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Chapter 1.0 Introduction

1.1 General public interest purposes

The general public interest purposes implicit in this Bicycle and Pedestrian Action Plan are:

• To promote public health and safety, access to community facilities and businesses for all, regardless of age, physical capacity, weather conditions and time of day, and to promote diverse modes of transportation.

This chapter sets out the more specific purpose and objectives of the Bicycle and Pedestrian Action Plan

1.2 Purpose of the Plan:

- · To increase bicycle and pedestrian use,
- · To identify a potential network of bicycle and pedestrian facilities, and
- To identify methods of creating it.

1.3 Objectives of the Plan:

- To identify locations for improved facilities or engineering improvements which:
 - connect neighborhoods to adjacent existing schools, activity centers, recreational facilities and transit stops,
 - close gaps between existing facilities,
 - facilitate travel between residential neighborhoods and key employment, recreation, shopping centers, such as downtown and UNC and,
 - connect Chapel Hill with neighboring communities
- To identify actions which promote walking and bicycling through education and encouragement.
- To outline an implementation strategy for the actions identified in the action plan.

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Chapter 2.0 Background

This Chapter sets out the context to the Bicycle and Pedestrian Action Plan. More plan and policy background is provided in Appendix 1and 2. The chapter also identifies other planned bicycle and pedestrian facilities not included in this plan.

2.1 Context for the Plan

In May 2000 the Town of Chapel Hill adopted a Comprehensive Plan

The stated transportation goal of the Comprehensive Plan (p 92) is to:

"Develop a balanced, multi-modal transportation system that will enhance mobility for all citizens, reduce automobile dependence, and preserve/enhance the character of Chapel Hill."

The Plan states the following general objectives (p 93) for

Bikeways: Develop and maintain a system of safe and efficient bikeways (on-street bike lanes and off-street bike paths within greenways) designed to contribute to Townwide mobility, connecting neighborhoods with activity centers, schools, parks, and other neighborhoods.

Pedestrian (facilities): Develop and maintain a pedestrian circulation system, including sidewalks and greenway trails that provide direct, continuous, and safe movement within and between districts of Town. Link neighborhoods to activity centers, transit stops, schools, parks, and other neighborhoods.

A key action as stated in Section 10A-2 p 97 of the Comprehensive Plan is to: 'Develop a comprehensive pedestrian and bicycle network."

"This network should be designed to provide direct connections between neighborhoods and from neighborhoods to activity centers. It should include sidewalks and bike lanes along streets and highways (the focus of this strategy) and off-street bicycle/pedestrian paths developed as part of the greenway network.

Page 97 goes on to state that:

"A multi-faceted approach to developing the comprehensive pedestrian and bicycle network should be pursued. For example, roadway resurfacing or reconstruction projects should incorporate re-striping to accommodate bicycle lanes wherever feasible. Traffic signals or other devices should be provided at intersections to accommodate

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pedestrians and bicyclists needing to cross major roadways. Consideration should be given to use of utility rights-of-way for bikeways/greenways where feasible. Development of the pedestrian/bicycle network should be coordinated with Carrboro, Orange County, Hillsborough, and the City and County of Durham to encourage regional connections."

2.2 Other planned bicycle and pedestrian improvements shown on the facilities plan maps but covered by other plans.

In addition to the facilities identified in the Action Plan there are other bicycle and pedestrian facilities programmed and planned for construction in the town. The plan has taken into account of the following.

UNC Campus Development Plan

Sidewalks on

- Mason Farm Rd to South Fordham Blvd.
- South Rd. north side, west of Country Club Rd, adjacent cemetery.

UNC Campus to NC Botanical Garden Trail

Proposed nature trail running from Ridge Rd roughly parallel to Manning Dr.

UNC Softball Complex.

The Town Council's 2004 approval for development at the UNC Softball Complex off Raleigh Road included a stipulation to provide a short off road bicycle and pedestrian path to Christopher Road and thereby providing a bicycle and pedestrian route between Raleigh Road and Christopher Road/Fordham Boulevard by-passing the intersection of US 54 and US15-501.

Town of Chapel Hill Town Operations Center

 Sidewalk on Millhouse Rd from Eubanks Road to the Town Operations Center

1998 Town of Chapel Hill Greenways Master Plan:

One of the stated goals of the greenways master plan is to connect neighborhoods, so although greenways are covered by a separate long-range plan they are integral to the development of a connected system of bicycle and pedestrian facilities for the town. Please note that the Town Council consider an update of Greenways Master Plan in 2005 which may include some facilities that are different than the Bicycle and

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Pedestrian Action Plan). The list of greenways included in the 1998 Plan is reproduced below). (see map)

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 Upper Booker Creek from Homestead Park to Weaver Dairy Rd and Spur to Weaver Dairy Rd extension. Deleted: Includes the following proposed greenways:¶

- Rail Trail Umstead Park to Eubanks Rd.
- Old Field Creek Trail north of Eubanks Rd.
- North Trail running east to west from Erwin Rd west of Airport Rd with spur from Erwin Rd to east to New Hope Creek.
- Dry Creek Trail from Perry Creek Dr. to Providence Rd.
- Lower Booker Creek from Fordham Blvd to Little Creek Trail north of Cleland Rd.
- Little Creek Trail from north of Cleland Rd to Pinehurst Dr.
- Bolin Creek Extension from Community Center at S. Estes Dr. to Little Creek Trail.
- Bolin Creek Extension from north of Rashkis Elementary. School. Eastwards.
- Bolin Creek spur from Burlage Dr. to existing greenway.
- Tanyard Trail from Caldwell St o Umstead Park
- Morgan Creek east from Frank Porter Graham Elem entary. School. to US 15-501 and Merritt Mill Pasture.
- Wilson Creek Trail from US 15-501 South to town limits.
- Fan Branch south from Scroggs Elementary. School to Town limits.

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The highest priorities for the greenway program are the Bolin Creek, Dry Creek, Morgan Creek and Upper Booker Creek Trails. These projects have funding scheduled in the near term.

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2.3 North Carolina Department of Transportation (NCDOT) Programmed Improvements to State Maintained Streets.

Sidewalks and Striped Bicycle Lanes

US 15-501 North of Main St, Southern Village to Culbreth Rd 2004

Weaver Dairy Rd from Airport Rd to Erwin Rd.
 2007

South Columbia Street from Purefoy Rd to Manning Dr.
 2007

Crossing Improvement

Intersection of US15-501 at Erwin Rd.
 2004

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Chapter 3.0 Proposed Plan:

This chapter sets out the overall facilities plan with reference to a pedestrian facilities map and a bicycle facilities map. The proposed plan identifies a network of facilities connecting to existing and planned greenways, also to homes, workplaces, schools and services. The plan maps show the main bicycle and pedestrian corridors which serve the town. These corridors are where most bicycle and pedestrian travel is expected and so where generally improvements to facilities would likely be concentrated (see section 4.1.9 Corridor Improvements). The maps also show specific improvement proposals. The proposed facilities consist of:

- Sidewalks.
- Off Road Paths (surfaced, shared facilities for pedestrians and bicyclists),
- Crossing Improvements,
- Signed Advisory Routes for pedestrians and bicyclists and.
- Bicycle Facilities.

3.1 Sidewalk Priorities

For the purposes of establishing broad priorities for a Town construction program, the sidewalks proposed in this plan have been divided into four categories based on the objectives of the plan and the sidewalk and transportation priorities identified by the Town. (Please see Appendix 3, 2006-2012 Town of Chapel Hill Transportation Priority List and Appendix 4 Action Plan Sidewalks Priority List. The Action Plan Sidewalks Priority List is a compilation of sidewalks identified through the preparation of this plan and the Town 's Sidewalk Priority list as it existed when work began on the Action Plan). Through the annual construction plan process. Projects will be selected from these categories. Selection would also take into account the factors of funding availability, right –of- way, construction feasibility, and necessity.

Projects are listed according to their street classification. The preferred side(s) of the street on which the sidewalk would likely be located is indicated in brackets. State maintained are indicated with an asterisk (*). For State maintained streets, where total improvement costs would exceed tens of thousands it is most likely that the timing of improvements will be determined by Federal and State funded improvement and enhancement programs. Sidewalks included in the Towns Transportation Improvement Priority List are indicated with (#).

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First Priority.

Projects considered to be first priority are drawn from either the Towns Transportation Improvement Priority List or its sidewalks priority list (projects scoring 24 or more points according to the Town sidewalks ranking system). **See Map 1**

Arterial Streets

- *Airport Rd (east) from Timber Hollow Court to Homestead Rd.
- *Airport Rd (west) north and south of N. Fields Dr.
- *Ephesus Ch Rd. (south) from 15-501 By-pass (N. Fordham Blvd) to Eden La.
- * # Estes Dr. (s outh) from Caswell Rd to East Franklin St.
- *Estes Dr. (south) from Franklin St. to Willow Dr.
- * # Estes Dr. Ext from Seawell School Rd to Airport Rd
- *NC 54 East: (south) west of Finley Golf Course Rd.
- * # South Fordham Blvd (north) from Manning Dr. to Old Mason Fm Rd. (See also section 3.2 "Off Road Paths")
- *US 15-501 By-pass (N Fordham Blvd) (west) from Ephesus Church Rd to Elliott Rd.
- *US 15-501 By-pass (N Fordham Blvd) (east) northeast corner at Estes Dr.

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Collector Streets

- * # Barbee Chapel (east) Rd from NC54 to Finley Forest Dr.
- * # Barbee Chapel Rd from Finley Forest Dr. to Downing Creek Pkwy.
- Cameron Ave(north) at northeast corner at Merritt Mill Rd
- *Culbreth Rd (south) from US 15-501South to Culbreth Park Dr.
- *Culbreth Rd from US 15-501South, north side to Channing La.
- *Culbreth Rd (south) from Cobble Ridge Dr. west to town limits
- *Culbreth Rd (north) Adam Way to Smith Level Rd.
- Legion Rd (both sides) Europa Dr. to Ephesus Church Rd.
- Legion Rd at intersection Ephesus Church Rd.
- *Old Weaver Dairy Rd. (one side) from Weaver Dairy Rd to Erwin Rd.
- Ransom St. (east) from McCauley St. to University Dr.
- Rosemary St. (north) From 157 E. Rosemary to Henderson St.
- Rosemary St. (north) from Pickard St to Boundary St
- Rosemary St (south) at S.Graham St
- Rosemary St (south) at Roberson St
- Rosemary St (north) west of Church St
- Rosemary St (north) east of Church St
- Willow Dr. (west) south of Conner Dr.
- West Rosemary St. north side, east and west of Church St.
- West Rosemary St. south side at Roberson St. and at Graham St.

Local Streets

University Drive (north) from Pittsboro St to Ransom St.

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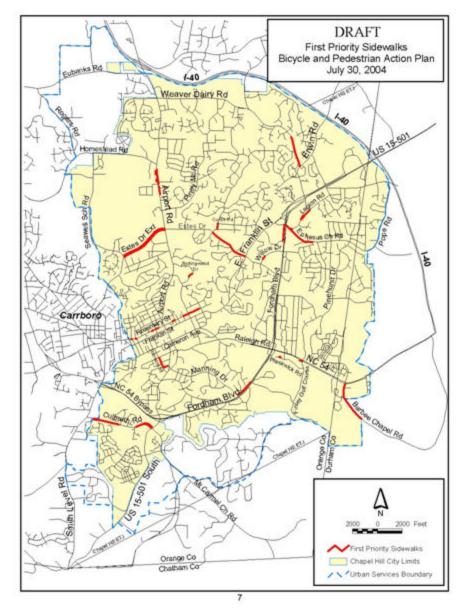
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- Curtis Rd. (west) from Clayton Rd. to Elliott Rd.
- Bolinwood Dr. (west) from Bolinwood Dr.
- Northside neighborhood (various) following neighborhood study planned 2004
- Prestwick Rd. (north) short link into shopping center.

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Second Priority

Projects considered to be second priority are drawn from the Towns Transportation Improvement Priority List and its sidewalks priority list (projects scoring between 20 to 23 points according to the Town sidewalks ranking system). **See Map 2.**

Arterial Streets

- * # Erwin Rd (one side) from Weaver Dairy Rd to 15-501 By-pass (North Fordham Blvd)
- * # Estes Dr. (north) from Airport Rd to Curtis Rd.
- * # Estes Dr. Ext from western town limits (University Railroad Spur) to Seawell School Rd
- * # Homestead Rd (south) from Hearthstone La. to Weaver Dairy Rd Ext.
- * # Homestead Rd (south) from Orange Human Services to Shelter
- * # Homestead Rd (south) from Seawell School Rd to existing sidewalk
- * Sage Rd (west) south from Coleridge Dr.
- * US 15-501 South (east) from Mount Carmel Church Rd to S. Columbia St. ←

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Collector Streets

- Hillsborough St (west) from Bolinwood Dr. to Airport Rd.
- Kingston Dr. (east) from Weaver Dairy Road to Cedar Ct.
- McCauley St: (south) from Brookside Dr. to Pittsboro St.
- Pritchard Ave. (one side) from Longview St. to Umstead Dr.
- * # Seawell School Rd from Homestead Rd to High School Rd
- Piney Mountain Rd (north) from Forest Creek Dr. to Priestly Circle Dr.
- Hillsborough St. (east) from Rosemary St to Mill Race Dr.
- Sedgefield Dr. (one side) for entire length.
- *Sunrise Rd (east) from Sweeten Cir. Dr. northwards (development related)
- · Westminster Dr (north) from east of Banks Rd
- Caswell Road (north) for entire length
- *Umstead Dr. (south) from Estes Dr. ext to Village Dr. (link to Bolin Creek Greenway)

Local Streets

- University Mall entrances: S. Estes Dr. (2 locations west side) Request Mall owners to provide or require as future development stipulation.
- University Mall north entrance at Willow Dr. Request Mall owners to provide or require as future development stipulation.
- Europa Dr. (west) from Europa Dr. missing sections entire length
- Dobbins Dr. (north) missing sections for entire length

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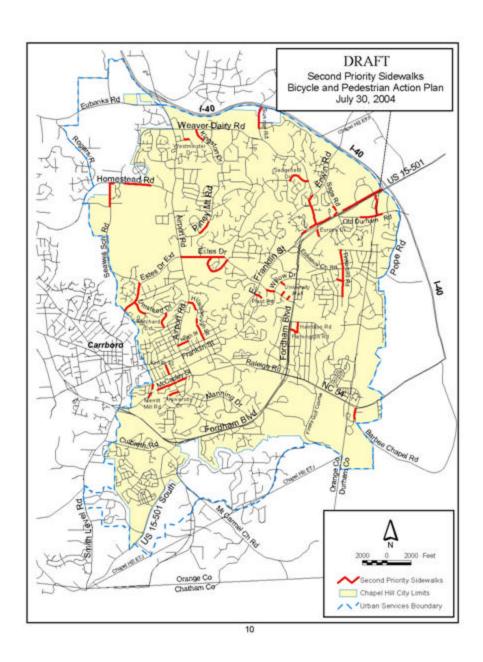
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- · Kenan Street (east) from Cameron Ave to Franklin St
- McCauley St. (north) from Brookside Dr. to Brookside Dr. Ext.
- West University Dr (south) from Ransom St to Westwood Dr.
- Lakeview Dr. (east) from Old Durham Chapel Hill Rd. to 15/501(require as development stipulation).
- Hamilton Rd (east) from Cleland Dr to Flemington Rd.
- Flemington Rd (one side) from Hamilton Rd to Hayes Rd.
- North Street (north) Airport Rd to Henderson St.
- Plant Road (south) from Parks & Recreation facility to Franklin St.
- Manly St. from Longleaf Dr. to Tinkerbell Dr
- Tinkerbell Rd. from Ephesus Ch. Rd. to LeClair St.
- Tinkerbell Rd. from Ephesus Ch. Rd. to Fountain Ridge Rd.

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Deleted: <#>* # Mason Farm Road (south) from Purefoy Rd to 15-501

Fordham Blvd. (facility is included in UNC Campus Development Plan)¶

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Third Priority

Projects considered to be third priority are drawn from the Towns Transportation Improvement Priority List and its sidewalks priority list (projects scoring less than 20 points according to the Town sidewalks ranking system). See Map 3

Arterial Streets

Fordham Blvd (north) from rear of Binkley Baptist Church to Estes Drive (See also Section 3.2 "Off road paths").

Collector Streets

- * # Old Durham Chapel Hill Rd. from US 15-501to Town limits (facility to continue into City of Durham)
- Burning Tree Dr. from NC54 to Pinehurst Dr. Cameron Ave (south) southeast corner at Merritt Mill Rd.

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- Cleland Drive (south) for entire length
- Cleland Rd (south) for entire length
- Eastwood Rd (north) at Shady Lawn Dr.
- Country Club Rd.(north) from Raleigh Rd to Gimghoul Rd and 300 feet west (UNC Campus possible upgrade from Chapel Hill Gravel to permanent material).
- Cedar Hills Dr. (one side) from Weaver Dairy Rd. to Partin St.
- Honeysuckle Rd. Sedgefield Dr. to N. Lakeshore Dr.
- Dixie Dr (one side) to Cynthia Dr.
- Cynthia Dr. (one side from Dixie Dr. to Seminole Dr.
- Dixie La (one side) for entire length
- Lake Ellen Drive from Piney Mountain Rd to Forest Hills Rd
- Mallette St. from West Franklin St to Cameron Ave.
- Stateside Dr (one side) from Airport Rd to Dixie Dr
- Old Oxford Rd missing sections from Erwin Rd to Booker Creek Rd
- Westminster Dr. (north) from west of Banks Rd to Airport Rd.
- Willow Dr. from Longleaf Dr. to Emory Dr.

Local Streets

- Elizabeth Street (north) from Penny Ln. to East Franklin St.
- Rigsbee Rd. (one side) from Piney Mountain Rd to Brookview Dr.
- Roosevelt Drive (east) for entire length.
- Skipper Bowles Dr. (north) Manning Dr. to Manning Dr. (UNC Campus)
- Brookview Dr. for entire length.
- Booker Creek Rd for entire length.
- Shady Lawn Road (north) from Eastwood Rd to Lakeshore Dr.

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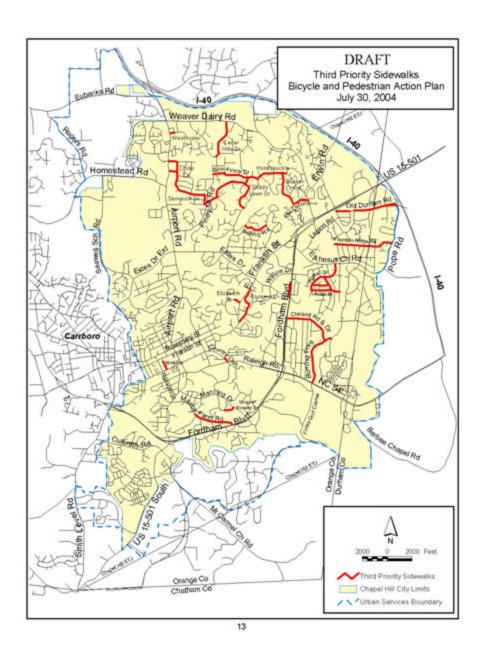
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- Rolling Road (south) from South Lakeshore Dr to Ridgecrest Dr. Forest Hills Rd from Lake Ellen Dr to Seminole Dr
- Seminole Dr (one side) for entire length.
- LeClair St. from Longleaf Dr. to Tinkerbell Dr.
- Longleaf Dr. from Ephesus Ch. Rd. to LeClair St.
- Churchill Dr. from Longleaf Dr. to LeClair St.
- Fountain Ridge Rd. for entire length.

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Long Range Projects.

Projects considered to be long range projects are drawn from the Towns Transportation Improvement Priority List and its sidewalks priority list and are located either beyond present town limits or in partially developed areas of the town. **See Map 4**

Arterial Streets

- *Airport Rd from Estes Dr. to Critz Dr. (west). Require as stipulation to UNC Carolina North/ Horace Williams Development.
- *Airport Road (west) from Weaver Dairy Rd to Northwoods Dr. (outside town limits).
- *Airport Road (west) from Northwoods Dr. to Eubanks Rd. (outside town limits).
- * # Homestead Rd (one side from High School Rd to Seawell School Rd (project outside town limits).
- * # Homestead Rd (north) from Hearthstone La. to Weaver Dairy Rd Ext.
- * # Homestead Rd (north) from Weaver Dairy Rd to Airport Rd.
- * # Ephesus Church Rd (north) from Sharon Rd. to Pope Rd.
- * Pope Road (both sides) from Ephesus Church Rd to Old Durham Rd.(outside of Town limits in Durham City County jurisdiction)
- * # US 15-501 By-pass (North Fordham Blvd) Corridor improvement from East Franklin Street to eastern town limits and beyond. (Within corridor opportunities may exist to provide sidewalks through development/redevelopment along existing service roads which run parallel to thoroughfare).
- *NC 54 East of Barbee Chapel Rd to Town Limits

Collector Streets

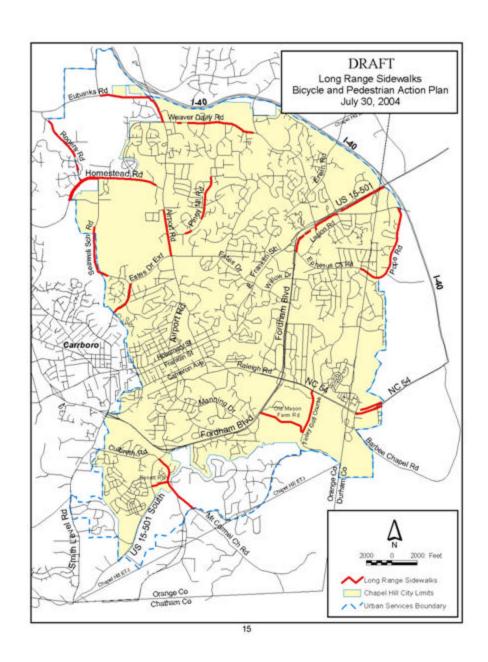
- *Rogers Rd (east) from Homestead Rd to Sylvan Way. (Outside town limits)
- *Rogers Rd (east) from Rusch Rd to Urban Services Boundary.
- *Bennett Rd. (north) from US 15-501South, to Fire Station 5
- * # Seawell School Rd. from Seawell Elementary School to Hanover Pl. (mostly in Carrboro Town limits).
- *Eubanks Rd from Urban Services Boundary to Airport Rd.
- * # Mount Carmel Church Rd: US 15-501South to southern town limits (possible first phase to Azalea Dr.)
- * # Piney Mountain Rd. from Woodshire La. To Old Forest Creek Dr.
- * # Piney Mountain Rd. from Priestly Circle Dr. to Rigsbee Rd.

Local Streets

- Old Mason Fm Rd (one side) for entire length.
- Finley Golf Course Rd (one side) for entire length.

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3.2 Off Road Paths

Off road paths are surfaced, shared facilities for pedestrians and bicyclists. They share many of the characteristics of greenways except the primary function is intended to be more for transportation than recreation. Paved greenways and paved off-road paths will likely be constructed of the same materials, concrete or asphalt, unpaved greenways are often dirt unless they are heavily worn. Unpaved off —road paths are more likely to be constructed of compacted crushed aggregate or Chapel Hill Gravel because of wear and tear. The selection of appropriate materials may vary with local conditions such as at watercourses or in wooded areas.

The proposed plan contains only a few of these facilities. However, for the purposes of establishing priorities for a Town construction program, projects 1 and 2 are strategically important facilitating access for both pedestrians and cyclists. In combination they would create a link between neighborhoods in the south east of the town (Glen Lennox, The Oaks and Meadowmont) to the UNC campus. They should be scheduled together and linked to the provision of a crosswalk at 15-501 and Old Mason Farm Rd.

First Priority

- 1. 15-501 South Fordham Boulevard from Manning Dr to Kings Mill Rd. (path on north side of street parallel to road way. (Chapel Hill TIP priority)
- 2. 15-501 South Fordham Boulevard by-pass from Old Mason Farm Rd to Prestwick Rd through UNC property.
- 3. Merritt Mill Rd to west end of Cameron Avenue.(facilitate access to campus)

Second Priority

- 4. Fordham Blvd (north) from rear of Binkley Baptist Church to Estes Dr. (require as stipulation to any rehabilitation of University Mall). Part of a north south facility providing access to University Mall.
- 5. Christopher Rd (extension) from northern end to S. Estes Dr.
- US 15-501 South Fordham Boulevard from Meadow Lane to Morgan Creek Greenway.
- 7. NC54 Finley Golf Course Rd to Hamilton Rd (south side) extend existing path as part of any redevelopment of University Inn property.

Third Priority

8. From Broad Street (Carrboro) to Tanyard Branch greenway. (Consider as a possible addition to Town Greenways Master Plan).

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The existing unpaved Battle Branch Greenway Trail connects UNC Campus and Downtown with The Community Center Park and also Estes Drive/ University Mall. The provision of a hard surfaced off road path within the corridor of the Battle Branch Greenway Trail could provide an off road alternative for cyclists which would by-pass Franklin Street, Fordham Boulevard and Raleigh Road. The provision of a path here suitable for cyclists would be a desirable addition to this plan.¶

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3.3. Crossing Improvements

The bicycle and pedestrian facilities maps identify the locations where improvements to existing crossings or new crossings would assist bicyclists and pedestrians. The list is not definitive; it reflects input at the time the plan was prepared, and in future other locations may be identified. Further, the locations shown are not fixed. Further action is recommended by this plan to investigate if and how and then what improvements could be made in these locations. Improvements may include but are not limited to the following:

Street markings, advanced signing, signals (automatic and user activated), central refuges to assist crossing of wider streets or speed tables (ramped crosswalk area, raised to level of sidewalk).

The following list is not exhaustive and locations are not fixed. Locations will depend on safety and spacing requirements in relation to intersections and driveways.

Several potential underpasses associated with the greenways master plan and potential footbridges are also identified on the facilities maps.

Crossing improvements should be provided in combination with the provision of sidewalk, and greenway facilities. The following facilities are identified by street.

Airport Road:

Estes Dr.

Mount Bolus Rd

Airport Dr.

Stateside Dr.

Weaver Dairy Rd.

Westminster Dr.

N. Columbia St.

Piney Mountain. Rd.

Bolin Creek Greenway (potential underpass)

Ashe Place:

Footbridge across Morgan Creek linking to Arboretum Drive, Farrington Hills.

E. Barbee Chapel Rd

Harris Teeter and Village center (Meadowmont)

Barclay Road:

Access to Estes Drive extension from end of Barclay Rd.

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Cameron Ave

Merritt Mill Rd. Country Club Rd

Country Club Road

Termination of Battle Branch Greenway

Culbreth Rd

Fan Branch Greenway (potential underpass)

Erwin Rd

Dry Creek Greenway Trail

Estes Drive. Ext.

Bolin Creek Greenway (potential underpass)

N. Estes Drive

Curtis Rd. Library Dr.

S. Estes Drive

Community Park/ Willow Dr.

E.Franklin St

Bolin Creek greenway Booker Creek greenway at Eastgate Mall Elliott Rd. Elizabeth Street

S. Estes Dr.

W. Franklin St

Merritt Mill Rd. Mallette St. Church St. Graham St

Fordham Blvd. North

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Cleland Rd Brandon Rd S. Estes Dr. Ephesus Ch. Rd. Willow Dr.

S. Fordham Boulevard.

Morgan Creek Greenway (potential underpass)
Manning Dr
Oteys Rd
Old Mason Fm Rd
Mason Fm Rd

Homestead Rd

Hearthstone La. Rogers Rd High School Rd. Weaver Dairy Rd. Ext. Homestead Park.

NC54 By-pass

East of Merritt Mill Rd.

NC54

Barbee Chapel Rd Meadowmont La & Friday Center Burning Tree/Finley Golf Course Rd. 15/501 ramps

Prestwick Rd

Rear of shopping center

Seawell School Rd.

High School Rd.

University railroad crossing (connect Rail trail to Carrboro trails)

Sprunt St

Mid block east of UNC Health Center

Umstead Drive.

Pritchard Ext.

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US 15-501

Eastowne Dr

Silver Creek Trail

Weaver Dairy Rd

Kingston Dr Entrance to East Chapel Hill High School Silo Dr Entrance to Carol Woods

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3.4 Bicycle Advisory Routes

Bicycle Advisory Routes are identified on the proposed plan to be signed as routes for cyclists. They connect parts of the town via local and collector streets as alternatives to more heavily trafficked arterial streets.

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Arrowhead Rd

Audubon Rd

Bolin Creek Greenway

Deleted: Battle Branch Trail¶

Booker Creek Rd

Brookview Dr.

Burning Tree Dr.

Caldwell St

Cameron Ave

Cedar Hills Dr

Christopher Rd.

Church St

Cleland Dr.

Cleland Rd

Curtis Rd

Dobbins Dr

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Elliott Rd

Europa Dr.

Finley Golf Course Rd.

Greenwood Rd Deleted: Forest Hills Dr.¶

Hamilton Rd

Hayes Rd

Honeysuckle Rd

Kings Mill Rd

Lanark Rd Deleted: Lake Ellen Dr¶

Laurel Hill Rd.

Legion Rd

Morgan Creek Rd

N. Columbia St

North Lakeshore Dr

North St.

Old Durham Chapel Hill Rd

Old Mason Farm Rd

Park Pl.

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Partin St.

Pinehurst Dr.

Prestwick Rd

Ransom St.

Rigsbee Rd

Rosemary St

S. Boundary

Sandy Creek Rd.

Seawell School Rd

Sedgefield Dr.

Sunrise Rd Umstead Dr.

Weaver Dairy Rd. Ext.

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3.5 Bicycle Facilities

Existing bicycle facilities are identified on the bicycle facilities plan map as either wide outside lanes or striped bicycle lanes. The map also identifies which greenways have paved surfaces.

In November 2003, the Town adopted a revised bicycle facilities policy which calls for the provision of striped bicycle lanes on newly constructed or reconstructed Arterial Streets and for either striped bicycle lanes or wide outside lanes on Collector Streets depending on site specific circumstances. (Please see Appendix 5 for the full policy).

The policy recognizes that "There are variable circumstances exist in the Town of Chapel Hill such as topography, vehicle speed and volume, impediments such as parked vehicles, drainage grates or raised reflectors, access to public facilities and activity centers and available right of way." And states that:

"Within the Planning Jurisdiction of the Town of Chapel Hill, the appropriate design, type and width of bicycle facilities will be assessed on an individual and site-specific basis depending on the circumstances that exist."

The Town Manager has been authorized by the Town Council to utilize this policy in reviewing development plans and in the design of roadway improvements within the Chapel Hill Planning Jurisdiction.

The following is a list of long range road way improvements to arterial and collector streets as expressed in the Town's Transportation Priority List. These improvements

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include the provision of bicycle lanes with a preference for striped lanes if possible in accordance with the Town's bicycle facilities policy.

Proposed Facilities included in Town of Chapel Hill Transportation Improvement Priority List.

- Barbee Chapel Rd from NC 54 to Southeastern town limits.
- Erwin Rd from eastern town limits to US 15-501.
- Estes Dr ext. from western town limits to Airport Rd.
- Finley Golf Course Rd from NC 54 to Old Mason fm Rd.
- Homestead Rd from western town limits to Airport Rd.
- Mason Farm Rd. from South Fordham Blvd. to Finley Golf Course Rd.
- Mount Carmel Church Rd from US 15-501South to Urban Services Boundary.
- Old Durham Chapel Hill Rd from northern town limits to US 15-501. (project extends to Durham feasibility in study 2004)
- Piney Mountain Rd from Airport Rd to Rigsbee Rd.
- Pope Rd from Ephesus Church Rd to Old Durham Chapel Hill Rd.
- Seawell School Rd from Estes Dr ext. to Homestead Rd. (feasibility study in 2004)
- US 15-501 from Northeastern town limits to E. Franklin St.

Facilities Programmed for Construction on State Maintained Streets

Striped Bicycle Lanes

•	US 15-501(South) north of Main St. Southern Village to Culbreth Rd.	2004
•	S. Columbia St. South Fordham Blvd. to Manning Dr.	2007
•	Weaver Dairy Rd.	2007

Proposed Assessment for Potential Future Facilities

Chapter 4 of this plan sets out a recommended action for the Town to make an assessment of each existing arterial and collector streets in order to determine whether wide outside lanes or bicycle lanes would be appropriate.

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Chapter 4.0 Implementation Strategy

This chapter describes various actions which have been categorized as either involving engineering improvements or actions for education and encouragement that would help increase bicycle and pedestrian use.

Table 1 which is located at the end of this chapter presents a summary schedule of these initiatives and actions for implementing the Action plan. It classifies the actions according to a time frame and type of action. Actions are shown with provisional timeframes as being implemented in either the short, medium or long term.

4.1 Engineering Actions

The Pedestrian Facilities Plan and the Bicycle facilities Plan outlined in Chapter 3 will take many years to complete through the coordination of a Town construction program, State improvement programs and through the development or redevelopment of adjoining properties.

Principal Sources of Funding

Since the mid 1980s the Town has had a construction program for facilities. It has the most control over its own construction program, but the program is dependent on the availability of resources. Funds and manpower are needed to implement. The Town has historically used a combination of its own public works crew and private contractors to construct facilities. Funding for facilities in the Town's annual capital budget cannot be guaranteed because of the uncertainties of the economy and contributions to the costs of providing local services from State and Federal funds. In November 2003, when citizens endorsed a sidewalks and streets bond, this provided a commitment to a specific source of funding for facilities.

Improvements to State maintained streets are normally scheduled and provided through State improvement programs. These programs are subject to competing demands and priorities for projects and improvements from other municipalities and agencies in our region. They are also subject to the availability of funds. State programs identify improvements for a six year period and can also identify long range projects for inclusion in a future program beyond that timeframe.

Section 4.1.1 below includes recommendations for implementation of the facilities identified on the plan maps and listed in Chapter 3.

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Section 4.1.2 identifies how individual improvements could be combined into packages for implementation.

4.1.1 Approach for Implementation

The facilities improvements set out on Chapter 3 "Proposed Plan" and identified on the bicycle and pedestrian facilities maps will take many years to accomplish. While there may be a natural tendency where public money is being spent, to spread improvements around, there should be an overriding principle to undertake where possible packages of improvements.

The underlying objectives of this plan set out in chapter 1 envision that emphasis will be given to providing continuous facilities, connecting existing and programmed facilities, providing access to the most popular origins and destinations.

Packages of improvements would be made up of a combination of sidewalks, crossing improvements, off road paths and bicycle facilities which provide accessibility to an area, connecting it to a wider system.

Individual or isolated improvements would still be undertaken and the following considerations would apply.

Sidewalks:

These should be selected from the either the first or second priority categories as funds and material considerations allow. Priority shall be given to the expenditure of Town funds for sidewalk construction on Town maintained Streets Material consideration would include but are not limited to the availability of right —of- way, construction feasibility, necessity and the potential combination with other proposed bicycle and pedestrian facilities identified in the plan. Projects would not normally be selected from the third priority category unless or until there were no projects feasible in the higher priority categories for inclusion in the Town's annual construction plan in any given year. Long range improvements would either be tackled as development reached these locations or as state improvement projects were undertaken.

Off Road Paths:

Highest priority is recommended for the construction of facilities linking Manning Drive to Prestwick Road as part of a combination of improvements to link the Meadowmont, Glen Lennox and the Oaks neighborhoods to the UNC central Campus.

Crossing improvements:

combine a selection of these individual improvements into a specific package for implementation.

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In order to assess which are the most pressing crossing improvements for implementation identified in this plan, a detailed look of each location should be undertaken. This should be programmed if possible as a first priority action of this plan. Investigation should be carried out by the spring of 2005 If possible.

Priority thereafter would be given to the implementation of crossing improvements which would enhance safety, connectivity with other facilities and that could be carried out in conjunction with the provision of other facilities identified in the Plan.

Bicycle Advisory Routes

2 or 3 routes should be selected as a pilot initiative and then if successful sign other routes as funds allow. The routes could either be numbered or named. If named suggestions should be considered by a Council Naming Committee.

Bicycle Facilities (Bicycle lanes):

Bicycle lanes and striped bicycle lanes if possible will be implemented according to the Town's adopted bicycle facilities policy. Before this can be done it is a recommended action of this plan that the Town makes an assessment of each existing arterial and collector street in order to determine whether wide outside lanes or bicycle lanes would be appropriate. See paragraph 4.1.5 below.

4.1.2 Package of Improvements

The following identify potential, packages of improvements for specific areas of the town. They are identified as a guide to show how individual improvements could be combined if implemented incrementally. An asterisk indicates a State maintained street and # indicates if the improvement is included on the Town of Chapel Hill Transportation Improvement Priority list.

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Package 1 Glen Lennox, The Oaks and Meadowmont to UNC Central Campus and to University Mall. (See Map 5)

Sidewalks:

- * # Barbee Chapel (west) Rd from NC54 to Finley Forest
- *NC 54 East: (south) west of Finley Golf Course Rd.
- Hamilton Rd (east) from Cleland Dr to Flemington Rd.
- Cleland Rd from Hamilton Rd to southern end of existing "Muirhead Trail" offroad path.
- Prestwick Rd (link on north side into shopping center.

Off Road Paths:

- *# US 15- 501 South Fordham Boulevard from Manning Dr to Old Mason Farm Rd. (path parallel to road way. (Chapel Hill TIP priority)
- US 15-501 South Fordham Boulevard by-pass from Old Mason Farm Rd to Prestwick Rd through UNC property.

Crossings:

- *US 15-501 (North):
 - Bolin Creek Greenway (pot ential underpass),
 - Cleland Rd
 - Brandon Rd
 - *S. Estes Dr,
- *NC54:
 - Barbee Chapel Rd,
 - Meadowmont La & Friday Center ,
 - Burning Tree/Finley Golf Course Rd,
 - 15/501 ramps.
- Prestwick Rd
- *S. Fordham Boulevard:
 - Manning Dr, Old Mason Fm Rd.

Bicycle Advisory Routes:

- Burning Tree Dr.
- Cleland Dr.
- Cleland Rd
- Finley Golf Course Rd.
- Hamilton Rd
- Hayes Rd

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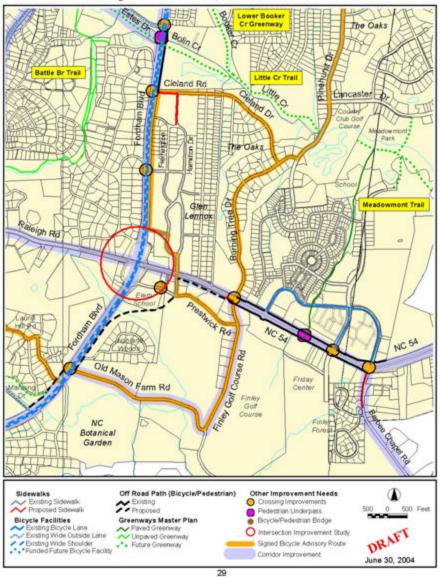
- Laurel Hill Rd.
- Old Mason Farm Rd
- Pinehurst Dr.
- Prestwick Rd.

Bicycle Facilities.

Apply bicycle facilities policy tα

- Barbee Chapel Road,
- NC54,
- South Fordham Boulevard,
- Raleigh Rd,
- Finley Golf Course Road and
- Old Mason Farm Road

Map 5
Package 1: Glen Lennox, The Oaks and Meadowmont



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Package 2 Southern Village to UNC Central Campus and Downtown. (See Map 6)

Sidewalks:

- *Culbreth Rd (south) from US 15-501South to Culbreth Park Dr.
- *Culbreth Rd from US 15-501South, north side to Channing La.
- *Culbreth Rd (south) from Cobble Ridge Dr. west to town limits
- *Culbreth Rd (north) Adam Way to Smith Level Rd.

Off Road Paths:

 Meadow Lane (parallels US 15-501 South Fordham Boulevard) to Morgan Creek Greenway.

Crossings:

- *Culbreth Rd:
 - Fan Branch Greenway (potential underpass)
- *S. Fordham Boulevard:
 - Morgan Creek Greenway (potential underpass)

Bicycle Advisory Routes:

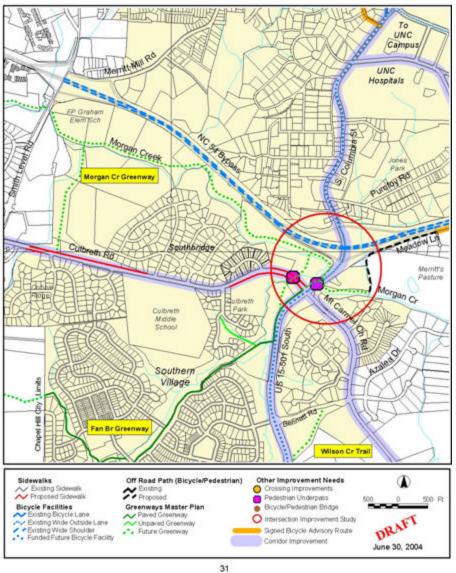
- Meadow Lane (depends upon off-road path)
- Morgan Creek Road (depends upon off-road path)

Bicycle Facilities

Apply bicycle facilities policy to:

· Culbreth Road.

Map 6 Package 2: Southern Village to UNC Central Campus and Downtown



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Package 3 Intersection Ephesus Church Rd and US 15-501. (See Map7)

Sidewalks

- *US 15-501 By-pass (North Fordham Blvd) (west) from Ephesus Church Rd to Elliott Rd.
- Legion Rd (both sides) Europa Dr. to Ephesus Church Rd.
- · Legion Rd intersection with Ephesus Church Rd.
- *Ephesus Church Rd. (south) from 15-501 By-pass (North Fordham Blvd) to
 *Eden La.

Off Road Paths:

 Fordham Blvd (north) from rear of Binkley Baptist Church to Estes Dr. (require as stipulation to any rehabilitation of University Mall). Part of a north south facility providing access to University Mall.

Crossings:

Fordham Blvd. North*

- Ephesus Ch. Rd.
- Willow Dr.
- Elliott Road (potential underpass for Booker Creek Greenway)
- S. Estes Dr.

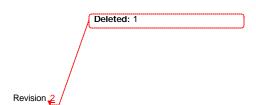
Bicycle Advisory Routes:

- Legion Rd
- Booker Creek Greenway
- Dobbins Dr
- Elliott Rd
- Europa Dr.

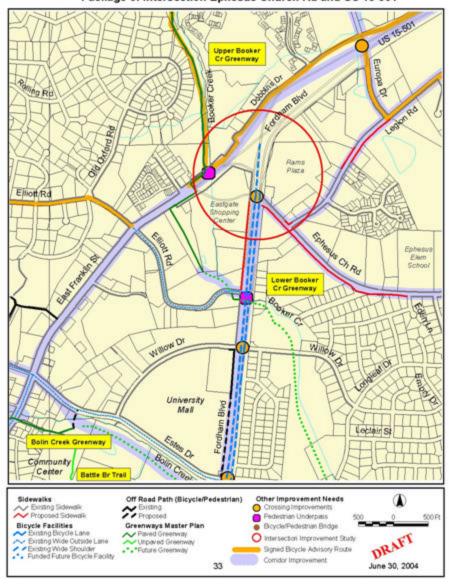
Bicycle Facilities:

Apply bicycle facilities policy to:

- Ephesus Church Road;
- Legion Road and



Map 7
Package 3: Intersection Ephesus Church Rd and US 15-501



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Package 4 Downtown (See Map 8)

Sidewalks:

- Ransom St. (east) from McCauley St. to University Dr.
- Rosemary St. (north) From 157 E. Rosemary to Henderson St.
- Rosemary St. (north) from Pickard St to Boundary St
- University Drive (north) from Pittsboro St to Ransom St.
- McCauley St: (south) from Brookside Dr. to Pittsboro St.
- Kenan Street (east) from Cameron Ave to Franklin St
- McCauley St. (north) from Brookside Dr. to Brookside Dr. Ext.
- West University Dr (south) from Ransom St to Westwood Dr.
- West Rosemary Street east and west of Church St, at S.Graham St. and at Roberson St.
- North Street (north) Airport Rd to Henderson St.
- Mallette St. (west) from Cameron Avenue to West Franklin St.

Off Road Paths:

• Merritt Mill Rd to west end of Cameron Avenue.(facilitate access to campus)

Crossings:

- *W. Franklin St:
 - Merritt Mill Rd,
 - Mallett e St,
 - Church St and
 - Graham St
- *Cameron Ave:
 - Merritt Mill Rd.
- *Airport Rd:
 - North St.

Bicycle Advisory Routes:

- Caldwell St
- Cameron Ave
- Church St
- N. Columbia St
- North St.
- · Ransom St.
- Rosemary St
- S. Boundary

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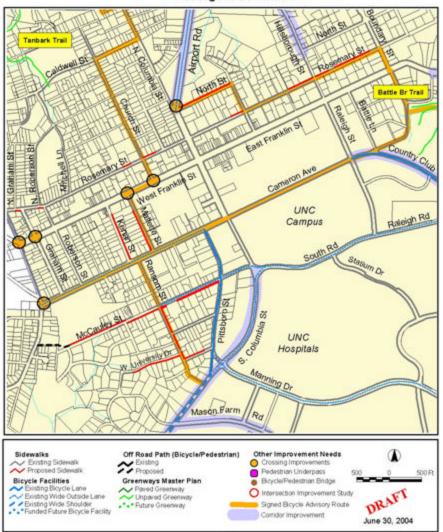
Bicycle Facilities: Apply bicycle facilities policy to:

- Franklin Street,
- Rosemary Street and
- Cameron Avenue.

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Map 8 Package 4: Downtown



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Package 5 Airport Road. A separate study identifying potential improvements for bicyclists and pedestrians using the Airport Road Corridor from I-40 to Franklin Street is being carried out as part of the Town's Active Living by Design Program. The University of North Carolina Highway Safety Research Unit has been contracted to prepare a report with a package of recommended improvements. A report is due to the Town Council at the end of June 2004)

Package 6 Northside Neighborhood. The Northside neighborhood is an established residential neighborhood located adjacent the Downtown. As part of the Town's Active Living by Design Program a separate study identifying potential improvement for pedestrians is being carried out. The study is provisionally due to report to The Town Council in the fall of 2004. A package of improvements is expected to be recommended.

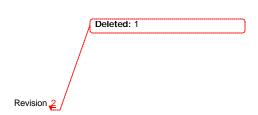
4.1.3 Small area studies

The design and layout of the following listed intersections are perceived as barriers to bicyclists and pedestrians with origins and destinations on either side them. Pedestrians and slower moving cyclists can be in conflict with vehicles trying to change lanes and make turning movements. Cloverleaf intersection designs are particularly difficult for cyclists to use. The intersections are all located on State maintained streets. Improvements which may include alternative facilities are needed to get users safely through or around these locations:

- NC54 and US 15-501
- NC54 by -pass and Merritt Mill Road
- US 15-501 South, S. Columbia and Culbreth Road and Mount Carmel Church Road (study to include providing a sidewalk crossing James Taylor bridge on the east side of the highway to connect S. Columbia and Mount Carmel Church Road)
- US 15-501 North and Ephesus Church Road

Recommended Action: It is recommended that the Town Council request that the North Carolina Department of Transportation (NCDOT) to make an assessment of these locations for solutions to overcome bicycle and pedestrian impediments to use.

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4.1.4 Pedestrian performance measures (procedures developed for evaluating the operating performance of pedestrian facilities).

The Town of Chapel Hill 2000 Comprehensive Plan, included an Action to develop a comprehensive pedestrian and bicycle network. Specifically it identified 2 new initiatives to address the main action:

- The Development of this Bicycle and Pedestrian Action Plan
- Adoption of pedestrian/bicycle operating performance measures.

For the latter action page 94 of the Town of Chapel Hill 2000 Comprehensive Plan, advocated the development and adoption of a pedestrian levels of service performance measures. The performance measures would be used to evaluate the operating performance of a pedestrian network. The performance measures would include factors including directness, continuity, safety crossing a street, visual attractiveness and visual features and sense of security.

The Comprehensive Plan identified potential pedestrian zones where such performance measures might be applied (Please see Appendix 6) The Approved Town Council Goals for 2004 have targeted completion of this task in early 2005

Adopted Town Council Goal and Plan Action: Develop and adopt pedestrian performance measures.

4.1.5 Bicycle performance measures (procedures developed for evaluating the operating performance of bicycle facilities).

As stated in the previous section the Town of Chapel Hill Comprehensive Plan, 2000, identifies the development of bicycle performance measures as an initiative tied to the development of a comprehensive pedestrian and bicycle network

Page 96 of the Town of Chapel Hill Comprehensive Plan, 2000 states that:

"Intuitively the Town of Chapel Hill has all the makings for a community with high bicycle mobility: a University population, high trip density with relatively short trips, and good climate. The completeness of the bicycle network to provide safe and direct connections, however, is lacking.

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Further complicating matters, there is no methodology widely accepted by engineers, planners, or bicycle coordinators that will allow the ability of a roadway to allow efficient operation of both bicycles and motor vehicles to be determined. Determining how existing traffic operations and geometric conditions impact a bicyclist's decision to use or not use a specific roadway is the first step in defining the bicycle compatibility or performance of the roadway."

The Comprehensive Plan included the following recommendations on page 96: "Actions: Pedestrian/Bicycle Operating Performance

- Use the adopted procedures to evaluate existing and planned pedestrian and bicycle facilities (Town staff)
- Hold a Town/NCDOT summit on bicycle compatible highway design and develop roadway design standards that incorporate bicycle Ianes (Citizens, Town staff, NC DOT)
- Incorporate schedule to implement bicycle lane design standards into the Bicycle Improvement Action Plan developed per Strategy 10A-2 (Walks and Bikeways Commission, Town staff, Town Council)"

Except in a few cases where road improvement plans are sufficiently developed it does not define the streets in the town where particular types of bicycle lane are planned. The Town's revised bicycle facilities policy sets out a preference for the provision of striped bicycle lanes on newly constructed or reconstructed Arterial Streets and for either striped bicycle lanes or wide outside lanes on Collector Streets depending on site specific circumstances. However, until an assessment of each street can be made it is not possible to identify what type of facility is appropriate to the particular location.

Adopted Town Council Goal and Plan Action: Develop and adopt bicycle performance measures.

Recommended Action: That the Town Council of the Town of Chapel Hill undertake a preliminary assessment of the existing streets for the application of its adopted bicycle facilities policy as part of the development of the bicycle performance measures. Thereafter the bicycle facilities map could be amended to be more specific.

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4.1.6 Town bicycle parking standards.

Bicycle parking requirements are included in the Town of Chapel Hill Land Use Management Ordinance. These identify the number and type of spaces which should be provided as part of new developments and redevelopments. The Town of Chapel Hill Design Manual includes information on the type of bicycle parking facilities and recommendations for their location.

Recommended Action: It is recommended that every two years the Town bicycle parking standards be reviewed in the light of experience. It is also recommended that supplementary graphic details of appropriate parking stands and storage facilities be selected by the Bicycle and Pedestrian advisory Board for inclusion in the Town of Chapel Hill Standard Details.

4.1.7 Traffic Control Devices:

The free movement of bicyclists and pedestrians can be restricted by traffic control devices at street intersections. The Town has traditionally installed pedestrian activated crossing signals instead of having an automatic pedestrian phase at traffic lights.

Traditional traffic lights include detection loops installed in the pavement to detect the presence of waiting vehicles and cause the light sequence to change. These loops are normally activated by the mass of metal contained in the vehicle. Bicycles often have insufficient metal mass to be detected and so the cyclist is at a disadvantage. In the summer of 2004, the Town will install an experimental bicycle loop detector at an intersection in the Town to evaluate its performance.

Recommended Action: That the Bicycle and Pedestrian Advisory Board work with Town staff to review existing Town standards for traffic control devices and to develop a policy and program for detecting pedestrians and bicyclists at traffic controlled intersections.

4.1.8 Sunken drainage grates.

The Town of Chapel Hill Design Manual requires that new streets been installed with curb inlets clear of travel lanes. However, many of the existing arterial and collector streets in the town which, are mainly State maintained, have slatted drainage grates in the pavement. When streets are resurfaced, a common oversight is not to make adjustments to the height of existing drainage grates. Resurfacing can result in the drainage grate being sunken inches below the travel lane surface. This is a hazard to

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bicyclists. On Airport Road and Raleigh Road hazardous sunken grates are marked with a diagonal white stripe.

Recommended Action: That the Bicycle and Pedestrian Advisory Board develop for the Town a policy and program for raising sunken drainage grates.

<u>4.1,9 Corridor Improvements</u>

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Roads into and through Chapel Hill can be improved in order to facilitate Pedestrian and Cyclist movement. These corridor improvement routes are colored purple on the Facilities Plans. The bicycle facilities policies should be applied to these corridors.

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Recommended Action: That in addition to the specific improvements identified on the facilities maps whenever regional plans for the corridors are being prepared they should include facilities for bicyclist and pedestrians.

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4.2 Education and Encouragement Actions:

The Town of Chapel Hill, Comprehensive Plan page 97 states that:

"Bicycle facility development and maintenance should be couple with other measures to promote bicycle usage in Chapel Hill, such as a public information and education program."

4.2.1 Bicycle education class

Despite opportunities to expand greenways and other off-road facilities through recent bond funding, the town's street network will continue to be the primary facilities for cyclists. In order to safely increase bicycle usage in the town, it is important that cyclists (1) feel confident riding in traffic, and (2) feel comfortable using their bicycle to travel throughout the town. Bicycle education classes are an important way to achieve these goals and have been used by many localities as part of a comprehensive program to enhance bicycle usage. In the last several years, successful classes have been offered in Cary, Carrboro and Durham.

Recommended Action: That the Town of Chapel Hill offer bicycle education classes and provide facilities for bicycle instructor training.

4.2.2 Historic district/downtown way-marked walk

The central core of the Town of Chapel Hill contains two historic districts, the UNC central campus and the downtown. These are overlapping attractions and destinations. A way-marked walk (route/ trail marked by signs) could connect places of interest, recreation and commerce to enhance the visitor experience. It could also provide an opportunity to display public art and also interpretive material about places of interest.

Recommended Action: That the Bicycle and Pedestrian Advisory Board or a sub-committee thereof prepare a proposal for a historic district/downtown way-marked walk.

4,2.3 Pedestrian facilities map

Recommended Action: That the Town publish a map which shows the location of existing pedestrian facilities and transit stops.

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4.2.4 Recreational walks map

The maps accompanying this plan document show where pedestrian facilities already exist and the location of proposed future facilities. This is useful information but it does not direct potential users to or recommend which places would make an enjoyable, recreational walk.

As part of this plan preparation process a citizen presented to Town staff an undated, aged pamphlet entitled "Walking in Chapel Hill, Ten Neighborhood Walks". The pamphlet identifies ten walks through the neighborhoods of Chapel Hill. Each walk is planned to take 1 ½ to 2 hours at an east pace. Much of the walks shown must be done in the streets, but walks have been planned to avoid streets with a lot of traffic. Suggested parking areas are included at the beginning of each walk. The walks were designed to be roughly circular to avoid retracing steps. In order to promote pedestrian activity:

Recommended Action: That the Bicycle and Pedestrian Advisory Board or a sub-committee thereof prepare a recreational walks map for publication by the Town of Chapel Hill.

4.2.5 Bicycle route/rides map

In the spring and fall each year the Town's Bicycle and Pedestrian Advisory Board and the Transportation Board have a stall at the Apple Chill and Festifall Street Festivals. One of the most frequent citizen requests is for a map showing the location of bicycle routes and recreational rides. The maps accompanying this plan document show where bicycle facilities already exist and the location of proposed future facilities. This is useful information but it does not direct potential users to or recommend which places are currently suitable to ride for leisure and recreation

Recommended Action: That the Bicycle and Pedestrian Advisory Board or a sub-committee thereof prepare an advisory bicycle route map for publication by the Town of Chapel Hill.

4.2.6 Safe Routes to School program

Safe Routes to School (SR2S) programs are sustained efforts by parents, other community members, community leaders and local, state, and federal governments to improve the health and well-being of children by enabling and encouraging them to walk and bicycle to school. SR2S programs examine conditions around schools and facilitate the planning, development, and implementation of projects and activities that improve

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safety and reduce traffic and air pollution in the vicinity of schools. As a result, these programs make bicycling and walking to school a safer and more appealing transportation alternative thus encouraging a healthy and active lifestyle from an early age.

In November 2003, the Town of Chapel Hill was selected as a grant recipient by Active Living by Design a health promotional organization funded by the Robert Wood Johnson Foundation. The Town has outlined a 2 year program involving a partnership group of community organizations to promote active living. The program includes developing a Safe Routes to School Program.

Re commended Action: That the Town of Chapel Hill be an active partner in the Active Living by Design program to promote and develop a Safe Routes to School program.

4.2.7 Way-marking and advisory sign program.

This plan identifies advisory bicycle routes. The main task in encouraging use of these routes is to install information or direction signs to alert users. Information and direction signs may also be used to draw attention to existing facilities. Signs which advise users to "Share the Road" and "City wide watch for Pedestrians" are currently installed at entrance locations to the Town. The existing signs do not encompass all modes of transportation and the "Share the Road" sign can be misinterpreted by motorists.

The Bicycle and Pedestrian Advisory Board has designed replacement signs which are clearer. Please See Appendix 7 which is a design for a "Streets Are for Everyone" (SAFE) sign and a COEXIST sign.

Recommended Action: It is recommended that the Bicycle and Pedestrian Advisory Board select 2 or 3 advisory routes for signing as a pilot project. If deemed a success the Board can develop a program for sign installation as funds allow.

It is further recommended that the Town Council consider replacing the present "Share the Road" and "City wide watch for Pedestrians" signs with "Streets Are for Everyone" (SAFE) and or a "COEXIST" sign.

4.2.8 Lobby State and Federal representatives for funds.

The majority of improvements identified in this plan are located on State maintained streets. Funds for improvements to State maintained streets are programmed through the State Transportation Improvement Program (STIP). This is an expenditure program

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which is produced every two years and covers a six year period. The Town of Chapel Hill can use this plan as a tool to help justify the inclusion of bicycle and pedestrian a facilities in future reviews of the STIP. The Town can also use this plan as a tool to help justify any discretionary expenditure available via the North Carolina Department of Transportation (NCDOT) or the Durham, Carrboro, Chapel Hill Metropolitan Planning Organization (DCCHMPO). There are formal public participation processes built into the preparation of these programs.

Recommended Action: That the Town Council of the Town of Chapel Hill develop a strategy to lobby State and Federal representatives for funds, including the provision of guidance to citizens and interest groups to encourage effective public participation and lobbying of local representatives.

4.2.9 Lobby State agencies and other agencies as appropriate to make policy changes to increase bicycle and pedestrian use.

The majority of improvements identified in this plan are located on State maintained streets. Facilities must be constructed in accordance with State standards and must meet thresholds to justify provision. In the case of crossings, meeting the standards required is arduous. There is need for greater flexibility and pragmatism in order to increase bicycle and pedestrian use in the Town.

Recommended Action: That the Town Council of the Town of Chapel Hill develop a strategy to lobby State agencies and other agencies as appropriate to make policy changes to increase bicycle and pedestrian use.

4.2.10Performance measures for action plan implementation.

The preparation and adoption of this plan should mark the beginning of a process to monitor and review the actions recommended herein.

Recommended Action: That the Bicycle and Pedestrian Advisory Board undertake an annual review of progress on the actions set out in this plan. The review should coincide with the preparation of the Town's Capital Improvements Program. The Board should also develop a set of performance measures and benchmarks for the annual review.

4.2.11 Integrating Public Art

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When implementing the Action Plan the Town will encourage the integration of public art in the fabric of the built environment and public space in order to define space and offer aesthetic interpretations of how space may be used.

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Recommended Action: Pub lic art and an artistic approach shall be included in the development of facilities where possible, including paving, bicycle racks, way-finding signs and pedestrian maps, and any other improvements where a change of materials or design turns an everyday object into something artistic, and does not create additional cost.

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4.3 Coordinating Actions: Formatted: Bulletsand Num [2] **Formatted** [3] The Town of Chapel Hill cannot develop a comprehensive network of bicycle and pedestrian facilities alone; it will require the assistance and cooperation of other public **Formatted** [4] service agencies and landowners. **Formatted** [5] **Formatted** [6] 4.3.1 University Plans Formatted [7] Several proposed routes go through university property. The university campus and Formatted [8] property form important corridors of the town. There is much to be gained by Formatted [9] coordinating efforts with the University. Formatted [10] Formatted [11] Recommended Action; Town Staff meet with University planners. Formatted [12] Formatted: Bulletsand Nu 4.3.2 Other Public and Community Entities. [13] **Formatted** [14] Formatted [15] Orange County, Chapel Hill Carrboro City School. (CHCCS) The Orange Water and **Formatted** [16] Sewer Authority (OWASA), religious institutions, and social organizations control **Formatted** [17] properties which have public paths and routes that connect to town and university Formatted facilities. Some also control unofficial paths to neighborhoods. Some of these entities [18] might be interested in adding to the network of facilities the public can use. Formatted [19] Formatted [20] Recommended Action: Invite these organizations to inventory their paths, trails and Formatted [21] sidewalks. If they have any routes that could connect to the town facilities, encourage **Formatted** [22] them to make them available to the walking or cycling public by granting easements and **Formatted** [23] constructing links. Formatted [24] Formatted [25] 4.3.3 Greenways Formatted: Bulletsand Nu [26] **Formatted** [27] The Greenways Master Plan contains a number of goals. There is the goal of **Formatted** [28] preserving riparian environment. There is the goal of providing off road paths that **Formatted** [29] connect neighborhoods and parks. Paths may be unimproved, mulch, chapel hill gravel, Formatted [30] large size gravel, asphalt, concrete, new pervious materials, board walk etc. Paths can Formatted be narrow or wide. [31] **Formatted** [32] Recommended Action; As part of the Greenways Master Plan update clarify how Formatted [33] Greenways can be used for non-motorized transportation. **Formatted** [34] **Formatted** [35] Formatted [36]

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4.3.4 Maintenance

Once facilities are created they need to be maintained. This may be done by nearby property owners, volunteers, Chapel Hill Public Works, UNC, local businesses, clubs and DOT. Sometimes there is confusion about who should provide maintenance

Recommended Action: Inform the public who has the responsibility to maintain facilities. Describe the procedures to report problems.

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