



Chapter Sections:

3.1 Overview

3.2 Transportation Plans

*3.3 Bicycle, Greenway, and
Open Space Plans*

3.4 Other References

3.1 Overview

Numerous plans, guidelines, and strategies have covered issues related to bicycle planning in Durham and the surrounding region. They have addressed alternative transportation, greenways and trails, land use, and facility design standards on municipal, county, regional, state, and private levels. All of these documents represent important efforts, provide valuable insight and background, and have influenced the development of this plan.

The current plans are reviewed and summarized below only as they relate to bicycle planning in Durham. For further information on each plan, please consult the reviewed document in its entirety.

3.2 Transportation Plans

3.2.1 Statewide Transportation Plan (2004, NCDOT)

The latest version of this document calls for connectivity improvements between different modes of transportation as well as the development of new opportunities for bicycle transportation. To achieve this, the plan recommends a larger financial investment in bicycle facilities than has historically been available. It also promotes the strengthening of community-level goals in transportation planning and “mainstreaming” the development of bicycle facilities, i.e. ensuring that bicycle facility planning is considered early on in project planning and is a regular part of everyday transportation across the state, rather than a secondary consideration or overlooked component.

3.2.2 2030 Long Range Transportation Plan (2005, DCHC MPO)

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) has set a goal to create a “pedestrian and bicycle system that provides alternative transportation, allows greater access to public transit, and supports recreational opportunities.” Furthermore, the MPO strives towards the development of “a safe, accessible and convenient network of regional bike and pedestrian routes.” In order to achieve these goals, the MPO reviewed the 1993 Regional Bike Plan

in 2002, identifying and recommending important regional bicycle transportation corridors. For the City and County of Durham, the Plan recommends a total of 131 projects, totaling 406 miles at an estimated cost of \$64,616,768. The MPO's recommended bicycle projects have been taken into account during the development of the Durham Comprehensive Bicycle Plan.

3.2.3 Southwest Durham Collector Street Plan (2006, DCHC MPO)

The MPO is developing a collector street plan for the southwest area of Durham County and southeast area of Chapel Hill. The primary function of a collector street is to draw traffic from local streets and expedite the movement of this traffic in the most direct route to an arterial or other collector street. According to the Collector Street Plan, the most appropriate bicycle network for the southwest Durham area is a combination of wide travel lanes, on-street bicycle lanes, greenways, and bicycle routes. While the Collector Plan's section on Bicycle Circulation emphasizes the needs of "basic users," it does not identify any bicycle facility types in its Recommended Collector Street Plan Network Map, or in the map's street cross section inset diagram. Instead, the preference among the four bicycle facilities mentioned above will be a function of traffic volumes, travel speeds, right-of-way constraints, adjacent land uses, and route directness.



Figure 3.1 - DCHC MPO 2030 Long Range Transportation Plan

3.3 Bicycle, Greenway, and Open Space Plans

3.3.1 1993 Regional Bicycle Plan (Durham and Orange Counties)

This plan was produced for the Transportation Advisory Committee of the Durham-Chapel Hill-Carrboro Urban Area. The plan represents the collaborative efforts of four local jurisdictions, including the City and County of Durham. Substantial public input provided guidance for the plan's comprehensive list of recommendations. While some of the recommendations within the Regional Bicycle Plan have been implemented, many of the Plan's recommendations still have yet to be addressed. The Durham Comprehensive Bicycle Transportation Plan has incorporated the remaining recommendations that are still relevant today.

3.3.2 Old Chapel Hill/Old Durham Road Bicycle Corridor Study (2005, Durham Chapel Hill Carrboro MPO)

The purpose of this study was to prepare a bicycle and pedestrian plan that will not only serve as a prototype for other Durham/Chapel Hill corridors, but also serve as a guide for local, regional, and state agencies in developing and promoting safe, convenient facilities and services oriented to bicyclists/ pedestrians. This study recommends a two- or three-lane roadway cross-section with bike lanes and sidewalks (where applicable) on both sides for the entire length of the Old Durham-Chapel Hill Road corridor. The plan outlines solutions for specific intersections and also calls for many specific bicycle improvements such as special bicycle detection equipment (loop sensors or detection cameras), traffic signals timed to allow bicycles adequate clearance, bicycle shoulders on bridges, and many other treatments.

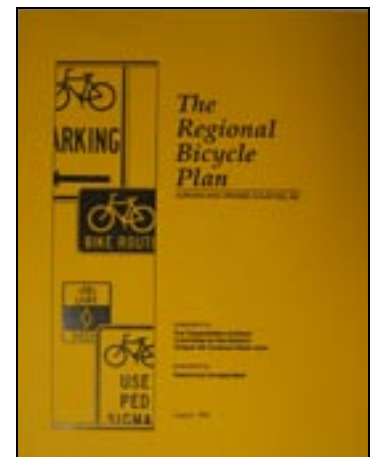


Figure 3.3 - 1993 Regional Bicycle Plan (Durham and Orange Counties)

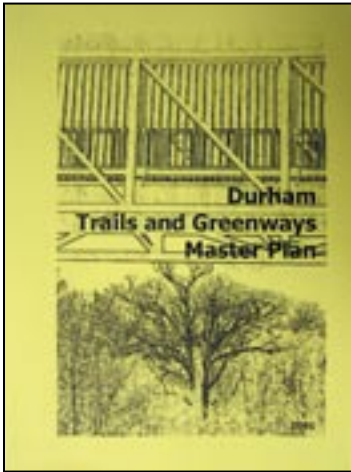


Figure 3.2 - 2001 Durham Trails and Greenways Master Plan

3.2.3 Durham Trails and Greenway Master Plan (2001)

The Durham Open Space and Trails Commission was critical in the development of this Plan, which was adopted in 2001 by the Durham City Council and the Durham Board of Commissioners. The Plan provides existing and proposed trail and greenway maps, showing how those routes connect to other systems in the community. The goal of the plan is for the City and County of Durham “to have a system of trails and greenways that connects people and places in the community while it preserves and enhances the region’s natural environment.” More focused goals include connectivity, accessibility, right-of-way preservation, water quality protection, open space preservation, community education, and community involvement. The Plan outlines priority trail projects, which are listed below.

Priority Trail Developments:

1. Completion of the American Tobacco Trail
2. Construction of the Third Fork Creek Greenway
3. Completion/Upgrade of the North/South Greenway
4. Eno River Greenway
5. Completion of Rocky Creek/Pearsonstown Greenway
6. New Hope Creek Greenway
7. Roxboro Rail-Trail Greenway
8. Little Lick Creek Greenway
9. Crooked Creek/ Herndon Creek Trail
10. Lick Creek Greenway

These and other trail priorities have been incorporated into the Durham Comprehensive Bicycle Transportation Plan’s recommended routes.

3.2.4 New Hope Corridor Open Space Master Plan (1991, City and County of Durham, Orange County, and the Town of Chapel Hill)

Even though the recommendations in the New Hope plan are from 1991, its Master Plan Action Summary calls for trail construction in its 10-20 year phase, just in time for 2006. Six specific bike and pedestrian trails were recommended for Durham in the New Hope plan, portions of which have been developed. The remaining segments of trails that were recommended have been included in the Durham Comprehensive Bicycle Transportation Plan.

3.2.5 Pedestrian-Bicycle-Green Space Plan (2005, Center of the Region Enterprise)

Six local governments and four partner organizations, including the City and County of Durham, developed this plan. It compiles information on existing and planned pedestrian bicycle and green space facilities, and identifies opportunities for coordination among participating groups throughout the Triangle area. The plan contains charts listing priority on-road bike lanes and trails for the City and County of Durham. This list of recommendations informed the Durham Comprehensive Bicycle Transportation Plan and serves as a factor in the prioritization of the Plan’s recommended routes.

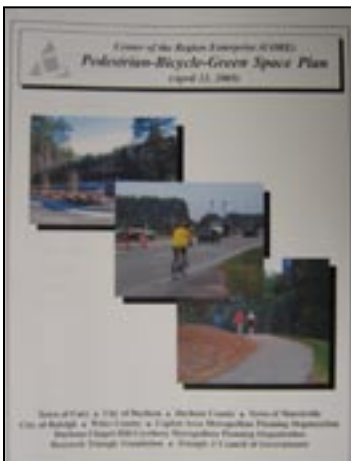


Figure 3.4 - CORE Pedestrian-Bicycle-Green Space Plan 2005

3.4 Other References

3.4.1 Bicycle Facilities Planning and Design Guidelines (NCDOT, 1994)

These guidelines inform engineers, planners and other transportation officials of the planning and design considerations that are recommended by NCDOT to maximize safety, efficiency, and conformity of facilities. Chapter 5 of the Durham Comprehensive Bicycle Transportation Plan draws upon the NCDOT's Guidelines in Section 5.2: National and State Guidelines.

3.4.2 Guide for the Development of Bicycle Facilities (1999, AASHTO)

The American Association of State Highway and Transportation Officials (AASHTO) created the guide to provide information on the development of facilities to enhance and encourage safe bicycle travel. After outlining bicycle-planning principles, the guide presents design considerations for shared roadways, signed shared roadways, bike lanes, and shared use paths. The guide concludes with other design considerations and a section on operation and maintenance. Chapter 5 of the Durham Comprehensive Bicycle Transportation Plan draws upon the AASHTO's Guidelines, among other resources, as a baseline for minimum bicycle facility design (See section 5.2: National and State Guidelines).



Figure 3.5 - Commuter cyclist on West Main Street