2023 Pedestrian & Bicycle Plan

Town of Catawba, NC



connect catawba

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Consulting Team

Traffic Planning and Design, *Asheville NC*

Kristy Carter, AICP
Christy Staudt, PE
Teresa Buckwalter, RLA
Rachael Bronson, AICP
Kenny Armstrong, AICP
Danielle Kauffman
Colin Kinton, PE
Jon Muthersbaugh

Town Council Adoption Date

April 17, 2023



(Source: Traffic Planning & Design, Inc.)

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ACKNOWLEDGMENTS

A Plan like *Connect Catawba* represents many hours of effort from volunteers, residents, Town staff, elected officials, and community partners. The following individuals had the vision to initiate and craft this Plan, along with the residents of Catawba. *Connect Catawba* was created for everyone who uses its streets, greenways, bike lanes, and parks - we sincerely appreciate all of those who were a part of the development of this Plan and who shared their input and reflected their commitment and love to the community in these pages. *Thank you!*

The Residents and Visitors of Catawba

Catawba Elected Officials

Mayor Pro-Tem Donnie Allen

Councilmember Patrick Laney

Councilmember Duane McCombs

Councilmember Carroll Yount

Connect Catawba Steering Committee

Scott Berson, *Town Planner, Western Piedmont Council of Governments*

Tom Garchek, *Resident*

Lisi Girrard, *Planning Board*

Averi Ritchie, *Western Piedmont Council of Governments*

Jeff Isenhour, *Planning Board*

Elizabeth Krige, *Town Manager*

Michael Lee, *Elementary School Principal*

Duane McCombs, *Councilmember*

Jennifer McCracken, *County Health Director*

Vanessa McCullum, *Planning Board*

Leanne Reed, *Business Owner/PTA President*

Christina Vang, *High School Student*

Jennifer Whisnant, *Resident*

North Carolina Department of Transportation (NCDOT)

Pamela Cook, *Transportation Planning Unit*

Alexius Farris, *NCDOT Integrated Mobility Division*

Anil Panicker, *Highway Division 12*

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1 INTRODUCTION



(Source: Traffic Planning & Design, Inc.)

INTRODUCTION

Project Background

Catawba describes itself as a “small town doing big things” and indeed it is. A group of Town leadership, staff and volunteers are working hard to improve their beloved community and make it a desirable place to live and visit. Community development and improved downtown engagement has been the focal point of the Town for the last decade, collaborating with organizations that share an interest in their goal of community improvements. An example of this is Catawba's partnership with the Downtown Activities Committee, which has led to more social engagement activities in the town's center and the beautification of landmarks. Meanwhile, the Town and NCDOT previously collaborated on improvements along Main Street, a state highway. Now the focus is improving the pedestrian and bicycle network, with the goal to enhance economic development and overall quality of life for Catawba's residents.

In 2021 the Town of Catawba successfully applied to the North Carolina Department of Transportation (NCDOT) Integrated Mobility Division for a Bicycle and Pedestrian Project Acceleration Planning Grant. The purpose of this Plan is to provide a framework for the Town, Catawba County, Western Piedmont Council of Governments (COG), residents, NCDOT, developers and other partners to create an implementable plan for walking and biking improvements.



WHAT IS A PROJECT ACCELERATION PLAN?

These plans are intended for smaller communities to develop a document concentrating on the identification of priority projects. These plans are on an “accelerated” schedule, typically less than one year, and are more action oriented in nature.

PURPOSE & GOALS

The following represents this Plan's purpose and goals as developed with the Connect Catawba *Project Steering Committee.*

Connect Catawba

Identify multimodal infrastructure projects to connect key locations for people walking and biking.

Identify the Network

Determine priority projects, costs, and funding opportunities.

Build a Pedestrian & Bicycle Friendly Catawba

Identify programs, policies, and funding strategies to promote walking and biking.



GOAL 1: Create the Network

Connect greenways, sidewalks, bike facilities and street crossings.

GOAL 2: Build Safe Streets

Create connections that are comfortable for people of all ages and abilities.

GOAL 3: Economic Development

Identify infrastructure improvements and programming ideas that would support tourism and the economic development goals of the Town.

GOAL 4: Promote a Culture of Walking and Biking

Develop programs that create a culture where walking and biking is celebrated.

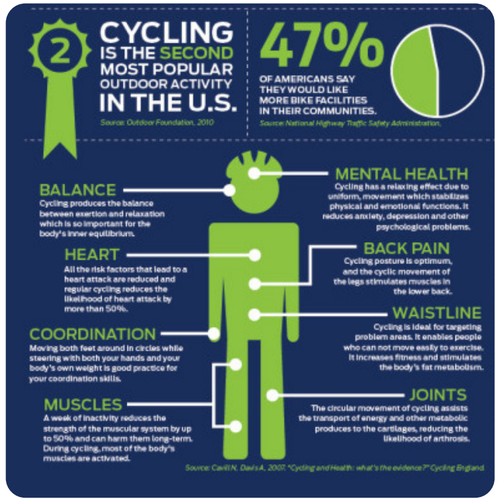
Why This Plan Is Important for Catawba

Catawba, like many forward-thinking towns across the nation, is reshaping the community to promote what their residents value; accessibility, a growing economy, and healthy living. *Connect Catawba*'s main goal is to recommend ways in which Catawba can create safer streets and sidewalks for walking and biking, connect key destinations by building out trails and improving accessibility for everyone to utilize and enjoy. Walking and bicycling is great for personal health and wellbeing, but also good for local economies and a contributor to the overall resiliency and success of a community. The return on investment from multimodal programs and infrastructure is significant, and will include the benefits of improved health for residents and better access for those who are not able to drive.

The importance of physical activity for public health is well established. A US Surgeon General's report in 1996, *Physical Activity and Health*,[i] summarized evidence from cross-sectional studies, longitudinal studies and clinical investigations, concluding that physical inactivity contributes to increased risk of many chronic diseases and health conditions. The research suggested that even 30 minutes per day of moderate-intensity physical activity provides significant health benefits.

A study published in the American Journal of Public Health[ii] found a link between walkable and bikable physical environments and lower obesity rates. The results point to a direct relationship between "active travel" – bicycling or walking rather than driving – and obesity. The researchers concluded that transportation policies should be designed to encourage walking and cycling for daily travel.

Figure 1. The Physical Benefits of Bicycling



(Source: Atlanta Bicycle Coalition)

"Americans need to **WALK REGULARLY TO COMBAT HEART DISEASE** *and diabetes, while at the same time recognizing that the way neighborhoods are designed often are unsafe or aren't conducive to walking."*

- U.S. Surgeon General in a 2015 call-to-action

*Every **$1.00** of trail construction supports **$1.72 annually** in local business revenue, sales tax revenue, and benefits related to health and transportation.*

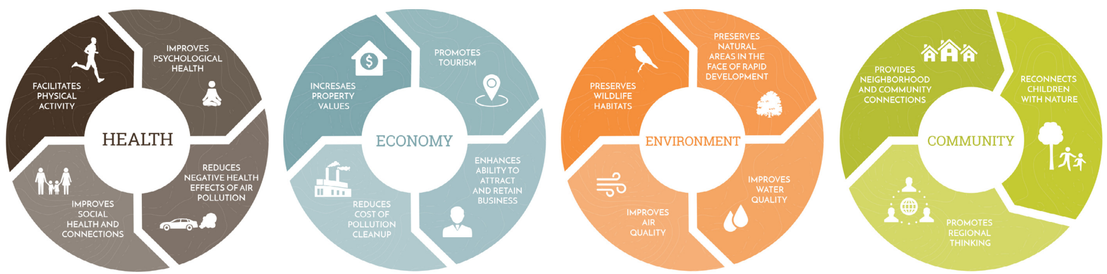
(Source: 2018 NC State University Institute of Transportation Research and Education study evaluating the economic impacts of four shared use paths in the state)

Along with health benefits and general safety improvements, multimodal infrastructure can contribute to economic success. Regional greenways can bring tourism revenue, while comprehensive sidewalks and crossings can spur downtown development. In addition, economic benefits from a walkable network extend to home values as well. Research suggests that "investments in neighborhood amenities and sidewalks will yield a greater home price increase in a walkable neighborhood than in a car-dependent neighborhood."[iii] Catawba has higher density neighborhoods where the addition of sidewalks could result in increasing home values. With its existing sidewalks and close destinations in downtown, these benefits are especially meaningful for Catawba and can be a key factor in attracting jobs, retaining young workers and families, and allowing the elderly to age in place for longer.

New sidewalk connections and multi-use paths give Catawba residents the choice to walk or ride their bicycle safely, improving their quality of life and enabling them to have greater freedom in their transportation and recreation decisions. This infrastructure means that everyone can decide for themselves how they get to school, work, or their neighbor's house - that Catawba residents are not limited to feeling like they need to drive everywhere all the time.

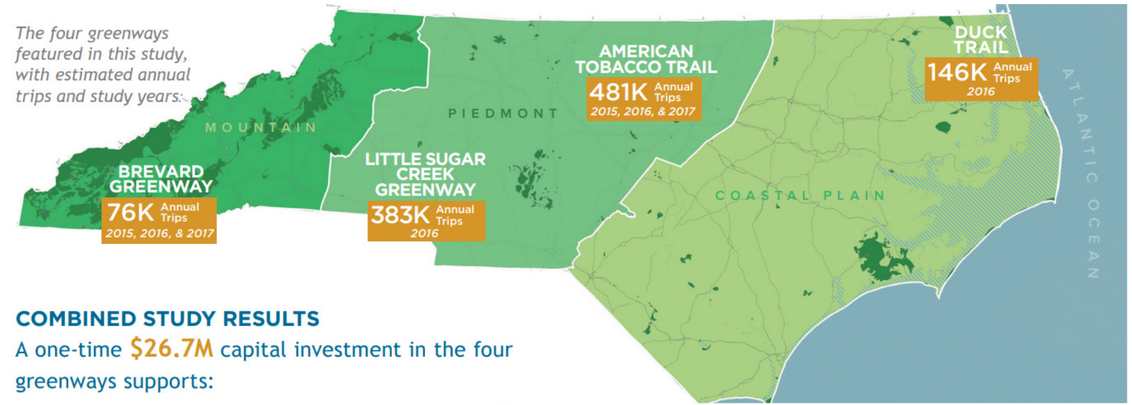
Figures 1-3 and the Appendix describe the benefits of walking and biking.

Figure 2. The Many Benefits of Walking & Bicycling



(Source: Carolina Thread Trail website, www.carolinathreadtrail.org/trail-benefits/)

Figure 3. Infographic from 2018 ITRE Study on Economic Impacts of Four Shared Use Paths in NC



COMBINED STUDY RESULTS

A one-time $26.7M capital investment in the four greenways supports:

$19.4M
Estimated annual sales revenue at local businesses along the four greenways

$684K
Estimated annual local and state sales tax revenue from businesses along the greenways

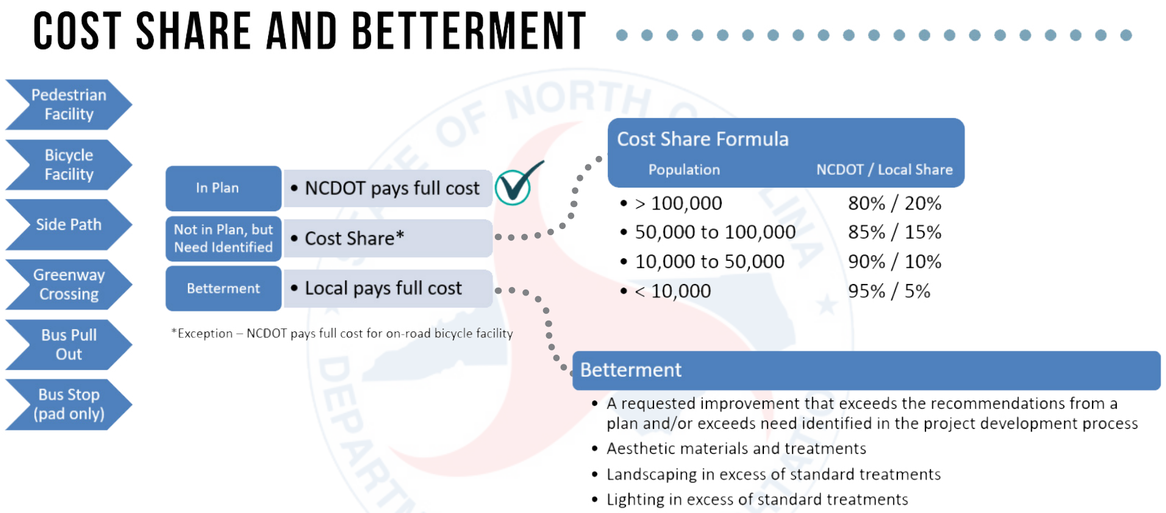
$25.7M
Estimated annual savings due to more physical activity, less pollution and congestion, and fewer traffic injuries from use of the greenways

$48.7M
Estimated business revenue from greenway construction

790 JOBS
Are supported annually through greenway construction

(Source: ITRE)

Figure 4. NCDOT Complete Streets Facility Cost Share Breakdown



The NC Department of Transportation (NCDOT), through its Complete Streets policy, has developed a formula for sharing the cost of improvements with local governments. NCDOT will review and incorporate planned projects, and may pay for the full cost of a bicycle or pedestrian project on a state road if the project is feasible, scores well and is in an adopted plan such as *Connect Catawba.* NCDOT is committed to collaborate with cities, towns, and communities to ensure planned pedestrian, bicycle, and transit options are included as an integral part of their total transportation vision. Planned multimodal facilities are consistently incorporated into NCDOT Planning and Project Development processes. Multimodal considerations are consistently made during resurfacing and maintenance operations.

Even if a cost estimate for a proposed project seems prohibitve for a small Town budget, it is important to keep in mind that state and federal monies are available. It helps to have key recommendations listed in an adopted plan. Having an adopted plan provides better documentation to help NCDOT decide whether or not to include Complete Streets infrastructure.

Summary

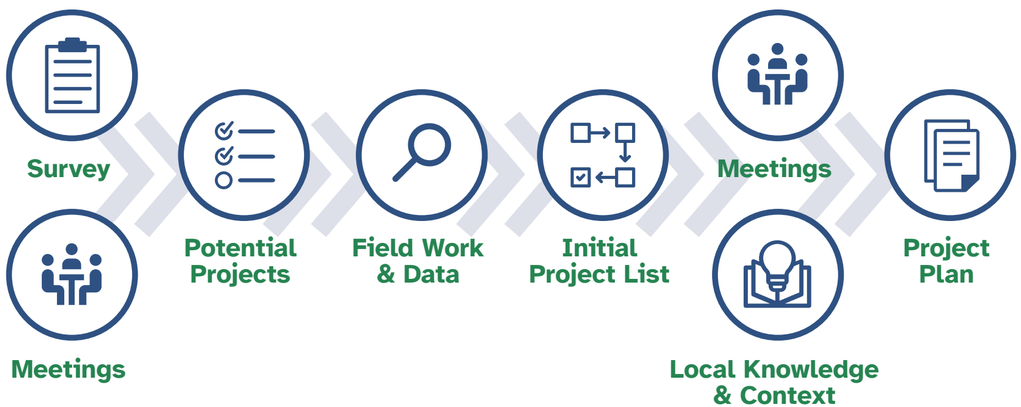
Connect Catawba covers the incorporated portion of the Town and some regional connections, focusing primarily on recommendations for the Town to pursue as well as projects in partnership with Catawba County and NCDOT.

The Plan identifies proposed bicycling facilities and greenway corridors, along with projects to address missing sidewalk segments in Town in order for Catawba to have a more complete network for people walking and biking. *Connect Catawba* also includes design guidelines and an implementation matrix to support the Town's efforts to move forward with the list of projects and policies. Figure 5 illustrates the planning process that was followed to arrive at these outcomes.

Bicycle and pedestrian friendly communities are happier, healthier, and more livable places. Creating a more welcoming environment for bicycling and walking improves resident's quality of life and your municipality's bottom line. Encouraging biking and walking reduces a community's automobile dependence. This allows residents to become more active, reduces air pollution, and creates an equitable transportation network open to all—regardless of age, physical ability, or income. The recommendations in this plan can have a direct impact on Catawba residents' quality of life.

The Town of Catawba recognizes the need to plan for an effective and safe bicycle, pedestrian, and greenways system as the Town continues to experience change and growth over time. *Connect Catawba* is intended to be a living document that will require ongoing coordination with NCDOT, Catawba County, Greater Hickory MPO, Western Piedmont COG, other state agencies, neighboring municipalities, nonprofits, consultants, developers, advocates, and the public. This Plan should be re-evaluated periodically as collaboration occurs, data is analyzed, trends are understood, and projects are brought to fruition. Implementation will require flexibility and creativity for long-term success.

Figure 5. Connect Catawba Planning Process



2 COMMUNITY ANALYSIS



(Source: Traffic Planning & Design, Inc.)

COMMUNITY ANALYSIS

History

Catawba, like the County and River, is named for the Catawba Native Americans who were the first inhabitants of the land. Specifically, local nations who first inhabited what is now the Town were the Keyauwee, Cheraw, and Mánu: Yį Įsuwą (Catawba)[iv]. These nations hunted, fished, farmed, and raised families on this land. The colonization of the Americas proved devastating to the Catawba, with disease and war reducing their population and land holding.[v]

By the 1800s, what is known today as the Town of Catawba began to form around the railroad station, with businesses and homes establishing on and surrounding Main Street. The Town was first known as Catawba Station and eventually was incorporated in 1893; it is one of the oldest towns between Salisbury and Asheville. As the Town grew, it became a market center for locally produced tobacco and flour. Today, Main Street's original buildings are remarkably intact and reflect Catawba's rich history.

Image 1. Main Street in Catawba, 1900s



(Source: Loftin Family Genealogy Website)

Image 2. Train Number 11 at Catawba Depot



(Source: Loftin Family Genealogy Website)

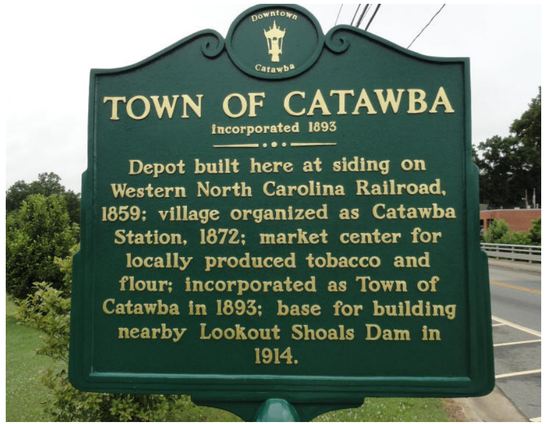
In 1893, the Town removed “Station” from its name when the US Postmaster ordered all small offices to have a one-word designation, and as such, the Town of Catawba was formally incorporated. While the original Train Depot no longer stands, freight trains still use nearby rail lines. The Town’s rail history is a significant part of its identity, as the current Town logo symbolizes the front of a train car. Other notable events in the first part of the 20th century include Catawba's presence as a base for the construction of the nearby Lookout Shoals Dam in 1914[vi]; and in 1927 the Town began to pave streets and sidewalks.[vii]

The 1950s and 60s were the most economically vibrant times for Catawba; following that time, there was a decline in businesses in Town, largely due to family businesses closing, larger shopping areas in neighboring communities, and the completion of Interstate 40.[vii]

Demographics

Figure 6 provides a demographic snapshot of Catawba, compared to surrounding Catawba County and the state of North Carolina, from the US Census 2020 American Community Survey (ACS) 5-Year Estimates and the 2020 Decennial Census.

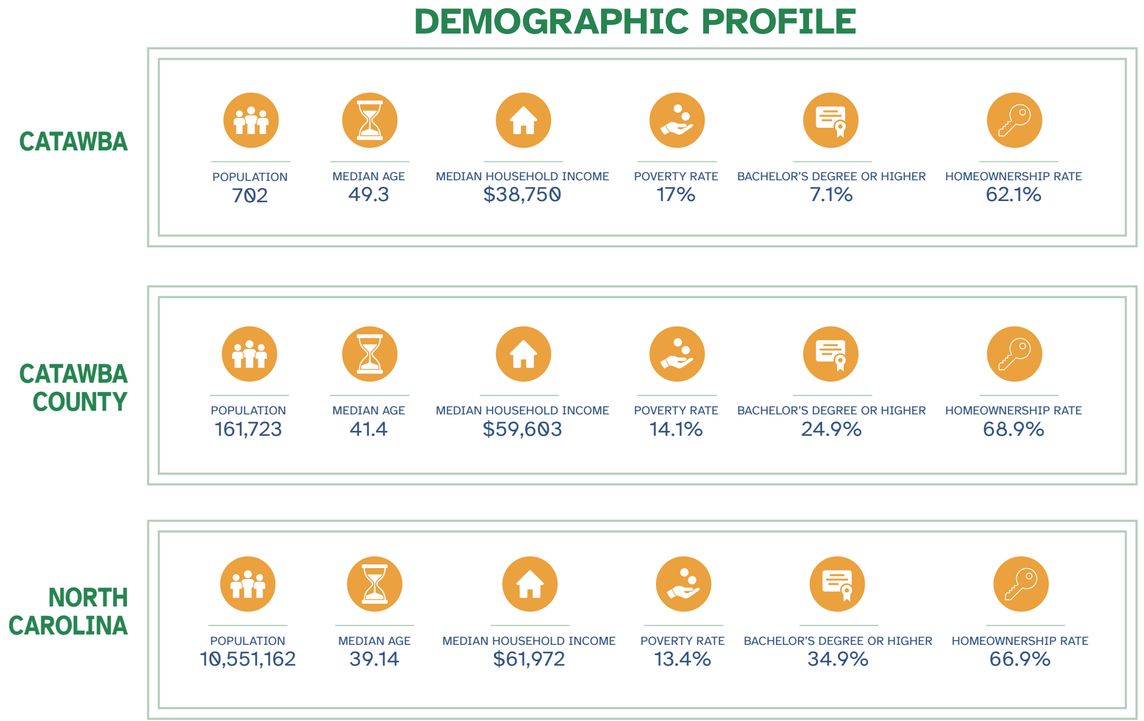
Image 3. Catawba historical marker



(Source: Traffic Planning & Design, Inc.)

Image 4. Town of Catawba logo

Figure 6. Demographic Snapshot of Catawba Compared to the County and State of North Carolina



(Source: U.S. Census, 2021 American Community Survey 1-Year Estimates)

17%

Catawba residents at or below the poverty level.

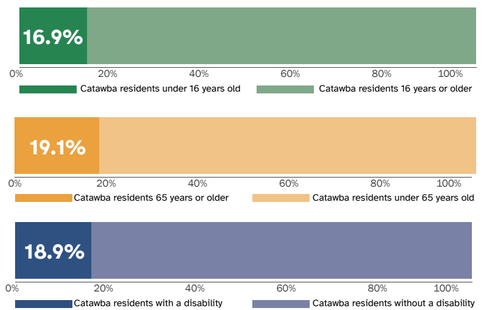
(Source: U.S. Census, 2017-2021 American Community Survey 5-Year Estimates)

$9,666

*The average annual cost to own and operate a vehicle in the U.S.**

**According to AAA, in 2021 it Cost $9,666/Year to Own and Drive a Car. (Source: AAA)*

Figure 7. Catawba Age & Disability Statistics



People younger than sixteen cannot drive a vehicle and driving can become more of a challenge as people age. Meanwhile, some disabilities prevent people from driving a personal vehicle. This leaves a substantial segment of the population reliant of walking, bicycling, and transit for mobility.

(Source: U.S. Census, 2017-2021 American Community Survey 5-Year Estimates)

Physical Characteristics & Transportation Network

The Town of Catawba is in the western piedmont of central North Carolina, nestled within the Catawba River valley (see Map 1). As such, the terrain is characterized by low rolling hills, the Catawba River (which frames the Town's eastern border) and several smaller creeks and tributaries. The Town occupies about four square miles of land.

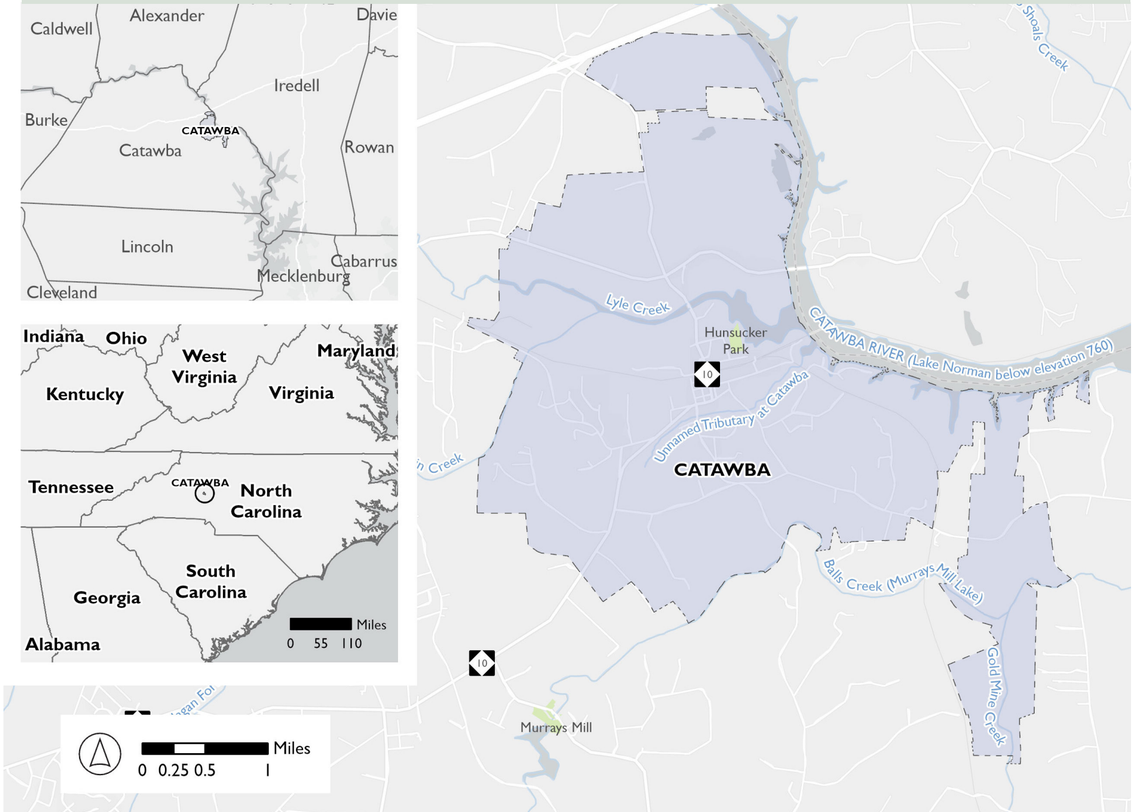
There are several key destinations in the Town, as shown in Map 2, mostly located along Main Street / NC-10 which bisects the Town. Other destinations in the County include those with historical significance and schools. After passing through the center of Town, NC-10 leads north to Exit 138 on Interstate 40 and southwest to the Town of Newton. Other main roads in the Town include US Route 70 which crosses just north of downtown and leads to Statesville to the east and Hickory to the west.

Other key NCDOT state-maintained roads in Catawba include:

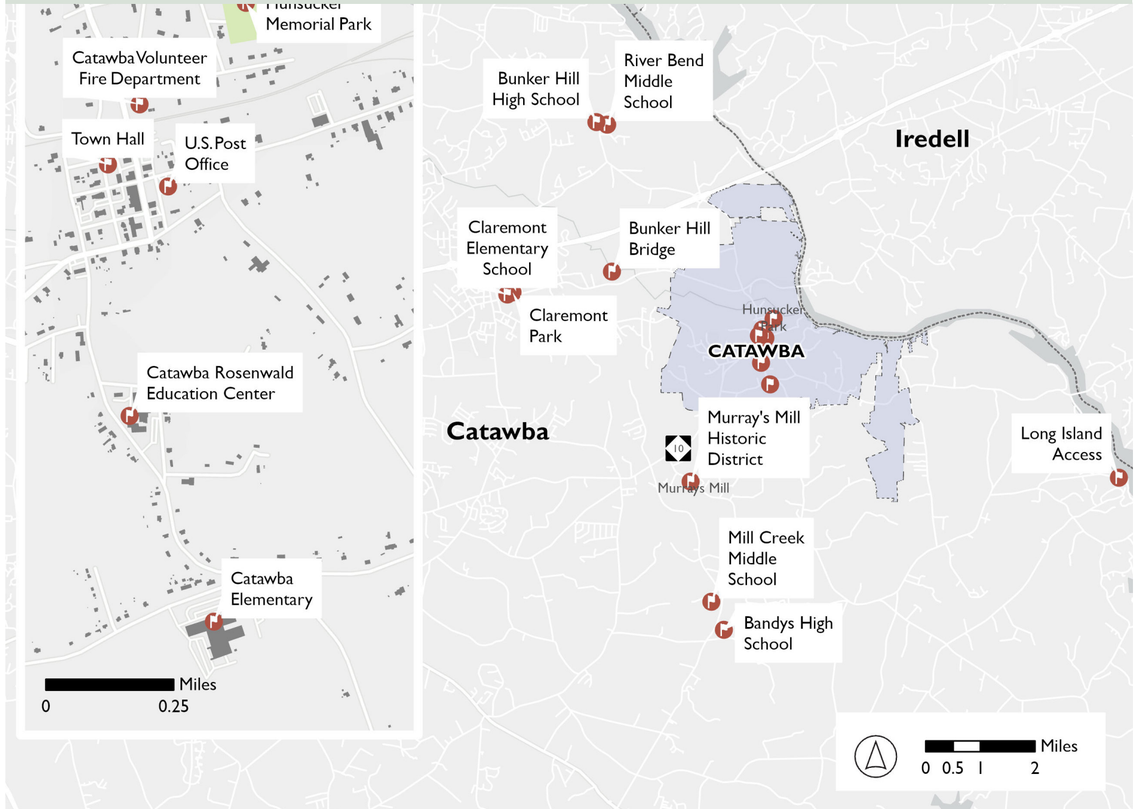
- Old Catawba Road / 4th Avenue SW (SR-1722)
- Hudson Chapel Road (SR-1826 / SR-2627 / SR-1004)
- Rosenwald School Street / Lowrance Road (SR-1822)
- 2nd Avenue SE / 2nd Street SE (SR-1004)

The remaining streets in Catawba are owned and maintained by the Town. These streets largely follow a naming convention of being assigned a number increasing in value as it radiates from Central and Main Streets, with east-west streets ending in a designation of 'Avenue' and north-south streets ending in 'Street'. According to the 2021-2022 NCDOT Powell Bill Map, the Town has an inventory of 5.79 miles of paved roads.[viii]

Map 1. Catawba Location



Map 2. Catawba Key Destinations



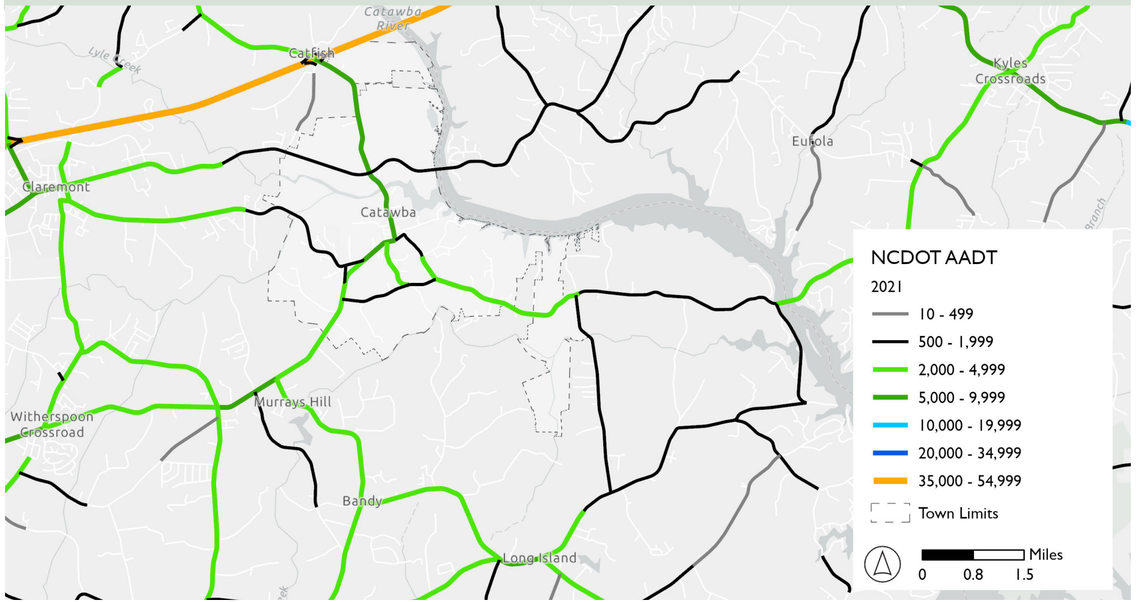
Transportation Network, Cont'd

In 2021, the recorded Annual Average Daily Traffic (AADT)* of NC-10 just north of downtown was 7,100 vehicles per day (vpd) and just south of downtown was 5,500 vpd. Rosenwald School Street saw about 2,300 vpd and Hudson Chapel Road about 2,500 vpd, both in 2021. These volumes may be impacted by the effects of the COVID-19 pandemic on travel patterns, which proved to reduce AADT throughout the state and nation.

There is one signal-controlled intersection in Town at the intersection of NC-10 and Central Avenue. All remaining streets are stop-controlled.

**What is AADT? Annual average daily traffic (AADT) is a measure used primarily in transportation planning and engineering. Traditionally, it is the total volume of vehicle traffic on a highway or road for a year divided by 365 days.*

Map 3. Catawba Area 2021 Average Annual Daily Traffic (AADT)



(Source: NCDOT)

Overview: People Walking & Biking

For its small size, Catawba has a strong network of sidewalks in Town – nearly three miles total. Many sidewalks are within the downtown core, radiating off of Main Street. Longer segments of sidewalk travel along East Central Avenue, 2nd Avenue SE and SW, 3rd Avenue SW, Rosenwald School Street, 6th Avenue SW, South Main Street, and Hudson Chapel Road. There are no existing bike lanes or greenways in Town. See Map 4 for more detail.

Data from NCDOT between 2007-2021 reveal that there have been very few reported crashes involving people walking or biking in Catawba. Only two incidents occurred involving a person walking and a person biking, both in 2008. This limited data does not lend itself to understanding safety in the Town. As a proxy, this Plan focuses on key indicators of crash risks, which include traffic volume and speed. Community feedback is also crucial to understanding safety, which was a key component of this Plan.

Whether you would enjoy a nice picnic in the park, boating on the Catawba River, ***A COOL GLASS OF LEMONADE ON A HOT SUMMER DAY****, or a delicious southern-style meal, this town is for you!*

- Town of Catawba website

Image 5. South Main Street in Catawba's downtown



(Source: Traffic Planning & Design, Inc.)

Catawba's downtown is walkable, with enough sidewalks to get around comfortably. However, small investments in pedestrian amenities (shade trees, crosswalks, wider sidewalks) can have a big impact on the comfort of people walking.

Image 6. North Main Street crossing the railroad tracks



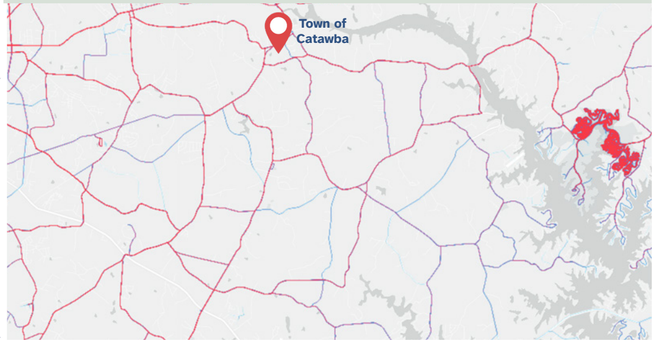
(Source: Traffic Planning & Design, Inc.)

People can walk to destinations just outside the Town center on long stretches of sidewalk, but there are gaps in the system and opportunities for safety improvements.

Map 4. Catawba Existing Sidewalk Network

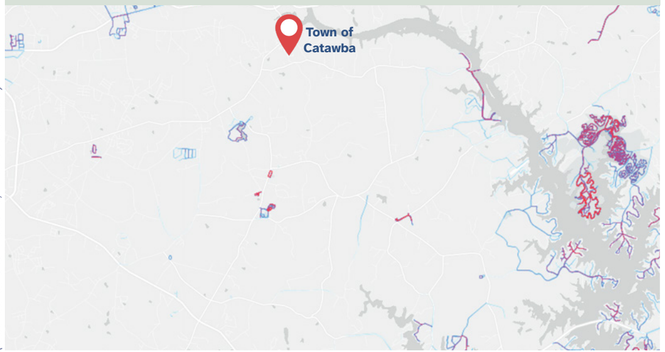


Map 5. Strava Heat Map of Recorded Bicycling Rates



(Source: Strava Website, www.strava.com)

Map 6. Strava Heat Map of Recorded Walking Rates



(Source: Strava Website, www.strava.com)

*The online fitness website and app **Strava** can provide a broad overview of the networks on which people walk, hike and bike. People use the app to voluntarily record their activity, usually for recreation purposes, which provide a relative approximation of walking and biking patterns in a geographic area.*

Strava has developed "heat maps" showing aggregated public activities taken by its users over the years. Maps 5 and 6 show streets in the Catawba area with blue and red colored lines that indicate relative use; blue indicates relatively lower use, while red lines indicate more use.

Map 5 suggests that people biking travel the main arterial roads in Catawba, those that connect to adjacent communities and nearby destinations. These trips are likely taken by people on bikes who are seeking longer-distance travel for recreational purposes. It appears that people do ride their bicycles along Catawba County's rural roads, though most bicycling occurs at Lake Norman State Park.

Map 6 indicates trips on foot. While there is some data on people's walking habits, this also shows a recreational focus, with most walking data recorded outside the Town limits and centered around Lake Norman's outdoor opportunities, Murray's Mill Historic Site, and the more urban areas of Claremont and Conover.

www.strava.com

Opportunities & Challenges

Enhancing the bicycle and pedestrian network in Catawba requires an awareness of the opportunities and challenges. Downtown Catawba has seen significant improvements to the building infrastructure that make up the downtown businesses. However, Main Street itself is still heavily impacted by vehicle traffic, including truck traffic. Traffic calming measures and higher visibility crosswalks would help make the downtown a more comfortable environment for pedestrians (which, in turn, promotes greater business in the downtown).

Another challenge to long-term greenway trails is the active rail line that runs north of downtown Catawba. Railroad crossings are limited and railroad companies are not likely to grant new crossings for greenway trails. In addition, the terrain along Lyle Creek is challenging to develop greenway trails along the Creek in certain areas, creating a financial constraint to overall feasibility. However, Catawba's location and natural features offer opportunities for future recreational trail development. For example, Duke Energy is working with the community to plan hiking trails and access to Lyle Creek on a tract of land north of downtown. Large parcels of undeveloped land along Lyle Creek and Balls Creek make getting easements for future greenway trails more feasible.

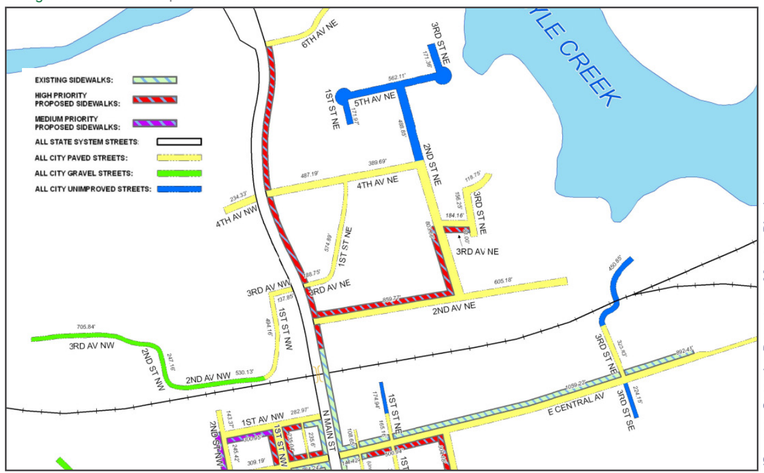
With Catawba's location near Lake Norman, recreational bicycling is already happening. Catawba could capture additional bicycle tourism (and the business development, entrepreneurship, and spending that comes with it) through signage improvements, strategic roadway improvements and advertising.

Local, Regional and State Plans

In the Appendix, the full review of relevant local, regional and state plans is provided. The Plans that have been reviewed are listed in Figure 8. Recurring themes and recommendations throughout these documents indicate the strong support of walking and biking infrastructure in Catawba, including sidewalk improvements, the benefits of bicycle and greenway tourism, and the importance of coordination with NCDOT. The sidewalk recommendations from the Downtown Master Plan had a particular influence on this Plan (Image 7). For example, three of the top projects identified in Project Cutsheets originated from that plan and were further developed. However, this Plan has a greater focus on developing and improving pedestrian connections to destinations.

The Carolina Thread Trail, described further in Image 8, offers a regional connection for Catawba that will link the Town to this important bicycling and walking system.

Image 7. Sidewalk Map from Catawba's Downtown Master Plan



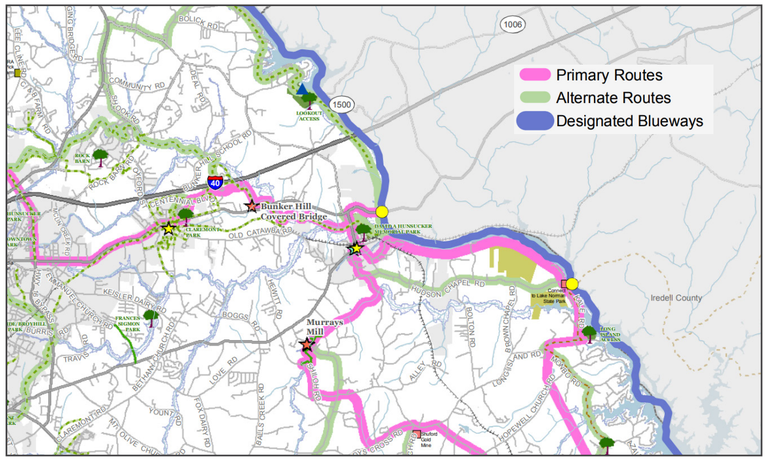
(Source: Catawba Downtown Master Plan)

Previous planning efforts offer a picture of the community's priorities from a different perspective and time. They often give direction and help identify missed opportunities - in this case, a continued need for sidewalk connections.

Figure 8. Local, Regional and State Plans

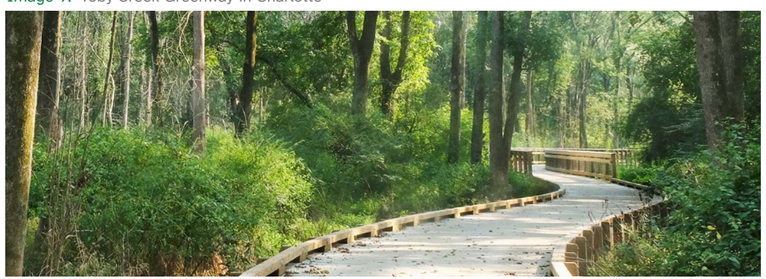


Image 8. Carolina Thread Trail Proposed Trail Corridors



(Source: Carolina Thread Trail)

Image 9. Toby Creek Greenway in Charlotte



(Source: Nancy Pierce)

THE GREAT TRAILS STATE NC

The Great Trails State Plan and network seeks to connect all counties in North Carolina and key destinations throughout the state to a growing network of strategic greenways. Other principal goals of the plan include:

- Fvdevelop, manage, and maintain the system

Community Engagement

Community engagement was an important component of this Plan's development. One method of engaging the community was through a Steering Committee made up of community leaders, professionals in the health and education field, downtown business owners, residents, a student, and transportation and planning professionals. Preferences, recommendations, and specific project ideas were brought to the Steering Committee, whose input guided the plan and project development.

The planning team also set up an information and engagement booth at the Wine & Jazz Festival, a popular community event in downtown Catawba, in September 2022. Community members were able to view specific projects, provide input and indicate preferences for priority focus areas. The proposed bicycle and pedestrian network plan was presented to the public for their feedback.



1 One walking field visit meeting

3 Three Steering Committee meetings

1 One meeting with NCDOT

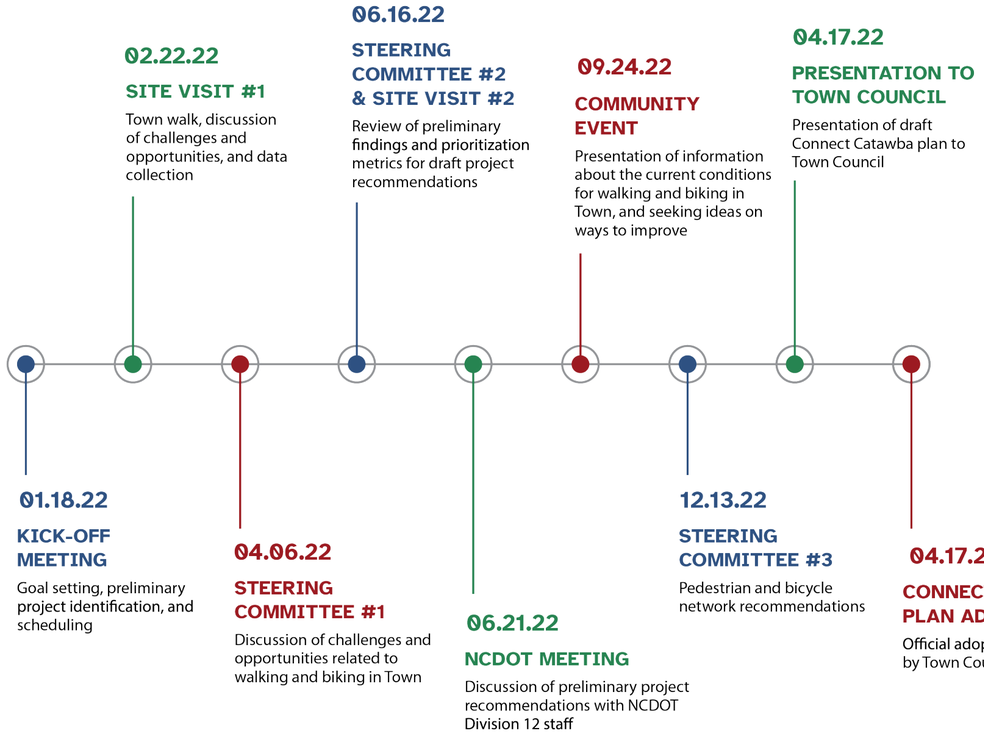
1 One public pop-up event





(Source: Traffic Planning & Design, Inc.)

Figure 9. Timeline of Key Project Milestones



3 NETWORK PLAN



(Source: Traffic Planning & Design, Inc.)

PEDESTRIAN & BICYCLE NETWORK PLAN

How We Got Here

Connect Catawba was heavily guided by a Steering Committee, whose input provided the local knowledge and insight of the Town's vision, plan goals and project needs. Figure 10 describes the project tasks that culminated in the *Connect Catawba* pedestrian and bicycle network plan. The process to determine the pedestrian and bicycle network plan was iterative, involving multiple check-ins with the Town staff and NCDOT in conjunction with the Steering Committee. Community engagement was also a critical piece to finalizing the recommendations and network.

Prioritization Methodology

Much of the community's feedback gathered during this project took the form of a project idea or recommendation, such as a desire for a sidewalk connection on a particular street. In a Plan like *Connect Catawba*, this results in a list of project ideas. Although all projects are important, neither

Image 9. Hopscotch at the 2022 Wine & Jazz Festival



(Source: Traffic Planning & Design, Inc.)

Figure 10. Network Plan Project Development Process

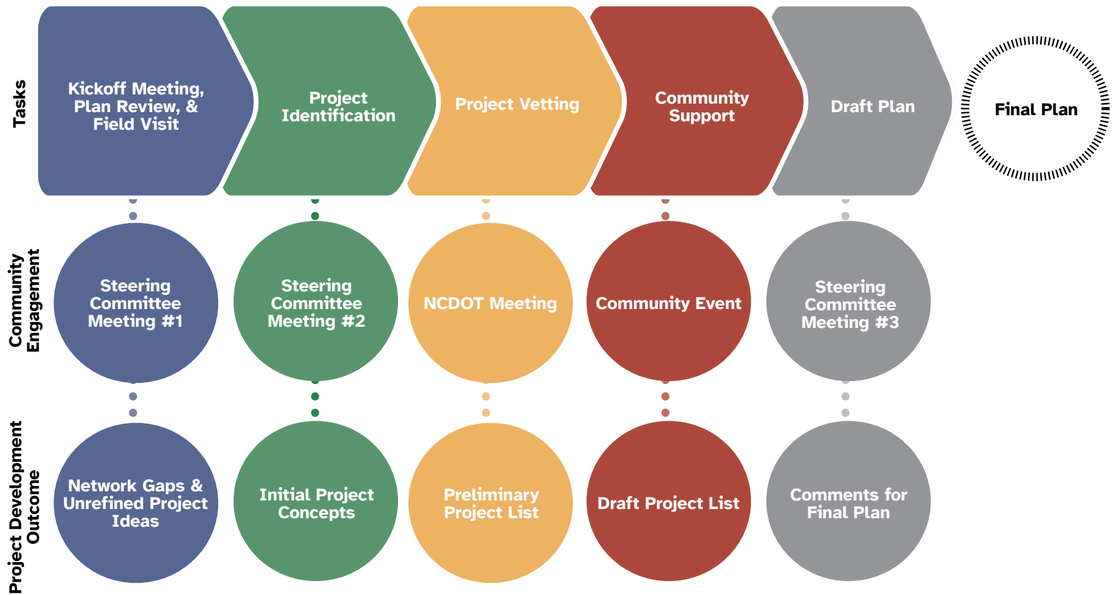


Figure 11. Project Scoring Criteria

PROJECT SCORING CRITERIA

Vehicle Exposure (+4 Points)
(Roadway Width, Traffic Speed/Volume)

This factor is based on perceived levels of comfort/stress and considers the length of time people walking or bicycling are exposed to vehicles and adjacent traffic speeds and volumes. This is used as a proxy for actual crash records since those numbers are relatively low in Catawba and are not always predictive of crash potential.

Connectivity (+4 Points)

This factor evaluates whether the project is a key connection for Catawba (improving accessibility for the whole community) or only serves a few homes or businesses.

Public Sentiment (+4 Points)

This score includes the rankings from the Steering Committee and input from Public Meeting attendees.

Equity (+1 Point)

This factor adds up to one point for projects that are in historically underserved communities and that are in higher density residential.

Feasibility (-1 Point)

This factor considers existing available right-of-way, topography challenges, utility easements, and other obstacles to completiona and deducts up to one point for projects that are hard to implement.

Image 10. North Main Street Railroad Bridge



(Source: Traffic Planning & Design, Inc.)

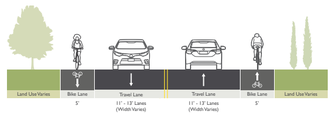
Connectivity is a high priority for project ranking because an incomplete pedestrian network makes it hard to get around and impossible for some people. Gaps in the system and sidewalk infrastructure that ends without safe crossings force people to make unsafe decisions and make walking a less desirable option.

the Town nor NCDOT have the resources to complete the entire envisioned network at one time. As such, it is important to identify projects with the greatest need so that the Town can focus limited resources on key projects to achieve the goals and vision set out at the beginning of this plan.

The project team used a scoring methodology to narrow the focus on key projects. The higher the score, the higher the priority of the project. Lower scoring projects were eliminated to help keep recommendations for those that would have the biggest impact and likelihood of implementation. These criteria and scoring were developed from the project goals and the NCDOT Strategic Prioritization methodology used for bicycle and pedestrian projects and are outlined in Figure 11. The full scoring details are provided in the Appendix.

Table 1. Primary Facility Types for *Connect Catawba* Project Recommendations

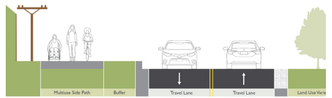
PAVED SHOULDER / BIKE LANE





Paved, designated space on the edge of the roadway that is striped with a white lane line.

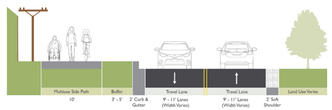
SIDEWALK





A designated space along the side of a road for use by people walking. Traditional sidewalk design includes a 5-foot concrete sidewalk with a 3-5-foot minimum buffer between the sidewalk and nearest travel lane.

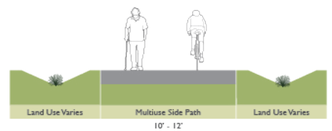
MULTI-USE SIDEPATH





A two-way shared use path (minimum 10 feet wide with a 3-5-foot buffer strip between the path and nearest travel lane) located immediately adjacent and parallel to a roadway.

GREENWAY

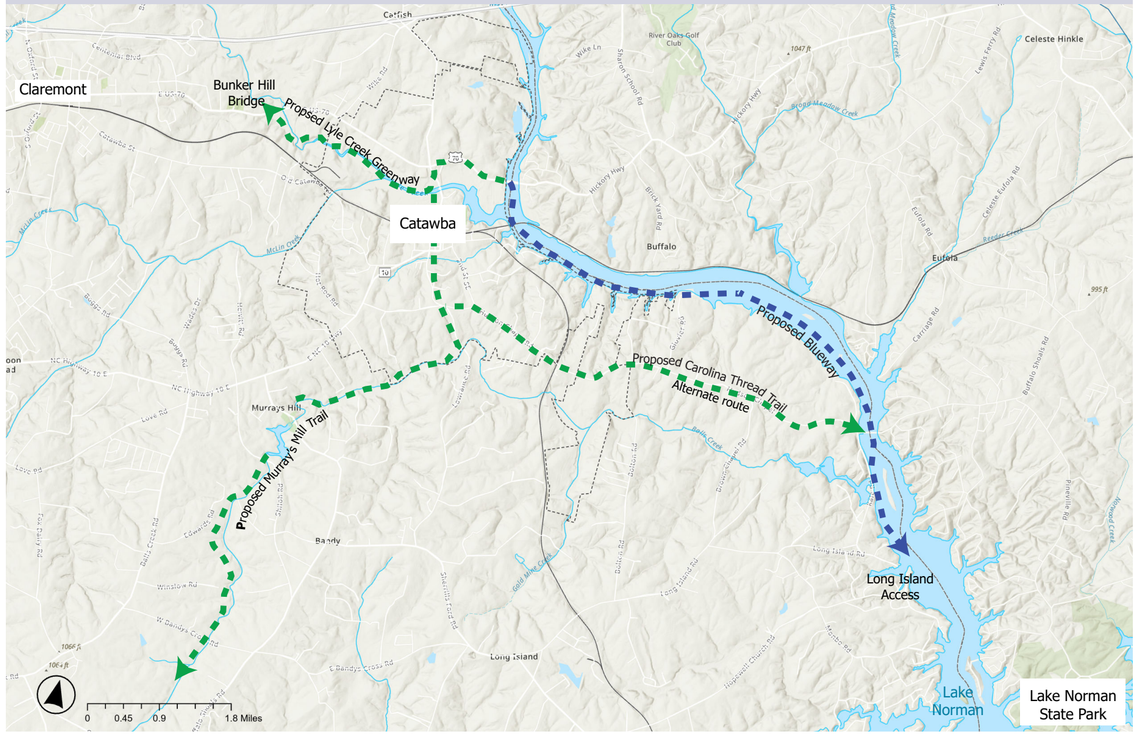




A corridor of land, usually following features such as rivers or old railroad lines, which is used for recreation or alternative transportation purposes (e.g., Lyle Creek Greenway in Claremont).

The project recommendations, as described in the following sections, relate back to these primary facility types for consistency, but also include recommendations for signage, crossings, and other safety/visibility improvements.

Map 7. Regional Connections



Catawba has the opportunity to connect to other regional trails in the long-term, to develop its outdoor recreation offerings.

Regional Connections

Catawba is at the heart of future multimodal connections in the region. This vision for a connected trail system influenced project recommendations and should be considered as this Plan is implemented in the years to come. The Carolina Thread Trail, a major regional initiative to develop a network of greenways connecting natural resources and communities, centers around the Charlotte metropolitan area. A proposed primary route in Catawba County goes through downtown Catawba and would connect to Murrays Mill and the Bunker Hill covered bridge. In addition, Lyle Creek is proposed as a greenway connector and blueway (a paddle trail) in the Carolina Thread Trail Master Plan. Nearby Lake Norman boasts hiking trails and bicycling opportunities with more planned. Hudson Chapel Road is a key connector to Lake Norman and ultimately to Lake Norman State Park. See Map 7 for a summary of these important regional connections.

CAROLINA THREAD TRAIL

The Carolina Thread Trail is a coordinated multi-jurisdictional effort to plan, construct, and maintain a network of paved and unpaved walking and bicycling trails throughout North Carolina. Fifteen counties are part of this system, including Catawba County, with a vision to link these communities to each other. With 350 miles already included in the network and another 1,250 miles proposed, it would be prudent to make sure that Catawba remains a link in this network.

Image 11. Murray's Mill



(Source: George Moore)

Image 12. Bunker Hill Covered Bridge



Image 13. Lake Norman's mountain bike trails



(Source: Tarheel Trailblazers)

Downtown Catawba

With its existing network of sidewalks and crossings, downtown Catawba already has the core system in place for people walking. Additional recommendations could improve upon this infrastructure to encourage more walking and foster economic development.

Streetscape

An improved streetscape aims to enhance existing streets, sidewalks and street crossings to create a vibrant pedestrian, bicycle, and community gathering environment. Streetscape enhancements can include the addition of street trees or vegetation, outdoor seating, artwork, or other amenities that create a more welcoming atmosphere and contribute to traffic calming and improved crossings. Many communities in North Carolina have implemented streetscaping in their downtown to support a friendlier environment and boost economic development. Multiple studies and real-world examples show that trees and streetscape leads to greater visitation and higher retail sales for businesses.[i]

Image 15. Streetscape Visualization



An artist's rendering of a streetscape project in Sparta, NC.

Pedestrian-Scale Wayfinding

Signage for people walking is a critical aspect to complement any pedestrian and bicycle system. Signage can offer the user information about destinations of interest, distance (in feet/miles and/or minutes) and the direction. Such wayfinding sign systems would be a compliment to the downtown. A wayfinding system can guide people walking to key destinations such as Hunsucker Park, or running or walking on a dedicated loop with specific mileage.

Secondary Projects & Crossings

Although the Priority Projects are critical to the development of Catawba's pedestrian and bicycle system, the Secondary Projects and crossings are also key components of the Plan. the Appendix provides the facility type and name for each of these Secondary Projects.

Image 14. Wayfinding Sign Visualization











(Sources: Hottman Law Office / top left, Bay Area News Group / top right, Washington State DOT / middle, South Carolina DOT / bottom)

BICYCLE FACILITY TREATMENTS ON CONSTRAINED AND RURAL ROADWAYS

Retrofitting streets with bicycle and pedestrian infrastructure is not an easy task, particularly in a region like the foothills of North Carolina where the roadways are often constrained by terrain, streams, railroad, and other natural and man-made features. In many cases, the roads in the region were designed to serve rural farms and built at a time when the area was less populated and traffic volume and speeds were lower. Increases in travel speeds and traffic volumes combined with increased need for multimodal facilities have strained the roadways, making solutions challenging to implement due to engineering challenges and budgeting constraints.

On these rural roadways with challenging terrain, the addition of sidewalks and bicycle lanes are very expensive and sometimes not feasible. To build such projects in a community the size of Catawba can be a significant portion of the Town's modest budget, making it even less likely that the Town will be able to make significant strides in their pedestrian and bicycle network despite their stated vision and goals.

To overcome this challenge, bicycle facility solutions can be implemented in a "spot improvement" approach, where constrained or challenging sections of roadways can be upgraded to offer enhancements to a person riding a bicycle. While not as extensive as a dedicated linear improvement such as a bike lane or shoulder, spot improvements can enhance the bicycling experience while being more cost-effective for small communities like Catawba. In the priority projects described in this Plan, any shoulder recommendations can be supplemented with the following spot improvements.

Examples below are provided for educational purposes; locations for installation and appropriateness of treatments should be determined by a licensed transportation engineer.

1. WARNING SIGNAGE

Warning signage with specific messaging about passing people on bikes may be implemented at spot locations. These should be consistent with national and state guidance. There are many types of warning signs and examples are shown here.

2. WARNING FLASHERS

Warning flashers may be implemented at spot locations with limited sight lines or maneuverability for people on bikes. Traditional warning flashers that flash at all hours may be less effective as drivers become accustomed to them. When feasible and appropriate, detection is recommended to ensure that flashers are activated only when needed.

3. RUMBLE STRIPES AND RUMBLE STRIPS

Rumble strips can be either raised or recessed patterns on pavement that, when driven on, will vibrate and create noise. Rumble strips' use as a bicycle treatment consist of a pattern of grooves cut from the asphalt along the edge of the travel lane with the intention of discouraging drivers from entering the shoulder where bicycles may be present.

4. SPOT SHOULDER WIDENING

For sections of roadway where vehicles do not have sufficient line of sight to safely cross the centerline of the roadway to pass a bicycle, strategic shoulder widening can be identified to allow for additional space for bicycles to "pull over" to allow vehicles to safely pass. This is most critical on long uphill roadway sections where drivers may pass when it is not safe to do so.

5. SPOT SIGHT LINE IMPROVEMENTS

It is important to maximize visibility between people driving and bicycling, and between opposing users that need to see each other in order to safely pass. As such, key locations can be investigated to remove obstructions to visibility such as vegetation, structures, fences and embankments, etc.

6. SPOT INTERSECTION IMPROVEMENTS

Points of conflict between various road users increase at intersections; and, in rural areas, most intersections do not have full signal control to manage these conflicts. Bicycles that travel through uncontrolled intersections in rural areas may be exposed to additional conflicts where they are not always visible or anticipated by drivers. Problem intersections can be treated with safety countermeasures, where necessary, to enhance safety for all modes, including people on bikes. Examples of countermeasures include spot sight line improvements as well as enhanced warning signs and markings, flashing warning devices and modified intersection control such as all way stop control or roundabouts, etc.

7. EDUCATION CAMPAIGNS

Education campaigns can be a good compliment to infrastructure projects where they emphasize a facility type or include general messaging about the presence of people on bikes or rules of the road. Placement of these along constrained or rural roadways is strategic and can help ensure that drivers of motorized vehicles remain alert and aware of possible conflicts with other modes of travel.





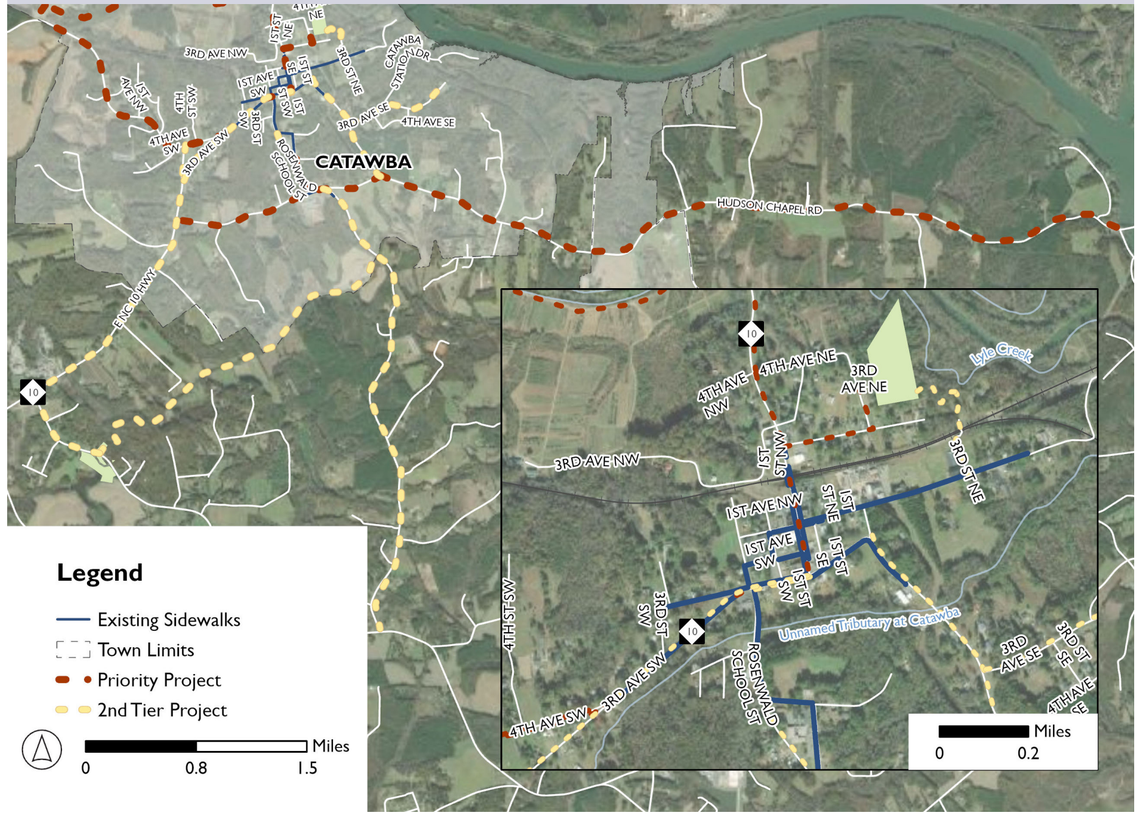






(Sources: CalTrans / top, Chesterfield Observer/ second from top, South Carolina DOT / second from bottom, BikeFM / bottom left, TheSource.Metro.Net / bottom right)

Map 8. Proposed Bicycle & Pedestrian Projects



PROJECT HIGHLIGHTS

These projects were given a closer look, with additional information detailed on the following pages.

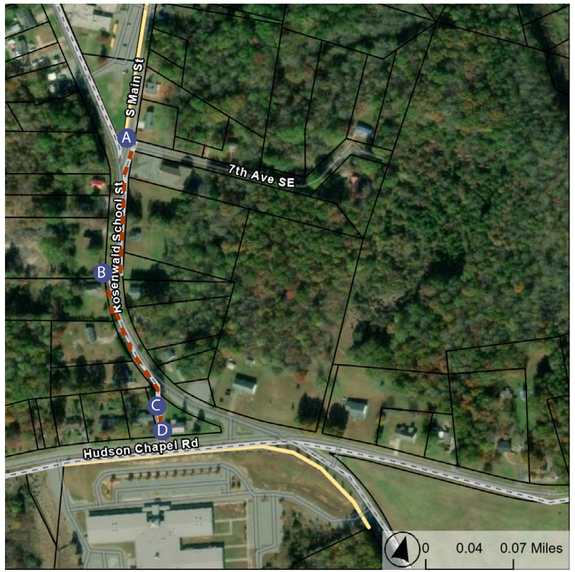
- Rosenwald School Street Sidewalk *(to Catawba Elementary School)*
- 2nd Street SE Multi-Use Sidepath
- North Main Street Sidewalk *(from 2nd Avenue NE to 6th Avenue NE)*
- Main Street (Highway 10) Traffic Calming
- 2nd Avenue NE Sidewalk *(from Main Street to Hunsucker Park)*
- Hudson Chapel Road Multi-Use Sidepath
- Old Catawba Road/4th Avenue SW Bicycle Facility
- Hudson Chapel Road Bicycle Facility *(to Lake Norman)*
- 2nd Avenue SW Sidewalk & Crosswalks *(at 3rd Avenue SW)*
- Old Catawba Road/4th Avenue SW Sidewalk *(from 3rd Ave SW to 6th St SW)*
- Lyle Creek Greenway

Project details can be found on the following pages, including icons representing the key community need each project meets. Note that these different needs often link with different funding sources.

CONNECTIVITY **SAFETY** **RECREATION**

These projects were cross-checked with the NCDOT 2021-2025 Highway Maintenance Improvement Program (HMIP), which indicates NCDOT's plan for maintenance to roadways, including preservation, resurfacing and rehabilitation. Coordination with the HMIP offers opportunities for cost-savings and construction coordination to reduce construction impacts to the community.

A ROSENWALD SCHOOL STREET SIDEWALK (TO CATAWBA ELEMENTARY SCHOOL)



LEGEND

- Priority Project & Map Notes
- Other Proposed Project
- Catawba Town Limits
- Existing Sidewalks
- Points of Interest
- Park

PLANNING LEVEL COST ESTIMATE:

$450,000

Includes design, right-of-way, utilities and construction per assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool. Intersection improvements need additional investigation and are not included in this cost estimate.

PROJECT DESCRIPTION

This 5' wide sidewalk would provide a critical walking connection from South Main Street to Catawba Elementary School along Rosenwald School Street. Ultimately this would complete a pedestrian corridor between the two schools.

CONNECTIONS	NOTES *(SEE CORRESPONDING LETTERS ON MAP)*
o Catawba Elementary School o Catawba Rosenwald Education Center	A. Pedestrian crossing needed. Investigate intersection and driveway modifications to shorten pedestrian crossing, create a more perpendicular intersection and improve driveway delineation. B. High visibility crossing of Rosenwald School Street to have sidewalk on west side of street. Sight line clearing will be needed. C. Explore easement through Providence Church property. D. High visibility crossing on Hudson Chapel Road to connect with existing sidewalk on the Catawba Elementary School property.
CROSSINGS	
o 7th Avenue SW o Hudson Chapel Road	



Modifications are recommended at the intersection of South Main Street at Rosenwald School Street to reduce pedestrian exposure to traffic. This can be accomplished by changing the intersection to be more perpendicular, consolidating driveways, and adding crosswalk markings.

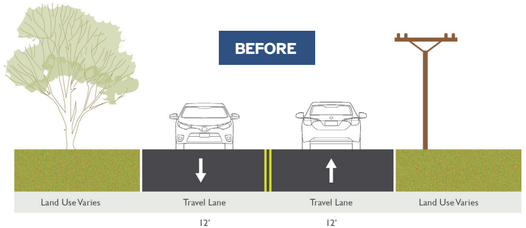


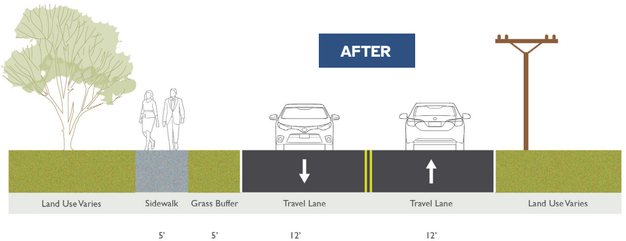
While there is a sidewalk in front of Catawba Elementary School, it does not connect to the broader community, tie into the existing sidewalk network or have crosswalks to cross Hudson Chapel Road or Lowrance Road. This makes it difficult for teachers, children, and their families to walk to school.



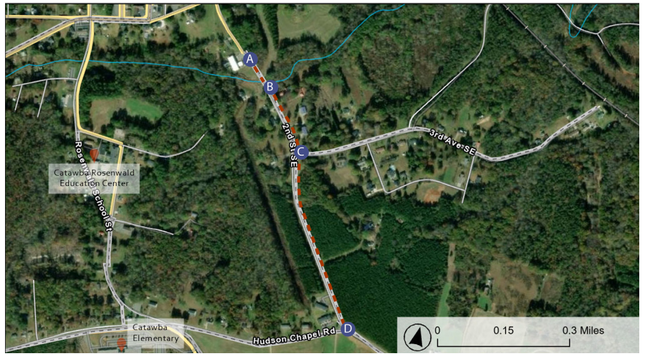
Children who walk or bike to school benefit from the positive health impacts of those activities, including improved cardiovascular health and reduced risk of chronic disease, diabetes, and obesity - as well as possible academic performance improvements.

(Source: Safe Routes Utah; https://saferoutes.utah.gov)



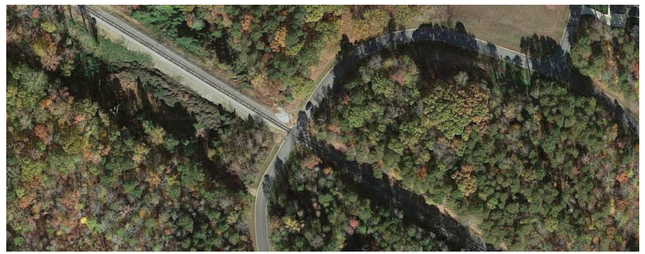


B 2ND STREET SE MULTI-USE SIDEPATH



LEGEND

- A — Priority Project & Map Notes
- Other Proposed Project
- Catawba Town Limits
- Existing Sidewalks
- Points of Interest
- Park



Some residents have noted that they walk along the railroad track to get downtown rather than risk walking along 2nd Street SE.

PLANNING LEVEL COST ESTIMATE:

$1,690,000

Includes design, right-of-way, utilities and construction per assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool. Intersection improvements need additional investigation and are not included in this cost estimate.

PROJECT DESCRIPTION

This project is a 10' wide multi-use sidepath that is 3,550 linear feet. The project would connect to the existing sidewalk on 2nd Street SE and cross the street with a high-visibility crosswalk to the multi-use sidepath. The path traverses the east side of 2nd Street SE to connect to Hudson Chapel Road

CONNECTIONS	NOTES *(SEE CORRESPONDING LETTERS ON MAP)*
o Downtown Catawba o Catawba Elementary School	A. High visibility crosswalk with Rectangular Rapid Flash Beacon (RRFB). B. Creek crossing may require additional culvert. C. Connection to residential neighborhood on 3rd Ave SE. D. High visibility crosswalk on Hudson Chapel Road to future multi-use sidepath.
CROSSINGS	
o 3rd Avenue SE	

RENDERING OF PROPOSED MULTI-USE SIDEPATH



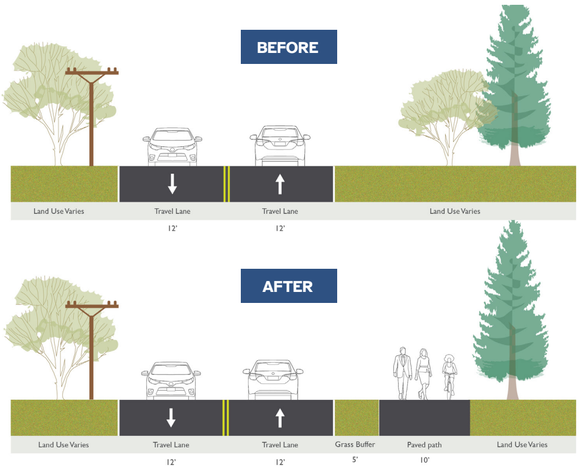
A 10' wide, multi-use sidepath along 2nd Street SE would connect existing residential neighborhoods to Catawba Elementary School and help people walk and bike safely from their homes to downtown. Crosswalk infrastructure should be explored at Hudson Chapel Road to connect to the proposed multiuse sidepath along that corridor.





(Source: Carmanah)

Rectangular Rapid Flash Beacons (RRFBs) can be useful for improving pedestrian visibility, especially at night.



C NORTH MAIN STREET SIDEWALK (FROM 2ND AVENUE NE TO 6TH AVENUE NE)



LEGEND

- Priority Project & Map Notes
- Other Proposed Project
- Catawba Town Limits
- Existing Sidewalks
- Points of Interest
- Park

PLANNING LEVEL COST ESTIMATE:

$1.1 million

Includes design, right-of-way, utilities and construction per assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool.

PROJECT DESCRIPTION

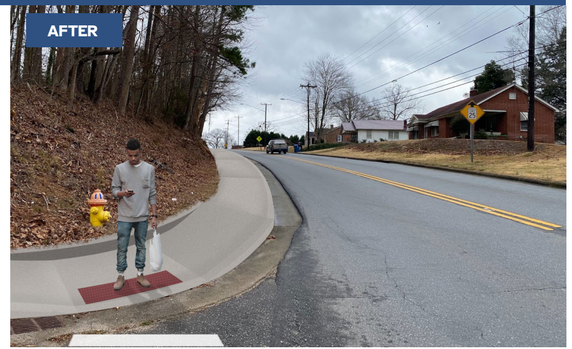
Adding a 5' curb-and-gutter sidewalk along North Main Street would improve neighborhood residents' ability to safely walk downtown, while bolstering community development investments and improving access to Hunsucker Park. Additionally, this corridor could serve as a "gateway" into Catawba.



CONNECTIONS	NOTES *(SEE CORRESPONDING LETTERS ON MAP)*
o Downtown Catawba o Hunsucker Memorial Park	A. Seek easement to connect to Duke property on Lyle Creek. B. Signage and markings for a shared road on this low-volume dead end street (6th Avenue NE). C. Where feasible include 5' wide grass buffer between sidewalk and North Main Street. D. Crossing 4th Avenue requires ADA ramp *(see rendering at right).* E. Open frontage at gas station would require pavement marking for designated walkway. F. Connect to existing sidewalks on east side of North Main Street.
CROSSINGS	
o 6th Avenue NE o 4th Avenue NE o 3rd Avenue NE o 2nd Avenue NE	

RENDERING OF PROPOSED SIDEWALK AND CROSSING

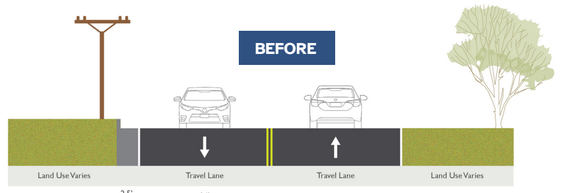


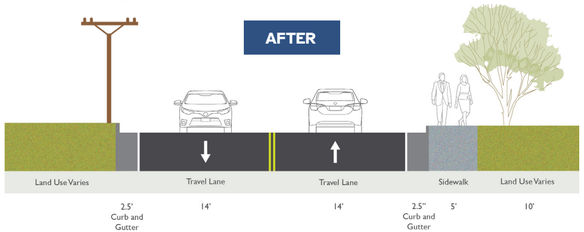


A 5' wide sidewalk would provide an important way to walk from downtown to Hunsucker Park.



This project will complete missing sidewalk gaps as shown at this location at 2nd Avenue NE. Improvements to crossings and extending the sidewalk network could help make this neighborhood truly walkable, which would provide greater incentive for economic development and encourage people to walk downtown.





D MAIN STREET (HIGHWAY 10) TRAFFIC CALMING



LEGEND

- A — Priority Project & Map Notes
- Other Proposed Project
- Catawba Town Limits
- Existing Sidewalks
- Points of Interest
- Park



Streetscape improvements can be complemented by other placemaking initiatives, like murals, banners, street furniture, and artwork in intersections.

PLANNING LEVEL COST ESTIMATE:

$500,000 *Phase 1**

*Includes design, right-of-way, utilities and construction per assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool. *This improvement may be more feasible to accomplish through phased implementation. The cost above represents a first phase that does not include full corridor ADA upgrades or signal modifications.*

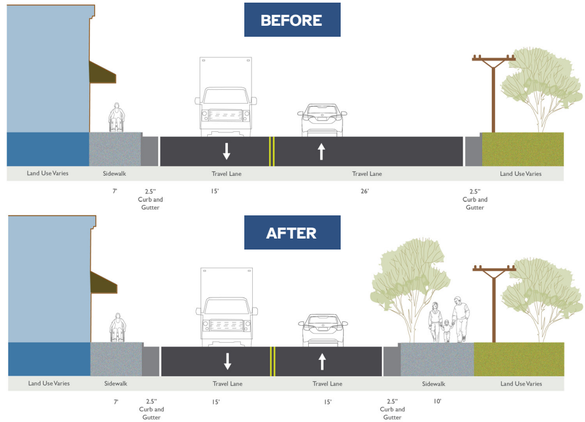
PROJECT DESCRIPTION

Downtown Catawba has already seen new investment and will likely see more as new residential homes are built. A more pedestrian friendly downtown will continue to support a healthy business district. The project identifies short- and long-term treatment for pedestrian improvement including crosswalks and traffic-calming measures such as curb extensions and street trees.

CONNECTIONS	NOTES *(SEE CORRESPONDING LETTERS ON MAP)*
o Downtown businesses o Town Hall	A. Pedestrian improvements to intersection including high visibility crosswalk and curb extensions.
CROSSINGS	B. Missing ADA ramps and signal equipment for legal unmarked crosswalks (upgrade at all four crossings).
o 1st Avenue (SW & NW) o 2nd Avenue o Central Avenue	C. Improve crossings for South Main Street and 1st Ave SW. D. Complete missing sidewalk section. E. Intersection improvements needed to provide ADA upgrades, missing sidewalks and high visibility crossings. Consideration may be given to using an all-way stop.



Main Street's northern approach to downtown is very wide. The Town of Catawba can take a two-step approach to downtown streetscape improvement, using temporary measures to test ideas for rethinking the street in creative ways before investing in permanent infrastructure.



RENDERINGS OF PROPOSED SHORT- AND LONG-TERM STREETSCAPE IMPROVEMENTS

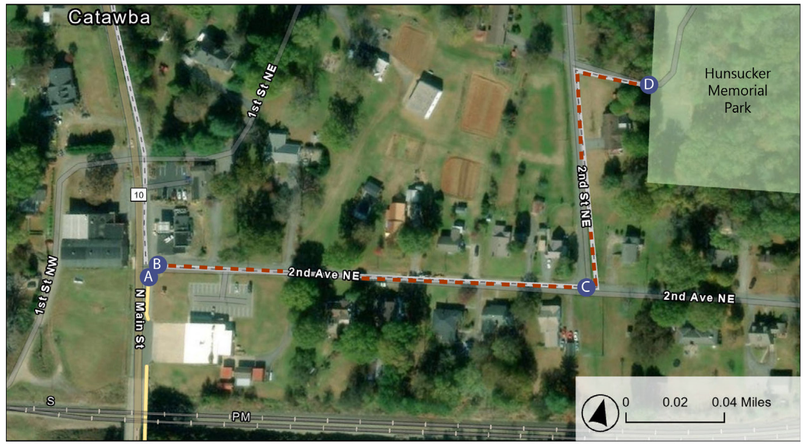


In the short-term a lower cost option to reclaim more room for pedestrians and a more attractive gateway would include planters, delineators, and a crosswalk at 1st Avenue NW.



A longer-term treatment would involve curb extensions, adding more sidewalks where there are gaps in the network, adding street trees and wayfinding signage.

E 2ND AVENUE NE SIDEWALK (FROM MAIN STREET TO HUNSUCKER PARK)



LEGEND

- A — Priority Project & Map Notes
- Other Proposed Project
- Catawba Town Limits
- Existing Sidewalks
- Points of Interest
- Park



PLANNING LEVEL COST ESTIMATE:

$350,000

Includes design, right-of-way, utilities and construction per assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool.

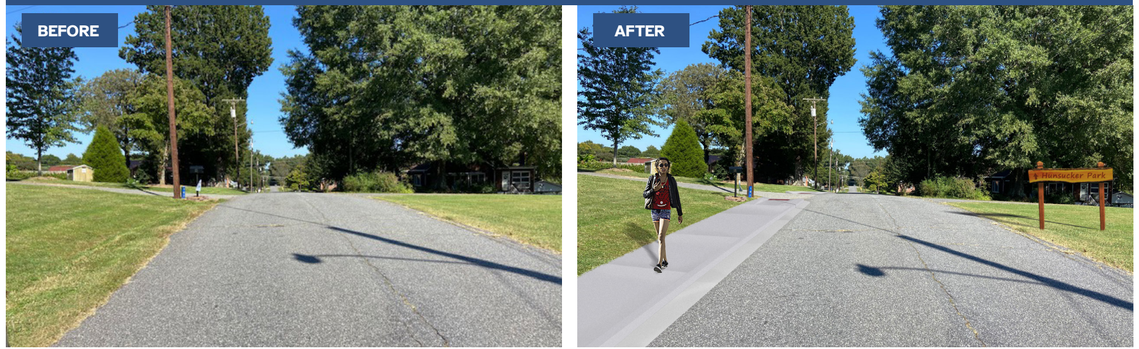
PROJECT DESCRIPTION

Identified as a high priority in the Catawba Downtown Master Plan (2005), this sidewalk along 2nd Avenue NE and 2nd Street NE would connect with the sidewalk on Main Street at the fire station, providing an important way to walk between downtown and the park.

A near-term, lower cost treatment could include either a 4' wide at-grade walking path and two 9' vehicular lanes or advisory shoulders. *See example images on the following page.*

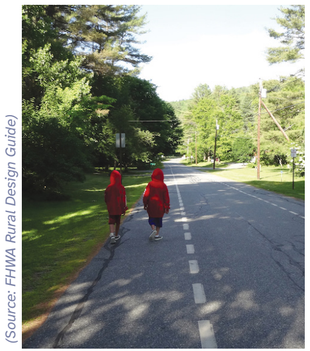
CONNECTIONS	NOTES *(SEE CORRESPONDING LETTERS ON MAP)*
o Downtown Catawba o Hunsucker Memorial Park	A. Connection to Main Street sidewalk, creating a direct link between Hunsucker Park and downtown Catawba.
CROSSINGS	B. Crossing 2nd Avenue NW for walkway on the north side of the road.
o 2nd Avenue NE o 2nd Street NE	C. Crossing 2nd Street NE for walkway on the east side of the road.
	D. Connection to Hunsucker Memorial Park.

RENDERING OF PROPOSED SIDEWALK



A 5' wide sidewalk would provide an important way to walk from downtown to Hunsucker Park.

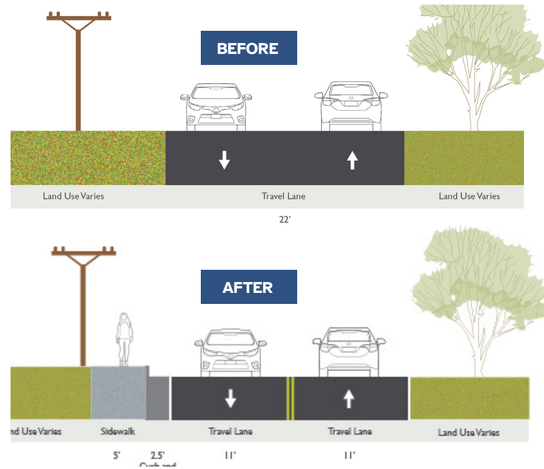
(Source: FHWA Rural Design Guide)



Example of an advisory shoulder application, which creates a yield traffic condition for two-way traffic.



Example of a stamped pavement walkway delineation along a low volume street. This application should be combined with detectable edging treatment for people with limited vision.



F HUDSON CHAPEL ROAD MULTI-USE SIDEPATH



LEGEND

- A — Priority Project & Map Notes
- Other Proposed Project
- Existing Sidewalks
- Points of Interest
- Park
- Catawba Town Limits

PLANNING LEVEL COST ESTIMATE:

$3.8 million

Includes design, right-of-way, utilities and construction per assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool.

PROJECT DESCRIPTION

A 10' wide paved sidepath along the south side of Hudson Chapel Road between Highway 10 and 2nd Street SE.

CONNECTIONS	NOTES *(SEE CORRESPONDING LETTERS ON MAP)*
o Catawba Elementary School o Legacy Ridge Residential Community	A. Crosswalk here to ensure continuity along the proposed sidewalk on Highway 10. B. Connect to Legacy Ridge development. C. Connect to Catawba Elementary School sidewalk network. D. Crossing locations may vary; additional engineering investigation is needed to assess travel speeds, crossing improvements, sight distances, and possible intersection improvements for Lowrance Road. E. Connection to 2nd Street SE.
CROSSINGS o Lowrance Road	



A multiuse path would give Catawba Elementary students, faculty, staff, and parents the opportunity to walk and bike safely to school.

RENDERING OF PROPOSED MULTI-USE SIDEPATH

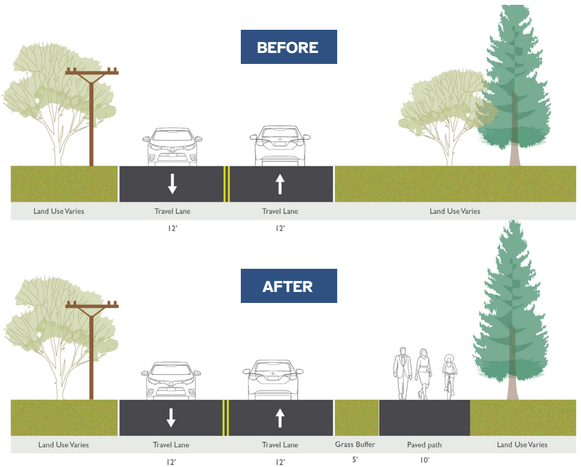




A 10' wide, multi-use sidepath along Hudson Chapel would connect new and existing residential areas to Catawba Elementary School. A high visibility crosswalk should be explored for connection to the Legacy Ridge neighborhood.



Much of Hudson Chapel Road is agricultural or undeveloped. However, recent trends suggest that this corridor is attractive to residential growth. Existing and future residents would benefit from investments in pedestrian infrastructure. A multiuse path serves both a transportation and recreational function.



G OLD CATAWBA ROAD/4TH AVENUE SW BICYCLE FACILITY



LEGEND

- A — Priority Project & Map Notes
- Other Proposed Project
- Catawba Town Limits
- Existing Sidewalks
- Points of Interest
- Park



SHORT-TERM IMPROVEMENT PLANNING LEVEL COST ESTIMATE:

$20,000

Signage only.

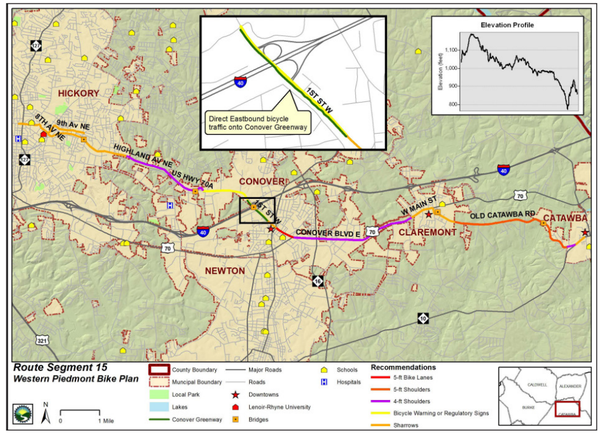
$1.1 million

Spot bicycle improvements for priority locations to provide spot widening and roadway sight line improvements with bicycle awareness signage. Does not include the cost for full-length shoulder or bicycle lane widening.

PROJECT DESCRIPTION

Bike lanes or shoulder widening along Old Catawba Road connecting Catawba to Claremont was identified as a high priority project in the Western Piedmont Bike Plan (2014). This project identifies the long-term recommendation as bike lanes and several short-term solutions: signage and spot safety improvements.

CONNECTIONS	NOTES *(SEE CORRESPONDING LETTERS ON MAP)*
o Annie Trace neighborhood o Mulberry Creek Farm o Pöppelmann Plastics workplace o Town of Claremont	A. Connection to employer and proposed trail along McLin Creek. B. Bridge over McLin Creek has 2' shoulders. C. Crossing Highway 10 needs further engineering to determine appropriate crossing treatments and possible intersection realignment.



The 2014 Western Piedmont Bike Plan recommended bicycle infrastructure along Old Catawba Road as part of a broader regional "spine" bicycle network connecting Catawba, Claremont, Conover, and Hickory.

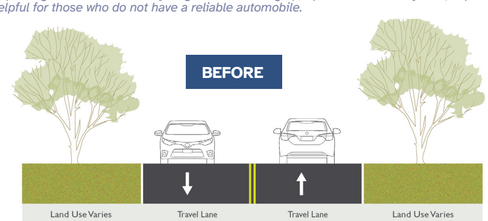


The bridge over McLin Creek was not designed for bicycle shoulders. Short-term treatments would include signage and shared lanes. Long-term treatments would include a full bridge replacement to accommodate bicycle lanes. NOTE: Bridge replacement was not included in cost estimate.



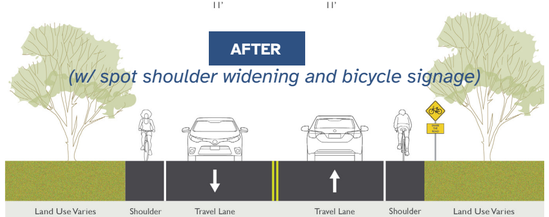
While Old Catawba Road land uses are mostly residential and agricultural, there are destinations such as Pöppelmann Plastics, Mulberry Creek Farm, churches, and more. Improving this corridor for bicycling could encourage people to commute by bike, especially helpful for those who do not have a reliable automobile.

BEFORE

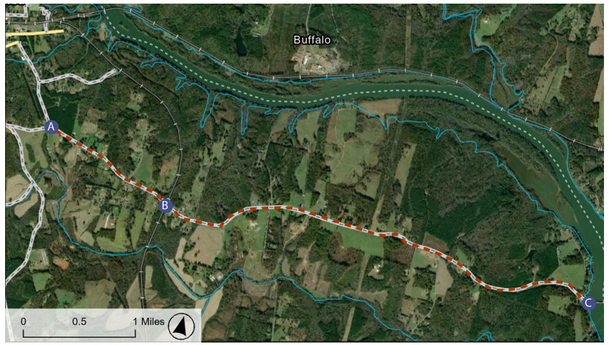


AFTER

(w/ spot shoulder widening and bicycle signage)



H HUDSON CHAPEL ROAD BICYCLE FACILITY (TO LAKE NORMAN)



LEGEND

- A — Priority Project & Map Notes
- Other Proposed Project
- Catawba Town Limits
- Existing Sidewalks
- Points of Interest
- Park

SHORT-TERM IMPROVEMENT PLANNING LEVEL COST ESTIMATE:

$30,000

Signage only.

$1.5 million

Spot bicycle improvements for priority locations to provide spot widening and roadway sight line improvements with bicycle awareness signage. Does not include the cost for full-length shoulder or bicycle lane widening.

PROJECT DESCRIPTION

Bike lanes or shoulder widening along Hudson Chapel Road would provide an important route between the Town of Catawba and Lake Norman and could increase bicycle tourism for the Town. This project identifies the long-term recommendation as bike lanes and several short-term solutions: signage and spot safety improvements.

CONNECTIONS	NOTES *(SEE CORRESPONDING LETTERS ON MAP)*
o Waterside Grill at Lake Norman o Buffalo Shoals Road o Troutman	A. Connection to other proposed projects, including a multi-use path along the western section of Hudson Chapel Road. B. Bridge over the railroad is narrow and has 2' shoulders. C. Link to the Catawba River, Buffalo Shoals Road, and Troutman.
CROSSINGS	
o Several low-volume local roads	



Destinations like Waterside Grill would be reachable from Catawba by bicycle.



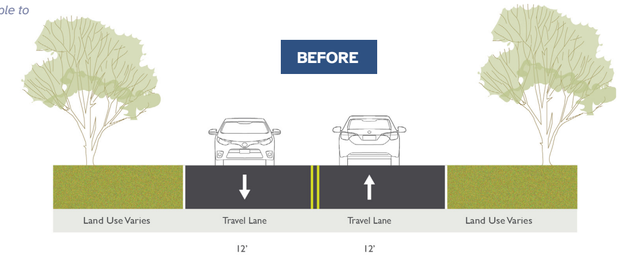
A wide shoulder can give recreational bicyclists a refuge from traffic and encourage more people to bike along a particular road.

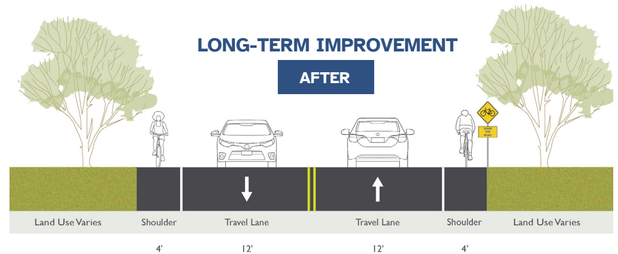


A bike-friendly Hudson Chapel Road could encourage outdoor recreation in the area and help support local entrepreneurship through tourism and river access.

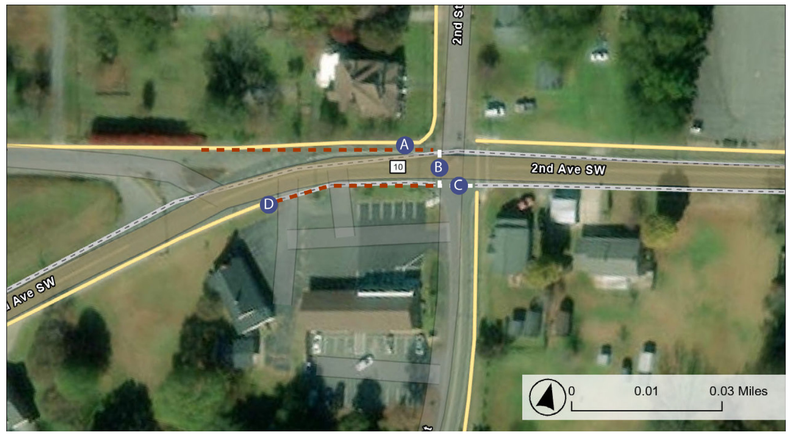


Long-term road widening to include a 4-foot paved shoulder along Hudson Chapel Road should also include a replacement of this bridge over the railway line, whose existing shoulders are very narrow. NOTE: bridge replacement was not included in the cost estimates.





I 2ND AVENUE SW SIDEWALK & CROSSWALKS (AT 3RD AVENUE SW)



LEGEND

- A — Priority Project & Map Notes
- Other Proposed Project
- Catawba Town Limits
- Existing Sidewalks
- Points of Interest
- Park



PLANNING LEVEL COST ESTIMATE:

$260,000

Includes design, right-of-way, utilities and construction per assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool.

PROJECT DESCRIPTION

This project will improve a key section of sidewalk, including on 2nd Avenue SW at 2nd Street SW and a crosswalk at 3rd Ave SW and Rosenwald School Street. This small but important connection would make it possible for people to walk to the downtown business district, Rosenwald Education Center and the Catawba Creamery.

CONNECTIONS	NOTES *(SEE CORRESPONDING LETTERS ON MAP)*
o Sidewalk on Rosenwald School Street o Catawba Creamery	A. Replace existing sidewalk with new sidewalk on the wide shoulder (*see rendering*). B. Add high visibility crosswalk here. C. Add crosswalk and ADA ramps for crossing of Rosenwald School Street to connect with existing sidewalk. D. Connect with existing sidewalk on Highway 10.
CROSSINGS	
o 3rd Avenue SW (Highway 10)	

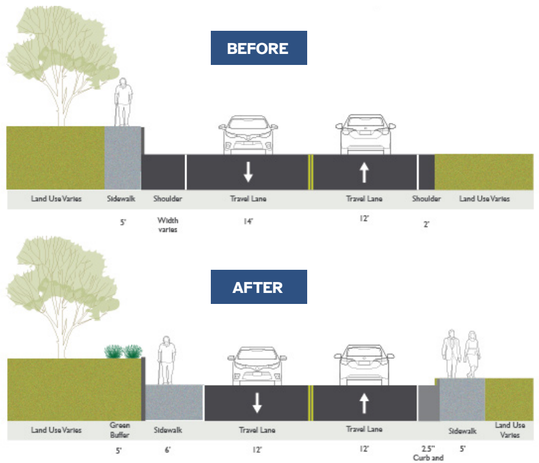
RENDERING OF PROPOSED SIDEWALK IMPROVEMENTS AND CROSSWALK INSTALLATION



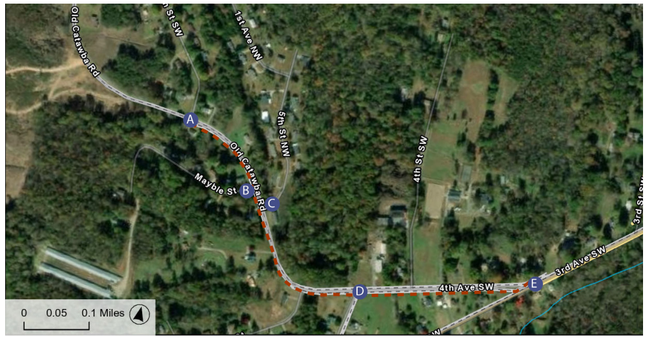
The existing elevated sidewalk is impractical and unsafe and does not provide access to the rest of the sidewalk system at this intersection, making crossing the road difficult. The proposed project also includes a high visibility crosswalk across Highway 10.



This intersection is missing several ADA ramps and existing ramps are non-compliant. Include ADA ramp upgrades at all corners to ensure accessible ramps and crossings for all existing and proposed crosswalks.



J OLD CATAWBA ROAD/4TH AVENUE SW SIDEWALK (FROM 3RD AVENUE SW TO 6TH STREET SW)



LEGEND

- A — Priority Project & Map Notes
- Other Proposed Project
- Catawba Town Limits
- Existing Sidewalks
- Points of Interest
- Park

PLANNING LEVEL COST ESTIMATE:

$710,000

Includes design, right-of-way, utilities and construction per assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool.

PROJECT DESCRIPTION

A 5' curb-and-gutter sidewalk along the south side of 4th Avenue SW (Old Catawba Road) would connect neighborhoods on the west side of Town to Highway 10 (3rd Avenue SW), enabling people to walk all the way to the Town center. Also consider intersection improvements to create a perpendicular intersection and reduce high speed right turns (not included in cost estimate).

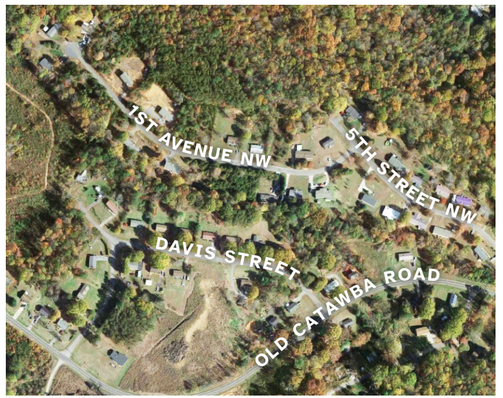
CONNECTIONS	NOTES *(SEE CORRESPONDING LETTERS ON MAP)*
o Annie Trace neighborhood o Mulberry Creek Farm	A. Crossing needed to connect to 6th Street NW. B. Connection to Mulberry Creek Farm. C. Crossing needed to connect to 5th Street NW and Annie Trace neighborhood. D. Crossing needed at 5th Street SW. E. Explore the feasibility of a high visibility crosswalk with rectangular rapid flash beacon to cross Highway 10.
CROSSINGS	
o 5th Street SW o Edna Street o Mayble Street	



A fall market at Mulberry Creek Farm. Having a sidewalk along 4th Avenue SW would improve walkability in the area, making it possible for people to safely walk to nearby businesses, and churches, and visit their neighbors.



People walking west along Highway 10 must cross the street when the sidewalk ends, without curb ramp or crosswalk infrastructure to connect them safely to 4th Avenue SW. Additional sidewalk infrastructure will improve walking, but consideration should also be given to realigning this intersection to reduce speeds of right-turning vehicles.

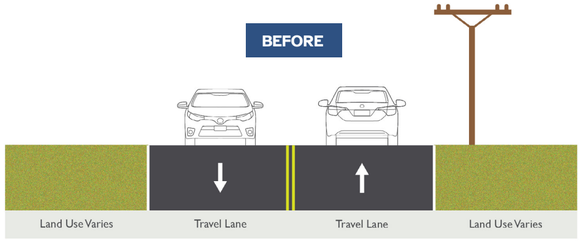


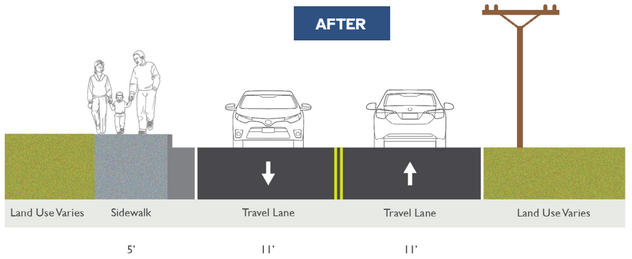
A number of residents live less than a mile from downtown Catawba, but they cannot safely or comfortably walk there.



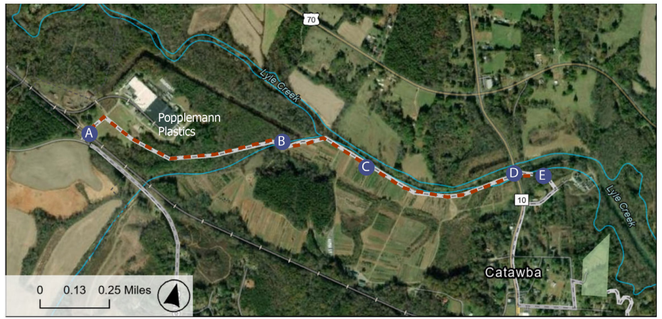
(Source:TAPCO; https://www.tapconet.com)

Rectangular Rapid Flash Beacons (RRFBs) can help improve visibility for people crossing rural roads. They include flashing lights to signal that someone is crossing.





K LYLE CREEK GREENWAY



LEGEND

- A — Priority Project & Map Notes
- Other Proposed Project
- Catawba Town Limits
- Existing Sidewalks
- Points of Interest
- Park

PLANNING LEVEL COST ESTIMATE:

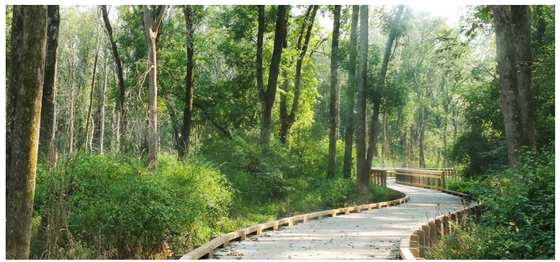
$4.9 million

Includes design, right-of-way, utilities and construction per assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool.

PROJECT DESCRIPTION

A 10'+ multiuse trail (greenway) along Lyle Creek from North Main Street /Highway 10 proposed sidewalks to proposed bike lanes/ widened shoulders on Old Catawba Road.

A feasibility study is needed to identify constraints and alternatives and determine final trail alignment.

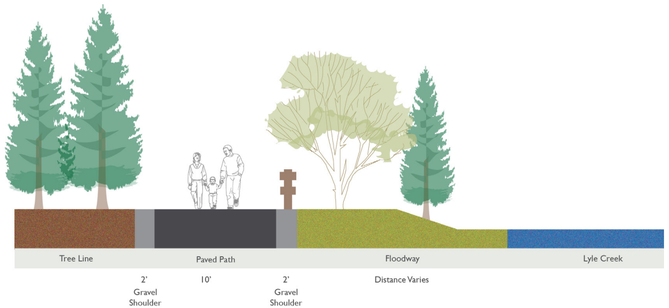


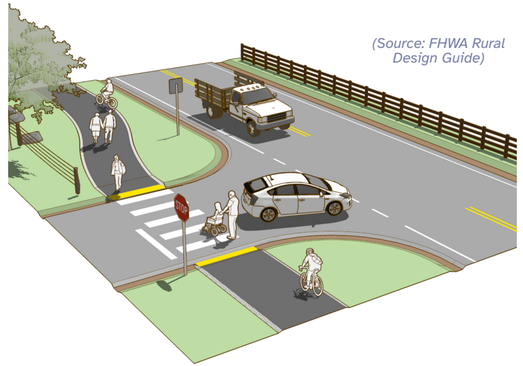
Floodplain and topography constraints could necessitate some elevated portions and increase the final cost of construction and maintenance.

CONNECTIONS	NOTES *(SEE CORRESPONDING LETTERS ON MAP)*
o Duke hiking land on Lyle Creek o Pöppelmann Plastics workplace o Town of Claremont trail system	A. Crossing railroad tracks at entrance to Pöpplemann Plastics campus. B. Pedestrian bridge needed over McLin Creek. C. Explore trail easements on undeveloped land adjacent to Lyle Creek. D. Investigate feasibility of underpass under Highway 10. E. Connect to Duke property hiking trails.
CROSSINGS	
o Highway 10 (could go underneath the bridge) o Old Catawba Road	



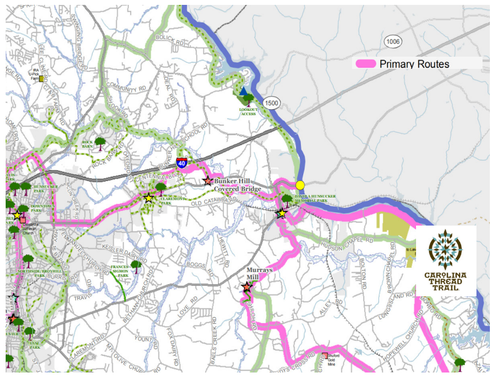
The City of Conover has a 1.6-mile natural surface trail along a segment of Lyle Creek. This trail is ideal for biking, walking, and wildlife viewing and follows the same waterway as this recommendation. Ultimately, a continuous stretch along Lyle Creek could connect Conover to Catawba, providing a key regional recreation destination and tourism opportunity.





(Source: FHWA Rural Design Guide)

This image from the Federal Highway Administration (FHWA) illustrates a multi-use sidepath and potential roadway crossing treatments.



This connection could become a crucial link to proposed Carolina Thread Trail primary routes for Catawba County, part of a broader regional trail system.

4 IMPLEMENTATION PLAN



(Source: Traffic Planning & Design, Inc.)

IMPLEMENTATION PLAN

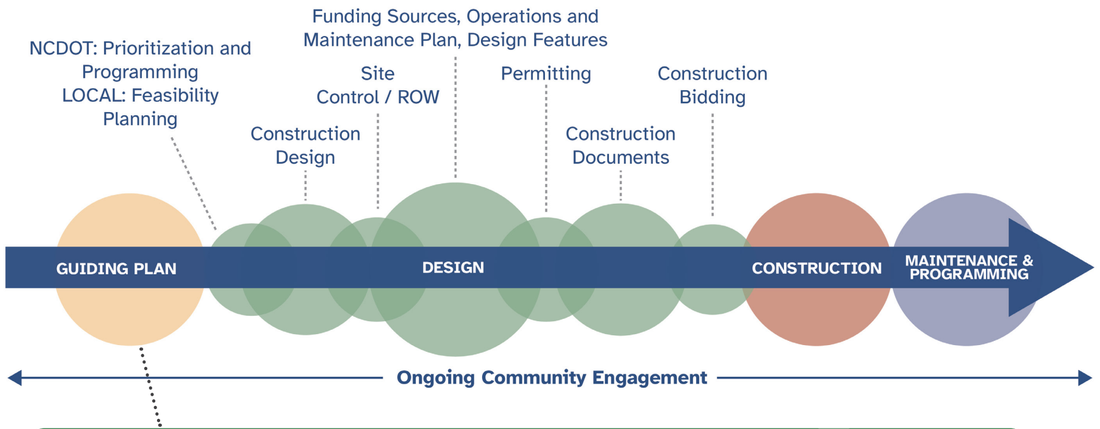
Lifecycle of a Multimodal Project

The project recommendations in this Plan are a starting point for the Town to develop a network for people walking and biking. Many of the project recommendations appear as lines on a map, and these are intended to be a high-level concept for the Town to develop further as the projects advance into the next stages of a typical project lifecycle. These lines are not intended to represent the final alignment for construction; they are simply a place for the Town to work with their partners in project development and pedestrian/bicycle network expansion. This Plan provides the 15–20-year vision for the Town to improve walking and biking for its residents and visitors.

Figure 12 describes the typical lifecycle of a multimodal project. The *Connect Catawba* Plan represents the 'Guiding Plan' phase of this process; from there, a project identified in this Plan will move into the many stages of design, then construction, and then maintenance and programming. It is important to acknowledge this process as it helps set the stage for project success. The time it takes to implement a project can depend on how uncomplicated or complex the project may be, who "manages" the project (e.g., local jurisdiction or NCDOT), the type of funding involved, how much land is needed, and the scale (size) of the project. An example of an uncomplicated project is a new crosswalk. An example of a complex project is a greenway that requires the purchase of private property and crosses streams and busy roadways.

The following Action Plan offers a rough estimate of the timeframe in which projects may be completed; however, it should be noted that this depends on capacity and budget. Project timeframes are variable based on funding, resources and other unforeseen project elements.

Figure 12. Lifecycle of a Transportation Project



Connect Catawba *is the "Guiding Plan" - a preliminary phase of the lifecycle of a transportation project and a key to unlocking funding and support for future phases. Years of extensive planning, study and work occur before NCDOT ever begins a roadway engineering project. The in-depth, phased process begins with developing long-term plans that identify area transportation needs and priorities.*

The needs identified in the planning stage of the project development process are then evaluated using a data-driven scoring process to help prioritize funding and, ultimately, construction for transportation projects. Each proposed project is reviewed, ranked and scored based on specific criteria – such as safety, congestion relief and benefit-cost. The Greater Hickory MPO can help make sure that Catawba's priorities are reflected through representation on the Movability Advisory Committee.

NCDOT, working with the GHMPO, then uses the scores and rankings – as well as other factors – to determine which projects will be funded in the 10-year State Transportation Improvement Program (STIP) and then "programs" projects' development, design and construction schedules, based on available funding. The STIP is updated every two years to be sure that it accurately reflects the state's current financial situation and local needs.

The Action Plan

The Action Plan describes the administrative, infrastructure, policy, and program steps needed to see *Connect Catawba* move forward. It should be noted that evolving project partner and funding opportunities may shift priorities and action items.

Table 2. Implementation Action Plan

TASK #	DESCRIPTION	LEAD	PARTNER	TIMEFRAME	HOW SUCCESS WILL BE MEASURED
	ADMINISTRATIVE ACTION ITEMS				
1	Adopt *Connect Catawba* as the Town's Pedestrian and Bicycle Plan. This allows the Plan to become the official multimodal planning document for the Town and shows intention to support implementation over time. The Plan should be shared with County, regional and state partners for inclusion in the comprehensive plan, County Transportation Plan (CTP) and other planning documents.	Town Council	Steering Committee, Catawba County, NCDOT, GHMPO	2023	Adopted Plan
2	Formalize the *Connect Catawba* Steering Committee as a planning advisory group/body on pedestrian and bicycle project implementation.	Town Council, Steering Committee		2023	Committee charter or meeting agenda/ minutes
3	Ensure that recommendations from *Connect Catawba* are incorporated into regional plans, such as the MTP, CTP and the County Comprehensive Plans.	County staff, NCDOT, GHMPO	Steering Committee	2023	Amendments to Plan documents
4	Send interested volunteers to BikeWalkNC Trainings and other multimodal design opportunities as they are offered.	Steering Committee		2023	Attendance at training events
5	Update *Connect Catawba* in 5 years. If any projects or programs have been completed, a new set of priorities should be proposed.	Steering Committee, Town staff	Town Council	2028	Initiated planning process

Table 2. Implementation Action Plan *(Continued)*

TASK #	DESCRIPTION	LEAD	PARTNER	TIMEFRAME	HOW SUCCESS WILL BE MEASURED
6	Work with Western Piedmont COG or others to determine the need for Capital Improvement Plan (CIP) and begin implementing a CIP if the need exists. Capital funding may be needed as a match for certain projects.	Town staff, Town Council	GHMPO	2023	Capital Improvement Plan (CIP) Evaluation
7	Actively participate in regional trail planning efforts to ensure a regional trail network and connectivity.	Town staff, GHMPO, Steering Committee		Ongoing	Attendance at coordination meetings
INFRASTRUCTURE ACTION ITEMS					
8	Develop feasibility study for these three projects: Lyle Creek Greenway, Main Street Improvements and Hudson Chapel Multi-Use Trail. Seek funding from NCDOT.	Steering Committee	Town Council, GHMPO	2026	Feasibility study for three key projects
9	Work with NCDOT Division 12 to review their 5-year resurfacing program to identify possible opportunities on the horizon for pedestrian project implementation (HMIP). Begin talking with NCDOT immediately about Hudson Chapel repaving project.	Steering Committee, NCDOT, GHMPO		2023, ongoing	Annual coordination meeting agenda and minutes
10	Design a pedestrian- and bicycle-scale wayfinding system to indicate destinations, distance and direction. Given Catawba's small size, the system would be achievable and could include a map and app for people walking, running, or biking.	Town staff, Steering Committee	Town Council	2026	Draft wayfinding system plan
11	Implement bike parking racks or other bicycle amenities (e.g., fix-it stations) in downtown.	Steering Committee, Town staff	Town Council	2024	Bike racks installed
12	Explore options and grant funding to add trails to Hunsucker Park.	Steering Committee, Town staff	Town Council	2023	Improved trails
13	Coordinate with Duke Energy to connect to their future hiking trails on Lyle Creek.	Steering Committee, Town staff		2023	Field visit with Duke

Table 2. Implementation Action Plan *(Continued)*

TASK #	DESCRIPTION	LEAD	PARTNER	TIMEFRAME	HOW SUCCESS WILL BE MEASURED
POLICY & PROGRAM ACTION ITEMS					
14	Follow guidance outlined in the Downtown Master Plan related to improving existing sidewalks and updating ordinance to support developer-funded sidewalk construction.	Town Council	Steering Committee	2026	Ordinance updates as needed
15	Create a façade improvement incentive grant program for businesses; use this program to build support for larger downtown streetscape improvements. Invite staff from the NC Main Street Center to speak to the Town about options such as these.	Town Council	Town staff	2025	Catawba Façade and Streetscape Program
16	Work with Hickory - Conover Tourism Development Authority to determine if there are ways to partner on funding opportunities for community projects, tourism development, or standalone bicycle/pedestrian infrastructure.	Town Council	Steering Committee	2024	Coordination with the TDA
17	As walking and biking activities grow in the Town, consider ways to celebrate walking and biking such as free, temporary bike parking at Town events; bicycle rodeos for kids; or free loaner bikes for short trips in town.	Steering Committee		2026	New events in the community

How to Use This Plan

At the heart of a successful bicycle and pedestrian plan is a coordinated effort by Town staff and other partners to support active modes of travel. Everyone has a role to play in implementing *Connect Catawba* and should use this report to establish programs, policies and infrastructure investments throughout town.

Town of Catawba

Town staff can use this report to document existing roadway design deficiencies and advocate for specific improvement opportunities. Continuing to coordinate with developers and NCDOT will be key to implementing bicycle and pedestrian facilities. *Connect Catawba* provides documentation and recommendations to refer to in shaping private development and NCDOT projects.

NCDOT

NCDOT staff - specifically within Division 12 - can use this plan to get familiar with proposed local priorities and key projects. NCDOT will play an integral role in the design, construction, and maintenance of pedestrian facilities throughout the NCDOT maintained roadways. The Town and GHMPO can communicate with NCDOT personnel to affect how STIP projects are formulated and designed.

Developers

As private development continues in Catawba and the surrounding area, bicycle and pedestrian infrastructuruve could be consistently incorporated into each site design. Considerable active transportation connectivity can result from Town policy and the development community incorporating these elements into site planning as a priority, building these connections as new developments come to fruition.

Local Stakeholders

Interested Catawba residents can use this plan to understand and confirm the conditions in their neighborhoods, advocate for project implementation, and become familiar with the ways in which they can support program goals. Often, education and encouragement programs require these dedicated volunteers (or "champions").

Potential Funding Sources

To advance Catawba's priority projects, there are several eligible funding sources that the Town may consider, including County, state, and federal programs. The North Carolina Main Street and Rural Planning Center's Potential Funding Sources and Resources for Downtown and Rural Economic Development document is a great resource for Catawba. This contains dozens of resources and is found in the Appendix.

Given the small size and population of Catawba, the Town will need to consider ways to provide local matching funds for grant-funded projects. In addition to the resources in the Appendix, the following are a few considerations, including new funding sources as of 2022. Each funding source has unique eligibility and funding amounts. The funding programs may also change, so the information provided is accurate at the time of publication of this Plan.

Capital Improvement Plan (CIP)

A CIP may be needed to reserve funds for and apply for various funding sources and help guide the Town in transportation improvements. As described in the Action Plan, the first step is determining the need and then developing a plan.

Locally Administered Projects Program (LAPP) Grants

The Locally Administered Projects Program (LAPP) was adopted by the Greater Hickory Metropolitan Planning Organization (GHMPO) to prioritize and program local transportation projects in the region that utilize federal transportation funding. This process involves a regular call for projects, and will result in new projects added to the GHMPO's Transportation Improvement Program (TIP). The GHMPO receives a direct allocation of approximately $3,335,000 in Surface Transportation Block Grant Direct Attributable (STBG-DA) funding annually.

LAPP is a competitive funding program managed by GHMPO that prioritizes locally administered projects in the region. These projects are funded using the federal funding sources with a minimum 20% local match. Member jurisdictions are eligible to apply for these funds, competing as either roadway, bicycle and pedestrian, or transit projects; while Complete Streets elements are required for all projects considered.

What is an MPO?

Metropolitan Planning Organizations (MPO) are part of a federal process to conduct local transportation planning in urbanized areas. The MPO process is a partnership between local and state government to make decisions about transportation planning in urbanized areas and to meet planning requirements established by federal authorizing legislation for transportation funding.

Greater Hickory MPO

Greater Hickory Metropolitan Planning Organization

The Greater Hickory MPO (GHMPO) - a part of the Western Piedmont Council of Governments - serves the transportation needs for all 28 local governments in Alexander, Burke, Caldwell and Catawba Counties. GHMPO is responsible for the allocation of federal transportation funds and ensuring funds are spent in accordance with federal policy.

GHMPO's Movability Advisory Committee (MAC) was specially designed to help the MPO planning area identify necessary policy, systematic, and environmental changes. The committee promotes equitable access to all forms of transportation, specifically bike, transit, and pedestrian. MAC utilizes locally adopted plans as well as public involvement to identify mobility barriers. The committee addresses barriers by coordinating with municipalities, NCDOT, and key representatives in the four-county region to address. Representatives serving on the committee have the expertise to most effectively reach the right voices and promote equity throughout our region, including representatives from health, education, transit, NCDOT, recreation, and many other sectors.

The Town of Catawba should make sure that they have a representative voice on the committee to help make sure that local priorities are reflected and that Connect Catawba project recommendations are programmed for funding.

Applying jurisdictions must have the following items to be competitive:

- Map(s) of proposed project
- GIS files of project
- Completed Funding Request Submittal Form – Background Information
- Completed mode specific criteria form
- Resolutions of support from local government agency to apply for STBG-DA/TAP funding AND committing a minimum 20% match
- Supporting documents – Pictures, additional maps, plans that specify a need for the project, etc.

NCDOT Integrated Mobility Division Feasibility Funding

The North Carolina General Assembly allocated funding in 2022 to establish a Paved Trails Feasibility Study Program. For pedestrian and bicycle projects that require a more in-depth study into environmental conditions, routing challenges and costs, feasibility studies can provide a critical bridge between planning and implementation. This funding source could be useful for specific projects in this plan, especially greenway projects which require further study and stakeholder outreach.

Integrated Mobility Division
N.C. DEPARTMENT OF TRANSPORTATION

Complete Streets in North Carolina

NCDOT adopted a Complete Streets policy in 2009, which was updated in 2019. The policy directs transportation engineers and planners to consider and incorporate multimodal facilities in the design and improvement of all appropriate transportation projects in North Carolina. A 2022 update to the policy offers additional methodology and guidance for Complete Streets review.

The process for project advancement under the new policy is through NCDOT's Strategic Prioritization and the local Comprehensive Transportation Plan (CTP). The importance of this new policy to municipalities like Catawba cannot be underscored; it reduces or eliminates cost-sharing requirements by the municipality, which has been a burden and barrier for many towns to implement multimodal projects. Catawba may coordinate with their local NCDOT Division Planning Engineer or Corridor Development Engineer to understand how a complete street project can move through the project development process.

Bipartisan Infrastructure Law (BIL)

In 2021, President Biden signed the Infrastructure Investment and Jobs Act (IIJA) (Public Law 117-58, also known as the "Bipartisan Infrastructure Law" or BIL) into law. The Bipartisan Infrastructure Law provides $550 billion over fiscal years 2022 through 2026 in new Federal investment in infrastructure, including in roads, bridges, and mass transit, water infrastructure, resilience, and broadband. The BIL continues the Transportation Alternatives set-aside from the Surface Transportation Block Grant (STBG) program. Eligible uses of the set-aside funds include all projects and activities that were previously eligible under the Transportation Alternatives (TA) Program under the Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Fixing America's Surface Transportation (FAST) Act. This encompasses a variety of smaller-scale transportation projects such as pedestrian and bicycle facilities, recreational trails, and safe routes to school projects.

States and MPOs (including the Greater Hickory MPO) will conduct a competitive application process for the use of TA funds. Eligible applicants include tribal governments, local governments, transit agencies, school districts, and a new eligibility for nonprofit organizations responsible for local transportation safety programs. The Town of Catawba can work with the GHMPO to apply for this grant funding for local and regional transportation projects.

Infrastructure is so elemental to our society that when it's not there to serve us in the right way, all of us are impacted. But when it is — when it's strong — every community — large and small, rural and urban, privileged and marginalized — every community feels the benefits.

- Secretary of Transportation Pete Buttigieg

Safe Streets and Roads for All (SS4A) Grant Program

The Bipartisan Infrastructure Law (BIL) established the new Safe Streets and Roads for All (SS4A) discretionary program with $5 billion in appropriated funds over the next 5 years. The SS4A program funds regional, local, and Tribal initiatives through grants to prevent roadway deaths and serious injuries. The SS4A program supports Secretary of Transportation Pete Buttigieg's National Roadway Safety Strategy and the Department's goal of zero deaths and serious injuries on our nation's roadways.

The following activities are eligible for the SS4A program:

- Develop or update a comprehensive safety action plan (Action Plan).
- Conduct planning, design, and development activities in support of an Action Plan.
- Carry out projects and strategies identified in an Action Plan.

There are two types of SS4A grants: Action Plan Grants and Implementation Grants. Below are illustrative examples of activities that could be conducted as part of an Implementation Grant as identified in an Action Plan.

- Applying **low-cost roadway safety treatments** system-wide, such as left- and right-turn lanes at intersections, centerline and shoulder rumble strips, wider edge lines, high-friction surface treatments, road diets, and better signage along high-crash urban and rural corridors.
- Identifying and correcting common risks across a network, such as **improving pedestrian crosswalks** by adding high-visibility pavement markings, lighting, and signage at transit stops, in a designated neighborhood, or along a busy public transportation route.
- Transforming a roadway corridor on a High-Injury Network into a **Complete Street** with safety improvements to control speed, separate users, and improve visibility, along with other measures that improve safety for all users.
- Installing **pedestrian safety enhancements** and closing network gaps with sidewalks, rectangular rapid-flashing beacons, signal improvements, and audible pedestrian signals for people walking, rolling, or using mobility assisted devices.
- Working with community members in an identified problem area to carry out **quick-build street design** changes informed by outreach and user input.
- Supporting the development of **bikeway networks with bicycle lanes** for different roadway volumes and speeds that are safe for people of all ages and abilities.
- Carrying out **speed management strategies** such as implementing traffic calming road design changes, addressing speed along key corridors through infrastructure, conducting education and outreach, setting appropriate speed limits, and making strategic use of speed safety cameras.
- Creating **safe routes to school** and public transit services through multiple activities that lead to people safely walking, biking, and rolling in underserved communities.
- Promoting the adoption of innovative technologies or strategies to promote safety and **protect vulnerable road users** in high-traffic areas where commercial motor vehicles (CMVs), pedestrians, bicyclists, motorcyclists, etc. interact.
- Conducting **education campaigns** to accompany new or innovative infrastructure, such as roundabouts, pedestrian hybrid beacons, or pedestrian-only zones.



(Source: Traffic Planning & Design, Inc.)

- Implementing standard and novel **data collection and analysis** technologies and strategies to better understand vulnerable road user (pedestrian/bicycle/transit rider) network gaps and to collect exposure data.
- Deploying **advanced transportation technologies**, such as the installation of connected intersection-based safety solutions and vehicle-to-infrastructure (V2I) advisory speed limit systems (e.g., Intelligent Speed Assistance [ISA]).
- **Combating roadway departure crashes** through enhanced delineation, shoulder widening, rumble strips, and roadside safety improvements.
- Evaluating and **improving the safety of intersections** by considering innovative design changes, improved delineation, and advanced warning.
- **Improving first responder services** with improved crash data collection, formalizing street names and addressing, and enhancing emergency vehicle warning systems.
- **Unifying and integrating safety data across jurisdictions** where local agencies share their crash, roadway inventory, and traffic volume data to create an analytic data resource.

Rural Transformation Grant

The Rural Transformation Grant Fund provides local governments with grants and expert guidance to improve economic vitality and overcome the unique challenges many rural communities face. Open to local governments in the state's Tier 1 and Tier 2 counties, as well as qualified census tracts in Tier 3 counties. (Catawba County is a Tier 2 county). Rural Transformation Grants can support:

- Main Street and downtown investment and revitalization efforts;
- Initiatives that help create resilient neighborhoods;
- Community enhancements that spur economic growth;
- Professional development and education programs to build local government capacity.

The Fund, created by the North Carolina General Assembly in *Session Law 2021-180 (S.105)*, has an available pool of $48 million for grantmaking. As North Carolina recovers from the COVID-19 pandemic and applies lessons from the public health emergency to improve community resiliency, the Rural Transformation Grant Fund offers a new resource to local government leaders as they guide their communities toward a brighter future.

Economic Infrastructure Program Grant

This program provides grants to local governments to assist with infrastructure projects that will lead to the creation of new, full-time jobs. Eligible projects include but are not limited to:

- Upgrades/repair of public drinking water or wastewater treatment plants
- Upgrades, extensions, or repair of public water or sewer lines
- Extensions of publicly owned natural gas line (with an executed Pipeline Construction, Operating and Resale Agreement
- Installation or extension of public broadband infrastructure
- Construction of publicly owned access roads not funded or owned by the NC Department of Transportation

Eligible applicants are units of local government with priority given to the counties that have the 80 highest rankings under *N.C.G.S.143B-437.08*.

Recreational Trails Program (RTP) Grants

The Bipartisan Infrastructure Law also reauthorized the Recreational Trails Program (RTP) through Federal fiscal years 2022 through 2026 as a set-aside from the Transportation Alternatives under the Surface Transportation Block Grant (STBG). The North Carolina Division of Parks and Recreation and the State Trails Program manages these funds with a goal of helping citizens, organizations and agencies plan, develop and manage all types of trails ranging from greenways and trails for hiking, biking, and horseback riding to river trails and offhighway vehicle trails. Grants are available to governmental agencies and nonprofit organizations. The maximum grant amount is $250,000 and requires a 25% match of RTP funds received. Permissible uses include:

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

Parks & Recreation Trust Fund (PARTF) Grants

The Parks and Recreation Trust Fund (PARTF) provides dollar-for-dollar matching grants to local governments for parks and recreational projects to serve the general public. Counties, incorporated municipalities, and public authorities, as defined by G.S. 159-7, are eligible applicants. A local government can request a maximum of $500,000 with each application.

An applicant must match the grant dollar-fordollar, 50 percent of the total cost of the project, and may contribute more than 50 percent. The appraised value of land to be donated to the applicant can be used as part of the match. The value of in-kind services, such as volunteer work, cannot be used as part of the match. Property acquired with PARTF funds must be dedicated for public recreational use.

Business Improvement Districts

The North Carolina code authorizes local governments to define special areas to assess property tax on properties located within the district, which in turn funds projects and services in said district. These special taxing districts, often known as Business Improvement Districts (BIDs) fund various services and functions including downtown revitalization projects. Such projects may encompass the following: maintenance of streets, sidewalks, and other public facilities; downtown marketing and events; and construction of capital improvements.

Closing

Downtown Catawba of the 1950s and 1960s was a vibrant and bustling place. Many of the business were family-owned and Main Street was the heart of the community. Downtown had a strong sidewalk network which enabled people to connect and gather. Although the ensuing years saw a decline in activity, today a group of volunteers, Town staff and leadership are dedicated to improving the community. From this spirit developed *Connect Catawba*, a Plan to identify sidewalk, bike and greenway connections for residents and visitors.

The Town is already experiencing new residential development and given the proximity to the Charlotte metropolitan area, it will likely continue to see new development in the coming decade. With growth, demand for new recreational opportunities, greenways and pedestrian infrastructure will also increase. The Town can position itself for greater tourism by developing a bicycle and pedestrian network.

To improve the downtown, Catawba will be successful by focusing first on smaller wins to generate support for the bigger projects. For instance, developing a gateway and adding signage in downtown will allow the Town to gain the momentum for larger projects like streetscape improvements.

As the Town sets its sight on the recommendations in this Plan, it should pause and celebrate the tremendous amount of effort that have brought it to the present day. Acknowledging this progress and dedication, Catawba will surely be successful in their endeavors. People will seek out its small-Town authenticity and plentiful opportunities to connect with nature, live, dine and gather as a community.

Endnotes

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connect catawba

town of catawba