D. Henry Fork Connector: 2nd St in Hickory to Henry Fork

Route Profile:

- 2.8 miles in length along Hwy 127, 2nd St, and Brookford Blvd
- · 1.9 miles existing sidewalk
- · 0.4 miles proposed sidewalk
- \cdot 0.5 miles other

Access Opportunities:

 Adjacent to Brookford Park, Robinson Park, and Southside Heights Park

Population within 1/2 mile of proposed segment:

- · 2807 residents
- 1003 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

- · SALT Block
- · Ivey Arboretum
- · Downtown Hickory
- · Brookford Town Center
- · Claremont Historic District
- · Brookford Park
- Robinson Park
- · Southside Heights Park
- · Taft Broome Park

Other Destinations within walking distance (1/4 mi):

- · Harper House / Hickory History Center
- · Cornerstone Christian Academy

Challenges and Opportunities:

- Challenge: Section near downtown Hickory with no existing sidewalk
- · Challenge: Hwy 70 crossing
- Opportunity: Interstate 40 crossing 2nd St. crossover bridge has sidewalk

Site Visit Notes:

- Good consistent sidewalks along both north and south bound lanes of Hwy 127
- Several obstacles noted as shown; No bike lanes provided
- · Some street crossings need to be upgraded as shown



Highway 127



Corridor 3: Lyle Creek Corridor (see map page 54)

J. Lyle Creek Corridor: 2nd Street in Hickory to Thornburg Drive in Conover Route Profile:

- · 8.3 miles in length
- 1.0 miles along existing sidewalk using 2nd Ave, 3rd St, Main Ave, 7th Ave, 8th St
- 2.8 miles along existing sidewalk on Highland Ave
- · 4.5 miles along Lyle Creek

Access Opportunities:

 Adjacent to McComb Park, Robinson Park, and Cliff Teague Park

Population within 1/2 mile of proposed segment:

- · 8039 residents
- · 969 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

- · SALT Block
- · Ivey Arboretum
- · McComb Park
- · Robinson Park
- Cliff Teague Park
- Downtown Hickory
- · Lenoir Rhyne University
- · Claremont Historic District in Hickory

Other Destinations within walking distance (1/4 mi):

· Harper House / Hickory History Center

- St Stephens Elementary
- · Hickory Christian Academy
- · Highland Center
- NC Center for Engineering Technologies

Challenges and Opportunities:

- Challenge: Multiple property owners and surrounding neighborhoods
- · Opportunity: Potential sewer line easements
- Opportunity: More gentle topography than southwest

Site Visit Notes:

- · High volume of vehicular traffic noted.
- Well maintained sidewalks adjacent to Lenoir Rhyne University (LRU).
- Highland Ave. is one way (eastbound) from approximately 8th Ave. NE to 16th Street NE.
- · Sidewalks are present but with gaps along Highland Ave.
- Some improvements would need to be made to correct poor utility placement and deteriorating concrete.
- Higland overpass at McDonald Parkway will be a challenge.
- Potential to use Lyle Creek at this location, however, McDonald Parkway will still be a challenge to cross.
- · Lyle Creek headwater is less than ideal.



O. Claremont Connector: Thornburg Dr. in Conover to Main Street in Catawba

Route Profile:

- · 10.6 miles in length
- 0.5 mile along proposed Conover greenway south of Lyle Creek,
- · 1.7 miles along sidewalks on Thornburg Dr,
- · 2.7 miles along Conover Blvd sidewalks,
- · 0.9 miles along Main St in Claremont,
- 0.4 miles through Claremont Park and along proposed Claremont Greenway,
- · 0.4 miles along Centennial Blvd,
- 0.8 miles overland connector south of the I40 Rest Area,
- · 3.2 miles along Lyle Creek

Population within 1/2 mile of proposed segment:

- · 3207 residents
- 3o3 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

- · Concordia Lutheran Church
- · Bunker Hill Covered Bridge
- · Downtown Conover
- · Downtown Claremont
- · Conover Downtown Park
- · Claremont City Park

Other Destinations within walking distance (1/4 mi):

- · Conover Library
- · Claremont Library
- · Claremont Elementary
- Tri-City Christian School

· Claremont Proposed Greenway

Challenges and Opportunities:

- · Opportunity: Proposed sidewalks along Centennial Blvd.
- Opportunity: Investigate I-40 rest areas for trailheads (contingent upon NCDOT approval) potential to provide I-40 rest area connection to Bunker Hill Covered Bridge
- Opportunity: Have contacts with property owners around Bunker Hill Covered Bridge – has been in process for some time



Historical Landmarks



Corridor 4: Central County Corridor (see map page 55)

L. Conover Greenway Connector: Lyle Creek to Conover Blvd

Route Profile:

- · 3.1 miles in length
- o.5 miles along County Home Rd. (Conover proposed greenway route)
- o.4 miles overland connector (Punch Loop Rd to 10th St.)
- · 0.7 miles along existing Conover Greenway
- · 0.4 miles on sidewalks on 1st street
- o.3 miles on sidewalks on 2nd Ave and through Conover Downtown Park
- · 0.2 miles on sidewalks on 5th Ave
- o.2 miles overland connector to 1st Ave
- o.4 miles on sidewalks along 1st Ave

Access Opportunities:

 Adjacent to Conover Downtown Park, Majestic Park, Travis Park, and Washington/ Southwest Park

Population within 1/2 mile of proposed segment:

- · 2882 residents
- 930 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

- · Downtown Conover
- · Conover Downtown Park
- · Majestic Park
- Washington/Southwest Park

Other Destinations within walking distance (1/4 mi):

- · Concordia Lutheran Church
- · Conover Library
- · Conover School
- · Concordia Christian Day School

Challenges and Opportunities:

- · Challenge: Hwy 70 crossing
- · Opportunity: Existing sidewalk over I-40

Site Visit Notes:

- Thornburg offers exemplary condition of sidewalk trail route
- · County Home Road does not have sidewalks or bike lanes
- Appears to have sewer line along this portion of Lyle Creek

M. Newton Connector: Conover Blvd to Southside Park

Route Profile:

- 5.6 miles in length
- · 2.4 miles along N. Main Ave in Newton,
- · o.5 miles on West A Street,
- · 0.5 miles on Radio Station Rd,
- · 0.9 miles along Hildebran Creek,
- · 1.3 miles along Clark Creek to Southside Park

Access Opportunities:

 Within walking distance to Newton Greenway, Newton Recreation Center, Northside/Broyhill Park, Rowe Park, Westside Jaycee Park, and Southside Park



Population within 1/2 mile of proposed segment:

- · 5693 residents
- · 1017 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

- · Catawba County Museum of History
- · Downtown Newton
- · North Main Ave Historic District
- · Westside Jaycee Park
- · Newton Recreation Center
- · Central Recreation Center
- · Northside/Broyhill Park
- · Rowe Park
- · Southside Park
- Newton Heritage Greenway

Other Destinations within walking distance (1/4 mi):

- · Newton Library
- · Thornton Elementary
- · Newton Conover Middle School
- · Newton Conover High School
- · Newton Conover Health-Science High School
- · Grace Reformed Church
- · Catawba County Courthouse
- · Bost-Burris House

Challenges and Opportunities:

- Challenge: Hwy 70 crossing
- · Opportunity: 321 crossing at Radio Station Road

Site Visit Notes:

- · One way streets in downtown Newton
- · Good sidewalks in Newton.
- A stretch between Newton and Conover has sidewalks in disrepair.
- · Good sidewalks and pedestrian crossings in Conover.
- Continue to address land owner concerns of South Side Park.
- · High traffic volume along 321.

N. Newton to Maiden Connector: Southside Park to Main St in Maiden

Route Profile:

- 5.1 miles in length
- · 2.7 miles along Clark Creek corridor
- o.8 miles along powerline easement where feasible
- · 0.9 miles along Hwy 321
- · 0.7 miles along Carolina Ave in Maiden

Population within 1/2 mile of proposed segment:

- · 1888 residents
- · 370 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

- · Southside Park
- · Maiden Town Center

Other Destinations within walking distance (1/4 mi):

- Maiden Elementary
- · Maiden Middle School
- · Maiden High School
- · Maiden Library
- · Warren-Hood Farm



Challenges and Opportunities:

- · Challenges: Use of powerline easement.
- Duke Energy owns part of this property in fee simple
- Trails and greenways running parallel to Duke Energy right of ways cannot exceed 5' in width
- Trails and greenways may 'meander' in a parallel fashion through the transmission rightof-way, but cannot zigzag from side to side or cross under the lines multiple times.
- Must obtain proper permissions / easements from private land owners.
- Opportunity: Interested land owners west of Clark Creek

Site Visit Notes

 Southern portion of this route through Maiden will require upgrade in sidewalk conditions as well as addition of bike lanes.

K. South Fork – Maiden Connector:South Fork River to Carolina Ave in MaidenRoute Profile:

- 6.0 miles in length
- o.7 miles along South Fork tributary through Catawba Lands Conservancy (CLC) land
- o.3 miles north on Herter Rd.
- · 0.9 miles along Blackburn Bridge Rd
- 1.3 miles along Startown Rd using Hwy 321 underpass
- · 1.3 miles along Maiden Rd.
- 1.5 miles using existing sidewalk along Center St and Main St.



Maiden

Access Opportunities

- Adjacent to 219 acres of Catawba Lands Conservancy properties and easements
- Provides access to proposed South Fork blueway access site

Population within 1/2 mile of proposed segment:

- · 1126 residents
- 188 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

· Maiden Town Center

Other Destinations within walking distance (1/4 mi):

- · Maiden Elementary
- · Maiden Middle School
- · Maiden High School
- · Maiden Library
- · Santa's Forest

Challenges and Opportunities:

- Challenge: Use of road segments for walking trail
- Challenge: Startown Rd Bridge @ 321 is very narrow
- Opportunity: Property just east of South Fork is owned by the Catawba Lands Conservancy and includes a Clean Water easement along the tributary.
- Opportunity: Potential for new commercial/ industrial development in Startown Road interchange area which could incorporate trail development

Site Visit Notes:

- Pedestrian pathways not present along Blackburn Bridge Rd as shown in the photograph below
- Property owner's fence lines appear to go up to the right of way in many locations
- · Several stables were noted in this portion of the county
- Low lying areas adjacent with perceived flooding potential at South Fork / Blackburn Bridge as shown



Rural Roadway



Naturalized Area

Corridor 5: Catawba Connectors (see map page 56)

P. Lyle Creek Pedestrian Bridge Connector: Main Street in Catawba to Iredell County Route Profile:

- · 1.0 miles in length
- o.1 miles to connect with proposed pedestrian bridge over Lyle Creek just east of existing bridge
- 0.2 miles along 1st Ave Ct NE
- 0.7 miles existing sidewalks along Hwy 70

Access Opportunities:

· Adjacent to Town of Catawba's Hunsucker Park

Population within 1/2 mile of proposed segment:

- · 229 residents
- · 229 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

· Hunsucker Park

Cross-County Connections:

· Iredell County

Challenges and Opportunities:

- Challenge: Route must be outside of Duke Energy's Project Boundary or must obtain special Federal Energy Regulatory Commission (FERC) approval.
- Opportunity: There is adequate room under the Main Street Bridge for pedestrians to safely pass under.
- Opportunity: Through Duke Energy's Federal Energy Regulatory Commission (FERC) relicensing process, there will be a linear park on the south side of Lyle Creek at the southeast corner of where Lyle Creek and the Catawba River merge.

Site Visit Notes

 Significant and costly project to construct bridge connection across Lyle Creek. Consult with plant nursery and land owners along Lyle Creek to determine feasibility of route. Lyle Creek tributaries present additional crossing challenges to the south of Lyle Creek. Power easements may be available. Significant topography along south of Lyle Creek noted as well.

Q. Town of Catawba: Lyle Creek to Hudson Chapel Rd

Route Profile:

- · 1.4 miles in length
- · 0.4 miles of proposed sidewalk along Main St
- 0.5 miles of existing sidewalks along Main St, 2nd Ave, Rosenwald Rd
- o.5 miles of proposed sidewalk along 6th Ave, S
 Main St, and Rosenwald Rd

Population within 1/2 mile of proposed segment:

- · 483 residents
- 345 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

- · Catawba Town Center
- · Town of Catawba Historic District and Museum
- · Hunsucker Park

Other Destinations within walking distance (1/4 mi):

- · Catawba Elementary
- · Catawba Rosenwald Education Center

Challenges and Opportunities:

 Challenge: Lyle Creek tributaries present additional crossing challenges to the south of Lyle Creek.

Challenge: Significant topography along south of Lyle Creek noted as well.

Opportunity: Power easements may be available.

R. Catawba River: Rosenwald Rd to Iredell County

Route Profile:

- 5.7 miles in length
- · 0.2 miles along 2nd Ave,
- · 0.3 miles along 2nd St,
- · 0.2 miles along 3rd Ave,
- · 0.5 miles along Catawba Station Dr,
- · 4.3 miles along the Catawba River Corridor, and
- o.2 miles along Hudson Chapel Rd to the Iredell County line

Access Opportunities

· Adjacent to 720 acres of current gamelands

Population within 1/2 mile of proposed segment:

- · 894 residents
- 57 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

· none

Other Destinations within walking distance (1/4 mi):

- · Catawba Elementary
- · Downtown Catawba
- · Town of Catawba Historic District and Museum
- · Catawba Elementary
- · Alexander Moore Farm
- · Catawba Community Park

Cross-County Connections:

· Iredell County and access to Lake Norman State Park

Challenges and Opportunities:

- Challenge: Hudson Chapel Bridge –
 Pedestrian and bike accommodation needed
- Opportunity: Possible Catawba River Walk is being explored, based upon coordinated efforts with the Catawba Lands Conservancy
- Opportunity: low traffic count on Hudson Chapel Rd

Site Visit Notes:

· not reviewed

Corridor 6: Murrays Mill/Sherrills Ford Corridor (see map page 57)

S. Murrays Mill Connector: Hudson Chapel Rd to Hopewell Church Rd

Route Profile:

- · 9.5 miles in length
- \cdot 0.5 miles along Lowrance Rd
- · 3.0 miles along Balls Creek and Mill Pond
- · o.8 miles along Shiloh Rd
- · 0.5 miles along Thorneburg Rd
- · 1.3 miles overland connector east of Sugarfarm Rd
- · 1.1 miles along Bandy's Cross Rd
- · 2.3 miles along Sherrills Ford Rd

Population within 1/2 mile of proposed segment:

- · 1383 residents
- 146 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

- · Murrays Mill
- · Murrays Mill Historic District
- · Catawba Elementary
- · Murrays Mill Trail

Other Destinations within walking distance (1/4 mi):

· Shuford Gold Mine (historic location), not public

Challenges and Opportunities:

- Challenge: Sherrills Ford Rd Pedestrian and bike accommodation needed
- · Challenge: Farmland
- Opportunity: Opportunity with property owners around Murrays Mill – Existing Trails around Mill pond illustrate a good example of a trail in coordination with farming land owner.

Site Visit Notes:

 Image taken along Sherrills Ford; pedestrian / bike route needed; some multi-modal transportation noted



Rural Roadway

T. Mountain Creek Park Connector: Sherrills Ford Rd to Hwy 150

Route Profile:

- · 5.0 miles in length
- · 2.8 along a powerline easement where feasible
- · 1.0 miles along Mt. Pleasant Rd
- · 1.2 miles along Little Mountain Rd

Access Opportunities:

 Adjacent to Mountain Creek – future County Park

Population within 1/2 mile of proposed segment:

- · 818 residents
- · 164 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

· Mountain Creek – future County Park

Other Destinations within walking distance (1/4 mi):

· Birdbrain Ostrich Ranch

Challenges and Opportunities:

- · Challenge: Use of powerline easement.
- Challenge: Trails and greenways running parallel to Duke Energy right-of-ways cannot exceed 5' in width
- Challenge: Trails and greenways may 'meander' in a parallel fashion through the transmission rightof-way, but cannot zigzag from side to side or cross under the lines multiple times.
- Challenge: Must obtain proper permissions / easements from private land owners.

Site Visit Notes:

 Power lines images show view from Sherrills Ford Road looking north then south; upgrade Little Mountain Road and Mt. Pleasant to include pedestrian / bike routes.



Utility Corridor

U. Hwy 150 Connector: Little Mountain Rd to Iredell County

Route Profile:

· 4.2 miles in length – all along Hwy 150

Access Opportunities

- Adjacent to Marshall Fishing Area

Population within 1/2 mile of proposed segment:

- · 1414 residents
- · 337 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

- Terrell
- · Marshall Fishing Area

Other Destinations within walking distance (1/4 mi):

· Terrell Historic District

Cross-County Connections:

· Iredell County

Challenges and Opportunities:

- Challenge: Hwy 150 corridor Pedestrian and bike accommodation needed
- Opportunity: Growth corridor along Hwy. 150 which would require sidewalk construction with new development approvals

Site Visit Notes:

 Image shows narrow bridge connection across Lake Norman at Hwy 150 between Little Mountain and Slanting Bridge



Bridged Crossing at Slanting Bridge Road

V. Slanting Bridge Road: Hwy 150 to Lincoln County

Route Profile:

- · 2.8 miles in length
- · All NC DOT designated bike route
- · 1.3 mi along Slanting Bridge Road

Population within 1/2 mile of proposed segment:

- 933 residents
- 333 residents / greenway mile



Cross-County Connections:

 Lincoln County (access to Rock Springs Park and Denver area)

Challenges and Opportunities:

- Challenge: Bridge/water crossing Pedestrian and bike accommodation needed
- Opportunity: Reserved Duke access site on southeast quadrant of Slanting Bridge Road bridge crossing
- Opportunity: County owns large tract on west side of Slanting Bridge road south of Hwy. 150.

W. Sherrills Ford Connector: Hudson Chapel Rd to Hwy 150

Route Profile:

- · 9.5 miles in length
- · 1.3 miles along Kale Rd
- · 0.9 miles along Long Island Rd
- 2.9 miles along powerline easement where feasible
- 1.3 miles along Raccoon Track Dr
- · 0.8 miles along Island Point Rd
- · 2.3 miles along Sherrills Ford Rd

Population within 1/2 mile of proposed segment:

- · 1094 residents
- · 115 residents / greenway mile

Access Opportunities:

- · Adjacent to Marshall Fishing Area
- Adjacent to future Terrapin Creek Conservation Easement

Priority Destinations within walking distance (1/4 mi):

- · Sherrills Ford
- · Terrell
- · Long Island Access Site

Other Destinations within walking distance (1/4 mi):

- · Uncle Billy's Garden
- · Terrell Historic District
- · Sherrills Ford Library
- · Sherrills Ford Elementary

Cross-County Connections:

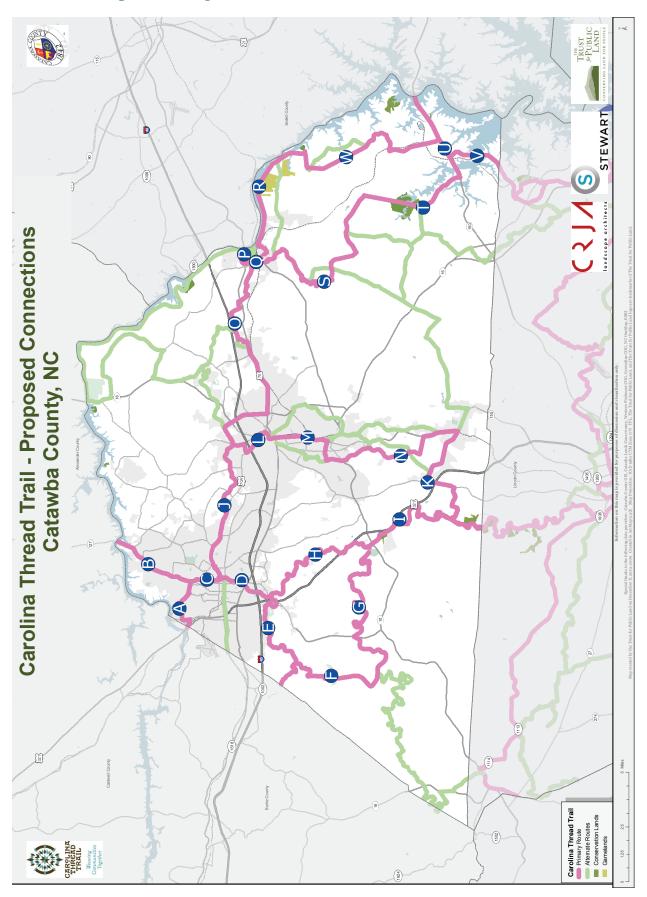
· Iredell County and access to Lake Norman State Park

Challenges and Opportunities:

- · Challenges: Use of powerline easement:
- Challenge: Sherrills Ford Rd is a busy road will be a challenge to make safe for pedestrians.
- Trails and greenways running parallel to Duke Energy right-of-ways cannot exceed 5' in width
- Challenge: Trails and greenways may 'meander' in a parallel fashion through the transmission right-of-way, but cannot zigzag from side to side or cross under the lines multiple times.
- Challenge: Must obtain proper permissions / easements from private land owners.
- Opportunity: Pedestrian facilities are required along Raccoon Track Dr. and Island Point Road as part of a proposed development in that area
- Opportunity: Terrain along this route will provide a diverse hiking opportunity in this part of the county.

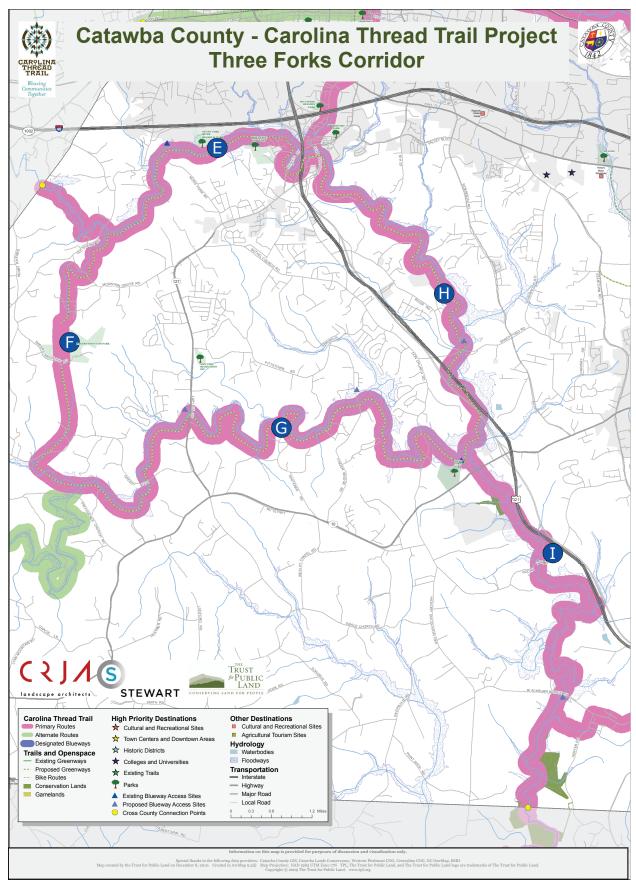


Corridor Segment Map



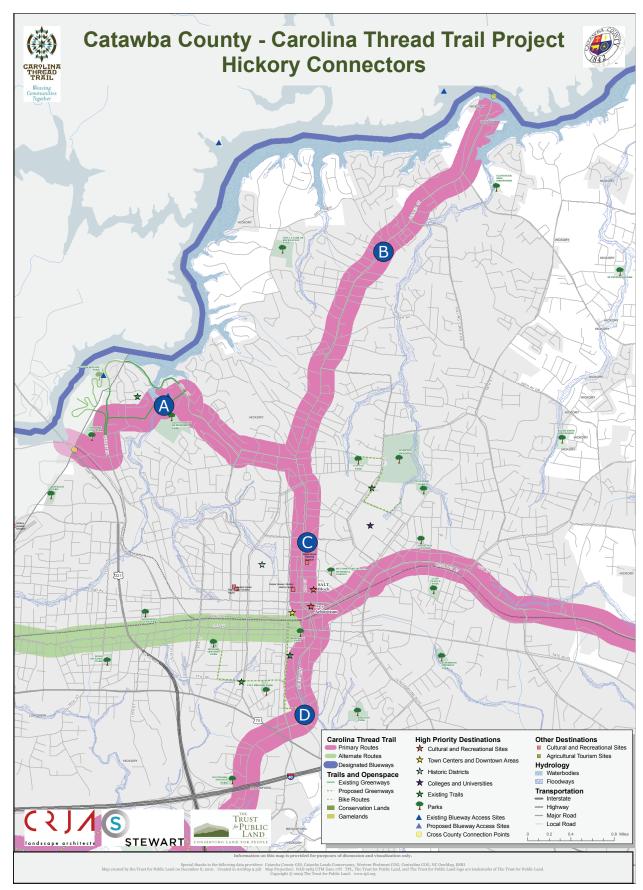


Corridor 1: Three Forks Corridor



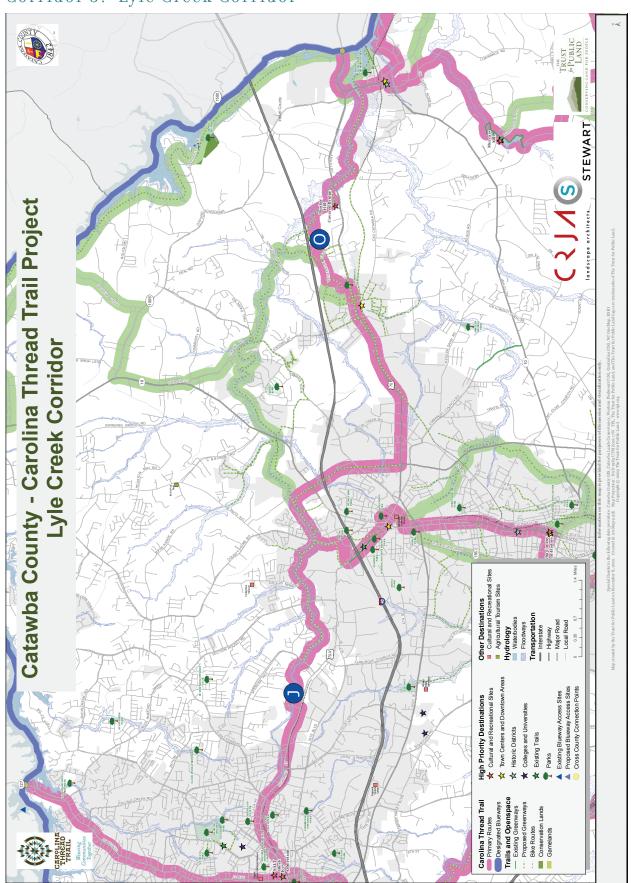


Corridor 2: Hickory Connectors



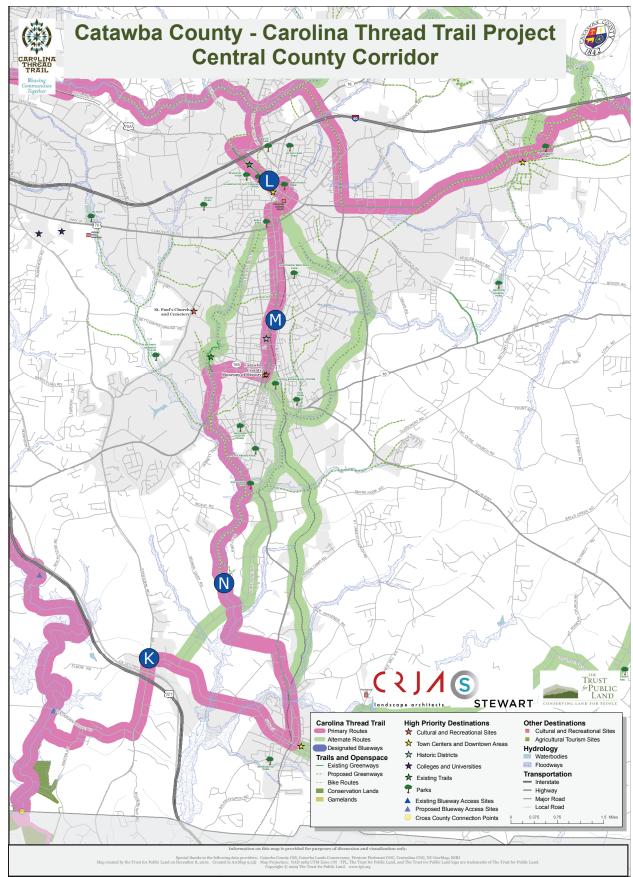


Corridor 3: Lyle Creek Corridor



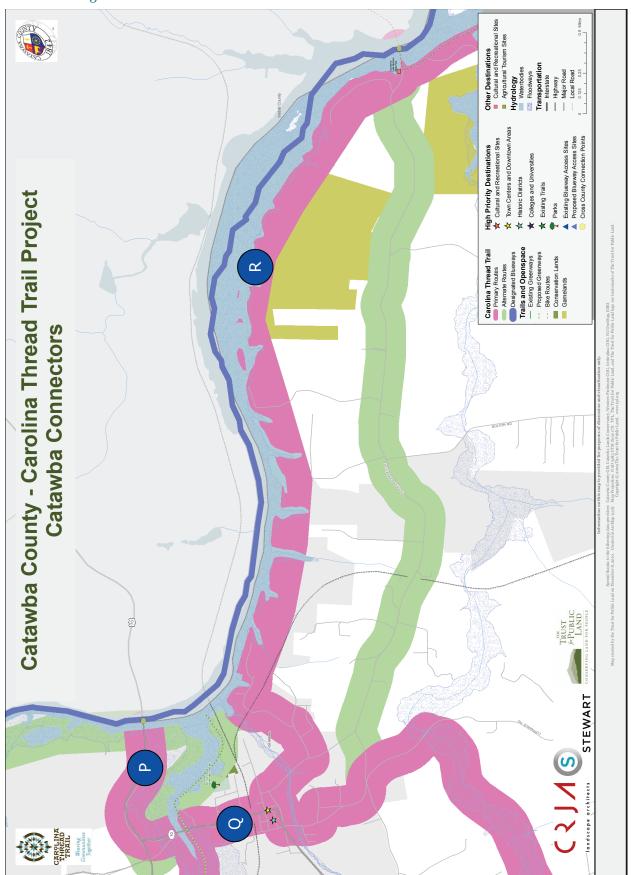


Corridor 4: Central County Corridor



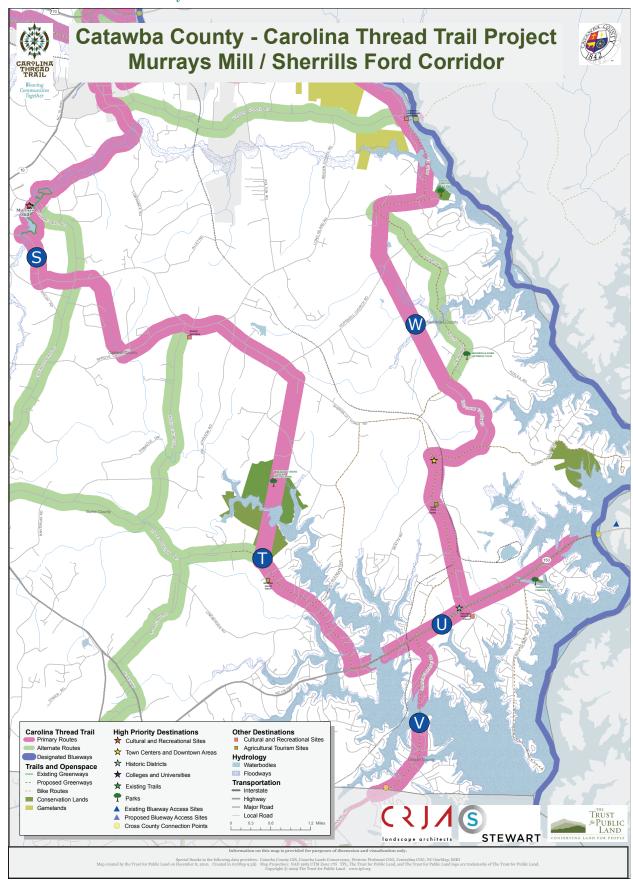


Corridor 5: Catawba Connectors





Corridor 6: Murrays Mill/Sherrills Ford Corridor







Chapter 5. Recommended Actions for Implementation

Plan Adoption

The Steering Committee approved the Carolina Thread Trail Master Plan as shown on page 50 at its committee meeting on September 10th, 2010. Each municipality and Catawba County staff has had the opportunity to review and comment on the plan. The municipalities include Catawba, Claremont, Conover, Hickory, Longview, Maiden, and Newton.

The plan was submitted to each municipal governing body for consideration of acceptance and/or adoption. Upon adoption by the municipal boards, the County Board of Commissioners adopted the plan December 20th, 2010. It is the responsibility of each municipality and the County to review the plan and consider revisions to land development and zoning ordinances to facilitate trail implementation.

PHASE I Build Public Support

Continuing to build upon the progress made to date is critical for the implementation of the trail routes identified within this document. Upon plan adoption, it is recommended that the County form a Greenway Trails Advisory Committee (GTAC) with representatives from government agencies and local citizens to continue and build upon the momentum already created through this County-wide planning process. The advisory committee could coordinate efforts of not-for-profit conservation agencies to assist with right of way acquisitions, and coordinate planning efforts with local parks and recreation departments, state agencies, and entities such as Duke Energy and the North Carolina Department of Transportation. The advisory committee

could also facilitate public awareness campaigns by hosting information booths at festivals or organizing ribbon cutting and dedications as trail segments are completed. It is recommended the GTAC partner with the Western Piedmont Council of Governments Trail Advisory Committee.

Phase I (Build Public Support)

Establish a Greenway Trails Advisory Committee using members of the Steering Committee to promote greenway development and advise the County and local municipalities on trail implementation.

Conduct a public information campaign to advertise trail successes and future trail plans

Form partnerships with regional non-profit organizations to facilitate open space procurement and trail opportunities

PHASE II Complete Top Priority Segments

Identified in this master plan document are priority segments for development near term (executive summary, p. 4). Priority segments are measured against the following criteria:

Availability of Land:

Land ownership status and assessment of each corridor or segment to determine its availability and potential for development

Public Support:

How likely will the public be to support this route? Consider segments with potentially strong public support as a priority. Areas of high population will likely have strong support.

Chapter 5. Recommended Actions for Implementation, continued

<u>Linkages</u>:

Priority trail segments should serve as linkages between important destinations.

Maintenance Availability:

Consider trail maintenance and availability of staff or volunteers to keep up each trail segment; partnerships with non-profits could be valuable resources to assist with maintenance.

Resources at Risk:

Evaluate land or resources at risk for being lost to development; prioritize cultural or environmental resources for conservation easements, historic landmarks or other means of preservation.

Priority Segments

The following Priority Segments, in no particular order, are recommended by the Steering Committee. As future land acquisition and funding becomes available additional portions of trail may be added. Refer to Priority Segment Route Map on page 64.

- 1. Portion of Segments A and C:
 - 4.4 mile segment from the intersection of Old Lenoir Road and Hwy. 321 to Ivey Arboretum.
 - · 3.0 miles are along public sidewalks
 - · 1.2 miles via existing greenway
 - · o.2 miles along Old Lenoir Rd ROW
- 2. Portion of Segment I:

2.1 miles in length along the South Fork River from the proposed blueway access at Blackburn Bridge Road to Lincoln County's jurisdictional border.

3. Portion of Segment M:

3.2 miles in length between Catawba County Museum of History in Newton to Southside Park

- · o.5 miles on West A Street
- · o.5 miles on Radio Station Road
- · 0.9 miles along Hildebran Creek
- · 1.3 miles along Clark Creek to Southside Park
- 4. Portion of Segment O:
 - 2.2 miles in length from Lyle Creek to Hwy 16
 - o.5 miles are along proposed greenway
 - 1.7 miles along Thornburg Drive, all public sidewalks

5. Portion of Segment O:

2.5 miles in length from Claremont City Hall to Bunker Hill Covered Bridge along future Centennial Drive sidewalks with an overland connector south of I-40 Rest Area and along Lyle Creek

6. Portion of Segment O:

2.6 miles in length from Bunker Hill Covered Bridge to Town of Catawba along the Lyle Creek ripariam corridor

7. Portion of Segment S:

- 2.6 miles in length from Murray's Mill to the Town of Catawba
 - 1.6 miles along Balls Creek
 - 0.7 miles along Lowrance Road
 - o.3 miles along proposed 6th Ave sidewalk and South Main Street



Chapter 5. Recommended Actions for Implementation, continued

8. Portion of Segment T:

Undetermined length within future Mountain Creek Park

9. Portion of Segment W:

4.2 miles in length in Sherrills Ford Road along Raccoon Track Drive to Duke Energy power easement.

- · 1.3 miles along Raccoon Track Drive
- 2.9 along Duke Energy power easement where feasible

Phase II (Prioritization)

Update priority segments as necessary; discuss and rank new greenway priorities based on agreed upon criteria

Identify and maximize local trail opportunities through the development plan review process, open space acquisition, and floodplain regulations; coordinate efforts with Catawba County Planning

Review current and future utility corridors/easements for local greenway opportunities

Continue to analyze criteria for trail priorities (i.e. what other factors may be considered-cost, length of trail, conservation benefit, etc.)

Consider developing and recommending a multi-year, dedicated funding source to support greenway acquisition and stewardship

PHASE III Identify Funding:

The Carolina Thread Trail has catalytic grants available for implementation to facilitate design and construction of designated trail routes. This money will not totally support trail development but can be used as leverage financing for other grants.

Evaluation by the County and any supporting organizations should be ongoing to organize efforts of non-profits, governmental agencies and county citizens on a yearly basis. Due to the long term goals of trail implementation, a

flexible approach guided by the framework put forth within this master plan document will assist in the future success of the Carolina Thread Trail project in Catawba County.

Funding and Financing

Options for funding are available from many different sources, including public and private. Due to the many benefits captured by greenway systems, the sources of funding are just as diverse, including funding related to air, water, land conservation, economic development, and transportation.

These criteria should be used in the ongoing evaluation by the County and any supporting organizations such as the GTAC to organize efforts of non-profits, governmental agencies and County citizens on a yearly basis.

1. Private Funding

Private funding from individual donors and foundations may be available to supplement public funding sources. The Carolina Thread Trail organization, housed within the Catawba Lands Conservancy, is spearheading a private fundraising campaign to make seed dollars available to communities in the form of grants for not only trail planning, but also design, acquisition, and construction of individual trail projects that follow in the heels of the planning process. Fund raising campaigns such as donor bricks at trailheads or 'buy a foot' campaigns spearheaded by the Greenway Trails Advisory Committee could also be implemented. These, along with other potential local funds, can provide catalytic dollars that communities will pool together for trail development.



2. Public Funding

a. Federal Funding Options:

Federally funded programs are described in Appendix V. Trail related programs appear at the top of the list, and many other programs are included that do not relate directly to trails but may be used to help fund trail creation in certain instances. They are all administered by federal agencies but vary in how funds are delivered for on the ground trail projects. For example, some of these program funds are directed to the states, which in turn decide what projects to fund, while other program funds are granted by a federal agency through a competitive process. In still other cases, Congress may "earmark" funds for individual projects. The descriptions provided are meant to provide a broad overview of funding sources.

b. State Funding Options:

Most statewide conservation funding comes through five major trust fund programs including Land and Water Conservation Trust Fund, North Carolina Parks and Recreation Trust Fund, Clean Water Management Trust Fund, National Heritage Trust Fund, and North Carolina Health and Wellness Trust Fund.

3. Local Funding Options:

Generally, there are three primary types of revenue sources available to local governments in North Carolina for parks and trails: discretionary annual spending, creation of dedicated funding streams, and debt financing. The financing options utilized by a community will depend on a variety of factors, such as taxing capacity, budgetary resources, voter preferences and political will.

The ability of local governments to establish dedicated funding sources also depends upon state enabling authority. North Carolina has given local governments a limited number of options to fund land conservation and trail projects. Catawba County has shown foresight and the importance it places on parks and greenways as expressed in the Comprehensive Parks Master Plan. The County could consider funding through referenda similar

Phase III (Funding & Financing)

Pursue all avenues of grants from state, federal and non-governmental funding sources $\,$

Consider public fundraising drives

to Mecklenburg County, which generated nearly 3 million dollars.

Phase IV Evaluate Acquisition Options

Methods of land acquisition could include any of the following:

Donations — land or easements (the right to use a portion of land for certain purposes, as defined in a contract, while fee simple ownership is retained) can be donated to a local government or a local land trust by private citizens or business owners, which in turn can generate a tax reduction for them. Details should be confirmed with a qualified tax advisor.

Purchase — this method is probably the most common method of acquiring land, and land trusts can often help acquire land at less than fair market value.

Zoning/Development Regulations — buffers along certain stream corridors in North Carolina are already protected in order to prevent building intrusion into sensitive areas which in turn may be used for some trail corridors. Additional development regulations can also be



adopted that create building restrictions and dedication requirements. Examples of these requirements include, but are not limited to, setbacks from perennial streams, floodplain development restrictions and open space/trail dedication requirements.

Developer Contributions

Once the conceptual route (See page 50) is officially incorporated into community plans, it can be included in GIS layers for local governments. As discussed previously, if a developer applies for a permit for a development and it overlaps with any of the proposed trail connections, local governments can require or offer incentives for an open space set aside, or for that portion of the trail corridor to be developed as part of the subdivision development approval process. The trail will be a marketing benefit to the developer and will in turn allow them to charge a higher premium for the homes adjacent to the trail.

Abandoned Rail Corridors

Discussions will need to be held with the rail corridor owners as well as NC DOT Rails Division. The cost of trail construction is typically lower along abandoned rail corridors because a graded corridor with gradual slopes is already established. However, as discovered in conversations with NCDOT, some rail corridors such as that between Maiden and Newton may be held up in federal relief programs and unable to be used. See Appendix VI for further discussion on this topic.

Phase IV (Acquisition)

Approach property owners about potential voluntary easement(s) or property donations based on the established priorities

Negotiate with property owner(s)

Retain control of the desired trail corridor

Phase V Design, Construct and Maintain Trails

Once a trail segment is selected and land acquired, trail design typically follows. It will be essential for communities to determine the intended use or uses of a particular segment and design with that in mind. Designing for safety and for affordable maintenance is also highly recommended. Intended uses of the trail will dictate the surface material to be used and will have a direct bearing on the construction and maintenance costs.

Catawba County's planning process revealed that in general, people are most interested in walking, biking, enjoying quiet time, hiking, dog walking, and accessing waterways. During the public process very little interest was expressed in equestrian-friendly trails; however, this could change during design development phases as future greenway segments are opened to public input prior to construction.

Multi-purpose trail segments for walkers and bikers could use a surface material of either crushed limestone or granite screening. Trail construction costs will vary, and until a project is advertised for competitive bid, there is no way to accurately determine local prices. A competitive bid process should require line items for cost of trail construction in order to fully understand the costs and potential savings amongst installers. Preliminary site plans should be reviewed by all county and local municipal staff members, including emergency service personnel, so they can offer suggestions, guidance, and have their voices heard from the onset. Additionally, trails proposed through utility easements shall require additional

Chapter 5. Recommended Actions for Implementation, continued

coordination with Duke Energy to ensure design standards are satisfactorily meet.

Trail Life Safety Plans should be developed in conjunction with security experts such as the local police chief or county sheriff. Each should be consulted early on in order to seek their advice and to alert them that the trail will be built and that they need to plan for it as well. Well placed lights, wide-open spaces along the trail, removal of underbrush, and easily accessible trailheads all add to the security matrix. Routine patrols and staff members in uniform will alert people that the trail is being watched. Security tips and procedures can be conveyed on bulletin boards, on brochures and in informal gatherings by park staff along the trail.

Phase V (Design, Construction, and Beyond)

Develop life safety plans with emergency service staff

Establish trail design review process with municipal engineering departments for all local utilities, where applicable

Establish trail design review process with state agency representatives such as NCDOT and Duke Energy where applicable.

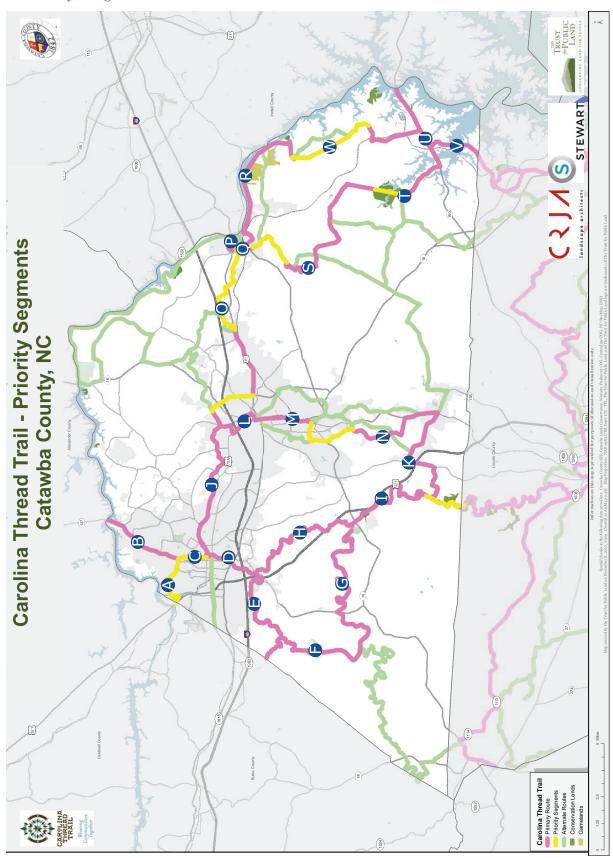
Develop a long-term maintenance plan

After the corridor is acquired proceed with the following steps:

- Survey the desired trail segment
- Complete and approve construction drawings
- Bid the trail project and select the contractor
- Oversee completion of work by contractor
- Consider planning and executing a trail ribbon cutting/Grand Opening
- Coordinate with volunteer groups to maintain the trail facilities



Priority Segment Routes





Chapter 6. Conclusion

This Master Plan document represents a year long collaborative planning and visioning process by Catawba County and its municipalities. Although the master planning process concluded, the County is just beginning to execute the vision set forth by the Carolina Thread Trail. The goals are greater connectivity for all citizens of Catawba County, the preservation of its culture and natural resources, and the celebration of the area's colorful and unique history. Ambitious as the Plan is, the local and county governments, its citizens, non-profit groups and advocates will need to work together towards achieving the plan's goals. All of the community partners engaged through this process understand the need to act prudently, yet remain patient and vigilant to capitalize on opportunities as they present themselves. This is only the beginning.



Downtown Newton

Appendix I. Priority Destinations List

Appendix I: Carolina Thread Trail Priority Destinations List

Through previously described planning exercises, the Steering Committee developed a list of Priority Destinations throughout the County. The following list developed by the Committee and using input from the public process highlights the County's regional destinations. The list is not inclusive but rather selects destinations on a regional scale in regard to the entire Thread Trail network. The list of destinations (below) provided the framework by which the public began to stitch together locations of significant regional value.

Catawba County Carolina Thread Trail: Priority Destinations

Cultural and Recreational Sites High Priority

- · Bunker Hill Covered Bridge
- · Murray's Mill
- · SALT Block
- · Catawba County Museum of History
- · St. Paul's Church and Cemetery
- · Ivey Arboretum

Medium Priority

- · Rehobeth Methodist Church Terrell
- · Shuford House and Gardens
- · Shuford Gold Mine
- · Harper House / Hickory History Center
- · Hickory Aviation Museum
- · Jenny Lynn Forge
- · Providence Mill
- · Maple Grove Historical Museum
- · Propst House

Existing Trails and Parks

- · Conover Gateway Greenway
- · Hickory Greenway
- · Newton Heritage Trail Greenway_Parks
- · Existing and Proposed Parks

Colleges and Universities

High Priority

- · Lenoir Rhyne University
- · Catawba Valley Community College
- · Appalachian State University Extension

Medium Priority

· N.C. Center for Engineering Technology

Town Centers and Downtown Areas High Priority

- Hickory
- · Newton
- Conover
- Catawba
- · Claremont
- · Maiden
- · Sherrills Ford

Medium Priority

- · Longview
- · Brookford
- · Terrell

Appendix I. Priority Destinations List, continued

Historic Districts

High Priority

- · Murray's Mill Historic District
- · Terrell Historic District
- · Town of Catawba Historic District
- · Claremont Historic District Hickory
- · North Main Ave Historic District Newton

Medium Priority

· Catawba College Historic District

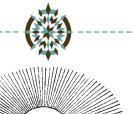
Agricultural Tourism Sites

Medium Priority

- BirdBrain Ostrich Ranch
- Buffalo Beal's Animal Park
- Uncle Billy's Garden
- Ira's U-Pick Farms

Blueways and Riparian Corridors

- Catawba River
- Jacob Fork
- South Fork Catawba River
- Glen Hilton Park Blueway
- Henry Fork
- Lyle Creek
- Clark Creek



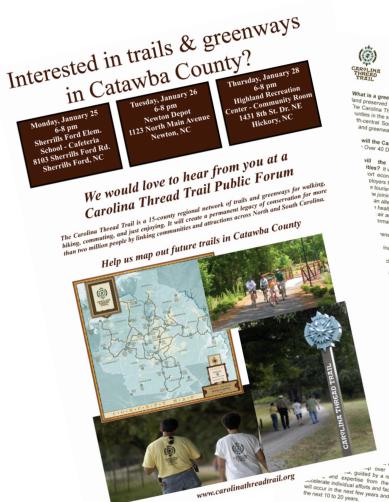
Appendix II: Public Meeting Summary

Three Public Forums were held in January, 2010. The community was solicited to help with identifying strategic greenway routes throughout the county. Forums were held at:

January 25^{th} Sherrils Ford Elementary School - Sherrills Ford, 38 attendees

January 26th Newton Depot-Newton, 34 attendees

January 28th Highland Recreation Center - Hickory, 24 attendees



^Carolina Thread Trail Frequently Asked Questions

and preserved for recreational use or environmental protection, the colonia Thread Trail inhibitive is an effort to encourage 15 thread trail inhibitive is an effort to encourage 15 threadth South Central piedmont of North Carolina and the and greenway system.

Over 40 Destinations 7,300 Square Million

vill the Carolina Thread Trail benefit our

ployers to the area

an alternative means of transportation
healthy lifestyles

air and clean water preservation

inable of cultural and historical

hildren through

Idren to nature What counties are t of the initiative? Anson, Cabarrus, Klepber, Cleveland, Gaston

avaricing the project in the region trusts and community partners the lead agency for the project is serving as a key consultant provides leadership as a champion, Duke Energy 1 and in-kervices. Ruth the chair of our Governing 1 governance leadership, uncil provides technologies.

In three roles. They three roles. They alls and greenways facilitate getting ged vision. They Il be given out in 19 legs of The roling state and

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that has no governmental power, such as eminent

discretion of the community's governing body. It is very

communities of the planned, built and owned by the planning is collaborative and based on citizen input. Planning guidelines encourage routing the Thread across acquired from willing landowners.

rtunities for implementation of trail segments arise

successfully built? There are very successful, large-scale trail nas beer as very successful, large-scale trail nas for the successful and su



Public Forums

Following questions and answers about the project, the consultant facilitated an interactive mapping exercise. Participants were asked to draw on maps of the county to show where they felt the trail should go and what destinations it should connect. These maps were later digitized and incorporated into the project mapping. As the maps were digitally "stacked," we were able to see patterns and concentrations of routes. This mapping was crucial in the development of the plan's overall draft routes.



Newton-Opportunities to voice personal ideas.



Sherrills Ford- Understanding how communities are connected



Hickory- Selecting Thread Trail routes



Open Houses

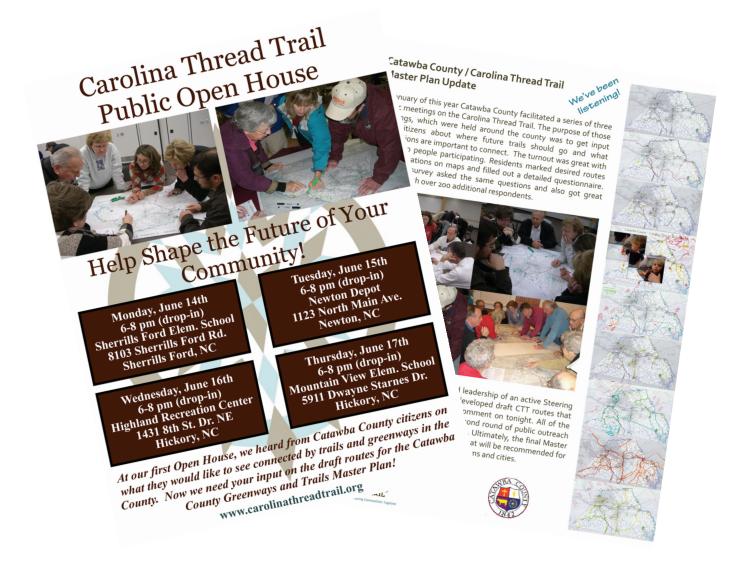
Four Open Houses were held in June 2010 to present the draft Plan to the public for review and comment. Each of the open houses were held at:

June 14th, 2010 Sherrils Ford Elementary School - Sherrills Ford, 23 attendees

June 15th ,2010 Newton Depot- Newton, 13 attendees

June 16th, 2010 Highland Recreation Center - Hickory, 7 attendees

June 17th, 2010 Mountain View Elementary School - Mountain View, 8 attendees





Appendix III: Survey Summary

Survey One: 176 responses tabulated



Public Meeting Comment Form Catawba County Carolina Thread Trail Master Plan January 25, 2010 Sherrills Ford Elementary



Name:	Email:	
Address:		
Street	City	ZIp Code
For the CTT in Catawba Coun Medium, Low):	ty which types of trail users a	re most important (Rank High
Walkers/Hikers	Cyclists	Rollerbladers
Equestrians	Baby Carriages	Other:
	will be similar to an interstate and Cities to connect? (Rank	system for trails. What are the High, Medium, Low):
Brookford	Catawba	Other:
Claremont	Conover	Other:
Hickory	Longview	
Maiden	Newton	
How will you use the trail? (R	ank your top three most likel	y activities - 1 - 2 - 3):
Walking / Hiking	Horseback Riding	Touring the County
Running	Rollerblading	Teaching Children
Cycling	Daily Exercise	Connect to Rivers
Commute to Work	Reduce Car Trips	Entertain Guests
Trips to other counties	Other:	Other:
Dlazga abara with us any gon	eral comments you have abou	et the projects
icase share with as any gen	eral comments you have abou	it the project.

Colleges and Universities
Lenoir Rhyne University
Catawba Valley Community College
Appalachian State Univ. Extension
N.C. Center for Engineering Tech.
Historic Districts
Claremont Historic District – Hickory
Town of Catawba Historic District
Catawba College Historic District
Murray's Mill Historic District
North Main Ave Historic District - Newton
Terrell Historic District
Agricultural Tourism Sites
BirdBrain Ostrich Ranch
Santa's Forest
Buffalo Beal's Animal Park
Blueways and Rivers
Glen Hilton Park Blueway
Catawba River
Henrys Fork
Jacobs Fork
South Fork Catawba River
Clark Creek
Lyle Creek
Tail Race below Oxford Dam

Results of Survey One:

Which types of users are most important in Catawba County?

	High Priority	Low Priority
Walkers and Hikers	91 %	3 %
Cyclists	58 %	6 %
Baby Carraiges	23 %	27%
Equestrians	10 %	56 %
Rollerbladers	5 %	62 %

The Carolina Thread Trail in Catawba County will be similar to an interstate system for trails. What are the most important towns, cities and crossroads to connect?

	High Priority	Low Priority
Hickory	84.%	5 %
Newton	82 %	3 %
Conover	76 %	6 %
Catawba	60 %	9 %
Claremont	51 %	10 %
Maiden	49 %	14, %
Sherrills Ford	46 %	19 %
Long View	31 %	28 %
Terrell	36 %	27 %
Brookford	23 %	33 %

How would you describe your attitude towards the idea of the Carolina Thread Trail?

Strongly Support	43 %
Support	17 %
Don't Feel Strongly Either Way	3 %
Oppose	o %
Strongly Oppose	2 %
No Answer	36 %

What are you concerns about building a network of trails in Catawba County?

 $\begin{array}{lll} \mbox{Safety of Trail Users} & 57 \ \% \\ \mbox{Property Rights} & 37 \ \% \\ \mbox{Potential Damage to Farmland} & 12 \ \% \\ \end{array}$

Other Comments:

There are other projects that are more important

Maintenance

The project is taking too long

Environmental Concerns

Cost to taxpayers

Trails should be paved

Equestrian access

Visual intrusion on adjacent property owners

Difficulty in getting easements

Appendix III. Survey Summary, continued

Catawba County is rich in cultural, recreational and natural resources. Which of the following are the most important to connect into the CTT trail network?

connect into the GTT trail hetwork:		
Destinations	High Priority	Low Priority
Bunker Hill Covered Bridge	87%	4.%
Propst House	86%	3%
Ivey Arboretum	61%	13%
Firefighters Museum	60%	8%
Burlon Craig Kiln Site	43%	15%
Harper House / Hickory History Center	42%	22%
Shuford House and Gardens	36%	19%
Hoff Cemetery	33%	17%
Catawba County Museum of History	33%	20%
Murray's Mill	32%	22%
Piedmont Wagon Company	27%	29%
Houk's Chapel	27%	17%
Shuford Gold Mine	27%	19%
Sherrill Cemetery	26%	33%
Hickory Motor Speedway	24.%	23%
McCorkle Cemetery	20%	41%
Jenny Lynn Forge and Providence Mill	19%	25%
Maple Grove Historical Museum	16%	56%
Concordia Lutheran Church in Conover	9%	45%
SALT Block	8%	49%
Hickory Aviation Museum	7%	49%
St. Paul's Church and Cemetery	6%	51%
Existing Greenway Trails		
•	0.04	0.4
Hickory Greenway	80%	4%
Newton Heritage Trail Greenway	80%	3%
Conover Gateway Greenway	74%	6%
Universities and Colleges		
Lenoir Rhyne University	72%	8%
Catawba Valley Community College	72%	8%
Appalachian Štate Extension	50%	17%
NC Center for Engineering Tech	30%	30%

Appendix III. Survey Summary, continued

Historic Districts		
	0 - 0/-	4.0/-
Murray's Mill Historic District North Main Ave Historic District - Newton	82% 6=%	4.% 6%
	65%	
Town of Catawba Historic District	57%	7%
Claremont Historic District - Hickory	52%	8%
Terrell Historic District	43%	14.%
Catawba College Historic District	40%	12%
Agri-tourism		
Buffalo Beal's Animal Park	31%	34%
BirdBrain Ostrich Ranch	20%	35%
Uncle Billy's Garden	19%	42%
Santa's Forest	ı3%	47%
Dimon		
Rivers		
Catawba River	92%	2%
South Fork Catawba River	73%	7%
Jacob Fork	69%	6%
Glen Hilton Park Blueway	69%	8%
Tail Race Below Oxford Dam	69%	9%
Henry Fork	68%	5%
Lyle Creek	64%	7%
Clark Creek	4,2%	14%



Appendix III. Survey Summary, continued

Survey Two: 69 responses tabulated



Catawba County / Carolina Thread Trail Draft Survey Route Survey

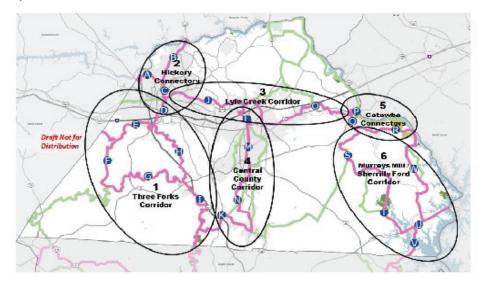


Name:	
Town and Zip:	
Email :	

Welcome to the second public survey on the Carolina Thread Trail route within Catawba County. There have been a series of public meetings and outreach efforts to solicit input for the development of a county wide trail plan. This survey has been created based on your input to date. At each public meeting participants were asked to draw their recommended routes on county maps and to rank the most important destinations within the county. The maps and destinations that you will be asked to comment on today are the results of public input, existing plans and the guidance of the Steering Committee, which is composed of county and municipal staff and Catawba County Citizens.

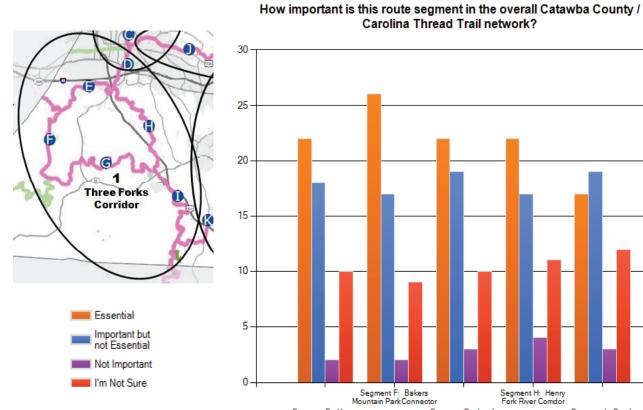
The map below represents the draft routes being analyzed for the final plan. Trails displayed in pink are those recommended for the Carolina Thread Trail designation and trails in green are presented for consideration to further tie together the people and destinations of Catawba County communities. The trail corridors in this plan are depicted with ½ mile wide lines to show the general location of the intended route. The trail itself will be narrower, in recognition that communities will determine the exact location of their segments upon trail design and development. The broadly defined greenway corridors present multiple opportunities and adjustments for a defined route, so that landowners can continue to be involved in fine tuning and defining the location of trails and amenities. The draft routes have been grouped into six corridors, including:

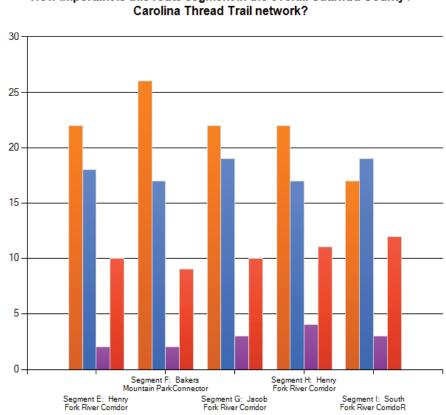
- 1) Three Forks Corridor
- 2) Hickory Connectors
- 3) Lyle Creek Corridor
- 4) Central County Corridor
- 5) Catawba Connectors
- 6) Murrays Mill / Sherrills Ford Corridor













Corridor 2 – Hickory Connectors



How important is this route segment in the overall Catawba County / Carolina Thread Trail network?

