignalized intersection	46%
nstall pedestrian refuge island	36%
nstall pedestrian countdown signal heads	25%

Fewer Chronic Less Reduced **Disease Deaths** Increased **Diabetes** Obesity + Active **Increased Life** Physical **High Blood** Overweight Transportation Expectancy Activity Pressure System **Better Mental** (Walking + **Certain Cancers** Health Bicycling) Depression **Quality of Life Fewer** Better Respiratory Air Quality Illnesses

Figure 1.3 Active Transportation: Pathway to Health

Source: Alta Planning + Design; WalkBikeNC

ECONOMIC IMPACTS OF ACTIVE **TRANSPORTATION**

ECONOMIC TRENDS IN NORTH CAROLINA

Bicycle and pedestrian facilities generate economic returns by raising property values, supporting local businesses and jobs, and attracting visitors. Below are some key economic trends related to walking and bicycling in North Carolina:

- North Carolina is the 6th most visited state in the United States and visitors spend as much as \$18 billion a year, many of whom partake in activities related to walking or biking.11
- The annual return to local businesses and state and local governments on bicycle facility development in the Outer Banks is approximately nine times higher than the initial investment.12
- Even for households that do have motor vehicles, walking and biking are free transportation that keep household disposable income available for other wants and needs.
- Walking and biking are economically efficient transportation modes. Many North Carolinians cannot afford to own a vehicle and are dependent on walking and biking for transportation (6.5% of occupied housing units in North Carolina do not own a vehicle).¹³
- The report, Walking the Walk: How Walkability Raises Housing Values in U.S. Cities, analyzed data from 94,000 real estate transactions in

15 major markets provided by ZipRealty and found that in 13 of the 15 markets, higher levels of walkability, as measured by Walk Score, were directly linked to higher home values.

MOBILITY AND ACCESSIBILITY **BENEFITS OF ACTIVE** TRANSPORTATION

OPPORTUNITY TO INCREASE WALKING AND BICYCLING RATES

According to the 2011 Bicycle and Pedestrian Safety Survey, at least 70 percent of North Carolinians would walk or bike more for daily trips if walking and bicycling conditions were improved.1 With appropriate accommodations, walking and bicycling can provide alternatives to driving for commuting to work, running errands, or making other short trips.

Commute rates for walking and bicycling in North Carolina currently fall below the national average, with just 0.2% of North Carolina commuters bicycling to work and 1.8% walking to work, compared to 0.6% bicycling and 2.9% walking nationwide. This places North Carolina 42nd for walking commute rates and 41st for bicycling commute rates in nationwide state rankings.3

The table on page 18 shows walking and biking rates for Newport, as compared to Carteret County and North Carolina overall.

An estimated 40% of all trips (commute and non-commute) taken by Americans each day are less than two miles, equivalent to a bike ride of 10 minutes or less; however, just 13% of all trips are made by walking or bicycling nationwide.3 To put these numbers into perspective, 34% of all trips are made by walking or bicycling in Denmark and Germany, and 51% of all trips in the Netherlands are by foot or by bike.¹⁴ Germany, Denmark, and the Netherlands are wealthy countries with high rates of automobile ownership, just like the United States. Yet, an emphasis has been placed on providing quality walking and bicycling environments which has alleviated the reliance on motor vehicles for short trips.

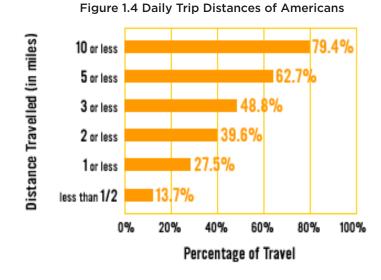
Some cities in the U.S. have made great strides in bicycling and walking commute rates, showing that significant improvements are possible across the U.S. Boston, MA (17%), Washington, DC (14%), and San Francisco (13%) are examples of large cities with the highest rates.3

Some participants in this planning process for Newport have mentioned that there are local people who now commute by bike, and the potential for more people to enjoy a safe walking or biking commute could really benefit Newport households.

These mobility benefits go beyond commuting as well. Newport is fortunate in having banks, schools, parks, a library, offices, and agencies within town and close by, and Newport people can benefit from safe facilities that increase the rate of walking and biking for short trips to these destinations. Furthermore, other aspects of mobility and accessibility also apply to children and those who can no longer drive due to advanced age. Moreover, improved walking infrastructure benefits those who use wheelchairs or scooters, as well as people who have visual impairments.

REDUCED VEHICLE MILES TRAVELED (VMT) & Congestion

Taking short trips by foot or by bike can help to greatly reduce motor vehicle miles driven and traffic congestion. Under the Nonmotorized Transportation Pilot Program, walking and bicycling investments contributed to an estimated 23% increase in the number of walking trips and an estimated 48% increase in the number of bicycling trips in four pilot communities between 2007 and 2013.15 These individual changes in travel behavior can add up to produce significant societal benefits. Traffic on arterials and other streets can be mitigated as people use sidewalks, bike lanes, paths, and



Most driving trips are for a distance of five miles or less. Even for those who are only willing to walk or bike distances of a one mile or less, there is potential to replace one-quarter (27.5%) of short driving trips with walking or biking.

Source: Bicycle and Pedestrian Information Center website, www.pedbikeinfo.org

other alternatives to get around. Parking lots can also be made less congested by reducing crowding, circling, and waiting for open spots.

The following web addresses link to more comprehensive research on transportation efficiency.

- http://www.walkbikenc.com/
- http://www.pedbikeinfo.org/data/factsheet_ general.cfm

STEWARDSHIP BENEFITS OF ACTIVE TRANSPORTATION

Stewardship addresses the impact that transportation decisions (both at the government/policy level and individual level) can have on the land, water and air that Newport residents and visitors enjoy.

TRENDS AND CHALLENGES

Below are some key trends and challenges related to stewardship and transportation in North Carolina:

- Even a modest increase in walking and bicycling trips (in place of motor vehicle trips) can have significant positive impacts for the environment. For example, replacing two miles of driving each day with walking or bicycling will, in one year, prevent 730 pounds of carbon dioxide from entering the atmosphere.¹⁶
- According to the National Association of Realtors and Transportation for America, 89% of Americans believe that transportation investments should support the goal of reducing energy use.¹⁷
- North Carolina's 2009-2013 Statewide **Comprehensive Outdoor Recreation Plan** (SCORP) found "walking for pleasure" to be the most common outdoor recreational activity, enjoyed by 82% of respondents, and bicycling by 31% of respondents.18

Providing safe accommodations for walking and bicycling in Newport can help to reduce automobile dependency, which in turn leads to a reduction in vehicle emissions - a benefit for Newport residents and visitors and the surrounding environment. As of 2003, 27 percent of U.S. greenhouse gas emissions are attributed to the transportation sector, and personal vehicles account for almost two-thirds (62 percent) of all transportation emissions.¹⁶ Primary emissions that pose potential health and environmental risks are carbon dioxide, carbon monoxide, volatile organic compounds, (VOCs), nitrous oxides (NOx), and benzene. Children and senior citizens are particularly sensitive to the harmful affects of air pollution, as are individuals with heart or other respiratory illnesses. Increased health risks such as asthma and heart problems are associated with vehicle emissions.19

The following web addresses link to more comprehensive research on active transportation and stewardship.

- http://www.walkbikenc.com/
- http://www.pedbikeinfo.org/data/ factsheet environmental.cfm

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CHAPTER TWO: CURRENT CONDITIONS

Local Context | Current Conditions | Related Programs and Plans | Review of Development Regulations | Public Input

LOCAL CONTEXT

Newport is located in west-central Carteret County. A four-lane highway (US 70) passes through the town west of the center, and the Newport River passes through town roughly east to west. US 70 leads southeast 10 miles to Morehead City and north seven miles to Havelock. New Bern is 25 miles to the north up US 70. According to the US Census Bureau, Newport has a total area of 7.7 square miles of land, with low topography, causing some potential issues with road widening for bicycle and pedestrian facilities. According to the 2014 5-year American Community Survey (ACS), the population of Newport was 4,487 and the median age of the population was 36.4 years.

In the 18th century, Newport was known as a port town where ships could dock to load lumber, tobacco, and naval stores. Today, Newport prides itself on being a tight-knit community with small town charm. Many of the families that reside in Newport are connected to the Cherry Point Marine Air Station in Havelock. Newport serves as a housing alternative to more expensive coastal locations where residents can easily access employment centers in two different directions - Havelock to the north and Morehead City to the south.

Newport has two public schools, Newport Elementary and Newport Middle School. A consolidated high school, West Carteret High, is located in neighboring Morehead City. Morehead City is

a popular tourist destination due to its location next to the beach. Visitors and residents alike may choose to stay in Newport, a family-friendly community, and visit the beach from there. In addition, much of Newport is surrounded by the Croatan National Forest, with nearby trails such as the Neusiok Trail (which is part of the North Carolina Mountians-to-Sea Trail). The Neusiok Trail is a popular destination hikers, with more than 20 miles of winding trail from a sandy beach on the Neuse River to a salt marsh on the Newport River.

BICYCLING AND WALKING IN **NEWPORT TODAY**

Due to the size of the community, many residents walk, run and bike to their destinations since the parks, schools, churches, the library, government buildings, restaurants and medical offices are all in walking distance. In many communities, walking and biking commute rates are used as an indicator of overall walking and biking. According to the latest census data, 0% of Newport residents bike to work, and 1.4% of Newport residents walk to work (Table 2.1, below). Although bicycling and walking as a commute option is likely to remain low for most Newport residents, there are opportunities for gains in the number of errands and school travel by foot or bicycle due to the proximity of schools and daily convenience destinations in and near town. Newport is fortunate in having many destinations within town and close by, making walking and biking for many short trips possible.

Table 2.1 Demographic Comparison

	NEWPORT	CARTERET COUNTY	NORTH CAROLINA
Population ¹	4487	67,851	9,750,405
Median Age ¹	36.4	46.0	37.8
Median Household Income ¹	\$38,490	\$47,179	\$46,693
% Households without a Vehicle ¹	5.8%	5.7%	6.5%
% Walk to Work ¹	1.4%	1.4%	1.8%
% Bike to Work ¹	0.0%	0.2%	0.2%
% School-Age Children (ages 5-19) ¹	22.0%	16.1%	19.9%

¹ US Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

CURRENT CONDITIONS

Tables 2.2-2.4 and Maps 2.1-2.3 that follow describe key opportunities and challenges in Newport related to current conditions for walking and bicycling, and provide a basic inventory of existing facilities, destinations, and conditions. It is based on input from the Steering Committee, general public, field review, and available data.

Table 2.2 Current Conditions Assessment

Opportunities and	
Challenges	Assessment
General Considerations	s ·
Overall Transportation Network	The main part of Newport is roughly bound by US 70 to the west and Chatham St to the east, with both streets meeting one another to the north and the south of town. Howard Blvd and the Newport River run east-west through town, with most of the main destinations and residential areas north of Howard Blvd (with the important exceptions of Newport Middle School, Fort Benjamin Park, and several residential areas south of the river). Howard Blvd is the only relatively wide street in the central part of town, offering opportunity to better accommodate bicycling within the existing pavement width. Additionally, the street is short enough that heavy traffic and high speed traffic is not as much of an issue is it is elsewhere. It should also be noted that the narrow residential streets in town keep traffic speeds low, and could present an opportunity to create "shared space" with pavement markings.
Existing On- and Off-street Bicycle/ Pedestrian Facilities (Also refer to Map 2.1, on page 22)	Major corridors in Newport include Howard Boulevard, US 70, and Chatham Street. Sidewalks are present in very few parts of Newport, including one side of Howard Boulevard, one short segment of Chatham Street (along with a few side blocks off Chatham), South Park Lane, Daughters Drive, and Courtyard West (See Map 2.1 for a sidewalk inventory generated specifically for this plan). Where sidewalks do exist, their conditions are generally good, with 4-5 ft widths in most locations. Exceptions include visible cracking in some driveway crossings on East Chatham St, and the very narrow vegetative buffer that provides no vertical separation from traffic on East Forest Drive and Johnson Street. For major corridor streets, Howard, Chatham and Highway 70, the following conditions are noted:
	 Howard Blvd - Walking and biking on this street is fairly easy. The sidewalk is well lighted and there are generally people travelling along the route at all hours of the morning, day and night. Most residents would consider this a very safe sidewalk. Although the sidewalk is developed on Howard, there is limited connectivity and signage to surrounding neighborhoods and commercial areas. Chatham Street - This route is heavily travelled since both Newport Elementary School and Newport Middle School are on this street. There are sidewalks for 1,600 feet of the street near the elementary school. There are no sidewalks to the middle school or the recreation center next to the school. Students frequently bike and walk in the middle of the street to their destinations. US 70 - There are no pedestrian or bicycle facilities. See "Safety Hazards and Problematic Street Crossings/Intersections" and "Man-made Barriers" below for more on this corridor.
	There are no existing bicycle facilities in Newport.
Current connectivity/ Gaps	There is limited connectivity for walking and bicycling, as indicated above with the small amount of existing facilities. For example, Newport Elementary is located in the northern section of Chatham Street while Newport Middle is located off the southern portion of Chatham Street. It is not feasible to safely walk or bike from Newport Elementary to Newport Middle due to lack of infrastructure. Fort Benjamin Park, located near Newport Middle School, is also major destination off of south Chatham St.
Safety Hazards and Problematic Street Crossings/ Intersections: (Also refer to Map 2.2, on page 25)	Map 2.2 shows pedestrian and bicycle crashes in the Town of Newport and surrounding areas that were reported to the NCDOT between 2007 and 2013. There were 12 pedestrian crashes and five bicycle crashes within the Newport town limits and Newport ETJ. Of these collisions, three pedestrian collisions and two bicycle collisions were fatal, which is an extraordinarily high number for a town the size of Newport. A large majority of the crashes occurred along US 70, with a small cluster of crashes occurring at the intersection of US 70 and Howard Blvd. Lack of safe crossings on US 70 is a barrier to safe pedestrian and bicyclist between the central part of Newport and destinations to the west, such as shopping/employment areas, as well as future development. With a closure of a grocery store in the town center in 2014, more pedestrians are walking/biking to access this essential service across US 70. See the inventory of existing pedestrian crossing facilities in Table 2.3 on page 24.
Ownership of Public Road Right-of-Ways (Also refer to Map 2.3, on page 26)	The roadway network in Newport is a combination of locally-owned and state-owned roads. The ownership of the public right-of-way is important for determining the types of facilities that can be constructed in or along a roadway, the agency in charge of maintaining the roadway and implementing bicycle and pedestrian recommendations, and how improvements are scheduled, funded, and constructed. Map 2.3 shows which roadways in Newport are state-versus- locally-owned. The town will need to coordinate with NCDOT Division 2 and the Division of Bicycle and Pedestrian Transportation to implement this plan's recommended improvements along these roadways.

 Table 2.2 Current Conditions Assessment (Continued)

Opportunities and Challenges	Assessment	
Opportunities		
Density of Key Destinations (Also refer to Map 2.1, on page 22)	The Town is unusually rich with public and private destinations within a half-mile radius of its center, including the public library, Town Hall, police and fire departments, post office, convenience stores, preschools, churches, nursing home, apartments, parks, ballfields, a manufacturing business, doctors' offices, history museum, elementary school, and other destinations, all in a fairly concentrated area. Walking and biking trips can be shorter due to the close proximity of these destinations. This relatively dense land use pattern also gives Newport a big head start on walkability and bikeability, which many other towns do not have.	
Future Development (Also refer to Map 2.1, on page 22)	Several areas in Newport are ripe for future development. These areas are mainly along US 70 near Fort Benjamin Park, near Roberts Road, south of Cannon Blvd, and north of Lincoln Drive. The Heritage Point development near Nine Foot Road will potentially include 300 residential units that are geared towards families. New development will need sidewalks and bike lanes, and the town has an opportunity if it acts now to ensure that the facilities are constructed as the town grows.	
Regional Planning	A portion of the North Carolina Mountains-to-Sea Trail (MST), a trail connecting one side of the state to the other, is proposed to run near Newport, through the Town of Havelock. Connections between Newport and Havelock and to the Croatan National Forest are outlined in the 2014 Croatan Regional Bicycle and Trails Plan, mainly consisting of a sidepath along Hibbs road to the west and a sidepath and greenway trail north to Havelock. This would also allow for a connection to NC Bike Route 7, which passes just east of Havelock (see www.NCBikeways.com for routing details). The East Coast Greenway (ECG), a proposed trail that will run 3,000 miles from Maine to Florida, is another key regional connection for Newport. Connecting to these regional trails has the potential to increase tourism and economic development in Newport. Please refer to pages 28 and 62 for more on these proposed routes and regional connectivity for Newport.	
School-aged Children Who Walk to School	Children have been observed walking along Church St to Newport Elementary School, and along Chatham St to Newport Middle School. Residents consider these areas more dangerous because students are often distracted and not paying attention to vehicles. Pedestrian improvements could focus on these areas where children and other people are already walking.	
Challenges		
Access Management	There are access management challenges with the existing parking areas along Church/Chatham that are not delineated from the roadway. This causes potential conflicts for bicyclists and pedestrians traveling along the corridor when cars are entering and existing the multiple driveways and parking spaces along these routes. The corridors could benefit from better managing the frequency and magnitude of conflict points at intersections and driveways by delineating pedestrian space with curbs and planting strips, and by considering closure, consolidation, or relocation or driveways.	
Natural Barriers	Low-lying land: Much of the land lies within the floodplain. Presence of steep ditchbanks along many of the roads may pose challenges for constructing pedestrian and bicycle facilities. Also, the Newport River passes through town roughly east to west, and it's wetlands effectively cut off the Middle School and county park from the rest of Town, except for the narrow bridge over the river of Chatham St.	
Man-made Barriers/ Substandard Design	Railroad crossings act as a physical barrier for walking and biking. There are six at-grade railroad crossings (at Tom Mann Rd, Masontown Rd, S. Lakeview Dr, Johnson St, Chatham St, and Main St). Similarly, a four-lane highway (US 70) passes through the town west of the center, and often has motor vehicles traveling at high speeds (the speed limit on US 70 is 55 mph). There are no existing crossing facilities for pedestrians along US 70. Crossing multiple lanes on US 70 creates a high-stress pedestrian and bicyclist environment, effectively cutting off bicyclists and pedestrians from key shopping destinations west of town. Bridges can also be barriers. In Newport, the only bridge that is of concern for future bicycle and pedestrian travel is over the Newport River, on E. Chatham Street. NCDOT's "List of Bridges and	
	Current Status" lists this bridge (which was built in 1922) as functionally obsolete, but not structurally deficient. The existing bridge is too narrow to safely accommodate walking or bicycling.	
Inaccessibility of Newport Middle School	Newport Middle School is somewhat separated from the rest of the town by the Newport River and its surrounding wetlands. There are not safe facilities for walking and biking to it, so families and school staff tend to drive to school. This causes motor traffic during peak hours. The middle school is located on a two-lane road that is the only local through-street alternative to US-70. Students and staff need a safe and accessible route of reaching the middle school. Improving pedestrian and bicyclist access to the middle school could help to alleviate traffic conditions.	
Special Populations	Newport's unique make up includes military families, aging residents, transplants from larger communities, commuters to Marine Corps Cherry Point and family farmers. Newport also has an independent and assisted care facility for seniors with approximately 150 residents, located on Market St. The addition of sidewalks and crosswalks near this facility would increase safety for seniors who desire to walk to destinations in town from this facility.	



The railroad tracks are a physical barrier to crossing Chatham Street.





A safe, accessible corridor to reach Newport Middle School does not currently exist.

The sidewalk on Howard Boulevard ends before reaching the intersection at US 70. Crossing improvements to get across US 70 are lacking.



Kids walking home from Newport Elementary School on Chatham Street. View from Haskett St looking south (right) and from Haskett St looking north (below).



Map 2.1 - Existing Facilities and Destinations



LACK OF BICYCLE FACILITIES

Although there are no physical facilities specifically for bicycles, there are still some roads on currently capable of serving bicyclists. These include some of the lower-volume, lower speed residential streets, such as White Sands Boulevard, Lakeview Drive, Forest Drive, and the small neighborhood streets that connect to them. This issue is that outside this "island" of residential streets, traffic volumes and speeds become higher. While streets like Howard Boulevard and Chatham Street may be suitable for bicyclists accustomed to sharing the road with traffic, they are less suitable in their current condition for inexperienced bicyclists, particularly for children. Town staff have reported that students frequently bike and walk in the middle of the street to their destinations.

LIMITED PEDESTRIAN FACILITIES

Sidewalks are present in very few parts of Newport, including one side of Howard Boulevard, one short segment of Chatham Street (along with a few side blocks off Chatham), South Park Lane, Daughters Drive, and Courtyard West. In addition to the sidewalk facilities noted in Table 2.2 on page 19, Newport also has other examples of pedestrian facilities, such as:

- A well-marked crosswalk, ADA-compliant curb ramps, and pedestrian crossing signage at Howard Boulevard and East Forest Drive
- Pedestrian-scale liahtina on Howard Boulevard

- Traffic calming signage, such as the "Please Drive Slowly We Love Our Children" sign on East Forest Drive, and "Slow Children Playing" on Johnson Street
- Although not a facility, the 20 MPH speed limit on Chatham Street also helps create a safer environment for pedestrians (and bicyclists), so long as it is enforced/obeyed.

There is also room for improvement, as the examples above are the exception rather than the rule for much of Newport's pedestrian facilities. For example:

- Most existing curb ramps are not ADAcompliant (most are missing detectable warnings, for example)
- Many curb ramps are missing altogether, some even missing at marked crosswalks (both crosswalks in front of Newport Elementary on Chatham Street are missing curb ramps)
- Only four marked crossings in Newport overall (see Table 2.3 on page 24), and no crossing facilities provided across US 70. With the unusually high number of bicycle and pedestrian crashes along US 70 (see Map 2.2, page 25), this should be a priority improvement, especially at Howard Boulevard and US 70, where three pedestrian crashes occurred in just the 5-year period of 2007-2012.

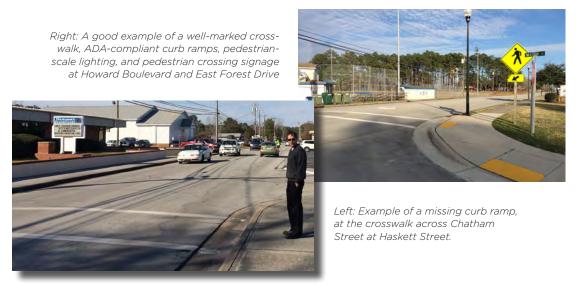


Table 2.3 Inventory of Existing Pedestrian Crossing Facilities

Facility Type/ Location

Notes

Mid-block crosswalk across Chatham St, between Johnson St and Haskett St

This mid-block crosswalk is in front of Newport Elementary School, where a crossing guard was observed helping kids cross the street during field observations. It crosses two lanes of traffic, with a speed limit of 20 MPH. Crossing signage is directed at southbound traffic only, with no sign facing on the direction. One side of the street has a curb, but no curb ramp, and the other side is flush with parking spaces serving businesses across from the school. There are no sidewalks or defined pedestrian space at either side of the crosswalk.



Crosswalk across Chatham St, at **Haskett St**

This crosswalk serves Newport Elementary School (just south of the mid-block crosswalk above), crossing two lanes of traffic with a speed limit of 20 MPH. Crossing signage is present in both directions. Both sides have curb and gutter, but only the west side has a curb ramp, which is non-ADA compliant (missing detectable warning strips/truncated domes). There are sidewalks on both sides of the crosswalk.



Crosswalk across Chatham St, at Mann St

This crosswalk is one block south of crosswalk above, crossing two lanes of traffic with a speed limit of 20 MPH. Crossing signage is present in both directions. Both sides have curb and gutter, but only the west side has a sidewalk and curb ramp, which is non-ADA compliant (missing detectable warning strips/truncated domes).



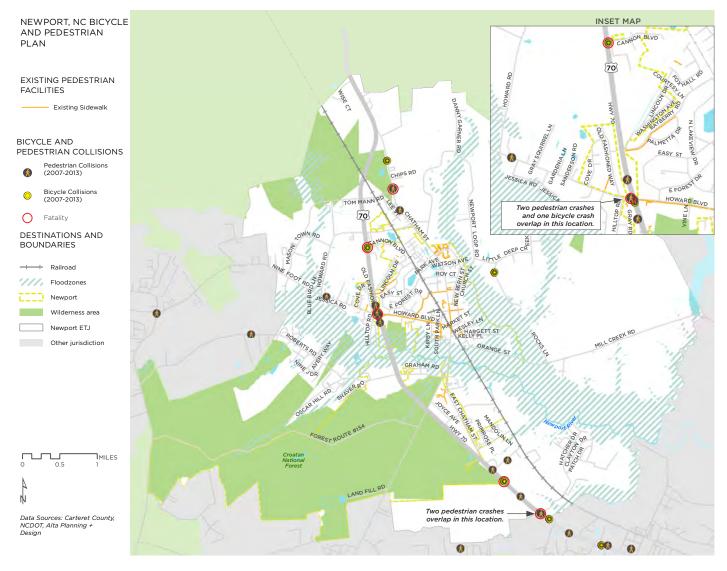
Crosswalk across Howard Blvd, at East Forest Dr

This crosswalk is located next to the Newport Little League ballfield, crossing two lanes of traffic and a center turn lane, with a speed limit of 35 MPH. It connects sidewalk on the south side of Howard Blvd to sidewalk on the east side of East Forest Dr. It is Newport's best example of a pedestrian crossing, with ADA-compliant curb ramps, pedestrian-scale lighting, and pedestrian crossing signage in both directions



Images from Google Street View.

Map 2.2 - Bicycle and Pedestrian Crashes



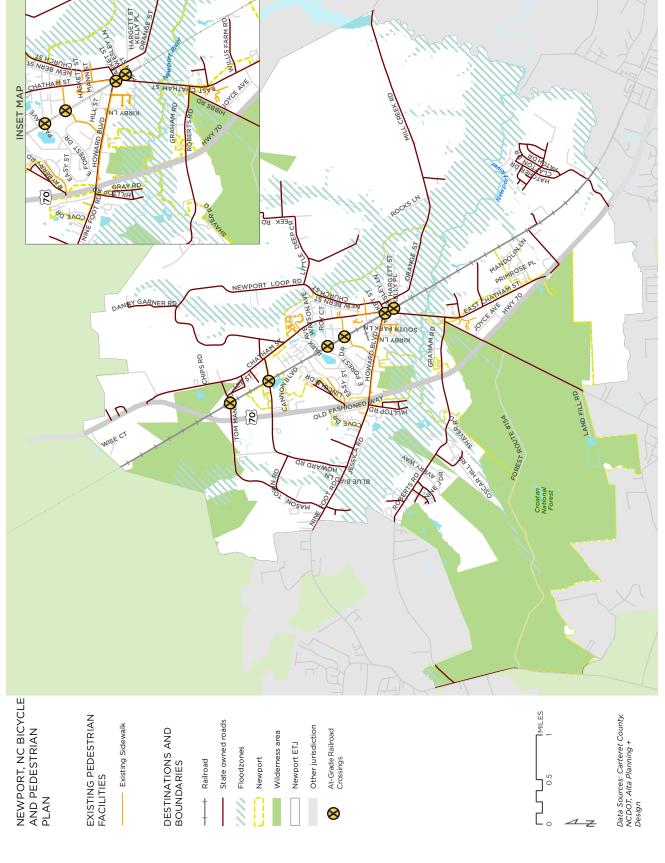
CRASH ANALYSIS

Map 2.2 shows pedestrian and bicycle crashes in the Town of Newport and surrounding areas that were reported to the NCDOT between 2007 and 2013. There were 12 pedestrian crashes and five bicycle crashes within the Newport town limits and Newport ETJ. Of these collisions, three pedestrian collisions and two bicycle collisions were fatal, which is an extraordinarily high number for a town the size of Newport.

A large majority of the crashes occurred along US 70, with a cluster of five crashes occurring at or near the intersection of US 70 and Howard Boulevard. This reflects a need for crossing safety improvements between the main part of Newport east of that intersection, and the grocery store shopping center and services (and for some people, jobs) located on the west side of that intersection.

Another pattern of crashes occurs heading south from Newport along US 70. This could be reflective of the fact that there are no alternative side streets to US 70 in this location (south of East Chatham Street). This reflects the need for a way to connect pedestrians and bicyclists to destinations south of Newport, possible along a regional greenway trail or sidepath.

Map 2.3 - NCDOT-Owned Roads



This map shows which roadways in Newport are state-versus- locally-owned. The town will need to coordinate with NCDOT Division 2 and the Division of Bicycle and Pedestrian Transportation to implement this plan's recommended improvements along these roadways.

Table 2.4 Roadway Inventory

Street Name	Appx. Road Width (ft)	Predominant Lane Configuration	Curb & Gutter (Y/N)	AADT*	Speed Limit
Chatham Street	24'	One travel lane each direction	Partial curb & gutter from Johnson St to Westfield Rd only	3,100	20-35 MPH
	- Wall	Water and the same of the same			
			電		A.T.
East Chatham Street	24'	One travel lane each direction	No	5,900	35 MPH in school zone; 45 MPH out of school zone
		省 1/1%		计划 及	
	11 11 11 11			The En	动物教堂
	0	A Property			
Howard Boulevard	40'	One travel lane each direction, w/ center turn lane	Yes	5,700	35 MPH
The second second					
			as as a second		
			1		3-6
		One travel lane each			
Nine Foot Road	24'-30'	direction, part w/ center turn lane	No	4,800	35 MPH
de		COMMENS.			
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1			line Fa		
		1	4: 1		

*Annual Average Daily Traffic (AADT) traffic volumes from NCDOT Traffic Survey Group (2015) Images from Google Street View.

Table 2.4 Roadway Inventory (continued)

Table 2.4 Roadway I	Table 2.4 Roadway Inventory (continued)				
Street Name	Appx. Road Width (ft)	Predominant Lane Configuration	Curb & Gutter (Y/N)	AADT*	Speed Limit
Roberts Road	20'	One travel lane each direction	No	1,600 east of US 70 & 4,300 west of US 70	35 MPH
			L ODGE		
Hibbs Road	22'-39'	One travel lane each direction, part w/ center turn lane	No	6,600	45 MPH
			EPP N		
Church Street	16-17'	One travel lane each direction	No	1,137	25 MPH
US 70	100' with median	Two lanes in each direction, divided highway	No	21,000	55 MPH
			Cendell's .		

*Annual Average Daily Traffic (AADT) traffic volumes from NCDOT Traffic Survey Group (2015) Images from Google Street View.

RELATED PROGRAMS & PLANS

A review of previous programs and plans related to the Town of Newport was conducted. The purpose of the plan review was to identify previous pedestrian and bicycle recommendations and other relevant information in and near Newport. Although this is not an exhaustive list, these plans were the most relevant to the planning and development of bicycle and pedestrian facilities.

EXISTING PROGRAMS

There are no current and ongoing programs in the Town of Newport specific to walking and bicycling. However, in general, the Town has regular expenses dedicated to public works and streets, public safety, and culture and recreation-indicating that a future bicycle and pedestrian program could become a part of one or all of these government expenditures.

As far as past programs, the project Steering Committee mentioned that there have been "bicycle rodeo" events that focused on safe riding for kids, and there was a Safe Routes to School grant application in 2008. The grant application was unsuccessful, but it provided letters of support from many town and county organizations and agencies, and provided a basis for some of the key recommendations of this plan.

CARTERET COUNTY AREA TRANSPORTATION SYSTEM (CCATS)

CCATS is a public transportation service for all residents and guests of Carteret County. It is an address-to-address service that requires a 24-hour advanced reservation. It provides transportation for trips such as commuting to work, shopping, and non-emergency medical transportation, with service in all areas of Carteret County.

People who use transit are almost always pedestrians (or bicyclists) at some point along their trip, though this may be less so with "addressto-address" service such as this. Still, as transit options grow in the region, Newport can make those options more accessible by providing bicycle and pedestrian facilities that connect people to transit.

CARTERET COUNTY COMPREHENSIVE TRANSPORTATION PLAN (2014)

This is a long-range, multi-modal transportation plan covering needs of the county through 2040. Modes of transportation covered in this plan include highway, bicycle, pedestrian, rail, and public transportation.

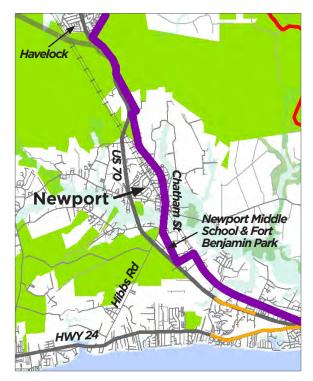
The bicycle map included in the plan shows corridors for on-road bicycle facilities in Newport that need improvement. These corridors include: Howard Boulevard, East Chatham Street, and McCabe Road.

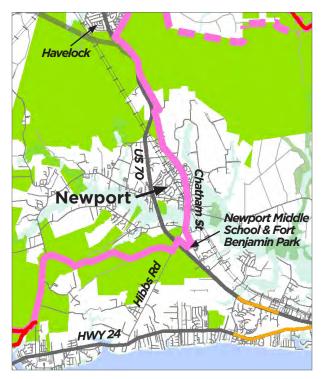
For pedestrian facilities, a recommendation was made for a multi-use path on East Chatham Street between Westfield Road and McQueen Avenue. Other recommended improvements include a multi-use path along Highway 24 near Newport.

CARTERET COUNTY COMPREHENSIVE PLAN (2002)

This planning document serves as a guide to promote sustainable development patterns over a twenty-year period (2002-2022). A major environmental objective is to develop and expand greenways and bikeways in the county. A major transportation objective is to expand and improve bicycle paths and walking trails. To realize this objective, the county hopes to expand the number of bike paths, bike lanes, and pedestrian paths as well as to connect neighborhoods through biking and walking systems. Other steps outlined to achieve this objective are to develop pedestrian plans, require consideration of sidewalks as part of road improvements, and develop a county policy for sidewalk and bikeway design standards, construction, and maintenance.

This is relevant to Newport's efforts to improve conditions for bicycling and walking because it signals an intent on the part of the County to support such efforts, and possibly become a partner in implementation and walking and bicycling connections to County facilities and destinations.





Portions of the recommendation maps from the Croatan Regional Bicycle and Trails Plan (2014), zoomed into Newport (labels added for use in this plan). At left is the proposed routing for the East Coast Greenway (in purple) going along Chatham Street through Newport. At right is the proposed routing of the North Carolina Mountains-to-Sea Trail (in pink), also along Chatham Street in Newport.

CROATAN REGIONAL BICYCLE AND TRAILS PLAN (2014)

The emphasis of the Croatan Regional Bicycle and Trails Plan is on connectivity of bicycle routes and trail corridors that will connect communities and destinations throughout the Croatan region, including Newport. The most significant recommendations from this plan that are relevant to Newport are:

- The proposed routing for the East Coast Greenway (ECG), a proposed trail that will run 3,000 miles from Maine to Florida. The proposed ECG route runs through the heart of Newport on Chatham Street (above, left).
- The proposed routing of the North Carolina Mountains-to-Sea Trail (MST), the most important trail in the North Carolina offroad walking trail network. The proposed MST route also runs along Chatham Street through Newport (above, right).

See page 62 of this plan for more information on regional connectivity recommendations for Newport.

MOUNTAINS-TO-SEA NORTH CAROLINA STATE TRAIL MASTER PLAN (2015)

The vision for the Mountains-to-Sea Trail (MST) is an off-road hiking trail connecting Clingmans Dome on North Carolina's western border to Jockey's Ridge State Park in the Outer Banks. According to the 2015 MST State Trail Master Plan, it will pass near Newport. However, the exact future location of the MST in this region will depend partly on which communities build significant portions of trail first, allowing for official MST route designation.

REVIEW OF DEVELOPMENT REGULATIONS

The Town of Newport's zoning ordinance and subdivision regulations were reviewed in order to understand how they influence the planning of pedestrian and bicycle enhancements. The zoning ordinance and subdivision regulations describe specific requirements for development. One of the most cost-effective strategies for implementing this plan is to establish land development regulations and street design

policies that promote walkable and bikeable new development and capital projects.

The consultant team identified model regulatory and policy language from North Carolina and the United States for elements including land use and transportation integration (being aware of how land use decisions effect the transportation system and vise versa), transportation system connectivity, Complete Streets, and bicycle parking. The purpose of this review is to enable the Town of Newport to maximize bicycle and pedestrian improvements in conjunction with new development, redevelopment, and corridor improvement projects. If a change is necessary to improve pedestrian and bicycle access, then a modified policy was recommended as part of this review.

POLICY REVIEW SUMMARY

The key items listed below are the main findings of the policy review, which will improve upon the existing policy framework:

- »Adopt Complete Streets Policy and Design Guidelines (including those developed by NCDOT)
- »Revise and expand sidewalk requirements and sidewalk infill policy
- »Integrate other Complete Street requirements and standards into regulatory documents, such as subdivision improvement standards and zoning requirements

- for landscaping, parking, and other site development standards (see Appendix B: Complete Streets Example for policy details)
- »Require dedication or reservation of identified greenway corridors as part of development process
- »Revise and update land use and urban design policy plans and development requirements to be more pedestrian and bicycle-oriented (see Table 2.2 for examples)

These approaches will complement priority projects, and education, enforcement, and evaluation recommendations provided in the following tables.

Other pedestrian and bicycle-oriented standards to consider include:

- 1. Require pedestrian-scaled lighting (less than 18 feet tall) along streets and pathways.
- 2. Revise/update block size requirements: Development density should determine the length of a block, with shorter blocks being more appropriate in areas of higher density. Maximum block length in any situation should rarely exceed 800-1000 feet for good connectivity. In areas with highest development density (urbanized, mixed use centers), block lengths can be as little as 200 feet.
- 3. Limit dead end streets or cul-desacs. Require connectivity between developments.

Table 2.5 Newport Zoning Ordinance Review

Document Section Name	Current Policy	Recommended Policy
Article II. Interpretations and Definitions 2-2 Term Definitions	Conservation Area. Such areas include natural areas protected by law, such as wetlands that meet the definition in the Clean Water Act; shore land areas; water bodies; riparian buffers; populations of endangered or threatened species, or habitat for such species, archaeological sites, cemeteries, and burial grounds; important historic sites; other significant features and scenic viewsheds; and existing trails or corridors that connect the tract to neighboring areas. [Emphasis added]	Recommend adding to the definition any proposed trails or greenway corridors that are in an adopted planning document
Article IX. Provisions for Special Uses 9.3.6 Manufactured Home Parks 9-3.6.1 Park Development Standards	Pedestrian pathways shall be provided to recreation area	Provide definition and guidelines/standards for "pedestrian pathway" design requirements. Should be minimum 5 feet wide and accessible surface.

 Table 2.5 Newport Zoning Ordinance Review (continued)

Document Section	Current Policy	Recommended Policy
Name		
Article XII. Landscaping and Buffering 12-5.2. Street Frontage Requirements	Street Frontage Requirements consists of a planting strip, made up of trees and shrubs, located between the abutting edge of the sidewalk and parking lot curb line, or where there is no sidewalk, between the public right-of-way line and the parking lot curb line.	In addition to buffer requirements along street frontage, consider adding requirements for streetscape elements (e.g., street trees, pedestrian-scale lighting) between the sidewalk and the curb to enhance the comfort, safety, and attractiveness of the pedestrian zone and roadway corridors. See Town of Wendell UDO Chapter 8, especially section 8.8, Street Trees. http://files.wendell.gethifi.com/departments/planning/zoning/udo-unified-development-ordinance/Chapter_8 amended_092611.pdf
Article XIII. Off-street Parking and Access Requirements 13-3 Required Bicycle Spaces	Bicycle parking spaces, as set forth in the design criteria shall equal in number to two (2%) percent of the total number of parking spaces required as set forth in Section 13-5 with a minimum of one (1) bicycle parking space. This requirement shall be in addition to the requirement for automobile parking. This requirement may be administratively waived by the Zoning Administrator in those unique instances where it is clearly demonstrated that bicycle parking is inappropriate.	The bicycle parking requirements are insufficient in detail and number compared to state and national best practices. Consider rewriting this section to provide greater detail and to include provisions for additional minimum requirements based on land use types and locations. Consider striking the subjective language regarding inappropriateness. This will be very hard to determine without objective standards. In general, bicycle parking should be provided for all non-residential uses and multi-family residential uses. Bicycles should receive equal consideration when calculating parking needs with specific calculations provided for determining the amount of bicycle parking provided by zoning district or land use type. Design and location standards for bicycle parking should be clearly stated. Different standards of bicycle parking are needed for short-term visitors and customers and for longer term users like employees, residents, and students. See City of Wilson UDO Chapter 9, Parking and Driveways, Section 9.4 and 9.6. Good standards for bicycle parking design can be found through the Association of Pedestrian and Bicycle Professionals' <i>Bicycle Parking Guidelines</i> .
Article XIII. Off-street Parking and Access Requirements 13-4 Accessible Handicapped Provisions	Parking lots, ramps, walks, bridges, entrances and the like shall be designed and constructed in accordance with the North Carolina Building Code dealing with making buildings and facilities accessible to and usable by persons with disabilities, as from time to time amended, in addition to minimum requirements of this chapter.	Consider adding reference to soon-to-be adopted PROWAG requirements for construction in public right-of-way. https://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way/proposed-rights-of-way-guidelines
Article XIII. Off-street Parking and Access Requirements 13-7. Parking Criteria	Bicycle parking facilities shall be conveniently located adjacent to on-site bicycle pedestrian circulation pedestrian routes and shall be provided with durable and function bicycle racks.	See suggested text strike-through at left. Provide more detailed bicycle parking design guidance. See City of Wilson UDO, Chapter 9, Parking and Driveways, Section 9.4 and 9.6. Good standards for bicycle parking design can be found through the Association of Pedestrian and Bicycle Professionals' Bicycle Parking Guidelines.

Table 2.5 Newport Zoning Ordinance Review (continued)

Document Section Name	Current Policy	Recommended Policy
Article XVI. Conditional Use Districts (CUD) and Planned United Developments (PUD) 16-4.4 Development Standards	Walkways shall be paved to form a logical, safe, and convenient system for pedestrian access to all dwelling units, project facilities, and principal off-site pedestrian destinations. Walkways to be used by substantial numbers of children as play areas or routes to school or other destinations, shall be so located and safeguarded as to minimize contact with normal automotive traffic	This section needs detailed guidance and requirements on the design of pedestrian facilities. Requirements should be based on street types and land use factors. See sidewalks requirements comments below.
Article XVI. Conditional Use Districts (CUD) and Planned United Developments (PUD) 16-4.4 Development Standards	Walkways and recreational areas shall form an interconnected system serving as routes to schools, churches and other major pedestrian destinations.	This section needs detailed guidance and requirements on the design of pedestrian facilities. Requirements should be based on street types and land use factors. See Complete Street comments and sidewalk comments in Subdivision Regulations.
Article XVI. Conditional Use Districts (CUD) and Planned Unit Developments (PUD) 16-4.4. Development standards	The recreation and walkway system shall be located in block interiors and oriented away from exposure to automotive traffic.	The recreation and walkway systems may not be the one and the same. Some walkways may be required along street frontages for access and transportation. See sidewalk requirements comments.

Table 2.6 Newport Subdivision Regulations Review

Document Section Name	Current Policy	Recommended Policy
6-2.9 Road Intersections	Road intersections in accordance with NCDOT Subdivisions Roads Manual.	Consider using the following for the basis of street design guidance based on street typologies and land uses:
		NCDOT Complete Streets Planning and Design Guidelines. http://completestreetsnc.org
		NCDOT <i>Traditional Neighborhood Development (TND) Guidelines</i> : http://ntl.bts.gov/lib/22000/22600/22616/tnd.pdf
		These documents can be adopted by reference in development regulations.
6-2.11 Pedestrian Walkways	Pedestrian easements or walkways shall be provided through the interior of blocks having a length greater than one thousand (1,000) feet. Pedestrian easements shall be at least six (6)	Consider modifying requirements to state the following: In areas with blocks as long as 800 feet or greater, a pedestrian and/or bicycle path of 6-8 feet in width should be required through the long side of the block, with an easement width of 15-20 feet.
	feet wide and shall be laid out along property lines. The walkways shall be paved.	Consider in-lieu fees or other mechanisms for pedestrian walkways so the town can build an overall continuous network (among and between development sites) rather than waiting on developer-built segments to create these connections.

Table 2.6 Newport Subdivision Regulations Review (continued)

Document Section Name	Current Policy	Recommended Policy
6-2.13 Streets	a. Character The arrangement, character, extent, width, grade and location of all streets shall conform to all of the elements of the official plans for the community and shall be designed in accordance with the provisions of NCDOT Manual referred to in Section 7-3.6b.	Consider using the following for the basis of street design guidance based on street typologies and land uses: NCDOT Complete Streets Planning and Design Guidelines. http://completestreetsnc.org NCDOT Traditional Neighborhood Development (TND) Guidelines: http://ntl.bts.gov/lib/22000/22600/22616/tnd.pdf These documents can be adopted by refrence in development regulations.
7-3.5 Open Space Reservation for Parks, Playgrounds or Recreation	Every person or corporation that subdivides land for residential purposes under the requirements of this ordinance shall also be required to dedicate a portion of such land, to provide cash-in-lieu-of-land payment, or to provide a combination of land, cash and facility development acceptable to the Town for the purpose of developing park, recreation and open space sites to serve the residents of the neighborhood in which the subdivision is located or in the immediate area of the subdivision.	Consider adding requirements for greenweay reservation, dedication, or provision in new developments where a greenway or trail is shown on an adopted plan or where a property connects to an existing or proposed greenway. See requirements in Wake Forest, NC UDO, Section 6.8.2 Grenways: "When required by Wake Forest Open Space & Greenways Plan or the Wake Forest Transportation Plan, greenways and multi-use paths shall be provided according to the provisions [that follow in the section cited above.]" http://www.wakeforestnc.gov/udo.aspx
7-3.6 Paving and Street Improvement	All streets shall be designed, constructed and paved in accordance with the "Division of Highways, North Carolina Department of Transportation, Subdivision Roads, Minimum Construction Standards Manual," current edition.	Consider using the following for the basis of street design guidance based on street typologies and land uses: NCDOT Complete Streets Planning and Design Guidelines. http://completestreetsnc.org NCDOT Traditional Neighborhood Development (TND) Guidelines: http://ntl.bts.gov/lib/22000/22600/22616/tnd.pdf These documents can be adopted by reference in development regulations.
7-3.8 Sidewalks	Sidewalks shall be required along any street where considerable pedestrian traffic is expected, as determined by the Town Planning Board or Town Council, especially in the vicinity of schools, parks, and commercial activity. Sidewalks shall be constructed on street right-of-way and installed in accordance with Town policy.	Better standards would require sidewalks on both sides of all collector and arterial streets and on at least one side of local streets where warranted by density and/or system connectivity. (For example, residential densities of at least 4 dua should require sidewalks on both sides of the street.) For good model language, see City of Wilson, NC UDO, Section 6.3: Required Improvements for All Development (and related sections that follow) http://www.wilsonnc.org/attachments/pages/545/CH%20 6-Infrastructure%20Standards.pdf Five foot wide sidewalks along local streets and six foot wide sidewalks along collectors and arterials are preferred minimum widths. In areas of higher density and mixed-use development, the minimum required width for sidewalks should be six feet or more. The land use context and density of development necessitates a greater level of requirement for sidewalk specifications. In areas such as downtown with buildings at the back of the sidewalk and ground level retail, sidewalks should be as wide as 10-18 feet wide. See NCDOT Complete Streets Planning and Design Guidelines for context-based pedestrian zone recommendations. See Chapter 4 of the NCDOT Complete Streets Planning and Design Guidelines for recommendations of sidewalk and bikeway type by roadway type. http://completestreetsnc.org/ Also: NCDOT Traditional Neighborhood Development (TND) Guidelines: http://ntl.bts.gov/lib/22000/22600/22616/tnd.pdf

PUBLIC INPUT

PUBLIC INPUT ON EXISTING CONDITIONS

Public input for this plan was collected through the project website, public comment form, public workshops, and outreach events. Steering committee members and local organizations in Newport helped to spread the word about the plan in order to garner responses about existing conditions and areas for improvement. During public meetings, steering committee members marked up maps to indicate corridors and intersections in Newport that were in need of pedestrian and bicyclist improvements.

Throughout the planning process, the goal was to hear from as many residents and visitors of Newport as possible in order to understand where and what type of pedestrian and bicycle improvements are needed. One way of reaching out to the public was to attend the Newport Pig Cookin' Contest on April 3, 2016. The team set up a table to get feedback on existing conditions as well as to solicit input by having residents fill out a comment form.

PUBLIC COMMENT FORM RESULTS

The charts on the following pages summarize public input collected during this planning process in Spring/Summer 2016. More than 200 residents, property owners, employees, and visitors contributed their input.

Almost all respondents rated walking and bicycling conditions in Newport as "poor" (59%) or "fair" (40%), indicating a significant need for improvement. About four out of five respondents



discussed what they saw as current opportunities and constraints for walking and bicycling in Newport.



agreed with this need, indicating that improving conditions for walking and bicycling in Newport was "very important".

As far as the types of improvements desired, respondents indicated "safer conditions" as their top goal (among six goals related to walking and bicycling), followed by "more choices for recreation and exercise". This is not surprising considering that most respondents said the primary purpose of their walking and bicycling trips are for recreation and exercise, and the desire for safer conditions reflects what was heard at Steering Committee meetings.

Of those who responded, about a third of them (34%) walk or bike in Newport weekly, while about a quarter of them do so daily. Interestingly, a relatively high number of them (31%) indicated that they only walk or bike a few times a year or not at all; again revealing an opportunity for improvement, especially as physical activity can improve overall health. Many people indicated the main factors that discourage walking and bicycling as a lack of bicycle lanes and trails (93%), unsafe street crossings (75%), and heavy/ fast motor vehicle traffic (64%).

The good news is that an overwhelming majority of respondents (96%) indicated that they would walk and bike more often if there were

more sidewalks and bikeways, suggesting that if Newport invests in such infrastructure, that it could have a positive impact on the health of residents, and on their recreation choices.

Regarding where to invest in infrastructure, respondents indicated a desire to walk and bike primarily to public places, like parks, schools, and the town library. Specifically, they were interested in connecting to Fort Benjamin Park, Newport Middle School, and Newport Elementary School. The desire to connect these destinations was also reflected in the responses to the open-ended question of this comment form, which asked for top locations of desired improvements; See Figure 2.10, which shows a substantial preference for the Chatham Street/E Chatham Street corridor as a top location for improvement (which is where these parks and schools are located).

In conclusion, the public comment form responses suggest that improving conditions for walking and bicycling in Newport is important, especially related to safety, and for creating more places for recreation and exercise. People are discouraged from walking and bicycling by a lack of facilities, and they would like to see walking and bicycling connections and improvements, particularly along the Chatham Street/E Chatham Street corridor, connecting the parks, schools, and destinations along that corridor.



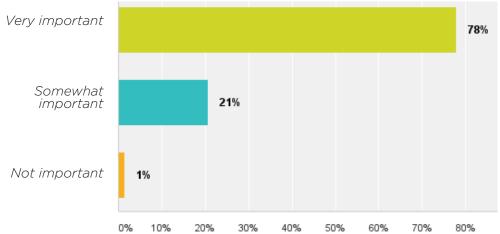
Steering Committee members provide input on top priority projects.

Figures 2.1-2.11 Public Comment Form Results

Figure 2.1 How do you rate present bicycling and walking conditions in Newport? Excellent 1% Fair 40% Poor 59% 10% 20% 30% 40% 50% 60%

Figure 2.2 How often do you ride your bike or walk in Newport? 27% Daily Once a 34% week Once a 11% month A few times 23% a year 8% Never 10% 20% 30% 40%

Figure 2.3 How important to you is improving bicycling and walking conditions in Newport?



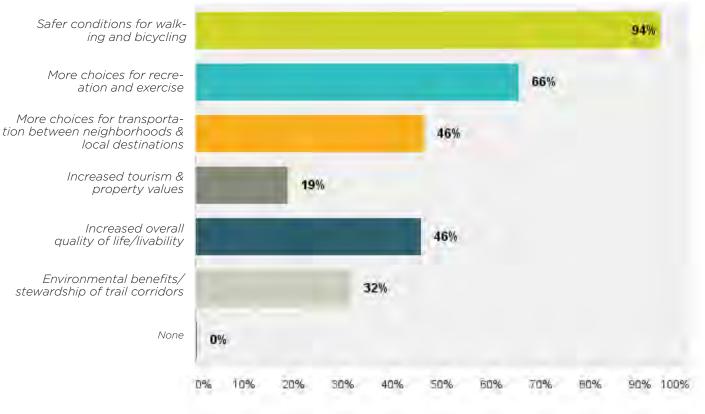
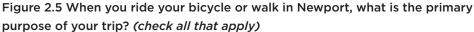
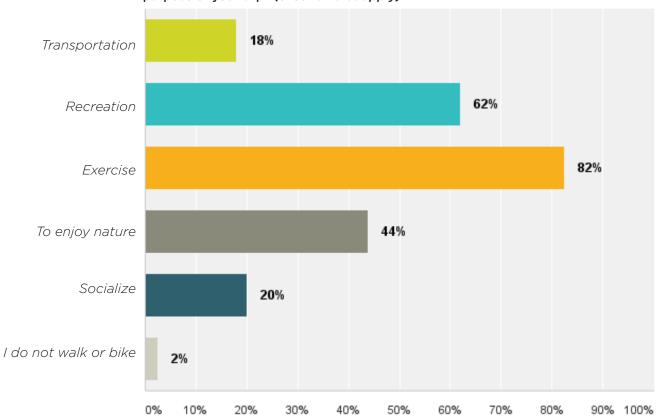


Figure 2.4 What should be the most important goals and outcomes of this plan? (check all that apply)

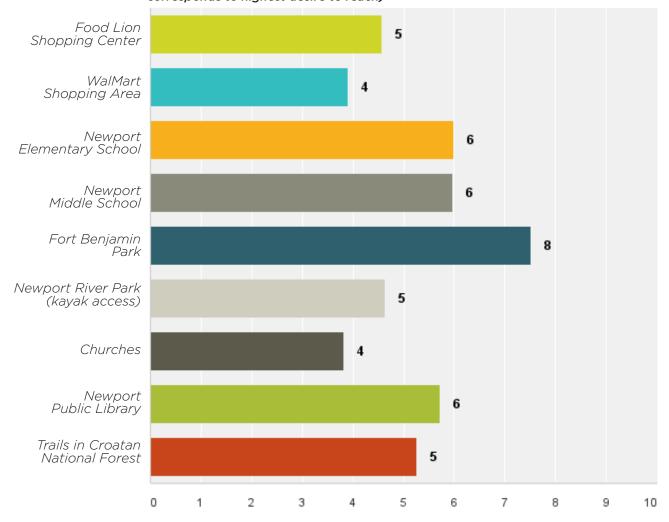




Yes 40% 50% 80% 90% 100%

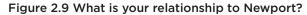
Figure 2.6 Would you walk and/or ride your bike more often if there were more sidewalks and bikeways in Newport?

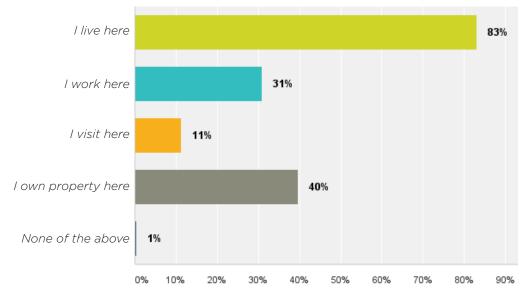
Figure 2.7 What destinations would you most like to reach by bicycling or walking? Please rank (1 = most like to reach, 8 = least like to reach) (higher number in bar chart corresponds to highest desire to reach)



Lack of bicycle lanes and trails Lack of information about 34% local trails & bicycle routes Unsafe street 75% crossings Heavy/fast motor 64% vehicle traffic Aggressive motorist 36% behavior Lack of access to bicycles 8% and bicycling equipment Lack of amenities (bicycle racks, wayfinding signs, 30% water fountains, etc.) Lack of nearby 23% destinations Personal safety concerns 29% (other than traffic) Other 20% 30% 40% 60% 80% 90% 100%

Figure 2.8 What do you think are the factors that most discourage bicycling or walking in Newport? (Please select up to 5 factors)





Figures 2.10-2.11 What are the top three locations for improving conditions for walking and bicycling in Newport? The results to this openended question were organized and tallied by corridors and intersections in figures 2.10-2.11. The top location that respondents listed was by far the Chatham Street/E Chatham Street corridor. This was reflected by input from the Steering Committee, who also were unanimous in their recommendation to concentrate priority improvements on this corridor. Other top locations included Church Street, Howard Street, and the US 70/Howard Street intersection crossing.

Additionally, there were 33 other comments that were not related to specific corridors or intersections (mostly were too general to apply to a certain location, such as just the word "neighborhoods" or "downtown"). Some comments included unique concerns, such as dogs in some areas, and sidewalks with slopes on driveways; they also included unique requests, such as a desire to see more nature trails for kids.

Example public comments:

- "Sidewalk is too close to road. I've almost been hit several times walk to and from the park with my grandkids"
- "Middle school kids walking on Chatham in afternoons and mornings. They need a sidewalk for safety."
- "Sidewalk access down Chatham Street past NES and all the way to NMS for students and families"
- "All of Chatham St. Our Students deserve safe walking to school"
- "Beside old hwy 70 on way from Newport towards middle school. In some places [there is] no area beside road to ride when cars are on highway."
- "Safer crosswalks at the elementary school (drivers do NOT stop for those crossing or waiting to cross)

See Map 2.4 on the following page that shows the locations of the top three intersections and corridors. See Appendix C for the full list of public comments for this question.

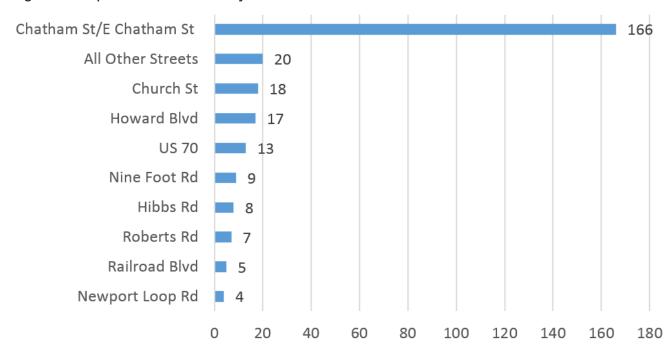
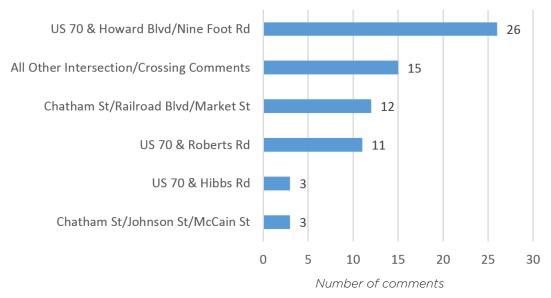


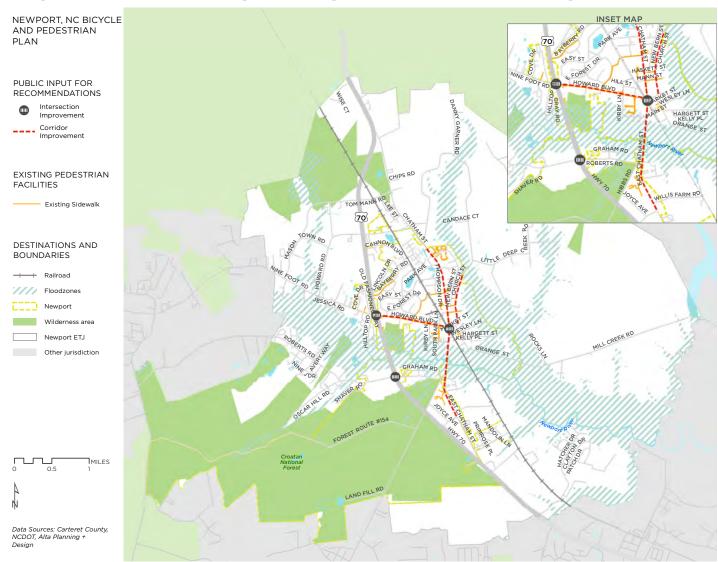
Figure 2.10 Top Corridors Identified by Public Comments

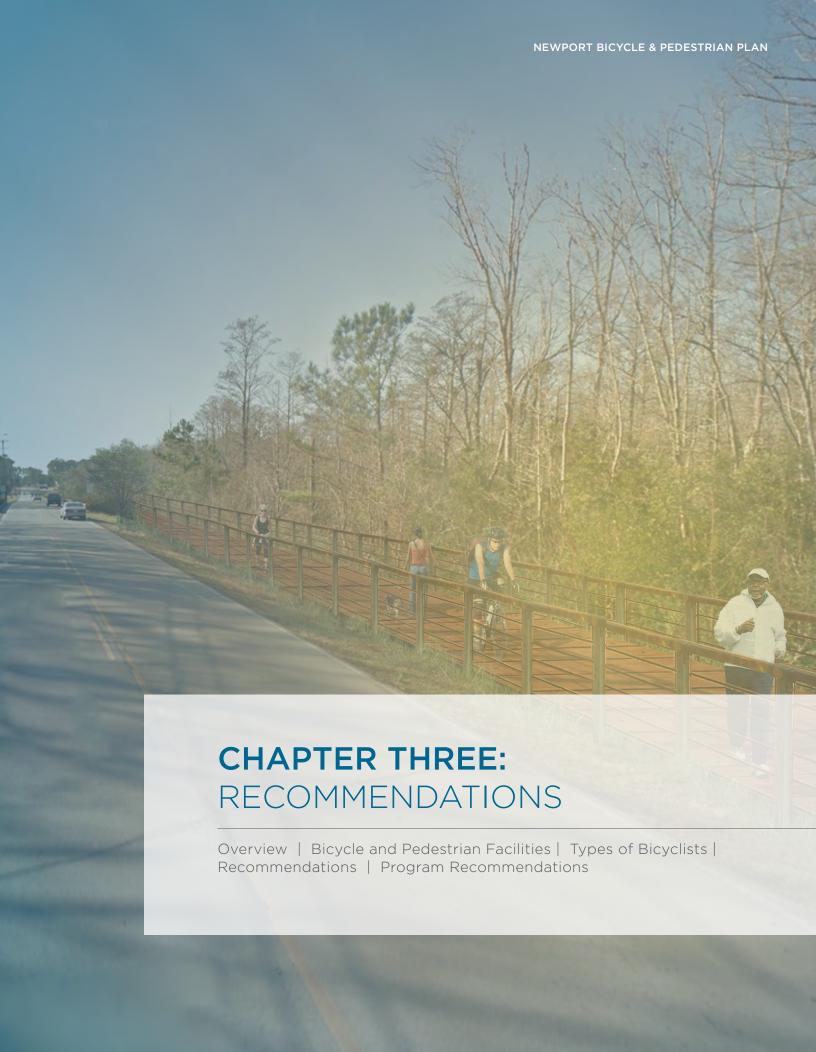
Number of comments

Figure 2.11 Top Intersections Identified by Public Comments



Map 2.4 - Public Input: Top Locations for Improvement





OVERVIEW

This chapter outlines the recommendations for making Newport safer and more enjoyable for walking and bicycling, with improved connections within town and beyond. A diverse mix of facilities are recommended to create these connections, including sidewalks, crossing improvements, on-road bicycle facilities, and shared-use paths. The chapter concludes with program recommendations to further meet the goals of this plan.

BASIS OF RECOMMENDATIONS

Recommendations were developed based on information from several sources: input from the town staff and Steering Committee, public input obtained through public comment forms and inperson workshops, previous plans and studies, review of existing bicycle and pedestrian facilities, noted bicycle and pedestrian destinations, and the consultant's field analysis. Field work examined the potential and need for facilities along key roadway corridors and to make connections between key destinations in Newport. Input sources for the plan are summarized in the diagram and table below.

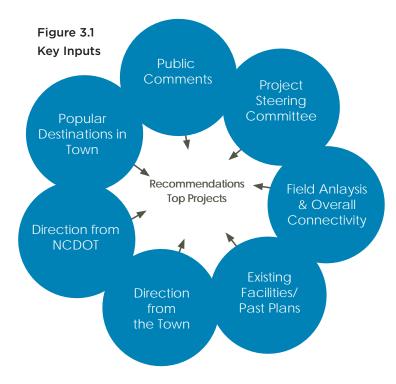


Table 3.1 Basis of Recommendations

SOURCE	KEY FINDING	MORE INFO
Public Comments	The top corridor for improvements is by far the Chatham St/E. Chatham St corridor, followed by Church St and Howard St. The top intersections are along US 70, most importantly the one at Howard Blvd/Nine Foot Road.	Figures 2.10- 2.11, pages 41-42
Project Steering Committee	Steering schools, shopping centers, and other key destinations. The committee also	
Field Analysis & Overall Connectivity	There are many challenges and barriers to connectivity, particularly between the neighborhoods and destinations north of the Newport River, and those to the south (Newport Middle School/Fort Benjamin Park). Bicycle and pedestrian crash history also shows safety issues crossing US 70.	Pages 19-28
Existing Facilities/ Past Plans	Key regional planning efforts include future plans for the East Coast Greenway and the Mountains-to-Sea Trail that could positively affect Newport.	Pages 29-30
Direction from the Town	The Town Manager, Mayor, and several council members attended committee meetings and provided guidance and perspective on draft recommendations as they were developed. A key related effort from the Town of Newport was the 2008 Safe Routes to School Grant, which aimed to connect neighborhoods north of the river to Newport Middle School. The grant application was widely supported by area stakeholders and Town leadership at the time. This helped form the basis of one of this plan's top projects.	Acknowl- edgements page/ 2008 SRTS Grant Application

Table 3.1 Basis of Recommendations (continued)

SOURCE	SOURCE KEY FINDING	
Direction from NCDOT	NCDOT Division of Bicycle and Pedestrian Transportation (DBPT) provided extensive feedback on the draft version of this plan, and helped to shape the plan analysis and the recommendations featured in the final plan. NCDOT Division 2 representatives reviewed the draft plan and provided direction during committee meetings.	Elizabeth Kane (DBPT) & Jeff Caban- iss (NCDOT Division 2)
Popular Destinations	The top three destinations to which people would most like to walk and bike are Fort Benjamin Park, Newport Middle School, and Newport Elementary School (all located along the Chatham St/E. Chatham St corridor).	Figure 2.7, page 39

BICYCLE AND PEDESTRIAN FACILITIES

The descriptions here through page 49 offer a brief overview of the primary facility types recommended in this plan, and an overview of the main types of bicyclists. For more information on facility design, please see the list of design resources on page 90.

SHARED USE PATHS (INDEPENDENT RIGHT-OF-WAY)

A shared use path is a facility that is separated from the roadway and designed for a variety of users, including bicyclists, walkers, hikers, joggers, wheelchair users, and skaters.

- » Shared use paths may be paved or unpaved and are the preferred facility for novice and average bicyclists.
- » These facilities are frequently found in parks, along rivers, beaches, and in greenbelts or utility corridors, away from roadway ROW where there are few conflicts with motorized vehicles.
- » Path facilities can also include amenities such as lighting, signage, and fencing (where appropriate).



Shared use path (independent ROW) example, paved shared use path.



Boardwalk can also be used for shared use paths in wetland areas, or areas prone to flooding.



Sidepath example using boardwalk along a roadway in the Outer Banks, NC.

SIDEPATHS (ROADWAY RIGHT-OF-WAY)

A sidepath is a type of shared use path that follows a road corridor but is separated from onroad traffic. Sidepaths are more transportationoriented in character and used by bicyclists and pedestrians. Because of operational concerns, it is generally preferable to place paths within independent rights-of-way away from roadways. However, there are situations where existing roads provide the only corridors available.

- » Sidepaths are most appropriate in corridors with few driveways and intersections.
- » Signage should be included along sidepaths to direct users to access points with high-visibility crosswalks.
- » Families and novice bicyclists are most comfortable on shared use paths. Therefore, a comprehensive network of shared use paths, that includes trails built in open space as well as sidepaths is an integral part of the overall bicycle facility network, and its development should be a priority of Newport.
- » A minimum 10' wide path allows for safer shared use by bicyclists, pedestrians, and other users.



Example of bicycle lanes in Elizabethtown, NC.

BICYCLE LANES

Bicycle lanes are a portion of the roadway designated for preferential use by bicyclists. They are one-way facilities that typically carry bicycle traffic in the same direction as adjacent motor vehicle traffic. Bike lanes are the appropriate and preferred bicycle facility for thoroughfares in both urban and suburban areas.

- » Bike lanes are used to delineate available road space for preferential use by bicyclists.
- » Bike lanes enable bicyclists to ride at their preferred speed, even when adjacent traffic speeds up or slows down.

» Bike lanes also encourage bicyclists to ride on the roadway in a position where they are more likely to be seen by motorists entering or exiting the roadway than they would be if riding on sidewalks.



Example of 5' wide paved shoulders.

PAVED SHOULDERS

Typically found in less-dense areas, paved shoulders are striped shoulders (5'+) wide enough for bicycle travel along paved roadways.

- » Paved shoulders often, but not always, include signage alerting motorists to expect bicycle travel along the roadway.
- » This type of treatment is not typical in urban areas and should only be used where engineering guidance, such as the AASHTO Bike Guide, indicates they are appropriate.
- » If roadways are widened to accommodate increasing traffic volumes, or as curb and gutter is added, upgrades to another bicycle facility should be provided, such as bicycle lanes or road-separated sidepaths, depending on the context of the roadway.



Example of shared-lane markings on pavement.

SHARED-LANE MARKINGS (SHARROWS)

These pavement marking symbols (also known as sharrows) are useful in locations where there is insufficient width to provide bike lanes. The marking also alerts road users to the lateral position bicyclists are likely to occupy within the traveled way, therefore encouraging safer passing practices. Shared-lane markings may also be used to reduce the incidence of wrongway bicycling. Shared-lane markings may be applicable in the following scenarios:

- In a shared lane with adjacent on-street parallel parking, to assist bicyclists with lateral positioning that reduces the chance of a bicyclist impacting the open door of a parked vehicle.
 - » On wide outside lanes, to indicate more appropriate positioning away from the curb or the edge of the traveled way.
 - » On a section of roadway with shared lanes, to fill a gap between two sections of roadway that have bike lanes, or to fill a gap between a shared use path and a nearby destination, or other similar connections.
 - » On a section of roadway where the lanes are too narrow for a bicyclist and motorist to travel side-by-side in the lane.

SIDEWALKS

Sidewalks are a fundamental component of a pedestrian network and can serve a complementary function to bicycle facilities.

- » Sidewalks in Newport should be at least 5' wide, and, where possible, should include a buffer strip between the sidewalk and roadway.
- » Areas of higher pedestrian volume may require 7' wide sidewalks, and sidewalks serving as part of the shared use path system should be at least 10' in width (sidepaths).



Sidewalk example on Howard Street in Newport.

CROSSING IMPROVEMENTS

Standard crossing improvements, such as crosswalks and curb ramps, help facilitate and guide pedestrians on sidewalks and sidepaths across intersections and side streets, while also visually highlighting pedestrian space to motorists.

- » Signage should be included on side streets to alert approaching drivers to look both ways for crossing pedestrian and bicycle traffic before turning.
- » Crossings that link to sidewalk on each side of the road should possess curb cuts that comply with ADA requirements, including ramps, landings, slope, and other elements. In-roadway signage can be used to remind drivers of the state law to yield to pedestrians in the crosswalk.
- » Some of these treatments have been proven to reduce crashes, as shown in the 2007 FHWA Crash Reduction Factors Study (http://safety.fhwa.dot.gov/ped_bike/ tools_solve/ped_tctpepc/).

High-visibility crossing improvements use continental markings (see image at bottom left), and can be supplemented with a variety of treatments, such as pedestrian countdown signals, pedestrian refuge islands, signage, and other treatments that facilitate safe crossings at busy intersections.



High-visibility crosswalk in Holly Springs, NC.

TYPES OF BICYCLISTS

Bicyclists can be categorized into four distinct groups based on comfort level and riding skills. Bicyclists' skill levels greatly influence expected speeds and behavior, both in separated bikeways and on shared roadways. Each of these groups has different bicycle facility needs, so it is important to consider how a bicycle network will accommodate each type of cyclist when creating a non-motorized plan or project. In the US population, people are generally categorized into one of Geller, City of Portland four cyclist types. The characteristics, attitudes, and infrastructure preferences of each type are described below. Based on observations, committee comments, and public input, most of Newport collected nationally since likely falls within the "Interested but Concerned" group, and the plan's recommendations reflect this. For example, in Newport, there is strong interest in connecting across the Newport River with a shared use path (rather than bike lanes or shared-lane markings), thereby accommodating as many user types as possible.

Source: Four Types of Cyclists. (2009). Roger Bureau of Transportation. Supported by data

Figure 3.2 Types of Bicyclists



HIGHLY EXPERIENCED (~1% OF POPULATION)

Characterized by bicyclists that will typically ride anywhere regardless of roadway conditions or weather. These bicyclists can ride faster than other user types, prefer direct routes and will typically choose roadway connections -- even if shared with vehicles -- over separate bicycle facilities such as shared use paths.



ENTHUSED AND CONFIDENT (~ 5-10% OF POPULATION)

This user group encompasses bicyclists who are fairly comfortable riding on all types of bikeways but usually choose low traffic streets or multi-use paths when available. These bicyclists may deviate from a more direct route in favor of a preferred facility type. This group includes all kinds of bicyclists such as commuters, recreationalists, racers and utilitarian bicyclists.



INTERESTED BUT CONCERNED (~ 60% OF POPULATION)

This user type comprises the bulk of the cycling population and represents bicyclists who typically only ride a bicycle on low traffic streets or multi-use trails under favorable weather conditions. These bicyclists perceive significant barriers to their increased use of cycling, specifically traffic and other safety issues. These people may become "Enthused & Confident" with encouragement, education and experience.



NO WAY, NO HOW (~ 30% OF POPULATION)

Persons in this category are not bicyclists, and perceive severe safety issues with riding in traffic. Some people in this group may eventually become more regular cyclists with time and education. A significant portion of these people will not ride a bicycle under any circumstances.

RECOMMENDATIONS, PRIORITIZATION & PROJECT CUT-SHEETS

The tables below summarize all of the infrastructure recommendations of this plan (see pages 44-45 for the basis of these recommendations). Projects 1-3 and A-C were selected as the highest priorities for the Town of Newport and were provided with further detail on project "cut-sheets". Not every project has its own cut-sheet, due in part to the scope of this planning study, but more importantly due to the key factors for ranking listed in the tables below. Map 3.1 on page 53 shows the locations of these projects, using the project identification number or letter in the left-hand column of the tables. The map is followed by the aforementioned cut-sheets, beginning on page 54.

Table 3.2 Recommended Corridor Projects (listed in order of priority)

ID	NAME & LOCATION	DESCRIPTION	KEY FACTORS IN PRIORITY RANKING	DISTANCE & COST ESTIMATES
1*	East Chatham St Sidepath, Boardwalk, and Bridge (from Westfield Rd to Newport Middle School)	 Sidepath with boardwalk and bridge and associated crossing/intersection improvements. Constraints: Crossing wetlands and Newport River. Consider reducing speed limit to 25 MPH. See pages 54-55 for more info. 	 ✓ Part of #1 corridor from public input ✓ #1 project from steering committee ✓ Connects multiple top destinations from public input ✓ Provides a safe route to school ✓ 2008 SRTS Grant Application ✓ East Chatham St is one of several proposed Mountains-to-Sea Trail & East Coast Greenway routes 	Distance: 4,424 feet / 0.84 miles Total Cost Estimate: (see cut-sheet): \$2.2M
2*	Chatham St Sidewalk & Shared Lane Markings (from Merrywoods Dr to Westfield Rd)	 Sidewalk, shared lane markings, and associated crossing/intersection improvements. Constraint: Bicycle lanes will not fit in the available pavement width. Consider reducing speed limit to 25 MPH. See pages 56-57 for more info. 	 ✓ Part of #1 corridor from public input ✓ #2 project from steering committee ✓ Connects a top destination from public input ✓ Provides a safe route to a school ✓ Chatham St is one of several proposed Mountains-to-Sea Trail & East Coast Greenway routes 	Distance: 6,960 feet / 1.32 miles Total Cost Estimate: (not including shared lane markings; see cut-sheet): \$630K Per-Mile Shared lane Markings: \$38K**
3*	Church St Sidewalk (from Nellie St to Chatham St via Market St)	 Sidewalk and associated crossing/intersection improvements. Constraint: May have to seek easements in some locations to avoid tree removal. See pages 58-59 for more info. 	 ✓ #2 corridor from public input ✓ #3 project from steering committee ✓ Serves a top destination from public input ✓ Provides a safe route to a school 	Distance: 4,246 feet / 0.80 miles Total Cost Estimate: (see cut-sheet): \$320K
4	Howard Blvd Bicycle Lanes (from Chatham St to US 70) & Mid-Block Crossing at Town Hall	 Restripe for bicycle lanes Constraint: Would require narrowing existing lane widths, or removal of center turn lane. Add mid-block crosswalk at Verdun St (near Town Hall) Existing sidewalk (south side of street) and crosswalk (at Forest Dr) in good condition - consider adding sidewalk to both sides in long term. Consider reducing speed limit to 25 MPH. 	 ✓ #3 corridor from public input, yet existing conditions for pedestrians are relatively good, compared to other corridors in Newport; existing conditions for bicyclists are mixed, depending on bicyclist experience levels ✓ Connects a top destination from public input ✓ Mid-block crossing at Verdun St would serve Town Hall, Town Library & a church; nearest existing crosswalk is 1/4 mile to the west at Forest Dr 	Distance: 5,127 feet / 0.97 miles Per Mile Bicycle Lanes: \$420K**

 Table 3.2 Recommended Corridor Projects (continued; listed in order of priority)

ID	NAME	DESCRIPTION	KEY FACTORS IN PRIORITY RANKING	DISTANCE & COST ESTIMATES
5	Nine Foot Rd Sidewalk (within ETJ)	 Sidewalk and associated crossing/intersection improvements Consider reducing speed limit to 25 MPH near the Food Lion shopping center. 		Distance: 8,409 feet / 1.59 miles Per Mile Sidewalk: \$332K** Crosswalk: \$3K/ea**
6-9*	Paved Shoulders for Regional Bicycle Connectivity: 6. Hibbs Rd (within ETJ) 7. Nine Foot Rd (within ETJ) 8. Orange St (within ETJ) 9. Chatham St (Newport Loop Rd to Whitetail Rd)	 Paved shoulders for regional bicycle connectivity to the Croatan National Forest, Havelock, and destinations on Hwy 24 Recommended for completion as these roads are widened or resurfaced within Newport ETJ; Portions outside the ETJ will depend on leadership from county and state agencies Constraint: Drainage along some portions of these roads may prevent additional pavement width from being possible (without significant additional costs) 	 ✓ The Croatan Regional Bicycle Trails Plan recommends "wide shoulders" for Hibbs Rd, Nine Foot Rd, and Orange St ✓ Hibbs Rd & Chatham St through Newport is one of several proposed Mountains-to-Sea Trail routes ✓ Chatham St is one of several proposed East Coast Greenway routes ✓ Significant safety concerns (3 bike/ped crashes along this section of Chatham St from 2007-2013, one of them fatal) ✓ Fewer mentions from the public than corridors above, but still mentioned multiple times in the public comment form 	Per Mile Paved Shoulders: \$336K**
10	Roberts Rd Sidewalk (from E Chatham St to WalMart area) and Paved Shoul- ders (within ETJ)	Sidewalk and associated crossing/intersection improvements Paved shoulders for rural residential bicycle connectivity Recommended for completion as these roads are widened or resurfaced Constraint: Drainage along some portions of Roberts Rd may significantly add to cost of shoulders and sidewalks	✓ Fewer mentions from the public than corridors above, but still mentioned multiple times in the public comment form	Per Mile Paved Shoulders: \$336K** Per Mile Sidewalk: \$332K**
11	Newport Loop Rd Paved Shoulders (from Church St to Chatham St)	 Paved shoulders for local bicycle connectivity (and for safer walking along this loop) Constraint: Drainage along some portions of Newport Loop Rd may significantly add to cost of shoulders 	✓ Fewer mentions from the public than corridors above, but still mentioned multiple times in the public comment form	Per Mile Paved Shoulders: \$336K**

^{*}See associated project cut-sheet with more information.

^{**}Per-mile costs sourced from 'Cost of Independent Bicycle and Pedestrian Facilities in North Carolina' (2016) by the NCDOT Research and Analysis Group. It is important to note that costs for bicycle and pedestrian infrastructure vary greatly from site to site. The cost information above should be used only for estimating purposes and not necessarily for determining actual bid prices for a specific infrastructure project. Please see NCDOT's cost tool & guide for more information: https://connect. ncdot.gov/projects/BikePed/Pages/Guidance.aspx

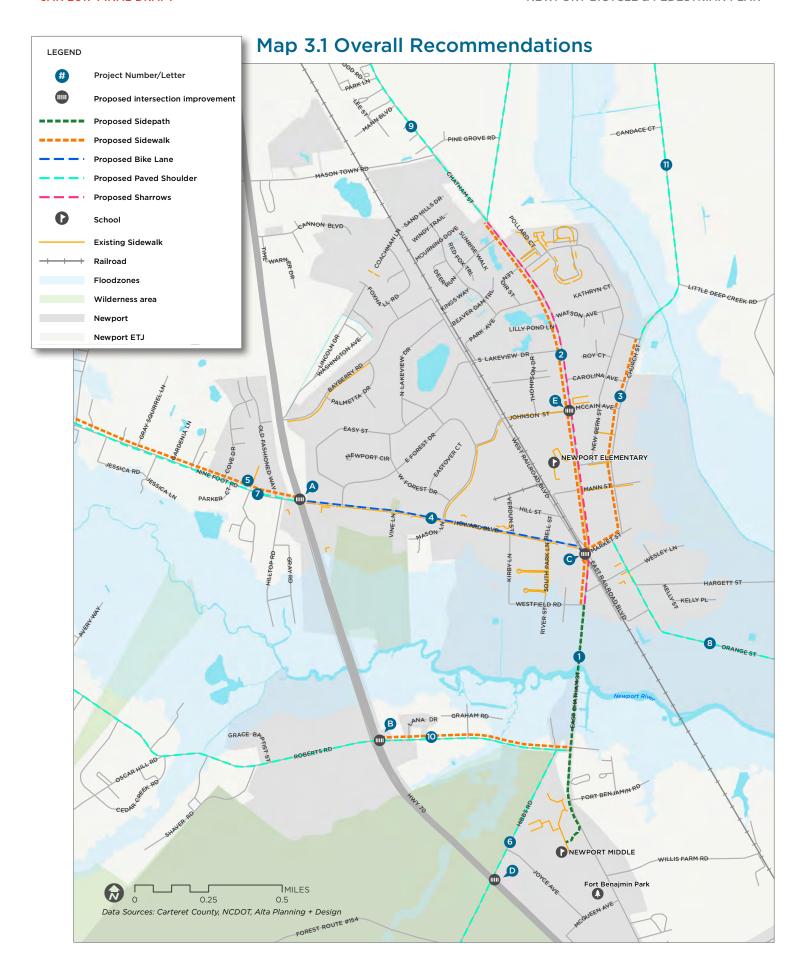
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 Table 3.3 Recommended Intersection Projects (listed in order of priority)

ID	NAME	DESCRIPTION	KEY FACTORS IN PRIORITY RANKING		COST ESTIMATES**
A*	US 70 & Howard Blvd/ Nine Foot Rd Intersection Improvements	Crossing Improvements: High visibility crosswalks Pedestrian countdown signals Sidewalk & wheelchair ramps connecting to new crosswalks on both sides Median refuge island Constraints: Design of the crossing improvements will have to accommodate turning movements of large trucks, possibly impacting the ability to include a median refuge island. See page 60 for more info.	 ✓ #1 intersection from public input ✓ Significant safety concerns (5 bike/ ped crashes near this location from 2007-2013) 	•	Crosswalk: \$3K/ea Ped Signal Head: \$2K/ea Per Mile Sidewalk: \$332K Wheelchair ramps: \$1K/ea Median refuge island: N/A
B*	Chatham St/ Railroad Blvd/Market St Intersection Improvements	Crossing Improvements: High visibility crosswalks Sidewalk & wheelchair ramps connecting to new crosswalks on both sides Constraints: If additional right-of-way is needed for crossing RR tracks, it could be expensive and/or not offered by the RR owner. See page 61 for more info.		•	Crosswalk: \$3K/ea Per Mile Sidewalk: \$332K Wheelchair ramps: \$1K/ea
C*	US 70 & Roberts Rd Intersection Improvements	 Crossing Improvements & Constraints: Same as above for project A. See page 61 for more info. 		•	Crosswalk: \$3K/ea Ped Signal Head: \$2K/ea Per Mile Sidewalk: \$332K Wheelchair ramps: \$1K/ea Median refuge island: N/A
D	US 70/Hibbs Rd Intersection Improvements	Crossing Improvements & Constraints: Same as above for project A.	Fewer mentions from the public than the intersections above, but still mentioned multiple times in the public comment form	•	Crosswalk: \$3K/ea Ped Signal Head: \$2K/ea Per Mile Sidewalk: \$332K Wheelchair ramps: \$1K/ea Median refuge island: N/A
E	Chatham St/ Johnson St/McCain St Intersection Improvements	Crossing Improvements: High visibility crosswalks Sidewalk & wheelchair ramps connecting to new crosswalk on both sides Constraints: There are open parking lots on two corners of this intersection; pedestrian space will need to be better defined on these corners	Fewer mentions from the public than the intersections above, but still mentioned multiple times in the public comment form	•	Crosswalk: \$3K/ea Wheelchair ramps: \$1K/ea

^{*}See associated project cut-sheet with more information.

^{**}Per-mile costs sourced from 'Cost of Independent Bicycle and Pedestrian Facilities in North Carolina' (2016) by the NCDOT Research and Analysis Group. It is important to note that costs for bicycle and pedestrian infrastructure vary greatly from site to site. The cost information above should be used only for estimating purposes and not necessarily for determining actual bid prices for a specific infrastructure project. Please see NCDOT's cost tool & guide for more information: https://connect.ncdot.gov/projects/BikePed/Pages/Guidance.aspx



PRIORITY PROJECT #1: EAST CHATHAM STREET SIDEPATH. BOARDWALK, & BRIDGE

FROM WESTFIELD ROAD TO NEWPORT MIDDLE SCHOOL

The existing roadway consists of one 12' travel lane in each direction, with little room for sharing the road or walking on the shoulder. The existing bridge is also too narrow to safely accommodate walking or bicycling. The proposed sidepath, boardwalk, and bridge will use existing right-of-way on the west side of the road to connect Newport Middle School and Fort Benjamin Park to the majority of Newport residents north of the river, while also serving as a key connection for proposed statewide trail routes.

PROJECT AT A GLANCE

- » Project type: 10'-wide boardwalk and concrete sidepath
- » Length: 4,400 ft (0.8 miles)
- » Part of #1 corridor from public input
- » #1 project from steering committee
- » Trip Generators: Commercial hub at Railroad Boulevard, neighborhoods north of the Newport River, Newport Middle School, Newport River Park, and Fort Benjamin Park

PREVIOUS PLANNING

- » Carteret County Comprehensive Plan (2002)
- » Carteret County Comprehensive Transportation Plan (2014)
- » Croatan Regional Bicycle and Trails Plan (2014)
- » 2008 Safe Routes to School Grant Application
- » East Chatham St is one of several proposed Mountains-to-Sea Trail & East Coast Greenway routes

Existing conditions on the southern part of Chatham Street, looking south near the Newport River, heading towards Newport Middle School.

POTENTIAL PERMITTING NEEDS

- » Carteret County/Newport Floodplain Development Permit
- » Carteret County/Newport Stormwater Management (National Pollutant Discharge Elimination System General Permit)
- » Carteret County/Newport Land Disturbance Permit
- » North Carolina Department of Transportation **Encroachment Permit**
- » U.S. Army Corps of Engineers Section 401/404 Permit
- » Coastal Area Management Act Permit

POTENTIAL PARTNERSHIPS

- » Carteret County
- » Carteret County Schools (for trail on school property)
- » North Carolina Safe Routes to School Program
- » Down East Rural Transportation Planning Organization

COST ESTIMATE

- » Estimated \$1,400,000 \$1,700,000 construction cost
- » Estimated \$2,200,000 total cost, assuming NCDOT or federal funding (including construction, 20% contingency, utilities, preliminary engineering and environmental, NCDOT engineering and construction, and construction administration)

POTENTIAL FUNDING MECHANISMS

- » NCDOT/STI funding: Regional & Division levels
- » MAP-21 Transportation Alternatives Program (including the Safe Routes to School program)
- » Duke Energy Water Resources Fund
- » Clean Water Management Trust Fund
- » Recreational Trails Program
- » NC Parks and Recreation Trust Fund
- » Newport Capital Improvement Plan



Proposed conceptual improvements include a boardwalk, bridge, and a shared-use path. The actual project will look different of the ground, including a greater separation between the roadway and the path/ boardwalk

OPPORTUNITIES & CONSTRAINTS FOR PRIORITY PROJECT #1

The 10'-wide sidepath is proposed on the west side of Chatham Street, beginning at Westfield Road (connecting to project #2). It connects the neighborhoods north of the Newport River (a major barrier to mobility) to Newport River Park, Newport Middle School, and Fort Benjamin Park.

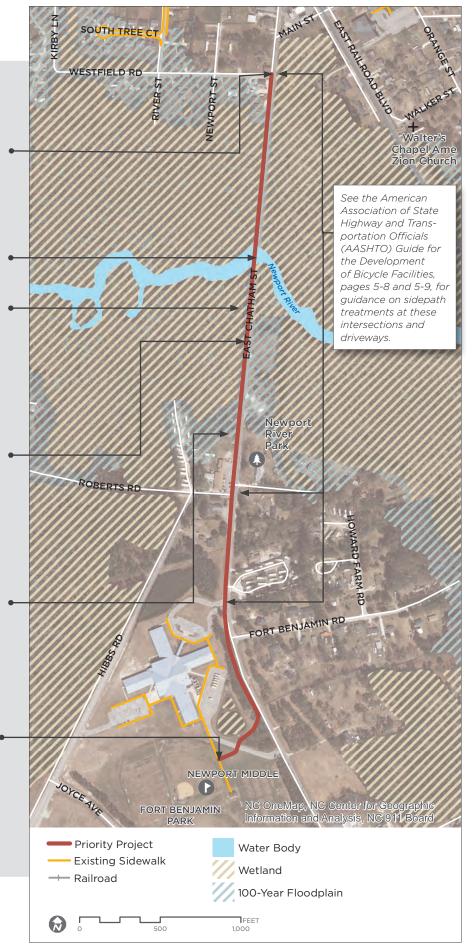
An approximately 150-foot long bridge is required over the Newport River.

Where the sidepath overlaps wetlands, a boardwalk is recommended to reduce wetland impacts and associated permitting requirements. Wood boardwalk is assumed for the cost estimate provided. See example of this type of facility (from Outer Banks, NC) on page 46.

No right-of-way acquisition is required for the project, which can be constructed within the roadway right-ofway and land owned by the Carteret County Board of Education. A minimum 5'-wide clear zone should be provided between the boardwalk and roadway in accordance with the AASHTO Guide for the Development of Bicycle Facilities.

The sidepath transitions from boardwalk to paved concrete trail north of Roberts Road. Concrete is recommended for paved portions for durability and consistency with sidewalks to which the trail connects.

> The sidepath terminates at an existing sidewalk on the north side of Fort Benjamin Park.



PRIORITY PROJECT #2: CHATHAM STREET SIDEWALK & SHARED-LANE MARKINGS

FROM MERRY WOODS DRIVE TO WESTFIELD DRIVE

This project connects through the heart of Newport with sidewalks along the west side of Chatham Street for pedestrians, and shared-lane markings for bicyclists. It will connect nearby neighborhoods to Newport Elementary School, shopping, restaurants, and churches.

PROJECT AT A GLANCE

- » Project type: 5'-wide concrete sidewalk
- » Length: 6,960 ft (1.3 miles)
- » Part of #1 corridor from public input
- » #2 project from steering committee
- » Trip Generators:
 - » Newport Elementary School
 - » Newport Public Library
 - » Corridor shops and restaurants
 - » Central neighborhoods

PREVIOUS PLANNING

- » Carteret County Comprehensive Plan (2002)
- » Croatan Regional Bicycle and Trails Plan (2014)
- » Chatham St is one of several proposed Mountains-to-Sea Trail & East Coast Greenway routes

POTENTIAL PERMITTING NEEDS

- » Carteret County/Newport Stormwater Management (National Pollutant Discharge Elimination System General Permit)
- » Carteret County/Newport Land Disturbance Permit

- » North Carolina Department of Transportation Encroachment Permit
- » Coastal Area Management Act Permit

POTENTIAL PARTNERSHIPS

- » Carteret County
- » Carteret County Schools
- » North Carolina Safe Routes to School
- » Down East Rural Transportation Planning Organization

COST ESTIMATE

- » Estimated \$390,000 \$470,000 construction cost
- » Estimated \$630,000 total cost (not including shared-lane markings), assuming NCDOT or federal funding (including construction, 20% contingency, utilities, preliminary engineering and environmental, NCDOT engineering and construction, and construction administration)
- » The need for additional ROW at the proposed railroad crossing of Chatham Street is to be determined upon preliminary design (see page 61). The North Carolina Railroad Company & Norfolk Southern Corporation should be contacted if additional ROW is needed, which may increase costs of this project.
- » Per-Mile Shared-Lane Markings: \$38K (Source: 'Cost of Independent Bicycle and Pedestrian Facilities in North Carolina' (2016) by the NCDOT Research and Analysis Group.

POTENTIAL FUNDING MECHANISMS

- » MAP-21 Transportation Alternatives Program (including the Safe Routes to School program)
- » SPOT Safety program
- » Newport Capital Improvement Plan



Existing conditions along Chatham Street (looking south near Johnson Street).



Rendering of the proposed Chatham Street Sidewalk, with curb ramps and crosswalks.

OPPORTUNITIES & CONSTRAINTS FOR PRIORITY PROJECT #2

The proposed sidewalk is on the west side of Chatham Street, starting at Merrywood Drive. It goes south to Westfield Rd, connecting key town destinations along the way.

New curb and gutter may be required for some segments. The only existing curb & gutter on Chatham St is between Johnson St & Westfield Rd (with gaps near the railroad).

No right-of-way acquisition is required to construct the sidewalk. The project fits within the roadway right-of-way.

The sidewalk connects neighborhoods to Newport Elementary School and Vikings Field, creating the opportunity for nearby students to walk to school.

The proposed mid-block crossing improvement near Newport Vikings Field will need to be designed with driveway access management on the east side (in front of business parking areas), so that the crosswalk does not lead to a parking space, as it currently does.

Between Johnson Street and Mann Street, the sidewalk is recommended streetside of the existing utility poles, narrowing the roadway width. The width here allows for this design, which avoids impacts to drainage.

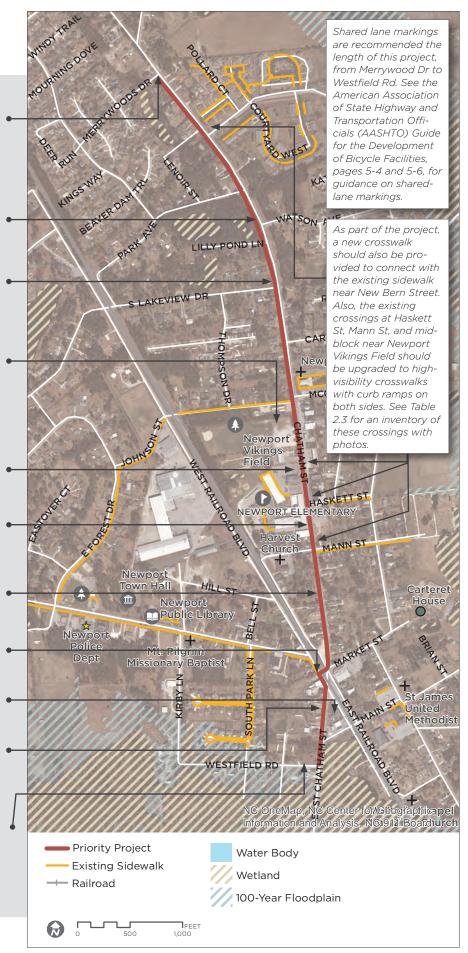
> An existing sidewalk is in place on the west side of Chatham Street from Haskett Street to Market Street.

> See cut-sheet for priority intersection improvement project C, page 61, for recommendations at this intersection.

This project connects to a commercial hub here, at Railroad Boulevard and Chatham Street.

Some existing sidewalk is in place on the west side of the Chatham Street, south of Railroad Blvd, going south about half-way to Westfield Rd.

Project #2 terminates at Westfield Road, where project #1 begins.



PRIORITY PROJECT #3: CHURCH STREET SIDEWALK

CHURCH STREET (FROM NELLIE STREET TO MARKET STREET) & MARKET STREET (FROM Church Street to Chatham Street)

This project links residents along Church Street with a sidewalk to the commercial hub near Chatham Street and Railroad Boulevard. It also increases pedestrian connectivity throughout east Newport by linking to existing sidewalks on several cross-streets as well as the existing sidewalks on Chatham Street.

PROJECT AT A GLANCE

- » Project type: 5'-wide concrete sidewalk
- » Length: 4,200 ft (0.8 miles)
- » #2 corridor from public input
- » #3 project from steering committee
- » Trip Generators:
 - » Newport Elementary School
 - » Chatham Street shops and restaurants
 - » Carteret House (senior living facility)
 - » East Newport neighborhoods

PREVIOUS PLANNING

» Carteret County Comprehensive Plan (2002)

POTENTIAL PERMITTING NEEDS

- » Carteret County/Newport Stormwater Management (National Pollutant Discharge Elimination System General Permit)
- » Carteret County/Newport Land Disturbance Permit
- » North Carolina Department of Transportation Encroachment Permit
- » Coastal Area Management Act Permit

POTENTIAL PARTNERSHIPS

- » Carteret County
- » Down East Rural Transportation Planning Organization

COST ESTIMATE

- » Estimated \$200.000 \$240.000 construction cost
- » Estimated \$320,000 total cost, assuming NCDOT or federal funding (including construction, 20% contingency, utilities, preliminary engineering and environmental, NCDOT engineering and construction, and construction administration)

POTENTIAL FUNDING MECHANISMS

- » SPOT Safety program
- » Newport Capital Improvement Plan



Existing conditions on Church Street (looking south)where sidewalks are lacking on both sides



Proposed improvements: sidewalk on the east side of the street with landscaping.

OPPORTUNITIES & CONSTRAINTS FOR PRIORITY PROJECT #3

The sidewalk is proposed on the west side of Church Street, beginning at Nellie Street, connecting residential housing along and west of Church Street.

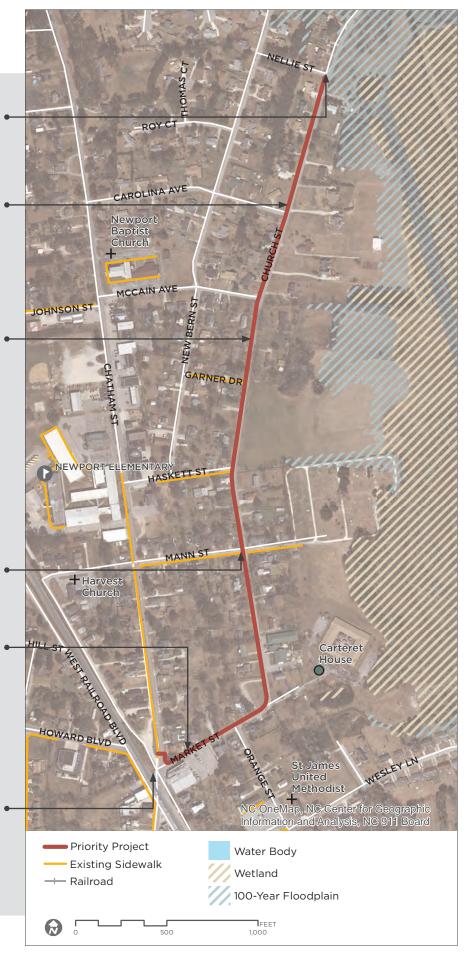
Sidewalk construction is recommended on the backside of roadway drainage swales to make use of available right-of-way and provide a buffer between the sidewalk and the road.

No right-of-way acquisition is required to construct the sidewalk, which fits within the roadway rightof-way. The sidewalk design should make use of the right-of-way available to route around constrained locations, such as mailboxes, trees, and utility poles where possible. The Town may seek easements from property owners to route around trees and therefore avoid tree removal.

The project connects to existing sidewalks on Garner Drive, Haskett Street, and Mann Street, increasing overall pedestrian connectivity.

A fence constructed within the roadway right-of-way along with utility poles creates a short constrained section along Market Street. The fence could be relocated (moved back), or the sidewalk could be constructed adjacent to the road along with new curb and gutter installation to avoid relocating the fence. ADA minimum requirements, however, must be maintained.

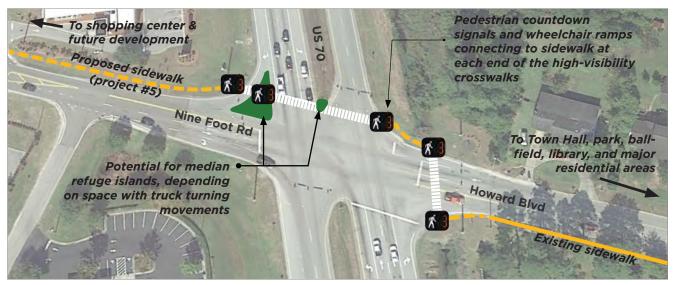
See cut-sheet for priority intersection improvement project C, page 61, for recommendations at this intersection.



PRIORITY INTERSECTION PROJECT A: US 70 & HOWARD BOULEVARD/ NINE FOOT ROAD INTERSECTION IMPROVEMENTS

This project links Newport's largest residential areas (plus destinations on Howard Boulevard) to a major shopping center (Food Lion) and other residents west of US 70 on Nine Foot Road. It would also serve to connect people from future development north of Nine Foot Road to Howard Boulevard. It was identified by the public as the top intersection most in need of improvement in Newport. There are also significant safety concerns, with five bike/ped crashes near this location from 2007-2013.

Reasoning behind the proposed crossing locations: The goal of this project is to connect the existing sidewalk on the southeast corner of the intersection to the key destinations of the shopping center and future development on the northwest corner. The crossing locations indicated below were recommended in order to avoid a northsouth crosswalk on the west side of US 70, where there are more intersecting roadways and turning vehicles from adjacent parking lots.



This is not a design plan; precise locations and elements should be designed in accordance with engineering standards. All facility recommendations along NCDOT-maintained roadways will require review and approval by NCDOT Highway Division 2 prior to implementation. Background Image from Google Earth. See per-unit costs estimates in Table 3.3.



Existing conditions looking north along US 70, with the Food Lion shopping center at left.

Proposed conceptual improvements include high-visibility crosswalks and a pedestrian refuge island.

PRIORITY INTERSECTION PROJECT B: CHATHAM ST /RAILROAD BLVD/MARKET ST INTERSECTION IMPROVEMENTS

This project provides crosswalks through a complex intersection of railroad tracks and multiple streets. It was identified by the public as the second intersection most in need of improvement in Newport.

Reasoning behind the proposed crossing locations: The crossing shown at Railroad Boulevard provides the most direct link between existing sidewalk on Chatham Street, Railroad Blvd, and E Chatham Street, while also being located at the midway point for pedestrians connecting south onto E. Chatham Street or west to Howard Boulevard. The crossing at Market Street provides a direct link to proposed sidewalks for project #3.

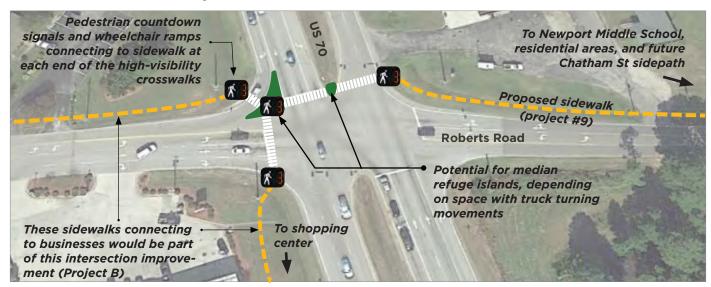


Above & below: These are not a design plans; precise locations and elements should be designed in accordance with engineering standards. All facility recommendations along NCDOT-maintained roadways will require review and approval by NCDOT Highway Division 2 prior to implementation. Background Image from Google Earth. See per-unit costs estimates in Table 3.3.

PRIORITY INTERSECTION PROJECT C: US 70 & ROBERTS ROAD INTERSECTION **IMPROVEMENTS**

This project links Newport residents east of US 70 (plus Newport Middle School) with a major shopping center (Wal-Mart) and other residents west of US 70 on Roberts Road. It was identified by the public as the third intersection most in need of improvement in Newport.

Reasoning behind the proposed crossing locations: Project #9 recommends sidewalk on the north side of Roberts Road, because more people live on that side of the street, allowing for more direct access to the sidewalk. The crossing locations indicated below were recommended in order to connect that sidewalk to the shopping center on the southwest corner of the intersection, while also serving destinations on the northwest corner of the intersection.

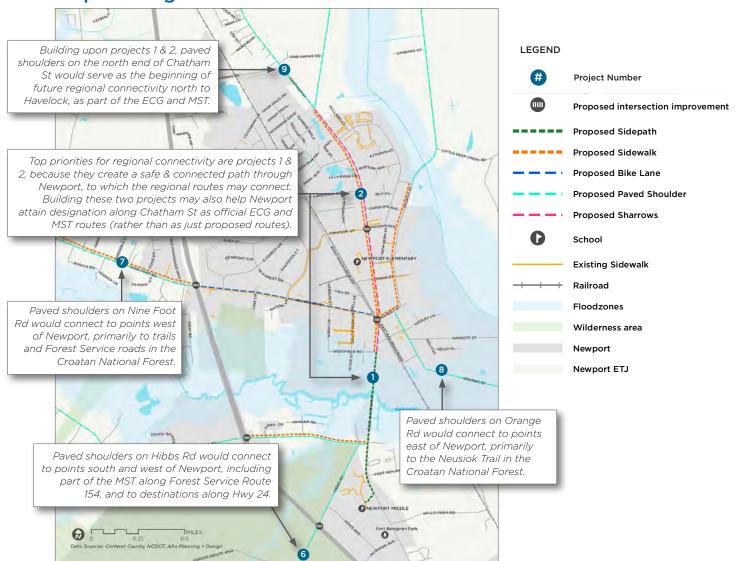


RECOMMENDATIONS FOR REGIONAL CONNECTIVITY

Projects 6-9 recommend regional connectivity to Havelock, destinations on Hwy 24, multiple portions of the Croatan National Forest, and to rural residential areas. These are recommended as paved shoulder projects along Hibbs Road, Nine Foot Road and Orange Street, within the Newport ETJ (portions outside the ETJ will depend on leadership from county and state agencies). Paved shoulders are also recommended along the northern portion of Chatham Street, from Newport Loop Road to Whitetail Road (other portions of Chatham Street are covered in projects 1 & 2).

These recommendations for regional connectivity are supported in regional plans for the East Coast Greenway (ECG) and the North Carolina Statewide Mountains-to-Sea Trail (MST). As noted in Chapter 2, the 2014 Croatan Regional Bicycle and Trails Plan shows proposed routing for the ECG and the MST as going through Newport, along Chatham Street (see maps on page 30). The Croatan Regional Bicycle and Trails Plan also proposes wide shoulders on Hibbs Road, Nine Foot Road and Orange Street. See the notes in the map below for more on these proposed connections.

Map 3.2 Regional Recommendations



REGIONAL TRAILS AS AN ECONOMIC DEVELOPMENT OPPORTUNITY FOR NEWPORT

Newport is uniquely positioned to potentially become home to not one, but two regional trails of statewide and national significance: The East Coast Greenway and the North Carolina Statewide Mountains-to-Sea Trail. There are several proposed routes for these trails in the eastern part of the state, but ultimately, official route designation will only come with completed bicycle and pedestrian facilities. Newport stands a much better chance of official designation if and when its portions of trail are completed. Designation is important for Newport, not simply as an accolade or "bragging right", but more importantly for the positive economic impact often associated with popular trails. This type of impact can come in the form of increased property values and revenue from increased tourism. A research group (Headwaters Economics) compiled 120 studies on the impacts of trails in a single library, searchable by type of benefit, use, year, and region. For more on this topic, please refer to this research available at: https://headwaterseconomics. org/economic-development/trails-pathways/ trails-research/

THE EAST COAST GREENWAY (ECG)

From the East Coast Greenway website (www. greenway.org):

"The East Coast Greenway, conceived in 1991, is the nation's most ambitious longdistance urban trail. By connecting existing and planned shared-use trails, a continuous, traffic-free route is being formed, serving self-powered users of all abilities and ages. At 3,000 miles long, the Greenway links Calais, Maine, at the Canadian border, with Key West, Florida, Alternate routes add another 2,000 miles to the ECG trail system.

A linear park, the East Coast Greenway is almost entirely on public right-of-way, incorporating waterfront esplanades, park paths, abandoned railroad corridors, canal towpaths, and pathways along highway corridors. Designed to accommodate tourists, locals, and users of all abilities, the East Coast Greenway has universal appeal.

The East Coast Greenway can be used today. By connecting existing trails with carefully selected on-road routing, a complete route is in place from Maine to Florida. Today, nearly 30% of the route is trail."

THE NORTH CAROLINA STATEWIDE MOUNTAINS-TO-SEA TRAIL (MST)

From the Friends of the Mountains-to-Sea Trail website (www.ncmst.org/):

"The NC Mountains-to-Sea Trail is North Carolina's premier hiking trail. The North Carolina state trail stretches 1150 miles from the Great Smoky Mountains to the Outer Banks, stopping at many of our state's most beautiful places along the way.

What can the NC Mountains-to-Sea Trail mean to you? It may mean a short walk or hike with your family near your house, in the mountains, along the Blue Ridge Parkway, or along the sea. It may mean a weekend backpacking trip. Or it may even mean a challenging, inspiring trek to hike the entire length of the 1150-mile NC state trail. However you experience the Mountains-to-Sea Trail, the beauty of North Carolina from Jockey's Ridge to Clingman's Dome, will fill you with wonder and joy."

PROGRAM RECOMMENDATIONS

Below are key program recommendations that are essential and complementary to improvements in infrastructure. Each of the following program ideas (among others) were presented at committee meetings for input and discussion. The program ideas that follow were well-received by the project steering committee, as being most suitable for Newport. See Chapter 4: Implementation for more information on other program ideas related to plan implementation.

MEDIA CAMPAIGN TO EDUCATE MOTORISTS, BICYCLISTS, AND PEDESTRIANS

The public comment form for this plan indicated "safer conditions for walking and bicycling" as a top goal for this plan, and showed fast moving vehicle traffic and unsafe crossings as key factors in discouraging walking and bicycling in Newport.

Watch for Me NC is a comprehensive campaign aimed at reducing the number of bicyclists and pedestrians hit and injured in crashes with vehicles. The campaign consists of educational messages on traffic laws and safety, and an enforcement effort by area police.

Watch for Me NC is an ongoing statewide grant program administered by the NCDOT Division of Bicycle and Pedestrian Transportation (NCDOT DBPT). Newport should contact the NCDOT DBPT to request materials and guidance. As a part of this program, the Town could:

- » Distribute the educational materials made available by NCDOT at local festivals and other events. at local bike shops and other businesses, and in renters' information packets and property owners' guest information books.
- » Work with police officers to hand out bicycle lights along with bicycle and pedestrian safety cards.
- » Broadcast program promotions and educational videos on the local government access channel.
- » Enforce motorist rates of yielding to pedestrians.

Town may participate by visiting WatchForMeNC.org and downloading materials and information that may be used right away. The Town should also apply when the Call for Participants is issued, typically in February of each year. See the website for contact information and notice of the annual program opening.







OPEN STREETS EVENTS

The Steering Committee was interested in ways to promote walking, bicycling, exercise, and recreation, and the concept of an "Open Streets" event was well-received by them as a potentially lower-cost activity that could achieve that. Open Streets events are periodic street closures (usually on Sundays) that create a temporary park that is open to the public for walking, bicycling, dancing, hula hooping, roller skating, and other forms of human-powered activity. These programs are known by many names: Ciclovias, Open Streets, Sunday Parkways, Summer Streets, and Sunday Streets. They promote health by creating a safe and attractive space for physical activity and social interaction.

For this type of program, organizers should consider lessons learned and best practices from other communities. Some recommendations include:

- » These events lend themselves to innovative partnerships and public/private funding. Health care providers whose mission includes facilitating physical activity are often major sponsors. Businesses may also support the event if it brings customers to their location. They often take place on a Sunday - partnerships with local churches in Newport could be pursued.
- » Informing residents along the route about what it means for them is essential. They should be informed numerous times (3-6 times is not too much), including a reminder the day before the event. Expectations about vehicle access to and from residences should be managed clearly.
- » Closing Chatham Street in Newport may be challenging due to through traffic needs however, part of Howard Street could be a great location for an Open Streets event.
- » For more local examples, refer to Durham's Bull City Summer Streets event. The Town of Boone, Marion, and the City of Salisbury have all held at least one ciclovia as well.



HIKE & BIKE MAP

One of the most effective ways of encouraging people to walk more often or to ride a bicycle is through the use of maps and guides to show where you can walk and bike, and to guide people to enjoyable routes and destinations. The Town of Newport currently has no such map or brochure.

These maps can be designed so that a portion of the map is devoted to bicycle and pedestrian safety education, such as informational graphics that demonstrate bicycle hand signals and how to share the road and the trail safely. The map should be made available online and printed as needed to be actively distributed to residents and visitors. A town map could be created following completion of this plan's pilot projects, but safety education information could be produced at anytime.



Public Bicycle Maintenance Stand

Public maintenance stands have become a popular amenity in bicycle friendly communities because they provide bicyclists with access to tools onthe-go and encourage people to teach and learn bicycle maintenance in an informal setting. The Town of Newport could help encourage bicycling by providing such stands, and the Steering Committee suggested that the location of Town Hall/Public Library would be an ideal location.

These stands can also help to reduce the number of abandoned or trashed bikes in a community; bikes are often abandoned by their owners when they have a minor mechanical issue that they do not have the tools or knowledge to fix. Public maintenance stands encourage people to learn bicycling skills from one another and send a message to residents and visitors that bicycling is supported in the community. These fixtures can be placed in a park or in another public place and require little upkeep or oversight, since the tools and stand are designed to be self-contained and theft-resistant.

BICYCLE RACKS

Bicyclists expect a safe, convenient place to secure their bicycle when they reach their destination. Bicycle racks should be installed at parks, public buildings, schools, shopping centers, and other important destinations (see destinations shown on Map 2.1, for example).

In order to maximize security, whenever possible bicycle parking facilities shall be located in areas highly visible from the street and from the interior of the building they serve (i.e., placed adjacent to windows). General guidance for placement is as follows:

- 2 ft minimum from the curb face to avoid 'dooring.'
- 4 ft between racks to provide maneuvering room
- Locate close to destinations; 50 ft maximum distance from main building entrance.
- Minimum clear distance of 6 ft should be provided between the bicycle rack and the property line.

Public bicycle maintenance and tool stand examples.









Perpendicular bike racks.

Refer to the Essentials of Bike Parking for information on purchasing or installing bike parking fixtures on a limited scale. This 12-page guide is available for download at:

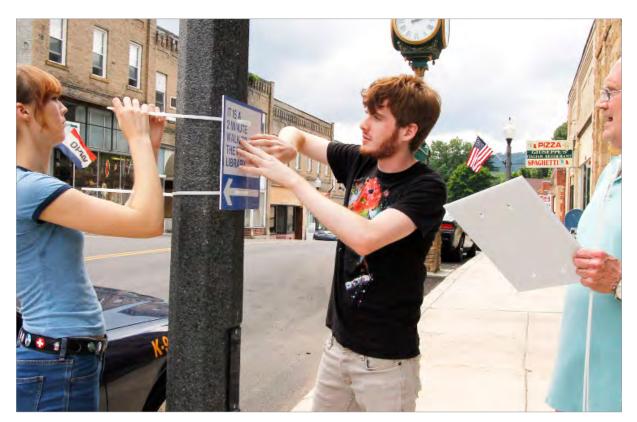
http://www.apbp.org/Bike_Parking

SIGNAGE AND WAYFINDING

A relatively low-cost program that Newport can pursue is to develop and adopt a wayfinding signage style policy and procedure, to be applied throughout the entire community, to make it easier for people to find destinations. The Walk [Your City] program highlighted one such program that could be implemented as part of this effort (see below).

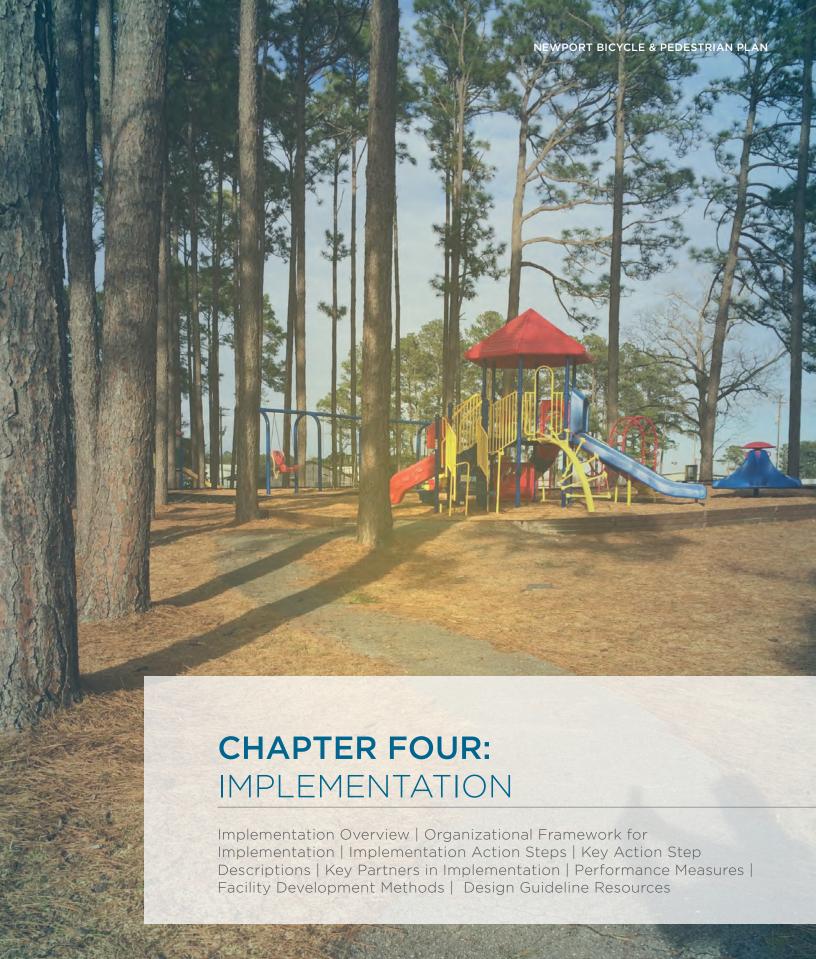
Bicycle route signs are another example of wayfinding signs, and could be installed along routes independently of other signage projects or as a part of a more comprehensive wayfinding improvement project. Posting signage that includes bicycle and walk travel times to major destinations can help to increase awareness of the ease and efficiency of bicycle and pedestrian travel.

For a step-by-step guide to help non-professionals participate in the process of developing and designing a signage system, as well as information on the range of signage types, visit the Project for Public Places website: www.pps.org/ reference/signage_guide





Road signage has traditionally been expensive and car-centered, leaving walkers and bikers by the wayside. Walk [Your City] lets anyone from citizens to corporations quickly and affordably promote healthy lifestyles, public safety, and human-centered transit. Walk Visit http://walkyourcity.org/ for more information.



IMPLEMENTATION OVERVIEW

This chapter defines a structure for managing the implementation of the Town of Newport Bicycle and Pedestrian Plan. Implementing the recommendations within this plan will require leadership and dedication to pedestrian and bicycle facility development on the part of a variety of agencies. Equally critical, and perhaps more challenging, will be meeting the need for a recurring source of revenue. Even small amounts of local funding are essential for matching and leveraging outside sources. Most importantly, the town need not accomplish the recommendations of this plan by acting alone; success will be realized through collaboration with regional and state agencies, the private sector, and nonprofit organizations. Funding resources that may be available to Newport are presented in Appendix A of this plan.

Given the present day economic challenges faced by local governments (as well as their state, federal, and private sector partners), it is difficult to know what financial resources will be available at different time frames during the implementation of this plan. However, there are still important actions to take in advance of major investments, including key organizational steps, the initiation of education and safety programs, and the development of strategic, lower-cost sidewalk and on-road bicycle facilities. Even just getting a project "shovel-ready" can be a huge step towards implementation, as many outside funding sources look more favorably upon projects that are already in public right-of-way, planned, and designed. Following through on these priorities will allow the key stakeholders to prepare for the development of larger pedestrian and trail projects over time, while taking advantage of strategic opportunities as they arise.

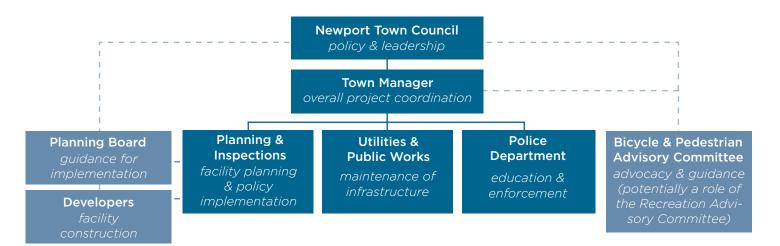


Members of the Newport Bicycle and Pedestrian Plan Steering Committee and/or the Newport Recreation Advisory Committee could be good candidates for a standing Bicycle and Pedestrian Advisory Committee (BPAC) during plan implementation

ORGANIZATIONAL FRAMEWORK FOR IMPLEMENTATION

The key players and steps involved in implementation are summarized in this organizational framework, and in Table 4-1 that follows.

Figure 4.1 Organizational Framework for implementation



Potential Partnerships in Implementation for the Town of Newport

Municipal, Regional, and DOT Partners:

Neighboring Towns: coordinate on

Down East RPO: coordinate with TIP and

NCDOT Division 2: coordinate on facility

Local Residents, Advocacy Groups, Civic Associations, and other Regional Partners

Table 4.1 Implementation Action Steps

TASK	LEAD	SUPPORT	DETAILS	PHASE
		ADMINISTRAT	IVE ACTION STEPS	
Present this plan to Town Council.	Project Consul- tants	Town Manager, Project Steer- ing Committee	Presentation to Town Council in Fall 2016.	Short-term (2017)
Approve this plan.	NCDOT Bike/Ped Division	Project Consultants	Official letter of approval in Fall 2016.	Short-term (2017)
Adopt this plan.	Town Council	Town Manager, Project Consultants	Through adoption, the Plan becomes an official planning document of the Town. Adoption does not commit the town to dedication of funding, but rather shows intention to support plan implementation over time. It also signals to outside funding groups that Newport has undergone a successful, supported planning process, which is key to securing outside funding. See page 76 for more information.	Short-term (2017)
Designate staff to lead this effort.	Town Council	Town Manager	The Town Manager and the Town Planning Director are identified as the leads on most tasks below, until other staff are designated. See page 76 for more information.	Short-term (2017)
Designate an advisory committee for the implementation of this plan.	Town Council	Town Manager, Project Steering Committee, Recreation Advisory Committee	Options include: A) using the Town's current Recreation Advisory Committee, B) forming a subcommittee from the Recreation Advisory Committee for bicycle and pedestrian issues, or C) forming a new separate committee for these issues, as the Bicycle and Pedestrian Advisory Committee (called BPAC). Whichever group is designated, they should focus on implementation of this plan. For the purpose of these action steps, this group will be referred to as "BPAC" below. See page 76 for more information.	Short-term (2017)
Communicate the goals of this plan and its top priority projects to other local and regional groups.	Town Manager	BPAC and Down East RPO	The purpose of this step is to network with potential project partners, and to build support for implementing the top projects. Possible groups to receive a presentation: Down East RPO, Carteret County Comprehensive Transportation Plan representatives, Carteret County Health Department, Carteret County Partnership for Children (SHAPE Carteret), Carteret County School Health Advisory Council (SHAC), Carteret Economic Development Council, NCDOT Planning Branch, etc.	Short-term/ Ongoing (Beginning 2017)
Begin annual meeting with key project partners.	Town Manager	NCDOT, BPAC, and local & regional stakeholders	Key project partners (see org. chart on page 71) should meet on an annual basis to evaluate the implementation of this Plan. Meetings could also include on-site tours of priority project corridors.	Short-term/ Ongoing (Fall 2017)
Plan Update	Town Council & BPAC	Planning & Inspections	This plan should be updated by 2021 (about five years from adoption). If many projects and programs have been completed by then, a new set of priorities should be established. If not, a new implementation strategy should be established.	Long-Term (2021)

Table 4.1 Implementation Action Steps (Continued)

TASK	LEAD	SUPPORT	DETAILS	PHASE			
INFRASTRUCTURE & FUNDING ACTION STEPS							
Locate the 2008 engineering drawings for the proposed path to Newport Middle School.	Planning Director	NCDOT Division of Bicycle and Pedestrian Transportation	In 2008, the Town of Newport applied for a Safe Routes to School project (Appendix C) that aligns this plan's top priority project (with updated facility recommendations). Engineering drawings for this project were completed in 2008, but no copy of them was found during this 2016 planning process. These drawings would be a valuable resource in developing an updated design of this top project.	Short-term (2017)			
Begin Priority Project #1.	Town Manager, Town Council	Private contractors/ designers/ engineers	Dedicate funding, seek proposals, and hire a contractor for a site survey, construction documents, and permitting. Confirm that the project can be designed completely within existing public right-of-way, and secure easements if needed. When design is complete, select a phase of the project to be constructed first, based on costs and funding available at that stage. Send the project out to bid, select a contractor, and begin work.	Short-term (2017)			
Continue subsequent phases of Priority Project #1.	Town Manager, Town Council	Private contractors/ designers/ engineers	While the first phase is underway, begin identifying funding for the subsequent phases. After the first phase is complete, begin collecting bids for the next phase, and adjust cost estimates based on the experience/results of phase one. Proceed with subsequent phases until complete.	Mid-term (2018- 2020)			
Ensure that priority projects are incorporated in NCDOT's prioritization process.	Down East RPO	Town Manager, NCDOT Division 2	The RPO, the Town of Newport, and NCDOT Division 2 should coordinate to fund this plan's recommendations over time. Use the plan cutsheets and recommendation maps to communicate project details.	Short-term (2017)			
Pursue fund- ing through NC Parks and Recre- ation Trust Fund (PARTF).	Town Manager & Planning Director	BPAC	Review NC Parks and Recreation Trust Fund requirements and attend an informational workshop. PARTF funding announcements are made in August. Visit www.ncparks.gov for more information	Short-term (2017)			
Learn about the design of different facility types.	Town Manager and NCDOT Division 2	BPAC, Planning Board	Become familiar with the design resources listed at the end of this chapter.	Short-term (2017)			
Seek multiple funding sources and facility development options.	Town Manager & Planning Director	Town Council, BPAC, Planning Board, NCDOT Division 2, Down East RPO	Chapter 3 contains project cost estimates and Appendix A contains potential funding opportunities. See page 83 for more on development options.	Short- term/On- going (2017 onward)			
Develop a long- term funding strategy	Town Manager & Town Council	Down East RPO, NCDOT Division 2	To allow continued development of the project recommendations, capital funds for bicycle and pedestrian facility construction should be set aside every year. Powell Bill funds should be programmed for facility construction. Funding for an ongoing maintenance program should also be included in the Town's operating budget.	Short- term/On- going (2017 onward)			

Table 4.1 Implementation Action Steps (Continued)

TASK	LEAD	SUPPORT	DETAILS	PHASE
	INFRASTRUC		G ACTION STEPS (CONTINUED)	
Maintain bicycle & pedestrian facilities.	Utilities & Public Works	BPAC & General Public (for re- porting mainte- nance needs)	Newport should maintain existing and future bicycle and pedestrian facilities, pavement markings, and sidewalks, working with NC-DOT where necessary.	Short- term/On- going (2017 onward)
Improve crossing facilities across US 70.	NCDOT Division 2	Town Manager, NCDOT Bike/Ped Division	Town and NCDOT Division 2 to coordinate on design of future improvements to US 70 to ensure they accommodate pedestrian movement across the intersections	Mid-term (2017-2019)
Install bike racks at key destinations in town.	Utilities & Public Works	Town Manager & BPAC	Install bike racks at parks, public buildings, schools, shopping centers, and other important destinations (see destinations shown on Map 2.1, for example)	Mid-term (2017-2019)
Complete additional priority projects.	Town Manager & NCDOT Division 2	Down East RPO, NCDOT Bike/Ped Division	Follow similar steps as described in this table for Priority Project 1. Chapter 3 provides info on the Priority Projects. Aim to complete all three by the end of 2021.	Mid- to Long-term (2020- 2021)
Coordinate with NCDOT Division 2 on their 3-year road resurfacing schedule (and any short term changes to it) to accomplish projects that require pavement markings.	Town Manager & BPAC	NCDOT Division 2	Resurfacing is a very important part of implementing bike facilities (particularly in RPO communities) and comes at very little cost. It is essential for implementation that the Town stay in close touch with NCDOT Division 2 Operations and Maintenance staff to stay on top of the resurfacing schedule and keep closely abreast of any updates or changes to the schedule. Checking in with the Division at least once every quarter is not too often. Additionally, BPAC should include quarterly reviewing the three-year resurfacing/restriping schedule from Division 3 to ensure there are no missed opportunities for project improvements to be made as this work proceeds.	Short- term/On- going (2017 onward)
		POLICY AC	TION STEPS	
Update zoning and development ordinances to better support walking and bicycling.	Planning and Inspections	Town Council, Planning Board	See the recommended policies for the Newport zoning ordinance subdivision regulations on pages 31-34. If the Town can get assistance with this process through the NCDOT Division of Bicycle and Pedestrian Transportation, the Division of Community Assistance in Commerce (Little Washington office), or through a consultant.	Short-term (2017)
Develop new policies & approaches for implementation.	Planning and Inspections	Town Council, Planning Board	Establish land right-of-way acquisition mechanisms, coordinate development plans, & implement driveway access management (see page 78).	Short- term/On- going (2017 onward)
Notify Town Manager of upcoming roadway reconstruction, resurfacing, and restriping projects in Newport.	NCDOT Division 2, Down East RPO	Town Manager, Planning and Inspections	Provide sufficient time for comments (in advance of the design phase); Incorporate bicycle/pedestrian recommendations from this Plan into future updates to the CTP and into future project design plans.	Short- term/On- going (2017 onward)

Table 4.1 Implementation Action Steps (Continued)

TASK	LEAD	SUPPORT	DETAILS	PHASE
Educate and train law enforcement officers and others about the laws related to walking and bicycling in North Carolina, and help educate others.	Newport Police	NCDOT Bike/Ped Division, BPAC	Police staff should be familiar with state bicycle and pedestrian policies and laws, including best practices for reporting on crashes involving people walking or bicycling: https://www.ncdot.gov/bikeped/lawspolicies/ Also, the National Highway Traffic Safety Administration has made available a 2-hour self-paced interactive video training for all law enforcement officers: http://www.nhtsa.gov/Driving+Safety/Bicycles/Enhancing+Bicycle+Safety:+Law+Enforcement's+Role	Short-term (2017)
		PROGRAM A	CTION STEPS	
Launch new programs.	Town Manager & BPAC	NCDOT Bike/ Ped Division, Newport Police Department, Carteret County Health Department	These groups should coordinate to launch new programs, as described in Chapter 3, such as the hike & bike map, one-stop website, bicycle maintenance stand, and others (see pages 64-68).	Short- term/On- going (2017 onward)
Distribute bicycle and pedestrian safety information.	ВРАС	NCDOT Bike/Ped Division, Police Department	NCDOT has print material with safety tips for motorists, bicyclists and pedestrians available for download at www.ncdot.gov/bikeped/safetyeducation/materials/. Other methods of distribution could include web sites, social media, and 'on-the-ground' in park kiosks. The Watch for Me NC program is another resource for this task (discussed on page 64; with more information at Watch-ForMeNC.org).	Mid-term (2017-2019)
Conduct communication & outreach campaigns related to walking and bicycling.	BPAC	Local news- papers, Town website & social media mangers	BPAC should publicly announce their successes as progress is made. This could be achieved partly by establishing a page on the town website dedicated to bike/ped education and project updates (see page 65). Also, BPAC should calendar regular (annual) reports to the Town Board on progress measurements (as detailed on p. 83 under "Performance Measures")	Mid-term (2017-2019)
Consider reducing speed limits in some locations.	Town Council	NCDOT, BPAC	Consider lowering the speed limits along key corridors, such as along Chatham St/E Chatham St, Howard Blvd, and Nine Foot Rd (near the Food Lion shopping center). Installing temporary speed feedback signs is another traffic calming strategy.	Short- term/On- going (2017 onward)
Seek designation as a Bicycle-Friendly Community & Walk- Friendly Community.	ВРАС	Town Manager	The development and implementation of this plan is an essential first step toward becoming a designated Bicycle-Friendly and Walk-Friendly Community. With progress on program, policy, and infrastructure recommendations, the Town should be in a position to apply for and receive recognition by 2021. See page 79 for more information.	Mid- to Long-term (2020- 2021)

KEY ACTION STEP DESCRIPTIONS

ADMINISTRATIVE ACTION STEPS

ADOPT THIS PLAN

Before any other action takes place, the Town of Newport should adopt this plan. This should be considered the first step in implementation. Through adoption of this plan and its accompanying maps as the Town's official bicycle and pedestrian plan, Newport will be better able to shape transportation and development decisions so that they fit with the goals of this plan. Most importantly, having an adopted plan is extremely helpful in securing funding from state, federal, and private agencies. Adopting this plan does not commit Newport to dedicate or allocate funds, but rather indicates intent to implement this plan over time, starting with these action steps.

The Planning Board should review and recommend the plan to the Town Council, which in turn must consider and officially incorporate the recommended infrastructure improvements of this plan into its land-use plans. The following entities should adopt this plan:

- The Town of Newport
- Down East RPO

This plan and its recommended facilities should be approved by the NCDOT, and they should be included in the future planning of the NCDOT Planning Branch, the Division of Bicycle and Pedestrian Transportation (DBPT), and NCDOT Division 2. This plan's recommendations should also be integrated into an update to the Comprehensive Transportation Plan (CTP) for Carteret County. NCDOT should refer to this document when assessing the impact for future projects and plans. Likewise, Croatan National Park officials should refer to this plan in any projects for future state parks or trails near Newport.

DESIGNATE STAFF

The Town should designate staff to oversee the implementation of this plan and the proper maintenance of the facilities that are developed. It is recommended that the town manager or existing planning staff and maintenance/services staff oversee the day-to-day implementation of this plan. In many municipalities, a full-time bicycle and pedestrian coordinator covers this task, but in smaller towns, such as Newport, it makes more sense to fold these responsibilities into current staff responsibilities.

FORM AN ADVISORY COMMITTEE

The Town of Newport should form a bicycle and pedestrian advisory committee (BPAC) out of the plan's steering committee to assist in the implementation of this plan. The BPAC should have representation from active pedestrians and commuting and recreational cyclists and should champion the recommendations of this plan. The formation of this group would be a significant step in becoming designated as a Bicycle Friendly and Walk Friendly Community (see section that follows). The committee would provide a communications link between the residents of the community and local government. They should also continue to meet periodically, and be tasked with assisting Town staff in community outreach, marketing, and educational activities recommended by this plan.

As an alternative for a small town like Newport, members of the Town's existing Recreation Advisory Committee could fulfill this role (or a subcommittee of that group), working with Town staff on implementation of both the infrastructure and non-infrastructure elements of the plan.

COMMUNICATION AND OUTREACH

The BPAC should lead the effort to establish a communication campaign to celebrate successes as facilities are developed and otherwise raise awareness of the overall pedestrian and bicycle network and its benefits. A key first task of this group is to design and add a web page on the Town's current website. See page 63 for details.



An annual meeting with project partners will help the plan stay on track for years to come. Above: Steering Committee members discuss top projects at a draft plan meeting.

BEGIN ANNUAL MEETING WITH KEY PROJECT **P**ARTNERS

Coordination between key project partners will establish a system of checks and balances, provide a level of accountability, and ensure that recommendations are implemented. The Town of Newport should work with Down East RPO to organize this meeting and ensure key collaborative efforts are communicated. This meeting should include representatives from the Organizational Chart shown on page 69, particularly NCDOT Division 2 highway staff and the NCDOT Division 2 planning engineer. The purpose of the meeting should be to ensure that this plan's recommendations are integrated with other transportation planning efforts in the region, as well as long-range and current land use planning, economic development planning, and environmental planning. Attendees should work together to identify and secure funding necessary to immediately begin the first year's work, and start working on a funding strategy that will allow the Town to incrementally complete each of the suggested physical improvements, policy

changes and programs over a 5-10 year period. A brief progress benchmark memo should be a product of these meetings, and participants should reconfirm the plan's goals each year. The meetings could also occasionally feature special training sessions on pedestrian, on-road bicycle, and trail issues.

INFRASTRUCTURE & FUNDING **ACTION STEPS**

IDENTIFY FUNDING

Achieving the vision defined within this plan will require, among other things, a stable and recurring source of funding. Communities across the country that have successfully engaged in pedestrian and bicycle programs have relied on multiple funding sources to achieve their goals. No single source of funding will meet the recommendations identified in this Plan. Instead, stakeholders will need to work cooperatively with municipality, state, and federal partners to generate funds sufficient to implement the program.

Donations from individuals or companies are another potential source of funding. The BPAC or assigned commissioner/board member should establish an "Adopt a Trail" or "Adopt a Sidewalk" program as a mechanism to collect these donations for the development of sidewalk, trail and sidepath recommendations discussed in Chapter 3. This can include project components such as wayfinding signage. In addition to a formalized program, a website should be set up as an easy way for individuals to donate smaller amounts.

Federal and state grants should be pursued along with local funds to pay for necessary right-of-way acquisition and project design, construction, and maintenance expenses. "Shovel-ready" designed projects should be prepared in the event that future federal stimulus funds become available. Additional recommended funding sources may be found in Appendix A.

SEEK MULTIPLE FUNDING SOURCES AND FACILITY DEVELOPMENT OPTIONS

Multiple approaches should be taken to support bicycle and pedestrian facility development and programming. It is important to secure the funding necessary to undertake priority projects but also to develop a long-term funding strategy to allow continued development of the overall system. Dedicated local funding sources will be important for the implementation of this plan. Capital and local funds for pedestrian facilities and trail construction should be set aside every year, even if only for a small amount. Small amounts of local funding can be matched to outside funding sources or could be used to enhance NCDOT projects with bicycle and pedestrian features that may otherwise not be budgeted for by the state. A variety of local, state, and federal options and sources exist and should be pursued.

A priority action is to immediately evaluate the recommendations against transportation projects that are currently programmed in the Transportation Improvement Program (TIP) to see where projects overlap, compliment, or conflict with each other. The Town should also evaluate which of the proposed projects could be added to future TIP updates, and should coordinate closely with NCDOT Division 2 and the Down East RPO on priority projects.

> See Appendix A: Funding Resources for more on this topic.

POLICY ACTION STEPS

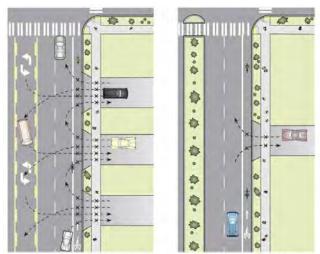
COORDINATE DEVELOPMENT PLANS

The Town of Newport should ensure that adopted bicycle, pedestrian, trail and multiuse path recommendations from this plan are included in future residential and commercial developments that connect with such proposed facilities. See Chapter 2 for an analysis of the Town's existing policies and recommendations for improvement.

IMPLEMENT DRIVEWAY ACCESS MANAGEMENT

Newport should consider adding access management language to the town ordinances for both future development and retrofits to existing development, especially high-volume corridors. The NCDOT's policy on 'Street and Driveway Access to North Carolina Highways' provides examples on how to reduce conflict points between motor vehicles and pedestrians and bicyclists. For more information: www. ncdot.org/doh/preconstruct/altern/value/manuals/pos.pdf

High numbers of driveways or conflict points are unsafe and hostile to bicyclists and pedestrians. Limiting 200 ft between curb cuts will significantly enhance bicycle and pedestrian travel.



Uncontrolled access (left) creates more conflict points at every driveway. Medians and consolidated driveways reduce conflift points (right).

ADOPT A COMPLETE STREETS POLICY

There is a growing national trend towards integrating bicycling, walking, and transit as a routine element in highway and transit projects. This movement has developed under the name of "Complete Streets." which is defined by the Complete the Streets Coalition as follows:

"Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and bus riders of all ages and abilities are able to safely move along and across a complete street."

The Safe Routes to School National Partnership (SRTSNP) can assist the Town's efforts in writing Complete Streets policy. Technical assistance can range from providing resources to assistance in creating marketing campaigns and Complete Streets language.

Appendix B outlines a draft Complete Streets policy for consideration by the Town of **Newport.** By adopting a "Complete Streets" policy, the Town would be committing to developing new roadways and reconstructing existing roadways to accommodate all users.

PROGRAM ACTION STEPS

LAUNCH NEW PROGRAMS

Education, encouragement, and enforcement campaigns could also occur as new facilities are built, through cooperation between the Town, the BPAC, and groups such as walking and bicycling clubs. When an improvement has been made, the roadway environment has changed and proper interaction between motorists, bicyclists, and pedestrians is critical for the safety of all users. A campaign through local television, on-site enforcement, education events, and other methods will bring attention to the new facility, and educate, encourage, and enforce

proper use and behavior. Chapter 3 (pages 64-68) provides program ideas to choose from, some of which are included in the action steps table starting on page 72.

PROVIDE ENFORCEMENT AND EDUCATION TRAINING FOR POLICE OFFICERS

Law enforcement officers have many important responsibilities, yet pedestrians and bicyclists remain the most vulnerable forms of traffic. The Newport Police Department has been aware of this planning process, and should be involved in implementation. In many cases, citizens (and even sometimes officers) are not fully aware of state and local laws related to bicyclists and pedestrians. Training on this topic can lead to additional education and enforcement programs that promote safety. Training for Newport's officers could be done through free online resources available from the National Highway Traffic Safety Administration (NHTSA) (see http://www.nhtsa. gov/Driving+Safety/Bicycles/Enhancing+Bicycle +Safety:+Law+Enforcement's+Role).

Another option is to apply to participate in future Watch for Me, NC campaigns offered by the NCDOT Bike/Ped Division. A key component of the campaign is to offer bicycle and pedestrian law enforcement training to local police officers.

BECOME DESIGNATED AS A WALK FRIENDLY AND BICYCLE FRIENDLY COMMUNITY

A goal for Newport should be to seek a "Bicycle Friendly Community" (BFC) designation from the League of American Bicyclists. The BFC campaign is an award program that recognizes municipalities that actively support bicycling activities and safety. A Bicycle Friendly Community provides safe accommodation for bicycling and encourages its residents to bicycle for transportation and recreation. Boone and Davidson are examples of small North Carolina towns that have become designated as Bicycle Friendly Communities.

Similarly, the Walk Friendly Community (WFC) Campaign is an awards program that recognizes municipalities that actively support pedestrian activity and safety. A Walk Friendly Community provides safe accommodation for walking and encourages its residents to walk for transportation and recreation. The program is maintained by the UNC Highway Safety Research Center's Pedestrian and Bicycle Information Center, with support from a variety of national partners.

Becoming designated as a Bicycle- and Walk-Friendly Community signals to current residents, potential residents, and visitors that the town is a safe and welcoming place for individuals and families to live and recreate. The development and implementation of this plan is an essential first step toward becoming a Walk- and Bicycle-Friendly Community.



With this plan and its top recommendations completed, the Town should be in a position to apply for and receive a bronzelevel BFC status and recognition as a Walk Friendly Community.



KEY PARTNERS IN IMPLEMENTATION

ROLE OF THE NEWPORT TOWN COUNCIL

The Town Council and Mayor will be responsible for adopting this plan. Through adoption, the Town's leadership is further recognizing the value of bicycle and pedestrian transportation and is putting forth a well-thought out set of recommendations for improving public safety and overall quality of life (see the 'Why This Plan is Important' section in Chapter 1). By adopting this plan, the Town Council is also signifying that they are prepared to support the efforts of other key partners in the plan's implementation, including the work of Town departments and NCDOT.

Adoption of this plan is in line with public support. Newport's online comment form for the planning process yielded over 200 responses and showed strong support for improving bicycling and pedestrian conditions.

ROLE OF THE NEWPORT **PLANNING BOARD**

The Newport Planning Board serves as an advisory board to the Town Council on matters of planning and zoning. The Planning Board should be prepared to:

- Become familiar with the recommendations of this plan, and support its implementation.
- Learn about pedestrian- and bicycle-related policies in North Carolina. (see: www.ncdot. gov/bikeped/lawspolicies/policies/)

ROLE OF NEWPORT PLANNING & INSPECTIONS

Planning & Inspections staff will take primary responsibility for interacting with staff leading new development projects to implement the plan (with support from the Public Utilities Department and Down East RPO). The staff should be prepared to:

- Communicate and coordinate with local developers on adopted recommendations for bicycle and pedestrian facilities, including paved multi-use trails.
- Become familiar with the design standards listed on page 86 of this plan.
- Secure encroachment agreements for work on NCDOT-owned and maintained roadways.
- Communicate and coordinate with Carteret County, Down East RPO, and neighboring municipalities on regional facilities; partner for joint-funding opportunities.
- Communicate and coordinate with NCDOT Division 2 on this plan's recommendations for NCDOT-owned and maintained roadways. Provide comment and reminders about this plan's recommendations no later than the design phase.
- Work with NCDOT Division 2 to ensure that when NCDOT-owned and maintained roadways in Newport are resurfaced or reconstructed, this plan's adopted recommendations for bicycle and pedestrian facilities are included on those streets. If a compromise to the original recommendation is needed, then contact NCDOT Division of Bicycle and Pedestrian Transportation for guidance on appropriate alternatives.
- Become familiar with bicycle and pedestrian-related policies in North Carolina. (see: www.ncdot.gov/bikeped/lawspolicies/ policies/)

ROLE OF THE BICYCLE AND PEDESTRIAN ADVISORY COMMITTEE (OR RECREATION ADVISORY COMMITTEE)

The Committee should be prepared to:

Meet with staff from Planning & Inspections and the Public Utilities Department; evaluate progress of the plan's implementation and offer input regarding pedestrian, bicycle, and trail-related issues.

- Assist Newport staff in applying for grants and organizing bicycle- and pedestrianrelated events and educational activities.
- Build upon current levels of local support for pedestrian and bicycle issues and advocate for local project funding.

ROLE OF THE LOCAL NCDOT **DIVISION 2**

Division 2 of the NCDOT is responsible for the construction and maintenance of pedestrian and bicycle facilities on NCDOT-owned and maintained roadways in Newport, or is expected to allow for the Town to do so with encroachment agreements. The Town should be proactive and take the lead in communicating with and working with Division 2, but Division 2 should also be prepared to do the following, as they are able:

- Recognize this plan as not only an adopted plan of the Town of Newport, but also as an approved plan of the NCDOT.
- Become familiar with the bicycle and pedestrian facility recommendations for NCDOT roadways in this plan (Chapter 3); take initiative in incorporating this plan's recommendations into the Division's schedule of improvements whenever possible.
- Become familiar with the design standards listed on page 86 of this plan; construct and maintain recommended facilities using the highest standards allowed by the State (including the use of innovative treatments on a trial basis).
- Notify the Town of Newport staff of all upcoming roadway reconstruction or resurfacing/restriping projects in town, no later than the design phase. Provide sufficient time for comments from the planning staff.
- If needed, seek guidance and direction from the NCDOT Division of Bicycle and Pedestrian Transportation on issues related to this plan and its implementation.

ROLE OF THE NEWPORT POLICE DEPARTMENT

The Newport Police Department is responsible for providing the community the highest quality law enforcement service and protection to ensure the safety of the citizens and visitors. The Police Department should be prepared to:

- Become experts on pedestrian-and bicycle related laws in North Carolina (see: www. ncdot.gov/bikeped/lawspolicies/laws/).
- Continue to enforce not only bicycle- and pedestrian-related laws, but also motorist laws that affect walking and bicycling, such as speeding, running red lights, aggressive driving, etc.
- Participate in bicycle- and pedestrian-related education programs.
- Review safety considerations as projects are implemented.

ROLE OF DEVELOPERS

Developers in Newport can play an important role in facility development whenever a project requires the enhancement of transportation facilities or the dedication and development of onroad bicycle facilities, sidewalks, trails or crossing facilities. Developers should be prepared to:

- Become familiar with the benefits, both financial and otherwise, of providing amenities for walking and biking (including trails) in residential and commercial developments.
- Revised development regulations should require that developers install bike and pedestrian infrastructure and/or contribute in-lieu fees as part of the subdivision review and approval process
- Be prepared to account for bicycle and pedestrian circulation and connectivity in future developments.

ROLE OF LOCAL & REGIONAL **STAKEHOLDERS**

Stakeholders for bicycle and pedestrian facility development and related programs, such as Carteret County, Down East RPO, and local organizations play important roles in the implementation of this plan.

Local and regional stakeholders should be prepared to:

- Become familiar with the recommendations of this plan, and communicate & coordinate with the Town for implementation, specifically in relation to funding opportunities, such as grant writing and developing local matches for facility construction.
- Down East RPO should work with Newport on populating the Strategic Transportation Improvement (STI) list with pedestrian and bicycle infrastructure projects.
- Carteret County should coordinate with the Town on trail development.
- Business owners and organizations should look for opportunities to partner on specific projects, such as streetscape improvements, or comprehensive signage and wayfinding projects.

ROLE OF LOCAL RESIDENTS. CLUBS AND ADVOCACY GROUPS

Local residents, clubs, and advocacy groups also play a role in the success of this plan. BPAC should be prepared to engage local residents and groups by:

- Asking for input regarding pedestrian and bicycling issues in Newport.
- Enlisting volunteers for bicycle- and pedestrian-related events and educational activities and/or to participate in such activities.
- Encouraging people to speak at Town Board meetings and advocate for local pedestrian and bicycle project and program funding.

ROLE OF VOLUNTEERS

Services from volunteers, students, and seniors, or donations of material and equipment may be provided in-kind, to offset construction and maintenance costs. Formalized maintenance agreements, such as adopt-a-trail/greenway or adopt-a-highway can be used to provide a regulated service agreement with volunteers.

Other efforts and projects can be coordinated as needed with senior class projects, scout projects, interested organizations, clubs or a neighborhood's community service to provide for many of the program ideas outlined in Chapter 3 of this plan. Advantages of utilizing volunteers include reduced or donated planning and construction costs, community pride and personal connections to the town's trail, bicycle, and pedestrian networks.

PERFORMANCE MEASURES (EVALUATION AND MONITORING)

Newport should establish performance measures to benchmark progress towards fulfilling the recommendations of this plan. BPAC should play a key role in presenting these performance measures in an annual evaluation update to Town Council. Performance measures could address the following aspects of pedestrian and bicycle transportation and recreation in Newport:

- Safety. Measures of pedestrian- and bicycle-related crashes and injuries.
- Facilities. Measures of how many pedestrian and bicycle facilities have been funded and constructed since the plan's adoption.
- Maintenance. Measures of existing sidewalk/crosswalk or bicycle facility deficiency or maintenance needs.
- Counts. Measures of pedestrian and/or bicycle traffic at specific locations.
- Education, Encouragement and Enforcement. Measures of the number of people who have participated in part of a pedestrian- or bicycle-related program since the plan's adoption.

FACILITY DEVELOPMENT METHODS

This section describes different construction methods for the proposed pedestrian and bicycle facilities outlined in Chapter 3. Note that many types of transportation facility construction and maintenance projects can be used to create new bicycle and pedestrian facilities. It is

much more cost-effective to provide bicycle and pedestrian facilities during roadway construction and re-construction projects than to initiate the improvements later as "retrofit" projects.

To take advantage of upcoming opportunities and to incorporate bicycle and pedestrian facilities into routine transportation and utility projects, Newport should keep track of NCDOT's projects and any other local transportation improvements. While doing this, town staff should be aware of the different procedures for state and local roads and interstates.

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) STRATEGIC TRANSPORTATION INVESTMENTS (STI)

The NCDOT's State Transportation Improvement Program is based on the Strategic Transportation Investments Bill, signed into law in 2013. The Strategic Transportation Investments (STI) Initiative introduces the Strategic Mobility Formula, a new way to fund and prioritize transportation projects.

The new Strategic Transportation Investments Initiative was fully implemented in 2015. Projects scheduled for construction before then will proceed as scheduled under the current Equity Formula. Projects slated for construction after that time will be ranked and programmed according to the new formula. The new Strategic Mobility Formula assigns projects for all modes into one of three categories: 1) Statewide Mobility, 2) Regional Impact, and 3) Division Needs.

All independent bicycle and pedestrian projects are placed in the "Division Needs" category, and are currently ranked based on 50% data (safety, access, demand, connectivity, and cost effectiveness) and 50% local input. See Appendix A for more information.

RESIDENTIAL AND COMMERCIAL **DEVELOPMENT**

The construction of sidewalks, bicycle facilities, trails, and safe crosswalks should be required during development. Construction of facilities that corresponds with site construction is more cost-effective than retrofitting. In commercial development, emphasis should also be focused on safe pedestrian and bicyclist access into, within, and through large parking lots. This ensures the future growth of the pedestrian and bicycle networks and the development of safe communities.

LOCAL ROADWAY CONSTRUCTION OR RECONSTRUCTION

Pedestrians and bicyclists should be accommodated any time a new road is constructed or an existing road is reconstructed. In the longer-term, all new roads with moderate to heavy motor vehicle traffic should have sidewalks, bicycle facilities, and safe intersections. However, side paths can be an acceptable solution when a road has few driveways and high-speed, high-volume traffic.

Also, case law surrounding the Americans with Disabilities Act (ADA) has found that roadway resurfacing constitutes an alteration, which requires the addition of curb ramps at



intersections where they do not yet exist. The Department of Justice and the Federal Highway Administration recently released guidance on the Title II of the ADA requirement to provide curb ramps when streets, roads, or highways are altered through resurfacing. More information is available on the following website:

http://www.ada.gov/doj-fhwa-ta.htm.

REPAVING

Repaving projects provide a clean slate for revising pavement markings. When a road is repaved, the roadway should be restriped to create narrower lanes and provide space for bike lanes and shoulders, where feasible. In addition, if the spaces on the sides of non-curb and gutter streets have relatively level grades and few obstructions, the total pavement width can be widened to include paved shoulders.

NCDOT provides three-year plans that include resurfacing schedules. Please see the following website - https://connect.ncdot.gov/resources/ Asset-Management/HMIP-Plans/Pages/HMIP. aspx. According to both the 2016-2018 and 2017-19 HMIP Plans, there are no scheduled maintenance projects for state roads in Newport at this time (mid-2016).

BRIDGE CONSTRUCTION OR REPLACEMENT

Provisions should always be made to include a walking and bicycling facility as a part of vehicular bridges. In Newport, the only bridge that is of concern for future bicycle and pedestrian travel is over the Newport River, on E. Chatham Street. NCDOT's "List of Bridges and Current Status" lists this bridge (which was built in 1922) as functionally obsolete, but not structurally deficient.

A new or replacement bridge over the Newport River in this location should accommodate twoway travel for all users, including walking and bicycling. Even though bridge construction and replacement does not occur regularly, it is important to consider these policies for long-term bicycle and pedestrian planning. NCDOT bridge policy states that sidewalks shall be included on new NCDOT road bridges with curb and gutter approach roadways. A determination of providing sidewalks on one or both sides is made during the planning process.

TOWN EASEMENTS

Newport should explore opportunities to revise existing easements to accommodate public access greenway trail facilities. Adopting policy language to allow for public access for trail users, as a matter of right, on all new sewer and utility easements would greatly enhance the development of greenways. Sewer easements are very commonly used for this purpose, offering cleared and graded corridors that easily accommodate trails. This approach avoids the difficulties associated with acquiring land, and it better utilizes the Town's resources.



Coordination with a recent repaving project in Goldsboro, NC, allowed for an opportunity to restripe the road with buffered bicycle lanes, as shown above. This was a recommendation that came out of Goldsboro's Bicycle, Pedestrian, and Greenway Plan.

DESIGN GUIDELINE RESOURCES

Planners and project designers should refer to these standards and guidelines in developing the infrastructure projects recommended by this plan. The following resources are from the NCDOT website, for "Bicycle & Pedestrian Project Development & Design Guidance", located here:

https://connect.ncdot.gov/projects/BikePed/ Pages/Guidance.aspx

All resources listed below are linked through the web page listed above, retrieved in August 2016.

NATIONAL GUIDELINES

American Association of State Highway and Transportation Officials (AASHTO):

- » Guide for the Development of Bicycle **Facilities**
- » Guide for the Planning, Design, and Operation of Pedestrian Facilities

The Federal Highway Administration (FHWA):

- » Accessibility Guidance
- Design Guidance
- Facility Design
- **Facility Operations**

Manual on Uniform Traffic Control Devices (MUTCD):

- » Part 4E: Pedestrian Control Features
- Part 7: Traffic Controls for School Areas
- Part 9: Traffic Controls for Bicycle Facilities

National Association of City Transportation Officials (NACTO):

- » Urban Bikeway Design Guide
- Urban Street Design Guide

Safe Routes to School (SRTS)

Non-Infrastructure:

- National Center for Safe Routes to School
- National Partnership for Safe Routes to School

US Access board:

- » ABA Accessibility Standards
- ADA Accessibility Guidelines
- ADA Accessibility Standards
- » Public Rights-of-Way, Streets & Sidewalks, and Shared Use Paths

NORTH CAROLINA GUIDELINES

Manual on Uniform Traffic Control Devices (MUTCD):

- 2009 NC Supplement to MUTCD
- Part 7. Traffic Controls for School Areas
- Part 9: Traffic Controls for Bicycle Facilities

North Carolina Department of Transportation (NCDOT):

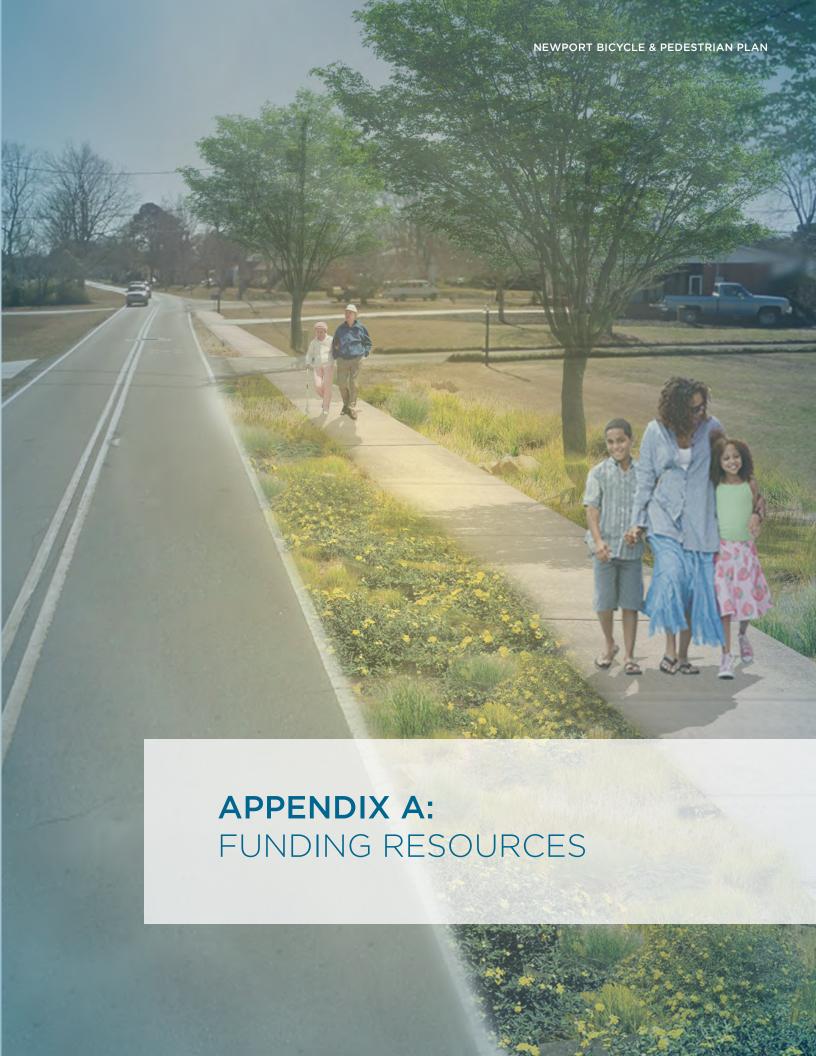
- » WalkBikeNC: The Statewide Pedestrian and Bicycle Plan
- » Glossary of North Carolina Terminology for Active Transportation
- NCDOT Complete Streets, including the Complete Streets Planning and Design Guidelines
- » Evaluating Temporary Accommodations for Pedestrians
- NC Local Programs Handbook
- Traditional Neighborhood Development Guidelines
- NCDOT Pedestrian Crossing Assessment Flowchart

Greenway Construction Standards:

- Greenway Standards Summary Memo
- Design Issues Summary
- Greenway Design Guidelines Value Engineering Report
- Summary of Recommendations
- » Minimum Pavement Design Recommendations for Greenways
- Steps to Construct a Greenway or Shared-Use Trail

Route Signing & Mapping

- Bike Maps and Routes
- Share the Road Initiative
- How to Select Routes
- NCDOT Bicycle Route Signing & Mapping Program



OVERVIEW

When considering possible funding sources for bicycle and 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 consider 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 non-profit 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 grants or direct appropriations. 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 construction of pedestrian and bicycle improvements.

FIXING AMERICA'S SURFACE TRANSPORTATION (FAST ACT)

In December 2015, President Obama signed the FAST Act into law, which replaces the previous Moving Ahead for Progress in the Twenty-First Century (MAP-21). The Act provides a longterm funding source of \$305 billion for surface transportation and planning for FY 2016-2020. Overall, the FAST Act retains eligibility for big programs - Transportation Investments Generating Economic Recovery (TIGER), Surface Transportation Program (STP), Congestion Mitigation and Air Quality (CMAQ), and Highway Safety Improvement Program (HSIP) - and funding levels between highways and transit.

In North Carolina, federal monies are administered through the North Carolina Department of Transportation (NCDOT) and Metropolitan Planning Organizations (MPOs). Most, but not all, of these programs are oriented toward transportation versus recreation, with an emphasis on reducing auto trips and providing intermodal connections. Federal funding is intended for capital improvements and safety and education programs, and projects must relate to the surface transportation system. For more information, visit: https://www.transportation.gov/ fastact

TRANSPORTATION ALTERNATIVES

Transportation Alternatives (TA) is a funding source under the FAST Act that consolidates three formerly separate programs under SAFETEA-LU: Transportation Enhancements (TE), Safe Routes to School (SRTS), and the Recreational Trails Program (RTP). These funds may be used for a variety of pedestrian, bicycle, and streetscape projects including sidewalks, bikeways, multi-use paths, and rail-trails. TA funds may also be used for selected education and encouragement programming such as Safe Routes to School, despite the fact that TA does not provide a guaranteed set-aside for this activity as SAFETEA-LU did.

Funding for the Surface Transportation Block Grant Program (STPBG) will grow from the current level of \$819 million per year to \$835 million in 2016 and 2017 and to \$850 million in 2018 through 2020.

The FAST Act provides \$84 million for the Recreational Trails Program. Funding is prorated among the 50 states and Washington D.C. in proportion to the relative amount of offhighway recreational fuel tax that its residents paid. To administer the funding, states hold a statewide competitive process. The legislation stipulates that funds must conform to the distribution formula of 30% for motorized projects, 30% for non-motorized projects, and 40% for

mixed used projects. Each state governor is given the opportunity to "opt out" of the RTP.

For the complete list of eligible activities, visit: http://www.fhwa.dot.gov/fastact/factsheets/stbqfs.cfm

For funding levels, visit: http://trade.railstotrails. org/index

SURFACE TRANSPORTATION PROGRAM

The Surface Transportation Program (STP) provides states with flexible funds which may be used for a variety of highway, road, bridge, and transit projects. A wide variety of pedestrian improvements are eligible, including trails, sidewalks, crosswalks, pedestrian signals, and other ancillary facilities. Modification of sidewalks to comply with the requirements of the Americans with Disabilities Act (ADA) is also an eligible activity. Unlike most highway projects, STP-funded pedestrian facilities may be located on local and collector roads which are not part of the Federalaid Highway System. 50 percent of each state's STP funds are allocated by population to the MPOs; the remaining 50 percent may be spent in any area of the state. For more information, visit http://www.fhwa.dot.gov/specialfunding/stp/

HIGHWAY SAFETY IMPROVEMENT PROGRAM

HSIP provides \$2.4 billion for projects and programs that help communities achieve significant reductions in traffic fatalities and serious injuries on all public roads, bikeways, and walkways. Bicycle and pedestrian safety improvements, enforcement activities, traffic calming projects, and crossing treatments for non-motorized users in school zones are eligible for these funds. For more information: http://www.fhwa.dot.gov/ fastact/factsheets/hsipfs.cfm

CONGESTION MITIGATION/AIR QUALITY PROGRAM

Congestion Mitigation/Air Quality Improvement Program (CMAQ) provides funding for projects and programs in air quality nonattainment and maintenance areas for ozone, carbon monoxide, and particulate matter which

reduce transportation related emissions. States with no non-attainment areas may use their CMAQ funds for any CMAQ or STP eligible project. These federal dollars can be used to build bicycle and pedestrian facilities that reduce travel by automobile. Purely recreational facilities generally are not eligible. Communities located in attainment areas who do not receive CMAQ funding apportionments may apply for CMAQ funding to implement projects that will reduce travel by automobile. For more information: hhttp://www. fhwa.dot.gov/fastact/factsheets/cmaqfs.cfm

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-seniorsindividuals-disabilities-section-5310

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 a shared-use path. However, intersection improvements (i.e. signalization, marking/upgrading crosswalks, etc.), on street bicycle facilities (bike lanes, wide paved shoulders, etc.) or off-street shared-use paths are also eligible for SRTS funds.

For more information: http://saferoutespartnership.org/healthy-communities/policy-change/ federal/FAST-act-background-resources

OTHER FEDERAL FUNDING **SOURCES**

PARTNERSHIP FOR SUSTAINABLE COMMUNITIES

Founded in 2009, the Partnership for Sustainable Communities (PSC) is a joint project of the Environmental Protection Agency (EPA), the U.S. Department of Housing and Urban Development (HUD), and the U.S. Department of Transportation (USDOT). The partnership aims to "improve access to affordable housing, more transportation options, and lower transportation costs while protecting the environment in communities nationwide."

The Partnership is based on five Livability Principles, one of which explicitly addresses the need for bicycle and pedestrian infrastructure ("Provide more transportation choices: Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation's dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health"). The Partnership is not a formal agency with a regular annual grant program. Nevertheless, it is an important effort that has already led to some new grant opportunities (including both TIGER I and TIGER II grants). North Carolina jurisdictions should track Partnership communications and be prepared to respond proactively to announcements of new grant programs. Initiatives that speak to multiple livability goals are more likely to score well than initiatives that are narrowly limited in scope to pedestrian improvement efforts. PSC 2015 Priorities include: using PSC agency resources to advance Ladders of Opportunity for every American and every community; helping communities adapt to a changing climate, while mitigating future disaster losses; and supporting implementation of community-based development priorities. For more information:

http://www.sustainablecommunities.gov/

http://www2.epa.gov/smart-growth/hud-dotepa-partnership-sustainable-communities

Resource for Rural Communities: http://www.sustainablecommunities.gov/sites/sustainablecommunities.gov/files/docs/federal resources rural. pdf

FEDERAL LAND AND WATER CONSERVATION FUND

The Land and Water Conservation Fund (LWCF) provides grants for planning and acquiring outdoor recreation areas and facilities, including trails. Funds can be used for right-of-way acquisition and construction. The program is administered by the Department of Environment and Natural Resources as a grant program for states and local governments. Maximum annual grant awards for county governments, incorporated municipalities, public authorities, and federally recognized Indian tribes are \$250,000. The local match may be provided with in-kind services or cash. For more information: http://www.ncparks. gov/About/grants/lwcf_main.php

RIVERS, TRAILS, AND CONSERVATION ASSISTANCE PROGRAM

The Rivers, Trails, and Conservation Assistance Program (RTCA) is a National Parks Service (NPS) program providing technical assistance via direct NPS staff involvement to establish and restore greenways, rivers, trails, watersheds and open space. The RTCA program provides only for planning assistance—there are no implementation 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. This program may benefit trail development in North Carolina locales indirectly through technical assistance, particularly for community organizations, but is not a capital funding source. Annual application deadline is August 1st. For more information: http:// www.nps.gov/ncrc/programs/rtca/ or contact the Southeast Region RTCA Program Manager Deirdre "Dee" Hewitt at (404) 507-5691

FEDERAL LANDS TRANSPORTATION PROGRAM (FLTP)

The FLTP funds projects that improve access within federal lands (including national forests, national parks, national wildlife refuges, national recreation areas, and other Federal public lands) on federally owned and maintained transportation facilities. More than \$300 million per fiscal year has been allocated to the program for 2017 and 2018. For more information: https://flh.fhwa. dot.gov/programs/fltp/

ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANTS

The Department of Energy's Energy Efficiency and Conservation Block Grants (EECBG) may be used to reduce energy consumptions and fossil fuel emissions and for improvements in energy efficiency. Section 7 of the funding announcement states that these grants provide opportunities for the development and implementation of transportation programs to conserve energy used in transportation including development of infrastructure such as bike lanes and pathways and pedestrian walkways. Although the current grant period has passed, more opportunities may arise in the future. For more information: http:// www1.eere.energy.gov/wip/eecbg.html

TIGER DISCRETIONARY GRANTS

The U.S. Department of Transportation's (DOT) Transportation Investment Generating Economic Recovery (TIGER) discretionary grants are intended to fund capital investments in surface transportation infrastructure. The grant program focuses on "capital projects that generate economic development and improve access to reliable, safe, and affordable transportation for disconnected both urban and rural, while emphasizing improved connection to employment, education, services and other opportunities, workforce development, or community revitalization." Infrastructure improvement projects such as recreational trails and greenways with an emphasis on multi-modal transit qualify for this grant. Pre-Application deadlines are typically in

May, with final application deadlines in June. For more information: http://www.dot.gov/tiger

ECONOMIC DEVELOPMENT ADMINISTRATION

Under Economic Development Administration's (EDA) Public Works and Economic Adjustment Assistance programs, grant applications are accepted for construction, non-construction, technical assistance, and revolving loan fund projects. "Grants and cooperative agreements made under these programs are designed to leverage existing regional assets and support the implementation of economic development strategies that advance new ideas and creative approaches to advance economic prosperity in distressed communities." Application deadlines are typically in March and June.

For more information: http://www.eda.gov/ funding-opportunities/files/2015-EDAP-FFO-Fact-Sheet.pdf

ENVIRONMENTAL SOLUTIONS FOR COMMUNITIES GRANT PROGRAM

The National Fish and Wildlife Foundation (NFWF) and Wells Fargo seek to promote sustainable communities through Environmental Solutions for Communities by supporting highly-visible projects that link economic development and community well-being to the stewardship and health of the environment. Priority for grants to projects that successfully address one or more of the following:

- Support innovative, cost-effective programs that enhance stewardship on private agricultural lands to enhance water quality and quantity and/or improve wildlife habitat for species of concern, while maintaining or increasing agricultural productivity.
- Support community-based conservation projects that protect and restore local habitats and natural areas, enhance water quality, promote urban forestry, educate and train community leaders on sustainable practices, promote related job creation and

training, and engage diverse partners and volunteers.

- Support visible and accessible demonstration projects that showcase innovative, cost-effective and environmentally-friendly approaches to improve environmental conditions within urban communities by 'greening' traditional infrastructure and public projects such as storm water management and flood control, public park enhancements, and renovations to public facilities.
- Support projects that increase the resiliency of the Nation's coastal communities and ecosystems by restoring coastal habitats, living resources, and water quality to enhance livelihoods and quality of life in these communities.
- In North Carolina, strong preference will be given to projects located in the regions of Charlotte, Raleigh, or Winston Salem.

For more information: http://www.nfwf.org/ environmentalsolutions/Pages/2015rfp.aspx#. VS-8SPnF-Bw

STATE FUNDING SOURCES

There are multiple sources for state funding of bicycle and pedestrian transportation projects. However, beginning July 1, 2015, state transportation funds cannot be used to match federallyfunded transportation projects, according to a law passed by the North Carolina Legislature.

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (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 the Strategic Mobility Formula, a new way of allocating available revenues based on data-driven scoring and local input. It was used for the first time to develop NCDOT's current construction schedule, the 2016-2025 State Transportation Improvement Program (STIP).

The STIP, which identifies the transportation projects that will receive funding during a 10-year period, is a state and federal requirement. Federal law requires it to be updated at least every four years. NCDOT, however, updates it every two years. Work is currently underway to update the STIPfor 2018-2027.

The new Strategic Mobility Formula funds projects in three categories: Division Needs, Regional Impact, and Statewide Mobility.



STI Revenue Distribution (Source: www. ncdot.gov/strategictransportationinvestments)

All independent bicycle and pedestrian projects are placed in the "Division Needs" category, and are currently ranked based on 50% data (safety, access, demand, connectivity, and cost effectiveness) and 50% local input, with a breakdown as follows:

SAFETY 15%

- Definition: Projects or improvements where bicycle or pedestrian accommodations are non-existent or inadequate for safety of users
- How it's measured: Crash history, posted speed limits, and estimated safety benefit
- Calculation:
 - » Bicycle/pedestrian crashes along the corridor within last five years: 40% weight
 - » Posted speed limits, with higher points for higher limits: 40% weight
 - » Project safety benefit, measured by each specific improvement: 20% weight

Access 10%

- Definition: Destinations that draw or generate high volumes of bikes/pedestrians
- How it's measured: Type of and distance to destination

DEMAND 10%

- Definition: Projects serving large resident or employee user groups
- How its measured: # of households and employees per square mile within 1 ½ mile bicycle or ½ mile pedestrian facility + factor for unoccupied housing units (second homes)

CONNECTIVITY 10%

- Definition: Measure impact of project on reliability and quality of network
- How it's measured: Creates score per each Strategic Transportation Investments based on degree of bike/ped separation from roadway and connectivity to similar or better project type

Cost Effectiveness 5%

- Definition: Ratio of calculated user benefit divided by NCDOT project cost
- How it's measured: Safety + Demand + Access + Connectivity)/Estimated Project Cost to NCDOT

LOCAL INPUT 50%

- Definition: Input from MPO/RPOs and NCDOT Divisions, which comes in the form points assigned to projects.
- How it is measured: Base points + points for population size. A given project is more likely to get funded if it is assigned base points from both the MPO/RPO and the Division, making the need for communicating the importance of projects to these groups critical. Further, projects that have a local match will score higher.

ADDITIONAL BICYCLE AND PEDESTRIAN PROJECT REQUIREMENTS:

- Federal funding typically requires a 20% non-federal match
- State law prohibits state match for bicycle and pedestrian projects (except for Powell Bill). Since state law prohibits state monies from being the match for bicycle and pedestrian projects, the Town will need to supply the 20% match from other sources, such as the Town's own funds, matching grants, etc.
- Limited number of project submittals per MPO/ RPO/Division
- Minimum project cost requirement is \$100,000
- Bike/Ped projects typically include: bicycle lanes, multi-use path/greenway, paved shoulders, sidewalks, pedestrian signals, SRTS infrastructure projects, and other streetscape/multi-site improvements (such as median refuge, signage, etc.)

These rankings largely determine which projects will be included in NCDOT's State Transportation Improvement Program (STIP). The STIP is a federally mandated transportation planning document that details transportation planning improvements prioritized by the stakeholders for inclusion in NCDOT's Work Program over the next 10 years. "More than 900 non-highway construction projects were prioritized for years 2015-2020, totaling an estimated \$9 billion. NCDOT will only have an estimated \$1.5 billion to spend during this time period." The STIP is updated every 2 years. The STIP contains funding information for various transportation divisions of NCDOT, including, highways, rail, bicycle and pedestrian, public transportation and aviation.

For more information on STIP: www.ncdot.gov/ strategictransportationinvestments/

To access the STIP: https://connect.ncdot.gov/projects/ planning/Pages/State-Transportation-Improvement-Program.aspx

For more about the STI process: http://www.ncdot.gov/ download/performance/performance_TheProcess.pdf

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. This is increasingly common with the adoption of NCDOT's "Complete Streets" Policy.

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, and usually with a local match. On-road bicycle accommodations, if warranted, typically do not require a local match.

"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 project. It also helps local government identify what their priorities are and how they might be able to pay for these projects. Under "Complete Streets" local governments may be responsible for a portion of the costs for bicycle and pedestrian projects. For more information: http://www.ncdot.gov/bikeped/funding/ process/

DUKE ENERGY WATER RESOURCES **FUND**

Duke Energy is investing \$10 million in a fund for projects that benefit waterways in the Carolinas. The fund supports science-based, researchsupported projects and programs that provide

direct benefit to at least one of the following focus areas:

- Improve water quality, quantity and conservation:
- Enhance fish and wildlife habitats:
- Expand public use and access to waterways; and
- Increase citizens' awareness about their roles in protecting these resources.

Newport could consider this resource for its proposed creekside greenways. For more information: http://www.duke-energy.com/community/ foundation/water-resources-fund.asp

CLEAN WATER MANAGEMENT TRUST FUND

The Clean Water Management Trust Fund is available to any state agency, local government, or non-profit 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.

The application deadline is typically in February. For more information: http://www.cwmtf. net/#appmain.htm

SPOT SAFETY PROGRAM

The Spot Safety Program is a state funded public safety investment and improvement program that provides highly effective low cost safety improvements for intersections, and sections of North Carolina's 79,000 miles of state maintained roads in all 100 counties of North Carolina. The Spot Safety Program is used to develop smaller improvement projects to address safety, potential safety, and operational issues. The program is funded with state funds and currently receives approximately \$9 million per state fiscal year. Other monetary sources (such as Small Construction or Contingency funds) can assist in funding Spot Safety projects, however, the maximum allowable contribution of Spot Safety funds per project is \$250,000.

The Spot Safety Program targets hazardous locations for expedited low cost safety improvements such as traffic signals, turn lanes, improved shoulders, intersection upgrades, positive guidance enhancements (rumble strips, improved channelization, raised pavement markers, long life highly visible pavement markings), improved warning and regulatory signing, roadside safety improvements, school safety improvements, and safety appurtenances (like guardrail and crash attenuators).

A Safety Oversight Committee (SOC) reviews and recommends Spot Safety projects to the Board of Transportation (BOT) for approval and funding. Criteria used by the SOC to select projects for recommendation to the BOT include, but are not limited to, the frequency of correctable crashes, severity of crashes, delay, congestion, number of signal warrants met, effect on pedestrians and schools, division and region priorities, and public interest. For more information: https://connect. ncdot.gov/resources/safety/Pages/NC-Highway-Safety-Program-and-Projects.aspx

POWELL BILL FUNDS

Annually, State street-aid allocations (Powell Bill Funds) are made to incorporated municipalities which establish their eligibility and qualify as provided by G.S. 136-41.1 through 136-41.4. Powell Bill funds shall be expended only for the purposes of maintaining, repairing, constructing, reconstructing or widening of local streets that are the responsibility of the municipalities or for planning, construction, and maintenance of bikeways or sidewalks along public streets and highways. Beginning July 1, 2015 under the Strategic Transportation Investments initiative, Powell Bill funds may no longer be used to provide a match for federal transportation funds such as Transportation Alternatives. Certified Statement, street listing, add/delete sheet and certified map from all municipalities are due between July 1st and July 21st of each year. Additional documentation is due shortly after. More information: https://connect.ncdot.gov/municipalities/State-Street-Aid/Pages/default.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). For more information: https://connect. ncdot.gov/resources/safety/Pages/NC-Highway-Safety-Program-and-Projects.aspx

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. 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. State Highway Applicants must use the web-based grant system to submit applications. For more information: http://www.ncdot.org/programs/ghsp/

EAT SMART, MOVE MORE NORTH CAROLINA COMMUNITY GRANTS

The Eat Smart, Move More (ESMM) NC Community Grants program provides funding to local communities to support their efforts to develop community-based interventions that encourage, promote, and facilitate physical activity. The current focus of the funds is for projects addressing youth physical activity. Funds have been used to construct trails and conduct educational programs. For more information: http://www.eatsmartmovemorenc.com/ Funding/Funding.html

THE NORTH CAROLINA DIVISION OF PARKS AND RECREATION - RECREATIONAL TRAILS AND ADOPT-A-TRAIL GRANTS

The North Carolina Division of Parks and Recreation and the State Trails Program offer funds to help 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 offhighway vehicle trails. "The Adopt-a-Trail Grant Program (AAT) awards \$108,000 annually to government agencies, nonprofit organizations

and private trail groups for trail projects. The Recreational Trails Program (RTP) is a \$1.3 million grant program funded by Congress with money from the federal gas taxes paid on fuel used by off-highway vehicles. Grant applicants must be able to contribute 20% of the project cost or in-kind contributions. Both grant applications are typically due in January or February. For more information: http://www.ncparks.gov/ About/trails grants.php

NC PARKS AND RECREATION TRUST FUND (PARTF)

The Parks and Recreation Trust Fund (PARTF) provide 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 inkind services, such as volunteer work, cannot be used as part of the match. Grant applications are typically due in February. For more information: http://www.ncparks.gov/About/grants/ partf_main.php



Carteret County was awarded PARTF funding for Fort Benjamin Park, above.

COMMUNITY DEVELOPMENT BLOCK **GRANT FUNDS**

Community Development Block Grant (CDBG) funds are available to local municipal or county governments that qualify for projects to enhance the viability of communities by providing decent housing and suitable living environments and by expanding economic opportunities, principally for persons of low and moderate income. State CDBG funds are provided by the U.S. Department of Housing and Urban Development (HUD) to the state of North Carolina. All North Carolina small cities are eligible to apply for funds except for 23 entitlement cities that receive funds directly from the U.S. Department of Housing and Urban Development (HUD) (Newport does not receive direct funds, so it is eligible to apply). Each year, CDBG provides funding to local governments for hundreds of critically-needed community improvement projects throughout the state. More information: https://www.nccommerce.com/ ruraldevelopment/state-cdbg/grant-categories

CLEAN WATER MANAGEMENT TRUST FUND (CWMTF)

This fund was established in 1996 and has become one of the largest sources of money in North Carolina for land and water protection, eligible for application by a state agency, local government, or non-profit. At the end of each year, a minimum of \$30 million is placed in the CWMTF. The revenue of this fund is allocated as grants to local governments, state agencies, and conservation non-profits to help finance projects that specifically address water pollution problems. Funds may be used for planning and land acquisition to establish a network of riparian buffers and greenways for environmental, educational, and recreational benefits. Deadlines are typically in February. For more information: http://www. cwmtf.net/#appmain.htm

SAFE ROUTES TO SCHOOL (SRTS)

SRTS is managed by NCDOT, but is federally funded; See Federal Funding Sources above for more information.

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 toward planning and establishing 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 a more effective and efficient management of urban and community forests. Grant requests should range between \$1,000 and \$15,000 and must be matched equally with non-federal funds. Grant funds may be awarded to any unit of local or state government, public educational institutions, approved non-profit 501(c)(3) organizations, and other tax-exempt organizations. First time municipal applicant and municipalities seeking Tree City USA status are given priority for funding. Grant applications are due by March 31 at 5:00 pm and recipients are notified by mid-July each year.

For more about Tree City USA status, including application instructions, visit: http://ncforestservice.gov/Urban/urban_grant_overview.htm

LOCAL GOVERNMENT **FUNDING SOURCES**

Municipalities often plan for the funding of pedestrian and bicycle facilities or improvements through development of Capital Improvement Program (CIP) or occasionally, through their annual Operating Budgets. In Raleigh, for example, the greenways system has been developed over many years through a dedicated source of annual funding that has ranged from \$100,000 to \$500,000, administered through the Recreation and Parks Department. CIPs should include all types of capital improvements (water, sewer, buildings, streets, etc.) versus programs for single purposes. This allows municipal decision-makers to balance all capital needs. Typical capital funding mechanisms include the capital reserve fund, capital protection ordinances, municipal service district, tax increment financing, taxes, fees, and bonds. Each category is described below. A variety of possible funding options available to North Carolina jurisdictions for implementing pedestrian and bicycle projects are also described below. However, many will require specific local action as a means of establishing a program, if not already in place.

CAPITAL RESERVE FUND

Municipalities have statutory authority to create capital reserve funds for any capital purpose, including pedestrian facilities. The reserve fund must be created through ordinance or resolution that states the purpose of the fund, the duration of the fund, the approximate amount of the fund, and the source of revenue for the fund. Sources of revenue can include general fund allocations, fund balance allocations, grants, and donations for the specified use.

CAPITAL PROJECT ORDINANCES

Municipalities can pass Capital Project Ordinances that are project specific. The ordinance identifies and makes appropriations for the project.

LOCAL IMPROVEMENT DISTRICT (LID)

Local Improvement Districts (LIDs) are most often used by cities to construct localized projects such as streets, sidewalks, or bikeways. Through the LID process, the costs of local improvements are generally spread out among a group of property owners within a specified area. The cost can be allocated based on property frontage or other methods such as traffic trip generation.

MUNICIPAL SERVICE DISTRICT

Municipalities have statutory authority to establish municipal service districts, to levy a property tax in the district additional to the town-wide property tax, and to use the proceeds to provide services in the district. Downtown revitalization projects are one of the eligible uses of service districts, and can include projects such as street. sidewalk, or bikeway improvements within the downtown taxing district.

TAX INCREMENT FINANCING

Project Development Financing bonds, also known as Tax Increment Financing (TIF) is a relatively new tool in North Carolina, allowing localities to use future gains in taxes to finance the current improvements that will create those gains. When a public project (e.g., sidewalk improvements) is constructed, surrounding property values generally increase and encourage surrounding development or redevelopment. The increased tax revenues are then dedicated to finance the debt created by the original public improvement project. Streets, streetscapes, and sidewalk improvements are specifically authorized for TIF funding in North Carolina. Tax Increment Financing typically occurs within designated development financing districts that meet certain economic criteria that are approved by a local governing body. TIF funds are generally spent inside the boundaries of the TIF district, but they can also be spent outside the district if necessary to encourage

development within it. Although larger cities use this type of financing more often, Woodfin, NC is an example of another small town that has used this type of financing.

OTHER LOCAL FUNDING OPTIONS

- Bonds/Loans
- Taxes
- Impact fees
- Exactions
- Installment purchase financing
- · In-lieu fees
- Partnerships

PRIVATE AND NON-PROFIT **FUNDING SOURCES**

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

UNION BANK

Union Bank is a community bank serving the north central North Carolina region with a location in Newport. Union Bank strives to make the communities it serves better by providing strong financial and customer service. With its strong commitment to the communities it serves, Union Bank is involved in a variety of different local projects.

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. The campaign was successful in 2013 in asking the North Carolina General Assembly to continue to support conservation efforts in the state. The state budget bill includes about \$50 million in funds for key conservation efforts in North Carolina. 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 ROBERT WOOD JOHNSON **FOUNDATION**

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

Grant making is concentrated in four areas:

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

Projects considered for funding typically are innovative and aim to create meaningful, transformative change. Project examples include: service demonstrations; gathering and monitoring of health-related statistics; public education; training and fellowship programs; policy analysis; health services research; technical assistance; communications activities; and evaluations. For more specific information about what types of projects are funded and how to apply, visit http:// www.rwjf.org/en/how-we-work/grants/what-wefund.html

NORTH CAROLINA COMMUNITY **FOUNDATION**

The North Carolina Community Foundation, established in 1988, is a statewide foundation seeking gifts from individuals, corporations, and other foundations to build endowments and ensure financial security for non-profit organizations and institutions throughout the state. Based in Raleigh, the foundation also manages a number of community affiliates throughout North Carolina, that make grants in the areas of human services, education, health, arts, religion, civic affairs, and the conservation and preservation of historical, cultural, and environmental resources. The foundation also manages various scholarship programs statewide. For more information: http://nccommunityfoundation.org/

WALMART STATE GIVING PROGRAM

The Walmart Foundation financially supports projects that create opportunities for better living. Grants are awarded for projects that support and promote education, workforce development/economic opportunity, health and wellness, and environmental sustainability. Both programmatic and infrastructure projects are eligible for funding. State Giving Program provides grants to 501(c)(3) organizations, ranging from \$25,000 to \$250,000. The program grant application deadline is May 1st. Online resource: http://foundation.walmart.com/ apply-for-grants/state-giving

RITE AID FOUNDATION GRANTS

The Rite Aid Foundation is a foundation that supports projects that promote health and wellness in the communities that Rite Aid serves. Award amounts vary and grants are awarded on a one year basis to communities in which Rite Aid operates. The Rite Aid Foundation focuses on three core areas for charitable giving: children's health and well-being; special community health and wellness needs; and Ride Aid's own community of associates during times of special need. Online resource: https://www.riteaid.com/ about-us/rite-aid-foundation

Z. SMITH REYNOLDS FOUNDATION

This Winston-Salem-based Foundation has been assisting the environmental projects of local governments and non-profits in North Carolina for many years. The Foundation focuses its grant making on five focus areas: Community Economic Development; Environment; Public Education; Social Justice and Equity; and Strengthening Democracy. Deadline to apply is typically in August. For more information: www. zsr.ora

BANK OF AMERICA CHARITABLE FOUNDATION, INC.

The Bank of America Charitable Foundation is one of the largest in the nation. There are numerous different initiatives and grant programs, yet the ones most relevant to increased recreational opportunities and trails are the Revitalizing Neighborhoods and Environment Programs. Starting in 2013, a new 10-year, \$50 billion goal to be a catalyst for climate change was launched. This initiative aims to spark the "innovation economy and advance a transition to a low-carbon future." For more information: www.bankofamerica.com/foundation

DUKE ENERGY FOUNDATION

Funded by Duke Energy shareholders, this nonprofit organization makes charitable grants to selected non-profits or governmental subdivisions. Each annual grant must have:

- An internal Duke Energy business "sponsor"
- A clear business reason for making the contribution

The grant program has several investment priorities: Education; Environment; Economic and Workforce Development; and Community Impact and Cultural Enrichment. Related to this project, the Foundation would support programs that support conservation, training, and research around environmental and energy efficiency initiatives. For more information: http:// www.duke-energy.com/community/foundation. asp

AMERICAN GREENWAYS EASTMAN KODAK AWARDS

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

NATIONAL TRAILS FUND

American Hiking Society created the National Trails Fund in 1998, the only privately supported national grants program providing funding to grassroots organizations working toward establishing, protecting and maintaining foot trails in America. 73 million people enjoy foot trails annually, yet many of our favorite trails need major repairs due to a \$200 million backlog of badly needed maintenance. National Trails Fund grants help give local organizations the resources they need to secure access, volunteers, tools and materials to protect America's cherished public trails. To date, American Hiking has granted more than \$588,000 to 192 different trail projects across the U.S. for land acquisition, constituency building campaigns, and traditional trail work projects. Awards range from \$500 to \$10,000 per project.

Projects the American Hiking Society will consider include:

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

Constituency building surrounding specific trail projects - including volunteer recruitment and support.

For more information: http://www.americanhiking.org/national-trails-fund/

THE CONSERVATION ALLIANCE

The Conservation Alliance is a non-profit organization of outdoor businesses whose collective annual membership dues support grassroots citizen-action groups and their efforts to protect wild and natural areas. Grants are typically about \$35,000 each. Since its inception in 1989, The Conservation Alliance has contributed \$4,775,059 to environmental groups across the nation, saving over 34 million acres of wild lands.

The Conservation Alliance Funding Criteria:

- The Project should be focused primarily on direct citizen action to protect and enhance our natural resources for recreation.
- The Alliance does not look for mainstream education or scientific research projects, but rather for active campaigns.
- All projects should be quantifiable, with specific goals, objectives, and action plans and should include a measure for evaluating success.
- The project should have a good chance for closure or significant measurable results over a fairly short term (within four years).

For more information: http://www.conservationalliance.com/grants

NATIONAL FISH AND WILDLIFE **FOUNDATION (NFWF)**

The National Fish and Wildlife Foundation (NFWF) is a private, non-profit, 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. A few of the most relevant programs for bicycle and pedestrian projects include Acres for America, Conservation Partners Program, and Environmental Solutions for Communities. Funding priorities include bird, fish, marine/ coastal, and wildlife and habitat conservation. Other projects that are considered include controlling invasive species, enhancing delivery of ecosystem services in agricultural systems, minimizing the impact on wildlife of emerging energy sources, and developing future conservation leaders and professionals.

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 have intentions 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

BLUE CROSS BLUE SHIELD OF NORTH CAROLINA FOUNDATION (BCBS)

Blue Cross Blue Shield (BCBS) focuses on programs that use an outcome approach to improve the health and well-being of residents. Healthy Places grant concentrates on increased physical activity and active play through support of improved build environment such as sidewalks. and safe places to bike. Eligible grant applicants must be located in North Carolina, be able to provide recent tax forms and, depending on the size of the non-profit, provide an audit. For more information: http://www.bcbsncfoundation.org/

ALLIANCE FOR BIKING & WALKING: ADVOCACY ADVANCE GRANTS

Bicycle and pedestrian advocacy organizations play the most important role in improving and increasing biking and walking in local communities. Rapid Response Grants enable state and local bicycle and pedestrian advocacy organizations to develop, transform, and provide innovative strategies in their communities. Since 2011, Rapid Response grant recipients have won \$100 million in public funding for biking and walking. The Advocacy Advance Partnership with the League of American Bicyclists also provides necessary technical assistance, coaching, and training to supplement the grants. For more information, visit www.peoplepoweredmovement.org

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. Municipalities typically create funds to facilitate and simplify a transaction from a corporation's donation to the given municipality. 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. Municipalities typically create funds to facilitate and simplify a transaction from an individual's donation to the given municipality. Donations are mainly received when a widely supported capital improvement program is implemented.

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 a greenway corridor. Individual volunteers from the community can be brought together with groups of volunteers form church groups, civic groups, scout troops and environmental groups to work on greenway development on special community workdays. Volunteers can also be used for fund-raising, maintenance, and programming needs.

INNOVATIVE FUNDING OPTIONS

Crowdsourcing "is the process of obtaining needed services, ideas, or content by soliciting contributions from a large group of people, and especially from an online community, rather than from traditional employees or suppliers."

For some success stories and ideas for innovative fundraising techniques: http://www.americantrails.org/resources/funding/TipsFund.html

TRAIL PARTNERSHIP CASE STUDIES IN THE CAROLINAS

Newport may be able to partner with the private sector for funding or sponsership for some aspects of this plan, whether it be for sidepath construction along E. Chatham Street, or even just the sigange that accompanies such a project. Some examples of trail partnerships in the Carolinas are provided below.

WILMINGTON/NEW HANOVER **COUNTY & BLUE CROSS BLUE** SHIELD (BCBS)

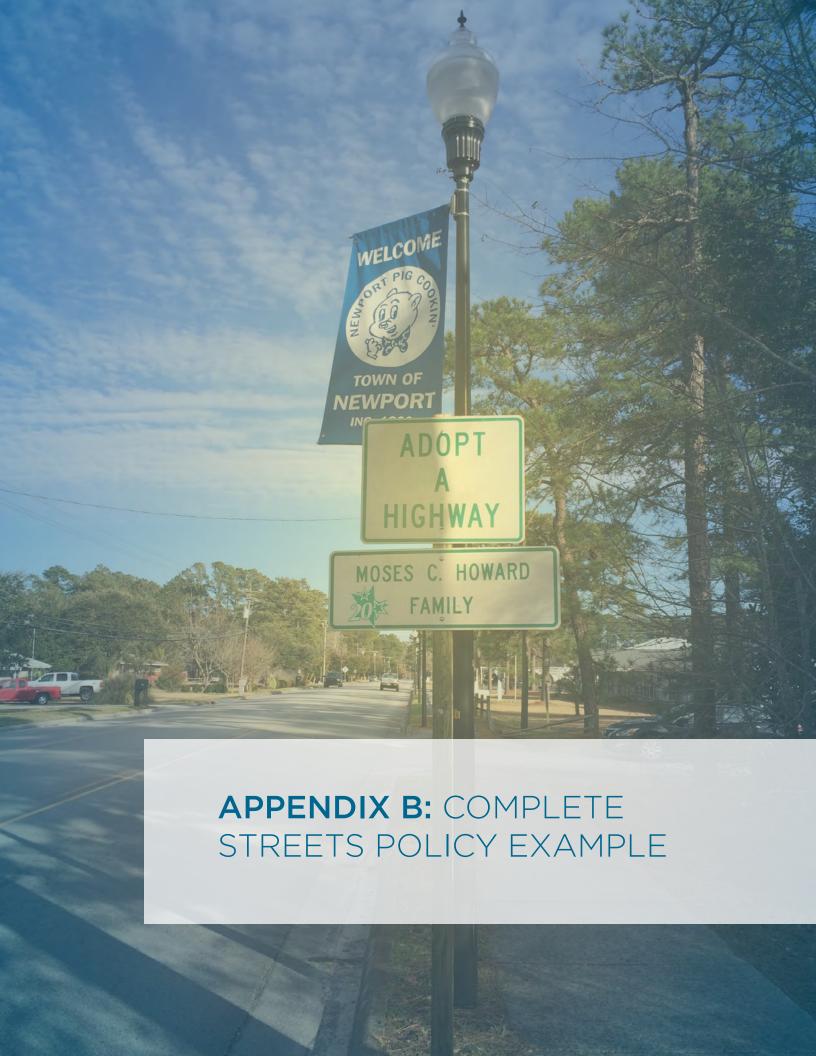
BCBSNC and their GO NC! program donated funds to complete the final phase of the 15-mile Gary Shell CrossCity Trail from Wade Park to the drawbridge at Wrightsville Beach. In addition to completing the trail, other enhancements include mile markers along the 15-mile trail and five bicycle fix-it stations along the trail. This partnership came about during development of the WMPO's Wilmington/New Hanover County Comprehensive Greenway Plan in 2012. Project contact: Amy Beatty, Superintendent, City of Wilmington Recreation & Downtown Services, 302 Willard Street, Wilmington, NC 28401; Phone: 910. 341.7855.

SPARTANBURG, SC & THE MARY **BLACK FOUNDATION**

The Mary Black Foundation Rail Trail was a collaboration between the Mary Black Foundation, Palmetto Conservation Foundation, City of Spartanburg, Partners for Active Living, SPATS, and local citizens. It extends from downtown Spartanburg at Henry Street, between Union and Pine Streets, and continues 2 miles to Country Club Road. Since its inception there has been buzz about redeveloping the Rail Trail corridor. The commuter and recreational trail brings together all walks of life, and connects neighborhoods, businesses, restaurants, a school, a bike shop, the YMCA, a grocery store, and a skate park. As the Hub City Connector segment of the Palmetto Trail through Spartanburg County, the Rail Trail is an outdoor transportation spine for Spartanburg from which other projects are expected to spin off. One great example is the first phase of B-cycle bicycle-sharing program located at the Henry Street trailhead. Project contact: Lisa Bollinger, Spartanburg Area Transportation Study, 366 North Church Street, Suite 700, Spartanburg, SC 29303; Phone: 864-596-3570.

SWAMP RABBIT TRAIL AND GREENVILLE HEALTH SYSTEM, GREENVILLE, SC

The Greenville Health System Swamp Rabbit Trail is a shared-use-path that runs along the Reedy River through Greenville County, connecting parks, schools, and local businesses. The GHS Swamp Rabbit has become very popular among residents and visitors for recreational and transportation purposes. The Greenville Heath System has become a private sponsor because of the health benefits offered by the trail as well as the branding opportunity achieved by having its name and logo on the trail's signs. The GHS Swamp Rabbit Trail continues to increase in size and popularity, with communities in neighboring counties making plans to extend the trail into their towns. Project contact: Ty Houck, Director of Greenways, Natural and Historic Resources, Greenville County Parks, Recreation and Tourism. 4806 Old Spartanburg Road, Taylors, SC 29687. Phone: 864-676-2180 ext. 141.



COMPLETE STREETS

In recent years, Complete Streets has been gaining nationwide attention and cities have been moving towards adopting and implementing Complete Streets policies. Newport should explore opportunities to adopt a Complete Streets policy to create safer, more accessible streets for residents and visitors.

What are Complete Streets?

Complete Streets calls for a safe, accessible transportation network that accommodates users of all ages and abilities, which encompasses bicyclists, pedestrians, transit riders, and motorists. The intent behind Complete Streets is that streets should be for everyone. To carry this vision out, a Complete Streets approach is integrated into the planning, design, construction, operation, and maintenance of the transportation system. In addition, Complete Streets redefines the goals a transportation agency is going to meet and how a community should prioritize funding. No single prescription exists in terms of what a complete street should look like. Examples of some elements of Complete Streets are crosswalks, sidewalks, bike lanes, bus shelters, and narrower travel lanes.

Why Complete Streets?

A Complete Streets approach can help reduce traffic-related injuries and fatalities. Traffic related injury is a major public health concern in the United States. According to the National Highway Traffic Safety Administration (NHTSA), 4,743 pedestrians were killed in 2012 and an estimated 76,000 were injured in traffic crashes. On average, a pedestrian was killed every 2 hours and injured every 7 minutes in traffic crashes. In 2012, 726 cyclists were killed and an additional 49,000 were injured in collisions with motor vehicles.

A major public health issue that Complete Streets addresses is the rise in obesity in the United States. Lack of infrastructure for physical activity hinders residents' opportunities to safely walk or bike. Safer streets that have pedestrian and bicyclist infrastructure in place offer opportunities for physical activity and recreation.

Complete Streets Policy

In April 2016, the National Complete Streets Coalition and Smart Growth American released a report that compiles the best examples of complete streets policies that were passed in 2015. At the time that the report was published, a total of 899 complete streets policies were in place in all 50 states. Small towns have passed 17% of all municipal policies.

Passing a policy is the first step to Complete Streets and signifies a community's intent to provide a safe and attractive transportation network. A policy would direct decision-makers to fund, plan, construct, operate, and maintain streets that accommodate all anticipated users, including people walking, bicycling, taking public transportation, and driving. Many types of policy statements can be considered as commitments to Complete Streets. They are legislation, resolutions, ordinances, executive orders, internal policies, policies adopted by an elected board, tax ordinances, comprehensive or master plans, and design guidance. Essential elements to a Complete Streets policy include vision, including all users and modes, all projects and phases, exceptions, network, jurisdiction, design, current and planned context, performance measures, and implementation steps.

After a policy is passed, implementation of the policy is a crucial step. Even with strong policies, communities still need to implement them and carry out projects that integrate Complete Streets.

NCDOT COMPLETE STREETS POLICY & PLANNING AND DESIGN **GUIDELINES**

The N.C. Department of Transportation adopted a "Complete Streets" policy in July 2009. The policy directs the Department to consider and incorporate several modes of transportation when building new projects or making improvements to existing infrastructure.

For detailed information, including training resources, project examples, related events, and a link to the NCDOT Planning and Design Guidelines, go to: www.completestreetsnc.org

MODEL COMPLETE STREETS POLICY

Commitment to safer and more accessible streets starts with a solid policy in place. With the wealth of information available and existing Complete Streets policies that have been adopted, Newport can build off of these policies and tailor them to fit its needs.

The Village of Lakemoor, Illinois, which has a population of 6,000 people, adopted a Complete Streets resolution in 2014. This policy was recogized as one of the best Complete Streets policies in 2014. Below are Sections 1 and 2 of Lakemoor's Complete Streets resolution, which covers goals and applicability. The full resolution can be found http://www.smartgrowthamerica.org/documents/cs/policy/cs-il-lakemoor-resolution.pdf

RESOLUTION NO. 14-R-11

A RESOLUTION ADOPTING THE VILLAGE OF LAKEMOOR COMPLETE STREETS POLICY

WHEREAS, transportation, quality of life, and economic development are all connected through well-planned, well designed, and context sensitive transportation solutions; and

WHEREAS, a Complete Street is defined as one that provides safe and convenient access for all users of the road, including pedestrians, bicyclists, transit users, and vehicular traffic; and

WHEREAS, the Village of Lakemoor views all transportation improvements as opportunities to connect neighborhoods, calm traffic and improve safety, provide greater access and mobility for users of the public way, and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system; and

WHEREAS, the Village of Lakemoor Comprehensive Plan promotes a transportation principal that Lakemoor residents should be able to drive, walk, or bike safely and conveniently throughout the Village for daily needs and activities.

WHEREAS, numerous jurisdictions in the United States have adopted Complete Streets Policies, including the State of Illinois, the Counties of Cook and Du Page, the Cities of Champaign, Chicago and Des Plaines, and the Villages of Arlington Heights, Oak Park and Forest Park; and

WHEREAS, the Village strives to provide transportation options to maximize the independence and mobility of its aging population;

NOW THEREFORE BE IT RESOLVED by the Village President and Village Board of Trustees of the Village of Lakemoor, Illinois that the Village of Lakemoor hereby adopts a Complete Streets Policy, the goals, elements, and procedures of which are as follows:

SECTION 1: Goals. Complete Streets can be achieved through network level improvements, through integration into single location projects, or incrementally, though a selies of small improvements or maintenance activities. Decisions regarding the public right-of-way shall promote use by pedestrians, bicyclists, public transit and motor vehicles, in a safe and effective manner taking into account the surrounding community context and land uses. The Village shall strive to create a comprehensive, integrated and connected network of transportation options for all modes of conveyance, designed and operated to enable approp1iate and safe access for all users.

SECTION 2: Applicability. The Complete Streets policy shall be applied to all projects involving roadway improvements and the movement of people when feasible. It is understood that there may be circumstances in which it may not be practical or feasible to apply the Policy. Such circumstances include the following:

- The scope of the relevant project is limited to maintenance activities intended to keep the roadway in serviceable condition.
- There is sufficient documentation that there is no feasible way to accommodate improvements for non-vehicular traffic with a project's scope.
- There is no documented current or anticipated need for accommodations of non motorized roadway user or the road is not a current or planned transit route.
- d. The cost for a particular Complete Street design recommendation would be excessively disproportionate to the need of that particular improvement, with due consideration given to future users, latent demand, and the social and economic value of providing a safer and more convenient transportation system for all users.
- Documented environmental constraints or unsafe transportation issue.

A "fee in lieu of ' by the applicant to the Village may be considered so that other areas in the community could benefit from complete streets elements. However, a written request justifying the reasons why a project cannot incorporate complete streets elements must be reviewed by the Complete Streets Committee and approved by the Village Board.



APPENDIX C:

LIST OF PUBLIC COMMENTS

(from the 2016 Public Comment Form question, "What are the top three locations for improving conditions for walking and bicycling in Newport?"

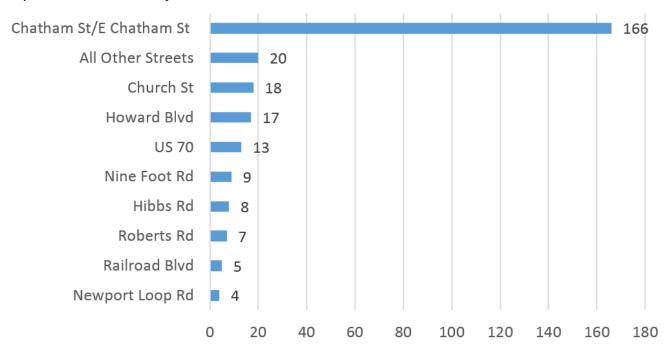
PUBLIC COMMENTS FROM THE 2016 PUBLIC COMMENT FORM QUESTION: "WHAT ARE THE TOP THREE LOCATIONS FOR IMPROVING CONDITIONS FOR WALKING AND BICYCLING IN **NEWPORT?**"

The tables below list the public responses to the question above, as part of this plan's comment form. These responses were collected during Spring/Summer 2016. More than 200 residents, property owners, employees, and visitors contributed their input. See Chapter 2, pages 35-42, for all other aspects of public input and input analysis.

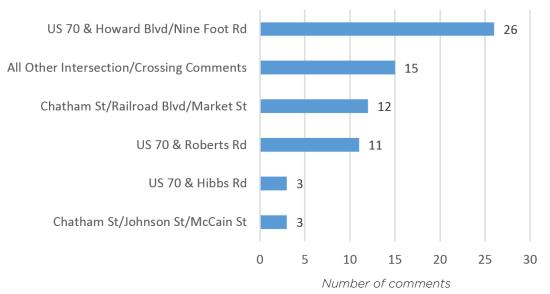
The results are organized and tallied by corridors and intersections. The top location that respondents listed was by far the Chatham Street/E Chatham Street corridor. This was reflected by input from the Steering Committee. who also were unanimous in their recommendation to concentrate priority improvements on this corridor. Other top locations included Church Street, Howard Street, and the US 70/ Howard Street intersection crossing.

Additionally, there were many other comments that were not related to specific corridors or intersections (mostly were too general to apply to a certain location, such as just the word "neighborhoods" or "downtown"). Some comments included unique concerns, such as dogs in some areas, and sidewalks with slopes on driveways; they also included unique requests, such as a desire to see more nature trails for kids.

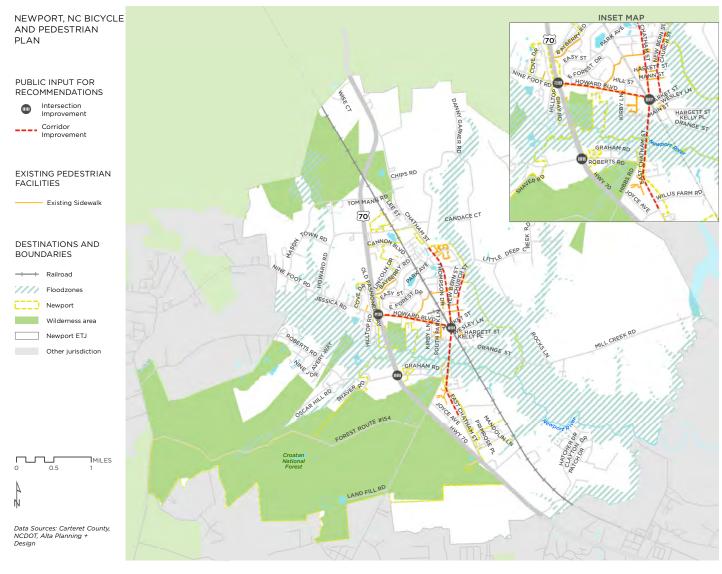
Top Corridors Identified by Public Comments



Top Intersections Identified by Public Comments



Public Input: Top Locations for Improvement



LIST OF COMMENTS: CORRIDORS

Responses listed verbatim. Responses with asterisks were not included in the total count, as they could potentially apply to multiple corridors. They are still listed with streets below for which they might apply.

CHATHAM STREET/ E CHATHAM STREET

- A bicycle lane/walk going to Fort Benjamin
- A sidewalk from newport elementary to newport middle
- » A way to get from town to Fort Benjamin safely
- All along Chatham St
- All of Chatham should have a sidewalk
- All of Chatham St
- All of Chatham St. Our Students deserve safe walking to school
- along Chatham street
- Along old hwy 70
- Areas around Newport Middle and Newport Elementary
- beside old hwy 70 on way from Newport towards middle school.. Some places no area beside road to ride when cars are on highway.
- between BP & Ft. Benjamin Park
- Between Gracelyn Park and Fort Benjamin
- between newport middle school and fort benjamin park
- Chatam Street
- Chatem Steet and Newport River Bridge
- Chatham
- Chatham
- Chatham
- Chatham
- Chatham
- Chatham
- Chatham st
- chatham heading towards more head city for ft Benjamin park
- Chatham st
- Chatham St
- Chatham St

- Chatham St
- Chatham st
- Chatham St
- Chatham St
- Chatham St
- Chatham St
- Chatham st
- Chatham st east from rr to ft benjamin
- Chatham St from intersection of RR tracks/ old Red n White to Ft Benjamin park
- Chatham st near fort benjamin
- Chatham St.
- Chatham St.
- Chatham Street
- Chatham Street Chatham street
- Chatham Street (Old Hwy 70)
- Chatham Street (where the sidewalk ends after Elem.)
- Chatham Street Downtown
- Chatham Street from Middle School to Main Street
- chatham street from newport elementary towards white sands
- chatham street from roberts road to town and to fort benjamin park
- Chatham Street from White Sands to Newport Elem
- Chatham street including East Chatham
- Chatham Street over Newport River Bridge
- Chatham Street to Fort Benjamin Park
- Chatham Street to the parks
- Chatham Street towards the middle school
- Chatham to Newport Middle School

- Chatham/Old 70 (extend sidewalk both ways)
- Connecting sidewalks from Howard Blvd to build new ones on old hwy 70 towards ft benjamin
- Down Chatham Street from the Hwy 70 turn off to at least Newport Elementary School
- Downtown area to Fort Benjamin Park
- Downtown area to Newport Middle School
- Downtown Chatham st west
- E Chatham St
- East Chatham and Newport River Bridge
- East Chatham Street
- East Chatham Street
- East Chatham to FT Benjamin from Howard Blvd. Need wider shoulder and a pedestrian bridge.
- Elementary school
- Elementary school to White Sands
- Expand sidewalk on Chatham on other side of Newport el
- Football/softball field
- fort benjamin
- Fort Benjamin Park
- Fort Benjamin Park
- Fort Benjamin Park
- Fort Benjamin park from railroad to park
- Fort Benjamin Park new bike lane and walking path
- From BP to Middle school
- From downtown to Fort Benjamin
- From Gracelyn park to Middle School
- From Middle School to town
- From the Railroad tracks at Chatham Street to Newport Middle School
- Ft benjamin park
- Ft. Benj.
- Ft. Benjamine area
- Improve side walks from old Red and White to White Sands
- In Town Chatam Street

- Jr high
- Middle School
- Middle school
- Middle School
- Need a side walk all the way to the middle school with lights
- need sidewalk from town out to Fort Benjamin
- Newport Elementary
- Newport Elementary School
- Newport Elementary School
- Newport Middle
- Newport Middle
- newport middle
- Newport middle school
- Newport Middle School and Ft. Ben. Area
- Newport Middle School area
- **Newport River**
- Newport River bridge needs a crosswalk
- Newport River Park
- Old 70
- Old 70
- Old 70
- Old 70 by middle school
- Old 70 from downtown out to Fort Benjamin Park and the middle school
- Old 70!
- Old hwy 70
- Old hwy 70 coming into Newport towards Ft Benjamin and then connecting to existing sidewalks
- People walking to Fort Benjamin Park
- Road that stretches from Ace Refridgeration to Ft Benjamin
- Schools
- Schools
- Schools

- Sidewalk access down Chatham Street past NES and all the way to NMS for students and families
- Sidewalk form Newport El to Fort Benjamin
- Sidewalk from Elementary school to garden center
- Sidewalk on ALL of Chatham- from elementary school to Fort Benjamin
- sidewalk repaired on Chatham St
- Sidewalk to Fort benjamin
- Sidewalk towards Newport middle towards park
- Sidewalk, bicycle lane going to Fort Benjamin
- Sidewalk, bicycle lane going to Newport Middle
- Sidewalk/bridge on Chatham Street from CM Hill hardware to Fort Benjamin Park
- Sidewalks needed entire length of Chatham
- Sidewalks needed near middle school
- Sidewalks on Chatham from Elementary school to Ft. Benjamin
- Students need safe sidewalk to reach schools on Chatham
- Students walking home from Newport Middle
- The bridge on Chatham is extremely dangerous for pedestrians
- The number of motorized scooters is terrifving. Also, middle school kids walking on Chatham in afternoons and mornings. They need a sidewalk for safety.
- Then from Fort Benjamin to downtown Newport
- To Fort Benjamin
- to the Middle School
- town to middle school
- Train tracks by old red and white all the way to ft benjamin
- White Sands
- White Sands into Newport
- White sands neighborhood down to ft Benjamin on Chatham
- *all parks
- *Any bike trail to the park and ball field

- *Baseball fields
- *bicycle lane to parks
- *Parks
- *Parks
- *Parks and Rec
- *Recreation

CHURCH STREET

- A trail down church Street or sidewalk
- Church
- Church
- Church
- Church St
- Church St
- Church st
- Church St
- Church Street
- Church street Church Street
- church street needs a sidewalk
- Church Street, very narrow road shoulders
- sidewalk needed on Church Street

HOWARD BOULEVARD

- All of Howard Blvd
- around little league park
- Frank door company
- Howard blvd
- Howard Boulevard
- Little lead Field
- Neighborhood sidewalks-bikelanes in front of Frank door company
- Newport Park and Library
- Newport Public Library
- Newport Town Hall/Park area
- park and little league field
- Public places like library

- The road beside the little league ball field. Sidewalk is too close to road, I've almost been hit several times walk to and from the park with my grandkids
- *all parks
- *Any bike trail to the park and ball field
- *Baseball fields
- *bicycle lane to parks
- *Bike lane on main roads like Chatham and others
- *Parks
- *Parks
- *Parks and Rec
- *Recreation

US 70

- 70 hwy side, mason town to ft benjamin
- along Hwy 70
- Bike paths to Havelock and Morehead City
- Hwy 70
- hwy 70
- Hwy 70
- **HWY 70**
- Hwy 70
- Multiuse path from Newport to Morehead and Havelock
- route 70
- to morehead
- Trail or path to havelock
- Trail or path to morehead.

NINE FOOT ROAD

- 9 Foot Road
- 9 Foot Road
- 9 Foot Road
- 9ft
- A sidewalk on nine foot road
- Nine foot road
- Nine Foot Road
- Nine Foot Road
- Sidewalk down 9 ft
- *All of west Newport
- *Bike lane on main roads like Chatham and others

HIBBS ROAD

- A route from Chatham Street to the Croatan Forest Walking Trails
- Hibbs extension
- Hibbs Rd
- Hibbs Rd!
- Hibbs Road
- Hibbs road
- Hibbs Road
- Hibbs Road

NEWPORT LOOP ROAD

- around Newport Loop Road
- Loop Road
- Newport Loop Rd
- Walking and Bicycle trails on Newport Loop Road

ROBERTS ROAD

- Roberts Rd
- Roberts Rd/Dickens Park area
- Roberts Road
- Roberts Road
- Roberts road
- roberts road
- Sidewalk down Roberts rd

RAILROAD BOULEVARD

- Railroad Blvd
- Railroad Boulevard
- Railroad Street
- roads beside railroad tracks...
- W Railroad Blvd

ALL OTHER STREETS

- A sidewalk on nine mile road
- Behind Mill Creek Road
- E Forest Dr
- F&W
- **Howard Street**
- Market street
- Masontown Rd (needs sidewalk and speed bumps)
- McCain St
- Mill Creek Rd

- Mill Creek Road from downtown out to the Neusiok Trail
- New Bern Street
- New Bern Street
- New Bern Street (needing sidewalks)
- Newport Road
- Nine mile road
- Orange
- Orange St
- Orange St to Mill Creek Rd
- Palmatta drive
- from town to neusiok trail on mill creek road

ALL OTHER COMMENTS

- An adult workout area and Newport Park
- by that one place
- city limit to city limit
- Dogs on Chatham near White Sands. and Dogs in White Sands are a problem
- down town
- downtown
- downtown
- downtown Newport
- downtown newport
- Downtown Newport
- in front of the road
- Main street has side walks but the drive ways have large slopes making it annoying to ride a bike
- Nature trails
- Nature trails for kids/family exploring with bridges and terrain changes for complete exercise
- Near Croatan
- neighborhoods
- Neighborhoods
- Neighborhoods like sandridge
- Newport in general
- on side streets because no bike areas
- Parking at Millcreek's walking trails
- right down the road
- side streets off of chatham street and howard blvd.
- Stores

- The back road by the RxR tracksa sidewalk there would be great!!!
- They are all fine
- Throughout Veteran's Park Subdivision
- town wide sidewalks
- trails
- Trails around Benjamin park for family riding
- trails around parks in Croatan
- Where sidewalk ends in front of Sudden Link
- Wide enough areas for walkers and bikes

LIST OF COMMENTS: **INTERSECTIONS**

Responses listed verbatim. Responses with asterisks were not included in the total count, as they could potentially apply to multiple intersections. They are still listed with intersections below for which they might apply.

US 70 & HOWARD BOULEVARD/ NINE FOOT ROAD

- 70 and Howard Blvd
- Near the Food Lion and Walmart areas
- A way to cross highway 70 to get to food lion
- **>>** Crossing highway to Food Lion
- Crossing HWY 70 to foodlion
- Crossing hwy 70 to Food Lion
- Crossing hwy. 70 at Food Lion
- Crosswalk at Food Lion
- Food Line Shopping Center
- Food Lion
- Food lion
- Food Lion area
- Food Lion Area
- Food Lion intersection to cross hwy 70 and Howard blvd
- Howard Blvd to Food Lion street crossing
- HWY & and Howard Blvd Intersection
- Hwy 70 and Howard Blvd
- Hwy 70 and Howard light
- Hwy 70 and nine foot road
- Hwy 70 intersection at Food Lion Shopping Center

- Hwy 70/9 Foot Road intersection
- Hwy 70/9 Ft Rd intersection
- Hwy 70/9foot Road intersection
- intersection Howard and Nine Ft
- Near the Food Lion and Walmart areas
- On the way to Food Lion
- *All of west Newport
- *Cross Hwy 70
- *Cross Hwy 70
- *Crossing Hwy 70
- *Crossing Hwy 70
- *hwy 70 crossing
- *Shopping Areas
- *Shopping centers

US 70 & ROBERTS ROAD

- » A way to cross highway 70 to get to Wal-Mart neighborhood market
- Crossing HWY 70 to walmart
- Crosswalk at WalMart
- Hwv 70/Roberts Road intersection
- Near the Food Lion and Walmart areas
- On the way to Newport Wal-Mart, Roberts intersection
- Roberts Road to Walmart street crossing
- Same down to Walmart Newport.
- Wal mart
- Walmart area
- Walmart/Roberts Rd
- *All of west Newport
- *Cross Hwy 70
- *Cross Hwy 70
- *Crossing Hwy 70
- *Crossing Hwy 70
- *hwy 70 crossing
- *Shopping Areas
- *Shopping centers

CHATHAM ST/RAILROAD BLVD/ MARKET ST

- by the Red n White/Hardware store intersection
- Chatham Street and Railroad intersection
- Cross where old red and white used to be
- Crossing on Chatham near Red and White
- Intersection at Chatham and Howard at the tracks

- Intersection at older Red and White
- Intersection where red and white was
- Old Hwy 70 intersection Howard Blvd
- Old food store intersection
- Stop light at red n white area
- The five way stop by Shepherdville store
- Worst intersection is Chatham Street and Howard at the railroad tracks.

US 70 & HIBBS RD

- Crossing HWY 70 at Hibbs
- Hbbs/hwy70 intersection
- Hwy 70 and Howard
- *All of west Newport
- *Cross Hwy 70
- *Cross Hwy 70
- *Crossing Hwy 70
- *Crossing Hwy 70
- *hwy 70 crossing

CHATHAM ST/JOHNSON ST/ MCCAIN ST

- Cross old hwy 70 at Baptist Church
- Crossing Chatham at the Garden Center
- Garden center

ALL OTHER INTERSECTION/ **CROSSING COMMENTS**

- Baywoods neighborhood
- crossing at library/town hall
- Crossing into Graclyn Park for East Chatham
- Hwy 24 would be nice to have a cross walk that would be safe
- Hwy 70 & Chatham St
- Hwy 70 & Sam Garner Rd
- Intersection by boat ramp on Chatham St
- Intersection of Hwy70 and Chatham St
- Intersections
- Intersections
- Johnson Street/Forest Street
- Need more street lights for safety
- Roberts Road and Chatam intersection
- Safer crosswalks at the elementary school (drivers do NOT stop for those crossing or waiting to cross)

Prepared for the Town of Newport & NCDOT Prepared by Alta Planning + Design