



2011 Harnett County Comprehensive Transportation Plan



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Comprehensive Transportation Plan

Harnett County

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Transportation Planning Branch N.C. Department of Transportation

In Cooperation with: Harnett County

Town of Lillington Town of Coats City of Dunn Town of Erwin Town of Angier

Fayetteville Area Metropolitan Planning Organization Capital Area Metropolitan Planning Organization

Mid-Carolina Rural Planning Organization

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Executive Summary

In September of 2006, the Transportation Planning Branch of the North Carolina Department of Transportation and Harnett County initiated a study to cooperatively develop the Harnett County Comprehensive Transportation Plan (CTP), which includes the Town of Lillington, Town of Coats, City of Dunn, Town of Erwin, and Town of Angier. This is a long range multi-modal transportation plan that covers transportation needs through 2035. Modes of transportation evaluated as part of this plan include: highway, public transportation and rail, bicycle, and pedestrian. This plan does not cover standard bridge replacements, routine maintenance, or minor operations issues. Refer to Appendix A for contact information on these types of issues.

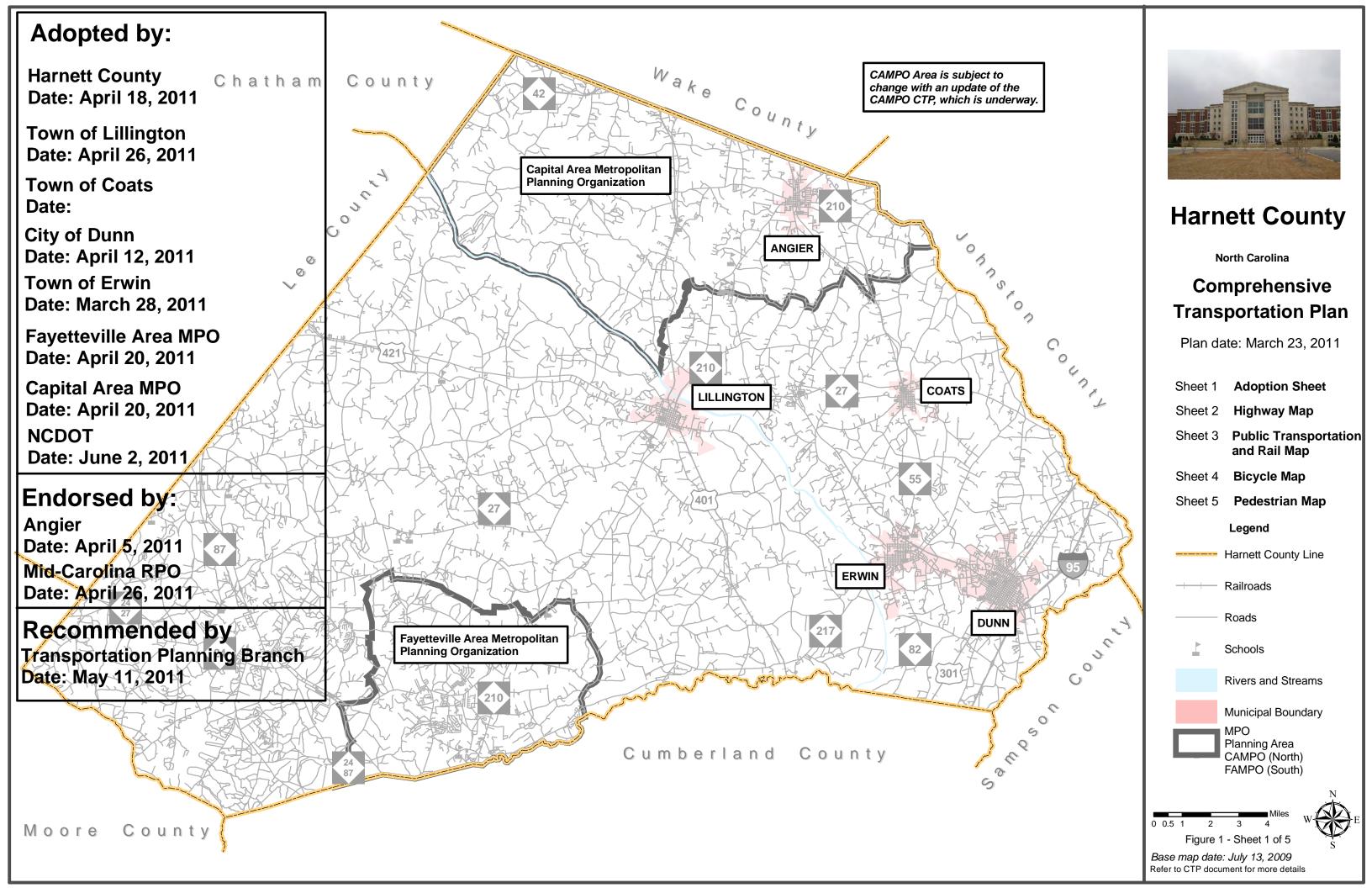
Findings of this CTP study were based on an analysis of the transportation system, environmental screening, and public input. Refer to Figure 1 for the CTP maps, which were mutually adopted in 2011. Implementation of the plan is the responsibility of Harnett County, its municipalities, and NCDOT. Refer to Chapter 2 for information on the implementation process.

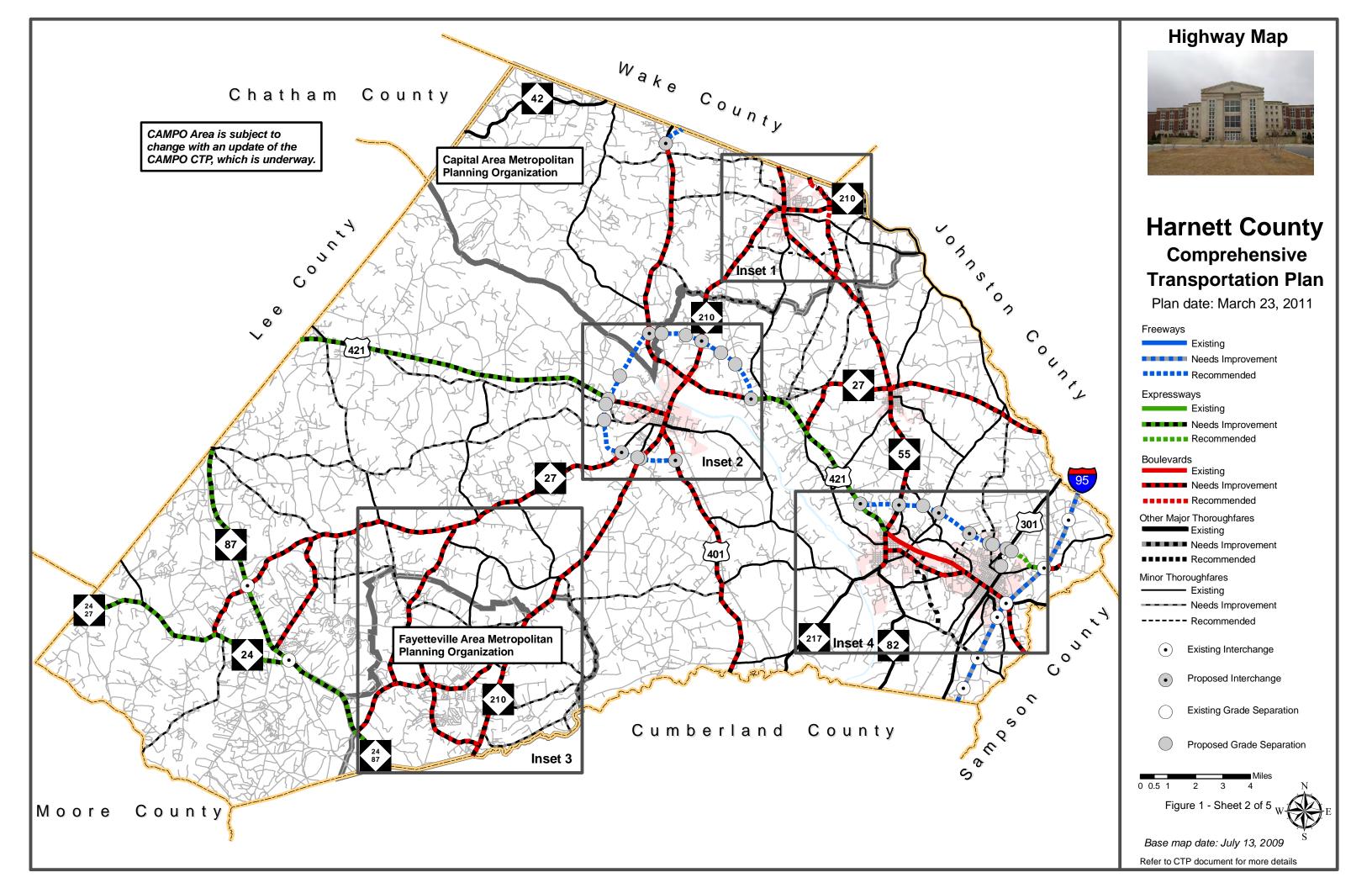
This report documents the recommendations for improvements that are included in the Harnett County CTP. The major recommendations for improvements are listed below. Prior to constructing any of these recommendations a more detailed and thorough environmental study will need to be completed. More detailed information about these and other recommendations can be found in Chapter 2.

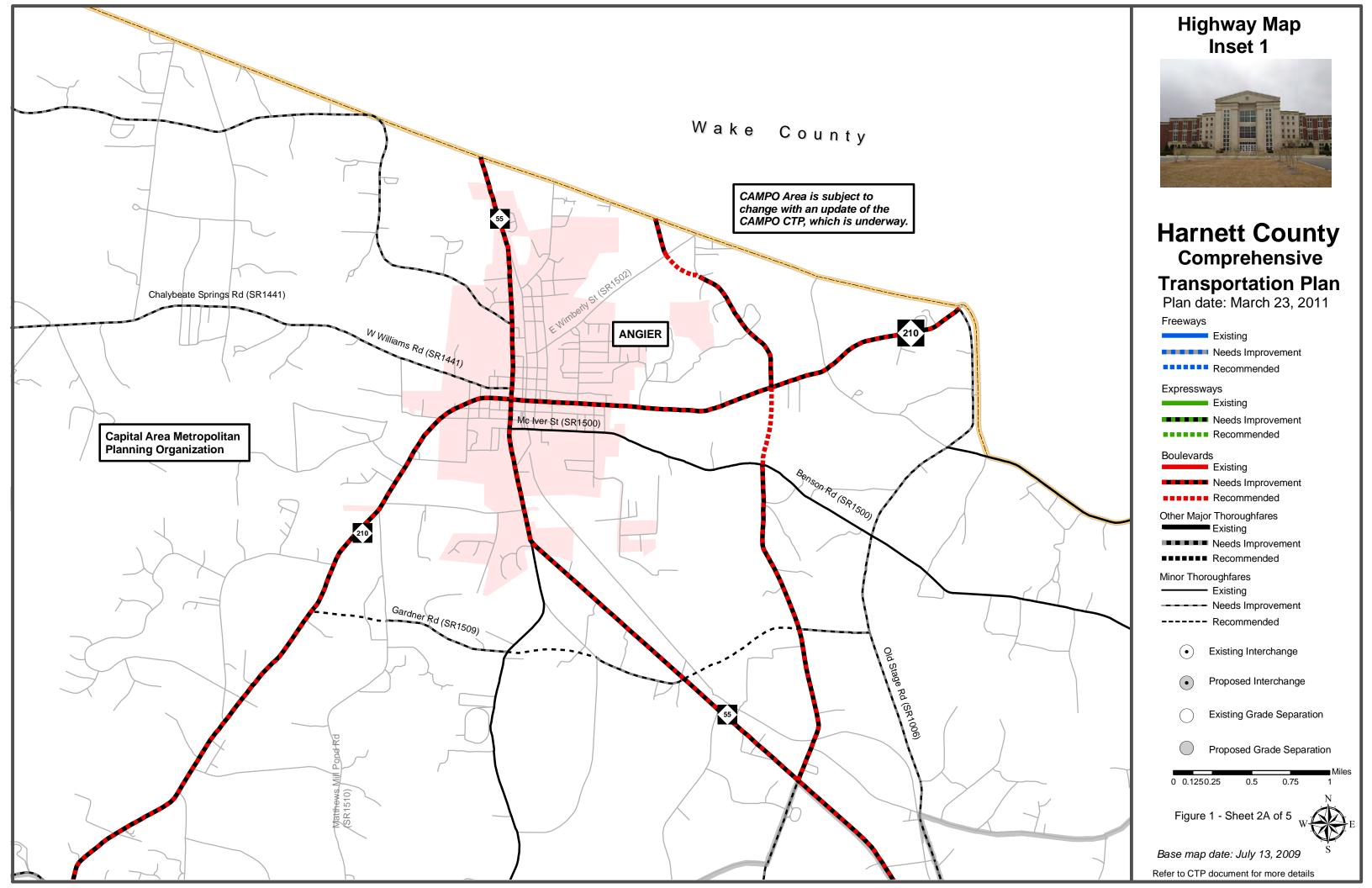
- I-4745 (I-95): Upgrade interchanges and widen to a 6-lane freeway from the Cumberland County line to the Johnston County line.
- R-2609 (US 401): Widen existing facility to a 4-lane boulevard throughout Harnett County. In Lillington, construct a US 401 bypass on new location from Stock Yard Road (SR 2045) to Spence Road (SR 1457). Construct interchanges at US 401 (north and south of Lillington), NC 27, US 421, and NC 210. Construct grade separations at Shawtown Road (SR 1133), McDougald Road (SR 1229), Old US 421 (SR 1291), South River Road (SR 1247), and the Rails to Trails Multi-use path.
- R-5185 (US 401 Bus): Improve existing facility to a 4-lane boulevard from NC 210 (north of Lillington) to proposed US 401 bypass.
- R-2529 (NC 24/27): Widen the existing NC 24/27 facility to a 4-lane expressway from the Moore County line to NC 27. From NC 27 to NC 87 widen existing NC 24 to a 4-lane expressway.
- R-2540 (NC 55): Widen existing facility to a 4-lane boulevard from US 421 to Nelson Lane.

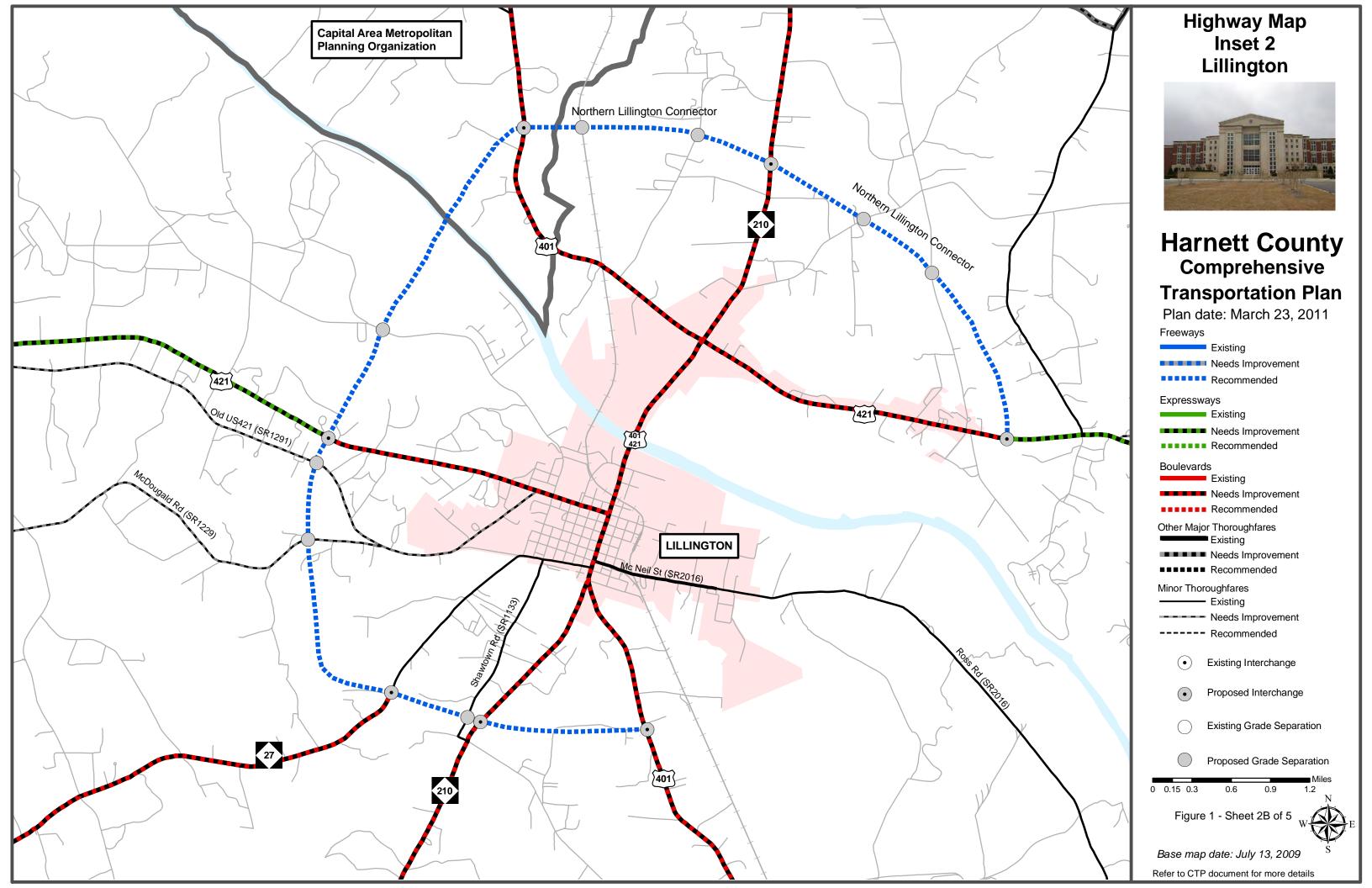
- U-3465 (Ray Road (SR 1121)): Widen existing facility to a 4-lane boulevard from NC 210 to Overhills Road (SR 1120).
- Northern Lillington Connector (HARN0001-H): Construct freeway on new location from US 401 Bypass to US 421. Reroute NC 210, NC 27, US 401, and US 421 on this facility. Construct grade separations at the railroad crossing, Matthews Road (SR 1436), Sherriff Johnson Road (SR 1516), and Neil's Creek Road (SR 1513). Construct new interchanges at NC 210 and US 421.
- US 421 Bypass (HARN0010A/B-H): Construct a new location US 421 Bypass from Avery Road (SR 2013) to Jonesboro Road (SR 1808) and along existing Jonesboro Road (SR 1808) from US 421 Bypass to I-95. Interchanges are recommended at Avery Road (SR 2013), US 301, Red Hill Church Road (SR 1703), NC 55 and the Powell Street Extension. Grade separations are recommended at Ashe Avenue (SR 1725), Meadowlark Road (SR 1715), Fairground Road (SR 1705), and at the railroad crossing.
- NC 87 (HARN0015-H): Improve existing facility to a 4-lane expressway from the Lee County line to the Cumberland County line
- Southern Angier Bypass (HARN0019A/B-H): Construct/improve existing minor thoroughfare connections to create a southern bypass of Angier from NC 210 to Old Stage Road (SR 1006).
- Eastern Angier Bypass (HARN0019C/D-H: Construct/improve existing facilities to a 4-lane boulevard to create an eastern bypass of Angier from the Wake County line to NC 55.
- **US 301 Relocation (HARN0060-H):** Relocate US 301 from existing US 301 to Carolina Drive (SR 1808) along a new 2-lane major thoroughfare.

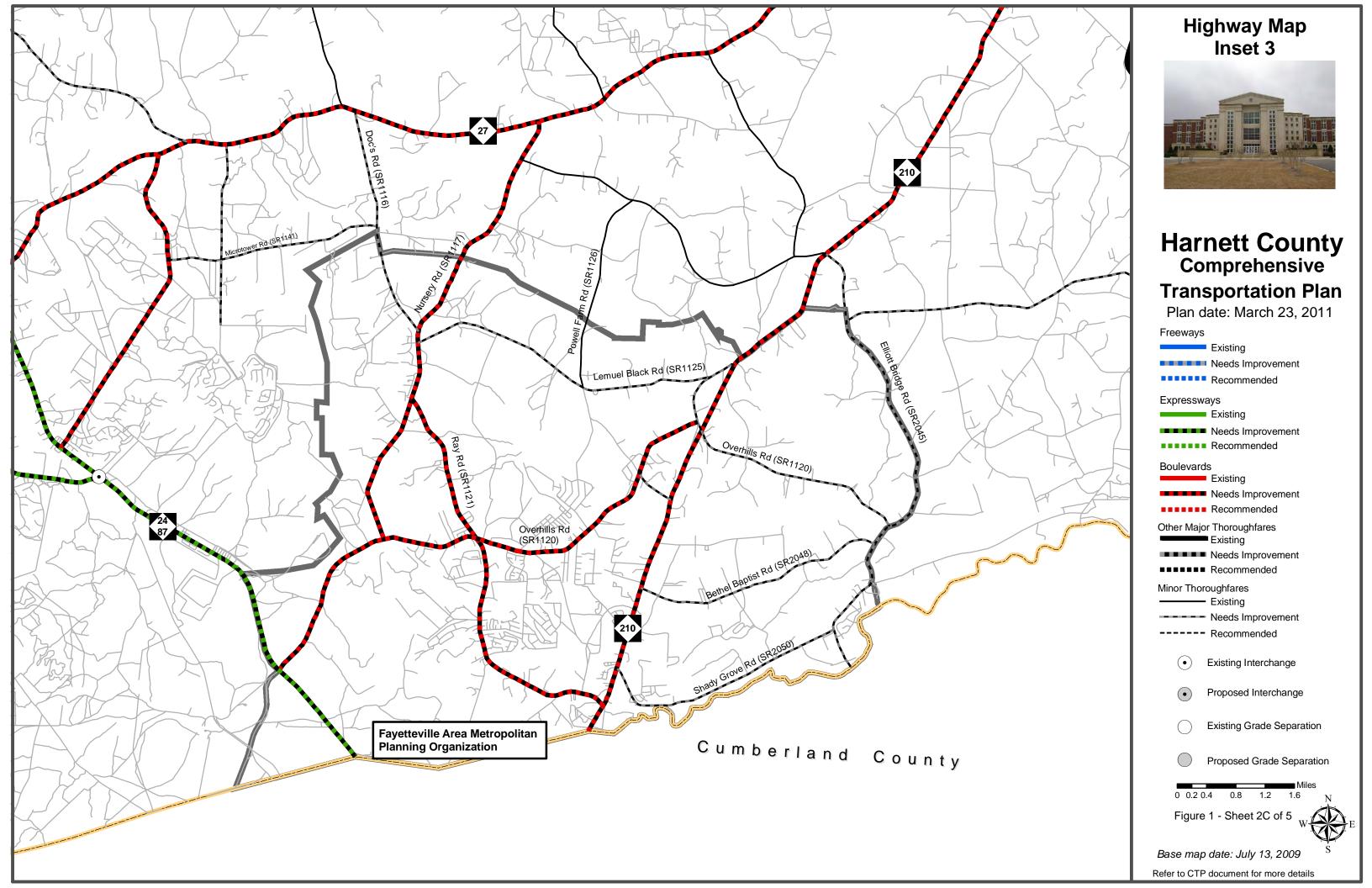
Since the adoption of the Harnett County Comprehensive Transportation Plan, planning has continued for potential growth along US 421 between Campbell University and the Town of Lillington. This includes the Campbell University Medical School expansion, the Harnett Campus for the Central Carolina Community College and the dental school for East Carolina University. This central portion of the county is expected to become Campbell University's medical corridor with expansion of medical practices, schools, and clinics. The recommendation for improvement to US 421 between Lillington and Campbell University provides the necessary mobility and access needed to handle the planned development. As more information and specific plans become available, the municipalities and county should work with these institutions to ensure that inconsistencies with the CTP are resolved.

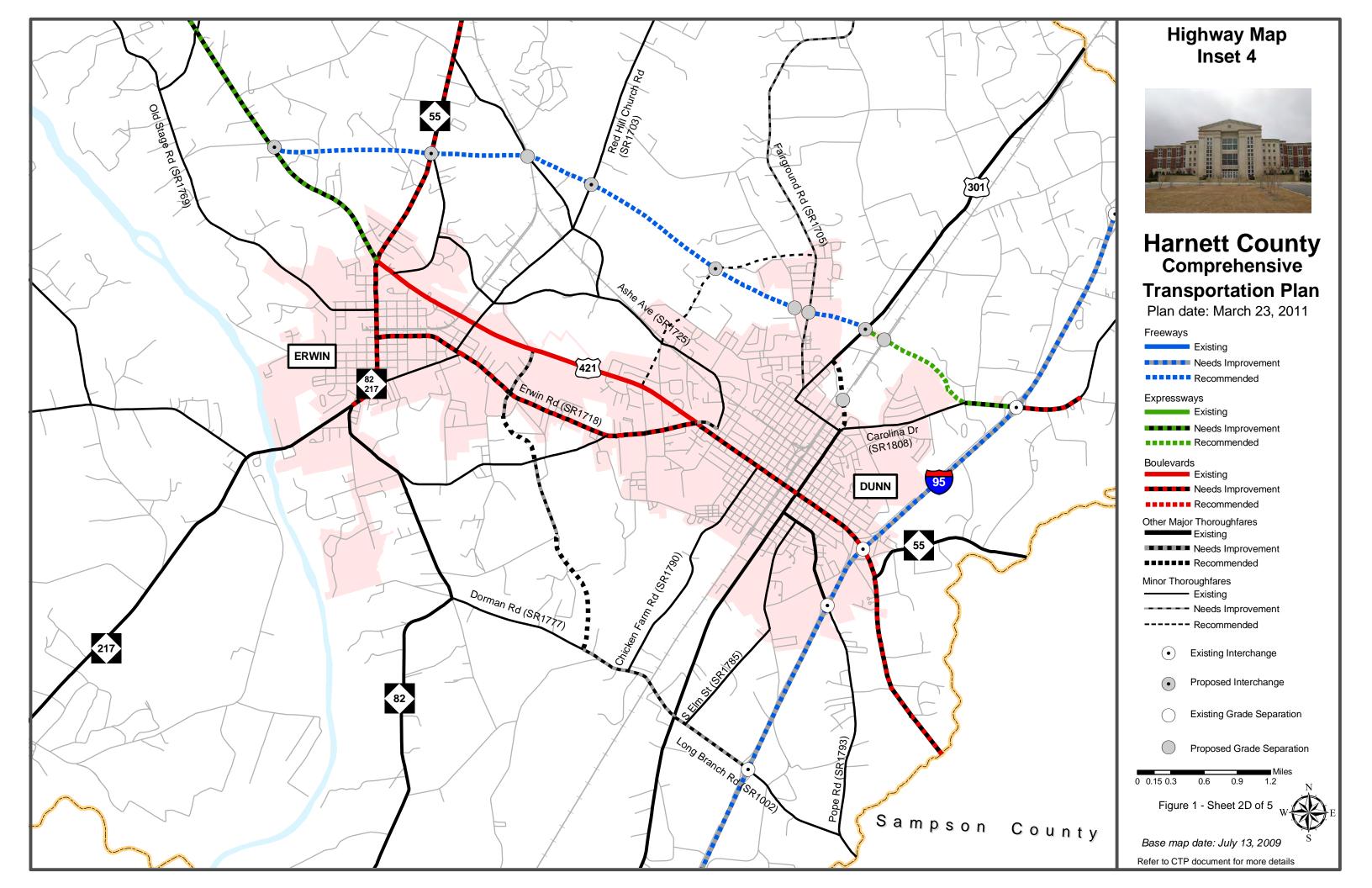


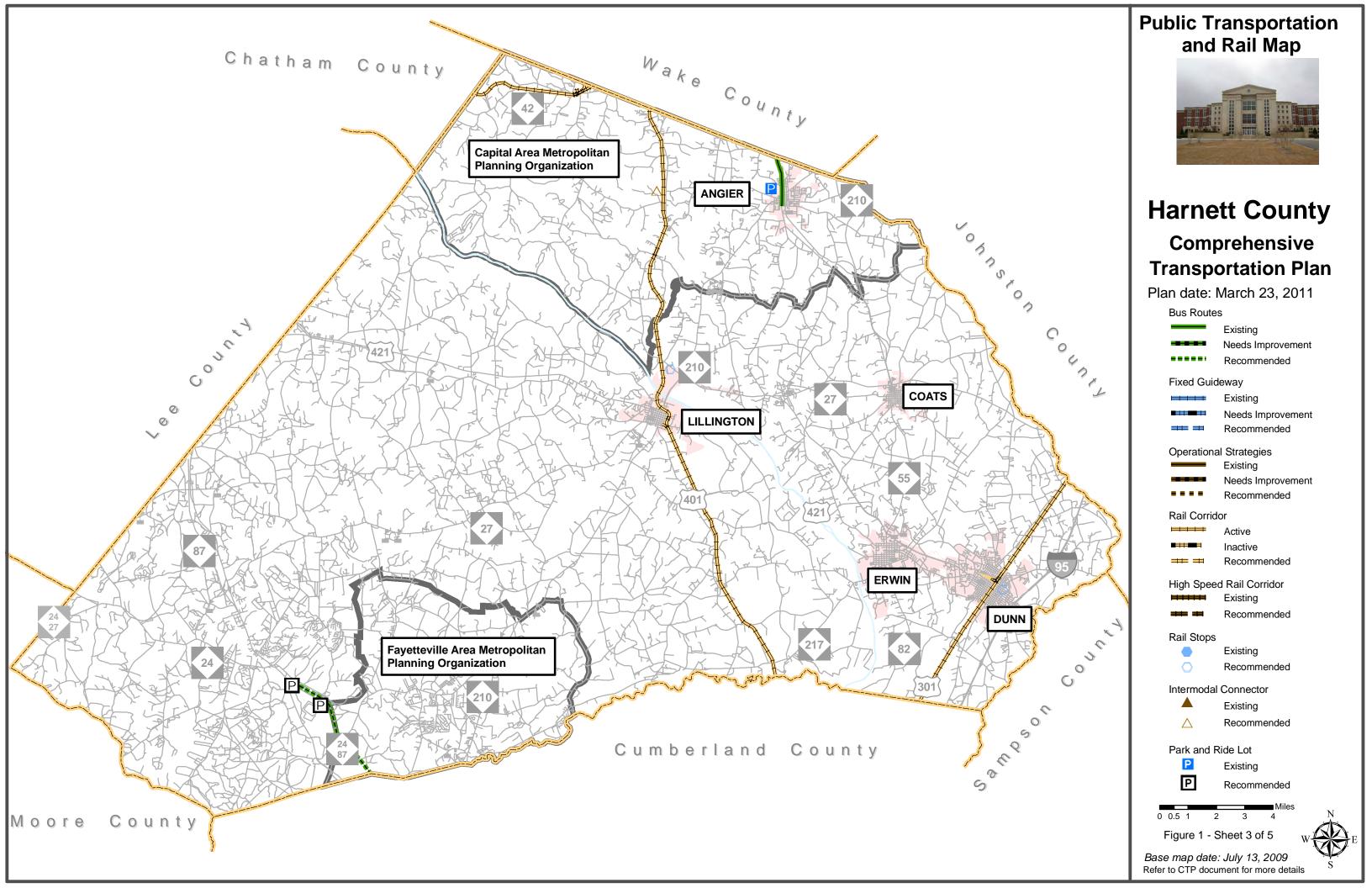


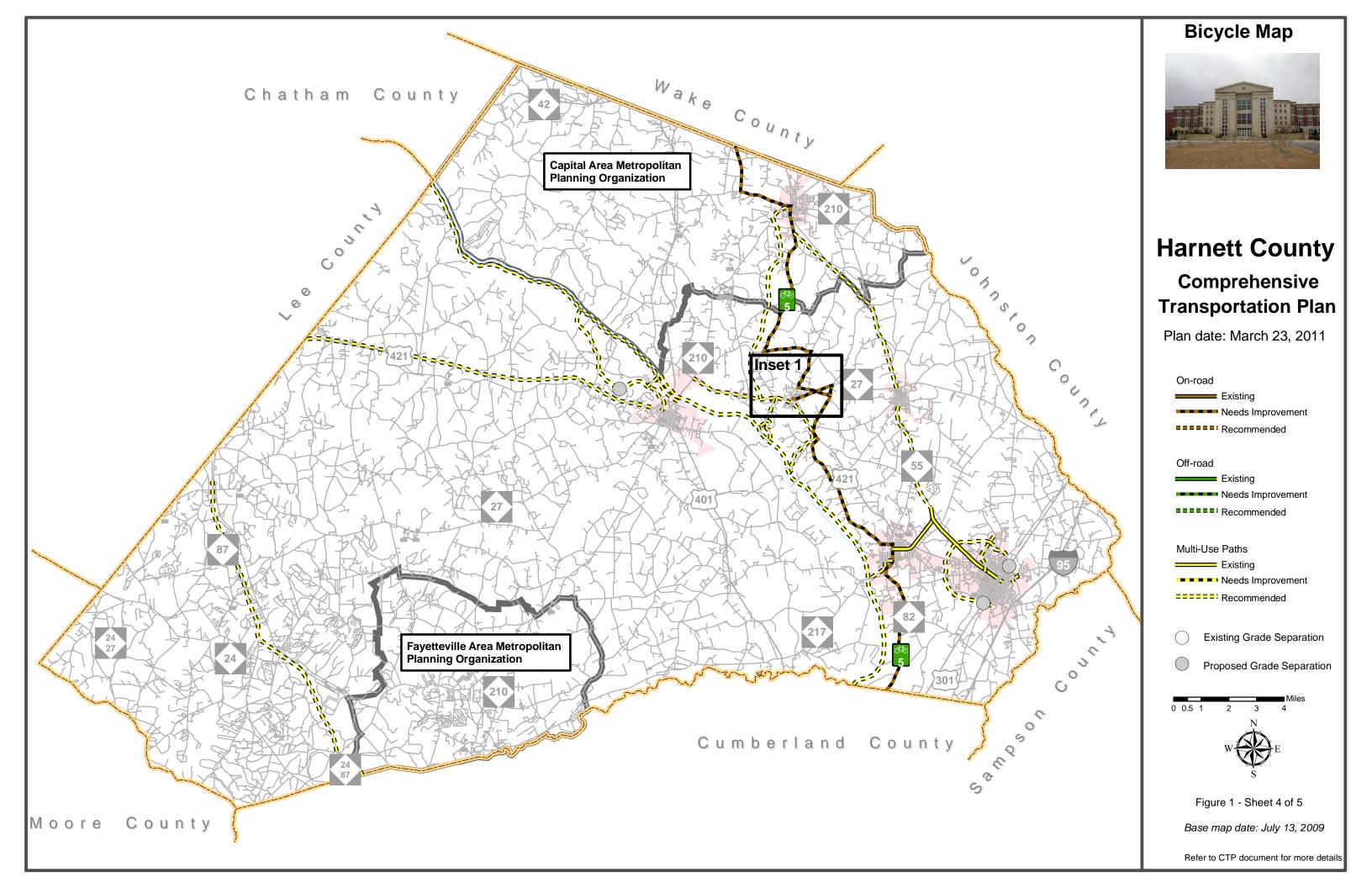


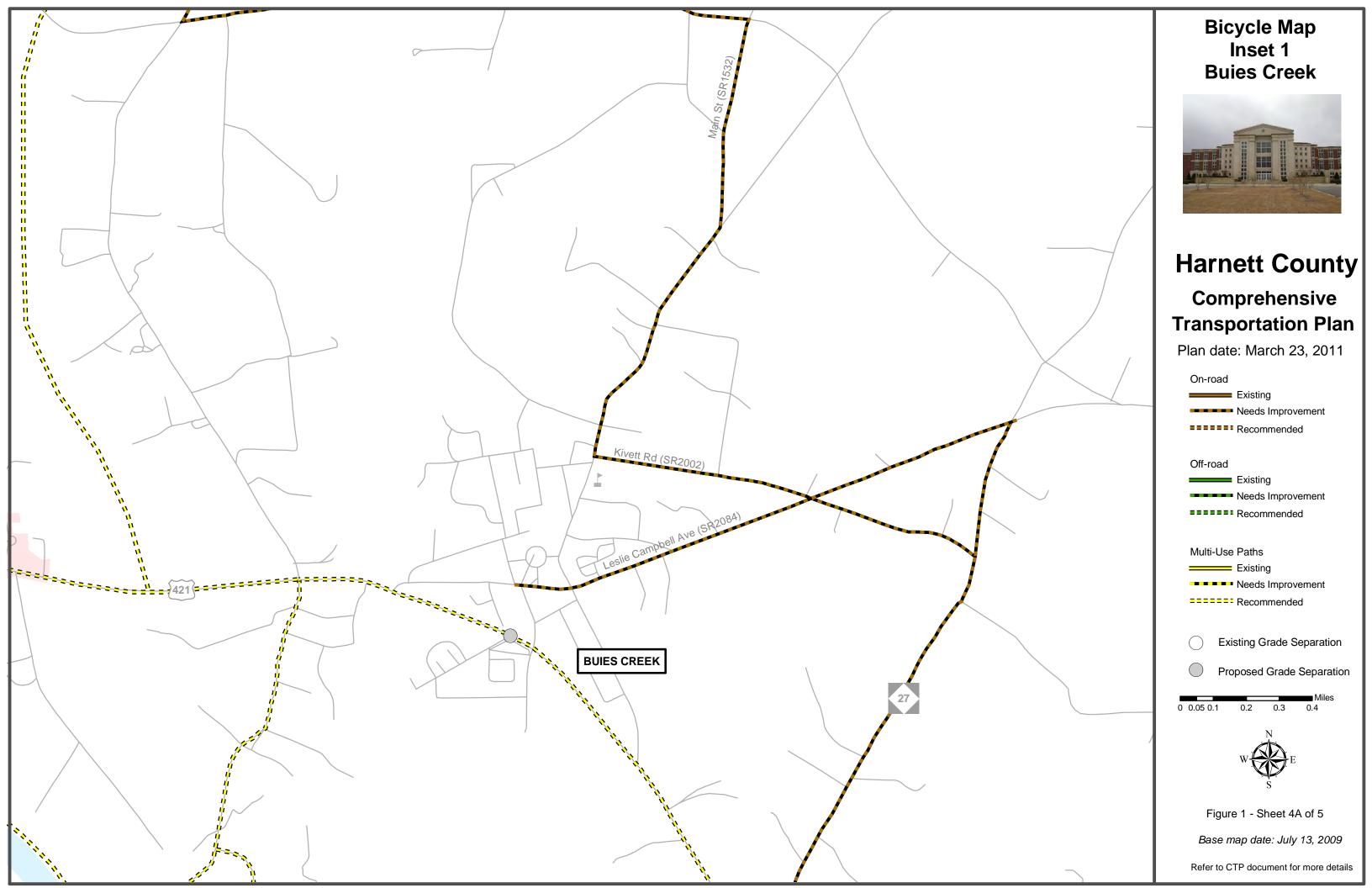


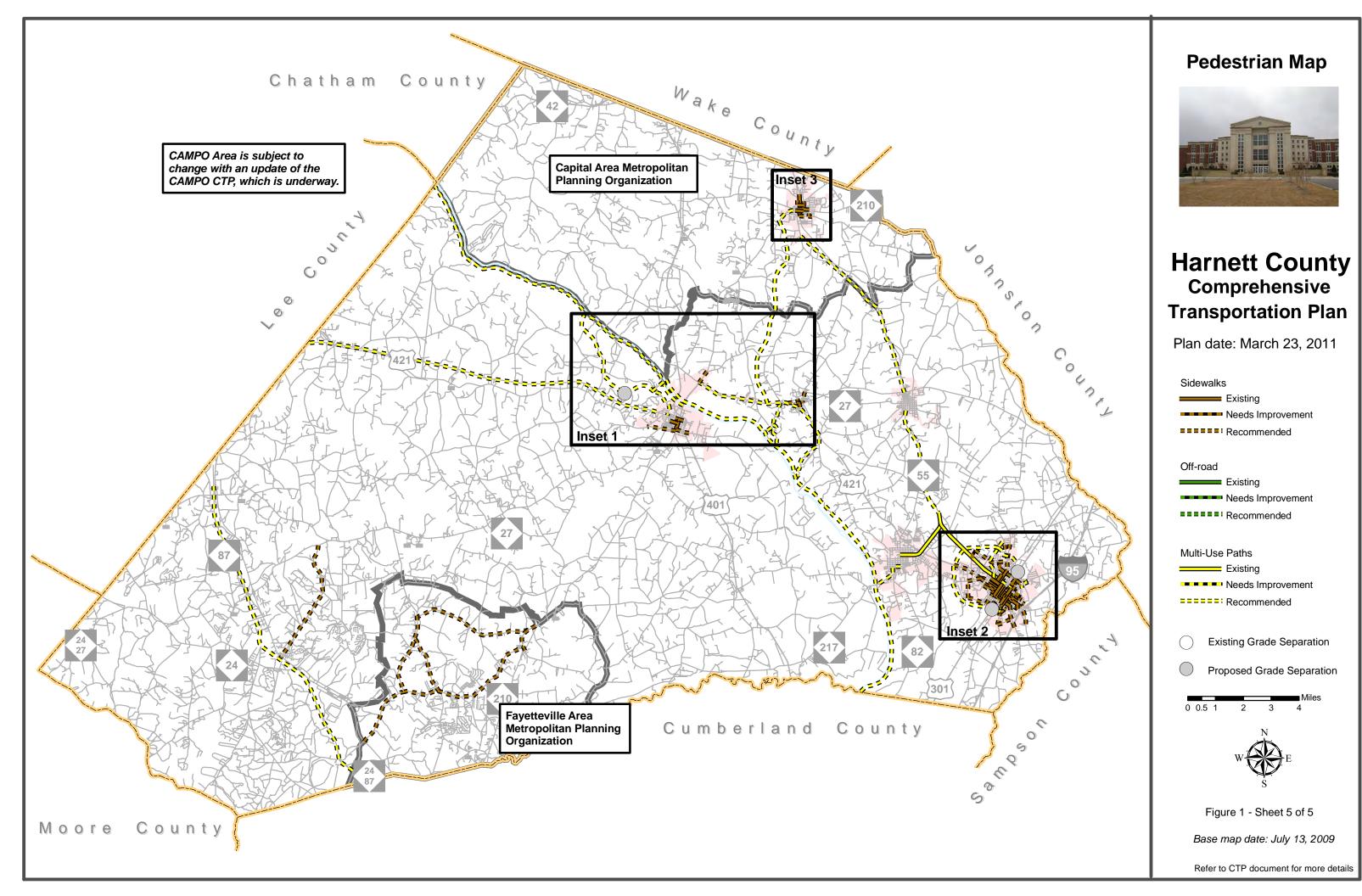


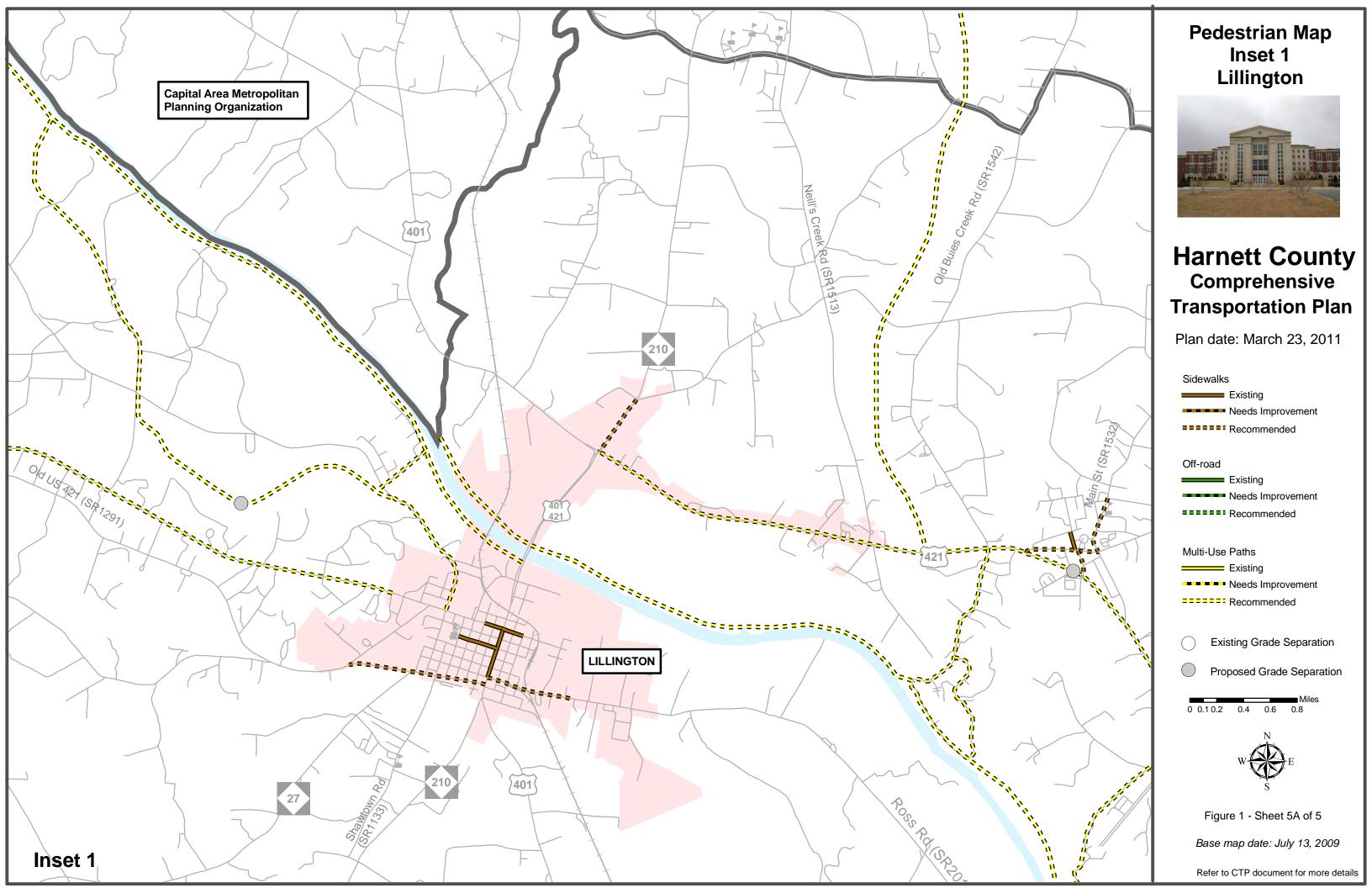


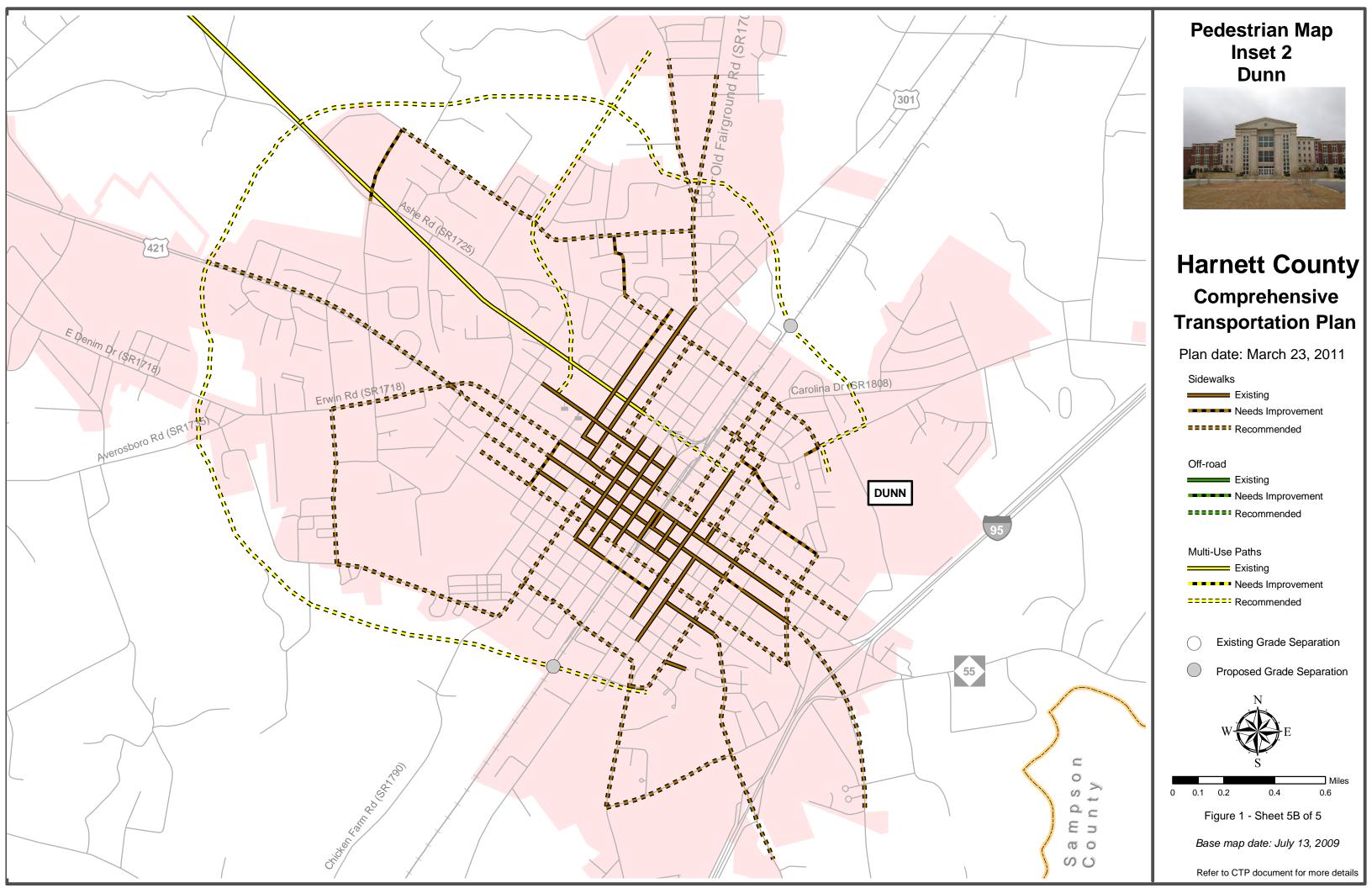


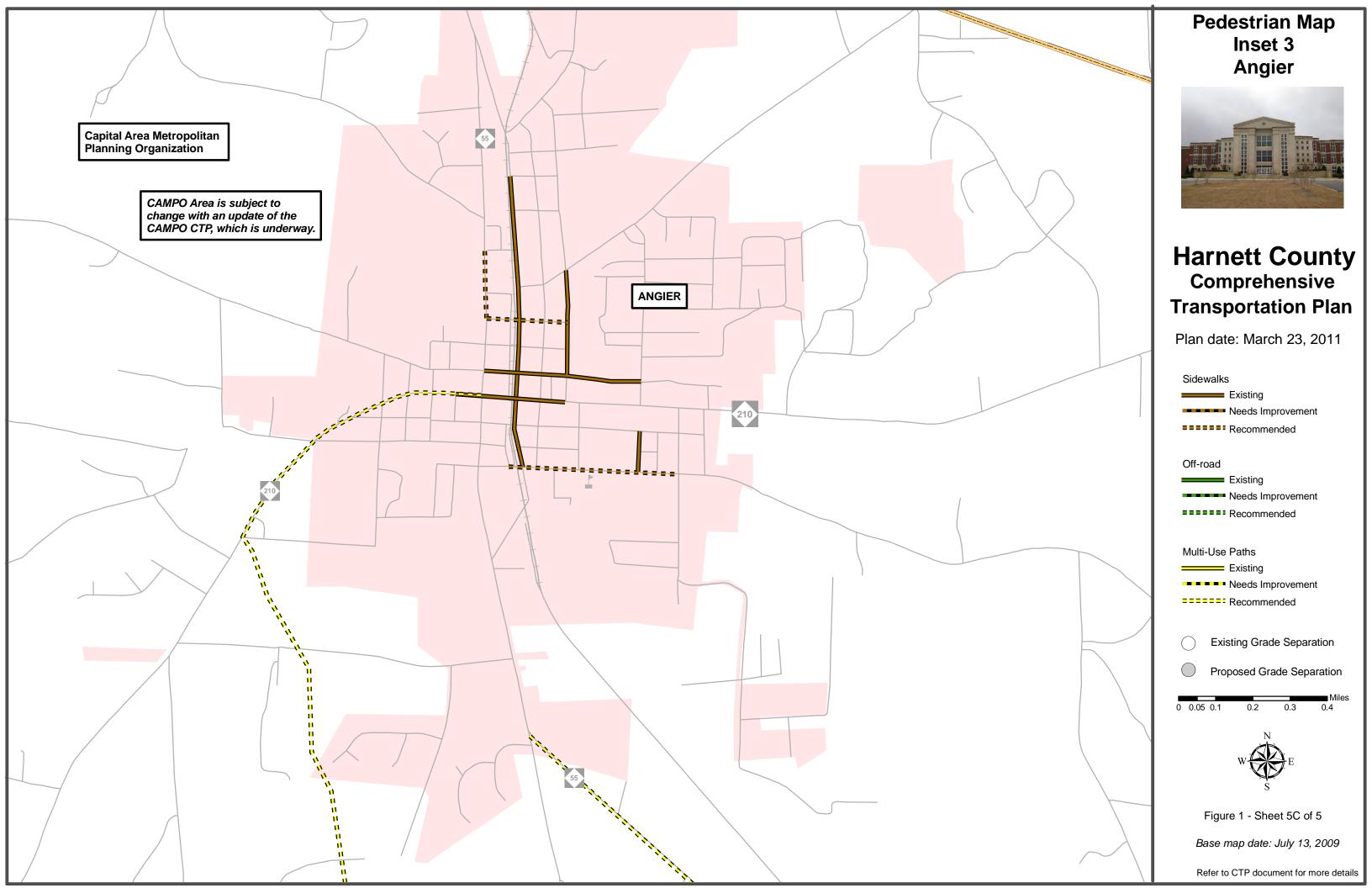












I. Analysis of the Existing and Future Transportation System

A Comprehensive Transportation Plan (CTP) is developed to ensure that the progressively developed 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 Comprehensive Transportation Plan (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.

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 desires. 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 such as pavement widths, intersection geometry, and intersection controls; or system problems, such as the need to construct missing travel links, bypass routes, loop facilities, additional radial routes or infrastructure improvements to meet statewide initiatives.

One of those statewide initiatives is the Strategic Highway Corridor (SHC) Vision Plan adopted by the Board of Transportation on September 2, 2004 and last revised on July 10, 2008. The SHC Vision Plan represents a timely initiative to protect and maximize the mobility and connectivity on a core set of highway corridors throughout North Carolina, while promoting environmental stewardship through maximizing the use of existing facilities to the extent possible, and fostering economic prosperity through the quick and efficient movement of people and goods.

The primary purpose of the SHC Vision Plan is to provide a network of high-speed, safe, reliable highways throughout North Carolina. The primary goal to support this purpose is to create a greater consensus towards the development of a genuine vision for each corridor – specifically towards the identification of a desired facility type (Freeway, Expressway, Boulevard, or Thoroughfare) for each corridor. Individual Comprehensive Transportation Plans shall incorporate the long-term vision of each corridor. Refer to Appendix A for contact information.

In the development of this plan, travel demand was projected from 2007 to 2035 using a trend line analysis based on Annual Average Daily Traffic (AADT) from 1990 to 2007. In addition, local land use plans, growth expectations, and travel demand model information from the Fayetteville Area and Capital Area Metropolitan Planning Organizations were used to further refine future growth rates and patterns. The established future growth rates were endorsed by Harnett County (August 3, 2009), Erwin (August 6, 2009), Dunn (July 14, 2009), and Angier (August 9, 2009).

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 Figure 2 for existing and future capacity deficiencies.

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;
- 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 express dissatisfaction. The practical capacity for each roadway was developed based on the 2000 Highway Capacity Manual using the NC LOS Program. 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.

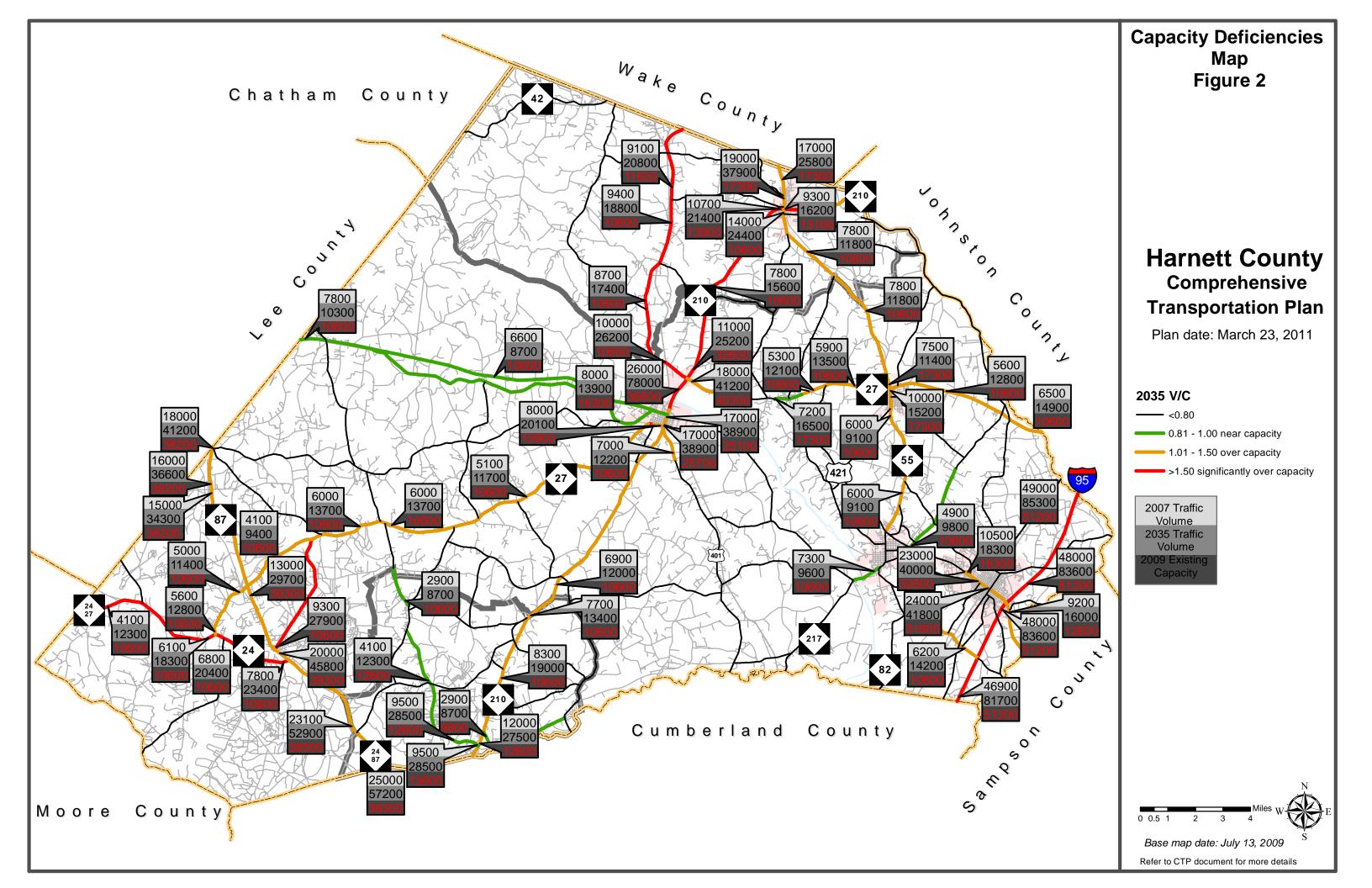
Traffic Crash Analysis

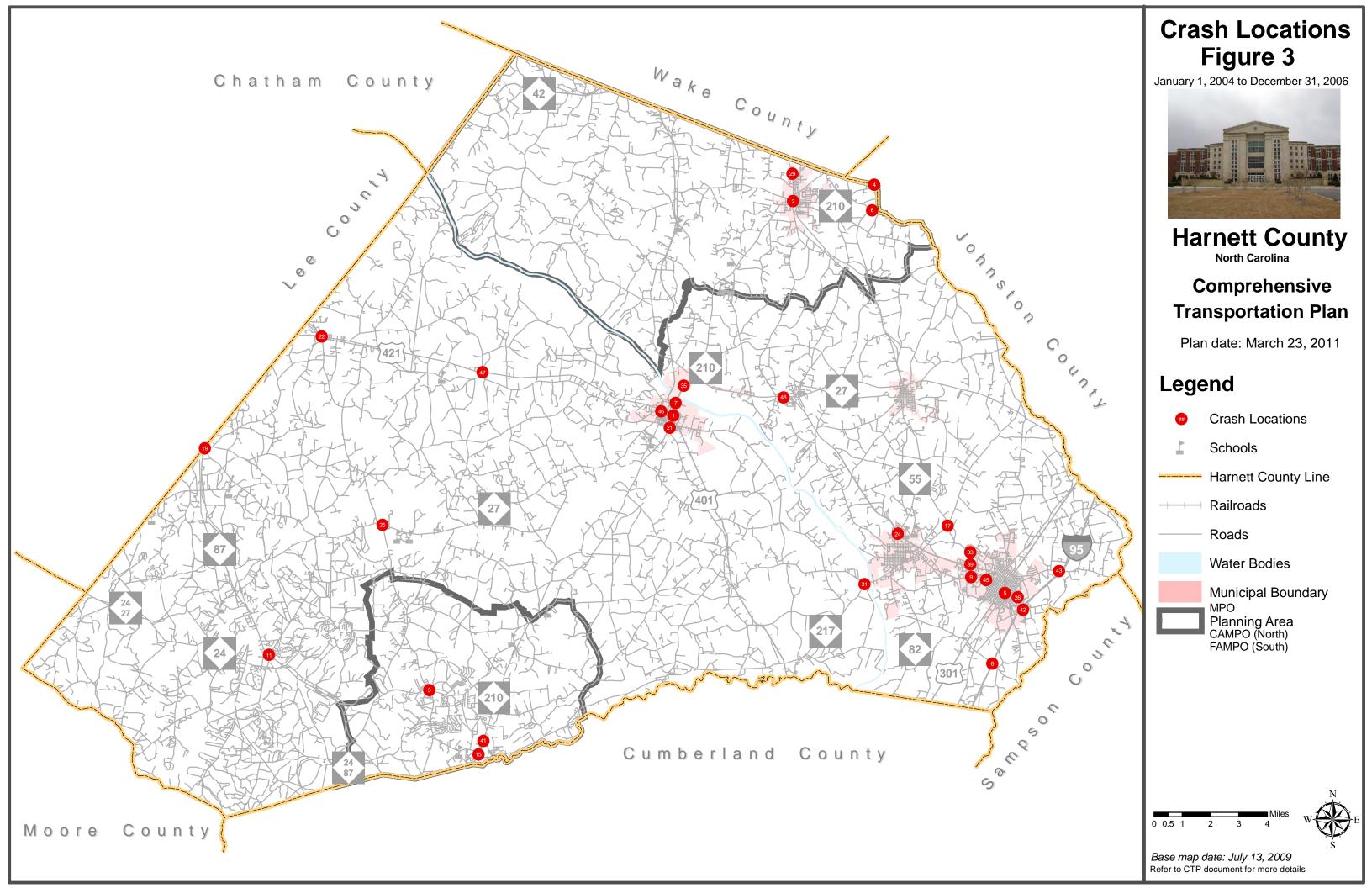
Traffic crashes are often used as an indicator for locating congestion and roadway problems. Crash patterns obtained from an analysis of crash data can lead to the identification of improvements that will reduce the number of crashes. A crash analysis was performed for the Harnett County CTP for crashes occurring in the planning area between January 1, 2004 and December 31, 2006. During this period, a total of 51 intersections were identified as having ten or more crashes as illustrated in Figure 3. Refer to Appendix F for a detailed crash analysis.

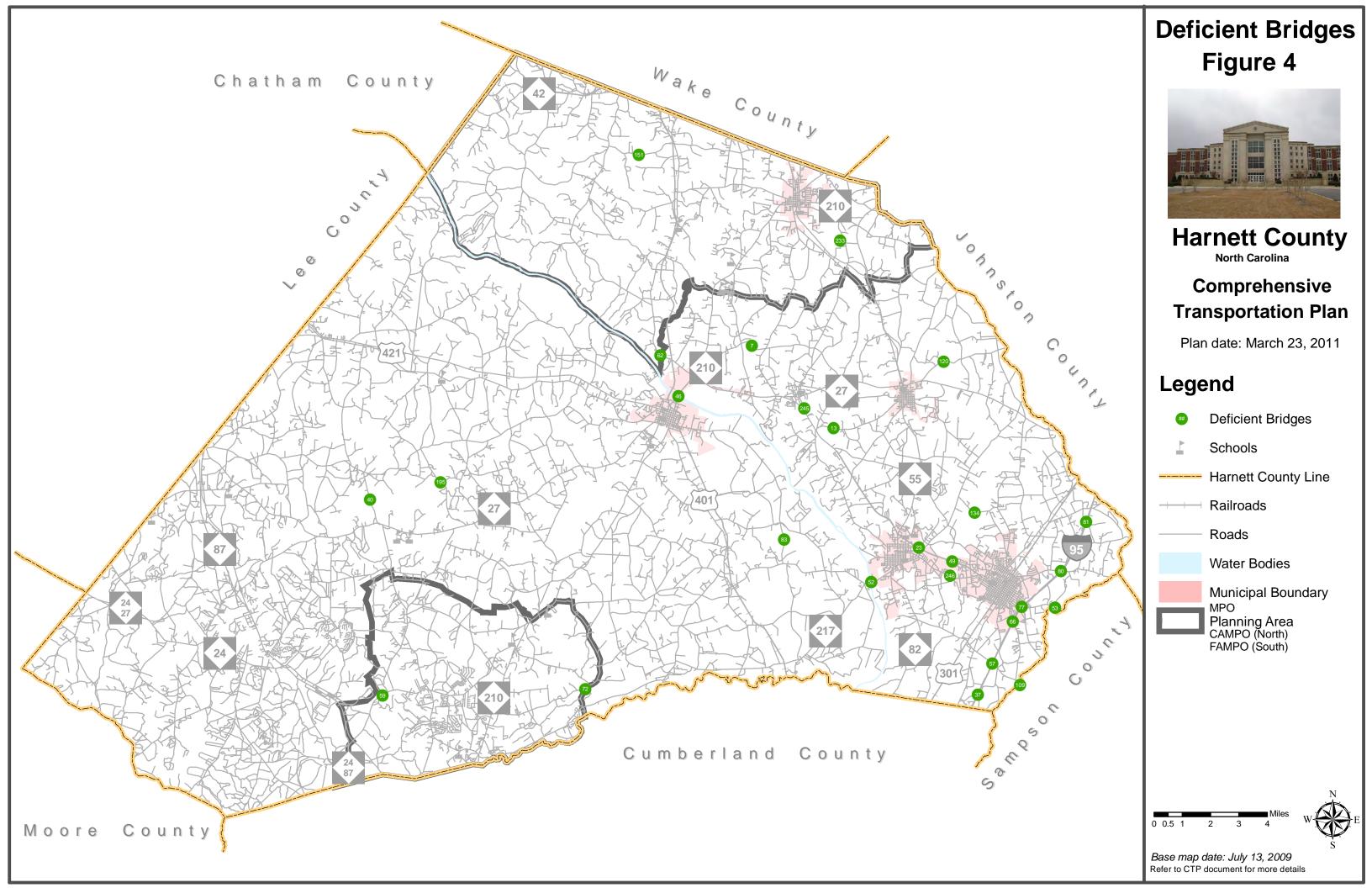
Bridge Deficiency Assessment

Bridges are a vital and unique 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-two deficient bridges were identified within the planning area and are illustrated in Figure 4. Refer to Appendix G for more detailed information.







Public Transportation and Rail

Public transportation and rail are vital modes of transportation that give alternative options 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, the NCDOT Board of Transportation is encouraging single-county systems 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 are at work 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 and throughout the United States and Canada.
 Greyhound/Carolina Trailways operates 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. A Park and Ride lot exists along NC 55 in Angier and two are recommended along NC 87 near Fort Bragg. 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.

Rail

Today North Carolina has about 3,600 miles of railroad tracks throughout the state. There are two types of trains that operate in the state, passenger trains and freight trains.

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 everyday. Combined, the Carolinian and Piedmont carry more than 200,000 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 20 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. Rail stops are recommended in Lillington and Dunn along existing rail corridors. All recommendations for rail were coordinated with the local governments and the Rail Division of NCDOT. Refer to Appendix A for contact information.

Bicycles & Pedestrians

Bicyclists and pedestrians are a growing part of the transportation equation 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 upon and along the approximately 80,000-mile statemaintained highway system. The policy details guidelines for planning, design, construction, maintenance, and operations pertaining to bicycle facilities and accommodations. All bicycle improvements undertaken by the 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 2008 Dunn Pedestrian Plan was utilized in the development of the pedestrian portion of the CTP. North Carolina Bike Route #5 travels through Harnett County through Erwin, Campbell University, and

Angier from the Cumberland County line to the Wake County line. 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.

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 Harnett County Land Use Plan was used to meet this requirement and is illustrated along with other land use maps in Figures 5 through 9.

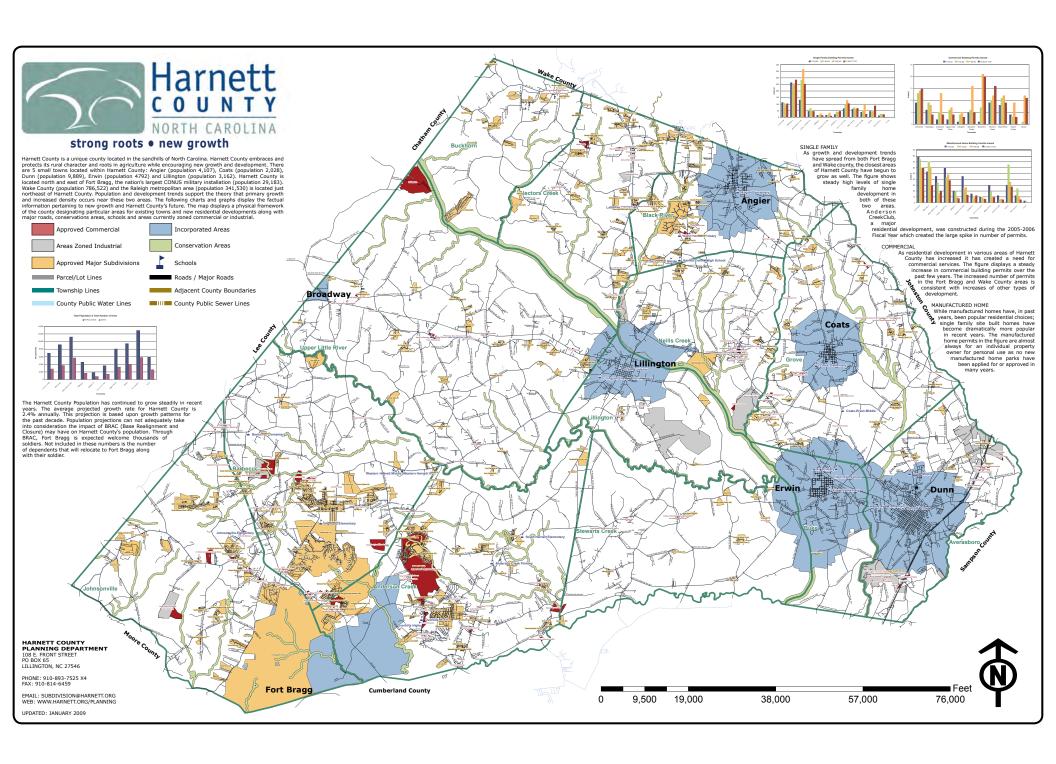
Land use refers to the physical patterns of activities and functions within an area. Traffic demand in a given area is, in part, attributed to adjacent land use. For example, a large shopping center typically generates higher traffic volumes than a residential area. The spatial distribution of different 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:

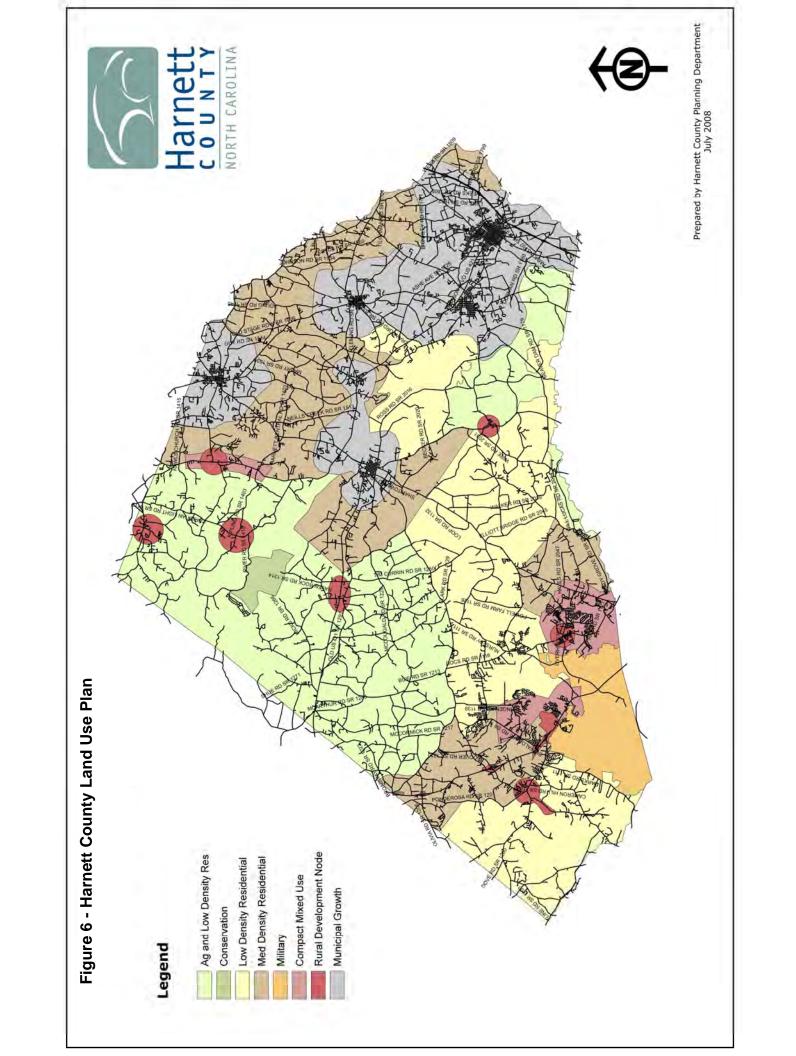
- Residential: Land devoted to the housing of people, with the exception of hotels and motels which are considered commercial.
- <u>Commercial</u>: Land devoted to retail trade including consumer and business services and their offices; this may be further stratified into retail and special retail classifications. Special retail would include high-traffic establishments, such as fast food restaurants and service stations; all other commercial establishments would be considered retail.
- <u>Industrial</u>: Land devoted to the manufacturing, storage, warehousing, and transportation of products.
- <u>Public</u>: Land devoted to social, religious, educational, cultural, and political activities; this would include the office and service employment establishments.
- <u>Agricultural</u>: 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.
- <u>Mixed Use:</u> Land devoted to a combination of any of the categories above.

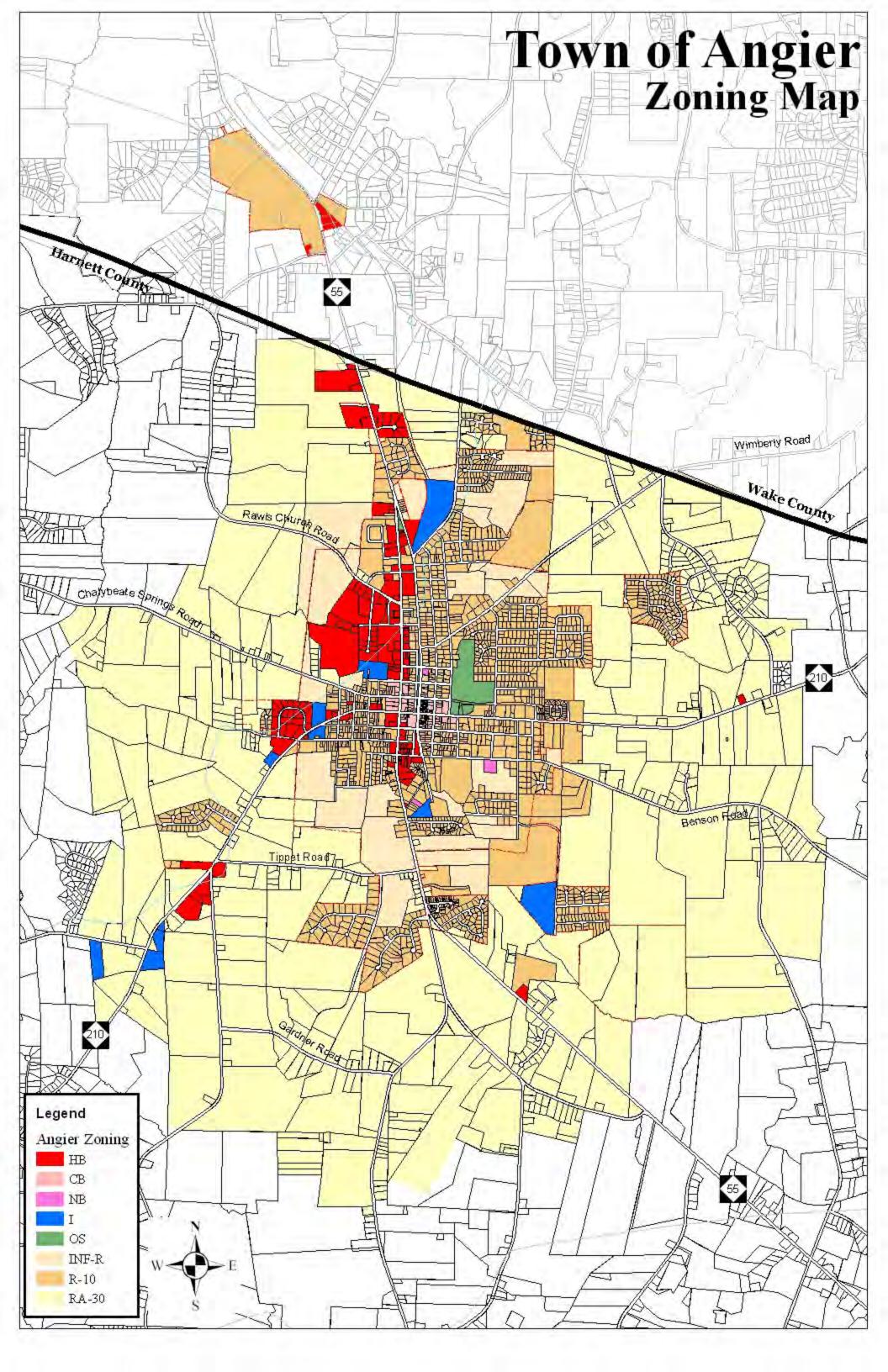
Anticipated future land development is, in general, a logical extension of the present spatial land use distribution. Locations and types of expected growth within the planning area help to determine the location and type of proposed transportation improvements.

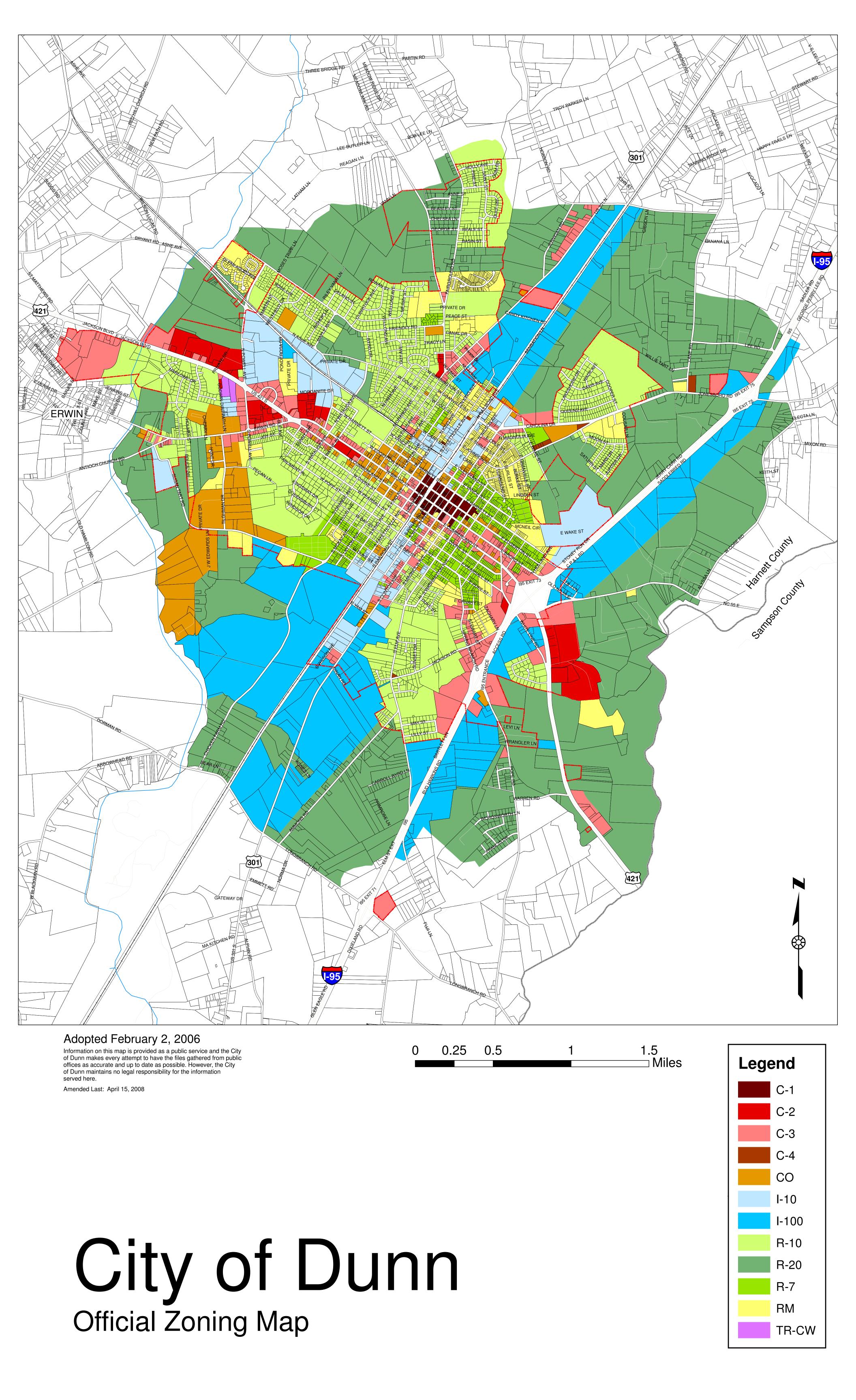
Harnett County primarily anticipates substantial growth in the Overhills area in the southwest portion of the county. This will generate from Fort Bragg and Fayetteville as both areas continue to expand and create low density commercial and residential development in the area. As the Raleigh area continues to extend south, Harnett County's population and economy will expand to Angier.

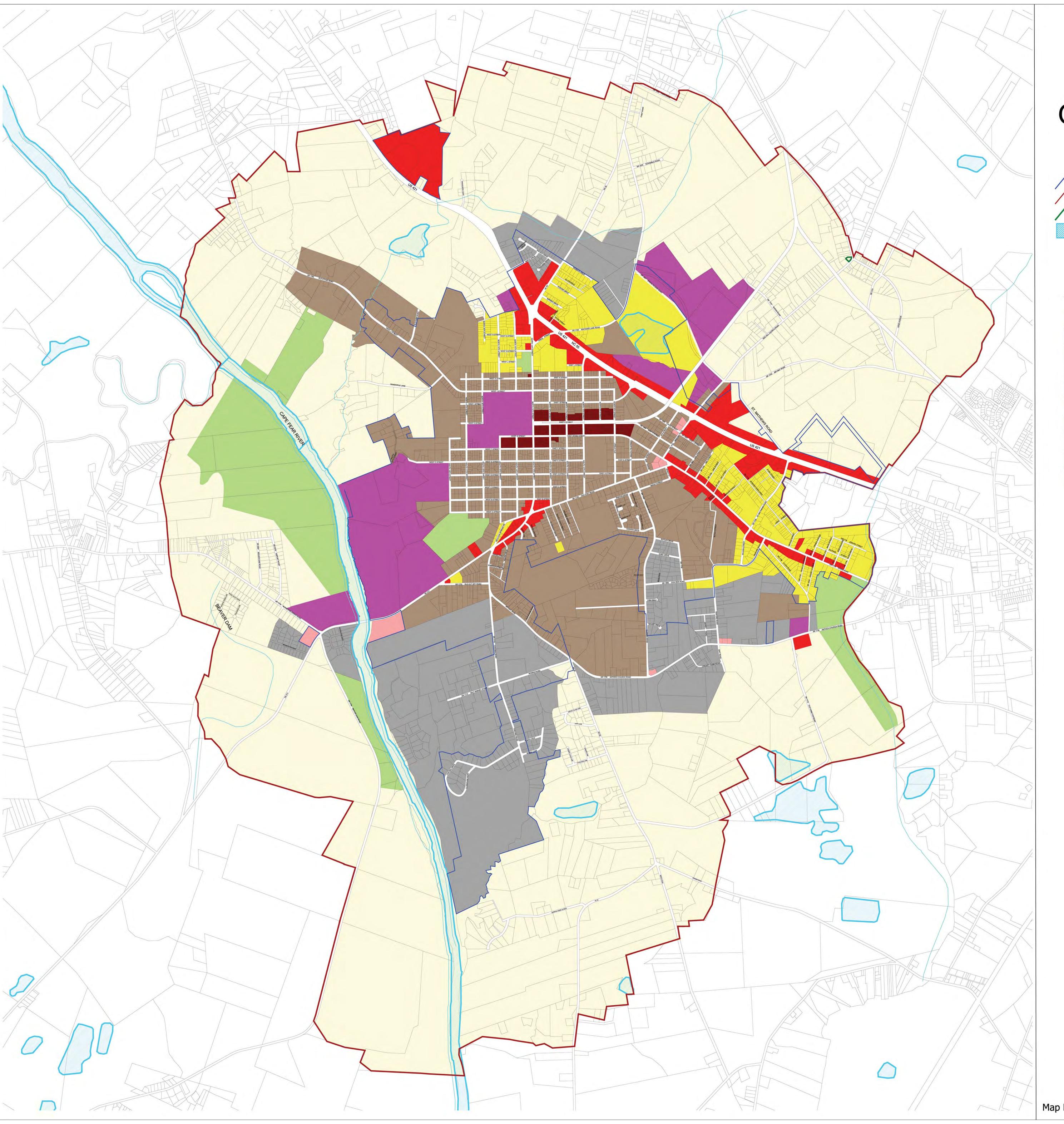
The central portion of the county, mostly along the Cape Fear River, will implore land use policies that continue to grow the local economies while being environmentally sensitive to the area. Expansion of commercial and industrial development in the middle of county is planned and additional residential developments will be needed to keep up with the population growth expected in the area.











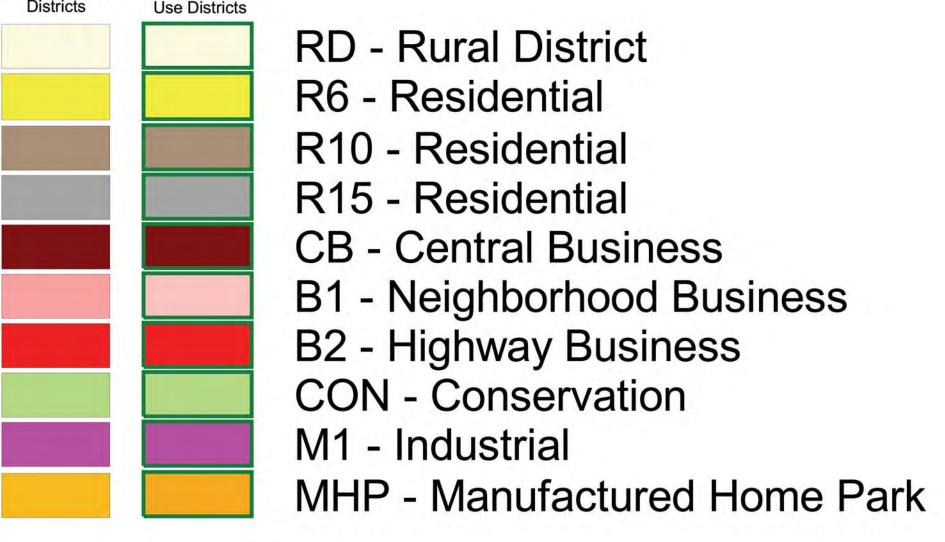
TOWN OF ERWIN, NC

OFFICIAL ZONING MAP

*This copy is uncertified.

Corporate Boundary
Planning Area Boundary (ETJ)
Parallel Conditional Use District Boundaries
Water Features

Zoning Districts



BY OFFICIAL ACTION OF THE TOWN BOARD OF COMMISSIONERS, IN ACCORDANCE WITH THE AMENDMENT PROVISIONS OF THE ZONING ORDINANCE OF ERWIN, NORTH CAROLINA, THE FOLLOWING CHANGES WERE MADE TO THE OFFICIAL ZONING MAP:

MAYOR ATTEST

_ATTEST (TOWN CLERK)

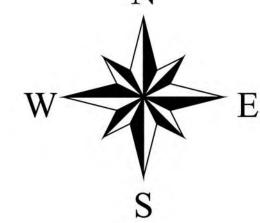
DATE DESCRIPTION OF CHANGE

THIS IS TO CERTIFY THAT THIS IS THE OFFICIAL ZONING MAP OF THE TOWN OF ERWIN, NORTH CAROLINA.

THIS MAP IS HEREBY ADOPTED AND BECOMES THE OFFICIAL ZONING MAP OF THE TOWN OF ERWIN, NORTH CAROLINA ON THIS ____ DAY OF _____, AS APPROVED BY THE ERWIN BOARD OF COMMISSIONERS.

_____MAYOR





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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 (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, 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 were examined as a part of this study is shown in the following tables utilizing the best available data. Environmental features occurring within Harnett County are shown in Figures 10-13.

Table 1 – Environmental Features

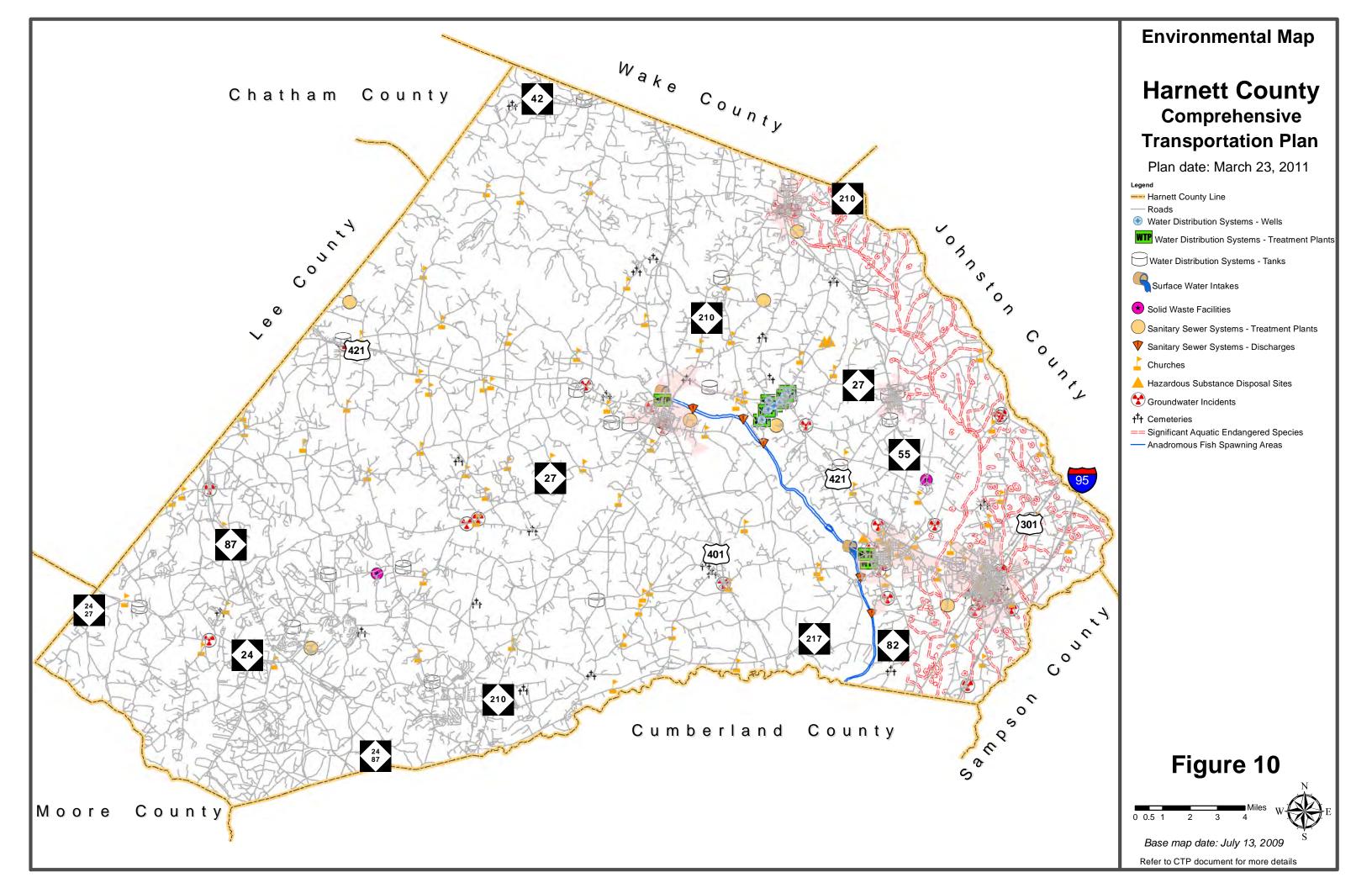
- Airport Boundaries
- Anadromous Fish Spawning Areas
- Bike Routes (NCDOT)
- Cemeteries and Churches
- Coastal Marinas
- Colleges and Universities
- Conservation Tax Credit Properties
- Emergency Operation Centers
- Federal Land Ownership
- Fisheries Nursery Areas
- Geology (including Dikes and Faults)
- Groundwater Incidents
- Hazardous Substance Disposal Sites
- Hazardous Waste Facilities
- High Quality Waters
- Hospital Locations
- Hydrography (1:24,000 scale)
- Lands Managed
- Land Trust Priority Areas
- National Wetlands Inventory

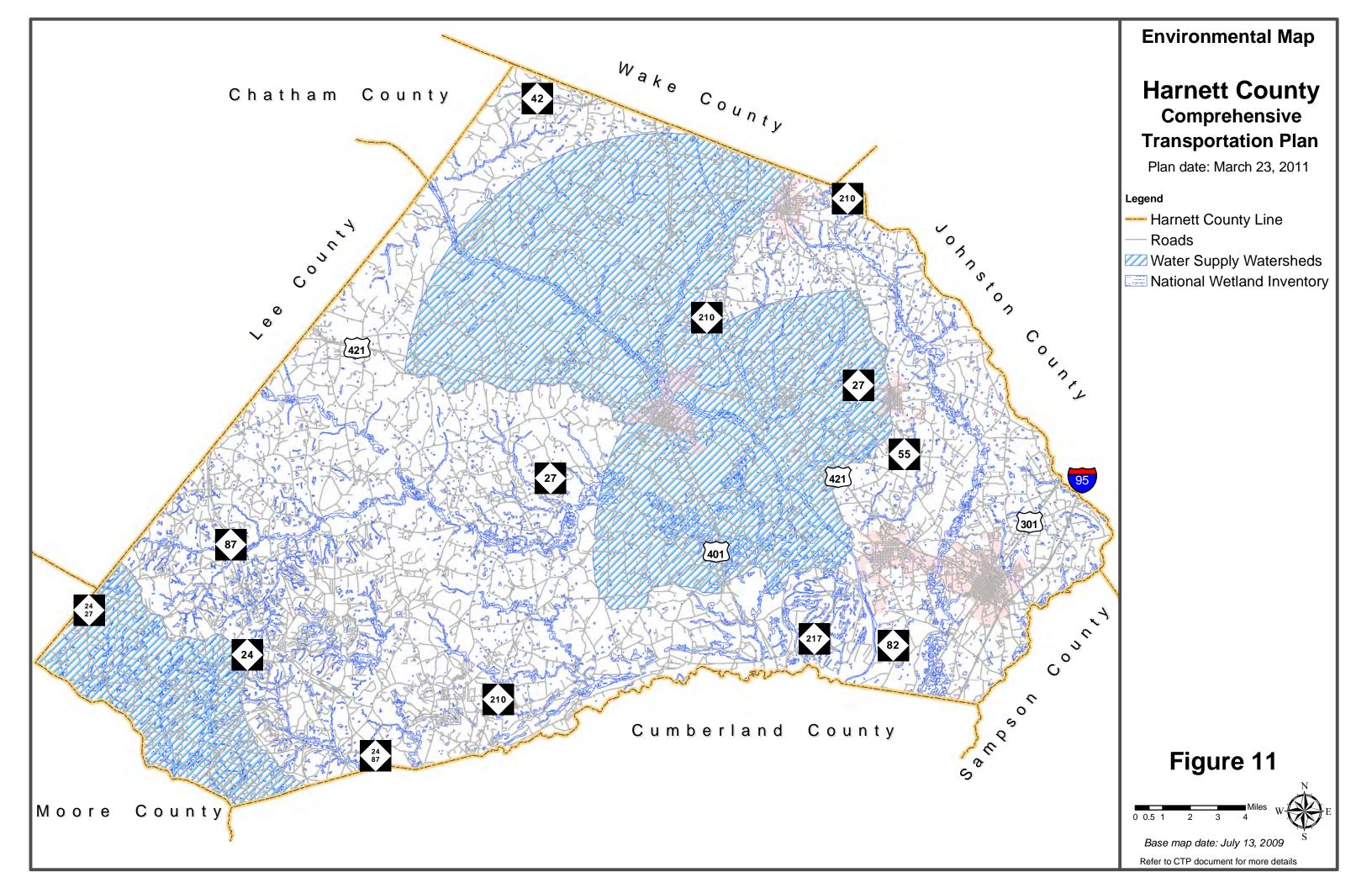
- North Carolina Coastal Region Evaluation of Wetland Significance (NC-CREWS)
- Railroads (1:24,000 scale)
- Recreation Projects Land and Water Conservation Fund
- Sanitary Sewer Systems –
 Discharges, Land Application
 Areas, Pipes, Pumps and
 Treatment Plants
- Schools Public and Non-Public
- Shellfish Strata
- Significant Aquatic Endangered Species
- Significant Natural Heritage Areas
- Solid Waste Facilities
- State Parks
- Submersed Rooted Vasculars
- Surface Water Intakes
- Target Local Watersheds EEP
- Water Distribution Systems Pipes, Pumps, Tanks, Treatment Plants, and Wells
- Water Supply Watersheds

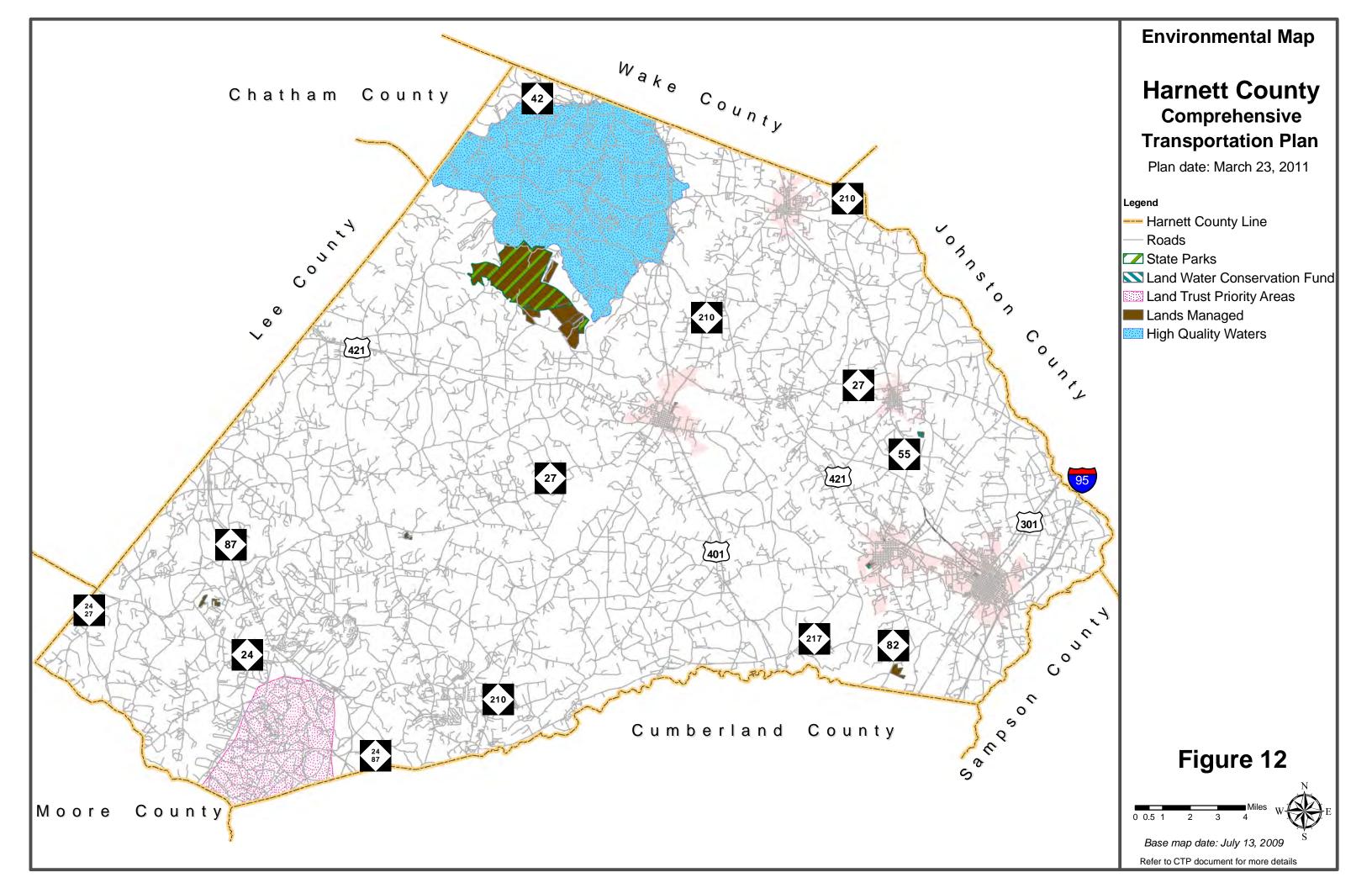
Additionally, the following environmental features were considered but are not mapped due to restrictions associated with the sensitivity of the data.

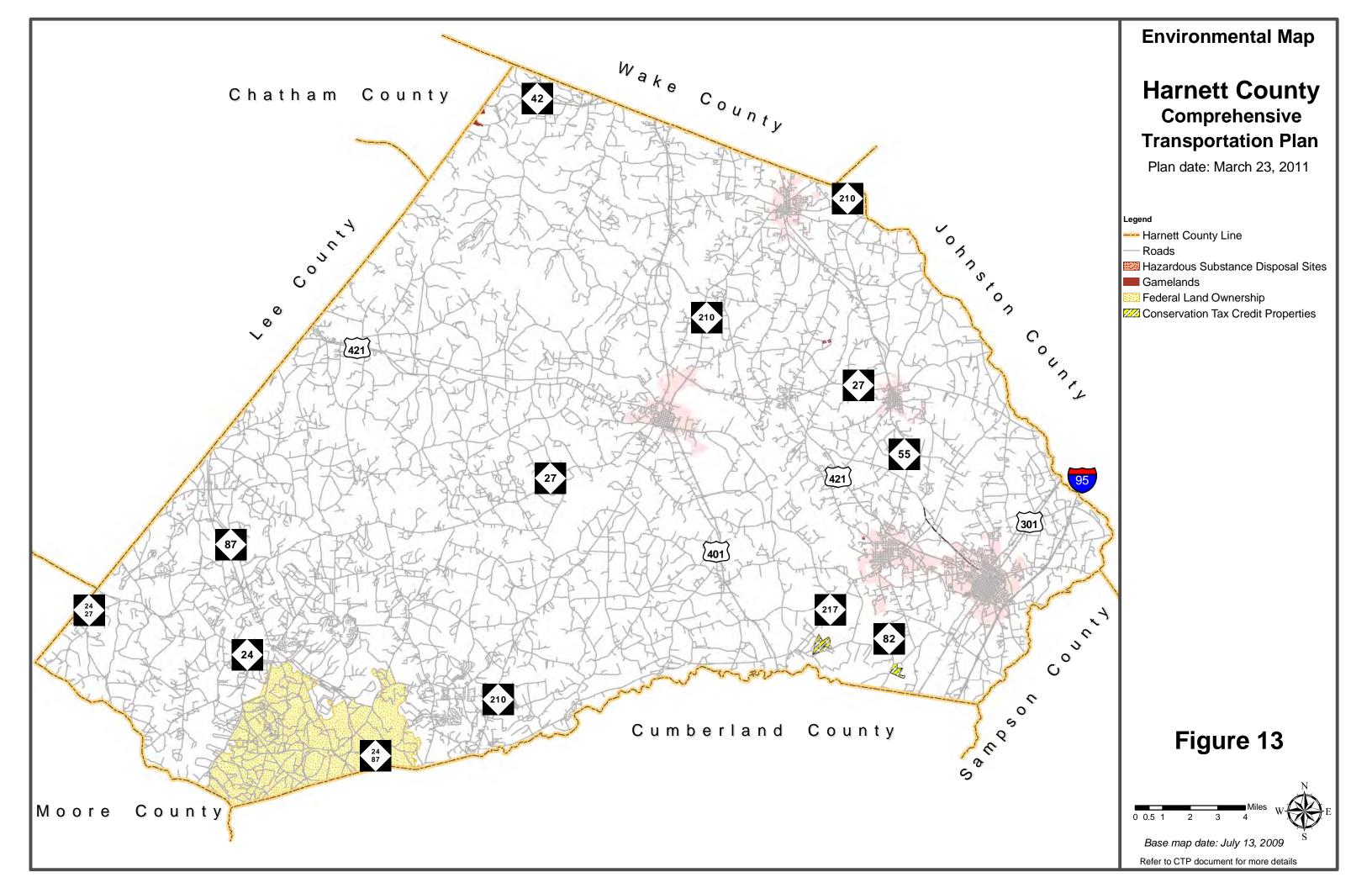
Table 2 – Restricted Environmental Features

- Archaeological Sites
- Historic National Register Districts
- Historic National Register Structures
- Macrosite Boundaries
- Managed Areas
- Megasite Boundaries









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 Harnett County Board of Commissioners in the fall of 2007 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 Transportation Planning Branch cooperatively worked with the Harnett County Comprehensive Transportation Plan Committee, which included a representative from each municipality, county staff, the RPO and others, to provide information on current local plans, to develop transportation vision and goals, and to develop proposed CTP recommendations. A subcommittee on the future growth of Harnett County was developed to further study population and employment projections. 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 Harnett County to present the proposed Comprehensive Transportation Plan to the public and solicit comments. The first meeting was held on February 15, 2011 at Overhills High School; the second meeting was held on February 16, 2011 at Triton High School; and the third meeting was held on February 17, 2011 at Harnett Central High School. Each session was publicized in the local newspaper and on community websites and was held from 4-7pm. Twenty-three people attended the three sessions.

Public hearings were held on the following dates for the Harnett County CTP. The purpose of these meetings was to discuss the plan recommendations and to solicit further input from the public. After each public hearing the CTP was adopted at the subsequent local officials meeting.

March 28, 2011 Erwin April 5, 2011 Angier April 12, 2011 Dunn April 18, 2011 Harnett County April 26, 2011 Lillington

The Mid-Carolina RPO endorsed the CTP on April 26, 2011. The Fayetteville Area and Capital Area MPOs adopted the CTP on April 20, 2011. The North Carolina Board of Transportation voted to mutually adopt the Harnett County CTP on June 2, 2011.

II. Recommendations

This report documents the development of the 2011 Harnett County Comprehensive Transportation Plan (CTP) as shown in Figure 1. This chapter presents recommendations for each mode of transportation in Harnett County. Refer to Appendix I for documentation of project alternatives and scenarios that were studied, but are not included in the adopted CTP.

The following deficiencies were identified during the development of the CTP, but remain unaddressed:

- Along US 401 from NC 27/US 421/NC 210 intersection across the Cape Fear River in Lillington the 2035 projected traffic is 78,000 vehicles per day (vpd). Including all the recommendations in the CTP, the traffic is reduced to 46,800 vpd in 2035; however this is still above the recommended capacity of 36,600 vpd.
- In Lillington, the projected traffic on US 421 from US 401 to old US 421 is 12,100 vpd which is above the recommended capacity of 10,700 vpd. This section of US 421 is recommended to be changed from a 4 lane facility to 2 lanes with parking on both sides causing a reduction in capacity but improving the safety and improving access to the changing land use of the area.

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 Comprehensive Transportation Plan should be consistent with the other elements. High crash locations are defined as having 10 or more identified crashes within the three year period January 1, 2004 to December 31, 2006.

Initiative for implementing the CTP rests predominately with the policy boards and citizens of Harnett 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 Capital Area MPO, Fayetteville Area MPO, or the Mid-Carolina RPO for prioritization and submittal to NCDOT. Refer to Appendix A for contact information on funding. Local governments may use the CTP to guide development and protect corridors for the recommended projects. It is critical that NCDOT and local government coordinate on relevant land development reviews and all transportation projects to ensure proper implementation of the CTP. Local governments and the North Carolina Department of Transportation share the responsibility for access management and the planning, design and construction of the recommended projects.

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 (SEPA). This CTP may be used to provide information in the NEPA/SEPA process.

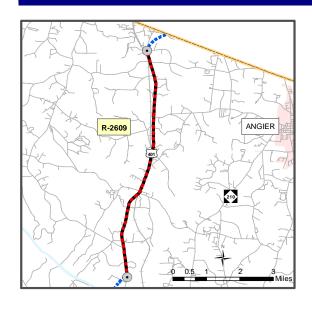
The following pages contain problem statements for each recommendation, organized by CTP modal element.

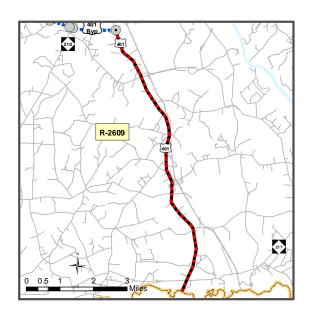
HIGHWAY

Full Problem Statements

US401 from Wake County line to Cumberland County line

Local ID: R-2609 Last Updated: 4/17/2013





R-2609 LILLINGTON April 1.5 Byp O 0.250.5 Miles This is the second of the second

IDENTIFIED PROBLEM

US 401 is projected to be mostly over capacity by 2035 throughout Harnett County. The primary purpose of improving US 401 is to relieve congestion on the existing facility such that a minimum of Level of Service D can be achieved.

Justification of Need

US 401 is a major north-south corridor in Harnett County, connecting the county seat of Lillington with other municipal centers outside of the county including Raleigh and Fayetteville. The facility is a vital artery for moving people and goods through North Carolina

ultimately connecting Virginia to South Carolina. This section of US 401 has one of only two crossings of the Cape Fear River in Harnett County making it vital to the movement of vehicles, goods and services across this major water body.

US 401 is currently a major thoroughfare with a 2-lane undivided cross-section from the Wake County line to NC 210 north of Lillington. It is a boulevard with a 4-lane divided cross-section in Lillington from NC 210 north of town to NC 210 south of Lillington. From NC 210 south of Lillington to Cumberland County line the facility operates as a major thoroughfare with a 2-lane cross-section. US 401 is identified on the Strategic Highway Corridor Vision Plan, in order to provide regional and statewide mobility and connectivity.

By 2035 the facility is projected to be near or over capacity throughout the county based on the capacity of providing a LOS D. From the Wake County line to the proposed US 401 Bypass the traffic is projected to increase from 10,000 vehicles per day (vpd) in 2007 to 20,000 vpd in 2035 compared to a capacity of 10,600 vpd. Within Lillington, traffic is projected to increase from 26,000 vpd in 2007 to 78,000 vpd in 2035, compared to a capacity of 36,600 vpd. South of Lillington, traffic is projected to increase from 7,000 vpd in 2007 to 12,200 vpd in 2035, compared to a capacity of 10,600 vpd.

On the southbound lanes of US 401 across the Cape Fear River, bridge number 46 has been designated structurally deficient by the NCDOT Bridge Maintenance Unit. This bridge is included on the State Transportation Improvement Program (STIP) as project B-4138 and improvements are slated for completion by November 2013.

Community Vision and Problem History

Due to Harnett County's close proximity to Fort Bragg, rapid growth related to the Department of Defense Base Realignment and Closure (BRAC) implementation over the next five years is expected to continue. Population is also expected to continue increasing through the 2035 planning period due to new residents from the Fayetteville and Raleigh migrating to the middle of Harnett County to live. Lillington is located in the middle of Harnett County and as population continues to increase the need for additional transportation facilities in paramount. It is expected that the greatest growth in the town will occur in the west side of Lillington.

There is currently a single crossing of the Cape Fear River in the Lillington area (Main Street), which carries the following routes: US 401, US 421, NC 27, and NC 210. This crossing is one of only two crossings in Harnett County; the other crossing is in eastern Harnett County. The existing facility carries numerous US and NC route designations. This traffic is funneled through the downtown area of Lillington mixing with the local traffic. While the community envisions a vibrant downtown area, the current levels of congestion make access difficult for residents and visitors. The lower speeds and signals in the downtown area are conducive for pedestrian and local vehicular traffic, but inefficient for automobile trips that are going through the area.

As for the northern and southern sections of US 401, continued expansion of residents commuting to Fayetteville and Raleigh will continue to place more people in the area and the need to provide a safe, efficient facility through the county will be vital.

CTP PROJECT PROPOSAL

Project Description and Overview

The CTP proposed project (Local ID R-2609) is broken up into four main sections. The first section is from the Wake County line to Rawls Club Road (SR 1447). The proposal for this section is to construct a new location freeway facility that will complete the proposed Fuquay-Varina Bypass.

The second section of the CTP project proposal is to provide a 4-lane, boulevard facility on existing location from Rawls Club Road (SR 1447) to the proposed US 401 bypass northwest of Lillington.

The third section of the CTP project proposal is to provide a 4-lane, freeway facility on new location west of Lillington, connecting US 401 from south of Stock Yard Road (SR 2035) to north of Matthews Road (SR 1436). Interchanges are proposed at NC 210, NC 27, US 421 and both connections with existing US 401. Grade separations are proposed at Shawtown Road (SR 1133), McDougald Road (SR 1229), Old US 421 (SR 1291), and South River Road (SR 1257).

The CTP project proposal for the proposed US 401 Bypass would reduce congestion in downtown Lillington and provide better efficiency for through traffic. The CTP recommendation would provide for a LOS D or better along existing US 401 through Lillington and a LOS C or better on the new location for US 401.

The proposed improvements to US 401 would provide an additional crossing of the Cape Fear River and provide better access to Lillington, Raleigh, and Fayetteville. The CTP proposal to add a new location facility for US 401 would allow for through traffic to move around the downtown area of Lillington without having to use the congested town streets and would provide better access to the other NC and US routes. It is the goal of this recommendation to allow through trips to move around the area, but at the same time make a more efficient and direct north-south connection for Harnett County residents and visitors.

The fourth section of the CTP project proposal is to provide a 4-lane boulevard facility on existing location from the proposed US 401 bypass south of Lillington to the Cumberland County Line.

Between January 1, 2004 and December 31, 2006 there were three high accident locations identified along US 401 in the county. The intersection with US 421 in Lillington includes 34 total collisions, the most in the county. The intersection with Tenth

Street included 24 total collisions and the intersection McKinney Parkway had 12 total collisions.

Linkages to Other Plans and Proposed Project History

The recommendations for US 401 are an important link to many of the recommendations in the Harnett County CTP. It directly connects to proposed improvements of NC 210, NC 27, and US 421; there are interchanges recommended at each of these intersections.

The 1995 Harnett County Thoroughfare Plan recommends improvement of US 401 to a multi-lane facility. Consistent with this prior recommendation, the 2011 Harnett County CTP also recommends improvement to a multi-lane facility and specifies full access control as a freeway facility where there are new location recommendations.

Land Use Patterns

There are significant commercial and residential developments planned on the western side of the Lillington. Development in the eastern part of the Lillington area is limited due to natural environmental resources.

The CTP proposal for a freeway facility would ensure the new facility has full control of access. Through interchanges, it would provide more efficient and safer access using NC 210, NC 27, and US 421 to these new developments. As Raleigh and Fayetteville continue to expand the need for development and access control along existing US 401 in the rural sections of the northern and southern Harnett County will be a priority. The CTP proposed project would allow Lillington and Harnett County to develop in a manner consistent with the anticipate growth identified in their respective plans, the 2009 Lillington Zoning Map and the 2008 Harnett County Land Use Plan.

Natural & Human Environmental Context

In the development of the 2011 Harnett County CTP, various options were studied for US 401 new location improvements. A new location route was chosen in the vicinity of Lillington due to substantial human impacts to businesses and residents if the existing facility were to be widened. Several options for the new location route were studied and are documented in Appendix I.

The final two corridors studied had the potential to impact high quality wetlands, watersheds, and river crossings. In these two corridors, there were 44 homes and between 1 and 3 businesses potentially impacted. The selected CTP alternative for the entire corridor minimizes the impacts to homes, businesses, high quality wetlands, and watersheds. All new location corridors that were evaluated include a new Cape Fear River crossing.

Multi-modal Considerations

The CTP includes recommendations for bicycle, pedestrian and public transportation facilities around the Lillington area. There are specific improvements for adding bicycle lanes on NC 210, NC 27 and US 421. There is a recommendation for an off-road multi-

use path along the Cape Fear River through the area. The CTP project proposal for US 401 will need to be designed to accommodate this multi-use path at the Cape Fear River. These multi-modal features do not impact the traffic demand along this corridor. In addition, there is not a transit system currently in operation or planned through the year 2035 that would reduce the need to improve this facility.

Public/ Stakeholder Involvement

As part of developing the CTP recommendation for US 401, multiple options were considered by the Harnett County CTP Team, the Lillington Planning Board, Lillington Town Council and the Harnett County Commissioners. These groups analyzed in detail the corridor options, considering transportation needs and impacts to the natural and human environment, before recommending the proposed corridor shown on the Harnett County CTP. From public meetings and other comment opportunities, the primary public concern was that no new location options be located east of Lillington in order to protect the rural character of the area and limit the impacts to environmentally sensitive areas.

Local ID: U-3465 Last Updated: 4/17/2013

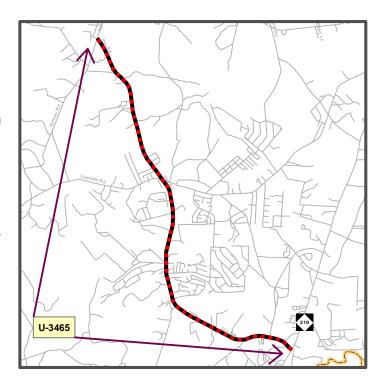
IDENTIFIED PROBLEM

Existing Ray Road (SR 1121) is projected to be over capacity by 2035, from NC 210 to Overhills Road (SR 1120). The primary purpose of improving Ray Road is to relieve congestion on the existing facility such that a minimum of LOS D can be achieved.

Justification of Need

Ray Road is a major facility in Harnett County providing a vital connection for residents in the area that travel south to Fort Bragg and Fayetteville.

Ray Road is currently a 2-lane facility from NC 210 to Overhills Road. It is part of the subregional tier of the NC Multimodal Investment Network (NCMIN).



By 2035 the facility is projected to be over capacity based on the capacity of providing a LOS D. The traffic is projected to increase from 9,500 vehicles per day (vpd) in 2007 to 28,500 vpd in 2035, compared to a capacity of 13,600 vpd.

Community Vision and Problem History

Due to Harnett County's close proximity to Fort Bragg, it is expected to continue experiencing rapid growth related to the Department of Defense Base Realignment and Closure (BRAC) implementation over the next few years. Population is also expected to continue increasing through the 2035 planning period due to new residents from the Fayetteville area expanding north. The Overhills area is located in southwestern Harnett County and it is expected that the greatest residential and commercial growth will occur in this area of the county.

As this area continues to develop, a need for multi-modal connections and options becomes ever present. The community would like to see expanded options for walking and bicycling in the area.

CTP PROJECT PROPOSAL

Project Description and Overview

The CTP proposed project (STIP # U-3465) will provide a 4-lane, boulevard facility on existing location from NC 210 to Overhills Road (SR 1120). Bicycle lanes and

sidewalks are also recommended within the cross-section and turn lanes where needed are proposed.

The CTP project proposal for Ray Road (SR 1121) would reduce congestion and provide better efficiency for residents attempting to access commercial and residential development. The CTP recommendation would provide for a LOS D or better along existing Ray Road.

There is also a need to address a major safety concern along the facility. At the intersection with Overhills Road, there were 28 identified collisions from January 1, 2004 to December 31, 2006. This is the 3rd highest crash location in the county. Although these collisions were not as severe as those at other locations throughout the county, the need for improvements at this intersection is vital.

Linkages to Other Plans and Proposed Project History

The Fayetteville MPO Comprehensive Transportation Plan includes the recommended improvement of Ray Road (SR 1121) to a boulevard facility.

Land Use Patterns

There are significant commercial and residential developments planned in the Overhills area of Harnett County. The proposed boulevard facility would ensure the residents in this area have additional options for transportation while ensuring that access to all of the development is not impeded. The proposed improvements would assist with the influx of residents and construction that will be occurring in the area in the immediate future. As additional military personnel moves to the area the need to address the expanding commercial and residential land use with additional transportation options will be vital.

Natural & Human Environmental Context

This project is not expected to have many natural environmental impacts; however care should be taken to avoid impacts to existing residents and businesses along the corridor. Future environmental study should be done as the project may affect the following environmental feature:

Water Distribution Center, Tanks

Multi-modal Considerations

The CTP project proposal includes recommendations for bicycle lanes and sidewalks along the facility. Other future considerations for additional modes will be warranted to keep up with expected growth.

Public/ Stakeholder Involvement

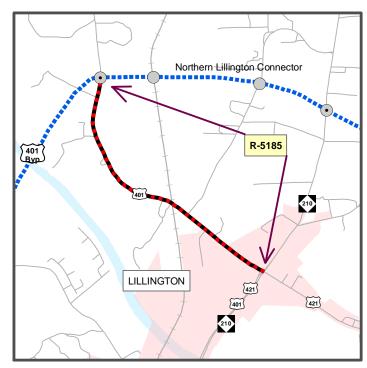
This project was displayed at the three public workshops held in February 2011. No comments were received regarding this specific project. For further information regarding public involvement, see Appendix H.

IDENTIFIED PROBLEM

US 401 is projected to be over capacity by 2035, from just north of Spence Road to the intersection with NC 210/US 421. The primary purpose of improving US 401 is to relieve congestion on the existing facility such that a minimum of LOS D can be achieved.

Justification of Need

US 401 is a major north-south corridor in Harnett County, providing one of only two crossings of the Cape Fear River in the county. The section of the facility north of Lillington provides one of only two major transportation options to residents and commuters that reside in the northwestern part of



Local ID: R-5185

Last Updated: 4/17/2013

Harnett County. US 401 is currently a 2-lane facility along this section. It is identified on the Strategic Highway Corridor Vision Plan, in order to provide regional and statewide mobility and connectivity.

By 2035 the facility is projected to be over capacity in this section based on the capacity of providing a LOS D. The traffic is projected to increase from 10,000 vehicles per day (vpd) in 2007 to 26,200 vpd in 2035, compared to a capacity of 10,600 vpd.

Community Vision and Problem History

There are large developments that have been built or are planned to be built in this area for which a widened and partial control access facility is needed. Lillington has continued to expand along US 401 north and west and as more commercial development has come the need for expanding US 401 has as well.

CTP PROJECT PROPOSAL

Project Description and Overview

The CTP proposed project (TIP # R-5185) is to provide a 4-lane, boulevard facility on existing location from Spence Road to NC 210. Bicycle lanes and sidewalks are also recommended within the cross-section and turn lanes where needed are proposed.

The CTP project proposal for US 401 would increase the capacity from 10,600 vpd to 40,500 vpd and would therefore reduce congestion along the facility and provide better efficiency for residents attempting to access commercial and industrial development. The CTP recommendation would provide for a LOS D or better along existing US 401.

There is one identified high accident location in this section of US 401 located at the intersection with NC 210. 19 crashes were identified from January 1, 2004 to December 31, 2006 although the severity of those crashes was very low compared to other locations in the county and below the statewide average.

Linkages to Other Plans and Proposed Project History

The 1995 Harnett County Thoroughfare Plan recommends improvement of US 401 to a multi-lane facility. Consistent with this prior recommendation and STIP Project # R-5185, the 2011 Harnett County CTP also recommends improvement to a multi-lane facility and specifies partial access control as a boulevard facility.

On US 401, there is a crossing of Neill's Creek, bridge number 62, which has been designated functionally obsolete by the NCDOT Bridge Maintenance Unit. This bridge is included on the State Transportation Improvement Program (STIP) as project # R-5185, and improvements are slated for completion by June 2013.

Land Use Patterns

On the northwestern end of the recommendation there is industrial growth planned in the near future. A hospital is planned along US 401 in the project area as well and is scheduled to open in early 2013. There is high potential for additional industrial and commercial growth along this section due to the close proximity to the Norfolk Southern freight rail line. Additional low density commercial is likely nearer to Lillington and the intersection with NC 210/US 421.

Natural & Human Environmental Context

This project is not expected to have many natural environmental impacts; however care should be taken to avoid impacts to existing residents and businesses along the corridor. Future environmental study will be done as the project may affect the following environmental features:

- Wetlands
- Cemeteries
- Cape Fear Watershed

Multi-modal Considerations

The CTP includes recommendations for a public rail stop along US 401 at the Norfolk Southern railroad crossing. This would be an additional freight stop and would be essential to future industrial and commercial development in the area. As part of the recommendation for this section of US 401, bicycle lanes and sidewalks are recommended. There are sidewalks recommended for NC 210 north of Lillington as well as a multi-use path parallel with US 421 towards the town of Erwin (Campbell University Connection) that both start at the eastern end of this recommendation.

Public/ Stakeholder Involvement

This project was displayed at the three public workshops held in February 2011. No comments were received regarding this specific project. For further information regarding public involvement, see Appendix H.

Local ID: R-2540 Last Updated: 4/17/2013

IDENTIFIED PROBLEM

NC 55 from the Wake County Line to NC 27 in Coats is projected be over capacity by 2035. The primary purpose for improving NC 55 from the Wake County line to US 421 is to relieve this congestion on the existing facility such that a minimum of LOS D can be achieved.

Justification of Need

NC 55 is a major north-south facility in Harnett County that provides an alternative route to Interstate 95 between Raleigh and Dunn-Erwin. Since it is the primary connection for four municipalities in the county, mobility is the primary concern when planning for the future of this NC route.

NC 55 is currently a major thoroughfare (2-lane and 3-lane cross-sections) from the Wake County line to US 421. It is part of the regional tier of the North Carolina Multimodal Investment Network (NCMIN).

By 2035 the facility is projected to be over capacity based on the capacity of providing

ANGIER

27

COATS

421

LOS D. The highest volume of traffic on the facility is near the Wake County line and the lowest volume of traffic is near US 421. The traffic is projected to increase from the range of 5,300-17,300 vehicles per day (vpd) in 2007 to a range of 8,000-37,900 vpd in 2035, compared to a capacity range of 10,600-17,300 vpd.

Community Vision and Problem History

Consistent with the Harnett County vision, NC 55 serves as a vital corridor to promote economic development. As a bedroom community for the Raleigh-Durham area, Angier will continue to see growth. Maintaining mobility along this corridor is important as this growth occurs.

CTP PROJECT PROPOSAL

Project Description and Overview

The CTP proposed project (TIP # R-2540) is to provide a 4-lane boulevard facility on existing location from the Wake County Line to US 421 in Erwin. There are two boulevard cross-sections recommended on NC 55, 4B (a boulevard with a grass

median and 12-foot lanes) and 4C (a boulevard with a concrete median, bicycle lanes and sidewalks).

- From the Wake County line to NC 210 in Angier 4B is recommended
- From NC 210 in Angier south for 0.2 miles 4C is recommended
- From this point to the northern Coats town limits 4B is recommended
- From the north Coats town limits to Crawford Road (SR 2006) 4C is recommended
- From Crawford Road (SR 2006) to US 421 4B is recommended

The CTP project proposal for NC 55 would reduce congestion for commuters and local residents utilizing the facility and provide a much needed improvement to an existing alternative route for Interstates 40 and 95 out of Raleigh. The CTP recommendation would provide for a LOS D or better along existing NC 55.

Between January 1, 2004 and December 31, 2006 there were 70 crashes along the corridor. Two intersections in the Town of Angier, NC 210 and Williams Road (SR 1441) carried the most crashes. The NC 55/NC 210 intersection had the second most crashes of any intersection in the county with 30.

Linkages to Other Plans and Proposed Project History

The 1995 Harnett County Thoroughfare Plan recommended improvement of the NC 55 approaches to the intersection with NC 210, TIP Project R-2804. This plan also recommended that NC 55 be improved with "some multilane sections" from US 421 to NC 210 in Angier, TIP Project R-2540.

The 2001 Angier Thoroughfare Plan recommended widening NC 55 from the Wake County line to Rawls Church Road (SR 1415) to a three-lane cross section. This plan recommended a five-lane section for NC 55 from Tippett Road (SR 1507) to the Extraterritorial Jurisdiction (ETJ) south of Angier. These recommendations were in coordination with TIP Project R-2540.

Improvements to NC 55 have been needed for a long time and have been a priority for Harnett County for over 20 years. It has been scheduled for reprioritization in Prioritization 3.0, North Carolina's process for prioritizing transportation projects.

Land Use Patterns

Along the rural areas of this section of NC 55, the land use patterns are almost exclusively low density residential with a few commercial properties. There is one school and one church along the facility. In the Towns of Coats and Angier, there is medium density commercial and medium density residential land use currently and plans are to continue this type of land use into the future.

Natural & Human Environmental Context

This project is not expected to have many natural environmental impacts; however care should be taken to minimize impacts to existing residents and businesses along the

corridor. Future environmental study will be done as the project may affect the following natural environmental features:

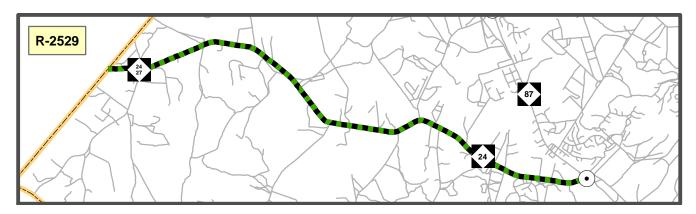
- Wetlands
- Water Distribution Systems Tanks
- Cape Fear Watershed
- Significant Aquatic Endangered Species

Multi-modal Considerations

A portion of this recommendation includes State Bike Route 5 that follows NC 55 in the southern town limits of Angier from Williams Road (SR 1441) to Old Buies Creek Road (SR 1542). From Old Buies Creek Road to Prospect Road (SR 2009) north of Erwin the NC 55/Rail Trail multi-use path is recommended. This multi-use path is recommended to be built on the abandoned rail line that parallels NC 55. There is a recommended park and ride lot located along NC 55 in downtown Angier. In both the downtown areas of Angier and Coats the recommendation for improvements along existing NC 55 includes additional sidewalks on both sides of the facility.

Public/ Stakeholder Involvement

This project was displayed at the three public workshops held in February 2011. No comments were received regarding this specific project. For further information regarding public involvement, see Appendix H.



IDENTIFIED PROBLEM

NC 24 from the Moore County line to NC 87 is projected to be over capacity by 2035. The primary purpose for improving NC 24 in this area is to relieve congestion on the existing facility such that a minimum of LOS D can be achieved.

Justification of Need

NC 24 is a primary facility traveling east-west through North Carolina connecting Charlotte with Morehead City. It provides connection for commuters from the east and the west, is a direct route to Fort Bragg, Fayetteville and destinations in Moore County.

NC 24 is currently a major thoroughfare (2-lane cross-section) from the Moore County line to NC 87. It is part of the regional tier of the NC Multimodal Investment Network (NCMIN).

By 2035 the facility is projected to be over capacity based on the capacity of providing a LOS D. The traffic is projected to increase from 7,800 vehicles per day (vpd) in 2007 to 23,400 vpd in 2035, compared to a capacity of 10,600 vpd.

Community Vision and Problem History

Due to Harnett County's close proximity to Fort Bragg, it is expected to continue experiencing rapid growth related to the Department of Defense Base Realignment and Closure (BRAC) implementation over the next few years. Population is also expected to continue increasing through the 2035 planning period due to new residents from the Fayetteville and Raleigh areas. NC 24 provides that direct connection from the west for military commuters. NC 24 is an element of Harnett County's vision of providing strategic capacity and improving existing infrastructure first before building on new location.

CTP PROJECT PROPOSAL

Project Description and Overview

The CTP proposed project (TIP # R-2529) is to provide a 4-lane expressway facility on existing location from the Moore County line to NC 87. This cross-section proposes a

46-foot grass median and 4-10 foot paved shoulders. The CTP project proposal for NC 24 would reduce congestion along the facility and provide more access control. The CTP recommendation would provide for a LOS D or better along existing NC 24.

Linkages to Other Plans and Proposed Project History

The 1995 Harnett County Thoroughfare Plan recommends improvement of NC 24 to a multi-lane facility in coordination with TIP Project R-2529. Consistent with this prior recommendation, the 2009 Harnett County CTP also recommends improvement to an expressway facility.

Improvements to NC 24 have been needed for a long time and have been a priority for Harnett County for over 20 years. It is currently scheduled in the STIP as project # R-2529, but is only funded for preliminary engineering at this time. It has been scheduled for reprioritization in Prioritization 3.0.

Land Use Patterns

There are numerous subdivisions that access NC 24 directly and from side roads along the corridor. There are about 10 commercial properties that currently have direct access to NC 24. In the coming years, there is expected to be an influx of residents coming to the area as a result of BRAC. With those residents, Harnett County expects commercial and industrial businesses to continue to flourish in the area directly adjacent to NC 24. There will probably be a need for additional schools in the area as well.

Natural & Human Environmental Context

This project is not expected to have many natural environmental impacts; however care should be taken to minimize impacts to existing residents and businesses along the corridor. Future environmental study should be done as the project may affect the following natural environmental features:

- Wetlands
- Churches
- Groundwater Incidents

Multi-modal Considerations

There were no specific multi-modal improvements or considerations made with this recommendation.

Public/ Stakeholder Involvement

This project was displayed at the three public workshops held in February 2011. No comments were received regarding this specific project. For further information regarding public involvement, see Appendix H.

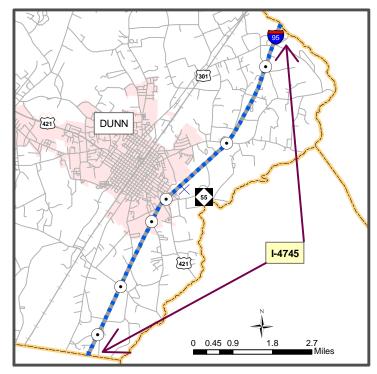
Local ID: I-4745 Last Updated: 4/17/2013

IDENTIFIED PROBLEM

Interstate 95 from the Johnston County Line to the Cumberland County Line is projected to be over capacity by 2035. The primary purpose for improving Interstate 95 (I-95) in this area is to relieve congestion on the existing facility such that a minimum of LOS D can be achieved and to rehabilitate the structures along the corridor.

Justification of Need

I-95 is vital facility that runs the entire length of the east coast of the United States. It provides a major connection through multiple states for commuters and freight traffic. The mobility, safety, and infrastructure health of the facility are some of the most important



issues facing North Carolina and Harnett County.

I-95 is currently a freeway facility (4-lane cross-section) from the Johnston County Line to the Cumberland County Line. It is identified on the Strategic Highway Corridor (SHC) Vision Plan.

By 2035 the facility is projected to be over capacity based on the capacity of providing a LOS D. The traffic is projected to increase from 49,000 vehicles per day (vpd) in 2007 to 85,300 vpd in 2035, compared to a capacity of 51,200 vpd.

There are numerous bridges on I-95 that have been designated either functionally obsolete or structurally deficient. The functionally obsolete bridges are bridges 73 and 77 which are the north and south bound lanes over US 421 in Dunn and bridge number 81, which is Hodges Chapel Road (SR 1709). The structurally deficient bridges include bridges 37, 57, 66, and 80 which are the interchanges with Bud Hawkins Road (SR 1811), Long Branch Road (SR 1002), Spring Branch Road (SR 1793), and Jonesboro Road (SR 1808), respectively.

Community Vision and Problem History

The vision for I-95 in the county is to provide an efficient method of travel for commuters and to provide safe access to the interstate at all of the interchanges. Collisions at the interchanges have been a big problem for Harnett County residents and commuters accessing the businesses as they travel along the interstate.

I-95 through Harnett County was built in the 1960s. It does not meet the current design standards for the amount of automobile and truck traffic. Improvements to the facility have been a challenge mainly due to lack of funding. The cost of increasing capacity on the portion of I-95 in Harnett County is substantial and without a large investment for the entire corridor, widening of the facility will be further delayed.

CTP PROJECT PROPOSAL

Project Description and Overview

The CTP proposed project (TIP # I-4745) is to provide a 6-lane, freeway facility on existing location from the Johnston County line to the Cumberland County line. Improvements to each interchange, rehabilitation of all existing structures, and widening of the facility are all part of this recommendation.

The CTP project proposal for I-95 would reduce congestion on the facility and improve the movement of freight traffic and through traffic in the county. The CTP recommendation would provide for a LOS D or better along I-95.

There are four high accident locations along Interstate 95 that occur at interchanges within the county. The interchange with Jonesboro Road (SR 1818) had 10 crashes from January 1, 2004 to December 31, 2006. US 421 had 25 and US 301 had 22 during the same time period.

Linkages to Other Plans and Proposed Project History

The 2002 Dunn-Erwin Thoroughfare Plan recommends improvement of intersections at service roads along I-95. It specifically recommends the realigning the following service roads to eliminate their intersection with I-95 interchange ramps: SR 1833, SR 1837, SR 1838, SR 1872, SR 1840, SR 1841, and SR 1842.

There is an I-95 Corridor Planning and Finance Study (http://www.driving95.com) being conducted by NCDOT. The Finance study will assess the means by which the improvements described in the corridor plan will be funded. Several toll and non-toll options will be considered. Toll options may include "open" versus "closed" toll systems, managed lanes, variable pricing and high occupancy toll lanes. Non-toll options may include the Highway Fund, bonds and other financing methods.

Improvements to I-95 have been needed for a long time and those improvements are a continual priority for Harnett County and the rest of the state. Currently pavement repair is being done through STIP project # I-4906 and bridge rehabilitation is being completed as part of STIP project # B-5545. Widening of I-95 is listed in the STIP as project # I-4745, but is only funded for preliminary engineering at this time. It has been scheduled for reprioritization in Prioritization 3.0.

Land Use Patterns

Given the position of I-95 along the eastern seaboard, the access to additional major transportation facilities provides a vital link to industries looking to thrive. There are many businesses that are located along I-95 in Harnett County so that they can take advantage of this link, including: Food Lion distributors, Copart, Inc., EnviroServe, Inc., Carolina Precast and many others.

At each of the interchanges along I-95 there is primarily low density commercial land use including gas stations, restaurants, auto parts stores, and pharmacies.

Natural & Human Environmental Context

I-95 is a fully controlled facility through Harnett County which minimizes the impacts to the human and natural environment. During rehabilitation of the facility and the construction of additional lanes, care should be given to protect the environment. There are a few wetland crossings and significant aquatic endangered species along the corridor and, as bridges are expanded, minimizing impacts to these features is vital.

Multi-modal Considerations

There were no specific multi-modal improvements or considerations made with this recommendation.

Public/ Stakeholder Involvement

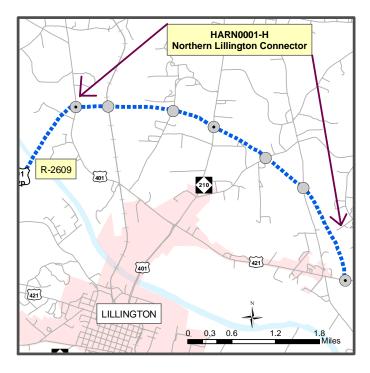
This project was displayed at the three public workshops held in February 2011. No comments were received regarding this specific project. For further information regarding public involvement, see Appendix H.

IDENTIFIED PROBLEM

Existing US 421 and 401 north of Lillington are expected to be over capacity by 2035. The primary purpose for constructing the Northern Lillington Connector is to relieve congestion on existing US 401 and 421 such that a minimum of LOS D can be achieved. There also needs to be improved connectivity between NC 27, NC 210, and US 421.

Justification of Need

With US 401 being improved throughout the county (R-2609) and rerouted on new location around Lillington on the west side, continued connection for the other major facilities that travel through the town is needed. NC 27, NC 210, and US



421 all have proposed interchange connections with the proposed new location of US 401. However, all of the traffic from NC 27, NC 210 and US 421 traveling though Lillington that will use this new facility would be forced to use existing US 401 northwest of Lillington. This would add to an already congested facility and cause traffic issues for commuters at the existing US 421/NC210/US401/NC27 intersection.

By 2035, NC 210 (north of US 401) and US 421 (east of US 401) from the Northern Lillington Connector to US 401 are projected to be over capacity based on the capacity of providing a LOS D. On NC 210 traffic is projected to increase from 9,400 vehicles per day (vpd) in 2007 to 21,500 vpd in 2035, compared to a capacity of 10,600 vpd. On US 421traffic is projected to increase from 18,000 vpd in 2007 to 41,200 vpd in 2035, compared to a capacity of 39,300 vpd.

Community Vision and Problem History

The town of Lillington is continually expanding in the commercial, residential, and industrial sectors. Its growth is largely based on Lillington's function as a bedroom community for Raleigh, Fayetteville, and Fort Bragg. Lillington has one of the two crossings of the Cape Fear River in the county and commuters using US 421, US 401, NC 210 and NC 27 currently must travel through the middle of town. This creates congestion in town which the community recognizes as an issue that needs to be addressed.

There is a need to provide for through travel on US 421, NC 27 and NC 210. These routes currently converge into one facility in and through Lillington. There is a need to provide LOS C or D for these trips.

CTP PROJECT PROPOSAL

Project Description and Overview

The CTP proposed project (Local ID HARN0001-H) is to provide a 4-lane, freeway facility on new location north of Lillington, connecting US 401 near Spence Road (SR 1457) to US 421 near Neill's Creek Road (SR 1513). Interchanges are proposed at US 401, NC 210, and US 421. Grade separations are proposed at the Norfolk Southern railroad, Matthews Road (SR 1436), Old Coats Road (SR 1516), and Neill's Creek Road (SR 1513).

The CTP project proposal would be an extension of the recommended US 401 Bypass and would reduce congestion in northern Lillington and provide alternate route for NC 210, US 421, and NC 27 through Lillington. The CTP recommendation would be built to ensure that it would operate at a minimum LOS C in 2035.

By redirecting traffic around the intersection of these major highways including NC 27, NC 210, US 421 and US 401 and moving those vehicles along a fully controlled facility there will be a reduction in the amount of crashes occurring at major intersections of the aforementioned highways. 19 crashes occurred at the intersection of US 401/NC 210/NC 27/US 421 on Lillington's northern side from January 1, 2004 to December 31, 2006 while over 125 other crashes occurred in downtown Lillington on these facilities.

Linkages to Other Plans and Proposed Project History

This project has not been part of any previous plans.

Land Use Patterns

The recommended Northern Lillington Connector is proposed to be primarily constructed in open space north of existing US 401 and US 421. There are a few subdivisions that exist along NC 210 between the proposed facility and US 401. There is primarily low density residential along the secondary roads that the new connector would cross. There is industrial growth planned at the intersection with US 401 at the connection with the proposed US 401 bypass. Coordination with Harnett County and Lillington land use plans would need to be made so that the proposed facility would support the planned growth in the area.

When the proposed Northern Lillington Connector is constructed there would likely be new low density commercial built around the area to serve the needs of additional commuters utilizing the facility.

Natural & Human Environmental Context

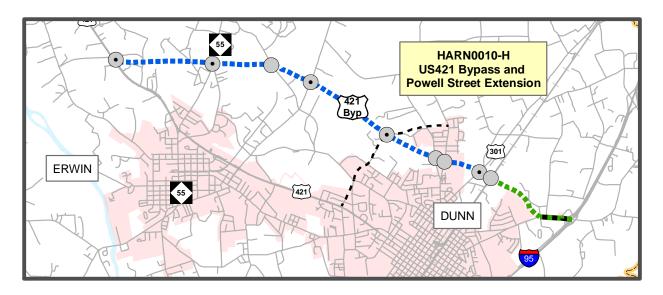
The proposed Northern Lillington Connector is located on new location completely within the Cape Fear Watershed. There is one church along the new location corridor and care should be taken to avoid it. Future environmental study will be done as well on the project because it may potentially affect wetlands in the area.

Multi-modal Considerations

This facility will need to provide a grade separation at the intersection with the north-south Norfolk Southern railroad. Care should be taken to not adversely impact the recommended Campbell University Connection multi-use path at the interchange on US 421 between Lillington and Campbell University.

Public/ Stakeholder Involvement

This project was displayed at the three public workshops held in February 2011. No comments were received regarding this specific project. For further information regarding public involvement, see Appendix H.



IDENTIFIED PROBLEM

US 421 from Avery Road (SR 2013) to Interstate 95 is projected to be near or over capacity by 2035. It is desirable to relieve congestion and provide for through freight movement through the Dunn/Erwin area.

Justification of Need

US 421 is an important east-west corridor that traverses North Carolina from Wilmington to Tennessee. In addition to regional significance, it provides access from Dunn-Erwin eastward to Wilmington and westward to Greensboro and Winston-Salem through Lillington in Harnett County. US 421 is the most significant facility that travels east-west through the county.

Existing US 421 is currently a 4-lane divided cross section through Erwin and 4-lane undivided cross-section through Dunn. It is part of the regional tier of the NC Multimodal Investment Network (NCMIN).

By 2035, existing US 421 is projected to be near or over capacity through Dunn and Erwin based on the capacity of providing a LOS D. Traffic is projected to increase from a range of 12,400 to 24,000 vehicles per day (vpd) in 2007 to a range of 28,400 to 41,800 vpd in 2035, compared to a capacity range of 32,600 to 39,300 vpd.

Community Vision and Problem History

The City of Dunn and the Town of Erwin desire to maintain the existing cross section of US 421 through their towns as much as possible. However, there is a concern with the amount of truck traffic that is currently on this facility. US 421 is used by trucks to access I-95 on the east side of Dunn. This issue has been at the forefront for both Dunn and Erwin for years.

CTP PROJECT PROPOSAL

Project Description and Overview

The CTP project proposal is to provide a US 421 bypass around Dunn and Erwin and provide a connection from the bypass to existing US 421 in between Dunn and Erwin. It is broken up into four sections. The first section of the recommendation (Local ID HARN00010A-H) is to provide a 4-lane, freeway facility on new location north of the Town of Erwin and City of Dunn, connecting US 421 at Avery Road (SR 2013) to US 301. This recommendation includes interchanges at US 421 near Avery Road, NC 55, Red Hill Church Road (SR 1703), the proposed Powell Street (SR 1719) Extension, and US 301. Grade separations are recommended at Ashe Avenue (SR 1725), Meadowlark Road (SR 1715), and Fairground Road (SR 1705). HARN0010A-H matches the recommendation alignment from the 2002 Dunn-Erwin Thoroughfare Plan.

The second section of the recommendation (Local ID HARN0010B-H) is to provide a 4-lane, expressway facility on new location from US 301 to Jonesboro Road (SR 1818) at Lane Road (SR 1802). This recommendation directly connects with HARN0010A-H continuing the proposed US 421 bypass on new location. A grade separation is recommended over the CSX rail line north of Dunn.

The third section of this recommendation (Local ID HARN0010C-H) is to improve Jonesboro Road (SR 1818) from Lane Road (SR 1802) to Interstate 95 to a 4-lane expressway facility. This recommendation connects with HARN0010B-H completing the proposed US 421 bypass.

The fourth section of the recommendation, the Powell Street extension, is a connection between Dunn and Erwin that provides additional route connecting existing US 421 with the proposed bypass and Fairground Road. The recommendation (Local ID HARN0010D-H) is to provide 2-lane, minor thoroughfare facility on new location from US 421 at Powell Street to Fairground Road. There is an interchange proposed where the Powell Street Extension would intersect the proposed US 421 bypass.

This new bypass could help to address some of the safety concerns along existing US 421 by reducing the number of vehicles along existing US 421. There were 12 high accident locations identified along US 421 in this area between January 1, 2004 and December 31, 2006 that included approximately 175 crashes.

These recommendations would provide much needed congestion relief and provide additional access points for future development planned in the area. In addition, freight traffic would have an alternate route to utilize and potentially keep trucks from using local routes.

Linkages to Other Plans and Proposed Project History

The 2002 Dunn-Erwin Thoroughfare Plan recommended a four-lane freeway on new location from US 421 east of Dunn near Sampson County to US 421 west of Erwin near Avery Road (SR 2013). Grade separations were proposed at Ashe Avenue (SR 1725),

Meadowlark Road (SR 1715), Fairground Road (SR 1705), the CSX rail line; interchanges would be at NC 55 east of Dunn, Jonesboro Road (SR 1808), US 301, Proposed Powell Avenue Extension, Red Hill Church Road (SR 1703) and NC 55 north of Erwin. Consistent with this prior recommendation, the 2011 Harnett County CTP also recommends a new location freeway north of existing US 421.

The difference between the two recommendations is the termination of the US 421 bypass in Dunn. The Harnett County CTP project proposal is slightly different after it intersects with US 301. The Harnett County CTP project proposal uses Jonesboro Road's alignment and its existing interchange with I-95 to complete the bypass whereas the Dunn-Erwin plan had a grade separation over I-95 and reconnected with US 421 east of Dunn. The reason for this change was to ensure there was a connection with I-95.

Land Use Patterns

For the majority of the proposed US 421 bypass, existing land use consists of mainly low density residential. Along the CSX rail line there are numerous industrial clusters and along Jonesboro Road (SR 1808) there is commercial development near the interchange with Interstate 95.

Once the proposed bypass is complete, low density commercial will begin to be built around the interchanges. Industrial clusters will begin to emerge because of the connection to Interstate 95. There are even possible land use changes from low density commercial to industrial along existing US 421 from Erwin to Lillington that could occur.

Natural & Human Environmental Context

In the development of the 2011 Harnett County CTP, various options were studied for US 421 new location improvements. Comparison of the different alternatives studied and their potential impacts to the human and natural environment are documented in Appendix I.

Multi-modal Considerations

The CTP includes recommendations for multi-use paths and pedestrian improvements in the City of Dunn, including all recommendations from the City of Dunn pedestrian plan (for information on pedestrian recommendations refer to the 2008 City of Dunn Pedestrian Plan). The Dunn-Erwin multi-use trail currently runs from Ashe Avenue (SR 1725) to US 301 north of US 421 in the City of Dunn along an abandoned rail line.

There are three other proposed multi-use paths around the city. The Black River trail is recommended to be constructed in the southern part of the city from Elm Avenue to US 421 and from US 421 to Meadowlark Road on the northwest side of Dunn. From there, the path continues east but is renamed Hannah's Pond Trail and terminates at Jonesboro Road (SR 1818). There is also a recommendation for a School Connector multi-use path which originates on Meadowlark Road north of Dunn and follows a wetland south until it connects with US 421 (see the 2008 City of Dunn Pedestrian Plan

for more information on these recommendations). These multi-use paths should be accommodated with the US 421 Bypass.

A CSX passenger and freight rail line parallels US 301 through Dunn and construction of a grade separation for the recommended US 421 bypass will be needed.

Public/ Stakeholder Involvement

The Harnett County CTP Steering Committee considered both new location proposals east of US 301 and selected the current recommendation differing slightly from the previous recommendation in the 2002 Dunn-Erwin Thoroughfare Plan. This project was displayed at the three public workshops held in February 2011. No comments were received regarding this specific project. For further information regarding public involvement, see Appendix H.

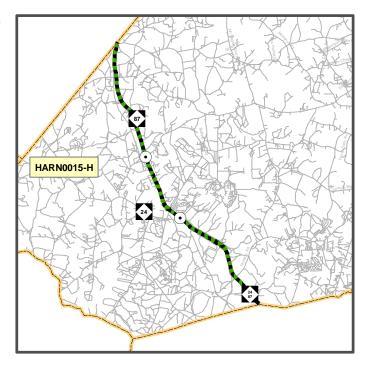
IDENTIFIED PROBLEM

NC 87 from the Lee County line to the Cumberland County line is projected to be over capacity by 2035. The primary purpose is to relieve congestion on NC 87 such that a minimum of LOS D can be achieved.

Justification of Need

NC 87 is a major facility in Harnett County providing a vital connection for residents in the area that travel south to Fort Bragg and Fayetteville.

NC 87 currently has a 4-lane and 5-lane cross-section from the Lee County line to the Cumberland County line. It is a Strategic Highway Corridor (SHC).



By 2035 the facility is projected to be over capacity based on the capacity of providing a LOS D. The highest volume of traffic on the facility is near the Cumberland County line and the lowest volume of traffic is near NC 27. The traffic is projected to increase from 13,000-21,300 vehicles per day (vpd) in 2007 to 29,700-57,200 vpd in 2035, compared to a capacity range of 13,000-23,100 vpd.

Community Vision and Problem History

Due to this area's close proximity to Fort Bragg, it is expected to continue experiencing rapid growth related to the Department of Defense Base Realignment and Closure (BRAC) implementation over the next few years. Population is also expected to continue increasing through the 2035 planning period due to new residents from the surrounding counties.

This area continues to expand and the need to improve the facility is paramount for Harnett County. In the late 1990s, the facility was widened to accommodate growing traffic and new residents moving to the area and to address safety concerns. There has been recent recognition by planners that there is a need to improve the control of access on the facility due to more additional residents and substantial commercial growth.

CTP PROJECT PROPOSAL

Project Description and Overview

The CTP proposed project (Local ID HARN0015-H) is to provide a 4-lane expressway facility on existing location from the Lee County line to the Cumberland County line.

This would reduce congestion along the facility and provide better efficiency for residents attempting to access development while also providing an access controlled facility for through movements. This recommendation would provide for a LOS D or better along existing NC 87.

There is a need to improve safety along NC 87 in the county specifically at two high accident location intersections, Barbecue Church Road (SR 1209) and Buffalo Lake Road (SR 1115). From January 1, 2004 to December 31, 2006, 17 crashes occurred at Buffalo Lake Road with a high severity index of 10.36. During the same time period, 19 crashes occurred at Barbecue Church Road which equated to the highest severity index in the county at 12.87.

Linkages to Other Plans and Proposed Project History

The 1995 Harnett County Thoroughfare Plan recommended improvement of NC 87 from the Cumberland County line to the intersection with NC 24 to a multi-lane facility. Consistent with this prior recommendation, the 2011 Harnett County CTP also recommends improvement of the section; however the proposal enhances the facility to an expressway.

Land Use Patterns

Land use adjacent to NC 87 is primarily low density residential and medium density commercial. The commercial land use is primarily located in the Buffalo Lakes area in the southern portion of Harnett County. Residential land use adjacent to existing NC 87 is sparse. Because the facility is divided and high speed, its primary purpose is providing mobility. This will continue to limit direct land use impacts and driveway access along the corridor.

However, high growth is expected in the area due to Fort Bragg and commuters to Fayetteville moving into the area are expected. Residential and commercial land use will continue to grow and the need to enhance NC 87 to handle these land uses will be critical.

Natural & Human Environmental Context

This project is not expected to have many natural environmental impacts; however care should be taken to minimize impacts to existing residents and businesses along the corridor. On the southern end, NC 87 does go through Fort Bragg, so any improvements will need to be coordinated so that impacts do not negatively affect the military installation. Future environmental study will be done as the project may affect the following additional natural environmental features:

- Wetlands
- Groundwater Incidents

Multi-modal Considerations

There are two park and ride lots proposed on NC 87 within Fort Bragg located just south of the intersection with NC 24 in the Overhills area. This is to serve commuters from Fayetteville and south to the Overhills/Fort Bragg area. These recommended park and ride lots are the end of the recommended bus route that extends from Fayetteville along NC 87 in Harnett County. There is also a multi-use path recommended to parallel NC 87 from the Cumberland to Moore County line called the Fort Bragg/NC 87 Path.

Public/ Stakeholder Involvement

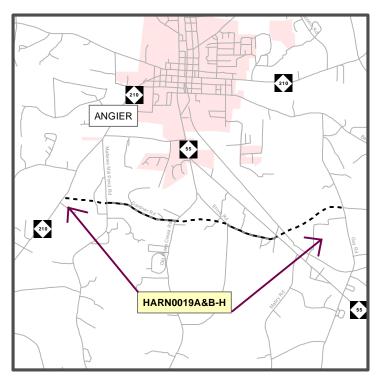
This project was displayed at the three public workshops held in February 2011. No comments were received regarding this specific project. For further information regarding public involvement, see Appendix H.

IDENTIFIED PROBLEM

NC 210 in the town limits of Angier is projected to be over capacity by 2035. The primary purpose for improvements and linkages to be constructed in southern Angier is to relieve congestion on the existing facility such that a minimum of LOS D can be achieved.

Justification of Need

The Town of Angier continues to become a larger bedroom community for commuters to Raleigh and Durham areas. This tight-knit area has been expanding the past 20 years and the need to keep up with that growth is vital. Mobility and



Local ID: HARN0019A/B-H

Last Updated: 4/17/2013

safety issues are growing in the town and the need to provide additional capacity and make connections between existing facilities is essential. By connecting and expanding a few facilities, a southern bypass can be created and will assist in providing an additional route of travel.

Currently all sections of the facilities to be improved are 2-lane minor thoroughfare sections and are as follows: Gardner Road (SR 1509) from Matthew Mills Pond Road (SR 1510) to Old Buies Creek Road and Ennis Road (SR 1543) from NC 55 to Montague Road (SR 1540).

It is anticipated that 10,000 vpd will utilize the southern bypass that will provide 14,600 in vehicle capacity in 2035.

Community Vision and Problem History

Angier's continuing vision for areas directly adjacent to these proposed linkages is low to medium density residential development. Angier recognizes that the growing population and commuter traffic that is utilizing the facilities through their municipal limits causing safety and mobility concerns is a vital issue. The previous thoroughfare plan began to address these issues with a proposed loop and new location connections. These recommendations are consistent with those proposals and provide those linkages to address some of the community's transportation concerns.

CTP PROJECT PROPOSAL

Project Description and Overview

The CTP proposed project (Local ID HARN00019A/B-H) is to provide a southern bypass around Angier. The southern bypass, HARN0019A/B-H, is proposed from NC 210 at Millwood Lane to Guy Road (SR 1544). The entire section is recommended as a 2-lane minor thoroughfare facility that includes 12-foot lanes and a 5-foot paved shoulder on both sides of the roadway.

The southern bypass includes improvements to existing roads and proposes new location connections at the following locations: NC 210 to Matthew Mills Pond Road, Old Buies Creek Road to Ennis Road and NC 55 to Old Stage Road (SR 1006). Existing road sections to be improved include Gardner Road from Matthew Mills Pond Road to Old Buies Creek Road and from Ennis Road to NC 55. This proposal will help to alleviate congestion on NC 210 in the Town of Angier.

Linkages to Other Plans and Proposed Project History

The 2001 Angier Thoroughfare Plan (TP) recommended a proposed Lipscomb Road (SR 1504)/Guy Road (SR 1544) Connector. This proposal recommended that a two-lane facility on new location be constructed for an approximate length of 0.5 miles connecting Lipscomb Road and Guy Road.

According to the 2001 Angier TP, "the Lipscomb/Guy connector would play a very important role of providing a direct connection between NC 55 and NC 210. The connector would also serve as a more direct route to I-95, than the congested NC 55. This connector would primarily serve those living along Lipscomb Road and Guy Road and those living south of Angier." The proposed southern bypass would connect NC 210 to NC 55 in the southern part of Angier for NC 210 commuters to use around Angier when travelling east-west.

Land Use Patterns

The land use that exists on the southern limits of the Town of Angier is very low density residential. There are numerous plans for new subdivisions in the future and the need to provide those residents with a transportation system is essential. The land use that is planned is almost exclusively residential and the majority of commercial land use is limited to the major facilities in the area, NC 210 and NC 55.

Natural & Human Environmental Context

Along these proposed improvements care should be taken so that impacts to residents and businesses are kept to a minimum. The Town of Angier will continue to grow and coordinating with current land use plans will assist in minimizing the impacts in these areas. Other natural environmental features that will potentially impact with these improvements are:

- Significant Aquatic Endangered Species
- Wetlands

Multi-modal Considerations

There were no specific multi-modal improvements or considerations made with this recommendation.

Public/ Stakeholder Involvement

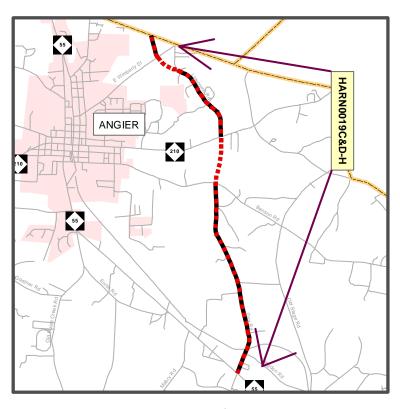
This project was displayed at the three public workshops held in February 2011. No comments were received regarding this specific project. For further information regarding public involvement, see Appendix H.

IDENTIFIED PROBLEM

NC 55 in the town limits of Angier are projected to be over capacity by 2035. The primary purpose for improvements and linkages to be constructed in eastern Angier is to relieve congestion on the existing facility such that a minimum of LOS D can be achieved.

Justification of Need

The Town of Angier continues to become a larger bedroom community for commuters to Raleigh and Durham areas. This tight-knit area has been expanding the past 20 years and the need to keep up with that growth is vital. Mobility and safety issues are growing in the town and the need to provide additional capacity and make connections between existing facilities is essential. By connecting and expanding a few facilities, an eastern



Local ID: HARN0019C/D-H

Last Updated: 4/17/2013

bypass can be created and will assist in providing an additional route of travel.

Currently all sections of the facilities to be improved are 2-lane minor thoroughfare sections and are as follows: Guy Road (SR 1544) from NC 55 to Benson Road (SR 1500), Lipscomb Road (SR 1504) from Wimberly Street (SR 1502) to NC 210, and O'Stephenson Road from Wimberly Street to the Wake County line.

It is anticipated that 15,000 vpd will utilize the eastern bypass that will provide 45,200 in vehicle capacity in 2035.

Community Vision and Problem History

Angier's continuing vision for areas directly adjacent to these proposed linkages is low to medium density residential development. Angier recognizes that the growing population and commuter traffic that is utilizing the facilities through their municipal limits causing safety and mobility concerns is a vital issue. The previous thoroughfare plan began to address these issues with a proposed loop and new location connections. These recommendations are consistent with those proposals and provide those linkages to address some of the community's transportation concerns.

CTP PROJECT PROPOSAL

Project Description and Overview

The CTP proposed project (Local ID HARN00019C/D-H) is to provide an eastern bypass around Angier. The eastern bypass, HARN0019C/D-H, is proposed from NC 55 at Oak Grove Church Road (SR 1532) to the intersection of O'Stephenson Road (SR 1503) and the Wake County Line.

The eastern bypass includes improvements to existing roads and proposes new location connections. Existing road sections to be improved include Guy Road (SR 1544) from NC 55 to Benson Road (SR 1500), Lipscomb Road (SR 1504) from Wimberly Street (SR 1502) to NC 210, and O'Stephenson Road from Wimberly Street to the Wake County Line. New location improvements are recommended from Benson Road to NC 210 and from Lipscomb Road to Wimberly Street.

The new connected routes will help to address some of the safety concerns along existing NC 55 and NC 210 when vehicles begin to take the proposed connections reducing the number of drivers on existing NC 55 and 210. There were 3 high accident locations identified along NC 55 in this area between January 1, 2004 and December 31, 2006 that included approximately 60 crashes.

Linkages to Other Plans and Proposed Project History

The 2001 Angier Thoroughfare Plan (TP) recommended a proposed Lipscomb Road (SR 1504)/Guy Road (SR 1544) Connector. This proposal recommended that a two-lane facility on new location be constructed for an approximate length of 0.5 miles connecting Lipscomb Road and Guy Road.

According to the 2001 Angier TP, "the Lipscomb/Guy connector would play a very important role of providing a direct connection between NC 55 and NC 210. The connector would also serve as a more direct route to I-95, than the congested NC 55. This connector would primarily serve those living along Lipscomb Road and Guy Road and those living south of Angier."

The proposed eastern bypass would provide commuters a route around Angier for NC 55 commuters to use when travelling north-south.

Land Use Patterns

The land use that exists on the southern and eastern outskirts of the Town of Angier is very low density residential. There are numerous plans for new subdivisions in the future and the need to provide those residents with a transportation system is essential. The land use that is planned is almost exclusively residential and the majority of commercial land use is limited to the major facilities in the area, NC 210 and NC 55.

Natural & Human Environmental Context

Along these proposed improvements care should be taken so that impacts to residents and businesses are kept to a minimum. The Town of Angier will continue to grow and coordinating with current land use plans will assist in minimizing the impacts in these areas. Other natural environmental features that will potentially impact with these improvements are:

- Significant Aquatic Endangered Species
- Wetlands

Multi-modal Considerations

There were no specific multi-modal improvements or considerations made with this recommendation.

Public/ Stakeholder Involvement

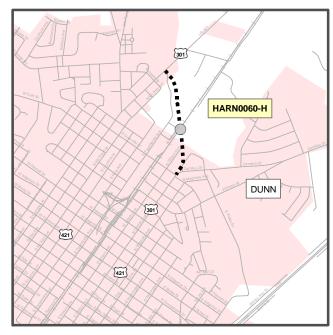
This project was displayed at the three public workshops held in February 2011. No comments were received regarding this specific project. For further information regarding public involvement, see Appendix H.

IDENTIFIED PROBLEM

Through Dunn, US 301 makes several turns making it difficult to maneuver. It also is expected to be congested in 2035.

Justification of Need

US 301 is an important north-south corridor that extends through all of North Carolina. It provides access to Smithfield, Rocky Mount and Wilson to the north and Fayetteville and Lumberton to the south. US 301 parallels Interstate 95 and provides a much needed alternative when the Interstate becomes too congested.



US 301 currently has 2-lane and 3-lane

cross-section in the City of Dunn. It is part of the regional tier of the NC Multimodal Investment Network (NCMIN). US 301 in the downtown area is currently routed along Clinton Avenue and Granville Street, requiring several turns to follow the US route.

Community Vision and Problem History

There has been a need for relocating this facility for years and a desire by the locals to complete the project. Community leaders believe that the project can and should be constructed to provide safer, more efficient access for commuters using US 301.

CTP PROJECT PROPOSAL

Project Description and Overview

The CTP proposed project (Local ID HARN0060-H) is to provide a 4-lane major thoroughfare on new location from US 301 near Burnett Street to N. Clinton Avenue (existing US 301). This recommendation includes bicycle lanes and sidewalks, along with a grade separation over the CSX railroad. This grade separation over the CSX rail line eliminates the need for at grade intersection with a heavily used freight rail facility. By constructing this proposed new location, providing the grade separation of the rail line and rerouting US 301 along this new location the efficiently for this vital US route will be greatly improved in Dunn.

The CTP project proposal for the re-routing of US 301 would reduce congestion the existing route for US 301 and minimize the number of turns needed to follow the existing route. The CTP recommendation would provide for a LOS "c" or better along the proposed new location.

Linkages to Other Plans and Proposed Project History

The 2002 Dunn-Erwin Thoroughfare Plan recommended that US 301 be rerouted on a new location facility from Granville Street at Clinton Avenue to US 301 south of Candy Kitchen Road (SR 1800). This recommendation is included on the Harnett County CTP as it was on the previous plan. At the time of the Dunn-Erwin TP adoption, this recommendation was included in the STIP as Project # U-3631. It has since been dropped from the STIP.

Land Use Patterns

The existing and future land use adjacent to the proposed new location for US 301 is medium density industrial. A new location for US 301 in this area will continue to enhance the development and help to expand and improve the efficiency of the businesses. This new facility is expected to spur industrial development to the area north of Dunn.

Natural & Human Environmental Context

There is the possibility of impact to wetlands and aquatic endangered species along the northeast side of the recommended project corridor. Further study on the exact location of the improvement could minimize impacts to these natural environmental features and preserve residential development. There is one groundwater incident in the area and that should also be considered during future study. Due to substantial impacts to low income and minority communities, the proposed new location was delayed.

Multi-modal Considerations

The project proposal includes bicycle and pedestrian recommendations along the proposed facility.

Public/ Stakeholder Involvement

This project was displayed at the three public workshops held in February 2011. No comments were received regarding this specific project. For further information regarding public involvement, see Appendix H.

Other Problem Statements

<u>US 401, Local ID: HARN0002-H</u>

US 401 between the southern connection of the proposed US 401 Bypass (R-2609) and NC 210 is expected to be over capacity by 2035. Improvements are needed to accommodate projected traffic in order to maintain a Level of Service D.

This section of US 401 currently has a two-lane, 30-foot cross section. The 2007 annual average daily traffic (AADT) is 7,000 vehicles per day (vpd) and by 2035 the AADT is expected to be 13,200 vpd compared to a LOS D capacity of 10,600 vpd for the existing cross section.

The CTP project proposal (Local ID HARN0002-H) is to provide a four-lane boulevard facility with a concrete median, bicycle lanes and sidewalks.

US 401, Local ID: HARN0003-H and HARN0004-H

US 401 between NC 210 and the NC 210/US 421/NC 27 intersection is expected to be over capacity by 2035. Improvements are needed to accommodate projected traffic in order maintain a LOS D.

There are 9 identified high accident locations along the corridor. They include the intersections with NC 27, McNeill Street (SR 2016), James Street, US 421 (Front Street), Harnett Street, Tenth Street, Duncan Road, McKinney Parkway, and NC210/US421/NC27 north of Lillington. On the southbound lanes of US 401 across the Cape Fear River, bridge number 46 has been designated structurally deficient by the NCDOT Bridge Maintenance Unit. This bridge is included on the State Transportation Improvement Program (TIP) as Project # B-4138, and improvements are slated for completion by November 2013.

This section of US 401 currently has a four-lane, 48 to 56-foot cross section for 1.6 miles and a five-lane 64-foot cross section for 0.5 miles. The 2007 AADT is 26,000 vpd and by 2035 the AADT is expected to be 78,000 vpd without the proposed US 401 Bypass compared to a LOS D capacity of 36,600 for the existing cross section.

The CTP project proposal (Local ID HARN0003/4-H) is to provide a four-lane boulevard facility with a concrete median, bicycle lanes and sidewalks.

US 421, Local ID: HARN0005-H

US 421 from the Lee County line to the proposed US 401 Bypass is expected to be near capacity by 2035. Improvements are needed to accommodate mobility along the corridor and to maintain a capacity LOS D.

There are 2 identified high accident locations along the corridor. They include intersections at Cool Springs Road (SR 1265) and Seminole Road (SR 1280).

This section of US 421 currently has a two-lane, 28-foot cross section. The 2007 AADT is 7,800 vpd and by 2035 the AADT is expected to be 10,300 vpd compared to a LOS D capacity of 10,600 for the existing cross section.

The CTP project proposal (Local ID HARN0005-H) is to provide a four-lane expressway facility with a grass median.

US 421, Local ID: HARN0006A/B-H

US 421 between the proposed US 401 Bypass and existing US 401 in Lillington is expected to be near capacity by 2035. Improvements are needed to accommodate capacity and provide access for local traffic while maintaining a capacity LOS D. There are 2 identified high accident locations along the corridor. They include intersections at Wayne Avenue and Eighth Street in Lillington.

This section of US 421 currently has a two-lane, 28-foot cross section between the proposed US 401 Bypass and Old US 421 (HARN0006A-H) and a four-lane, 64-foot cross section between Old US 421 and US 401 (HARN0006B-H). The 2007 AADT ranges from 6,600 to 9,300 vpd and by 2035 the AADT is expected to range from 8,700 to 16,200 compared to a LOS D capacity of 10,600 to 25,700. The CTP project proposal (Local ID HARN0006A-H) is a four-lane expressway facility with a concrete median, bicycle lanes and sidewalks.

The CTP project proposal (Local ID HARN0006B-H) is a two-lane boulevard facility with bicycle lanes, parking on both sides and sidewalks.

US 421. Local ID: HARN0007-H

US 421 between the NC 210/NC 27/US 421 intersection and the proposed Northern Lillington Connector is expected to be over capacity by 2035. Improvements are needed to accommodate projected traffic in order to maintain a LOS D.

There is one identified high accident location along the corridor occurring at the intersection of NC 210/US 421/NC 27/US 401.

This section of US 421 currently has a four-lane, 48-foot cross section. The 2007 AADT is 18,000 vpd and by 2035 the AADT is expected to be 41,200 vpd compared to a LOS D capacity of 39,300 for the existing cross section.

The CTP project proposal (Local ID HARN0007-H) is to provide a four-lane boulevard facility with a concrete median, bicycle lanes and sidewalks.

US 421, Local ID: HARN0008-H

US 421 between the proposed Northern Lillington Connector and Maynard Lake Road (SR 1726) is expected to be over capacity by 2035. Improvements are needed to accommodate projected traffic in order to maintain a LOS D.

Two high accident locations have been identified along this section of US 421, one at the intersection with Leslie Campbell Avenue (SR 2084) and the other at NC 55.

This section of US 421 currently has four-lane and five-lane cross-sections that range from 48 to 64 feet. The 2007 AADT is 18,000 vpd and by 2035 the AADT is expected to be 47,200 vpd compared to a LOS D capacity of 39,300 for the existing cross section.

The CTP project proposal (Local ID HARN0008-H) is to provide a four-lane expressway facility with a 46-foot wide grass median along the corridor.

US 421, Local ID: HARN0009A-H

US 421 between Erwin Road (SR 1718) and the eastern edge of the City of Dunn limits is expected to be over capacity by 2035. Improvements are needed to accommodate projected traffic in order to maintain a LOS D and to address the many high accident locations located along the corridor.

The 12 high accident locations are located at the intersections with Watauga Avenue, Wayne Avenue, Ellis Avenue, Wilson Avenue, US 301, Magnolia Avenue, Washington Avenue, Sampson Avenue, Lee Avenue, both I-95 ramp terminals, and NC 55.

This section of US 421 currently has four-lane and three-lane cross-sections that range from 60 to 100 feet. The 2007 AADT is 24,000 vpd and by 2035 the AADT is expected to be 41,800 vpd with no improvements and 32,600 vpd if the proposed US 421 bypass is constructed compared to a LOS D capacity of 24,000 vpd for the existing cross section.

The CTP project proposal (Local ID HARN0009A-H) is to provide a four-lane boulevard facility with 23-foot concrete median including bicycle lanes and sidewalks.

US 421, Local ID: HARN0009B-H

US 421 between the Sampson County line and the expansion to 3 lanes just before NC 55 is expected to be over capacity by 2035. Improvements are needed to accommodate projected traffic in order to maintain a LOS D.

This section of US 421 currently has a two-lane, 28-foot cross section. The 2007 AADT is 8,400 vpd and by 2035, the AADT is expected to be 14,600 compared to a LOS D capacity of 10,600 for the existing cross section.

The CTP project proposal (Local ID HARN0009B-H) is to provide a four-lane, boulevard facility with turn lanes where necessary.

NC 27, Local ID: HARN0012-H

NC 27 between NC 24 and the proposed US 401 Bypass is expected to be over capacity by 2035. Improvements are needed to accommodate projected traffic in order to maintain a LOS D.

One high accident location has been identified along the corridor at the intersection with Doc's Road (SR 1116).

This section of NC 27 currently has a two-lane, 26-foot cross section. The 2007 AADT is 6,000 vpd and by 2035, the AADT is expected to be 13,700 vpd compared to a LOS D capacity of 10,600 vpd for the existing cross section.

The CTP project proposal (Local ID HARN0012-H) is to provide a four-lane boulevard facility with a 30-foot grass median.

NC 27, Local ID: HARN0013-H

NC 27 between US 421 and the Johnston County line is expected to be over capacity by 2035. Improvements are needed to accommodate projected traffic in order to maintain a LOS D.

This section of NC 27 currently has a two-lane, 24-foot cross-section. The 2007 AADT is 8,500 vpd and by 2035, the AADT is expected to be 19,400 vpd for the existing cross-section. There are plans for growth around the Town of Coats along NC 27 which accounts for the high increase in traffic.

The CTP project proposal (Local ID HARN0013-H) is to provide a four-lane, boulevard facility with a grass median and turn lanes where necessary.

NC 217, Local ID: HARN0014-H

NC 217 between NC 82 and US 421 is expected to be near capacity by 2035. Improvements are needed to accommodate projected traffic and provide access for the locals while maintaining a capacity LOS D.

One high accident location has been identified along NC 27 at the intersection with Bunnlevel-Erwin Road (SR 1779).

NC 217 has three different cross-sections including a two-lane 26-foot section, a four-lane 44-foot section and a three-lane 40-foot section in the Town of Erwin. The 2007 AADT ranges from 5,900 vpd to 10,000 vpd and by 2035, the AADT is expected to range from 7,800 to 13,200 compared to a LOS D capacity of 16,000 vpd for the majority of the facility.

The CTP project proposal (Local ID HARN0014-H) is to provide a four-lane, boulevard facility.

NC 210, Local ID: HARN0016-H

NC 210 between US 401 Business south of Lillington and the Cumberland county Line is expected to be over capacity by 2035. Improvements are needed to enhance safety and accommodate projected traffic in order to maintain a LOS D.

At the southern end of NC 210, two high accident locations have been identified at the intersections with Shady Gove Road (SR 2050) and Ray Road (SR 1121).

In this section, NC 210 has three different cross-sections including a two-lane 26-foot section, a three-lane 36-foot section, and a five-lane 100-foot section near the Cumberland county line. The 2007 AADT ranges from 6,900 to 12,000 vpd and by 2035, the AADT is expected to range from 12,000 to 27,500 vpd compared to a LOS D capacity of 10,600 vpd for the majority of the facility.

The CTP project proposal (Local ID HARN0016-H) is to provide a four-lane boulevard facility.

NC 210, Local ID: HARN0017-H

NC 210 between the recommended Southern Angier Bypass and US 401 north of Lillington is expected to be over capacity by 2035. Improvements are needed to accommodate projected traffic in order to maintain a LOS D.

This section of NC 210 currently has three different cross sections: a two-lane, 26-foot cross section, a three-lane, 38-foot cross section, and four-lane, 48-foot cross section near US 401. The 2007 AADT ranges from 7,800 to 11,000 vpd and by 2035, the AADT is expected to range from 24,000 to 25,200 vpd compared to a LOS D capacity range from 10,600 to 32,600 vpd near US 401. The land along this corridor is situated perfectly for development between Angier and Lillington for the growth in the Raleigh and Fayetteville regions.

The CTP project proposal (Local ID HARN0017-H) is to provide a four-lane, boulevard facility with a grass median and turn lanes where necessary.

NC 210, Local ID: HARN0018-H

NC 210 between the Johnston county line and the recommended Southern Angier Bypass is expected to be over capacity by 2035. Improvements are needed to accommodate projected traffic in order to maintain a LOS D.

Two high accident locations have been identified; one at the intersection with Old Stage Road (SR 1006) and one at the intersection with NC 55 in Angier.

This section of NC 210 has a two-lane, 24-foot cross section. The 2007 AADT is 10,700 vpd and by 2035, the AADT is expected to be 21,400 compared to a LOS D capacity of 13,900 for the existing cross section. As the Triangle metropolitan area continues to expand south, the need for Angier's transportation system to be enhanced is vital.

The CTP project proposal (Local ID HARN0018-H) is to provide a two-lane boulevard facility with a concrete median, bicycle lanes, and sidewalks.

<u>Dunn-Erwin Southern Truck Connection, Local ID: HARN0020-H; Longbranch Road (SR 1002), Local ID: HARN0021-H</u>

Between the City of Dunn and the Town of Erwin, there is an identified need to reduce the number of large trucks using US 421 that use this facility to connect with I-95 southbound in Dunn. The Harnett County CTP recommends a Dunn-Erwin Southern Truck Connection and Longbranch Road (SR 1002) improvements that are needed to offer large trucks an alternate route to I-95 south of the City of Dunn.

There is one high accident location at the ramp terminals at the interchange of I-95 and Longbranch Road there have been 22 total crashes between January 2004 and December 2006.

Along Longbranch Road between US 301 and I-95, the 2007 AADT is 6,200 vpd; by 2035 the AADT is projected to be 14,200 vpd while the LOS D capacity is 10,600. When the Southern Truck Connection is complete the 2035 AADT in this location will be 16,000 vpd while the LOS D capacity will be improved to 29,100.

The CTP project proposals (Local ID HARN0020-H and HARN0021-H) are a 5 lane major thoroughfare with a center turn lane, bicycle lanes, curb and gutter and sidewalks.

Buffalo Lake Road (SR 1115), Local ID: HARN0025-H

Buffalo Lake Road (SR 1115) between NC 87 and NC 27 is expected to be over capacity by 2035. Improvements are needed to accommodate projected traffic in order to maintain a LOS D.

A high accident location has been identified at the intersection with NC 87 resulting in the highest severity rate of crashes in Harnett County.

Buffalo Road currently has a two-lane, 26-foot cross section. The 2007 AADT is 9,300 vpd and by 2035 the AADT is expected to be 27,900 compared to a LOS D capacity of 10,600 vpd for the existing cross section. With the influx of military personnel to the area and the expansion of residential and commercial development, expansion of this facility is very important to the growth of the area.

The CTP project proposal (HARN0025-H) is to provide a four-lane, boulevard facility with a median.

Nursery Road (SR 1117), Local ID: HARN0027-H

Nursery Road (SR 1117) between NC 27 and NC 87 is expected be over capacity by 2035. Improvements are needed to accommodate projected traffic in order to maintain a LOS D.

Nursery Road has a two-lane, 26-foot cross section between NC 27 and NC 87. The 2007 AADT is 4,900 vpd and by 2035, the AADT is expected to be 14,700 vpd compared to a LOS D capacity of 10,600 vpd for the existing cross section. This area

continues to expand in both commercial and residential sectors because of the ever expanding military community.

The CTP project proposal (Local ID HARN0027-H) is to provide a four-lane facility with a grass median.

Overhills Road (SR 1120), Local ID: HARN0028-H

Overhills Road (SR 1120) between Nursery Road (SR 1117) and Anderson Creek School Road (SR 2064) is expected to be over capacity by 2035. Improvements are needed to accommodate projected traffic in order to maintain a LOS D.

One high accident location has been identified on Overhills Road and occurs at the intersection with Ray Road (SR 1121) where a documented 28 crashes occurred in a three year period.

Overhills Road currently has a two-lane, 26-foot cross section. The 2007 AADT is 6,000 vpd and by 2035 the AADT is expected to be 18,000 vpd compared to a LOS D capacity of 10,600 vpd for the existing cross section. Continual increases in population due to military expansion will drive the need for new residential and commercial development in this part of Harnett County.

The CTP project proposal (Local ID HARN0028-H) is to provide a four-lane, boulevard facility with a median on Overhills Road.

Ray Road (SR 1121), Local ID: HARN0030-H

Ray Road (SR 1121) between Overhills Road (SR 1120) and Nursery Road (SR 1117) is expected to be near capacity in 2035. Improvements are needed to accommodate projected growth and traffic in the area.

Two high accident locations occur along Ray Road, a distance of only 2 miles, at Overhills Road and NC 210.

Ray Road currently has a two-lane, 28-foot cross section. The 2007 AADT is 4,100 vpd and by 2035, the AADT is expected to increase to 12,300 vpd compared to a LOS D capacity of 12,400 vpd. This facility is in the southern portion of Harnett County that is experiencing substantial growth due to military expansion at Fort Bragg.

The CTP project proposal (Local ID HARN0030-H) is to provide a four-lane, boulevard facility with a median and turn lanes were necessary.

Erwin Road (SR 1718) and Denim Avenue, Local ID: HARN0045-H

Erwin Road (SR 1718) from US 421 to Denim Avenue and Denim Avenue from Erwin Road to NC 82 are expected to be over capacity in 2035. Improvements are needed to accommodate projected traffic in order to maintain a LOS D.

One high accident location has been identified at the intersection with Powell Avenue (SR 1719) which included 20 crashes from January 1, 2004 to December 31, 2006. There is a functionally obsolete bridge is located on Erwin Road at the crossing of the Black River.

Erwin Road and Denim Avenue currently have a two-lane, 26-foot cross section. The 2007 AADT is 13,200 vpd; by 2035, the AADT is expected to increase to 20,000 vpd compared to a LOS D capacity of 16,300 vpd. As the population in Dunn and Erwin continues to grow and industries continue to expand the need for maximizing the efficiency of the existing transportation facilities is paramount.

The CTP project proposal (Local ID HARN0045-H) is to provide a four-lane boulevard facility with a concrete median, bicycle lanes, and sidewalks.

Jonesboro Road (SR 1808), Local ID: HARN0047-H

Jonesboro Road (SR 1808) between I-95 and Wise Road (SR 1799) needs to be widened to a boulevard facility to accommodate the improvements to the interchange with I-95 that will be improved with the construction of the proposed US 421 bypass. The US 421 bypass will be partially constructed along Jonesboro Road from I-95 heading west to the intersection with Lane Road.

The I-95 bridge that passes over Jonesboro Road at this interchange, bridge number 80 has been designated structurally deficient by the NCDOT Bridge Maintenance Unit. At this same interchange, a high accident location has been identified with 10 accidents from January 2004 to December 2006.

This section of Jonesboro Road currently has a two-lane, 20-foot cross section. The 2007 AADT 3,200 vpd; by 2035 the AADT is expected to be 5,200 vpd compared to a LOS D capacity of 9,800 vpd. When the US 421 bypass is extended to connect with existing US 421 in Sampson County, additional improvements to this facility will need to be made.

The CTP project proposal (Local ID HARN0047-H) is to provide a four-lane boulevard facility with a median and turn lanes where necessary.

West Broad Street, Local ID: HARN0055-H

West Broad Street between US 421 and Ashe Avenue (SR 1725) is expected to be over capacity by 2035. Improvements are needed to accommodate projected traffic in order to maintain a LOS D.

Broad Street currently has a two-lane, 48-foot cross section. The 2007 AADT is 10,500 vpd and by 2035, the AADT is expected to be 18,300 vpd compared to a LOS D capacity of 16,300 vpd for the existing cross section.

The CTP project proposal (Local ID HARN0055-H) is to provide a four-lane, boulevard facility.

Minor Widening Improvements

The following routes do not have capacity issues, but are recommended to be upgraded to two 12-foot lanes with 2-foot paved shoulders to improve safety or to correspond to proposed bicycle improvements. Some of the following routes will require turn lanes at major intersections (coordinate with local NCDOT staff on future project specifications/need). Refer to CTP mapping (Figure 2) for recommendation details.

- HARN0022-H: North Old Stage Road (SR 1006) from NC 210/Wake County line to NC 27.
- **HARN0023-H:** Hillmon Grove Road (SR 1106) from Moore County line to Flynn-McPherson Road (SR 1109).
- **HARN0024-H:** Cameron Hill Road (SR 1108) from Hillmon Grove Road (SR 1106) to NC 24.
- **HARN0026-H:** Doc's Road (SR 1116) from NC 27 to Nursery Road (SR 1117).
- **HARN0029-H:** Overhills Road (SR 1120) from Anderson Creek School Road (SR 2064 to Elliot Bridge Road (SR 2045).
- HARN0031-H: Lemuel Black Road (SR 1125) from Anderson Creek Road (SR 2064) to Nursery Road (SR 1117).
- HARN0032-H: Tingen Road (SR 1139) NC 27 to DL Phillips Lane (SR 2138) is recommended to be improved to a 3-lane minor thoroughfare with a center turn lane.
- **HARN0033-H:** Buffalo Lake Road (SR 1115) to Doc's Road (SR 1116) is recommended to be improved to a 3-lane minor thoroughfare with a center turn lane
- HARN0034-H: Bill Shaw Road (SR 1144) from NC 210 to Overhills Road (SR 1120).
- **HARN0035-H:** Barbecue Church Road (SR 1209) from NC 27 to Broadway Road (SR 1222).
- **HARN0036-H:** Mount Pisgah Church Road (SR 1214) from McDougald Road (SR 1229) to McArthur Road (SR 1280).
- **HARN0037-H:** McDougald Road (SR 1229) from Old US 421 to Broadway Road (SR 1222).
- **HARN0038-H:** McArthur Road (SR 1280) from US 421 to Mount Pisgah church Road (SR 1214).
- **HARN0039-H:** Old US 421 from US 421 in western Harnett County to US 421 in Lillington.
- HARN0040-H: Rawls Church Road (SR 1415) from Christian Light Road (SR 1412) to NC 55.
- HARN0041-H: Chalybeate Springs Road (SR 1441) from NC 55 to US 401 is recommended to be improved to a 3-lane minor thoroughfare with a center turn lane.
- **HARN0042-H:** Matthews Mill Pond Road (SR 1510) from Old Buies Creek Road (SR 1542) to Harnett Central Road (SR 2215).

- **HARN0043-H:** Oak Grove Church Road (SR 1532) from Leslie Campbell Avenue (SR 2084) to NC 55.
- **HARN0044-H:** Fairground Road (SR 1705) from NC 27 to US 301.
- **HARN0048-H:** Kivett Road (SR 2002) from Leslie Campbell Avenue (SR 2084) to Oak Grove Church Road (SR 1532).
- **HARN0049-H:** McLean Chapel Church Road (SR 2030) from Elliot Bridge Road (SR 2045) to US 401.
- HARN0050-H: Elliot Bridge Road (SR 2045) from Cumberland County line to NC 210.
- **HARN0051-H:** Bethel Baptist Road (SR 2048) from Elliot Bridge Road (SR 2045) to NC 210.
- HARN0052-H: Shady Grove Road (SR 2050) from NC 210 to Elliot Bridge Road (SR 2045).
- **HARN0053-H:** Anderson Creek School Road (SR 2064) from Overhills Road (SR 1120) to NC 210.
- HARN0054-H: Leslie Campbell Avenue (SR 2084) from NC 27 to US 421.
- **HARN0056-H:** Harnett Central Road (SR 2215) from US 401 to Matthews Mill Pond Road (SR 1510).

PUBLIC TRANSPORTATION & RAIL

NC 87 - Bus Route, Local ID: HARN0001-T

NC 87 is expected to be over capacity by the year 2035. In order to reduce to the number of vehicles on the roadway, bus service connecting Fort Bragg to the Overhills area in southern Harnett County on NC 87 is recommended. The 2011 Harnett County CTP recommends adding a bus route from the Cumberland County line to the intersection with NC 24 in the Overhills area. Two Park-and-Ride lots are recommended along this corridor to provide the Overhills residents with a place to park their vehicles and access the bus service. See CTP Mapping and Appendix C for more information on HARN0001-T.

Lillington Rail Stop, Local ID: HARN0001-R

A public rail stop in the Town of Lillington is needed to provide additional access to the area. A rail stop is recommended in Lillington along Alexander Drive near McKinney Parkway. This rail stop would provide a location for travelers to access public bus service to travel around Harnett County. It would also provide close access to the hospital and neighboring businesses. See CTP Mapping and Appendix C for more information on HARN0001-R.

US 401 Freight Rail Stop, Local ID: HARN0002-R

A rail stop in the unincorporated area of Kipling is needed to a provide freight transfer location for Norfolk Southern. This rail stop would provide a much needed transition point for freight that is being shipping through central North Carolina. See CTP Mapping and Appendix C for more information on HARN0002-R.

Dunn Public Rail Stop, Local ID: HARN0003-R

A public rail stop in the City of Dunn is needed to provide a transit alternative for commuters that travel from Dunn and Erwin to Raleigh and Fayetteville. A rail stop is recommended to be constructed along US 301 north of US 421. This rail stop is intended to provide access to the CSX rail line and be utilized as a future hub for public transportation connections. See CTP Mapping and Appendix C for more information on HARN0003-R.

BICYCLE

Currently, the only bicycle route in Harnett County is Cape Fear Run NC Bike Route 5, which travels from Wake County to New Hanover County. NC Bike Route 5 is recommended for improvement through the entire county by providing on-road bicycle lanes to each side of the road on which it is routed (refer to CTP Mapping – Figure 1 for details). This facility follows Atkins Road (SR 1448), Chalybeate Springs Road (SR 1441), NC 55, Old Buies Creek Road (SR 1542), Sheriff Johnson Road (SR 1516), Main Street (SR 1532), Kivett Road (SR 2002), NC 27, US 421, Old Stage Road (SR 1769), and NC 82.

There is one additional on-road bicycle improvement recommendation in Harnett County. Bicycle lanes along Leslie Campbell Avenue (SR 2084) from NC 27 to Lanier Street (SR 1525) are recommended. This will provide additional bicycle capacity on Campbell University. For additional information on bicycle improvements see CTP Mapping, Figure 1 – Sheets 4 and 4A.

Multi-use path recommendations are listed below. Each recommendation is for a 10-foot wide paved path with a 40-foot right-of-way. Please refer to the 2008 City of Dunn Pedestrian Plan for specifics on multi-use path recommendations in Dunn.

- Cape Fear Trail, Local ID: HARN0005-M, a 27.3 mile trail from the Cumberland County line to US 421.
- Campbell University Connection, Local ID: HARN0006-M, a 7 mile trail from Campbell University to Keith Hills Golf Course and the county airport.
- Lillington/Raven Rock Connection, Local ID: HARN0007-H, a 5.8 mile trail from the Lee County line to Raven Rock State Park and to US 421.
- Fort Bragg/NC 87 Path, Local ID: HARN0008-M, a 12.2 mile trail from the Cumberland County line to Olivia Road (SR 1205).
- **Erwin Park Connection, Local ID: HARN0009-M**, a 1.3 mile trail from NC 82 to the recommended Cape Fear Trail.
- Neill's Creek Trail, Local ID: HARN0010-M, a 7.8 mile trail from US 421 to NC 210 in Angier.
- **US 421 West Trail, Local ID: HARN0011-M**, a 12.9 mile trail from Lillington to the Lee County line.
- NC 55 Rail Trail, Local ID: HARN0012-M, a 10.7 mile trail from Old Buies Creek Road to existing Rails to Trails path north of Erwin.

PEDESTRIAN

The pedestrian network in Harnett County needs to be improved for safety and connectivity. Recommendations for pedestrian improvements are primarily within the municipal limits. Please refer to the 2008 City of Dunn Pedestrian Plan for specifics on pedestrian recommendations in Dunn.

The following on-road pedestrian recommendations have been identified in the Harnett County CTP. Refer to CTP mapping (Figure 1 – Sheets 5, 5A, 5B, and 5C) Appendix C and Appendix D for more information. Each recommendation is for sidewalks to be installed along both sides of the identified facility.

- **HARN0041-P:** NC 210 between Old Coats Road (SR 1516) and US 421.
- HARN0046-P: NC 27 (West Old Road) between US 401 and Old US 421 (SR 1291).
- HARN0047-P: Ross Road (SR 2016) between US 401 and 0.75 miles east of US 401.
- HARN0048-P: Leslie Campbell Avenue (SR 2084) between Main Street (SR 1532) and US 421.
- HARN0049-P: Harmon Road (SR 2062) between Leslie Campbell Avenue (SR 2084) and US 421.
- HARN0050-P: Main Street (SR 1532) between Kivett Road (SR 2002) and Leslie Campbell Avenue (SR 2084).
- **HARN0052-P:** NC 55 between Dora Street and Cutts Street in Angier.
- HARN0053-P: Cutts Street between NC 55 and Willow Street in Angier.
- HARN0054-P: Benson Road (SR 1500) between Broad Street and Wilma Street.
- HARN0056-P: Buffalo Lake Road between NC 27 and NC 87.
- HARN0057-P: Nursery Road (SR 1117) between NC 87 and Doc's Road (SR 1116).
- HARN0058-P: Ray Road (SR 1121) between Overhills Road (SR 1120) and Nursery Road (SR 1117).
- **HARN0059-P:** Overhills Road (SR 1120) between Anderson Creek School Road (SR 2064) and Nursery Road (SR 1117).
- HARN0060-P: Anderson Creek School Road (SR 2064) between NC 210 south to NC 210 north.
- **HARN0061-P:** Lemuel Black Road (SR 1125) between Anderson Creek School Road (SR 2064) and Nursery Road (SR 1117).

Appendix A Resources and Contacts

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 homepage:

1-877-DOT-4YOU (1-877-368-4968)

https://apps.dot.state.nc.us/dot/directory/authenticated/ToC.aspx

Secretary of Transportation

1501 Mail Service Center Raleigh, NC 27699-1501 (919) 707-2800 http://www.ncdot.org/about/leadership

http://www.ncdot.org/about/leadership/secretary.html

Board of Transportation Member

Post Office Box 53668 Fayetteville, NC 28305 (910) 486-1493 http://www.ncdot.gov/about/board/default.html

Highway Division Engineer

Contact the Division Engineer with general questions concerning NCDOT activities within each Division and for information on Small Urban Funds.

558 Gillespie St. Fayetteville, NC 28301 (910) 486-1493

http://www.ncdot.gov/doh/operations/division6/

Division Project Manager

Contact the Division Project Manager with questions concerning transportation projects within each Division.

558 Gillespie St. Fayetteville, NC 28301 (910) 437-2611

Division Construction Engineer

Contact the Division Construction Engineer for information concerning major roadway improvements under construction.

558 Gillespie St. Fayetteville, NC 28301 (910) 486-1493

Division Traffic Engineer

Contact the Division Traffic Engineer for information concerning traffic signals, highway signs, pavement markings and crash history.

450 Transportation Drive Fayetteville, NC 28301 (910) 486-1452

Division Operations Engineer

Contact the Division Operations Engineer for information concerning facility operations.

558 Gillespie St. Fayetteville, NC 28301 (910) 437-2611

Division Maintenance Engineer

Contact the Division Maintenance Engineer information regarding maintenance of all state roadways, improvement of secondary roads and other small improvement projects. The Division Maintenance Engineer also oversees the District Offices, the Bridge Maintenance Unit and the Equipment Unit.

558 Gillespie St. Fayetteville, NC 28301 (910) 486-1493

District Engineer

Contact the District Engineer for information on outdoor advertising, junkyard control, driveway permits, road additions, subdivision review and approval, Adopt A Highway program, encroachments on highway right of way, issuance of oversize/overwidth permits, paving priorities, secondary road construction program and road maintenance.

600 Southern Ave Fayetteville, NC 28301 (910) 486-2496

Transportation Planning Branch (TPB)

Contact the Transportation Planning Branch for information on long-range multi-modal planning services.

1554 Mail Service Center Raleigh, NC 27699-1554 (919) 707-0900 http://www.ncdot.gov/doh/preconstruct/tpb/

Strategic Planning Office

Contact the Strategic Planning Office for information concerning prioritization of transportation projects.

1501 Mail Service Center Raleigh, NC 27699-1501 (919) 707-4740

https://apps.dot.state.nc.us/dot/directory/authenticated/UnitPage.aspx?id=11054

Project Development & Environmental Branch (PDEA)

Contact PDEA for information on environmental studies for projects that are included in the TIP.

1548 Mail Service Center Raleigh, NC 27699-1548 (919) 707-6000 http://www.ncdot.gov/doh/preconstruct/pe/

State Road Management

Contact the State Road Management Office for 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 27699-1535 (919) 733-1838

http://www.ncdot.gov/doh/operations/secondaryroads/

Program Development Branch

Contact the Program Development Branch for information concerning Roadway Official Corridor Maps, Feasibility Studies and the Transportation Improvement Program (TIP).

1534 Mail Service Center Raleigh, NC 27699-1534 (919) 707-4610 http://www.ncdot.org/planning/development/

Public Transportation Division

Contact the Public Transportation Division for information public transit systems.

1550 Mail Service Center Raleigh, NC 27699-1550 (919) 733-1391 http://www.ncdot.org/transit/nctransit/

Rail Division

Contact the Rail Division for rail information throughout the state.

1553 Mail Service Center Raleigh, NC 27699-1553 (919) 707-4700 http://www.bytrain.org/

<u>Division of Bicycle and Pedestrian Transportation</u>

Contact this Division for bicycle and pedestrian transportation information throughout the state.

1552 Mail Service Center Raleigh, NC 27699-1552 (919) 707-2600 http://www.ncdot.gov/transit/bicycle/

Bridge Maintenance Unit

Contact the Bridge Maintenance Unit for information on bridge management throughout the state.

1565 Mail Service Center Raleigh, NC 27699-1565 (919) 733-4362

http://www.ncdot.gov/doh/operations/dp_chief_eng/maintenance/bridge/

Division of Highways

The Division of Highways consists of the Roadway Design, Structure Design, Photogrammetry, Location & Surveys, Geotechnical, and Hydraulics Units. Contact the Division of Highways for information regarding design plans and proposals for road and bridge projects throughout the state.

1584 Mail Service Center Raleigh, NC 27699-1584 (919) 733-9428 http://www.ncdot.gov/doh/

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/en/CommunityServices/

Other Contacts

Mid-Carolina Rural Planning Organization (RPO)

Contact the RPO for information on long-range multi-modal planning services.

130 Gillespie St. Fayetteville, NC 28301 (910) 323-4191 Ext. 34 http://www.mccog.org/

Capital Area Metropolitan Planning Organization (MPO)

Contact the MPO for information on long-range multi-modal planning services.

127 West Hargett St. Raleigh, NC 27601 (919) 807-8500 http://www.campo-nc.us/

<u>Fayetteville Area Metropolitan Planning Organization (MPO)</u>

Contact the MPO for information on long-range multi-modal planning services.

130 Gillespie Street Fayetteville, NC 28302 (910) 678-7631 http://www.fampo.org

Appendix B Comprehensive Transportation Plan Definitions

Highway Map

For visual depiction of facility types for the following CTP classification, visit http://www.ncdot.gov/doh/preconstruct/tpb/SHC/facility/.

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 Uturns 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, or system continuity. The improvement to the facility may be widening, other operational strategies, increasing the level of access control along the facility, or a combination of improvements and strategies. "Needs improvement" does not refer to the maintenance needs of existing facilities.
- **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 high speed rail service is provided (there are currently no existing high speed corridor in North Carolina).
 - Recommended Proposed corridor for high speed rail service.
- Rail Stop A railroad station or stop along the railroad tracks.
- Intermodal 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 or a bus station.
- Park and Ride Lot A strategically located parking lot that is free of charge to anyone who parks a vehicle and commutes by transit or in a carpool.
- Existing Grade Separation Locations where existing rail facilities and 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-ofway.
- 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 '(ft)' is the approximate width of the roadway from edge of pavement to edge of pavement. Listed under 'lanes' is the total number of lanes, with the letter 'D' if the facility is divided.
- Existing ROW: The estimated existing right-of-way is based on Roadway Conditions Layer. 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 using NCLOS, as documented in Chapter I.
- Existing and Proposed AADT (Annual Average Daily Traffic) volumes, given in vehicles per day (vpd), are estimates only based on a systems-level analysis. The '2035 AADT E+C' is an estimate of the volume in 2035 with only existing plus committed projects assumed to be in place, where committed is defined as projects programmed for construction in the Transportation Improvement Program (TIP). The '2035 AADT with CTP' (or '2035 AADT with LRTP', in MPO areas) is an estimate of the volume in 2035 with all proposed CTP improvements assumed to be in place. The '2035 AADT 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 I.
- **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 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 Mulitmodal Investment Network (NCMIN). Abbreviations are Sta= statewide tier, Reg= regional tier, Sub= subregional tier.
- 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, and P= pedestrian).

CTP INVENTORY AND RECOMMENDATIONS

					HI	GHW.	AY											
							2007 E	xisting	System	,			Proposed S	ystem	1			
				Dist.	Se	ross- ection	ROW		Existing Capacity	2007	2035 AADT No	2035 AADT with	Proposed Capacity	Cross-	ROW	CTP Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	Build	CTP	(vpd)	Section	(ft)	cation	Tier	Modes
I-4745	I-95	Johnston County line - Exit 77 Parker Road (SR 1709)	Harnett County	1.0	88	4	300	65	51,200	49,000	85,300	85,300	90,700	6A	300	F	Sta	
I-4745	I-95	Exit 77 Parker Road (SR 1709) - Exit 75 Jonesboro Road (SR 1808)	Harnett County	2.0	88	4	300	65	51,200	48,000	83,600	83,600	90,700	6A	300	F	Sta	
I-4745	I-95	Exit 75 Jonesboro Road (SR 1808) - Exit 73 US 421	Dunn	1.9	88	4	300	65	51,200	48,000	83,600	72,000	90,700	6A	300	F	Sta	
I-4745	I-95	Exit 73 US 421 - Exit 72 Pope Road (SR 1793)	Dunn	0.6	88	4	300	65	51,200	48,000	83,600	78,000	90,700	6A	300	F	Sta	
I-4745	I-95	Exit 72 Pope Rd. (SR 1793) - Exit 71 Long Branch Rd. (SR 1002)	Harnett County	1.6	88	4	300	65	51,200	47,000	81,800	79,000	90,700	6A	300	F	Sta	
I-4745	I-95	Exit 71 Long Branch Rd. (SR 1002) - Exit 70 Bud Hawkins Rd. (SR 1811)	Harnett County	1.6	88	4	300	65	51,200	46,000	80,100	80,100	90,700	6A	300	F	Sta	
I-4745	I-95	Exit 70 Bud Hawkins Rd. (SR 1811) - Cumberland County Line	Harnett County	0.5	88	4	300	65	51,200	46,900	81,700	81,700	90,700	6A	300	F	Sta	
	US 301	Cumberland County Line - Longbranch Rd. (SR 1002)	Harnett County	2.1	24	2	60	55	10,600	3,700	4,900	4,900		ADQ		Maj	Reg	
	US 301	Longbranch Rd. (SR 1002) - change to 35mph	Harnett County	1.0	24	2	60	55	10,600	2,700	3,600	3,600		ADQ		Maj	Reg	Р
	US 301	Change to 35mph - add curb and gutter	Dunn	0.4	24	2	60	35	14,400	6,400	8,500	8,500		ADQ		Maj	Reg	Р
	US 301	Add curb and gutter - change to 20mph and on street parking	Dunn	0.7	36	3	100	35	15,400	8,000	10,600	10,600		ADQ		Мај	Reg	Р
	US 301	Change to 20mph and on street parking - E. Harnett St.	Dunn	0.4	40	2	60	20	14,200	5,700	7,500	7,500		ADQ		Maj	Reg	Р
	US 301	E. Harnett St change to 35mph	Dunn	0.2	41	2	60	35	15,200	6,000	7,900	7,900		ADQ		Maj	Reg	Р
	US 301	Change to 35mph - change to 3 lanes	Dunn	0.2	41	2	60	35	15,200	4,900	6,500	6,500		ADQ		Maj	Reg	Р
	US 301	Change to 3 lanes - change to 2 lanes	Dunn	0.4	41	3	100	35	16,200	9,300	12,300	4,000		ADQ		Min	Reg	Р
HARN0060-H	US 301 relocation (new location)	US 301 - Jonesboro Road (SR 1808)	Dunn	0.6								9,400	25,500	4C	110	Maj	Reg	

					НІ	GHW	AY											
							2007 E	xisting	System			2035 F	Proposed S	ystem				
Local ID	Facility	Section (From - To)	Jurisdiction	Dist.	Se	ross- ection lanes	ROW (ft)		Existing Capacity (vpd)	2007 AADT	2035 AADT No Build	2035 AADT with CTP	Proposed Capacity (vpd)	Cross- Section	ROW (ft)	CTP Classifi- cation	Tier	Other Modes
Eodai ib	US 301	Change to 2 lanes - proposed US 421 Bypass	Dunn	0.6	24	2	60	35	15,200	6,500	8,600	6,300		ADQ		Min	Reg	
	US 301	Proposed US 421 Bypass - Johnston County Line	Harnett County	3.4	24	2	60	55	10,600	5,100	6,700	6,700		ADQ		Maj	Reg	
R-2609	US 401	Cumberland County Line - Bunnlevel-Erwin Rd. (SR 1779)	Harnett County	2.9	30	2	60	55	10,600	6,100	8,100	8,100	45,200	4B	150	В	Sta	
R-2609	US 401	Bunnlevel-Erwin Rd. (SR 1779) - change to 45mph	Harnett County	0.5	30	2	60	45	12,600	5,900	7,800	7,800	36,600	4B	150	В	Sta	
R-2609	US 401	Change to 45mph - change to 55mph	Harnett County	0.2	30	2	60	45	12,600	4,800	6,300	6,300	36,600	4B	150	В	Sta	
R-2609	US 401	Change to 55mph - proposed US 401 Bypass	Harnett County	4.8	30	2	60	55	10,600	4,900	6,500	6,500	45,200	4B	150	В	Sta	
R-2609	US 401 Lillington Bypass (new location)	US 401/Stockyard Rd. (SR 2035) - NC 210	Harnett County	1.3								13,000	60,700	4A	300	F	Sta	
R-2609	US 401 Lillington Bypass (new location)	NC 210 - NC 27	Harnett County	0.7								22,000	60,700	4A	300	F	Sta	
R-2609	US 401 Lillington Bypass (new location)	NC 27 - US 421	Harnett County	2.3								25,000	60,700	4A	300	F	Sta	
R-2609	US 401 Lillington Bypass (new location)	US 421 - US 401	Harnett County	2.9								31,000	60,700	4A	300	F	Sta	
R-2609	US 401	Proposed US 401 Bypass - Lafayette Rd. (SR 1443)	Harnett County	3.9	32	2	60	55	10,600	8,700	17,400	17,400	45,200	4B	150	В	Sta	
R-2609	US 401	Lafayette Rd. (SR 1443) - Chalybeate Springs Rd. (SR 1441)	Harnett County	1.4	32	2	60	45	10,600	9,400	18,800	18,800	43,600	4B	150	В	Sta	
R-2609	US 401	Chalybeate Springs Rd. (SR 1441) - Rawls Church Rd. (SR 1415)	Harnett County	1.8	32	2	60	55	10,600	10,200	20,400	20,400	45,200	4B	150	В	Sta	
R-2609	US 401	Rawls Church Rd. (SR 1415) - Rawls Club Rd. (SR 1447)	Harnett County	0.3	44	3	100	55	11,600	9,100	20,800	20,800	45,200	4B	150	В	Sta	
R-2609	US 401 Fuquay- Varina Bypass (new location)	Rawls Club Rd. (SR 1447) - Wake County Line	Harnett County	0.8								15,700	60,700	4A	300	F	Sta	
	US 401	Rawls Club Rd. (SR 1447) - Wake County Line	Harnett County	0.7	32	2	60	55	10,600	8,700	26,100	10,400		ADQ		Maj	Sta	

					НІ	GHW	AY											
							2007 E	xisting	System			2035 F	Proposed S	ystem				
Local ID	Facility	Section (From - To)	Jurisdiction	Dist.		ross- ection lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2007 AADT	2035 AADT No Build	2035 AADT with CTP	Proposed Capacity (vpd)	Cross- Section	ROW (ft)	CTP Classifi- cation	Tier	Other Modes
Local ID	,	Proposed US 401 Bypass8	Julisulction	(1111)			(11)	(IIIPII)	(vpu)	AADI	Dullu		` ' '				1101	
HARN0002-H	US 401	miles south of NC 210 .8 miles south of NC 210 - NC	Lillington	0.6	30	2	60	55	10,600	7,000	12,200	6,100	40,500	4D	110	В	Sta	Р
HARN0002-H	US 401	210	Lillington	0.8	30	2	60	55	10,600	7,600	13,200	6,600	40,500	4D	110	В	Sta	Р
HARN0003-H	US 401	NC 210 - NC 27	Lillington	0.1	48	4	100	35	25,700	15,000		_	28,100	4D	85	В	Sta	P
HARN0003-H	US 401	NC 27 - change to 20mph	Lillington	0.2	48	4	100	35	25,700	17,000	38,900		28,100	4D	110	В	Sta	Р
HARN0003-H	US 401	Change to 20mph - US 421	Lillington	0.2	52	4	100	20	25,100	17,000		24,100	25,400	4D	110	В	Sta	Р
HARN0003-H HARN0003-H	US 401 US 401	US 421 - start of grass median Start of grass median - end of grass median	Lillington Lillington	0.3	48 56	4	300	45 45	25,100 36,600	23,000		46,800	35,100 36,600	4D 4D	110	B B	Sta	
HARN0004-H	US 401	End of grass median - NC 210/US 421/N C27 Intersection	Lillington	0.5	64	5	100	45	36,600	26,000	78,000	46,800	36,600	4D	110	В	Sta	
R-5185	US 401	NC 210/US 421/NC 27 Intersection - change to 55mph	Lillington	0.2	48	4	100	35	25,700	9,200	24,100	12,000	31,600	4D	110	В	Sta	
R-5185	US 401	Change to 55mph - CAMPO Planning Area Boundary	Lillington	1.0	32	2	60	55	10,600	10,000	26,200	13,100	40,500	4D	110	В	Sta	
R-5185	US 401	CAMPO Planning Area Boundary - proposed US 401 Bypass	Harnett County	1.0	32	2	60	55	10,600	8,700	17,400	8,700	40,500	4B	150	В	Sta	
HARN0005-H	US 421	Lee County Line - Seminole Road (SR 1280)	Harnett County	0.7	28	2	60	55	10,600	7,800	10,300	10,300	57,400	4A	180	E	Reg	М
HARN0005-H	US 421	Seminole Road (SR 1280) - Old US 421	Harnett County	1.7	28	2	60	55	10,600	7,000	9,200	9,200	57,400	4A	180	Е	Reg	М
HARN0005-H	US 421	Old US 421 - Cool Springs Rd. (SR 1268)	Harnett County	0.7	28	2	60	55	10,600	6,100	8,100	8,100	57,400	4A	180	Е	Reg	М
HARN0005-H	US 421	Cool Springs Rd. (SR 1268) - Community Rd. (SR 1314)	Harnett County	0.8	28	2	60	55	10,600	5,700	7,500	7,500	57,400	4A	180	Е	Reg	М
HARN0005-H	US 421	Community Rd. (SR 1314) - proposed US 401 Bypass	Harnett County	3.9	28	2	60	55	10,600	6,600	8,700	8,700	57,400	4A	180	Е	Reg	М
HARN0006A-H	US 421	Proposed US 401 Bypass - Lakeside Dr.	Lillington	1.3	28	2	60	55	10,600	6,600	8,700	6,100	57,100	4D	110	Е	Reg	М
HARN0006A-H	US 421	Lakeside Dr Old US 421	Lillington	0.3	28	2	60	35	16,300	8,000	13,900	9,700	31,600	4D	110	В	Reg	
HARN0006B-H	US 421	Old US 421 - US 401	Lillington	0.6	64	4	80	35	25,700	9,300	16,200	12,100	10,700	2G	85	В	Reg	Р
	US 421	US 401 - US 401/NC 210/NC 27							See US	401 for f	urther inf	ormation	ı					
HARN0007-H	US 421	US 401/NC 210/NC 27 - start of grass median	Lillington	0.3	64	5	150	55	40,300	18,000	41,200	28,900	40,500	4D	110	В	Reg	М
HARN0007-H	US 421	Start of grass median - proposed Northern Lillington Connector	Harnett County	2.2	48	4	150	55	39,300	18,000	41,200	28,900	40,500	4D	110	В	Reg	М

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							2007 E	xisting	System			2035 F	Proposed S	ystem				
				Dist.	_	ross- ection	ROW	Speed Limit	Existing Capacity	2007	2035 AADT No	2035 AADT with	Proposed Capacity	Cross-	ROW	CTP Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	Build	CTP	(vpd)	Section	(ft)	cation	Tier	Modes
HARN0008-H	US 421	Proposed Northern Lillington Connector - change to 45mph/start of curb and gutter	Harnett County	0.4	48	4	150	55	39,300	18,000	41,200	41,200	57,400	4A	180	E	Reg	М
HARN0008-H	US 421	Change to 45mph/start of curb and gutter - Harmon Rd. (SR 2068)	Harnett County	0.9	64	5	150	45	50,300	18,000	47,200	47,200	57,400	4A	180	E	Reg	М
HARN0008-H	US 421	Harmon Rd. (SR 2068) - change to 55mph	Harnett County	0.3	64	5	150	45	50,300	12,000	31,400	31,400	57,400	4A	180	Е	Reg	М
HARN0008-H	US 421	Change to 55mph - NC 27/change to 45mph	Harnett County	0.8	64	5	150	55	50,300	12,000	31,400	31,400	57,400	4A	180	Е	Reg	М
HARN0008-H	US 421	NC 27/change to 45mph - change to 55mph	Harnett County	1.1	52	4	150	45	48,000	13,000	29,700	29,700	57,400	4A	180	Е	Reg	М
HARN0008-H	US 421	Change to 55 mph - proposed US 421 Bypass	Harnett County	1.7	52	4	150	55	39,300	12,400	28,400	28,400	57,400	4A	180	E	Reg	М
HARN0010A-H	US 421 Bypass (new location)	Avery Road (SR 2013) - NC 55	Harnett County	1.2								12,000	59,900	4A	300	F	Reg	
HARN0010A-H	US 421 Bypass (new location)	NC 55 - Red Hill Church Road (SR 1703)	Harnett County	1.5								14,000	59,900	4A	301	F	Reg	
HARN0010A-H	US 421 Bypass (new location)	Red Hill Church Road (SR 1703) - proposed Powell Street Extension	Harnett County	1.3								15,000	59,900	4A	302	F	Reg	
HARN0010A-H	US 421 Bypass (new location)	Proposed Powell Street Extension - US 301	Harnett County	1.6								15,000	59,900	4A	303	F	Reg	
HARN0010B-H	US 421 Bypass (new location)	US 301 - Jonesboro Road (SR 1808)	Harnett County	1.2								17,000	57,400	4A	180	Е	Reg	
HARN0008-H	US 421	Proposed US 421 Bypass - change to 45mph @ NC55	Harnett County	1.8	52	4	150	55	39,300	12,400	28,400	16,400	57,400	4A	180	Е	Reg	
HARN0008-H	US 421	Change to 45mph @ NC 55 - Maynard Lake Rd. (SR 1726)	Erwin	0.2	52	4	150	45	48,000	13,000	29,700	22,700	57,400	4A	180	В	Reg	
	US 421	Maynard Lake Rd. (SR 1726) - Red Hill Church Rd. (SR 1703)	Erwin	0.8	52	4	150	45	48,000	14,000	24,400	19,300		ADQ	-	В	Reg	
	US 421	Red Hill Church Rd. (SR 1703) - change to 45mph	Erwin	1.2	52	4	150	45	48,000	21,000	37,500	28,500		ADQ	-	В	Reg	
	US 421	Change to 45mph - Erwin Rd.	Erwin	1.1	52	4	150	45	48,000	22,000		29,200		ADQ	-	В	Reg	Р
HARN0009A-H	US 421	Erwin Rd change to 20mph	Dunn	1.0	48	4	60	35	32,600	23,000	40,000	31,500	31,600	4D	110	В	Reg	Р
HARN0009A-H	US 421	Change to 20mph - change to 35mph	Dunn	0.3	48	4	60	20	31,800	24,000	41,800	32,600	31,600	4D	110	В	Reg	Р
HARN0009A-H	US 421	Change to 35mph - change to 45mph and 3 lanes @ NC 55	Dunn	0.9	48	4	100	35	32,600	20,000	34,800	27,200	31,600	4D	110	В	Reg	Р

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							2007 E	xisting	System			2035 F	Proposed S	ystem				
				Dist.	Se	ross- ection	ROW	Limit	Existing Capacity	2007	2035 AADT No	2035 AADT with	Proposed Capacity	Cross-	ROW			Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	Build	CTP	(vpd)	Section	(ft)	cation	Tier	Modes
HARN0009A-H	US 421	Change to 45mph and 3 lanes @ NC 55 - change to 2 lanes and 55mph	Dunn	0.5	38	3	100	45	12,600	9,200	16,000	16,000	36,600	4D	110	В	Reg	Р
HARN0009B-H	US 421	Change to 2 lanes and 55mph - Sampson County line	Harnett County	1.5	28	2	60	55	10,600	8,400	14,600	14,600	40,500	4B	150	В	Reg	
HARN0010D-H	Powell Street Extension (new location)	US 421 - Ashe Ave (SR 1725)	Dunn	0.4								8,900	11,800	2B	60	Min	Sub	
HARN0010D-H	Powell Street Extension (new location)	Ashe Ave (1725) - proposed US 421 Bypass	Dunn	0.8								8,400	11,800	2B	61	Min	Sub	
HARN0010D-H	Powell Street Extension (new location)	Proposed US 421 Bypass - Fairground Road (SR 1705)	Dunn	0.9								7,200	11,800	2B	62	Min	Sub	
R-2529	NC 24	Moore County Line - Claude White Rd. (SR 1001)	Harnett County	2.5	24	2	60	55	10,600	4,100	12,300	12,300	57,400	4A	180	Е	Sta	
R-2529	NC 24	Claude White Rd. (SR 1001) - NC 27	Harnett County	3.0	24	2	60	55	10,600	6,100	18,300	18,300	57,400	4A	180	Е	Sta	
R-2529	NC 24	NC 27 - Marks Rd. (SR 1111)	Harnett County	1.7	24		60	55	10,600	6,800	-,	20,400	57,400	4A	180	Е	Sta	
R-2529	NC 24	Marks Rd. (SR 1111) - NC 87	Harnett County	1.8	24	2	60	55	10,600	7,800	23,400	23,400	57,400	4A	180	E	Sta	
	NC 24	NC 87 - Cumberland County Line							See NC	87 for f	uther info	rmation						
	NC 27	Moore County Line - NC 27					,		See NC	24 for fu	irther info	ormation	,		,			
HARN0012-H	NC 27	NC 24 - Johnsonville School Rd. (SR 1202)	Harnett County	1.0	26	2	60	55	10,600	5,600	12,800	12,800	45,200	4B	150	В	Reg	
HARN0012-H	NC 27	Johnsville School Rd. (SR 1202) - NC 87	Harnett County	0.9	26	2	60	55	10,600	5,000	11,400	11,400	45,200	4B	150	В	Reg	
HARN0012-H	NC 27	NC 87 - Hoover Rd. (SR 1210)	Harnett County	1.5	26	2	60	55	10,600	4,100	9,400	9,400	45,200	4B	150	В	Reg	
HARN0012-H	NC 27	Hoover Rd. (SR 1210) - Buie Rd. (SR 1213)	Harnett County	4.4	26	2	60	55	10,600	6,000	13,700	13,700	45,200	4B	150	В	Reg	
HARN0012-H	NC 27	Buie Rd. (SR 1213) - Norrington Rd. (SR 1230)	Harnett County	5.4	26	2	60	55	10,600	6,000	13,700	13,700	45,200	4B	150	В	Reg	
HARN0012-H	NC 27	Norrington Rd. (SR 1230) - proposed US 401 Bypass	Harnett County	5.4	26	2	60	55	10,600	5,100	11,700	11,700	45,200	4B	150	В	Reg	
	NC 27	Proposed US 401 Bypass - Shawtown Rd. (SR 1133)	Harnett County	1.6	26	2	60	55	10,600	5,100	11,700	5,900		ADQ	-	Maj	Reg	
	NC 27	Shawtown Rd. (SR 1133) - NC 210	Harnett County	0.4	22	2	60	35	13,900	8,000	20,100	8,900		ADQ	-	Maj	Reg	
	NC 27	NC 210 - NC 210/US 421/NC 27 Intersection							See US	401 for f	urther inf	ormation	1					

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							2007 E	xisting	System			2035 F	Proposed S	ystem				
				Dist.	_	ross- ection	ROW		Existing Capacity	2007	2035 AADT No	2035 AADT with	Proposed Capacity	Cross-	ROW	CTP Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	Build	CTP	(vpd)	Section	(ft)	cation	Tier	Modes
	NC 27	US 401/NC 210/NC 27 intersection - NC 27/US 421							See US	421 for f	urther inf	ormation	1					
HARN0013-H	NC 27	US 421/NC 27 - Old Stage Road (SR 1006)	Harnett County	1.9	22	2	60	55	9,400	1,700	3,900	3,900	45,200	4B	150	В	Reg	В
HARN0013-H	NC 27	Old Stage Road (SR 1006) - change to 45mph	Harnett County	1.9	24	2	60	55	10,600	5,900	13,500	13,500	45,200	4B	150	В	Reg	
HARN0013-H	NC 27	Change to 45mph - change to 35mph	Coats	0.3	24	2	60	45	10,600	6,100		14,000	36,600	4B	150	В	Reg	
HARN0013-H	NC 27	Change to 35mph - NC 55	Coats	0.2	24	2	60	35	15,100	6,200		14,200	28,100	4B	150	В	Reg	
HARN0013-H	NC 27	NC 55 - change to 45mph	Coats	0.3	24	2	60	35	15,100	8,500	19,400		28,100	4B	150	В	Reg	
HARN0013-H	NC 27	Change to 45mph - change to	Coats	0.4	24	2	60	45	11,600	5,600	12,800	12,800	36,600	4B	150	В	Reg	
HARN0013-H	NC 27	Change to 55mph - Red Hill Church Rd. (SR 1703)	Harnett County	3.6	24	2	60	55	10,600	5,600	12,800	12,800	45,200	4B	150	В	Reg	
HARN0013-H	NC 27	Red Hill Church Rd. (SR 1703) - Johnston County Line	Harnett County	1.6	24	2	60	55	10,600	6,500	14,900	14,900	45,200	4B	150	В	Reg	
	NC 42	Lee County Line - Fletcher Tutor Road (SR 1406)	Harnett County	4.9	24	2	60	55	10,600	1,700	5,100	5,100		ADQ	-	Maj	Reg	
	NC 42	Fletcher Tutor Road (SR 1406) - Oak Ridge Duncan Road (SR 1409)	Harnett County	0.6	24	2	60	35	10,600	4,800	9,600	9,600		ADQ	-	Maj	Reg	
	NC 42	Oak Ridge Duncan Road (SR 1409) - Wake County Line	Harnett County	0.8	24	2	60	45	10,600	3,300	5,000	5,000		ADQ	-	Maj	Reg	
R-2540	NC 55	Wake County line - start of curb and gutter	Harnett County	0.9	38	3	100	35	17,300	17,000	25,800	12,900	31,600	4B	150	В	Reg	Т
R-2540	NC 55	Start of curb and gutter - end of curb and gutter/change to 2 lanes	Angier	0.5	36	3	100	35	17,300	19,000	37,900	19,000	28,100	4B	150	В	Reg	Т
R-2540	NC 55	End of curb and gutter/change to 2 lanes - NC 210	Angier	0.2	26	2	60	35	16,300	19,000	37,900	19,000	28,100	4B	150	В	Reg	Т
R-2540	NC 55	NC 210 - change to 55mph	Angier	0.2	26	2	60	35	10,600	14,000	24,400	12,200	28,100	4C	110	В	Reg	BPT
R-2540	NC 55	Change to 55mph - change to 35mph/Coats city limits	Harnett County	4.4	24	2	60	55	10,600	7,800	11,800	5,900	40,500	4B	150	В	Reg	MB
R-2540	NC 55	Change to 35mph/Coats city limits - NC 27	Coats	0.2	38	3	100	35	17,300	7,500		11,400	31,600	4C	110	В	Reg	М
R-2540	NC 55	NC 27 - change to 20mph	Coats	0.2	36	3	100	35	17,300	10,000	15,200	15,200	28,100	4C	110	В	Reg	М
R-2540	NC 55	Change to 20mph - change to 35mph	Coats	0.2	36	3	100	20	15,900	9,200	12,200	12,200	28,100	4C	110	В	Reg	М
R-2540	NC 55	Change to 35mph - Crawford Rd. (SR 2006)	Coats	0.4	36	3	100	35	17,300	6,500	8,600	8,600	31,600	4C	110	В	Reg	М

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							2007 E	xisting	System			2035 F	Proposed S	ystem				
Local ID	Facility	Section (From - To)	Jurisdiction	Dist.	Se	ross- ection lanes	ROW (ft)	Limit	Existing Capacity	2007 AADT	2035 AADT No Build	2035 AADT with CTP	Proposed Capacity (vpd)	Cross- Section	ROW (ft)	CTP Classifi- cation	Tier	Other Modes
	'	Crawford Rd. (SR 2006) -		,				(mph)	(vpd)				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \					
R-2540	NC 55	change to 45mph	Harnett County	4.4	24	2	60	55	10,600	6,000	9,100	9,100	40,500	4B	150	В	Reg	M
R-2540	NC 55	Change to 45mph - US 421	Erwin	0.4	24	2	60	45	12,600	5,300	8,000	6,000	36,600	4B	150	В	Reg	М
	NC 55	Change to 45mph @ NC 55 - change to 45mph and 3 lanes @ NC 55							See US	421 for f	urther inf	ormation	1					
	NC 55	US 421 - Sampson County Line	Harnett County	1.4	26	2	60	55	10,600	5,400	7,100	7,100		ADQ	-	Maj	Reg	
	NC 82	US 421 - change to 35mph @ NC 82							See NC	217 for f	urther inf	ormation	1					
	NC 82	NC 217 - change to 45mph	Erwin	0.5	22	2	60	35	15,900	3,300	5,700	5,700		ADQ	-	Maj	Reg	В
	NC 82	Change to 45mph - Dorman Rd. (SR 1777)	Harnett County	1.5	22	2	60	45	10,600	6,200	8,200	8,200		ADQ	-	Maj	Reg	В
	NC 82	Dorman Rd. (SR 1777) - Arrowhead Rd. (SR 1780)	Harnett County	1.5	22	2	60	55	10,600	810	1,100	1,100		ADQ	-	Maj	Reg	В
	NC 82	Arrowhead Rd. (SR 1780) - Cumberland County Line	Harnett County	2.5	22	2	60	55	10,600	560	700	700		ADQ	-	Maj	Reg	В
HARN0015-H	NC 87	Lee County Line - Broadway Rd. (SR 1222)	Harnett County	0.1	68	5	150	55	38,200	18,000	41,200	41,200	57,400	4A	180	E	Sta	Т
HARN0015-H	NC 87	Broadway Rd. (SR 1222) - Olivia Rd. (SR 1205)	Harnett County	1.5	68	5	150	55	38,200	16,000	36,600	36,600	57,400	4A	180	Е	Sta	Т
HARN0015-H	NC 87	Olivia Rd. (SR 1205) - divided highway start	Harnett County	1.2	68	5	150	55	38,200	15,000	34,300	34,300	57,400	4A	180	Е	Sta	TM
HARN0015-H	NC 87	Divided highway start - NC 27	Harnett County	2.7	56	4	150	55	39,300	15,000	34,300	34,300	57,400	4A	180	Е	Sta	TM
HARN0015-H	NC 87	NC 27 - Buffalo Lake Rd. (SR 1115)	Harnett County	2.5	56	4	150	55	39,300	13,000	29,700	29,700	57,400	4A	180	E	Sta	TM
HARN0015-H	NC 87	Buffalo Lake Road (SR 1115) - NC 24	Harnett County	0.7	56	4	150	55	39,300	20,000	45,800	45,800	57,400	4A	180	Е	Sta	TM
HARN0015-H	NC 87	NC 24 - FAMPO Planning Area Boundary	Harnett County	2.2	56	4	150	55	39,300	23,000	52,600	52,600	57,400	4A	180	Е	Sta	TM
HARN0015-H	NC 87	FAMPO Planning Area Boundary - Nursery Rd. (SR 1117)	Harnett County	1.4	56	4	150	55	39,300	23,100	52,900	52,900	57,400	4A	180	Е	Sta	TM
HARN0015-H	NC 87	Nursery Rd. (SR 1117) - Cumberland County Line	Harnett County	1.7	56	4	150	55	39,300	25,000	57,200	57,200	57,400	4A	180	E	Sta	TM
HARN0018-H	NC 210	Old Stage Rd. (SR 1006) - City limits of Angier/change to 35mph	Harnett County	2.3	24	2	60	55	10,600	5,400	14,100	12,000	20,200	21	90	В	Reg	Р
HARN0018-H	NC 210	City limits of Angier/change to 35 mph - change to 20mph	Angier	0.5	24	2	60	35	13,900	7,400	12,900	9,000	14,000	21	90	В	Reg	Р

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							2007 E	xisting	System			2035 F	Proposed S	ystem				
				Dist.	Se	ross- ection	ROW	Limit	Existing Capacity	2007	2035 AADT No	2035 AADT with	Proposed Capacity	Cross-	ROW	CTP Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)		lanes		(mph)	(vpd)	AADT	Build	CTP	(vpd)	Section	(ft)	cation	Tier	Modes
HARN0018-H	NC 210	Change to 20mph - NC 55	Angier	0.2	46	2	60	20	13,100	9,300	16,200		12,500	21	90	В	Reg	P
HARN0018-H	NC 210	NC 55 - change to 55mph	Angier	0.4	26	2	60	35	13,900	10,700	21,400	13,800	14,000	21	90	В	Reg	Р
HARN0018-H	NC 210	Change to 55mph - propose Angier Southern Bypass	Harnett County	1.6	26	2	60	55	13,900	10,700	21,400	15,000	20,200	21	90	В	Reg	Р
HARN0017-H	NC 210	Proposed Southern Angier Bypass - change to 3 lanes	Harnett County	0.6	26	2	60	55	10,600	12,000	24,000	24,000	45,200	4B	150	В	Reg	
HARN0017-H	NC 210	Change to 3 lanes - Neill's Creek Road (SR 1513)	Harnett County	0.8	38	3	100	55	11,600	9,900	19,800	19,800	45,200	4B	150	В	Reg	
HARN0017-H	NC 210	Neill's Creek Road (SR 1513) - CAMPO Planning Area Boundary	Harnett County	1.1	26	2	60	55	10,600	7,800	15,600	15,600	45,200	4B	150	В	Reg	
HARN0017-H	NC 210	CAMPO Planning Area Boundary - proposed Northern Lillington Connector	Harnett County	1.4	26	2	60	55	10,600	9,400	21,500	21,500	45,200	4B	150	В	Reg	
HARN0017-H	NC 210	Proposed Northern Lillington Connector - change to 35mph and 4 lanes	Harnett County	1.5	26	2	60	55	10,600	9,400	21,500	11,000	45,200	4B	150	В	Reg	
HARN0017-H	NC 210	Change to 35mph and 4 lanes - US 401 north of Lillington	Lillington	0.2	48	4	120	35	32,600	11,000	25,200	12,900	31,600	4B	150	В	Reg	
HARN0016-H	NC 210	US 401 south of Lillington - change to 55mph and 2 lanes	Lillington	0.3	36	3	100	35	17,300	7,900	13,800	6,900	31,600	4B	150	В	Reg	
HARN0016-H	NC 210	Change to 55mph and 2 lanes - proposed US 401 Bypass	Lillington	1.1	26	2	60	35	17,300	7,900	13,800	6,900	31,600	4B	150	В	Reg	
HARN0016-H	NC 210	Proposed US 401 Bypass - Darroch Rd. (SR 1128)	Harnett County	6.3	26	2	60	55	10,600	7,400	12,900	12,900	45,200	4B	150	В	Reg	
HARN0016-H	NC 210	Darroch Rd. (SR 1128) - FAMPO Planning Area Boundary	Harnett County	0.8	26	2	60	55	10,600	6,900	12,000	12,000	45,200	4B	150	В	Reg	
HARN0016-H	NC 210	FAMPO Planning Area Boundary - Anderson Creek School Road (SR 2064)	Harnett County	1.3	26	2	60	55	10,600	7,700	13,400	13,400	45,200	4B	150	В	Reg	
HARN0016-H	NC 210	Anderson Creek School Road (SR 2064) - Bill Shaw Road (SR 1144)	Harnett County	3.2	26	2	60	55	10,600	7,900	18,100	18,100	45,200	4B	150	В	Reg	
HARN0016-H	NC 210	Bill Shaw Road (SR 1144) - change to 3 lanes	Harnett County	1.4	26	2	60	55	10,600	8,300	19,000	19,000	45,200	4B	150	В	Reg	
HARN0016-H	NC 210	Change to 3 lanes - change to 45 mph	Harnett County	0.6	38	3	100	55	11,600	10,100	23,100	23,100	45,200	4B	150	В	Reg	
HARN0016-H	NC 210	Change to 45mph - Ray Rd. (SR 1121)	Harnett County	0.8	38	3	100	45	12,600	12,000	27,500	27,500	43,600	4B	150	В	Reg	

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								xisting	System			2035 F	roposed S	ystem				
				Dist.	_	oss- ction	ROW	Speed	Existing Capacity	2007	2035 AADT No	2035 AADT with	Proposed Capacity	Cross-	ROW	CTP Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	Build	CTP	(vpd)	Section	(ft)	cation	Tier	Modes
HARN0016-H	NC 210	Ray Rd. (SR 1121) - Cumberland County Line	Harnett County	0.4	60	5	100	45	48,000	12,000	27,500	27,500	43,600	4B	150	В	Reg	
	NC 217	Cumberland County Line - Titan-Roberts Rd. (SR 2021)	Harnett County	2.9	26	2	60	55	10,600	1,700	2,200	2,200		ADQ	•	Мај	Reg	
	NC 217	Titan-Roberts Road (SR 2021) - Bunnlevel-Erwin Rd./change to 45mph	Harnett County	1.6	26	2	60	55	10,600	5,100	6,700	6,700	1	ADQ	ı	Maj	Reg	1
	NC 217	Bunnlevel-Erwin Rd./change to 45mph - NC 82/change to 35mph	Erwin	0.9	26	2	60	45	10,600	7,300	9,600	9,600		ADQ	-	Мај	Reg	М
HARN0014-H	NC 217	NC 82/change to 35mph - change to 4 lanes/change to 20mph	Erwin	0.2	26	2	60	35	15,900	10,000	13,200	13,200	28,100	4D	110	В	Reg	В
HARN0014-H	NC 217	Change to 4 lanes/change to 20mph - Denim Dr.	Erwin	0.4	44	4	60	20	31,800	7,300	9,600	9,600	25,400	4D	110	В	Reg	В
HARN0014-H	NC 217	Denim Dr change to 45mph	Erwin	0.3	40	3	100	35	16,900	8,200		10,800	28,100	4D	110	В	Reg	В
HARN0014-H	NC 217	Change to 45mph - US 421	Erwin	0.4	40	3	100	45	11,600	5,900	7,800	7,800	35,100	4D	110	В	Reg	В
HARN0001-H	Northern Lillington Connector	Proposed US 401 Bypass - NC 210	Harnett County	1.8								25,000	65,400	4A	300	F	Reg	
HARN0001-H	Northern Lillington Connector	NC 210 - US 421	Harnett County	3.2								25,000	65,400	4A	300	F	Reg	
HARN0019A-H	Southern Angier Bypass (new location)	NC 210 to Matthew Mills Pond Road (SR 1510), Old Buies Creek Road (SR 1542) to Ennis Road, NC 55 to Old Stage Road (SR 1006)	Harnett County	2.0								10,000	14,600	2A	60	Min	Sub	
HARN0019B-H	Southern Angier Bypass existing road improvements	Along Gardner Road (SR 1509) from Matthew Mills Pond Road (SR 1510) to Old Buies Creek Road (SR 1542), along Ennis Road to NC 55	Harnett County	2.0								10,000	14,600	2A	60	Min	Sub	
HARN0019C-H	Eastern Angier Bypass (new location)	Benson Road (SR 1500) to NC 210; Lipscomb Road (SR 1504) to Wimberly Street (SR 1502)	Angier	0.8		1			1		-	13,000	45,200	4B	150	В	Sub	

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						:	2007 E	xisting	System			2035 F	Proposed S	ystem				
Local ID	Facility	Section (From - To)	Jurisdiction	Dist.	Se	ross- ection lanes	ROW (ft)	•	Existing Capacity (vpd)	2007 AADT	2035 AADT No Build	2035 AADT with CTP	Proposed Capacity (vpd)	Cross- Section	ROW (ft)	CTP Classifi- cation	Tier	Other Modes
	Eastern Angier Bypass (existing) improvements	Along Guy Road (SR 1544) from NC 55 to Benson Road (SR 1500); Along Lipscomb Road (SR 1504) from Wimberly Street (SR 1502) to NC 210; Along O'Stephenson Road (SR 1503) from Wimberly Street (SR 1502) to Wake County line	Angier	3.2								15,000	45,200	4B	150	В	Sub	
HARN0020-H	Dunn-Erwin Southern Truck Connection	US 421 to US 301; on new location and existing portions of St. Matthews Road, Wilson Stree, Old Hamilton Road and Arrowhead Road	Dunn/Erwin	3.0								11,200	29,100	5A	100	Maj	Sub	
	Claude White Rd. (SR 1001)	Lee County Line - NC 24	Harnett County	1.6	22	2	60	55	10,600	1,600	2,800	2,800		ADQ	-	Maj	Sub	
HARN0021-H	Longbranch Rd. (SR 1002)	US 301 - I-95	Harnett County	1.2	22	2	60	55	10,600	6,200	14,200	16,000	29,100	5A	100	Maj	Sub	
	Longbranch Rd. (SR 1002)	I-95 - Pope Rd. (SR 1793)	Harnett County	0.7	22	2	60	55	10,600	2,600	5,900	5,900		ADQ	-	Maj	Sub	
HARN0022-H	North Old Stage Rd. (SR 1006)	NC 210 - Benson Rd. (SR 1500)	Harnett County	1.7	20	2	60	55	9,800	2,900	5,800	5,800	15,100	2A	60	Min	Sub	
HARN0022-H	North Old Stage Rd. (SR 1006)	Benson Rd. (SR 1500) - Langdon Rd. (SR 1532)	Harnett County	1.8	20	2	60	55	9,800	2,000	2,600	2,600	15,100	2A	60	Min	Sub	
HARN0022-H	North Old Stage Rd. (SR 1006)	Langdon Rd. (SR 1532) - NC 55	Harnett County	0.8	20	2	60	55	9,800	1,700	3,000	3,000	15,100	2A	60	Min	Sub	
HARN0022-H	North Old Stage Rd. (SR 1006)	NC 55 - NC 27	Harnett County	3.4	20	2	60	55	9,800	1,700	3,000	3,000	15,100	2A	60	Min	Sub	
HARN0023-H	Hillmon Grove Rd. (SR 1106)	Moore County Line - Flynn- McPherson Road (SR 1109)	Harnett County	2.1	18	2	60	55	8,400	950	1,700	1,700	15,100	2A	60	Min	Sub	
HARN0024-H	Cameron Hill Rd. (SR 1108)	Hillmon Grove Rd. (SR 1106) - NC 24	Harnett County	3.6	20	2	60	55	9,800	1,200	2,700	2,700	15,100	2A	60	Min	Sub	
HARN0025-H	Buffalo Lake Rd. (SR 1115)	NC 87 - NC 27	Harnett County	4.5	26	2	60	55	10,600	9,300	27,900	27,900	45,200	4B	150	В	Sub	Р
HARN0026-H	Doc's Rd. (SR 1116)	NC 27 - FAMPO Planning Area Boundary	Harnett County	1.5	22	2	60	55	10,600	1,600	2,100	2,100	15,100	2A	60	Min	Sub	
HARN0026-H	Doc's Rd. (SR 1116)	FAMPO Planning Area Boundary - Nursery Rd. (SR 1117)	Harnett County	1.7	22	2	60	55	10,600	2,900	8,700	8,700	15,100	2A	60	Min	Sub	

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Lasal ID	F:::	Continu (France To)	li mia diata a	Dist.	Se	ross- ection	ROW	Limit	Existing Capacity	2007	2035 AADT No	2035 AADT with	Proposed Capacity	Cross-	ROW	CTP Classifi-	Т:	Other
Local ID	Facility Nursery Rd. (SR	Section (From - To) NC 27 - FAMPO Planning Area	Jurisdiction	(mi)	(π)	lanes	(ft)	(mph)	(vpd)	AADT	Build	CTP	(vpd)	Section	(ft)	cation	Tier	Modes
HARN0027-H	1117)	Boundary	Harnett County	2.2	26	2	60	55	10,600	1,800	5,400	5,400	45,200	4B	150	В	Sub	Р
HARN0027-H	Nursery Rd. (SR 1117)	FAMPO Planning Area Boundary - Doc's Rd. (SR 1116)	Harnett County	1.2	26	2	60	55	10,600	1,400	4,200	4,200	45,200	4B	150	В	Sub	Р
HARN0027-H	Nursery Rd. (SR 1117)	Doc's Rd. (SR 1116) - Taylor Rd. (SR 1146)	Harnett County	1.3	26	2	60	55	10,600	2,100	6,300	6,300	45,200	4B	150	В	Sub	Р
HARN0027-H	Nursery Rd. (SR 1117)	Taylor Rd. (SR 1146) - Overhills Rd. (SR 1120)	Harnett County	1.7	26	2	60	55	10,600	2,300	6,900	6,900	45,200	4B	150	В	Sub	Р
HARN0027-H	Nursery Rd. (SR 1117)	Overhills Rd. (SR 1120) - Wilson Rd.	Harnett County	1.3	26	2	60	55	10,600	4,900	14,700	14,700	45,200	4B	150	В	Sub	Р
HARN0027-H	Nursery Rd. (SR 1117)	Wilson Rd NC 24/87	Harnett County	1.2	26	2	60	55	10,600	4,200	12,600	12,600	45,200	4B	150	В	Sub	Р
HARN0028-H	Overhills Rd. (SR 1120)	Nursery Rd. (SR 1117) - change to 45mph	Harnett County	0.7	26	2	60	55	10,600	3,100	9,300	9,300	45,200	4B	150	В	Sub	Р
HARN0028-H	Overhills Rd. (SR 1120)	change to 45mph - Ray Rd. (SR 1121)	Harnett County	0.6	26	2	60	45	8,700	3,300	9,900	9,900	43,600	4B	150	В	Sub	Р
HARN0028-H	Overhills Rd. (SR 1120)	Ray Rd. (SR 1121) - change to 55mph	Harnett County	0.4	26	2	60	45	8,700	6,000	18,000	18,000	43,600	4B	150	В	Sub	Р
HARN0028-H	Overhills Rd. (SR 1120)	Change to 55mph - Bill Shaw Rd. (SR 1144)	Harnett County	2.7	26	2	60	55	10,600	4,200	12,600	12,600	45,200	4B	150	В	Sub	Р
HARN0028-H	Overhills Rd. (SR 1120)	Bill Shaw Rd. (SR 1144) - Anderson Creek School Rd. (SR 2064)	Harnett County	1.1	22	2	60	55	10,600	2,400	7,200	7,200	45,200	4B	150	В	Sub	Р
HARN0029-H	Overhills Rd. (SR 1120)	Anderson Creek School Rd. (SR 2064) - NC 210	Harnett County	0.1	20	2	60	55	9,800	1,800	5,400	5,400	22,600	2A	60	В	Sub	Р
HARN0029-H	Overhills Rd. (SR 1120)	NC 210 - Elliot Bridge Rd. (SR 2045)	Harnett County	3.1	20	2	60	55	9,800	1,100	3,300	3,300	22,600	2A	60	В	Sub	Р
U-3465	Ray Rd. (SR 1121)	NC 210 - Rambeaut Rd. (SR 1124)	Harnett County	0.3	40	3	100	45	13,600	9,500	28,500	28,500	43,600	4C	110	В	Sub	Р
U-3465	Ray Rd. (SR 1121)	Rambeaut Rd. (SR 1124) - change to 55mph	Harnett County	0.5	28	2	60	45	12,600	9,500	28,500	28,500	43,600	4C	110	В	Sub	Р
U-3465	Ray Rd. (SR 1121)	Change to 55mph - change to 45mph	Harnett County	0.8	24	2	60	55	10,600	9,000	27,000	27,000	45,200	4C	110	В	Sub	Р
U-3465	Ray Rd. (SR 1121)	Change to 45mph - Overhills Rd. (SR 1120)	Harnett County	1.9	28	2	60	45	12,600	8,300	24,900	24,900	43,600	4C	110	В	Sub	Р
HARN0030-H	Ray Rd. (SR 1121)	Overhills Rd. (SR 1120) - change to 55mph	Harnett County	0.3	28	2	60	45	12,600	4,100	12,300	12,300	43,600	4B	150	В	Sub	Р
HARN0030-H	Ray Rd. (SR 1121)	Change to 55mph - Nursery Rd. (SR 1117)	Harnett County	1.8	28	2	60	55	10,600	3,300	9,900	9,900	45,200	4B	150	В	Sub	Р

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							2007 E	xisting	System				Proposed S	ystem				
Local ID	Facility	Section (From - To)	Jurisdiction	Dist.	Se	ross- ection lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2007 AADT	2035 AADT No Build	2035 AADT with CTP	Proposed Capacity (vpd)	Cross- Section	ROW (ft)	CTP Classifi- cation	Tier	Other Modes
HARN0031-H	Lemuel Black Rd. (SR 1125)	Anderson Creek Rd. (SR 2064) - Nursery Rd. (SR 1117)	Harnett County	4.4	22		60	55	9,800	1,000	2,300	1,125	15,100	2A	60	Min	Sub	
	Powell Farm Rd. (SR 1126)	Lemuel Black Rd. (SR 1125) - FAMPO Planning Area Boundary	Harnett County	0.9	20	2	60	55	9,800	200	300	300		ADQ	-	Min	Sub	
	Powell Farm Rd. (SR 1126)	FAMPO Planning Area Boundary - Darroch Rd. (SR 1128)	Harnett County	1.8	20	2	60	55	9,800	180	200	200		ADQ	-	Min	Sub	
	Darroch Rd. (SR 1128)	NC 210 - Nursery Rd. (SR 1117)	Harnett County	5.0	22	2	60	55	10,600	1,500	2,000	2,000		ADQ	-	Min	Sub	
	Norrington Rd. (SR 1130)	NC 27 - Clark Rd. (SR 1129)	Harnett County	1.2	20	2	60	55	9,800	650	1,100	1,100		ADQ	-	Min	Sub	
	1130)	Clark Rd. (SR 1129) - Darroch Rd. (SR 1128)	Harnett County	2.0	20	2	60	55	9,800	800	1,400	1,400		ADQ	-	Min	Sub	
	Shawtown Rd. (SR 1133)	NC 210 - change to 35mph	Harnett County	0.4	20	2	60	55	9,800	1,700	2,200	2,200		ADQ	-	Min	Sub	
	1133)	Change to 35mph - change to 55mph	Harnett County	0.7	20	2	60	35	9,800	1,700	2,200	2,200		ADQ	-	Min	Sub	
	1133)	Change to 55mph - W. Old Rd. (NC 27)	Harnett County	0.5	20	2	60	55	9,800	1,700	2,200	2,200		ADQ	-	Min	Sub	
HARN0032-H	Tingen Rd. (SR 1139)	NC 27 - DL Phillips Lane (SR 2138)	Harnett County	2.9	20	2	60	55	9,800	1,700	2,200	2,200	16,500	3B	80	Min	Sub	Р
HARN0033-H	Microtower Rd. (SR 1141)	Buffalo Lake Road (SR 1115) - Doc's Road (SR 1116)	Harnett County	2.8	20	2	60	55	9,800	2,100	4,200	4,200	16,000	3A	80	Min	Sub	
HARN0034-H	Bill Shaw Rd. (SR 1144)	NC 210 - Overhills Rd. (SR 1120)	Harnett County	0.5	20	2	60	55	9,800	1,200	2,700	2,700	15,100	2A	60	Min	Sub	
HARN0035-H	Barbecue Church Rd. (SR 1209)	NC 27 - McCormick Rd. (SR 1217)	Harnett County	1.2	22	2	60	55	10,600	3,300	7,600	7,600	15,100	2A	60	Min	Sub	
HARN0035-H	Barbecue Church Rd. (SR 1209)	McCormick Rd. (SR 1217) - Big Branch Rd. (SR 1218)	Harnett County	2.1	22	2	60	55	10,600	3,300	7,600	7,600	15,100	2A	60	Min	Sub	
HARN0035-H	Barbecue Church Rd. (SR 1209)	Big Branch Rd. (SR 1218) - Broadway Rd. (SR 1222)	Harnett County	2.0	22	2	60	55	10,600	3,200	7,300	7,300	15,100	2A	60	Min	Sub	
	Buie Rd. (SR 1213)	McDougald Rd. (SR 1229) - NC 27	Harnett County	1.9	18	2	60	55	8,400	1,000	1,700	1,700		ADQ		Min	Sub	
HARN0036-H	Mt. Pisgah Church Rd. (SR 1214)	McDougald Rd. (SR 1229) - McArthur Rd. (SR 1280)	Harnett County	2.1	18	2	60	55	8,400	1,200	1,600	1,600	15,100	2A	60	Min	Sub	

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								xisting	System			2035 F	Proposed S	ystem				
				Dist.	Se	ross- ection	ROW	Limit	Existing Capacity	2007	2035 AADT No	2035 AADT with	Proposed Capacity	Cross-	ROW	CTP Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	Build	CTP	(vpd)	Section	(ft)	cation	Tier	Modes
HARN0037-H	McDougald Rd. (SR 1229)	Old US 421 - Tim Currin Rd. (SR 1250)	Harnett County	4.5	20	2	60	55	9,800	900	1,600	1,600	15,100	2A	60	Min	Sub	
HARN0037-H	McDougald Rd. (SR 1229)	Tim Currin Rd. (SR 1250) - Spring Hill Church Rd. (SR 1238)	Harnett County	1.7	20	2	60	55	9,800	720	1,300	1,300	15,100	2A	60	Min	Sub	
HARN0037-H	McDougald Rd. (SR 1229)	Spring Hill Church Rd. (SR 1238) - Buie Rd. (SR 1213)	Harnett County	4.2	20	2	60	55	9,800	600	1,000	1,000	15,100	2A	60	Min	Sub	
HARN0037-H	McDougald Rd. (SR 1229)	Buie Rd. (SR 1213) - Broadway Rd. (SR 1222)	Harnett County	5.8	20	2	60	55	9,800	1,100	1,900	1,900	15,100	2A	60	Min	Sub	
	Spring Hill Church Rd. (SR 1238)	Old US 421 - McDougald Rd. (SR 1229)	Harnett County	2.6	22	2	60	55	10,600	840	1,100	1,100		ADQ	-	Min	Sub	
	Spring Hill Church Rd. (SR 1238)	McDougald Rd. (SR 1229) - Falcon Rd. (SR 1239)	Harnett County	0.8	22	2	60	55	10,600	1,100	1,500	1,500		ADQ	-	Min	Sub	
	Spring Hill Church Rd. (SR 1238)	Falcon Rd. (SR 1239) - NC 27	Harnett County	2.3	22	2	60	55	10,600	1,200	1,600	1,600		ADQ	-	Min	Sub	
	McArthur Rd. (SR 1280)	Lee County line - US 421	Harnett County	0.9	22	2	60	55	10,600	1,200	1,600	1,600		ADQ	-	Min	Sub	
HARN0038-H	McArthur Rd. (SR 1280)	US 421 - Mt. Pisgah Church Rd. (SR 1214)	Harnett County	2.8	18	2	60	55	8,400	1,200	1,600	1,600	15,100	2A	60	Min	Sub	
HARN0039-H	Old US421 (SR 1291)	US 421 - US 421	Harnett County	11.5	20	2	60	55	9,800	3,400	7,800	7,800	15,100	2A	60	Min	Reg	
	Christian Light Rd. (SR 1412)	Harnett County line - US 401	Harnett County	9.5	22	2	60	55	10,600	2,500	5,000	5,000		ADQ	-	Min	Sub	
HARN0040-H	Rawls Church Rd. (SR 1415)	Christian Light Rd. (SR 1412) - US 401	Harnett County	2.5	22	2	60	55	10,600	1,200	3,600	3,600	15,100	2A	60	Min	Sub	
HARN0040-H	Rawls Church Rd. (SR 1415)	US 401 - Purfoy Rd. (SR 1446)	Harnett County	2.0	20	2	60	55	9,800	1,800	5,400	5,400	15,100	2A	60	Min	Sub	
HARN0040-H	Rawls Church Rd. (SR 1415)	Purfoy Rd. (SR 1446) - Angier City limits	Harnett County	3.0	20	2	60	55	9,800	2,700	7,100	7,100	15,100	2A	60	Min	Sub	
HARN0040-H	Rawls Church Rd. (SR 1415)	Angier City Limits - NC 55	Harnett County	0.3	20	2	60	55	9,800	2,300	5,300	5,300	15,100	2A	60	Min	Sub	
HARN0041-H	Chalybeate Springs Rd. (SR 1441)	NC 55 - change to 55mph	Harnett County	0.3	24	2	60	35	16,300	2,100	3,700	3,700	12,300	ЗА	80	Min	Sub	В
HARN0041-H	Chalybeate Springs Rd. (SR 1441)	Change to 55mph - US 401	Harnett County	3.9	24	2	60	55	10,600	1,400	3,200	3,200	15,900	ЗА	80	Min	Sub	В

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								xisting	System			2035 F	Proposed S	ystem				
Local ID	Facility	Section (From - To)	Jurisdiction	Dist.	Se	ross- ection lanes	ROW (ft)		Existing Capacity (vpd)	2007 AADT	2035 AADT No Build	2035 AADT with CTP	Proposed Capacity (vpd)	Cross- Section	ROW (ft)	CTP Classifi-	Tier	Other Modes
Local ID	Benson Rd. (SR	,	Julisalction	,			` '		` ' '				(vpu)		(11)	cation		
	1500)	NC 55 - change to 55mph	Angier	0.7	26	2	60	35	16,300	3,200	5,600	5,600		ADQ	-	Min	Sub	
	Benson Rd. (SR 1500)	Change to 55mph - County line Rd. (SR 1551)	Harnett County	5.3	24	2	60	55	10,600	2,100	4,200	4,200		ADQ	-	Min	Sub	
HARN0019D-H	O'Stephenson Rd. (SR 1503)	Wimberly Street (SR 1502) - Wake County Line	Harnett County	0.2	20	2	60	55	9,800	800	1,600	13,000	45,200	4B	150			
HARN0019D-H	Lipscomb Rd. (SR 1504)	NC 210 - Wimberly St. (SR 1502)	Harnett County	1.2	20	2	60	55	9,800	800	1,600	13,000	45,200	4B	150	Min	Sub	
	Piney Grove Rd. (SR 1505)	Old Stage Rd. (SR 1006) - Johnston County Rd. (SR 1551)	Harnett County	1.8	20	2	60	55	9,800	1,800	4,100	4,100		ADQ	-	Min	Sub	
HARN0042-H	Matthews Mill Pond Rd. (SR 1510)	Old Buies Creek Rd. (SR 1542) - Harnett Central Rd. (SR 2215)	Harnett County	0.7	20	2	60	55	9,800	2,200	5,800	5,800	15,100	2A	60	Min	Sub	
HARN0043-H	Main St. (SR 1532)	Leslie Campbell Ave. (SR 2084) - change to 35mph	Harnett County	0.4	32	2	60	20	13,100	6,400	8,500	8,500	10,000	2A	60	Min	Sub	В
HARN0043-H	Main St. (SR 1532)	Change to 35mph - change to 55mph	Harnett County	0.6	18	2	60	35	9,400	2,100	2,800	2,800	10,200	2A	60	Min	Sub	В
HARN0043-H	Oak Grove Church Rd. (SR 1532)	Change to 55mph - CAMPO Planning Area Boundary	Harnett County	3.5	20	2	60	55	9,800	1,600	2,100	2,100	14,600	2A	60	Min	Sub	В
HARN0043-H		CAMPO Planning Area Boundary - NC 55	Harnett County	0.5	20	2	60	55	9,800	1,600	2,100	2,100	14,600	2A	60	Min	Sub	В
	Rd. (SR 1542)	NC 55 - CAMPO Planning Area Boundary	Harnett County	3.1	20	2	60	55	9,800	1,900	2,500	2,500		ADQ	-	Min	Sub	В
	Rd. (SR 1542)	CAMPO Planning Area Boundary - US 421	Harnett County	3.5	20	2	60	55	9,800	1,600	3,200	3,200		ADQ	-	Min	Sub	В
	Johnston County Rd. (SR 1551)	Piney Grove Church Rd. (SR 1505) - Benson Rd. (SR 1500)	Harnett County	0.9	24	2	60	55	10,600	1,800	5,400	5,400		ADQ	-	Min	Sub	
	Johnston County Rd. (SR 1551)	Benson Rd. (SR 1500) - Bailey's Crossroads Rd. (SR 1581)	Harnett County	4.0	24	2	60	55	10,600	1,000	2,300	2,300		ADQ	-	Min	Sub	
	Abbattior Rd. (SR 1552)	Johnston County Rd. (SR 1551) - change to 45mph	Harnett County	3.6	22	2	60	55	10,600	1,000	2,300	2,300		ADQ	-	Min	Sub	
	Orange St. (SR 1552)	Change to 45mph - NC 27	Harnett County	0.4	20	2	60	45	10,600	1,700	3,000	3,000		ADQ	-	Min	Sub	
	Bailey's Crossroads Rd. (SR 1581)	Johnston County Rd. (SR 1551) - Ebeneezer Church Rd. (SR 1558)	Harnett County	0.9	24	2	60	55	10,600	2,700	4,700	4,700		ADQ	-	Min	Sub	

					Н	GHW	AY											
								xisting	System			2035 F	Proposed S	ystem				
				Dist.	Se	ross- ection	ROW	Limit	Existing Capacity	2007	2035 AADT No	2035 AADT with	Proposed Capacity	Cross-	ROW	CTP Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	Build	CTP	(vpd)	Section	(ft)	cation	Tier	Modes
	Bailey's Crossroads Rd. (SR 1581)	Ebeneezer Church Rd. (SR 1558) - NC 27	Harnett County	2.5	24	2	60	55	10,600	2,100	3,700	3,700		ADQ	-	Min	Sub	
	Cane Mill Rd. (SR 1700)	Red Hill Church Rd. (SR 1703) - change to 45mph	Harnett County	2.1	22	2	60	55	10,600	1,500	2,600	2,600		ADQ	-	Min	Sub	
	Cane Mill Rd. (SR 1700)	Change to 45mph - change to 35mph	Harnett County	1.0	22	2	60	45	10,600	1,500	2,600	2,600		ADQ	-	Min	Sub	
	Cane Mill Rd. (SR 1700)	Change to 35mph - add curb and gutter	Harnett County	0.4	22	2	60	35	16,300	1,500	2,600	2,600		ADQ	-	Min	Sub	
	Cane Mill Rd. (SR 1700)	Add curb and gutter - NC 55	Harnett County	0.3	40	2	60	35	16,300	1,800	2,400	2,400		ADQ	-	Min	Sub	
	Red Hill Church Rd. (SR 1703)	Bailey's Crossroads Rd. (SR 1581) - Turlington Rd. (SR 1723)	Harnett County	2.6	22	2	60	55	10,600	4,200	7,300	7,300		ADQ	-	Min	Sub	
	Red Hill Church Rd. (SR 1703)	Turlington Rd. (SR 1723) - Bryant Rd. (SR 1720)	Harnett County	3.0	22	2	60	55	10,600	4,100	9,400	8,000		ADQ	-	Min	Sub	
	Red Hill Church Rd. (SR 1703)	Bryant Rd. (SR 1720) - US 421	Harnett County	0.4	22	2	60	55	10,600	4,900	9,800	8,200		ADQ	-	Min	Sub	
	Masonic Rd. (SR 1703)	US 421 - Denim Ave.	Erwin	0.3	22	2	60	35	16,300	4,600	8,000	8,000		ADQ	-	Min	Sub	
HARN0044-H	Fairground Rd. (SR 1705)	NC 27 - change to 45mph	Harnett County	2.8	22	2	60	55	10,600	1,300	3,000	3,000	15,100	2A	60	Min	Sub	Р
HARN0044-H	1705)	Change to 45mph - change to 35mph	Harnett County	1.4	22	2	60	45	10,600	1,200	1,600	1,600	12,200	2A	60	Min	Sub	Р
HARN0044-H	1705)	Change to 35mph - Meadowlark Rd. (SR 1715)	Dunn	1.3	20	2	60	35	16,300	4,000	7,000	5,000	10,200	2A	60	Min	Sub	Р
HARN0044-H	Fairground Rd. (SR 1705)	Meadowlark Rd. (SR 1715) - US 301	Dunn	0.4	20	2	60	35	16,300	5,700	13,000	10,000	10,200	2A	60	Min	Sub	Р
HARN0045-H	Erwin Rd. (SR 1718)	US 421 - no curb and gutter/change to 3 lanes	Dunn	0.4	48	4	60	35	25,700	13,200	20,000	20,000	31,600	4D	110	В	Sub	Р
HARN0045-H	Erwin Rd. (SR 1718)	No curb and gutter/change to 3 lanes - change to 2 lanes	Dunn	0.3	38	3	100	35	17,300	13,200	20,000	20,000	31,600	4D	110	В	Sub	Р
HARN0045-H	Erwin Rd. (SR 1718)	Change to 2 lanes - Denim Ave.	Dunn	0.2	26	2	60	35	16,300	9,000	13,700	13,700	31,600	4D	110	В	Sub	Р
	Bryant Rd. (1720)	Red Hill church Rd. (SR 1703) - Ashe Rd. (SR 1725)	Harnett County	1.0	22	2	60	55	10,600	2,200	4,400	4,400		ADQ	-	Min	Sub	
	Ashe Rd. (SR 1725)	NC 55 - Red Hill Church Rd. (SR 1703)	Harnett County	1.9	20	2	60	55	9,800	1,900	2,500	2,500		ADQ	-	Min	Sub	
	Ashe Rd. (SR 1725)	Red Hill Church Rd. (SR 1703) - Bryant Rd. (SR 1720)	Harnett County	0.8	20	2	60	55	9,800	3,000	4,000	4,000		ADQ	-	Min	Sub	

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							2007 E	xisting	System			2035 F	Proposed S	ystem				
				Dist.	Se	ross- ection	ROW	Limit	Existing Capacity	2007	2035 AADT No	2035 AADT with	Proposed Capacity	Cross-	ROW	CTP Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	Build	CTP	(vpd)	Section	(ft)	cation	Tier	Modes
	Ashe Rd. (SR 1725)	Bryant Rd. (SR 1720) - change to 35mph	Harnett County	1.2	20	2	60	55	9,800	4,600	6,100	6,100		ADQ	-	Min	Sub	
	` ′	Change to 35mph - W. Broad St.	Harnett County	0.5	20	2	60	35	16,300	2,000	2,600	2,600		ADQ	-	Min	Sub	
	Maynard Lake Rd. (SR 1726)	NC 55 - change to 35mph	Harnett County	1.0	22	2	60	55	10,600	2,800	3,700	3,700		ADQ	-	Min	Sub	
	Maynard Lake Rd. (SR 1726)	Change to 35mph - US 421	Erwin	0.3	22	2	60	35	16,300	2,800	3,700	3,700		ADQ	-	Min	Sub	
	Antioch Church Rd. (SR 1735)	Erwin Rd Lucas Rd. (SR 1815)	Harnett County	0.6	22	2	60	45	16,600	4,800	6,300	6,300		ADQ	-	Min	Sub	
	Antioch Church Rd. (SR 1735)	Lucas Rd. (SR 1815) - NC 82	Harnett County	1.4	22	2	60	45	16,600	4,200	5,500	5,500		ADQ	-	Min	Sub	
	Old Post Rd. (SR 1746)	NC 82/NC 217 - East Denim Ave.	Erwin	0.8	24	2	60	35	16,300	4,900	6,500	6,500		ADQ	-	Min	Sub	
	South Old Stage Rd. (SR 1769)	US 421 - change to 50mph	Harnett County	0.6	20	2	60	55	9,800	1,000	1,300	1,300		ADQ	-	Min	Sub	
	South Old Stage Rd. (SR 1769)	Change to 50mph - change to 35mph	Harnett County	3.1	20	2	60	50	9,800	1,300	1,700	1,700		ADQ	-	Min	Sub	
	South Old Stage Rd. (SR 1769)	Change to 35mph - change to 20mph	Erwin	0.8	20	2	60	35	16,300	1,300	1,700	1,700		ADQ	-	Min	Sub	
	West St. (SR 1769)	Change to 20mph - N. 13th St.	Erwin	0.2	20	2	60	25	13,100	1,600	2,100	2,100		ADQ	-	Min	Sub	
	Dorman Rd. (SR 1777)	NC 82 - Arrowhead Rd. (SR 1780)	Harnett County	1.5	22	2	60	55	10,600	2,500	3,300	3,300		ADQ	-	Min	Sub	
	Bunnlevel-Erwin Rd. (SR 1779)	NC 217 - change to 45mph	Harnett County	0.5	24	2	60	55	10,600	4,600	6,100	6,100		ADQ	-	Min	Sub	
	Bunnlevel-Erwin Rd. (SR 1779)	Change to 45mph - change to 55mph	Harnett County	1.1	24	2	60	45	10,600	1,900	2,500	2,500		ADQ	-	Min	Sub	
	Bunnlevel-Erwin Rd. (SR 1779)	Change to 55mph - change to 35mph	Harnett County	3.3	24	2	60	55	10,600	1,800	2,400	2,400		ADQ	-	Min	Sub	
	Bunnlevel-Erwin Rd. (SR 1779)	Change to 35mph - US 401	Harnett County	0.4	24	2	60	35	16,300	1,700	2,200	2,200		ADQ	-	Min	Sub	
	Arrowhead Rd. (SR 1780)	Dorman Rd. (SR 1777) - US 301/change to Longbranch Rd. (SR 1002)	Harnett County	0.9	22	2	60	55	10,600	3,800	5,000	6,000		ADQ	-	Maj	Sub	
	Elm Ave. (SR 1785)	Pope Rd. (SR 1793) - Ammons Rd. (SR 1791)	Dunn	1.0	20	2	60	35	9,400	700	900	900		ADQ	-	Min	Sub	
	Chicken Farm Rd. (SR 1790)	Longbranch Rd. (SR 1002) - Dunn city limits/change to 35mph	Harnett County	1.4	20	2	60	55	9,800	2,100	2,800	2,800		ADQ	-	Min	Sub	

					Н	IGHW	AY											
								xisting	System			2035 F	Proposed S	ystem				
				Dist.	Se	ross- ection	ROW	Limit	Existing Capacity		2035 AADT No	2035 AADT with	Proposed Capacity	Cross-	ROW	CTP Classifi-		Other
Local ID	Facility McKay Ave. (SR	Section (From - To) Dunn city limits/change to	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	Build	CTP	(vpd)	Section	(ft)	cation	Tier	Modes
	1790)	35mph - US 421	Dunn	0.9	20	2	60	35	16,300	3,000	6,900	6,900		ADQ	-	Min	Sub	
	Ammons Rd. (SR 1791)	Elm Ave Longbranch Rd. (SR 1002)	Harnett County	1.1	18	2	60	55	8,400	500	700	700		ADQ	-	Min	Sub	
		Sampson County line - Longbranch Rd. (SR 1002)	Harnett County	0.3	24	2	60	55	10,600	3,200	4,200	4,200		ADQ	-	Min	Sub	
		Longbranch Rd. (SR 1002) - Fairview Hill Rd. (SR 1851)	Harnett County	1.5	24	2	60	55	10,600	3,200	4,200	4,200		ADQ	-	Min	Sub	
	Pope Rd. (SR 1793)	Fairview Hill Rd. (SR 1851) - I- 95	Harnett County	0.7	24	2	60	45	10,600	3,900	5,200	5,200		ADQ	-	Min	Sub	
	Pope Rd. (SR 1793)	I-95 - US 301	Harnett County	0.9	44	4	60	35	16,300	4,500	5,900	5,900		ADQ	-	Min	Sub	
HARN0010C-H	Jonesboro Rd. (SR 1808)	Proposed US 421 Bypass - I-95	Harnett County	0.8	20	2	60	45	10,600	4,300	5,700	20,000	57,100	4A	180	Е	Reg	
HARN0047-H	Jonesboro Rd. (SR 1808)	I-95 - Wise Rd. (SR 1799)	Harnett County	0.7	20	2	60	55	9,800	3,200	4,200	5,200	45,200	4D	110	В	Sub	
	Jonesboro Rd. (SR 1808)	Wise Rd. (SR 1799) - Johnston County line	Harnett County	4.3	20	2	60	55	9,800	1,200	1,600	1,600		ADQ	-	Min	Sub	
	Tobacco Barn Ln. (SR 1907)	Maynard Lake Rd. (SR 1726) - Red Hill Church Rd. (SR 1703)	Dunn	0.8	22	2	60	55	10,600	2,000	2,600	2,600		ADQ	-	Min	Sub	
HARN0048-H	Kivett Rd. (SR 2002)	Leslie Campbell Ave. (SR 2084) - Main St. (SR 1532)	Harnett County	0.6	18	2	60	35	16,300	1,300	3,000	3,000	10,200	2A	60	Min	Sub	В
	Crawford Rd. (SR 2006)	NC 55 - change to 55mph	Coats	0.7	18	2	60	35	9,400	1,200	1,600	1,600		ADQ	-	Min	Sub	
	Crawford Rd. (SR 2006)	Change to 55mph - US 421	Harnett County	2.3	18	2	60	55	8,400	400	500	500		ADQ	-	Min	Sub	
	Crawford Rd. (SR 2006)	US 421 - Old Stage Rd. (SR 1769)	Harnett County	0.7	18	2	60	55	8,400	200	300	300		ADQ	-	Min	Sub	
	Ross Rd. (SR 2016)	US 401 - change to 2 lanes	Harnett County	1.0	44	4	100	35	32,600	5,800	7,700	7,700		ADQ	-	Maj	Sub	
	Ross Rd. (SR 2016)	Change to 2 lanes - change to 55mph	Harnett County	0.4	22	2	60	35	16,300	1,600	2,100	2,100		ADQ	-	Min	Sub	
	Ross Rd. (SR 2016)	Change to 55mph - Titan Roberts Rd. (SR 2021)	Harnett County	4.7	22	2	60	55	10,600	1,600	2,100	2,100		ADQ	-	Min	Sub	
		Bunn-level Erwin Rd. (SR 1779) - Ross Rd. (SR 2016)	Harnett County	2.5	22	2	60	55	10,600	2,000	2,600	2,600		ADQ	-	Min	Sub	
	Titan Roberts Rd. (SR 2021)	Ross Rd. (SR 2016) - US 401	Harnett County	2.4	22	2	60	55	10,600	870	1,100	1,100		ADQ	-	Min	Sub	
	Horshoe Bend Rd. (SR 2027)	US 401 - NC 217	Harnett County	2.1	22	2	60	55	10,600	2,600	3,400	3,400		ADQ	-	Min	Sub	

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								xisting	System			2035 F	Proposed S	ystem				
				Dist.	_	ross-	ROW	Speed Limit	Existing Capacity	2007	2035 AADT No	2035 AADT with	Proposed Capacity	Cross-	ROW	CTP Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	Build	CTP	(vpd)	Section	(ft)	cation	Tier	Modes
HARN0049-H	McLean Chapel Church Rd. (SR 2030)	Elliot Bridge Rd. (SR 2045) - Sandefer Rd. (SR 2030)	Harnett County	2.0	18	2	60	55	8,400	1,400	1,800	1,800	15,100	2A	60	Min	Sub	
HARN0049-H	McLean Chapel Church Rd. (SR 2030)	Sandefer Rd. (SR 2030) - US 401	Harnett County	3.7	18	2	60	55	8,400	1,300	1,700	1,700	15,100	2A	60	Min	Sub	
HARN0050-H	Elliot Bridge Rd. (SR 2045)	Cumberland County line - Shady Grove Rd. (SR 2050)	Harnett County	0.6	22	2	60	55	10,600	2,400	7,200	7,200	15,100	2A	60	Min	Sub	
HARN0050-H	Elliot Bridge Rd. (SR 2045)	Shady Grove Rd. (SR 2050) - Bethel Baptist Rd. 9SR 2048)	Harnett County	1.4	22	2	60	55	10,600	2,000	6,000	6,000	15,100	2A	60	Min	Sub	
HARN0050-H	Elliot Bridge Rd. (SR 2045)	Bethel Baptist Rd. (SR 2048) - McLean Chapel Church Rd. (SR 2030)	Harnett County	3.6	22	2	60	55	10,600	700	2,100	2,100	15,100	2A	60	Min	Sub	
HARN0050-H	Elliot Bridge Rd. (SR 2045)	McLean Chapel Church Rd. (SR 2030) - NC 210	Harnett County	1.1	22	2	60	55	10,600	1,200	2,100	2,100	15,100	2A	60	Min	Sub	
HARN0051-H	Bethel Baptist Rd. (SR 2048)	Elliot Bridge Rd. (SR 2045) - NC 210	Harnett County	3.4	18	2	60	55	8,400	1,200	3,600	3,600	15,100	2A	60	Min	Sub	
HARN0052-H	Shady Grove Rd. (SR 2050)	NC 210 - Elliot Bridge Rd. (SR 2045)	Harnett County	3.5	20	2	60	55	9,800	2,900	8,700	8,700	15,100	2A	60	Min	Sub	
HARN0053-H	Anderson Creek School Rd. (SR 2064)	Overhills Rd. (SR 1120) - NC 210	Harnett County	1.5	20	2	60	55	9,800	2,200	6,600	6,600	15,100	2A	60	Min	Sub	Р
HARN0054-H	Leslie Campbell Ave. (SR 2084)	NC 27 - change to 35mph and curb and gutter	Harnett County	0.9	22	2	60	55	10,600	5,300	12,100	12,100	15,100	2A	60	Min	Sub	В
HARN0054-H	Leslie Campbell Ave. (SR 2084)	Change to 35mph and curb and gutter - US 421	Harnett County	1.0	33	3	100	35	17,300	7,200	16,500	16,500	17,300	ЗА	60	Min	Sub	В
HARN0056-H	Harnett Central Rd. (SR 2215)	US 401 - change to 55mph	Harnett County	0.4	22	2	60	35	9,800	1,600	3,200	3,200	10,200	2A	60	Min	Sub	
HARN0056-H	Harnett Central Rd. (SR 2215)	Change to 55mph - NC 210	Harnett County	2.0	22	2	60	55	10,600	1,900	3,800	3,800	15,100	2A	60	Min	Sub	
HARN0056-H	Harnett Central Rd. (SR 2215)	NC 210 - Matthews Mill Pond Rd.	Harnett County	1.8	20	2	60	55	16,300	2,200	5,800	5,800	15,100	2A	60	Min	Sub	
HARN0045-H	Denim Ave.	Erwin Rd change to 35mph	Erwin	1.0	26	2	60	45	10,600	5,700	7,500	7,500	36,600	4D	110	В	Sub	Р
HARN0045-H	Denim Ave.	Change to 35mph - change to 4 lanes/curb and gutter	Erwin	0.3	26	2	60	35	16,300	7,600	10,000	10,000	31,600	4D	110	В	Sub	Р
HARN0045-H	Denim Ave.	Change to 4 lanes/curb and gutter - NC 217/NC 82	Erwin	0.8	48	4	60	35	32,600	4,000	5,300	5,300	31,600	4D	110	В	Sub	Р
HARN0055-H	W. Broad St.	Ashe Ave. (SR 1725) - US 421	Dunn	0.2	48	2	60	35	16,300	10,500	18,300	18,300	22,700	4D	110	В	Sub	Р

		PUBLIC TR	ANSPO	RTATION	1		
			Speed		Existing System	Proposed System	
			Limit	Distance			Other
Local ID	Facility/ Route	Section (From - To)	(mph)	(mi)	Type	Type	Modes
HARN0001-T	NC 87 - Fort Bragg Bus Route	Cumberland County Line to Overhills	55	4.5		Bus route from Fayetteville to Fort Bragg	HB
		Cumberland County Line to Overhills				Add two park and ride stops on Fort Bragg	
HARN0001-R	Alexander Drive - Public Rail Stop	Near McKinney Parkway in Lillington				Public Rail Stop for connection with HARTS on Norfolk Southern rail line	
HARN0002-R	US 401 - Freight Rail Stop	In Kipling				Rail stop for freight transfer on Norfolk Southern	
HARN0003-R	US 301 - Public Rail Stop	In Dunn				Public Rail stop proposed in Dunn on CSX rail line	:

¹Only major public transportation routes and proposals are shown here. For further documentation of the public transportation system, refer to *Harnett Area Rural Transit System*.

			RAIL									
				Speed		Exis	ting Syster	n	Prop	osed Syste	em	
				Limit	Distance		ROW	Trains		ROW	Trains	Other
Local ID	Facility/ Route	Section (From - To)	Class	(mph)	(mi)	Type	(ft)	per day	Type	(ft)	per day	Modes
	Norfolk Southern - NC 42	Chatham County Line - Wake County Line	2	25	4.5	Freight	25-100	2				
	Norfolk Southern - US 401	Cumberland County Line - Wake County Line	3	35	21.6	Freight	25-100	8				
	CSX - US 301	Cumberland County Line - Johnston County Line	4	80	9.5	Freight Passanger	25-100	50				

		BICYCLE					
				Existing System	Propose	d System	
			Distance	Cross-Section			Other
Local ID	Facility/ Route	Section (From - To)	(mi)	(ft) lanes	Type	Cross-Section	Modes
NC Bike Route 5	NC Bike Route 5	Wake County Line to Cumberland County Line	26.3	Concurrent with N	C Bike Route 5 Table	- See Highway	Н
IHARN0016-B	Leslie Campbell Avenue (SR 2084)	NC 27 to Lanier Street (SR 1525)	1.6	Concurrent with	Leslie Campbell 2084)	Avenue (SR	Н

		PEDESTRIAN						
				Existin	g System	Propose	d System	Other
			Distance		Side of			
Local ID	Facility/ Route	Section (From - To)	(mi)	Type	Street	Type	Side of Street	Modes
	For additional Po	edestrian recommendations, please see the 2	008 City of	Dunn Pe	edestrian Pl			
HARN0041-P	NC 210 in Lillington	Old Coats Road (SR 1516) to US 421	0.5			Sidewalks	Both	Н
HARN0046-P	West Old Road (NC 27)	SR 1291 to US 401	1.0			Sidewalks	Both	Н
HARN0047-P	Ross Road (SR 2016)	US 401 to 0.75 miles east of US 401	0.6			Sidewalks	Both	Н
HARN0048-P	Leslie Campbell Avenue (SR 2084)	Main Street (SR 1532) to US 421	0.6			Sidewalks	Both	Н
HARN0049-P	Harmon Road (SR 2062)	Leslie Campbell Avenue (SR 2084) to US 421	0.2			Sidewalks	Both	
HARN0050-P	IIVIAIN STREET (SK 1537)	Kivett Road (SR 2002) to Leslie Campbell Avenue (SR 2084)	0.4			Sidewalks	Both	Н
HARN0052-P	NC 55 in Angier	Dora Street to Cutts Street	0.2			Sidewalks	Both	Н
HARN0053-P	Cutts Street	NC 55 to Willow Street	0.2			Sidewalks	Both	
HARN0054-P	Benson Road (SR 1500)	Broad Street to Wilma Street	0.5			Sidewalks	Both	Η
HARN0056-P	Buffalo Lake Road (SR 1115)	NC 27 to NC 87	4.5			Sidewalks	Both	Η
HARN0057-P	Nursery Road (SR 1117)	NC 87 to Doc's Road (SR 1116)	5.4		-	Sidewalks	Both	Н
HARN0058-P	IRAV ROAD (SR 1171)	Overhills (SR 1120) to Nursery Road (SR 1117)	2.1			Sidewalks	Both	Н
HARN0059-P		Anderson Creek School Road (SR 2064) to Nursery Road (SR 1117)	5.6			Sidewalks	Both	Н
HARN0060-P	Anderson Creek School Road (SR 2064)	NC 210 south to NC 210 north	1.5			Sidewalks	Both	Н
HARN0061-P	II emilei Black Road (SR 1175)	Anderson Creek School Road (SR 2064) to Nursery Road (SR 1117)	4.4			Sidewalks	Both	Н

MULTI-USE PATH								
				Existing System		Proposed System		Other
				Side				
			Distance	of	Cross-			
Local ID	Facility/ Route	Section (From - To)	(mi)	Street			Cross-Section	Modes
For additional Multi-use path recommendations, please see the 2008 City of Dunn Pedestrian Plan								
HARN0005-M	Cape Fear Trail	Cumberland County line to US 421	27.3		-		MA	
HARN0006-M	ICamphell University Connection	Campbell University to Keith Hills Golf	7.0				MA	
		Course and the county airport	7.0					
HARN0007-M	Lillington/Raven Rock	Lee County to Raven Rock State Park to US	5.8				MA	
	Connection	421					IVIA	
HARN0008-M	Fort Bragg/NC 87 Path	Cumberland County line to Olivia Road (SR 1205)	12.2				MA	Н
HARN0009-M	Erwin Park/Cape Fear Connection	NC 82 to Cape Fear Trail (proposed)	1.3				MA	
HARN0010-M	Neill's Creek Trail	US 421 to NC 210 in Angier	7.8		-		MA	
HARN0011-M	US 421 West Trail	Lillington to Lee County	12.9		-		MA	Н
HARN0012-M	NC55/Rail Trail	Old Buies Creek Road to existing Rails to Trails path north of Erwin	10.7				MA	Н

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.

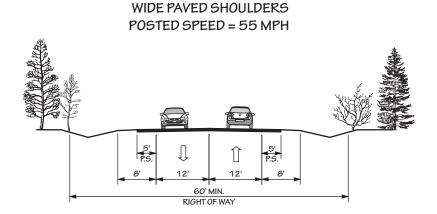
The typical cross sections were updated on December 7, 2010 to support the Department's "Complete Streets" policy that was adopted in July 2009. This guidance established design elements that emphasize safety, mobility, and accessibility for multiple modes of travel. These "typical" cross sections should be used as preliminary 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 (NEPA) documentation and through final plan 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:

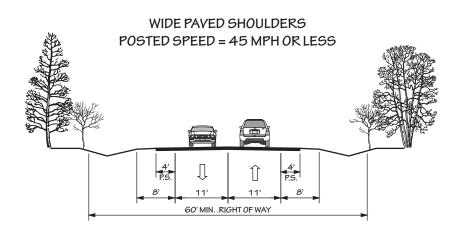
- roadways which may require widening after the current planning period,
- roadways which are borderline adequate and accelerated traffic growth could render them deficient, and
- roadways where an urban curb and gutter cross section may be locally desirable because of urban development or redevelopment.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

TYPICAL HIGHWAY CROSS SECTIONS 2 LANES

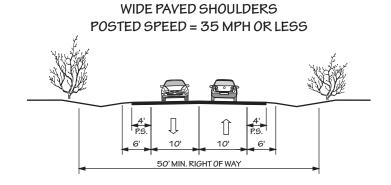
2 A



2 B

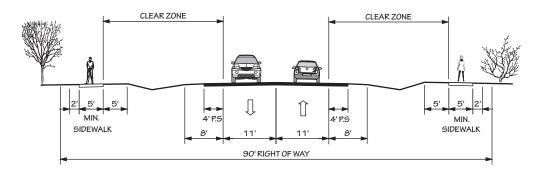


2 C



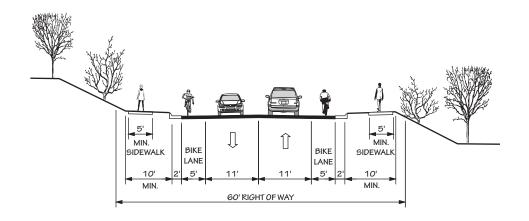
TYPICAL HIGHWAY CROSS SECTIONS 2 LANES

SIDEWALK PLACEMENT BEHIND A ROADWAY DITCH



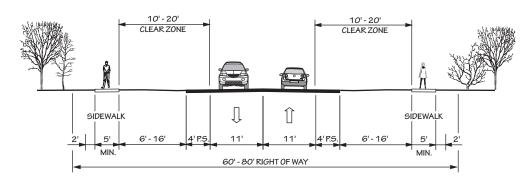
2 E

CURB AND GUTTER
WITH BIKE LANES AND SIDEWALKS



2 F

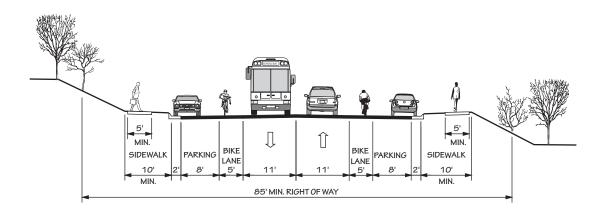
BUFFERS AND SIDEWALKS WITHOUT A ROADWAY DITCH (20 MPH TO 45 MPH) (TYPICALLY COASTAL AREA MANAGEMENT ACT COUNTIES)



TYPICAL HIGHWAY CROSS SECTIONS 2 LANES

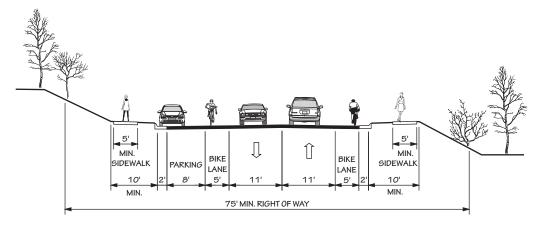
2 G

CURB & GUTTER - PARKING ON EACH SIDE



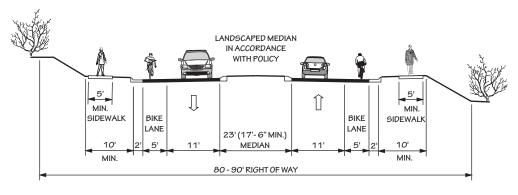
2 H

CURB & GUTTER - PARKING ON ONE SIDE



2

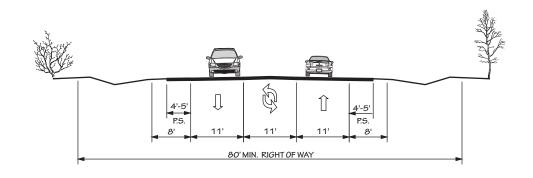
RAISED MEDIAN WITH CURB & GUTTER



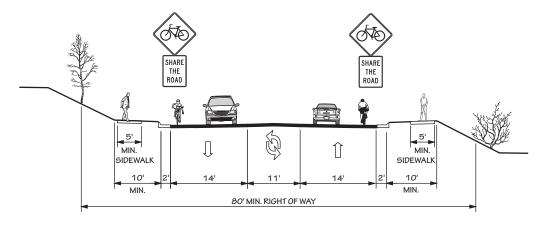
TYPICAL HIGHWAY CROSS SECTIONS 3 LANES

3 A

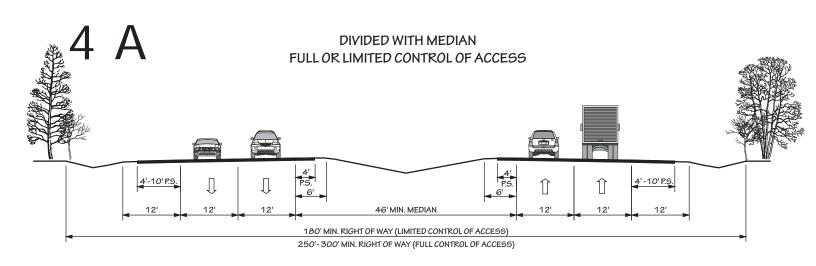
WIDE PAVED SHOULDERS

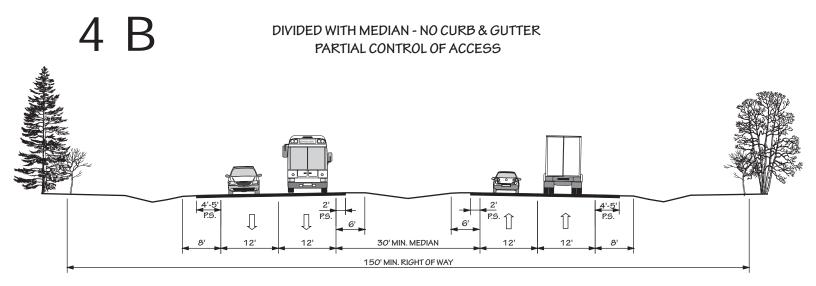


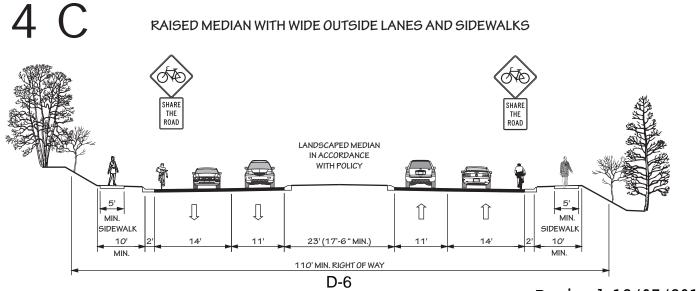
3 B CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS



TYPICAL HIGHWAY CROSS SECTIONS 4 LANES

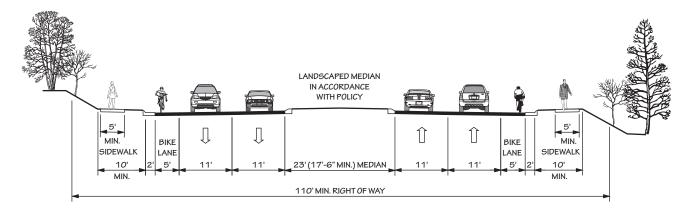


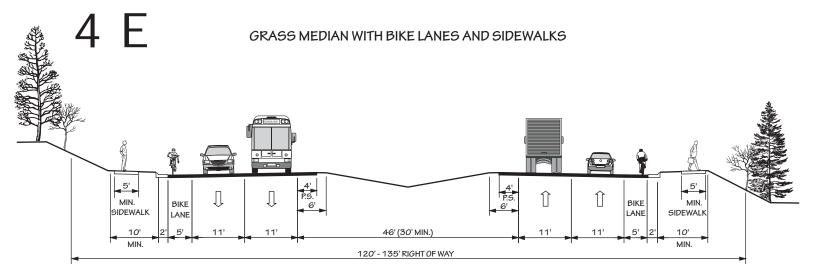


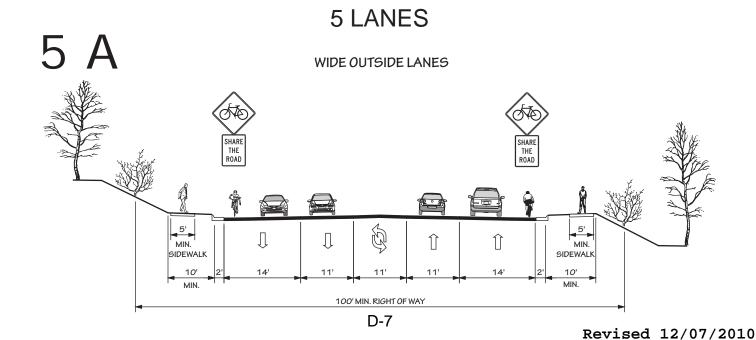


TYPICAL HIGHWAY CROSS SECTIONS 4 LANES

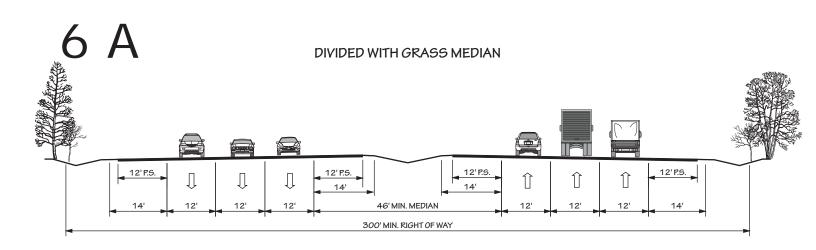
4 D RAISED MEDIAN - CURB & GUTTER WITH BIKE LANES AND SIDEWALKS

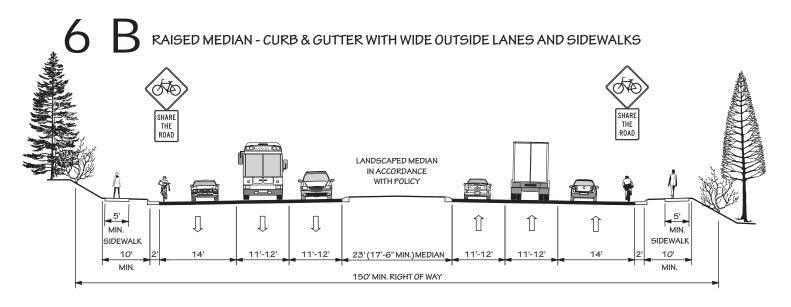




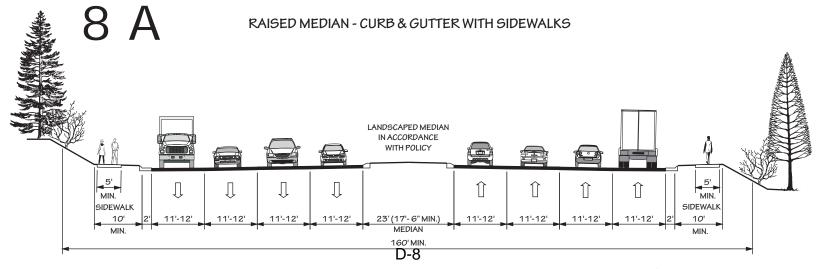


TYPICAL HIGHWAY CROSS SECTIONS 6 LANES



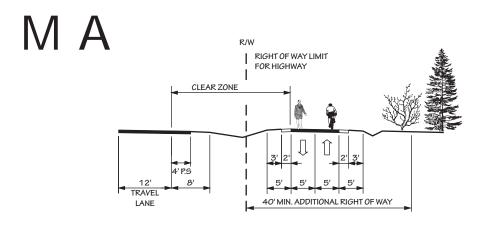


8 LANES

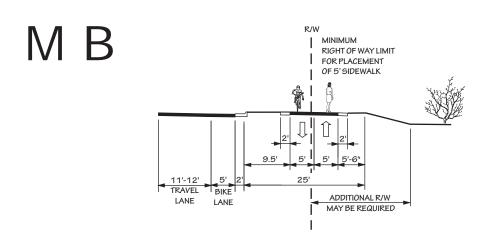


TYPICAL MULTI - USE PATH

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



MULTI - USE PATH ADJACENT TO CURB AND GUTTER



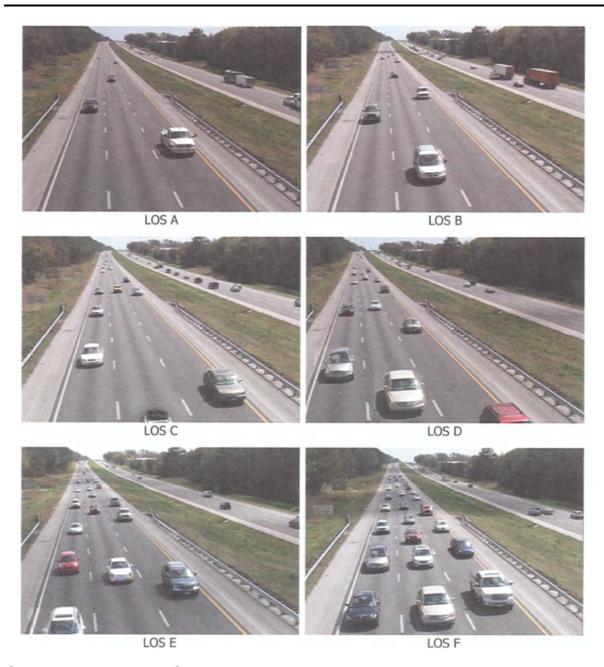
Appendix E Level of Service Definitions

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 10.

- ❖ <u>LOS A</u>: 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 10 - Level of Service Illustrations



Source: 2010 Highway Capacity Manual, Exhibit 11-4

Appendix F Traffic Crash Analysis

A crash analysis performed for the Harnett County CTP factored crash frequency, crash type, and crash severity. Crash frequency is the total number of reported collisions and contributes to the ranking of the most problematic intersections. Crash type provides a general description of the crash and allows the identification of any trends that may be correctable through roadway or intersection improvements. Crash severity is the crash rate based upon injuries and property damage incurred.

The severity of every crash is measured with a series of weighting factors developed by the NCDOT Division of Highways (DOH). These factors define a fatal or incapacitating crash as 47.7 times more severe as one involving only property damage and a crash resulting in minor injury is 11.8 times more severe than one with only property damage. In general, a higher severity index indicates more severe accidents. Listed below are levels of severity for various severity index ranges.

<u>Severity</u>	Severity Index
low	< 6.0
average	6.0 to 7.0
moderate	7.0 to 14.0
high	14.0 to 20.0
very high	> 20.0

Table 3 depicts a summary of the crashes occurring in the planning area between January 1, 2004 and December 31, 2006. The data represents locations with 10 or more crashes and/or a severity average greater than that of the state's index, 4.96. The "Total" column indicates the total number of accidents reported within 150-ft of the intersection during the study period. The severity listed is the average crash severity for that location.

	Table 4 - Crash Location	15	
Map Index	Intersection	Average Severity	Total Collisions
1	US 421(Front St.) and US 401 (Main St.)	2.48	34
2	NC 210 (Depot St.) and NC 55 (S. Raleigh St.)	4.21	30
3	SR 1120 (Óverhills Rd.) and SR 1121 (Ray Rd.)	7.44	28
4	NC 210 and SR 1006 (Old Stage Rd.)	5.11	26

Table 4 - Crash Locations - Continued

Map Index	Intersection	Average Severity	Total Collisions
5	US 301 (Clinton Ave.) and US 421 (Cumberland Ave.)	4.55	25
6	SR 1006 (Old Stage Rd.) and SR 1505 (Pearidge Rd.)	4.55	25
7	US 401 (Main St.) and (Tenth St.)	4.70	24
8	I-95 and SR 1002 (Long Branch Rd.)	8.48	22
9	SR 1718 (Erwin Rd.) and SR 1719 (Powell Ave.)	4.33	20
10	US 401(Main St.) and NC 210 (north or Lillington)	3.11	19
11	NC 87 and SR 1115 (Buffalo Lake Rd.)	12.87	19
12	US 401 (Main St.) and NC 27 (W. Old Rd.)	6.44	18
13	US 421(Cumberland Ave.) and Washington Ave.	4.70	18
14	Commerce Dr. and US 421 (Cumberland Ave.)	2.95	18
15	NC 210 and SR 1121 (Ray Rd.)	11.22	17
16	US 421 (Cumberland Ave.) and Sampson Ave.	2.74	17
17	SR 1703 (Red Hill Church Rd.) and SR 1725 (Ashe Ave.)	10.68	17
18	NC 55 (S. Raleigh St.) and Williams St.	1.44	17
19	NC 87 and SR 1222 (Broadway Rd.)	10.36	17
20	Duncan Road and US 401 (Main St.)	4.70	16
21	NC 210 (Main St.) and SR 2016 (McNeil St.)	4.70	16
22	US 421 and SR 1280 (Seminole Rd.)	9.90	16
23	US 421 and Ellis Ave.	4.45	15
24	NC 55 and US 421 (Cumberland Ave.)	9.01	15
25	NC 27 and SR 1116 (Doc's Rd.)	3.47	15
26	US 421 (Cumberland Ave.) and Lee Ave.	3.47	14
27	US 401 (Main St.) and James St.	1.53	14
28	I-95 and US 421 (Cumberland Ave.)	2.97	14
29	NC 55 (N. Raleigh St.) and N. Broad St.	3.28	13
30	Broad St. and US 301 (Clinton Ave.)	2.14	13
31	NC 217 and SR 1779 (Bunnlevel Erwin Rd.)	10.82	13
32	Harnett St. and US 401 (Main St.)	4.42	13
33	Ashe Ave. and Powell Ave.	5.55	13

Table 4 - Crash Locations - Continued

Map Index	Intersection	Average Severity	Total Collisions
34	US 421 and NC 55 (east of Dunn)	3.28	13
35	US 401 (Main St.) and McKinney Pkwy.	7.93	12
36	US 421 (Cumberland Ave.) and Wilson Ave.	5.32	12
37	US 421 (Cumberland Ave.) and Watauga Ave.	4.70	11
38	Eighth St. and US 421 (Front St.)	2.35	11
39	US 421 (Cumberland Ave.) and Powell Ave.	3.69	11
40	Broad St. and McIver St. (in Angier)	4.36	11
41	NC 210 and SR 2050 (Shady Grove Rd.)	11.93	11
42	I-95 and US 421	3.47	11
43	I-95 and SR 1808 (Jonesboro Rd.)	3.96	10
44	US 421 (Cumberland Ave.) and Magnolia Ave.	4.70	10
45	US 421 (Cumberland Ave.) and Wayne Ave.)	4.36	10
46	US 421 (Front St.) and Tenth Ave.	2.35	10
47	US 421 and SR 1265 (Cool Springs Rd.)	11.54	10
48	US 421 and SR 2084 (Leslie Campbell Ave.)	5.44	10

The NCDOT is actively involved with investigating and improving many of these locations. To request a more detailed analysis for any of the locations listed in Table 3, or other intersections of concern, contact the Division Traffic Engineer. Contact information for the Division Traffic Engineer is included in Appendix A.

Appendix G Bridge Deficiency Assessment

The State 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 Structure 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 or functionally obsolete. 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 quality 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 within the planning area are listed in Table 5.

Table 5 - Deficient Bridges

Bridge Number	Facility	Feature	Condition	Local ID
7	SR 1516	West Buies Creek	Structurally Deficient	B-5412
13	SR 2005	Thortons Creek	Structurally Deficient	
22	US 421 SBL	Durham Southern RR	Functionally Obsolete	
23	US 421 NBL	Durham Southern RR	Functionally Obsolete	
29	NC 55	Mingo Swamp	Structurally Deficient	B-3654
35	NC 42	Norfolk Southern RR	Functionally Obsolete	
37	SR 1811	I-95	Structurally Deficient	I-4745
39	US 421 SBL & NC 55 EBL	Black River	Structurally Deficient	
40	SR 1213	Barbeque Swamp	Structurally Deficient	B-4542
46	US 401 SBL	Cape Fear River	Structurally Deficient	HARN0004-H; B-4138
49	US 421 WBL & NC 55 WBL	Black River	Structurally Deficient	
52	NC 217	Cape Fear River	Structurally Deficient	
53	NC 55	Mingo Swamp	Structurally Deficient	B-3654
57	SR 1002	I-95	Structurally Deficient	I-4745
59	SR 1120	McLeod Creek	Structurally Deficient	HARN0028-H
62	US 401	Neil's Creek	Functionally Obsolete	R-5185
66	SR 1793	I-95	Structurally Deficient	I-4745
72	SR 2045	Anderson Creek	Structurally Deficient	HARN0050-H; B-5513
73	I-95 NBL	US 421 and NC 55	Functionally Obsolete	I-4745
77	I-95 SBL	US 421 and NC 55	Functionally Obsolete	I-4745
80	SR 1808	I-95	Structurally Deficient	I-4745
81	SR 1709	I-95	Functionally Obsolete	I-4745
83	SR 2016	Upper Little River	Functionally Obsolete	
109	SR 1002	Mingo Swamp	Functionally Obsolete	HARN0021-H
120	SR 1558	Black River	Structurally Deficient	B-4543
133	SR 1722	Black River	Structurally Deficient	B-4544
134	SR 1722	Black River Overflow	Structurally Deficient	B-4544
151	SR 1415	Hector's Creek	Structurally Deficient	HARN0040-H; B-5505
195	SR 1234	Upper Little River	Structurally Deficient	
233	SR 1544	Black River	Structurally Deficient	HARN0019-H; B-5339
245	SR 2054	East Buies Creek	Structurally Deficient	
246	SR 1718	Black River	Functionally Obsolete	HARN0045-H

Appendix H Public Involvement

Comprehensive Transportation Plan Committees

Harnett County Comprehensive Transportation Plan (HCCTP) Steering Committee

Fourteen meetings of the HCCTP Steering Committee were held from February 2008 to February 2010. This group was charged with development of the CTP including establishing vision and goals (in this Appendix), developing the surveys (surveys and results are in this Appendix), creating the CTP maps and recommendations, and other public involvement activities.

- Tyler Bray, PE, North Carolina Department of Transportation
- Scott Walston, PE, North Carolina Department of Transportation
- Diane Wilson, Capital Area Metropolitan Planning Organization
- Maurizia Chapman, Fayetteville Area Metropolitan Planning Organization
- Scott Sauer, Harnett County Manager
- Joseph Jeffries, Harnett County Planning Director
- Mark Locklear, Harnett County Planning Manager
- Samantha Ficzko, Harnett County Planning
- Theresa Thompson, Town of Lillington
- Bryan Thompson, Town of Erwin
- Steven Nueschafer, City of Dunn
- Coley Price, Town of Angier
- Frances Avery, Town of Coats
- Lee Jernigan, North Carolina Department of Transportation-Division 6
- Joel Strickland, Mid-Carolina Rural Planning Organization
- James Roberts, Campbell University
- Charles Young, Fort Bragg

Harnett County CTP Growth Sub-committee

Five meetings of the HCCTP Growth Sub-committee were held from February 2009 to June 2009. This group discussed growth throughout the county and other various activities including growth rates for roadways based on land use and future development.

- Tyler Bray, PE, North Carolina Department of Transportation
- Scott Walston, PE, North Carolina Department of Transportation
- Diane Wilson, Capital Area Metropolitan Planning Organization
- Samantha Ficzko, Harnett County Planning
- Theresa Thompson, Town of Lillington
- Bryan Thompson, Town of Erwin

Joel Strickland, Mid-Carolina Rural Planning Organization

Other Public Involvement activities

Other public involvement meetings were held during the development of the plan to discuss various issues including bicycle and pedestrian recommendations, US 421 and US 401 bypass recommendations and specific transportation issues in the town of Angier.

Three Public Drop-in sessions were held to present the DRAFT HCCTP recommendations to the public. The sessions were held in Triton High School, Overhills High School and Harnett Central High School in February 2011. There were 30 attendees at the drop-in sessions and comments were received.

Public Involvement Plan for Harnett County Comprehensive Transportation Plan

All meetings will be announced 10 days prior to the meeting date to all *media outlets* provided below by the Mid-Carolina Rural Planning Organization. Agenda packets and additional materials will be available online and at specific *locations* listed below 10 days prior to the meeting date.

Media Outlets

The Daily Record-Dunn
The Angier Independent-Angier
Paraglide-Fort Bragg

Fayetteville Observer-Fayetteville

Sanford Herald-Sanford

(Minority Newspaper) – Fayetteville Press

Acento Latino

Email

hadams@mydailyrecord.com news@angierindependent.com erin.mcdermott2@us.army.mil parrillat@fayobserver.com joshsmith@sanfordherald.com

fayepress@aol.com

Diana@acentolatino.com

WCKB Radio-Dunn WCCEE Radio-Buies Creek WUAW Radio-Erwin

Time Cable Community Channel Charter Cable Community Channel

Website

http://www.ncdot.org/doh/preconstruct/tpb/planning/HarnettCo.html

Locations

County Administration Offices 102 East Front Street, Lillington, NC

County Planning Offices 108 East Front Street, Lillington, NC

Place **Email** Name Harnett County Public Library Melanie Collins mhcollins@harnett.org abdavis@angier.org Angier Public Library Amanda Davis mhcollins@harnett.org Coats Public Library Melanie Collins Dunn Public Library Mike Williams mwilliams@dunn-nc.org mhcollins@harnett.org Anderson Creek Library Melanie Collins Erwin Public Library bpollard@harnett.org Betsy Pollard

Additional Notes

• A website will be maintained throughout the life of the plan. The website will house important documents, meeting information and any additional relevant

- material in order that the public will have easy access to the information. The website will also have some additional materials translated into Spanish such as the minutes, agendas, surveys and other important documentation.
- In compliance with the Americans with Disabilities Act, meetings will be held in
 wheelchair-accessible meeting rooms at facilities with accessible parking.
 Assistance will be available to aid the hearing and/or verbally impaired to
 participate at public meetings. Anyone wishing to attend a public meeting who
 requires the assistance of a sign-language expert is requested to notify the
 MCRPO office seven days prior to the meeting so arrangements can be made to
 provide signing services.
- A legal notice published in the legal advertisement section (published in at least two local newspapers with regional circulation) shall be advertised indicating that plans, programs or amendments have been prepared and are available for public review and comment at all jurisdictions. The public review period shall be no less than 30 days. My contact information shall be included in the public notice.
- The Goals and Objectives Survey will be available as a link on all local government websites and in paper form at all *locations* listed above. It will be available online to complete. The Capital Area MPO will distribute 1300 postcards to citizens of Harnett County (100 from each township).
- Local municipalities and the county will be asked to review the following major milestones of the plan during the development process: network roads, capacity deficiencies, and the draft comprehensive transportation plan (CTP) prior to public meetings. Finally, after public comment/review, they will be asked to adopt/endorse the draft CTP. After local adoption/endorsement, the Mid-Carolina Rural Planning Organization will be asked to endorse the plan, and Capital Area Metropolitan Planning Organization and Fayetteville Area Metropolitan Planning Organization will be asked to adopt the areas in their jurisdiction.

Public Drop-in Sessions and Public Hearings will be scheduled with the municipalities and the county when a draft plan is developed to allow for public comment.

Additional Contacts for the Goals and Objectives Survey

Major Employers within Harnett County Harnett County Employees Campbell University

Harnett County's Community Vision & CTP Goals and Objectives Statement:

Vision:

Provide a safe, reliable, efficient, and sustainable multi-modal regional transportation network that enhances quality of life and economic vitality that is compatible with the environment and land use patterns. Maximize the use of existing facilities across traditional jurisdictions and add capacity strategically.

Goals:

- Establish a County-wide multi-modal transportation system to ensure safe and reliable choices are available to County residents, by utilizing existing rights-of-way, orderly design of new rights-ofway, and planning for alternative forms of transportation.
- 2) Coordinate transportation and land use plans with Harnett County and its municipalities, local and state organizations, the North Carolina Department of Transportation, Fort Bragg, the Capital Area Metropolitan Planning Organization, the Fayetteville Area Metropolitan Planning Organization, and the Mid-Carolina Rural Planning Organization.
- 3) Make informed transportation decisions that are sensitive to the environment, including the Cape Fear River.
- 4) Study crashes and capacity within the county and make recommendations where needed to improve safety and reduce congestion.
- 5) Improve and upgrade the connections between local urban areas by identifying major corridors, such as the Strategic Highway Corridor, and using traffic management techniques.
- 6) Coordinate with Harnett County Emergency Management and other relevant organizations to ensure the evacuation plan and other emergency plans are considered in plan development.
- 7) Consider additional transportation goals and objectives for the future from the municipalities and Harnett County

Harnett County Comprehensive Transportation Plan Business Survey

Dear Harnett County Resident:

As you know, transportation plays a vital role in the economic prosperity of a region. In order to achieve sustainable growth, adequate transportation must be provided to support employment centers, education, travel and tourism, field to market agricultural demands/needs, and the movement of goods and services.

Harnett County and its municipalities are working with the NC Department of Transportation and additional partners to create a Comprehensive Transportation Plan for the entire County. A key part of both the plan and the information gathering process is citizen input. We are asking for a few minutes of your time to complete a survey so that your opinion can be included with those of your neighbors. The final plan, a Comprehensive Transportation Plan, will provide a 'road map' for a sustainable future in Harnett County. The purpose of this plan is to identify solutions to roadway and other transportation problems and to help keep traffic in Harnett County moving!

Did you know:

- Our population has grown from 60,000 people in 1980 to 107,000 today. More people mean more cars and more traffic. This growth is likely to continue and our population will be near 175,000 by 2035.
- The Base Realignment and Closure (BRAC) initiative is expected to bring nearly 40,000 additional military personnel, families, and related industry personnel to our region. This does not include the contractors that will follow the military realignment and business that will be generated by such an in flux of people.

Because roadways and other transportation facilities are an important issue in Harnett County to maintain our great quality of life, we need YOUR input!

Please take a few minutes to fill out the attached survey and return to us or complete online at www.surveymonkey.com/HarnettCountybus by August 1, 2008.

This survey is anonymous and your name will not be associated with the survey unless you want us to.

Thank you for your participation and please call Tyler Bray at 919-733-4705 with any questions or if you wish to receive more information about this transportation plan!!!

Sincerely,

Harnett County Planning Services
Angier Planning and Zoning Department
Coats Planning Department
Dunn Planning and Zoning Department
Erwin Code Enforcement Department
Lillington Planning and Zoning Department
Mid-Carolina Rural Planning Organization
Capital Area Metropolitan Planning Organization
Fayetteville Area Metropolitan Planning Organization

	1	2	3	4	5	6
Faster Automobile Travel Times (High-speed roads with more lanes and fewer intersections; more connector roads; less congestion)	ja	j∢n	j∢n	j∢n	j∕on	j∢
Community and Rural Character Preservation (Keeping businesses in downtown areas; preservation of existing buildings and neighborhoods; maintaining the rural character and landscape)	jα	jα	jα	jα	jζη	j<
Increased Public Transportation Options (Bus or rail service to destinations; Park-n-ride lots to facilitate carpooling, vanpooling, and transit service)	jα	j∢n	j∢n	jα	j∕on	jo
Service of Special Needs (Better transportation services for low income, elderly, and disabled residents	jα	ja	jα	jα	jα	jo
Economic Growth (Building or improving roads and railways to attract new businesses and to allow existing businesses to expand)	ja	ja	jα	ja	jζn	jα
Increased Transportation Mode Choices (Additional opportunities to walk and bike to destinations)	ja	ja	jo	jo	jα	jα
2. To alleviate traffic congestion a road should be improved by: (Please r from 1, most important to 4, least important.)	ank i	n ord	er of	impor	rtanc	е
		1	2	3		4
Building additional travel lanes	j		jα	jα		jα
Controlling the frequency and locations of driveways and cross streets that access the road	j		ja	jo		j∕on
Improving intersection design, better traffic signal timing, adding turn lanes, and creating roundabouts	j		ja	jo		j∕on
Providing an alternative means of transportation (bus, train, bicycle, park-n-ride)	j		jα	jo		j∕o
3. Are you concerned with safety or crash problems at any specific locat	ions?	•				
ja Yes						
ja No						
If yes, please give a description of the location(s) including road name or inte	rsecti	on.				_
4. When traveling in your area, do you find that you often have to go out destination because the most direct route is too congested?	of yo	our w	ay to	get to	o you	ır
ja Yes						
ja No						
	al are	a), ar	nd des	stinatio	ons.	
If yes, please provide examples including road names, starting location (gener						

oply.) Spring Lake			hapel Hill				nford		
e Benson		€ R	esearch T	riangle Pa	rk	€ Fu	quay-Varii	na	
Raleigh		€ D	urham			€ Sm	nithfield		
Southern Pines/Pi	nehurst	€ F	ayettevill	е		€ Fo	rt Bragg		
S 421	1 ja	2 	3	4 	5 ja	6 ja	7 _j⊲n	8 	9 j⊲
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C 82	ja ja	ja ja	ja	ja	ja	ja ja	j∢n	j∢n	ja ja
C 87	ja	ja	ja	ja ja	ja ja	ja ja	ja ja	ja ja	jo jo
C 210	ja	ja	jan	jan	jan	ja	jan	jan	ja
95	ja	ja	ja	ja	ja	jα	ja	ja	jo
C 24	ja	jan	jan	j∢n	jα	jα	ja	ja	ja
C 27	ja	ja	jo	jo	ja	jα	ja	jo	jo
S 401	ja	jan	jan	ja	jα	jα	ja	jα	j⊲
Identify any seco	ndary road	lways tha	t need im	nproveme	ent				
3 3									

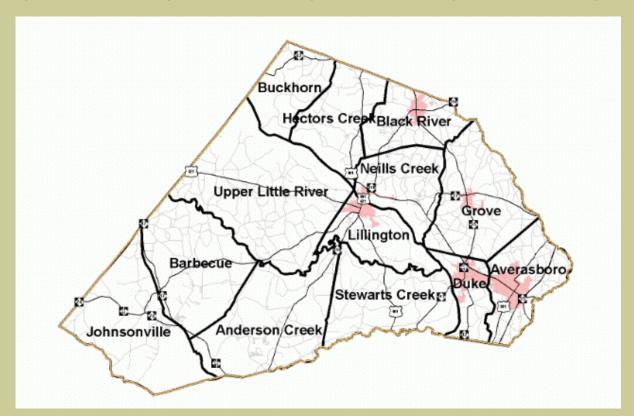
	Yes	No
Bus service to/from Fayetteville	j¢n	jα
On-road bicycle facilities such as bike lanes and wide shoulders	ja	ja
Off-road trails or greenways for walking and biking,	ja	jα
Bus service to/from Fort Bragg	ja	ja
Bus service to/from Greensboro	ja	jα
Bus service to/from Raleigh	ja	ja
Sidewalks	ja	ja
Rail Service (throughout the County and to near by urban areas)	ja	ja
Bus service to/from Charlotte	ja	ja
If yes to any options, please indicate where?		
		A
		V
10. What other transportation issues exist in Harnett County?		
		_
		~
11. How can transportation for husiness and industry be improved in F	Harnett County?	<u></u>
11. How can transportation for business and industry be improved in F	Harnett County?	Y
11. How can transportation for business and industry be improved in F	Harnett County?	▽
11. How can transportation for business and industry be improved in F	Harnett County?	Y A
11. How can transportation for business and industry be improved in F 12. What modes of transportation are most often used by your busine modes, if made available, would be used?		d what
12. What modes of transportation are most often used by your busine		d what
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Harnett County Comprehensive Transportation Plan Business Survey

We would like to know a little about you so that we can verify that this survey has reached a wide variety of our residents. Your answers will be kept strictly confidential. Your answers will not be sold to any outside parties. Please CHECK the appropriate box:

14. How many full-time employees work for your business?

- ja <10
- 10-50
- 50-100
- 100-200
- >200



15. In what community of Harnett County is your business located? (Please check only one box. If you live in an unincorporated area, please check a township(TS), use the above map for reference.)

- Angier
- **Coats**
- j Dunn
- **Erwin**
- Lillington
- Anderson Creek(TS)
- Averasboro(TS)
- Barbecue(TS)
- Black River(TS)

- Buckhorn(TS)
- Duke(TS)
- Grove(TS)
- Hector's Creek(TS)
- Johsonville(TS)
- Lillington(TS)
- Neill's Creek(TS)
- Stewart's Creek(TS)
- Upper Little River(TS)

16. If you wish to receive updates on the future developments of the Harnett County Comprehensive Transportation Plan, please list your email address below:

Tyler Bray	this survey! Please return this survey by August 1, 2008 to:
Transportation Engineer NCDOT	
1554 Mail Service Center Raleigh, NC 27699	
	H-12

Harnett County Comprehensive Transportation Plan Residential Survey

Dear Harnett County Resident:

As you know, transportation plays a vital role in the economic prosperity of a region. In order to achieve sustainable growth, adequate transportation must be provided to support employment centers, education, travel and tourism, field to market agricultural demands/needs, and the movement of goods and services.

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Thank you for your participation and please call Tyler Bray at 919-733-4705 with any questions or if you wish to receive more information about this transportation plan!!!

Sincerely,

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Fayetteville Area Metropolitan Planning Organization

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estination because the most direct route is too congested? yes		E
estination because the most direct route is too congested? yes		
estination because the most direct route is too congested? yes		▼
	get to y	your
f yes, please provide examples including road names, starting location (general area), and design	tination	ns.

5. Is truck traffic a pr	roblem in t	he area?							
ja Yes									
ja No									
If yes, please provide	road name	s or locati	ons.						
6. What towns or desapply.)	stinations	would yo	u like to l	have acce	ess to imp	roved? (I	Please ch	eck all th	at
€ Raleigh		€ F	uquay-Va	rina		€ Foi	rt Bragg		
Chapel Hill		€ E	Benson			€ Re	search Tri	angle Park	
⊜ Durham		€ 5	Smithfield			€ Sp	ring Lake		
e Fayetteville		€ 5	Southern P	Pines/Pineh	nurst	€ Sa	nford		
7. Please rank the fo	llowina ma	aior roady	wavs in H	larnett Co	ounty in t	ne order k	ov which	they need	d to be
improved: 1-Most Im	_	-	-		carrey iii ti	ic order k	by Willeli	triey rices	
	1	2	3	4	5	6	7	8	9
NC 24	j⟨o₁	ja	j⟨o₁	j⟨n	j⟨o	ja	j∢n	j∢n	j∢n
NC 27	j∢ı	jo	jα	jα	jα	jo	j⊲	j⊲	jα
I-95	j∢n	ja	j∢n	jø	jøn	ja	j∢n	jø	jø
NC 210	j∢ı	ja	j∢ı	j∢ı	j∢ı	ja	j∢ı	j∢ı	j∢ı
NC 55	ja	jan	ja	ja	ja	jan	ja	ja	ja
US 421	j∢ı	ja	j∢ı	j∢ı	j∢ı	ja	j∢ı	j∢ı	j∢ı
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NC 82	j∢n	ja	j∢n	j∢i ∵	j∢ı	ja	j∢ı	ja	ja
US 401	j∢n	j∢n	jΦ	j∢n	j∢n	j∢n	j∢n	j∢n	j∢n
8. Identify any secon	ndary road	ways tha	t need in	nproveme	ent				
									V

Would you use the following transportation facilities instead of your own personere provided? (Please check the appropriate box and write in the locations)	nal vehicle it	f they
us samilas ta /fasan Fast Dusan	Yes	No
us service to/from Fort Bragg us service to/from Charlotte	j∢n	ja
	ja :-	ja :
us service to/from Fayetteville	ja	j(n
ff-road trails or greenways for walking and biking dewalks	jo	ja
us service to/from Greensboro	ja :-	ja :-
ail Service (throughout the County and to near by urban areas)	jo :-	ja
us service to/from the Triangle (Raleigh/Durham)	j@ :-	ja
n-road bicycle facilities such as bike lanes and wide shoulders	jo :-	ja
	jΦ	ja
yes to any options, please indicate where?		
		~
) What other transportation issues swipt in Harnott County C		
). What other transportation issues exist in Harnett County?		
		▼

Harnett County Comprehensive Transportation Plan Residential Survey

We would like to know a little about you so that we can verify that this survey has reached a wide variety of our residents. Your answers will be kept strictly confidential. Your answers will not be sold to any outside parties. Please CHECK the appropriate box:

11. What is your age?

ja Under 18 ja 18-24 ja 25-34 ja 35-44 ja 45-64 ja 65-74 ja Over 74

12. How would you classify your race?

jo White jo Other jo Native jo Hispanic jo Black jo Asian

American

13. How many people live in your household including yourself?

ja 1 ja 2 ja 3 ja 4 ja 5 ja 6 ja 7 ja 8 or more

14. What was your household income last year?

ja Below ja \$30,000 - ja \$40,000 - ja \$53,800 - ja Above ja I choose not \$30,000 \$39,999 \$53,799 \$70,000 \$70,000 to answer



And And Averiga Barria Bladia Budo 6. Who	nn	ja Grove(TS) ja Hector's Creek(TS) ja Johsonville(TS) ja Lillington(TS) ja Neill's Creek(TS) ja Stewart's Creek(TS) ja Upper Little River(TS) ja Live outside Harnett County
ia Erwina Lillii Andia Aveira Barria Bladia Buda 6. Who	rin ngton derson Creek(TS) erasboro(TS) ebecue(TS) ck River(TS) ckhorn(TS)	ja Johsonville(TS) ja Lillington(TS) ja Neill's Creek(TS) ja Stewart's Creek(TS) ja Upper Little River(TS)
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Nev	ere did you get this survey?	
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oth	ner	
_	ou wish to receive updates on th ortation Plan, please list your em	ne future developments of the Harnett County Comprehensivnail address below:
rler Bra canspoi CDOT 554 Ma		se return this survey by August 1, 2008 to:

Survey Executive Summary

The Goals and Objectives Survey for the Harnett County CTP received 218 residential responses and 25 business responses for a total of 243 completed surveys. We received 61 email addresses from citizens. There is extremely beneficial information that was obtained in the survey and additional citizen concerns that will be addressed as we move forward.

There is particular interest across the county in making sure that they plan works well to keep economic growth one of its primary focuses. Also, with gas prices continuing to rise, many responses were in favor of all forms of public transportation. There is interest in bus service across all of North Carolina and rail service in the county.

Two interesting notes from the open ended responses were about school traffic on roads that connected to larger schools. Issues regarding safety, number of cars and bus use were of interest. Also, there were substantial comments about the growing need for elderly transportation across the county. There are quite a few concerns regarding this in the rural areas of the county. Some of the responses and comments received included the truck, safety, and traffic issues in Lillington and the need for an additional crossing of the Cape Fear River.

*Included in the enclosed documentation you will find the complete answers to all questions less the demographic information.

Question 1: How important are the following transportation goals to you?							
	Residential		Business		Combined		
	Response	Residential	Response	Business	Response	Combined	
and Answer	Rating ¹	Rank	Rating ¹	Rank	Rating ²	Rank	
Increased Transportation Mode		·					
Choices (Additional Opportunities	483	6	30	5	513	6	
to walk and bike to destinations)					, , si .	-	
Increased Public Transportation				H AC		6 ₃	
Options (Bus or rail service to						Ĭ.	
destinations; Park-n-ride lots to	385	2	24	3	409	2	
facilitate carpooling, vanpooling,							
and transit service							
Fast Automobile Travel Times					and the second		
(High-speed roads with more lanes	455	5	27	4	482	5	
and fewer intersections; more	1 33	5	21	1	402	5	
connector roads; less congestion)	:			-			
Community and Rural Character							
(Keeping businesses in downtown							
areas; preservation of existing	445	4	20		465	3	
buildings and neighborhoods;	445	4	20	1	405	3	
maintaining the rural character and							
landscape)							
Economic Growth (Building or							
improving roads and railways to							
attract new businesses and to	365	1	21	2	386	1	
allow existing businesses to							
expand)							
Service of Special Needs (Better	:						
transportation services for low	420	_	44		474	1	
income, elderly, and disable	430	3	44	6	474	4	
residents)							

 $^{^{1}}$ Rating is calculated by multiplying the number of responses for each rank by that rank and adding all values together.

²Rating is calculated by adding Business Response Rating and Residential Response Rating.

Question 2: To alleviate traffic congestion a road should be improved by:							
	Residential		Business		Combined		
	Response	Residential	Response	Business	Response	Combined	
Answer	Rating ¹	Rank	Rating ¹	Rank	Rating ²	Rank	
Building Additional Travel Lanes	392	2	17	2	409	2: ::.	
Controlling the frequency and		·				7 A 1 A 1 A 1	
locations of driveways and cross	448	4	26	4	474	4	
streets that access the road						12.0	
Improving intersection design, better traffic signal timing, adding turn lanes, and creating roundabouts	311	1	12	1	323	1	
Providing an alternative means of transportation (bus, train, bicycle, park-n-ride)	409	3	25	3	434	3	

¹Rating is calculated by multiplying the number of responses for each rank by that rank and adding all values together.

²Rating is calculated by adding Business Response Rating and Residential Response Rating.

Question 3: Are you	concerned with safet	y or crash pro	oblems at s	specific locatio	ns?	
	Residential	Business				
	Responses	Responses	Total	Percentage		
Yes	121	15	136	59.4		
No	84	9	93	40.6		
	Places					
US 421/401 NC 210/27 in Lilli	ington			41		
Ray Road and Overhills Road					12	
NC 210 (general)					0 .	
Buffalo Lakes Road				8		
US 421 (general)				5		
NC 210 and Harnett Central F	Road				5	
NC 27 and NC 24 Intersection	1				5	
US 421 at Campbell Universit	у				4	
US 421 in Dunn					3	
Dunn-Erwin Road and Tilghm	an Road				3	
US 401 and Harnett Central Road					2	
NC 27 and Johnsville Elementary					2	
Broad Street					2	

Question 4: When traveling in your area, do you find that you often have to go out of your way to
get to your destination because the most direct route is too congeted?

	Residential	Business		
	Responses	Responses	Total	Percentage
Yes	57	5	62	27.0
No	148	20	168	73.0

Places	Total Responses
US 421/401 NC 210/27 in Lillington	12
Ray Road and Overhills Road	7
US 421 - Dunn	7
NC 87 and NC 210 through Spring Lake	3
US 401 to F-V	3
NC 55	3
Buies Creek during school	2
NC 210 and Harnett Central Road	2 3.5
Buffalo Lake Road	1

	Question 5	: Is truck traff	ic a problem i	n the area?	gauneh (penuh	1 4,1
		Residential	Business			
		Responses	Responses	Total	Percentage	
Yes		69	6	75	32.8	
No		135	19	154	67.2	
	Pl	laces			Total Res	sponses
US 421/401 NC	210/27 in Lillington				26	5
NC 210 - Spring	Lake to Lillington				12	2
NC 27					6	
US 421 - Dunn					5	
NC 55					3	
US 401 and Har	rnett Central Road				2	
Buffalo Lake Ro					2	

Question 6: What towns or destinations would you like to have access to improved?						
	Residential Responses	Business Responses	Total Responses	Percentage of Responses		
Benson	18	3	21	3.3		
Chapel Hill	36	4	40	6.3		
Durham	23	5	28	4.4		
Fayetteville	80	9	89	14.0		
Fort Bragg	46	8	54	8.5		
Fuquay-Varina	68	6	74	11.7		
Raleigh	94	12	106	16.7		
Research Triangle Park	35	4	39	6.1		
Sanford	59	7	66	10.4		
Smithfield	25	4	29	4.6		
Southern Pines/Pinehurst	26	6	32	5.0		
Spring Lake	53	4	57	9.0		

Question 7: Please rank the follo	wing major road	ways in Harn improved.	ett County in	the order b	y which they	need to be
eede min in deed office on deed			488611			
	Residential		Business		Combined	A alimbuo
	Response	Residential	Response	Business	Response	Combined
	Rating ¹	Rank	Rating ¹	Rank	Rating ²	Rank
I-95	925	7	39	6	964	7
NC 24	901	6	43	7	944	6
NC 27	693	5	25	2	718	4
NC 55	686	4	32	4	718	4
NC 82	1042	9	46	8	1088	9
NC 87	926	8	48	9	974	8
NC 210	574	1	30	3	604	1 1
US 401	594	2	38	5	632	2
US 421	679	3	24	1	703	3

¹Rating is calculated by multiplying the number of responses for each rank by that rank and adding all values together.

 $^{^{2}}$ Rating is calculated by adding Business Response Rating and Residential Response Rating.

Question 8: Identify any secondary roads that need improvement	
Places	Total Responses
Overhills Road	7
Old Stage Road	6
Ray Road	6
Christian Light Road	5
Buffalo Lake Road	4
Old US 421	3:
Hillmon Grove Road	3
Nursery Road	2
McDougald Road	2
Neill's Creek Road	2
Harnett Central Road	2
Ponderosa Road	2
Old Fairground Road	2

Question 9: Would you use the fo				f your own
personal v	ehicle if they we	re provided)	
			tys ee	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	Residential	Business	antight is	Percentage
	Yes	Yes	Total Yes	of Yes
	Responses	Responses	Responses	Responses ³
Sidewalks	149	14	163	71.8
Off-road trails or greenways for				
walking and biking	136	13	149	65.6
On-road facilities such as bike	-4			Tall to the second
lanes and wide shoulders	93	11	104	45.8
Bus service to/from Fort Bragg	55	2	57	25.1
Bus service to/from Fayetteville	73	3	76	33.5
Bus service to/from the Triangle				
(Raleigh/Durham)	85	7	92	40.5
Bus service to Charlotte	49	2	51	22.5
Bus service to/from Greensboro	45	0	45	19.8
Rail Service (throughout the				
lo 1 1	ı	i	i	I

126

135

9

59.5

County and to near by urban

areas)

³Number or total responses was 227

Question 10: What other transportation issues exist in Harnett	County?
Issues	Total Responses
Public transportation for disabled and low income families	14
Any public transportation	9
Bypass of Lillington	8
Additional sidewalks and greenways	6 / 27
Maintenance of Secondary Roads	6
Public transportation for workers, governmet carpooling	5
Better scheduling and advertisements for HARTS (rude workers, too limited)	4
Additional Cape Fear River crossing	4
Rail service throughout the county	3
Widening for NC 210	2
Speeding and traffic on Harnett Central Road	2
School traffic (not enough children using the bus)	2
Increased lanes on I-95	1
Better striped side streets across the county	1
Rumble strips on the centerline of two lane roads	1
Place a toll road around Fort Bragg and Spring Lake	1
Additional taxis	1
Keep tractor-trailors off of McDougald Road	1 1 1
Widening for NC 401	1
Signal synchronization in Dunn along US 421	1
Light rail access to Fort Bragg	1
Speeding on NC 87	1
Angier Bypass	1
Dunn-Erwin Bypass of US 421	1
Improve the airport	1
Subdivision traffic and Two-lane highways	1
NC 87 corridor protection and planning	1

fysion of Madeu schallens office it in term factor of		
Improvements	Total Respons	es
Bus service	2	
New bridge and bypass around Lillington	* : : : : : : : : : : : : : : 1	
Public transportation for factory workers who work in Lillington	and Connegation and	All de M
Four-lane all major facilities	1	5
Make access convienent by turn lanes	1 3	
Faster access to RDU from Harnett County	21 48 June 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Faster access to Fort Bragg along I-95	1	Specifical in
Wider two-lane roads designated for trucks	1	

Question 12 (business-only): What modes of transportation are most often used by your business and employees? And what modes, if made available would be used?

Options	Reponses	Percentage of Total Responses
Public Transportation	5 75 x 5 x 15 x 15 x 15 x 15 x 15 x 15 x	20.0
Rail	0	0.0
Automobiles	22	88.0
Commercial Vehicles	10	40.0

Improvements	Total Responses
Better downtown parking in Lillington	1
Minimize railroad delays	1
Additional Bus service	1
Additional Rail service	1
Intersection where duncan st. and 10th st. goes into 401/421/210/27. many accidents,	
intersection must be redesigned.	1
Good planning for roundabouts	1

Appendix I Additional Transportation Alternatives & Scenarios Studied

This appendix includes documentation for alternatives and scenarios that were studied but were not selected as the CTP project proposal.

US 401

TIP Project R-2609 identifies the need for US 401 to provide additional capacity and mobility improvements throughout Harnett County. In coordination with this need, the Harnett County CTP began identifying improvements for US 401 in the Lillington area. Improving existing US 401 to relieve congestion was eliminated from consideration due to right of way restrictions and potential impacts to homes and businesses.

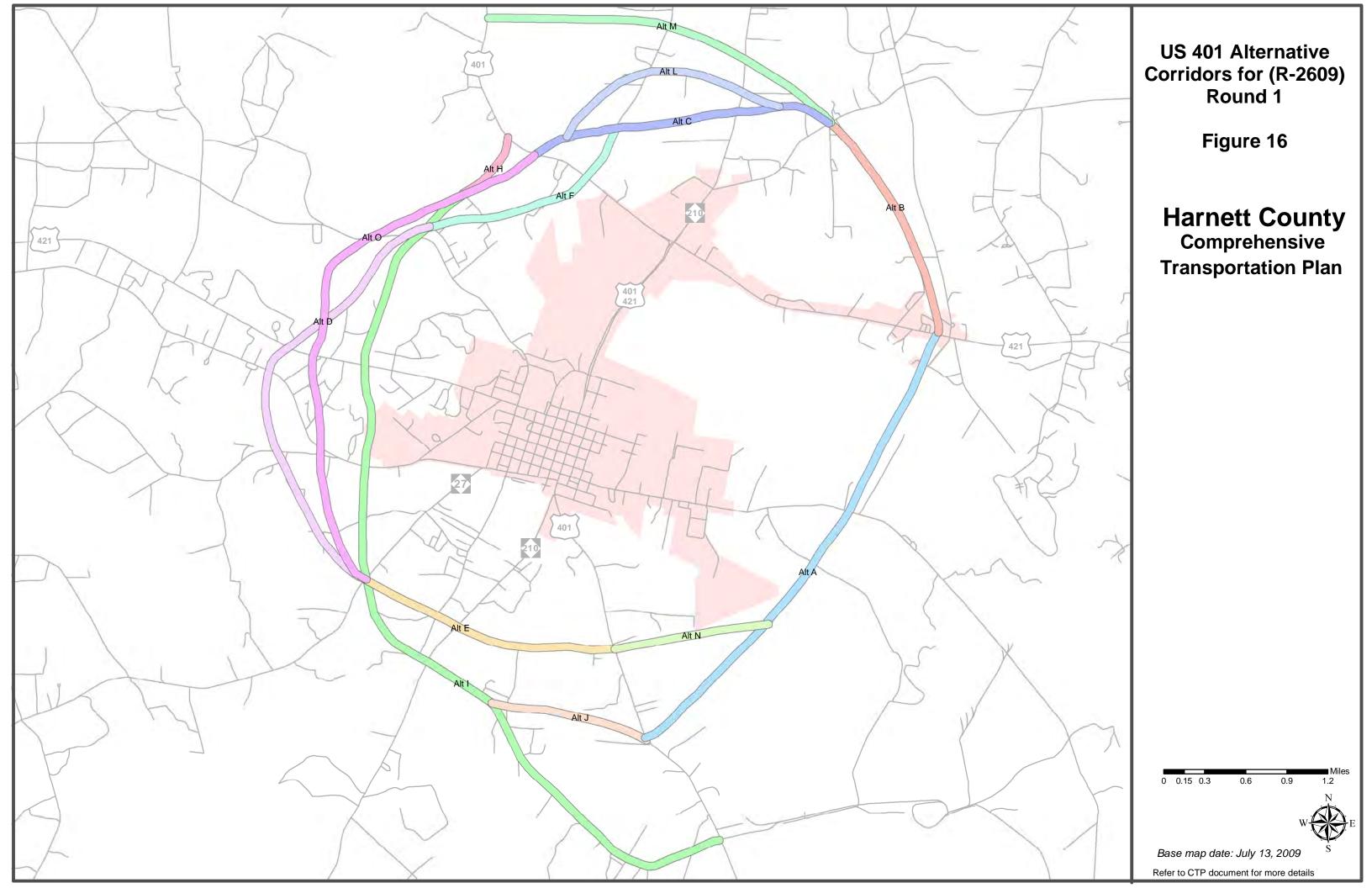
The CTP Steering Committee decided that alternatives would be developed for this new location facility and a US 401 sub-committee would be created to evaluate these alternatives and make a decision on the corridor for US 401 to be shown on the Harnett County CTP. This sub-committee met three times to analyze alternatives. The first meeting looked at the alternatives shown in Figure 16 and the subsequent potential environmental impacts shown in Table 6. Those alternatives were narrowed down and slightly altered and presented at the second meeting along with their potential environmental impacts in Figure 17 and Table 7.

The group narrowed down those alternatives to two corridors (A and B, show in Figure 18) and presented them to the CTP Team along with Table 8 showing the potential environmental impacts. The CTP Team selected Corridor A as the CTP project proposal, shown in Figure 19 and after some small refinements the recommendation was finalized and included on the CTP.

US 421

A US 421 Bypass was recommended on the Dunn-Erwin Thoroughfare Plan from 2002 and that recommendation was included on the Harnett County CTP as well. The old bypass recommendation and additional bypass alternatives were analyzed for the Harnett County CTP. The CTP Steering Committee analyzed multiple bypass alternatives, Figures 20-23, traffic projections and potential environmental impacts (Table 9) to help guide the selection of the final recommendation.

The final recommendation for the bypass was different from the Dunn-Erwin Thoroughfare Plan. Alternative ABCE was selected, but refined to use existing Jonesboro Road (SR 1808) and its interchange connection with Interstate 95. It includes a termination at Jonesboro Road and an additional connection to existing US 421 called the Powell Street Extension. Additional information on this is located in Chapter 2.



VI	IMPACT TABLE FOR US401 ALTERNATIVES - Round	ABLEF	OR US	401 ALT	ERNATI	VES - F	tound 1								
	ALT A	ALT B	ALTC	ALT D	ALT E /	ALT F /	ALT G	ALT H /	ALT I A	ALT J	ALT K	ALT L	ALT M	ALT N /	ALT O
PROJECT FACTORS															
Mainline New Location Length - miles ¹	4.05	1.79	2.73	3.00	0.58	1.45	1.93	3.39	3.60	1.19	0.43	2.22	1.82	1.53	0.61
Number of new interchanges	2	1	2	2	1	2	3	2	2	1	1	2	1	1	1
Number of grade separations (roadway)	1	1	1	2	0	1	1	3	3	0	0	1	1	0	0
Railroad Crossings Grade Separated	-	0	-	-	0	0	0	-	-	1	0	-	0	-	0
Estimated Cost (\$ Millions)															
SOCIOECONOMIC FACTORS															
Businesses Impacted															
Churches and Cemeteries	-	0	0	0	0	0	0	-	0	0	0	0	1	0	0
Employees Impacted															
Houses Impacted															
Parks Impacted	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Receptors Impacted by Noise ⁶															
Schools Impacted	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
INFRASTRUCTURE															
Gas Line Crossings															
Sewer Line Crossings															
Transmission Line Crossings															
Water Line Crossings															
ENVIRONMENTAL FACTORS															
Conservation Tax Credit Property ⁵	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Federal Land Ownership ⁵	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fish Spawning Areas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gamelands ⁵	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Groundwater Incidents	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hazardous Disposal Sites ⁴	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
High Quality Outstanding Water Resources ⁵	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lands Managed Conseravtion Open Space ⁵	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Trust Priority Areas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recreation Projects Land Water Conservation Fund ⁵	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sanitary Sewer Discharges	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sanitary Sewer Treatment Plants	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Solid Waste Facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
River Crossings ⁷	_	0	0	0	_	0	0	0	0	_	0	0	0	0	_
Surface Waters Intakes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Wetlands Impacted ⁵	6.5	10.3	8.1	1.5	3.2	0.7	9.0	9.0	0	20.5	0	1.7	0	0.3	13.7
									•						

WI	IMPACT TABLE FOR US401 ALTERNATIVES - Round	ABLEF	OR US4	101 ALT	ERNAT	IVES -	Round 1								
	-	ŀ	L	-	ľ	ŀ	- 1	- 1	ŀ	L	ľ				
	ALT A	ALT B	ALT C /	ALT D /	ALT E /	ALT F	ALT G	ALT H	ALT I /	ALT J /	ALT K	ALT L	ALT M	ALT N	ALT O
Watershed ⁵	147	65	66	109	21	53	20	75	37	43	16	81	99	99	22
Water Storage Tanks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Water Treatment Plants	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wells Groundwater Intakes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED FACTORS															
Dedicated and Registered Areas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Historic National Register Districts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Historic National Register Structures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Historic Study List Structures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Managed Area	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Natural Heritage Element Occurrence, points	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Natural Heritage Element Occurrence, lines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Natural Heritage Element Occurrence, areas	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Significant Natural Heritage Areas ⁷	1	0	0	0	1	0	0	0	0	1	0	0	0	0	1

Notes: Unless otherwise noted, estimates of impacts based on 300 foot corridor (estimated right of way limits)

¹ Lengths are approximate. Mainline lengths include all new location corridors in the alternative

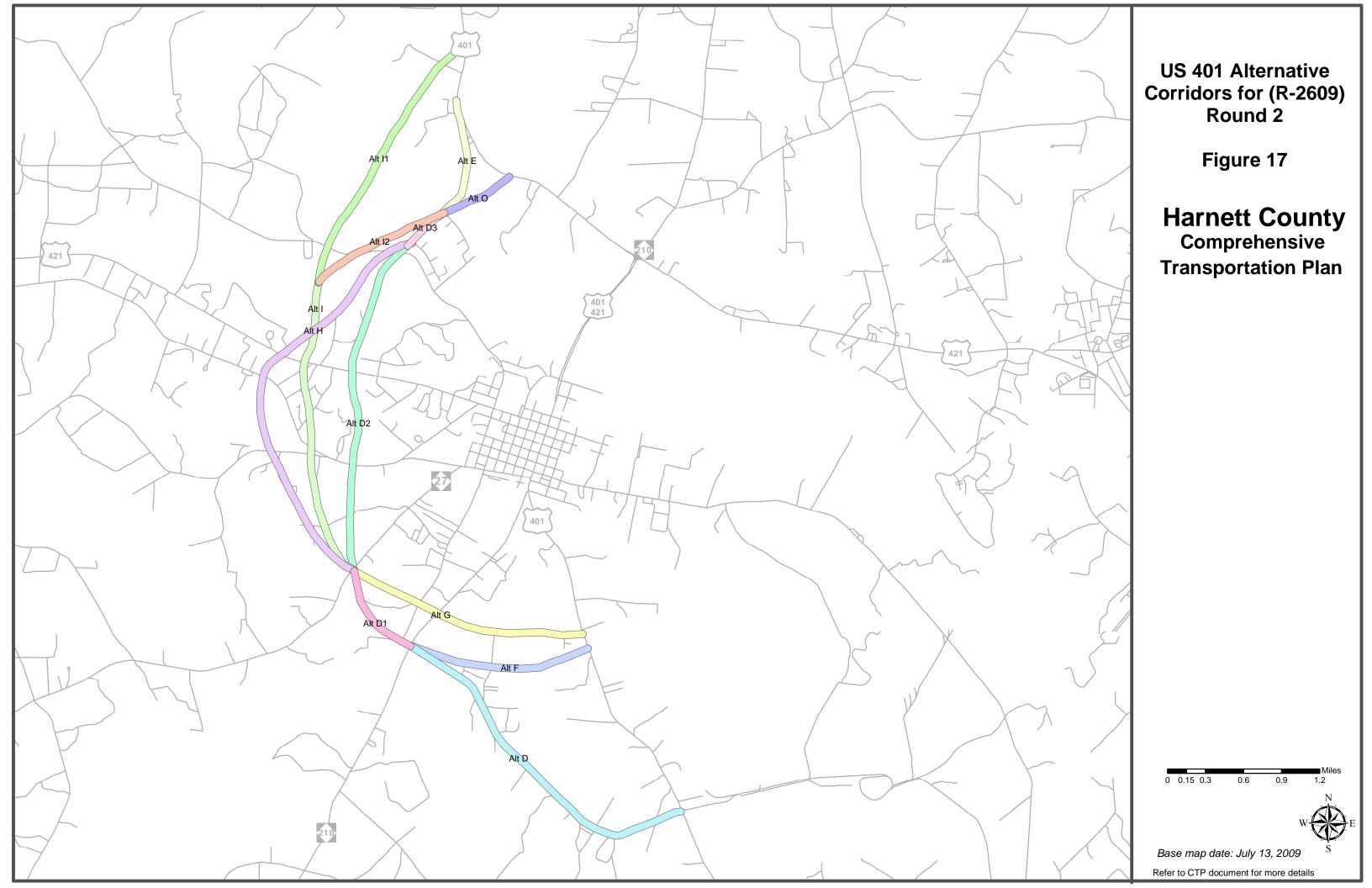
² Rebuilt interchanges are those that would need to be reconstructed to accommodate a new or additional traffic

 3 Includes ponds and lakes, includes entire pond acreage if pond is anticipated to be drained

⁴ Impacts include superfund points and sites, groundwater incidents, and hazardous waste facilities

⁵Area Impacts are given in acres

⁶Recepetors are assumed to be 350 feet from roadway centerline ⁷From the Cape Fear River



MM	PACT TABLE FOR US401 ALTERNATIVES -Round 2	LE FOR	US401 ₽	LTERNA	TIVES -F	Sound 2							
	SEC D	SEC D1	SEC D2	SEC D3	SEC E	SEC F	SEC G	SEC H	SECI	SEC 11	SEC 12	SECO	Existing
PROJECT FACTORS													
Mainline New Location Length - miles ¹	1.46	0.78	2.69	0.39	0.97	1.45	1.93	3.39	2.44	2.20	1.10	0.61	7.35
Number of new interchanges	2	1*	1	0	1	7	2*	1	1	1	0	1	0
Number of grade separations (roadway)	0	0	2	0	0	0	1	2	2	1	1	0	0
Railroad Crossings Grade Separated	0	0	0	0	0	0	0	0	0	0	0	0	0
Estimated Cost (\$ Millions)	27	14	30	5	32	22	35	35	30	33	10	50	25
SOCIOECONOMIC EACTORS													
Businesses Impacted	+	1	1	c	C	O	С	-	4	-	С	c	11
Churches and Cemeteries	. 0	. 0	. 0	0	0	0	0		0	. 0	0	0	-
Employees Impacted	10	10	10	0	0	0	0	10	40	10	0	0	110
Houses Impacted	47	4	20	2	2	8	56	30	36	6	0	0	06
Parks Impacted	0	0	0	0	0	0	0	0	0	0	0	0	0
Schools Impacted	0	0	0	0	0	0	0	0	0	0	0	0	0
INFRASTRUCTURE													
Gas Line Crossings													
Sewer Line Crossings			Z	Nood Information from Local Governments	40.00		- 4	را در		400	Ų		
Transmission Line Crossings			_	<u> </u>		= = 2) 5		5	į		
Water Line Crossings													
ENVIRONMENTAL FACTORS													
Conservation Tax Credit Property ⁵	0	0	0	0	0	0	0	0	0	0	0	0	0
Federal Land Ownership ⁵	0	0	0	0	0	0	0	0	0	0	0	0	0
Fish Spawning Areas	0	0	0	0	0	0	0	0	0	0	0	0	0
Gamelands ⁵	0	0	0	0	0	0	0	0	0	0	0	0	0
Groundwater Incidents	0	0	0	0	0	0	0	0	0	0	0	0	1
Hazardous Disposal Sites ⁴	0	0	0	0	0	0	0	0	0	0	0	0	0
High Quality Outstanding Water Resources ⁵	0	0	0	0	0	0	0	0	0	0	0	0	0
Lands Managed Conseravtion Open Space ⁵	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Trust Priority Areas	0	0	0	0	0	0	0	0	0	0	0	0	0
Recreation Projects Land Water Conservation Fund ⁵	0	0	0	0	0	0	0	0	0	0	0	0	0
Sanitary Sewer Discharges	0	0	0	0	0	0	0	0	0	0	0	0	0
Sanitary Sewer Treatment Plants	0	0	0	0	0	0	0	0	0	0	0	0	0
Solid Waste Facilities	0	0	0	0	0	0	0	0	0	0	0	0	0
River Crossings	0	0	0	0	1	0	0	0	0	_	0	1	1
Surface Waters Intakes	0	0	0	0	0	0	0	0	0	0	0	0	0

IMF	ACT TAE	MPACT TABLE FOR US401 ALTERNATIVES -Round 2	US401 A	LTERNA	TIVES -R	ound 2							
	SEC D	SEC D1	SEC D2	D2 SEC D3	SEC E	SEC F S	SEC G S	SEC H	SECI	SEC 11	SEC 12	SECO	Existing
Total Wetlands Impacted ⁵	0.13	2.09	1.14	2.61	9.26	0.7	9.0	9.0	0	8.26	2.61	13.7	13.58
Watershed ⁵	53.1	28.36	95.55	14.18	35.27	53	20	75	66.11	80	40	22	267.72
Water Storage Tanks	0	0	0	0	0	0	0	0	0	0	0	0	0
Water Treatment Plants	0	0	0	0	0	0	0	0	0	0	0	0	0
Wells Groundwater Intakes	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED FACTORS													
Dedicated and Registered Areas	0	0	0	0	0	0	0	0	0	0	0	0	0
Historic National Register Districts	0	0	0	0	0	0	0	0	0	0	0	1	0
Historic National Register Structures	0	0	0	0	0	0	0	0	0	0	0	0	0
Historic Study List Structures	0	0	0	0	0	0	0	0	0	0	0	0	0
Managed Area	0	0	0	0	0	0	0	0	0	0	0	0	0
Natural Heritage Element Occurrence, points	0	0	0	0	0	0	0	0	0	0	0	1	2
Natural Heritage Element Occurrence, lines	0	0	0	0	0	0	0	0	0	0	0	0	0
Natural Heritage Element Occurrence, areas	0	0	0	0	0	0	0	1	0	0	0	0	0
Significant Natural Heritage Areas	0	0	0	0	1	0	0	0	0	1	0	1	1

Notes: Unless otherwise noted, estimates of impacts based on 300 foot corridor (estimated right of way limits)

¹ Lengths are approximate. Mainline lengths include all new location corridors in the alternative

² Rebuilt interchanges are those that would need to be reconstructed to accommodate a new or additional traffic

 3 Includes ponds and lakes, includes entire pond acreage if pond is anticipated to be drained

⁴ Impacts include superfund points and sites, groundwater incidents, and hazardous waste facilities

⁵Area Impacts are given in acres ⁶Recepetors are assumed to be 350 feet from roadway centerline



IMPACT TABLE FOR US401 ALTERNATIV	ES - Round	3	1
OCCURANCES PER ALTERNAT			1
	Corridor A	Corridor B	
PROJECT FACTORS			1
Mainline New Location Length - miles ¹	6.75	5.89	1
Number of new interchanges	5	5	1
Number of grade separations (roadway)	4	2	Notes: Unless otherwise noted, estimates
Railroad Crossings Grade Separated	0	0	of impacts based on 300 foot corridor
Estimated Cost (\$ Millions)			(estimated right of way limits)
			¹ Lengths are approximate. Mainline
SOCIOECONOMIC FACTORS			lengths include all new location corridors in
Businesses Impacted	3	1	the alternative
Churches and Cemeteries	0	0	² Rebuilt interchanges are those that would
Employees Impacted	30	10	need to be reconstructed to accommodate
Houses Impacted	43	44	a new or additional traffic
Parks Impacted	0	0	
•			Includes ponds and lakes, includes entire
Schools Impacted	0	0	pond acreage if pond is anticipated to be
			drained
INFRASTRUCTURE			⁴ Impacts include superfund points and
Gas Line Crossings	N	eed	sites, groundwater incidents, and
Sewer Line Crossings	Informa	tion from	hazardous waste facilities
, and the second			inazardous waste racilities
Transmission Line Crossings	-	ocal	
Water Line Crossings	Gove	rnments	
			⁵ Area Impacts are given in acres
ENVIRONMENTAL FACTORS			, 9
Conservation Tax Credit Property ⁵	0	0	⁶ Recepetors are assumed to be 350 feet
Federal Land Ownership ⁵	0	0	from roadway centerline
Fish Spawning Areas	0	0	
Gamelands ⁵	0	0	1
Groundwater Incidents	0	0	1
Hazardous Disposal Sites ⁴	0	0	1
High Quality Outstanding Water Resources ⁵	0	0	1
Lands Managed Conseravtion Open Space ⁵	0	0	1
Land Trust Priority Areas	0	0	1
Recreation Projects Land Water Conservation Fund ⁵	0	0	1
Sanitary Sewer Discharges	0	0	
Sanitary Sewer Treatment Plants	0	0	1
Solid Waste Facilities	0	0	
River Crossings	1	1	1
Surface Waters Intakes	0	0	1
Total Wetlands Impacted ⁵	15	37	1
Watershed ⁵ (III-IV)	328	357	
Water Storage Tanks	0	0	1
Water Treatment Plants	0	0	1
Wells Groundwater Intakes	0	0	1
Wolle Creatianate manes	Ŭ	Ü	
RESTRICTED FACTORS			
Dedicated and Registered Areas	0	0	1
Historic National Register Districts	1	0	
Historic National Register Structures	0	0	
Historic Study List Structures	U		1
Thistoric Study List Structures	0	0	
Managed Area		0	
Managed Area Natural Heritage Element Occurrence, points	0 0	0	
Managed Area Natural Heritage Element Occurrence, points Natural Heritage Element Occurrence, lines	0 0 0 0	0 1 0	
Managed Area Natural Heritage Element Occurrence, points	0 0	0	



US 401 Alternative Elimination Reasons September 10, 2009 (Round 1)

The committee decided that recommending a new location facility to the east would connect all major roads in the area.

Alternative J was eliminated because it will impact future planned development and will negatively impact housing.

Alternative K was eliminated because it will impact proposed hospital connections.

Alternative O and Alternative E were altered slightly where they connect with existing US 401 north of Lillington.

Alternative M and Alternative L were eliminated because of impact to existing development.

Alternative A and Alternative N do not meet the need of the project and were eliminated. They were the alternatives on the east side of Lillington.

US 401 Alternative Elimination Reasons September 23, 2009 (Round 2)

Alternative D was eliminated because of too many housing impacts.

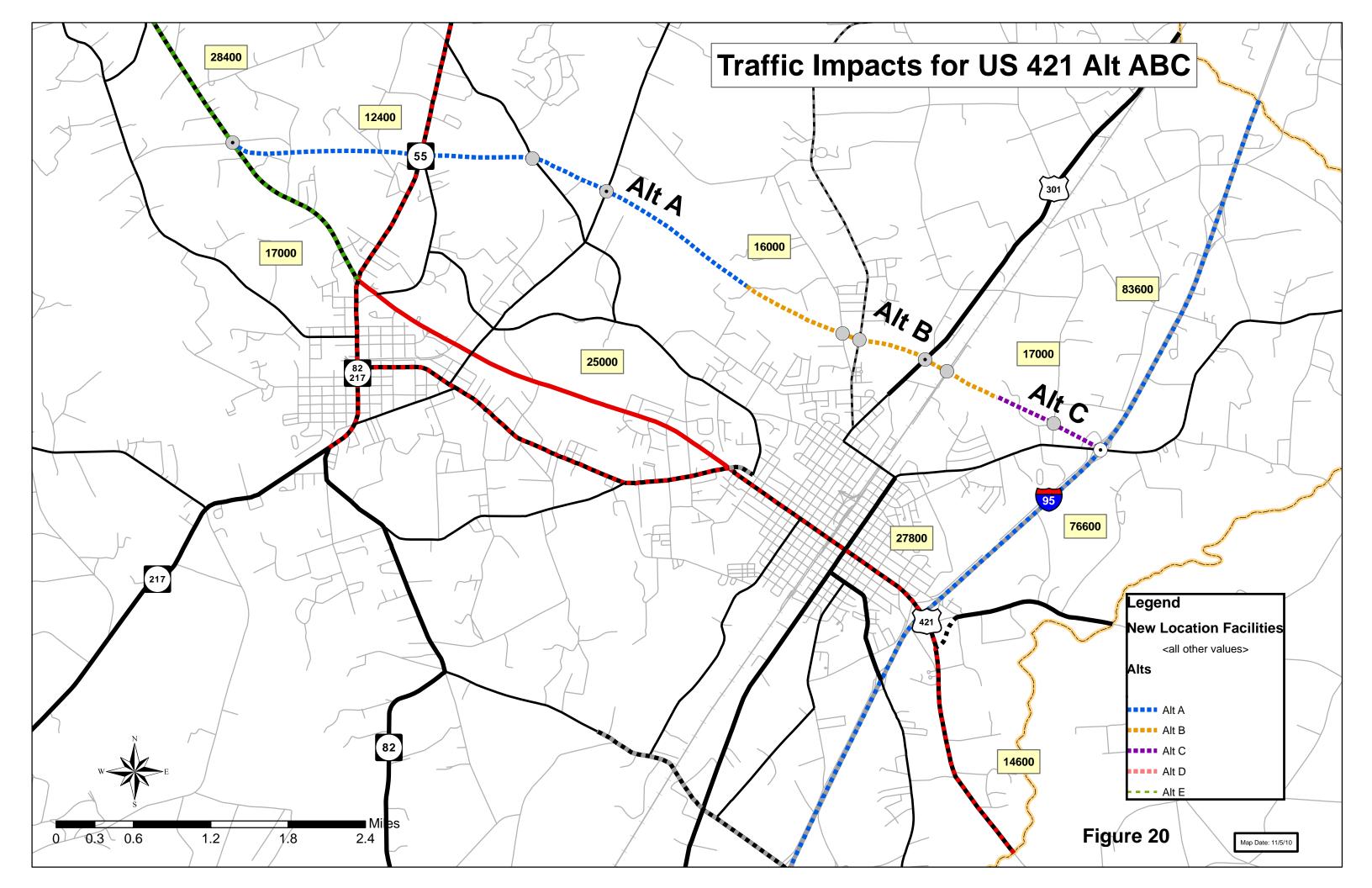
The internal portion of Alternative I was eliminated from Alternative H to NC 27.

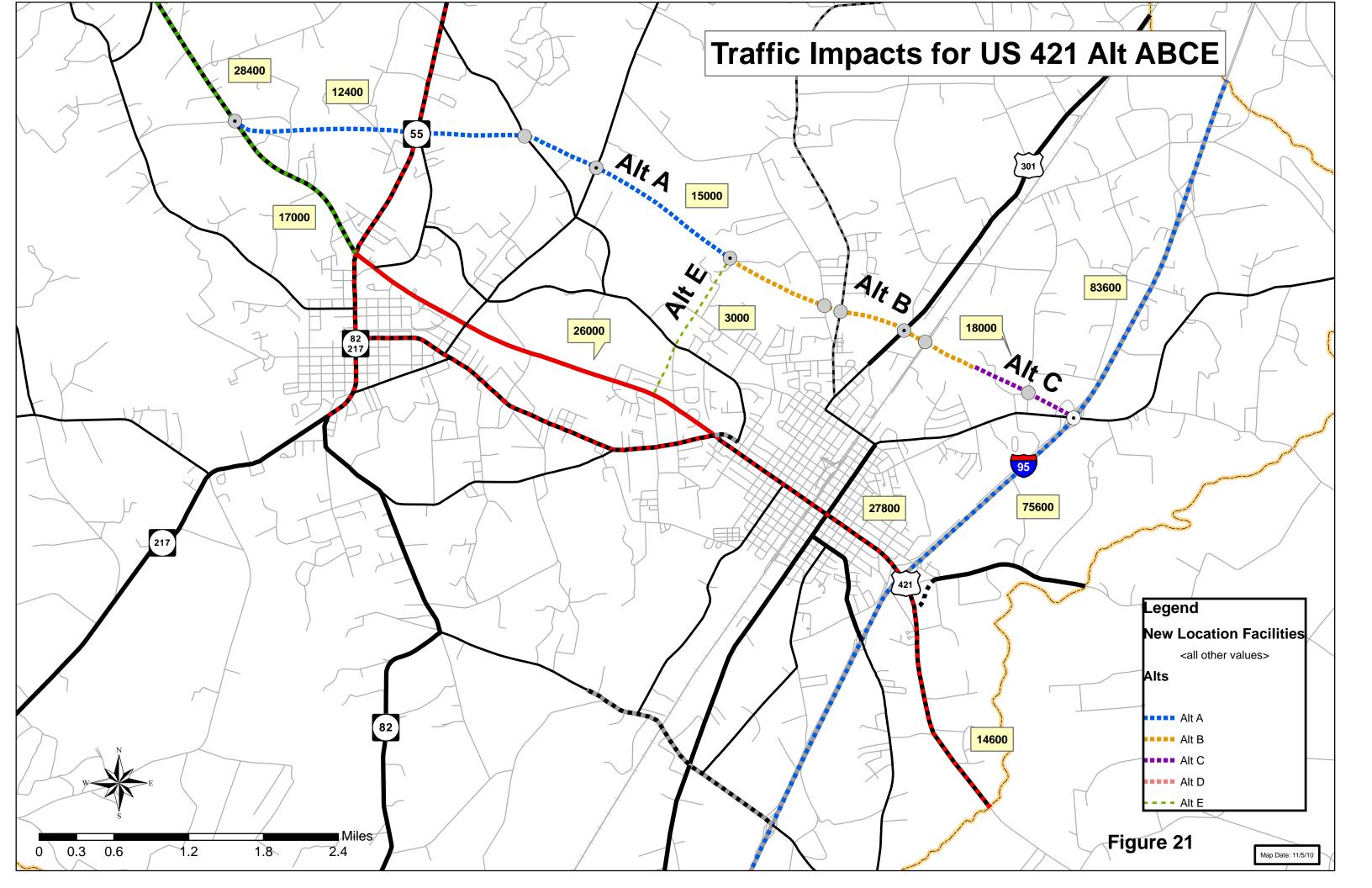
Northern part of Alternative H was eliminated from Alternative I to Alternative D3.

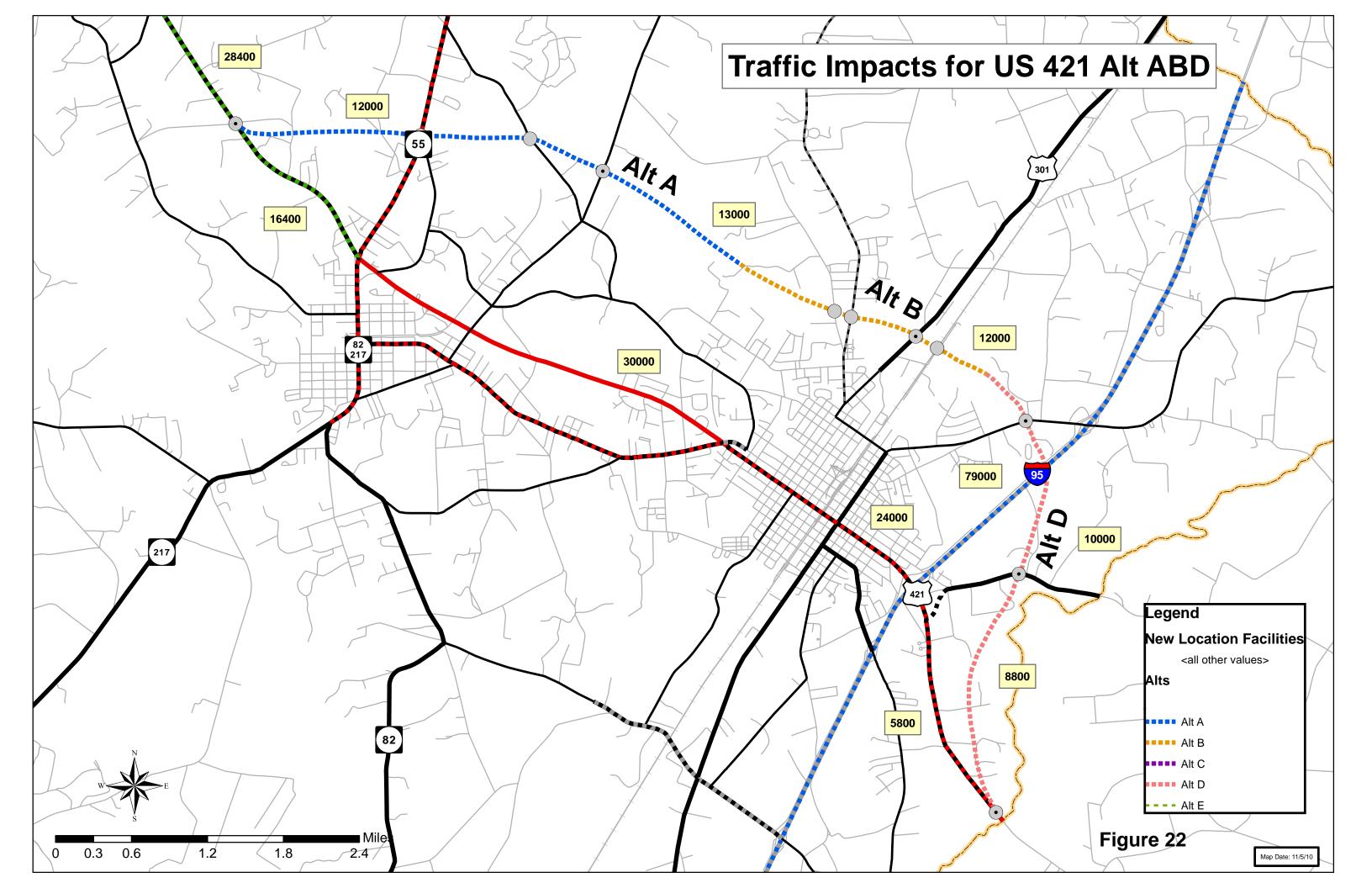
Alternative E was eliminated and Alternative O was kept for the Corridor B.

Alternative F-D1-D2-D3-O was converted into **Corridor B**.

Alternative G-H (southern)-IA (new)-I1 was converted into **Corridor A**.







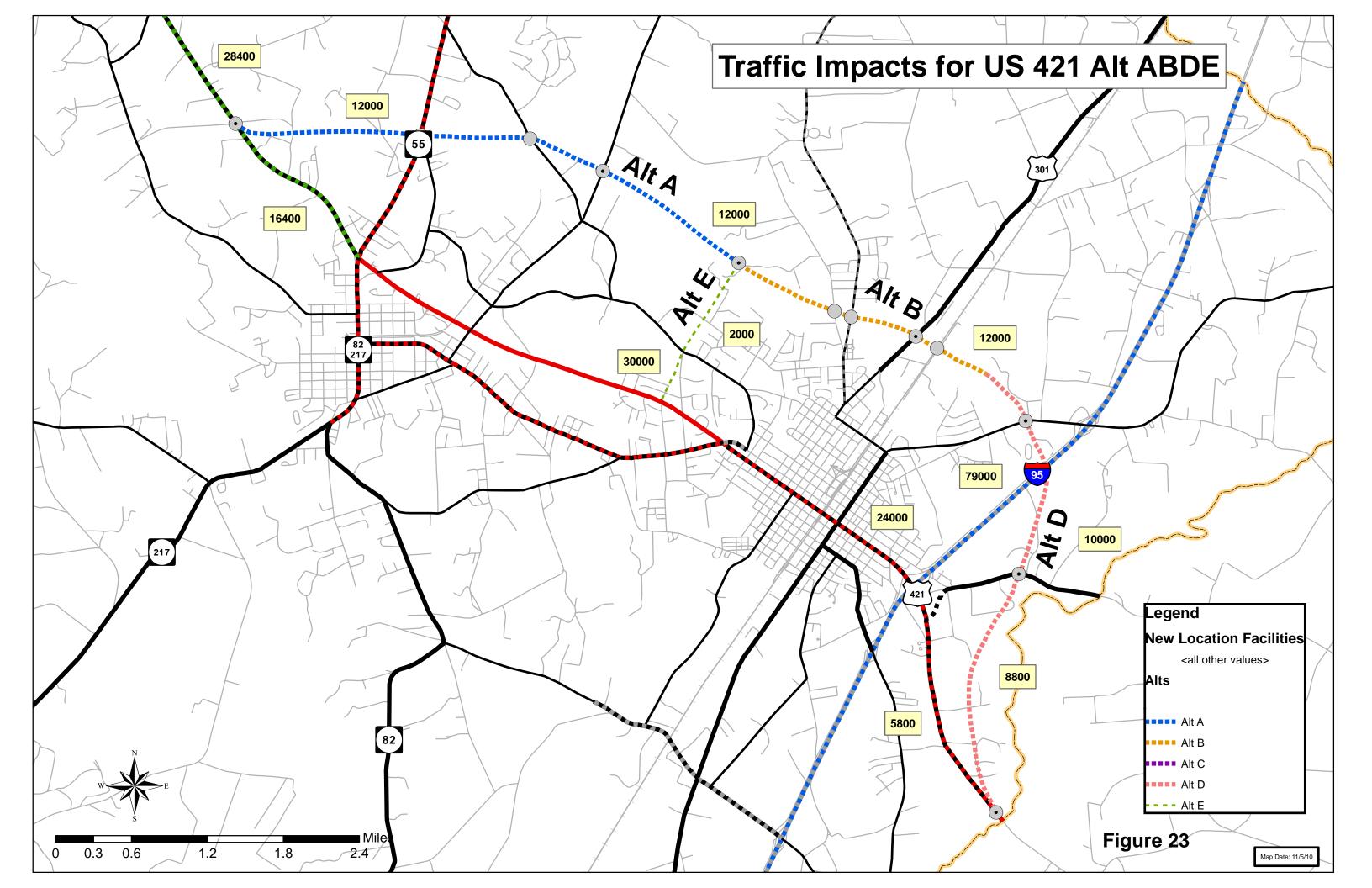


Table 9

IMPACT TABLE FOR US421 ALTERNATIVES					
	ALT A	ALT B	ALT C	ALT D	ALT E
PROJECT FACTORS					
Mainline New Location Length - miles ¹	4.29	2.18	0.89	3.78	1.26
Number of new interchanges	4	1	0	3	0
Number of grade separations (roadway)	1	3	1	1	0
Railroad Crossings Grade Separated	0	1	0	0	0
3			_	_	
SOCIOECONOMIC FACTORS					
Businesses Impacted	1	2	3	2	2
Churches and Cemeteries	0	0	0	0	0
Employees Impacted	10	20	30	20	20
Houses Impacted	15	14	7	6	6
Parks Impacted	0	0	0	0	0
Receptors Impacted by Noise ⁶	60	25	15	25	0
Schools Impacted	0	0	0	0	0
ENVIRONMENTAL FACTORS					
Conservation Tax Credit Property⁵	0	0	0	0	0
Federal Land Ownership ⁵	0	0	0	0	0
Fish Spawning Areas	0	0	0	0	0
Gamelands ⁵	0	0	0	0	0
Groundwater Incidents	0	0	0	0	0
Hazardous Disposal Sites ⁴	0	0	0	0	0
High Quality Outstanding Water Resources ⁵	0	0	0	0	0
Lands Managed Conseravtion Open Space ⁵	0	0	0	0	0.37
Land Trust Priority Areas	0	0	0	0	0
Recreation Projects Land Water Conservation Fund ⁵	0	0	0	0	0
River Crossings'	1	0	0	0	0
Sanitary Sewer Discharges	0	0	0	0	0
Sanitary Sewer Treatment Plants	0	0	0	0	0
Significant Aquatic Endangered Species Habitats	1	5	0	4	0
Solid Waste Facilities	0	0	0	0	0
State Parks	0	0	0	0	0
Surface Waters Intakes	0	0	0	0	0
Total Wetlands Impacted ⁵	18.63	4.75	0.82	13.11	1.52
Watershed ⁵	0	0	0.02	0	0
Water Storage Tanks	0	0	0	0	0
Water Treatment Plants	0	0	0	0	0
Wells Groundwater Intakes	0	0	0	0	0
RESTRICTED FACTORS	Ü	Ü	Ü	Ů	Ů
Dedicated and Registered Areas	0	0	0	0	0
Historic National Register Districts	0	0	0	0	0
Historic National Register Structures	0	0	0	0	0
Historic Study List Districts	0	0	0	0	0
Managed Area		0	0	0	0
	()				
	0				Λ
Natural Heritage Element Occurrence, points	0	0	0	1	0
					0 0 0

Notes: Unless otherwise noted, estimates of impacts based on 300 foot corridor (estimated right of way limits)

Lengths are approximate. Mainline lengths include all new location corridors in the alternative Rebuilt interchanges are those that would need to be reconstructed to accommodate a new or additional traffic Includes ponds and lakes, includes entire pond acreage if pond is anticipated to be drained

Impacts include superfund points and sites, groundwater incidents, and hazardous waste facilities

⁵Area Impacts are given in acres

⁶Recepetors are assumed to be 350 feet from roadway centerline; includes all homes and businesses

⁷From the Cape Fear River