

## Chapter 1: Introduction

Greenways and trails are not a new term or a new theme for Buncombe County, North Carolina. The area, along with much of the rest of Western North Carolina, has been a destination for outdoor enthusiasts who have enjoyed the region's trails for more than a century. Cities and towns within Buncombe County have invested considerable resources in planning for and building greenway systems.

As demand was growing for a countywide, comprehensive approach to greenways and trails planning, Buncombe County, through a variety of partnerships, undertook the effort to develop this Greenways and Trails Master Plan in 2011 and 2012. The results of that effort are summarized in this document and reflect a comprehensive evaluation of the need and ability for Buncombe County, through its partnering with communities, cities and towns, non-profit organization, land conservancies, and other government agencies, to realize a well-connected and integrated system of projects, programs and policies to promote greenways.

The Greenways and Trails Master Plan identifies nearly 102 miles of proposed routes to connect to many of the 13 miles of greenways already in place within town and city limits.

Buncombe County's unincorporated areas are growing and urbanizing, sometimes at a rate faster than the growth and urbanization of the municipalities within its boundaries. This is evident in urban- or suburban-scale development and the land use policies that promote these developments in unincorporated areas. It was also a theme of the County's Land Use Plan Update in 2006.

This type of urbanized growth represents a new trend for County governments, not only in North Carolina,

but across the United States. As more residents live in these unincorporated and urban areas and businesses locate there to serve these residents, a desire often emerges from these communities for more amenities than have not historically been provided by a County government.

The residents and businesses enjoy the convenience of municipal water, sewer systems, trash collection, quick response times for fire service and law enforcement. An growing expectation in these urban area is for facilities that provide for movement of pedestrians and bicyclists, not just for recreational purposes but for transportation, running errands, relieving stress and offsetting the effects of obesity, attracting new businesses, and making communities more livable and marketable.

In unincorporated areas that are urbanizing and oftentimes have hybrid development patterns that blend urban and rural characteristics, greenways can provide the type of infrastructure to address this demand. Further, they can be cheaper and more easily-maintained than sidewalks while serving other purposes such as land conservation and stream buffer protection.

### What is a Greenway?

The definition of greenways has changed over the last century as the function of what communities call greenways evolved from rings of open space surrounding urban areas to corridors that preserve natural settings around rivers, streams and other features, and to recreational and transportation corridors.

For purposes of this Plan, the definition of greenways is found in Charles Little's book *Greenways for America* (1990) and shown at right.



### Greenway (grēn' - wā) n

1. A linear open space established along either a natural corridor, such as a riverfront, stream valley, or ridgeline, or overland along a railroad right-of-way converted to a recreational use, a canal, a scenic road, or other route.
2. Any natural or landscaped course for pedestrian or bicycle passage.
3. An open-space connector linking parks, nature reserves, cultural features, or historic sites with each other and with populated areas.
4. Locally, certain strip or linear parks designated as a parkway or greenway.

## Greenways & Trails Themes

Before the planning process began, Buncombe County identified several themes to examine during the course of the effort. An integral, over-arching theme was one of creating a meaningful, vibrant and affordable practice today that does not deplete the County's resources for tomorrow. This must be achieved in a fiscally responsible way and with an outcome that is compelling and understood by the people who use it and need to live with it. These themes are consistent with those found in the County's Land Use Plan and Sustainability Plan.



*The ribbon-cutting for the trail at Alexander Park in 2011 brought about a new era for Buncombe County as it is the first greenway segment constructed and managed by the County.*

Photo Credit: Buncombe County

For a system of greenways and trails to contribute to a community's long-term viability, it needs to address the ideas summarized below. These themes inspired much of the Greenways and Trails Master Plan effort and informed recommendations.

**Connecting infrastructure.** By creating an infrastructure of a connected greenway and trails system, a community is allowing its citizens to use it as transportation infrastructure. By connecting the greenway system to the transit systems, a community allows a greater sense of sustainability by making commuting without a car more feasible. By making the commitment of connecting neighborhoods to commercial corridors, schools and other popular destinations, a community can use greenways as a viable form of transportation. When citizens can connect to their parks and other community gathering places via a greenway, they improve their well-being in many ways. Visitors who explore the area on bike or on foot spend money the same way as those who explore the area by car.

**Environmental and ecological integrity.** When a community invests in greenways, they are creating eco-

logical buffers that protect water bodies, steep slopes and ridgelines as they promote public access to undevelopable lands. Exposing citizens to their local ecological resources develops an awareness of those resources and a desire to protect them. The environmental and ecological integrity of Western North Carolina is also a significant factor to the continued draw of tourists and businesses to the region, as environmental stewardship has long been a theme of the mountains throughout the 20<sup>th</sup> century and even before the Civil War.

**Social and cultural vibrancy.** By creating a well-designed greenway and trails system, a community provides equitable access to a better quality of life through health and wellness benefits. It gives the citizens and visitors the ability to enjoy nature and social aspects of their communities. Unincorporated areas of Buncombe County are more affordable than some areas of nearby cities and towns, which is a draw for families and individuals who may desire more walking and biking activities but cannot afford to live near existing trails.

**Economic prosperity.** Greenways are a proven economic tool. The third largest industry in Buncombe County is Tourism and Services. So this type of economic development is a very logical investment for a community. Places such as Abingdon, Virginia and Greenville, South Carolina have shown how a well-connected and quality greenways system can be an economic boon, attracting businesses specifically targeting trail users. In Asheville, New Belgium Brewing Company's decision to locate near the French Broad River and the planned Wilma Dykeman River-Way was stated as a major influence in their site selection process and their ultimate decision to locate in Asheville instead of other east coast cities.

## Why a Greenways & Trails Master Plan?

The conceptual framework of any planning effort—land use, recreation, economic development, housing, transportation or otherwise—should include a summary of present-day conditions and a long-range vision for how the community can address the unique characteristics of a specialized plan. It should be a goal of any such master plan to be “comprehensive” inasmuch as time and resources allow.

Being comprehensive entails incorporating the needs of citizens, government agencies and key stakeholders, including businesses, within an integrated examination of various projects, programs and policies that should be pursued to foster a regional greenways and trails system. Involvement of citizens, visitors, businesses and stakeholders is crucial to conducting this evaluation.

The concept of being regional in scope is critical in a comprehensive plan such as the Greenways and Trails Master Plan. Buncombe County represents a significant geographic area that could be classified as a region in and of itself; it is also the county with the largest metropolitan area in Western North Carolina. Trails such as the Point Lookout Trail in McDowell County already connect near Buncombe County’s eastern boundary. The Mountains-to-Sea Trail runs the length of the Blue Ridge Parkway in Buncombe County and connects along the parkway to adjacent counties and other trails. Hundreds of miles of trails are located in the Pisgah National Forest.

A major premise of the Greenways and Trails Master Plan was an examination of what is known as the “5E’s” of a planning effort with pedestrian and bicyclists themes. Recognition of the variety of pedestrians, bicyclists and other users, as well as the facilities they desire has led to this 5E approach that in-

cludes: Engineering, Education, Encouragement, Enforcement, and Evaluation.

**Engineering** represents what has been built or is planned to be built in the community to promote greenways, inclusive of developing recommendations for how they are built. Specific elements of the built environment include how pedestrian and bicyclists are considered in greenway corridors and in street design and construction that connects neighborhoods, downtown areas, natural features and others destination to the greenways. The interface with rivers, streams, parks, schools and natural areas are also important considerations in how greenways and trails are designed. Land use, including its design and placement, is a key element of a Complete Streets program to ensure pedestrians and bicyclists can access destinations along a well-designed and safe route.

**Education** is another key component for users of greenways and trails systems—bicyclists, pedestrians, equestrians and others—should be well-informed of safe methods to use greenways, how to interact with other users, and understand how to respect the environment surrounding greenways and trails. Various outreach programs and informational materials should be developed by a community to address all ages and all types of users.

**Encouragement** is inclusive of how a community promotes and encourages use and stewardship of its greenways and trails through volunteers, schools, non-profit organizations, land conservancies, bicycle clubs, organized events, promotional materials and marketing, maps of all types of greenways and trails, and Safe Routes to Schools programs. The development of other facilities such as sports fields, running tracks, river access points,



*The 5E’s associated with developing a greenway plan, which were incorporated into the Buncombe County Greenways and Trails Master Plan.*





*Frederick Law Olmsted could be considered the father of greenways in America through his work on incorporating natural features and trails into urban public works projects.*

Portrait of Olmsted from the Biltmore Estate

fishing docks, velodromes, BMX tracks and mountain bike trails are also an element of encouragement that are associated with greenways in many communities.

**Enforcement** relates primarily to the knowledge base of the law enforcement community and volunteers who look after the greenway system to encourage safe use. Enforcement programs include targeted efforts to encourage user to safely share the trail.

**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. Many communities track performance of their greenway system and progress of the community by examining use through regular counts of users, tallying how many children participate in greenway programs, how many volunteers are registered to help maintain the greenway system and track how it is growing.

The Buncombe County Greenways and Trails Plan addresses each of these components in various chapters and builds upon them through other recommendations, such as economics and health impacts.

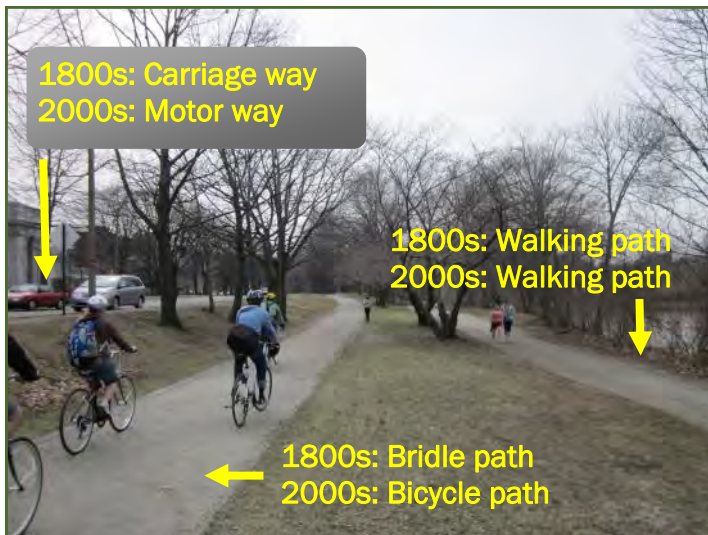
### Understanding Greenway & Trail Users

Well-planned and well-designed greenways can stand the test of time as uses, users and influences change. The works of Frederick Law Olmsted are a perfect example. Olmsted was an influence in the Asheville region with the Biltmore Estate and Biltmore Village. In the late 1800s Olmsted recognized the needs of different users of the time and the potential conflicts of those users along their recreation and transportation routes.

In Boston's Back Bay Fens project—a public works and water resources management endeavor—Olmsted designed for three distinct pathways through and along the wetlands: a carriage path, a bridle path, and a foot path (Exhibit 1-1). Today, the foot path remains dedicated to pedestrians while the bridle path has transitioned to a route for bicyclists. The carriage path has been paved and is now a roadway for motorists.

Planning for and designing greenways is dependent on understanding the types of users who are most likely to use a trail. While we may not reach the level of usage that Olmsted foresaw in Boston, high use greenways in Buncombe County should consider more generous dimensions. Some pathways in Asheville may someday require a separation of uses or additional trail width. Such challenges are a sign of success of both the community and the greenway system.

These design considerations are not just related to the volume of use, but the type of use, the destina-



*Exhibit 1-1: The Back Bay Fens, Boston. Led by Olmsted in the 1800s, the Fens has timeless design that has accommodated modernization and changes in users over the course of 150 years.*

Photo Credit: Don Kostelec

tions of users and their desired experience. Pedestrians travel at a speed of 2-3 mph. The 1991 Asheville Riverfront and Open Space Design Guidelines noted that greenways should be designed for 3 mph travel.

Along greenways bicyclists should be expected to travel at 12 mph or less and the rate of speed for pedestrians is best measured in feet per second instead of miles per hour. Riders on horseback may travel four to six miles per hour. The bicyclists or pedestrian sees things at a different scale and interact with one another in different ways.

**Casual and/or less confident** greenway users include a majority of the population and a wider range of people, pedestrians, bicyclists and children. They may walk, jog or ride infrequently or just enjoy being in the outdoors. They prefer paths with low volumes or fewer conflicts and are more likely to access greenways by car or low-speed streets. This group also includes bicyclists who ride for less strenuous recreation or with children.

Many programs that encourage greenway use are likely to be geared toward casual users. Population groups who are most dependent on walking or bicycling as a mode of transportation are included in this category. In order for this group to regularly choose walking and/or bicycling as a mode of transportation, a network of visible, convenient and well-designed facilities is necessary.

**Experienced and/or confident** greenway users are those who are comfortable walking, jogging or riding on almost any type of greenway, sidewalk or bicycle facility. These include long distance joggers, utilitarian and recreational bicycle riders of many ages; many with a high level of confidence using greenways and accessing them via busy streets. Inline skaters,

BMX riders and unicyclists are also in this group. These users may prefer routes that lead them along low-speed, low-volume residential streets or greenways; or they seek alternative routes if they are more preferred than the most direct route to reach their destination. They are more likely to reach a greenway from their house or destination point via foot or bike.

**Seniors** generally require different accommodations and rely on different cognitive and perceptual abilities to recreate or travel. Fears over balance and obstacles impact how they use a greenway. Conflicts with other users traveling on the trail at higher speeds—even joggers and youth—can be intimidating. If they ride a bicycle they are more likely to ride on a greenway than on a street. They travel at a slower pace and are less able to overcome hilly terrain, either through physical means or mental determination. The reaction time of seniors is also slower than younger users as is their judgment of speed and distance of other users and vehicles at locations where greenways intersect a street.

**Children** are similar to seniors in their physical abilities and are further limited by the degree to which their parents will allow them to use a greenway, particularly when alone. Children have greater difficulty understanding the level of danger posed by the roadway system and other motorists, and might not have the on-road knowledge of how to operate a vehicle. Therefore, greenways become a corridor of choice to learn how to ride a bike, play, and spend time with other family members. With parents and health organizations promoting physical activity in any form, greenways and the destinations they connect are a critical influence to help combat childhood obesity and related health problems.



*Greenway users are as varied as the settings in which the trails are located. Width, surface treatments, amenities and connectivity to destinations will vary based on the type of users and the desired impacts of the greenway.*

Photo Credit: Don Kostelec

**Equestrians** have difficulties finding suitable trails for riding in urban or developing areas and some trails forbid their use over fears of conflict with other users. Good design and strategic evaluation of where equestrians users would like to ride can help overcome worries over user conflicts.

Equestrians prefer natural or soft surface trails. Where space allows, a parallel tread along a paved trail is also a preferred surface for these users. Understanding the dimensional needs of equestrians is important in parking areas as well as along the trail, as space for horse trailers and the turning radius in those parking areas is an important consideration.

**Motorized users** can vary greatly and may come in conflict with non-motorized trails, particularly for off-highway vehicles (OHV) in rural or forest settings. Roads that connect to many hiking trails in the National Forest may be used by a variety of modes both motorized and non-motorized. For purposes of the Greenways and Trails Master Plan, it is assumed that motorized users are prohibited from using the corridors that will be managed by Buncombe County. Where trails and greenways intersect with trails allowing motorized use, signage and markings become increasingly important to raise awareness of conflicting modes.

### Past Planning Efforts

Several existing plans informed the findings of the 2012 Greenways and Trails Master Plan. Some efforts were directly incorporated into this plan, such as corridor-specific master plans or feasibility studies, while others helped establish the theme of the

plan. Below is a summary of the past efforts that helped lay the foundation for this Plan.

**Wilma Dykeman RiverWay Master Plan (2004).** The RiverWay plan sets the tone for development of a regional greenway system, amenities and other enhancements—both for the built and natural environment—along the French Broad and Swannanoa Rivers. Themes of the Plan included: recreation, health, education, transportation, economic development and environment. The RiverWay Plan also serves as demonstration plan for the French Broad River watershed to be replicated elsewhere in the region. The RiverWay is one of eight Priority Corridors in the Buncombe County Greenways and Trails Master Plan; the other seven Priority Corridor have either direct connections or linkages to the RiverWay. Design standards developed for the RiverWay Plan were used as a foundation for design typologies identified in this Greenways and Trails Master Plan. RiverLink, a non-profit organization that helps manage efforts to promote and protect the French Broad River watershed, led the RiverWay Plan and it was adopted by Buncombe County.

**Buncombe County Comprehensive Land Use Plan Update (2006).** The Land Use Plan was updated in 2006 in response to rapid growth in the County and urbanization around existing town and city limits since its development in 1998. The Update built upon the objectives of the 1998 plan related to growth:

- ◆ Continue existing trends for a broad mix of land uses; enhance environmental qualities to preserve natural and scenic areas;
- ◆ Ensure transportation/infrastructure patterns following logical corridors and were easily-managed; and
- ◆ Strengthen economic development by creating



*The Wilma Dykeman RiverWay Master Plan (2004) remains one of the key guiding documents for greenway development and environmental protection in the French Broad River watershed. Many of the Priority Corridors in the Buncombe County Greenways and Trails Master Plan have direct connections the existing and planned sections of the RiverWay.*



accessible commercial centers.

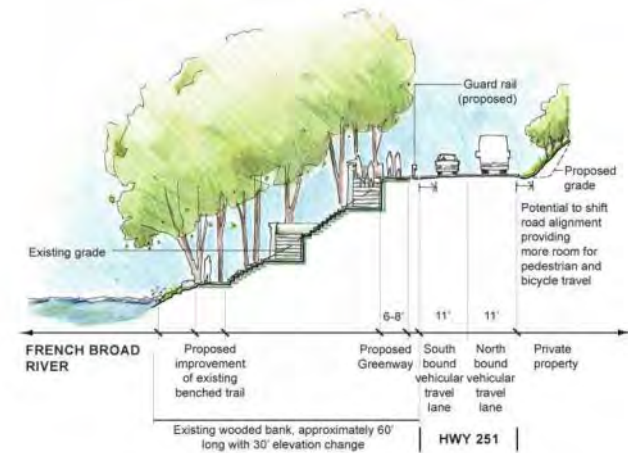
The Land Use Plan Update references concepts to link parks and greenways across the County and identified growth “hubs” that were conducive to this type of connectivity as well as linkages to schools. The recommendations for Priority Corridors in the Greenways and Trails Master Plan are concentrated in those areas identified the Land Use Plan Update maps of having medium density, located within future MSD service boundaries, and/or in areas proposed for what is noted as a “Primary Service Area” for what is now detailed zoning within those areas.

**Land of Sky Regional Council Regional Trails Master Plan (2008).** The plan, funded through the North Carolina State Trails Program, covered Buncombe, Haywood, Henderson, Madison and Transylvania Counties to identify existing greenways and trails and generate a map of ideas for future trails. The Trails Master Plan map includes trails, open space, bicycle routes and proposed regional and local trails. Included in Buncombe County were trails along the French Broad River; a Swannanoa River trail connecting Asheville to Black Mountain and Swannanoa with a connection to McDowell County; and connections to the Blue Ridge Parkway, Pisgah National Forest, and the Mountains-to-Sea Trail.

The French Broad River and Swannanoa River routes were the subject of feasibility studies conducted by Buncombe County in 2010 (summarized below). The Buncombe County Greenways and Trails Master Plan used the maps produced from these efforts as the starting point for identifying greenway and trails routes. Some routes were refined based on field observation and evaluation of Priority Corridors and long-term trails mapped for the Plan.

**Buncombe County Parks & Recreation Master Plan (2008).** The Buncombe County Parks, Greenways and Recreation Services Department (then the Parks and Recreation Services department) drafted the master plan to provide an overview of the department actions as well as an outline of current and future department needs to serve as a strategic plan through 2017. The report includes documentation of facility inventory, statistics of past program attendance, community survey information, focus group recommendations, and agency partnership recommendations for future development within the department. The Plan first identified the need for the County to employ a planner whose main responsibility was overseeing development of greenways.

**French Broad River / NC 251 Greenway Feasibility Study (2010).** This corridor analysis began at the planned northern edge of the Wilma Dykeman RiverWay to identify a greenway route to the Madison County line. This route follows the historic Drivers Road and Buncombe Turnpike that served as a farm-to-market route connecting eastern Tennessee and western North Carolina to other markets in the Southeast in the 1800s and early 1900s. A key influence on this planned corridor is the constrained area east of the French Broad River that will require a greenway to be constructed between the river, NC Highway 251 and steep slopes / rock out-cropping adjacent to the highway. The west side of the river is more constrained by the presences of the Norfolk Southern Railroad tracks. The planned French Broad River / NC 251 is



*The French Broad River / NC 251 Greenway Feasibility Study examined options for a route along the east side of the River from the City of Asheville to the Madison County line. The study include conceptual design options for placing the greenway along the route in consideration of notable constraints in both the built and natural environment.*

Photo Credit: Don Kostelec

also identified as one of eight Priority Corridors in this Plan.

**US 70 / Swannanoa River Greenway Feasibility Study (2010).**

The study evaluated route options along or near the Swannanoa River and US 70 from East Asheville and the Wilma Dykeman RiverWay to the eastern edge of Buncombe County. This included connections to Azalea Park, Warren Wilson College, the Swannanoa Community, Black Mountain, Ridgecrest, Montreat and the Point Lookout Trail in McDowell County. The study along the 17-mile route evaluated conceptual alignments, connections to nearby schools and parks, challenge areas in relation to US Highway 70 and other streets, the influences of sewer easements and the Norfolk Southern Railroad. Themes such as Complete Streets, economic growth, environmental impacts and the impacts to private property were also studied. The US 70 / Swannanoa River Greenway route is included as one of the eight Priority Corridors identified in the Greenways and Trails Master Plan.

**French Broad River MPO 2035 Long Range Transportation Plan (2010).**

The Long Range Transportation Plan (LRTP) includes pedestrian, bicycle and greenways themes and is a required document for metropolitan areas with a population greater than 50,000. Buncombe County is part of a three-county metropolitan area covered by the plan (Haywood and Henderson Counties are the other two) which sets a vision for the region’s transportation system over the next 20 years. The LRTP contains a summary of key federal policies and the North Carolina Department of Transportation’s (NCDOT) Complete Streets policy. For greenway projects to be eligible for transportation-based federal funding managed

through several NCDOT-managed funding sources, they must be consistent with the findings of the LRTP. This does not mean that specific greenways have to be identified in the LRTP, but they must fit the major ideas and themes of policies or corridors identified for improvements within the LRTP. The Project Recommendations chapter of the LRTP includes several greenway projects across Buncombe County, including approximately \$3 million for the planned US 70 / Swannanoa River and French Broad River / NC 251 greenways. Another \$10 million is allocated in the long-range timeframe for general bicycle, pedestrian and greenways investments across the three counties.

**Sustainability Plan for Buncombe County (2012).**

Development of the Sustainability Plan was concurrent with the Greenways and Trails Master Plan. Buncombe County and a group of Sustainability Partners crafted the vision and a mission for the Sustainability Plan to guide both County Government and the community in the development of goals, objectives, indicators, outcomes, and strategies for implementation of the Plan. The Vision included themes of:

- ◆ A Sense of community through public engagement;
- ◆ A healthy, safe, well-educated, and thriving community with a sustainable quality of life;
- ◆ Environmental stewardship through conservation, preservation, and restoration of resources;
- ◆ A community and environmentally-conscious economy that is stable and diverse; and
- ◆ A strong sense of place with efforts to preserve our distinctive landscape and culture. Each of



“Because sustainability is defined in many different ways, it was important for us to develop an understanding of sustainability that speaks specifically to Buncombe County.

- Sustainability Plan for Buncombe County



these themes has strong parallels to the themes that drove the Greenways and Trails Master Plan. Specifically, the Sustainability Plan identifies an accessible, multi-modal, and efficient transportation system that includes greenways, Complete Streets, outreach programs similar to those targeted for greenway users, and fast-tracking of development that includes multi-modal linkages.

**Municipal Greenway, Bicycle and Pedestrian Plans.**

Several municipalities in Buncombe County have developed plans for greenways, bicycle facilities and sidewalks. Specifically, the greenway plans for Asheville, Black Mountain and Woodfin were used to develop Priority Corridors for the Greenways and Trails Master Plan, prioritizing linkages to the existing or planned investments. It was noted during development of the Plan that community gateways along greenways were important and that the design of these gateways and routes through communities should be allowed to reflect the look and feel of the community.

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