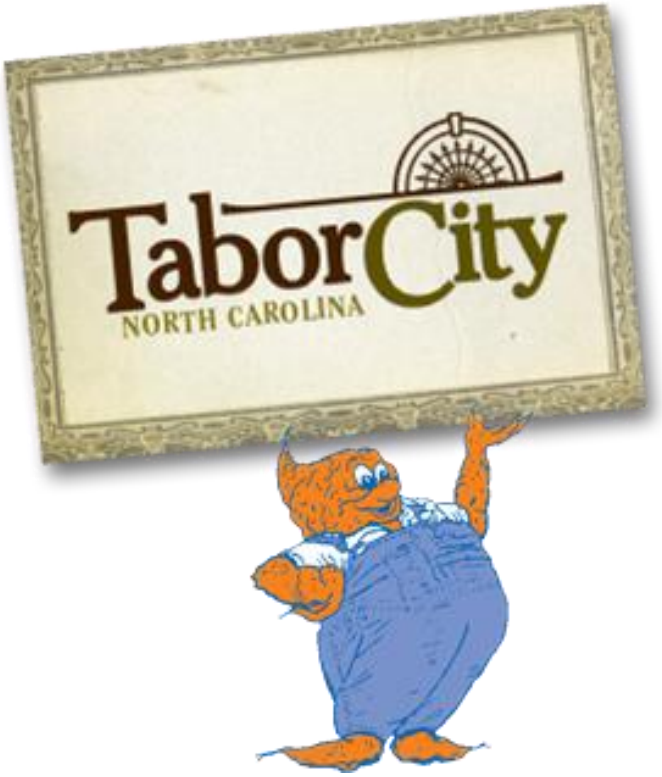
2015 Tabor City
Comprehensive Transportation Plan



2015 Tabor City
Comprehensive Transportation Plan

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Scott Walston, PE, Triangle Planning Group Supervisor
Transportation Planning Branch
N.C. Department of Transportation

In Cooperation with: Tabor City
Columbus County
Cape Fear Area Rural Planning Organization

Published: June 2015

Scott Walston, PE
Triangle Planning Group Supervisor

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Executive Summary

In August of 2013, the Transportation Planning Branch of the North Carolina Department of Transportation (NCDOT) and the town of Tabor City initiated a study to cooperatively develop the Tabor City Comprehensive Transportation Plan (CTP), which includes the town of Tabor City and adjacent areas within Columbus County. This is a long range multi-modal transportation plan that covers transportation needs through 2040. Modes of transportation evaluated as part of this plan include: highway, public transportation and rail, bicycle, and pedestrian. This plan does not cover routine maintenance or minor operations issues. Refer to Appendix A for contact information on these types of issues.

Findings of this CTP study were based on an analysis of the transportation system, environmental screening and public input, which are detailed in Chapter 1. Figure 1 shows the CTP maps, which were mutually adopted by NCDOT in 2015. Descriptive information and definitions for designations depicted on the CTP maps can be found in Appendix B. Implementation of the plan is the responsibility of the Columbus County, Tabor City, and NCDOT. Refer to Chapter 2 for information on the implementation process.

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

- **US 701:** Widen US 701 to four lane boulevard from the South Carolina state line to the eastern planning boundary with intersection improvements as warranted along the corridor.

- **NC 410:** Widen NC 410 to standard cross section from US 701 to the northern planning boundary. Realignment of NC 410 to a "T" intersection with US 701 is also recommended.

- **US 701 Bypass & Complex Street (SR 1305) Intersection:** Realign Complex Street (SR 1305) to a “T” intersection.

- **US 701 Business (Hickman Road) Relocation:** Relocate US 701 Business from Sandwall Drive to the US 701 Bypass north of realigned Complex Street (SR 1305).

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Adopted by:

Tabor City
Date: 12/9/2014
Columbus County
Date: 1/5/2015
NCDOT
Date: 4/2/2015

Endorsed by:

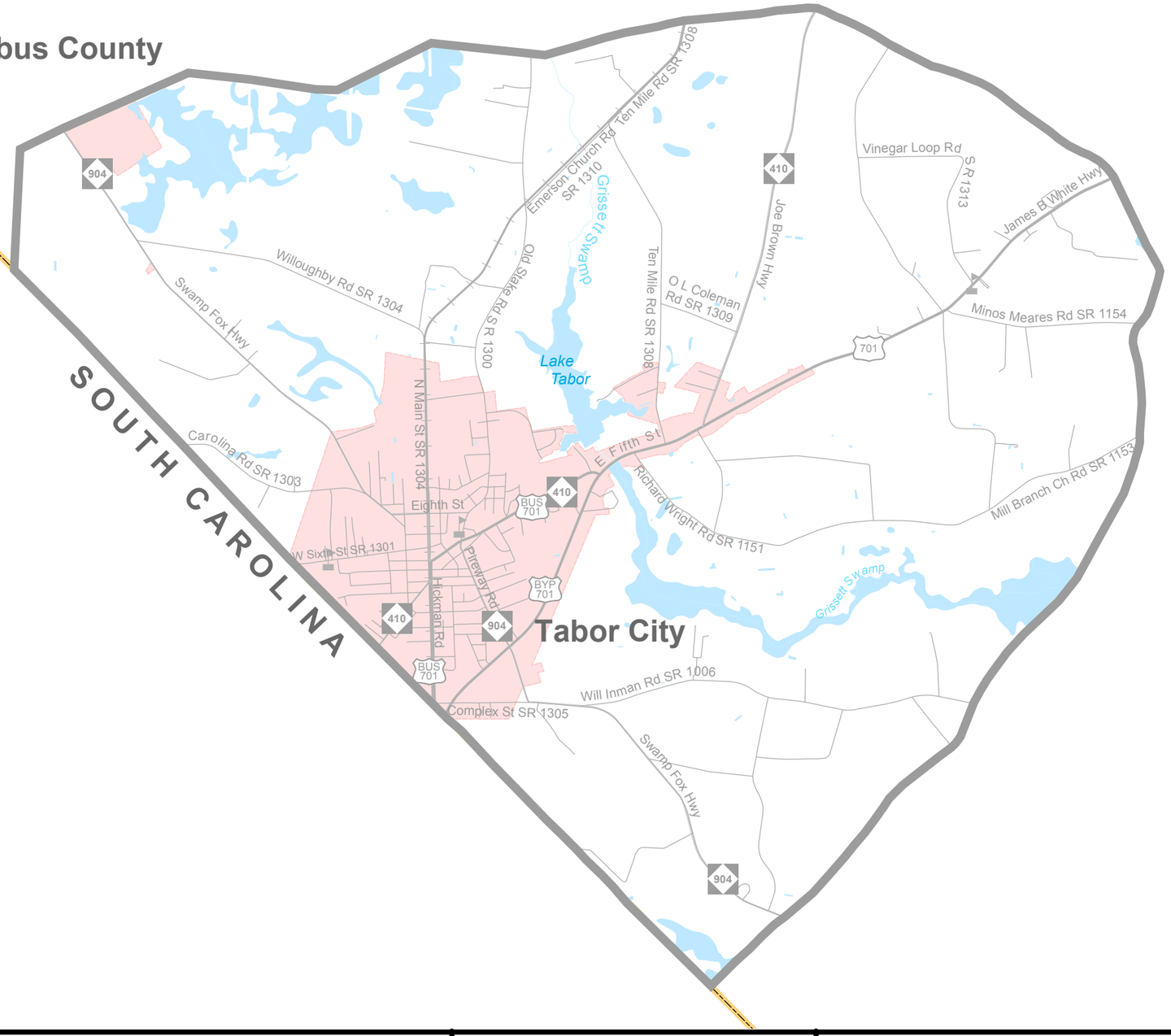
Cape Fear Area RPO
Date: 1/23/2015

Recommended by:

Transportation Planning Branch
Date: 2/3/2015

Notes:

Revised Highway Map to reflect improvement to SR 1300 (Stake Road)



Sheet 1 **Adoption Sheet**
Sheet 2 **Highway Map**
Sheet 3 **Public Transportation and Rail Map**
Sheet 4 **Bicycle Map**
Sheet 5 **Pedestrian Map**

Legend

- Schools
- Roads
- Railroad
- Rivers and Streams
- Water Bodies
- Municipal Boundary
- County Boundary
- Planning Area Boundary

Miles
0 0.5 1 2

N W E S

Figure 1
Sheet 1 of 5
Base map date: 3/11/2014
Refer to CTP document for more details

Tabor City Planning Area

Columbus County
North Carolina
Comprehensive Transportation Plan
Plan date: 12/9/2014

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Columbus County

SOUTH CAROLINA

Tabor City

Inset

Inset

Carolina Rd SR 1303
N Main St SR 1304
Heath St
W 8th St
E 8th St
Jones St
E 5th St
Williams St
W 6th St SR 1301
Orange St
W 4th St
E 4th St
Live Oak St
S Main St
Garrell St
Pineway Rd
Green Sea Rd
E. Bell St
Hickman Rd
Anderson St
Complex St SR 1305
Will Inman Rd SR 1005
Swamp Fox
Grissett Swamp
Miles
0 0.2 0.4 0.8

Willoughby Rd SR 1304
Swamp Fox Hwy
Carolina Rd SR 1303
Old Shake Rd SR 1300
Emerson Church Rd SR 1310
Ten Mile Rd SR 1308
Grissett Swamp
Lake Tabor
N Main St SR 1304
Eighth St
W Sixth St SR 1301
Pineway Rd
Hickman Rd
Complex St SR 1305
Inset
O L Coleman Rd SR 1309
Joe Brown Hwy
Vinegar Loop Rd
S R 1313
James B White Hwy
Minos Meares Rd SR 1154
E Fifth St
Richard Wright Rd SR 1151
Mill Branch Ch Rd SR 1153
Will Inman Rd SR 1006
Swamp Fox Hwy
Miles
0 0.5 1 2

Freeways
- Existing
- Needs Improvement
- Recommended

Expressways
- Existing
- Needs Improvement
- Recommended

Boulevards
- Existing
- Needs Improvement
- Recommended

Other Major Thoroughfares
- Existing
- Needs Improvement
- Recommended

Minor Thoroughfares
- Existing
- Needs Improvement
- Recommended

- Existing Interchange
- Proposed Interchange
- Interchange Needs Improvement
- Existing Grade Separation
- Proposed Grade Separation

Figure 1
Sheet 2 of 5
Base map date: 3/11/2014
Refer to CTP document for more details

Highway Map
Tabor City Planning Area
Columbus County
Comprehensive Transportation Plan
Plan date: 12/9/2014

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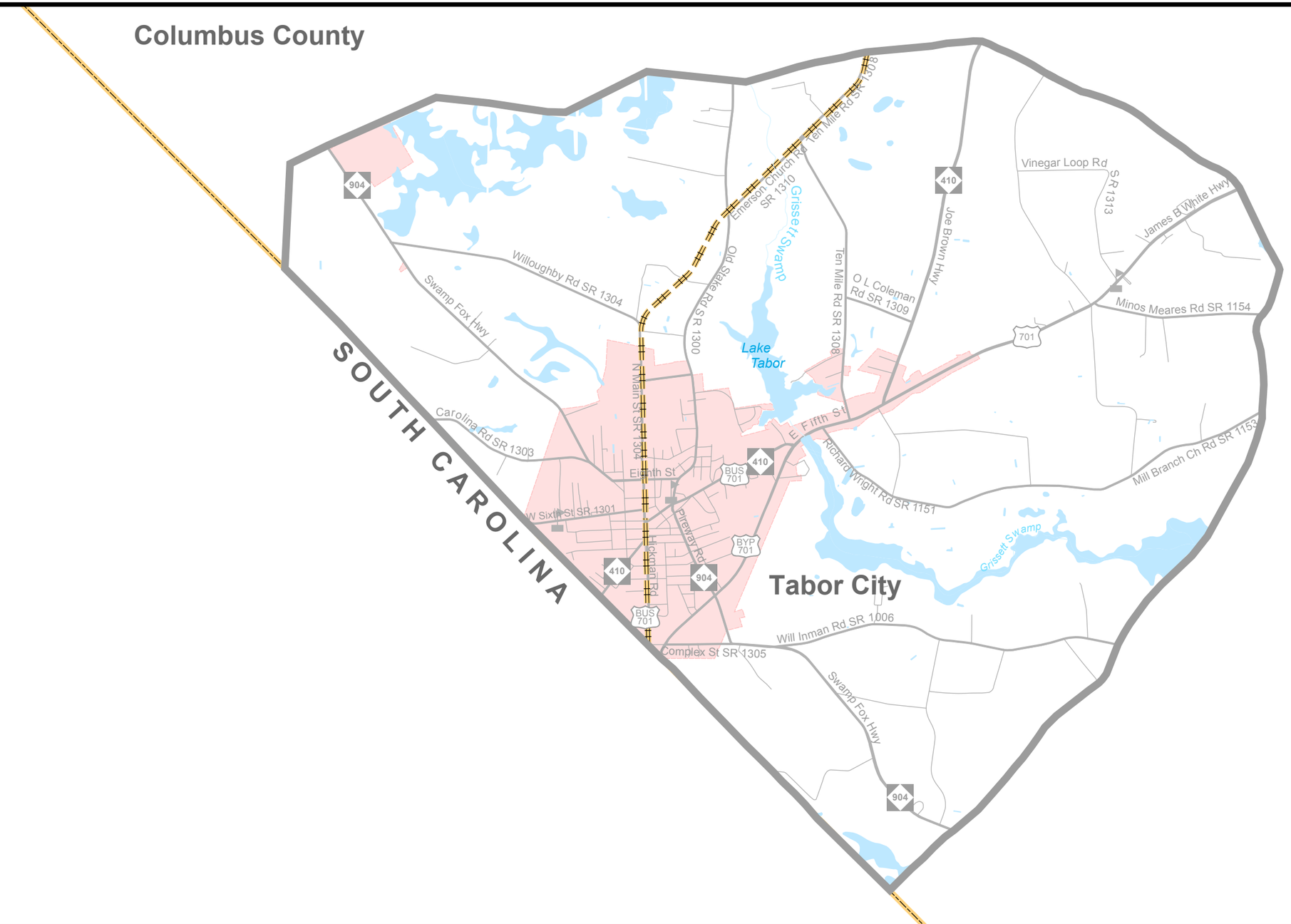

Bus Routes
- Existing
- Needs Improvement
- Recommended

Fixed Guideway
- Existing
- Needs Improvement
- Recommended

Operational Strategies
- Existing
- Needs Improvement
- Recommended

Rail Corridor
- Active
- Inactive
- Recommended

High Speed Rail Corridor
- Existing
- Recommended

Intermodal Connector
- Existing
- Recommended
- Existing Grade Separation
- Proposed Grade Separation

Rail Stops
- Existing
- Recommended

Park and Ride Lot
- Existing
- Recommended

Miles
0 0.5 1 2

N W E S

Figure 1
Sheet 3 of 5
Base map date: 3/11/2014
Refer to CTP document for more details

Public Transportation and Rail Map
Tabor City Planning Area
Columbus County
Comprehensive Transportation Plan
Plan date: 5/21/2014

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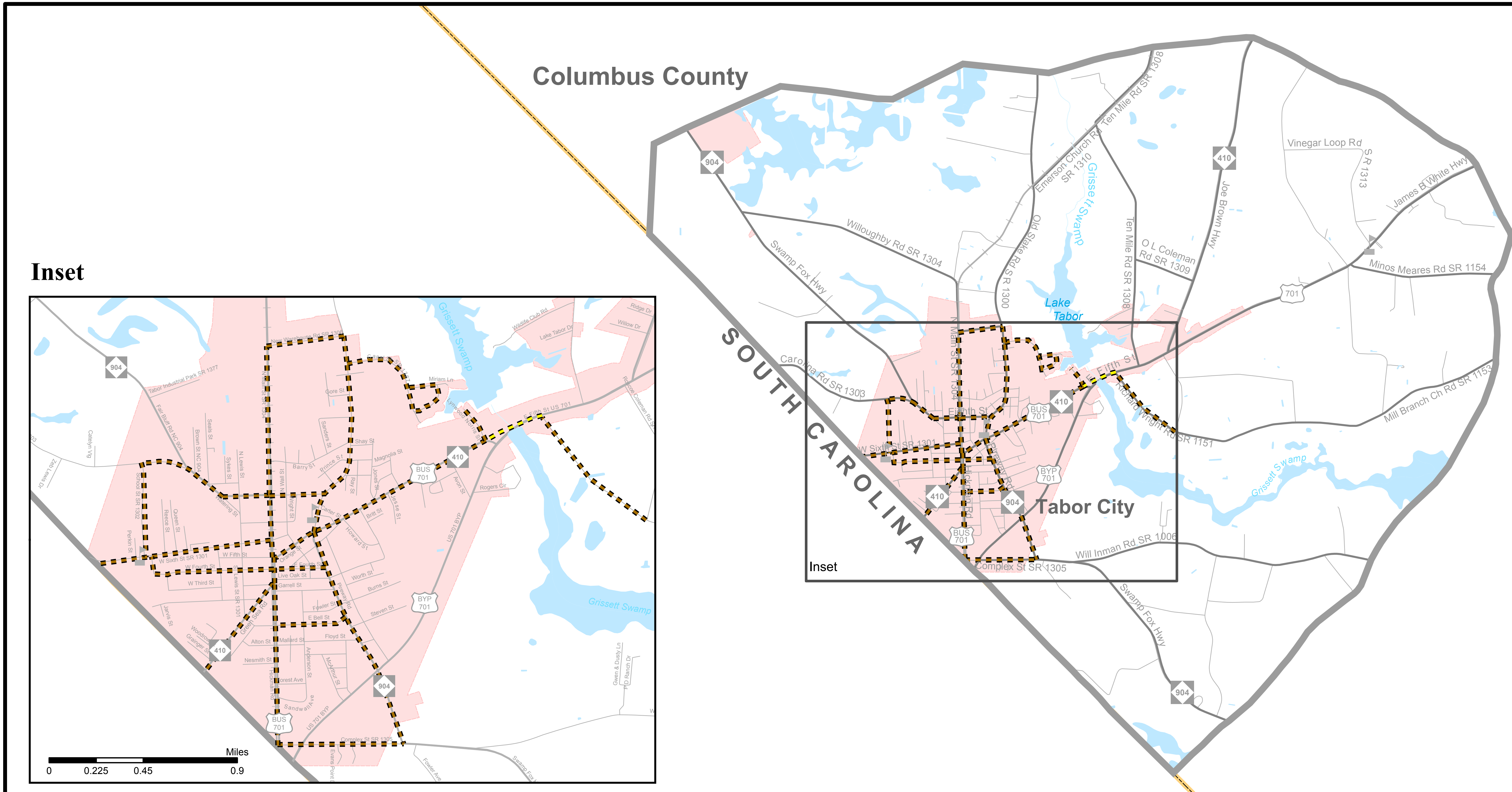

Columbus County
SOUTH CAROLINA
Tabor City
Lake Tabor
Grissett Swamp
Inset
Willoughby Rd SR 1304
Swamp Fox Hwy
Carolina Rd SR 1303
Vinegar Loop Rd
James B White Hwy
Minos Meares Rd SR 1154
Mill Branch Ch Rd SR 1153
Will Inman Rd SR 1006
Complex St SR 1305
Joe Brown Hwy
O L Coleman Rd SR 1309
Emerson Church Rd SR 1310
Ten Mile Rd SR 1308
Old Stake Rd SR 1300
Richard Wright Rd SR 1151
Fifth St
W Sixth St SR 1301
N Main St SR 1304
904
410
701
BUS 701
BYP 701
Miles
0
0.225
0.45
0.9

On-Road
- Existing
- Needs Improvement
- Recommended

Off Road
- Existing
- Needs Improvement
- Recommended

Multi-Use Paths
- Existing
- Needs Improvement
- Recommended

Parks

Schools

Miles
0 0.5 1 2

N W E S

Figure 1
Sheet 4 of 5
Base map date: 3/11/2014
Refer to CTP document for more details

Bicycle Map

Tabor City Planning Area

Columbus County

Comprehensive Transportation Plan

Plan date: 7/2/2014

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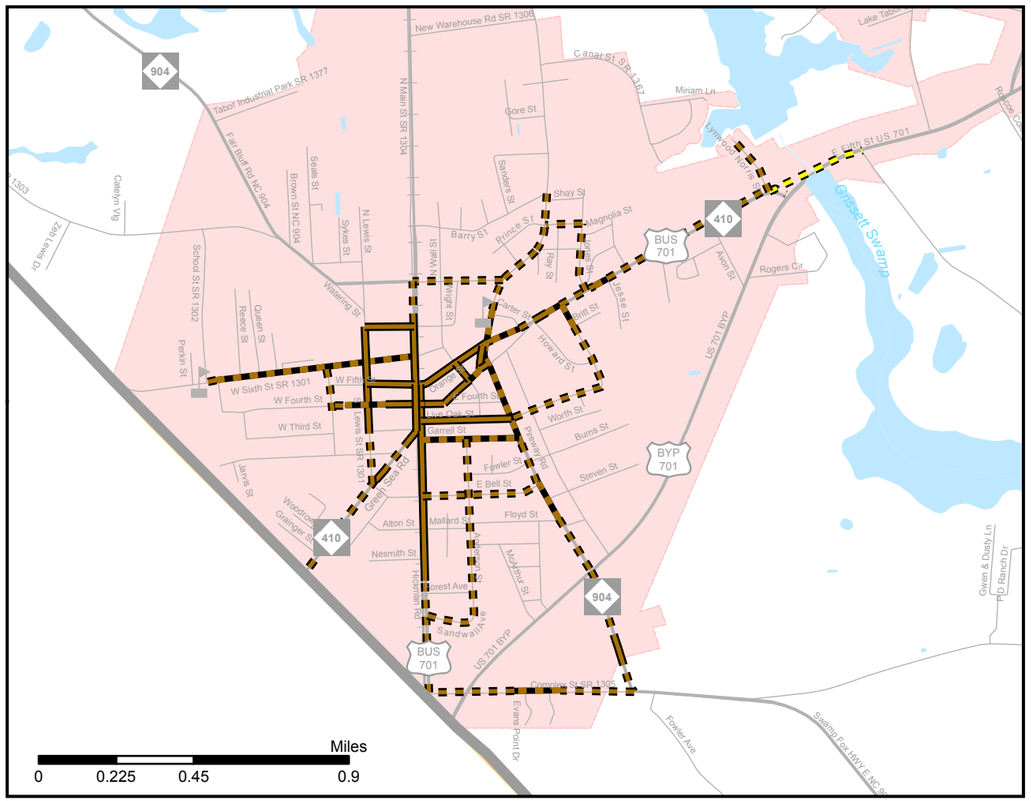
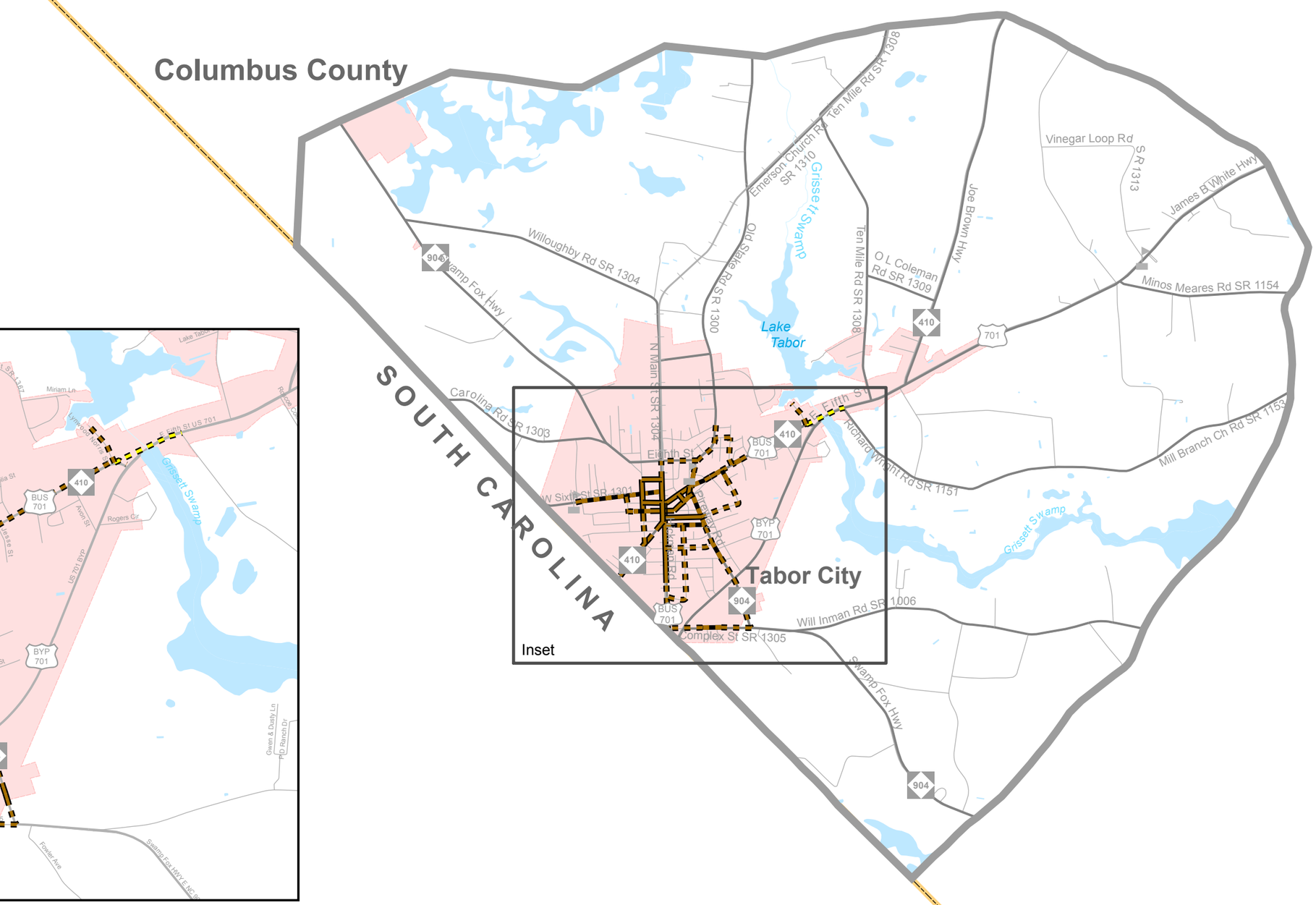
Inset





Sidewalks
- Existing
- Needs Improvement
- Recommended

Off Road
- Existing
- Needs Improvement
- Recommended

Multi-Use Paths
- Existing
- Needs Improvement
- Recommended

Parks

Schools

Miles
0 0.5 1 2

N W E S

Figure 1
Sheet 5 of 5
Base map date: 3/11/2014
Refer to CTP document for more details

Pedestrian Map
Tabor City Planning Area
Columbus County
Comprehensive Transportation Plan
Plan date: 7/2/2014

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1. Analysis of the Existing and Future Transportation System

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

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

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

1.1 Analysis Methodology and Data Requirements

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

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

Roadway System Analysis

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

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

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

The STC is an initiative to protect and maximize the mobility and connectivity on a critical set of transportation 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 STC is to provide a network of core multimodal transportation corridors that move most of North Carolina's freight and people, link critical centers of economic activity to international air and sea ports, and support interstate commerce. The primary goal to support this purpose is to create a greater consensus towards the development of a genuine vision for each corridor. Individual CTPs shall establish a vision for each corridor that preserves the inter-regional, long-distance travel needs into and through the study region.

In the development of this plan, travel demand was projected from 2012 to 2040 using a Hand Allocation travel demand model. Travel demand models are developed to replicate travel patterns on the existing transportation system as well as to estimate travel patterns for 2040. In addition, local land use plans and growth expectations were used to develop future growth rates and patterns. The established future growth rates were endorsed by the Tabor City Town Council (12/10/2013). Refer to Appendix G for more detailed information on growth expectations and the socio-economic data forecasting methodology.

Existing and future travel demand is compared to existing roadway capacities. Capacity deficiencies occur when the traffic volume of a roadway exceeds the roadway's capacity. Roadways are considered near capacity when the traffic volume is at least eighty percent of the capacity. Refer to Figure 2 and Figure 3 for existing and future capacity deficiencies respectively. The 2040 traffic volume in Figure 3 is an estimate of the traffic volume in 2040 with only existing plus committed projects assumed to be in place, where committed is defined as projects programmed for construction in the 2012 – 2020 Transportation Improvement Program[2] (TIP).

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

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

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

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

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

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

Traffic Crash Assessment

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

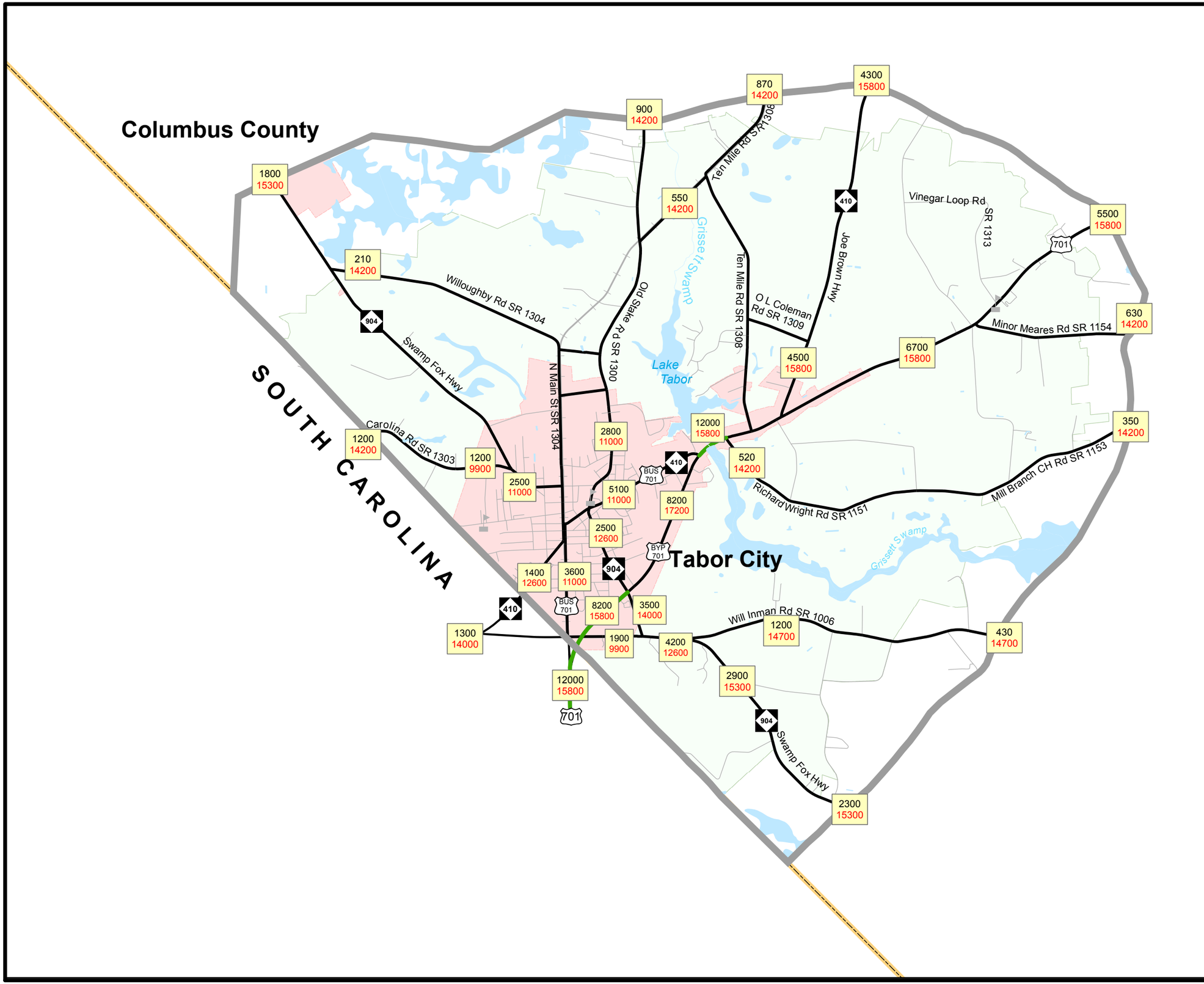
The NCDOT is actively involved with investigating and improving many of these locations. To request a more detailed analysis for any of these locations, or other intersections of concern, contact the Division Traffic Engineer (see Appendix A).

Bridge Deficiency Assessment

Bridges are a vital element of a highway system. First, they represent the highest unit investment of all elements of the system. Second, any inadequacy or deficiency in a bridge reduces the value of the total investment. Third, a bridge presents the greatest opportunity of all potential highway failures for disruption of community welfare. Finally, and most importantly, a bridge represents the greatest opportunity of all highway

failures for loss of life. For these reasons, it is imperative that bridges be constructed to the same design standards as the system of which they are a part.

The NCDOT Structures Management Unit inspects all bridges in North Carolina at least once every two years. Bridges having the highest priority are replaced as federal and state funds become available. No deficient bridges were identified on roads evaluated as part of the CTP.



2012 Volumes & Capacity Deficiencies

Tabor City Planning Area Comprehensize Transportation Plan

- Roads
- Model Network Roads
- Near Capacity (0.80-0.99)
- Over Capacity (1.00+)
- Municipal Boundary
- Extraterritorial Jurisdiction
- Planning Area Boundary
- Rivers & Streams
- County Boundary
- Railroad
- ### / ### 2012 Volumes (AADT) / 2012 Capacity

N W E S

0 0.45 0.9 1.8 Miles

Figure 2

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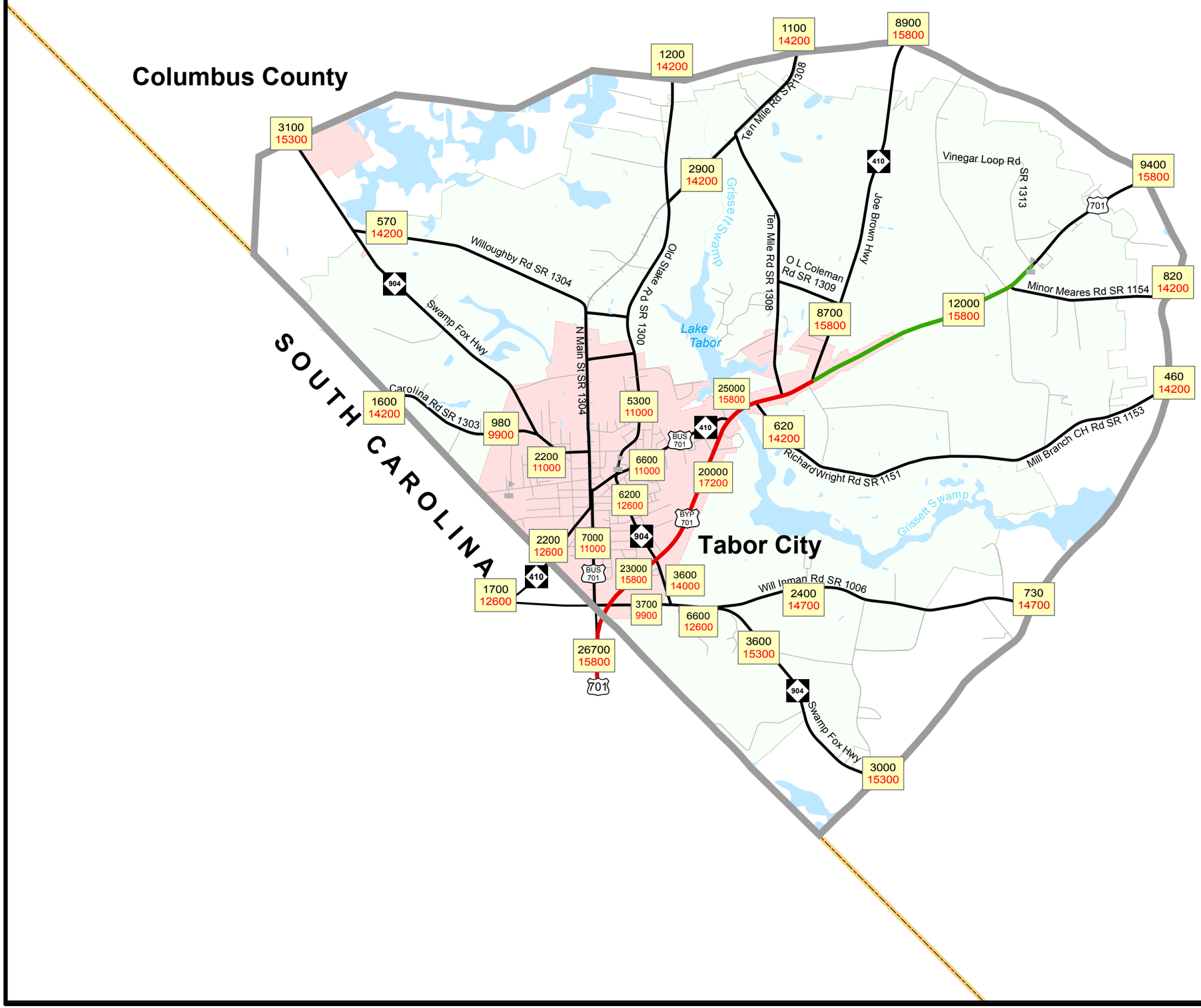
2040 Volumes & Capacity Deficiencies

Tabor City Planning Area Comprehensize Transportation Plan



- Roads
- Model Network Roads
- Near Capacity (0.80-0.99)
- Over Capacity (1.00+)
- Municipal Boundary
- Extraterritorial Jurisdiction
- Planning Area Boundary
- Rivers & Streams
- County Boundary
- Railroad
- #### / #### 2040 Volumes (AADT) 2012 Capacity

N W E S

0 0.5 1 2 Miles

Figure 3

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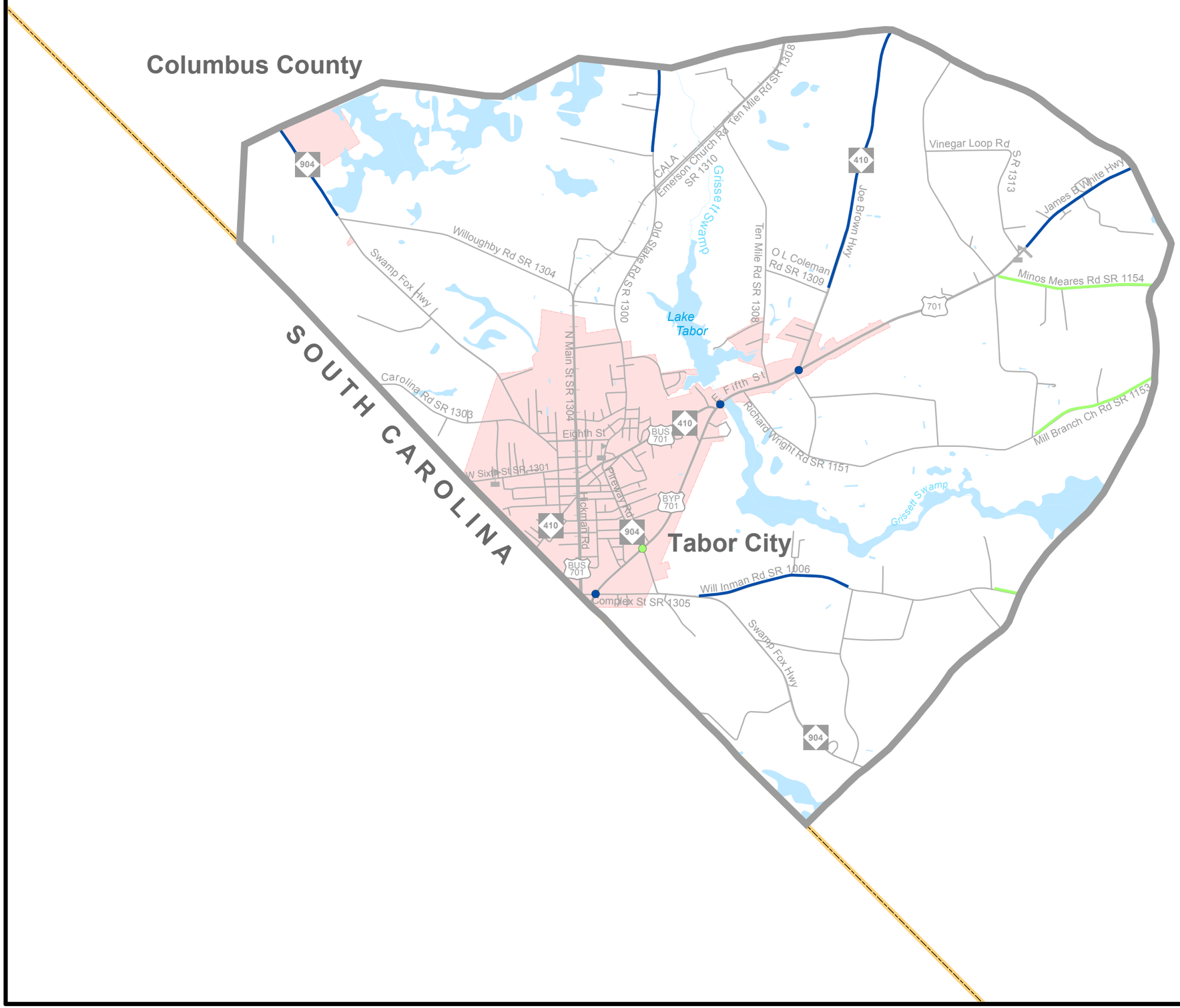
High Frequency Crash Locations

Tabor City Planning Area Comprehensize Transportation Plan

January 1, 2007 to
December 31, 2011



Crash Intersections
- 50 and above
- 40 to 49
- 30 to 39
- 20 to 29
- 10 to 19
- 4 to 9

Crash Sections
- 50 and above
- 40 to 49
- 30 to 39
- 20 to 29
- 10 to 19
- 4 to 9

Roads
Schools
Airports
Railroads
Rivers and Streams
Water Bodies
Municipal Boundaries
County Boundary

N
W E
S

Miles
0 0.5 1 2

Figure 4

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Public Transportation and Rail

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

Public Transportation

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

- Community Transportation - Local transportation efforts formerly centered on assisting clients of human service agencies. Today, the vast majority of rural systems serve the general public as well as those clients.
- Regional Community Transportation - Regional community transportation systems are composed of two or more contiguous counties providing coordinated / consolidated service. Although such systems are not new, 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 provide service in three areas of the state. Consolidated urban-community transportation exists in five areas of the state. In those systems, one transportation system provides both urban and rural transportation within the county.
- Regional Urban Transportation - Regional urban transit systems currently operate in three areas of the state. These systems connect multiple municipalities and counties.
- Intercity Transportation - Intercity bus service is one of a few remaining examples of privately owned and operated public transportation in North Carolina. Intercity buses serve many cities and towns throughout the state and provide connections to locations in neighboring states 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.

There are no existing or planned fixed public transportation routes for the Tabor City planning area. Columbus County does have a, non-fixed route, state and federally funded General Public Transportation System. It provides predominantly healthcare-related transportation, but also serves general users needing transportation to work or shopping. The transit system serves county residents weekdays from 6:00 am to 6:00 pm at varying fares. The system logs approximately 7500 miles per month serving residents of the Tabor City area.

Rail

Today North Carolina has 3,684 miles of railroad tracks throughout the state. There are two types of trains that operate in the state, passenger trains and freight trains.

Intercity passenger service is provided by a partnership between NCDOT and Amtrak. Amtrak currently operates six passenger services daily in or through North Carolina serving 16 cities across the state. Five of the services are interstate (Crescent, Palmetto, Silver Meteor, Silver Star, and Carolinian passenger trains) and one service (Piedmont passenger train) operates exclusively within North Carolina. In addition to the six passenger services mentioned, Amtrak also operates its Auto Train service which passes through North Carolina but does not make any stops. Amtrak ridership demand has been on a rise in the state. In 2010 ridership was 840,000 and increased to 893,000 passengers in 2011.

The North Carolina Department of Transportation sponsors two passenger trains, the Carolinian and Piedmont. The Carolinian runs between Charlotte and New York City, while the Piedmont train carries passengers from Raleigh to Charlotte and back every day. 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.

There are no active rail facilities for the Tabor City planning Area. There is an inactive railroad which was last used by Carolina Southern Railroad for freight services. It is the town of Tabor City's desire to promote the reactivation of the railroad facility. An inventory of existing and planned rail facilities for the planning area is presented on Sheet 3 of Figure 1. All recommendations for rail were coordinated with the local governments and the NCDOT Rail Division**.** Refer to Appendix A for contact information for the Rail Division.

Bicycles & Pedestrians

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

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

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

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

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

Inventories of existing and planned bicycle and pedestrian facilities for the planning area are presented on Sheets 4 and 5 of Figure 1. There are no regional or statewide bicycle facilities that go through the Tabor City planning area. All recommendations for bicycle and pedestrian facilities were coordinated with the town of Tabor City and the NCDOT Transportation Planning Branch.

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 1990 town of Tabor City Zoning map (refer to Figure 5) was used to meet this requirement. Though the plan is more than 5 years old, the town of Tabor City designates this land use plan as current and uses this land use plan in making zoning decisions.

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

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

- Agricultural: Land devoted to the use of buildings or structures for the raising of non-domestic animals and/or growing of plants for food and other production.
- Mixed Use: Land devoted to a combination of any of the categories above.

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

Heavy manufacturing is the main type of land use that exists along US 701 Bypass, though commercial businesses are on the increase on this route, particularly at the US 701/NC 904 intersection. US 701 Business, which travels through the center of the town, contains the central business district which contains restaurants, retail, and offices. In general, the areas outside of the central business district but within the municipal limits are residential. Areas within the Tabor City planning area but outside the municipal limits are considered rural and the land use is a mix of residential and agriculture.

The highest population/housing growth rates projected by the town are generally in the southeast and northeast areas. The highest employment growth rate areas are located along US 701 Bypass and in downtown Tabor City.

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

1.2 Consideration of Natural and Human Environment

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

A full listing of environmental features that are typically examined as a part of a CTP study is shown in the following tables. Environmental features occurring within the Tabor City Planning Area are shown in Figures 6, 7, 8, and 9 are shown in bold text in Table 1.

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

Table 1 – Environmental Features

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

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

1.3 Public Involvement

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

The study was initiated in July of 2013 and a with a meeting held with representatives from the town of Tabor City, Cape Fear Area Rural Planning Organization (RPO), NCDOT Division 6 engineers, and the NCDOT Transportation Planning Branch. A

meeting was held with the Tabor City Town Council in August 2013 to formally initiate the study, provide an overview of the transportation planning process, and to gather input on area transportation needs.

Throughout the course of the study, the NCDOT Transportation Planning Branch cooperatively worked with the Tabor City Planning Area Steering Committee, which included a representative from the town of Tabor City, Columbus county staff, the Cape Fear Area RPO and others. The committee provided information on current local plans, developed transportation vision and goals, discussed population and employment projections, and developed proposed CTP recommendations. Refer to Appendix H for detailed information on the vision statement, the goals and objectives survey and a listing of committee members.

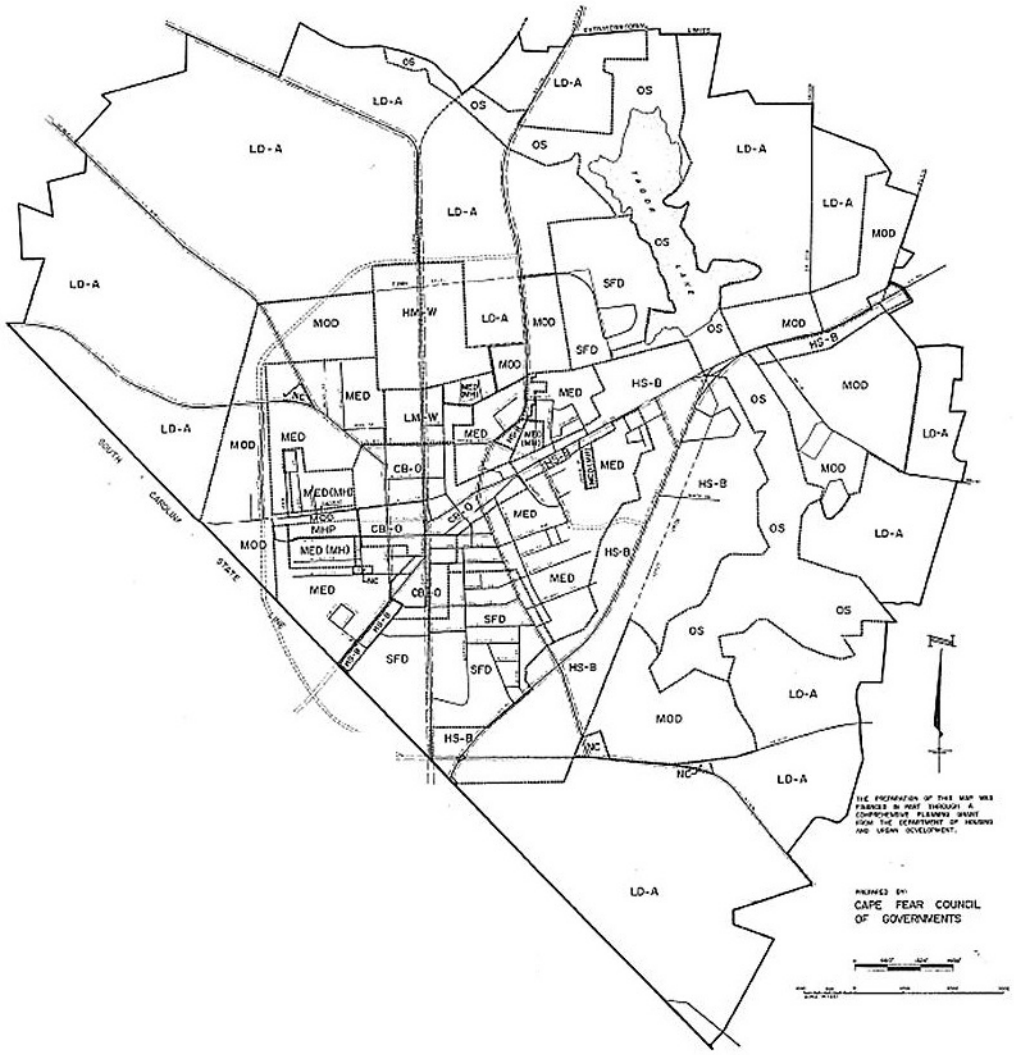
The public involvement process included holding one public drop-in session in the town of Tabor City to present the proposed CTP to the public and solicit comments. The meeting was held on October 14, 2014 at The Ritz Center in the downtown area. The public drop-in session was publicized in the local newspaper and was held from 4:00 PM – 6:00 PM. There were no formal comments submitted during the session.

A public hearing was held on September 9, 2014 during the Tabor City Town Council meeting. The purpose of the meeting was to discuss the plan recommendations. A second public hearing took place on October 14, 2014. The CTP was adopted during this meeting.

A public hearing was held on September 15, 2014 during the Columbus County Commissioners meeting. The purpose of this meeting was to present and discuss the plan recommendations. Another public hearing took place on November 3, 2014. The CTP was adopted during this meeting.

The Cape Fear Area RPO endorsed the CTP on October 11, 2014 contingent on the town of Tabor City's October 14, 2014 adoption. The North Carolina Department of Transportation mutually adopted the Tabor City CTP on December 4, 2014.

The Tabor City CTP Maps were later revised to reflect a highway improvement on Stake Road (SR 1300). The amended Tabor City CTP Maps were adopted on December 9, 2014 by the town of Tabor City, January 5, 2015 by Columbus County and the North Carolina Department of Transportation on April 2, 2015. The amended Tabor City CTP Maps were endorsed by the Cape Fear Area RPO on January 23, 2015.



HM-W	Heavy Manufacturing - Wholesale	MED (MH)	Medium Densiy Residential (w/mobile homes)
LM-W	Light Manufacturing - Wholesale	MED	Medium Density Residential
HS-B	Highway Services - Business	MOD	Moderate Density Residential
NC	Neighborhood Commercial	SFD	Single Family Dwelling Residential
CB-O	Central Business - Office	LD-A	Light Density Residential - Agricultural
MH-P	Mobile Home Park	OS	Open Space

FIGURE 5

Tabor City Planning Area

Zoning Jurisdictions

January 1990

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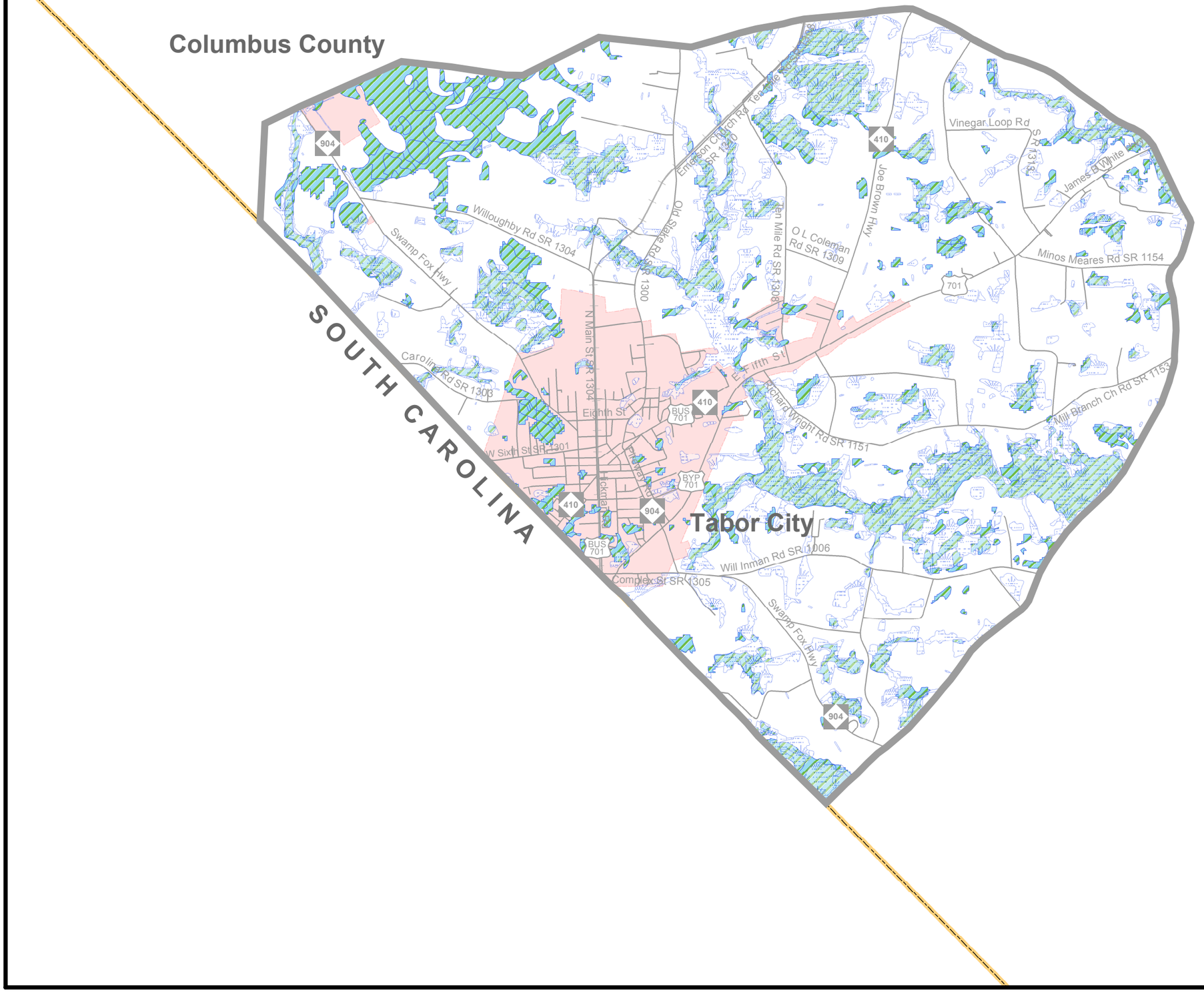
Primary Environmental Features Map

Tabor City Planning Area Comprehensive Transportation Plan



- Planning Area Boundary
- National Wetland Inventory
- NC-CREWS
- County Boundary
- Roads
- Railroads
- Municipal Boundaries

N
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Miles

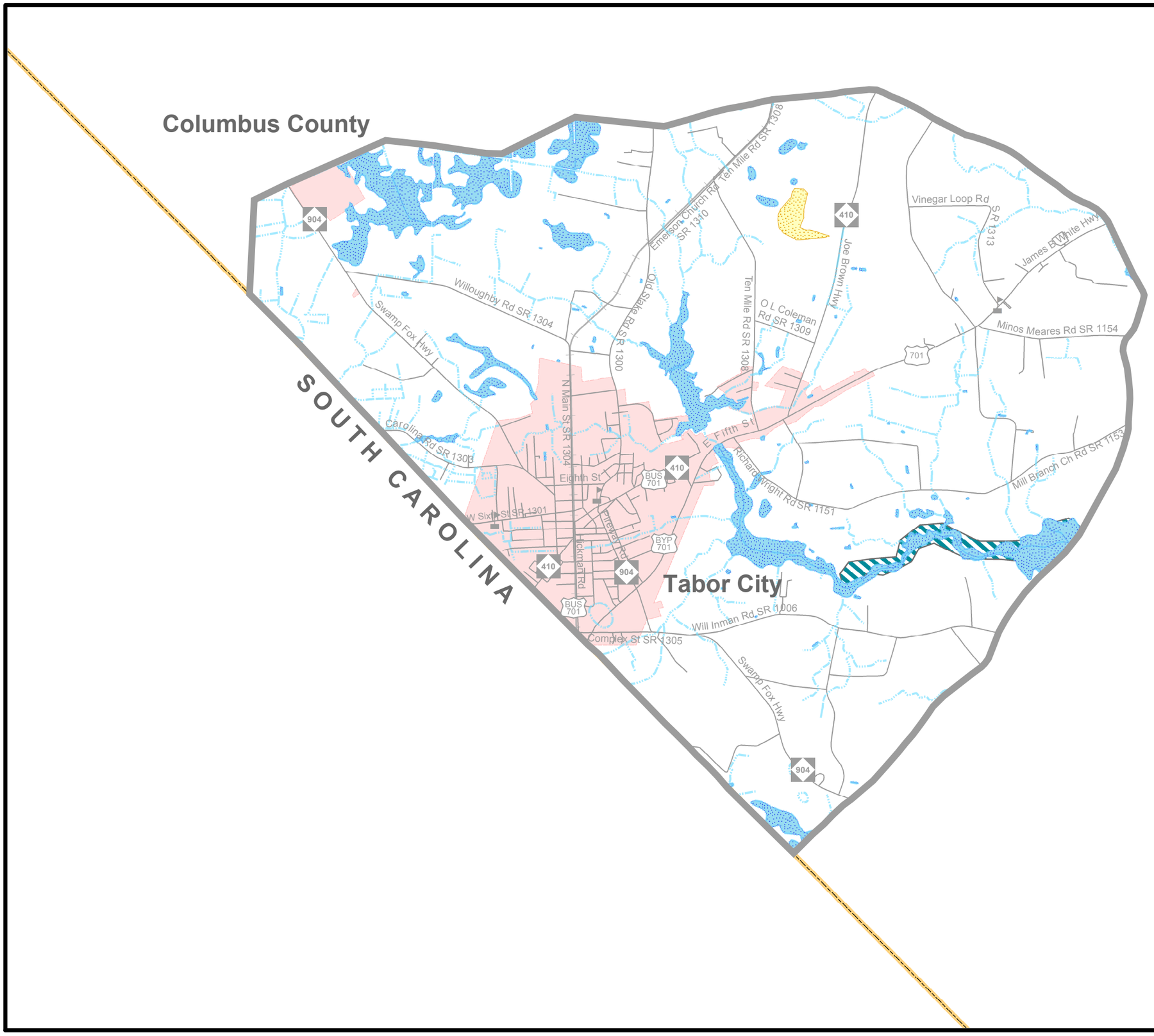
0 0.5 1 2

Figure 6

Back of Figure

Primary Environmental Features Map

Tabor City Planning Area Comprehensive Transportation Plan



- Planning Area Boundary
- Schools
- 24k Hydro Lines
- Hydrography Areas
- Landscape Habitat Indicator Guilds
- Significant Natural Heritage Areas
- County Boundary
- Roads
- Railroads
- Municipal Boundaries

N
W E
S

Miles

0 0.5 1 2

Figure 7

Back of Figure

Secondary Environmental Features Map

Tabor City Planning Area Comprehensive Transportation Plan

Columbus County

SOUTH CAROLINA

Tabor City

Willoughby Rd SR 1304

Swamp Fox Hwy

Westwood Dr

Carolina Rd SR 1303

Old Stake Rd SR 1300

Emerson Church Rd

Ten Mile Rd SR 1308

Ten Mile Rd SR 1309

O L Coleman Rd SR 1309

Joe Brown Hwy

Vinegar Loop Rd

S R 1313

James B White HWY S US 701

Minos Meares Rd SR 1154

Coleman Rd SR 1175

Richard Wright Rd SR 1151

Mill Branch Ch Rd SR 1153

Mill Branch Ch Rd SR 1155

Spivey Ward Rd

N Main St SR 1304

Seals St

Eighth St

W Sixth St SR 1301

W Third St

Stake Rd SR 1300

Williams St

Avon St

E Fifth St

Prevatt Rd

Anderson St

Hickman Rd

Hickman Rd US 701

Will Inman Rd SR 1006

Will Inman Rd SR 1005

Complex St SR 1305

Mills Dr

Lester Watts Rd SR 1156

Swamp Fox Hwy

Hazardous Substance Disposal Sites

Sewer Treatment Plants

Water Distribution Tanks

Water Pumping Stations

Natural Heritage Element Occurence

Columbus_County

All Roads

Railroad

Municipal

Planning Area Boundary

N

W E

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Miles

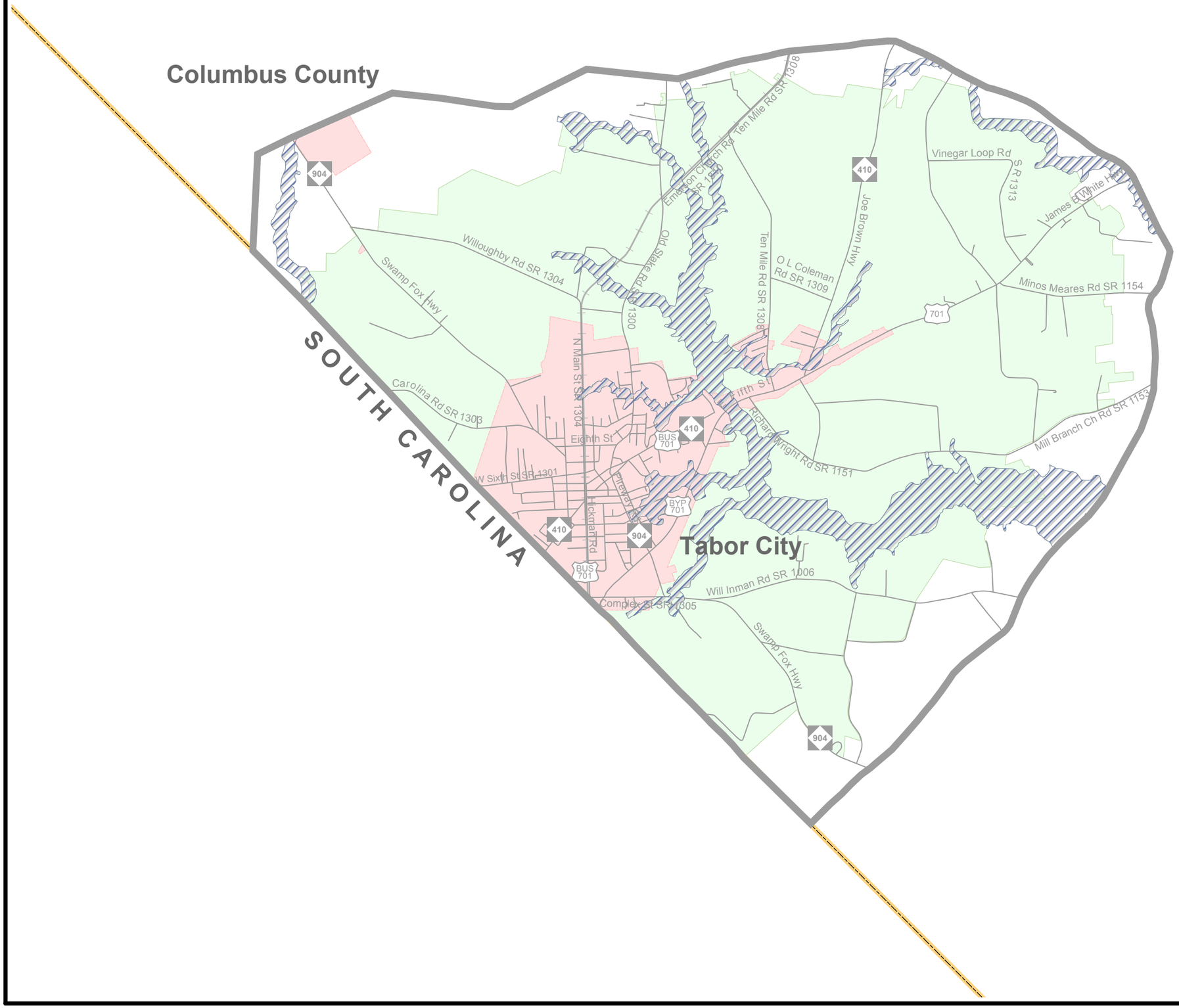
0 0.5 1 2

Figure 8

Back of Figure

Environmental Features
100-Year Flood Map

Tabor City
Planning Area
Comprehensive
Transportation Plan



- Planning Area Boundary
- County Boundary
- Roads
- Railroads
- Municipal Boundaries
- 100-Year Flood Zone
- Extraterritorial Jurisdiction

N
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Miles
0 0.5 1 2

Figure 9

Back of Figure

2. Recommendations

This chapter presents recommendations for each mode of transportation in the 2014 Tabor City CTP as shown in Figure 1. More detailed information on each recommendation is tabulated in Appendix C.

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

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

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

2.1 Implementation

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

Initiative for implementing the CTP rests predominately with the policy boards and citizens of the Tabor City and/or Columbus County. 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

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

and submitted to the Cape Fear Area RPO for prioritization and submittal to NCDOT. Refer to Appendix A for contact information on prioritization and funding. Local governments may use the CTP to guide development and protect corridors for the recommended projects. It is critical that NCDOT and local governments coordinate on relevant land development reviews and all transportation projects to ensure proper implementation of the CTP. Local governments and NCDOT share the responsibility for access management and the planning, design and construction of the recommended projects.

Prior to implementing projects from the CTP, additional analysis will be necessary to meet the National Environmental Policy Act (NEPA) or the North Carolina (or State) Environmental Policy Act[2] (SEPA). This CTP may be used to provide information in the NEPA/SEPA process.

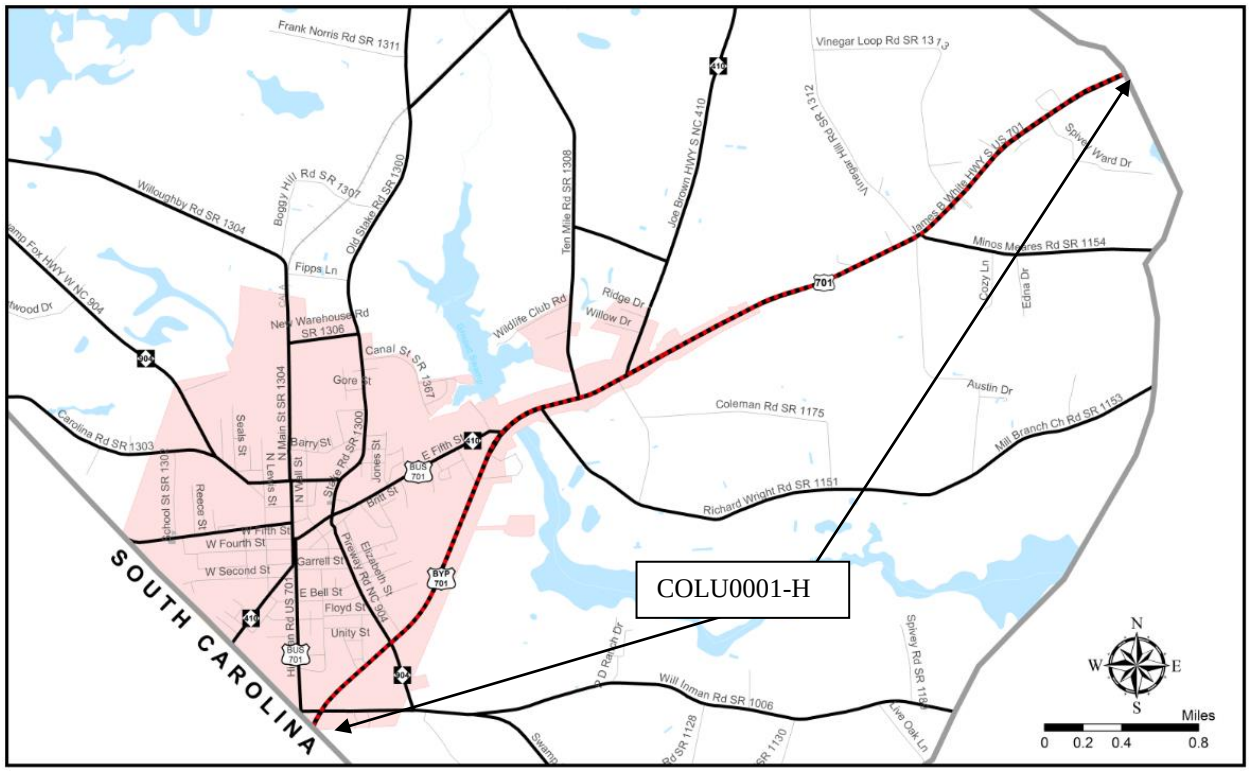
2.2 Problem Statements

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

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

HIGHWAY

US 701/US 701 Bypass Proposed Improvements from South Carolina State Line to 0.4 Miles north of Spivey Ward Drive	**Local ID: COLU0001-H** **Last Updated: 7/18/2014**



Identified Problem

Presently, US 701 is mostly approaching capacity from Richard Wright Road (SR 1151) to the South Carolina state line. The US 701 facility experiences peak congestion and is over capacity during summer periods in the Tabor City planning area. Based on 2040 traffic projections, US 701 will exceed capacity from Vinegar Loop Road (SR 1313) to the South Carolina state line. The primary purpose of improving US 701 is to relieve present and future congestion on the existing facility such that a minimum Level of Service (LOS) D can be achieved.

Justification of Need

US 701 is currently a two to five lane major thoroughfare in North Carolina. There is a short section in Clinton, NC that is a four lane expressway. US 701 extends from just south of Smithfield in Johnston County and continues south through Tabor City in Columbus County and ends in Georgetown, South Carolina. US 701 is a regionally tiered route in the NC Multimodal Investment Network (NCMIN).

For the US 701 section in Columbus County, it is a major north-south corridor. US 701 connects to US 74/ US 76, an east-west corridor that leads to the municipalities of Laurinburg, Chadbourn, and Whiteville, to the west, and to the metropolitan area of Wilmington, 65 miles to the east. In Tabor City, US 701 is also known as US 701 Bypass from the US 701 & US 701 Business/NC 410 (East 5th Street) intersection to the South Carolina border. The US 701 corridor is also significant because it is used by many vacationers en route to Myrtle Beach, South Carolina.

Based on LOS D, by 2040, US 701 is projected to be over capacity for a majority of the Tabor City planning area; from the South Carolina state line to Vinegar Loop Road (SR 1313). Currently, it is near capacity between Richard Wright Road (SR 1511) and the US 701 BUS/NC 410 (East 5th Street) section and between NC 904 (Pireway Road) and the South Carolina state line.

Local knowledge, historical population data, housing and employment trends, and a Hand Allocation model were used to determine the traffic projections (See Appendix G for a more detailed explanation). Table 2 shows, in vehicles per day (vpd), the comparisons between the 2012 Average Annual Daily Traffic (AADT), the projected 2040 AADT, and the existing capacity of the facility at LOS D. Although the study began in 2013, the 2012 AADT were the most recent counts available.

Table 2 – US 701/US 701 Bypass Volumes and Capacity

Section (From - To)	Capacity	2012 AADT	Projected 2040 AADT
Tabor City planning boundary – Vinegar Loop Road (SR 1313)	15,800	6,700	9,400
Vinegar Loop Road (SR 1313) – Tabor City town limits	15,800	6,700	12,000
Tabor City town limits – NC 410	15,800	6,700	12,000
NC 410 - Richard Wright Rd (SR 1151)	17,200	12,000	25,000
Richard Wright Road (SR 1151) – US 701 Business/NC 410 (East 5th Street)	15,800	12,000	25,000
US 701 Business/NC 410 (East 5th Street) – NC 904 (Pireway Road)	17,200	8,200	20,000
NC 904 (Pireway Road) – South Carolina state line	15,800	8,800	20,000

Community Vision and Problem History

Vehicular traffic is expected to increase through the 2040 planning period. According to the census, the town of Tabor City's population is growing. The population has increased from 2,330 in 1990 to 2,511 in 2010 (The 2010 census population numbers including prison population at the Tabor City correctional institution is 3,970). The town predicts that the population will grow linearly, at an annual rate of 1% and will, therefore, have an estimated population of 3,214 within the town limits by the year 2040. The population is expected to increase for the entire planning area, from 4,511 in 2010 to 5,774 by the year 2040. The increase in vehicular traffic in Tabor City will be mostly due to through traffic as drivers head to and from Myrtle Beach, South Carolina and other destinations south. The town has observed that with the increased use of global

positioning systems (GPS) since the early 2000s, the town has seen an increase in vehicular traffic.

The town of Tabor City has a vision and several goals and objectives that it would like to achieve. These can be found in the *Tabor City Comprehensive Transportation Plan* in Appendix H and the *2010 Land Use and Development Plan for Tabor City North Carolina*. A majority of their goals would be met with the conversion of US 701 to a four lane boulevard. The vision of Tabor City is to develop a safe, reliable and efficient multi-modal transportation infrastructure that is compatible with land use plans and environmental protection that will also recognize the natural beauty, quality of life, agricultural economy and pro-business climate that the town of Tabor City has to offer. The town has goals of relieving congestion and at the same encouraging more business along the US 701 corridor highway business district.

Seasonal traffic is the main type of traffic that is causing the most congestion for the town. A traffic count study was conducted during the 2013 Labor Day holiday weekend to compare to the most recent (2012) AADT counts. From Table 3, the ratio of volume to capacity (V/C) is greater than 1 for most of the sections of US 701 from NC 410 to the South Carolina state line. It can be concluded that during summer holidays and many weekends, the facility is over capacity. Additional traffic counts were taken during a regular summer (non-holiday) week (June 2, 2014 – June 9, 2014). Appendix I provides a more detailed explanation of the traffic counts taken. The results show that the weekday non-holiday summer traffic is comparable to the 2012 AADT; however, during regular non-holiday summer *weekends*, US 701 Bypass is still over capacity. To note, the projected 2040 AADT is greater than the 2012 summer holiday traffic.

Table 3 – US 701 Labor Day Weekend Traffic Volume vs AADT and Capacity

Section (From – To)	Capacity	2012 AADT	2012 AADT V/C	2013 Highest Labor Day Holiday counts	2013 Labor Day V/C
NC 410 – Richard Wright Road (SR 1151)	17,200	12,000	0.70	19,100	1.11
Richard Wright Road (SR 1151) – US 701 Business/NC 410 (East 5th Street)	15,800	12,000	0.76	17,400	1.10
US 701 Business/NC 410 (East 5th Street) – NC 904 (Pireway Road)	17,200	8,200	0.48	12,700	0.74
NC 904 (Pireway Road) – South Carolina state line	15,800	8,800	0.56	17,400	1.10

The town has mentioned that there are key intersections along the corridor which make it difficult for people to traverse through the area during this time period. Those intersections are:

US 701 & NC 410 (See COLU0002-H)
US 701 & US 701 Business/NC 410 (East 5th Street)
US 701 Bypass & NC 904 (Pireway Road)

The US 701 & NC 410 intersection is a three-legged unsignalized intersection. It is an especially difficult intersection at peak periods because drivers are unable to make left turns. The town has noted that during peak summer traffic, local law enforcement has had to direct traffic at the US 701 & NC 410 intersection.

In general, signals impede the smooth flow of traffic along the major leg of an intersection. This occurs at the US 701 & US 701 Business/NC 410 and at the US 701 Bypass & NC 904 (Pireway Road) intersection which are both two-phase signalized intersections. Generally, the traffic signal causes delays to those traveling along US 701 and the US 701 Bypass. The signal stops the flow of traffic on the US 701 Bypass so that those on NC 904 (Pireway Road) can complete their movements through the intersection. In addition, because the traffic signal has a permissive only left-turn phasing, drivers are having difficulty making left turns from US 701 Bypass to NC 904 (Pireway Road) during peak periods. With the completion of new businesses in 2013 near the US 701 Bypass & NC 904 (Pireway Road) intersection, there is more intersection volume.

There are significant issues during the summer along the US 701 corridor from NC 410 to the South Carolina state line. There is a need for continuous flow of vehicles along the corridor. At the same time, there is a need for intersection improvements to allow drivers to easily get on or off US 701. Improvements of these three intersections in conjunction with the widening of US 701 will allow for better flow of traffic for the area. There is a need for cooperation with the South Carolina Department of Transportation so that widening improvements made in North Carolina continue into South Carolina to meet highway SC-9, which is a four lane boulevard.

CTP Project Proposal

Project Description and Overview

The proposed project (COLU0001-H) is to widen US 701's existing two lane and three lane facility to a four lane boulevard. The project begins at US 701 Bypass at the South Carolina state line, goes through the Tabor City planning area, and continues north to US 74/US 76 in Whiteville. The facility upgrade would help in providing smooth flowing traffic for through vehicles on US 701 and increase overall capacity. The facility's current capacity in the Tabor City planning area ranges from 15,800 vpd to 17,200 vpd. The new capacity of the facility will be 43,900 vpd with the conversion to a four lane boulevard.

Project Segmentation

It is recommended that the proposed project be segmented into multiple smaller projects in order to better reach the ultimate goal of completing the project. Listed below are the following segments listed by location:

US 701 Bypass from the South Carolina state line to NC 904 (Pireway Road) – Upgrade from a two lane facility to a four lane boulevard

US 701 Bypass/US 701 from NC 904 (Pireway Road) to NC 410 – Upgrade from a three lane facility to a four lane boulevard.

US 701 from NC 410 to the Tabor City planning boundary – Upgrade from a two lane facility to a four lane boulevard.

US 701/NC 410 & US 701 Business/NC 410 (East 5th Street) – Intersection improvement.

US 701 Bypass & NC 904 – Intersection improvement.

Natural & Human Environmental Context

Since the upgrade of the roadway is predominantly on the existing right-of-way (ROW), the natural environmental impact would be minimal. The exception would be the section of US 701/NC 410 between Richard Wright Road (SR 1151) and US 701 Business/NC 410 (East 5th Street). The culvert over Grissett Swamp could be upgraded to match the new width of the road.

According to the Natural Heritage Program of the North Carolina Department of Environment and Natural Resources (NCDENR)[3], the Tabor City planning area is designated as a natural heritage element occurrence (Figure 8) for a rare animal species which was last seen before 2006. Since less than 5% of the mapped area is occupied by the element, the estimation of the viability of the element in the Tabor City planning area is uncertain.

There would be minimal to no human environment impacts along NC 410 and a majority of the US 701 corridor in the Tabor City planning area because the ROW needed for the upgrade is already acquired. The exception to this would be the section of US 701/NC 410 between Richard Wright Road (SR 1151) and US 701 Business/NC 410 (East 5th Street) where the current ROW is 125 feet instead of the 150 feet which is the minimum necessary for the new cross section. Property would likely need to be acquired to obtain the necessary ROW.

Relationship to Land Use Plans

The land use along the US 701 Bypass is zoned as a highway service business district, created to provide for effective use of land situated in relationship to major highways so efficient grouping of activities can be developed to service the traveling public.

The interest of the town of Tabor City is the promotion of new business along the highway service business district which will encourage travelers to stop en route to their destinations.

[3] *For more information on the Natural Heritage Program by NCDENR go to: http://portal.ncdenr.org/web/nhp/element-occurrences*

Linkages to Other Plans and Proposed Project History

The plan proposal links directly with several proposed projects for the Tabor City planning area: COLU0002-H, COLU0004-H, and COLU0005-H. COLU0002-H is the widening and realignment of NC 410 at the US 701 & NC 410 intersection. COLU0004-H moves US 701 Business (Hickman Road) to a new location which intersects with the US 701 Bypass. It also closes access to US 701 Bypass from Complex Street (SR 1305) west of the Bypass. COLU0005-H realigns Complex Street (SR 1305) east of the US 701 Bypass to a T-intersection at the US 701 Bypass & Complex Street (SR 1305) intersection.

The upgrade of US 701 to a boulevard is consistent with the *2007 Columbus County Comprehensive Transportation Plan*[4] which proposes to upgrade US 701 from NC 131, north of Whiteville, to Tabor City.

Multi-modal Considerations

The town of Tabor City CTP does not include any multi-modal recommendations for bicycle, pedestrian or public transportation facilities along the proposed project. There should be consideration for a crosswalk added at the US 701 & Richard Wright Road (SR 1151) intersection to provide access the proposed Lake Tabor Multi-use Path (COLU0001-M). Crosswalks should be considered at the US 701 Bypass & NC 904 (Pireway Road) intersection and the US 701 Bypass & Complex Street (SR 1305) intersection.

Public/ Stakeholder Involvement

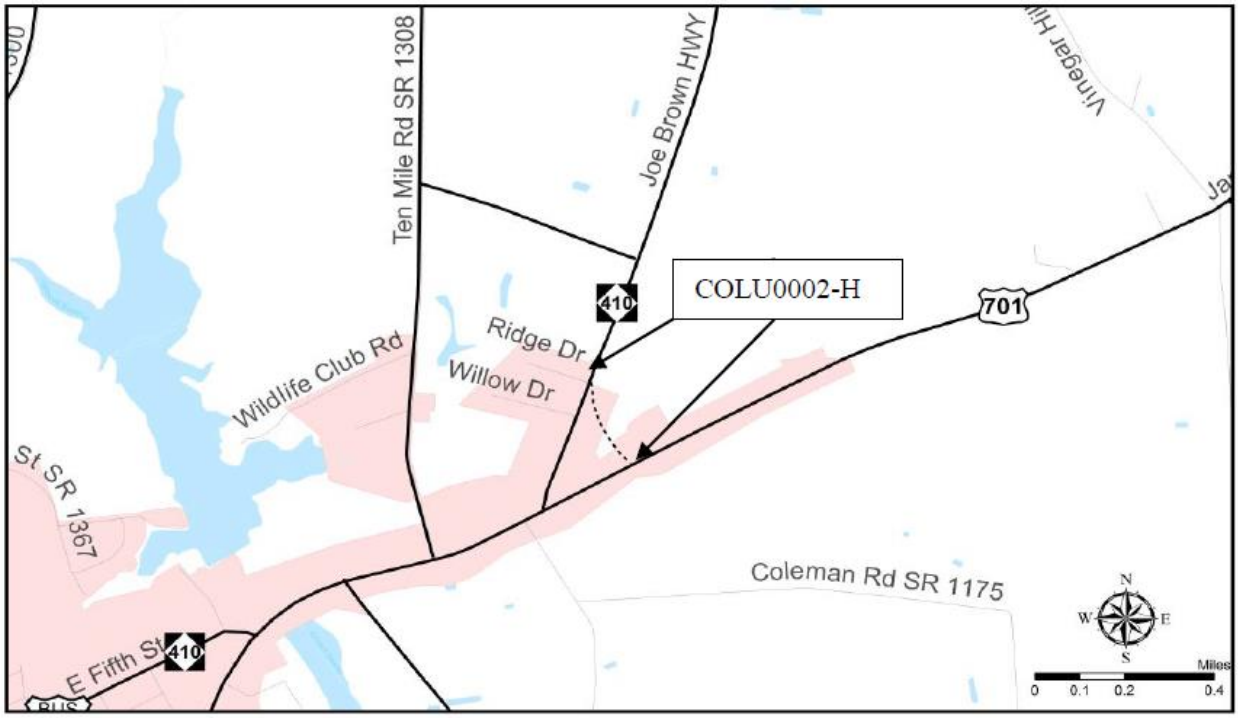
Public/stakeholder involvement is part of the process in the development of the CTP recommendations. NCDOT worked with Cape Fear Area RPO, Columbus County and Tabor City representatives who formed the Tabor City CTP Advisory Committee. The advisory committee discussed recommendations for the planning area and brought these recommendations to the Tabor City council meeting on October 14, 2014. The US 701 recommendation was met with full support. The residents attended the public drop-in session on October 14, 2014, expressed their concerns about the current congestion issues and their hopes that the congestion would be resolved with the improvements to the facility. Their concerns were also expressed in a public survey (Appendix H).

Other Highway Recommendations

The following highway proposals are recommended to reduce projected congestion and/or improve mobility.

[4] *For more information on the 2007 Columbus County CTP, go to: https://connect.ncdot.gov/projects/planning/Pages/CTP-Details.aspx?study_id=Columbus County*

NC 410 Realignment, Local ID: COL0002-H



NC 410 is a north-south, two lane major thoroughfare in Columbus County. The route originates north, in the town of Dublin in Bladen County and continues south through Bladenboro and Chadbourn and then to Tabor City. The route joins then splits with US 701 in Tabor City and then ends when it reunites with US 701 in South Carolina 21 miles later. The section of NC 410 in the Tabor City planning area is significant because it is used by many vacationers en route to Myrtle Beach, South Carolina. NC 410 is a regionally tiered route in the NC Multimodal Investment Network (NCMIN).

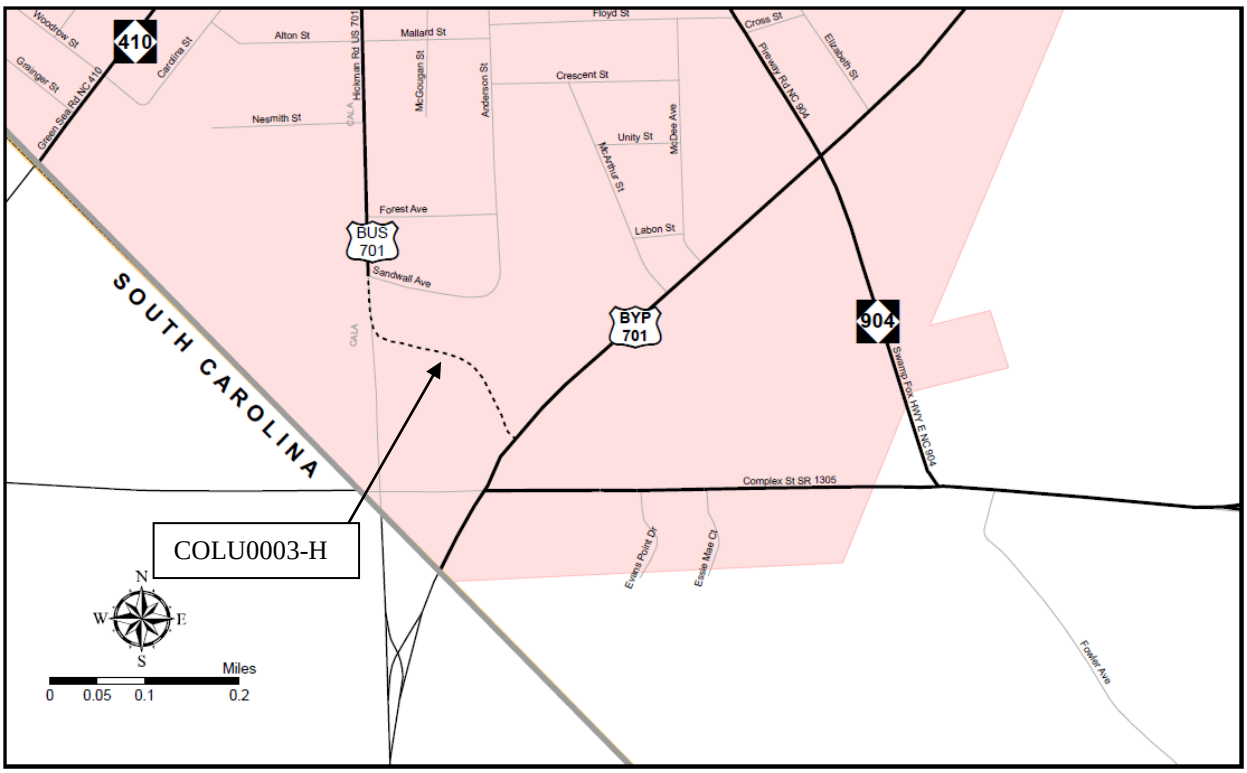
The CTP project proposal (COLU0002-H) recommends realigning NC 410 from just north of Ridge Drive to the US 701 & NC 410 intersection. It is proposed to improve this segment of NC 410 to a T-intersection in order to improve the sight distance.

The US 701 & NC 410 intersection is a three-legged unsignalized intersection. It is an especially difficult intersection at peak periods because drivers are unable to make left turns. The town has noted that during peak summer traffic, local law enforcement has had to direct traffic at the US 701/NC 410 intersection.

In addition, at the US 701 & NC 410 intersection, there were a total of 11 reported crashes between January 2007 and December 2011. NC 410 & US 701 meet at a skewed angle. According to the FHWA's report, *NCHRP Report 500 / Volume 5: A Guide for Addressing Unsignalized Intersection Collisions*, roadways that intersect at skewed angles may experience one or more of the following problems:

- Vehicles may have a longer distance to traverse while crossing or turning onto the intersecting roadway, resulting in an increased time of exposure to the cross-street traffic.
- Older drivers may find it more difficult to turn their heads, necks, or upper bodies for an adequate line of sight down an acute-angle approach.
- The driver's sight angle for convenient observation of opposing traffic and pedestrian crossings is decreased.
- Drivers may have more difficulty aligning their vehicles as they enter the cross street to make a right or left turn.
- Drivers making right turns around an acute-angle radius may encroach on lanes intended for oncoming traffic from the right.
- The larger intersection area may confuse drivers or cause them to deviate from the intended path.
- Through-roadway drivers making left turns across an obtuse angle may attempt to maintain a higher than normal turning speed and cut across the oncoming traffic lane on the intersecting street.
- The vehicle body may obstruct the line of sight of drivers with an acute-angle approach to their right.

US 701 Business (Hickman Road) Realignment, Local ID: COL0003-H



US 701 Business in Tabor City begins at the US 701 Bypass & US 701 Business/NC 410 intersection where it is known as East 5th Street. The route continues left onto

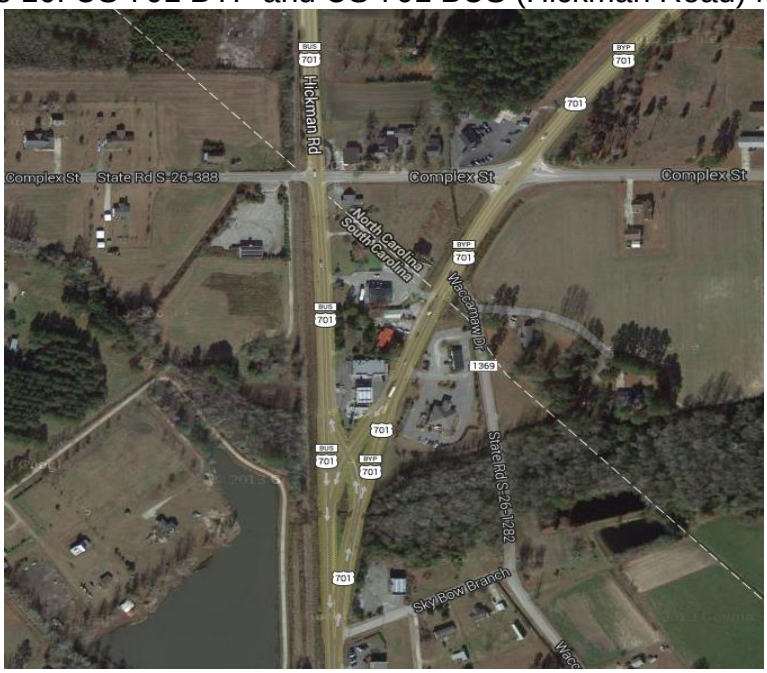
Hickman Road and through the Tabor City central business district and then to the South Carolina state line. It rejoins US 701 Bypass 0.3 miles south of the state line as a three-legged Y intersection with has merges, yields, and stops.

The CTP project proposal (COL0003-H) recommends relocating the portion of US 701 Business (Hickman Road) from Sandwall Road to the South Carolina state line. The road would be relocated to meet with the US 701 Bypass just north of Complex Street. It is currently a two lane major thoroughfare. The relocated facility would be a two lane major thoroughfare.

Included in the project proposal is to convert the remaining US 701 Business (Hickman Street) to a local road that dead ends at the South Carolina border. The remaining portion of Complex Street (SR 1305), west of the US 701 Bypass, would also be converted to a local road. Access to the US 701 Bypass from the west side of Complex Street (SR 1305) would be eliminated. As previously mentioned, US 701 Business (Hickman Road) would remain intact as a local road and would have bicycle (COLU0002-B) and sidewalk (COLU0002-P) access and Complex Street (SR 1305) would have bicycle (COLU0014-B) and sidewalk (COLU0012-P) access.

This section of US 701 Business (Hickman Road) has a 2012 AADT of 3,200 vpd and is forecasted to reach an AADT of 5,600 vpd by the year 2040. The capacity of the facility is 11,000 vpd. Though the road has not reached capacity, the town has observed that many non-resident drivers become confused when driving through and near the intersection because of the way US 701 Business (Hickman Road) merges with US 701 Bypass just south of the border (Figure 10).

Figure 10: US 701 BYP and US 701 BUS (Hickman Road) Merge



In addition, several reported and non-reported accidents have occurred in the area. More details about the crashes can be found in the Complex Street realignment project (COLU0004-H). The relocation would improve mobility and safety in the southern portion of the Tabor City planning area.

Complex Street (SR 1305) Realignment (eastern side of Complex Street (SR 1305) at the intersection of US 701 Bypass and Complex Street (SR 1305)), Local ID: COLU0004-H

Complex Street (SR 1305) is a minor thoroughfare that connects motorists to US 701 Bypass and US 701 Business (Hickman Road). The CTP project proposal (COLU0004-H) recommends realigning the existing intersection in order to improve the sight distance. Complex Street (SR 1305) and US 701 Bypass intersect at a skewed angle. According to the FHWA's report, *NCHRP Report 500 / Volume 5: A Guide for Addressing Unsignalized Intersection Collisions*, roadways that intersect at skewed angles may experience one or more of the following problems:

- Vehicles may have a longer distance to traverse while crossing or turning onto the intersecting roadway, resulting in an increased time of exposure to the cross-street traffic.
- Older drivers may find it more difficult to turn their heads, necks, or upper bodies for an adequate line of sight down an acute-angle approach.
- The driver's sight angle for convenient observation of opposing traffic and pedestrian crossings is decreased.
- Drivers may have more difficulty aligning their vehicles as they enter the cross street to make a right or left turn.
- Drivers making right turns around an acute-angle radius may encroach on lanes intended for oncoming traffic from the right.
- The larger intersection area may confuse drivers or cause them to deviate from the intended path.
- Through-roadway drivers making left turns across an obtuse angle may attempt to maintain a higher than normal turning speed and cut across the oncoming traffic lane on the intersecting street.
- The vehicle body may obstruct the line of sight of drivers with an acute-angle approach to their right.

The town has safety concerns at and near the US 701 Bypass & Complex Street (SR 1305) intersection. Of particular concern is the northern sight distance on Complex Street (SR 1305). The other concern is the nearby, US 701 Bypass and US 701 Business merge just south of the state line. The North Carolina Department of Transportation's (NCDOT) Transportation, Mobility & Safety (TMS) Division has records of seventeen crashes at the US 701 Bypass & Complex Street (SR 1305) intersection from 2007 to 2011. According to the Tabor City Fire Department incident reports, an additional seven crashes have occurred at the intersection between 2012 and 2013. To note, the Tabor City Fire Department also takes calls in South Carolina near the border. The crashes, though they may have an effect on traffic in North Carolina, are not

reported to TMS. The entire southern portion of the town of Tabor City is of concern because of the merging of US 701 Bypass and US 701 Business (Hickman Road) just south of the border.

The primary purpose of improving the intersection is to minimize the problems that can occur with having a skewed angle intersection. The improvement may aid in the reduction of crashes that occur in the area. The project proposes the realignment of Complex Street (SR 1305), at the intersection of US 701 Bypass and Complex Street (SR1305), just north of the existing intersection.

Minor Improvements

The following facilities are not projected to exceed Level of Service (D) by 2040 but are considered narrow roads that are recommended to be upgraded to 2A typical cross-section standards (See Appendix D). These facilities were recommended for modernization in the *2007 Columbus County Comprehensive Transportation Plan*.

- **NC 410, Local ID: COLU0005-H:** NC 410 from US 701 to the northern Tabor City planning boundary.

- **NC 904, Local ID: COLU0006-H:** NC 904 from Carolina Road (SR 1303) to the northeastern Tabor City planning boundary and NC 904 from Complex Street (SR 1305) to the southeastern Tabor City planning boundary

- **Emerson Church Road (SR 1310), Local ID: COLU0011-H:** Emerson Church Road (SR 1310) from Old Stake Road (SR 1300) to Ten Mile Road (SR 1308).

- **Old Stake Road (SR 1300), Local ID: COLU0015-H:** Old Stake Road (SR 1300) from Canal Street (SR 1367) to Emerson Church Road (SR 1310).

- **Ten Mile Road (SR 1308), Local ID: COLU0017-H:** Ten Mile Road (SR 1308) from Emerson Church Road (SR 1310 to the northern Tabor City planning boundary.

- **Will Inman Road (SR 1006), Local ID: COLU0018-H:** Will Inman Road (SR 1006) from NC 904 to the eastern Tabor City planning boundary.

Minor Improvements- Planned Bond Referendum

The following facilities are not projected to exceed Level of Service (D) by 2040 but are curb and gutter improvements that are proposed by the town of Tabor City for better mobility and for modernization as growth occurs. These facilities are planned to be improved through a local bond referendum.

- **West Fourth Street, Local ID: COLU0007-H:** West Fourth Street from Lewis Street to Bay Street.

- **East Eighth Street, Local ID: COLU0008-H:** Eight Street from Stake Road (SR 1300) to North Main Street (SR 1304).

- **Anderson Street, Local ID: COLU0009-H:** Anderson Street from Garrell Street to US 701 Business (Hickman Road).

- **Bell Street, Local ID: COLU0010-H:** Bell Street from NC 904 (Pireway Road) to US 701 Business (Hickman Road).

- **Heath Street, Local ID: COLU0012-H:** Heath Street from Jones Street to Stake Road (SR 1300).

- **Jones Street, Local ID: COLU0013-H:** Jones Street from US 701 Business/NC 410 (East 5th Street) to Heath Street.

- **Live Oak Street, Local ID: COLU0014-H:** Live Oak Street from NC 904 (Pireway Road) to Williams Street.

- **Orange Street, Local ID: COLU0016-H:** Orange Street from US 701 Business/NC 410 (East 5th Street) to East 4th Street.

- **Stake Road (SR 1300), Local ID: COLU0020-H:** Stake Road (SR 1300) from US 701 Business/NC 410 (East 5th Street) to East 8th Street.

- **Williams Street, Local ID: COLU0019-H:** Williams Street from US 701 Business/NC 410 (East 5th Street) to Live Oak Street.

PUBLIC TRANSPORTATION & RAIL

A public transportation and rail assessment was completed during the development of the CTP. There are no recommended improvements associated with the public transportation mode in the Tabor City planning area. As for the railroad, it is currently owned by Carolina Southern Railroad (CALA) which is a member of the Carolina Rails system with connections that run from Whiteville, North Carolina to Mullins, South Carolina and also from Chadbourn, North Carolina, through Tabor City, North Carolina and on to Conway, South Carolina. The railroad is currently inactive. The rail line which runs through Tabor City once carried goods to and from several businesses in the town. The future of the CALA railroad line is uncertain. The rail line is important to the town of Tabor City as it can further the town's vision of economic growth. The town of Tabor City would like to see the railroad line reactivated.

BICYCLE

According to the *WalkBikeNC North Carolina Statewide Pedestrian and Bike Plan*, bicycling has been part of transportation in North Carolina for more than 100 years. Bicyclists helped champion North Carolina's "Good Roads" movement in the early 1900's. Formal planning for bicycle accommodation in North Carolina began with passage of the Bicycle and Bikeway Act in 1974. The Tabor City CTP will help continue bicycling as an alternative form or transportation.

During the development of the CTP, the bicycle facilities listed below were identified as recommended bicycle routes by the Tabor City CTP Steering Committee. The recommended bicycle map includes several improvements needed to provide adequate, safe, and desirable facilities for use by bicyclists. The bicycle facilities provide connectivity and access to key places in and around Tabor City such as schools, park and recreation facilities, retail, grocery, and others.

In accordance with American Association of State Highway and Transportation Officials (AASHTO), roadways identified as bicycle routes should incorporate the following standards as roadway improvements are made and funding is available:

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

It should be noted that the recommended improvements to on-road facilities can include several potential solutions. The improvements can be as minor as installing "Share-the-Road" signs and pavement markings to more major projects such as constructing wide shoulders or bicycle lanes.

The following is the list of facilities identified for on-road bicycle improvements. Some recommendations are concurrent with highway and/or pedestrian projects. Refer to CTP mapping (Figure 1, Sheet 4) and Appendix C for more information.

- **US 701 Business/NC 410 (East 5th Street), Local ID: COLU0001-B**
  Add bicycle lanes accommodations on both sides of US 701 Business/NC 410 (East 5th Street) from US 701 Bypass to US 701 Business (Hickman Road).

- **US 701 Business (Hickman Road), Local ID: COLU0002-B**
  Add "Share the Road" bicycle accommodations on US 701 Business (Hickman Road) from US 701 Business/NC 410 (East 5th Street) NC 410 (Green Sea Road) and add bicycle lane from NC 410 (Green Sea Road) to the South Carolina state line.

- **NC 410 (Green Sea Road), Local ID: COLU0003-B**
  Add bicycle lane accommodations on NC 410 (Green Sea Road) from US 701 Business (Hickman Road) to the South Carolina state line.

- **NC 904 (West 8th Street), Local ID: COLU0004-B**
  Add bicycle lane accommodations on NC 904 (West 8th Street) from Stake Road (SR 1300) (North Main Street) to NC 904 (Fair Bluff Road).

- **NC 904 (Fair Bluff Road), Local ID: COLU0005-B**
  Add bicycle lane accommodations on NC 904 (Fair Bluff Road) from NC 904 (West 8th Street) to Carolina Road (SR 1303).

- **NC 904 (North Main Street), Local ID: COLU0006-B**
  Add bicycle lane accommodations on NC 904 (North Main Street) from US 701 Business/NC 410 (East 5th Street) to NC 904 (West 8th Street).

- **NC 904 (Pireway Road), Local ID: COLU0007-B**
  Add bicycle lane accommodations on NC 904 (Pireway Road) from US 701 Business/NC 410/NC 904 (East 5th Street) to Complex Street (SR 1305).

- **East 4th Street, Local ID: COLU0008-B**
  Add "Share the Road" bicycle accommodations on East 4th Street from NC 904 (Pireway Road) to West 6th Street (SR 1301).

- **West 6th Street (SR 1301), Local ID: COLU0009-B**
  Add "Share the Road" bicycle accommodations on West 6th Street (SR 1301) from NC 904 (North Main Street) to the South Carolina state line.

- **East 8th Street, Local ID: COLU00010-B**
  Add "Share the Road" bicycle accommodations on East 8th Street from Stake Road (SR 1300) to North Main Street (SR 1304).

- **East Bell Street, Local ID: COLU00011-B**
  Add "Share the Road" bicycle accommodations on Bell Street from US 701 Business (Hickman Road) to NC 904 (Pireway Road).

- **Canal Street (SR 1367), Local ID: COLU00012-B**
  Add "Share the Road" bicycle accommodations on Canal Street (SR 1367) from Stake Road (SR 1300) to loop Lakeside Drive and Miriam Lane.

- **Carolina Road (SR 1303), Local ID: COLU0013-B**
  Add paved shoulder bicycle accommodations on Carolina Road (SR 1303) from NC 904 (Fair Bluff Road) to School Street (SR 1302).

- **Complex Street (SR 1305), Local ID: COLU0014-B**
  Add paved shoulder bicycle accommodations on Complex Street (SR 1305) from NC 904 (Pireway Road) to US 701 Business (Hickman Road).

- **Lynwood Norris Road, Local ID: COLU0015-B**
  Add "Share the Road" bicycle accommodations on Lynwood Norris Road from US 701 Business/NC 410 (East 5th Street) to the end of the road.

- **North Main Street (SR 1304), Local ID: COLU0016-B**
  Add paved shoulder bicycle accommodations on North Main Street (SR 1304) from NC 904 (North Main Street) to New Warehouse Road (SR 1306).

- **New Warehouse Road (SR 1306), Local ID: COLU0017-B**
  Add paved shoulder bicycle accommodations on New Warehouse Road (SR 1306) from Old Stake Road (SR 1300) to Willoughby Road (SR 1304).

- **Old Stake Road (SR 1300), Local ID: COLU0018-B**
  Add paved shoulders bicycle accommodations on Stake Road (SR 1300) from New Warehouse Road (SR 1306) to Canal Street (SR 1367).

- **Richard Wright Road (SR 1151), Local ID: COLU0019-B**
  Add paved shoulders bicycle accommodations on Richard Wright Road (SR 1151) which will provide access from the Yogi Bear's Jellystone Park to US 701 and meet the Lake Tabor Multiuse Path (COLU0001-M).

- **School Street (SR 1302), Local ID: COLU0020-B**
  Add paved shoulder bicycle accommodations on School Street (SR 1302) from Carolina Road (SR 1303) to West 6th Street (SR 1301).

- **Stake Road (SR 1300), Local ID: COLU0021-B**
  Add bicycle accommodations from Canal Street (SR 1367), to Carter Street, add "Share the Road" bicycle accommodations from Carter Street to US 701 Business/NC 410 (East 5th Street).

PEDESTRIAN

In the Statewide Bicycle and Pedestrian Plan[5], it states that North Carolinas vision for walking and biking. "North Carolina is a place that incorporates walking and bicycling into daily life, promoting safe access to destinations, physical activity opportunities for improved health, increased mobility for better transportation efficiency, retention and attraction of economic development, and resource conservation for better environmental stewardship of our state."

The recommended projects in the Tabor City CTP pedestrian map identifies pedestrian improvements such as new sidewalks, improving existing sidewalk facilities by either adding a sidewalk to the other side or filling in gaps. The recommended projects will aid in meeting North Carolina's vision for pedestrians.

[5] *For more information on the Statewide Bicycle and Pedestrian Plan, visit http://www.ncdot.gov/bikeped/planning/walkbikenc/*

The following is the list of facilities identified for sidewalk improvements. Some recommendations are concurrent with highway and/or bicycle projects. Refer to CTP mapping (Figure 1, Sheet 5) and Appendix C for more information.

- **US 701 Business (Hickman Road), Local ID: COLU0001-P**
  Add sidewalk on the eastern side of US 701 Business (Hickman Road) from Forest Road to Complex Street (SR 1305).

- **US 701 Business/NC 410/NC 904 (East 5th Street), Local ID: COLU0002-P**
  Add sidewalks to both sides of US 701 Business/NC 410/NC 904 (East 5th Street) from Stake Road (SR 1300) to Lynwood Norris Road. Some sections have sidewalk existing on at least one side of the facility. Add crosswalks at major intersections and update for ADA compliance.

- **NC 410 (Green Sea Road), Local ID: COLU0003-P**
  Add sidewalks on both sides of NC 410 (Green Sea Road) from South Main Street to the South Carolina state line. Some sections are existing on at least one side of the facility. Fill in sidewalk gaps.

- **NC 904 (North Main Street), Local ID: COLU0004-P**
  Add sidewalk to west side of NC 904 (North Main Street) from 7th Street to NC 904 (8th Street).

- **NC 904 (Pireway Road), Local ID: COLU0005-P**
  Add sidewalks on both sides of NC 904 (Pireway Road) from US 701 Business/NC 410/NC 904 (East 5th Street) to Floyd Street, filling in gaps. Some sections have sidewalk existing on at least one side of the facility. Add sidewalks on both sides of NC 904 (Pireway Road) from Floyd Street to Complex Street (SR 1305). Add crosswalks at major intersections and check/update for ADA compliance.

- **West 4th Street, Local ID: COLU0006-P**
  Add sidewalk on both sides of West 4th Street from NC 410 (South Main Street) to Bay Street. Some sections have sidewalk existing on at least one side of the facility.

- **West 6th Street (SR 1301), Local ID: COLU0007-P**
  Add sidewalks on both sides of West 6th Street (SR 1301) from NC 904 (North Main Street) to School Road (SR 1302). Sidewalks exist on either side of the facility.

- **East 8th Street, Local ID: COLU0008-P**
  Add sidewalks on both sides of East 8th Street from Stake Road (SR 1300) to North Main Street (SR 1304).

- **Anderson Street, Local ID: COLU0009-P**
  Add sidewalks on both sides of Anderson Street from Garrell Street to Sandwall Drive.

- **Bay Street, Local ID: COLU0010-P**
  Add sidewalks on both sides of Bay Street from West 6th Street to West 4th Street.

- **East Bell Street, Local ID: COLU0011-P**
  Add sidewalks on both sides of East Bell Street from US 701 Business (Hickman Road) to NC 904 (Pireway Road).

- **Complex Street (SR 1305), Local ID: COLU0012-P**
  Add sidewalks on both sides of Complex Street (SR 1305) from NC 904 (Pireway Road) to US 701 Business (Hickman Road). There is existing sidewalk on one side of the road from Essie Mae Court and Evans Point Drive. Add crosswalks at major intersections, at Essie Mae Court, and at Evans Point Drive.

- **Garrell Street, Local ID: COLU0013-P**
  Add sidewalks on the north side of Garrell Street from US 701 Business (Hickman Street) to NC 904 (Pireway Road).

- **Heath Street, Local ID: COLU0014-P**
  Add sidewalks on both sides of Heath Street from Jones Street to Stake Road (SR 1300).

- **Jones Street, Local ID: COLU0015-P**
  Add sidewalks on both sides of Jones Street from US 701 Business/NC 410 (East 5th Street) to Heath Street.

- **Live Oak Street, Local ID: COLU0016-P**
  Add sidewalks on both sides of Live Oak Street from Williams Street to NC 904 (Pireway Road).

- **Lynwood Norris Street, Local ID: COLU0017-P**
  Add sidewalk on Lynwood Norris Street from US 701 Business/NC 410 (East 5th Street) to the end of the road.

- **Sandwall Drive, Local ID: COLU0018-P**
  Add sidewalks on both sides of Sandwall Drive from Anderson Street to US 701 Business (Hickman Road).

- **Stake Road (SR 1300), Local ID: COLU0019 -P**
  Add sidewalks on both sides of Stake Road (SR 1300) from US 701 Business/NC 410 (East 5th Street) to Barry Street. There is existing sidewalk on

the west side of Stake Road (SR 1300) from US 701 Business/NC 410 (East 5th Street) to Carter Street.

- **Williams Street, Local ID: COLU0020-P**
  Add sidewalks on both sides of Williams Street from US 701 Business/NC 410 (East 5th Street) to Live Oak Street. There is existing sidewalk on the west side of Williams Street from US 701 Business/NC 410 (East 5th Street) to Britt Street.

MULTI-USE PATH

The NCDOT envisions that all citizens of North Carolina and visitors to the state should be able to walk and bicycle safely and conveniently to their desired destinations with reasonable access to roadways. Increased bicycle and pedestrian safety and connectivity are needed within the town of Tabor City. On-road bicycle facilities serve a specific purpose, as do sidewalks, but multi-use paths offer a unique combination of the two. They cater to both modes of transportation, while typically offering an off-road, safer, more recreational experience.

The purpose of the recommended multi-use path in Tabor City is to provide an adequate, safe, and desirable facility that both pedestrians and bicyclists can use for local connectivity within the planning area. Below is the identified multi-use path recommended by the town of Tabor City. Refer to either the Bicycle CTP map (Figure 1, sheet 4) or the Pedestrian CTP map (Figure 1, Sheet 5), and Appendix C for more information.

- **Lake Tabor Multi-Use Path, Local ID: COLU001-M**
  Provide a multi-use path from Richard Wright Road (SR 1151) to Lynwood Norris Street. The proposed path will allow residents and visitors access to Lake Tabor. The Lake Tabor Multi-Use Path (COLU001-M) connects to the Richard Wright (SR 1151) bicycle path (COLU0019-B) and the Lynwood Norris Street bicycle "Share the Road" path (COLU0014-B) and pedestrian sidewalk (COLU0017-P).

APPENDICES

Appendix A
Resources and Contacts

Local Planning Organization

Cape Fear Area Rural Planning Organization *(http://www.capefearcog.org/)* Contact the RPO for information on long-range multi-modal planning services.
1480 Harbour Drive Wilmington, NC 28401 (910) 395-4553

North Carolina Department of Transportation

Customer Service Office
Contact information for other units within the NCDOT that are not listed in this appendix is available by calling the Customer Service Office or by visiting the NCDOT directory:
1-877-DOT-4YOU (1-877-368-4968) *http://www.ncdot.gov/contact/*

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

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

Highway Division 6 *(https://apps.dot.state.nc.us/dot/directory/authenticated/ToC.aspx)*
558 Gillespie Street Fayetteville, NC 28301 (910) 486-1493

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

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

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

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

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

Other State Government Offices

Department of Commerce – Division of Community Assistance

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

http://www.nccommerce.com/cd

Appendix B
Comprehensive Transportation Plan Definitions

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

Highway Map

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

Facility Type Definitions

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

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

❖ **Boulevards**

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

❖ **Other Major Thoroughfares**

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

❖ **Minor Thoroughfares**

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

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

Other Highway Map Definitions

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

Public Transportation and Rail Map

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

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

- **Operational Strategies** – Plans geared toward the non-single occupant vehicle. This includes but is not limited to HOV lanes or express bus service.
- **Rail Corridor** – Locations of railroad tracks that are either active or inactive tracks. These tracks were used for either freight or passenger service.
  - Active – rail service is currently provided in the corridor; may include freight and/or passenger service
  - Inactive – right of way exists; however, there is no service currently provided; tracks may or may not exist
  - Recommended – It is desirable for future rail to be considered to serve an area.
- **High Speed Rail Corridor** – Corridor designated by the U.S. Department of Transportation as a potential high speed rail corridor.
  - Existing – Corridor where 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-of-way.

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

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

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

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

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

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

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

Appendix C
CTP Inventory and Recommendations

Assumptions/ Notes:

- **Local ID:** This Local ID is the same as the one used for the Prioritization Project Submittal Tool. If a TIP project number exists it is listed as the ID. Otherwise, the following system is used to create a code for each recommended improvement: the first 4 letters of the county name is combined with a 4 digit unique numerical code followed by '-H' for highway, '-T' for public transportation, '-R' for rail, '-B' for bicycle, '-M' for multi-use paths, or '-P' for pedestrian modes. If a different code is used along a route it indicates separate projects will probably be requested. Also, upper case alphabetic characters (i.e. 'A', 'B', or 'C') are included after the numeric portion of the code if it is anticipated that project segmentation or phasing will be recommended.
- **Jurisdiction:** Jurisdictions listed are based on municipal limits, county boundaries, and MPO Metropolitan Planning Area Boundaries (MAB), as applicable.
- **Existing Cross-Section:** Listed under 'Total Width (ft)' is the approximate width of the roadway from edge of pavement to edge of pavement and under 'Lane Width (ft)' is the approximate width of a single lane based on centerline/ edge line markings. Listed under 'Lanes' is the total number of lanes, with 'D' if the facility is divided, and 'OW' if it is a one-way facility.
- **Existing ROW:** The estimated existing right-of-way is based on NCDOT GIS Roadway Characteristic layer in conjunction with current aerial photography. These right-of-way amounts are approximate and may vary.
- **Existing and Proposed Capacity:** The estimated capacities are given in vehicles per day (vpd) based on LOS D for existing facilities and LOS C for new facilities. These capacity estimates were developed based on the 2000 Highway Capacity Manual using the Transportation Planning Branch's LOS D Standards for Systems Level Planning, as documented in Chapter 1.
- **Existing and Proposed Volumes**, given in vehicles per day (vpd), are estimates only based on a systems-level analysis. The '2040 Volume E+C' is an estimate of the volume in 2040 with only existing plus committed projects assumed to be in place, where committed is defined as projects programmed for construction in the 2012 - 2020 Transportation Improvement Program (TIP). The '2040 Volume with CTP' is an estimate of the volume in 2040 with all proposed CTP improvements assumed to be in place. The '2040 Volume with CTP' is shown in bold if it exceeds the proposed capacity, indicating an unmet need. For additional information about the assumptions and techniques used to develop the AADT volume estimates, refer to Chapter 1.
- **Proposed Cross-section:** The CTP recommended cross-sections are listed by code; for depiction of the cross-section, refer to Appendix D. An entry of 'ADQ' indicates the existing facility is adequate and there are no improvements recommended for the given mode as part of the CTP.

- **CTP Classification:** The CTP classification is listed, as shown on the adopted CTP Maps (see Figure 1). Abbreviations are F= freeway, E= expressway, B= boulevard, Maj= other major thoroughfare, Min= minor thoroughfare.
- **Tier:** Tiers are defined as part of the North Carolina Multimodal Investment Network (NCMIN). Abbreviations are Sta= statewide tier, Reg= regional tier, Sub= subregional tier.
- **Proposals for Other Modes:** If there is an improvement recommended for another mode of transportation that relates to the given recommendation, it is indicated by an alphabetic code (H= highway, T= public transportation, R= rail, B= bicycle, P= pedestrian, and M= multi-use path).

Table 5: CTP Inventory and Recommendations

HIGHWAY																					
		Section				2012 Existing System							2040 Proposed System								
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd	2012 (2011) Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
COLU0001-H	US 701 Byp	South Carolina Line	0.2 Mile South NC 904	Town of Tabor City	0.8	24	2	12	150	55	15800	8800	20000	20000	43900	4E	150	Maj	Reg	
COLU0001-H	US 701 Byp	0.2 Mile South NC 904	0.1 Mile South US701 Bus/NC 410 (E. 5th St.)	Town of Tabor City	1.2	36	3	12	150	55	17200	8200	20000	20000	43900	4E	150	Maj	Reg	
COLU0001-H	US 701/NC 410 (E. 5th St.)	0.1 Mile South US 701 Bus/NC 410 (E. 5th St.)	.1 Mile South Richard Wright Rd. (SR 1151)	Town of Tabor City	0.1	24	2	12	150	55	15800	12000	25000	25000	43900	4E	150	Maj	Reg	
COLU0001-H	US 701/NC 410 (E. 5th St.)	.1 Mile South Richard Wright Rd. (SR 1151)	0.2 Mile South NC 410 (Joe Brown Hwy)	Town of Tabor City	0.3	36	3	12	125	55	17200	12000	25000	25000	43900	4E	150	Maj	Reg	
COLU0001-H	US 701/NC 410 (E. 5th St.)	0.2 Mile South NC 410 (Joe Brown Hwy)	NC 410 (Joe Brown Hwy)	Town of Tabor City	0.2	36	3	12	150	55	15800	6700	19000	19000	43900	4E	150	Maj	Reg	
COLU0001-H	US 701/NC 410 (E. 5th St.)	NC 410 (Joe Brown Hwy)	0.2 Mile North NC 410 (Joe Brown Hwy)	Town of Tabor City	0.2	36	3	12	150	55	15800	6700	19000	19000	43900	4E	150	Maj	Reg	
COLU0001-H	US 701 (James B. White Hwy)	0.2 Mile North NC 410 (Joe Brown Hwy)	Tabor City Town Limit	Town of Tabor City	0.7	24	2	12	150	55	15800	6700	19000	19000	43900	4E	150	Maj	Reg	
COLU0001-H	US 701 (James B. White Hwy)	Tabor City Town Limit	Richard Wright Rd. (SR 1151)	Columbus County	0.9	24	2	12	150	55	15800	6700	19000	19000	43900	4E	150	Maj	Reg	
COLU0001-H	US 701 (James B. White Hwy)	Richard Wright Rd. (SR 1151)	Vinegar Loop Rd. (SR 1313)	Columbus County	0.4	36	2	12	150	55	15800	6700	19000	19000	43900	4E	150	Maj	Reg	
COLU0001-H	US 701 (James B. White Hwy)	Vinegar Loop Rd. (SR 1313)	Butler Rd. (SR 1155)	Columbus County	1.3	24	2	12	150	55	15800	6700	9400	9400	43900	4E	150	Maj	Reg	
COLU0003-H	US 701 Bus. Relocation	US 701 Byp	Sandwall St.	Town of Tabor City	0.2	-	-	-	-	-	-	-	-	5600	11000	2C	60	Maj	Reg	
	US 701 Bus. (Hickman Rd)	Sandwall St.	NC 410 (Sea Green Rd.)	Town of Tabor City	0.6	40	2	20	60	20	11000	3600	7000	7000	11000	2E	60	Maj	Reg	B P
	US 701 Bus. (E. 5th St.)	NC 410 (Sea Green Rd.)	US 701 Bus./NC 410/NC 904 (E. 5th St.)	Town of Tabor City	0.2	24	2	12	50	20	11000	4800	7600	7600	11000	ADQ[1]	60	Maj	Reg	B P
	US 701 Bus. (E. 5th St.)	US 701 Bus./NC 410 (Hickman Rd.)	NC 904 (Pireway Rd.)	Town of Tabor City	0.2	24	2	12	50	20	11000	3500	7800	7800	11000	2E	60	Maj	Reg	B P
	US 701 Bus. (E. 5th St.)	US 701 Bus./NC 410 (E. 5th St.)	0.1 Mile East Orange St.	Town of Tabor City	0.2	24	2	12	50	20	11000	5100	6600	6600	11000	2E	60	Maj	Reg	B P

HIGHWAY																					
		Section				2012 Existing System							2040 Proposed System								
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd	2012 (2011) Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
	US 701 Bus. (E. 5th St.)	Orange St.	Jessie St.	Town of Tabor City	0.3	36	3	12	100	35	14000	5100	6600	6600	14000	3C	100	Maj	Reg	B P
	US 701 Bus. (E. 5th St.)	Jessie St.	US 701	Town of Tabor City	0.5	36	3	12	100	35	14000	5600	8600	8600	14000	3C	100	Maj	Reg	B P
	NC 410 (Green Sea Rd.)	South Carolina Line	S. Lewis St. (SR 1301)	Town of Tabor City	0.3	36	3	12	60	35	14000	1400	2200	2200	14000	3C	60	Maj	Reg	B P
	NC 410 (Green Sea Rd.)	S. Lewis St. (SR 1301)	US 701 Bus./NC 410 (Hickman Rd.) and NC 410 (S. Main St.)[3]	Town of Tabor City	0.2	24	2	12	60	35	12600	1400	1700	1700	12600	2E	60	Maj	Reg	B P
	NC 410 (S. Main St.)	NC 410 (Green Sea Rd.)	NC 904 (N. Main St.)	Town of Tabor City	0.1	12	1 OW[3]	12	40	20	5500	N/A	N/A	N/A	5500	ADQ	40	Maj	Reg	
	NC 410 (E. 5th St.)	NC 904 (N. Main St.)	US 701 Bus./NC 410 (Hickman Rd.)	Town of Tabor City	0.1	24	2	12	50	20	11000	3500	7800	7800	11000	2E	60	Maj	Reg	B P
	NC 410 (Hickman Rd.)	US 701 Bus./NC 410 (Hickman Rd.)	US 701 Bus./NC 410/NC 904 (E. 5th St.)	Concurrent with US 701 Bus.																
	NC 410 (E. 5th St.)	US 701 Bus./NC 410/NC 904 (E. 5th St.)	NC 904 (Pireway Rd.)	Concurrent with US 701 Bus. /NC 904																
	NC 410 (E. 5th St.)	NC 904 (Pireway Rd)	Orange St.	Concurrent with US 701 Bus.																
	NC 410 (E. 5th St.)	Orange St.	Jessie St.	Concurrent with US 701 Bus.																
	NC 410 (E. 5th St.)	Jessie St.	US 701/NC 410 (E. 5th St)	Concurrent with US 701 Bus.																
	NC 410 (James B. White Hwy)	US 701/NC 410	.1 Mile South Richard Wright Rd. (SR 1151)	Concurrent with US 701																
	NC 410 (James B. White Hwy)	.1 Mile South Richard Wright Rd. (SR 1151)	NC 410 (Joe Brown Hwy)	Concurrent with US 701																
COLU0002-H	NC 410 (Joe Brown Hwy) Realignment	NC 410 (Joe Brown Hwy)	Tabor City Town Limit	Town of Tabor City	0.3	24	2	12	100	55	15800	4500	8700	8700	15800	2A	60	Maj	Reg	
COLU0005-H	NC 410 (Joe Brown Hwy)	Tabor City Town Limit	Northern planning boundary	Town of Tabor City	2.4	24	2	12	100	55	15800	4500	8900	8900	15800	2A	60	Maj	Reg	

HIGHWAY																					
		Section				2012 Existing System							2040 Proposed System					CTP Classifi-cation		Proposals for Other Modes
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd	2012 (2011) Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)		Tier	
COLU0006-H	NC 904 (Swamp Fox Hwy)	0.1 Mile N. Mccrimmon Exd. (SR 1126)	Complex St. (SR 1305)	Columbus County	2.2	22	2	11	60	55	15300	2900	3600	3600	15800	2A	60	Maj	Reg	
	NC 904 (Pireway Rd.)	Complex St. (SR 1305)	Tabor City Town Limit	Columbus County	0.2	36	3	12	60	35	14000	4200	6600	6600	14000	3C	60	Maj	Reg	B P
	NC 904 (Pireway Rd.)	Tabor City Town Limit	US 701	Town of Tabor City	0.2	36	3	12	60	35	14000	3500	4900	4900	14000	3C	60	Maj	Reg	B P
	NC 904 (Pireway Rd.)	US 701	US 701 Bus./NC 410 (E. 5th St.)	Town of Tabor City	0.7	32	2	16	60	35	12600	2500	6200	6200	12600	2E	60	Maj	Reg	B P
	NC 904 (E. 5th St.)	US 701 Bus./NC 410 (E. 5th St.)	US 701 Bus./NC 410/NC 904 (Hickman Rd.)	Concurrent with US 701 Bus./NC 410																
	NC 904 (E. 5th St.)	US 701 Bus./NC 410/NC 904 (Hickman Rd.)	Main St.	Town of Tabor City	0.1	24	2	12	40	20	11000	1200	2200	2200	11000	ADQ	40	Maj	Reg	
	NC 904 (N. Main St.)	Main St.	NC 904 (W. 8th St.)	Town of Tabor City	0.3	40	2	20	40	35	12600	1200	2200	2200	12600	ADQ[2]	40	Maj	Reg	B
	NC 904 (W. 8th St.)	NC 904 (W. 8th St.)	NC 904 (Fair Bluff Rd.)	Town of Tabor City	0.2	34	2	17	60	35	11100	2500	4400	4400	11100	ADQ[2]	60	Maj	Reg	B
	NC 904 (Fair Bluff Rd.)	NC 904 (Fair Bluff Rd.)	Carolina Rd. (SR 1303)	Town of Tabor City	0.2	34	2	17	60	35	12200	2500	4400	4400	12200	ADQ[1]	60	Maj	Reg	B
COLU0006-H	NC 904 (Fair Bluff Rd.)	Carolina Rd. (SR 1303)	Tabor City Town Limit	Town of Tabor City	0.4	22	2	11	60	35	12200	2500	4400	4400	12200	2A	60	Maj	Reg	B
COLU0006-H	NC 904 (Swamp Fox Hwy)	Tabor City Town Limit	0.2 Mile N. Prison Entrance	Columbus County	2.7	22	2	11	60	55	15300	1800	3100	3100	15800	2A	60	Maj	Reg	
	E. 4th St.	US 701 Bus./NC 410 (Hickman Rd.)	Northern planning boundary	Town of Tabor City	0.2	18	2	9	40	20	9000	N/A	N/A	N/A	9000	ADQ[4]	40	Min	-	
	E. 4th St.	NC 410 (S. Main St)	S. Lewis St. (SR 1301)	Town of Tabor City	0.1	18	2	9	40	20	9000	N/A	N/A	N/A	9000	ADQ[4]	40	Min	-	B P
COLU0007-H	E. 4th St.	S. Lewis St (SR 1301)	Bay St.	Town of Tabor City	0.1	18	2	9	40	20	9000	N/A	N/A	N/A	9000	ADQ[4]	40	Min	-	B P
	E. 4th St.	Bay St.	W. 6th St. (SR 1301)	Town of Tabor City	0.4	18	2	9	40	20	9000	N/A	N/A	N/A	9000	ADQ[4]	40	Min	-	B P
	W. 6th St.	NC 410 (S. Main St.)	N. Lewis St.	Town of Tabor City	0.1	18	2	9	60	35	9900	200	250	250	9900	ADQ[4]	60	Min	Sub	B P
	W. 6th St. (SR 1301)	N. Lewis St.	South Carolina Line	Town of Tabor City	0.8	18	2	9	60	35	9900	200	250	250	9900	ADQ[4]	60	Min	Sub	B P

HIGHWAY																					
		Section				2012 Existing System							2040 Proposed System					CTP Classifi-cation		Proposals for Other Modes
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd	2012 (2011) Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)		Tier	
COLU0008-H	E. 8th St.	Stake Rd. (SR 1300)	N. Main St. (NC 904)	Town of Tabor City	0.1	20	2	10	40	35	N/A	N/A	N/A	N/A	N/A	2E	60	Min	-	B P
COLU0009-H	Anderson St.	Garrell St.	US 701 Bus. (Hickman Rd.)	Town of Tabor City	0.7	18	2	9	40	20	9000	N/A	N/A	N/A	9000	ADQ[4]	40	Min	-	P
COLU0010-H	E. Bell St.	NC 904 (Pireway Rd.)	US 701 Bus. (Hickman Rd.)	Town of Tabor City	0.3	18	2	9	40	20	9000	N/A	N/A	N/A	9000	ADQ[4]	40	Min	-	B P
	Carolina Rd. (SR 1303)	NC 904 (Fair Bluff Rd.)	Tabor City Town Limit	Town of Tabor City	0.3	18	2	9	60	35	9900	(1200)	1300	1300	9900	ADQ	60	Min	Sub	
	Carolina Rd. (SR 1303)	Tabor City Town Limit	South Carolina Line	Columbus County	0.9	18	2	9	60	55	14200	(1200)	1600	1600	14200	ADQ	60	Min	Sub	
COLU0003-H	Complex St. (SR 1305)	US 701 Bus.	US 701 Byp	Town of Tabor City	0.1	18	2	9	60	35	9900	(1900)	3700	3700	9900	2E[5]	60	Min	Sub	B P
COLU0004-H	Complex St. (SR 1305) Realignment	US 701 Byp	Evans Pointe Dr.	Town of Tabor City	0.2	18	2	9	60	35	9900	(1900)	3700	3700	9900	2E[5]	60	Min	Sub	B P
	Complex St. (SR 1305)	Evans Pointe Dr.	Tabor City Town Limit	Town of Tabor City	0.2	18	2	9	60	35	9900	(1900)	3700	3700	9900	2E[5]	60	Min	Sub	B P
	Complex St. (SR 1305)	Tabor City Town Limit	NC 904 (Pireway Rd.)	Columbus County	0.1	18	2	9	60	55	14200	(1900)	3700	3700	14200	2E[5]	60	Min	Sub	B P
COLU0011-H	Emerson Church Rd. (SR 1310)	Ten Mile Rd. (SR 1308)	Old Stake Rd. (SR 1300)	Columbus County	0.7	18	2	9	60	55	14200	(550)	2900	2900	15800	2A	60	Min	Sub	
	Garrell St.	US 701 Bus./NC 410 (Hickman Rd.)	NC 904 (Pireway Rd.)	Town of Tabor City	0.3	18	2	9	40	20	9000	N/A	N/A	N/A	9000	ADQ[3]	40	Min	-	P
COLU0012-H	Heath St.	Jones St.	Stake Rd. (SR 1300)	Town of Tabor City	0.1	18	2	9	40	20	9000	N/A	N/A	N/A	9000	ADQ[3]	40	Min	-	P
COLU0013-H	Jones St.	US 701 Bus./NC 410 (E. 5th St.)	Heath St.	Town of Tabor City	0.1	18	2	9	40	20	9000	N/A	N/A	N/A	9000	ADQ[4]	40	Min	-	P
COLU0014-H	Live Oak St.	NC 904 (Pireway Rd.)	Williams St.	Town of Tabor City		18	2	9	40	20	9000	N/A	N/A	N/A	9000	ADQ[4]	40	Min	-	
	N. Main St. (SR 1304)	New Warehouse Rd. (SR 1306)	Barry St.	Town of Tabor City	0.6	18	2	9	60	55	14200	450	510	510	14200	2A[5]	60	Min	Sub	B
	N. Main St. (SR 1304)	Barry St.	NC 904 (W. 8th St.)	Town of Tabor City	0.2	28	2	14	60	35	15800	450	510	510	15800	2C	60	Min	Sub	B
	Mill Branch Rd. (SR 1153)	Richard Wright Rd. (SR 1151)	Eastern planning boundary	Columbus County	1.0	18	2	9	60	55	14200	350	460	460	14200	ADQ	60	Min	Sub	
	Minos Meares Rd. (SR 1154)	US 701 (James B. White Hwy)	Eastern planning boundary	Columbus County	1.3	18	2	9	60	55	14200	(590)	820	820	14200	ADQ	60	Min	Sub	

HIGHWAY																					
		Section				2012 Existing System							2040 Proposed System					CTP Classifi-cation		Proposals for Other Modes
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd	2012 (2011) Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)		Tier	
	New Warehouse Rd. (SR 1306)	Old Stake Rd. (SR 1300)	Willoughby Rd. (SR 1305)	Town of Tabor City	0.3	18	2	9	60	55	14200	(410)	1000	1000	14200	ADQ	60	Min	Sub	
	O L Coleman Rd. (SR 1309)	NC 904 (Joe Brown Hwy)	Ten Mile Rd. (SR 1308)	Columbus County	0.5	18	2	9	60	55						ADQ		Min	Sub	
COLU0015-H	Old Stake Rd. (SR 1300)	Canal St.	Tabor City Town Limit	Town of Tabor City	0.2	18	2	9	60	55	14200	(2800)	5300	5300	15800	2A	60	Min	Sub	
COLU0015-H	Old Stake Rd. (SR 1300)	Tabor City Town Limit	Northern planning boundary	Columbus County	2.0	18	2	9	60	55	14200	940	1200	1200	15800	2A	60	Min	Sub	
COLU0016-H	Orange St.	US 701 Bus./NC 410 (E. 5th St)	NC 904 (Pireway Rd.)	Town of Tabor City	0.1	18	2	9	40	20	9000	N/A	N/A	N/A	9000	ADQ[4]	40	Min	-	
COLU0016-H	Orange St.	NC 904 (Pireway Rd.)	Wall St.	Town of Tabor City	0.1	18	2	9	40	20	9000	N/A	N/A	N/A	9000	ADQ[4]	40	Min	-	P
COLU0016-H	Orange St.	Wall St.	E. 4th St.	Town of Tabor City	0.1	18	2	9	40	20	9000	N/A	N/A	N/A	9000	ADQ	40	Min	-	
	Richard Wright Rd. (SR 1151)	US 701/NC 410 (E. 5th St.)	Tabor City Town Limit	Town of Tabor City	0.1	18	2	9	60	55	14200	(520)	620	620	14200	2A[5]	60	Min	Sub	B
	Richard Wright Rd. (SR 1151)	Tabor City Town Limit	Mill Branch Rd. (SR 1153)	Columbus County	2.4	18	2	9	60	55	14200	370	620	620	14200	2A[5]	60	Min	Sub	B
COLU0020-H	Stake Rd. (SR 1300)	US 701 Bus./NC 410 (E. 5th St.)	E. 8th St.	Town of Tabor City	0.2	32	2	16	60	35	11000	(2800)	5300	5300	10600	2E	60	Min	Sub	B P
	Stake Rd. (SR 1300)	E. 8th St.	Canal St.	Town of Tabor City	0.8	32	2	16	60	35	11000	(2800)	5300	5300	10600	2E	60	Min	Sub	B P
	Ten Mile Rd. (SR 1308)	US 701 (James B. White Hwy)	Tabor City Town Limit	Town of Tabor City	0.5	18	2	9	60	55	14200	(580)	690	690	14200	2A	60	Min	Sub	
	Ten Mile Rd. (SR 1308)	Tabor City Town Limit	Emerson Church Rd. (SR 1310)	Columbus County	1.6	18	2	9	60	55	14200	(580)	690	690	14200	ADQ	60	Min	Sub	
COLU0017-H	Ten Mile Rd. (SR 1308)	Emerson Church Rd. (SR 1310)	Northern planning boundary	Columbus County	0.8	18	2	9	60	55	14200	(870)	1100	1100	15800	2A	60	Min	Sub	
COLU0018-H	Will Inman Rd. (SR 1006)	NC 904 (Swamp Fox Hwy)	Eastern planning boundary	Columbus County	2.5	20	2	10	60	55	14700	1200	2400	2400	15800	2A	60	Min	Sub	
COLU0019-H	Williams. St	US 701 BUS/NC 410 (E. 5th Street)	Live Oak St.	Town of Tabor City	0.3	18	2	9	40	20	9000	N/A	N/A	N/A	9000	ADQ[4]	40	Min	-	P
	Willoughby Rd. (SR 1304)	NC 904 (Swamp Fox Hwy)	Tabor City Town Limit	Columbus County	2.2	18	2	9	60	55	14200	(210)	570	570	14200	ADQ	60	Min	Sub	

HIGHWAY																					
		Section				2012 Existing System							2040 Proposed System					CTP Classifi-cation		Proposals for Other Modes
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd	2012 (2011) Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)		Tier	
	Willoughby Rd. (SR 1304)	Tabor City Town Limit	New Warehouse Rd. (SR 1306)	Town of Tabor City	0.1	18	2	9	60	55	14200	(210)	570	570	14200	ADQ	60	Min	Sub	

Footnotes:
(1) share the road bike utilized, NC 410 northbound is also US 701 Bus. which is two way.
(2) Adequate ROW, only stripping needed for bike lanes since sidewalks are not recommended
(3) NC 410 is one way southbound with on street parking on both sides
(4) Adequate ROW for type of bicycle and/or pedestrian recommendation
(5) adequate lane width, add 4' paved shoulder to accommodate bicycle lanes

RAIL												
				Speed		Existing System			Proposed System			
Local ID	Facility/ Route	Section (From - To)	Class	Limit (mph)	Distance (mi)	Type	ROW (ft)	Trains per day	Type	ROW (ft)	Trains per day	Other Modes
COLU0001-R	CALA - Whiteville North Carolina to Mullins South Carolina	Northern Tabor City planning boundary - South Carolina state line	Indep.	-	5.8	Inactive	80+/-	0	-	-	-	-

BICYCLE								
				Existing System		Proposed System		
				Cross-Section				Other
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	(ft)	lanes	Type	Cross-Section	Modes
COLU0001-B	US 701 Bus. (E. 5th St.)	US 701 Byp. - US 701 Bus. (Hickman Rd.)	1.2	50-100	2-3	On Road	2E, 3B	P
COLU0002-B	US 701 Bus. (Hickman St.)	US 701 Bus./NC 410/NC 904 (E. Eth St.) - NC 410 (Green Sea Rd.)	0.1	50	2	On Road	Share the Road$_2$	P
COLU0002-B	US 701 Bus. (Hickman St.)	NC 410 (Green Sea Rd.) - Complex St. (SR 1305)	0.7	60	2	On Road	2E	P
COLU0003-B	NC 410 (Green Sea Rd.)	NC 410 (S. Main St.) - South Carolina stateline	0.5	60	2-3	On Road	2E, 3B	P
COLU0004-B	NC 904 (W. 8th St.)	NC 904 (N. Main St.) - NC 904 (Fair Bluff Rd.)	0.2	60	2	On Road	ADQ$_1$	P
COLU0005-B	NC 904 (Fair Bluff Rd.)	NC 904 (W. 8th St.) - Carolina Rd. (SR 1303)	0.2	60	2	On Road	ADQ$_1$	P
COLU0006-B	NC 904 (N. Main St.)	US 701 Bus./NC 410 (E. 5th St.) - NC 904 (8th St.)	0.3	40	2	On Road	ADQ$_1$	P
COLU0007-B	NC 904 (Pireway Rd.)	US 701 Bus./NC 410/NC 904 (E. 5th St.) - Complex St. (SR 1305)	1.1	60	2-3	On Road	2E	P
COLU0008-B	E. 4th St.	NC 904 (Pireway Rd.) - W. 6th St. (SR 1301)	0.8	40	2	On Road	Share the Road$_2$	P, H
COLU0009-B	W. 6th St. (SR 1301)	NC 904 (N. Main St.) - South Carolina stateline	0.8	40	2	On Road	Share the Road$_2$	P
COLU0010-B	E. 8th St.	Stake Rd. (SR 1300) - N. Main St. (SR 1304)	0.3	35	2	On Road	Share the Road$_2$	H
COLU0011-B	E. Bell St.	US 701 Bus. (Hickman Rd.) - NC 904 (Pireway Rd.)	0.3	30	2	On Road	Share the Road$_2$	P
COLU0012-B	Canal St. (SR 1367)	Stake Rd. (SR 1300) - Lakeside Dr.	0.5	50	2	On Road	Share the Road$_2$	
COLU0013-B	Carolina Rd. (SR 1303)	NC 904 (Fair Bluff Rd.) - School St. (SR 1302)	0.2	60	2	On Road	2C	
COLU0014-B	Complex St. (SR 1305)	NC 904 (Pireway Rd.) to US 701 Bus. (Hickman Rd.)	0.6	60	2	On Road	2C	P
COLU0012-B	Lakeside Dr.	Canal St. (SR 1367) - Miriam Ln.	0.1	50	2	On Road	Share the Road$_2$	
COLU0015-B	Lynwood Norris St.	US 701 Bus./NC 410 (E. 5th St.) - Lake Tabor	0.2	40-60	2	On Road	Share the Road$_2$	P
COLU0016-B	N. Main St. (SR 1304)	New Warehouse Rd. (SE 1306) - NC 904 (W. 8th St.)	0.7	60	2	On Road	2C	

BICYCLE								
				Existing System		Proposed System		
				Cross-Section				Other
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	(ft)	lanes	Type	Cross-Section	Modes
COLU0012-B	Miriam Ln.	Canal St. (SR 1367) - Lakeside Dr.	0.1	50	2	On Road	Share the Road$_2$	
COLU0017-B	New Warehouse Rd. (SR 1306)	Old Stake Rd. (SR 1300) - N. Main St. (SR 1304)	0.4	60	2	On Road	2C	
COLU0018-B	Old Stake Rd. (SR 1300)	Canal St. (SR 1367) - New Warehouse Rd. (SR 1306)	0.1	60	2	On Road	2C	
COLU0019-B	Richard Wright Rd. (SR 1151)	US 701/NC 410 (E. 5th St.) - 0.3 Mile W. Rosecoe Coleman Rd. (SR 1152)	0.4	40	2	On Road	2C	
COLU0020-B	School St. (SR 1302)	Carolina Rd. (SR 1303) to W. 6th St. (SR 1301)	0.4	40	2	On Road	2C	
COLU0021-B	Stake Rd. (SR 1300)	US 701 Bus./NC 410/NC 904 (E. Eth St.) - Canal St. (SR 1367)	0.9	60	2	On Road	2E, ADQ$_1$	P

(1) ROW is adequate, only stripping is needed
(2) Share the road signage is adequate

PEDESTRIAN								
				Existing System		Proposed System		Other
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Type	Side of Street	Type	Side of Street	Modes
COLU0001-P	US 701 Bus./NC 410/NC 904 (E. 5th St.)	Stake Rd. (SR 1300) - Carter St.	0.1	Sidewalk	Both	Sidewalk	Both, fill gaps	B
COLU0001-P	US 701 Bus./NC 410/NC 904 (E. 5th St.)	Carter St. - Howard St.	0.1	--	--	Sidewalk	Both	B
COLU0001-P	US 701 Bus./NC 410/NC 904 (E. 5th St.)	Howard St. - Williams St.	0.1	Sidewalk	South	Sidewalk	North	B
COLU0001-P	US 701 Bus./NC 410/NC 904 (E. 5th St.)	Williams St. - Jones St.	0.1	--	--	Sidewalk	Both	B
COLU0001-P	US 701 Bus./NC 410/NC 904 (E. 5th St.)	Jesse St. - Lynwood Norris Rd.	0.5	--	--	Sidewalk	Both	B
COLU0002-P	US 701 Bus. (Hickman Rd.)	Forest Rd. - Complex St. (SR 1305)	0.9	--	--	Sidewalk	Both	B
COLU0003-P	NC 410 (Green Sea Rd.)	NC 410 (S. Main St.) - South Carolina stateline	0.5	Sidewalk	West	Sidewalk	Both, fill gaps	B
COLU0004-P	NC 904 (N. Main St.)	7th St. to NC 904 (8th St.)	0.1	Sidewalk	East	Sidewalk	West	B
COLU0005-P	NC 904 (Pireway Rd.)	US 701 Bus./NC 410/NC 904 (E. 5th St.) - Garrell St.	0.3	Sidewalk	East	Sidewalk	West	B
COLU0005-P	NC 904 (Pireway Rd.)	Garrell St. - E. Bell St.	0.2	--	--	Sidewalk	Both	B
COLU0005-P	NC 904 (Pireway Rd.)	E. Bell St. - Floyd St.	0.1	Sidewalk	West	Sidewalk	Both, fill gaps	B
COLU0005-P	NC 904 (Pireway Rd.)	Floyd St. - Complex St. (SR 1305)	0.4	--	--	Sidewalk	Both	B
COLU0006-H	W. 4th St.	S. Main St. - Bay St.	0.2	Sidewalk	Both	Sidewalk	Both	B
COLU0007-P	W. 6th St. (SR 1301)	NC 904 (N. Main St.) - Reece St.	0.6	Sidewalk	North	Sidewalk	South	B
COLU0007-P	W. 6th St. (SR 1301)	Reece St. - W. 4th St.	0.1	Sidewalk	South	Sidewalk	North	B
COLU0008-P	E. 8th St.	Stake Rd. (SR 1300) - N. Main St. (SR 1304)	0.3	--	--	Sidewalk	Both	B, H
COLU0009-P	Anderson St.	Garrell St. - Sandwall Dr.	0.6	--	--	Sidewalk	Both	H
COLU0010-P	Bay St.	W. 4th St. to W. 6th St. (SR 1301)	0.1	--	--	Sidewalk	Both	

PEDESTRIAN								
				Existing System		Proposed System		Other
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Type	Side of Street	Type	Side of Street	Modes
COLU0011-P	E. Bell St.	US 701 Bus. (Hickman Rd.) - NC 904 (Pireway Rd.)	0.3	--	--	Sidewalk	Both	B, H
COLU0012-P	Complex St. (SR 1305)	NC 904 (Pireway Rd.) - US 701 Bus. (Hickman Rd.)	0.6	--	--	Sidewalk	Both	B
COLU0013-P	Garrell St.	US 701 Bus. (Hickman Rd.) - NC 904 (Pireway Rd.)	0.3	Sidewalk	South	Sidewalk	North	
COLU0014-P	Heath St.	Jones St. - Stake Rd. (SR 1300)	0.1	--	--	Sidewalk	Both	H
COLU0015-P	Jones St.	US 701 Bus./NC 410 (E. 5th St.) - Heath St.	0.2	--	--	Sidewalk	Both	H
COLU0016-P	Live Oak St.	Williams St. - NC 904 (Pireway Rd.)	0.3	--	--	Sidewalk	Both	H
COLU0017-P	Lynwood Norris St.	US 701 Bus./NC 410 (E. 5th St.) - Dead end	0.2	--	--	Sidewalk	East	B
COLU0018-P	Sandwall Dr.	Anderson St. - US 701 Bus. (Hickman Rd.)	0.2	--	--	Sidewalk	Both	
COLU0019-P	Stake Rd. (SR 1300)	US 701 Bus./NC 410/NC 904 (E. 5th St.) - Carter St.	0.1	Sidewalk	West	Sidewalk	East	B
COLU0019-P	Stake Rd. (SR 1300)	Carter St. - McCullum St.	0.2	--	--	Sidewalk	Both	B
COLU0020-P	Williams St.	US 701 Bus./NC 410/NC 904 (E. 5th St.) - Live Oak St.	0.2	--	--	Sidewalk	Both	H

MULTI-USE PATH								
				Existing System		Proposed System		Other
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Side of Street	Cross-Section	Side of Street	Cross-Section	Modes
COLU0001-M	Lake Tabor Path	Richard Wright Rd. (SR 1151) - Lynwood Norris St.	0.3	--	--	To be determined	To be determined	--

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Appendix D
Typical Cross Sections

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

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

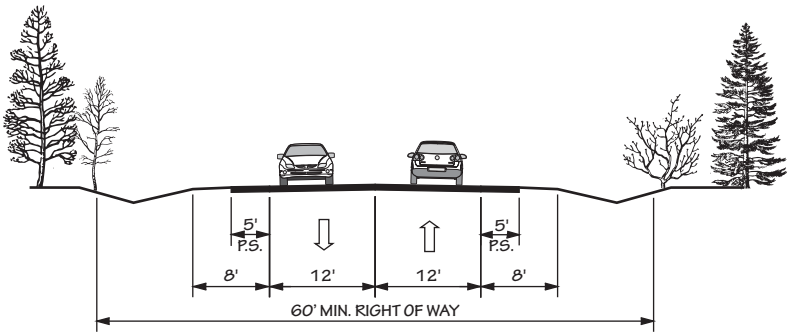
On all existing and proposed roadways delineated on the CTP, adequate right-of-way should be protected or acquired for the recommended cross sections. In addition to cross section and right-of-way recommendations for improvements, Appendix C may recommend ultimate needed right-of-way for the following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

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

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

FIGURE 14
"TYPICAL" HIGHWAY CROSS SECTIONS

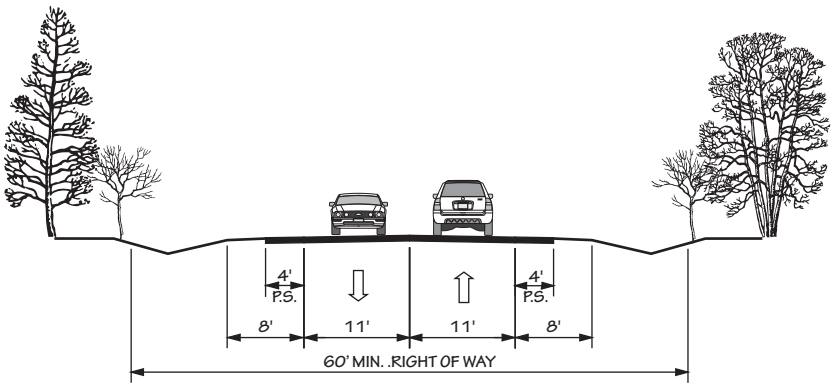
2A



2 LANE UNDIVIDED WITH PAVED SHOULDERS

POSTED SPEED 55 MPH

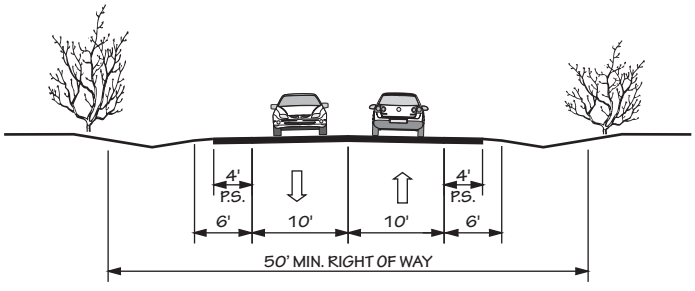
2B



2 LANES UNDIVIDED

POSTED SPEED 45 MPH OR LESS

2C



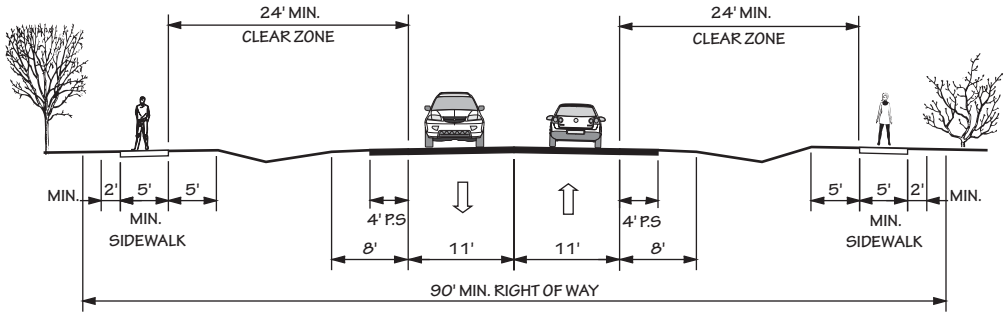
2 LANE UNDIVIDED WITH PAVED SHOULDERS

POSTED SPEED 25 - 35 MPH

Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS

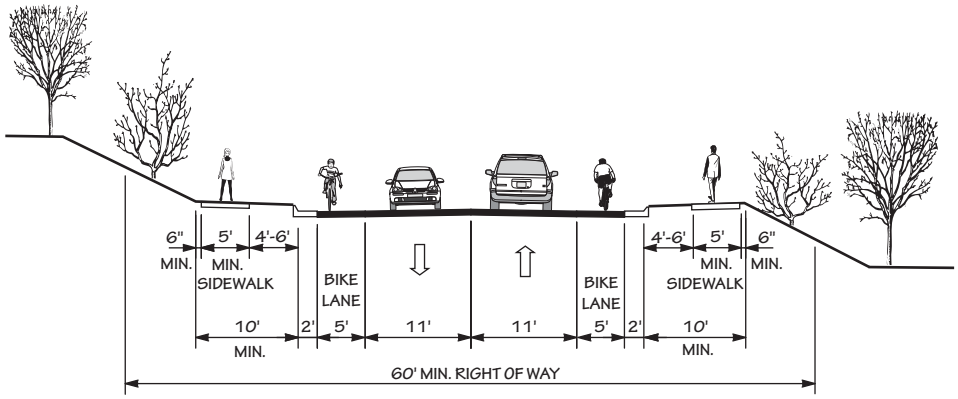
2D



2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEWALKS

POSTED SPEED 25-45 MPH

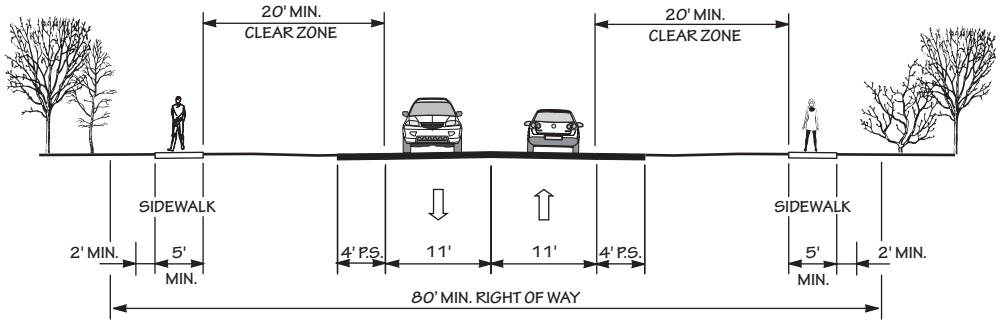
2E



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

POSTED SPEED 25-45 MPH

2F



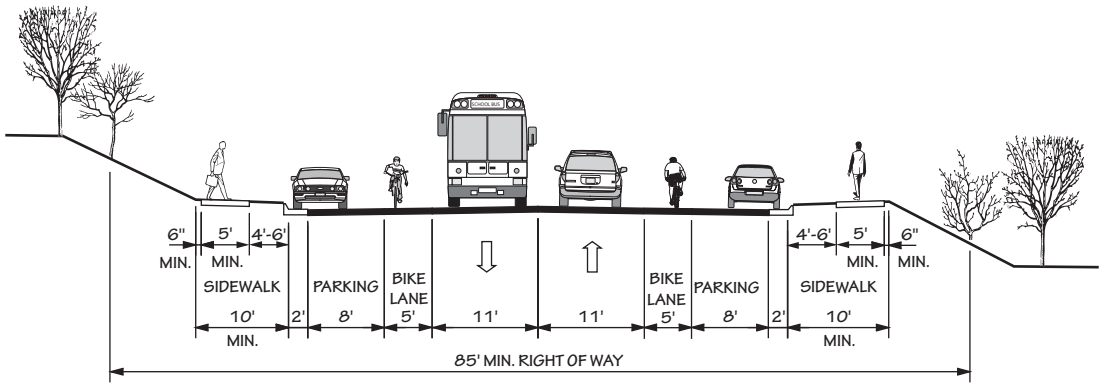
2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEWALKS
IN CAMA COUNTIES

POSTED SPEED 25-45 MPH

Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS

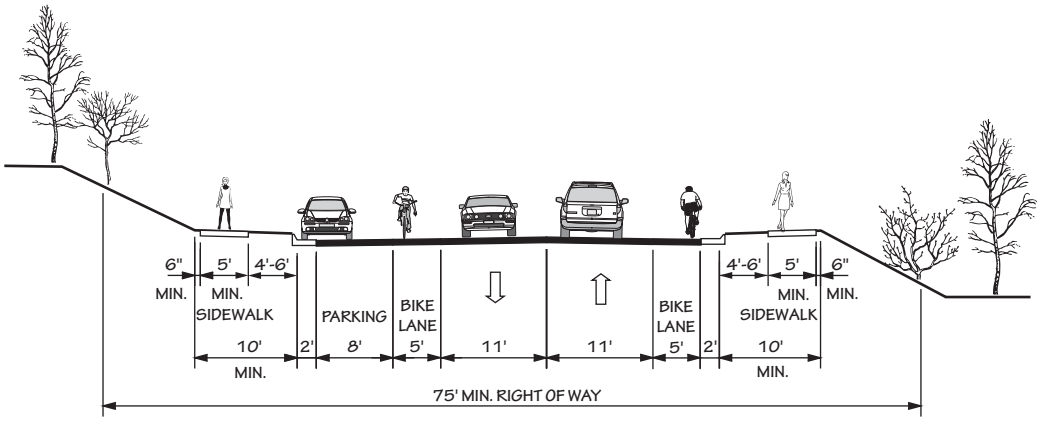
2G



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

POSTED SPEED 25-45 MPH

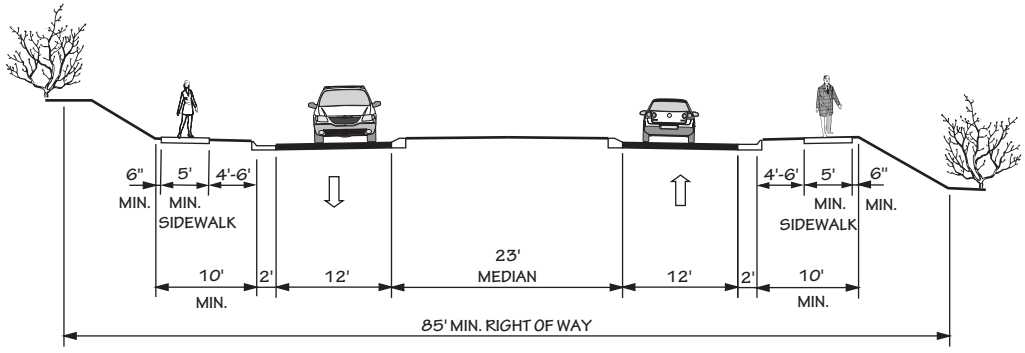
2H



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

POSTED SPEED 25-45 MPH

2I



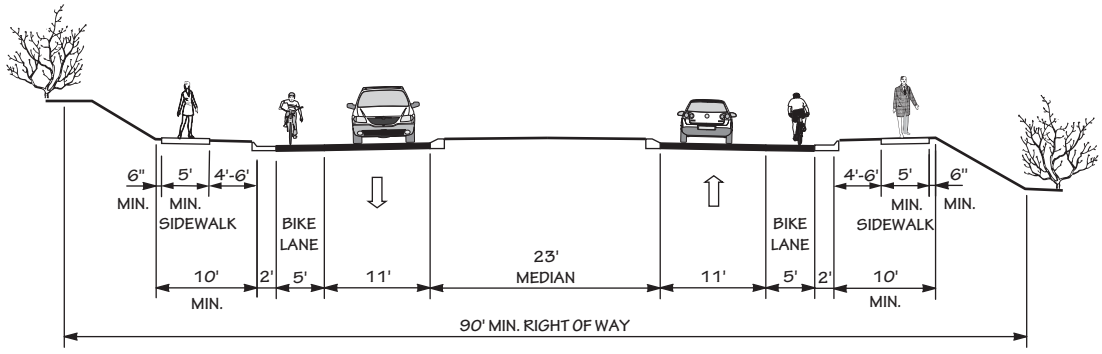
2 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER AND SIDEWALKS

POSTED SPEED 25-45 MPH

Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS

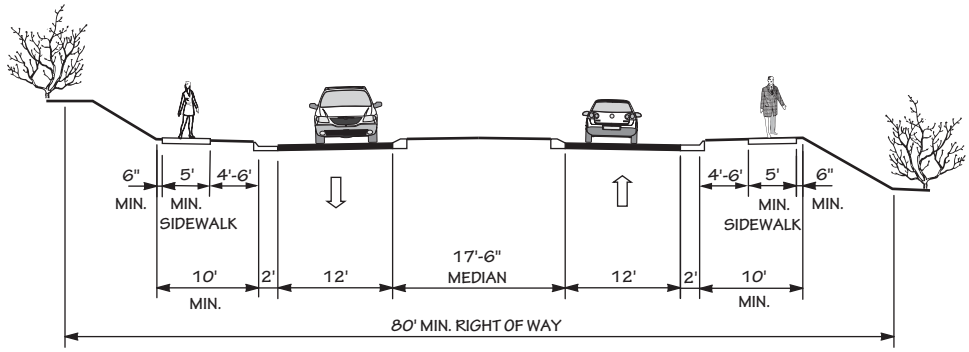
2J



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

POSTED SPEED 25-45 MPH

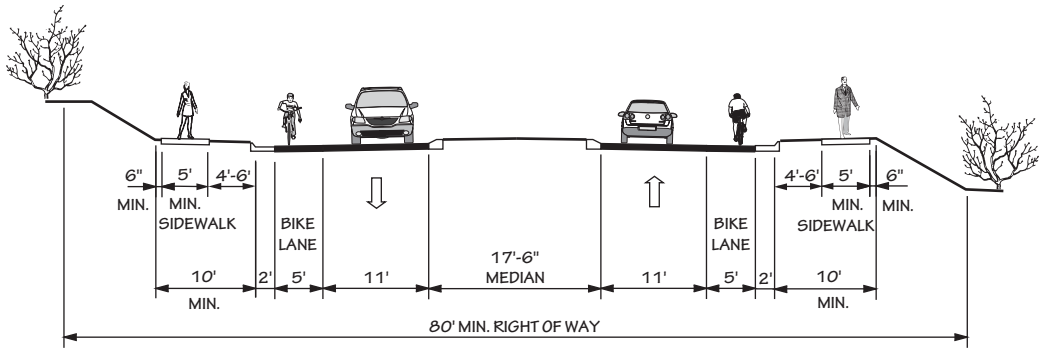
2K



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

POSTED SPEED 25-45 MPH

2L



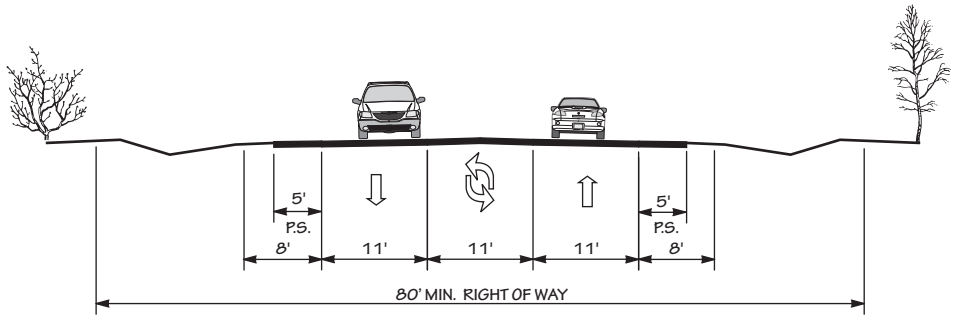
2 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH CURB & GUTTER, BIKE LANES, AND SIDEWALKS

POSTED SPEED 25-45 MPH

Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS

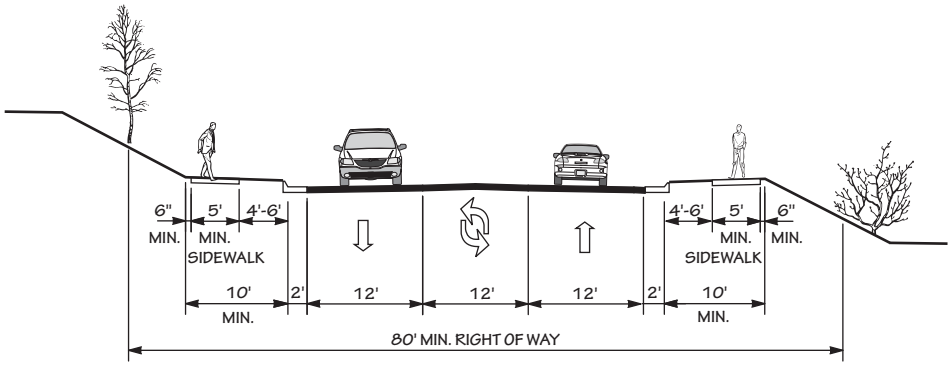
3A



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

POSTED SPEED 25-55 MPH

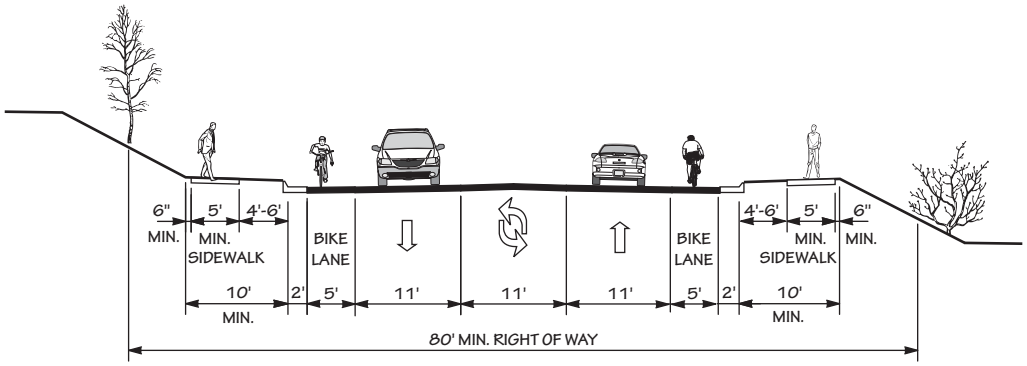
3B



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

POSTED SPEED 25-45 MPH

3C

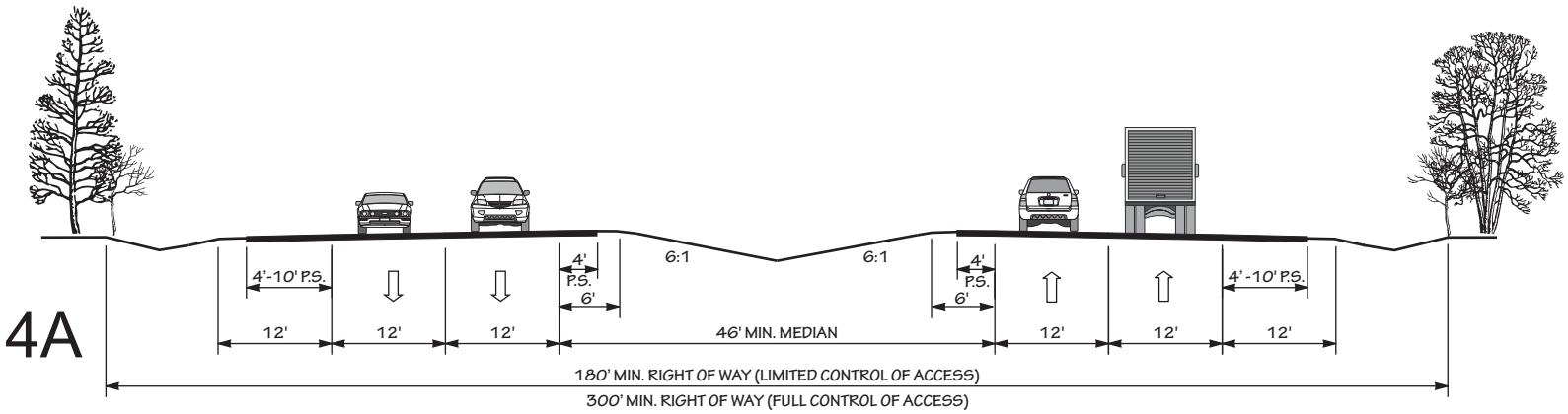


2 LANE WITH TWO WAY LEFT TURN LANE, CURB & GUTTER, BIKE LANES, AND SIDEWALKS

POSTED SPEED 25-45 MPH

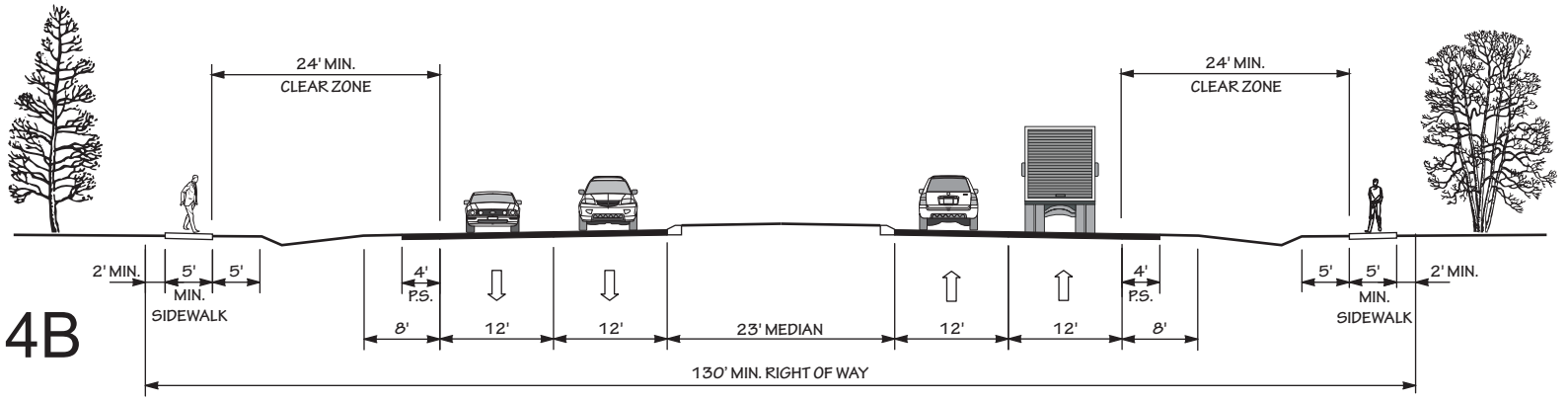
Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS



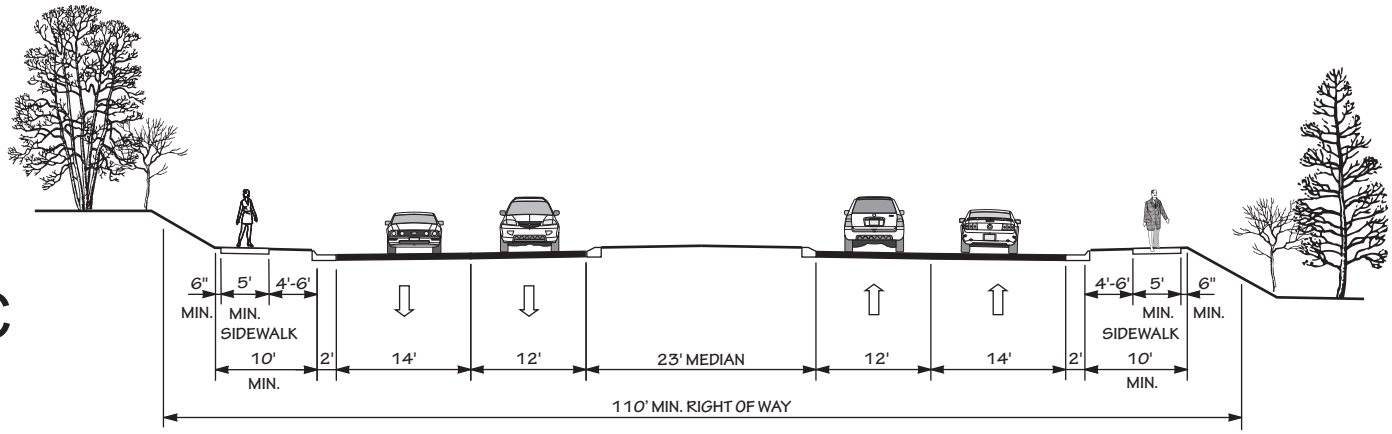
4 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS

POSTED SPEED 45-70 MPH



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

POSTED SPEED 35-55 MPH



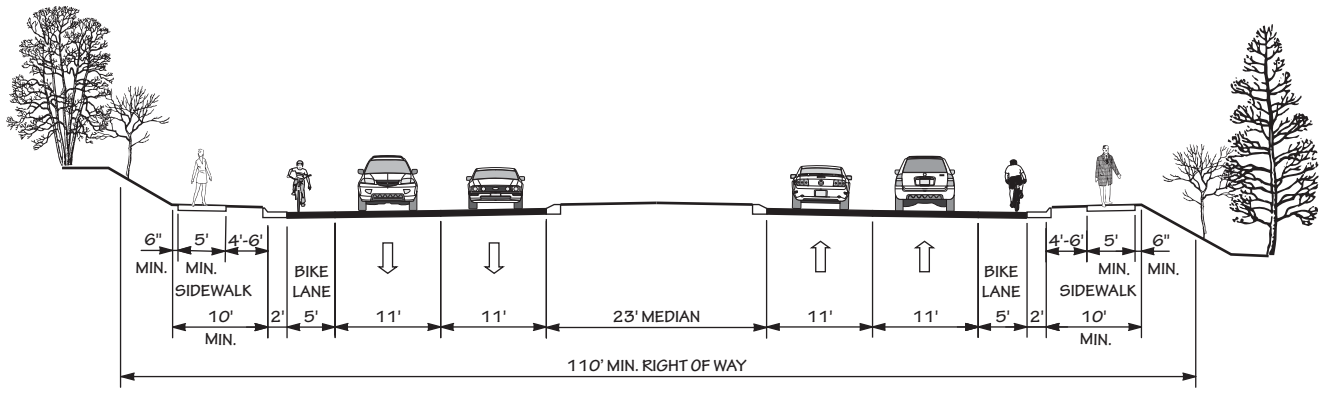
4 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER, WIDE OUTSIDE LANES, AND SIDEWALKS

POSTED SPEED 35-45 MPH

Revised 05/05/2014

"Typical" Highway Cross Sections

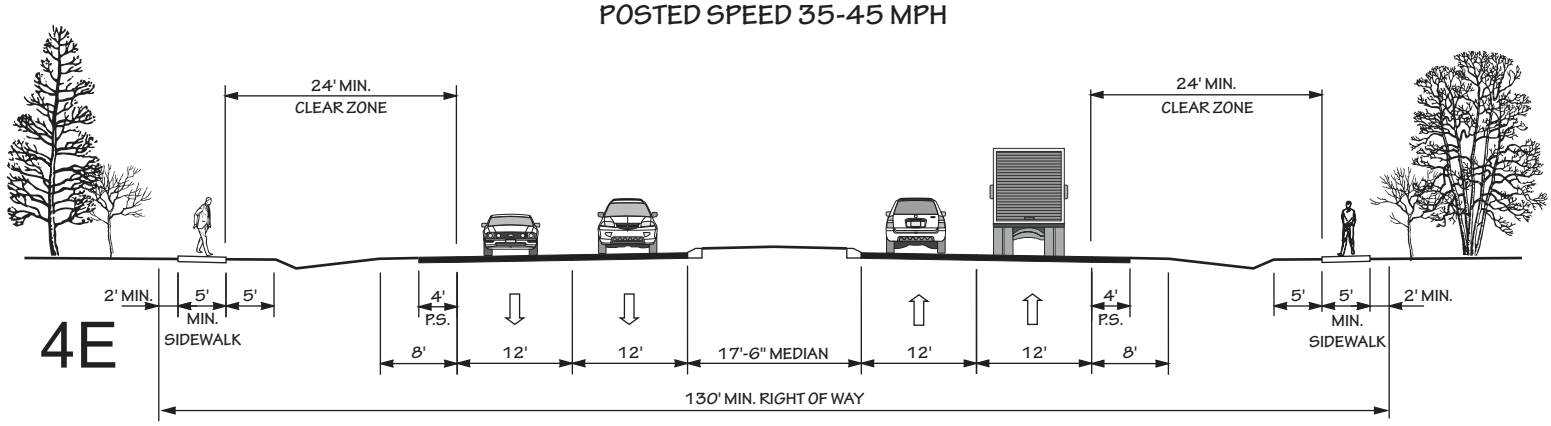
4D



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

POSTED SPEED 35-45 MPH

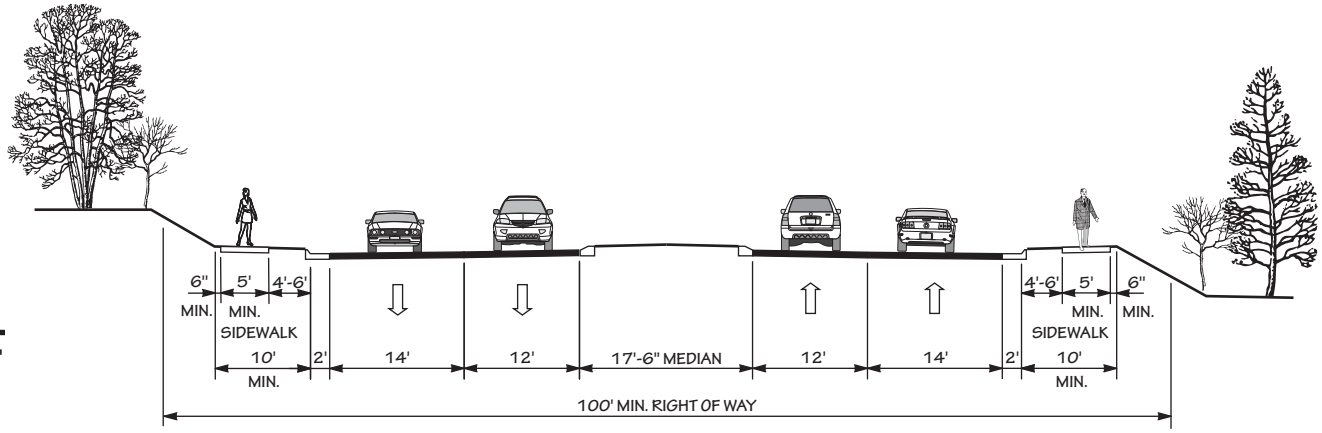
4E



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

POSTED SPEED 35-55 MPH

4F



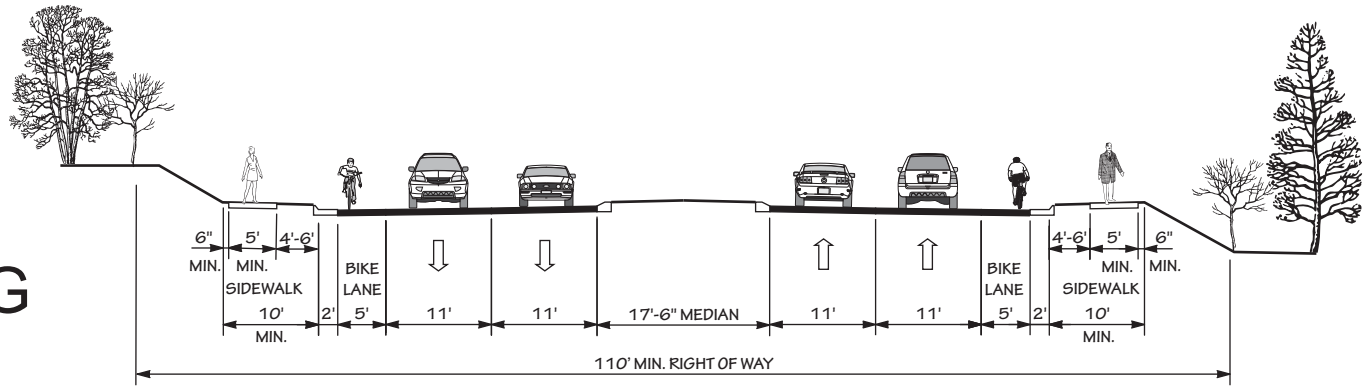
4 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH CURB & GUTTER, WIDE OUTSIDE LANES AND SIDEWALKS

POSTED SPEED 35-45 MPH

Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS

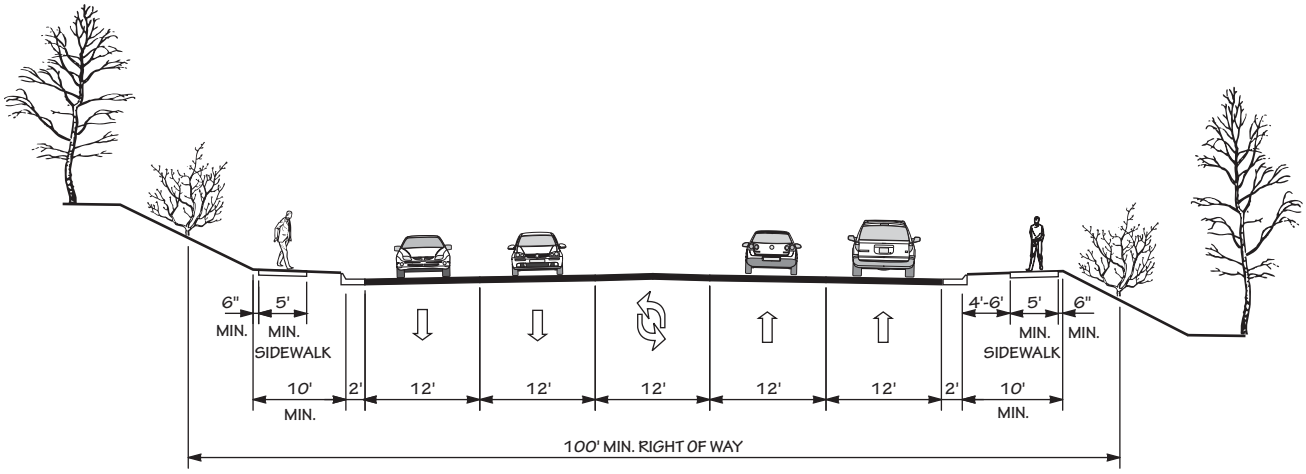
4G



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

POSTED SPEED 35-45 MPH

5A

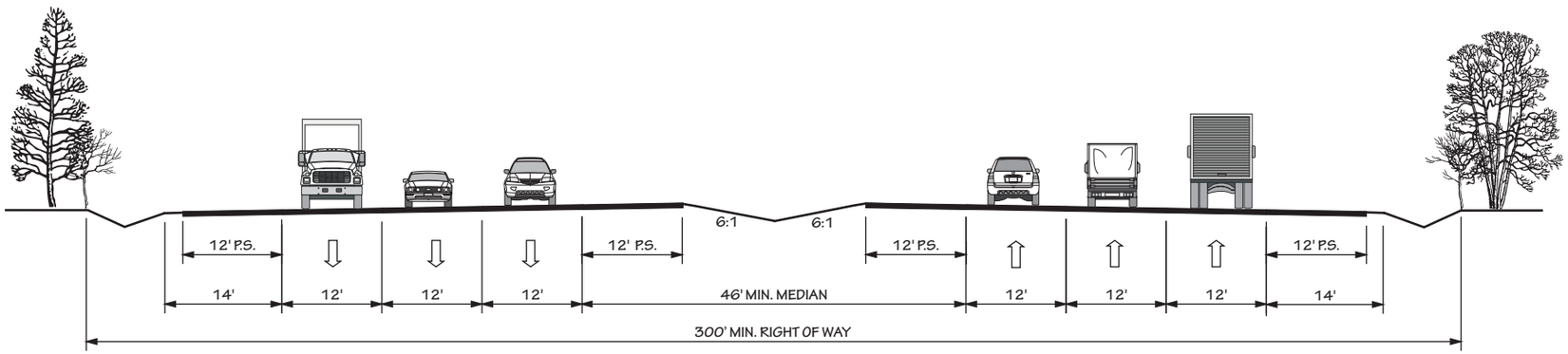


4 LANE WITH TWO WAY LEFT TURN LANE, CURB & GUTTER, AND SIDEWALKS

POSTED SPEED 35-45 MPH

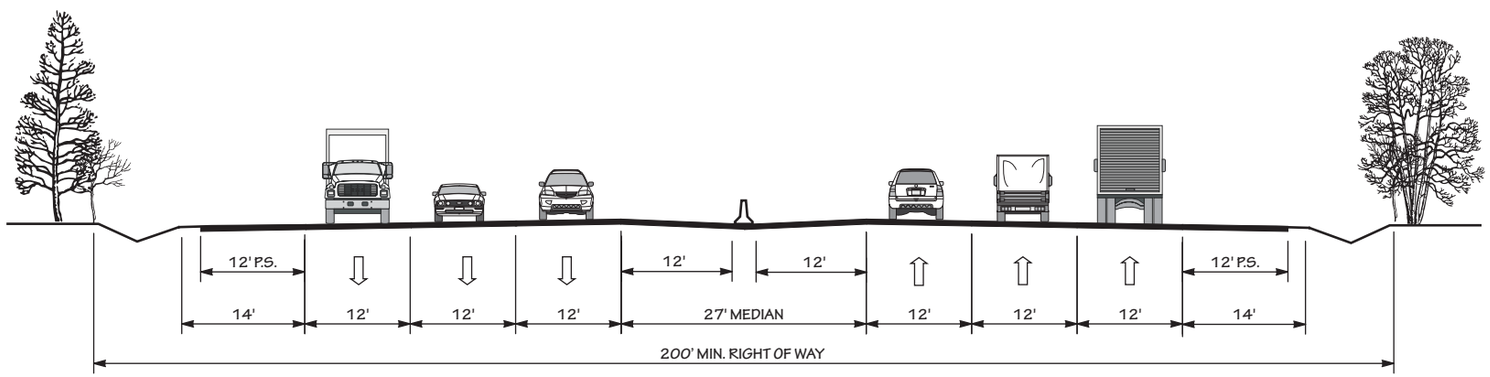
Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS



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

POSTED SPEED 45-70 MPH

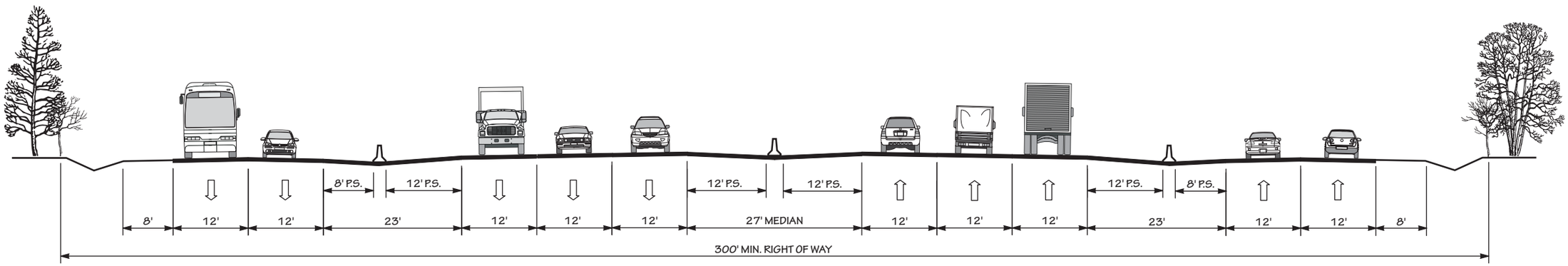


6B 6 LANE DIVIDED (27' MEDIAN WITH JERSEY BARRIER) WITH PAVED SHOULDERS

POSTED SPEED 55-70 MPH

Revised 05/05/2014

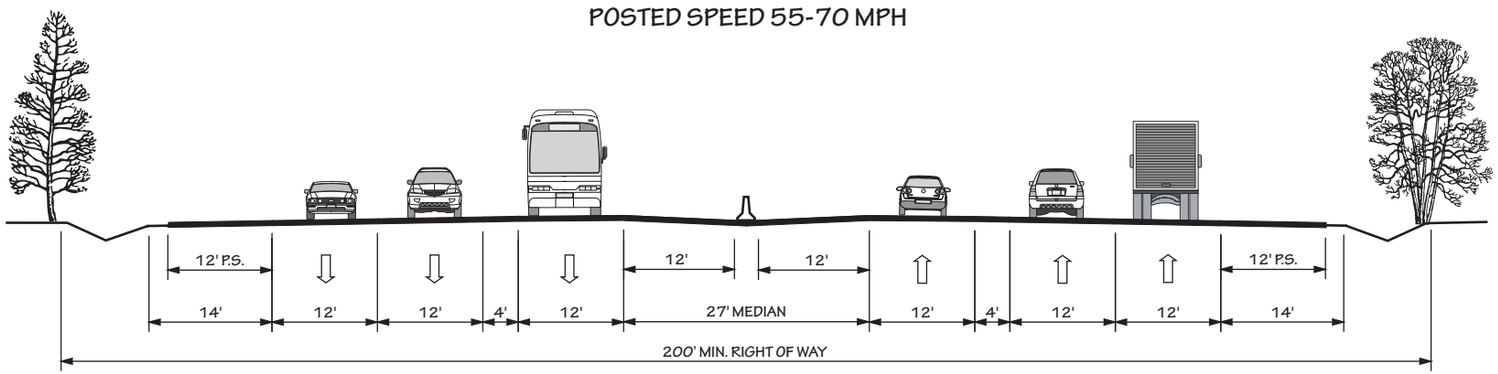
"TYPICAL" HIGHWAY CROSS SECTIONS



6C

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

POSTED SPEED 55-70 MPH



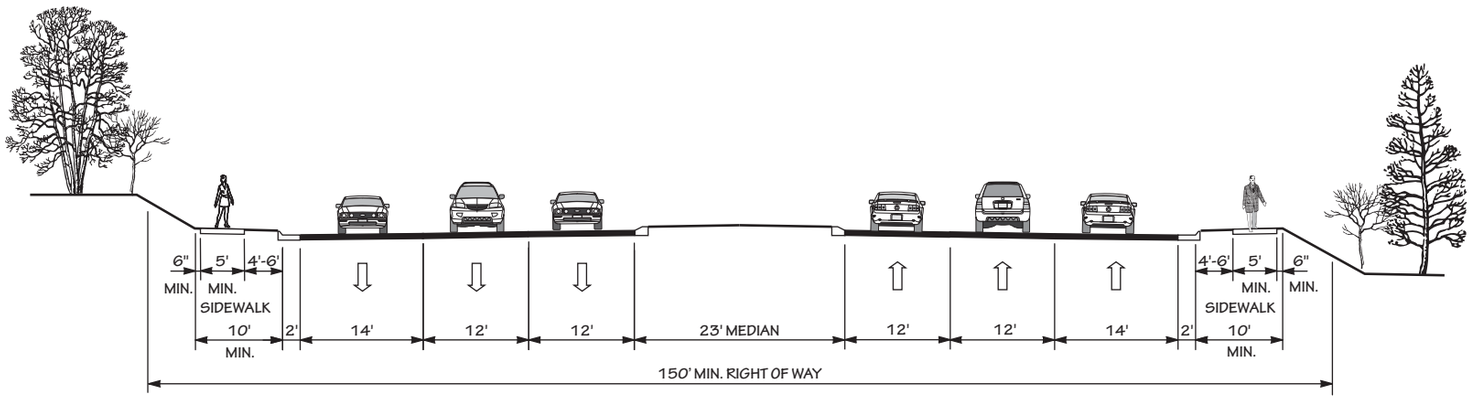
6D

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

POSTED SPEED 55-70 MPH

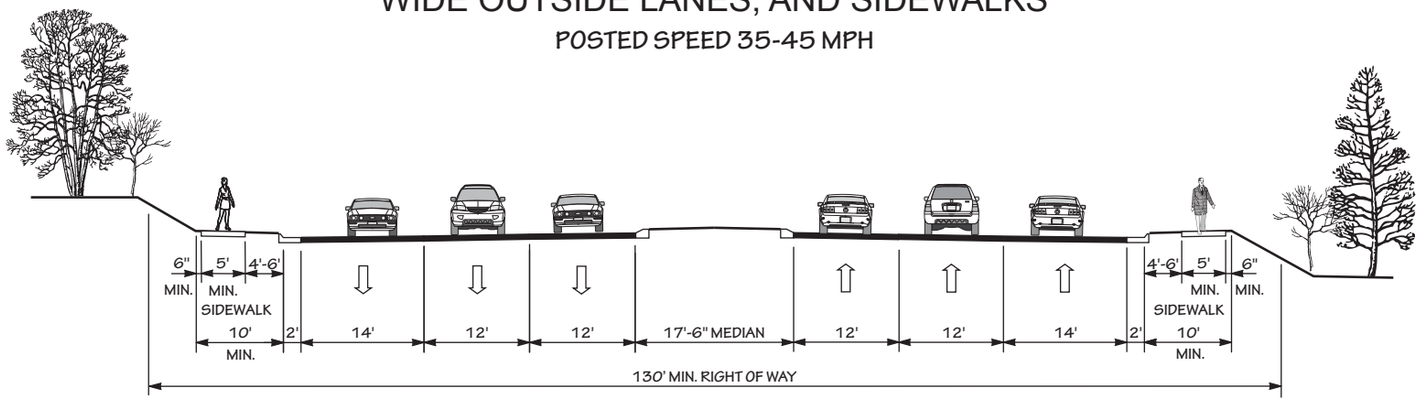
Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS



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

POSTED SPEED 35-45 MPH



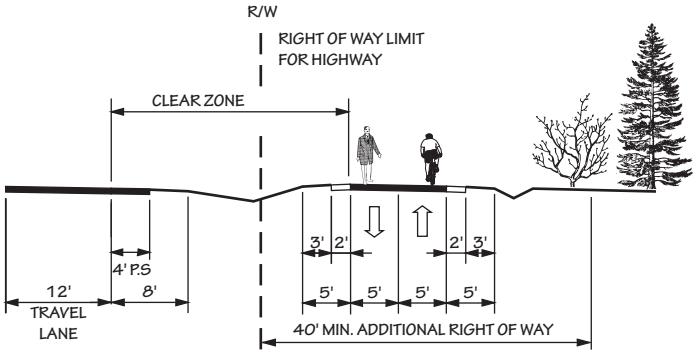
6F 6 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH CURB & GUTTER, WIDE OUTSIDE LANES, AND SIDEWALKS

POSTED SPEED 35-45 MPH

Revised 05/05/2014

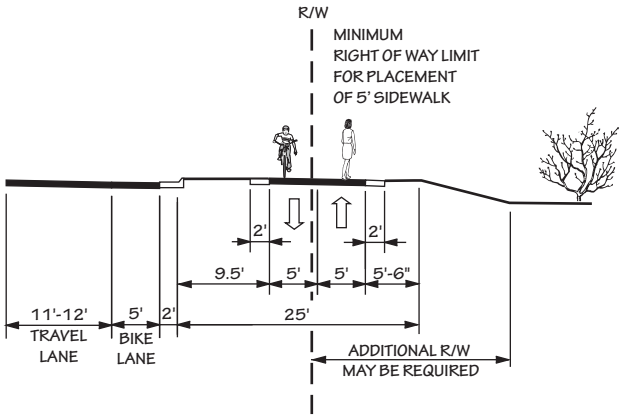
"TYPICAL" HIGHWAY CROSS SECTIONS

M A



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

M B



MULTI - USE PATH ADJACENT TO CURB AND GUTTER

Revised 05/05/2014

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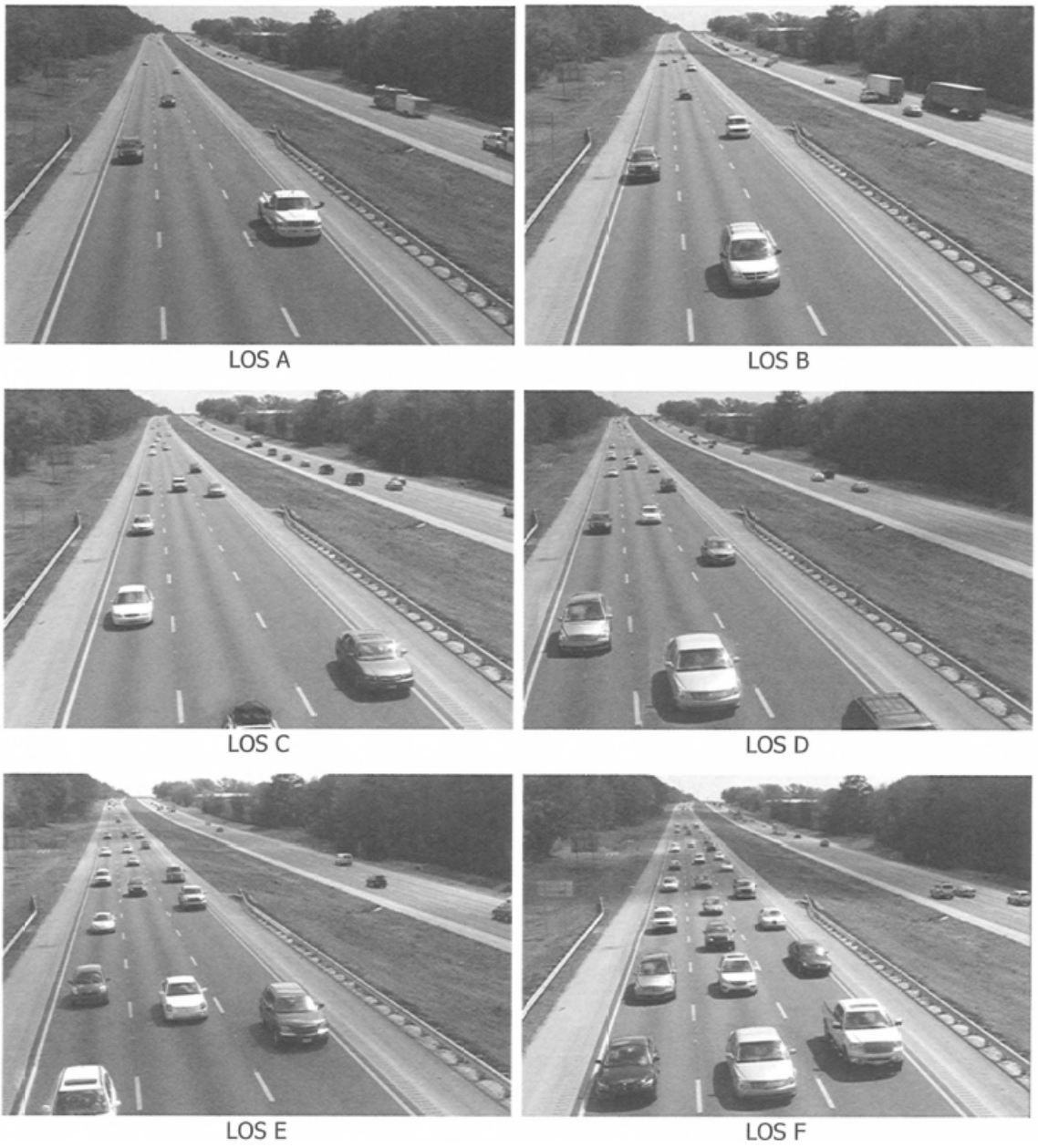
Appendix E
Level of Service Definitions

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 15.

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

Figure 12 - Level of Service Illustrations



Source: 2010 Highway Capacity Manual, Exhibit 11-4

Appendix F
Bridge Deficiency Assessment

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

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

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

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

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

There are no deficient bridges in the town of Tabor City planning area.

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Appendix G
Socio-Economic Data Forecasting Methodology

In the development of the town of Tabor City CTP, existing and anticipated deficiencies were determined through an analysis of the transportation system looking at both current and future travel patterns. The analysis was completed using a Hand Allocation Model. A defined study area and projection of socioeconomic data to the design year (2040) were necessary information to create the model. The data can be used to evaluate various issues on the transportation roadway network and evaluate alternative solutions.

The Study Area

The study area includes the town of Tabor City and some additional areas outside of the municipal boundary. The study area is divided into 10 zones (Figure 13). An area was chosen as a zone based on similarities in land use. In each zone, a centroid was placed. It is not necessarily the exact center of the zone, but rather the center of activity for that zone. Some zones (zone one and zone six) have two centroids. Zone six is dynamically subzoned, meaning one centroid represents employment and the other centroid represents housing. The purpose of dynamic subzoning is to allow different access points onto the transportation network by having one set of centroid connectors for employment, and one second set of centroid connectors for households" (A Recommended Approach to Delineating Traffic Analysis Zones in Florida, FDOT). For zone one, the majority of the zone is residential with very few employments. Because access is limited, it has two centroids. The 2012 socioeconomic data collected in each zone includes employment and dwelling unit/housing counts via windshield survey. Future socioeconomic projections were based on the present data, past trends, and collaborations with the NCDOT Transportation Planning Branch, Tabor City CTP Steering Committee members and the town of Tabor City council.

Base Year (2012) Network

The goal of the model is to replicate the current traffic conditions of the roadway network. By being able to represent the existing street system, a model of the future system is possible. Generally, all the major arterials and some of the major collector streets, which provide access to major land use areas, need to be represented.
Speed and distance are the major factors that define the minimum time path when traveling from zone to zone. The model uses minimum time paths as the basis for assigning traffic to streets. The roadway capacity is also important. The volume/capacity ratio (v/c) is an indicator of present and future congestion. Key factors in determining roadway capacity are speed limits, geometrics, and area type. *The Level of Service D Standards for Systems Level Planning, derived from the 2005 North*

Carolina Level of Service (NCLOS) Version 2.1 Program was used in determining the capacities.

Data Requirements – Traffic Counts

In order to create and calibrate a traffic model for the study area, traffic counts are needed for the chosen roadway system. The traffic counts are taken inside the modeled area and at external stations. The 2012 traffic counts taken by and published by the NCDOT Traffic Survey Unit were used for calibrating the data. Once the traffic is loaded onto the roadway, it is compared to the traffic counts in the Tabor City planning area. Figure 13 shows the location of the Average Annual Daily Traffic (AADT) stations. Traffic counts are collected annually for major routes and every other year for other routes. Therefore, the AADTs may come from 2011 or 2012 counts.

Data Requirements – Socioeconomic Data

The socioeconomic data consists of population, dwelling unit counts and employment estimates. The housing counts are used in the model as trip generators while employment is used as trip attractors.

The planning area population number was checked against the population of the town of Tabor City, the South Williams Township and the 2010 census blocks, because the planning area population data lies between those numbers. Figure 14 is a map with reflects the location of the planning area in comparison to the South Williams township and the Tabor City municipal limits. The population number used for the model does not include the prison population. The prison population is immobile so they do not have an effect on the roadway network.

The NCDOT Transportation Planning Branch conducted a windshield survey in August 2013 for dwelling units and employment estimates. The dwelling unit/housing counts were compared to the 2010 US Census block data. The number of employees for each business was estimated, with the exception of larger employers which were contacted for an exact employee count. Houses built and businesses opened after 2012 were not included in the base year data as the trips to and from these developments would not be reflected in the 2012 AADT. Table 11 provides a summary of the window survey results. See the “Design Year (2040) Network” section below for more information.

Commercial Vehicles

Commercial vehicles have different trip rate characteristics than privately owned vehicles. Due to the size of the study area, commercial vehicle data was not collected.

Trip Generation

Trip generation is the process by which external station traffic volumes, housing data, and employment data are used to generate traffic volumes that duplicate the traffic

volumes on the street network. There are three types of trips that are determined using the data: through trips, external<->internal trips, and internal trips. Through trips are trips that begin and end outside the planning area but pass through the planning area en route to a destination. External<->Internal trips are trips that are either entering or exiting the study area. With internal trips, both their origin and destination are inside the planning area.

Through Trips

The through trip table for this study was developed using the SYNTH computer program developed by J. T. McDonnell, P.E. It was based on *Technical Report # 3: Synthesized Through Trip Table for Small Urban Areas*, by David G. Modlin, Jr., Ph.D., P.E. This method of deriving through trips is based upon the Fratar balancing method, which balances the trip interchanges at the external stations. Table 13 presents a summary of the through travel at the external stations.

External<->Internal Trips

Table 13 also includes the summary of the external->internal and internal->external trips combined. With the 2012 AADT at the external stations and the now established through trips, the external<->internal trip volumes can be computed. It is determined by subtracting the total through trips at each station from the total volume at that station.

External<->Internal Trips = AADT – Total Through Trips
Where,
AADT = Annual Daily Traffic

Internal-Internal Trips

Internal trips are generated by those living in the planning area. The percent of internal<->internal trips depend on the data from external<->internal trips, housing and employment. From these we get the dwelling unit trip rates and can estimate commercial vehicle rates. For this model, residents generate internal trips and travel to/are attracted to zones with employment and other activities. In addition, the number of trips that a dwelling unit takes per day depends, not only on the employment but also on the population type.
.
The average percent of internal<->internal trips is between 80% to 90% of the total trips while the average trips per day in dwelling unit is eight for a small urban area. The model was initially tested with these values but was later adjusted. The section on model calibration provides an explanation to the adjustment.

The town of Tabor City is somewhat of a bedroom community. Therefore, 65% was used for the internal<->internal trips and the trip rates were reduced to seven trips per day. In addition, 12% is the percentage assigned to commercial vehicle trips. Table 5 is the summary of the input data used to determine the internal trips for the model. The

calculations were done using an excel spreadsheet called the “Travel Allocation Model (General Version).” It was developed based on the *NCDOT Technical Report 11: Allocation Type Approach to Estimation Travel for Small Urban Areas*.

Table 5: Base Year (2012) Parameters

	Base Year
Planning Area /Township (Population)	100.00%
Persons/DU	2.39
DU Vehicle Trip Rate	7.00
Percentage of CV Trips (%)	12.00%
Percentage of I-I Trips (%)	65.00%
Percentage of Secondary Trips (%)	30.00%

Persons per du = DU / planning area population
DU trips = (planning area population / persons per du)(trip rate)*
CV trips = (percent commercial vehicles)(du trips)*
Internal – Internal trips = (DU trips + CV trips)(percent internal-internal trips)*
Internal –> External trips = (DU trips + CV trips) - (internal-internal trips)
External –> Internal trips = (ADT – thru trips) – (internal-external trips)
NHB-NR = (external<->internal trips)(percent NHB)*
Total Internal Trips = (internal-internal trips) + (NHB)

Where,
AADT = Annual Daily Traffic
DU = Dwelling Unit
CV = Commercial Vehicles
ADT = Average Daily Traffic
NHB = Non-Home Based
NR – Non Residential

Trip Distribution

Once the number of trips per TAZ is determined, the trips still need to be distributed from external station to external station, from each zone to the external stations, from the external stations to the zones, and from zone to zone. Trips are distributed based on the attractiveness factor that each zone has. The more attractive a zone is, then the higher the percentage of trips that would travel to that zone. The total number of trips that occur internally in a zone is determined by multiplying their zonal attractiveness factor to the total number of internal trips.

Through Trip Distribution

The distribution of trips (Table 6) from one external station to another external station is determined using the SYNTH computer program.

Table 6: Through Trip Table Base Year (2012)

From \ To	Station # 11	Station # 12	Station # 13	Station # 14	Station # 15	Station # 16	Station # 17	Station # 18	Station # 19	Station # 20	Station # 21	Station # 22	Total
Station # 11	0	1	0	1	10	16	1	1	5	2	4	237	**278**
Station # 12	1	0	0	0	1	2	0	0	1	0	0	23	**28**
Station # 13	0	0	0	0	1	1	0	0	0	0	0	17	**19**
Station # 14	1	0	0	0	1	2	0	0	0	0	0	34	**38**
Station # 15	10	1	1	1	0	20	2	2	5	2	4	910	**958**
Station # 16	16	2	1	2	20	0	4	3	12	5	10	588	**663**
Station # 17	1	0	0	0	2	4	0	0	1	0	1	60	**69**
Station # 18	1	0	0	0	2	3	0	0	1	0	1	57	**65**
Station # 19	5	1	0	0	5	12	1	1	0	1	3	181	**210**
Station # 20	2	0	0	0	2	5	0	0	1	0	1	88	**99**
Station # 21	4	0	0	0	4	10	1	1	3	1	0	130	**154**
Station # 22	237	23	17	34	910	588	60	57	181	88	130	0	**2,325**
Total	**278**	**28**	**19**	**38**	**958**	**663**	**69**	**65**	**210**	**99**	**154**	**2,325**	**4,906**

External-> Internal Trip Distribution

For the external->internal trip table (Table 7), the attraction from an external station to a particular zone is within the excel program.

Table 7: External-Internal Trip Table Base Year (2012)

From \ To	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	Total
Station # 11	8	222	1	4	266	189	27	273	60	243	1,292
Station # 12	2	48	0	1	57	40	6	59	13	52	277
Station # 13	1	40	0	1	48	34	5	49	11	43	231
Station # 14	3	70	0	1	85	60	9	87	19	77	411
Station # 15	17	456	2	8	547	388	56	562	123	499	2,656
Station # 16	14	378	1	7	454	322	47	466	102	414	2,204
Station # 17	3	93	0	2	112	79	12	115	25	102	542
Station # 18	4	98	0	2	117	83	12	121	26	107	571
Station # 19	6	175	1	3	211	149	22	216	47	192	1,023
Station # 20	5	127	0	2	153	108	16	157	34	139	743
Station # 21	5	126	0	2	151	107	16	155	34	138	735
Station # 22	34	934	3	17	1,121	795	116	1,152	251	1,023	5,447
Total	101	2,767	10	50	3,321	2,355	342	3,411	745	3,029	16,131

Internal->External Trip Distribution

For the internal->external Trip Table (Table 8**),** the attraction from a zone to an external station is calculated within the excel program.

Table 8: Internal-External Trip Table Base Year (2012)

From \ To	Station # 11	Station #12	Station # 13	Station # 14	Station # 15	Station # 16	Station # 17	Station # 18	Station # 19	Station # 20	Station # 21	Station # 22	Total
Zone 1	43	9	8	14	89	74	18	19	34	25	25	182	540
Zone 2	60	13	11	19	124	103	25	27	48	35	34	254	753
Zone 3	8	2	1	2	16	13	3	3	6	4	4	32	94
Zone 4	46	10	8	15	95	79	19	20	37	27	26	195	578
Zone 5	123	26	22	39	253	210	52	54	98	71	70	519	1,538
Zone 6	53	11	9	17	109	90	22	23	42	30	30	223	659
Zone 7	35	7	6	11	72	60	15	15	28	20	20	147	436
Zone 8	2	0	0	0	3	3	1	1	1	1	1	6	19
Zone 9	44	9	8	14	89	74	18	19	34	25	25	183	543
Zone 10	38	8	7	12	79	65	16	17	30	22	22	161	477
Total	452	97	81	143	928	770	190	199	357	259	257	1,903	5,637

Internal->Internal Trip Distribution

For the internal->internal Trip Table (Table 9), the attraction from a zone to another zone is calculated within the excel program.

Table 9: Internal-Internal Trip Table Base Year (2012)

From \ To	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	Total
Zone 1	9	252	1	5	302	214	31	310	68	275	1,466
Zone 2	13	351	1	6	421	299	43	433	94	384	2,046
Zone 3	2	44	0	1	53	37	5	54	12	48	256
Zone 4	10	269	1	5	323	229	33	332	72	294	1,568
Zone 5	26	717	3	13	860	610	89	883	193	784	4,177
Zone 6	11	307	1	6	368	261	38	379	83	336	1,790
Zone 7	7	203	1	4	244	173	25	251	55	222	1,185
Zone 8	0	9	0	0	11	7	1	11	2	10	51
Zone 9	9	253	1	5	304	215	31	312	68	277	1,475
Zone 10	8	222	1	4	267	189	27	274	60	243	1,296
Total	95	2,626	10	48	3,151	2,235	325	3,237	707	2,874	15,308

Mode Choice

As there is very limited public bus access and no trains for public use in the town of Tabor City, the only mode used in this model is private motor vehicles.

Trip Assignment

A trip is assigned by selecting the route/path taken between the origin and destination. In the hand allocation model, the project engineer choses the path of each trip based on several factors: the perceived ease of access and speed limits. By correctly assigning the trips, the current traffic conditions can be mimicked and the future trips routes can be predicted.

Model Calibration and Validation

After each trip is assigned, the model has to be iteratively calibrated to make sure that it matches the existing traffic behavior. The model is calibrated by matching the modeled

traffic volumes to the base year observed AADT. When 80% or higher of the traffic count locations are calibrated with the modeled volumes, then the model is calibrated. The model calibration is valid when model volumes are within +/- 10% or +/- 1000 (whichever is greater) of the observed traffic volumes for the particular location in question
.
For the town of Tabor City, multiple iterations took place. There were too many total trips taking place in the model compared to the base year AADT counts. Changes made to the model involved lowering the trip rates from eight to seven trips per day for each dwelling unit and lowering the percentage of internal trips from 80% to 65%.

Some trips were not included to the model at all. Sidney-Cherry Grove Rd (SR 1314)/Butler Rd (SR 1155)/Peacock Rd (SR 1005) is a road that circulates around the outside of the town and is just outside the planning area. The road acts like a bypass around the town. Some of the external stations are connected to this road. For some of the through trips, especially for external stations that were next to each or near each other, they were routed using the “bypass” instead of traveling through the town.

In addition, the network roads initially chosen inside the planning area had to be updated to include additional local roads that travelers often take as alternatives through and around the town to avoid main roads and traffic signals. No AADT counts had ever been taken on those local roads but it was confirmed by the Tabor City CTP Steering Committee that these roads are used by the residents as alternative routes.

Design Year (2040) Network

The model is used to project traffic volumes and patterns for the design year of 2040. The base year data is modified to reflect assumed conditions in the design year. The future population, housing, and employment numbers are used in the same manner as the base year socioeconomic data to generate trips productions and attractions.
The first step in the projection process is the gathering of historical socioeconomic data from the census. Table 10 provides the historic socioeconomic trends for the town of Tabor City, the South Williams Township population, and the county. As previously mentioned the 2010 population numbers do not include the prison population. Those numbers would significantly affected projects which are based on historical data.

The linear annual growth rate values are from the socioeconomic historical trends and the expected land use for the Tabor City planning area. On December 10, 2013, the town of Tabor City council approved the growth rates listed in Table 11. Using the approved growth rates, the socioeconomic data is linearly projected to 2040 from the 2012 population, housing, and employment estimates.

Table 10: Historical Socioeconomic Data

Area	Year	Population	Dwelling Units	Person/Dwelling Unit	Employment
Tabor City	1960	2,338	-	-	-
	1970	2,400	-	-	-
	1980	2,710	-	-	-
	1990	2,320	1,026	2.26	854
	2000	2,509	1,116	2.25	830
	2010	2,511	1,239	2.03	1,000*
South Williams Township	1960	4,828	-	-	-
	1970	4,895	-	-	-
	1980	5,241	-	-	-
	1990	4,972	2,526	1.97	
	2000	5,507	2,348	2.35	1,866
	2010	5,565	2,526	2.20	1,967
Columbus County	1960	48,973	13,475	3.63	-
	1970	46,937	14,973	3.13	-
	1980	51,037	19,059	2.68	-
	1990	49,587	20,513	2.42	20,022
	2000	54,749	24,060	2.28	20,551
	2010	58,098	26,042	2.23	22,083*

* (American Community Survey 2006-2010) estimate

Table 11: Planning Area Growth Projections

	Population	Dwelling Units	Employment
Growth Rate (%)	1.00	1.35	0.85
2012	4,511	1,796	1,603
2040	5,774	2,512	2,302
Control Totals	-	716	699

The difference between the 2012 and 2040 numbers for housing and employment are defined as control totals. Any houses built or businesses opened after 2012 are added to the control totals. The control totals for dwelling units and employment are assigned by the steering committee distributed to the zones where growth is anticipated (Table 12).

The base year AADT is then projected to the design year of 2040. The AADT is projected at each external station. Using historical AADT counts, the AADT was linearly projected to the base year to obtain the past growth rate at each station. The growth rates were used to project the external station AADTs to the design year. The projected AADTs are used to project (and distribute) through trips and project external trips using the SYNTH computer program. Table 13 is the result of those projections.

Table 12: Zone Distribution of Socioeconomic Data

	Base Year (2012)		Design Year (2040)	
Zone	**Housing**	**Employment**	**Housing**	**Employment**
1	172	10	322	10
2	240	275	458	387
3	30	1	30	1
4	184	5	184	5
5	490	330	640	330
6	210	234	210	234
7	139	34	337	34
8	6	339	6	602
9	173	74	173	336
10	152	301	152	363

Table 13: Cordon Station Travel

Station Number	Station Location	BASE YEAR (2012)			DESIGN YEAR (2040)		
		Total ADT	Through Trip-Ends	Ext-Int Trips	Total ADT	Through Trip-Ends	Ext-Int Trips
11	NC 904 (East)	2,300	556	1,744	3,000	724	2,276
12	Will Inman Rd (SR-1006)	430	56	374	730	98	632
13	Mill Branch Church Rd (SR-1153)	350	38	312	460	50	410
14	Minor Meares Rd (SR-1154)	630	76	554	820	100	720
15	US 701 (North)	5,500	1,916	3,584	9,400	3,270	6,130
16	NC 410 (North)	4,300	1,326	2,974	8,900	2,752	6,148
17	Emerson Church Rd (SR-1310)	870	138	732	1,100	176	924
18	Old Stake Rd (SR 1300)	900	130	770	1,200	176	1,024
19	NC 904 (West)	1,800	420	1,380	3,100	728	2,372
20	Carolina Rd (SR-1303)	1,200	198	1,002	1,600	270	1,330
21	NC 410 (South)	1,300	308	992	1,700	400	1,300
22	US 701 (South)	12,000	4,650	7,350	26,700	8,348	18,352
Total		**31,580**	**9,812**	**21,768**	**58,710**	**17,092**	**41,618**

Following projection of through and external<->internal trips is the internal<->internal trip projection and secondary trips projections. The method used to obtain the trips for the base year is used for the design year. The parameters remain the same except the number of persons per dwelling unit has decreased from 2.39 to 2.22. This is because the population and the number of dwelling units have increased over the design year.

As with the base model, the Travel Allocation Model excel spreadsheet is used distribute the trips to the respective zones for through trips, external->internal trips, internal->external trips, and internal<->internal trips (See Tables 14, 15, 16, and 17 respectively). The trips were assigned to the same routes/paths that were originally in the base year.

Table 14: Through Trip Table Design Year (2040)

From \ To	Station # 11	Station # 12	Station # 13	Station # 14	Station # 15	Station # 16	Station # 17	Station # 18	Station # 19	Station # 20	Station # 21	Station # 22	Total
Station # 11	0	0	0	0	5	13	1	1	3	1	2	336	**362**
Station # 12	0	0	0	0	1	3	0	0	1	0	0	44	**49**
Station # 13	0	0	0	0	0	2	0	0	0	0	0	23	**25**
Station # 14	0	0	0	0	1	2	0	0	0	0	0	47	**50**
Station # 15	5	1	0	1	0	18	1	1	4	1	2	1,601	**1,635**
Station # 16	13	3	2	2	18	0	3	3	12	4	8	1,308	**1,376**
Station # 17	1	0	0	0	1	3	0	0	1	0	0	82	**88**
Station # 18	1	0	0	0	1	3	0	0	1	0	0	82	**88**
Station # 19	3	1	0	0	4	12	1	1	0	1	2	339	**364**
Station # 20	1	0	0	0	1	4	0	0	1	0	1	127	**135**
Station # 21	2	0	0	0	2	8	0	0	2	1	0	185	**200**
Station # 22	336	44	23	47	1,601	1,308	82	82	339	127	185	0	**4,174**
Total	**362**	**49**	**25**	**50**	**1,635**	**1,376**	**88**	**88**	**364**	**135**	**200**	**4,174**	**8,546**

Table 15: External-Internal Trip Table Design Year (2040)

From \ To	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	Total
Station # 11	8	317	1	4	270	192	28	493	275	297	1,886
Station # 12	2	88	0	1	75	53	8	137	76	83	524
Station # 13	1	57	0	1	49	35	5	89	50	54	340
Station # 14	3	100	0	1	86	61	9	156	87	94	597
Station # 15	22	854	2	11	728	516	75	1,328	741	801	5,079
Station # 16	22	856	2	11	730	518	75	1,332	743	803	5,094
Station # 17	3	129	0	2	110	78	11	200	112	121	766
Station # 18	4	143	0	2	122	86	13	222	124	134	848
Station # 19	9	330	1	4	282	200	29	514	287	310	1,965
Station # 20	5	185	0	2	158	112	16	288	161	174	1,102
Station # 21	5	181	0	2	154	109	16	282	157	170	1,077
Station # 22	66	2,556	7	33	2,180	1,546	225	3,976	2,219	2,398	15,205
Total	150	5,797	15	75	4,943	3,505	509	9,017	5,033	5,437	34,481

Table 16: Internal-External Trip Table Design Year (2040)

From \ To	Station # 11	Station #12	Station # 13	Station # 14	Station # 15	Station # 16	Station # 17	Station # 18	Station # 19	Station # 20	Station # 21	Station # 22	Total
Zone 1	50	14	9	16	135	135	20	23	52	29	29	403	915
Zone 2	71	20	13	23	192	192	29	32	74	42	41	574	1,301
Zone 3	5	1	1	1	13	13	2	2	5	3	3	38	85
Zone 4	29	8	5	9	77	77	12	13	30	17	16	231	523
Zone 5	99	28	18	31	268	269	40	45	104	58	57	802	1,818
Zone 6	33	9	6	10	88	88	13	15	34	19	19	263	597
Zone 7	52	15	9	17	141	141	21	24	55	31	30	422	957
Zone 8	1	0	0	0	3	3	0	0	1	1	1	8	17
Zone 9	27	7	5	9	72	73	11	12	28	16	15	217	492
Zone 10	24	7	4	7	64	64	10	11	25	14	13	190	432
Total	390	108	70	123	1,051	1,054	158	176	407	228	223	3,147	7,137

Table 17: Internal-Internal Trip Table for Design Year (2040)

From \ To	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	Total
Zone 1	13	509	1	7	434	307	45	791	442	477	3,025
Zone 2	19	723	2	9	617	437	64	1,125	628	678	4,303
Zone 3	1	47	0	1	40	29	4	74	41	44	282
Zone 4	8	291	1	4	248	176	26	452	252	273	1,729
Zone 5	26	1,011	3	13	862	611	89	1,572	878	948	6,012
Zone 6	9	332	1	4	283	201	29	516	288	311	1,973
Zone 7	14	532	1	7	454	322	47	828	462	499	3,166
Zone 8	0	9	0	0	8	6	1	15	8	9	56
Zone 9	7	273	1	4	233	165	24	425	237	256	1,625
Zone 10	6	240	1	3	205	145	21	373	208	225	1,428
Total	103	3,967	10	51	3,383	2,399	349	6,171	3,445	3,721	23,599

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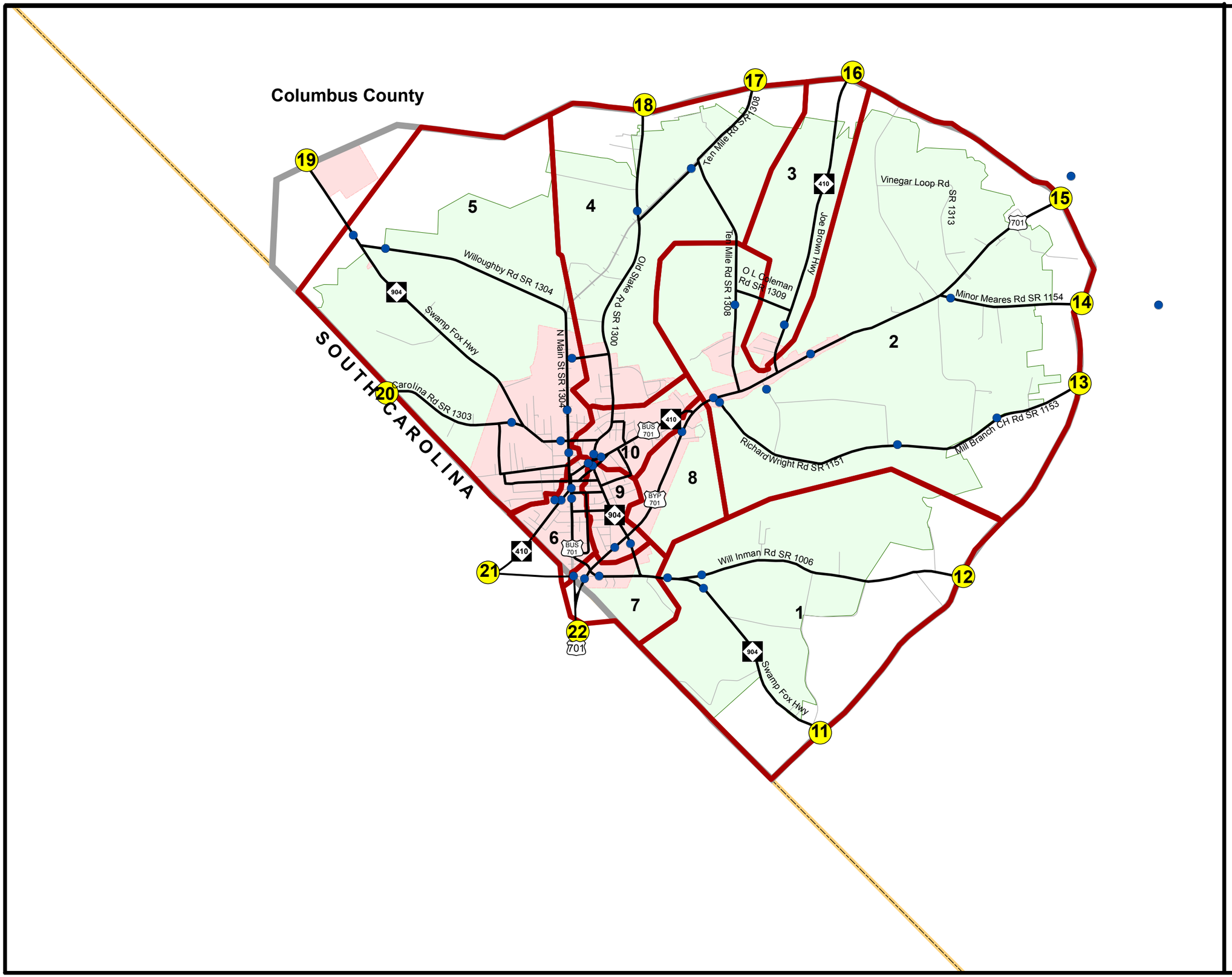
Traffic Analysis Zones, External Stations, AADT Locations

Tabor City Planning Area Comprehensive Transportation Plan



- # External Station
- AADT Station
- Model Network Roads
- Zone Boundary
- Planning Area Boundary
- Municipal ETJ
- Municipal Boundary

N
W E
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Miles
0 0.5 1 2

Figure 13

Back of Figure

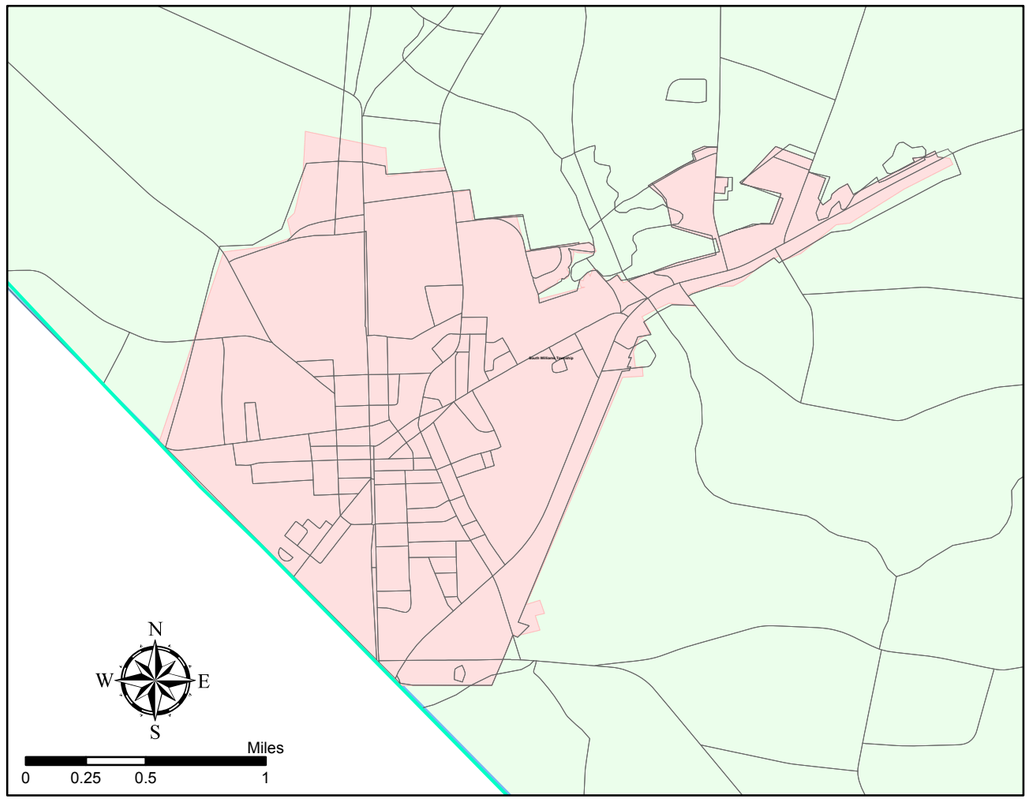
Columbus County

Williams Township

SOUTH CAROLINA

South Williams Township

Inset



Planning Area Boundary

Municipal Boundary

Township Boundary

2010 Census Blocks

Miles

0 1 2 4

N W E S

Figure 14

Tabor City, Planning Area, Townships & 2010 Census Block Boundaries

Comprehensive Transportation Plan

Plan date: 5/21/2014

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Appendix H
Public Involvement

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

List of CTP Steering Committee Members

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

- Al Leonard, Tabor City Manager
- Dianne Nobles Ward, Tabor City Promotions
- Donald James, Tabor City Public Works
- Don Eggert, Cape Fear Area RPO
- Allen Serkin, Cape Fear Area RPO
- Drew Cox, NCDOT District 3 Engineer
- Joe Bailey, NCDOT Division 6 Planning Engineer
- Scott Walston, NCDOT TPB
- Suzette Morales, NCDOT TPB

CTP Vision, Goals, Objectives and MOEs

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

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

Tabor City CTP Vision & Goals

Vision:

Develop a safe, reliable and efficient multi-modal transportation infrastructure that is compatible with land use plans and environmental protection that will also recognize the natural beauty, quality of life, agricultural economy and pro-business climate that the Town of Tabor City has to offer.

Goals:

1. Coordinate with the Columbus County CTP, Cape Fear Rural Planning Organization, NCDOT, and other relevant local and state organizations.

2. Study capacity, crash history and connectivity to make recommendations where needed to improve safety and mobility.

3. Insure the integrity of the existing transportation system by encouraging planned and strategic development.

4. Address congestion issues for both present and future traffic patterns on key routes which are associated with tourist traffic, such as the US 701/NC 410 intersection.

5. Encourage right of way preservation to ensure expansion of the existing system and future roadway projects

6. Support the reopening and revitalization of the local railroad industry in order to sustain the current economy and create future growth.

7. Promote roadways that allow and encourage alternative modes of transportation such as walking and biking.

8. Preserve the rural character of the county while accommodating growth to targeted areas.

Tabor City Community Goals

These goals below were taken from the 2010 Land Use and Development Plan for Tabor City, North Carolina. The bullet points below each goal are notes on ways that the CTP could include recommendations that support the land use plan.

1. Improve the visual quality of the town

Cars, homes, property in general will sell better if they are cleaned up and look their best. People have a greater sense of pride about something if it is neat and clean. They are proud of it. For that reason, the Town of Tabor City needs to have a general facelift. That includes beautification of street corners, especially entrances, and maybe some gardens in strategic spots that will give a fresh new look. Building and store fronts could use some façade improvements, and any abandoned or junked equipment and vehicles should be removed.

Implementation Strategies:

A. Provide funding and support for the work of the Tabor City Beautification and Appearance Committee, including a program of public recognition for homes and businesses that contribute to an improved community appearance.

B. Beautify the entrances to the community with new welcome signs and attractive landscaping. The Town can prepare selected street corners for plantings and then initiate a beautification committee to plant them. This will require a partnership with the town and citizens and a commitment by the town to keep the areas watered. Businesses and civic organizations should be encouraged to adopt a corner.

C. Develop a network of bikeways and pedestrian walkways for the use and enjoyment of residents and visitors to Tabor City.

D. *A*cquire and develop new park facilities for the enjoyment for residence and visitors.

E. Improve the appearance of abandoned buildings and unoccupied areas in order to give Tabor City a fresh face to advertise to potential incoming business. The NC Rural Economic Development Center has Building and Facade Grants, as do other grant sources. The Town should utilize the Cape Fear Council of Governments, DCA, or other available resource planners to assist in the procurement of funds to assist property owners with improvements. Dilapidated buildings may be targeted for removal by developing a Building Standards Ordinance.

F. Target clean up of junk and nuisance conditions throughout the town, through courteous requests and through, where necessary, code enforcement actions.

G. Target historically significant structures for Landmark designation and consideration of a Historic District with appropriate signage.

H. The Town should establish the standard and set a good example for land owners, throughout the community by landscaping, beautification, and maintenance of all municipal properties, especially maintenance facilities.

I. Develop and implement a uniform standard for street lighting throughout Town.

J. Coordinate with Civic groups to create memorial gardens at municipal properties and parks (Boy Scouts of America, Rotary, Kiwanis, Ruritan, Civitan, etc.).

- Cooperate with NCDOT to improve landscaping features
- Complete bicycle and pedestrian plans in the CTP to reach key town destinations
- Maintenance of historic appearance

2. Establish Tabor City has a wholesome, family-oriented community for residents and for visitors.

The total quality of life for residents in town can be enhanced by establishing standards that promote safety, community, and progress for all citizens regardless of their socio-economic situation. Community spirit evolves from family oriented neighborhoods that are clean, safe, and convenient to schools, essential services, shopping, and recreational amenities. Establishing a community that is welcoming to residents and visitors of all ages can create a sustainable community that can support itself during difficult economic times.

Implementation Strategies:

A. Promote an active, vibrant, interactive non-segregated community centered facilities where residents can cross paths and meet their neighbors as they go about their lives within Tabor City. The Town of Tabor City can create public spaces in which the community can gather and enjoy recreational opportunities. Creating parks or similar spaces in which to gather, exercise, play and compete. Tabor City should seek over time to create more public places and social gathering places which ought to be scattered in various neighborhoods throughout the town.

B. Develop a network of bikeways and pedestrian walkways for the use and enjoyment of residents and visitors to Tabor City.

C. Ensure that any new intensive development locates in a compact and distinct manner and close to areas of existing development which is, or are scheduled to be, provided with public water, sewerage, and other urban services.

D. Discourage and/or prohibit activities that are inconsistent with a wholesome, family-oriented community atmosphere through innovative public safety programs implemented by the Tabor City Police Department, such as a gang task force, neighborhood organizations to effect crime watch, etc. are examples. Encourage the Police Department to interact with the citizens and work with them to achieve mutual result of taking back the bad neighborhoods from criminal elements.

E. Preserve, wherever possible, the town's historical properties, structures, records and traditions. (See section 1-C above).

F. Enhance existing recreational opportunities through sports, activities, etc. that include all ages and all citizens.

- Ensure that new facilities are compatible with the Tabor City Land Use Plan
- Complete bicycle and pedestrian plans in the CTP to reach key town destinations
- Maintenance of historic appearance

3. Support policies that would stimulate jobs for citizens and sustainable growth that will provide sound economic protection in the future and encourage quality development, in order to establish and maintain a sustainable tax base to support an enhanced quality of life for its citizens

The Town believes that protection and support for existing business and implementation of business friendly regulatory codes that establish a climate that is favorable for small business entrepreneurship will result in sustainable economic growth and attract of larger business interests.

Implementation Strategies:

A. Support ongoing economic development efforts of Tabor City, Columbus County, Southeastern Economic Partnership, and the State Department of Commerce with complimentary land use regulation that promotes the availability of business services for residents and visitors.

B. Support existing industry and encourage new commercial opportunities that will provide higher paying employment.

C. Tabor City is served by US Highway 701 and NC Highways 904 and 410. As traffic on these highways continues to increase, so does the potential for new businesses. Long range planning should identify Policy Recommendation that will encourage growth along these corridors and current zoning should reflect zoning designations that accommodate that growth with reasonable and logical regulation.

D. Embrace sustainable development and controlled growth using existing policy tools (City Zoning Ordinances, Sub-division Ordinances and Code Enforcement).

E. Create a Technical Review Committee to assist planning staff with plan reviews for new, large developments. Committee should be composed of members from police/fire/emergency management, public works, building inspections, and others as needed.

F. Insure that any new intensive development locates in a compact and distinct manner close to areas of existing development which is, or are scheduled to be, provided with public water, sewage, and other urban services.

G. Ensure Tabor City's public infrastructure is capable of serving future growth and development.

H. Update the FEMA FIRM maps and develop a Flood Management Plan for Tabor City.

I. Seek grants assistance through EDA, NC Commerce, NC Rural Economic Development Center, The Golden Leaf Foundation, and others to support policy implementation goals.

J. Incorporate the policy goals established by the NC STEP process into this plan to encourage full implementation and coordination of efforts.

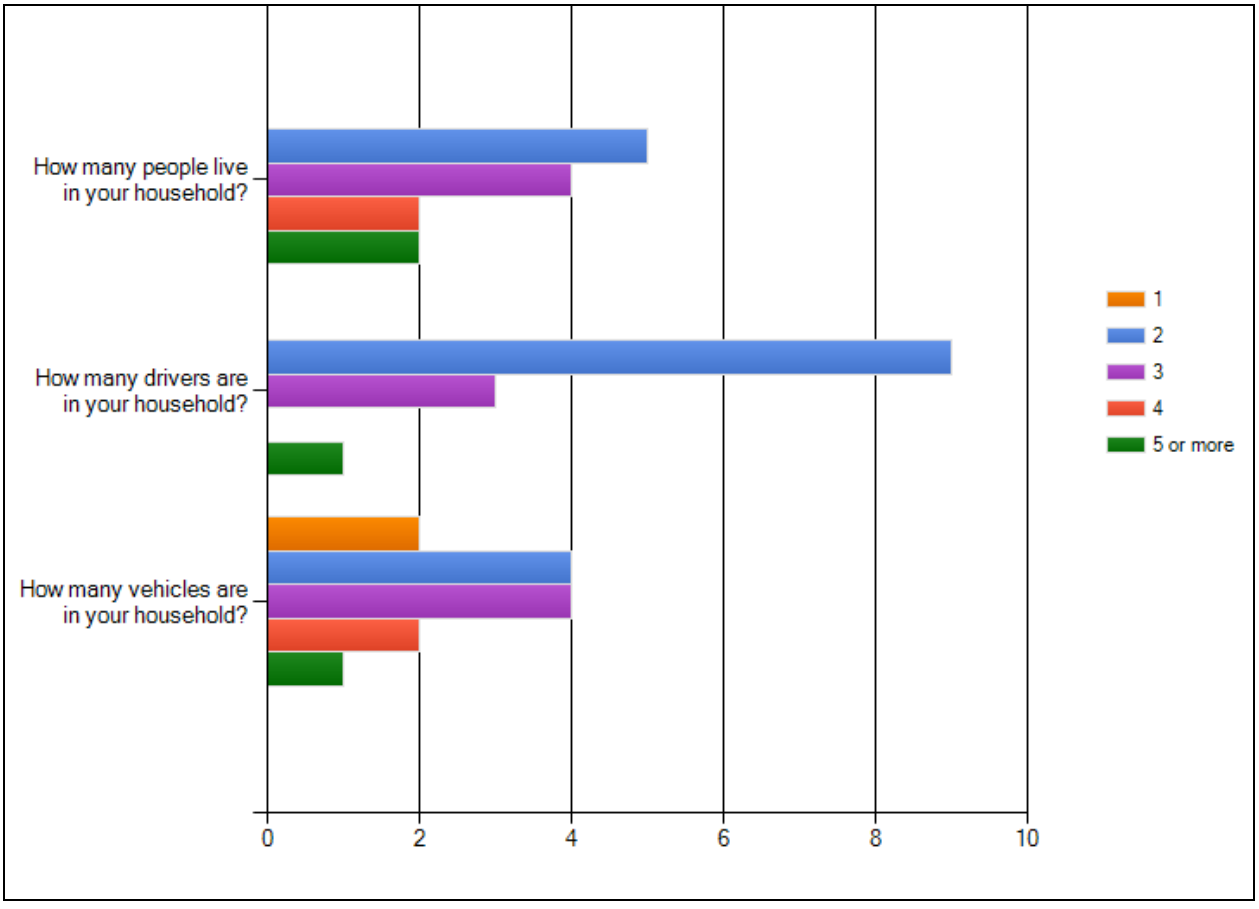
K. Commit to annual review and update of the Land Use Plan.

- Seek enhanced transportation improvements that will support expanded industrial needs by participation in the Regional Transportation Planning process and through direct advocacy to NCDOT.
- Ensure zoning designations and subsequent permitted uses are in place along targeted properties that are suitable for commercial development along the US HWY 701 and NC Route 410 Corridors.
- Provide related infrastructure to the above sites

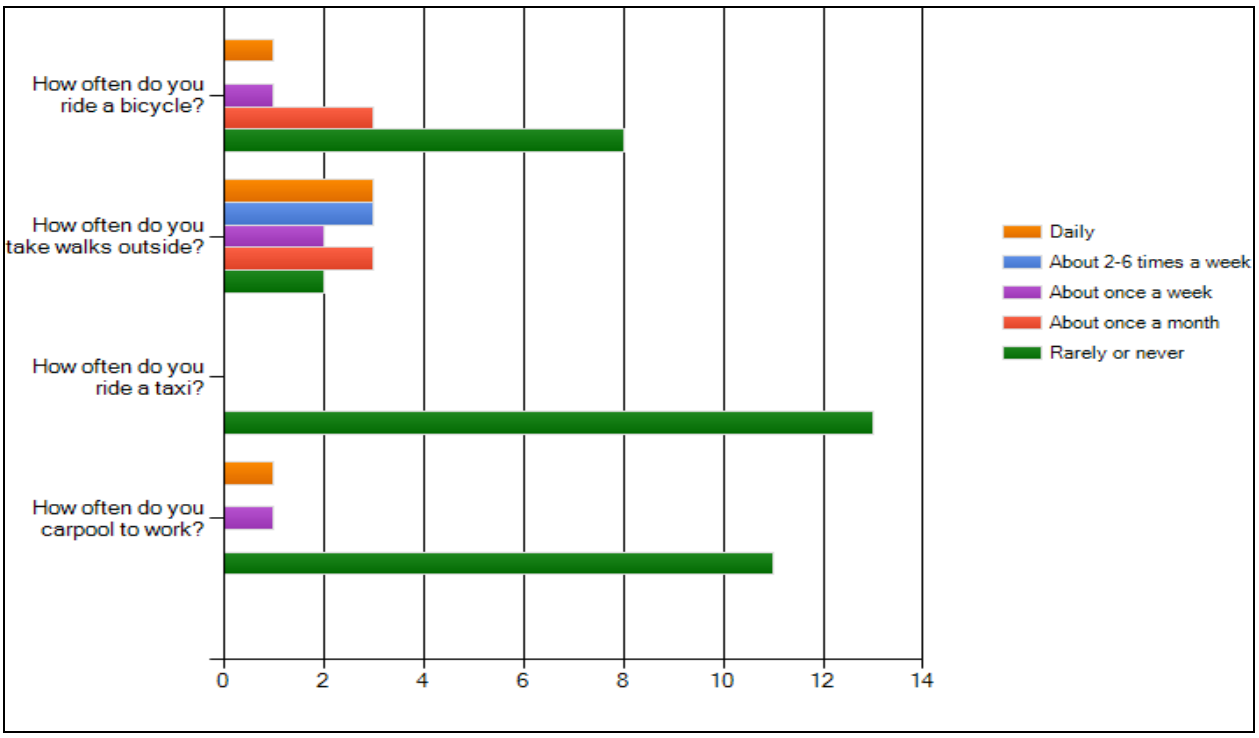
Goals and Objectives Survey

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

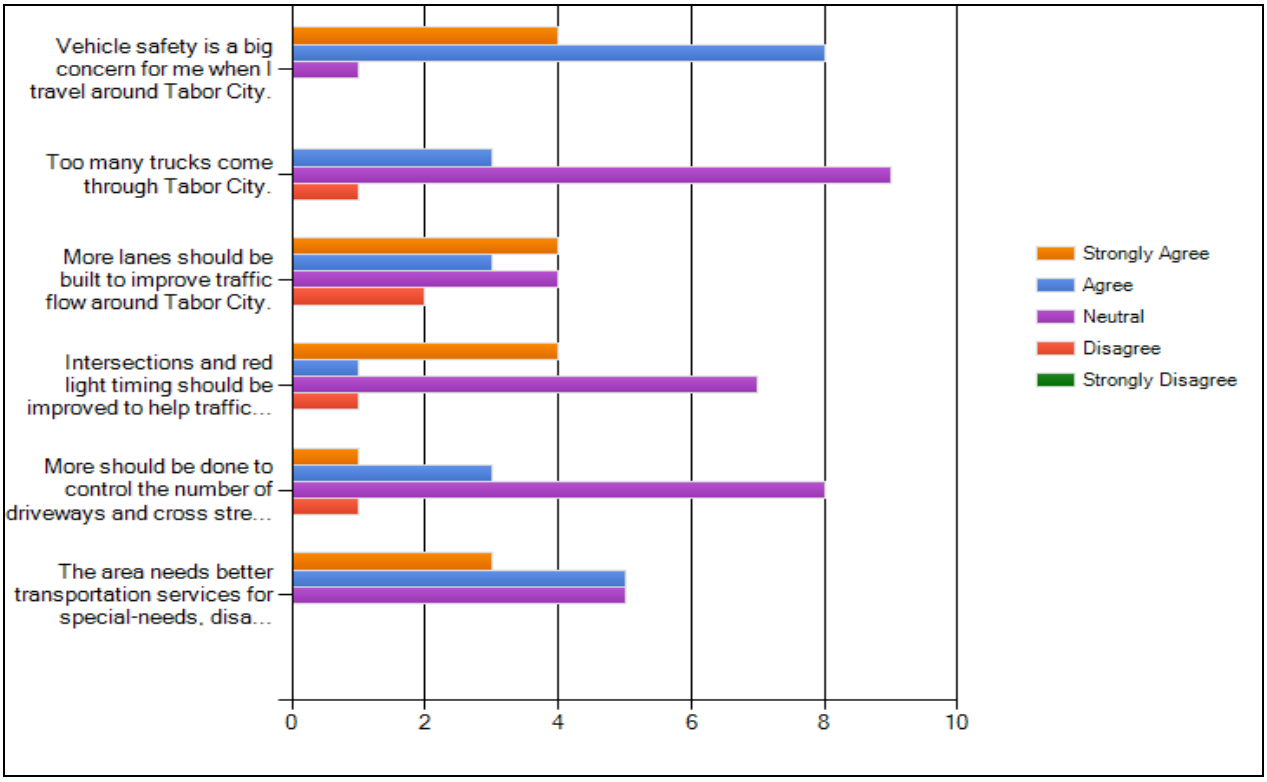
Vehicle & Household Summary



Other Modes of Transportation Summary



Town Concerns/Issues Summary



Additional Survey Comments Summary

Areas with the most congested Traffic are:

1. US 701 Bypass/NC 904 Intersection
2. US 701/NC 410 Intersection
3. US 701 during the summer
4. US 701 & Richard Wright Road intersection

Roads in and around Tabor City that need sidewalks are:

1. Pireway Road, Bell Street, Live Oak Street, Williams Street
2. Stake Road, US 701 Bus.
3. Railroad Street, 8th Street
4. Areas were seniors live, areas where one side of the street already has sidewalks
5. East 5th Street
6. 6th Street
7. Elizabeth Street
8. All of downtown Tabor City

Roads in the area needing improved connectivity are:

1. Elizabeth Street & NC 410
2. US 701 Bypass & NC 904
3. US 701 North at NC 410 heading to Chadbourn
4. NC 904 through town, reroute NC 904

Additional Comments are:

1. More jobs in Tabor City, more shops and restaurants open in the evening
2. Pedestrian access
3. US 701 Bus., US 701 Bypass, Complex Street (SR 1305) difficult turning movements, overall dangerous near state line
4. Lack of sight at downtown intersections because due to parked vehicles
5. Signalization at the intersections of US 701 & NC 410, US 701 Bus. & Ten Mile Road, US 701 Bypass & NC 904 (Pireway Road)
6. Grocery and other stores located on outskirts of town instead of downtown, residents need to walk to read them, downtown preservation
7. Downtown congestion

Public Meetings

The public involvement process included holding a public drop-session in Tabor City in order to present the proposed Comprehensive Transportation Plan to the public and to solicit comments. Below is a brief summary of the public meeting.

Public Drop-in Session

Date:	Tuesday, October 14, 2014
Time:	4:00 PM – 7:00 PM
Location:	The Ritz Center 213 US 701 Business (Hickman Road) Tabor City, NC
Purpose:	Present draft recommendations and solicit comments
Attendance:	16 (excluding NCDOT staff and steering committee members)
Public Input:	No comment forms were submitted during the session

Appendix I
Tabor City Special Traffic Counts

Currently, seasonal traffic is the primary cause of congestion for the town of Tabor City. US 701 in the town of Tabor City is a major north-south route that is used by vacationers as they head to Myrtle Beach, South Carolina and other locations south. The Tabor City steering committee had concerns that the 2012 Annual Average Daily Traffic (AADT) counts did not reflect the summer congestion that occurs there. The town believed that US 701 is over capacity during certain times in summer. The town observed that US 701 southbound is particularly congested at the beginning of the weekend as people head towards the beach. The northbound portion of the route becomes congested at the end of the weekend as vacationers head home. The town requested that traffic counts be completed in order to compare the AADT to summer traffic volumes.

A traffic count study was conducted during the 2013 Labor Day holiday weekend. Additional traffic counts were taken in 2014. The 2014 counts were completed in order to find out what traffic volumes are during a regular weekday in the summer and what traffic volumes are like during a non-holiday weekend. The 2014 counts took place from Monday, June 2, 2014 to Monday, June 9, 2014.

Due to limited equipment, only two locations along US 701 could be counted during Labor Day. The result (Figures 15, 16, and 17) of the study shows that when the counts are compared to the 2012 AADT, the traffic either doubles or nearly doubles on the US 701 just north of the South Carolina border. The volume also increases by 3,000 to 5,000 vehicles at the location south of Richard Wright Road (SR 1151). The capacity for both sections of the road is 15,800, meaning that the facility is over capacity. Additionally, the facility had about a 65-35 directional split at the beginning of the weekend with most of the traffic travelling southbound. There was a 25-75 directional split at the end of the weekend with a majority of the traffic traveling northbound.

Because the Tabor City CTP began towards the end of summer, a non-holiday summer count had to be conducted in 2014. More locations counts were chosen for the new counts. The goal was to compare summer weekday counts to the AADT and to compare summer non-holiday weekend days to the AADT and the previous Labor Day Holiday counts. Figures 18, 19, and 20 are the results of the traffic volume counts. The result of the counts shows that the weekday counts are very similar (and in some cases the same), to the AADT. Just like the Labor Day counts, though the location of the count along US 701 is different, the volume on US 701 has doubled during the weekend.

The figures show that a majority of the traffic is coming from NC 410 and US 701, just north of the Tabor City town limits. The two routes join and carry the combined traffic along US 701 and into South Carolina. Most of the weekend volumes are from NC 410. US 701 traffic volumes remain steady throughout the week.

The conclusion of the Tabor City traffic summer traffic count study for US 701 is that weekday traffic is comparable to the 2012 AADT volumes. The facility is over capacity during summer weekends as vacationers head to and from beach.

Figure 15: Tabor City Labor Day Holiday Traffic Counts – Friday 8/30/13

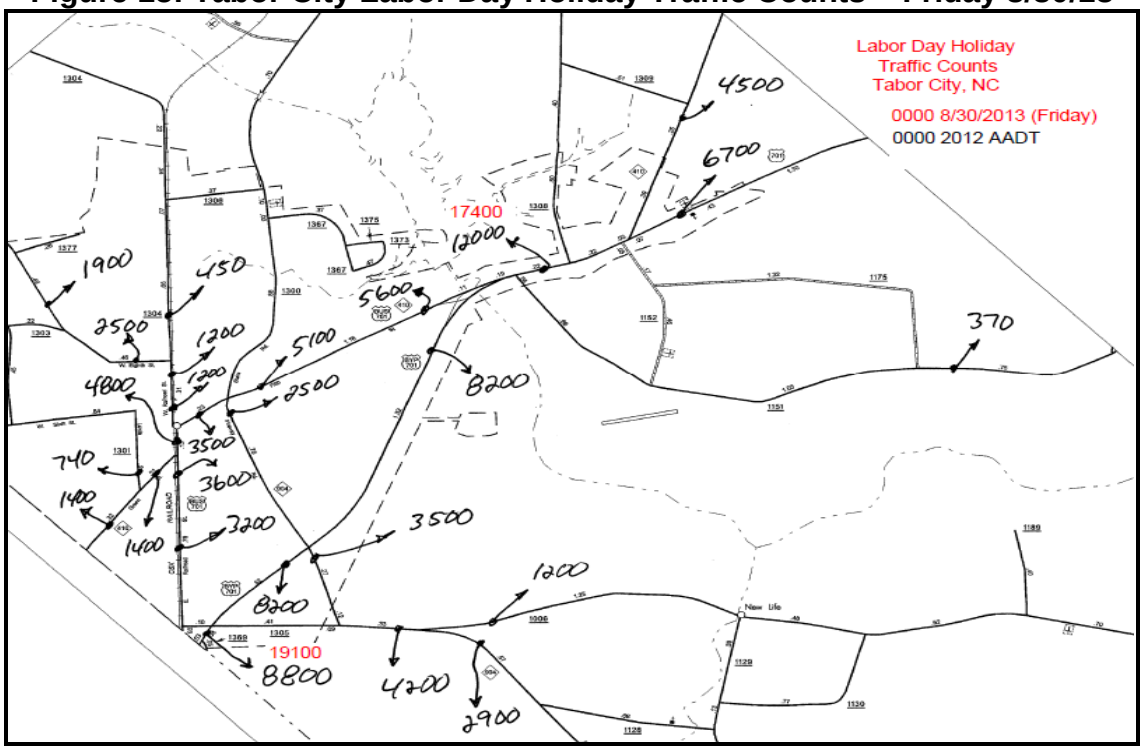


Figure 16: Tabor City Labor Day Holiday Traffic Counts – Saturday 8/31/13

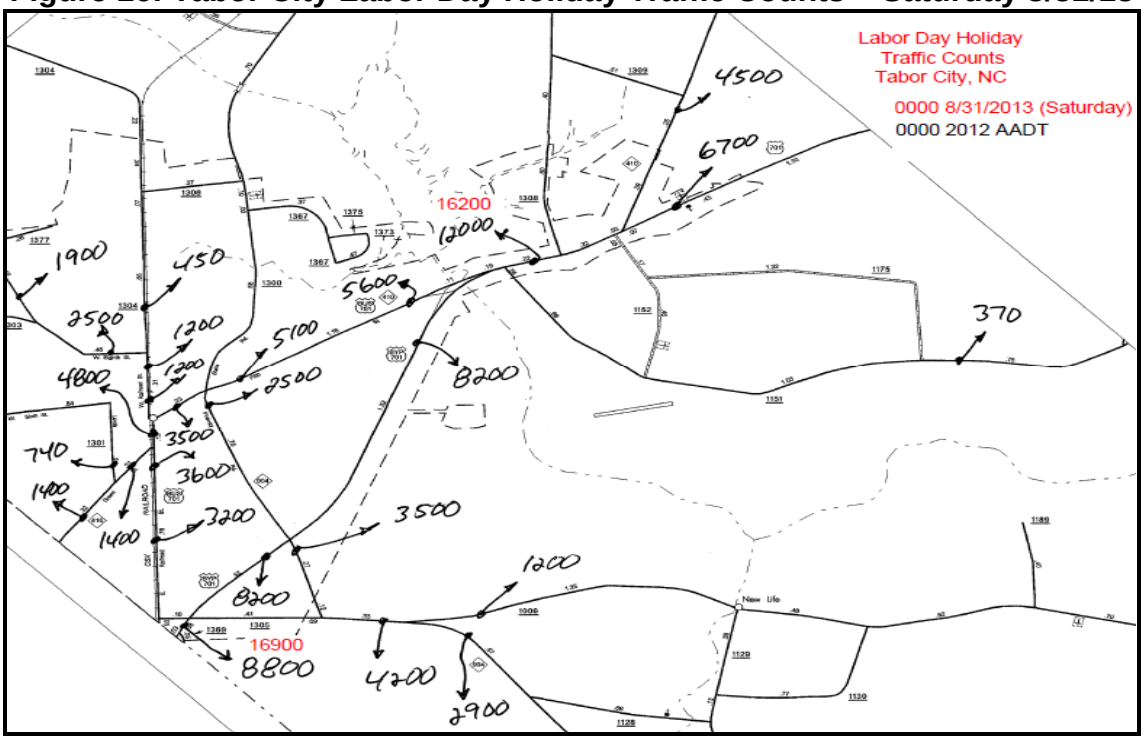


Figure 17: Tabor City Labor Day Holiday Traffic Counts – Monday 6/2/14

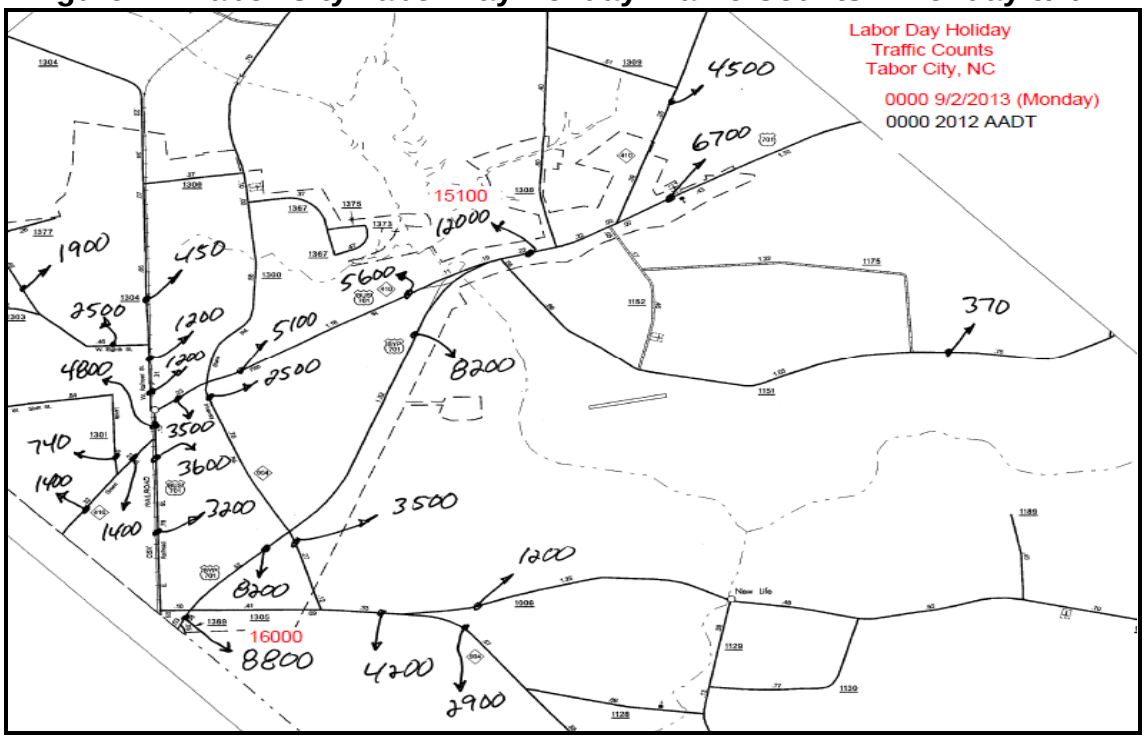


Figure 18: Tabor City Summer Traffic Counts- Tuesday 6/3/14

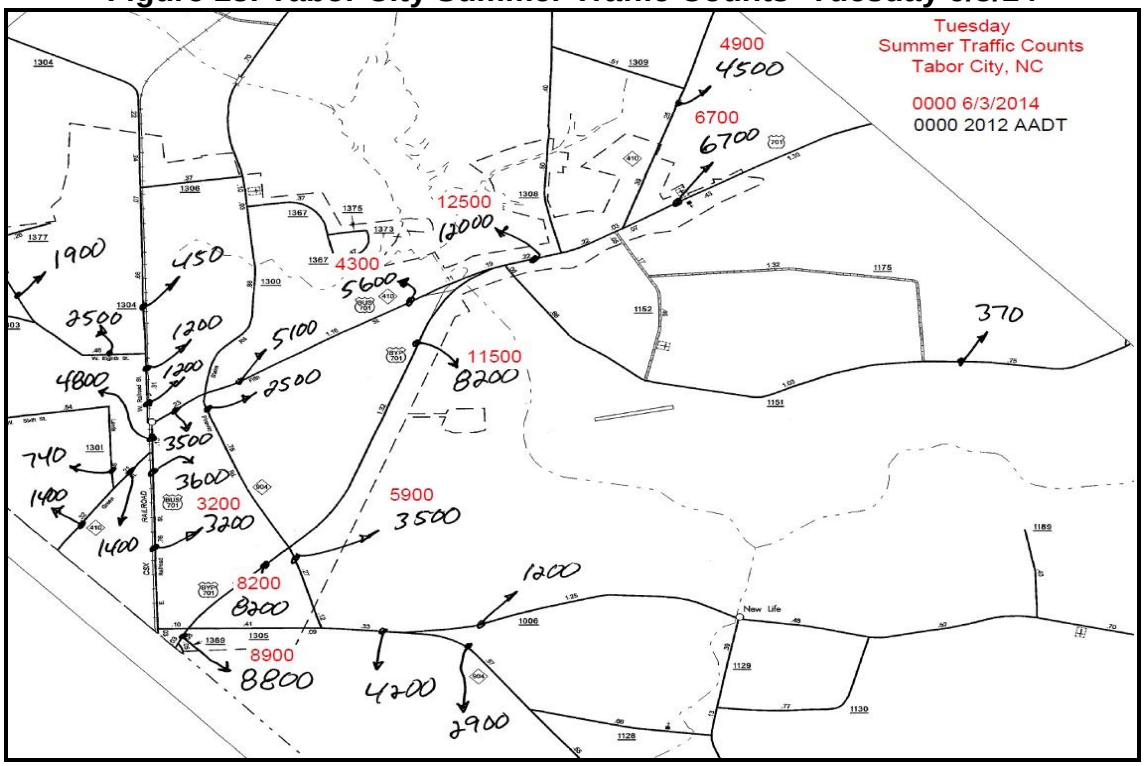


Figure 19: Tabor City Summer Traffic Counts- Friday 6/6/14

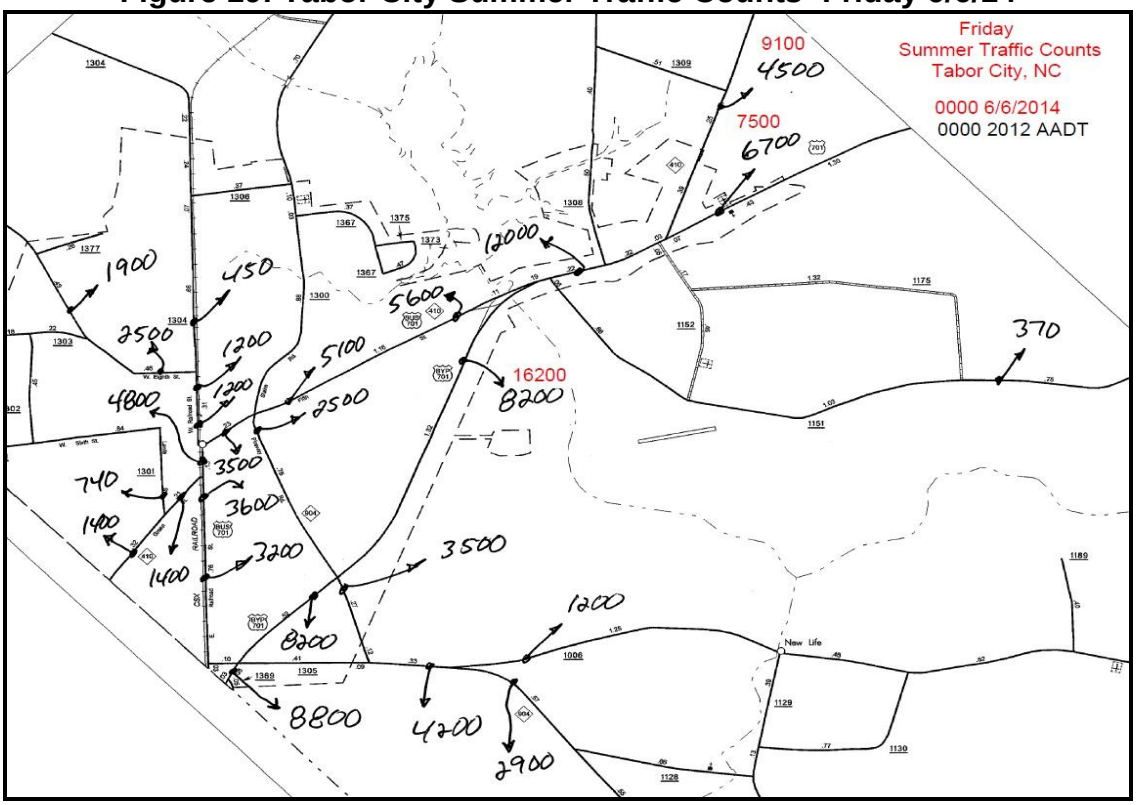


Figure 20: Tabor City Summer Traffic Counts- Saturday 6/7/14