2016 Chatham County
Comprehensive Transportation Plan

CHATHAM COUNTY
NORTH CAROLINA

August 2016

FIRST DRAFT

2016 Chatham County
Comprehensive Transportation Plan

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In Cooperation with: Chatham County, NC
Town of Goldston
Town of Siler City
Triangle Area Rural Planning Organization

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Executive Summary

In January of 2011, the Transportation Planning Branch of the North Carolina Department of Transportation (NCDOT) and Chatham County initiated a study to cooperatively develop the Chatham County Comprehensive Transportation Plan (CTP), which initially included the entire county minus the portion contained in the Durham Chapel Hill Carrboro Metropolitan Planning Organization. The Town of Pittsboro was not included in the final plan. This is a long range multi-modal transportation plan that covers transportation needs through 2040. Modes of transportation evaluated as part of this plan include: highway, public transportation and rail, bicycle, and pedestrian. This plan does not cover routine maintenance or minor operations issues. Refer to Appendix A for contact information on these types of issues.

Findings of this CTP study were based on an analysis of the transportation system, environmental screening and public input, which are detailed in Chapter 1. Figure 1 shows the CTP maps, which were mutually adopted by NCDOT in 2016. Descriptive information and definitions for designations depicted on the CTP maps can be found in Appendix B. Implementation of the plan is the responsibility of the Chatham County and NCDOT. Refer to Chapter 2 for information on the implementation process.

This report documents the recommendations for improvements that are included in the Chatham County CTP. The major recommendations for improvements are listed below. More detailed information about these and other recommendations can be found in Chapter 2.

- **US 64:** Improve current two lane sections of this roadway to an expressway, and Siler City section to a boulevard.
- **NC 87:** Improve section from Lee County line to the Pittsboro Comprehensive Planning Boundary to an expressway.
- **US 15/501:** Improve the section between the Pittsboro planning boundary and the Durham – Chapel Hill – Carrboro Metropolitan planning boundary to a boulevard.

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Insert CTP Maps

Figure 1

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1. Analysis of the Existing and Future Transportation System

A Comprehensive Transportation Plan (CTP) is developed to ensure that the transportation system will meet the needs of the region for the planning period. The CTP serves as an official guide to providing a well-coordinated, efficient, and economical transportation system for the future of the region. This document should be utilized by the local officials to ensure that planned transportation facilities reflect the needs of the public, while minimizing the disruption to local residents, businesses and environmental resources.

In order to develop a CTP, the following are considered:

- Analysis of the transportation system, including any local and statewide initiatives;
- Impacts to the natural and human environment, including natural resources, historic resources, homes, and businesses;
- Public input, including community vision and goals and objectives.

1.1 Analysis Methodology and Data Requirements

Reliable forecasts of future travel patterns must be estimated in order to analyze the ability of the transportation system to meet future travel demand. These forecasts depend on careful analysis of the character and intensity of existing and future land use and travel patterns.

An analysis of the transportation system looks at both current and future travel patterns and identifies existing and anticipated deficiencies. This is usually accomplished through a capacity deficiency analysis, a traffic crash analysis, and a system deficiency analysis. This information, along with population growth, economic development potential, and land use trends, is used to determine the potential impacts on the future transportation system.

Roadway System Analysis

An important stage in the development of a CTP is the analysis of the existing transportation system and its ability to serve the area's travel demand. Emphasis is placed not only on detecting the existing deficiencies, but also on understanding the causes of these deficiencies. Roadway deficiencies may result from inadequacies in pavement widths, intersection geometry, or intersection controls. System deficiencies may result from missing travel links, bypass routes, loop facilities, or radial routes; or improvements needed to meet statewide initiatives.

One of those statewide initiatives is the Strategic Transportation Corridors (STC)[1] adopted by the Board of Transportation on March 4, 2015.

[1] *For more information on the STC, go to:* https://connect.ncdot.gov/projects/planning/Pages/NCTransportationNetwork.aspx

The STC identify a network of critical multimodal transportation corridors considered the backbone of the state's transportation system. These 25 corridors move most of our freight and people, link critical centers of economic activity to international air and sea ports, and support interstate commerce. They must operate well to help North Carolina attract new businesses, grow jobs and catalyze economic development.

The primary purpose of the STC is to provide North Carolina with a network of high-priority, multimodal transportation corridors and facilities that connect statewide and regional activity centers to enhance economic development, promote highly-reliable, efficient mobility and connectivity, and support good decision-making. The primary goal to support this purpose is to create a greater consensus towards the development of a genuine vision for each corridor that establishes the statewide or regional importance of facilities and the need for maintaining high capacity and travel speed. During the development of CTPs, the STC network should be cross-referenced to ensure plan consistency. Incorporating the statewide and regional mobility goals set forth in the STC network should be done in a manner that fits with the character and vision for the community or county. If this cannot be achieved through the use of existing facilities, an alternative solution should be sought.

In the development of this plan, travel demand was projected from 2010 to 2040 using a trend line analysis based on past Annual Average Daily Traffic (AADT). In addition, local land use plans and growth expectations were used to further refine future growth rates and patterns. The established future growth rates were endorsed by the Chatham County Transportation Committee. Refer to Appendix H for more detailed information on growth expectations and the socio-economic data forecasting methodology.

Existing and future travel demand is compared to existing roadway capacities. Capacity deficiencies occur when the traffic volume of a roadway exceeds the roadway's capacity. Roadways are considered near capacity when the traffic volume is at least eighty percent of the capacity. Refer to Figures 2 and 3 for existing and future capacity deficiencies. The 2040 traffic volumes in Figure 3 are an estimate of the traffic volume in 2040 with only existing plus committed projects assumed to be in place, where committed is defined as projects programmed for construction in the 2016 – 2025 Transportation Improvement Program[2] (TIP).

Capacity is the maximum number of vehicles which have a "reasonable expectation" of passing over a given section of roadway, during a given time period under prevailing roadway and traffic conditions. Many factors contribute to the capacity of a roadway including the following:

- Geometry of the road (including number of lanes), horizontal and vertical alignment, and proximity of perceived obstructions to safe travel along the road;
- Typical users of the road, such as commuters, recreational travelers, and truck traffic;

[2] *For more information on the TIP, go to:* https://connect.ncdot.gov/projects/planning/Pages/default.aspx

- ❖ Access control, including streets and driveways, or lack thereof, along the roadway;
- ❖ Development along the road, including residential, commercial, agricultural, and industrial developments;
- ❖ Number of traffic signals along the route;
- ❖ Peaking characteristics of the traffic on the road;
- ❖ Characteristics of side-roads feeding into the road; and
- ❖ Directional split of traffic or the percentages of vehicles traveling in each direction along a road at any given time.

The relationship of travel demand compared to the roadway capacity determines the level of service (LOS) of a roadway. Six levels of service identify the range of possible conditions. Designations range from LOS A, which represents the best operating conditions, to LOS F, which represents the worst operating conditions.

LOS D indicates "practical capacity" of a roadway, or the capacity at which the public begins to experience delay. The practical capacity for each roadway was developed based on the 2000 Highway Capacity Manual using the Transportation Planning Branch's *LOS D Standards for Systems Level Planning*. Recommended improvements and overall design of the transportation plan were based upon achieving a minimum LOS D on existing facilities and a LOS C for new facilities. Refer to Appendix E for detailed information on LOS.

Traffic Crash Assessment

Traffic crashes are often used as an indicator for locating congestion and roadway problems. Crash patterns obtained from an analysis of crash data can lead to the identification of improvements that will reduce the number of crashes. The Traffic Safety Unit of NCDOT's Transportation Mobility and Safety Division identifies high frequency crashes at intersections and along roadway sections during a five year period. The high frequency crash locations examined during the development of the Chatham County CTP occurred between January 1, 2007 and December 31, 2011. During this period, a total of 62 intersections and 166 roadway sections were identified as having a high frequency of crashes as illustrated in Figure 4. Contact information for the Transportation Mobility and Safety Division can be found in Appendix A.

The NCDOT is actively involved with investigating and improving many of these locations. To request a more detailed analysis for any of these locations, or other intersections of concern, contact the Division Traffic Engineer (see Appendix A).

Bridge Deficiency Assessment

Bridges are a vital element of a highway system. First, they represent the highest unit investment of all elements of the system. Second, any inadequacy or deficiency in a bridge reduces the value of the total investment. Third, a bridge presents the greatest

opportunity of all potential highway failures for disruption of community welfare. Finally, and most importantly, a bridge represents the greatest opportunity of all highway failures for loss of life. For these reasons, it is imperative that bridges be constructed to the same design standards as the system of which they are a part.

The NCDOT Structures Management Unit inspects all bridges in North Carolina at least once every two years. Bridges having the highest priority are replaced as federal and state funds become available. Thirty-five deficient bridges were identified on roads evaluated as part of the CTP and are illustrated in Figure 5. Of these, five are scheduled for replacement in the 2016 – 2025 TIP. Additionally, three others occur along roadways recommended for improvement in the CTP. As deficient bridges are replaced, every consideration should be given to proposed CTP recommendation and cross section associated with the recommendation. Table 3 in Appendix F gives a listing of the deficient bridges identified in the CTP and the ID number associated with CTP project proposal. Refer to Appendix F for more detailed bridge deficiency information.

Insert Current Roadway Deficiency Map

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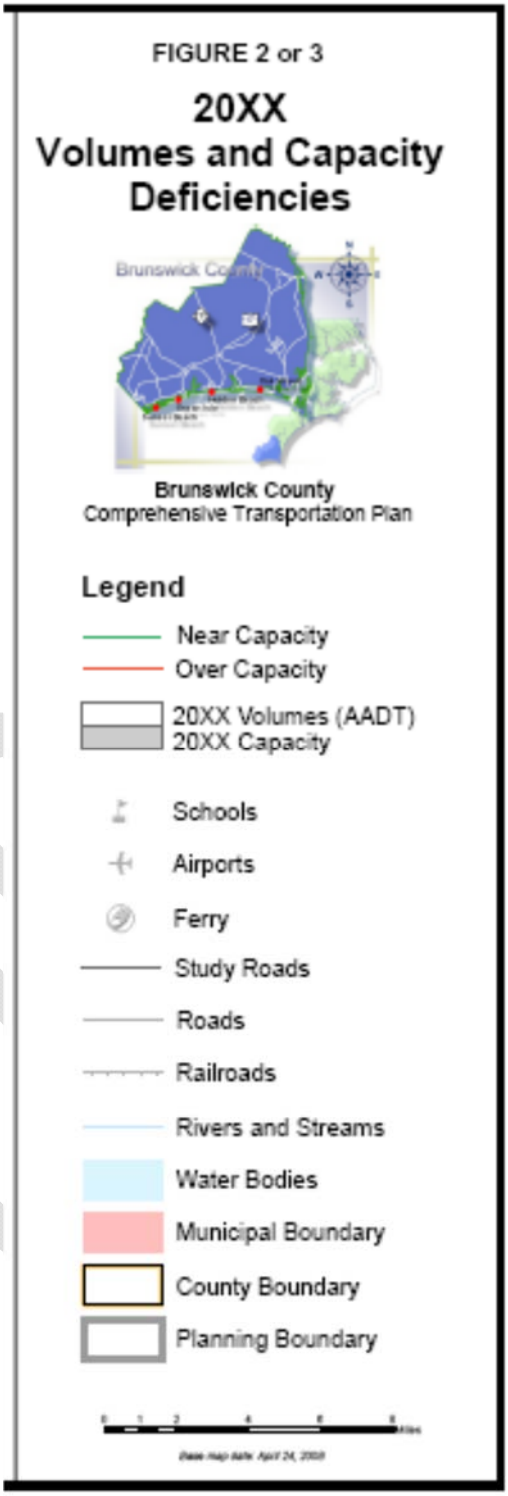

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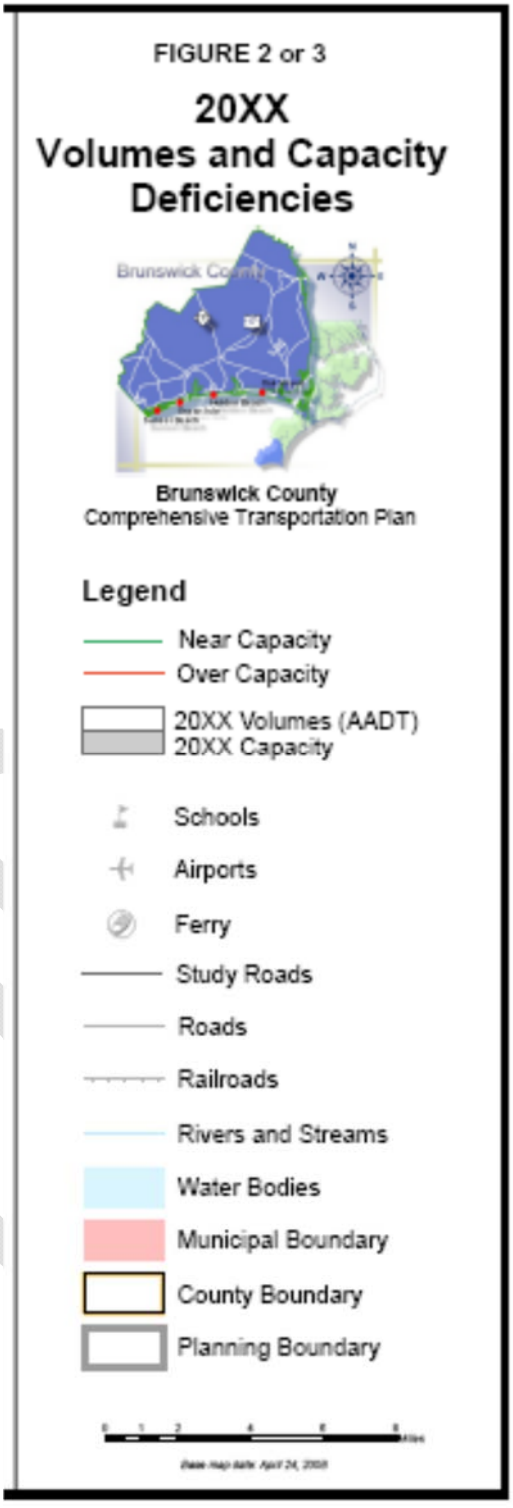

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Insert High Frequency Crash Locations Map

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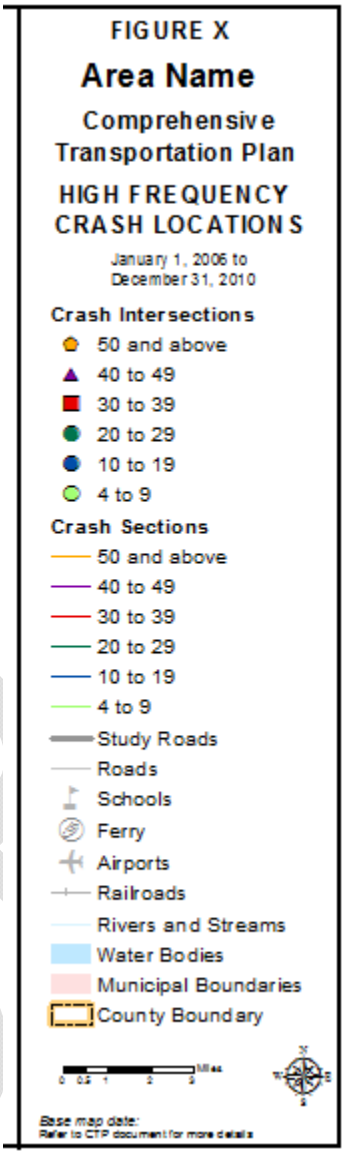

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Insert Deficient Bridges Map

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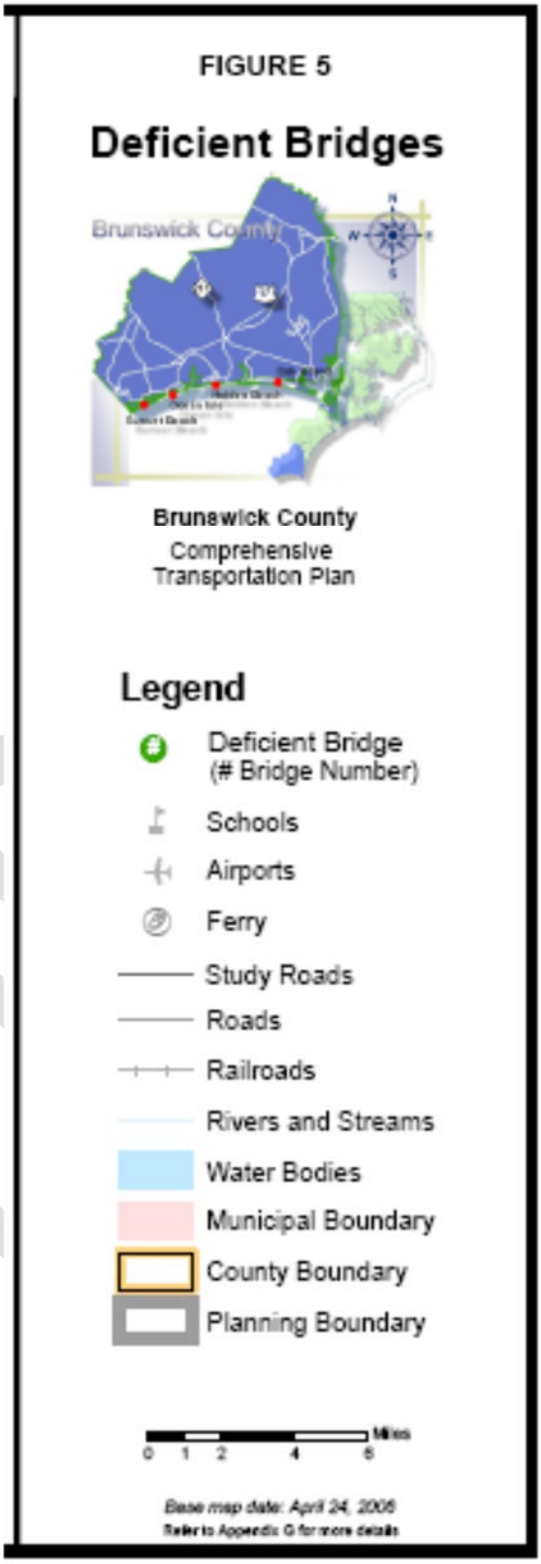

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Public Transportation and Rail

Public transportation and rail are vital modes of transportation that give alternatives for transporting people and goods from one place to another.

Public Transportation

North Carolina's public transportation systems serve more than 50 million passengers each year. Five categories define North Carolina's public transportation system: community, regional community, urban, regional urban and intercity.

- Community Transportation - Local transportation efforts formerly centered on assisting clients of human service agencies. Today, the vast majority of rural systems serve the general public as well as those clients.
- Regional Community Transportation - Regional community transportation systems are composed of two or more contiguous counties providing coordinated / consolidated service. Although such systems are not new, single-county systems are encouraged to consider mergers to form more regional systems.
- Urban Transportation – There are currently nineteen urban transit systems operating in North Carolina, from locations such as Asheville and Hendersonville in the west to Jacksonville and Wilmington in the east. In addition, small urban systems provide service in three areas of the state. Consolidated urban-community transportation exists in five areas of the state. In those systems, one transportation system provides both urban and rural transportation within the county.
- Regional Urban Transportation - Regional urban transit systems currently operate in three areas of the state. These systems connect multiple municipalities and counties.
- Intercity Transportation - Intercity bus service is one of a few remaining examples of privately owned and operated public transportation in North Carolina. Intercity buses serve many cities and towns throughout the state and provide connections to locations in neighboring states, Amtrak passenger station and throughout the United States and Canada. Greyhound and Amtrak Thruway service operate in North Carolina. However, community, urban and regional transportation systems are providing increasing intercity service in North Carolina.

An inventory of existing and planned fixed public transportation routes for the planning area is presented on Sheet 3 of Figure 1. All recommendations for public transportation were coordinated with the local governments and the Public Transportation Division of NCDOT. Refer to Appendix A for contact information for the Public Transportation Division.

Rail

Today North Carolina has 3,245 miles of railroad tracks throughout the state. There are two types of trains that operate in the state, passenger trains and freight trains.

Intercity passenger service is provided by Amtrak which currently operates six passenger services daily in or through North Carolina serving 16 cities across the state. Five of the services are interstate (Crescent, Palmetto, Silver Meteor, Silver Star, and Carolinian passenger trains) and one service (Piedmont passenger train) operates exclusively within North Carolina. In addition to the six passenger services mentioned, Amtrak also operates its Auto Train service which passes through North Carolina but does not make any stops. Amtrak ridership demand has been on a rise in the state. In 2010 ridership was 840,000 and increased to 975,645 passengers in 2013.

The North Carolina Department of Transportation sponsors two passenger trains, the Carolinian and Piedmont. The Carolinian runs between Charlotte and New York City, while the Piedmont train carries passengers from Raleigh to Charlotte and back every day. However, no passenger trains operate over the rail line from High Point that dead ends at Asheboro or over the rail line that runs from Gulf, NC to Greensboro. Combined, the Carolinian and Piedmont carry more than 300,000 passengers each year.

There are two major freight railroad companies that operate in North Carolina, CSX Transportation and Norfolk Southern Corporation. Also, there are more than 17 smaller freight railroads, known as shortlines.

An inventory of existing and planned rail facilities for the planning area is presented on Sheet 3 of Figure 1. No rail recommendations were made in the Comprehensive Transportation Plan. All recommendations for rail were coordinated with the local governments and the Rail Division of NCDOT. Refer to Appendix A for contact information for the Rail Division.

Bicycles & Pedestrians

Bicyclists and pedestrians are a growing part of the transportation system in North Carolina. Many communities are working to improve mobility for both cyclists and pedestrians.

NCDOT's Bicycle Policy, updated in 1991, clarifies responsibilities regarding the provision of bicycle facilities along the 77,000-mile state-maintained highway system. The policy details guidelines for planning, design, construction, maintenance, and operations pertaining to bicycle facilities and accommodations. All bicycle improvements undertaken by NCDOT are based upon this policy.

The 2000 NCDOT Pedestrian Policy Guidelines specifies that NCDOT will participate with localities in the construction of sidewalks as incidental features of highway

improvement projects. At the request of a locality, state funds for a sidewalk are made available if matched by the requesting locality, using a sliding scale based on population.

NCDOT's administrative guidelines, adopted in 1994, ensure that greenways and greenway crossings are considered during the highway planning process. This policy was incorporated so that critical corridors which have been adopted by localities for future greenways will not be severed by highway construction.

Inventories of existing and planned bicycle and pedestrian facilities for the planning area are presented on Sheets 4 and 5 of Figure 1. The 2011 Chatham County Bicycle Plan and the 2013 Siler City Pedestrian Master Plan were utilized in the development of these elements of the CTP. All recommendations for bicycle and pedestrian facilities were coordinated with the local governments and the NCDOT Division of Bicycle and Pedestrian Transportation. Refer to Appendix A for contact information for the Division of Bicycle and Pedestrian Transportation.

Land Use

G.S. §136-66.2 requires that local areas have a current (less than five years old) land development plan prior to adoption of the CTP. For this CTP, the currently in-progress Chatham County Comprehensive Plan (refer to Appendix H) was used to meet this requirement. Public meetings on the Comprehensive Plan were held concurrently with the Comprehensive Transportation Plan in June, 2016.

Land use refers to the physical patterns of activities and functions within an area. Traffic demand in a given area is, in part, attributed to adjacent land use. For example, a large shopping center typically generates higher traffic volumes than a residential area. The spatial distribution of different types of land uses is a predominant determinant of when, where, and to what extent traffic congestion occurs. The travel demand between different land uses and the resulting impact on traffic conditions varies depending on the size, type, intensity, and spatial separation of development. Additionally, traffic volumes have different peaks based on the time of day and the day of the week. For transportation planning purposes, land use is divided into the following categories:

- Residential: Land devoted to the housing of people, with the exception of hotels and motels which are considered commercial.
- Commercial: Land devoted to retail trade including consumer and business services and their offices; this may be further stratified into retail and special retail classifications. Special retail would include high-traffic establishments, such as fast food restaurants and service stations; all other commercial establishments would be considered retail.
- Industrial: Land devoted to the manufacturing, storage, warehousing, and transportation of products.

- Public: Land devoted to social, religious, educational, cultural, and political activities; this would include the office and service employment establishments.
- Agricultural: Land devoted to the use of buildings or structures for the raising of non-domestic animals and/or growing of plants for food and other production.
- Mixed Use: Land devoted to a combination of any of the categories above.

Anticipated future land development is, in general, a logical extension of the present spatial land use distribution. Locations and types of expected growth within the planning area help to determine the location and type of proposed transportation improvements.

Based the 2016 Comprehensive Plan for Chatham County, the area of highest growth will be in the northeast part of the county along the US 15/501 corridor. Agriculture is the main land use, comprising 49.3% of the county. The plan can be found at www.chathamnc.org.

Inside the Pittsboro Urban Area (which is not included in this study) contains the proposed Chatham Park development, which is a 7,000 acre development adjacent to Jordan Lake and downtown Pittsboro. At full buildout, there are plans for as many as 60,000 new residents, 20,000 new homes and some corporate campuses. The growth used in the 2011 Pittsboro Comprehensive Transportation Plan only used projected growth through 2035, which was not full buildout. This growth will impact other areas of the county.

For detailed information on how land use and growth projections were developed for and applied in the CTP, refer to Appendix G.

1.2 Consideration of Natural and Human Environment

Environmental features are a key consideration in the transportation planning process. Section 102 of the National Environmental Policy Act[3] (NEPA) requires consideration of impacts on wetlands, wildlife, water quality, historic properties, and public lands. While a full NEPA evaluation was not conducted as part of the CTP, every effort was made to minimize potential impacts to these features utilizing the best available data. Any potential impacts to these resources were identified as a part of the project recommendations in Chapter 2 of this report. Prior to implementing transportation recommendations of the CTP, a more detailed environmental study would need to be completed in cooperation with the appropriate environmental resource agencies.

A full listing of environmental features that are typically examined as a part of a CTP study is shown in the following tables. Environmental features occurring within Chatham County are shown in Figures 6 and are shown in bold text in Table 1.

[3] *For more information on NEPA, go to:* https://ceq.doe.gov/.

Table 1 – Environmental Features

- **24k Hydro Lines**
- **303D Streams**
- **Airport Boundaries**
- Anadromous Fish Spawning Areas
- APNEP - Submerged Aquatic Vegetation
- Beach and Waterfront Access
- Benthic Habitat
- Bicycle Routes
- **Boating Access**
- **Churches and Cemeteries**
- Colleges and Universities (Points)
- **Conservation Tax Credit Properties**
- **Critical Habitat for Threatened and Endangered Species**
- **Emergency Operation Centers**
- Fish Nursery Areas
- **Hazard Substance Disposal Sites (points & polygons)**
- **Hazardous Waste Facilities**
- **High Quality Waters and Outstanding Resource Water Management**
- **Historic Resources – National Register and Determined Eligible (points and polygons)**
- **Hospitals**
- **Hydrography - 1:24,000-scale (polygons)**
- **Landscape Habitat Indicator Guilds (LHIGs)**
- **Managed Areas**
- **National Wetlands Inventory (polygons)**
- **Natural Heritage Element Occurrences**
- NC-CREWS: N.C. Coastal Region Evaluation of Wetland Significance
- **NCDOT Maintained Mitigation Sites**
- **Railroads (1:24,000)**
- **Recreation Projects - Land and Water Conservation Fund**
- **Regional Trails**
- **Sanitary Sewer Systems - Treatment Plants**
- **Schools (Public & Non-Public)**
- **Significant Natural Heritage Areas**
- **State Natural and Scenic Rivers**
- **State Parks**
- Target Local Watersheds - EEP
- Trout Streams (DWQ)
- Trout Waters WRC (arcs & polygons)
- Unique Wetlands
- **Water Distribution Systems – Tanks & Treatment Plants**
- **Water Supply Watersheds**

Archaeological sites were also considered but are not mapped due to restrictions associated with the sensitivity of the data.

1.3 Public Involvement

Public involvement is a key element in the transportation planning process. Adequate documentation of this process is essential for a seamless transfer of information from systems planning to project planning and design.

A meeting was held with the Chatham County Board of Commissioners in February, 2011 to formally initiate the study, provide an overview of the transportation planning process, and to gather input on area transportation needs.

Throughout the course of the study, the NCDOT Transportation Planning Branch cooperatively worked with the Chatham County Transportation Advisory Board, which included representatives throughout the county. The committee provided information on current local plans, developed transportation vision and goals, discussed population and employment projections, and developed proposed CTP recommendations. Refer to Appendix H for detailed information on the vision statement, the goals and objectives survey and a listing of committee members.

The public involvement process included holding three public drop-in sessions in Chatham County to present the proposed CTP to the public and solicit comments. The meetings were held at:

- Tuesday, June 21, 2016 at Horton Middle School, Pittsboro
- Wednesday, June 22, 2016 at Earl B. Fitts Community Center, Siler City
- Thursday, June 23, 2016 at JS Waters Elementary School, Goldston

Refer to Appendix H for the detailed comments provided at each of the public drop-in sessions.

<Insert discussion of local adoption>>.

The Triangle Area RPO endorsed the CTP on XXXX. The North Carolina Department of Transportation mutually adopted the Chatham County CTP on XXXXXX.

Figure X – Environmental Features Map(s)

Back of Figure

2. Recommendations

This chapter presents recommendations for each mode of transportation in the 2016 Chatham County CTP as shown in Figure 1. More detailed information on each recommendation is tabulated in Appendix C. Refer to Appendix I for documentation of project alternatives and scenarios that were studied, but are not included in the adopted CTP.

NCDOT adopted a "Complete Streets[1]" policy in July 2009. The policy directs the Department to consider and incorporate several modes of transportation when building new projects or making improvements to existing infrastructure. Under this policy, the Department will collaborate with cities, towns and communities during the planning and design phases of projects. Together, they will decide how to provide the transportation options needed to serve the community and complement the context of the area. The benefits of this approach include:

- making it easier for travelers to get where they need to go;
- encouraging the use of alternative forms of transportation;
- building more sustainable communities;
- increasing connectivity between neighborhoods, streets, and transit systems;
- improving safety for pedestrians, cyclists, and motorists.

Complete streets are streets designed to be safe and comfortable for all users, including pedestrians, bicyclists, transit riders, motorists and individuals of all ages and capabilities. These streets generally include sidewalks, appropriate bicycle facilities, transit stops, right-sized street widths, context-based traffic speeds, and are well-integrated with surrounding land uses. The complete street policy and concepts were utilized in the development of the CTP. The CTP proposes projects that include multi-modal project recommendations as documented in the problem statements within this chapter. Refer to Appendix C for recommended cross sections for all project proposals and Appendix D for more detailed information on the typical cross sections.

2.1 Unaddressed Deficiencies

No deficiencies were identified during the development of the CTP but remain unaddressed.

2.2 Implementation

The CTP is based on the projected growth for the planning area. It is possible that actual growth patterns will differ from those logically anticipated. As a result, it may be necessary to accelerate or delay the implementation of some recommendations found within this plan. Some portions of the plan may require revisions in order to accommodate unexpected changes in development. Therefore, any changes made to one element of the CTP should be consistent with the other elements.

[1] *For more information on Complete Streets, go to: http://www.completestreetsnc.org/*

Initiative for implementing the CTP rests predominately with the policy boards and citizens of the county and its municipalities. As transportation needs throughout the state exceed available funding, it is imperative that the local planning area aggressively pursue funding for priority projects. Projects should be prioritized locally and submitted to the Triangle Area RPO for regional prioritization and submittal to NCDOT. Refer to Appendix A for contact information on regional prioritization and funding. Local governments may use the CTP to guide development and protect corridors for the recommended projects. It is critical that NCDOT and local governments coordinate on relevant land development reviews and all transportation projects to ensure proper implementation of the CTP. Local governments and NCDOT share the responsibility for access management and the planning, design and construction of the recommended projects.

Recommended improvements shown on the CTP map represents an agreement of identified transportation deficiencies and potential solutions to address the deficiencies. While the CTP does propose recommended solutions, it may not represent the final location or cross section associated with the improvement. All CTP recommendations are based on high level systems analyses that seek to minimize impacts to the natural and human environment. Prior to implementing projects from the CTP, additional analysis will be necessary to meet the National Environmental Policy Act (NEPA) or the North Carolina (or State) Environmental Policy Act[2] (SEPA). During the NEPA/SEPA process, the specific project location and cross section will be determined based on environmental analysis and public input. This CTP may be used to support transportation decision making and provide transportation planning data in the NEPA/SEPA process.

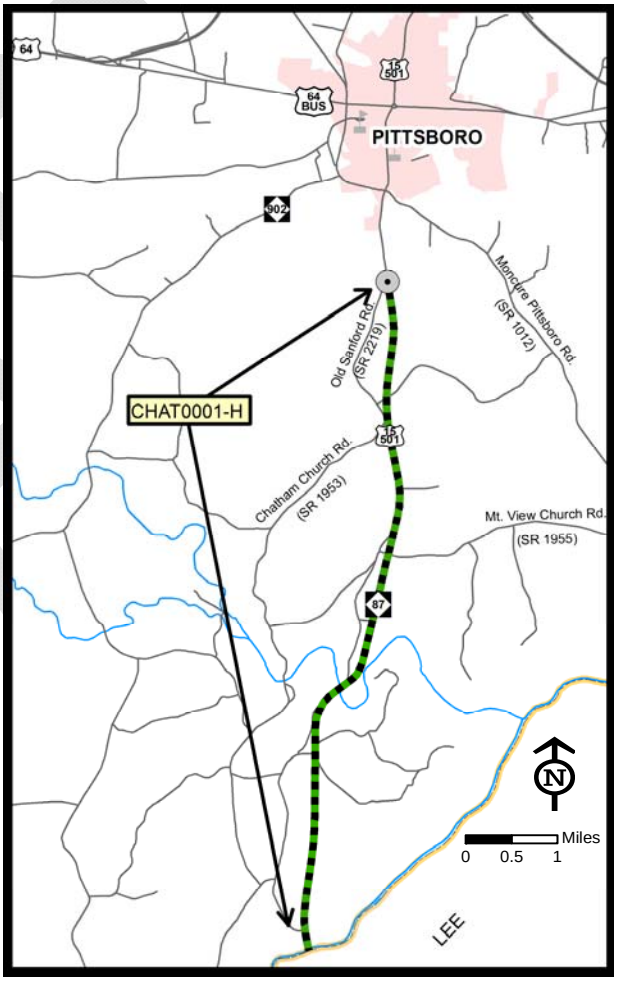
2.3 Problem Statements

The following pages contain problem statements for each recommendation, organized by CTP modal element. The information provided in the problem statement is intended to help support decisions made in the NEPA/SEPA process. A full, minimum or reference problem statement is presented for each recommendation, with full problem statements occurring first in each section. Full problem statements are denoted by a gray shaded box containing project information. Minimum problem statements are more concise and less detailed than full problem statements, but include all known or readily available information. Reference problem statements are developed for TIP projects where the purpose and need for the project has already been established.

[2]*For more information on SEPA, go to: http://www.doa.nc.gov/clearing/faq.aspx.*

HIGHWAY

Improvements to US 15/501 from Lee County line to proposed US 15/501 Pittsboro Bypass	**Local ID: CHAT0001-H** **Last Updated:**



Identified Problem

Traffic conditions along existing US 15/501 are projected to exceed level of service (LOS) D by 2035.

Justification of Need

US 15/501 is a major facility within Pittsboro, Chatham county, and central North Carolina. The facility is vital in moving people and goods through North Carolina, connecting Sanford in the south with Chapel Hill and Durham in the north, and providing access to US 1, US 64, I-40 and I-85.
Projections indicate that within the Pittsboro planning boundary, US 15/501 will be over capacity by 2035.

Community Vision and Problem History

Significant development (Chatham Park) is expected to occur in the Pittsboro planning area within the next thirty years. There is local concern for accommodating the expected increase in both local, and through trips, that increased development may bring.

CTP Project Proposal

Project Description and Overview

Currently, the roadway consists of two undivided 12-foot lanes with paved shoulders. The CTP recommends improving the facility to four 12-foot lanes with paved shoulders, median-divided, operating at the expressway designation from the Lee County line to the proposed US 15-501 Pittsboro Bypass (CHAT0002-H).

Natural & Human Environmental Context

The proposed project crosses both the Rocky River and Deep River.

Relationship to Land Use Plans

Current zoning along the US 15-501 facility in Chatham County permits mostly low density residential, and a small amount of heavy industrial use. The heavy industrial portion, on the east side of US 15-501 between Joe Womble Road (SR 1989) and Charlie Brooks Road (SR 1969) is the 3M plant quarry. Access to the existing development is primarily via cross streets and the occasional driveway.

Linkages to Other Plans and Proposed Project History

The 1996 Chatham County Thoroughfare Plan (not mutually adopted) recommends improving US 15/501 to a four-lane divided facility. The Strategic Highway Corridor (SHC) vision plan, adopted in 2004, designated US 15-501 from the Lee County line to Pittsboro as an expressway. The SHC vision plan was updated in 2015, resulting in the Strategic Transportation Corridors policy. While US 15-501 south of Pittsboro is not part of the STC policy and corridor network, local support remains to improve the facility.

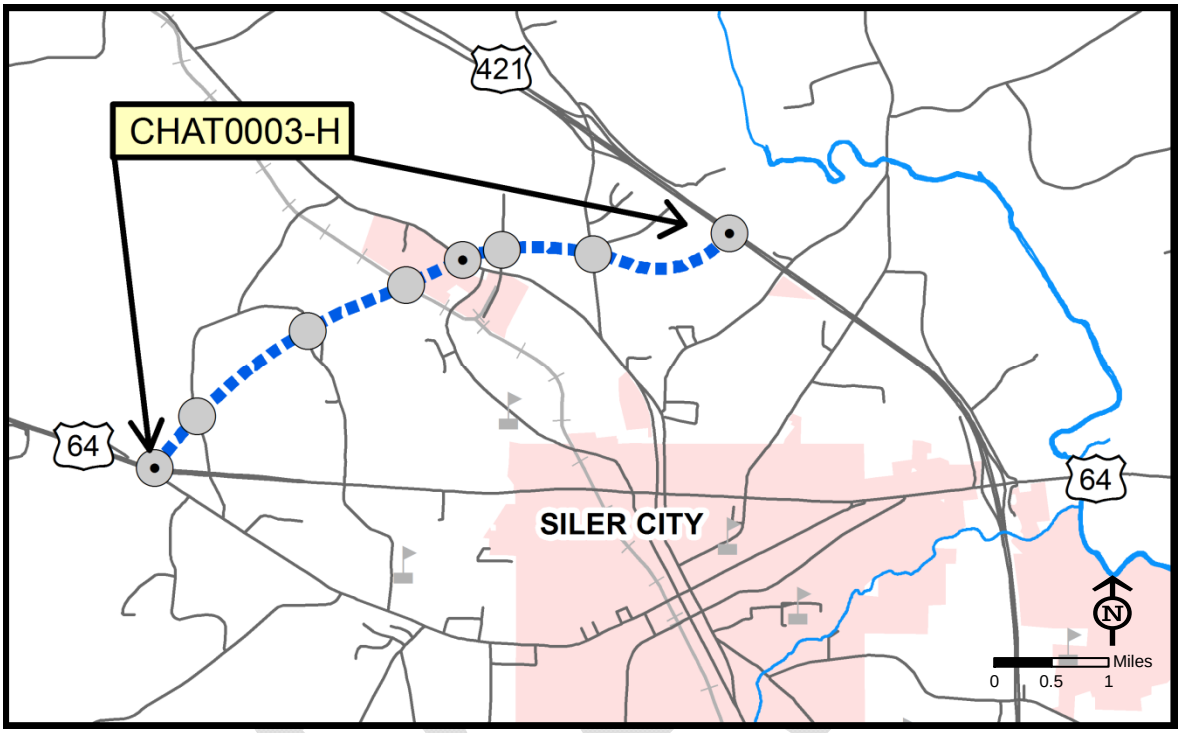
Multi-modal Considerations

There is a local desire for a multi-use path alongside or near US 15-501 to connect Rock Ridge Park, just north of Charlie Brooks Road (SR 1969) to Pittsboro (see CTP Bicycle recommendation maps). There is also a desire for a future, fixed-route transit line connecting Pittsboro to destinations in Lee County, including Sanford (see CTP Transit Recommendations maps).

Public/ Stakeholder Involvement

As part of developing the CTP recommendation for US 15-501, options were considered by the Pittsboro CTP Steering Committee and the Pittsboro Board of Commissioners (please see Appendix I). The public involvement efforts performed as part of this planning process are detailed in Appendix F.

US 64 Bypass of Siler City **From US 64 to US 421**	**Local ID: CHAT0003-H** **Last Updated:**



Identified Problem

Existing businesses, residences, driveways and at-grade signalized and unsignalized intersections along US 64 through Siler City conflict with the mobility needs of those utilizing the facility for regional connectivity. Portions of US 64 within the Siler City town limits are projected to be over capacity by 2040, which can be partially attributed to the facilities' current and projected mixed use of local and through trips.

Justification of Need

US 64 is important regionally as a parallel alternative to Interstate 40, and as a major portion of the route used by commercial vehicles and commuters traveling between the Raleigh, Charlotte and Greensboro metropolitan areas. Statewide, US 64 provides east-west connectivity to destinations such as the outer banks, Raleigh, western North Carolina and more. With US 64 in Chatham County being identified as a Strategic Transportation Corridor on the North Carolina Transportation Network vision plan, it is important to plan for the corridor's future now, which may help reduce potential impacts to the town of Siler City.

Community Vision and Problem History

Previous long-range transportation plans for the area considered providing alternatives to taking US 64 through Siler City. Local input for the 2015 Chatham County Comprehensive Transportation Plan study indicated that many in the Siler City area are concerned about increasing traffic along US 64 through town. Reported problems included cueing on side streets caused by difficulty making left turns onto US 64 at uncontrolled intersections, delays at controlled intersections and difficulty accessing businesses due to congestion. Local perception is that congestion is an issue today, and will be worse in the future.

When considering a US 64 Bypass project for Siler City, the general opinion expressed through input from the public, town staff and elected officials was that although they would rather not have to plan for a potential bypass, the community does not want to see existing US 64 through town upgraded to a more controlled access facility, such as an expressway or freeway.

Local consensus indicated that if a potential bypass were the only alternative to having a higher speed, controlled-access facility constructed on existing US 64, then a northern route would be preferred. The indication was that development and the existing roadway network to the south would make choosing an alignment extremely difficult. A northern alignment would be hindered less by development and could take advantage of existing US 421 to carry a portion of a potential bypass.

CTP Project Proposal

Project Description and Overview

A US 64 Bypass is recommended to the north of Siler City. A portion of the facility (approximately 3.9 miles) would be a four-lane divided freeway on new location connecting US 64 west of Siler City northeast to existing US 421. Existing US 421 would serve as a portion of the proposed bypass, connecting with US 64 east of town. The project would include several grade separations at existing roads along the new location portion of the proposed bypass, as well as new interchanges at Old US 421 (SR 1006) and where the new location joins existing US 421. Improvements would have to be made at the existing interchange where US 421 meets US 64 east of town.

Natural & Human Environmental Context

Although there appears to be some flexibility in selecting an alignment for the new location portion of a potential bypass, the project most likely would impact some residences and businesses. Several parcels of undeveloped farmland would be impacted by the proposed project.
A study of available GIS data indicates that there are identified wetlands occurring sporadically throughout the area.

Relationship to Land Use Plans

Much of US 64 through Siler City is zoned for commercial and residential use. The existing corridor is developed with access provided by driveways as well as side streets at controlled and uncontrolled intersections.

Linkages to Other Plans and Proposed Project History

The 1968 Siler City Thoroughfare Plan included a loop project around Siler City, effectively making bypass alternatives to US 64 both north and south of town. The 1996 Chatham County Thoroughfare Plan (not mutually adopted) mentions that a US 64 bypass was considered, but at the time, traffic projections did not support planning for such a project.

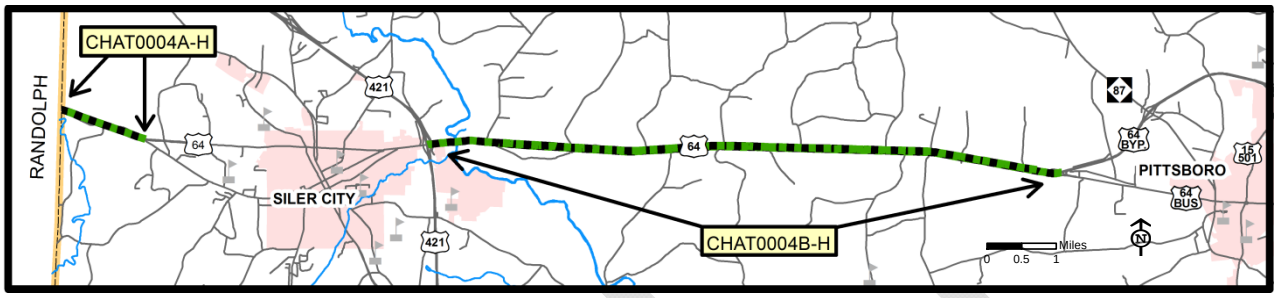
Multi-modal Considerations

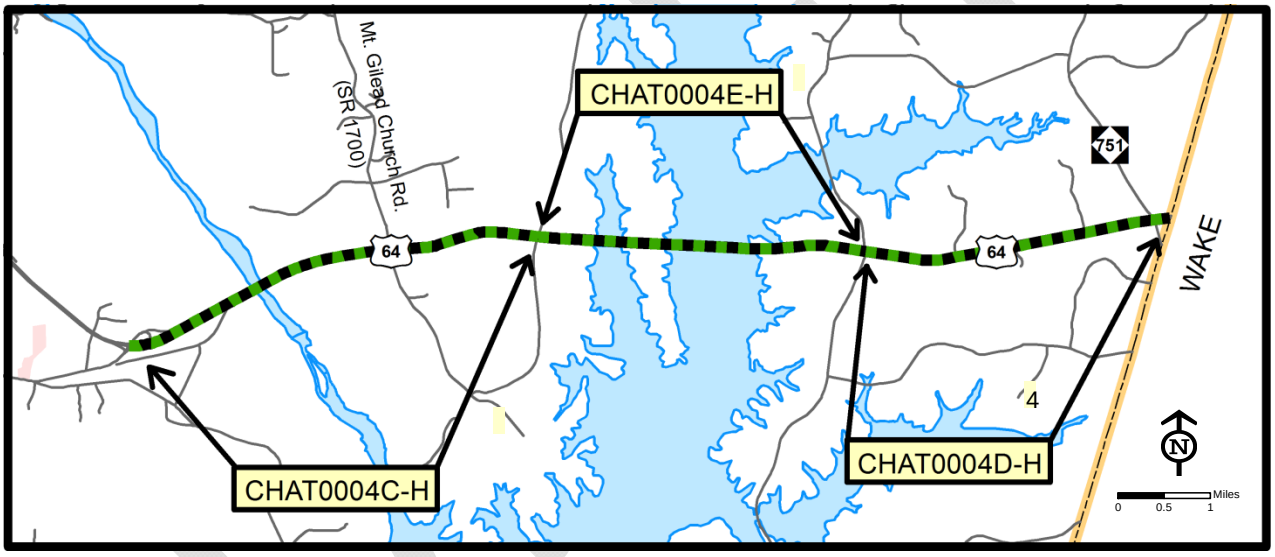
The project as proposed would be an access-controlled freeway and would not allow for bicycle or pedestrian access. Bicycle and pedestrian access should be considered at potential grade separations and interchanges. During the CTP study, input was collected regarding a local desire for increased public transportation services, including the need for inter-county express bus routes. A potential Siler City Bypass could make the creation of such routes more feasible as buses would not have to stop at signals located on the existing route.

Public/ Stakeholder Involvement

The Siler City Planning Board, Town Board, Chatham County CTP Committee and the public provided input regarding the potential Siler City Bypass. The CTP Committee met on a monthly basis during the study, and included representatives from the Siler City area. Two public input sessions were held in Siler City in November of 2012. Additional public input sessions were held throughout Chatham County in November of 2013. Input regarding the potential bypass was collected through a survey made available to the public (See Appendix XX).

US 64 Improvements from Randolph County line to Wake County line	Local ID: CHAT0004-H Last Updated:





Identified Problem

Projections indicate that traffic conditions on portions of US 64 will be approaching capacity or over capacity in 2040. US 64 is a major east-west connector in the region and is used for freight and commuter traffic.

Justification of Need

The North Carolina Transportation Network vision plan recognized US 64 in Chatham County as a Strategic Transportation Corridor. US 64 is important regionally as a parallel alternative to Interstate 40, and as a major portion of the route used by commercial vehicles and commuters traveling between the Raleigh and Charlotte metropolitan areas. Statewide, US 64 provides east-west connectivity between the outer banks and western North Carolina.

Community Vision and Problem History

Commercial and residential development along the US 64 corridor has been steadily increasing in Chatham County. The 1996 Chatham County Thoroughfare Plan (not mutually adopted), included recommendations to widen US 64 to a four-lane divided facility, which for the most part, has been done. Projected increases in traffic along US 64 may make access management an issue in the near future. Public comments and Chatham County Transportation Advisory Committee input indicates that upgrading the facility to a level of access control that would inhibit bicycle and pedestrian mobility would not be the desired choice of the community. A preference was expressed for the consideration of alternative methods of access control, such as grade-separated exclusive bicycle and pedestrian crossings, superstreets, etc. Community concerns about the facility included reduced bicycle and pedestrian access, difficulty in accessing parcels and streets that intersect US 64, increased high-speed "through-trips" and a decrease in motorists stopping to take advantage of the county's amenities.

CTP Project Proposal

Project Description and Overview

It is recommended that portions of US 64 be upgraded to a four-lane, divided expressway facility. The portions of US 64 recommended to be an expressway are:

- CHAT0004A-H, from the Randolph County line to the western terminus of the proposed US 64 Siler City Bypass
- CHAT0004B-H, from the Eastern terminus of the proposed US 64 Siler City Bypass to the western terminus of the US 64 Pittsboro Bypass
- CHAT0004C-H, from the Eastern terminus of the US 64 Pittsboro Bypass to the Wake County line.

Natural & Human Environmental Context

Currently there is significant commercial and residential development, driveways and at-grade intersections along the US 64 Corridor. Some businesses and residences would be affected by this project. Portions of this project traverse Jordan Lake and the Haw river, and would most likely impact these bodies of water.

Relationship to Land Use Plans

Large commercial and residential developments are in the early planning stages within the planning jurisdictions of both Siler City and Pittsboro. Upgrades to US 64 would allow the county to plan and prepare for the access needed in those areas. Managing

access on US 64 would promote the Chatham County Land Conservation and Development Plan goal of siting "…commercial clusters so that they extend up side roads off main thoroughfares rather than as strips along main thoroughfares."

Linkages to Other Plans and Proposed Project History

The 1983 Chatham County Thoroughfare Plan recommends widening US 64 across the entire county as a "high priority". The 1996 Chatham County Thoroughfare Plan (unadopted) recommended upgrading US 64 to a four-lane, median divided facility (its current geometry), but did not recommend access control.

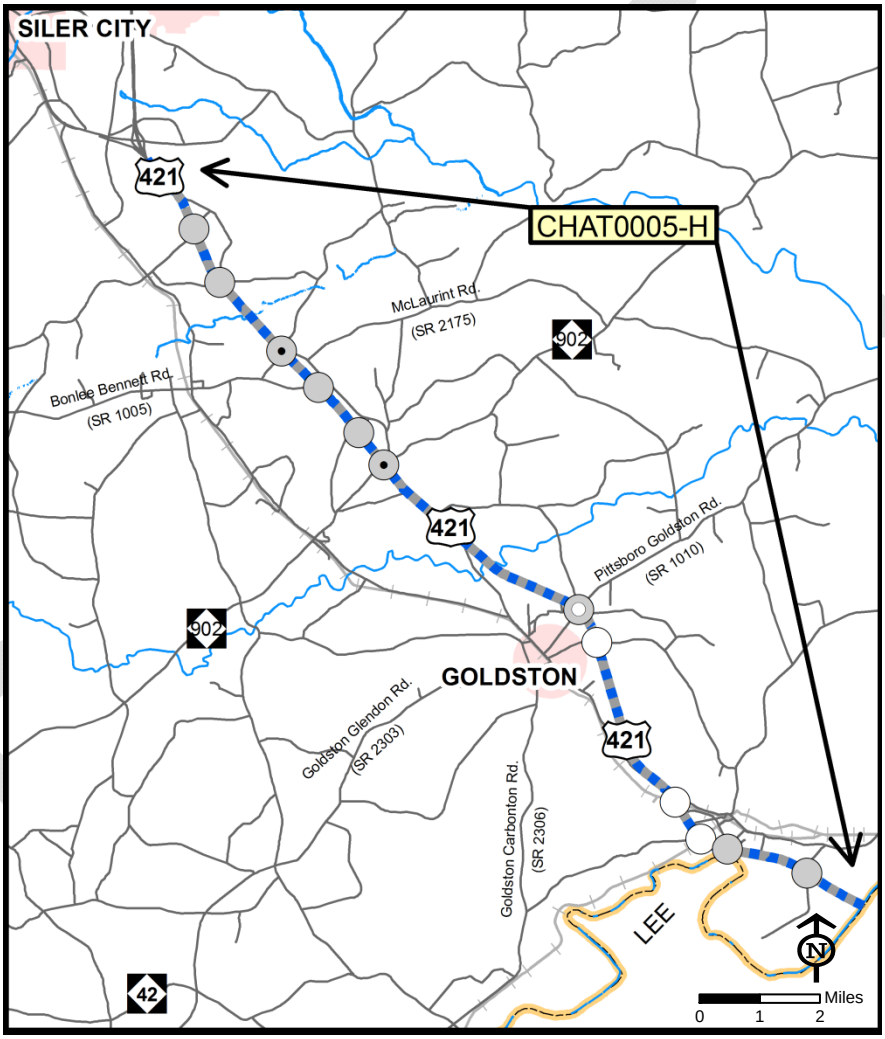
Multimodal Considerations

Due to the potentially high speed of the facility, the Chatham County CTP committee recommends a multi-use sidepath parallel to US 64. To maintain north/south bicycle and pedestrian connectivity throughout the county, frequent opportunities for crossings of US 64 are desired.

Public/ Stakeholder Involvement

Comments from the public at meetings throughout the CTP study process and through the Chatham County CTP Survey indicated that upgrading US 64 to anything more than an expressway is not favored by the local community.

US 421 Improvements from Sam Fields Road (SR 2113) to Lee County Line	Local ID: CHAT0005-H Last Updated:



Identified Problem

US 421 north of Siler City is currently a freeway facility, and the portion south of Chatham County, heading to Sanford, is designated to become a freeway facility in the 2007 Lee County CTP. The portion from the Lee County line north to Siler City, comprised of both boulevard and expressway cross sections, is inconsistent with the regional goal of providing a highly efficient, access-controlled facility to increase mobility in the region.

Justification of Need

US 421 through Chatham County is recognized in the North Carolina Transportation Network vision plan as a Strategic Transportation Corridor. Currently, the facility varies between an expressway and boulevard, and is inconsistent with the desired level of speed and mobility on US 421 north of Siler City and south of Chatham County

.

Community Vision and Problem History

The 1996 Chatham County Thoroughfare Plan (not mutually adopted) recommended the widening of US 421 from a two-lane undivided cross section to a four-lane divided cross section from the Lee County line to Siler City. This improvement has since been constructed, however, access control varies along the facility between boulevard and expressway designation. The 1999 Thoroughfare Plan Study and Technical Report For the Town of Siler City discusses recent improvements, at the time, of US 421 and construction (mentioned above from the 1996 Chatham County Thoroughfare Plan). The report also mentions the consideration of interchanges at the intersections of US 421 and Harold Andrews Road (SR 1316) and Alston Bridge Road (SR 2110). Projections at the time didn't necessarily warrant the construction of interchanges, and limitations in meeting a minimum two-mile spacing between interchanges were cited as reasons not to proceed with the interchange recommendations. The 2015 Chatham County CTP recommends an interchange at Alston Bridge Road (SR 2110).

CTP Project Proposal

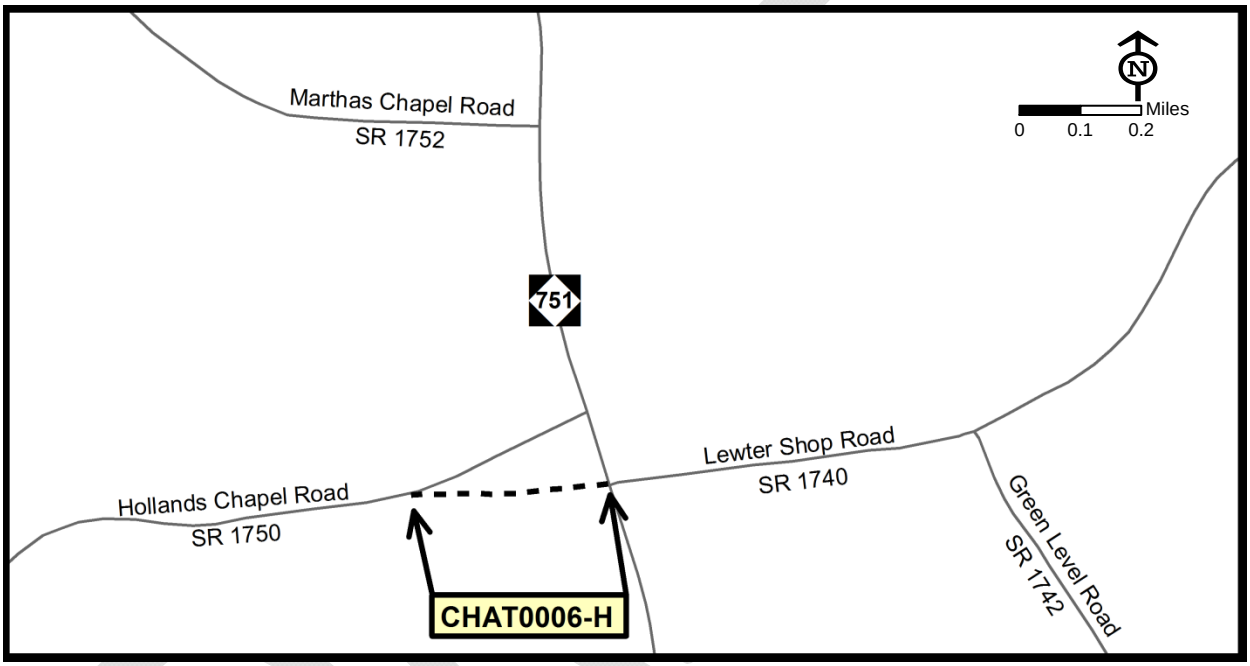
Project Description and Overview

From Sam Fields Road (SR 2113) to the Lee County line it is recommended that US 421 be upgraded to a controlled access four-lane divided freeway facility. Implementation of this project will require several grade separations as well as proposed new freeway interchanges at Ike Brooks Road (SR 2120), NC 902, Fayetteville Road (SR 2144) and approximately 1.5 miles north of the project area at US 421 and Alston Bridge Road (SR 2110).

Multi-modal Considerations

The facility designation does not allow for bicycle or pedestrian accommodations. There are two grade-separated rail crossings south of Goldston near the Lee County line on existing US 421 that will need to be considered if the facility is upgraded.

Hollands Chapel Road (SR 1750) Realignment	Local ID: CHAT0006-H Last Updated:



Identified Problem

For those traveling continuously from Hollands Chapel Road (SR 1750) to Lewter Shop Road (SR 1740), or vice versa, the two roads are not aligned, necessitating a right turn onto NC 751, followed by a left turn onto either Hollands Chapel Road or Lewter Shop Road, depending upon the direction of travel. Because NC 751 is currently a two-lane, relatively high-speed road, having motorists consistently making left turns onto either Hollands Chapel Road or Lewter Shop Road may inhibit the functional efficiency of NC 751.

Justification of Need

Hollands Chapel Road (SR 1750) and Lewter Shop Road (SR 1740) connect Chatham County to portions of the Town of Cary. Because the two roads are not aligned, movement between Hollands Chapel Road and Lewter Shop Road (or vice versa) requires a right turn onto NC 751 and an immediate left turn onto either Hollands Chapel Road or Lewter Shop Road. The North Eastern portion of Chatham County as well as areas to the east of Pittsboro are expected to grow significantly in the future,

which may put additional strain on routes that connect areas such as east Chatham to places like the Town of Cary. Projections for NC 751 indicate that the facility will be at or over capacity by 2040. The potential for an increased number of left turns from NC 751 onto either Hollands Chapel Road or Lewter Shop Road may decrease the facility's capacity and could increase the potential for rear end collisions.

CTP Project Proposal

Project Description and Overview

The CTP proposed project (Local ID CHAT0006-H) is to realign Hollands Chapel Road (SR 1750) at NC 751 to better align with Lewter Shop Road (SR 1740). Approximately 0.2 miles of Hollands Chapel Road would be affected. Currently, Hollands Chapel Road consists of two ten-foot lanes with a speed limit of 55 miles per hour.

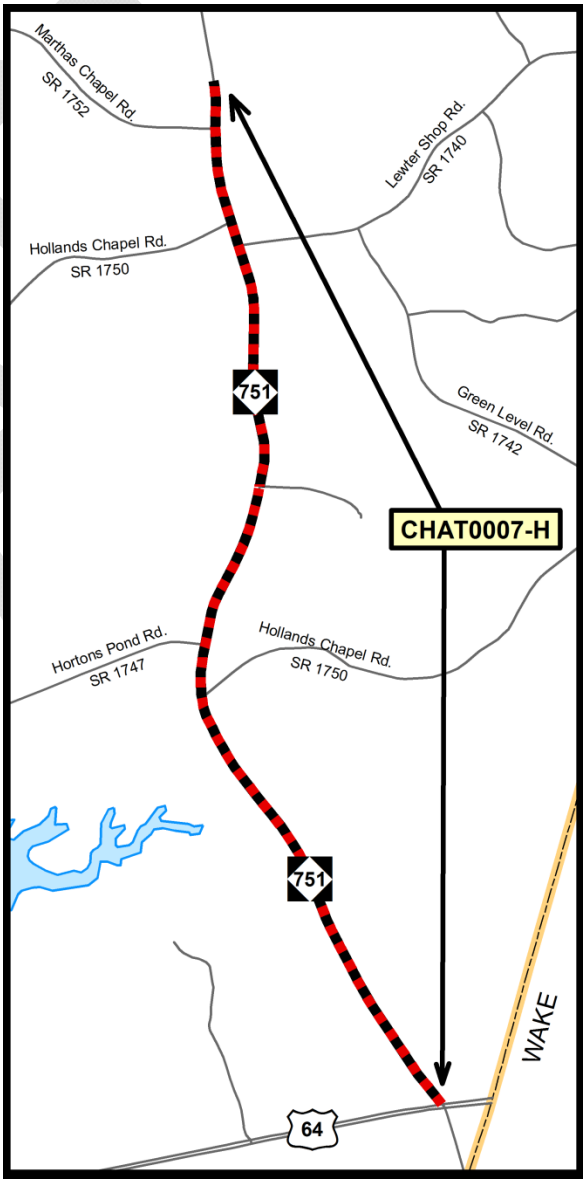
Natural & Human Environmental Context

The presence of ponds, a business and residences in the vicinity will need to be considered when evaluated an alignment for the project.

Multi-modal Considerations

The 2015 Chatham County CTP recommends minor improvements to NC 751 regarding bicycle accommodations in the form of wider paved shoulders. If bicycle traffic is increased by these measures, improving the connection between Lewter Shop Road and Hollands Chapel Road may also benefit the efficient mobility and safety of bicycle riders.

Improvements to NC 751 US 64 to DCHC MPO Boundary	Local ID: CHAT0007-H Last Updated:



Identified Problem

Traffic along NC 751 is expected exceed level of service (LOS) D by 2040. The current facility has an estimated LOS D capacity of approximately 14,000 to 15,000 vehicles per day (vpd). Traffic estimates 2040 indicate that there will be more than 20,000 vpd using NC 751 in Chatham County.

Justification of Need

NC 751 connects US 64 to I-40 and NC 54 in Durham County, and destinations such as Jordan Lake, residential developments and the Southpoint shopping area. NC 751 also provides a parallel alternative to the Western Wake Freeway (I-540) toll road to the east, and US 15-501 to the west. Projected development along the US 64 corridor from Pittsboro to the east will make NC 751 an increasingly important for regional connectivity. Projections indicate that in its current configuration, NC 751 will be over capacity by 2040.

Community Vision and Problem History

The 1996 Chatham County Thoroughfare Plan (not mutually adopted) recommended that NC 751 be widened to a three-lane (one lane in each direction with a center turn lane) facility with wide outside shoulders for bicycles. The

recommendation also specified building the cross-section on five lanes of right-of-way, presumable to allow room for future expansion.

CTP Project Proposal

Project Description and Overview

It is recommended to upgrade NC 751 to a four-lane divided boulevard facility with a minimum of four-foot shoulders to facilitate bicycle accommodations. Due to limited right-of-way and portions of the facility that interact with Jordan Lake, limitations on project footprint size should be considered.

Natural & Human Environmental Context

Portions of NC 751 cross or come close to Jordan Lake. The design footprint of a project resulting from this recommendation should be limited if possible.

Relationship to Land Use Plans

Development along US 64 – NC 28 is currently sparse. Commercial development is present alongside the road with residential access primarily provided by cross roads.

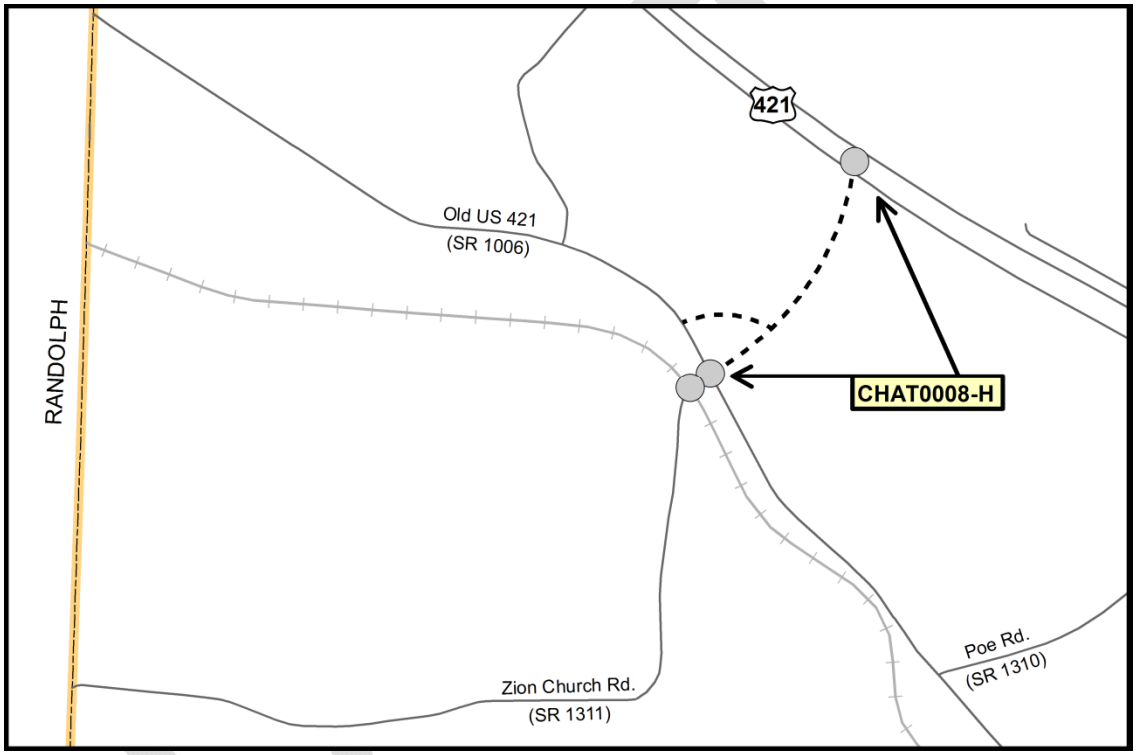
Linkages to Other Plans and Proposed Project History

The 1996 Chatham County Thoroughfare Plan (not mutually adopted) recommended that NC 751 be widened to a three-lane cross section on rive lanes of right-of-way with wide outside lanes to accommodate bicycles. The plan sites increasing traffic volumes and influences from development in Wake and Durham counties.

Multimodal Considerations

To facilitate bicycle accommodations on NC 751, it is recommended that paved shoulders on the facility should be a minimum of four feet in width.

Old US 421 (SR 1006) / Zion Church Road (SR 1311) Connector	Local ID: CHAT0008-H Last Updated:



Identified Problem

The site of a proposed major commercial development endorsed locally and at the statewide level has limited access to the surrounding roadway network. The nature of the potential development would necessitate efficient access of large trucks and connectivity to an existing rail line.

Justification of Need

Chatham County is making an effort to increase economic development and job creation in the county by promoting and investing in a large-scale commercial site. To attract an industry willing to build on and utilize the site, there will need to be an increased level of connectivity to the surrounding transportation network. The site's

close proximity to US 421, a freeway facility to the north of the project, make connecting to the freeway a logical choice.

Community Vision and Problem History

Recent declines in industry and jobs in the county (the closing of a large poultry processing plant and other commercial businesses) have increased the desire of the county to attract new businesses. With the support of the North Carolina Department of Commerce, local government entities and the land owners/developers have achieved the designation of North Carolina Certified Site for the project area.

CTP Project Proposal

Project Description and Overview

It is recommended that a new location four-lane divided boulevard be constructed from a new interchange on NC 421 south to Zion Church Road (SR 1311), which would then connect to a privately maintained access road to the Chatham-Siler City Advanced Manufacturing Site.

Natural & Human Environmental Context

Any new location facility in the area would require the acquisition of right-of-way consisting primarily of privately owned undeveloped land. Initial review of available GIS data layers does not indicate any major streams or wetlands in the project area.

Multimodal Considerations

This potential addition to the highway network would be intended primarily for heavy vehicles delivering and picking up industrial materials. Any accommodations for bicycle and/or pedestrian facilities would need to consider the compatibility of those modes with the stated intent of the project. The proposed facility would be a logical route for bus service as it could potentially connect a regional workforce to the project area.

Public/ Stakeholder Involvement

The state of North Carolina's Department of Commerce, as well as local entities, such as the Chatham Economic Development Corporation and the town of Siler City, has expressed support for this project.

NC 87, Local ID: CHAT0010-H

NC 87 from Pittsboro to the Alamance County line currently consists of a two-lane undivided cross section with 10-foot lanes and little to no paved shoulder. NC 87 serves as an important regional route for commuters both to and from the Pittsboro area, as well as trucks traveling between Lee and Orange counties.

It is recommended to upgrade the facility to two 12-foot lanes with a minimum of four-foot paved shoulders to help accommodate bicycle access.

N. Second Avenue (SR 1006 in Siler City), Local ID: CHAT0011-H

North Second Avenue in Siler City is an important route connecting the traditional downtown of Siler City with the highly developed US 64 (E. 11th Street) corridor. Currently, the facility is a mix of cross sections including five lanes with center turn lane and four lane undivided cross sections. Lanes are approximately 10 to 11 feet in width.

There is a local desire to slow traffic on this facility. The revitalizing traditional downtown area is experiencing growth and currently houses city services, including police and fire, as well as license plate registration, the courthouse, and more. Local perception is that drivers use N. Second street as a high-speed cut-through to get from the southern portion of Siler City to US 64 (E. 11th Street).

It is recommended that N. Second Avenue by reconfigured to a two-lane divided boulevard cross section with on-street parking and accommodations for bicycle and pedestrian traffic.

US 64 (E. 11th Street in Siler City), Local ID: CHAT0012-H

US 64 is a five-lane undivided with center turn lane configuration through Siler City from US 421 to the western town limits. Intersections vary from signalized to unsignalized with and without stop control measures. Pedestrian and bicycle accommodations are inconsistent and often do not exist along the facility. Of particular concern to locals is the perceived lack of safe crossing facilities (lack of crosswalks, pedestrian signals and signage). The speed limit is typically 45 mph, however local perception is that motorists often travel in excess of the speed limit.

It is recommended to upgrade US 64 (E. 11th Street) in Siler City to a four-lane divided boulevard facility with accommodations for bicycles as well as sidewalk facilities from approximately 0.3 miles west of Stockyard Rd (SR 1106) to US 421. This project is intended to be implemented with the Siler City Bypass proposal (CHAT-0003-H) in order to maintain a Level of Service (LOS) D. Crosswalk facilities are also desired as part of this project.

PUBLIC TRANSPORTATION & RAIL

The following routes are recommended for future bus routes

- US 421
- US 64 (east of Pittsboro).
- US 64 (west of US 421).

BICYCLE

During the development of the CTP, the following facilities were identified as needing improved bicycle accommodations. In accordance with American Association of State Highway and Transportation Officials (AASHTO), roadways identified as bicycle routes should incorporate the following standards as roadway improvements are made and funding is available:

- Curb & gutter sections require at minimum 5 foot bike lanes or 14 foot wide shoulder lanes.
- Shoulder sections require a minimum of 4 foot paved shoulder.
- All bridges along the roadways where bike facilities are recommended shall be equipped with 54 inch railings.

NC 902 from Bernard Purvis Road (SR 1151) to Pittsboro Goldston Road (SR 1010)

Airport Road (SR 1100) from Oakley Church Road (SR 1130) to Bonlee Bennett Road (SR 1005)

Bear Creek Church Road (SR 2300) from Bonlee Carbonton Road (SR 1009) to North Church Street (SR 2306)

Bennett Siler City Road (SR 1151) from Airport Road (SR 1100) to NC 902

Bonlee Bennett Road (SR 1139) from Bonlee School Road (SR 1139) to Old US 421 (SR 1176)

Bonlee Carbonton Road (SR 1009) from NC 902 to Bear Creek Church Road (SR 2300)

Bonlee School Road (SR 1139) from NC 902 to Bonlee Bennett Road (SR 1139)

Chatham Street (SR 1151) from Buffalo Street (SR 1154) to NC 902

Castle Rock Farm Road (SR 1549) from White Smith Road (SR 1506) to NC 87

Coleridge Road (SR 1102) from Randolph County line to West Third Street (SR 1107)

Devils Tramping Ground Road (SR 1100) from Bonlee Bennett Road (SR 1005) to NC 902

Epps Clark Road (SR 1557) from Silk Hope Lindley Mill Road (SR 1003) to White Smith Road (SR 1506)

Elmer Moore Road (SR 2126) from Old US 421 to Ike Brooks Road (SR 2120)

Goldston Carbonton Road (SR 2306) from Moore County line to Roberts Chapel Road (SR 2305)

Goldston Glendon Road (SR 2203) from Wilson Road (SR 2314) to Main Street (SR 2333)

Henderson Tanyard Road (SR 1558) from White Smith Road (SR 1506) to Castle Rock Farm Road (SR 1549)

Howards Mill Road (SR 1002) from Randolph County line to Chatham Street (SR 1151)

Ike Brooks Road (SR 2120) from Elmer Moore Road (SR 2126) to Sandy Branch Church Road (SR 2207)

Irving Lindley Road (SR 1556) from Woody Store Road (SR 1555) to Epps Clark Road (SR 1557)

Jesse Bridges Road (SR 1332) from Silk Hope Liberty Road (SR 1346) to Siler City Snow Camp Road (SR 1004)

Joe Brown Road (SR 1132) from Oakley Church Road (SR 1130) to Mt Vernon Springs Road (SR 1134)

Moon Lindley Road (SR 1337) from Tom Stevens Road (SR 1342) to Silk Hope Lindley Mill Road (SR 1003)

Mt Vernon Hickory Mountain Road (SR 1504) from Silk Hope Gum Springs Road (SR 1346) to US 64

Mt Vernon Springs Road (SR 1134) from Joe Brown Road (SR 1132) to Old US 421 (SR 1176)

North Church Street (SR 2306) from Bear Creek Church Road (SR 2300) to Goldston Glendon Road (SR 2303)

North Main Street (SR 2333) from Pittsboro Goldston Road (SR 1010) to Goldston Glendon Road (SR 2303)

Oakley Church Road (SR 1130) from Airport Road (SR 1100) to Joe Brown Road (SR 1132)

Old US 421 (SR 1176) from Gees Grove Road (SR 2114) to NC 902

Pittsboro Goldston Road (SR 1010) from North Main Street (SR 2333) to Meronies Church Road (SR 2187)

Siler City Glendon Road (SR 1006) from NC 902 to Moore County line

Siler City Snow Camp Road (SR 1004 from Alamance County line to US 421

Silk Hope Gum Springs Road (SR 1346) from Silk Hope Lindley Mill Road (SR 1003) to White Smith Road (SR 1506)

Silk Hope Liberty Road (SR 1346) from Staley Snow Camp Road (SR 1300) to Silk Hope Lindley Mill Road (SR 1003)

Silk Hope Lindley Mill Road (SR 1003) from Moon Lindley Road (SR 1337) to Silk Hope Gum Springs Road (SR 1346)

South Church Street (SR 2306) from Goldston Glenton Road (SR 2303) to Roberts Chapel Road (SR 2305)

South Main Street (SR 2333) from Pittsboro Goldston Road (SR 2303) to Murchison Road (SR 2195)

Staley Snow Camp Road (SR 1300) from the Randolph County line to Alamance County line.

Tom Stevens Road (SR 1343) from Siler City Snow Camp Road (SR 1004) to Moon Lindley Road (SR 1337)

White Smith Road (SR 1506) from Castle Rock Farm Road (SR 1549) to Silk Hope Gum Springs Road (SR 1346)

Wilson Road (SR 2314) from Siler City Glendon Road (SR 1006) to Goldston Glendon Road (SR 2303)

Woody Store Road (SR 1555) from Silk Hope Lindley Mill Road (SR 1003) to White Smith Road (SR 1506)

PEDESTRIAN

Refer to Figure 1, Sheets 5 for the Pedestrian CTP map.

The county's pedestrian plan and detailed information regarding its recommendations are available throughout Chatham County.

APPENDICES

Appendix A
Resources and Contacts

Local Planning Organization

Triangle Area Rural Planning Organization *(www.tarpo.org)*
Contact the RPO for information on long-range multi-modal planning services.
4307 Emperor Blvd, Suite 110 Durham, NC 27703 (919) 558-9397

North Carolina Department of Transportation

Customer Service Office
Contact information for other units within the NCDOT that are not listed in this appendix is available by calling the Customer Service Office or by visiting the NCDOT directory:

1-877-DOT-4YOU (1-877-368-4968) *http://www.ncdot.gov/contact/*

Secretary of Transportation *(http://www.ncdot.org/about/leadership/secretary.html)*
1501 Mail Service Center Raleigh, NC 27699-1501 (919) 707-2800

Board of Transportation *(http://www.ncdot.gov/about/board/)*
1501 Mail Service Center Raleigh, NC 27699-1501 (919) 707-2820

Highway Division 8 *(https://apps.dot.state.nc.us/dot/directory/authenticated/ToC.aspx)*
902 N. Sandhills Blvd. Aberdeen, NC 28315 (910) 944-2344

Contact the Highway Division with questions concerning NCDOT activities within each Division.

Contact the following NCDOT divisions and units[1] for:

Transportation Planning Branch (TPB)	*Information on long-range multi-modal planning services.* 1554 Mail Service Center Raleigh, NC 27699 (919) 707-0900
Strategic Planning Office	*Information concerning prioritization of transportation projects.* 1501 Mail Service Center Raleigh, NC 27699 (919) 707-4740
Project Development & Environmental Analysis (PDEA)	*Information on environmental studies for projects that are included in the TIP.* 1548 Mail Service Center Raleigh, NC 27699 (919) 707-6000
State Asset Management Unit	*Information regarding the status for unpaved roads to be paved, additions and deletions of roads to the State maintained system and the Industrial Access Funds program.* 1535 Mail Service Center Raleigh, NC 27699 (919) 707-2500

[1] Unit websites are hyperlinked and can also be accessed at *https://connect.ncdot.gov/Pages/default.aspx*.

Program Development Branch	*Information concerning Roadway Official Corridor Maps, Feasibility Studies and the Transportation Improvement Program (TIP).* 1542 Mail Service Center Raleigh, NC 27699 (919) 707-4610
Public Transportation Division	*Information on public transit systems.* 1550 Mail Service Center Raleigh, NC 27699 (919) 707-4670
Rail Division	*Rail information throughout the state.* 1553 Mail Service Center Raleigh, NC 27699 (919) 707-4700
Division of Bicycle and Pedestrian Transportation	*Bicycle and pedestrian transportation information throughout the state.* 1552 Mail Service Center Raleigh, NC 27699 (919) 707-2600
Structures Management Unit	*Information on bridge management throughout the state.* 1581 Mail Service Center Raleigh, NC 27699 (919) 707-6400
Roadway Design Unit	*Information regarding design plans and proposals for road and bridge projects throughout the state.* 1582 Mail Service Center Raleigh, NC 27699 (919) 707-6200
Transportation Mobility and Safety Division	*Information regarding crash data throughout the state.* 1561 Mail Service Center Raleigh, NC 27699 (919) 773-2800

Other State Government Offices

Department of Commerce – Division of Community Assistance

Contact the Department of Commerce for resources and services to help realize economic prosperity, plan for new growth and address community needs.

http://www.nccommerce.com/cd

Appendix B
Comprehensive Transportation Plan Definitions

This appendix contains descriptive information and definitions for the designations depicted on the CTP maps shown in Figure 1.

Highway Map

The "NCDOT Facility Type –Control of Access Definitions" document provides a visual depiction of facility types for the following CTP classification.

Facility Type Definitions

- **Freeways**
  - Functional purpose – high mobility, high volume, high speed
  - Posted speed – 55 mph or greater
  - Cross section – minimum four lanes with continuous median
  - Multi-modal elements – High Occupancy Vehicles (HOV)/High Occupancy Transit (HOT) lanes, busways, truck lanes, park-and-ride facilities at/near interchanges, adjacent shared use paths (separate from roadway and outside ROW)
  - Type of access control – full control of access
  - Access management – interchange spacing (urban – one mile; non-urban – three miles); at interchanges on the intersecting roadway, full control of access for 1,000ft or for 350ft plus 650ft island or median; use of frontage roads, rear service roads
  - Intersecting facilities – interchange or grade separation (no signals or at-grade intersections)
  - Driveways – not allowed

- **Expressways**
  - Functional purpose – high mobility, high volume, medium-high speed
  - Posted speed – 45 to 60 mph
  - Cross section – minimum four lanes with median
  - Multi-modal elements – HOV lanes, busways, very wide paved shoulders (rural), shared use paths (separate from roadway but within ROW)
  - Type of access control – limited or partial control of access;
  - Access management – minimum interchange/intersection spacing 2,000ft; median breaks only at intersections with minor roadways or to permit U-turns; use of frontage roads, rear service roads; driveways limited in location and number; use of acceleration/deceleration or right turning lanes
  - Intersecting facilities – interchange; at-grade intersection for minor roadways; right-in/right-out and/or left-over or grade separation (no signalization for through traffic)
  - Driveways – right-in/right-out only; direct driveway access via service roads or other alternate connections

❖ **Boulevards**

- Functional purpose – moderate mobility; moderate access, moderate volume, medium speed
- Posted speed – 30 to 55 mph
- Cross section – two or more lanes with median (median breaks allowed for U-turns per current NCDOT *Driveway Manual*
- Multi-modal elements – bus stops, bike lanes (urban) or wide paved shoulders (rural), sidewalks (urban - local government option)
- Type of access control – limited control of access, partial control of access, or no control of access
- Access management – two lane facilities may have medians with crossovers, medians with turning pockets or turning lanes; use of acceleration/deceleration or right turning lanes is optional; for abutting properties, use of shared driveways, internal out parcel access and cross-connectivity between adjacent properties is strongly encouraged
- Intersecting facilities – at grade intersections and driveways; interchanges at special locations with high volumes
- Driveways – primarily right-in/right-out, some right-in/right-out in combination with median leftovers; major driveways may be full movement when access is not possible using an alternate roadway

❖ **Other Major Thoroughfares**

- Functional purpose – balanced mobility and access, moderate volume, low to medium speed
- Posted speed – 25 to 55 mph
- Cross section – four or more lanes without median *(US and NC routes may have less than four lanes)*
- Multi-modal elements – bus stops, bike lanes/wide outer lane (urban) or wide paved shoulder (rural), sidewalks (urban)
- Type of access control – no control of access
- Access management – continuous left turn lanes; for abutting properties, use of shared driveways, internal out parcel access and cross-connectivity between adjacent properties is strongly encouraged
- Intersecting facilities – intersections and driveways
- Driveways – full movement on two lane roadway with center turn lane as permitted by the current NCDOT *Driveway Manual*

❖ **Minor Thoroughfares**

- Functional purpose – balanced mobility and access, moderate volume, low to medium speed
- Posted speed – 25 to 55 mph
- Cross section – ultimately three lanes (no more than one lane per direction) or less without median
- Multi-modal elements – bus stops, bike lanes/wide outer lane (urban) or wide paved shoulder (rural), sidewalks (urban)
- ROW – no control of access

- Access management – continuous left turn lanes; for abutting properties, use of shared driveways, internal out parcel access and cross-connectivity between adjacent properties is strongly encouraged
- Intersecting facilities – intersections and driveways
- Driveways – full movement on two lane with center turn lane as permitted by the current NCDOT *Driveway Manual*

Other Highway Map Definitions

- **Existing** – Roadway facilities that are not recommended to be improved.
- **Needs Improvement** – Roadway facilities that need to be improved for capacity, safety, operations, or system continuity. The improvement to the facility may be widening, increasing the level of access control along the facility, operational strategies (including but not limited to traffic control and enforcement, incident and emergency management, and deployment of Intelligent Transportation Systems (ITS) technologies), or a combination of improvements and strategies. *"Needs improvement" does not refer to the maintenance needs of existing facilities or the replacement or rehab of structures.*
- **Recommended** – Roadway facilities on new location that are needed in the future.
- **Interchange** – Through movement on intersecting roads is separated by a structure. Turning movement area accommodated by on/off ramps and loops.
- **Grade Separation** – Through movement on intersecting roads is separated by a structure. There is no direct access between the facilities.
- **Full Control of Access** – Connections to a facility provided only via ramps at interchanges. No private driveway connections allowed.
- **Limited Control of Access** – Connections to a facility provided only via ramps at interchanges (major crossings) and at-grade intersections (minor crossings and service roads). No private driveway connections allowed.
- **Partial Control of Access** – Connections to a facility provided via ramps at interchanges, at-grade intersections, and private driveways. Private driveway connections shall be defined as a maximum of one connection per parcel. One connection is defined as one ingress and one egress point. These may be combined to form a two-way driveway (most common) or separated to allow for better traffic flow through the parcel. The use of shared or consolidated connections is highly encouraged.
- **No Control of Access** – Connections to a facility provided via ramps at interchanges, at-grade intersections, and private driveways.

Public Transportation and Rail Map

- **Bus Routes** – The primary fixed route bus system for the area. Does not include demand response systems.
- **Fixed Guideway** – Any transit service that uses exclusive or controlled rights-of-way or rails, entirely or in part. The term includes heavy rail, commuter rail, light rail,

monorail, trolleybus, aerial tramway, included plane, cable car, automated guideway transit, and ferryboats.

- **Operational Strategies** – Plans geared toward the non-single occupant vehicle. This includes but is not limited to HOV lanes or express bus service.
- **Rail Corridor** – Locations of railroad tracks that are either active or inactive tracks. These tracks were used for either freight or passenger service.
  - Active – rail service is currently provided in the corridor; may include freight and/or passenger service
  - Inactive – right of way exists; however, there is no service currently provided; tracks may or may not exist
  - Recommended – It is desirable for future rail to be considered to serve an area.
- **High Speed Rail Corridor** – Corridor designated by the U.S. Department of Transportation as a potential high speed rail corridor.
  - Existing – Corridor where higher-speed rail service (over 79 mph) is provided or a corridor that is officially designated by FRA to run higher speed trains in the future. There is currently one federally designated high-speed rail corridor in North Carolina - The Southeast High Speed Rail Corridor.
  - Recommended – Proposed corridor for higher speed rail service.
- **Rail Stop** – A railroad station or stop along the railroad tracks.
- **Multimodal Connector** - A location where more than one mode of transportation meet such as where light rail and a bus route come together in one location. (NOTE- intermodal refers to two or more modes that transfer the same cargo unit-like 40' shipping container from ship to train or truck); multimodal is the transfer of people/cargo between two or more modes and in NC is used in public transit settings i.e. Charlotte Multimodal Station)
- **Park and Ride Lot** – A strategically located parking lot that provides commuters connections to transit or carpools.
- **Existing Grade Separation** – Locations where existing rail facilities are physically separated from existing highways or other transportation facilities. These may be bridges, culverts, or other structures.
- **Proposed Grade Separation** – Locations where rail facilities are recommended to be physically separated from existing or recommended highways or other transportation facilities. These may be bridges, culverts, or other structures.

Bicycle Map

- **On Road-Existing** – Conditions for bicycling on the highway facility are adequate to safely accommodate cyclists.
- **On Road-Needs Improvement** – At the systems level, it is desirable for **an existing** highway facility to accommodate bicycle transportation; however, highway improvements are necessary to create safe travel conditions for the cyclists.

- **On Road-Recommended** – At the systems level, it is desirable for **a recommended** highway facility to accommodate bicycle transportation. The highway should be designed and built to safely accommodate cyclists.

- **Off Road-Existing** – A facility that accommodates only bicycle transportation and is physically separated from a highway facility either within the right-of-way or within an independent right-of-way.

- **Off Road-Needs Improvement** – A facility that accommodates only bicycle transportation and is physically separated from a highway facility either within the right-of-way or within an independent right-of-way that will not adequately serve future bicycle needs. Improvements may include but are not limited to, widening, paving (not re-paving or other maintenance activities), and improved horizontal or vertical alignment.

- **Off Road-Recommended** – A facility needed to accommodate only bicycle transportation and is physically separated from a highway facility either within the right-of-way or within an independent right-of-way.

- **Multi-use Path-Existing** – An existing facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that serves bicycle and pedestrian traffic. Sidewalks should not be designated as a multi-use path.

- **Multi-use Path-Needs Improvement** – An existing facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that serves bicycle and pedestrian traffic that will not adequately serve future needs. Improvements may include but are not limited to, widening, paving (not re-paving or other maintenance activities), and improved horizontal or vertical alignment. Sidewalks should not be designated as a multi-use path.

- **Multi-use Path-Recommended** – A facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that is needed to serve bicycle and pedestrian traffic. Sidewalks should not be designated as a multi-use path.

- **Existing Grade Separation** – Locations where existing “Off Road” facilities and “Multi-use Paths” are physically separated from existing highways, railroads, or other transportation facilities. These may be bridges, culverts, or other structures.

- **Proposed Grade Separation** – Locations where “Off Road” facilities and “Multi-use Paths” are recommended to be physically separated from existing or recommended highways, railroads, or other transportation facilities. These may be bridges, culverts, or other structures.

Pedestrian Map

- **Sidewalk-Existing** – Paved paths (including but not limited to concrete, asphalt, brick, stone, or wood) on both sides of a highway facility and within the highway right-of-way that are adequate to safely accommodate pedestrian traffic.

- **Sidewalk-Needs Improvement** – Improvements are needed to provide paved paths on both sides of a highway facility. The highway facility may or may not need improvements. Improvements do not include re-paving or other maintenance activities but may include: filling in gaps, widening sidewalks, or meeting ADA (Americans with Disabilities Act) requirements.

- **Sidewalk-Recommended** – At the systems level, it is desirable for a recommended highway facility to accommodate pedestrian transportation **or** to add sidewalks on an existing facility where no sidewalks currently exist. The highway should be designed and built to safely accommodate pedestrian traffic.

- **Off Road-Existing** – A facility that accommodates only pedestrian traffic and is physically separated from a highway facility usually within an independent right-of-way.

- **Off Road-Needs Improvement** – A facility that accommodates only pedestrian traffic and is physically separated from a highway facility usually within an independent right-of-way that will not adequately serve future pedestrian needs. Improvements may include but are not limited to, widening, paving (not re-paving or other maintenance activities), improved horizontal or vertical alignment, and meeting ADA requirements.

- **Off Road-Recommended** – A facility needed to accommodate only pedestrian traffic and is physically separated from a highway facility usually within an independent right-of-way.

- **Multi-use Path-Existing** – An existing facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that serves bicycle and pedestrian traffic. Sidewalks should not be designated as a multi-use path.

- **Multi-use Path-Needs Improvement** – An existing facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that serves bicycle and pedestrian traffic that will not adequately serve future needs. Improvements may include but are not limited to, widening, paving (not re-paving or other maintenance activities), and improved horizontal or vertical alignment. Sidewalks should not be designated as a multi-use path.

- **Multi-use Path-Recommended** – A facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that is needed to serve bicycle and pedestrian traffic. Sidewalks should not be designated as a multi-use path.

- **Existing Grade Separation** – Locations where existing “Off Road” facilities and “Multi-use Paths” are physically separated from existing highways, railroads, or other transportation facilities. These may be bridges, culverts, or other structures.

- **Proposed Grade Separation** – Locations where “Off Road” facilities and “Multi-use Paths” are recommended to be physically separated from existing or recommended highways, railroads, or other transportation facilities. These may be bridges, culverts, or other structures.

Appendix C
CTP Inventory and Recommendations

Assumptions/ Notes:

- **Local ID:** This Local ID is the same as the one used for the Prioritization Project Submittal Tool. If a TIP project number exists it is listed as the ID. Otherwise, the following system is used to create a code for each recommended improvement: the first 4 letters of the county name is combined with a 4 digit unique numerical code followed by '-H' for highway, '-T' for public transportation, '-R' for rail, '-B' for bicycle, '-M' for multi-use paths, or '-P' for pedestrian modes. If a different code is used along a route it indicates separate projects will probably be requested. Also, upper case alphabetic characters (i.e. 'A', 'B', or 'C') are included after the numeric portion of the code if it is anticipated that project segmentation or phasing will be recommended.
- **Jurisdiction:** Jurisdictions listed are based on municipal limits, county boundaries, and MPO Metropolitan Planning Area Boundaries (MAB), as applicable.
- **Existing Cross-Section:** Listed under 'Total Width (ft)' is the approximate width of the roadway from edge of pavement to edge of pavement and under 'Lane Width (ft)' is the approximate width of a single lane based on centerline/ edge line markings. Listed under 'Lanes' is the total number of lanes, with 'D' if the facility is divided, and 'OW' if it is a one-way facility.
- **Existing ROW:** These right-of-way amounts are approximate and may vary.
- **Existing and Proposed Capacity:** The estimated capacities are given in vehicles per day (vpd) based on LOS D for existing facilities and LOS C for new facilities. These capacity estimates were developed based on the 2000 Highway Capacity Manual using the Transportation Planning Branch's LOS D Standards for Systems Level Planning, as documented in Chapter 1.
- **Existing and Proposed Volumes**, given in vehicles per day (vpd), are estimates only based on a systems-level analysis. The '2040 Volume E+C' is an estimate of the volume in 2040 with only existing plus committed projects assumed to be in place, where committed is defined as projects programmed for construction in the 2016 - 2025 Transportation Improvement Program (TIP). The '2040 Volume with CTP' (or '2040 Volume with LRTP', in MPO areas) is an estimate of the volume in 2040 with all proposed CTP improvements assumed to be in place. The '2040 Volume with CTP' is shown in bold if it exceeds the proposed capacity, indicating an unmet need. For additional information about the assumptions and techniques used to develop the AADT volume estimates, refer to Chapter 1.
- **Proposed Cross-section:** The CTP recommended cross-sections are listed by code; for depiction of the cross-section, refer to Appendix D. An entry of 'ADQ' indicates the existing facility is adequate and there are no improvements recommended for the given mode as part of the CTP.
- **CTP Classification:** The CTP classification is listed, as shown on the adopted CTP Maps (see Figure 1). Abbreviations are F= freeway, E= expressway, B= boulevard, Maj= other major thoroughfare, Min= minor thoroughfare.

- **Tier:** Tiers are defined as part of the North Carolina Multimodal Investment Network (NCMIN). Abbreviations are Sta= statewide tier, Reg= regional tier, Sub= subregional tier.
- **Proposals for Other Modes:** If there is an improvement recommended for another mode of transportation that relates to the given recommendation, it is indicated by an alphabetic code (H= highway, T= public transportation, R= rail, B= bicycle, P= pedestrian, and M= multi-use path).

CTP INVENTORY AND RECOMMENDATIONS

HIGHWAY																				
		Section				2010 Existing System							2040 Proposed System							
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd	2010 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Proposals for Other Modes
	US 1	Lee County Line	Moncure Pittsboro Rd. (SR 1012)	Chatham	0.5	48	4	12	130	65	58,000	21,000	47,400	47,400	58,000	4A	130	F		-
	US 1	Moncure Pittsboro Rd. (SR 1012)	Pea Ridge Rd. (SR 1972)	Chatham	2.1	48	4	12	130	65	58,000	20,000	42,300	42,300	58,000	4A	130	F		-
	US 1	Pea Ridge Rd. (SR 1972	Old US 1 (SR 1011	Chatham	2.9	48	4	12	130	65	58,000	19,000	42,200	42,200	58,000	4A	130	F		-
	US 1	Old US 1 (SR 1011	Wake County line	Chatham	1.1	48	4	12	130	65	58,000	19,000	44,600	44,600	58,000	4A	130	F		-
	US 15-501/ NC 87	Lee County line	Center Grove Church Rd. (SR 2218)	Chatham	3.3	24	2	12	270	55	14,300	5,900	10,200	10,200	14,300	2A	270	E		B
	US 15-501/ NC 87	Center Grove Church Rd. (SR 2218)	Pittsboro CTP planning boundary	Chatham	2.2	24	2	12	270	55	14,300	6,200	10,700	10,700	14,300	2A	270	E		B
	US 15-501	Pittsboro CTP planning boundary	Hamlets Chapel Rd. (SR 1525)	Chatham	1.5	60	4	12	160	55	40,500	12,000	28,000	28,000	40,500	4A	160	Blvd		B, MP
	US 15-501	Hamlets Chapel Rd. (SR 1525)	Mt. Gilead Church Rd. (SR 1700)	Chatham	1.5	48	4	12	160	55	40,500	12,000	28,000	28,000	40,500	4A	270	Blvd		B, MP
	US 15-501	Mt. Gilead Church Rd. (SR 1700)	Jack Bennett Rd. (SR 1717)	Chatham	1.9	48	4	12	160	55	40,500	13,000	35,000	35,000	40,500	4A	270	Blvd		B, MP
	US 15-501	Jack Bennett Rd. (SR 1717)	Manns Chapel Rd. (SR 1532)	Chatham	2.2	48	4	12	160	55	40,500	19,000	35,000	35,000	40,500	4A	270	Blvd		B, MP
	US 15-501	Manns Chapel Rd. (SR 1532)	Orange County line	Chatham	1.1	48	4	12	100	55	40,500	21,000	42,000	42,000	40,500	4A	200 to 150	Blvd		B, MP
	US 64	Randolph County line	West Third St. (SR 1107)	Chatham	1.6	56	4	12	100	55	40,500	9,000	13,800	13,800	40,500	4A	160	E		PT
	US 64	West Third St. (SR 1107)	North Chatham Ave. (SR 1108)	Chatham	2.8	67	5	12	150	55	31,800	11,000	16,800	16,800	31,800	5A	160	Blvd		PT
	US 64	North Chatham Ave. (SR 1108)	N Second Ave. (SR 1006)	Chatham	0.1	64	5	12	150	45	27,600	11,000	18,400	18,400	27,600	5A	160	Blvd		PT
	US 64	N. Second Ave. (SR 1006)	E. Third St. (SR 1107)	Chatham	1.1	64	5	12	150	45	27,600	14,000	22,200	22,200	27,600	5A	160	Blvd		PT

HIGHWAY																				
		Section				2010 Existing System							2040 Proposed System							
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd	2010 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Proposals for Other Modes
	US 64	E. Third St. (SR 1107)	US 421	Chatham	0.8	64	5	12	100	45	27,600	19,000	26,100	26,100	27,600	5A	160	Blvd		PT
	US 64	US 421	Silk Hope Rd. (SR 1003)	Chatham	1.1	60	5	12	200	45	27,600	19,000	33,100	33,100	27,600	5A	100	E		-
	US 64	Silk Hope Rd. (SR 1003)	Siler City model boundary	Chatham	4.1	48	4	12	100	55	40,500	12,000	24,300	24,300	40,500	4A	100	E		MP
	US 64	Silk Hope Rd. (SR 1003)	Arthur Teague Rd. (SR 1500)	Chatham	1.5	48	4	12	100	45	40,500	12,000	24,300	24,300	40,500	4A	150	E		MP
	US 64	Arthur Teague Rd. (SR 1500)	Siler City model area boundary	Chatham	2.7	48	4	12	100	55	40,500	12,000	24,300	24,300	40,500	4A	150	E		MP
	US 64	Siler City model area boundary	Hillside Dairy Rd. (SR 1511)	Chatham	1.3	48	4	12	100	55	45,200	12,000	24,300	24,300	40,500		150	E		MP
	US 64	Hillside Dairy Rd. (SR 1511)	Pittsboro CTP planning boundary	Chatham	1.8	48	4	12	100	55	45,200	12,000	24,300	24,300	45,200	4A	100	E		MP
	US 421	Randolph County line	Siler City model boundary	Chatham	1.1	48	4	12	200 to 285	65	58,000	11,000	20,100	20,100	58,000	4A	100	F		PT
	US 421	Siler City model boundary	Piney Grove Church Rd. (SR 1362)	Chatham	3.8	48	4	12	285	65	57,200	11,000	20,100	20,100	57,200	4A	285	F		PT
	US 421	Piney Grove Church Rd. (SR 1362)	US 64	Chatham	3.2	48	4	12	100 to 190	65	57,200	11,000	20,800	20,800	57,200	4A	100 to 190	F		PT
	US 421	US 64	Sam Fields Rd.	Chatham	2.8	48	4	12	100	65	57,200	12,000	17,600	17,600	57,200	4A	100	F		PT
	US 421	Sam Fields Rd.	Siler City model boundary	Chatham	2.8	48	4	12	100	65	54,800	11,000	15,700	15,700	54,800	4A	100	F		PT
	US 421	Siler City model boundary	Elmer Moore Rd. (SR 2126)	Chatham	1.3	48	4	12	100	65	54,800	11,000	15,700	15,700	54,800	4A	100	F		PT
	US 421	Elmer Moore Rd. (SR 2126)	Barker Rd. (SR 2128)	Chatham	0.8	48	4	12	200	55	54,800	10,000	13,000	13,000	54,800	4A	200	F		PT
	US 421	Barker Rd. (SR 2128)	NC 902	Chatham	0.5	48	4	12	200	55	54,800	10,000	14,800	14,800	54,800	4A	200	F		PT
	US 421	NC 902	Ralph Sipe Rd. (SR 2333)	Chatham	1.5	48	4	12	200	55	54,800	10,000	13,000	13,000	54,800	4A	200	F		PT
	US 421	Ralph Snipe Rd. (SR 2333)	Pittsboro Goldston Rd. (SR 1010)	Chatham	1.8	48	4	12	200	55	54,800	9,500	13,200	13,200	54,800	4A	200	F		PT
	US 421	Pittsboro Goldston Rd. (SR 1010)	S. Main St. (SR 2333)	Chatham	1.9	48	4	12	200	55	54,800	9,800	14,700	14,700	54,800	4A	200	F		PT

HIGHWAY																				
		Section				2010 Existing System							2040 Proposed System							
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd	2010 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Proposals for Other Modes
	US 421	S. Main St. (SR 2333)	Murchison Rd. (SR 2195)	Chatham	1.3	48	4	12	200	55	54,800	12,000	14,000	14,000	54,800	4A	200	F		PT
	US 421	Murchison Rd. (SR 2195)	Gulf Rd. (SR 2135)	Chatham	1.3	48	4	12	200	55	54,800	11,000	15,000	15,000	54,800	4A	200	F		PT
	US 421	Gulf Rd. (SR 2135)	Lee County line	Chatham	1.6	48	4	12	200	55	54,800	11,000	17,800	17,800	54,800	4A	200	F		PT
	NC 22	Moore County line	NC 902	Chatham	2.4	20	2	10	100	55	11,800	1,600	1,700	1,700	11,800	2A	100	Maj		-
	NC 22	NC 902	Randolph County line	Chatham	1.6	20	2	10	100	55	11,800	1,900	2,000	2,000	11,800	2A	100	Maj		-
	NC 42	Randolph County line	Charlie Garner Rd. (SR 2308)/ NC 22 split	Chatham	Coincides with NC 22															
	NC 42	NC 22	Hoyte Scott Rd. (SR 2319)	Chatham	3.5	20	2	10	60	55	11,800	800	900	900	11,800	2A	60	Maj		-
	NC 42	Hoyte Scott Rd. (SR 2319)	Bonlee Carbonton Rd. (SR 1009)	Chatham	5.7	20	2	10	60	55	11,800	700	900	900	11,800	2A	60	Maj		-
	NC 42	Bonlee Carbonton Rd. (SR 1009)	Lee County line	Chatham	1.9	18	2	9	60	55	10,500	1,500	1,800	1,800	10,500	2A	60	Maj		-
	NC 42	Lee County line	Corinth Rd. (SR 1916)	Chatham	1.3	18	2	9	60	55	10,500	2,100	2,500	2,500	10,500	2A	60	Maj		-
	NC 42	Corinth Rd. (SR 1916)	Harnett County Line	Chatham	5.4	18	2	9	60	55	10,500	1,700	2,700	2,700	10,500	2A	60	Maj		-
	NC 87	Lee County Line	Pittsboro southern city limits (Log Barn Rd.)	Chatham	Coincides with US 15-501															
	NC 87	Pittsboro CTP planning boundary	Chicken Bridge Rd. (SR 1546)	Chatham	2.1	20	2	10	60	55	11,800	3,000	8,000	8,000	11,800	2A	60	Maj		-
	NC 87	Chicken Bridge Rd. (SR 1546)	Alamance County line	Chatham	3.0	20	2	10	60	55	11,800	2,200	3,700	3,700	11,800	2A	60	Maj		-
	NC 751	US 64	Lewter Shop Rd. (SR 1743)	Chatham	3.3	24	2	12	60 to 200	55	15,100	7,300	22,300	22,300	15,100	2A	60 to 200	Blvd		-
	NC 751	Lewter Shop Rd. (SR 1743)	Mt. Pisgah Church Rd. (SR 1736)	Chatham	3.1	22	2	11	60 to 200	55	15,100	7,800	20,500	20,500	15,100	2A	60 to 200	Blvd		-

HIGHWAY																				
		Section				2010 Existing System							2040 Proposed System							
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd	2010 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Proposals for Other Modes
	NC 751	Mt. Pisgah Church Rd. (SR 1736)	Durham County line	Chatham	4.4	24	2	12	60 to 200	55	15,100	7,500	22,200	22,200	15,100	2A	60 to 200	Blvd		-
	NC 902	NC 22-24	Siler City Glendon Rd. (SR 1006)	Chatham	4.6	20	2	10	100	55	11,800	1,000	1,200	1,200	11,800	2A	100	Maj		-
	NC 902	Siler City Glendon Rd. (SR 1006)	Edwards Hill Church Rd. (SR 1141)	Chatham	2.3	20	2	10	60	55	11,800	1,600	2,100	2,100	11,800	2A	60	Maj		-
	NC 902	Edwards Hill Church Rd. (SR 1141)	Bonlee School Rd. (SR 1139)	Chatham	2.1	20	2	10	60	55	11,800	1,300	1,600	1,600	11,800	2A	60	Maj		-
	NC 902	Bonlee School Rd. (SR 1139)	US 421	Chatham	2.7	20	2	10	60	55	11,800	1,300	2,200	2,200	11,800	2A	60	Maj		-
	NC 902	US 421	Pleasant Hill Church Rd. (SR 1506)	Chatham	6.5	18	2	9	60	55	10,500	1,000	1,100	1,100	10,500	2A	60	Maj		-
	Airport Rd. (SR 1100)	Bonlee Bennett Rd. (SR 1005)	Siler City model boundary	Chatham	2.6	18	2	9	60	55	10,500	400	500	500	10,500	2A	60	Secondary		B
	Airport Rd. (SR 1100)	Siler City model boundary	S. Airport Rd.	Chatham	2.8	18	2	9	60	55	10,500	600	900	900	10,500	2A	60	Secondary		B
	Airport Rd. (SR 1100)	S. Airport Rd.	W. Third St. (SR 1107)	Chatham	2.3	18	2	9	60	55	10,500	1100 [2007]	1,500	1,500	10,500	2A	60	Secondary		B
	Andrews Store Rd. (SR 1526, 1528)	Manns Chapel Rd. (SR 1532)	Parker Herndon Rd. (SR 1526)	Chatham	2.2	20	2	10	60	55	11,800	2200	3200	3,200	11,800	2A	60	Secondary		-
	Andrews Store Rd. (SR 1526, 1528)	Parker Herndon Rd. (SR 1526)	US 15-501	Chatham	1.6	20	2	10	60	55	11,800	7000	12000	12,000	11,800	2A	60	Secondary		-
	Aurthur Teague Rd. (SR 1500)	US 64	Siler City model boundary	Chatham	2.7	20	2	10	60	55	11,800	200	400	400	11,800	2A	60	Secondary		-
	Beaver Creek Rd. (SR 1008)	Wake County line	Pea Ridge Rd. (SR 1972)	Chatham	3.5	22	2	11	60	55	12,400	500	1,200	1,200	12,400	2A	60	Secondary		-
	Beaver Creek Rd. (SR 1008)	Pea Ridge Rd. (SR 1972) to Ebenzer Rd.	Ebenzer Rd.	Chatham	1.0	24	2	12	60	55	12,400	500	1,200	1,200	12,400	2A	60	Secondary		-
	Beaver Creek Rd. (SR 1008)	Ebenzer Rd.	US 64	Chatham	2.2	22	2	11	60	55	12,400	2,700	5,900	5,900	12,400	2A	60	Secondary		-

HIGHWAY																				
		Section				2010 Existing System							2040 Proposed System							
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd	2010 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
	Bennett Siler City Rd. (SR 1151)	Buffalo St. (SR 1155)	Vaughn Bray Rd. (SR 1153)	Chatham	0.9	22	2	11	60	55	12,400	1,400	1,600	1,600	12,400	2A	60	Secondary		-
	Bennett Siler City Rd. (SR 1151)	Vaughn Bray Rd. (SR 1153)	Glovers Church Rd. (SR 1145)	Chatham	1.4	22	2	11	60	55	12,400	1,500	2,200	2,200	12,400	2A	60	Secondary		-
	Bennett Siler City Rd. (SR 1151)	Glovers Church Rd. (SR 1145)	Bonlee Bennett Rd. (SR 1005)	Chatham	1.4	22	2	11	60	55	12,400	1,200	1,400	1,400	12,400	2A	60	Secondary		-
	Big Woods Rd. (SR 1716)	US 64	Windy Ridge Rd.	Chatham	3	20	2	10	200	55	11,800	3,700	5,000	5,000	11,800	2A	200	Secondary		-
	Big Woods Rd. (SR 1716)	Windy Ridge Rd.	Jack Bennett Rd. (SR 1717)	Chatham	3.3	20	2	10	200	55	11,800	4,200	5,700	5,700	11,800	2A	200	Secondary		-
	Bonlee Bennett Rd. (SR 1005)	Bennett Siler City Rd. (SR 1151)	Airport Rd. (SR 1100)	Chatham	1.6	22	2	11	60	55	12,400	1,200	1,300	1,300	12,400	2A	60	Secondary		-
	Bonlee Bennett Rd. (SR 1005)	Airport Rd. (SR 1100)	Siler City Glendon Rd. (SR 1006)	Chatham	2.1	22	2	11	60	55	12,400	1,300	1,400	1,400	12,400	2A	60	Secondary		-
	Bonlee Bennett Rd. (SR 1005)	Siler City Glendon Rd. (SR 1006)	Petty Rd. (SR 1136)	Chatham	1.1	22	2	11	60	55	12,400	1,100	1,300	1,300	12,400	2A	60	Secondary		-
	Bonlee Bennett Rd. (SR 1005)	Petty Rd. (SR 1136)	Bonlee School Rd. (SR 1139)	Chatham	2.2	22	2	11	60	55	12,400	1,600	2,100	2,100	12,400	2A	60	Secondary		-
	Bonlee Bennett Rd. (SR 1005)	Bonlee School Rd. (SR 1139)	Old US 421 (SR 1176)	Chatham	0.3	22	2	11	60	55	12,400	2,100	2,400	2,400	12,400	2A	60	Secondary		-
	Chatham St. (SR 1151)	NC 22-42	Raleigh St. (SR 1161)	Chatham	0.7	22	2	11	60	55	12,400	900	1,100	1,100	12,400	2A	60	Secondary		-
	Chatham St. (SR 1151)	Raleigh St. (SR 1161)	Buffalo St. (SR 1154)	Chatham	0.2	20	2	10	60	35	10,200	1,400	1,600	1,600	10,200	2C	60	Secondary		-
	Chicken Bridge Rd. (SR 1545, 1546)	Chatham St. (SR 1151) from Siler City model boundary	Siler City limits.	Chatham																
	Chicken Bridge Rd. (SR 1545, 1546)	NC 87	River Rd. (SR 1545)	Chatham	3.7	20	2	10	60	55	11,800	1,600	3,700	3,700	11,800	2A	60	Secondary		-
	Chicken Bridge Rd. (SR 1545, 1546)	River Rd. (SR 1545)	Crawford Dairy Rd. (SR 1539)	Chatham	0.4	20	2	10	60	55	11,800	1,600	3,700	3,700	11,800	2A	60	Secondary		-

HIGHWAY																				
		Section				2010 Existing System							2040 Proposed System							
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd	2010 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Proposals for Other Modes
	Clyde Davis Rd.	Siler City Model boundary	Poe Rd.	Chatham	0.5	20	2	10	80	55	11,800	300	500	500	11,800	2A	80	Secondary		-
	Coleridge Rd. (SR 1102)	Randolph County line	W. Third St. (SR 1107)	Chatham	3.1	18	2	9	60	55	7,500	700	800	800	7,500	2A	60	Secondary		-
	Corinth Rd. (SR 1916)	NC 42	Moncure Flatwood Rd. (SR 1924)	Chatham	2.4	24	2	12	60	55	10,300	1,400	4,000	4,000	10,300	2A	60	Secondary		-
	Corinth Rd. (SR 1916)	Moncure Flatwood Rd. (SR 1924)	Old US 1	Chatham	2.7	24	2	12	60	55	10,300	3,400	5,000	5,000	10,300	2A	60	Secondary		-
	Crawford Dairy Rd. (SR 1539)	Orange County line	Chicken Bridge Rd. (SR 1545)	Chatham	2.9	20	2	10	60	55	11,800	600	900	900	11,800	2A	60	Secondary		-
	Crawford Dairy Rd. (SR 1539)	Chicken Bridge Rd. (SR 1545)	Jones Ferry Rd. (SR 1539)	Chatham	1.4	18	2	9	60	55	10,500	1,900	3,900	3,900	10,500	2A	60	Secondary		-
	E. Raleigh St. (SR 1006, 2103)	S. Chatham Ave. (SR 1108)	US 64	Chatham	1.5	20 to 44	2	12	60	35	10,500	5600.00	6,300	6,300	10,500	2C	60	Min		P
	Ellington Rd. (SR 1106)	W. Third St. (SR 1107)	US 64	Chatham	0.9	22	2	11	60	55	12,400	500	600	600	12,400	2A	60	Secondary		-
	Elmer Moore Rd. (SR 2126)	Old US 421 (SR 1176)	Ike Brookes Rd. (SR 2120)	Chatham	1.0	22	2	11	60	45	10,100	1,600	2,600	2,600	10,100	2B	60	Secondary		-
	Elmer Moore Rd. (SR 2126)	Ike Brookes Rd. (SR 2120)	Sandy Branch Church Rd. (SR 2207)	Chatham	1.0	20	2	10	60	55		-		-			60	Secondary		-
	Farrington Point Rd. (SR 1008,1725)	Marthas Chapel Rd. (SR 1752)	Old Farrington (Rd. SR 1726)	Chatham	4.1	22	2	11	60	55	12,400	4,300	10,700	10,700	12,400	2A	60	Secondary		-
	Farrington Rd. (SR 1008)	US 64	Marthas Chapel Rd. (SR 1726)	Chatham	1.5	24	2	12	60	55	12,400	4,100	10,800	10,800	12,400	2A	60	Secondary		-
	Foust Rd. (SR 2118)	Old US 421	Carter Brooks Rd. (SR 2210)	Chatham	1.2	20	2	10	60	55	11,800	600	1,100	1,100	11,800	2A	60	Secondary		-
	Gees Grove Rd. (2114)	Old US 421	S. Chatham Ave. Ext. (SR 2113)	Chatham	1.4	20	2	10	60	55	11,800	600	1,100	1,100	11,800	2A	60	Secondary		-
	Gilmore Lodge Rd. (SR 2119)	US 421	Ike Brooks Rd. (SR 2120)	Chatham	1.4	20	2	10	60	55	11,800	200	300	300	11,800	2A	60	Secondary		-
	Glosson Rd. (SR 1124)	Siler City Glendon Rd. (SR 1006)	S. Chatham Ave. (SR 2113)	Chatham	1.6	20	2	10	60	55	11,800	700 (2007)	1,300	1,300	11,800	2A	60	Secondary		-
	Grady Siler Rd.	Poe Rd.	Ed Clapp Rd.	Chatham	3.1	20	2	10	60	55	11,800	300	500	500	11,800	2A	60	Secondary		-

HIGHWAY																				
		Section				2010 Existing System							2040 Proposed System							
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd	2010 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Proposals for Other Modes
	Green Level Rd. (SR 1742)	Lewter Shop Rd. (SR 1740)	Wake County line	Chatham	1.5	18	2	9	60	55	10,500	1,200	2,200	2,200	10,500	2A	60	Secondary		-
	Hal Clark Rd. (SR 1128)	Wren Smith Rd. (SR 1127)	Airport Rd. (SR 1100)	Chatham	1.7	20	2	10	60	55	11,800	100	200	200	11,800	2A	60	Secondary		-
	Hamlets Chapel Rd. (SR 1525)	Jones Ferry Rd. (SR 1539)	Parker Herndon Rd. (SR 1526)	Chatham	3.6	18	2	9	60	55	10,500	4,300	4,500	4,500	10,500	2A	60	Secondary		-
	Hamlets Chapel Rd. (SR 1525)	Parker Herndon Rd. (SR 1526)	US 15-501	Chatham	0.5	22	2	11	60	55	12,400	2,500	4,500	4,500	12,400	2A	60	Secondary		-
	Hamp Stone Rd. (SR 1108)	Old US 421	N. Chatham Ave. (SR 1108)	Chatham	1.5	20	2	10	60	35	10,200	2,800	3,000	3,000	10,200	2A	60	Secondary		-
	Harold Andrews Rd. (SR 1316)	Old US 421	US 421	Chatham	1.2	18	2	9	60	55	10,500	1,100	1,200	1,200	10,500	2A	60	Secondary		-
	Harold Andrews Rd. (SR 1316)	US 421	Siler City Snow Camp (SR 1004)	Chatham	0.8	18	2	9	60	55	10,500	600	700	700	10,500	2A	60	Secondary		-
	Hollands Chapel Rd. (SR 1750)	Farrington Rd. (SR 1008)	NC 751	Chatham	2.6	20	2	10	60	55	11,800				11,800	2A	60	Secondary		-
	Howards Mill Rd. (SR 1002)	Randolph CL	NC 42	Chatham	0.4	18	2	9	60	55	11,800	800	900	900	11,800	2A	60	Secondary		-
	Ike Brooks Rd. (SR 2120)	Rives Chapel Church Rd. (SR 2170)	Siler City model boundary	Chatham	2	16	2	8	60	55	7,500	300	600	600	7,500	2A	60	Secondary		-
	Ike Brooks Rd. (SR 2120)	Siler City model boundary	US 421	Chatham	1.0	16	2	8	60	55	10,000	500	1,000	1,000	10,000	2A	60	Secondary		-
	Ike Brooks Rd. (SR 2120)	US 421	Elmer Moore Rd. (SR 2126)	Chatham	0.5	22	2	11	60	55	12,400	900	1,000	1,000	12,400	2A	60	Secondary		-
	Jack Bennett Rd. (SR 1717)	US 15-501	Big Woods Rd. (SR 1716)	Chatham	2.4	20	2	10	50	55	11,800	2,700	4,100	4,100	11,800	2A	50	Secondary		-
	Jack Bennett Rd. (SR 1717)	Big Woods Rd. (SR 1716)	Lystra Rd. (SR 1717)	Chatham	0.8	20	2	10	60	55	11,800	2,700	8,000	8,000	11,800	2A	60	Secondary		-
	Jessie Bridges Rd. (SR 1332)	Siler City Snow Camp Rd. (SR 1004)	Smith Hudson Rd. (SR 1328)	Chatham	0.8	18	2	9	60	55	10,500	400	500	500	10,500	2A	60	Secondary		-
	Jessie Bridges Rd. (SR 1332)	Smith Hudson Rd. (SR 1328)	Rufus Brewer Rd. (SR 1329)	Chatham	2	18	2	9	60	55	10,500	200	300	300	10,500	2A	60	Secondary		-
	Jessie Bridges Rd. (SR 1332)	Rufus Brewer Rd. (SR 1329)	Silk Hope Liberty Rd. (SR 1346)	Chatham	0.6	18	2	9	60	55	10,500	400	500	500	10,500	2A	60	Secondary		-
	Joe Brown Rd. (SR 1132)	Oakley Church Rd. (SR 1130)	Siler City Glendon Rd. (SR 1006)	Chatham	2.4	20	2	10	60	55	11,800	300	400	400	11,800	2A	60	Secondary		-

HIGHWAY																				
		Section				2010 Existing System							2040 Proposed System							
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd	2010 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Proposals for Other Modes
	John Emerson Rd. (SR 1116)	Wade Paschal Rd. (SR 1119)	W. Third St. (SR 1107)	Chatham	0.92	21	2	10	60	35	10,200	200	300	300	10,200	2C	60	Secondary		-
	Jones Ferry Rd. (SR 1539,1540)	Orange County line	Hamlet's Chapel Rd. (SR 1525)	Chatham	4.1	22	2	11	60	55	12,400	4,100	5,400	5,400	12,400	2A	60	Secondary		-
	Lewter Shop Rd. (SR 1740)	NC 751	Wake County line	Chatham	2.0	20	2	10	60	55	11,800	2,100	6,100	6,100	11,800	2A	60	Secondary		-
	Lystra Rd. (SR 1717, 1721)	US 15-501	Jack Bennett Rd. (SR 1717)	Chatham	3.6	22	2	11	60	55	12,400	4,500	8,100	8,100	12,400	2A	60	Secondary		-
	Lystra Rd. (SR 1717, 1721)	Jack Bennett Rd. (SR 1717)	Farrington Point Rd. (SR 1008)	Chatham	1.0	22	2	11	60	55	12,400	4,200	7,400	7,400	12,400	2A	60	Secondary		-
	Manns Chapel Rd. (SR 1532)	Hamlets Chapel Rd. (SR 1525)	Poythress Rd. (SR 1534)	Chatham	3.3	22	2	11	60	55	12,400	-	3,800	3,800	12,400	2A	60	Secondary		-
	Manns Chapel Rd. (SR 1532)	Poythress Rd. (SR 1534)	US 15-501	Chatham	1.9	22	2	11	60	45	14,600	6,000	15,000	15,000	14,600	2B	60	Secondary		-
	Marthas Chapel Rd. (SR 1752)	Farrington Point Rd. (SR 1008)	NC 751	Chatham	2.8	20	2	10	60	55	12,400	1,500	3,700	3,700	12,400	2A	60	Secondary		-
	Moncure Pittsboro Rd. (SR 1012)	Mt. View Church Rd. (SR 1955)	US 1	Chatham	2.6	22	2	11	100	55	11,800	3,600	6,300	6,300	11,800	2A	100	Min		B
	Moons Chapel Rd. (SR 1101)	Coleridge Rd. (SR 1102)	US 64	Chatham	2.3	20	2	10	60	55	11,800	400	700	700	11,800	2A	60	Secondary		-
	Mt. Carmel Church Rd. (SR 1008)	Orange County line	Old Farrington Rd. (SR 1726)	Chatham	1.2	22	2	11	60 to 80	55	11,600	5,200	11,000	11,000	11,600	2A	60 to 80	Secondary		-
	Mt. Gilead Church Rd. (SR 1700)	US 64	US 15-501	Chatham	4.3	22	2	11	60	55	12,400	2,100	5,800	5,800	12,400	2A	60	Secondary		-
	Mt. View Church Rd.	Center Grove Church Rd. (SR 2218)	E. Gargus Rd. (SR 1956)	Chatham	1.7	20	2	10	60	55	11,800	600	1,100	1,100	11,800	2A	60	Min		B
	Mt. View Church Rd.	E. Gargus Rd. (SR 1956)	Moncure Pittsboro Rd. (SR 1012)	Chatham	1.9	20	2	10	60	55	11,800	400	600	600	11,800	2A	60	Min		B
	Mt. Vernon Springs Rd. (SR 1134)	Siler City Glendon Rd. (SR 1006)	Old US 421	Chatham	3.2	16	2	8	60	55	7,500	200	300	300	7,500	2A	60	Secondary		-
	N. Main St. (SR 2333)	Old US 421 (SR 1176)	Goldston city limits	Chatham	0.3	22	2	11	60	55	12,400	2,200	2,500	2,500	12,400	2A	60	Secondary		-

HIGHWAY																				
		Section				2010 Existing System							2040 Proposed System							
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd	2010 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
	N. Main St. (SR 2333)	Goldston city limits	Pittsboro Goldston Rd. (SR 1010)	Chatham	0.4	20	2	10	60	35	10,200	2,200	2,500	2,500	10,200	2C	60	Min		P
	N. Main St. (SR 2333)	Pittsboro Goldston Rd. (SR 1010)	Lancaster Dr.	Chatham	0.1	44	2	12	60	35	11,000	2,200	2,500	2,500	11,000	2C	60	Min		P, B
	New Hope Church Rd. (SR 1733)	NC 751	Wake County line	Chatham	2.9	20	2	10	60	55	11,800	600	1,100	1,100	11,800	2A	60	Second ary		-
	O Kelly Chapel Rd. (SR 1731)	NC 751	Wake County line	Chatham	2.8	20	2	10	60	55	11,800	3,200	9,400	9,400	11,800	2A	60	Second ary		-
	Oakley Church Rd. (SR 1130)	Airport Rd. (SR 1100)	Siler City Glendon Rd. (SR 1006)	Chatham	2.6	20	2	10	60	55	11,800	400	500	500	11,800	2A	60	Second ary		-
	Old Farrington Rd. (SR 1726)	Durham County line	Farrington Point Rd. (SR 1008)	Chatham	1.7	20	2	10	60	55	11,800	3,500	10,000	10,000	11,800	2A	60	Second ary		-
	Old Graham Rd. (SR 1516, 1520)	Pittsboro CTP planning boundary	Chicken Bridge Rd. (SR 1545)	Chatham	2.5	22	2	11	60	55	11,800	500	2,500	2,500	11,800	2A	60	Min		-
	Old Plank Rd. (SR 2111)	S. Chatham Ave. Ext. (SR 2113)	Alston Bridge Rd. (SR 2110)	Chatham	1.5	20	2	10	100	50	12,400	400	900	900	12,400	2A	100	Second ary		-
	Old Sanford Rd. (SR 2219)			Chatham	1.8	22	2	11	100	50	12,400	300	700	700	12,400	2A	100	Second ary		-
	Old US 1 (SR 1011)	Lee county line	Lee county line	Chatham	0.4	22	2	11	100	55	12,400	2,200	2,700	2,700	12,400	2A	100	Min		B
	Old US 1 (SR 1011)	Moncure Pittsboro Rd. (SR 1012)	Moncure School Rd. (SR 1931)	Chatham	0.5	22	2	11	100	55	12,400	2,900	3,100	3,100	12,400	2A	100	Min		B
	Old US 1 (SR 1011)	Moncure School Rd. (SR 1931)	Wimberly Rd. (SR 1930)	Chatham	0.5	22	2	11	100	55	12,400	2,800	3,100	3,100	12,400	2A	100	Min		B
	Old US 1 (SR 1011)	Wimberly Rd. (SR 1930)	Corinth Rd. (SR 1916)	Chatham	1.3	22	2	11	100	55	12,400	2,300	3,100	3,100	12,400	2A	100	Min		B
	Old US 1 (SR 1011)	Corinth Rd. (SR 1916)	New Elam Church Rd. (SR 1910)	Chatham	2.9	22	2	11	100	55	12,400	1,500	2,200	2,200	12,400	2A	100	Min		B
	Old US 1 (SR 1011)	Elam Church Rd. (SR 1910)	US 1	Chatham	0.5	22	2	11	100	55	12,400	1,700	2,200	2,200	12,400	2A	100	Min		B
	Old US 1 (SR 1011)	US 1	Wake County line	Chatham	1.7	22	2	11	100	35	12,400	2,200	2,300	2,300	12,400	2B	100	Min		B

HIGHWAY																				
		Section				2010 Existing System							2040 Proposed System							
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd	2010 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
	Old US 421 (SR 1006, 1317, 1176)	Randolph CL	Poe Rd. (SR 1310)	Chatham	2.2	24	2	12	60	55	12,400	1,600	1,700	1,700	12,400	2A	60	Min		-
	Old US 421 (SR 1006, 1317, 1176)	Poe Rd. (SR 1310)	Harold Andrews Rd. (SR 1316)	Chatham	3.5	24	2	12	60	55	12,400	4,700	7,400	7,400	12,400	2A	60	Min		-
	Old US 421 (SR 1006, 1317, 1176)	Harold Andrews Rd. (SR 1316)	Siler City limits	Chatham	0.2	24	2	12	60	55	12,400	3,900	4,200	4,200	12,400	2A	60	Min		-
	Old US 421 (SR 1006, 1317, 1176)	South Chatham Ave. Ext. (SR 2113)	Siler City Model boundary	Chatham	3.8	20	2	10	60	55	11,800	-	-	-	11,800	2A	60	Min		-
	Old US 421 (SR 1006, 1317, 1176)	Siler City model boundary	Bonlee Bennett Rd. (SR 1139)	Chatham	0.4	20	2	10	60 to 200	55	11,800	2,000	2,100	2,100	11,800	2A	60 to 200	Min		-
	Old US 421 (SR 1006, 1317, 1176)	Bonlee Bennett Rd. (SR 1139)	Hanner Town Rd. (SR 1142)	Chatham	1.5	20	2	10	60	55	11,800	1,600	1,700	1,700	11,800	2A	60	Min		-
	Old US 421 (SR 1006, 1317, 1176)	Hanner Town Rd. (SR 1142)	NC 902	Chatham	1.8	20	2	10	60	55	11,800	1,400	1,500	1,500	11,800	2A	60	Min		-
	Old US 421 (SR 1006, 1317, 1176)	NC 902	Callicutt Rd. (SR 2301)	Chatham	0.9	20	2	10	60	55	11,800	1,100	1,200	1,200	11,800	2A	60	Min		-
	Old US 421 (SR 1006, 1317, 1176)	Callicutt Rd. (SR 2301)	N. Main St. (SR 2333)	Chatham	2.0	18	2	9	60	55	10,500	1,100	1,200	1,200	10,500	2A	60	Min		-
	Pea Ridge Rd. (SR 1972)	Old US 1 (SR 1011)	New Elam Church Rd. (SR 1910)	Chatham	3.4	22	2	11	60	55	12,400	1,900	4,900	4,900	12,400	2A	60	Secondary		-
	Pea Ridge Rd. (SR 1972)	New Elam Church Rd. (SR 1910)		Chatham	3.1	22	2	11	60 to 150	55	12,400	2,000	4,900	4,900	12,400	2A	60 to 150	Secondary		-
	Piney Grove Church Rd. (SR 1362)	Staley Snow Camp Rd. (SR 1300)	Siler City Model Planning Area Boundary	Chatham	1.6	18	2	9		55	10,500	600	1,000	1,000	10,500	2A		Secondary		-
	Pittsboro Goldston Rd. (SR 1010)	N. Main St. (SR 2333)	Goldston city limits	Chatham	0.5	24	2	12	100	35	10,200	1,400	1,700	1,700	10,200	2C	100	Min		B, P

HIGHWAY																				
		Section				2010 Existing System							2040 Proposed System							
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd	2010 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Proposals for Other Modes
	Pittsboro Goldston Rd. (SR 1010)	Goldston city limits	Goldston city limits to Meronies Church Rd. (SR 2187)	Chatham	2.0	22	2	11	60	45	11,400	1,800	2,000	2,000	11,400	2B	60	Min		B
	Pittsboro Goldston Rd. (SR 1010)	Meronies Church Rd. (SR 2187)	Mays Chapel Rd. (SR 2155)	Chatham	3.9	22	2	11	60	55	12,400	1,100	1,600	1,600	12,400	2A	60	Min		B
	Pittsboro Goldston Rd. (SR 1010)	Mays Chapel Rd. (SR 2155)	Pittsboro CTP planning boundary	Chatham	1.0	22	2	11	60	55	12,400	1,600	2,300	2,300	12,400	2A	60	Min		B
	Piney Grove Church Rd. (SR 1362)	Siler City Model boundary	US 421	Chatham	2.9	18	2	9	60	55	10,500	1,100	1,200	1,200	10,500	2A	60	Secondary		-
	Piney Grove Church Rd. (SR 1362)	US 421	Old US 421	Chatham	1.2	22	2	11	60	55	12,400	2,200	3,500	3,500	12,400	2A	60	Secondary		-
	Poe Rd. (SR 1310)	Old US 421	Siler City model boundary	Chatham	1.8	18	2	9	60	55	10,500	300	400	400	10,500	2A	60	Secondary		-
	Ralph Sipe Rd. (SR 2333)	US 421	Old US 422	Chatham	1.2	22	2	11	60	55	12,400	800	900	900	12,400	2A	60	Secondary		-
	River Rd. (SR 1525, 1545)	Chicken Bridge Rd. (SR 1545)	Hamlets Chapel (SR 1525)	Chatham	2.8	20	2	10	60	55	11,800	-	2,100	2,100	11,800	2A	60	Secondary		-
	Rives Chapel Church Rd. (SR 2170)	US 64	Siler City model boundary	Chatham	4.4	16	2	8	60	55	7,500	500	1,000	1,000	7,500	2A	60	Secondary		-
	Rives Chapel Church Rd. (SR 2170)	Siler City model boundary	McLaurin Road (SR 2175)	Chatham	0.9	16	2	8	60	55	10,500	500	1,000	1,000	10,500	2A	60	Secondary		-
	S. Edwards Rd. (SR 1121)	Airport Rd. (SR 1100)	Wade Paschal Rd. (SR 1119)	Chatham	1.1	20	2	10	60	55	10,500	200	300	300	10,500	2A	60	Secondary		-
	S. Main St. (SR 2333)	Lancaster Dr.	southern Goldston city limits	Chatham	0.5	20	2	10	60	55	10,200	1,600	1,600	1,600	10,200	2A	60	Min		B
	S. Main St. (SR 2333)	Southern Goldston city limits	US 421.	Chatham	1.0	20	2	10	60	55	11,800	1,600	1,600	1,600	11,800	2A	60	Min		-
	Sam Fields Rd. (SR 2113)	US 421	Alston Bridge Rd. (SR 2110)	Chatham	2.1	20	2	10	60 to 120	55	11,800	200	400	400	11,800	2A	60 to 120	Secondary		-

HIGHWAY																				
		Section				2010 Existing System							2040 Proposed System							
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd	2010 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
	Siler City Glendon Rd. (SR 1006)	Moore county line	Wilson Rd. (SR 2314)	Chatham	2.3	22	2	11	60	55	12,400	700	800	800	12,400	2A	60	Min		B
	Siler City Glendon Rd. (SR 1006)	Wilson Rd. (SR 2314)	NC 902	Chatham	1.9	22	2	11	60	55	12,400	1,300	1,900	1,900	12,400	2A	60	Min		B
	Siler City Glendon Rd. (SR 1006)	NC 902	Bonlee Bennett Rd. (SR 1005)	Chatham	4.8	22	2	11	60	55	12,400	1,200	1,600	1,600	12,400	2A	60	Min		-
	Siler City Glendon Rd. (SR 1006)	Bonlee Bennett Rd. (SR 1005)	Siler City model boundary	Chatham	0.4	22	2	11	60	55	12,400	2,400	3,100	3,100	12,400	2A	60	Min		-
	Siler City Glendon Rd. (SR 1006)	Siler City model boundary	Siler City southern boundary	Chatham	4.6	22	2	11	60	55	12,400	2,500	3,000	3,000	12,400	2A	60	Min		-
	Siler City Snow Camp Road (SR 1004)	US 421	Jesse Bridges Rd. (SR 1332)	Chatham	1.2	20	2	10	2	60	12,400	3,000		Siler City Model	12,400	2A	2	Min		B, P
	Siler City Snow Camp Road (SR 1004)	Jesse Bridges Rd. (SR 1332)	Wrenn Culberson Rd. (SR 1356)	Chatham	2.3	20	2	10	2	60	12,400	2,500		Siler City Model	12,400	2A	2	Min		B, P
	Siler City Snow Camp Road (SR 1004)	Wrenn Culberson Rd. (SR 1356)	Siler City model boundary	Chatham	0.6	20	2	10	2	60	12,400	1,800		Siler City Model	12,400	2A	2	Min		B, P
	Siler City Snow Camp Road (SR 1004)	Siler City model boundary	Alamance county line	Chatham	2.8	20	2	10	2	60	12,400	1,500	2,300	2,300	12,400	2A	2	Min		B, P
	Silk Hope Rd. (SR 1003)	US 64	Siler City model boundary	Chatham	3.2	20	2	10	2	60	12,400	2,000	2,900	2,900	12,400	2A	2	Min		-
	Silk Hope Gum Springs Rd. (SR 1346)	Silk Hope Lindley Mill Rd. (SR 1003)	Pittsboro CTP model boundary	Chatham	6.4	22	2	11	2	60	12,400	1,300	2,400	2,400	12,400	2A	2	Min		B
	Silk Hope Liberty Rd. (SR 1004, 1301, 1346)	Alamance county line	Siler City Snow Camp Rd. (SR 1004)	Chatham	6.8	22	2	11	60	55	12,400	800	1,000	1,000	12,400	2A	60	Min		B
	Silk Hope Liberty Rd. (SR 1004, 1301, 1346)	Siler City Snow Camp Rd. (SR 1004)	Plainfield Church Rd. (SR 1335)	Chatham	2.3	22	2	11	60	55	12,400	900	1,300	1,300	12,400	2A	60	Min		B

HIGHWAY																				
		Section				2010 Existing System							2040 Proposed System							
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd	2010 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
	Silk Hope Liberty Rd. (SR 1004, 1301, 1346)	Plainfield Church Rd. (SR 1335)	Silk Hope Lindley Mill Rd. (SR 1003)	Chatham	1.8	22	2	11	60	55	12,400	900	1,400	1,400	12,400	2A	60	Min		B
	Silk Hope Lindley Mill Rd. (SR 1003)	Silk Hope Liberty Rd. (SR 1346)	Van Thomas Rd. (SR 1553)	Chatham	2.4	20	2	10	60	55	11,800	1,000	1,400	1,400	11,800	2A	60	Min		B
	Silk Hope Lindley Mill Rd. (SR 1003)	Van Thomas Rd. (SR 1553)	Alamance county line	Chatham	2.1	20	2	10	60	55	11,800	600	900	900	11,800	2A	60	Min		B
	Silk Hope Rd. (SR 1003	Siler City model boundary	Silk Hope Liberty Rd. (SR 1346)	Chatham	0.9	20	2	10	60	55	11,800	2,000	2,900	2,900	11,800	2A	60	Min		B
	Smith Hudson Rd. (SR 1328)	Jessie Bridges Rd. (SR 1332)	Rufus Brewer Rd. (SR 1329)	Chatham	2.1	20	2	10	60	55	11,800	200	300	300	11,800	2A	60	Second ary		-
	Stage Coach Rd. (SR 2234)			Chatham	1.6	20	2	10	60	55	11,800	200	300	300	11,800	2A	60	Second ary		-
	Stockyard Rd. (SR 1105)	US 64	Bish Rd. (SR 1105)	Chatham	1.1	18	2	9	60	55	10,500	300	600	600	10,500	2A	60	Second ary		-
	Washington Street (SR 1163)	NC 42	Chatham Street (SR 1151)	Chatham	0.3	18	2	9	60	35	10,500	600	700	700	10,500	2C	60	Second ary		-
	Wren Smith Rd. (SR 1127)	Randolph CL	Coleridge Rd. (SR 1102)	Chatham	2.2	20	2	10	60	55	11,800	200	300	300	11,800	2A	60	Second ary		-
	Wade Paschal Rd. (SR 1119)	Siler City Glendon Rd. (SR 1006)	S. Edwards Rd. (SR 1121)	Chatham	2.6	18	2	9	60	55	7,500	200	300	300	7,500	2A	60	Second ary		-
	Wade Paschal Rd. (SR 1119)	S. Edwards Rd. (SR 1121)	West Raleigh St. (SR 1007)	Chatham	0.8	18	2	9	60	55	7,500	500	800	800	7,500	2A	60	Second ary		-
	West Raleigh St.	Siler City limits	S. Chatham Ave. (SR 1108)	Chatham	1.2	24 to 44	2	12	60	35	10,200	5,100	7,100	7,100	10,200	2C	60	Min		B, P
	West Third St. (SR 1107)	US 64 (East of Siler City)	Siler City eastern city limits	Chatham	2.4	24	2	12	60	55	12,400	2,400 (2009)	3,000	3,000	12,400	2A	60	Min		B, P
	West Third St. (SR 1107)	Siler City limits	US 64	Chatham	2.2	24 to 30	2	12	60	35	10,200	5,000	6,000	6,000	10,200	2C	60	Min		B, P
	White Cross Rd. (SR 1541)	Chatham County Line	Crawford Dairy Rd. (SR 1539)	Chatham	1.5	20	2	10	60	55	11,800	1,100	2,300	2,300	11,800	2A	60	Second ary		-
	Zion Church Rd. (SR 1311)	Randolph CL	Old US 421	Chatham	1.8	20	2	10	60	55	11,800				11,800	2A	60	Second ary		-

HIGHWAY																					
		Section				2010 Existing System							2040 Proposed System								
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd	2010 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes

Footnotes:
(1) Undivided 4-lane with shoulder
(2) Raised median 2 lane with 8 ft on-street parking both sides

Appendix D
Typical Cross Sections

Cross section requirements for roadways vary according to the capacity and level of service to be provided. Universal standards in the design of roadways are not practical. Each roadway section must be individually analyzed and its cross section determined based on the volume and type of projected traffic, existing capacity, desired level of service, and available right-of-way. These cross sections are typical for facilities on new location and where right-of-way constraints are not critical. For widening projects and urban projects with limited right-of-way, special cross sections should be developed that meet the needs of the project.

The comprehensive planning and design "typical" highway cross sections, as depicted on the following pages, were updated on May 5, 2014 in response to the Strategic Transportation Investments[1] (STI) law (House Bill 817) and are also consistent with SPOTOn!ine (used for project prioritization[2]), NCDOT's GIS-based web application for providing automated, near real-time prioritization scores and project costs. This guidance establishes design elements that emphasize safety, mobility, complete streets[3], and accessibility for multiple modes of travel. These "typical" highway cross sections should be used as guidelines for comprehensive transportation planning, project planning and project design activities. The specific and final cross section details and right of way limits for projects will be established through the preparation of the National Environmental Policy Act[4] (NEPA) documentation and through final design preparation.

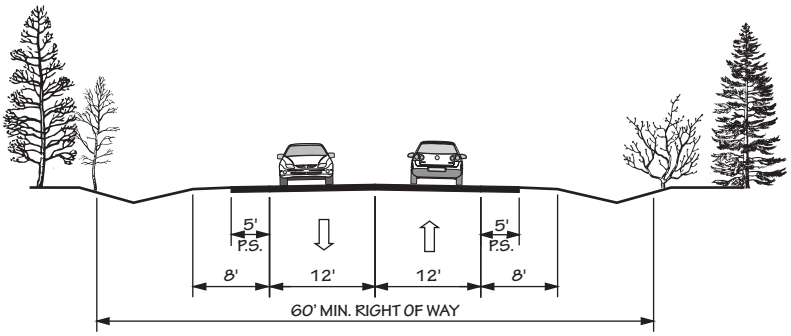
On all existing and proposed roadways delineated on the CTP, adequate right-of-way should be protected or acquired for the recommended cross sections. In addition to cross section and right-of-way recommendations for improvements, Appendix C may recommend ultimate needed right-of-way for the following situations:

- roadways which may require widening after the current planning period,
- roadways which are borderline adequate and accelerated traffic growth could render them deficient,
- roadways where an urban curb and gutter cross section may be locally desirable because of urban development or redevelopment, and
- roadways which may need to accommodate an additional transportation mode.

[1] *For more information on STI, go to:* http://www.ncdot.gov/strategictransportationinvestments/.
[2] *For more information on prioritization, go to:* https://connect.ncdot.gov/projects/planning/Pages/StrategicPrioritization.aspx.
[3] *For more information on Complete Streets, go to:* http://www.completestreetsnc.org/.
[4] *For more information on NEPA, go to:* http://ceq.hss.doe.gov/.

FIGURE 7
"TYPICAL" HIGHWAY CROSS SECTIONS

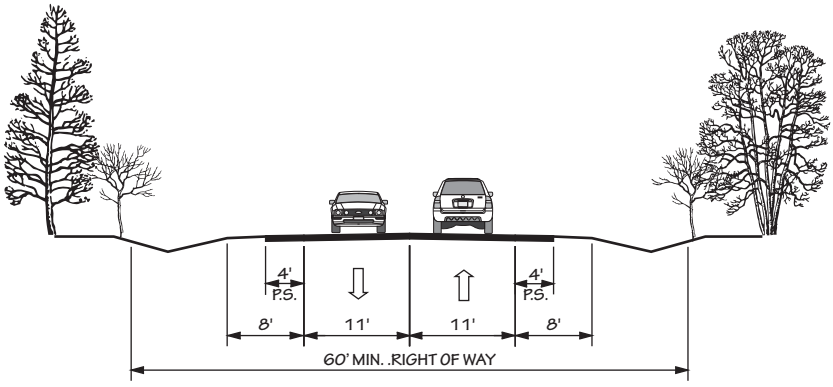
2A



2 LANE UNDIVIDED WITH PAVED SHOULDERS

POSTED SPEED 55 MPH

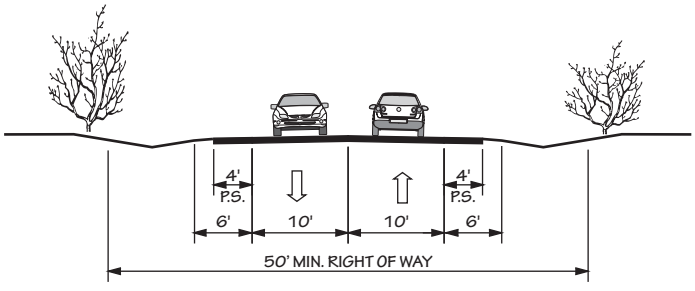
2B



2 LANES UNDIVIDED

POSTED SPEED 45 MPH OR LESS

2C



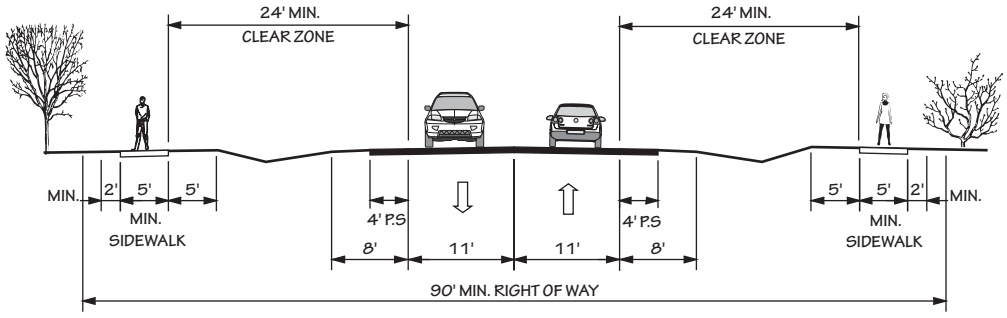
2 LANE UNDIVIDED WITH PAVED SHOULDERS

POSTED SPEED 25 - 35 MPH

Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS

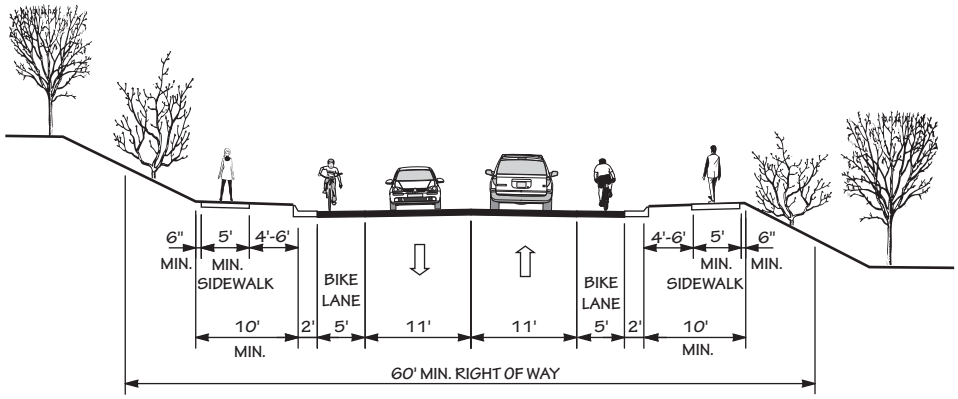
2D



2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEWALKS

POSTED SPEED 25-45 MPH

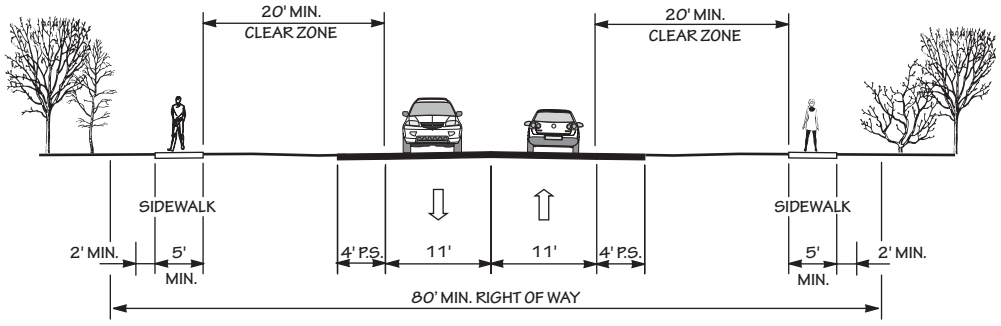
2E



2 LANE UNDIVIDED WITH CURB & GUTTER, BIKE LANES, AND SIDEWALKS

POSTED SPEED 25-45 MPH

2F



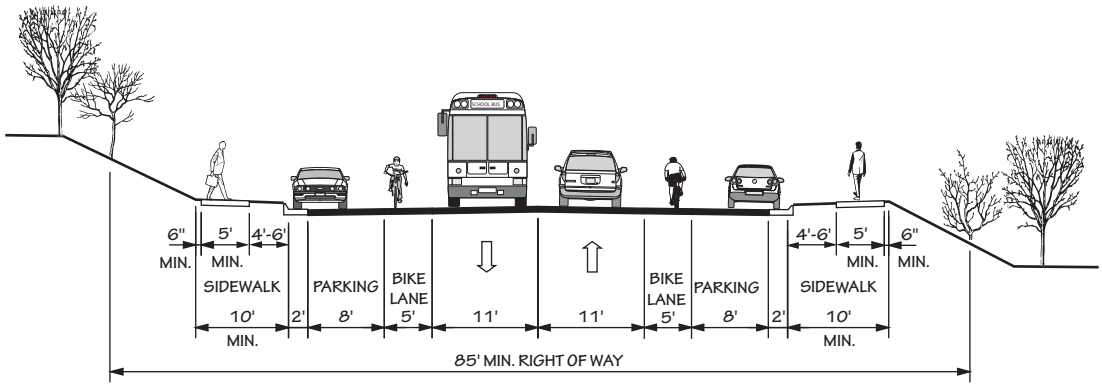
2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEWALKS
IN CAMA COUNTIES

POSTED SPEED 25-45 MPH

Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS

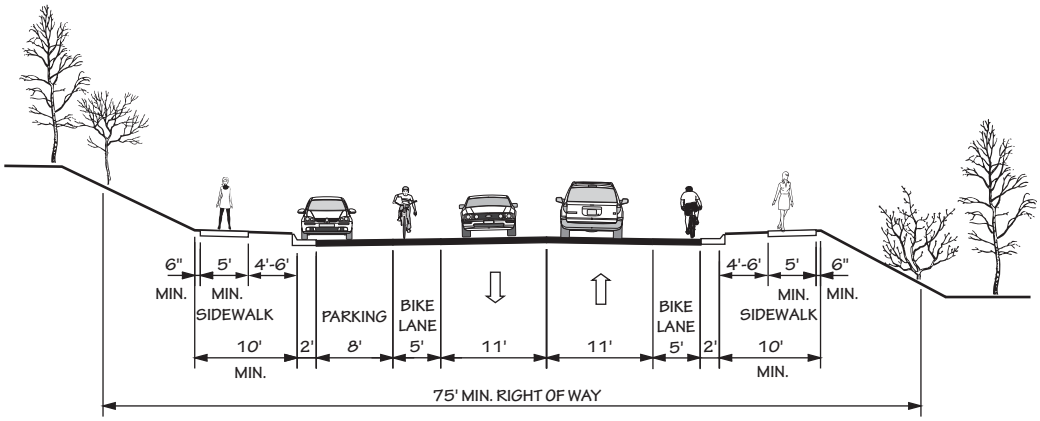
2G



2 LANE UNDIVIDED WITH CURB & GUTTER, PARKING BOTH SIDES, BIKE LANES, AND SIDEWALKS

POSTED SPEED 25-45 MPH

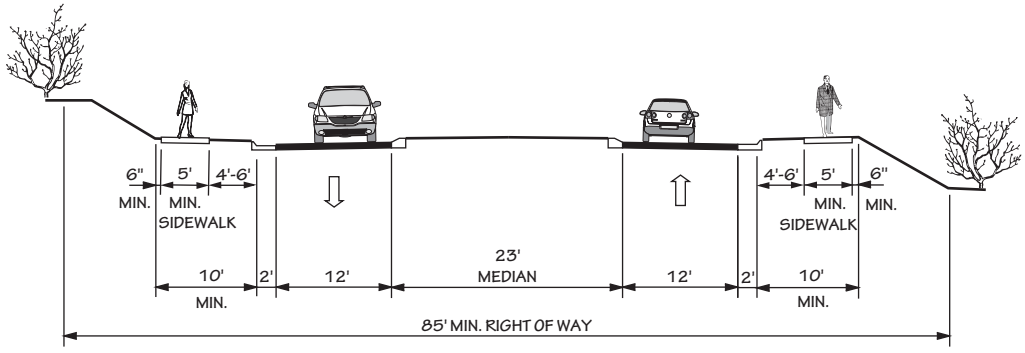
2H



2 LANE UNDIVIDED WITH CURB & GUTTER, PARKING ONE SIDE, BIKE LANES, AND SIDEWALKS

POSTED SPEED 25-45 MPH

2I



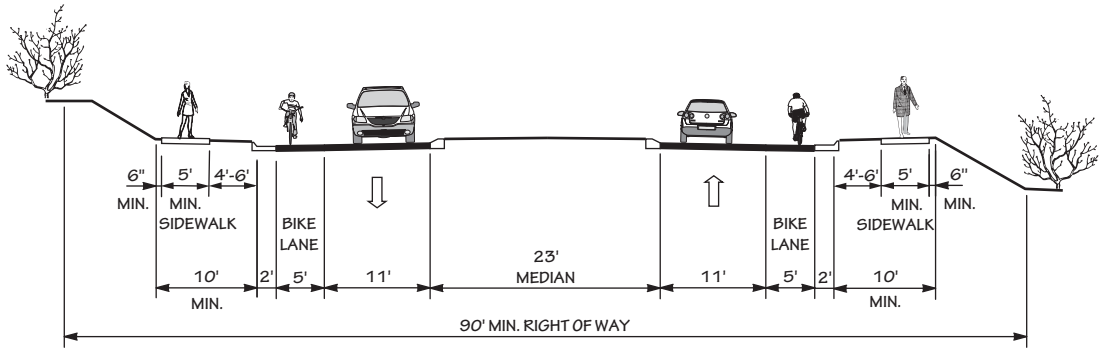
2 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER AND SIDEWALKS

POSTED SPEED 25-45 MPH

Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS

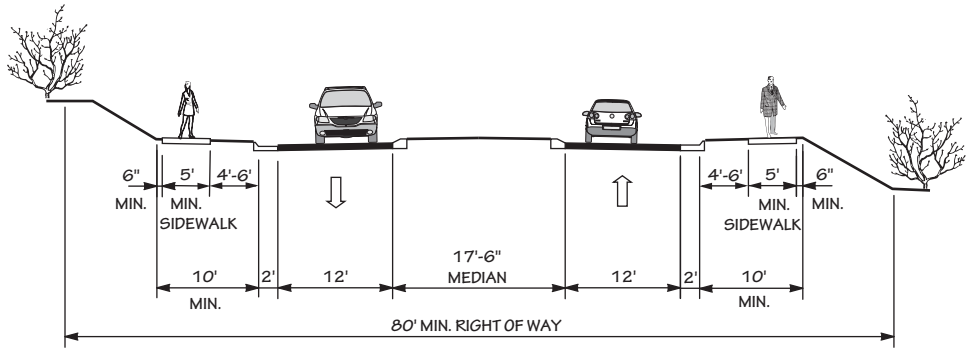
2J



2 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER, BIKE LANES, AND SIDEWALKS

POSTED SPEED 25-45 MPH

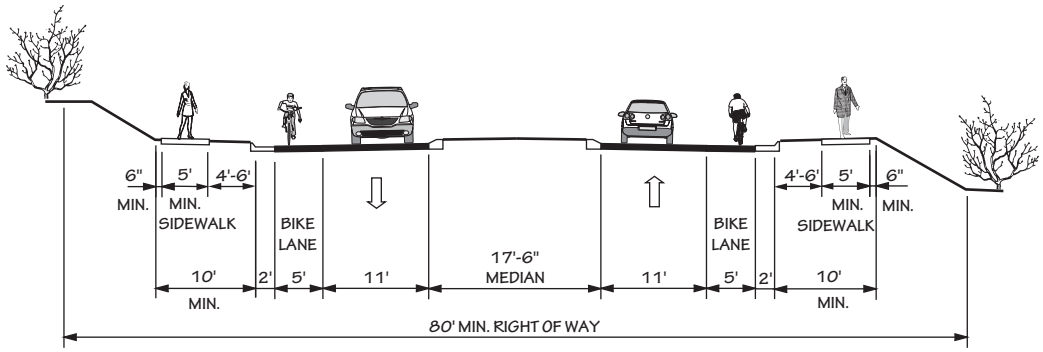
2K



2 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH CURB & GUTTER AND SIDEWALKS

POSTED SPEED 25-45 MPH

2L



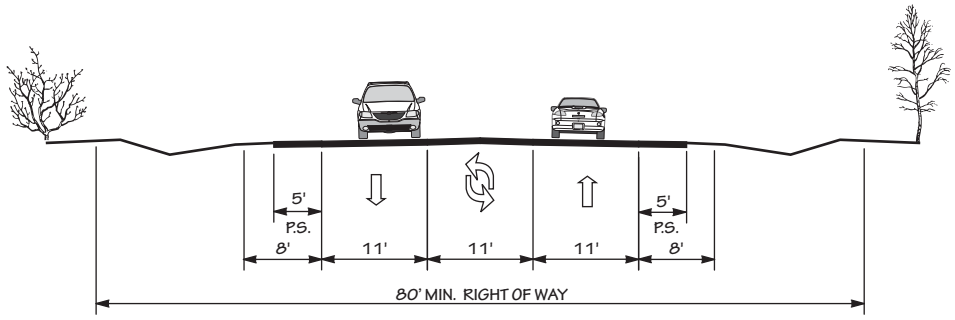
2 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH CURB & GUTTER, BIKE LANES, AND SIDEWALKS

POSTED SPEED 25-45 MPH

Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS

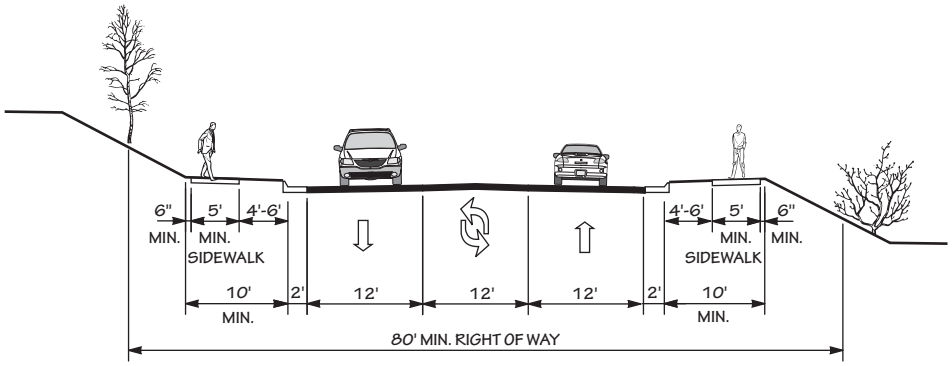
3A



2 LANE WITH TWO WAY LEFT TURN LANE, AND PAVED SHOULDERS

POSTED SPEED 25-55 MPH

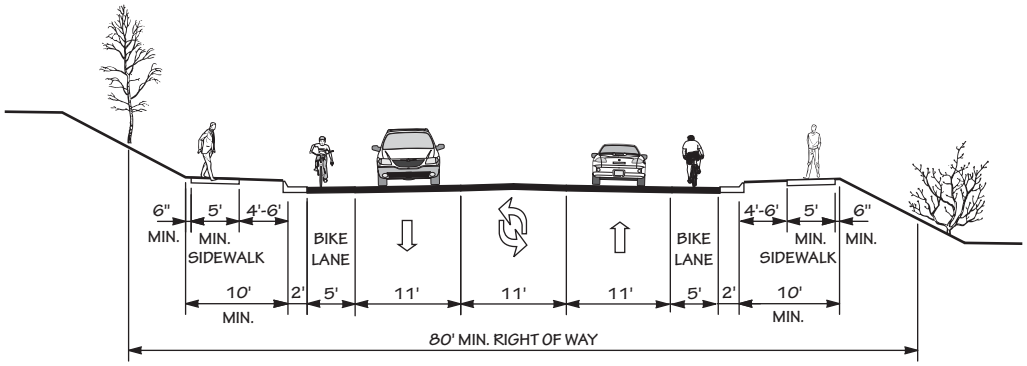
3B



2 LANE WITH TWO WAY LEFT TURN LANE, CURB & GUTTER, AND SIDEWALKS

POSTED SPEED 25-45 MPH

3C

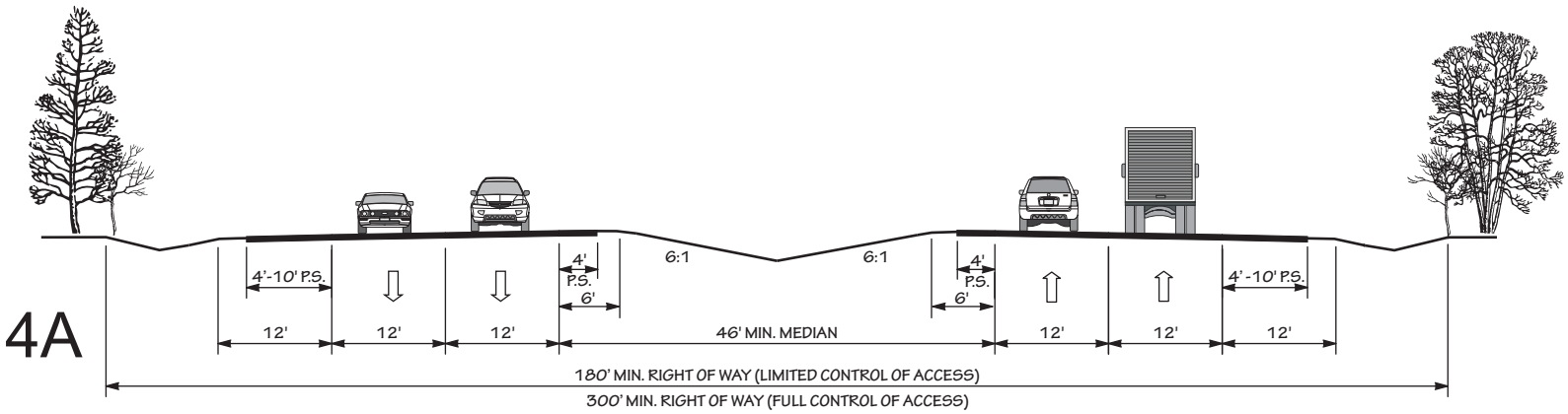


2 LANE WITH TWO WAY LEFT TURN LANE, CURB & GUTTER, BIKE LANES, AND SIDEWALKS

POSTED SPEED 25-45 MPH

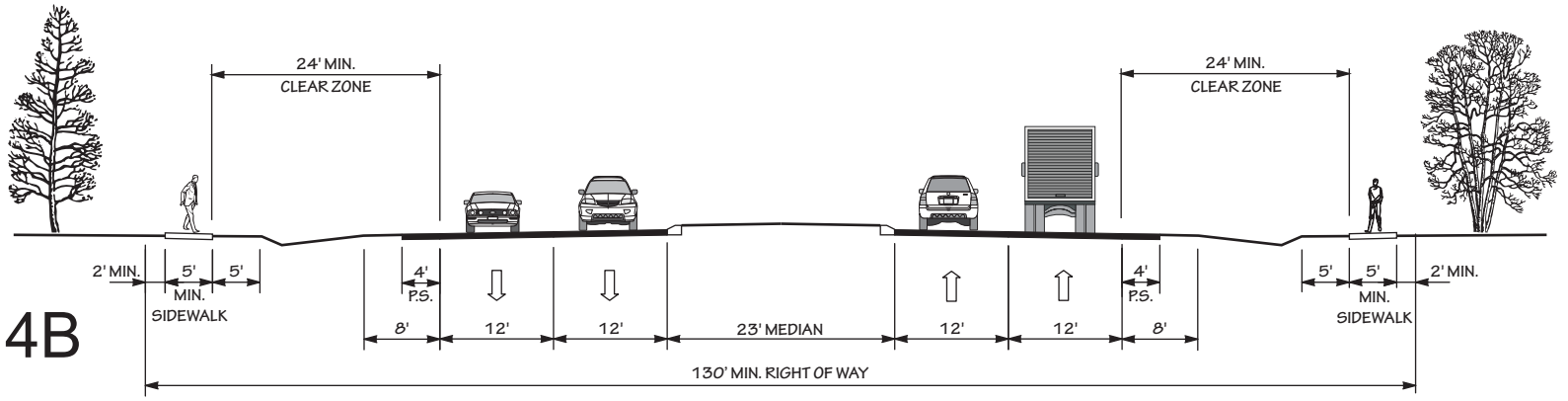
Revised 05/05/2014

"Typical" Highway Cross Sections



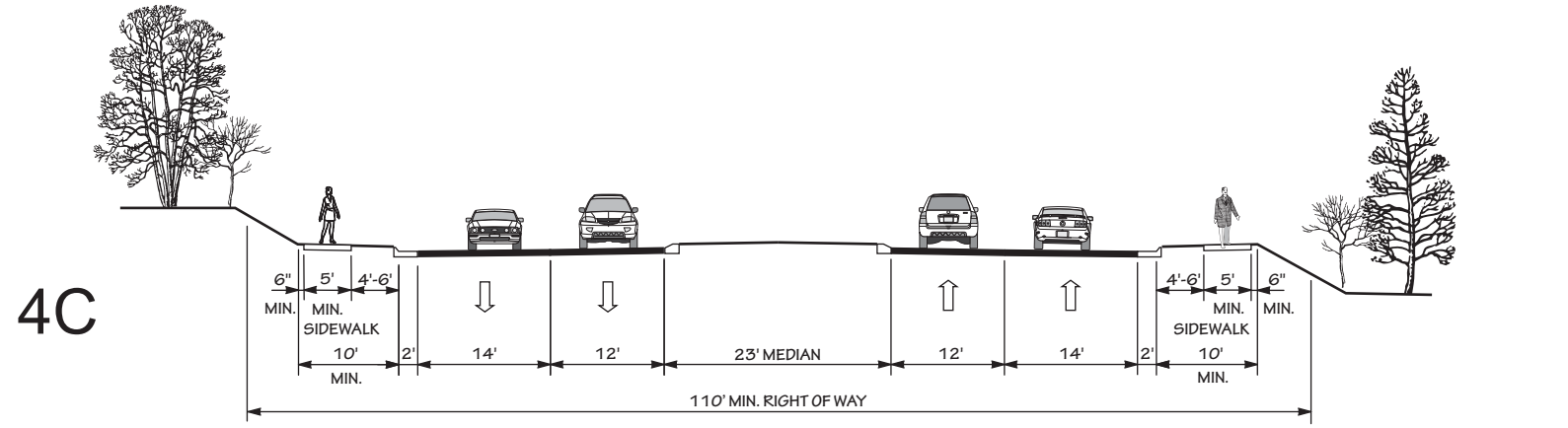
4 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS

POSTED SPEED 45-70 MPH



4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEWALKS

POSTED SPEED 35-55 MPH



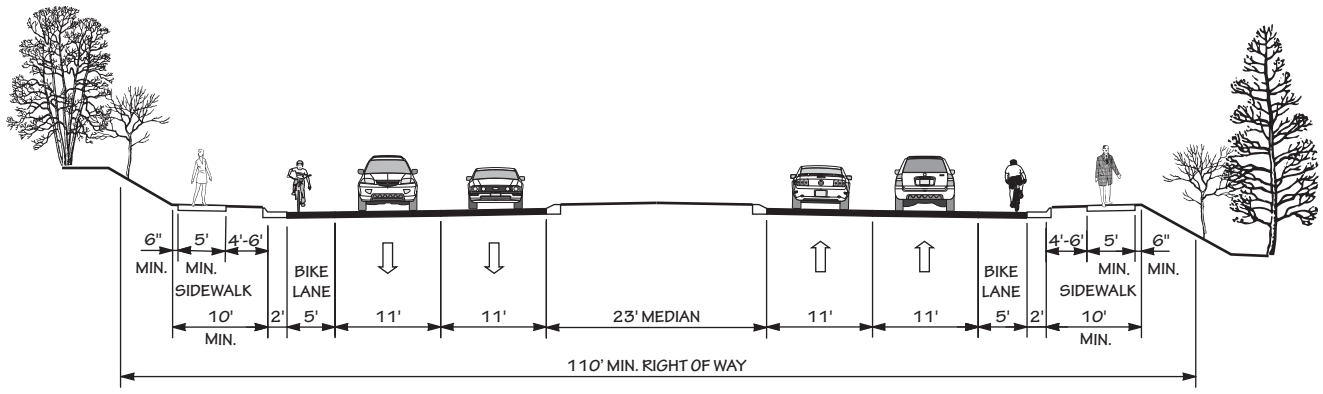
4 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER, WIDE OUTSIDE LANES, AND SIDEWALKS

POSTED SPEED 35-45 MPH

Revised 05/05/2014

"Typical" Highway Cross Sections

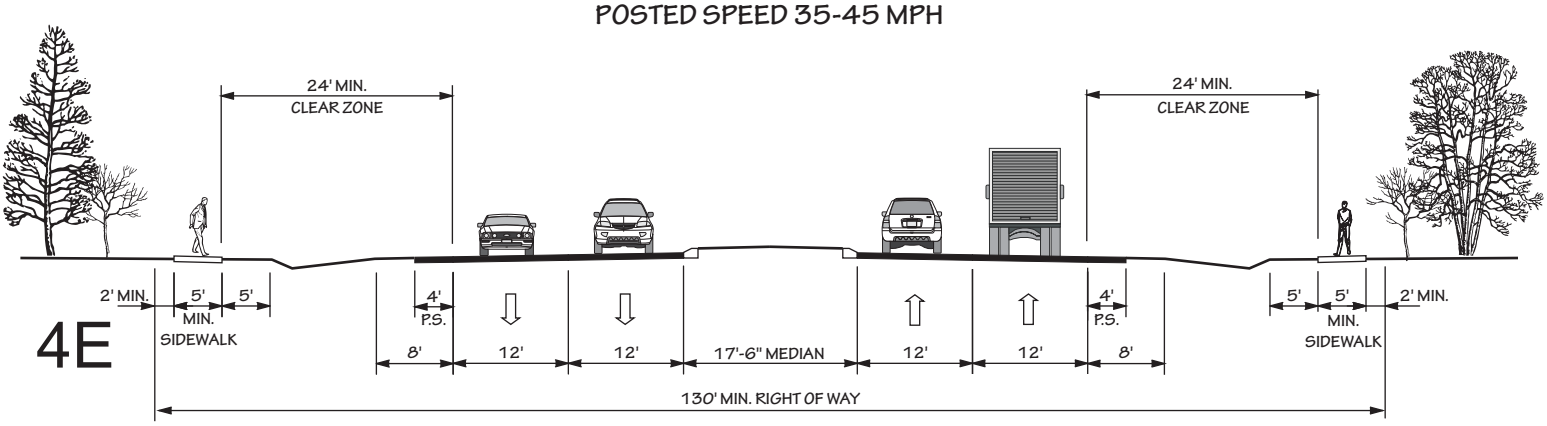
4D



4 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER, BIKE LANES AND SIDEWALKS

POSTED SPEED 35-45 MPH

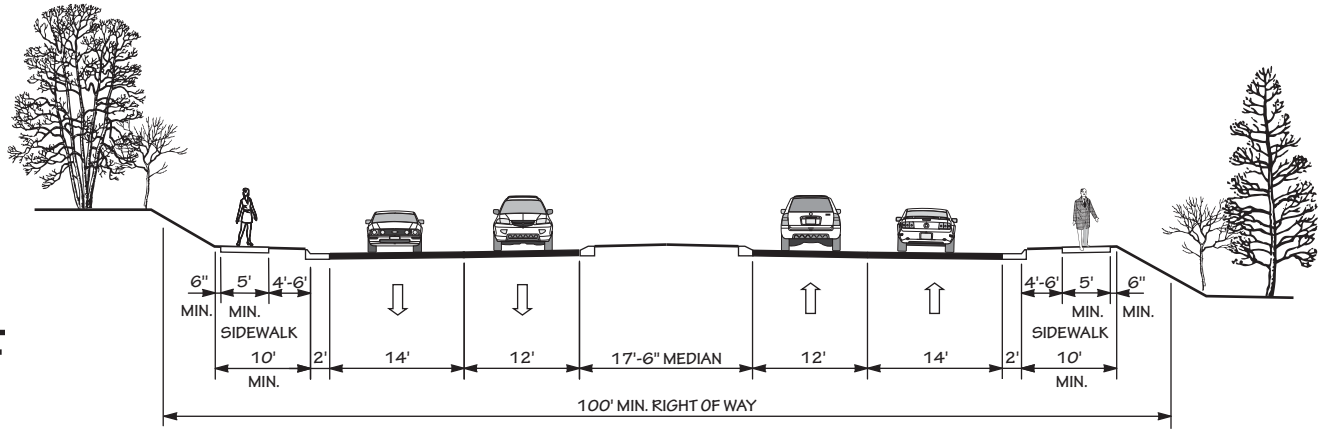
4E



4 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEWALKS

POSTED SPEED 35-55 MPH

4F



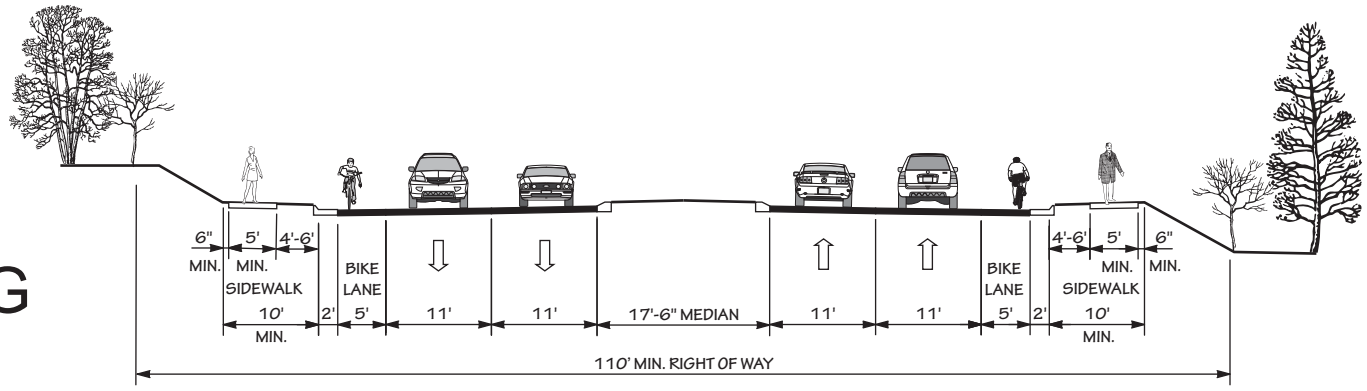
4 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH CURB & GUTTER, WIDE OUTSIDE LANES AND SIDEWALKS

POSTED SPEED 35-45 MPH

Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS

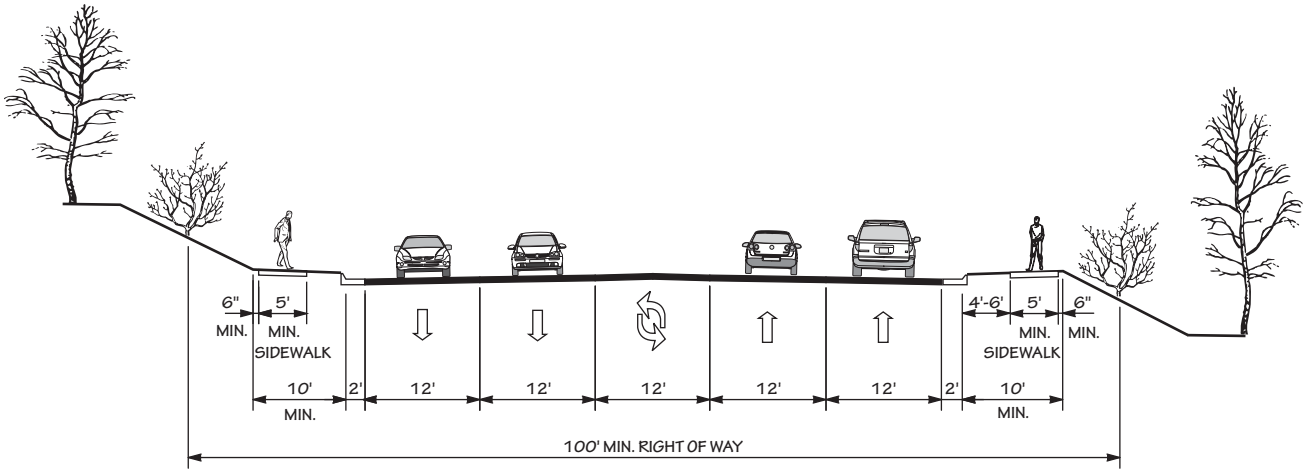
4G



4 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH CURB & GUTTER, BIKE LANES, AND SIDEWALKS

POSTED SPEED 35-45 MPH

5A

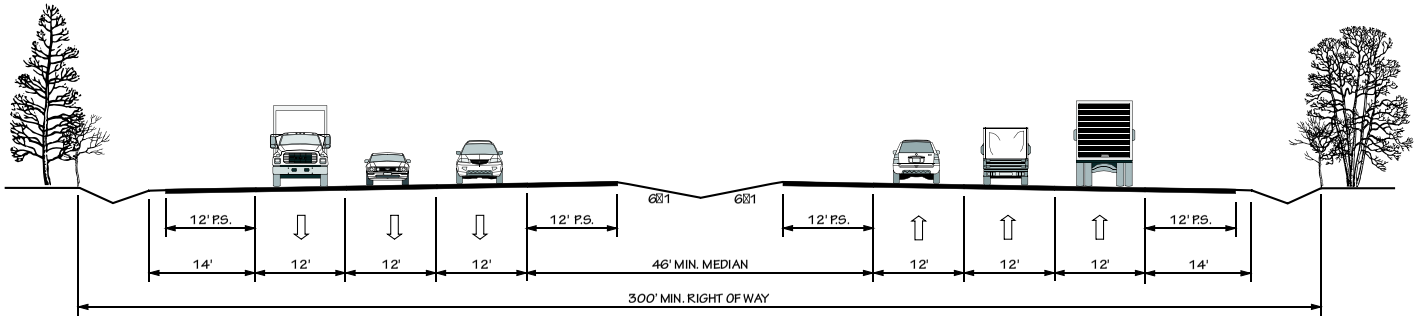


4 LANE WITH TWO WAY LEFT TURN LANE, CURB & GUTTER, AND SIDEWALKS

POSTED SPEED 35-45 MPH

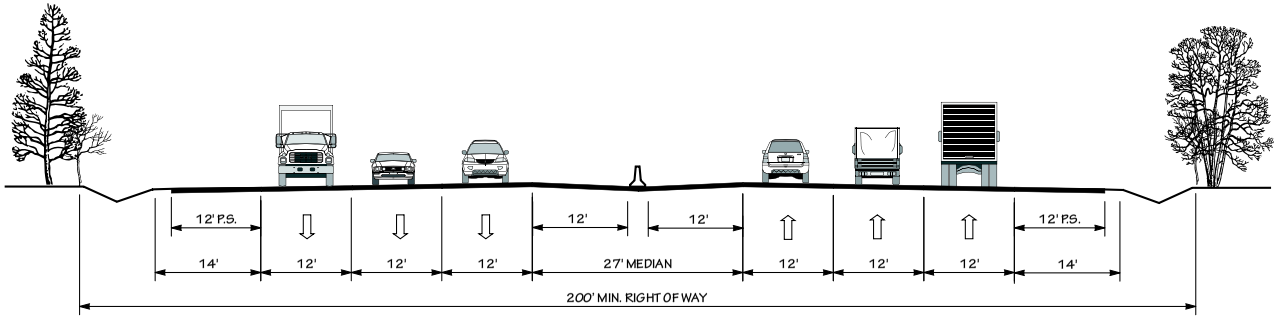
Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS



6A 6 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS

POSTED SPEED 45-70 MPH

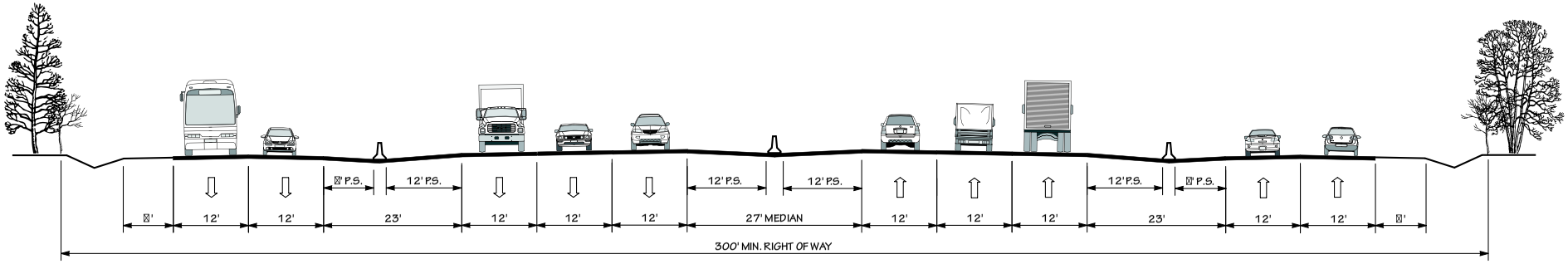


6B 6 LANE DIVIDED (27' MEDIAN WITH JERSEY BARRIER) WITH PAVED SHOULDERS

POSTED SPEED 55-70 MPH

Revised 05/05/2014

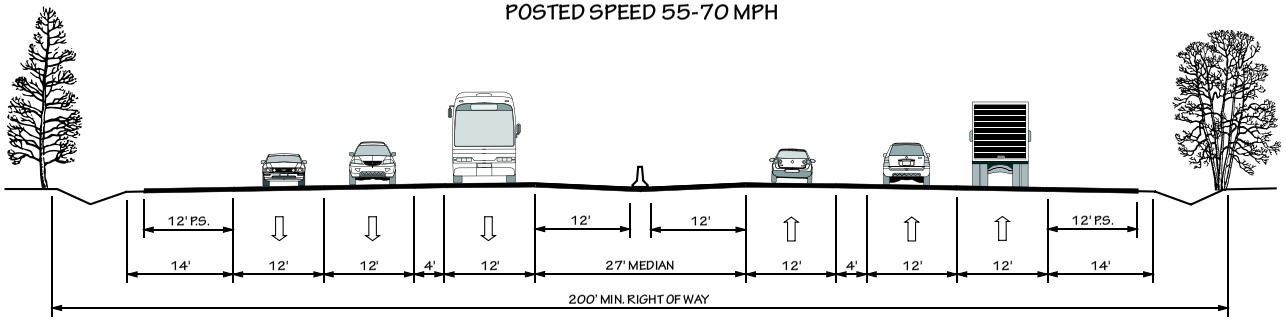
"TYPICAL" HIGHWAY CROSS SECTIONS



6C

6 LANE FREEWAY (27' MEDIAN WITH JERSEY BARRIER) WITH PAVED SHOULDERS AND 2 LANE ONE-WAY SERVICE ROADS EACH SIDE

POSTED SPEED 55-70 MPH



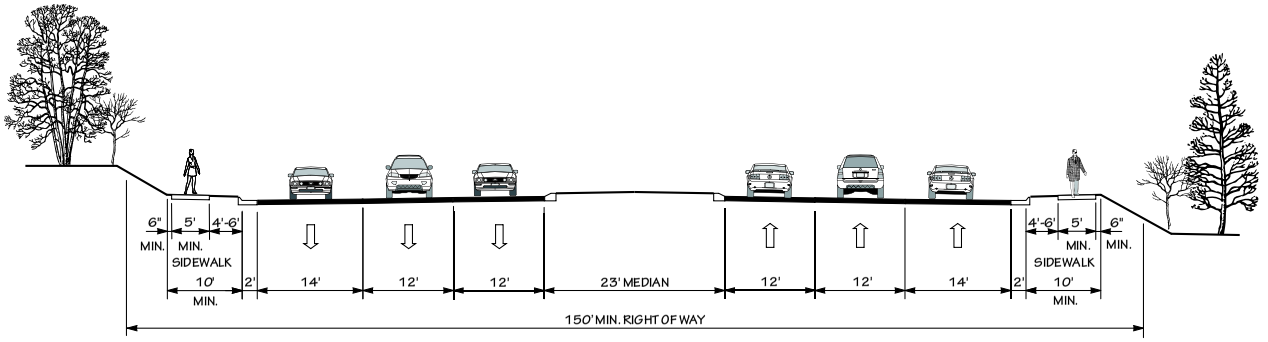
6D

6 LANE FREEWAY (4 GENERAL PURPOSE LANES, 2 MANAGED LANES, AND 27' MEDIAN WITH JERSEY BARRIER) WITH PAVED SHOULDERS

POSTED SPEED 55-70 MPH

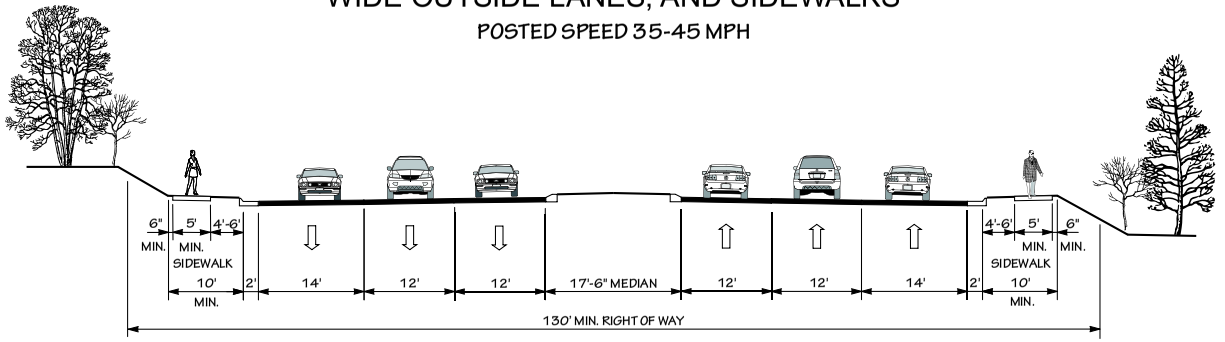
Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS



6E 6 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER, WIDE OUTSIDE LANES, AND SIDEWALKS

POSTED SPEED 35-45 MPH



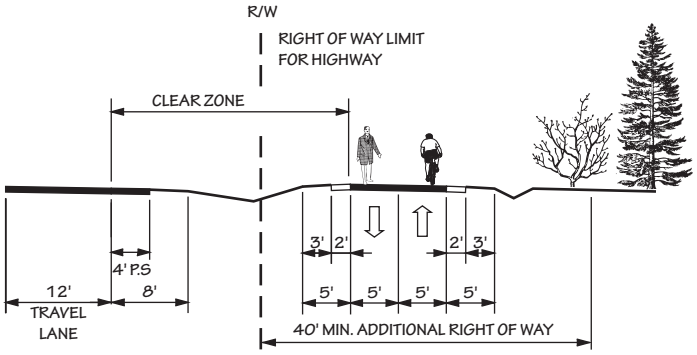
6F 6 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH CURB & GUTTER, WIDE OUTSIDE LANES, AND SIDEWALKS

POSTED SPEED 35-45 MPH

Revised 05/05/2014

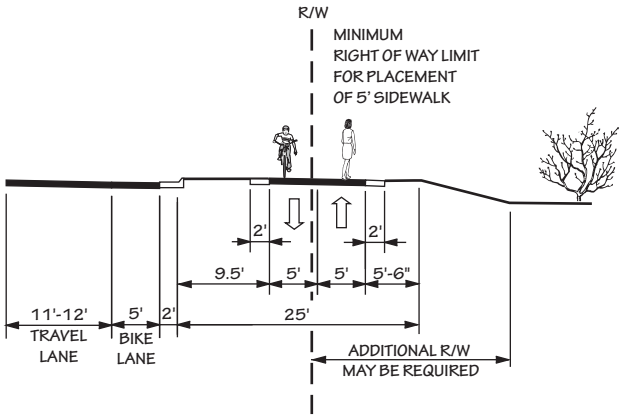
"TYPICAL" HIGHWAY CROSS SECTIONS

M A



MULTI - USE PATH
ADJACENT TO RIGHT OF WAY OR SEPARATE PATHWAY

M B



MULTI - USE PATH ADJACENT TO CURB AND GUTTER

Revised 05/05/2014

Appendix E
Level of Service Definitions

The relationship of travel demand compared to the roadway capacity determines the level of service (LOS) of a roadway. Six levels of service identify the range of possible conditions. Designations range from LOS A, which represents the best operating conditions, to LOS F, which represents the worst operating conditions.

Design requirements for roadways vary according to the desired capacity and level of service. LOS D indicates "practical capacity" of a roadway, or the capacity at which the public begins to express dissatisfaction. Recommended improvements and overall design of the transportation plan were based upon achieving a minimum LOS D on existing facilities and a LOS C on new facilities. The six levels of service are described below and illustrated in Figure 8.

- **LOS A**: Describes free-flow operations. Free Flow Speed (FFS) prevails and vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream. The effects of incidents or point breakdowns are easily absorbed.
- **LOS B**: Represents reasonably free-flow operations, and FFS is maintained. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high. The effects of minor incidents and point breakdowns are still easily absorbed.
- **LOS C**: Provides for flow with speeds near the FFS. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver. Minor incidents may still be absorbed, but the local deterioration in service quality will be significant. Queues may be expected to form behind any significant blockages.
- **LOS D**: The level at which speeds begin to decline with increasing flows, with density increasing more quickly. Freedom to maneuver within the traffic stream is seriously limited and drivers experience reduced physical and psychological comfort levels. Even minor incidents can be expected to create queuing, because the traffic stream has little space to absorb disruptions.
- **LOS E**: Describes operation at capacity. Operations at this level are highly volatile because there are virtually no usable gaps within the traffic stream, leaving little room to maneuver within the traffic stream. Any disruption to the traffic stream, such as vehicles entering from a ramp or a vehicle changing lanes, can establish a disruption wave that propagates throughout the upstream traffic flow. At capacity, the traffic stream has no ability to dissipate even the most minor disruption, and any incident can be expected to produce a serious breakdown and substantial queuing. The physical and psychological comfort afforded to drivers is poor.
- **LOS F**: Describes breakdown, or unstable flow. Such conditions exist within queues forming behind bottlenecks.

Figure 8 - Level of Service Illustrations

Source: 2010 Highway Capacity Manual, Exhibit 11-4

Appendix F
Bridge Deficiency Assessment

The Transportation Improvement Program (TIP) development process for bridge projects involves consideration of several evaluation methods in order to prioritize needed improvements. A sufficiency index is used to determine whether a bridge is sufficient to remain in service, or to what extent it is deficient. The index is a percentage in which 100 percent represents an entirely sufficient bridge and zero represents an entirely insufficient or deficient bridge. Factors evaluated in calculating the index are listed below.

- structural adequacy and safety
- serviceability and functional obsolescence
- essentiality for public use
- type of structure
- traffic safety features

The NCDOT Structures Management Unit inspects all bridges in North Carolina at least once every two years. A sufficiency rating for each bridge is calculated and establishes the eligibility and priority for replacement. Bridges having the highest priority are replaced as federal and state funds become available.

A bridge is considered deficient if it is either structurally deficient (SD) or functionally obsolete (FO). Structurally deficient means there are elements of the bridge that need to be monitored and/or repaired. The fact that a bridge is "structurally deficient" does not imply that it is likely to collapse or that it is unsafe. It means the bridge must be monitored, inspected and repaired/replaced at an appropriate time to maintain its structural integrity. A functionally obsolete bridge is one that was built to standards that are not used today. These bridges are not automatically rated as structurally deficient, nor are they inherently unsafe. Functionally obsolete bridges are those that do not have adequate lane widths, shoulder widths, or vertical clearances to serve current traffic demand or to meet the current geometric standards, or those that may be occasionally flooded.

A bridge must be classified as deficient in order to qualify for federal replacement funds. Additionally, the sufficiency rating must be less than 50% to qualify for replacement or less than 80% to qualify for rehabilitation under federal funding. Deficient bridges located on roads evaluated as a part of the CTP are listed in Table 3. For more details on deficient bridges within the planning area, contact the Structures Management Unit using the information in Appendix A.

Table 3 - Deficient Bridges

Bridge Number	Facility	Feature	Condition	Local ID
4	US 421 N	Tick Creek	FO	
10	SR 1916 (Corinth Rd)	Shaddox Creek	FO	B-4461
14	NC 902	East Prong Bear Creek	FO	
17	US 15, 501	Robertsons Creek	FO	
22	SR 2135 (St Lukes Church Rd)	US 421	FO	
26	US 421 NBL	Southern Railway	FO	
32	Seaboard Coastline	US 1	FO	
35	US 421 NBL	Norfolk Southern RR	FO	
39	NC 42	Norfolk Southern RR	FO	
61	NC 87/902	Robertsons Creek	FO	
94	SR 1520 (Mt Olive Church Rd)	Dry Creek	SD & FO	
129	SR 2159 (Alston Chapel Rd)	Branch of Rocky River	SD & FO	B-4731
141	SR 2170 (Rives Chapel Church Rd)	Rocky River	FO	
147	SR 1953 (Chatham Church Rd)	Rocky River	FO	B-5738
157	SR 2145	Cedar Creek	SD & FO	B-5747
171	SR 2333 (Main St)	Bear Creek	SD & FO	
175	SR 2120 (Ike Brooks Rd)	Tick Creek	FO	
187	SR 1136 (Palmer Chapel Rd)	Tick Creek	SD	
252	SR 1127 (Wrenn Smith Rd)	Blood Run Creek	FO	
282	SR 1362 (Piney Grove Church Rd)	Rocky River	SD & FO	
306	SR 1303	Prong of Rocky River	SD & FO	B-4729
383	SR 1355 (R.C. Overman Rd)	Mad Lick Creek	FO	
400	SR 2157 (Pete Roberson Rd)	Tributary Rocky River	FO	
402	SR 2156 (Woody Dam Rd)	Bear Creek	FO	
405	Pedestrian	Haw River	SD & FO	
410	SR 1522 (Eddie Perry Rd)	Brooks Creek	FO	
411	SR 1107 (Old US Hwy 64)	Blood Run Creek	FO	
421	SR 2234 (Stage Coach Rd)	Varnell Creek	FO	
422	SR 1564 (Old Siler City Rd)	Branch of Roberson Creek	FO	
429	Southern RR	SR 2195	FO	
430	Southern RR	SR 2195	FO	
431	SR 1169 (Graham Moore Rd)	Reids Creek	FO	
453	Wastewater treatment plant	Loves Creek	SD & FO	
490	SR 1500 (Arthur Teague Rd)	Branch of Varnell Creek	SD	
498	US 64 Business WBL	US 64	FO	

Appendix G
Socio-Economic Data Forecasting Methodology

In the development of the Chatham County CTP, existing and anticipated deficiencies were determined through an analysis of the transportation system looking at both current and future travel patterns. Two analysis methods were used: one for the non-modeled/rural areas and another for the more urbanized area around Siler City.

For the non-modeled/rural portion of Chatham County, including Goldston, travel demand was projected from 2010 to 2040 using a trend line analysis based on Annual Average Daily Traffic (AADT) from 1990 to 2011. In addition, local land use plans and growth expectations were used to further refine future growth rates and patterns. For this CTP, the 2016 Chatham County Land Use Plan was used and is illustrated in Figures 9 and 10, respectively.

It is more difficult to predict future travel patterns in urban areas where there are more alternative route options. Therefore, for Siler City and the surrounding area, travel demand was projected from 2010 to 2040 using a computerized travel demand model. Travel demand models are developed to replicate travel patterns on the existing transportation system as well as to estimate travel patterns for 2040. Additionally, travel demand models require a broad range of socio-economic input data such as population and employment. These inputs are available from sources like the U.S. Census Bureau, but data for 2040 is also required.

The CTP Steering Committee worked with NCDOT to estimate population growth, economic development potential, and land use trends to determine the potential impacts on the future transportation system in 2040. This data was endorsed by the Chatham County Commissioners in May 2012.

Below is a description of the methodology used in the analysis.

Population

Population trends were estimated using available data from the Office of State Budget and Management (OSBM) and simple exponential growth. Table 6 shows current and projected population through the year 2040 which were taken from the OSBM website.

The CTP Steering Committee identified areas in Chatham County that would experience growth rates higher and lower than the county average. The urbanized area, Siler City, was studied with the assistance of the Town Planner and Town Engineer. Accordingly, those with high growth potential attracted more trips than those identified as low growth areas.

Table 4 – Population Data

Year	Population – Chatham County
1980	33,415
1985	35,826
1990	38,979
1995	43,925
2000	49,812
2005	55,938
2010	63,505
2015	69,851
2020	75,494
2025	81,136
2030	86,776
2035	92,418
2040*	98,060

* Extrapolated by NCDOT

Employment

Future employment conditions within Chatham County were approved by the CTP Steering Committee. This included approximate locations and intensity for proposed employment centers. Any anticipated heavy demand on the future transportation system as a result of these proposals is accounted for in projected traffic volumes. Employment totals were based on US Census Bureau Info USA. Countywide 2040 employment totals were based on maintaining the same population-employment ratio as present in 2014.

Table 5 – Employment Data

Year	2014	2040*
Employment - Chatham County	13040	18307

** Estimated by NCDOT*

Existing Land Development Plan Map

Back of Figure

Future Land Development Plan Map

Back of Figure

Appendix H
Public Involvement

This appendix documents the public involvement process and includes a listing of steering committee members, the goals and objectives survey results, and public meetings held throughout the development of the CTP.

List of CTP Steering Committee Members

At the start of a CTP study, a committee is formed that is comprised of individuals who represent the various needs, issues and populations of the community. These representatives are responsible for capturing the transportation needs of the community relative to all modes of transportation and for guiding the development of the CTP. A listing of steering committee members for the Chatham County CTP is given below.

Jim Elza, Chair
Andy Bailey, Vice Chair
Caroline Siverson
Esta Cohen (alternate)
George Lucier (alternate)
James Crawford (interim)
John Fogleman
Kalyan Ghosh
Linda Harris
Marcia Herman-Giddens
Tandy Jones
Casey Mann
Amanda Robertson
Del Turner
Terry Schmidt
Sharon Garbutt
Jamie Nunnelly (alternate)
George Pauly (alternate)
Sherri Stuewer (alternate)

CTP Vision, Goals, Objectives and MOEs

The CTP vision, goals and objectives are developed as part of the public involvement process and help identify how the people within an area would like to develop the transportation system (all modes). The CTP committee develops the draft vision, goals, objectives, and MOEs which are further refined with input from citizens via the CTP Goals & Objectives (G&O) survey. These products become the official guide for the CTP being developed.

The vision statement, goals and objectives reflect what is important for the area and defines any local preferences concerning the transportation system and community assets. The vision statement is the framework for the area's strategic planning. Goals and objectives document how the area plans to fulfill its vision. The goals break down the vision statement into themes, while the objectives document how the area plans to make progress towards achieving each goal. MOEs are established to enable the area to track the progress of each objective.

Vision Statement:
The Chatham Comprehensive Transportation Plan will guide the development of a balanced and sustainable transportation system that provides mobility and access for people, goods and services in Chatham County. This plan is a blueprint to local, regional, and state transportation planners, elected officials, government staff, service providers, non-profit organizations, and community members. Its intent is to enhance connectivity and mobility within Chatham while taking regional and statewide transportation initiatives into account and recognizing the transportation system's impact on public health, economics, environment, inclusiveness, education and quality of life.

Goals and Objectives Survey

A G&O survey is a public involvement technique used to help identify an area's perception of transportation-related issues, identify concerns that should be addressed during the development of a CTP, and to help develop a vision for the community. The G&O survey is most appropriately implemented at the beginning of the transportation planning study. In addition to determining up front what is important to the citizens of the planning area, initiating the G&O survey early in the planning process allows the survey to serve as an introduction to the transportation planning process. The survey usually includes a brief introduction explaining what a transportation plan is and how the area can benefit from having one. The survey also includes a wide variety of questions that is tailored to each area as appropriate. A summary of the Chatham County G & O survey is given below.

Summary of Response Types

The Survey was available online and in print from January To March of 2012.

Response Type	Responses
Online, English	189
Online, Spanish	1
Paper, English	7
Paper, Spanish	0
Total	197

Question 1: Do you live in Chatham County?

	% Response	Response Count
Yes	93.6	181
No	6.4	13
Total		194

158 Respondents provided the zip codes, listed below:

Zip Code	Quantity	Zip Code	Quantity	Zip Code	Quantity
27206*	1	27330	3	27523*	3
27207	6	27344	13	27559	4
27208	1	27502	1	27562	1
27213*	1	27510	2	27603	1
27252	2	27516	11	27703	1
27302	1	27517*	26	28327	1
27312	75	27519*	8	32808	1

Question 2: When traveling in and around Chatham County, do you have trouble finding a direct route to your destination?

	% Response	Response Count
Yes	21.9	42
No	78.1	147
Total		189

35 Respondents provided descriptive explanations regarding the question.

Examples of responses include lack of crossings for Haw River and Jordan Lake, as well as a lack of a direct route from the Preserves to other areas in the region.

Question 3: Describe your typical work commute (from/to).

Common Listed Origins	Common Listed Destinations
Pittsboro	Pittsboro
Chatham	Chapel Hill
Siler City	Durham
The Preserve	Raleigh
North Chatham	Siler City
Silk Hope	Apex
Jordan Lake	Cary
Bear Creek	RTP

Question 4: What type of transportation do you normally use for your commute?

Mode	Percent	Quantity
Alone in car	88.6	156
Carpool/Vanpool	6.3	11
Bike	0.6	1
Bus	2.8	5
Walk	1.7	3
Total		176

There were 19 written responses, which included combinations of the above options, work from home and retired/no longer commute.

Question 5: About how long is your commute?

Time	Percent	Quantity
Less than 15 minutes	20.6	36
15-30 minutes	49.1	86
Between 30-45 minutes	26.3	46
45 minutes to an hour	8.6	15
More than an hour	1.1	2
Total		185

Question 6: Are there areas where you would like to see sidewalks constructed or improved?

	Percent	Quantity
Yes	44.6	79
No	55.4	98
Total		177

There were 81 write-in responses, which included several requests for sidewalk repairs in Pittsboro, new sidewalks in Pittsboro, Siler City, around schools and on rural two-lane roads. Safety and accessibility were mentioned.

Question 7: Are there locations you would like to see crosswalks or crossing signals added?

	Percent	Quantity
Yes	26.6	46
No	73.4	127
Total		173

There were 47 write-in responses, which included concerns about safety around the courthouse roundabout in Pittsboro, the Chatham marketplace in Pittsboro, Big Woods Road, US 64 in Siler City, churches in Moncure and the Cole Park Plaza area.

Question 8: Would you support widening existing roads to help accommodate the use of bicycles?

	Percent	Quantity
Yes	75.4	141
No	24.6	46
Total		187

There were 116 write-in responses, which included concerns about safety and accessibility. Commuters expressed the need for bicycle facilities along 64 and connecting various towns and areas, such as siler City to Silk Hope, Pittsboro to Siler City and Jordan lake to surrounding developments. Many rural two-lane roads were suggested for bicycle facilities, including Manns Chapel Rd., Andrews Store Rd., Hamlets Chapel Rd. and Jones Ferry Rd.

Question 9: Are there locations you would like to see served (or better served) by public transit? (Bus, vanpool, rail, etc.)

	Percent	Quantity
Yes	51.7	90
No	48.3	84
Total		174

There were 85 write-in responses. Suggestions included increased service along the PX route, including a stop at Briar Chapel and extended hours, increased services between Pittsboro and Siler City, with more stop locations in Siler City, service from Pittsboro to Raleigh and rail service connecting the region.

Question 10: Which three of the following choices are most important to you? (187 responses)

	Percent	Quantity
Community and rural culture preservation (encourage business growth downtown, protect neighborhoods, preserve landscape)	54.5	102
Environmental protection (protect wetlands, streams and wildlife, reduce air and noise pollution)	46.0	86
More transportation choices (More ways to get to places -- buses, sidewalks, bike trails, etc.)	43.3	81
Maintenance (repairs and general upkeep of existing transportation facilities)	35.8	67
Economic growth (new improved roads and railways to attract and expand businesses)	34.8	65
Increased public transit options (bus service to more destinations, park 'n' ride lots, etc.)	30.5	57
Care for special needs citizens (better transportation for elderly, low-income residents and those with disabilities)	24.1	45
More efficient travel times (Roads with more lanes and fewer intersections, express bus services, etc.)	17.1	32

Question 11: Are there areas where you think large or slow vehicles (trucks, tractors, heavy equipment and buses) are an issue?

	Percent	Quantity
Yes	37.3	66
No	62.7	111
Total		177

There were 68 write-in responses. Concerns included large vehicles wearing out the roads, the roundabout on NC 87 near the Chatham Community Library being too small to handle large vehicles and many two-lane roads being too narrow for large vehicles to travel safely.

Question 12: Are there specific roads or intersections in Chatham County that you see as having an issue?

	Percent	Quantity
Yes	44.8	78
No	55.2	96
Total		174

There were 78 write-in responses. A few of the intersections noted were at Jack Bennett Rd. and Lystra Rd., the Roundabout at the courthouse in Pittsboro, Big Woods Rd. and US 64, Adrews Store Rd. and US 15-501 and US 64 exits at US 15-501 north of Pittsboro at the Lowe's.

Question 13: Long-range plans for transportation in North Carolina include transitioning US 64 into a continuous, limited-access freeway. Which one of the following options would you consider for US 64 in Siler City?

	Percent	Quantity
Turn existing road into freeway	10.7	18
Construct a Northern US 64 Bypass	26.0	44
Construct a Southern US 64 Bypass	14.8	25
No opinion	53.3	90
Total		177

There were 28 write-in responses. Comments included both opposition and support for a bypass. Recommendations included constructing a bypass on the side of town that would result in the least environmental Impact.

Question 14: Please tell us about any other major transportation issues you see in Chatham County.

There were 63 responses to this question, which included:

- Need for more public transportation services
- Need for more bicycle and pedestrian facilities
- Desire to discourage "sprawl", develop responsibly
- Maintenance/improvements to 2-lane roads
- Reduce speed limits in certain locations
- Bypass for US 15-501 in Pittsboro

Question 15: What is your gender?

	Percent	Quantity
male	41.5	78
female	58.5	96
Total		183

Question 16: What is your approximate age?

	Under 18	18-25	26-35	36-45	46-55	56-65	66-75	Over 75
Percent	0.5	2.7	14.2	21.9	21.3	20.8	15.3	3.3
Responses	1	5	26	40	39	38	28	6

Question 17: Check all that apply to describe your race/ethnicity:

	American Indian or Alaska Native	Asian	White	Latino	Native Hawaiian or other pacific islander	Black or African American
Percent	3.4	1.1	89.8	4.0	0.6	6.3
Responses	6	2	158	7	1	11

Chatham County 2010 Census race/ethnic data

	American Indian or Alaska Native	Asian	White	Latino	Native Hawaiian or other pacific islander	Black or African American
Percent	0.5	1.1	76.0	13.0	0.0	13.2

Public Meetings

Three drop-in sessions for the public were held in Chatham County on Tuesday, June 21st thru Thursday, June 23rd in Pittsboro, Siler City and Goldston. During each session CTP maps with recommendations were displayed and the Transportation Planning Branch and Triangle Area Rural Planning Organization staffs were present to facilitate and answer questions. Brief summaries of public's concerns and suggestions from these sessions are given below.

June 21st – Pittboro, NC

- NC 902 needs to be widened, shoulders too small if other cars veer into your lane
- Urban planning should include more vertical development and less horizontal (sprawl). More hubs of retail (boroughs) and less strip mall type retail. More residential above retail as in Paris. Economic incentives for agriculture to be interspersed with urban. This may include parkland along farm edges to give impression of open spaces.
- Currently a bus route from Pittsboro to UNC has 3 stops. It could include several along US 15-501
- Pittsboro Loop is much needed as it opens up traffic flow around and through Pittsboro. Looks well thought out and configured.

June 22nd – Siler City, NC

- No particular concerns about the draft CTP maps were raised at this session.

June 23rd – Goldston, NC

- Please check signage for new bypass off NC 421 Business to NC 421 North. Trucks going through Comnock and going over little bridges not rated for that weight. Plus tearing up roads and turning in park, drives on road. The roads are now dangerous in that area – Cumnock Road and R. Jordan Road. Lots of accidents now on R. Johnston from road conditions.
- Need better signs at intersection along NC 421
- Do not narrow the courthouse circle unless a US15-501 bypass is complete.
- No more roundabouts.

Appendix I
Existing Transportation Plans

The following CTP for areas within the county that are not included as a part of this plan are listed below and can be viewed on the web.

2011 Pittsboro Comprehensive Transportation Plan
https://connect.ncdot.gov/projects/planning/Pages/CTP-Details.aspx?study_id=Pittsboro

Durham-Chapel Hill-Carrboro (DCHC) draft Comprehensive Transportation Plan (under development)

The following Thoroughfare Plans for areas within the county that were considered as a part of this plan are listed below and may be viewed on the web. Refer to these reports for detailed descriptions of recommendations that were not documented as a part of this report.

1983 Chatham County Thoroughfare Plan
1983 Chatham County Thoroughfare Plan (not adopted)
1999 Siler City Thoroughfare Plan