



Town of

Chapel Hill

Greenways Master Plan

May 29, 2013



Acknowledgements

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Table of Contents

SUMMARY	vii	7. CONCLUSION	86
1. INTRODUCTION	2	Adoption of the Plan	86
Statements and Goals Related To Open Space And Greenways.....	2	Review and Update of the Plan.....	86
The Term “Greenway” Defined	3	Appendix A. HISTORY OF THE GREENWAYS PROGRAM	88
Benefits Of Urban Greenways	3	Appendix B. MAINTENANCE AND OPERATIONAL POLICIES	94
Purpose Of The Master Plan.	4	Appendix C. DESIGN STANDARDS & GUIDELINES	98
Organization Of The Master Plan.....	4	Appendix D. FINANCING THE GREENWAYS PROGRAM	112
2. THE PLANNING PROCESS	6		
Assumptions for the Process	6		
Goals of the Master Plan.....	6		
Planning Methodology for the 2013 Update.....	7		
3. ANALYSIS OF CURRENT CONDITIONS.....	10		
Greenways Program Administration	10		
Role of the Greenways Commission	10		
Supporting Plans and Ordinances	11		
The Greenway System in 2013	14		
Components of the Greenway System	14		
Existing Greenway Trails	19		
Existing Park Trails	24		
4. STRATEGIC PLANNING.....	26		
Trail Systems.....	26		
Park Trails	56		
Regional and Local Coordination	61		
Current Capital Renovation Needs	69		
5. PRIORITIZATION.....	72		
Criteria for Land Acquisition and Trail Construction	72		
Land Acquisition Priorities	72		
Trail Construction Priorities.....	72		
Critical NCDOT and Town Road Intersections.....	76		
6. IMPLEMENTATION.....	80		
Implementation Policies	80		
Implementation Objectives	82		

List of Maps

MAP 3.1		MAP 4.12	
Potential Greenway Corridors.....	16	Park Trails	57
MAP 3.2		MAP 4.13	
Existing Greenway & Park Trails	20	Pritchard Park.....	58
MAP 4.1		MAP 4.14	
Proposed and Existing Greenway Network...27		Southern Community Park.....	59
MAP 4.2		MAP 4.15	
Chapel Hill Trail Systems.....	28	Carolina North Trails	60
MAP 4.3		MAP 4.16	
Old Field Trail	29	Regional & Local Connections.....	62
MAP 4.4		MAP 4.17	
Horace Williams Trail.....	30	Connections to Downtown and UNC	63
MAP 4.5		MAP 4.18	
Bolin Creek Trail.....	33	Connections to Carrboro & Orange County...66	
MAP 4.6		MAP 4.19	
Booker Creek Trail	40	Connections to Durham	67
MAP 4.7		MAP 4.20	
Little Creek Trail	44	NC Mountains-to-Sea Trail Corridor - Orange	
MAP 4.8		County Section	70
Morgan Creek Trail	47	MAP 5.1	
MAP 4.9		Population Density	74
North Trail	52	MAP 5.2	
MAP 4.10		Households without a Vehicle	74
Dry Creek Trail.....	54	MAP 5.3	
MAP 4.11		Median Household Income	74
Cedar Falls Park	56		



List of Tables

TABLE 5.1	
Prioritization Criteria for Planned Trail Segments.....	75
TABLE 5.2	
Critical Intersections.....	76
TABLE 6.1	
Anticipated Greenways/Open Space Program Funds by Project	84





Summary



GOALS OF THE GREENWAYS PROGRAM

The Chapel Hill Greenways Program has three major goals that were originally identified in the 1998 Greenways Master Plan:

- To establish and maintain a system of linear open spaces that will help protect the environment of Chapel Hill.
- To establish a system of trails, where appropriate, that will enable citizens to enjoy the recreational benefits of a network of greenways throughout the Chapel Hill community.
- To develop specific trails as alternatives to automobile transportation.

THE 2006 COMPREHENSIVE MASTER PLAN

On September 8, 2003, the Chapel Hill Town Council authorized the Greenways Commission to explore possible revision of the 1998 Greenways Master Plan. In addition, the Council authorized the Manager to seek input from Boards and Commissions. A series of five public forums were held from October 2003 through April 2004. The input gathered during the forums, in addition to other public comments received in various ways, was used by the staff to prepare a draft document that was then reviewed and refined by the Greenways Commission. The Plan was further reviewed by the Bicycle and Pedestrian Board, Community Design Commission, Transportation Board, Planning Board, Parks and Recreation Commission, local environmental organizations, the

University of North Carolina at Chapel Hill, adjoining local governments, and Town staff. The Town of Chapel Hill adopted its Comprehensive Greenway Master Plan Update in 2006.

THE 2013 UPDATE

In the years since the 2006 plan's adoption, much has changed in Chapel Hill. Aside from continued population growth and new development in and around Chapel Hill, there have been planning efforts in progress and greenway projects implemented both locally and regionally. This update expands upon key recommendations from the 2006 plan and provides the Town of Chapel Hill with new ideas and tools to effectively create and maintain a comprehensive greenway network.

GOALS OF THIS UPDATE:

- Provide specific recommendations for developing priority greenway segments and facilities based on new opportunities and current development projects and initiatives.
- Explore regional greenway connectivity with neighboring jurisdictions.
- Integrate relevant planning efforts, such as adopted bicycle, pedestrian, and parks and recreation plans, including the Chapel Hill 2020 Plan, to encourage a more active, bicycle- and pedestrian-friendly community.

PURPOSE OF THE MASTER PLAN

This Master Plan provides a foundation for making sound planning and design decisions related to the continued preservation of the Town’s greenway corridors. The recommendations provided in the Plan will help to maintain a balance among the goals of the Greenways Program of resource protection, recreational use, and transportation opportunities. It also provides the Council with an effective tool for discussion, negotiation regarding regional open space preservation, trail development initiatives, and for interacting with State agencies and other regulatory and funding agencies.

MAJOR CHANGES FOUND IN THE 2013 COMPREHENSIVE GREENWAYS MASTER PLAN:

- Addition of recently annexed areas, new schools, planned Town parks, greenway land acquisitions, and recent and planned private land developments.
- Addition of newly identified trail segments to the greenways program.
- Changes to available funding sources including federal, state, local, and private options.

- Addition of long-term trail prioritization method.
- New maps that are based on the adopted 2004 Bicycle and Pedestrian Action Plan.

CURRENT CONDITION OF THE GREENWAYS PROGRAM

Since its first meeting in October 1985, the Greenways Commission has worked to expand the amount of land preserved by the Town and to plan and oversee the construction of trails.

The Town’s current open space holdings total over 726 acres, most of which are within the greenways system. Portions of eleven greenway projects have been built to date and account for approximately 13.4 miles of recreational trails. This leaves about 14.6 miles of trail to build in the future in order to complete the trails portion of the master plan. In addition, four park trails that total approximately 4.2 miles have been built.

SUMMARY OF MAJOR RECOMMENDATIONS

This report continues to recommend the acquisition of 38 total miles of linear open space. The recreational uses proposed for the greenway corridors identified in this report are bicycle and pedestrian activity. Over 28

Greenway Trails In Use

TRAIL	SURFACE	MILES
Battle Branch	Natural	1.5
Bolin Creek	Paved	1.5
Dry Creek	Natural	2.0
Fan Branch	Paved	1.6
Horace Williams	Paved	0.3
Lower Booker Creek	Paved	1.3
Meadowmont/East 54	Paved	3.6
Morgan Creek	Paved	0.8
North	Paved	0.1
Tanyard Branch	Natural	0.4
Upper Booker Creek	Paved	0.3
TOTAL		13.4

Park Trails In Use

TRAIL	SURFACE	MILES
Cedar Falls	Natural	1.2
Meadowmont	Natural	0.5
Pritchard Park	Natural	1.0
Southern Comm. Pk.	Natural	1.5
TOTAL		4.2

miles of the Town's greenway corridors are suitable for development of paved or unpaved trails.

A variety of trail types are proposed to suit specific recreational or transportive priorities and specific site conditions. Trails may range from natural surface foot paths and boardwalks- utilized to negotiate sensitive or difficult site conditions- to paved pedestrian and bicycle trails offering maximum recreational and transportive uses.

The following paved trails were completed from 2006 to 2011:

- Fan Branch Trail (Southern Community Park to Culbreth Road; this segment is also referred to as the Morgan Creek Trail Phase 2)
- Morgan Creek Trail (Merritt's Pasture to NC 54)

The following trails are currently planned and funded:

- Bolin Creek Trail, Phase III (Martin Luther King Jr. Blvd. to Umstead Park)
- Fan Branch Trail Extension (Culbreth Rd. to Morgan Creek)
- Horace Williams Trail (Section through Carolina North)
- Dry Creek Trail from Perry Creek Road to Erwin Road

PROJECTS TO BE COMPLETED WITHIN 5 YEARS

- **Battle Branch Trail** - Replace all bridges and boardwalks on Town property installed prior to 2011. See page 36.
- **Bolin Creek Trail, Phase III** - Extend the trail from Martin Luther King Jr. Blvd. to Umstead Park. See page 35.
- **Bolin Creek Trail** - Build a flight of stairs from the trail to the north side of Franklin Street.
- **Bolin Creek Trail** - Renovate the existing trail from Martin Luther King Jr. Blvd. to Dickerson Court. See page 35.
- **Bolin Creek Trail, Phase IV** - Secure funding and begin planning and permitting this phase for a trail extension from Umstead Park to Carolina North. See page 34.
- **Campus to Campus Bicycle Route** - Select and build a first phase. See page 33.
- **Fan Branch Trail, Phase III (or Morgan Creek Trail Phase II)** - Complete the section from Culbreth Road to the Morgan Creek Trail. See page 66.
- **Dry Creek Trail** - Secure funding and begin the planning and permitting to pave a portion of the existing natural surface trail from Perry Creek Road to Erwin Road. See page 48.

- **Horace Williams Trail (Carolina North)** - Build a natural surface trail from Homestead Road to the Town's Operation Center using mostly volunteer labor. Build paved trail from Homestead Road to Municipal Drive. See page 54.
- **Tanyard Branch Trail, Phase 1** - Design and build a paved greenway trail from Cotton Street to Jay Street, with the assistance of the Chapel Hill/Carrboro City Schools. See page 29.
- **Morgan Creek Trail, Phase II** - Secure funding and begin the planning and permitting phase for a trail extension from the western end of the Morgan Creek Trail to Smith Level Road. See page 34.

PROJECTS TO BE COMPLETED WITHIN 10 YEARS

- **Dry Creek Trail** - Build a paved trail from Perry Creek Road to Erwin Road. See page 54.
- **Campus to Campus Bicycle Route** - Select and construct a second phase. See page 66.
- **Morgan Creek Trail, Phase II** - Extend the trail from the western end of the Morgan Creek Trail to Smith Level Road. See page 47.
- **Bolin Creek Trail, Phase IV** - Extend the trail to Carolina North. See page 33.

PROJECTS TO BE COMPLETED WITHIN 20 YEARS

- **Campus to Campus Bicycle Route** - Complete the project. See page 66.
- **Horace Williams Trail** - Build a paved trail from Homestead Road to the Town's Operation Center. See page 29.

REGIONAL CONNECTIONS

This plan explores potential regional connections in detail, in support of the Town's goal to integrate the greenway system into the greater regional system. The current status of potential connections with relevant neighbors such as Carrboro, Durham, and Orange County are detailed in Part Four.

A LOOK TO THE FUTURE

The recommendations found in this Master Plan offer the present and future citizens of Chapel Hill a guide for integrating their urban environment with the natural world.

The adoption of this Comprehensive Greenways Master Plan Update and a capital funding plan by the Council and the citizens of Chapel Hill will be one step toward achieving this goal.

Part 1

An important goal of the Master Plan is to create a guide for a continuing program of land acquisition, trail development, and open space preservation.

Introduction



This Master Plan Update is a revision of the Greenways Master Plan that was adopted by the Council on January 9, 2006. Aside from continued population growth and development in and around the Town, there have been numerous local and regional scale changes since the plan's adoption.

These changes include:

- The need to address new federal, state, and local funding sources that have become available since 2006. These are discussed in greater detail on page 108 of this report.
- Several significant land development projects have been planned or constructed since 2006, affecting transportation, land use, and connectivity. Appendix C discusses intersection priorities and makes recommendations for improving bicycle and pedestrian safety at these locations.
- Neighboring jurisdictions have changed their trail and open space plans in ways that affect the Town's plan. These changes are addressed.
- New initiatives have occurred since 2006 to encourage alternative transportation choices for Town citizens. Close examination of potential connections among the Town's existing and proposed bicycle, pedestrian, and trail networks will continue the objective of making Chapel Hill more bicycle- and pedestrian-friendly.
- The Town recently completed a community-wide vision plan to prepare for 2020. Public parks, greenways, and open space were important components of the 2020 Vision Plan. The plan identifies six themes that are critical to maintaining the Town's vibrancy and ensure people will continue to want "to live, work, and play" in Chapel Hill.

- The Town has enacted a new ordinance related to the State's Jordan Lake Buffer Rules. The rules will necessitate new considerations for placement and construction of trails that align with State required buffers due to continued pollution and nutrient sensitivity of Jordan Lake.

It is necessary to revise the 2006 Greenways Master Plan to reflect the current conditions and update the original recommendations. While Chapel Hill changes as a result of internal and external development pressures, it is critical to continually reevaluate and update planning efforts to keep up with new opportunities and stay ahead of potential constraints.

STATEMENTS AND GOALS RELATED TO OPEN SPACE AND GREENWAYS

The underlying assumption and need for this study emerges from three long-term concerns of the Town's governing body and its active citizenry. The first reflects the Town's continuing commitment to provide quality recreational facilities for the community. The second exemplifies the Town's commitment to preserving open space as an integrated component of the Town's urban landscape. The third reflects Chapel Hill's commitment to offer alternatives to automobile transportation. The Greenways Master Plan recommends linking the Town's land use objectives with its environmental, transportive and recreational goals to provide a viable network of pedestrian/bicycle trails and other passive recreation opportunities.

As the Town continues to grow, the notion of conserving undeveloped land has become a more pressing matter. Significant population increases and growth are projected over the next several decades in Chapel Hill and surrounding communities.

Development pressure will continue to influence the character of the Chapel Hill landscape, inevitably shaping the form and quality of the Town's open space.

The Town-wide greenway system proposed within this Master Plan occurs primarily along the Town's streams and watercourses. These open spaces along wooded stream corridors both protect and make accessible many of Chapel Hill's unique and beautiful natural settings.

The development of this Greenways Master Plan and its continuing update will contribute to the strategic organization of the Town's open space and greenways. The Master Plan is intended to provide a foundation for making decisions related to the greenways program and the quality of Chapel Hill's physical environment. The Plan's guidelines will ensure the continuity and coordination of open space conservation, passive recreation, and trail facilities for future decades.

THE TERM "GREENWAY" DEFINED

The term "greenway" is used in many communities throughout the United States. However, there is not a single, consistent definition of the term that would fit the needs of each locale. In some communities the word greenway is synonymous with the word "trail". In other towns and cities, the public may associate the term with specific types of trails, such as paved bicycle accessible paths along streams. Other communities use the words "greenbelt" or "greenway" to identify preservation areas or buffers between communities or non-complementary uses.

In 1993, the Chapel Hill Greenways Commission adopted the following language to describe Town "greenways":

Networks of natural spaces which provide corridors connecting areas such as neighborhoods, parks, and schools. These passageways typically include trails for pedestrians and non-motorized vehicles. They are a link to nature for the enjoyment of the community.

This definition describes greenways as linear, natural areas which sometimes may be suitable for the inclusion of trails. It is an important distinction to note, however, that some greenway areas in Chapel Hill may not be suitable for trail development and may find their "highest and best" land use by remaining as undeveloped open space, providing the community

with valuable buffers, environmental preserves, or wildlife corridors.

BENEFITS OF URBAN GREENWAYS

Greenways can provide economic, environmental, recreational, and transportation-related benefits to the entire community in which they are found. A greenway system, well-integrated within the Chapel Hill community, can function to:

- Preserve the natural environment that makes Chapel Hill a pleasant place to live.
- Provide recreational opportunities ranging from quiet enjoyment of natural areas to hiking and bicycling.
- Provide natural laboratories where flora, fauna and ecological relationships can be studied by all Chapel Hill citizens.
- Influence urban growth patterns by conserving open space, separating and buffering conflicting land uses, and connecting compatible land uses.
- Provide a network of pedestrian and bicycle trails—a safe and pleasant alternative to the Town's street system— that will connect neighborhoods, schools, shopping areas, and parks.
- Increase the value of all properties in Chapel Hill by creating an aesthetically pleasing community with greater options for non-motorized vehicle transportation, recreation, and open space.
- Mitigate flooding, soil erosion, and stream siltation by preserving buffers between developed areas and streams.
- Retard the degradation of air quality by allowing vegetation in the greenway areas to add oxygen, filter dust and airborne pollutants, and cool the air.
- Mitigate noise pollution by allowing vegetation in the greenways areas to act as natural noise barriers.
- Preserve habitats and travel corridors for wildlife within the urban area.
- Contribute to the aesthetic and visual structuring of the Town, helping to retain and amplify the character of the Town landscape. Greenways also offer a natural space for public art displays, with benefits to both citizens and local artists.
- Act as an important economic development tool in our community that values active recreation and bicycle and pedestrian transportation. Businesses and individuals frequently place high value on these types of facilities when making

decisions related to moving into a new community. Communities that have successful greenways programs, such as Davis, California and Boulder, Colorado generally have corresponding success bringing in employers who use higher wage employees.

PURPOSE OF THE MASTER PLAN

The Chapel Hill Greenways Program has had a substantial impact on the community's natural, scenic, and recreational resources during its first 27 years of existence. The quality and character of specific greenway corridors contribute significantly to the quality, image, and livability of the Town.

The creation and adoption of this revision to the 2006 Greenways Master Plan are important steps in the process of continued evaluation of the program. Adoption of a Greenways Master Plan is critical in helping to assure the continuity and direction of the program and its coordinated planning over time. Through this current master planning effort, citizens, elected officials, and Town staff have reexamined the direction of the Town's greenway corridor preservation and trail development efforts. Specifically, the Plan will provide an updated evaluation of potential greenway conservation areas and trail opportunities along the Town's primary greenway corridors.

Recommendations have been formulated for greenway opportunities in recently annexed areas of Town, and for greenways related to new schools and parks, recent land acquisitions, and private land developments.

As an adopted public policy document, the revised Greenways Master Plan will assist the Council in several important ways:

- The Master Plan will become an important planning tool, articulating a vision of what the greenways system may become, thereby becoming an essential guide for all future planning and decision making which impacts the system's physical form.
- The Master Plan will support the Council's legal basis, established in the Land Use Management Ordinance, for requiring the dedication of land for certain recreation areas and easements during the development approval process.
- The Master Plan will provide the Town with a policy mechanism to enter into discussion and negotiation regarding regional initiatives.

- The Master Plan will provide a tool for interacting with State agencies and other regulatory bodies. Some agencies, such as the North Carolina Department of Transportation, may not alter their projects to meet local greenways needs without the adoption of a Greenways Master Plan or similar document.

ORGANIZATION OF THE MASTER PLAN

The Master Plan is organized into eight sections:

1. **The Introduction** provides a summary of the Chapel Hill greenways program and describes the philosophical underpinnings of the Plan and its organization.
2. **The Planning Process** outlines assumptions for the process and goals for the Plan; it also includes a brief summary of the planning methodology.
3. **Analysis of Current Conditions** is a look at the greenways system as it exists today, including its administration, the role of the Greenways Commission, and the role of past planning efforts and supportive Town Ordinances. A summary of current land holdings within the greenways system and existing trail development is also provided.
4. **Strategic Planning** is divided into sections that organize the greenway system into geographic systems and discuss problems related to major streets and roads. Within each system, specific greenways are identified and evaluated for potential open space preservation or trail use.
5. **Prioritization** outlines the criteria and guidelines for priority land acquisition and trail construction to be accomplished during the next 5 years. In addition, the Report discusses recommended solutions for major NCDOT street and road intersections.
6. **Implementation** provides a policy approach for future land acquisition as well as detailed objectives for a ten-year and twenty-year timeframe.
7. **The Conclusion** provides a synopsis of the master planning process and the future of the greenway program in Chapel Hill.
8. **Appendices A through D** provide more detail on the history of the greenways program, maintenance and operational policies, design standards and guidelines, and the greenway program's financing.