



# HAYWOOD COUNTY BOARD OF COMMISSIONERS

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## AGENDA REQUEST

***Must be presented to the County Manager's Office  
NO LATER THAN 5 P.M. FRIDAY THE WEEK BEFORE THE MEETING***

DATE OF REQUEST: October 26, 2011

FROM: Claire Carleton

MEETING DATE REQUESTED: 11/7/11

Regular meetings: First (1<sup>st</sup>) Monday of the month at 9:00 am  
Third (3<sup>rd</sup>) Monday of the month at 5:30 pm

SUBJECT: Haywood County Bicycle Master Plan

REQUEST: Adoption of the County-Wide Bicycle Master Plan

BACKGROUND: One year ago a group of local cyclists known as BicycleHaywoodNC took the lead on raising the funds to create Haywood County's first-ever comprehensive bicycle plan. Cecil Yount, George Ivey, and Jennifer Jacobson serve as the leaders of this group and concluded that no formal communication existed in the county among cyclists, the community and local and governmental organizations that could be working with them, like the Department of Transportation and the Haywood County Recreation and Parks Department. The planning process kicked off April 2011 & the final public input meeting was held October 18, 2011.

IMPLEMENTATION PLAN: The implementation of the Plan will require a coordinated effort amongst County and Town officials, leaders, and citizen volunteers as well as follow-up plans and studies on more specific improvements. The implementation strategies of the Bicycle Plan are closely aligned with areas the state of North Carolina identified for Bicycle and Pedestrian Safety Strategies through a series of summits in early 2011. The major action initiatives identified through those summits to help guide NCDOT and other state agencies through the next decade were:

- Fully implement Complete Streets;
- Address multi-modal funding;
- Retrofit existing facilities;
- Require more from all road users;
- Increase public awareness through education;
- Connect transportation and land use; and
- Improve law and strengthen enforcement.

Each of these themes is addressed to some degree within the Haywood County Comprehensive Bicycle Plan. This can help stakeholders within Haywood County articulate to local, regional and state leaders that the implementation of this Plan is consistent with what has been identified at the state level. Ten action steps are identified to help guide development of the proposed bicycling network and create a supportive program and policy environment for a bicycle-friendly

Haywood County. These steps are crucial in moving forward with the overall recommendations of the Comprehensive Bicycle Plan.

FINANCIAL IMPACT STATEMENT: This is a planning document - no cost is involved at this time.

SUPPORTING ATTACHMENTS: YES  NO  HOW MANY? 1

LIST: 20111026\_HaywoodBikePlan\_ExecutiveSummary

**If yes, one ORIGINAL ATTACHMENT, and 14 copies, copied front and back side of pages, stapled and three-hole punched must accompany the agenda request**

PowerPoint Presentation: YES  NO

PERSON MAKING PRESENTATION AT MEETING: Cecil Yount & Don Kostelec

TITLE: Cecil -BicycleHaywoodNC Chair / Don -Kostelec Planning

PHONE NUMBER: Cecil-734-6088 / Don- 989-5811

E-MAIL: gr8smokieszeke@gmail.com / don.kostelec@gmail.com

***NOTE: Scot Worley, Recreation Specialist, will be present at the meeting since Claire Carleton, Recreation & Parks Director, will be unable to attend.***

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THIS SECTION FOR OFFICE USE ONLY

Received (Date/Time): \_\_\_\_\_

County Manager / Clerk to the Board Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
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In an effort to save paper, attachments should be copied on both front and back sides.



# Haywood County Comprehensive Bicycle Plan

## Executive Summary

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For consideration and adoption by the  
Haywood County Board of County Commissioners

October 28, 2011

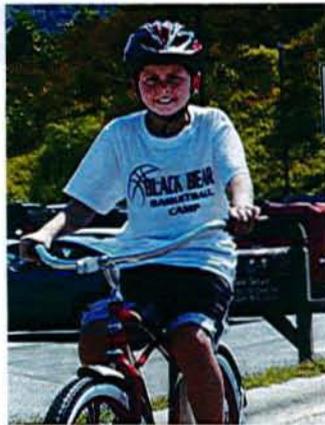
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**Executive Summary**

The Executive Summary is a high level review of the findings of the Haywood County Comprehensive Bicycle Plan. It is intended to be a handout for interested individuals, organizations and elected officials to gain an understanding of how to make Haywood County a bicycle-friendly community.

A full version of the Plan can be accessed via the BicycleHaywoodNC website:

[www.bicyclehaywoodnc.org](http://www.bicyclehaywoodnc.org)



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## Acknowledgments

BicycleHaywoodNC and Haywood County appreciate the efforts of the following business, agencies and individuals who contributed funding, time and resources to support the Haywood County Comprehensive Bicycle Plan.



### Individuals:

- ◆ Cecil Yount - BicycleHaywoodNC
- ◆ Claire Carleton - Haywood County Recreation & Parks Director
- ◆ George Ivey - BicycleHaywoodNC
- ◆ Jennifer Jacobson - BicycleHaywoodNC
- ◆ Michelle Trantham - BicycleHaywoodNC
- ◆ Stan Rathbone - BicycleHaywoodNC
- ◆ Carolyn Pilgrim - BicycleHaywoodNC
- ◆ Gerald & Kathy New - BicycleHaywoodNC
- ◆ Don & Nancy Lux - BicycleHaywoodNC
- ◆ Ron Leatherwood - BicycleHaywoodNC

### Consultant Team:

- ◆ Don Kostelec - Kostelec Planning
- ◆ Claudia Nix - Liberty Bikes
- ◆ Scott Lane - Stantec Consulting
- ◆ Bethany Schilleman - Stantec Consulting
- ◆ Adam Parast - Transpo Group
- ◆ Andy Mortensen - Transpo Group
- ◆ Chris Danley - Vitruvian Planning



## Executive Summary

### What is a Comprehensive Bicycle Plan?

A community that aspires to grow awareness of bicycling and create a bicycling culture must first take steps to identify what makes that community special and what attributes can be improved to facilitate more people taking to their bicycles. The pursuit of a countywide Comprehensive Bicycle Plan for Haywood County that encompasses all of its incorporated municipalities and rural communities is a critical first step.

The conceptual framework of any planning effort—land use, economic development, housing, transportation or otherwise—includes a summary of present-day conditions and a long-range vision for how the community can address the unique characteristics of a specialized plan.

Being comprehensive entails a full-scale examination, to the degree that time and resources will allow, to incorporate the needs of citizens, government agencies and key stakeholders within an integrated examination of various projects, programs and policies that should be pursued to foster a bicycle friendly community.

### Becoming a Bicycle-Friendly Community

A stated goal BicycleHaywoodNC is to apply for status to be a Bicycle-Friendly Community (BFC) through the League of American Bicyclists. North Carolina has nine (9) areas carrying the Bicycle

Friendly Community designation, including eight (8) Bronze level communities and one (1) Silver level community (Carrboro). As a state, North Carolina ranks 38 out of 50 for Bicycle Friendly State status, so there is clearly work to be done on a statewide and communitywide basis to improve these standings.

To this goal, BicycleHaywoodNC created a mission statement upon its formation in 2009 to reflect the perspective of its members and what it wants to accomplish for Haywood County and its residents in becoming a BFC. That mission statement is:

*"Dedicated to enhancing cycling through advocacy and addressing improved health and wellness, community growth, and reduction in dependence upon foreign oil."*

This mission statement also formed the vision of BicycleHaywoodNC and what propelled the group to organize the Haywood County Comprehensive Bicycle Plan.

During the course of the Plan, BicycleHaywoodNC established the following goals for implementation of the Comprehensive Bicycle Plan

- ◆ **Build bicycle infrastructure & other improvements:** Engineering-based infrastructure for bicycle routes & parking;
- ◆ **Develop support facilities & programs:** Help attract bicyclists to the community & connect bicyclists to facilities.



Roads in Haywood County range from low-speed, low-volume neighborhood streets (above) to narrow, curving mountain roads (below). Formulating a countywide bicycle plan that addresses this variety requires input from stakeholders, including planners, advocates, law enforcement, municipal management, elected officials, business and residents.

*Photo Credit: Don Kostelec*



Experienced / Confident Riders	Casual / Less Confident Riders
<ul style="list-style-type: none"> <li>Most are comfortable riding with vehicles on streets, and are able to negotiate streets like a motor vehicle, including use of the full width of a narrow travel lane when appropriate and using left-turn lanes.</li> </ul>	<ul style="list-style-type: none"> <li>Prefer shared-use paths, bike boulevards, or bike lanes along low-volume, low-speed streets.</li> </ul>
<ul style="list-style-type: none"> <li>While comfortable on most streets, some prefer on-street bike lanes, paved shoulders or shared-use paths (greenways) when available.</li> </ul>	<ul style="list-style-type: none"> <li>May have difficulty gauging traffic and may be unfamiliar with rules of the road as they pertain to bicycles; may walk bike across intersections.</li> </ul>
<ul style="list-style-type: none"> <li>Prefer a more direct route.</li> </ul>	<ul style="list-style-type: none"> <li>May use less direct route to avoid primary streets with heavy traffic volumes.</li> </ul>
<ul style="list-style-type: none"> <li>Avoid riding on sidewalks. Ride with the flow of traffic on streets.</li> </ul>	<ul style="list-style-type: none"> <li>If no on-street facility is available, may ride on sidewalks even though it is not necessarily safer than the street. Should always ride with flow of traffic.</li> </ul>
<ul style="list-style-type: none"> <li>May ride at speeds of up to 20 mph on flat ground, up to 45 mph on steep descents.</li> </ul>	<ul style="list-style-type: none"> <li>May ride at speeds around 8 to 12 mph.</li> </ul>
<ul style="list-style-type: none"> <li>May cycle longer distances.</li> </ul>	<ul style="list-style-type: none"> <li>Cycle shorter distances; 2 to 5 miles is a typical trip distance.</li> </ul>

Exhibit 1: Experienced / Confident Riders vs. Casual / Less Confident Riders

Source: AASHTO

- ◆ **Increase educational opportunities:** Provide hands-on outreach to users of all age groups & abilities;
- ◆ **Provide information to residents & visitors:** Promote bicycling through a variety of media & educational and outreach programs; and
- ◆ **Support policy change & economic development:** Identify methods for stakeholders, advocates, businesses and municipalities to promote bicycling.

### Understanding Bicycle Users

Bicycle and pedestrian professionals recognize several common elements in creating comprehensive plans for non-motorized travel. This stems from the experience of the users of bicycle and pedestrian systems, which differs greatly from the experience of motorists.

The operator of a car, truck or motorcycle experiences the transportation system and communities through which he or she travels at rates of speed higher than 25 mph. Even the most ardent bicyclists rarely travel at an average speed greater than 25 mph and most utilitarian cyclists move at speeds of 12 mph or less. The rate of speed for pedestrians is measured in feet per second instead of miles per hour.

The bicycle operator or pedestrian sees things at a different scale. The world moves slower and elements of the transportation system that may go un-



noticed by motorists can be discouraging at best to the bicyclist or pedestrian; deadly at worst. The characteristics of bicyclists is shown in Exhibit 1.

Even among experienced bicycle users there exists great variation in the skill and comfort level of the bicyclists and this impacts designers of transportation systems and how they should consider the various user types when determining the best-fit solution to accommodating bicycle traffic.

### 5 E's of a Comprehensive Bicycle Plan

A recognition of the variety of bicycle users and the facilities they desire has led the bicycle and pedestrian planning profession, along with the League of American Bicyclists, to endorse an approach to developing a bicycling culture that is inclusive of the “5 E’s”—Engineering, Education, Encouragement, Enforcement, and Evaluation.

In being considered for designation as a Bicycle Friendly Community (BFC), the League of American Bicyclists states “a community must demonstrate achievements in each of the five categories in order to be considered for an award” and “communities with more significant achievements in these areas receive superior awards.”

It is therefore incumbent on any community desirous of becoming a BFC that the 5 E’s become an integral component of their initiatives and a related bicycle plan is well-served to incorporate these 5 E’s. Recommendations in the Haywood County Com-

prehensive Bicycle Plan are organized through the lens of the 5 E’s and summarized below:

**Engineering** represents specific elements of the built environment include how bicyclists are considered in street design and construction as well as along greenway corridors. Engineering-based recommendations are contained in the:

- ◆ Best practices design guide;
- ◆ Cool corridors recommendations;
- ◆ Hot spot recommendations; and
- ◆ Bicycle route maps.

**Education** is also a critical component of a bicycle friendly community as the users of the system—bicyclists, motorists, pedestrians and others—should be well-informed of local and state laws pertaining to bicycling and share the road in a manner that is safe for everyone. Education-based recommendations include:

- ◆ Joint parent / child programs, such as bicycle rodeos, to teach proper riding skills;
- ◆ How-to booklets and coloring books;
- ◆ Traffic Skills 101 courses for adult bicyclists; and
- ◆ Public service announcement for motorists and bicyclists about rules of the road.

**Encouragement** is inclusive of how a community promotes and encourages bicycling through the organization of bicycle clubs, organized rides and

The 5 E's of a Comprehensive Bicycle Plan





“Transportation, quality of life, and economic development are all undeniably connected through well-planned, well-designed, and context-sensitive transportation solutions. To NCDOT the designations ‘well-planned’, ‘well-designed’ and ‘context-sensitive’ imply that transportation is an integral part of a comprehensive network that safely supports the needs of the communities and the traveling public that are served.”

- *NCDOT Complete Streets  
Policy Statement (2009)*

events, Bike to Work activities, promotional materials, maps of all types of routes and trails, and Safe Routes to Schools programs. Primary encouragement recommendations include:

- ◆ Establishment of a Silver Wheels program for older adults;
- ◆ Organizing a Safe Routes to Schools program;
- ◆ Conducting themed rides, such as culinary, coffee shops, or artists tours on bike;
- ◆ Wayfinding systems for bicyclists; and
- ◆ Health-base initiatives.

**Enforcement** relates primarily to the knowledge base of the law enforcement community and its willingness to enforce bicycle-related laws. Programs related to enforcement include targeted efforts to encourage motorists and bicyclists to safely share the road. The existence of bicycle-related safety laws at the state and local level are also critical, as is inclusion of appropriate regulatory signage along roadways. Enforcement recommendations are:

- ◆ Work with law enforcement to formalize a tiered system of bicycle incident reporting;
- ◆ Use specialized signage to enforce traffic laws;
- ◆ Encourage more helmet use in all circumstances, including on greenways; and
- ◆ Conduct site-specific stings related to bicyclist and motorist behavior.

**Evaluation** is the method by which a community understands and tracks the progress of its various projects, programs and policies to measure how well it is performing. Evaluation recommendations include tracking the performance of the bicycle system and progress of the bicycling community by examining usage of the bicycle system through regular counts, analyzing crash rates to look for trends, tallying how many children participate in bicycle rodeos or how many adults participate in training modules. Implementation of this Plan is also a key evaluation component.

### Complete Streets

The adoption of the Haywood County Comprehensive Bicycle Plan comes at an opportune time in North Carolina as the Department of Transportation (NCDOT) is embarking on a new business model for consideration of the needs of bicyclists, pedestrians and transit users in addition to motorists as the agency designs new streets and retrofits old streets.

NCDOT’s Board adopted a “Complete Streets” policy in 2009 to acknowledge the changing paradigm for how the agency considers the needs of all users in the design of its street system. A Complete Street can be defined as one that is designed to provide for the safe movement of all users of all abilities at all times.

This does not mean that all streets are required or should have bicycle and pedestrian facilities. For many residential streets, most bicyclists of any age or



ability is able to operate in the street without the need for dedicated space or bicycle lanes.

It will be imperative for groups like BicycleHaywoodNC to work with Haywood County and its towns, as well as NCDOT's Division 14, to ensure the proper needs of bicyclists are considered when the design of projects commences. It is also important to recognize there are some projects in Haywood County that were already designed or under design at the time this document was developed.

### Planning History

While there are no bicycle-specific plans for municipalities within Haywood County or its unincorporated areas, there are several related plans that have impacts to the existing and future bicycle system. Several plans were reviewed and summarized based on their relevance to the Comprehensive Bicycle Plan.

It is important for BicycleHaywoodNC and other bicycle-related stakeholders to track the progress of these plans and the projects identified within them for opportunities to provide input on the design and connectivity of the projects. Of particular note, the projects identified in the 2035 Regional Long-Range Transportation Plan suggests several million dollars in corridor improvements and bicycle/greenway facilities.

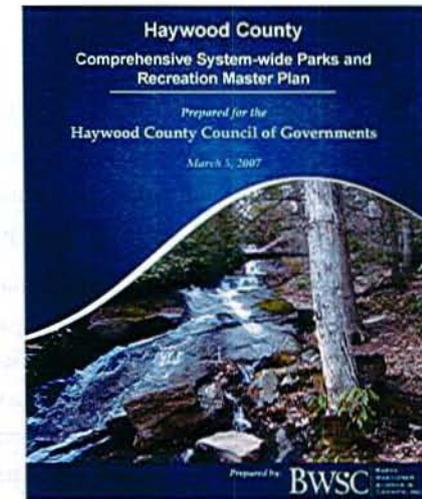
Plans reviewed for input to this Plan include:

- ◆ **Haywood County Comprehensive Recreation Plan (2007);**
- ◆ **Russ Avenue Corridor Study (2010);**
- ◆ **Waynesville Comprehensive Pedestrian Plan (2010);**
- ◆ **Land of Sky Regional Council Regional Trails Plan (2008);**
- ◆ **French Broad River MPO Comprehensive Transportation Plan (2007);**
- ◆ **French Broad River MPO 2035 Long-Range Transportation Plan (2010).**

### Public & Stakeholder Outreach

The public involvement features of the Haywood County Comprehensive Bicycle Plan consisted of six strategies to reach the most diverse populations and user group as possible given time and resource limitations. These strategies were:

- ◆ **Survey:** Online and hard copy completed by 170 individuals, as shown in Exhibits 2 & 3;
- ◆ **Festivals:** Distributing information about the Plan and BicycleHaywoodNC at four community events—one in each town;
- ◆ **Municipal Meetings:** Community-specific meetings with town staff, as well as Lake Junaluska, to gather bicycle-specific ideas, summarized in the Community Profiles;
- ◆ **Community Conversations:** BicycleHaywoodNC representatives introduced the plan to the Bethel Community Organizations and



“Any future roadway construction project in the County should include provisions to accommodate pedestrian and bicycle travel. This network should connect existing and future park and recreation facilities and greenways. Bike racks ... should be installed at all publicly owned facilities across the County.”

- Haywood County Comprehensive Recreation Plan (2007)



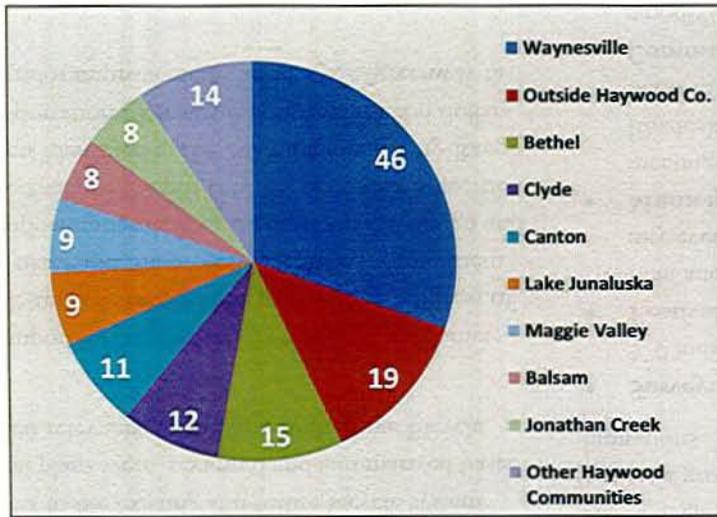


Exhibit 2: Geographic Distribution of Survey Respondents

- several civic / service clubs;
- ♦ **Blue Ridge Breakaway:** Economic survey of users, one-on-one conversations, and table with Plan information on the day of the event;
- ♦ **Articles & Blog:** Cecil Yount's columns in the *Mountaineer* and *GR8SMOKIESZEKE* blog.
- ♦ **Public Open House:** October public forum held at the Colonial Theatre in Canton to present the findings of the Plan prior to adoption by the Board of County Commissioners. Twenty-one (21) people attended the Open House.

### Community Profiles

The towns and rural communities in Haywood County are as diverse as the landscape that has both connected and isolated them throughout their respective histories. Other unincorporated communities also play a vital role in Haywood County's prosperity and national draw. Most prominent of those is Lake Junaluska, which is a recreational attractor for Haywood County as visitors and residents enjoy strolling the walkways around the lake.

The following pages contain snapshots of each community to outline bicycling-related features and opportunities identified during the community meetings and field analysis.

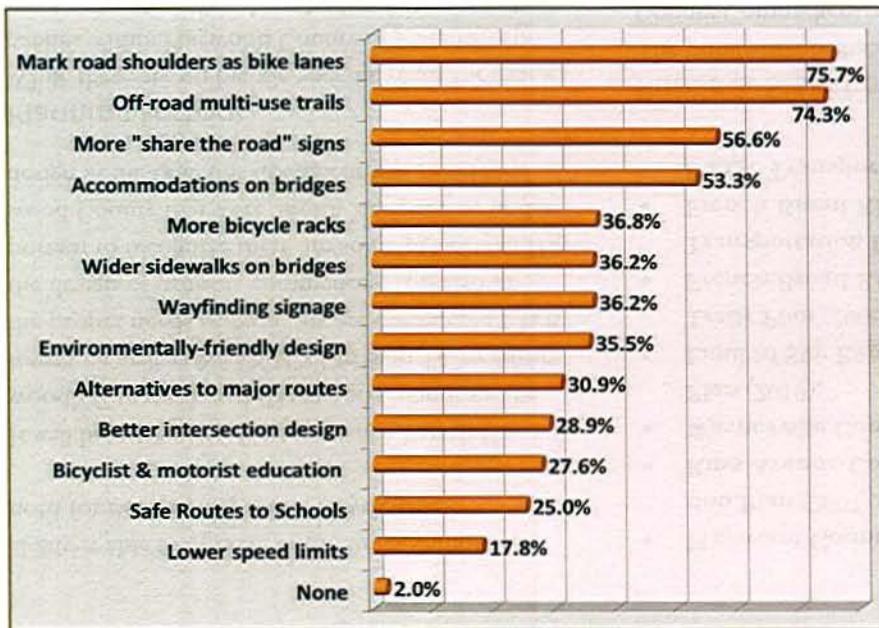


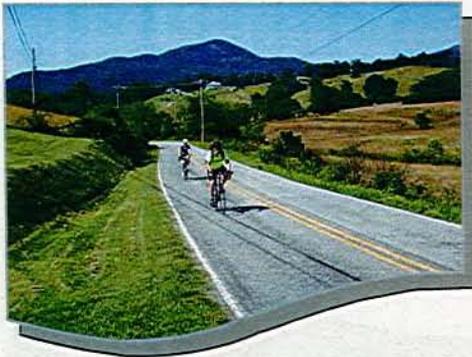
Exhibit 3: Preferred Improvements, by percentage of respondents, to Roadways and Other Facilities to Accommodate Bicyclists





## Haywood County

Population: 59,036  
 Pop. Growth (2000-2010): 9.3%  
 Land Area: 553 Sq Mi.



**Context:** Haywood County has diverse landscape ranging from rolling hills with forests and farmland to steep terrain and high mountainous areas. The Blue Ridge Parkway follows much of the southern boundary of the County.

**Influences:** A majority of the population of Haywood County resides in the urbanized area defined as the incorporated towns and unincorporated areas between Maggie Valley, Waynesville, Lake Junaluska, Clyde and Canton. Other communities such as Jonathan Creek, Bethel, Iron Duff and the Ratcliff Cove Road corridor have notable population clusters. Connecting these communities and major destinations within them should be the primary focus of bicycle facilities investment.

**Bicycling:** The state-designated and US highways form the backbone of the transportation system in Haywood County and link bicyclists to numerous two-lane, low-volume routes and loops throughout the rural areas. These routes and loops provide for some of the most scenic bicycle riding in North Carolina and will not likely require large-scale improvements. Adding shoulders or wide outside lanes to major corridors connecting to these routes, as well as greenways, should be a priority.



## Town of Waynesville

Population: 10,144  
 Pop. Growth (2000-2009): 9.8%



**Context:** Waynesville is the County seat, the largest town in Haywood County and a tourism and cultural hub. Several roads converge on Waynesville and it has several traditional neighborhoods, including Hazelwood, a very bicycle-friendly area.

**Influences:** Waynesville provides the majority of commercial and shopping destinations for the area. Waynesville's Main Street and nearby areas are one of the most vibrant small town downtowns in North Carolina and offer walkable destinations within a few blocks of one another. The Frog Level Historic District and Hazelwood also offer unique downtown shopping environments and great potential for bicycle-friendly nodes. There are several traditional neighborhoods in Waynesville as well as golf communities on its periphery.

**Bicycling:** Major corridors such as US 276 and US 23 Business create barriers for bicycling but there are alternative routes on parallel two-lane streets throughout town and other routes connect to scenic loops. The US 276—Russ Avenue corridor has large-scale commercial development and is planned for improvements that include bicycle lanes. The Town is planning a BMX park as part of the master plan for the Recreation Center. Downtown Waynesville is an ideal location for bicycle racks.





## Town of Canton

Population: 4,029  
Pop. Growth (2000-2009): 1.7%  
Land Area: 3.8 Sq. Mi.



**Context:** Canton is Haywood County's second largest town and the hub of employment with Evergreen Packaging (historically called Champion), which is the county's largest industry. It is also home to the historic Colonial Theatre.

**Influences:** Canton has witnessed a re-birth of its downtown in recent years as the town has emerged as a bedroom community for Asheville and re-investment has led to renovation of the Colonial Theatre and Imperial Hotel. Haywood County's second largest community is also the location of the county's largest private employer—Evergreen Packaging—which employs more than 1,200.

**Bicycling:** The renovation of the Colonial Theatre was partially funded through a transportation-related grant that stipulated the theatre would be opened to bicyclists for restrooms and water breaks. It also includes covered bicycle parking. The Rough Creek watershed is owned by the Town of Canton and has more than 10 miles of walking, running and mountain bike trails. Canton provides a gateway for bicyclists traveling recreational routes to and from Buncombe County and the Blue Ridge Parkway. Some residents expressed concern over a ban on bikes in the Recreation Park.



## Town of Maggie Valley

Population: 1,602  
Pop. Growth (2000-2009): 163.9%  
Land Area: 1.6 Sq. Mi.



**Context:** Residents and visitors to Maggie Valley enjoy quick access to the Great Smoky Mountains National Park and Blue Ridge Parkway. The town is a primary tourism destination for Western North Carolina.

**Influences:** Maggie Valley is one of Western North Carolina's primary tourist destinations and has remained so, even after the closure of the Ghost Town amusement park in 2007, due to the town's proximity to the Qualla Boundary and Cataloochee Ski Area. The Town is situated along a five-mile stretch of US 19—Soco Road, which is the only thoroughfare that connects the town to other communities.

**Bicycling:** The geographic constraints of Maggie Valley make it difficult to access via bicycle from other towns and communities within Haywood County. Some recreational bicyclists use Soco Road as a connection to the Blue Ridge Parkway. Maggie Valley has seen an increase in families using bicycles to get from campgrounds and residential areas to the commercial strip along Soco Road, but much of this takes place on the sidewalks. New parks are planned at either end of Moody Farm Road, which parallels Soco Road for two miles and has new sidewalks.



## Town of Clyde

Population: 1,401  
 Pop. Growth (2000-2009): 5.8%  
 Land Area: 0.8 Sq. Mi.



**Context:** Clyde is the cross-roads of Haywood County, located almost equidistant between Waynesville and Canton. The Pigeon River defines this close knit bedroom community that experienced devastating floods in 2004.

**Influences:** Clyde has historically been defined by the shape of its town limits, which is almost a perfect circle centered on the downtown district. The Town of Clyde is bisected by Carolina Boulevard (US 19 / 23), which connects to Waynesville and Canton. Haywood Community College and Haywood Regional Medical Center are located just west of Clyde, as is Tuscola High School.

**Bicycling:** Clyde has the potential to become the bicycling hub of Haywood County. Parcels purchased after the flood of 2004 along Glance Street are planned to be a county park and have pad sites and pathways ideal for conducting bicycle rodeos for children. Further, several key recreational routes converge in Clyde, including Old Clyde Road, Thickety Road, Hyder Mountain Road, and Main Street / Poison Cove Road. The presence of small parks in Clyde with restrooms and water fountains, as well as parking, are a benefit to bicyclists.



## Lake Junaluska

Population: 2,675 (2000)  
 Pop. Growth (2000-2010): N/A  
 Land Area: 1,200 acres



**Context:** Lake Junaluska is an unincorporated community, conference center and retreat affiliated with the United Methodist Church. There are more than 800 residences, 700 hotel rooms and several meeting spaces on the grounds.

**Influences:** Lake Junaluska is a private community founded in 1913 and serves more than 150,000 people each year through its various programs, events and retreats. Rental cottages, hotel rooms and apartments also make Lake Junaluska a vacation destination. The streets within the community are privately owned with the exception of County Road. A ring road around the lake is a popular scenic destination with the mountains as a backdrop.

**Bicycling:** Lake Junaluska is a popular recreation destination for Haywood County as residents and visitors flock to the walking trail around the lake. Bicyclists also enjoy riding the low-speed and low-volume streets. Residents of Lake Junaluska express concerns over bicyclists, particularly as it relates to their use of the pedestrian-only bridge and perceived conflicts during high volume times at the Assembly. Roads within the Lake Junaluska community will likely remain shared use due to space.





The Blue Ridge Parkway is designated as part of North Carolina Bicycle Route 2—Mountain to Sea. It is a popular regional destination for recreational cyclists and is part of the Blue Ridge Breakaway's 105-mile Hawk Route.

*Photo Credit: Don Kostelec*

### Major Bicycling Destinations

**Blue Ridge Parkway.** The Parkway is designated as part of North Carolina Bicycle Route 2 – Mountains to Sea as it follows the southern boundary of Haywood County. The Blue Ridge Breakaway's 105-mile Hawk Route follows the Parkway.

**Rough Creek Watershed Trails.** The area north of Canton known as the Rough Creek Watershed provides municipal water supply for the Town of Canton. The 830-acre preserve has more than 10 miles of designated trails that are becoming a popular mountain biking destination.

**Waynesville Recreation Center.** The complex and greenway along Richland Creek offers a safe environment for children to learn to bicycle and a place for families to ride. Plans call for the recreation center to add a BMX bicycling area as part of new development plans for the facility.

**Canton Recreation Park.** Canton's linear park stretches along a 1/2-mile section of the Pigeon River and includes several recreation facilities. The park features a trail along the river that is designated for walking only. Bicyclists are discouraged from using the trail, which as led to discussions among citizens and town leaders about how to effectively work with parents and children who would like to have a place to ride in Canton.

### Engineering Best Practices

A challenge for advocates of bicycle facilities is that bike lanes are oftentimes seen as the most

“disposable” component of a street that is being designed. This stems from varying levels of support from bicyclists as it relates to dedicated lanes and a lack of understanding by project designers of what type of facility is most suitable to support the types of bicyclists using that street.

Exhibit 4 on pages 14 and 15 was modified from AASHTO publications to illustrate the various types of bicycle facilities and associated characteristics of those facilities that should be considered in implementation. The facilities constitute the most likely outcomes for bicycle routes in Haywood County, given its rural and mountainous context.

NCDOT has a tendency to default to an option known as a Wide Outside Lane, typically 14-feet wide, to allow space for a bicyclist and a motorist to share the lane, especially when a motor vehicle is passing a bicycle. Many road cyclists feel comfortable when riding in this wide outside lane, however widespread use of this design option can discourage new riders from trying to ride on the road as they do not feel they have space in which to operate.

Dedicated bike lanes offer another set of opportunities and challenges. Bike lanes clearly let the motorists know that bicyclists belong on the road, but some motorists react negatively when they see a bicycle operating outside of that lane due to either debris in the bicycle lane or the need to change lanes to turn or avoid obstacles such as parked vehicles.

The clearing of debris from bike lanes and shoulders creates on-road conflicts when bicyclists have to operate in the travel lane to avoid debris. Conflicts also arise between government agencies that are tasked with maintaining the road and may have budget, labor and/or equipment limitations that prevent timely clearing of debris.

Several detailed design-related recommendations are identified in Chapter 4 of the full-length Plan.

### Engineering: Corridors & Intersections

Citizens, stakeholders, municipalities and members of BicycleHaywoodNC provided input as part of the Haywood County Comprehensive Bicycle Plan to identify intersections "Hot Spots" and "Cool Corridors" routes that should be targeted for improvements. These findings were developed as part of the planning process and should be refined as projects are designed and constructed.

**Cool Corridors** represent routes where bicyclists are most likely to travel for commuting, recreation or other purposes. They are seen by the community as the most visible, scenic and utilized bicycling routes. Eleven (11) routes or combinations of routes have been detailed on the following pages and constitute those routes that will require the greatest investment of time and resources to implement.

Other routes not included in these project capsules are primarily routes where few infrastructure upgrades were identified and these corridors will be subject to installation of signage such as Share the

Roads signs, bicycle route designation and, potentially, wayfinding.

Numerous corridors have been identified by French Broad River MPO and NCDOT for roadway investments and are referenced in these recommendations. Oftentimes, corridor analyses conducted by NCDOT and municipalities will not provide sufficient detail as to the reason and justification for inclusion of bicycle-related facilities on these corridors. The capsules for these projects outline the influences that contribute to the need for bicycle facilities in hopes that they can be used by BicycleHaywoodNC, Haywood County and towns to better substantiate the investments when working with NCDOT and other agencies.

As corridor studies are conducted in the future, it will be critical to use the Bicycle Plan as the foundation for discussions with NCDOT and others to help advocate for bicycle facilities. A benefit for Haywood County is the nature of the corridor recommendations, as many routes are shown for the addition of shoulders in rural areas with the potential for shoulders designated as bicycle lanes.

The recommendations for shoulders on US or State Highways is a goal of NCDOT to bring these roads up to current design standards. Shoulders provide a recovery area outside of the travel lanes for motorists and help with the overall pavement condition of the corridor as they can prevent deterioration of travel lanes. It is important to un-



The engineering recommendations included in this chapter for Cool Corridors and Hot Spots were generated following input from BicycleHaywoodNC members, the survey and public input. Project team members rode more than 300 miles of area routes and conducted in-the-field measurements to formulate these recommendations.

*Photo Credit: Dan Kostelec*



Type of Bikeway	Best Use	Motor Vehicle Design Speed	Intended use / Traffic Volume	Other considerations
 <p><b>Paved Shoulder</b></p>	Rural highways that connect towns and other major attractors.	Variable. Typical posted rural highway speeds (40-55 mph)	Rural roadways; inter-city highways.  Variable traffic volumes.	Provides more shoulder width for roadway stability. Width dependent on adjacent motor vehicle traffic (i.e. wider shoulder on high-speed roads).
 <p><b>Shared Roadways—No Special Provisions</b></p>	Minor roads with low speeds / volumes, where bicycles can share the road with no special provisions.	Speed differential between motorists and bicyclists is typically 15 mph or less. Speeds limits less than 30 mph.	Neighborhood or local streets.  Generally less than 1,000 vehicles per day.	Can provide alternative to busier streets. On a grid network, may be circuitous or discontinuous.
 <p><b>Shared Lanes—Wide Outside Lanes</b></p>	Major roads where bike lanes are not selected due to space constraints or other limitations.	Variable. Use as the speed differential between bicyclists and motorists increases. Generally any road where the design speed is more than 25 mph.	Arterials and collectors intended for major motor vehicle traffic movements.  General more than 3,000 vehicles per day.	Explore opportunities to provide parallel facilities for less confident bicyclists.

Exhibit 4: General Classifications for Different Bikeway Types

Source: AASHTO



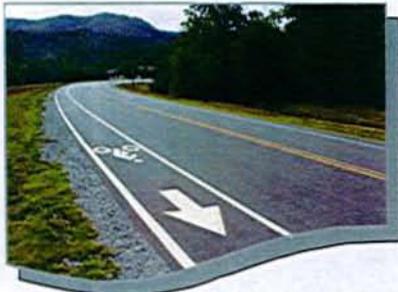
Type of Bikeway	Best Use	Motor Vehicle Design Speed	Intended use / Traffic Volume	Other considerations
 <p><b>Shared Lane—Shared Lane Markings</b></p>	Space constrained roads with narrow travel lanes, or road segments where bicycle lanes are not selected due to space. Also known as “sharrows”.	Variable. Use where speed limit is 35 mph or less.	Collector or minor arterials.  Variable. Useful where there is high turnover in on-street parking to prevent “dooring” crashes.	May be used in conjunction with wide outside lanes. Where on-street parking is present, ensure markings placement reduces conflict with opening car doors.
 <p><b>Bike Lanes</b></p>	Major roads that provide direct, convenient, quick access to major lane uses. Also can be used on collector roads and busy urban streets with slow speeds.	Generally, any road where the design speed is more than 25 mph.	Arterials and collectors intended for major motor vehicle traffic movements.  Variable traffic volumes. Speed differential is generally a more important factor than volume.	Where on-street parking is present, ensure bike lane placement reduces conflict with opening car doors. Analyze intersections to reduce bicycle / motorized vehicle conflict.
 <p><b>Shared-Use / Multi-Use Path</b></p>	Linear greenways or along waterways, highways, active or abandoned rail lines, or utility rights-of-way. May be a short connection between two cul-de-sacs.	No vehicular traffic. Bicyclists should be encouraged to travel at speeds lower than 12 mph to avoid conflicts with other users.	Provides a separated path for non-motorized users. Advanced riders may still prefer on-street facilities.  Traffic Volume: N/A	Analyze intersections to anticipate and mitigate conflict points between path and roadway users. Design path with all users in mind and width to accommodate expected usage.



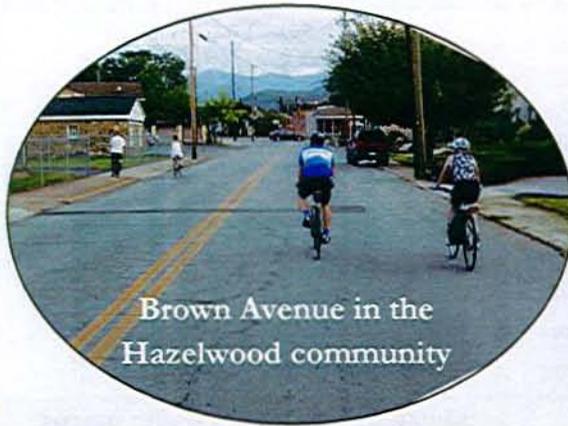
Exhibit 4: General Classifications for Different Bikeway Types (continued)

Source: AASHTO

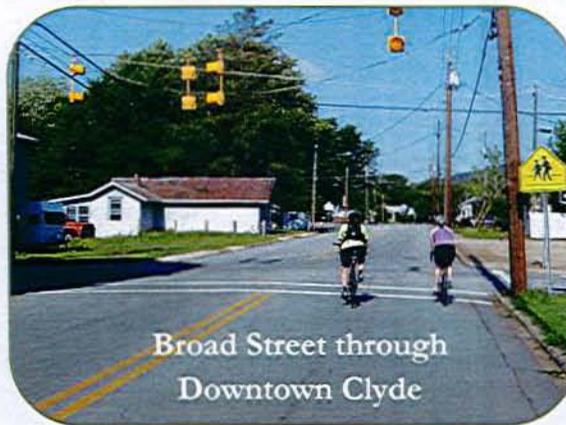
Photo Credit: Don Kostelec / Bethany Schilleman

## The Haywood Hub concept

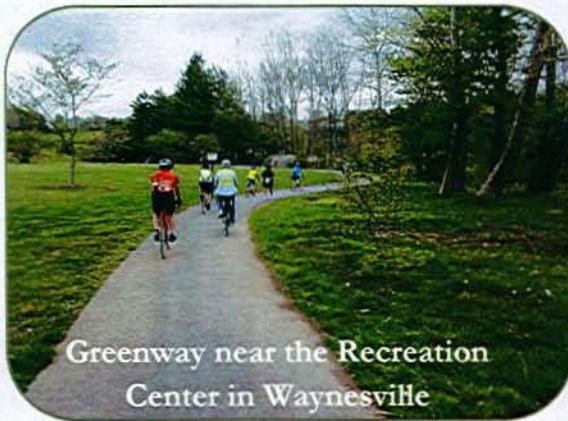
The concept of a Haywood Hub route was identified early in the planning process as the Vision and Goals exercise prioritized the need for a central route that connects the population centers of Haywood County. The Hub route requires various improvements to streets and greenway through different land use contexts, which are identified on the facing page.



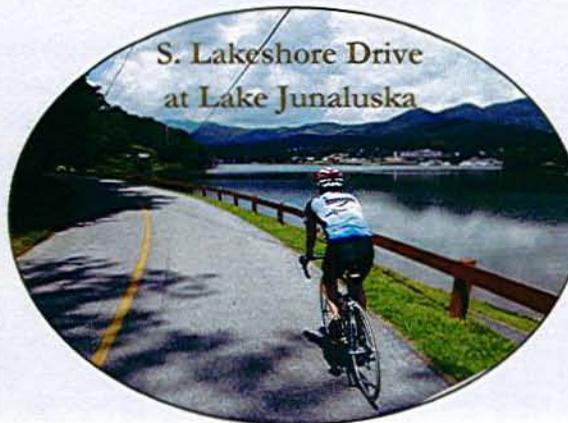
Brown Avenue in the  
Hazelwood community



Broad Street through  
Downtown Clyde



Greenway near the Recreation  
Center in Waynesville



S. Lakeshore Drive  
at Lake Junaluska

Understand the need for a program of regular maintenance to prevent debris and foliage from overwhelming the shoulders for use of them by bicyclists.

**Other Routes.** Following the pages dedicated to specific corridor improvements are corridor maps of other routes in Haywood County with recommended improvements. Three general types of bicycle route improvements are identified for on-street facilities.

**Urban Shared Route.** Routes are recommended for shared use of travel lanes with vehicles with shared lane markings ("sharrows") and/or "Share the Road" signs. These routes generally have constraints due to the built environment or topography that limit the potential for bicycle lanes or shoulders.

**Shoulder, Bike Lane.** These routes are typically along major arterials in the rural and urban areas, including the US and State Highways. The addition of shoulders in the non-curbed sections can provide space for bicyclists to operate. On more popular routes or in urban areas, a bicycle lane could be accommodated.

**Rural Shared Lane.** Routes in this category are generally low volume and low speed routes in rural areas. Many are located adjacent to rivers and streams and have other constraints such as topography. The low-volume, low-speed nature of these routes make them an area that can be enjoyed by recreational bicyclists without additional width or other accommodations. Routes may be designated as a bicycle route and have "Share the Road" signage.

Corridor Recommendations

*Cost estimates are planning level and may change dramatically due to right-of-way availability and actual design. Estimates with a (\*) reflect FBRMPO estimates for full corridor improvements identified in the 2035 Long-Range Transportation Plan.*

## Haywood Hub: A Central Route for Haywood County Communities

Short-term & Long-term investment  
Estimated Cost: \$3 - 7 million

**Context:** The Haywood Hub traverses the Towns of Waynesville, Clyde and Canton, as well as the Lake Junaluska community, to create a central route that serves the majority of the population of Haywood County.

**Influences:**

- Hazelwood Elementary School
- Hazelwood Community
- Waynesville Middle School
- Central Elementary School
- Downtown Waynesville
- Richland Creek
- Railroad tracks
- Frog Level Historic District
- Waynesville Recreation Center & Greenway
- Dutch Fisher Park & Vance St Park
- Lake Junaluska Walking Trail
- Tuscola High School
- Haywood Community College
- Haywood Regional Medical Center
- Clyde Elementary School
- Downtown Clyde & Parks
- Downtown Canton
- Canton Middle School & Recreation Park

**Recommendations:**

**Brown Avenue:** Road diet to three lanes plus bike lanes from South Main Street to Belle Meade Drive. Install Share the Road signs and / or shared lane markings from Belle Meade Drive to Richland Street.

**Richland Street, Commerce Street & Boundary Street:** From Brown Avenue to Shackleford Street install Share the Road signs and / or shared lane markings through Frog Level Historic District (alternate route: US 276 to Walnut Street).

**Vance Street Park / Waynesville Recreation Center:** Upgrade unpaved sections of greenway to paved sections. Connect greenway along Richland Creek or via Howell Mill Road to Industrial Park via Old Asheville Hwy.

**Greenway to Lake Junaluska:** Upgrade, where feasible, to paved greenway, and construct improvements at US 19—Dellwood to facilitate crossing to Lake Junaluska and South Lakeshore Drive.

**South Lakeshore Drive to NC 209—Crabtree Road:** Work with Lake Junaluska to gain approval for pavement markings, including shared lane markings or specialized signage.

**NC 209—Crabtree Road:** Complete shoulders to Old Clyde Road.

**Old Clyde Road/Broad St.:** Install shoulders for 7 miles from NC 209 to NC 215 in Canton. Re-stripe through downtown Clyde for travel lanes and bike lanes. Until then, sharrows or Share the Road signage should be installed.



**Complete Streets:** Several NCDOT Complete Streets Cross Sections could apply to this corridor due to diversity of land uses along it. The most applicable are the Rural Road and Rural Village Main Street cross sections (see Plan Appendix).



Corridor Recommendations

*Cost estimates are planning level and may change dramatically due to right-of-way availability and actual design. Estimates with a (\*) reflect FBRMPO estimates for full corridor improvements identified in the 2035 Long-Range Transportation Plan.*

**NC 209—Crabtree Road / Rush Fork Road**

Short-term investment

Estimated Cost: \$1.4 million

**Context:** The corridor connects Lake Junaluska to northern Haywood County and Madison County. The predominant land use is rural residential and agricultural with some commercial.

**Influences:**

- Lake Junaluska
- Haywood County Fairgrounds
- Connections to popular recreational routes
- Riverbend Elementary School
- I-40 interchange



Length: 7.1 miles

**Recommendations:** Add five-foot wide shoulders where possible along both sides of NC 209 from I-40 to Betsys Gap Road. Install climbing lanes on constrained sections. Consider specialized bike lane markings through intersections with I-40 interchange off-ramps. Designate as state bicycle route.



Sections of NC 209 south of I-40 already have paved shoulders of a width suitable for bicycle travel. This project recommends continuing this treatment to Betsys Gap Road, with climbing lanes in constrained areas.



**US 276—Jonathan Creek Road**

Short-term investment

Estimated Cost: \$1.1 million

**Context:** Route is a high-speed four-lane thoroughfare with rural residential and commercial land uses. US 276 connects I-40 at Exit 20 to Maggie Valley and the US 19 corridor.

**Influences:**

- Jonathan Valley Elementary School
- Future Haywood County Park
- Only road connection to popular recreational routes along Fines Creek Road and Coleman Mountain Road.



Length: 5.5 miles

**Recommendations:** Add six-foot wide shoulders from I-40 to US19 intersection. If rumble strips are installed, follow guidelines outlined in this Plan. Designate as state bicycle route.



Potential improvements to US 276 include the addition of shoulders, similar to these on NC 107 near Cullowhee. The markings of the shoulders as a bicycle lane would be an option for US 276.



Corridor Recommendations

Cost estimates are planning level and may change dramatically due to right-of-way availability and actual design. Estimates with a (\*) reflect FBRMPO estimates for full corridor improvements identified in the 2035 Long-Range Transportation Plan.

### US 276—Pigeon Road / Cruso Road

Short-/Long-term investment

Estimated Cost: \$1 - 47 million \*

**Context:** Route is a two-lane route through rolling terrain from Waynesville to Bethel, with a mix of residential, commercial, and agricultural uses. From Bethel, US 276 winds its way to the Blue Ridge Parkway.

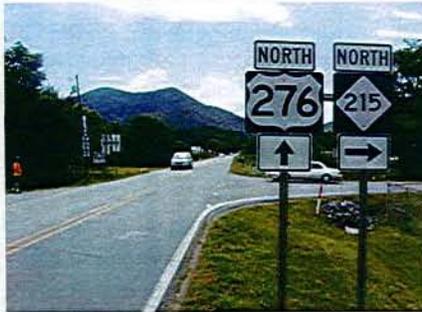
**Influences:**

- Downtown Waynesville
- Bethel Community & Schools
- Blue Ridge Parkway connection
- Connections to other recreational routes
- Campgrounds

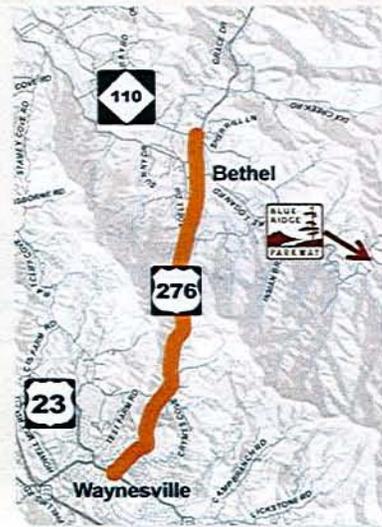


Length: 6.5 - 13.5 miles

**Recommendations:** *Short-term*—add share the road signs & climbing shoulders where possible between Waynesville & Bethel. *Long-term*—FBRMPO long-range plan identifies 6-mile \$47 million project from Waynesville to NC 215.



US 276—Pigeon Road was consistently mentioned as one of the corridors that presents the most challenges for bicyclists in terms of feeling safe next to high-speed traffic on a narrow two-lane road.



### US 276—Russ Avenue

Short-term investment

Estimated Cost: \$22+ million \*

**Context:** The Russ Avenue corridor study recommended bicycle lanes from US 23/74 to downtown Waynesville for this commercial corridor. Cross street improvements were not evaluated for bicycle facilities.

**Influences:**

- Connectivity between Maggie Valley & Waynesville
- Commercial land uses along Russ Avenue
- Local street connections to greenway & parks
- Need for various Complete Streets components identified in corridor study

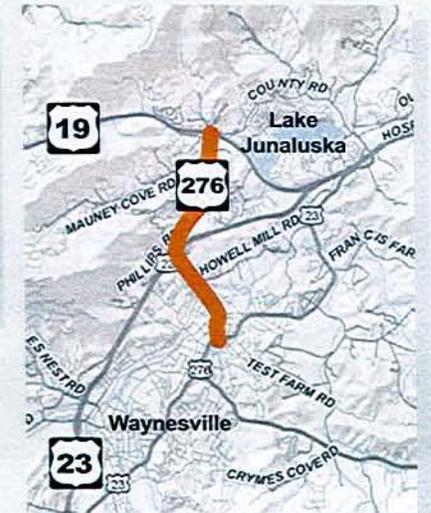


Length: 5.9 miles

**Recommendations:** *Short-term*—FBRMPO Long-Range plan identifies 2016-2025 as timeframe for corridor study implementation (\$22 million). *Long-term*—Conduct similar study from US 23/74 to US 276 / US 19—Dellwood Road.



A corridor study for US 276—Russ Avenue identified several improvements, including the addition of bicycle lanes, a completed network of sidewalks, landscaped medians and local street / parking area connectivity.



Corridor Recommendations

Cost estimates are planning level and may change dramatically due to right-of-way availability and actual design. Estimates with a (\*) reflect FBRMPO estimates for full corridor improvements identified in the 2035 Long-Range Transportation Plan.

**NC 215—Old River Road / Penland Street**

Short-/Long-term investment

Estimated Cost: \$12 million

**Context:** The route is parallel to the Pigeon River and NC 110 but is a more suitable route to connect downtown Canton to Bethel and US 276. Land uses transition from neighborhoods in Canton to agriculture along the River.

**Influences:**

- Downtown Canton & Canton Recreation Park
- Canton Middle School & Pisgah High School
- Connections to Stamey Cove Road & Bethel
- Bethel Middle & Elementary Schools
- Blue Ridge Parkway connection



Length: 6.0 miles

**Recommendations:** Add shoulders where possible from bridge near Recreation Park to Bethel and designate as bicycle lanes. Corridor improvements shown in FBRMPO long-range plan. Shared lane markings may be used in constrained areas. Install shared lane markings from Main Street in Canton to the Pigeon River bridge.



Sections of NC 215 between Canton and Bethel are narrow but have lower volumes of traffic than NC 110. The corridor has scenic value as it parallels the Pigeon River and passes numerous farms.



**US 19—Soco Road**

Short-term investment

Estimated Cost: \$200,000 \*

**Context:** US 19 flows through the heart of Maggie Valley's commercial district and is a popular route to connect to the Blue Ridge Parkway. Roadway includes four lanes and a center turn lane, along with sidewalks.

**Influences:**

- Maggie Valley commercial core
- Festival Grounds & Parks
- Blue Ridge Parkway connection
- Connections to other recreational routes
- Campgrounds & many tourists



Length: 7.1 miles

**Recommendations:** Re-stripe existing cross-section from US 276—Russ Ave. to old Ghost Town entry to have 10-foot travel lanes as shown in NCDOT Complete Streets: Rural Boulevard with 4-foot bicycle lanes (not counting gutter pan).



US 19—Soco Road is identified by the French Broad River MPO as a project for evaluation of a re-striping project to add bicycle lanes. Trucks are discouraged from using this route, which is constrained between Maggie Valley and Cherokee.



Corridor Recommendations

Cost estimates are planning level and may change dramatically due to right-of-way availability and actual design. Estimates with a (\*) reflect FBRMPO estimates for full corridor improvements identified in the 2035 Long-Range Transportation Plan.

**US 23 Business: S. Main Street—Waynesville**

Short-/Long-term investment      Estimated Cost: \$21 million \*

**Context:** Route is under study for section between Ninevah Road and US 23/74 interchange. The corridor consists of neighborhoods and commercial uses from downtown Waynesville to shopping centers at US 23/74.

**Influences:**

- Downtown Waynesville & Hazelwood
- West Waynesville shopping district
- Connections to recreational routes, Haywood Hub & Blue Ridge Parkway (State Bicycle Route 2)

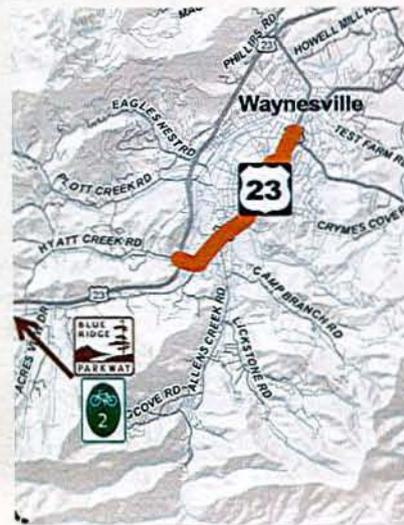


Length: 2.2 miles

**Recommendations:** *Short-term*—Add Share the Road signs & designate as bicycle route. *Long-term*—Install bicycle lanes consistent with NCDOT Complete Streets cross section for Urban/Suburban Main Street (Urban/Suburban Avenue if 4 lanes).



US 23 Business—S. Main Street is under analysis for potential improvements from Ninevah Road to the US 23/74 interchange, which is a busy street with numerous commercial driveways and turning conflicts.



**Newfound St-Rd / Bridge St / Beaverdam Rd**

Long-term investment      Estimated Cost: \$1.0 million

**Context:** Route transitions from historic neighborhoods in Canton to a rural route connecting to Buncombe County. Beaverdam Road provides access to mountain bike trails within the Rough Creek Watershed.

**Influences:**

- Downtown Canton & neighborhoods
- Rough Creek Watershed trails
- Recreational route connections to Buncombe County

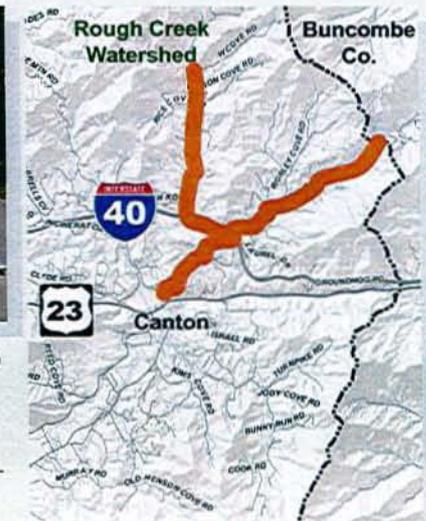


Length: 8.1 miles

**Recommendations:** Designate as shared route in Canton town limits with shared lane markings. Add shoulders where feasible from town limits to Buncombe County line. Designate Beaverdam Road as bicycle route.



Shared lane markings are a new addition to the MUTCD and can be used on neighborhood streets to connect bicycle routes where pavement or right-of-way width does not allow for bicycle lanes, as on Newfound Street & Bridge Street in Canton.



Corridor Recommendations

Cost estimates are planning level and may change dramatically due to right-of-way availability and actual design. Estimates with a (\*) reflect FBRMPO estimates for full corridor improvements identified in the 2035 Long-Range Transportation Plan.

**Panther Creek, Fines Creek, Iron Duff & Coleman Mtn Rds**

Short-term investment

Estimated Cost: \$100,000

**Context:** The popular recreational routes provide some of the most bicycle-friendly rural roads in Haywood County as they pass through rural residential and agricultural uses and connect to NC 209 and US 276, and other routes.

**Influences:**

- Popular loop routes for recreational cyclists
- Pigeon River and numerous creeks & streams
- Rolling hills and scenic vistas
- Connections to Madison County / Betsys Gap Rd
- Riverside Drive, Hyder Mountain Road and Upper Crabtree Road have direct or nearby connections.

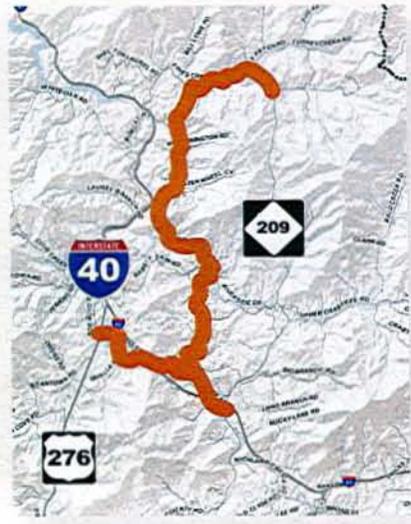
**Recommendations:** Designate as bicycle routes and install Share the Road signage along with wayfinding signs at intersections to connect bicyclists to other routes.



Length: 17.0 miles



Scenic vistas and low traffic volumes along these routes provide for spectacular bicycle-riding conditions even though the roads are narrow. These routes connect to other popular recreational routes and create a vast network of bicycling options in north Haywood County.



**Raccoon Road / Ratcliff Cove Road**

Long-term investment

Estimated Cost: \$1.2 mil-

**Context:** These recreational routes provide an alternate route around Waynesville and connect to US 276, US 23 Business, Poison Cove Rd. and Stamey Cove Rd. Land uses are rural residential, light commercial and agriculture.

**Influences:**

- Local street connections to downtown Waynesville and neighborhoods.
- Connections to other recreational routes.
- Right-of-way availability.
- Alternate route to US 276 / US 23 Business

**Recommendations:** Add four-foot shoulders where possible along each route and designate as bicycle lanes if width is available. Shared lane marking may be used in constrained areas. Designate as a bicycle route.

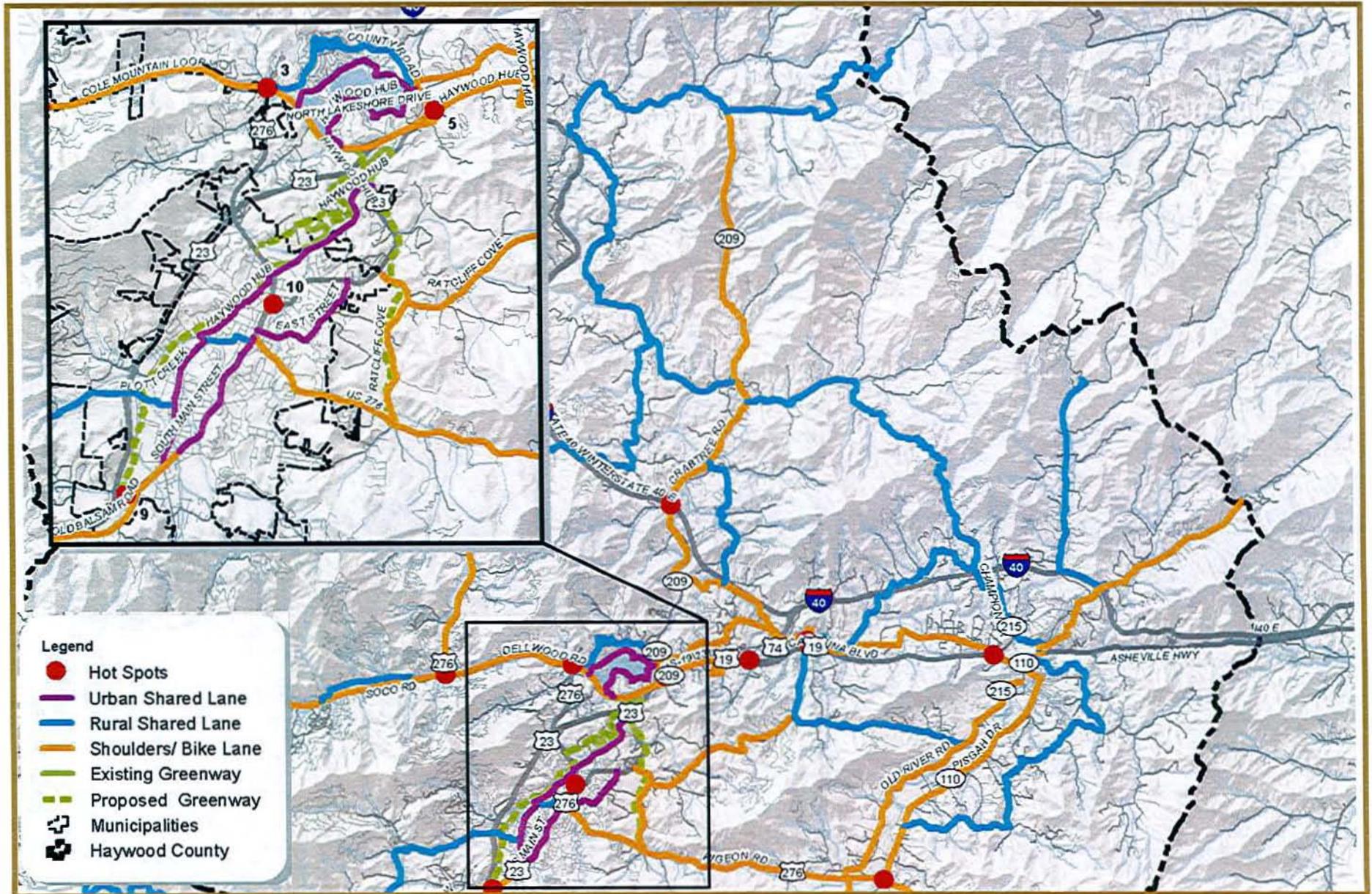


Length: 5.9 miles



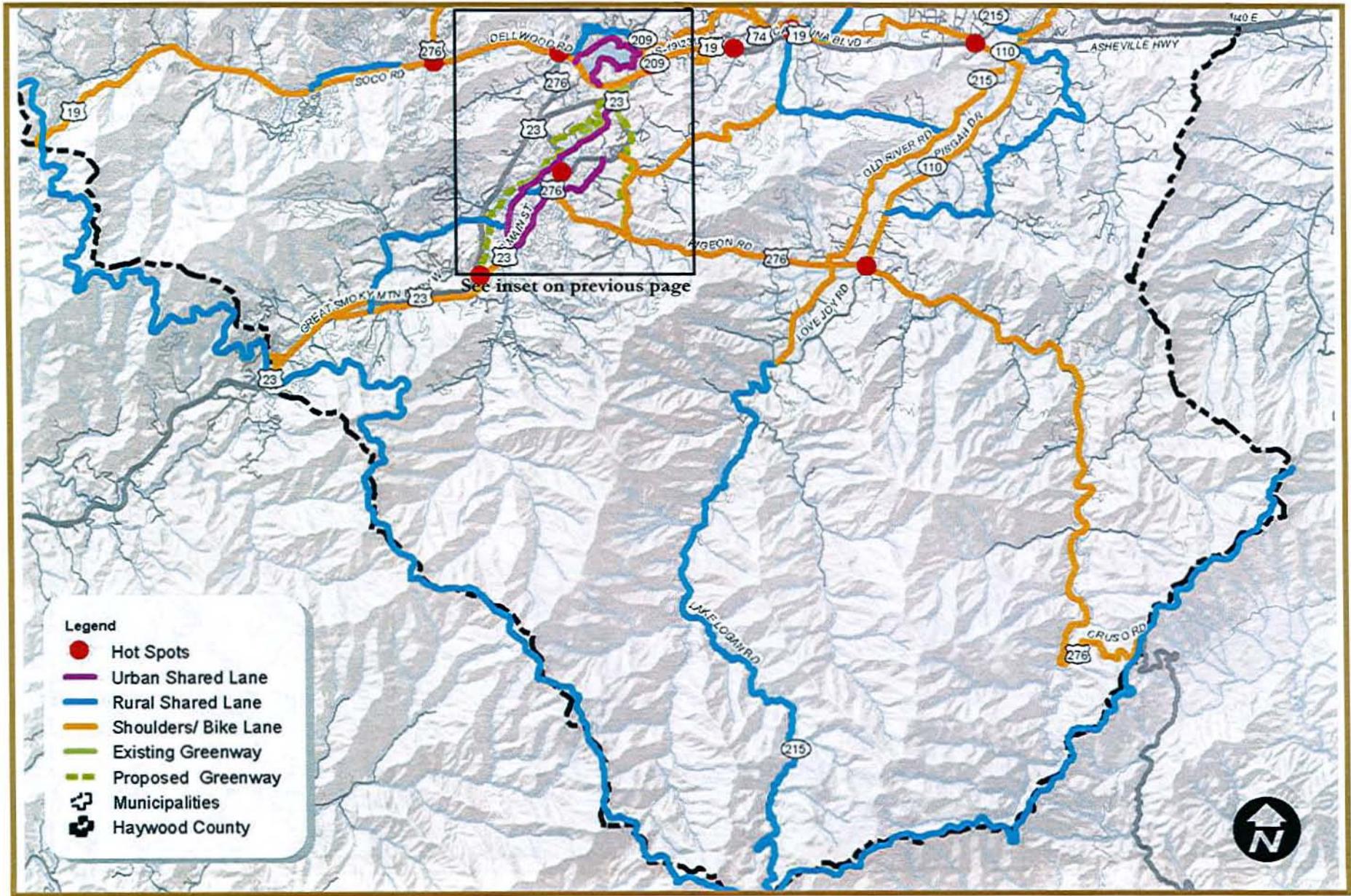
NCDOT has added shoulders designated as bicycle lanes to NC 107 between Cullowhee and the Caney Fork community in Jackson County. Similar investments along Raccoon Road and Ratcliff Cove Road are desirable but right-of-way constraints could limit implementation.





Route Recommendations: Northern Haywood County





Route Recommendations: Southern Haywood County



**Hot Spots.** Ten (10) locations were identified as intersections where bicyclists may find it uncomfortable to navigate during normal traffic conditions. Hot Spot locations in Haywood County are situated at the intersections of US and State Highways and have significant constraints related to the existing configuration of the intersection and features of the built environment (e.g. adjacent design of properties and driveways) that make them difficult to be addressed as standalone bicycle projects.

Some Hot Spots have been included as part of transportation corridor improvements identified in the French Broad River MPO 2035 Long-Range Transportation Plan. Given the complexity of many of these intersections, it is imperative that needs of bicyclists are represented as these projects and corridors studies move from a planning phase to a project development phase.

The Hot Spots identified in the plan are:

- ◆ Jones Cove Road & Hospital Drive between Waynesville and Clyde;
- ◆ Broad Street & Charles Street in Clyde.;
- ◆ US 276 (Russ Avenue) & Us 19 (Dellwood Avenue) near Lake Junaluska;
- ◆ NC 215 (Blackwell Drive) & Old Clyde Road in Canton;
- ◆ US 23/74 & NC 209 Interchange near Lake Junaluska;
- ◆ I040 & NC 209 Interchange in northern Hay-

wood County;

- ◆ US 276 (Pigeon Road) at NC 110 and Poin-dexter / Lake Logan Road near Bethel;
- ◆ US 19 (Soco Road) & US 276 (Jonathan Creek Road) in Maggie Valley;
- ◆ US 23/74 & Hyatt Creek Road Interchange in west Waynesville; and
- ◆ US 276 (Walnut Street) & US 23 Business (North Main Street) in downtown Waynesville.

### Health Assessment

A method of evaluation known as a Health Impact Assessment (HIA) was conducted as part of the Haywood County Comprehensive Bicycle Plan. The HIA was the first ever conducted in North Carolina for a non-motorized transportation plan and was used to bring a new perspective to the planning process and gather input from non-traditional stakeholders. The HIA included extensive document and data review, a half-day workshop with area health professionals, and an assessment of the Plan's recommendations.

The impacts of the Haywood County Comprehensive Bicycle Plan are generally positive in its potential impacts on community health. Due in part to the holistic approach of the Plan, implementation of the plan will mean that virtually all members of the community are aware of bicycling. Between the increased level of awareness and education, the specific roadway facilities and the numerous seg-



The presence of loose dogs along a route can become a barrier that dissuades people from riding a bicycle, particularly in rural areas.

Photo Credit: Dan Kostelec





Participants in the 2011 Blue Ridge Breakaway represented 15 states and territories, as well as a group of 12 riders from Ontario, Canada (above) who were in the region for a cycling-based vacation.

*Photo Credit: Dan Kastelec*

ments of the population who will be able to access both, the Plan should give citizens a level of bicycle understanding along with a strong chance of improving numerous elements of community health.

The outcomes of the HIA recognized the most significant impact on public health would be realized if the plan focused on improvements along the US 19/23 corridor (identified as the Haywood Hub route in the Engineering recommendations). Improvements for bicyclists along this corridor could impact nearly two-thirds of the County's population. The stretch between the west and east portions of the corridor span approximately 13 miles and include approximately 39,000 people of the 59,000 countywide total.

Additional support for the Haywood Hub includes establishment of economic urban centers, maximizing convenience to more concentrated pockets of residents, the possibility of gaining a greater mode share of utilitarian trips for access to the local jobs, educational and retail possibilities, and the highest number of K-12 school sites which could foster an environment of generational cyclist increases.

### The Blue Ridge Breakaway as a Barometer of Economic Impact

The 2011 event, held on August 20, was only the second year of organizing the ride that attracts

riders from across the southeast, primarily from western North Carolina, eastern Tennessee, and up-state South Carolina. From an anecdotal perspective, those involved with the Breakaway have felt the event positively impacts the local economy. Based on raw numbers, the 2011 event drew more than 400 riders with more than 90% of them residing outside Haywood County (Exhibit 5).

In an effort to begin to quantify the impacts of this event, a brief survey was developed and circulated to registrants via email both before and after the event. Given the limitations in available time and distribution channels, the survey did not achieve a high response rate (only 22 people completed the online survey) and thus did not yield adequate information to make statistically-relevant conclusions.

Some of the key responses to the survey did indicate some aspects of how people visit and view the event:

- ◆ Respondents were from North Carolina, South Carolina, Georgia, Tennessee, Florida, Kentucky and Maryland;
- ◆ 86% of respondents said they planned to stay overnight for the Breakaway;
- ◆ The average travel party size was 3.3 persons, with 2.3 persons per party participating in the Breakaway;
- ◆ The average stay in the area was reported as 4.3 days;
- ◆ Average responses for rating bicycling in Hay-

wood County based on the Breakaway were favorable; and

- ♦ Respondents noted they spent between \$30 per day and \$400 per day on accommodations.

The Chamber of Commerce and BicycleHaywoodNC should continue to promote this survey (or a similar survey) each year in order to gather multiple years of data and achieve a higher response rate. Working with entities such as the Public Policy Institute at Western Carolina University may be a low-cost way to achieve this and gain statistical acceptance of the ultimate results.

### Implementing the Bicycle Plan

Completion of the Haywood County Comprehensive Pedestrian Plan is only one step in creating a bicycle-friendly community. The implementation of the Plan will require a coordinated effort amongst County and Town officials, leaders, and citizen volunteers as well as follow-up plans and studies on more specific improvements. This chapter provides a series of actions steps for moving forward with the recommendations of the Plan, as well as potential funding sources and partners for proposed projects.

The implementation strategies of the Bicycle Plan are closely aligned with areas the state of North Carolina identified for Bicycle and Pedestrian Safety Strategies through a series of summits in early 2011 (The reports from this effort are included in the Appendix). The major action initiatives identified

through those summits to help guide NCDOT and other state agencies through the next decade were:

- ♦ Fully implement Complete Streets;
- ♦ Address multi-modal funding;
- ♦ Retrofit existing facilities;
- ♦ Require more from all road users;
- ♦ Increase public awareness through education;
- ♦ Connect transportation and land use; and
- ♦ Improve law and strengthen enforcement.

Each of these themes are addressed to some degree within the Haywood County Comprehensive Bicycle Plan. This can help stakeholders within Haywood County articulate to local, regional and state leaders that the implementation of this Plan is consistent with what has been identified at the state level.

### 10 Action Steps

Completing the 10 action steps illustrated on the following pages helps guide development of the proposed bicycling network and creates a supportive program and policy environment for a bicycle-friendly Haywood County.

These steps will be crucial in moving forward with the overall recommendations of the Comprehensive Bicycle Plan.

Place of Residence	Total
<b>North Carolina</b>	<b>178</b>
<i>Haywood County</i>	<i>28</i>
<i>Other Western NC</i>	<i>91</i>
<i>Outside Western NC</i>	<i>59</i>
<b>South Carolina</b>	<b>44</b>
<b>Tennessee</b>	<b>33</b>
<b>Georgia</b>	<b>33</b>
<b>Florida</b>	<b>14</b>
<b>Canada</b>	<b>12</b>
<b>Virginia</b>	<b>2</b>
<b>Kentucky</b>	<b>2</b>
<b>New Jersey</b>	<b>2</b>
<b>Ohio</b>	<b>2</b>
<b>Maryland</b>	<b>2</b>
<b>Guam</b>	<b>1</b>
<b>Texas</b>	<b>1</b>
<b>Hawaii</b>	<b>1</b>
<b>Indiana</b>	<b>1</b>

Exhibit 5: 2011 Blue Ridge Breakaway Participants by Place of Residence.

Source: Haywood County Chamber of Commerce

NOTE: These figures do not include day of event registrations.



## 10 Action Steps for Implementation

### 1 Adopt the Plan

This is the first stage of implementation. The Plan should be forwarded to regional and state decision-makers, such as the RPO, MPO and NCDOT Division office, for inclusion in a regional planning and development processes. Each town in Haywood County should also receive a copy for consideration when local plans or ordinances are updated.

**Partners:** County, Towns, MPO/RPO, NCDOT

### 5 Emphasize Complete Streets

Haywood County now has a Bicycle Plan that incorporates NCDOT's Complete Streets policy and design guidance, which bolsters the case for bicycle-related improvements on area roadways. To strengthen this position, the county and towns, MPO and RPO should adopt in-depth Complete Streets policies to complement NCDOT's efforts.

**Partners:** BicycleHaywoodNC, NCDOT, County, Towns, MPO/RPO

### 2 Meet regularly with stakeholders & organizations

The planning effort engaged citizens and organizations in visioning, goal-setting and identification of projects, programs, and policies. Some communities may take more convincing that a bicycle-friendly future is beneficial. Keeping citizens and organizations engaged in regular conversation about implementation. The meetings and conversations, particularly with NCDOT Division 14, often lead to identification of mutual interests and projects or funding sources.

**Partners:** BicycleHaywoodNC, NCDOT, County, Towns, MPO/RPO



### 3 Pursue best practices, Cool Corridor & Hot Spot investments

The county is in an opportunistic position to work with NCDOT on shoulder / bike lane projects on many state and US highways. These improvements can develop from long-range projects or from annual operating and maintenance expenditures identified by NCDOT Division 14.

**Partners:** BicycleHaywoodNC, NCDOT, County, Towns, MPO/RPO, Health Haywood, Chamber of Commerce, TDA

### 4 Adopt policy changes to the Bicycle Plan

Proposed ordinance changes will be crucial to balancing the public/private burden of implementing this Bicycle Plan. Local planning staff is in the best position to inform BicycleHaywoodNC on the proper methods to pursue these changes as each town can have a difference process.

**Partners:** County, Towns, MPO/RPO





## 6 Be involved in complementary planning efforts

Incorporate the recommendations of the Bicycle Plan into future and existing plans developed and updated at the local, regional and statewide level. For instance, the recommendations of the Haywood County Comprehensive Bicycle Plan should be incorporated into the regional bicycle plan for Western North Carolina being developed by the Land of Sky Regional Council and French Broad River MPO.

**Partners: BicycleHaywoodNC, NCDOT, County, Towns, MPO/RPO**

## 7 Develop supportive education, encouragement & enforcement programs

Bicycle facilities alone will not lead to a bicycle-friendly community. A variety of program recommendations are highlighted in this plan to be to promote a bicycling culture. Ideally, programs and policy priorities should be implemented alongside infrastructure improvements, but the community should recognize that programs such as installing signage or wayfinding can occur several years before major infrastructure projects.

**Partners: BicycleHaywoodNC, County, Towns, Haywood County Schools, Healthy Haywood, Haywood Community College, Sheriff's Department**

## 8 Measure performance

This chapter identifies methods by which BicycleHaywoodNC, Haywood County and others can track the performance in implementation of the Plan, which can help justify funding pursuits and strengthen the ability of the community to gain funding from various sources.

**Partners: BicycleHaywoodNC, County, MPO/RPO**

## 10 Be unique. Think big.

This Plan contains many firsts for the region and state in regards to: a county-wide bicycle plan in a rural and mountain environment, its application of Complete Streets, a new model of incident reporting for law enforcement, and the health impact assessment. These components should position Haywood County at the top of the list when it comes to funding for bicycling investments and recognizing the area as a leader in this field.

**Everyone.**

## 9 Complete the Bicycle-Friendly Community application

In the year following adoption of the Plan, the community should complete and submit a BFC application to the League of American Bicyclists. The application requires input from variety of data sources, many of which are included in this Plan. Even if the community does not receive BFC status on its first attempt, the feedback from the League and potential for Honorable Mention status can inspire local leaders to implement other Plan recommendations. Several BFC applications from other communities are included the Plan's Appendix for reference.

**Partners: BicycleHaywoodNC, County, Towns**

*Bicycle Friendly Community*

