

Appendix A



History of the Greenways Program



The Chapel Hill greenways program was established by Council resolution in 1985. However, the concept of preserving open space and greenways has been part of Chapel Hill's planning efforts for over fifty years. The first deliberate efforts toward preserving linear parcels of open space for the purpose of developing a greenways program began in the 1960s and early 1970s. The early movement was led by Planning Board member and later Alderman Alice Welsh, who worked to acquire easements from landowners along the Bolin Creek corridor. These early efforts resulted in many Town-owned properties and easements that stretched along Bolin Creek from Umstead Park to Franklin Street. The acquisition of these properties and easements contributed greatly toward the Town's goal of preserving Chapel Hill's first- and one of its most important- greenway corridors: the Bolin Creek Greenway.

During the 1980s, the Town's greenways planning and development efforts became more formalized. In 1981, the Parks and Recreation Department surveyed the Chapel Hill community to determine user concerns. Eighty-four percent of the respondents thought that greenway development was a high to moderately high priority. These findings were reinforced by the 1982 report, "Subcommunities in Chapel Hill: Conditions, Problems, Recommendations." The study outlined a major concern of citizens that greenways development would be dropped as a Town priority.

As the decade progressed, greenways programs in other North Carolina cities grew, especially in nearby Raleigh and Cary. As the success of the Raleigh and Cary programs grew, other municipalities, including Chapel Hill, became more interested in a greenways program.

This interest led to a January 9, 1984 resolution of the Town Council to create an eleven member Greenways Task Force to study whether or not the Town should initiate a greenways program. The members of the task force included Lightning Brown (Chair), Diane Byrne, Valerie Carter, Lynn Cox, Karen Davidson (Vice Chair), Betsy Pringle, Zora Rashkis, Gordon Rutherford, Betty Sanders, Randy Schenck, and Philip Szostak. The group included representatives of the development community, the University, environmental groups, the business community, and various neighborhoods. The group presented their report, "Greenways Task Force Final Report" to the Council on February 11, 1985.

The Task Force Report recommended the creation of a Greenways Commission. The Council agreed and on July 8, 1985 adopted a resolution which directed that the Greenways Commission be established and that the Parks and Recreation Department provide staff support for technical and administrative functions. The Council then appointed a seven member Commission, which met for the first time in October 1985.

Since its first meeting, the Greenways Commission has worked to expand the amount of land preserved by the Town and to plan and oversee construction of trails. The Greenways Commission has been partially responsible for the Town's purchase of over 100 acres of land and has made recommendations that resulted in many acres of property being dedicated or donated to the Town. The Commission has dedicated twelve major trails to date, and has been a vital part of the decision making process of Town government.

HISTORICAL HIGHLIGHTS

	An open space plan was adopted by Town Council.
1965	The Council reviewed the Mayor's Ad Hoc Open Space Committee Report. The report urged the development of a greenways system through fee simple purchase of land and easements. The report was not adopted by the Council.
1969	The Research Triangle Planning Commission recommended in its report, Chapel Hill, NC, Development Alternatives, that the Town undertake extensive linear park development and acquire open space. No formal action was taken on the recommendations.
1970	The Community Recreation Evaluation recommended that greenways be developed along streams and urged that the findings of the Mayor's Ad Hoc Open Space Committee Report and the Research Triangle Planning Commission Report be adopted. The recommendations of the Reports were not adopted.
1972	The Chapel Hill Long Range Policy Plan recommended greenway development. The plan was not adopted.
1979	The Comprehensive Plan: Community Facilities Report defined "greenways" and recommended implementation of a greenways system that would connect parks and recreation areas. The plan was adopted by the Council. The Cedar Falls Trail was completed.
1981	The Parks & Recreation Department administered The Townwide Leisure Survey, which found that 84% of the respondents rated the importance of greenways as moderately high to high.
1982	The results of neighborhood surveys in the report Subcommunities in Chapel Hill: Conditions, Problems, Recommendations indicated that greenways were looked upon with great favor. Neighbors were afraid that the greenways program would be dropped by the Town.
1984	The Council passed a resolution to create a Greenways Task Force. The Greenways Task Force made an interim report to the Council.
1985	The Greenways Task Force Final Report was presented to the Council. The Council accepted the Report and incorporated it into the Town's Comprehensive Plan. The Chapel Hill Greenways Commission was formed and met for the first time in October.
1986	The Tanyard Branch Trail was dedicated. A \$2.5 million bond for parks and open space passed.
1988	The Greenways Commission made an extensive evaluation of greenway possibilities along upper Bolin Creek and Battle Branch.

1989	A master plan for the middle Bolin Creek corridor was completed.
	The Battle Branch Trail was dedicated.
	The Council adopted the 1989 Community Facilities Report, which recommended greenway development.
	A \$5 million bond for parks and open space was passed.
1991	Phase I of the Lower Booker Trail was completed.
1993	Construction of Phase I of the Bolin Creek Greenway Trail started.
	The Council approved the Bolin Creek Greenway Advisory Committee's recommendations concerning Phase II of the Bolin Creek Trail. Work on the Special Use Permit started.
1994	Phase I of the Bolin Creek Greenway Trail was dedicated.
1996	Phase I of the Fan Branch Trail was constructed.
	The first "Greenways Trail Guide" was published.
	\$3 million bond for parks and greenways land acquisition was passed with 66% of the voters approving.
	The Council authorized the expenditure of funds for a Conceptual Plan Study of the Dry Creek and Upper Booker Creek Trails.
	The Dry Creek Trail Advisory Committee was established by the Council.
	Hurricane Fran damaged all existing trails and felled numerous trees.
	The Council dedicated the first phase of the Bolin Creek Trail in honor of former Alderman Alice Welsh.
1997	The Council adopted the Conceptual Plan for the Dry Creek Trail.
	A temporary 1.5-mile natural surface trail was constructed at the future site of Southern Community Park.
1998	The Council dedicated Phase II of the Bolin Creek Trail in honor of Lightning Brown, chair of the 1984-85 Greenways Task Force.
	On May 26, 1998, the Council adopted the Chapel Hill Greenways Comprehensive Master Plan.
1999	On March 14, 1999, the Council adopted the Booker Creek Linear Park Advisory Committee's Report to the Town Council.
2000	The Council adopted the Report of the Merritt Pasture Access Committee report on November 27, 2000. The report made recommendations to secure access to the pasture.
	The second "Greenways Brochure" was produced.

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The Greenways Commission sponsored the first annual Greenways and Open Space Award.

Voters approved Orange County Parks bonds that included \$2 million for the Southern Community Park and \$1 million for greenway development in Chapel Hill.

Phase I of the Dry Creek Trail was completed.

The Lower Booker Creek Trail was dedicated.

The Pritchard Park Trail was completed using all volunteer labor.

Chapel Hill voters approved \$2 million in open space bonds and \$5 million in parks bonds designated for greenways.

The last sections of the paved Meadowmont Greenway Trail were completed. Work started on the natural surface sections of trail in the low areas.

UNC renovated its portion of the Battle Branch Trail.

Phase II of Dry Creek Trail from Perry Creek Road to Erwin Road completed.

Natural surface trails in Meadowmont completed.

The Council adopted the 2006 Chapel Hill Greenways Comprehensive Master Plan.

The Council adopted the “Concept Plan for the Bolin Creek Greenway Phase 3”. This report described options for development of the westward expansion of the Bolin Creek Trail.

The Council adopted the “Report of the Morgan Creek Trail Conceptual Plan Committee”. The report described a plan of action for development of the Morgan Creek Trail and access to Merritt’s Pasture.

The Booker Creek Linear Park section of the Lower Booker Creek Trail is completed. This project extended the trail from Franklin Street to Fordham Boulevard.

Council granted a conservation easement over 92 town-owned acres along Morgan Creek to the Botanical Garden Foundation, creating the Morgan Creek Preserve

The estate of Joe Herzenberg, a former Council member and Greenways Commission Chair, left \$308,000 to The Friends of Chapel Hill Parks, Recreation, and Greenways to be used for the Bolin Creek Trail.

A development agreement for Carolina North is signed. The agreement describes the location of greenway trails on the future campus, including the location of the main north-south Horace Williams Trail and miles of natural surface trails.

Southern Community Park is finished, including a southward extension of the Fan Branch Trail through the park to Dogwood Acres Drive.

A survey of town citizens identified trails as the highest priority for development of new facilities.

The Meadowmont greenway path on the northwest side of NC Highway 54 was extended across property owned by the East 54 development and UNC hospitals.

Phase 1 of the Morgan Creek Trail was completed, including access to Merritt’s Pasture.

2011 Community Survey

The Town commissioned a community survey in late 2011 to assess citizen satisfaction with the quality of services. The purpose of the study was to assist town leaders in setting budgeting priorities and establishing policy decisions. A similar survey was conducted in 2009. Responses from the two surveys were compared.

Eighty-four percent (84%) of the residents expressing an opinion were satisfied with the maintenance of town parks. Almost three fourths (73%) expressed satisfaction with the number of parks. Likewise, almost three fourths (73%) were satisfied with the landscaping and appearance of public areas along streets (a maintenance responsibility of Parks and Recreation).

When asked which parks and recreation service should receive the most emphasis from the Town over the next two years, the following results were received:

Number of walking/biking trails	40%
Maintenance of town parks	28%
Special events/festivals	18%
Youth athletic programs	17%
Availability of program information	16%
Number of town parks	16%
Cultural arts programs	12%
Public art	11%
Quality of outdoor athletic fields	10%
Number of outdoor athletic fields	10%
Adult athletic programs	7%
Appearance of cemeteries	6%
Therapeutic recreation	6%

When asked to rate various community features as to the importance to the decision to live in Chapel Hill, availability of parks and recreation opportunities was listed as the fifth of fourteen factors. Eighty-five percent (85%) of those responding listed it as an important factor in the decision. Safety and security, quality of public schools, access to entertainment and the University community ranked higher. Availability of parks ranked higher than factors associated with housing, transportation, shopping or employment opportunities.

Eighty-eight percent (88%) responded that their needs were being met by the availability of parks and recreation opportunities. Likewise, eighty-five (85%) said their needs for available cultural activities and arts were being met.

Thirty-seven percent (37%) of those who listed additional bicycle lanes and off road paths felt improvements to bike lanes and off road paths was the most important capital improvement for the Town to make. This was the second highest capital improvement identified (second only to development of downtown). Twenty-nine (29%) of respondents felt trail and greenways were most important. Trail and greenways, open space acquisition (14%) and park renovations (12%) were lower on the list of improvements.

The community survey uses the information gathered to create an Importance-Satisfaction Analysis (ISA). The ISA is determined to assist community officials allocate limited resources to the activities and programs that are most beneficial to the citizens. The two most important criteria for decision making are (1) expend resources toward services that are of the highest importance to citizens and (2) to direct resources toward services where citizens are the least satisfied. The Importance-Satisfaction Rating is based the concept that citizens or towns will maximize overall citizen satisfaction by making improvements where the level of satisfaction is relatively low and the perceived importance of the service is relatively high.

Based on public input, the study calculated the Importance-Satisfaction Rating for 13 services or programs offered by the Parks and Recreation Department. A detailed assessment of the Importance-Satisfaction Ratings for Parks and Recreation is provided in the Town of Chapel Hill Parks and Recreation. Based on that rating system, adding to the number of walking and biking trails should be the highest priority of the Town.

Mechanisms for public participation in recreation planning have long been an integral part of the planning of Chapel Hill parks and greenways projects. The following methods of participation should continue to be encouraged: Greenways Commission, Park & Recreation Commission, Public Forums, and the Concept Plan Advisory Committee.

Maintenance & Operational Policies



MAINTENANCE

A cornerstone of a successful greenway trails program is the implementation of an effective maintenance program. Patrons expect a safe and aesthetically pleasing trail environment. As trail sections are built, Town residents will be watching the success of the maintenance program to determine if they will welcome trails in their own neighborhoods. Poorly maintained trails may endanger the expansion of the greenways trail system into new areas. Well-used and well-maintained trails, on the other hand, may become their best promoters. Maintenance should be performed in a manner that enhances the use of the land, maintains its appearance, and promotes the enjoyment and positive aspects of outdoor recreational activity.

MAINTENANCE PROGRAM GOALS

The maintenance program should strive to attain the following goals.

1. **Maintain Paved Trail Surfaces.**
Trail surfaces on paved trails should be kept free of litter and debris. Cracked pavement should be repaired immediately in order to keep the trail surface safe for bicycles, wheelchairs and pedestrians.
2. **Maintain Natural Trail Surfaces.**
Maintenance of natural trail surfaces should target removal of dangerous conditions and litter and the prevention of erosion. Ideally, routine maintenance inspections for natural surface trails should occur once a week. Uneven trail surfaces are to be expected on these trails.
3. **Keep Trails Litter Free.**
Maintenance should include pickup of litter visible within 100 feet of the actual trail.

4. **Maintain Trail Amenities.**

All trail amenities such as bridges, picnic facilities, signs, steps, benches, and other items should be inspected and repaired on a regular schedule.

5. **Practice Preventative Maintenance.**

Preventative maintenance should be emphasized in order to prevent future erosion problems, fallen trees, and other foreseeable problems.

6. **Develop Community Support.**

Community wide events can be organized for the purpose of large scale cleanups or light construction work. This type of project is especially useful on new trail segments. This type of program has been successfully used on both the Battle Branch and Tanyard Branch Trails.

TRAIL MAINTENANCE PLANS

The Parks & Recreation Department should develop detailed maintenance plans for each trail segment. Each plan should address routine maintenance, longer-term items, and relocation. Maintenance plans should emphasize visual inspection to identify issues that may arise unexpectedly.

CITIZEN PARTICIPATION IN THE GREENWAYS PROGRAM

The potential for a successful trail program is likely to be enhanced when citizens can assume a degree of ownership of individual trail projects through their participation in the planning process. Mechanisms for public participation in recreation planning have long been an integral part of the planning of Chapel Hill parks and greenways projects.

Each aspect of the greenways program demands a different degree and type of citizen input. The following methods of participation should continue to be encouraged:

GREENWAYS COMMISSION

The Commission provides a forum for direct citizen representation on matters of policy. Citizens appointed to the Greenways Commission make recommendations to the Town Council, other Boards and staff on a wide range of issues. Citizens not appointed to the Commission can also use the Commission meetings as a forum to present petitions, ideas and concerns.

PARKS & RECREATION COMMISSION

This Commission advises the Council, Town manager and Parks & Recreation Department staff on all issues pertaining to community recreation. The Parks & Recreation Commission may work in concert with the Greenways Commission on certain projects.

PUBLIC FORUMS

This form of public input should be used in most trail planning and construction programs. Neighbors and other individuals affected by the presence of the proposed trail should be encouraged to comment in the presence of Town citizens, Greenways Commission members, and staff. Meeting formats should be designed to encourage citizens to participate in the planning process.

In most cases, at least two public meetings should be held during the planning of each proposed greenway trail. Public forums should be publicly advertised in order to attract a range of community interests. The purpose of holding public forums is to provide citizens with information and opportunities for input throughout the planning process.

Neighbors who own property close to the proposed trail could be invited to a series of smaller meetings in order to discuss details of the project. These meetings should cover such topics as landscaping, grading, removal of trees, selection of building materials and other issues pertinent to persons living close to the trail.



CONCEPT PLAN ADVISORY COMMITTEE

Once a decision has been made to develop a particular trail, it may be appropriate to enlist persons affected by the project to help with the planning phase. This type of public involvement can allow proponents and opponents of a trail to actively participate in the decision making process. It is usually used if options are varied and controversial. Possible members of an Advisory Committee could include:

- Greenways Commission
- nearby residents
- property owners
- representatives of utility companies
- Town staff
- representatives of funding agencies

PROMOTION OF GREENWAYS

Promote public involvement in the greenway corridors to assure their conservation and to create expanding support for upgrading trail development and public use. Various means might include hiking events, trail clean-up volunteer work days, and the publication of promotional brochures

INTERAGENCY COOPERATION

ORANGE WATER AND SEWER AUTHORITY

Land utilized for Orange Water and Sewer Authority (OWASA) sewer easements may sometimes be jointly used for Town greenways. The Town and OWASA have cooperated in both the planning and implementation of trails such as Phase I and II of the Bolin Creek greenway and the Lower Booker Creek greenway. The acquisition of greenway easements allowing public access and trail construction within streamside sewer easements should be closely coordinated whenever such opportunities exist.

ENVIRONMENTAL ORGANIZATIONS

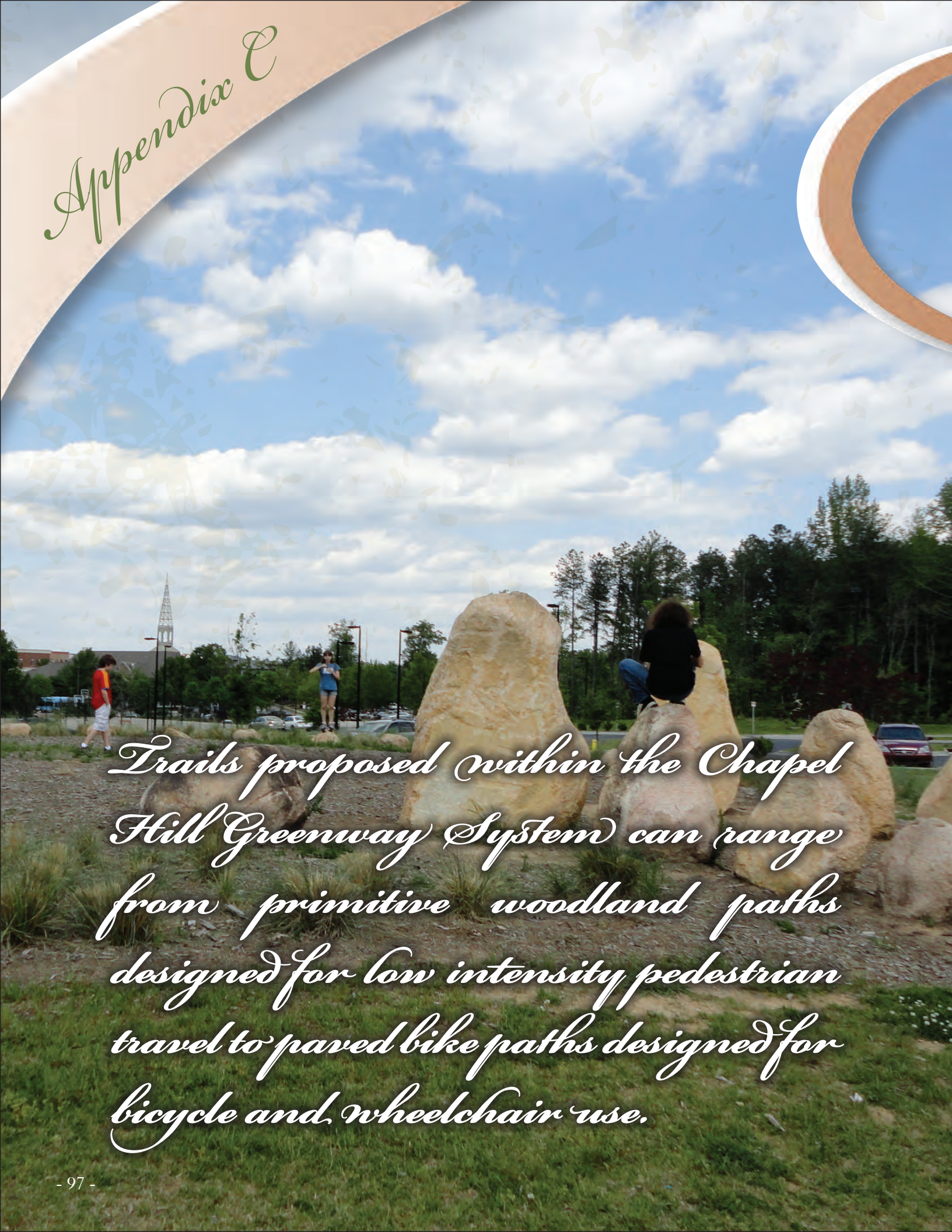
The Town should work closely with other organizations supportive of the greenways program such as the Friends of Bolin Creek, Morgan Creek Alliance, Sierra Club, Triangle Land Conservancy, NC Botanical Garden, Triangle Rails to Trails Conservancy and the Triangle Greenways Council to identify greenway corridors of mutual interest and to ensure the timely acquisition of these corridors.

SECURITY

Since the inception of the Town's greenway program in 1985, the Chapel Hill Police Department has reported sporadic incidences on dedicated trails. Reported incidents have primarily been related to non-violent sexual assault (indecent exposure, assault by unwanted touching, and women being followed). There have also been several incidents which resulted in minor loss of property but no personal injury. Reported complaints to the Parks and Recreation Department are typically limited to the presence of dogs on pedestrian trails and vandalism. Experiences in Chapel Hill and in other communities indicate that most security problems related to greenways tend to be infrequent and non-violent.

Communication with other greenway communities in North Carolina such as Raleigh, Charlotte, Durham and Cary, indicates that frequent and active use of a trail tends to decrease the number of crimes while causing an increase in relatively minor incidents such as littering, mountain bicycle infractions, and speeding on trails. The effectiveness of this "protection-by-use" approach can be enhanced by including trails in citizens watch programs. Additionally, police can be involved if problems arise that require law enforcement intervention. Police cannot be expected to regularly patrol trails, but in special circumstances police patrols could be used to address known issues or problems.

Town maintenance crews can be an important component in the security system. Maintenance crews are frequently assigned to work along various trails, and are the Town employees most likely to view violations of the law. In addition, they are the persons most likely to offer initial assistance to citizens in need. Maintenance crews can address litter and vandalism in the following way. Graffiti should be removed immediately. Vandalism should be repaired as soon as is practical. Litter should be removed daily if possible and weekly at most. A well-maintained trail may discourage persons intent upon minor and major infractions of the law, and may give users a sense that the area is well-used and safe.



Appendix C

Trails proposed within the Chapel Hill Greenway System can range from primitive woodland paths designed for low intensity pedestrian travel to paved bike paths designed for bicycle and wheelchair use.

Design Standards & Guidelines



The Design Standards and Guidelines section of the Master Plan provides a set of parameters for implementing a consistent physical character for Chapel Hill greenway system.

The guidelines address the following design issues:

- Corridor Width Guidelines
- Trail Classifications
- Special Trail Needs
- Trail Locations
- Trail Amenities
- Parking Areas
- Accessibility
- Naming Trails
- Signage

Greenway design standards and guidelines can help elected officials, advisory board members, and staff make decisions involving the expenditure of public funds and the enhancement of public safety. Decisions related to amounts of land or easements to be purchased, the types of trails to construct, and the location of trails can be facilitated by incorporating standards and guidelines in the greenways planning and decision-making process.

CORRIDOR WIDTH GUIDELINES

Greenway corridors in Chapel Hill vary in width according to the topography of the area, the amount of existing development, the existence of significant biological areas, and patterns of property ownership. The following guidelines are intended to balance the needs to preserve greenway corridors and connectors, provide enough land for trails when appropriate, and to provide privacy for existing residences.

The Town should make reasonable attempts to protect the following greenway corridors by restricting development, requiring greenway dedications, and purchasing land or easements.

STREAM CORRIDORS:

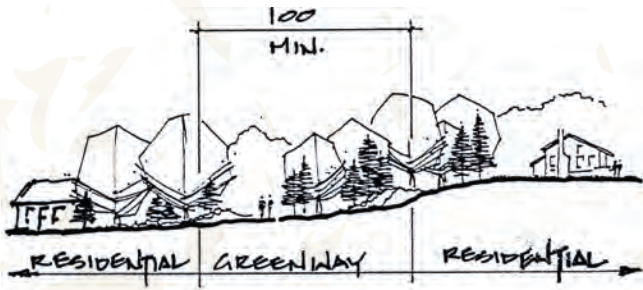
Stream corridors may vary in width depending on the stream and the site specific characteristics of the land itself. Corridor widths should generally be as wide as can be acquired to help assure the privacy of adjacent property owners and the environmental quality of the site. Several factors which often contribute to increased corridor widths of stream-associated greenways include adjacent sanitary sewer easements, 100-year floodplain land and areas within the Town's Resource Conservation District.



The recently passed Jordan Lake Rules require a 50' buffer on all surface waters including intermittent and perennial streams within the Jordan Lake watershed. While existing uses within this buffer are not affected unless changed, no new trails can be constructed within this 50' buffer unless there are no practical alternatives.

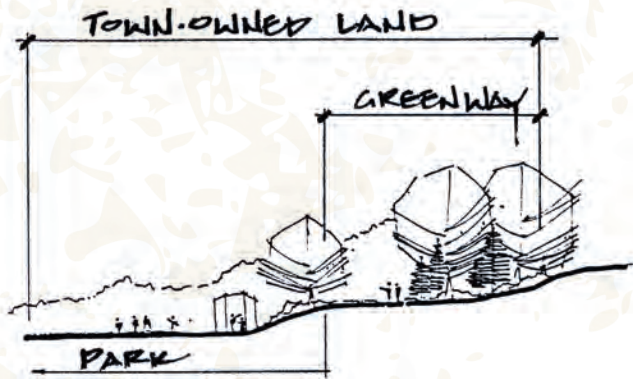
CONNECTOR TRAILS:

Greenway connectors not located along streams should be a minimum of 100 feet in width, if possible. This width should allow for sufficient buffering between neighborhoods, placement of trails, and adequate area for the free movement of wildlife. Smaller corridor widths, however, may be necessary in order to create trail connections between lots in subdivisions.



GREENWAYS AS PARKS:

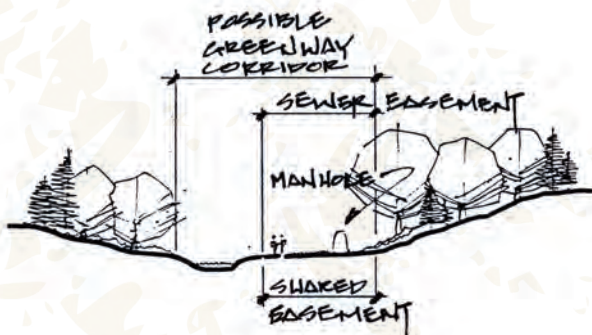
Wider greenways may be needed if the land is to be developed as a park. Parks require more land than is typically acquired for a linear greenway. Parks and greenways can share the same land, although the needs of the park may require additional lands outside of the



greenway corridor.

UTILITY EASEMENTS:

Pedestrian and non-motorized vehicle easements should be coupled with utility easements when possible.



DEVELOPED AREAS:

Greenway corridors or connectors should not be used for trails within areas that are currently developed if placement of a greenway trail would severely impact the privacy of existing residences. An exception would

include areas where approval of the development foresaw the construction of a trail. An example is the Parkside II neighborhood where a connector trail corridor was preserved relatively close to homes. In this case the planning and land acquisition was complete prior to the construction of the first home.

TRAIL CLASSIFICATIONS

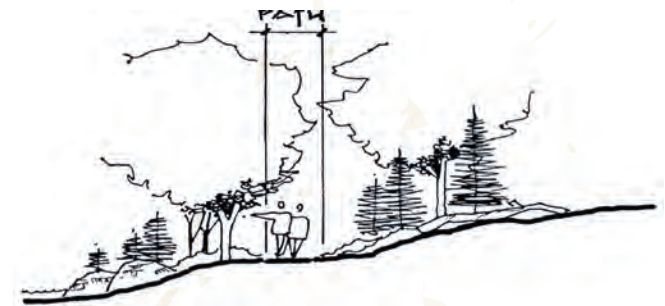
Trails proposed within the Chapel Hill Greenway System can range from primitive woodland paths designed for low intensity pedestrian travel to paved bike paths designed for bicycle and wheelchair use.

The following class system identifies different levels of trail development that were assigned to greenway segments in Part 5, "Strategic Planning". Essentially, it is a 6-level hierarchy of trail development ranging from unimproved greenways to paved trails of varying widths to accommodate different trail uses and intensity of use.

Class 1 Unimproved greenways lacking trails. No maintenance unless problems such as diseased or dying trees on Town-owned greenways that affect neighboring properties.



Class 2 Primitive trails created by wildlife or citizens, not maintained by the Town.



Class 3 Improved woodland trails generally with soft surface and minimal improvements. Sometimes referred to as footpaths or hiking trails, the natural surface trail is used along corridors that are environmentally-sensitive but can support bare earth, wood chip, or boardwalk trails. Natural surface trails are a low-impact solution and found in areas with limited development.

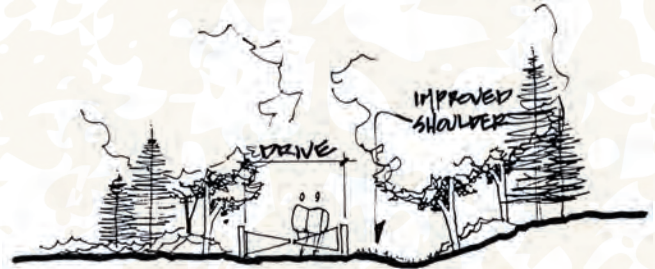


Several notes on Class 3 trails are listed below:

- The trail can vary in width from 18 inches to 6 feet; vertical clearance should be maintained at nine-feet above grade.
- Preparation varies from machine-worked surfaces to those worn only by usage.
- Trail surface can be made of dirt, rock, soil, forest litter, or other native materials. Some trails use crushed stone (a.k.a. “crush and run”) that contains about 4% fines by weight, and compacts with use.
- Provide positive drainage for trail tread without extensive removal of existing vegetation; maximum slope is five percent (typical).
- Trail erosion control measures include edging along the low side of the trail, steps and terraces to contain surface material, and water bars to direct surface water off the trail; use bedrock surface where possible to reduce erosion.
- Consider implications for accessibility when weighing options for surface treatments.

An important goal of the soft surface trails is to safely accommodate mountain bicycles (see Special Trail Needs, this section). Specific trail design should address erosion problems likely to result from mountain bicycle use. Maintenance typically includes removal of litter, removal of fallen tree limbs and trees, repair of erosion damage, and bridging of wet areas.

Class 4 Unpaved access drive with gates or bollards to prevent casual vehicle use. Suitable for pedestrians or mountain bicycle use. This class is usually a road built for other purposes and used as a trail.



Class 5 Paved trail less than 10 feet wide. This class of trail can be used to improve short sections of Class 3-4 trail suffering from severe erosion problems. This class can also be used for pedestrian or bicycle only trails which are signed against other uses. However, in situations of difficult terrain, this class of trail can be employed for pedestrian and bicycle use, but only if signage is displayed to warn users of possible conflicts.



Class 6 Paved trail 10 feet in width or wider for mixed bicycle and pedestrian traffic. Multi-use paths are completely separated from motorized vehicular traffic and are constructed in their own corridor, often within an open-space area. Multi-use trails typically have a concrete or paved asphalt surface and are capable of being constructed within flood-prone landscapes as well as upland corridors.



Several notes on Class 6 trails are listed below:

- Concrete is the recommended surface treatment. Paved asphalt or permeable paving can be used as alternatives with the following considerations:
 1. It is recommended that concrete be used for its superior durability and lower maintenance requirements—especially in areas prone to frequent flooding, and for intensive urban applications. Consider using high albedo pavement in place of conventional concrete surfaces (it reflects sunlight, reducing radiated heat).
 2. As an alternative to concrete, paved asphalt trails offer substantial durability for the cost of installation and maintenance. As a flexible pavement, asphalt can also be considered for installing a paved trail on slopes.
 3. Consider the following for permeable paving: a) It can be twice the cost of asphalt, b) A maintenance schedule for vacuuming debris is required to retain permeability, and c) Not suitable in the floodplain, or in areas without proper drainage (sheet flow or pooling of water with sediment clogs pours).
- Proper trail foundation will increase the longevity of the trail; two inches surfacing material over four inches (min.) of base course gravel over geotextile fabric is recommended. Soil borings may need to be conducted to determine adequate material depths; it should be designed to withstand the loading requirements of occasional maintenance and emergency vehicles.
- Typically 10' wide, 2% cross slope, with two-foot wide graded shoulders; the shoulders help prevent edges from crumbling and provide an alternate walking and jogging surface.
- Centerline stripes should be considered for trails that generate substantial amounts of traffic, and are particularly useful along curving sections of trail.
- Trail landscaping and maintenance should enhance conditions for wildlife by planting only native species in the trail corridor, removing invasive species when possible, and avoiding harmful pesticides and herbicides. The overall

shape of protected natural landscapes along trail corridors also influences wildlife: single, large, contiguous natural areas are more beneficial to wildlife than the same acreage split into smaller segments.

The Town's goal for all its paved trails is to be compliant with American Association of State Highway and Transportation Officials (AASHTO) and Americans with Disabilities Act (ADA) standards as much as is practicable. All Class 6 trails should be designed and constructed to the standards for off-road bicycle trails as published in the AASHTO "Guide for the Development of Bicycle Facilities" and the North Carolina Department of Transportation's, "Bicycle Facilities Planning and Design Guidelines". The editions of these publications which are current at the time of trail construction should be used by the planning team. These guidelines address design standards for trail alignment, design speeds, paving widths and clearances, slope restrictions, bridge structures and safety railings.

Class 6 trails should be designed to comply with ADA standards where possible. In attempting to provide access to the greatest extent possible for the greatest number of people, the Town's Class 6 greenways will allow handicap, elderly and very young users to more fully utilize the trails.

DESIGN AND MAINTENANCE CONSIDERATIONS FOR ENVIRONMENTAL PROTECTION

Construction of both paved and unpaved trails can have unintended negative consequences. It is important to balance multiple considerations during the planning, design, and construction of trails. Some of these factors include costs, accessibility, aesthetics, and other factors. These issues must be balanced against environmental needs. Some of these negative effects can be partially mitigated by following certain practices:

- The Town should consider the development of unpaved bicycle path design guidelines.
- Existing unpaved trails should be reviewed by a specialist for condition and rehabilitated or rerouted to address erosion and instability as funding allows.
- Trails should be designed to minimize stream crossings, including those of ephemeral and

intermittent streams.

- When small stream crossings are required, stabilized fords should be constructed, whenever possible, to reduce obstructions to the natural movement of water, sediment, and organic matter. Stabilized fords can be as simple as large stepping stones or slabs of rock embedded in the banks and channel, provided they follow the natural contours and slope of the unaltered channel. Engineered, stabilized fords are the preferred method for providing stable crossings for wheeled vehicles rather than small culverts. In the absence of aggressive maintenance, small culverts are prone to clogging, resulting in the stream cutting around the culvert and inducing considerable erosion.
- Bridges, rather than culverts, should be used to cross larger streams where possible. Bridges should be of sufficient height and length to span beyond the stream banks, which allows natural channel processes to continue and reduces erosive stress on the banks. In floodplains regulated by FEMA, bridges must be designed to avoid backwater effects upstream.
- Where culverts must be used, pipe diameters should be at least as large as the stream channel width at bank full flow conditions. While this is more than standard engineering design would require for sufficient conveyance of water, studies have shown that these design standards result in channel degradation and alteration upstream and downstream of the culvert. Culverts sized to protect channel shape and function should be installed at grades that match the stream's current grade, and directly in line with the flow of the stream to reduce channel degradation caused by the placement of a static feature in a dynamic channel environment. Appropriate maintenance of culverts is required to reduce channel degradation.
- Construct all trails at the maximum distance from streams as is practicable. Construction of trails immediately adjacent to or abutting streambanks should be avoided to the greatest degree possible. Trails of any variety right on the streambank interfere with natural channel processes that maintain stability. Heavy armoring of one section of streambank to protect a section of trail can induce a cascade of channel instability upstream and downstream of the stabilized area.
- Whenever appropriate, site plans, trail designs, and installation methods of paved greenway trails should allow for trees to grow as close as possible to the pavement, or use other methods to minimize open forest canopy. However, no tree should be allowed to grow closer than 3 feet from the edge of pavement due to safety considerations.
- To prevent the introduction and spread of invasive plants, the use of mulch or native groundcover species is recommended. Avoid groundcovers that require even annual mowing if at all possible. Native plants that will minimize municipal landscape maintenance requirements of trail corridors are recommended. In some locations it may be possible to create meadows using native plants. These meadows would require some mowing and maintenance.
- For both new and existing trails, use methods to reduce the transfer of invasive plant seeds and plant parts from infested areas to non-infested areas. Mowers and other equipment should be brushed or blown off thoroughly at the end of mowing before transporting the equipment to a new location.
- Where floodplain wetlands are present, use boardwalk trails to preserve the hydrologic and pedologic (as pertaining to soils) functioning of these fragile ecosystems.
- Do not use "crusher run" gravel near streams. Due to the broad range of particle sizes, "crusher run" gravel lacks voids sufficient for stormwater infiltration, so it is considered an impervious surface. A "crusher run" surface is equivalent to pavement in its relationship to underlying soil, runoff, and groundwater. When subject to erosion, "crusher run" gravel paths contribute an equivalent amount of sediment to streams as unimproved dirt track. Preferred alternative gravels include washed stone with narrow size ranges.
- Do not use "Chapel Hill grit" gravel near streams, or in any area subject to higher runoff

or shear stresses. This material has very low cohesiveness and erodes very easily. This material is no more permeable to runoff than “crusher run” gravel unless it has been washed, which leaves a sand-pea gravel mix.

- Through the use of signage, encourage off road bicyclists to avoid use of unpaved trails during and right after heavy rain to reduce soil compaction and erosion.
- Construct paved trails along existing utility easements only when such co-existence actually produces environmental benefits. In some situations the better choice would be to build the trail off of the easement, but further from streams.
- Siting considerations of paved trails near streams should include analysis of streams that have become disconnected from their floodplains by severe erosion and incision. These areas are inherently unstable and subject to extensive channel and eventual floodplain erosion, which may eventually undermine any trail or development near the stream. Trail design should include consideration of stream restoration potential. Stream restoration projects commonly involve considerable reshaping of the floodplain to reduce bank angles and heights to allow the stream to access its floodplain. Floodplain access reduces the erosive stress on the banks and restores a more natural hydrologic function to the floodplain in the process. Such restoration efforts are hampered or rendered infeasible when manmade structures and built trails are placed in the area.
- Unpaved trails are commonly used by off-road bicyclists, so all new unpaved trails built or sponsored by the Town should be designed for safe and environmentally-protective trail use by hikers and off-road bicyclists alike. When funding allows, new unpaved off-road bicycle trails should be designed to specifications of the International Mountain Biking Association (IMBA) to minimize damage to the forest, soil erosion and compaction, and negative effects on streams.

SPECIAL TRAIL NEEDS

There are some special trail needs that may be

considered by the Town for various reasons. Some uses such as hiking and mountain bicycling may not be compatible on the same trail. Specialty trail needs should be addressed if funds, land, and public support are assured. Examples of special trail needs are listed below:

MOUNTAIN BICYCLE USE

Class 3-4 trails should be designed for the use of mountain bicycles whenever possible. The extent of possible environmental damage by bicycle users should be considered on every project. Mountain bicycle use may have to be curtailed on occasion to allow natural regeneration of heavily eroded trails. Signs should be placed at all Class 3 and 4 trailheads requesting mountain bicycle users to yield to pedestrians and to refrain from using the trails in wet conditions.

Due to their narrow width and ability to contour with the natural topography, single-track mountain bike trails (or off-road bicycling trails) require the least amount of disturbance and support features of all types of trails. In addition:

- Their minimal footprint provides opportunities for localized stormwater management solutions. Localizing the stormwater features at small scales along the network keeps the trails available for use year-round and requires very little long term maintenance.
- If trails remain unused during storm events, and are constructed correctly, they can remain virtually maintenance free.
- Mountain bike trails are typically 18-24 inches wide and have compacted bare earth or leaf litter surfacing.
- Mountain bike trails are constructed using hand tools or low impact machinery such as a mini excavator.
- Refer to the International Mountain Bicycling Association (IMBA) standards for more information.

BOARDWALKS

Boardwalk or wood surface trails are typically required when crossing wetlands or other poorly drained areas. They are constructed of wooden planks or recycled material planks that form the top layer of the boardwalk. The recycled material has gained popularity in recent years since it lasts much longer



than wood, especially in wet conditions. A number of low-impact support systems are also available that reduce the disturbance within wetland areas to the greatest extent possible.

- When the height of a boardwalk exceeds 30", railings are required (see section on 'Railings and Fences' for details)
- The thickness of the decking should be a minimum of 2"
- Decking should be either non-toxic treated wood or recycled plastic. Plastic decking with slip-resistant treatment is the preferred option in all cases, if budgets allow.
- The foundation normally consists of wooden posts or auger piers (screw anchors). Screw anchors provide greater support and last much longer.
- Opportunities exist to build seating and signage into boardwalks.
- In general, building in wetlands should be avoided.
- Note: muddy bicycle tires may be slick on wood surfaces.

RAILINGS AND FENCES

Railing and fences are important features on bridges, some boardwalks, or in areas where there may be a hazardous drop-off or hazardous adjacent land uses (such as active rail lines).

- At a minimum, railings and fences should consist of a vertical top, bottom, and middle rail. Picket style fencing should be avoided as it presents a safety hazard for bicyclists.
- A pedestrian railing should be 42 inches above the surface.
- A bicyclist railing should be 54 inches above the surface.
- The middle railing functions as a "rub rail" for

bicyclists and should be located 33 and 36 inches above the surface.

- Local, state, and/or federal regulations and building codes should be consulted to determine when it is appropriate to install a railing.

INNOVATIVE ACCESSWAYS

There are also other innovative ways to provide direct access, particularly in topographically constrained areas (e.g., on steep hills, over waterways, etc.) Stairs, alleyways, bridges, and elevators can provide quick and direct connections throughout the city and can be designed so they are safe, inviting, and accessible to most trail users. For example, stairways can have wheel gutters so that bicyclists can easily roll their bicycles up and down the incline and boardwalks can provide access through sensitive wet areas and across small waterways.

TRAIL BRIDGES, OVERPASSES AND UNDERPASSES

Trail Bridges

Multi-Use Trail bridges (also 'bicycle/pedestrian bridges' or 'footbridges') are most often used to provide trail access over natural features such as streams and rivers, where a culvert is not an option. The type and size of bridges can vary widely depending on the trail type and specific site requirements. Some bridges often used for multi-use trails include suspension bridges, prefabricated span bridges and simple log bridges. When determining a bridge design for multi-use trails, it is important to consider emergency and maintenance vehicle access.



- If a corridor already contains a bridge such as an abandoned rail bridge, an engineer should be consulted to assess the structural integrity before deciding to remove or reuse it.
- A trail bridge should support 6.25 tons; Information about the load-bearing capacity of bridges can be found in the American Association

of State Highways and Transportation Officials (AASHTO) Standard Specifications for Highway Bridges.

- There are many options in terms of high quality, prefabricated pedestrian bridges available. Prefabricated bridges are recommended because of their relative low cost, minimal disturbance to the project site, and usually, simple installation.
- All abutment design should be sealed by a qualified structural engineer and all relevant permits should be filed.

Trail Overpass

Trail overpasses are most often used to provide trail access over large man-made features such as highways and railroads.

- Overpasses work best when existing topography allows for smooth transitions.
- Safety should be the primary consideration in bridge/overpass design.
- Specific design and construction specifications will vary for each bridge and can be determined only after all site-specific criteria are known.
- Always consult a structural engineer before completing bridge design plans, before making alterations or additions to an existing bridge, and prior to installing a new bridge.
- A ‘signature’ bridge should be considered in areas of high visibility, such as over major roadways. While often more expensive, a more artistic overpass will draw more attention to the trail system in general, and could serve as a regional landmark.
- For shared-use facilities, a minimum width of 14’ is recommended.
- Trail overpasses are prohibitively expensive and should only be placed in areas of substantial need.

“Vehicular” Bridges And Underpasses

All new or replacement bridges and tunnels should accommodate pedestrians and bicyclists. Even though bridge replacements do not occur regularly, it is important to consider these in longer-term pedestrian planning.

- Sidewalks should be included on roadway bridges on both sides, minimum 5’ wide, with minimum handrail height of 42”

- Sufficient bridge deck width should be provided on new bridges, including approaches, to accommodate bicyclists
- In roadway underpasses, where vertical clearance allows, the pedestrian walkway should be separated from the roadway by more than a standard curb height.
- On bridges built for controlled access roadways, a separated, multi-use sidepath should be provided, minimum 12 ‘ wide, with connections made to bike/ped facilities on both sides of the bridge.

Trail Underpass

- Over and underpasses should be considered for crossing arterials with greater than 20,000 vehicle trips per day and speeds 35 - 40 mph and over, or in the event of special circumstances in which such crossings are needed for safety or to solve a grade issue.
- Underpasses work best with favorable topography when they are open and accessible, and exhibit a sense of safety.
- Underpasses should have a daytime illuminance minimum of 10 foot-candles achievable through artificial and/or natural light provided through an open gap to sky between the two sets of highway lanes, and a night time level of 4 foot-candle.
- Typically utilize existing overhead roadway bridges adjacent to streams or culverts under the roadway that are large enough to accommodate trail users
- Vertical clearance of the underpass is ideally at least 10’; minimum clearance is 8’.
- Width of the underpass is ideally at least 12’; minimum width is 10’.
- Proper drainage must be established to avoid pooling of stormwater, however, some underpasses can be designed to flood periodically (after significant rainfall, for instance). See image below, at top right, as an example).



SIDEWALKS AND PUBLIC STREETS

In some cases, trail connections will be on sidewalks and along public streets. In the event that off-street bicycle paths merge onto streets, provide appropriate signage and pavement markings to help safe merging. The provision of designated bicycle lanes is desirable. Where a public street provides a link in a pedestrian path, sidewalks should be provided where possible.

INTERPRETIVE TRAILS

Trails can meet many different needs including education. Educational signage provides trail users with information about the greenway, native flora and fauna, history and culture, and significance of elements along the trail. Many trails can be converted to dual recreational/educational use by placing interpretive signs and stations along the pathway. Interpretive signage may identify or provide explanations of special natural features, geographic, historic or other points of interest. Interpretive trails should not be built in conjunction with trails that are anticipated to have moderate to heavy bicycle traffic. There is a wide variety of interpretive signage styles and the amount/type of information they provide. Consider the character of the trail and surrounding elements when designing educational signage. A skilled graphic designer should be used for sign design.

Locate interpretive signage 3 feet from the edge of the trail.

MEASURED TRAILS

Many individuals enjoy recreational walking and running. It is possible to measure sections of trails and to mark them for persons wishing to monitor their mileage. This type of activity is suitable on most trails, although, for fitness walking, the path surface should be relatively stable and free of obstacles. Locate mile markers 3 feet from the edge of the trail and at approximately 0.2 mile intervals beginning at the

ends of the trail network. Trail markers can also aid emergency responders in locating victims of accidents.



TRAIL LOCATIONS

The location of trails within greenway corridors is of vital importance to greenways planners, trail users, and the citizens who must live and work in the vicinity of these trails. Greenway planners should consider the following trail location guidelines:

- Trails should generally be located as far from residential structures as is reasonable in order to preserve privacy of nearby residents and the experience of trail users.
- Jordan Lake Rules require that trails should not be located closer than 50 feet from the top of any bank unless it can be shown that no reasonable alternative exists.
- It is the policy of the Town to generally build trails as far from stream banks as possible.
- Stream crossings should be avoided when possible.
- Trails should be located to ensure that minimum disruption of the trail would result from the repair or replacement of utilities.
- Street crossings should be grade separated if possible. At grade, street crossings should be planned so that trail and road users have the greatest sight distance possible.

TRAIL AMENITIES

Certain amenities may be planned to provide for the comfort and safety of trail users and area residents. The Town may provide the following amenities within greenway corridors:

BOLLARDS

These devices prevent automobiles from driving on greenway trails. Bollards are commonly used on trails of Class 5 or higher. Bollards should be locked, but in a manner that would allow emergency vehicles, police cars, and maintenance vehicles to have access to the trail.

The current standard for a locking bollard is one with a three-sided nut that can be opened with a hydrant wrench.



OBSERVATION DECKS

Observation decks can be built overlooking scenic areas. These structures should not be built within floodplains, in places where they may compromise the privacy of nearby residents, or in areas not readily accessible to maintenance vehicles.

GAZEBOS

These small structures can be provided to allow trail users to enjoy passive recreation activities such as resting, picnicking, or reading. These structures should not be built within floodplains, in places where they may endanger the privacy of nearby residents, or in areas not readily accessible to maintenance vehicles.

PICNIC TABLES

Picnic tables can be located along greenway trails, however past experience has found that these amenities should not be placed at random. Picnic tables are more likely to be used when placed in conjunction with some other attraction such as a play area. These structures should not be built in places where they may compromise the privacy of nearby residents, or in areas not readily accessible to maintenance vehicles. Picnic tables should always be accompanied with litter receptacles.

BENCHES

Many potential users of greenway trails are elderly or physically challenged. Benches should be placed where needed throughout the greenway trail corridor. Special care should be taken to place benches at the top of steep sections of trail. The Town has adopted an “art” bench standard through the recent for art process. Benches are made from recycled concrete and bus brake drums.

PUBLIC ART

Art and design have been identified by citizens participating in the 2020 Planning meetings as important components in the quality of life of Chapel Hill. The incorporation of art in the context of Chapel Hill’s various planning documents has been a stated goal of the Public & Cultural Arts Office and the Public Arts Commission since the 2005 Contextual Plan draft.



Art, if planned and implemented properly can add dimension to the park and greenway experience. Art can entice exploration and reveal nature, highlight the senses, mark natural changes, or offer an aesthetic approach to park and greenway infrastructure.

The Public Arts Commission recommends the Park & Recreation and Greenways Master Planning groups incorporate the following language for public art into those planning documents:

When planning for new parks, greenways, or facilities, or renovations or expansions to existing park or greenway inventory, art will be considered as part of the planning, design and constructed facilities or trails by:

- a. Involving the Public & Cultural Arts Office/ Public Arts Commission and/or artists early in the planning process for identifying opportunities for integrating art into the context of park and greenway inventory. Projects might include, artist-designed amenities, play spaces, artist-in residences, stand-alone art, landscape design, etc.

- b. Identifying sources of funding for incorporating the art (percent for art program funds park bond, possible future in-lieu of funds, etc.)
- c. Incorporating art that reflects the Town values of sustainability and environmental stewardship
- d. incorporating art that follows established guidelines for community involvement and education

PARKING AREAS/TRAIL HEADS

Although one of the primary purposes of greenways trails is that of providing non-motorized transportation, many individuals will use the trails for purely recreational purposes. In order to accommodate recreational users, provision of small parking areas should be a goal and should be pursued when possible.

Major access points should be established near commercial developments and transportation nodes, making them highly accessible to the surrounding communities. Minor trailheads should be simple pedestrian and bicycle entrances at locally known spots, such as parks and residential developments.

A minor trailhead could include facilities such as parking, drinking fountains, benches, a bicycle rack, trash receptacles, and an information kiosk and/or signage. Major trailheads could include all of the above plus additional facilities, such as rest rooms, shelters, picnic areas, a fitness course, an emergency telephone, and a larger parking area.

Partnerships could also be sought with owners of existing parking lots near trails. Benefits are three fold: Business benefit from trail-user patronage; trail owners benefit from not having to buy more land and construct a parking facility; and the environment benefits from less development in the watershed. In many cases, existing parking lots within Town parks can be used.

ACCESSIBILITY

The design of greenway facilities and trail amenities should provide accessibility in accordance with the American with Disabilities Act (ADA) standards to the greatest degree practicable. Many trails, however, will not be wheelchair accessible due to the constraints of existing terrain or due to the nature of soft, natural surfacing. The design process for each trail should address the priority of accessibility and provide the appropriate accommodations.

POWER-DRIVEN MOBILITY DEVICES FOR ACCESSIBILITY

On March 15, 2011 the Department of Justice (DOJ) revised rules went into effect allowing “other power-driven mobility devices” to be used by “individuals with mobility disabilities.” Under the American with Disabilities Act (ADA) Title II this DOJ rule applies to trails on State or local government lands. Also under the ADA Title III it applies to other “public accommodations” that would include trails open to the public on privately or commercially managed lands. An “other power-driven mobility device” (OPDMD) is defined in the rules as anything with a motor that can be driven, regardless of size or horsepower, if it is driven by a person who has a mobility related disability.

A visitor with a mobility disability has the right to expect to be able to use an OPDMD unless the trail entity has completed an assessment that has determined that the class of other power-driven mobility device cannot be operated in accordance with legitimate safety requirements or one or more of the assessment factors in the rule. More information can be found at http://www.ada.gov/regs2010/titleII_2010/titleII_2010_withbold.htm

NAMING TRAILS

Greenway corridors and trails should be named after the most prominent natural, or in some cases, man-made features in the immediate area of the trail. Trails located along streams should be named after those watercourses. In the event that non-contiguous sections of the same trail are developed it may be necessary to adopt temporary names for trail sections. As the links are joined, the temporary names can be abandoned. Procedures set by the Council should be followed prior to naming or dedicating a trail or greenway corridor for an individual.

SIGNAGE

A coordinated and consistent signage program is important to the safety and aesthetics of Chapel Hill’s greenway system. Signs should be employed to help potential users locate trails from nearby streets. Signs serve to identify trails, orient the greenway user and assist in way finding, but also have a great collective impact on the overall visual quality of the greenway system.

Signage should be used in a consistent, selective and strategic manner so as not to clutter nor dominate the visual character of the greenway. Signs are generally to be small and unobtrusive.

ENTRANCE SIGNAGE

Main entrance signs marking points of entry to each greenway should identify the name of the trail and display the Chapel Hill greenways program logo. The main entrance sign should be consistent in color throughout the Town system and should be constructed of a wood relief panel, wall-mounted, or attached to wood or recycled material posts.



Additional signs located at the entrances should inform users of several key facts: where the trail ends, the distance to the end of the trail, and what activities are not permitted while using the trail. Signs marking Town greenways may not be placed on University of North Carolina property.

INFORMATIONAL AND DIRECTIONAL SIGNAGE

Signs located along the course of the trail should inform users of the locations of side trails, interesting features, proper direction of travel should confusing options occur, and in the case of paved trails, directions for safe trail use.

Informational and directional signs at pedestrian-only trails may be of wood panel construction mounted on wood or recycled material posts. Signs should be located at significant decision points and positioned to provide a clear line-of-sight from the point of desired reading, free from obstructions.

BICYCLE ROUTES

Paved Class 6 trails designed for multiple uses will generally require more signage than pedestrian-only trails. These signs are used in the same manner as vehicular signage, but should be down-sized to remain in scale with the greenway. These signs are typically constructed of metal panel and placed on wood or recycled material posts.

Adequate signs and markings are essential to alert pedestrians and bicyclists to potential hazards and convey regulatory messages to vehicles at greenway crossings. Signs and pavement markings at Class 6

multi-use trails should follow the guidelines published in the “Manual of Uniform Traffic Control Devices” (MUTCD).

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Appendix D

Financing the Greenways Program



The establishment, growth, and maintenance of the Chapel Hill greenways system, its land and facilities, require both capital and operational funding. The extensive program of land acquisition and development of trails proposed in this Master Plan will entail large capital investment. Operation and maintenance will require annual budgeting of additional sums. Because of the magnitude of financial resources required, no single source of funds may be adequate and participation by a variety of entities and funding sources may be required.

Traditionally, financing for greenways property, easements and trails have come from the Town's general Capital Improvement Fund, bond initiatives, grants from various State agencies and programs as well as from contributions from Town citizens. In addition to these sources, the demands placed by future building programs will require the Town to explore alternative programs and combinations of sources to meet future demands. The town should consider the wide variety of local, state, federal and private funding sources available. Fortunately, since the benefits of protected greenways are many and varied, Chapel Hill may access money earmarked for a variety of purposes. These include water quality, hazard mitigation, recreation, air quality, alternate transportation, wildlife protection, community health, and economic development. Competition is almost always stiff for state and federal funds, so it becomes imperative that local governments work together to create multi-jurisdictional partnerships and to develop their own local sources of funding. These sources can then be used to leverage outside assistance.

At the time this report was prepared both State and Federal budgets were being reduced in many areas that affect funding options for greenways programs. The

increasing competition for the remaining funds may make it more likely that local financing will be more heavily relied on, at least in the near term.

FEDERAL FUNDING SOURCES

Federal funding is typically directed through State agencies to local governments either in the form of grants or direct appropriations, independent from State budgets, where shortfalls may make it difficult to accurately forecast available funding for future project development. Federal funding typically requires a local match of approximately 20%, but there are sometimes exceptions, such as the 2009 American Recovery and Reinvestment Act stimulus funds, which did not require a match. Since these funding categories are difficult to forecast, it is recommended that the local jurisdiction work with its MPO on getting pedestrian projects listed in the State Transportation Improvement Program (STIP), as discussed below.

The following is a list of possible Federal funding sources that could be used to support the construction of greenways. Most of these are competitive, and involve the completion of extensive applications with clear documentation of the project need, costs, and benefits. However, it should be noted that the FHWA encourages the construction of pedestrian facilities as an incidental element of larger ongoing projects. This would include a new trail or sidewalk connection on new and reconstructed roads.

Safe, Accountable, Flexible, Efficient Transportation Equity Act – a Legacy for Users

Federal funding for transportation is primarily distributed through a number of different programs established by Congress. On August 10, 2005, President Bush signed into law the Safe Accountable, Flexible, Efficient Transportation Equity Act: a

Legacy for Users (SAFETEA-LU). The legislation updated Titles 23 and 49 of the United States Code (U.S.C.) and built on the significant changes made to Federal transportation policy and programs by the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) and the 1998 Transportation Equity Act for the 21st Century (TEA-21). The legislation had a number of provisions to improve conditions for bicycling and walking and increase the safety of the two modes.

SAFETEA-LU authorized the federal surface transportation programs for highways, highway safety, and transit for the 5-year period 2005-2009. SAFETEA-LU legislation expired on September 30, 2009, but at the time of writing had been extended to June 30, 2012. It should therefore be noted that it is not possible to guarantee the continued availability of any listed SAFETEA-LU programs, or to predict their future funding levels or policy guidance. Nevertheless, many of these programs have been authorized in some form in repeated federal transportation reauthorization acts, and thus may continue to provide capital for improvements.

In North Carolina, federal funds are administered through the North Carolina Department of Transportation (NCDOT) and regional planning agencies. Most, but not all, of these programs are oriented toward transportation rather than recreation, with an emphasis on reducing auto trips and providing inter-modal connections. Federal funding is intended for capital improvements and safety and education programs, and projects must relate to the surface transportation system.

There are a number of programs identified within SAFETEA-LU that are applicable to pedestrian projects. These programs are discussed below. More information: <http://www.fhwa.dot.gov/safetealu/index.htm>

Surface Transportation Program

The Surface Transportation Program (STP) provides states with flexible funds which may be used for a variety of projects on any Federal-aid Highway including the National Highway System, bridges on any public road, and transit facilities. Bicycle and pedestrian improvements are eligible activities under the STP. This covers a wide variety of projects such as on-street facilities, off-road trails, sidewalks, crosswalks, bicycle and pedestrian signals, parking, and other ancillary facilities. SAFETEA-LU also specifically clarifies that the modification of sidewalks to comply with the requirements of the Americans

with Disabilities Act (ADA) is an eligible activity.

Funds under Title 23 generally may be used only for projects that are on the Federal-aid highway system -- which typically does not include local or minor collector roads. However, bicycle and pedestrian projects not located on the Federal-aid highway system may be funded under the STP (and therefore also under the Transportation Enhancement Activities, Congestion Mitigation and Air Quality Improvement Program) and under the Bridge Program. Highway Safety Improvement Program funds may be spent on any public highway or trail. In addition, non-construction projects, such as maps, coordinator positions, and encouragement programs, are eligible for STP funds. More information: <http://www.fhwa.dot.gov/safetealu/factsheets/stp.htm>

NCDOT Enhancement Funding (Enhancement Program Currently on Hold)

The federal Transportation Enhancement (TE) program is administered by the state Project Development Branch and is traditionally funded by a set-aside of Surface Transportation Program (STP) funds. Ten percent of STP funds are designated for Transportation Enhancement (TE) activities, which include the "provision of facilities for pedestrians and bicycles, provision of safety and educational activities for pedestrians and bicyclists," and the "preservation of abandoned railway corridors (including the conversion and use thereof for pedestrian and bicycle trails)" 23 USC Section 190 (a)(35). TE grants can be used to build a variety of pedestrian, bicycle, streetscape, and other improvements that strengthen the cultural, aesthetic, and environmental aspects of the State's intermodal transportation system.

The State typically will make a Call for Projects, and each project must benefit the traveling public and help communities increase transportation choices and access, enhance the built of natural environment and create a sense of place. The TE program funds project design, engineering, and construction. To improve chances of selection, applicants should demonstrate strong community support. Chances are also improved if the local match is higher than the required 20%. The program has been on hold since 2006, though funding is likely to become available again in the future with the reauthorization of the federal transportation bill.

A limited amount of statewide Enhancement funds are available each year for landscaping, stormwater runoff management, and pedestrian and bicyclist safety as a part of larger transportation projects. These funds are not allocated through the TE call for projects,

and must be evaluated through the TIP prioritization process. More information: <http://www.ncdot.gov/programs/Enhancement/>

The Town has successfully made use of these funds in order to construct the Booker Creek Linear Park and the Morgan Creek trail.

Safe Routes to School Program

The NCDOT Safe Routes to School (SRTS) program is a federally funded program to distribute funding and institutional support to implement SRTS programs in states and communities across the country. SRTS programs facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption and air pollution in the vicinity of schools. The Division of Bicycle and Pedestrian Transportation at NCDOT is charged with disseminating SRTS funding.

From 2005 to 2009, the state of North Carolina has been allocated \$15 million in Safe Routes to School funding for infrastructure and non-infrastructure projects. In 2009, more than \$3.6 million was distributed to 22 local agencies. All proposed projects must relate to increasing walking or biking to and from an elementary or middle school. An example of a non-infrastructure project is an education or encouragement program to improve rates of walking and biking to school. An example of an infrastructure project is construction of sidewalks around a school. Infrastructure improvements under this program must be made within 2 miles of an elementary or middle school. The state requires the completion of a competitive application to apply for funding. No local match is required, and individual grant awards are limited to approximately \$200,000.

More information: <http://www.saferoutespartnership.org/state/statemap/northcarolina> or contact DBPT/NCDOT at (919)807-0774.

Safe Routes to School Mini-grants

The National Center for Safe Routes to School offers 25 mini-grants of \$1,000 each to parents, students, schools, community leaders, nonprofit organizations and local, state, and tribal governments who partner with elementary and middle schools to support SRTS activities that enable and encourage children to safely walk and bicycle to school. Funds may be used for promotional and educational materials, safety items, equipment rentals and professional services. Applications are typically due in May for Fall implementation. The National Center seeks clear,

well-thought-out application responses that:

- Propose activities that can address the school's particular situation or interests and that have the potential to have a broad reach and lasting impact;
- Demonstrate a reasonable connection between activities and desired outcomes, and include a plan for measuring those outcomes; and
- Include a clear description of how funding will be used for these activities.

More information: <http://minigrants.saferoutesinfo.org>

Highway Safety Improvement Program

The Highway Safety Improvement Program (HSIP) is a Federal funding source administered through NCDOT focusing on potentially hazardous locations on North Carolina's roads, with an emphasis on high risk rural roads. Some eligible uses of these funds would include traffic calming, bicycle and pedestrian safety improvements, and installation of crossing signs. The ultimate goal of the HSIP is to reduce the number of traffic crashes, injuries and fatalities by reducing the potential for and the severity of these incidents on public roadways. The application process considers the types of collisions in the area, and favors projects that select countermeasures that offer the most cost effective solution for the problem. A formula apportions HSIP funds to state departments of transportation (DOT) to administer, but any public road or pathway, including those owned by local governments, can benefit. More information: <http://safety.fhwa.dot.gov/hsip/resources/fhwasa09030/> and <http://www.ncdot.org/doh/preconstruct/traffic/safety/Programs/>

Transportation, Community, and System Preservation Program

The Transportation, Community, and System Preservation (TCSP) Program provides federal funding for transit-oriented development, traffic calming, and other projects that improve the efficiency of the transportation system, reduce the impact on the environment, and provide efficient access to jobs, services, and trade centers. The program is intended to provide communities with the resources to explore the integration of their transportation system with community preservation and environmental activities. The TCSP Program funds require a 20 percent match. Pedestrian and bicycle projects meet several TCSP goals, are generally eligible for the TCSP program and are included in many TCSP projects. Past projects in North Carolina funded by TCSP include a greenway project in Knightdale and pedestrian connections

through neighborhoods in Charlotte.

Because TCSP program is one of many programs authorized under SAFETEA-LU, current funding has only been extended through March 31, 2012. In most years, Congress has identified projects to be selected for funding through the TCSP program. Assuming that this method is used to allocate TCSP funds in the future, the Town will need to work closely with the MPO, NCDOT, and Members of Congress to gain access to this funding. More information: <http://www.fhwa.dot.gov/tcsp/>

Congestion Mitigation and Air Quality Improvement program

The Congestion Mitigation and Air Quality (CMAQ) Improvement program currently allocates approximately \$20 million annually to North Carolina to fund programs in “air quality non-attainment and maintenance areas” (areas that do not meet federal air quality standards) and projects designed to improve air quality and reduce congestion, without adding single occupant vehicle capacity to the transportation system. These federal dollars can be used to build bicycle and pedestrian facilities that reduce travel by automobile. Purely recreational facilities generally are not eligible.

CMAQ funding is processed by NCDOT through North Carolina Metropolitan Planning Organizations (MPOs). Individual project proposals must meet a minimum cost threshold of \$100,000, and must meet a required local share of 20%. More information: <http://www.ncdot.org/doh/PRECONSTRUCT/tpb/services/air.html>

Federal Transit Administration programs

Federal Transit Administration (FTA) funding is available for projects designed to improve access to transit. Individual grant programs vary on the specific goals, but eligible improvements include crossing improvements, pedestrian signals, sidewalks and trails. Programs of the FTA are described in the following section.

New Freedom Program

The New Freedom formula grant program provides capital and operating costs to provide transportation services and facility improvements that exceed those required by the Americans with Disabilities Act. Examples of pedestrian/accessibility projects funded in other communities through the New Freedom Initiative include installing Accessible Pedestrian Signals (APS), enhancing transit stops to improve accessibility, and establishing a mobility coordinator position. Likely eligible improvements include mid-

block and high-visibility crossing improvements.

Applications for FTA funds are administered by the FTA, and pass through NCDOT for rural areas and MPO/RPOs for urbanized areas. More information: <http://www.hhs.gov/newfreedom/> and http://www.fta.dot.gov/funding/grants/grants_financing_3549.html

FTA Job Access and Reverse Commute Program

The Job Access and Reverse Commute (JARC) program was established to address the unique transportation challenges faced by welfare recipients and low-income persons seeking to obtain and maintain employment. Capital, planning and operating expenses for projects that transport low income individuals to and from jobs and activities related to employment, and for reverse commute projects. In North Carolina, these funds have been granted for sidewalks and pedestrian signals. More information: http://www.fta.dot.gov/funding/grants/grants_financing_3550.html

Metropolitan and Statewide Planning

This program provides funding for statewide and metropolitan coordinated transportation planning. Federal planning funds are first apportioned to State DOTs. State DOTs then allocate planning funding to MPOs. Eligible activities include pedestrian or bicycle planning to increase safety for non-motorized users, and to enhance the interaction and connectivity of the transportation system across and between modes. http://www.fta.dot.gov/funding/grants/grants_financing_3563.html

Partnership for Sustainable Communities

Founded in 2009, the Partnership for Sustainable Communities is a joint project of the Environmental Protection Agency (EPA), the U.S. Department of Housing and Urban Development (HUD), and the U.S. Department of Transportation (USDOT). The partnership aims to “improve access to affordable housing, more transportation options, and lower transportation costs while protecting the environment in communities nationwide.” The Partnership is based on five Livability Principles, one of which explicitly addresses the need for bicycle and pedestrian infrastructure (“Provide more transportation choices: Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation’s dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health”).

The Partnership is not a formal agency with a regular annual grant program. Nevertheless, it is an

important effort that has already led to some new grant opportunities (including both TIGER I and TIGER II grants). North Carolina jurisdictions should track Partnership communications and be prepared to respond proactively to announcements of new grant programs. Initiatives that speak to multiple livability goals are more likely to score well than initiatives that are narrowly limited in scope to pedestrian improvement efforts. More information: <http://www.epa.gov/smartgrowth/partnership/>

Community Development Block Grant Funds

State level Community Development Block Grant Recovery (CDBG-R) funds are allocated through the NC Department of Commerce, Division of Community Assistance to local municipal or county governments for projects that enhance the viability of communities by providing decent housing and suitable living environments and by expanding economic opportunities, principally for persons of low- and moderate-income.

Federal CDBG grantees may “use Community Development Block Grants funds for activities that include (but are not limited to): acquiring real property; reconstructing or rehabilitating housing and other property; building public facilities and improvements, such as streets, sidewalks, community and senior citizen centers and recreational facilities; paying for planning and administrative expenses, such as costs related to developing a consolidated plan and managing Community Development Block Grants funds; provide public services for youths, seniors, or the disabled; and initiatives such as neighborhood watch programs.”

State CDBG funds are provided by the U.S. Department of Housing and Urban Development (HUD) to the state of North Carolina. Some urban counties and cities in North Carolina receive CDBG funding directly from HUD. Each Year, CDBG provides funding to local governments for hundreds of critically-needed community improvement projects throughout the state. Approximately \$50 million is available statewide to fund a variety of projects. More information: <http://www.nccommerce.com/en/CommunityServices/CommunityDevelopmentGrants/CommunityDevelopmentBlockGrants/>

Land and Water Conservation Fund

The Land and Water Conservation Fund (LWCF) provides grants for planning and acquiring outdoor recreation areas and facilities, including trails. Funds can be used for right-of-way acquisition and construction. The program is administered by the

Department of Environment and Natural Resources as a grant program for states and local governments. Maximum annual grant awards for county governments, incorporated municipalities, public authorities, and federally recognized Indian tribes are \$250,000. The local match may be provided with in-kind services or cash. More information: http://www.ncparks.gov/About/grants/lwcf_main.php

Rivers, Trails, and Conservation Assistance Program

The Rivers, Trails, and Conservation Assistance Program (RTCA) is a National Parks Service (NPS) program providing technical assistance via direct NPS staff involvement to establish and restore greenways, rivers, trails, watersheds and open space. The RTCA program provides only for planning assistance—there are no implementation funds available. Projects are prioritized for assistance based on criteria including conserving significant community resources, fostering cooperation between agencies, serving a large number of users, encouraging public involvement in planning and implementation, and focusing on lasting accomplishments. This program may benefit trail development in North Carolina locales indirectly through technical assistance, particularly for community organizations, but is not a capital funding source. More information: <http://www.nps.gov/ncrc/programs/rtca/> or contact the Southeast Region RTCA Program Manager Deirdre “Dec” Hewitt at (404) 507-5691.

Public Lands Highway - Discretionary

The Public Lands Highway - Discretionary (PLH-D) Program is intended for the planning, design, construction, reconstruction or improvement of roads and bridges that are within or adjacent to, or provide access to public lands and Indian reservations. PLH-D funding has been used for bike trails, walkways, and transportation planning activities. More information: <http://flh.fhwa.dot.gov/programs/plh/discretionary/>

Department of Energy

The Department of Energy’s Energy Efficiency and Conservation Block Grants (EECBG) grants may be used to reduce energy consumptions and fossil fuel emissions and for improvements in energy efficiency. Section 7 of the funding announcement states that these grants provide opportunities for the development and implementation of transportation programs to conserve energy used in transportation including development of infrastructure such as bike lanes and pathways and pedestrian walkways. Although the current grant period has passed, more opportunities may arise in the future. More information: <http://>

www.eecbg.energy.gov

STATE FUNDING SOURCES

North Carolina Department of Transportation (NCDOT): State Transportation Improvement Program

NCDOT's Policy to Projects process uses data regarding pavement condition, traffic congestion and road safety, as well as input from local governments and NCDOT staff, to determine transportation priorities. This approach ranks projects for all modes of transportation in priority order, based on the department's goals and also determines which projects are included in the department's State Transportation Improvement Program (STIP), a federally mandated transportation planning document that details transportation improvements prioritized by stakeholders for inclusion in the Work Program over the next seven years. The STIP is updated every two years.

The STIP contains funding information for various transportation divisions of NCDOT including: highways, aviation, enhancements, public transportation, rail, bicycle and pedestrians, and the Governor's Highway Safety Program. Access to many federal funds require that projects be incorporated into the STIP. STIP is the largest single source of funding within SAFETEA-LU and NCDOT. To access the STIP: <http://www.ncdot.org/planning/development/TIP/TIP/>. For more about the STIP process: <http://www.ncdot.org/performance/reform/>

Spot Safety Program

The Spot Safety Program is a state funded public safety investment and improvement program that provides highly effective low cost safety improvements for intersections, and sections of North Carolina's 79,000 miles of state maintained roads in all 100 counties of North Carolina. The Spot Safety Program is used to develop smaller improvement projects to address safety, potential safety, and operational issues. The program is funded with state funds and currently receives approximately \$9 million per state fiscal year. Other monetary sources (such as Small Construction or Contingency funds) can assist in funding Spot Safety projects, however, the maximum allowable contribution of Spot Safety funds per project is \$250,000.

The Spot Safety Program targets hazardous locations for expedited low cost safety improvements such as traffic signals, turn lanes, improved shoulders, intersection upgrades, positive guidance enhancements

(rumble strips, improved channelization, raised pavement markers, long life highly visible pavement markings), improved warning and regulatory signing, roadside safety improvements, school safety improvements, and safety appurtenances (like guardrail and crash attenuators).

A Safety Oversight Committee (SOC) reviews and recommends Spot Safety projects to the Board of Transportation (BOT) for approval and funding. Criteria used by the SOC to select projects for recommendation to the BOT include, but are not limited to, the frequency of correctable crashes, severity of crashes, delay, congestion, number of signal warrants met, effect on pedestrians and schools, division and region priorities, and public interest. More information: <http://www.ncdot.org/doh/preconstruct/traffic/safety/Programs/>

High Hazard Elimination Program

The Hazard Elimination Program is used to develop larger improvement projects to address safety and potential safety issues. The program is funded with 90% federal funds and 10% state funds. The cost of Hazard Elimination Program projects typically ranges between \$400,000 and \$1 million. A Safety Oversight Committee (SOC) reviews and recommends Hazard Elimination projects to the Board of Transportation (BOT) for approval and funding. These projects are prioritized for funding according to a safety benefit to cost (B/C) ratio, with the safety benefit being based on crash reduction. Once approved and funded by the BOT, these projects become part of the department's State Transportation Improvement Program (STIP). More information: <http://www.ncdot.org/doh/preconstruct/traffic/safety/Programs/>

NCDOT Discretionary Funds

The Statewide Discretionary Fund is administered by the Secretary of the Department of Transportation. This \$10 million fund can be used on any project at any location within the State. Primary, urban, secondary, industrial access, and spot safety projects are eligible for consideration, by the Secretary upon direct appeal from a North Carolina jurisdiction.

NCDOT Contingency Fund

The Statewide Contingency Fund is a \$10 million fund administered by the Secretary of Transportation. The Division Engineer elicits written requests from municipalities, counties, businesses, schools, citizens, legislative members and NCDOT staff. The appeals are reviewed on their merits by the Contingency and Small Urban Funds Committee, which makes recommendations for funding to the Secretary.

Written requests must provide technical information such as justification, location, improvements being requested, timing, etc. for thorough review. More information: http://www.ncdot.gov/doh/preconstruct/traffic/tepp/Topics/F-19/F-19_mm.pdf

Small Urban Funds

Each NCDOT Highway Division administers \$2 million of funds for small-scale improvement projects in urban areas. Projects must be within 2 miles of city limits and have a maximum cost of \$250,000. Requests for small urban funds may be made by municipalities, counties, businesses, school and industrial entities. A written request should be submitted to the Division Engineer providing technical information such as justification, location, improvements being requested, timing, etc. for thorough review.

Spot Improvement Program

The Division of Bicycle and Pedestrian Transportation (DPBT) budgets \$500,000 per year for “spot” safety improvements throughout North Carolina. Eligible improvements include drain grate replacement, bicycle loop detectors, pedestrian signals and other small-scale improvements. These funds are used for small-scale projects not substantial enough to be included in the STIP. Proposals should be submitted directly to the Division of Bicycle and Pedestrian Transportation.

Small Construction Funds

The purpose of these funds is to finance improvements on the State System (US, NC, and SR routes) to be used for projects anywhere in the counties. These funds are used to fund a variety of transportation projects for municipalities, counties, businesses, schools, and industries throughout the state. There is a \$250,000 maximum amount per request per fiscal year. Any project with a total cost greater than \$150,000 requires a resolution or a letter of support for the project from the local jurisdiction. More information: <http://www.nctransportationanswers.org/ourforms/SMALLCONSTRUCTIONFORM.pdf>.

Governor’s Highway Safety Program

The Governor’s Highway Safety Program (GHSP) funds safety improvement projects on state highways throughout North Carolina. All funding is performance-based. Substantial progress in reducing crashes, injuries and fatalities is required as a condition of continued funding. This funding source is considered to be “seed money” to get programs started. The grantee is expected to provide a portion of the project costs and is expected to continue the program after GHSP funding ends. State Highway Applicants must use the web-based grant system to submit

applications. More information: <http://www.ncdot.org/programs/ghsp/>

Bicycle and Pedestrian Planning Grant Initiative

The Bicycle and Pedestrian Planning Grant Initiative is a matching grant program administered through NCDOT that encourages municipalities to develop comprehensive bicycle plans and pedestrian plans. The Division of Bicycle and Pedestrian Transportation (DPBT) and the Transportation Planning Branch (TPB) sponsor this grant. All North Carolina municipalities are eligible and are encouraged to apply. Funding allocations are determined on a sliding scale based on population. Municipalities who currently have bicycle plans or pedestrian plans, either through this grant program or otherwise, may also apply to update their plan provided it is at least five years old. More information: <http://www.ncdot.gov/bikeped/planning/>

Incidental Projects

Bicycle and pedestrian accommodations such as bike lanes, sidewalks, intersection improvements, widened paved shoulders and bicycle and pedestrian-safe bridge design are frequently included as incidental features of highway projects. Most pedestrian safety accommodations built by NCDOT are included as part of scheduled highway improvement projects funded with a combination of federal and state roadway construction funds or with a local fund match.

Eat Smart, Move More North Carolina Community Grants

The Eat Smart, Move More (ESMM) NC Community Grants program provides funding to local communities to support their efforts to develop community-based interventions that encourage, promote and facilitate physical activity. The current focus of the funds is for projects addressing youth physical activity. Funds have been used to construct trails and conduct educational programs. More information: <http://www.eatsmartmovemorenc.com/Funding/CommunityGrants.html>

The North Carolina Division of Parks and Recreation

The North Carolina Division of Parks and Recreation and the State Trails Program offer funds to help citizens, organizations and agencies plan, develop and manage all types of trails ranging from greenways and trails for hiking, biking and horseback riding to river trails and off-highway vehicle trails. More information: <http://www.ncparks.gov/About/grants/main.php>

The North Carolina Parks and Recreation Trust Fund (PARTF)

The Parks and Recreation Trust Fund (PARTF) provides dollar-for-dollar matching grants to counties, incorporated municipalities and public authorities, as defined by G.S. 159-7. Through this program, several million dollars each year are available to local governments to fund the acquisition, development and renovation of recreational areas. A local government can request a maximum of \$500,000 with each application. An applicant must match the grant dollar-for-dollar, 50% of the total cost of the project, and may contribute more than 50%. The appraised value of land to be donated to the applicant can be used as part of the match. The value of in-kind services, such as volunteer work, cannot be used as part of the match. More information: http://www.ncparks.gov/About/grants/partf_main.php

Recreational Trails Program

The Recreational Trails Program (RTP) of the federal transportation bill provides funding to states to develop and maintain recreational trails and trail-related facilities for both nonmotorized and motorized recreational trail uses. Examples of trail uses include hiking, bicycling, in-line skating, and equestrian use. These funds are available for both paved and unpaved trails, but may not be used to improve roads for general passenger vehicle use or to provide shoulders or sidewalks along roads. Recreational Trails Program funds may be used for:

- Maintenance and restoration of existing trails
- Purchase and lease of trail construction and maintenance equipment
- Construction of new trails, including unpaved trails
- Acquisition or easements of property for trails
- State administrative costs related to this program (limited to seven percent of a state's RTP dollars)
- Operation of educational programs to promote safety and environmental protection related to trails (limited to five percent of a state's RTP dollars)

In North Carolina, the Recreational Trails Program is administered by the North Carolina Division of Parks and Recreation. This grant is specifically designed to pay for recreational trail projects rather than utilitarian transportation-based projects. Grants up to \$75,000 per project, and applicants must be able to contribute 20% of the project costs with cash or in-kind contributions.

Projects must be consistent with the Statewide Comprehensive Outdoor Recreation Plan (SCORP). More information: http://www.ncparks.gov/About/trails_grants.php

Adopt-A-Trail Program

The Adopt-A-Trail (AAT) Program is a source of small funds for trail construction, maintenance, and land acquisition for trails. The program funds \$108,000 annually in North Carolina, and awards grants up to \$5,000 per project with no local match required. Applications are due in February. More information is available from Regional Trails Specialists and the Grants Manager. More information: http://www.ncparks.gov/About/grants/docs/AAT_info.pdf

Powell Bill Funds

Annually, Powell Bill State street-aid allocations are made to incorporated municipalities that establish their eligibility and qualify as provided by G.S. 136-41.1 through 136-41.4. Powell Bill funds shall be expended only for the purposes of maintaining, repairing, constructing, reconstructing or widening of local streets that are the responsibility of the municipalities or for planning, construction, and maintenance of bikeways or sidewalks along public streets and highways. Funding allocations are based on population and mileage of town-maintained streets. More information: http://www.ncdot.org/programs/Powell_Bill/

Clean Water Management Trust Fund (CWMTF)

This fund was established in 1996 and has become one of the largest sources of money in North Carolina for land and water protection. The revenue of this fund is allocated as grants to local governments, state agencies and conservation non-profits to help finance projects that specifically address water pollution problems. Funds may be used for planning and land acquisition to establish a network of riparian buffers and greenways for environmental, educational, and recreational benefits.

More information: <http://www.cwmtf.net/#appmain.htm>

State Administered Community Development Block Grants

State level funds are allocated through the NC Department of Commerce, Division of Community Assistance to be used to promote economic development and to serve low-income and moderate-income neighborhoods. Greenways and pedestrian improvements that are part of a community's economic development plans may qualify for

assistance under this program. Recreational areas that serve to improve the quality of life in lower income areas may also qualify. Approximately \$50 million is available statewide to fund a variety of projects. More information: www.hud.gov/offices/cpd/communitydevelopment/programs/stateadmin/ or (919) 733-2853.

North Carolina Health and Wellness Trust Fund

The North Carolina Health and Wellness Trust Fund (HWTF) in partnership with Blue Cross and Blue Shield of North Carolina (BCBSNC) offers the Fit Community Grants, designed to help communities become Fit Community designees. Up to eight communities that demonstrate a compelling need, proven capacity and promising opportunity for policy and environmental change in addressing physical activity and/or healthy eating behaviors will be awarded two-year grants up to \$60,000 each. More information: <http://www.fitcommunitync.org>

Urban and Community Forestry Grant

The North Carolina Division of Forest Resources Urban and Community Forestry grant can provide funding for a variety of projects that will help toward planning and establishing street trees as well as trees for urban open space. The goal is to improve public understanding of the benefits of preserving existing tree cover in communities and assist local governments with projects which will lead to a more effective and efficient management of urban and community forests. Grant requests should range between \$1,000 and \$15,000 and must be matched equally with non-federal funds. Grant funds may be awarded to any unit of local or state government, public educational institutions, approved non-profit 501(c)(3) organizations and other tax-exempt organizations. First-time municipal applicant and municipalities seeking Tree City USA status are given priority for funding. For more about Tree City USA status, visit http://www.dfr.state.nc.us/Urban/tree_city_usa_overview.htm.

For application instructions, visit: http://www.dfr.state.nc.us/Urban/urban_grant_overview.htm

LOCAL GOVERNMENT FUNDING SOURCES

Municipalities often plan for the funding of greenway facilities or improvements through development of Capital Improvement Programs (CIP). In Raleigh, for example, the greenways system has been developed over many years through a dedicated source of annual funding that has ranged from \$100,000 to \$500,000, administered through the Recreation and

Parks Department. In Chapel Hill, the Greenways Commission has recommended that a similar permanent funding source be located that could be used to fund greenways land acquisition and trail construction. The Commission recommended that a special tax be levied to fund this program. For several years the Council earmarked cell tower lease funds for the greenways program. This brought in about \$50,000 per year. In FY 2004-05 the cell tower money was diverted from the Greenways portion of the Capital Improvement Program to pay debt service on parks bonds.

Despite this setback, Chapel Hill's development requirements have historically contributed successfully to the number of trails available to local residents. Most of the trails built as requirements of the development process are located on property owned by local homeowners associations. Some of these trails are or will be public. For example, the developers of the 300+ acre Southern Village and the 400+ acre Meadowmont projects constructed paved greenways suitable for bicycle traffic. These trails enhance and add value to the private developments while simultaneously adding to the public greenway system. It has been the policy of the town that greenway trails proposed as part of major private developments were constructed to standards established by the NCDOT Bicycle Program and the American Association of Safety and Highway Traffic Officials (AASHTO). The trails built within the Meadowmont, Southern Village, and Chapel Watch developments follow this precedent. It should also be a goal of the Town to require a commitment for the construction of trails as part of the development plan approval process. This requirement would be similar to the current requirements that require developers to extend sewers and roads to their property lines. This method of financing construction may warrant further exploration by the Council.

The protection of most undeveloped greenways corridors has also been accomplished at no cost to the Town because of a variety of existing development regulations. The Town has adopted regulations that limit the development of floodplain areas, steep slopes, entranceway areas, and a corridor along Interstate 40. Although this protection is not perfect, and limited development and clearing may be allowed in these areas, the degree of protection is very high considering that it is achieved at no cost to the public. As long as these regulations remain in force, the majority of the Town's greenways corridors should remain relatively protected.

If the courts, the federal government, or the State legislature take actions that weaken the Town's ability to regulate development, these lands may once again be subject to development pressures. Only a small percentage of the Town's greenways are in Town ownership or direct control. The cost to acquire them in fee simple would likely be beyond the ability of the Town.

The following protection and acquisition methods related to development can maximize preservation of greenway corridors:

- Continue to rely on Town ordinances to protect stream corridors, steep slopes, entranceways, and the Interstate corridor.
- Use the provisions of the Land Use Management Ordinance (LUMO) to acquire greenway lands and easements wherever developments occur along identified greenways.
- Use the payment-in-lieu of recreation area provision of the Land Use Management Ordinance (LUMO) where appropriate to raise money for the purchase of greenway land and easements.
- Use of off-site dedication provisions of the Land Use Management Ordinance (LUMO) where appropriate.
- Encourage donations of land and easements.
- Trade unneeded Town land for needed easements or property.

A variety of additional funding tools available to North Carolina jurisdictions for implementing greenway projects on acquired lands are described below.

Capital Reserve Fund

Municipalities have statutory authority to create capital reserve funds for any capital purpose, including pedestrian facilities. The reserve fund must be created through ordinance or resolution that states the purpose of the fund, the duration of the fund, the approximate amount of the fund, and the source of revenue for the fund. Sources of revenue can include general fund allocations, fund balance allocations, grants and donations for the specified use. The greenways program must compete for these funds with other Town capital needs including parks, sidewalks, building improvements, capital construction, and purchase of capital equipment.

Capital Project Ordinances

Municipalities can pass Capital Project Ordinances

that are project specific. The ordinance identifies and makes appropriations for the project.

Municipal Service District

Municipalities have statutory authority to establish municipal service districts, to levy a property tax in the district additional to the citywide property tax, and to use the proceeds to provide services in the district. Downtown revitalization projects are one of the eligible uses of service districts, and can include projects such as street, sidewalk, or bikeway improvements within the downtown taxing district.

Tax Increment Financing

Project Development Financing bonds, also known as Tax Increment Financing (TIF) is a relatively new tool in North Carolina, allowing localities to use future gains in taxes to finance the current improvements that will create those gains. When a public project (e.g., sidewalk improvements) is constructed, surrounding property values generally increase and encourage surrounding development or redevelopment. The increased tax revenues are then dedicated to finance the debt created by the original public improvement project. Streets, streetscapes, and sidewalk improvements are specifically authorized for TIF funding in North Carolina. Tax Increment Financing typically occurs within designated development financing districts that meet certain economic criteria that are approved by a local governing body. TIF funds are generally spent inside the boundaries of the TIF district, but they can also be spent outside the district if necessary to encourage development within it.

Installment Purchase Financing

As an alternative to debt financing of capital improvements, communities can execute installment or lease purchase contracts for improvements. This type of financing is typically used for relatively small projects that the seller or a financial institution is willing to finance or when up-front funds are unavailable. In a lease purchase contract the community leases the property or improvement from the seller or financial institution. The lease is paid in installments that include principal, interest, and associated costs. Upon completion of the lease period, the community owns the property or improvement. While lease purchase contracts are similar to a bond, this arrangement allows the community to acquire the property or improvement without issuing debt. These instruments, however, are more costly than issuing debt.

TAXES

Many communities have raised money for general transportation programs or specific project needs through self-imposed increases in taxes and bonds. For example, Pinellas County residents in Florida voted to adopt a one-cent sales tax increase, which provided an additional \$5 million for the development of the overwhelmingly popular Pinellas Trail. Sales taxes have also been used in Allegheny County, Pennsylvania, and in Boulder, Colorado to fund open space projects. A gas tax is another method used by some municipalities to fund public improvements. A number of taxes provide direct or indirect funding for the operations of local governments. Some of them are:

Sales Tax

In North Carolina, the state has authorized a sales tax at the state and county levels. Local governments that choose to exercise the local option sales tax (all counties currently do), use the tax revenues to provide funding for a wide variety of projects and activities. Any increase in the sales tax, even if applying to a single county, must gain approval of the state legislature. In 1998, Mecklenburg County was granted authority to institute a one-half cent sales tax increase for mass transit.

Property Tax

Property taxes generally support a significant portion of a municipality's activities. However, the revenues from property taxes can also be used to pay debt service on general obligation bonds issued to finance greenway system acquisitions. Because of limits imposed on tax rates, use of property taxes to fund greenways could limit the municipality's ability to raise funds for other activities. Property taxes can provide a steady stream of financing while broadly distributing the tax burden. In other parts of the country, this mechanism has been popular with voters as long as the increase is restricted to parks and open space. Note, other public agencies compete vigorously for these funds, and taxpayers are generally concerned about high property tax rates.

Excise Taxes

Excise taxes are taxes on specific goods and services. These taxes require special legislation and funds generated through the tax are limited to specific uses. Examples include lodging, food, and beverage taxes that generate funds for promotion of tourism, and the gas tax that generates revenues for transportation related activities.

Occupancy Tax

The NC General Assembly may grant towns the

authority to levy occupancy tax on hotel and motel rooms. The act granting the taxing authority limits the use of the proceeds, usually for tourism-promotion purposes.

Fees

A variety of fee options have been used by local jurisdictions to assist in funding pedestrian and bicycle improvements. Enabling actions may be required for a locality to take advantage of these tools.

Stormwater Utility Fees

Greenway trail property may be purchased with stormwater fees, if the property in question is used to mitigate floodwater or filter pollutants.

Stormwater charges are typically based on an estimate of the amount of impervious surface on a user's property. Impervious surfaces (such as rooftops and paved areas) increase both the amount and rate of stormwater runoff compared to natural conditions. Such surfaces cause runoff that directly or indirectly discharge into public storm drainage facilities and create a need for stormwater management services. Thus, users with more impervious surface are charged more for stormwater service than users with less impervious surface. The rates, fees, and charges collected for stormwater management services may not exceed the costs incurred to provide these services.

BONDS AND LOANS

Bonds have been a very popular way for communities across the country to finance their pedestrian and greenway projects. A number of bond options are listed below. Contracting with a private consultant to assist with this program may be advisable. Since bonds rely on the support of the voting population, an education and awareness program should be implemented prior to any vote. Billings, Montana used the issuance of a bond in the amount of \$599,000 to provide the matching funds for several of their TEA-21 enhancement dollars. Austin, Texas has also used bond issues to fund a portion of its bicycle and trail system.

General Obligation Bonds

Cities, counties, and service districts generally are able to issue general obligation (G.O.) bonds that are secured by the full faith and credit of the entity. A general obligation pledge is stronger than a revenue pledge, and thus may carry a lower interest rate than a revenue bond. The local government issuing the bonds pledges to raise its property taxes, or use any other sources of revenue, to generate sufficient revenues to make the debt service payments on the

bonds. Frequently, when local governments issue G.O. bonds for public enterprise improvements, the public enterprise will make the debt service payments on the G.O. bonds with revenues generated through the public entity's rates and charges. However, if those rate revenues are insufficient to make the debt payment, the local government is obligated to raise taxes or use other sources of revenue to make the payments. Bond measures are typically limited by time, based on the debt load of the local government or the project under focus. Funding from bond measures can be used for right-of-way acquisition, engineering, design, and construction of pedestrian and bicycle facilities. Voter approval is required.

In 2003 Chapel Hill voters approved the sale of \$5,000,000 in Parks bonds (designated by the Council for Greenway development) and \$2,000,000 in bonds for purchase of open space. The open space bond has been expended. The remaining parks bond has been committed to the extension of the Fan Branch and Bolin Creek Trails.

Special Assessment Bonds

Special assessment bonds are secured by a lien on the property that benefits from the improvements funded with the special assessment bond proceeds. Debt service payments on these bonds are funded through annual assessments to the property owners in the assessment area.

ALTERNATIVE LOCAL GOVERNMENT

FUNDING SOURCES

Fee simple Purchase

The outright purchase of property is an important method for acquiring greenway land.

Mandatory Dedication of Recreation Areas

The Town's Land Use Management Ordinance (LUMO) requires developers of major subdivisions to dedicate a portion of a project's dry and flat land for active recreation purposes. Greenways land may be substituted for high and dry land when appropriate. The Town has been very successful in acquiring land and protecting greenways through the provisions of the Development Ordinance (which predated the LUMO). Several creative methods of using the LUMO exist:

- A. Payment-in-Lieu** -The LUMO contains a provision that allows payment of money in-lieu of dedication of land. Under certain conditions the Town may not desire the dedication of land. In some cases the Town would be better served if money were received

in-lieu of land dedication. The money received from payment-in-lieu could be used to buy land in other nearby locations or make improvements.

- B. Off-Site Dedication** -The LUMO contains a provision that allows developers to dedicate land off-site. With this method the developer would provide land of equal value at another location. In many situations, the developer of a tract may own land that is dry, level, and entirely developable. If the property is near a park; has little or no importance as open space, greenways, or park land; or would be difficult to develop as a park or greenway due to size or configuration constraints, it may be in the best interests of the developer and the Town to consider off-site dedication. The Town greenways program has already benefited from this method by acquiring important parcels along the Dry Creek, Bolin Creek and Tanyard Branch greenways. The Town should encourage off-site dedication when appropriate.

Gift

The Town has benefited greatly from gifts of land or easements. A North Carolina State tax credit is available to persons donating land to governmental agencies. Gifts should be pursued whenever possible. In some cases gifts may come with simple or extensive conditions for use of the land.

Exchange of Land

The town has participated in several land exchanges to benefit the greenway program. It may be possible to use this method again in the future to exchange unused Town-owned land for private property or property held by other governmental agencies. In this way, the Town may be able to trade idle land for property, which is desired for open space, greenways, and parks purposes.

Purchase or Gift of Easement

Easements are legally recorded rights to use land in a specific way; such as the right to locate sewers, electric power lines, gas lines, roads, and other purposes. Three types of easements are of special concern to the greenways program:

- Conservation easements are used to prevent development of private land.
- Pedestrian, motorized wheelchair, and non-motorized vehicle easements are granted to allow the public to walk or ride wheelchairs and bicycles

across private land.

- Construction easements are usually temporary and allow access for construction activities.

It is important to realize that one form of easement does not automatically include another use. For instance, sewer easements cannot legally be used for public pedestrian purposes unless that right is specifically given to the public by the owner of the property.

The donor or seller of an easement retains title to the land, pays taxes on the property, and may use the land for any purpose not inconsistent with the use of the easement. For example, the owner of the property may not build a fence across a public pedestrian easement. Easements may be given for a specific number of years or in perpetuity. A person donating an easement may be eligible for substantial tax benefits from both the state and federal governments.

The Town has acquired many public pedestrian and non-motorized vehicle easements on various greenways segments. By acquiring easements, the Town can avoid the costly process of buying land. Easements leave the lands in private hands for private purposes, allowing the Town to continue to receive taxes on the property. Some landowners are more receptive to the idea of donating or selling easements rather than selling fee-simple title to land.

Reserved Life Estate

Reserved life estates are gifts of land that the donor may use until he or she dies. In most cases, donors continue to live on a tract of land until their death. Reserved life estate agreements are usually structured such that heirs may not inherit or use the property after the donor's death. This form of gift has tax benefits, but is generally used only by persons who are absolutely certain they do not wish to pass on property to relatives or friends after their death. This method has not been used in Chapel Hill as of this time; however it has been used by other governmental agencies with some degree of success.

Bargain Sale

In this form of sale, the owner of the property sells it at a price below market value. The lost capital gain, which is the appraised value less the sale price, is taken as a tax deduction. Persons interested in aiding the greenways program may do so and benefit from a reduction in taxes. North Carolina State tax credits can be used with bargain sales under certain conditions.

Rent and Leaseback

It may be possible to purchase land well in advance of its need as a park or greenway. In some cases it may be possible to lease or rent the land back to its previous owner, or another party, for use until it is needed. The activity allowed under the lease should be consistent with its future use as park or greenway. For example, several houses on the Pritchard Park property were rented after purchase by the Town. The Town should take advantage of rent or leaseback opportunities whenever possible.

License to Use

The Town may wish to use or protect a property for a short period of time. A license to use may provide a temporary easement until such time as the Town can raise the necessary funds to purchase the land.

Condemnation

The Town of Chapel Hill has the right of eminent domain by which it may condemn a piece of property or an easement if all other attempts to acquire the land have failed. This process is adversarial and requires the Town to force the owner of a property to sell against his will. The process requires that both parties submit evidence and allow the judicial system to set the price at which the land will be sold. The nature of the process makes it a difficult, time consuming, and expensive way to purchase land. The use of condemnation should be used only after all other possible solutions have proved unsuccessful.

Tax Foreclosures

Occasionally lands useful for open space and greenways may be foreclosed due to failure of the private landowner to pay property taxes. This method may allow the Town to purchase land at a very low price.

FUNDS FROM PRIVATE FOUNDATIONS AND ORGANIZATIONS

Many communities have solicited greenway and pedestrian infrastructure funding assistance from private foundations and other conservation-minded benefactors. Below are several examples of private funding opportunities available in North Carolina.

Friends of Chapel Hill Parks, Recreation, and Greenways

In 1992, this 501(c)3 organization was formed with the stated mission of supporting the efforts of the Chapel Hill Parks and Recreation Department. In 2008 the organization received a bequeathment of \$308,000 from the estate of former Town Council member and Greenways Commission Chair Joe Herzenberg. These

funds have been used primarily for renovations to the Bolin Creek Trail and greenways related art. Once the Herzenberg funds are expended the organization will remain and could be used to generate additional funds. The organization supports a wide variety of programs including therapeutic recreation, athletics, community centers, youth programs, and special projects such as construction of trails and parks. More information can be found at <http://friendschparksrec.org/>.

Land for Tomorrow Campaign

Land for Tomorrow is a diverse partnership of businesses, conservationists, farmers, environmental groups, health professionals and community groups committed to securing support from the public and General Assembly for protecting land, water and historic places. The campaign is asking the North Carolina General Assembly to reject legislation that threatens to reduce funding of conservation focused trust funds. Land for Tomorrow will enable North Carolina to reach a goal of ensuring that working farms and forests; sanctuaries for wildlife; land bordering streams, parks and greenways; land that helps strengthen communities and promotes job growth; historic downtowns and neighborhoods; and more, will be there to enhance the quality of life for many generations. More information: <http://www.landfortomorrow.org/>

The Robert Wood Johnson Foundation

The Robert Wood Johnson Foundation was established in 1972 and today it is the largest U.S. foundation devoted to improving the health and health care of all Americans. Grant making is concentrated in four areas:

- To assure that all Americans have access to basic health care at a reasonable cost
- To improve care and support for people with chronic health conditions
- To promote healthy communities and lifestyles
- To reduce the personal, social and economic harm caused by substance abuse: tobacco, alcohol, and illicit drugs

For more information about what types of projects are funded and how to apply, visit <http://www.rwjf.org/grants/>

North Carolina Community Foundation

The North Carolina Community Foundation, established in 1988, is a statewide foundation seeking gifts from individuals, corporations, and

other foundations to build endowments and ensure financial security for nonprofit organization and institutions throughout the state. Based in Raleigh, North Carolina, the foundation also manages a number of community affiliates throughout North Carolina, which makes grants in the areas of human services, education, health, arts, religion, civic affairs, and the conservation and preservation of historical, cultural, and environmental resources. The foundation also manages various scholarship programs statewide. More information: <http://www.nccommunityfoundation.org/Grants>.

Z. Smith Reynolds Foundation

This Winston-Salem-based Foundation has been assisting the environmental projects of local governments and non-profits in North Carolina for many years. They have two grant cycles per year and generally do not fund land acquisition. However, they may be able to offer support in other areas of open space and greenways development. More information is available at <http://www.zsr.org>.

Bank of America Charitable Foundation, Inc.

The Bank of America Charitable Foundation is one of the largest in the nation. The primary grants program is called Neighborhood Excellence, which seeks to identify critical issues in local communities. Another program that applies to greenways is the Community Development Programs, and specifically the Program Related Investments. This program targets low- and moderate-income communities and serves to encourage entrepreneurial business development.

More information: <http://www.bankofamerica.com/foundation>.

Duke Energy Foundation

Funded by Duke Energy shareholders, this non-profit organization makes charitable grants to selected non-profits or governmental subdivisions. Each annual grant must have:

- An internal Duke Energy business “sponsor”
- A clear business reason for making the contribution

The grant program has three focus areas: Environmental and Energy Efficiency, Economic Development, and Community Vitality. The Foundation can support programs that support conservation, training and research around environmental and energy efficiency initiatives. More information: <http://www.duke-energy.com/community/foundation.asp>.

American Greenways Eastman Kodak Awards

The Conservation Fund's American Greenways Program has teamed with the Eastman Kodak Corporation and the National Geographic Society to award small grants (\$250 to \$2,000) to stimulate the planning, design and development of greenways. These grants can be used for activities such as mapping, conducting ecological assessments, surveying, holding conferences, developing brochures, producing interpretive displays, incorporating land trusts, and building trails. Grants cannot be used for academic research, institutional support, lobbying or political activities. More information: http://www.conservationfund.org/kodak_awards.

National Trails Fund

American Hiking society created the National Trails Fund in 1998 as the only privately supported national grants program providing funding to grassroots organizations working toward establishing, protecting, and maintaining foot trails in America. The society provides funds to help address the \$200 million backlog of trail maintenance. National Trails Fund grants help give local organizations the resources they need to secure access, volunteers, tools and materials to protect America's cherished public trails. To date, American Hiking has granted more than \$240,000 to 56 different trail projects across the U.S. for land acquisition, constituency building campaigns, and traditional trail work projects. Awards range from \$500 to \$10,000 per project. Projects the American Hiking Society will consider include:

- Securing trail lands, including acquisition of trails and trail corridors, and the costs associated with acquiring conservation easements.
- Building and maintaining trails that will result in visible and substantial ease of access, improved hiker safety, and/or avoidance of environmental damage.
- Constituency building surrounding specific trail projects, including volunteer recruitment and support.

More information: <http://www.americanhiking.org/>.

The Conservation Alliance

The Conservation Alliance is a non-profit organization of outdoor businesses whose collective annual membership dues support grassroots citizen-action groups and their efforts to protect wild and natural areas. Funded projects focus primarily on direct citizen action to protect and enhance natural resources for

recreation. Project requests should be quantifiable, with specific goals, objectives and action plans and should include a measure for evaluating success.

The Alliance prefers to fund projects with a good chance for closure or significant measurable results over a fairly short term of one to two years. More information: <http://www.conservationalliance.com/grants>.

BlueCross BlueShield of North Carolina Foundation

BlueCross BlueShield (BCBS) focuses on programs than use an outcome approach to improve the health and well being of residents. The Health of Vulnerable Populations grants program focuses on improving health outcomes for at-risk populations. The Healthy Active Communities grant funds projects that enhance the physical environment to create spaces and places for physical activity. Eligible grant applicants must be located in North Carolina, be able to provide recent tax forms and, depending on the size of the nonprofit, provide an audit. More information: <http://www.bcbsscncfoundation.org/grants/>.

Annual Azalea Celebration

NC Beautiful has promoted environmental education, beautification, and stewardship in North Carolina for 40 years and holds the Annual Azalea Celebration to help non-profit organizations enhance their community spaces. Winning applicants receive 100 azalea plants free of charge to beautify school- and church grounds, parks, greenways, public rights-of-way, and community and senior centers. In addition, recipients who sustain their projects and keep their azaleas healthy for a 3-year period are eligible to receive cash awards and additional plants through the A.J. Fletcher Award. More information: <http://www.ncbeautiful.org/programs/celebration.html>

Bikes Belong Grants

The Bikes Belong Grant program funds important and influential projects that leverage federal funding and build momentum for bicycling in communities across the U.S. These projects include greenways and rail trails accessible by pedestrians and bicyclists. Applicants can request a maximum amount of \$10,000 for their project, and priorities are given to areas that have not received Bikes Belong funding in the past three years.

A new Bikes Belong opportunity is Community Partnership Grants. These grants are designed to foster and support partnerships between city or county governments, non-profit organizations, and local businesses to improve the environment for bicycling in the community. Grants will primarily

fund the construction or expansion of facilities such as bike lanes, trails, and paths. The lead organization must be a non-profit organization with IRS 501(c)3 designation or a city or county government office. More information: <http://www.bikesbelong.org/grants/>

Local Trail Sponsors

A sponsorship program for trail amenities allows smaller donations to be received from both individuals and businesses. Cash donations could be placed into a trust fund to be accessed for certain construction or acquisition projects associated with the greenways and open space system. Some recognition of the donors is appropriate and can be accomplished through the placement of a plaque, the naming of a trail segment, and/or special recognition at an opening ceremony. Valuable in-kind gifts include donations of services, equipment, labor, or reduced costs for supplies.

Volunteer Work

Short segments of less intensively used unpaved trails and small connector paths have been implemented

by volunteer groups in cooperation with the Town of Chapel Hill. In these efforts by groups such as Boy Scouts of America, the Town's obligation is typically limited to the cost of construction materials only. These initiatives are encouraged by the Town with proper coordination to assure compatibility with the Town's greenway planning goals and construction standards.

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