

COLLECTOR STREET PLAN









Chapter 1 – Introduction

The Southwest Durham County and Southeast Chapel Hill Collector Street Plan has been developed to provide the community with a tool to plan and provide appropriate connectivity throughout the study area such that vehicular, pedestrian, bike, and transit traffic would be dispersed more evenly, reducing the congestion and giving the citizens a better quality of life.

History and Background

The study area is bounded by the New Hope Creek wetlands and U.S. Army Corps of Engineer property, NC 54, US 15-501, and the Durham/Orange County line as can be seen in **Figure 1.1**. Historically, this area has been farmland and still retains much of its natural environment within the central portion of the study area.

However, this area is under study because it is experiencing significant

growth that is expected to continue. The study area is currently not fully developed and its location and proximity to the Research Triangle Park, downtown Raleigh, Chapel Hill, and Durham is extremely attractive to developers and citizens. In addition, long-range plans exist for a fixed guideway regional corridor within the study area.







2004 Undeveloped Land in blue

Given the forecasted increases in population and development within the study area and surrounding area, many plans have been developed and have been considered through this planning process. Recent planning efforts include:

- <u>Durham Comprehensive Plan</u> (2005)
- <u>Land Use Plan</u> (2005)

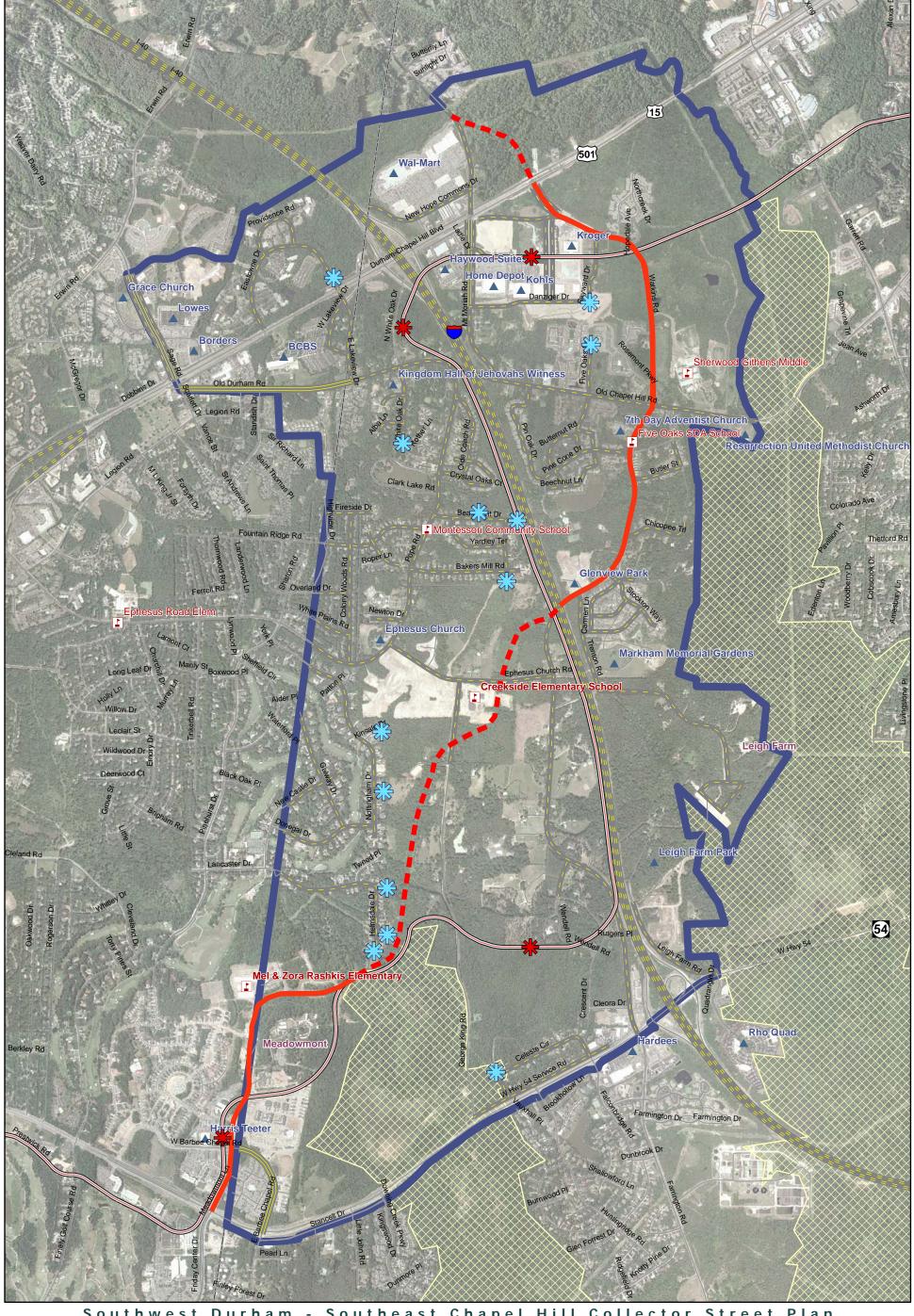




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- <u>Unified Development Ordinance</u> (2005)
- Thoroughfare Plan (1991) Durham and Chapel Hill
- <u>2030 Long Range Transportation Plan</u> (LRTP) (2005)
- <u>2006-2012 Transportation Improvement Program</u> (TIP) (2005)
- The US 15-501 Corridor Master Plan (1994)
- The US 15-501 Fixed Guideway Major Investment Study (2001)
- Triangle Transit Authority (TTA) Regional Rail Plan

With these plans in mind, the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) embarked on the development of the Southwest Durham County and Southeast Chapel Hill Collector Street Plan (CSP), to provide the community with a planning tool.





Southwest Durham - Southeast Chapel Hill Collector Street Plan
Figure 1.1 - Study Area





Plan Purpose

The purpose of the Southwest Durham County and Southeast Chapel Hill Collector Street Plan is to inventory the existing collector street network and develop a plan, standards, and policies that will promote future connectivity by creating an efficient network and accommodation for automobiles, transit, pedestrians, and bicycles as collector streets are constructed. It is the intent of this plan to provide city, town, and county staff with the necessary tools to encourage the construction of the collector street network as development occurs; it is not the intent of this plan to suggest that the local governments seek to fund and construct the network through property condemnation and land acquisition.

A Technical Steering Committee (TSC) was formed for this study, and the goals and objectives for the plan include the following:

- Prepare map showing existing and proposed interconnected streets
- Facilitate multimodal transportation options
- Recommend endorsement by MPO, then adoption and implementation by local governments

The collector street network will serve and provide benefits to the community throughout the immediate and surrounding areas. An effective interconnected collector street network can provide numerous benefits including:

- Reduced reliance on major arterials (thoroughfares) for short trips
- Reduced travel times without travel speed increases (improved connectivity) for pedestrians, bicyclists, city buses, school buses, cars, refuse collection, mail delivery, and newspaper delivery
- Compatible connections between complementary land uses
- Encouragement for mixed-use developments, resulting in the opportunity to bike or walk to local destinations
- More direct emergency response access
- Improvements to the non-vehicular transportation system (i.e., pedestrian and bicycle system improvements)
- Delay or avoid widening of major arterials beyond four lanes

While the collector street plan includes a map which depicts existing and future streets, it is important to note that the map is more qualitative than quantitative. *The maps are not precise and do not reflect the actual location or alignment of a proposed facility.* Location decisions can only be made after careful consideration and evaluation of a given facility, the specific constraints related to its construction,





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and proposed land use changes. The map associated with the CSP is intended to identify the general location of future collector streets and the desired level of connectivity.

It is also important to note that the proposal for collector streets assumes that development exists (or will exist at some future date) at a scale to warrant the construction of a collector street. To this end, the

plan would not generally support the construction of collector streets in the absence of development. That is, the City of Durham and the Town of Chapel Hill do not intend to build collector streets in this study area. Instead, they intend to require developers to build collector streets as one condition of approval for any new development that is approved by the City



Typical Collector Street

Council in Durham or Town Council in Chapel Hill.

This document was created to reflect the previous planning efforts, the mission and purpose, goals and objectives, and public vision. It should help guide the planning, construction, and maintenance of a collector street system in the study area.