Comprehensive Transportation Plan

Randolph County

January 2012

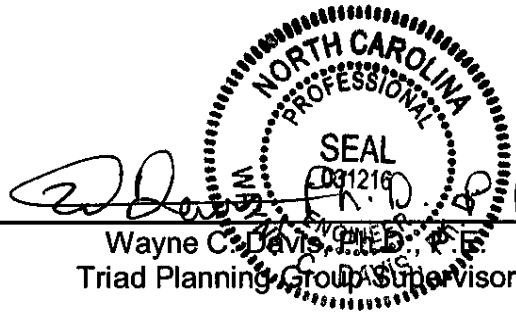
Comprehensive Transportation Plan

Randolph County

Prepared by: Vernia Wilson, Project Engineer
Wayne C. Davis, Ph.D., P.E., Triad Planning Group Supervisor
Transportation Planning Branch
N.C. Department of Transportation

In Cooperation with:
Randolph County
City of Asheboro
Town of Franklinville
Town of Liberty
Town of Ramseur
City of Randleman
Town of Seagrove
Town of Staley
Piedmont Triad Rural Planning Organization

January 2012



Wayne C. Davis, Ph.D., P.E.
Triad Planning Group Supervisor

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Executive Summary

In April of 2006, the Transportation Planning Branch of the North Carolina Department of Transportation and Randolph County initiated a study to cooperatively develop the Randolph County Comprehensive Transportation Plan (CTP), which includes the cities of Asheboro and Randleman, and the towns of Franklinville, Liberty, Ramseur, Seagrove and Staley. This is a long range multi-modal transportation plan that covers transportation needs through 2035. Modes of transportation evaluated as part of this plan include: highway, public transportation and rail, bicycle, and pedestrian. This plan does not cover routine maintenance or minor operations issues. Refer to Appendix A for contact information on these types of issues.

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

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

Highway

I-73/74 (US 220):

- RAND0048: Widen the existing facility from four to six-lanes from NC 134/US 220 Business to West Presnell Street (SR 1462) in Asheboro.

- I-4407: Upgrade to interstate standards from NC 134/US 220 Business to Park Drive Extension /West Presnell Street (SR 1462) in Asheboro.

- I-4921: Widen the existing facility from four to six-lanes and upgrade to interstate standards from Park Drive Extension/West Presnell Street (SR 1462) in Asheboro to I-85 in Greensboro and upgrade to interstate standards.

US 421:

- Upgrade to freeway standards from NC 49 to Guilford County implementing full control of access along the facility. An interchange is recommended at Deviney Road/Shiloh Road (SR 2407) and a grade separation at Starmount Road/Shiloh Road (SR 2407).

US 311 Bypass (Future I-74):

- R-2606: Construct a four-lane divided freeway from south of Tuttle Road (SR 1920) in the High Point MPO to US 220 north of Asheboro. Interchanges are recommended at US 311 and I-73/74 (US 220). Grade separations are recommended at Plainfield Road (SR 1518) and Heath Dairy Road (SR 1511).

US 220 Business:

- Widen from two to five lanes with a center left turn lane from US 311 to Old Liberty Road (SR 2261).

US 64:

- R-2220: Improve to an expressway from Davidson County to the proposed Asheboro Southern Bypass by widening the existing facility from two to four-lanes with median and improving US 64 to boulevard standards from the proposed Asheboro Southern Bypass to US 220.

- R-2536: (Asheboro Southern Bypass): Construct a four-lane freeway on new location south of Asheboro with interchanges at NC 49, I-73/74 (US 220), NC 159, and NC 42. Grade separations are recommended at Old NC Highway 49 (SR 1193), Mack Road (SR 1144), Southmont Drive (SR 1145), US 220B, Old Cox Road (SR 2834), Pine Hill Road (SR 2824), and Luck Road (SR 2604). This project includes a proposed connector (section D) for access to the NC Zoo at NC 159.

- Upgrade US 64, from US 220 (R-2220) to the proposed Asheboro Southern Bypass (R-2536) eastern terminus, to boulevard standards by converting the existing five-lane facility into a four-lane, median divided facility.

- Upgrade to freeway standards from the eastern terminus of the proposed Asheboro Southern Bypass (R-2536) to Pleasant Ridge Road (SR 1003) implementing full control of access along the facility. A grade separation is recommended at Iron Mountain Road (SR 2605).

- Upgrade the section of US 64 within Ramseur from Pleasant Ridge Road (SR 1003) to Reed Creek Road (SR 2668) to boulevard standards by converting the existing five-lanes into a four-lane median divided facility.

- US 64 Bypass (Ramseur): Construct a four-lane freeway on new location from US 64 near Pleasant Ridge Road (SR 1003) to US 64 east of Ramseur at Reed Creek Road (SR 2668). Interchanges are proposed at NC 22, NC 49 and both the western and eastern termini. A grade separation is proposed at Brady Street.

- Upgrade to freeway standards from Reed Creek Road (SR 2668) to Chatham County by converting the existing five-lanes into a four-lane median divided facility and implementing full control of access along the facility. A grade separation is recommended at Lee Layne Road (SR 2626) and an interchange is recommended at Browns Crossroad Road (SR 2469).

NC 49 (west of Asheboro):

- R-2535: Widen the existing two-lane facility to a four-lane divided facility from Waynick Meadow Road (SR 1174) west of Farmer to the proposed Asheboro Southern Bypass (R-2536) west of Old NC Highway 49 (SR 1193).

NC 49 (East Liberty Bypass):

- R-3803: Upgrade/Construct a two-lane major thoroughfare on a four-lane right of way, part on new location, from NC 49 Business (Fayetteville Street) at Kinro Road (SR 2427) to NC 49 (Swannanoa Street).

Pineview Road (SR 1712): Widen existing two lane facility to five lanes with a center left turn lane from the existing interchange at I-73/74 (US 220 Bypass) to US 220 Business.

Proposed Northeast Boulevard (Part on new Location): Widen the existing two lane facilities to five lane major thoroughfares with center turn lanes.

- Hub Morris Road (SR 2149), from US 220 Business to Old Liberty Road (SR 2261)
- On new location construct a five lane facility with center left turn lanes, from the intersection of Old Liberty Road (SR 2261) and Hub Morris Road (SR 2149) to the intersection of Giles Chapel Road (SR 2218) and Henley Country Road (SR 2215)
- Henley Country Road (SR 2215), from Giles Chapel Road (SR 2218) to south of Old Cedar Falls Road (SR 2216)
- On new location from south of the intersection of Henley Country Road (SR 2215) and Old Cedar Falls Road (SR 2216) to US 64/NC49, construct a five lane facility with a center turn lane.

Public Transportation and Rail

Asheboro Circulator Routes/Local Transit Service – It is recommended that two fixed-route bus services be developed through the Piedmont Authority for Regional Transportation (PART) in Asheboro. The routes would serve as circulators to PART's existing park-and-ride lots, and connecting to Route 10, Randolph County Express. These new routes would also service the primary corridors within the city which would be serving major destinations such as industrial plants, Randolph Hospital, Randolph County Community College, Senior Center, library, and shopping centers. A new transportation center in downtown Asheboro will be created to serve as the hub of express and circulator services.

US 311 Express – It is recommended that a fixed-route bus service be developed through PART on US 311 near the Randleman Lake community. This new route would include service to medical centers in the Winston-Salem area and also to the Winston-Salem Transportation Center.

NC Zoo Connector – It is recommended that a fixed route be established in conjunction with the proposed Asheboro Southern Bypass (TIP 2536-D), where PART will offer an alternate route to the NC Zoo. The Zoo Access Road will go from the Asheboro Southern Bypass to NC 159. This new route will enable greater frequency of service to the NC Zoo. These features can be seen in more detail on the Public Transportation and Rail Map.

Bicycle & Pedestrian

There is currently one state designated bicycle route that traverses Randolph County, NC Bike Route 6 (Piedmont Spur). Additionally, the 2003 Bicycling Randolph County Map identifies additional bicycle routes throughout the county. These routes are featured on Sheet 4 of Figure 1.

The 2007 Sidewalk Inventory (Piedmont Triad RPO) and the 2011 Piedmont Triad Trail Plan and Inventory were used to identify pedestrian facilities throughout Randolph County. These features are shown on Sheet 5 of Figure 1.

Adopted by:

Randolph County
Date: November 1, 2010

City of Asheboro
Date: September 9, 2010

Town of Franklinville
Date: September 14, 2010

Town of Liberty
Date: September 27, 2010

Town of Ramseur
Date: September 13, 2010

City of Randleman
Date: September 7, 2010

Town of Seagrove
Date: September 7, 2010

Town of Staley
Date: September 14, 2010

NCDOT
Date: January 6, 2011

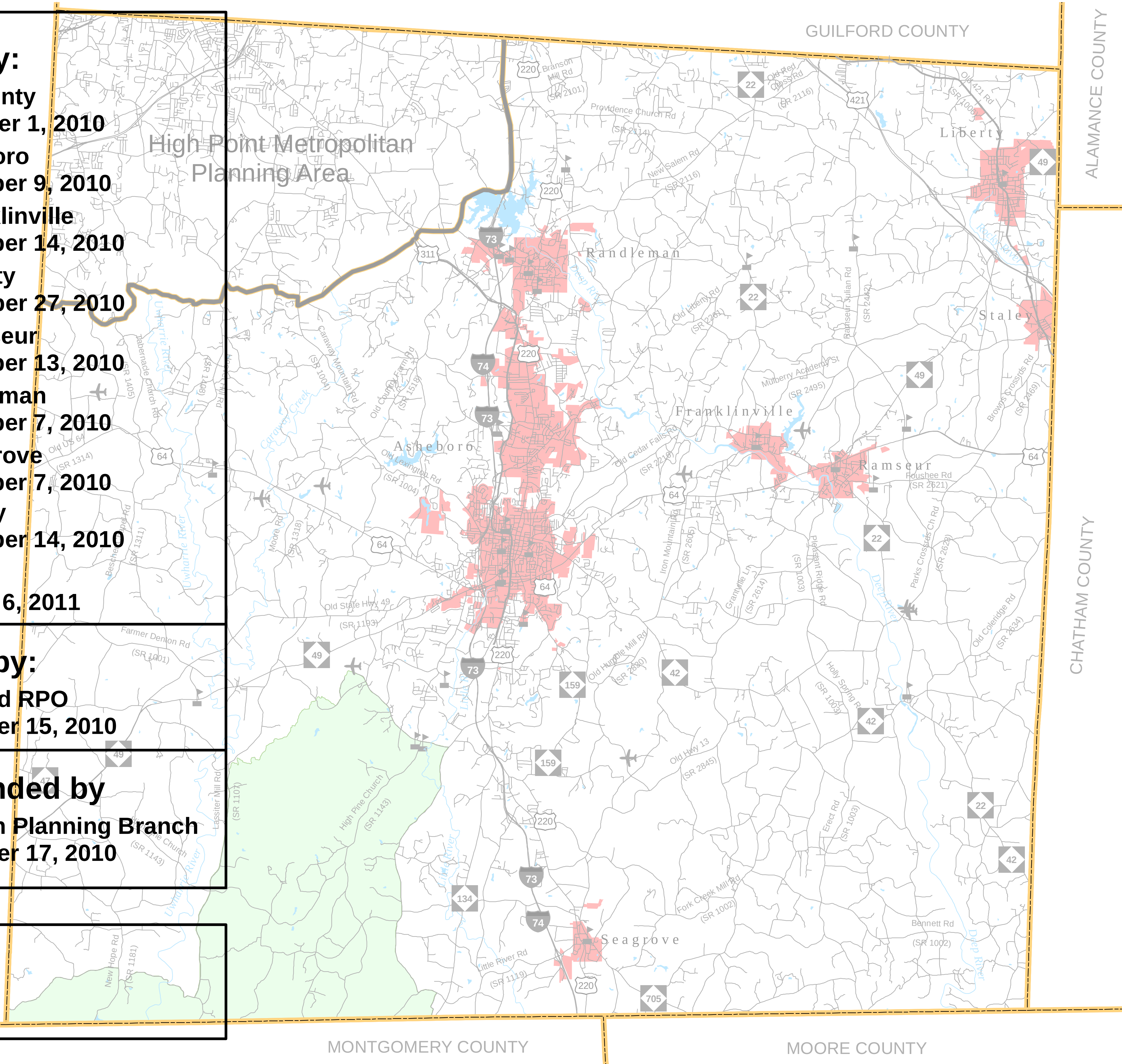
Endorsed by:

Piedmont Triad RPO
Date: December 15, 2010

Recommended by

Transportation Planning Branch
Date: December 17, 2010

NOTES:



Randolph County

North Carolina

Comprehensive Transportation Plan

Plan date: June 30, 2010

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

Figure 1 - Sheet 1 of 5

Base map date: December 2009

Refer to CTP document for more details

Highway Map

Randolph County

Comprehensive Transportation Plan

Plan date: June 30, 2010

High Point Metropolitan Planning Area

GUILFORD COUNTY

ALAMANCE COUNTY

DAVIDSON COUNTY

CHATHAM COUNTY

MONTGOMERY COUNTY

MOORE COUNTY

Inset A

Inset B

Inset C

Inset D

Inset E

Asheboro

Randleman

Liberty

Franklinville

Ramseur

Staley

Seagrove

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
- Existing Grade Separation
- Proposed Grade Separation

0 0.5 1 2 3 Miles

N W E S

Figure 1 - Sheet 2 of 5

Base map date: December 2009

Refer to CTP document for more details

Highway Map (Inset A)

Randolph County

Comprehensive Transportation Plan

Plan date: June 30, 2010

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
- Existing Grade Separation
- Proposed Grade Separation

Miles
0 0.5 1 2

N W E S

Figure 1 - Sheet 2A of 5

Base map date: December 2009

Refer to CTP document for more details

Inset B

Liberty

Bunton Swaim Rd (SR 2411)
York Martin Rd (SR 2410)
Old 421 Rd (SR 1006)
W Butler Ave
E Butler Ave (SR 2419)
Northwestern Loop (Butler Ave Ext)
Brookwood Ave (SR 2410)
Northeastern Loop (Hinshaw Rd Ext)
N Smith St
N Greensboro St
E Luther Ave
Starmount Rd (SR 2407)
W Starmount Ave
Faust St
Raleigh Ave
W Swannanoa Ave (SR 2261)
Old Liberty Rd (SR 2261)
NC 49 Bypass
Dameron Ave
Fayetteville St
Hinshaw Country Rd (SR 2426)
Rocky River
Troy Estate Rd (SR 2434)
Sizemore Ave Ext
Greensboro St (SR 1006)
Kinro Rd (SR 2427)
Southwestern Loop (Kinro Rd Loop)
49
421

0 0.25 0.5 1 Miles

Inset C

Franklinville

Cedar Falls Rd (SR 2226)
Clark Ave
Butlers Chapel Rd (SR 2499)
Academy St
Clark St (SR 2495)
Patterson Grove Rd (SR 2491)
Brady St Ext
Ramseur Julian Rd (SR 2442)
Alfred St
Depot St
Sunrise Ave
US 64 Bypass
Pleasant Cross Rd (SR 2224)
Pentecostal Church Rd (SR 2228)
Andrew Hunter Rd (SR 2235)
Faith Rock Rd (SR 2207)
Brady St
King Rd (SR 2488)
Kimrey St
Elam Ave
Liberty St
Columbia Ave
Main St (SR 2615)
Carter St
Ridge St
Reed Creek Rd (SR 2668)
Foushee Rd (SR 2621)
Brooklyn Ave (SR 2616)
Jones St (SR 2616)
Pleasant Ridge Rd (SR 1003)
Southern Bypass
Ramseur
22
49
64

0 0.25 0.5 1 1.5 Miles

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
- Existing Grade Separation
- Proposed Grade Separation

N W E S

Figure 1 - Sheet 2B of 5

Base map date: December 2009

Refer to CTP document for more details

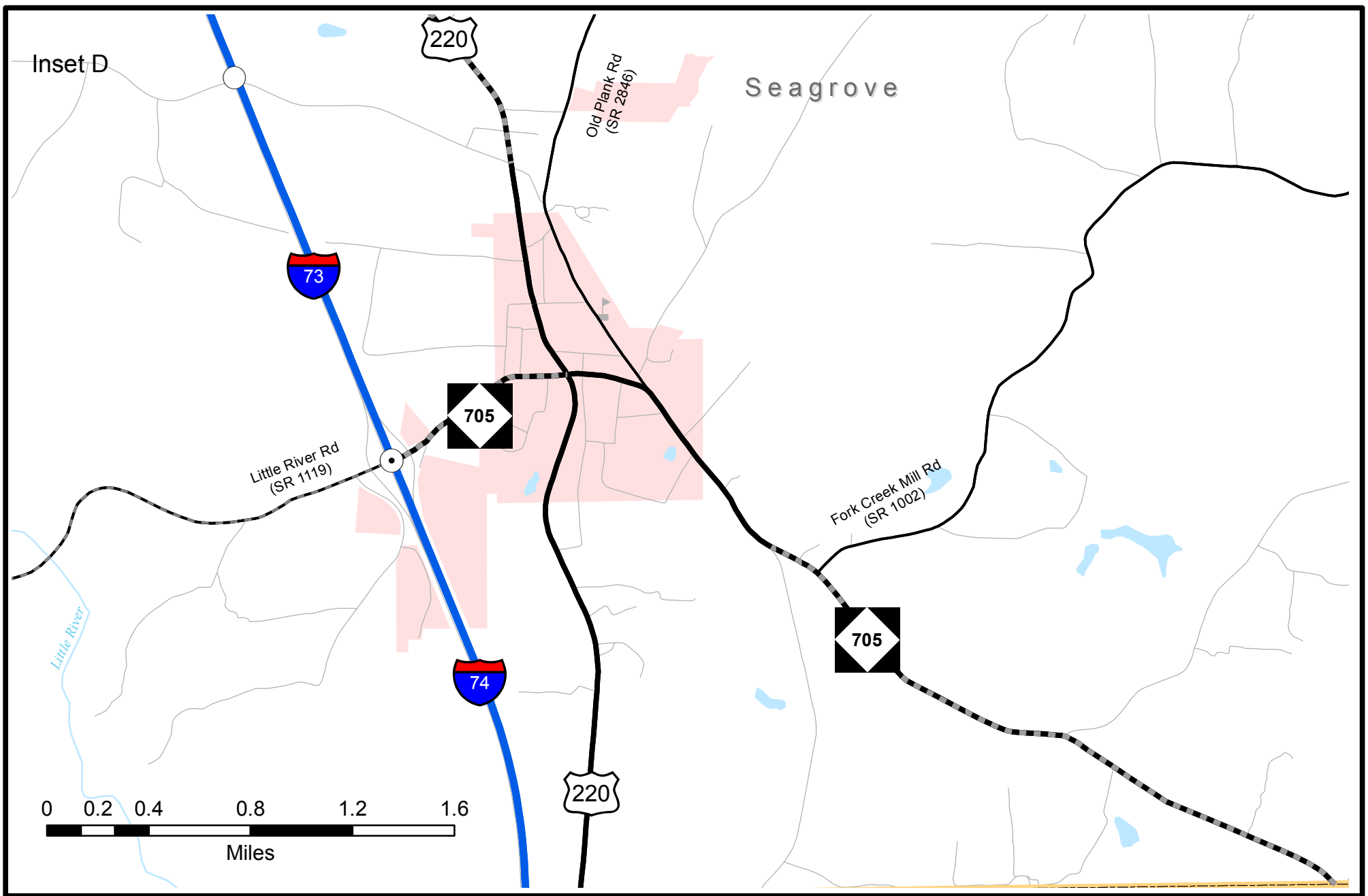
Highway Map (Insets B&C)

Randolph County

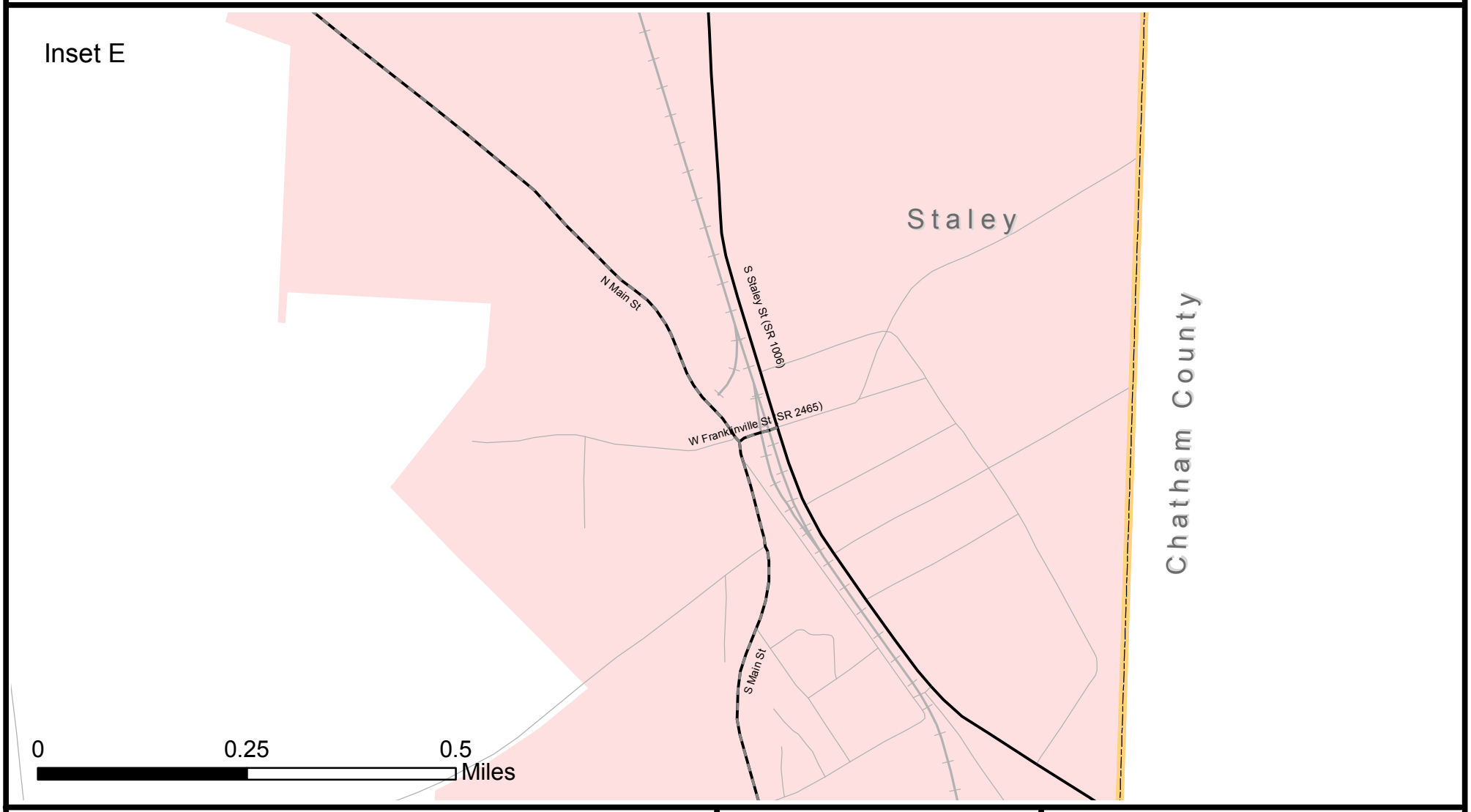
Comprehensive Transportation Plan

Plan date: June 30, 2010

Inset D



Inset E



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
- Existing Grade Separation
- Proposed Grade Separation

N W E S

Figure 1 - Sheet 2C of 5

Base map date: December 2009

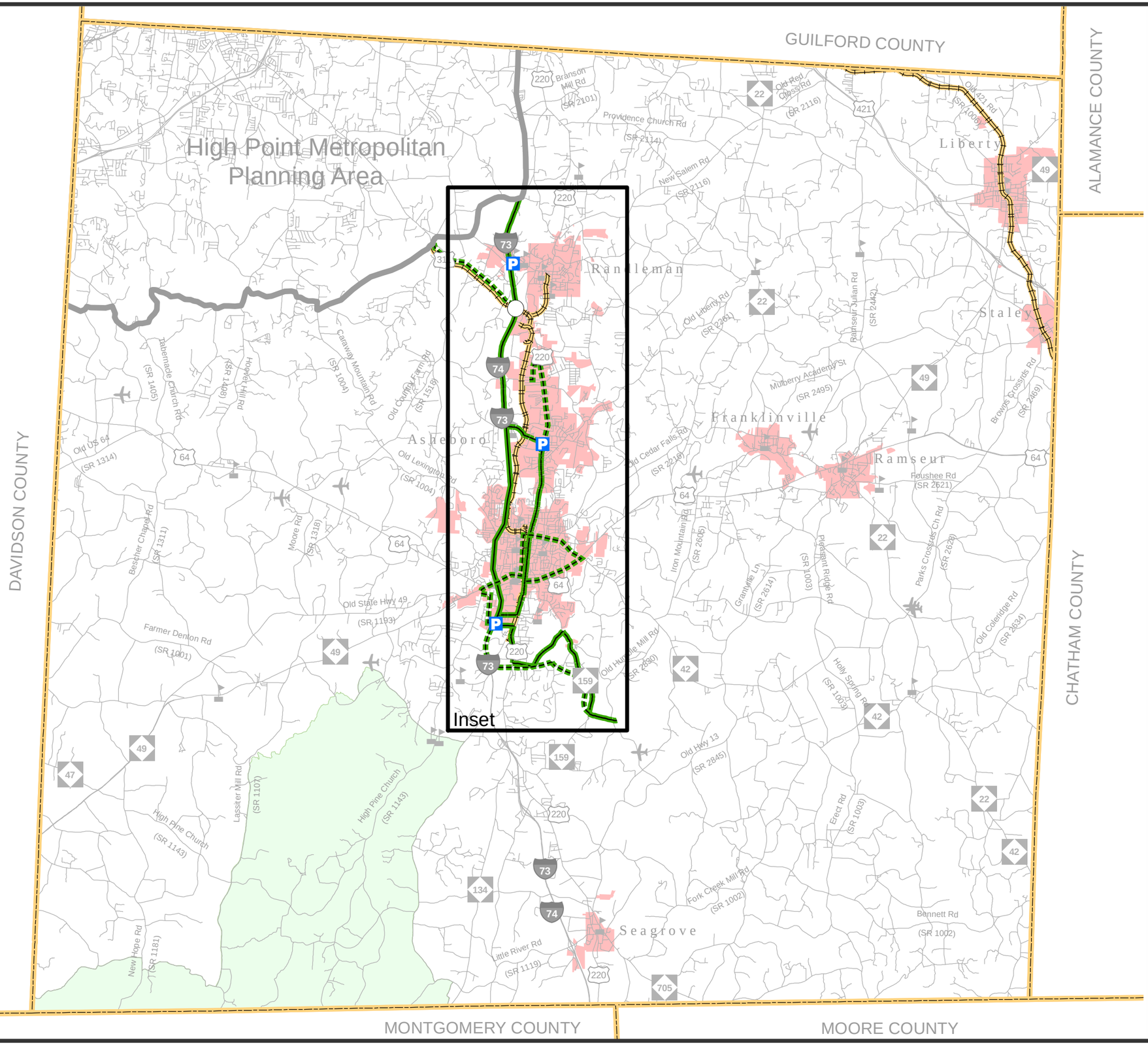
Refer to CTP document for more details

Highway Map (Insets D&E)

Randolph County

Comprehensive Transportation Plan

Plan date: June 30, 2010



Public Transportation and Rail Map

Randolph County

Comprehensive Transportation Plan

Plan date: June 30, 2010

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

Rail Stops
- Existing
- Recommended

Intermodal Connector
- Existing
- Recommended

Park and Ride Lot
- Existing
- Recommended

0 0.5 1 2 3 Miles

N W E S

Figure 1 - Sheet 3 of 5

Base map date: December 2009

Refer to CTP document for more details

Public Transportation and Rail Map (Inset)

Randolph County

Comprehensive Transportation Plan

Plan date: June 30, 2010

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

Rail Stops
- Existing
- Recommended

Intermodal Connector
- Existing
- Recommended

Park and Ride Lot
- Existing
- Recommended

Grade Seperation
- Existing Grade Separation
- Proposed Grade Separation

Miles
0 0.25 0.5 1 1.5

N W E S

Figure 1 - Sheet 3A of 5

Base map date: December 2009

Refer to CTP document for more details

Bicycle Map

Randolph County

Comprehensive Transportation Plan

Plan date: June 30, 2010

On-road
- Existing
- Needs Improvement
- Recommended

Off-road
- Existing
- Needs Improvement
- Recommended

Multi-Use Paths
- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

Miles
0 0.5 1 2 3

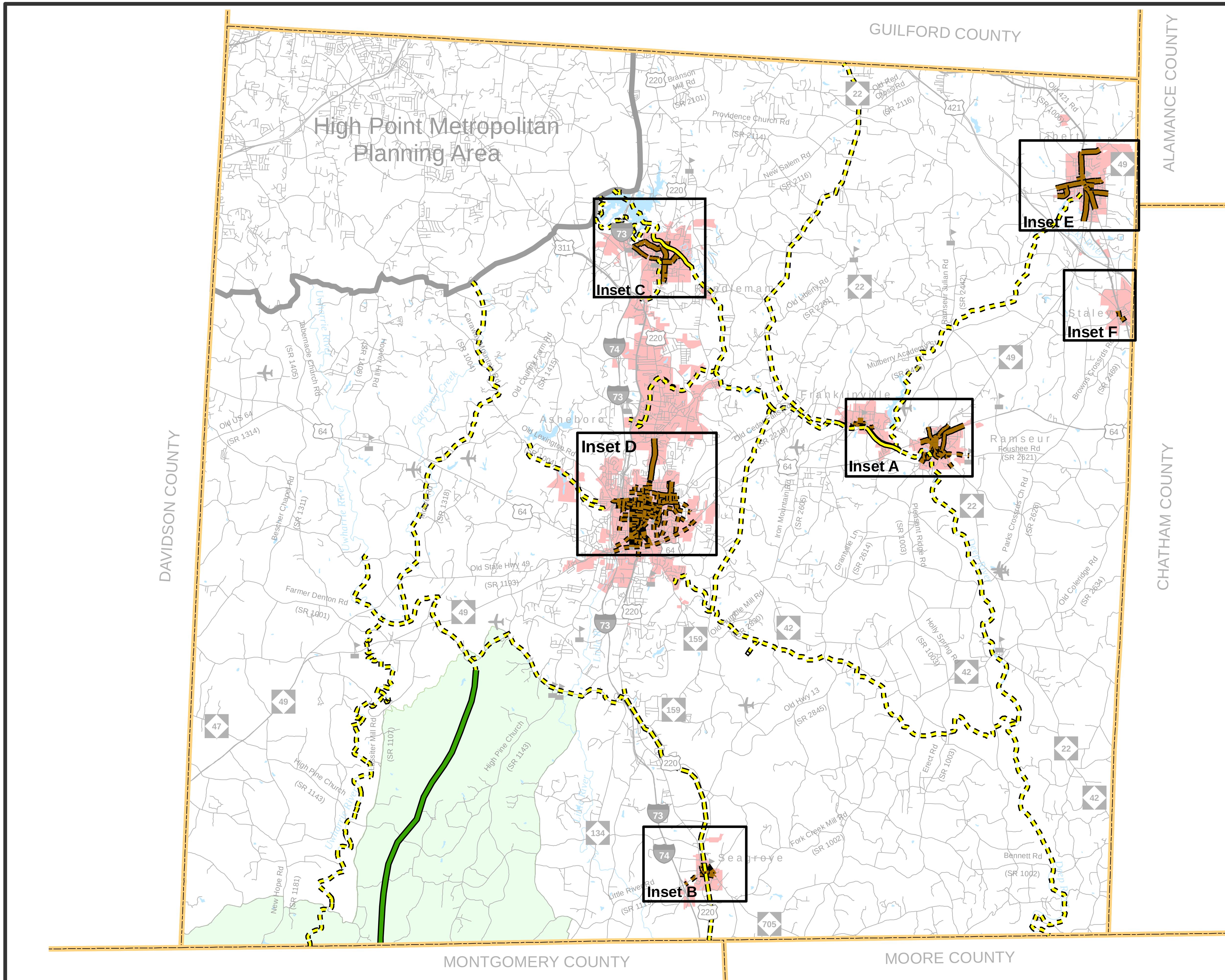
N E S W

Figure 1 - Sheet 4 of 5

Base map date: December 2009

Refer to CTP document for more details

GUILFORD COUNTY
ALAMANCE COUNTY
DAVIDSON COUNTY
CHATHAM COUNTY
MONTGOMERY COUNTY
MOORE COUNTY
High Point Metropolitan Planning Area
Randleman
Asheboro
Liberty
Staley
Franklinville
Ramseur
Seagrove



Pedestrian Map

Randolph County

Comprehensive Transportation Plan

Plan date: June 30, 2010

Sidewalks
- Existing
- Needs Improvement
- Recommended

Off-road
- Existing
- Needs Improvement
- Recommended

Multi-Use Paths
- Existing
- Needs Improvement
- Recommended

Existing Grade Separation

Proposed Grade Separation

Miles: 0 0.5 1 2 3

N W E S

Figure 1 - Sheet 5 of 5

Base map date: December 2009

Refer to CTP document for more details

Pedestrian Map (Insets A,B,C)

Randolph County

Comprehensive Transportation Plan

Plan date: June 30, 2010

Sidewalks
- Existing
- Needs Improvement
- Recommended

Off-road
- Existing
- Needs Improvement
- Recommended

Multi-Use Paths
- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

N W E S

Figure 1 - Sheet 5A of 5

Base map date: December 2009

Refer to CTP document for more details

Inset A

Franklinville

Ramseur

0 0.2 0.4 0.8 Miles

Inset B

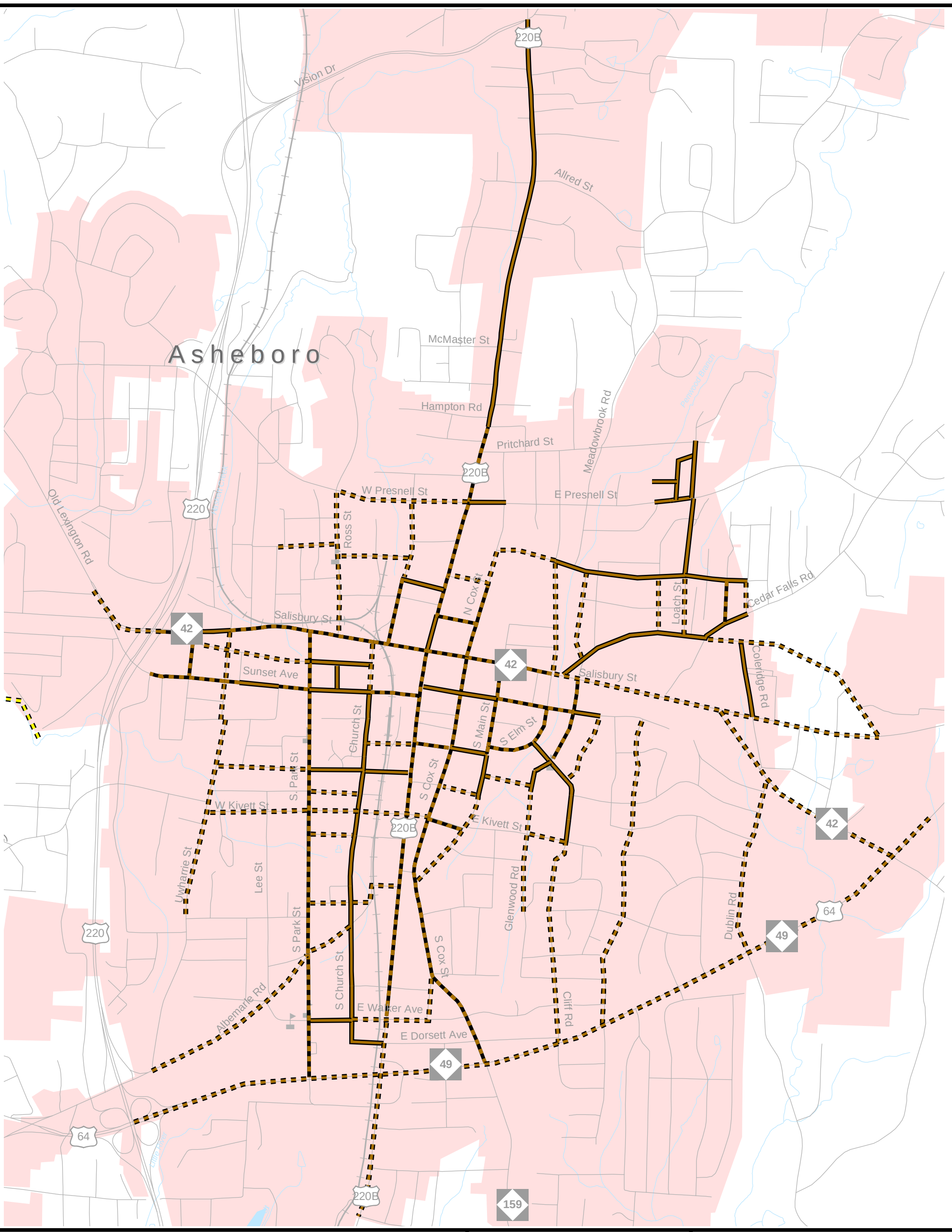
Seagrove

0 0.05 0.1 0.2 0.3 0.4 0.5 Miles

Inset C

Randleman

0 0.125 0.25 0.5 Miles



Sidewalks
- Existing
- Needs Improvement
- Recommended

Off-Road
- Existing
- Needs Improvement
- Recommended

Multi-Use Paths
- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

Miles
0 0.5

N W E S

Figure 1 - Sheet 5B of 5

Base map date: December 2009

Refer to CTP document for more details

Pedestrian Map (Inset D)

Randolph County

Comprehensive Transportation Plan

Plan date: June 30, 2010

Inset E

Liberty

Francis Dr
E Butler Ave
Hamilton Dr
W Brookwood Ave
E Brookwood Ave
Greensboro St
E Luther Ave
Smith St
Faust St
W Starmount Ave
E Swannanoa Ave
W Swannanoa Ave
Raleigh Ave
49
E Dameron Ave
S Kirkman St
S Fayetteville St
Greensboro St
Hinashaw Country Rd
S Fayetteville St
Kinro Rd
421
0 0.1 0.2 0.4 0.6 0.8 Miles

Inset F

Staley

Graham St
Franklinville St
Franklinville St (SR 2465)
Foushee St
Warren St
S Main St
Pittsboro St (SR 2466)
Edwards St
Columbia St (SR 2470)
W Railroad St (SR 2467)
S Staley St (SR 1006)
Chatham County
0 0.25 0.5 Miles

Sidewalks
- Existing
- Needs Improvement
- Recommended

Off-Road
- Existing
- Needs Improvement
- Recommended

Multi-Use Paths
- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

N W E S

Figure 1 - Sheet 5C of 5

Base map date: December 2009

Refer to CTP document for more details

Pedestrian Map (Inset E&F)

Randolph County

Comprehensive Transportation Plan

Plan date: June 30, 2010

I. Analysis of the Existing and Future Transportation System

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

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

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

Analysis Methodology and Data Requirements

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

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

Roadway System Analysis

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

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

The primary purpose of the SHC Vision Plan is to provide a network of high-speed, safe, reliable highways throughout North Carolina. The primary goal to support this purpose is to create a greater consensus towards the development of a genuine vision for each corridor – specifically towards the identification of a desired facility type (Freeway, Expressway, Boulevard, or

Thoroughfare) for each corridor. Individual Comprehensive Transportation Plans shall incorporate the long-term vision of each corridor. Refer to Appendix A for contact information.

In the development of this plan, travel demand was projected from 2009 to 2035 using a trend line analysis based on Annual Average Daily Traffic (AADT) from 1991 to 2009. In addition, local land use plans and growth expectations were used to further refine future growth rates and patterns. The established future growth rates were endorsed by the Randolph County Commissioners on July 6, 2009.

Existing and future travel demand is compared to existing roadway capacities. Capacity deficiencies occur when the traffic volume of a roadway exceeds the roadway's capacity. Roadways are considered near capacity when the traffic volume is at least eighty percent of the capacity. Refer to Figures 2 and 3 for existing and future capacity deficiencies.

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

- Geometry of the road (including number of lanes), horizontal and vertical alignment, and proximity of perceived obstructions to safe travel along the road;
- Typical users of the road, such as commuters, recreational travelers, and truck traffic;
- Access control, including streets and driveways, or lack thereof, along the roadway;
- Development along the road, including residential, commercial, agricultural, and industrial developments;
- Number of traffic signals along the route;
- Peaking characteristics of the traffic on the road;
- Characteristics of side-roads feeding into the road; and
- Directional split of traffic or the percentages of vehicles traveling in each direction along a road at any given time.

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

LOS D indicates "practical capacity" of a roadway, or the capacity at which the public begins to express dissatisfaction. The practical capacity for each roadway was developed based on the 2000 Highway Capacity Manual using the NCLOS Program. Recommended improvements and overall design of the transportation plan were based upon achieving a minimum LOS D on existing facilities and a LOS C for new facilities. Refer to Appendix E for detailed information on LOS.

Traffic Crash Analysis

Traffic crashes are often used as an indicator for locating congestion and roadway problems. Crash patterns obtained from an analysis of crash data can lead to the identification of improvements that will reduce the number of crashes. A crash analysis was performed for the Randolph County CTP for crashes occurring in the planning area between January 1, 2007 and December 31, 2009. During this period, a total of 42 intersections were identified as having a high number of crashes as illustrated in Figure 4. Refer to Appendix F for a detailed crash analysis.

Bridge Deficiency Assessment

Bridges are a vital and unique element of a highway system. First, they represent the highest unit investment of all elements of the system. Second, any inadequacy or deficiency in a bridge reduces the value of the total investment. Third, a bridge presents the greatest opportunity of all potential highway failures for disruption of community welfare. Finally, and most importantly, a bridge represents the greatest opportunity of all highway failures for loss of life. For these reasons, it is imperative that bridges be constructed to the same design standards as the system of which they are a part.

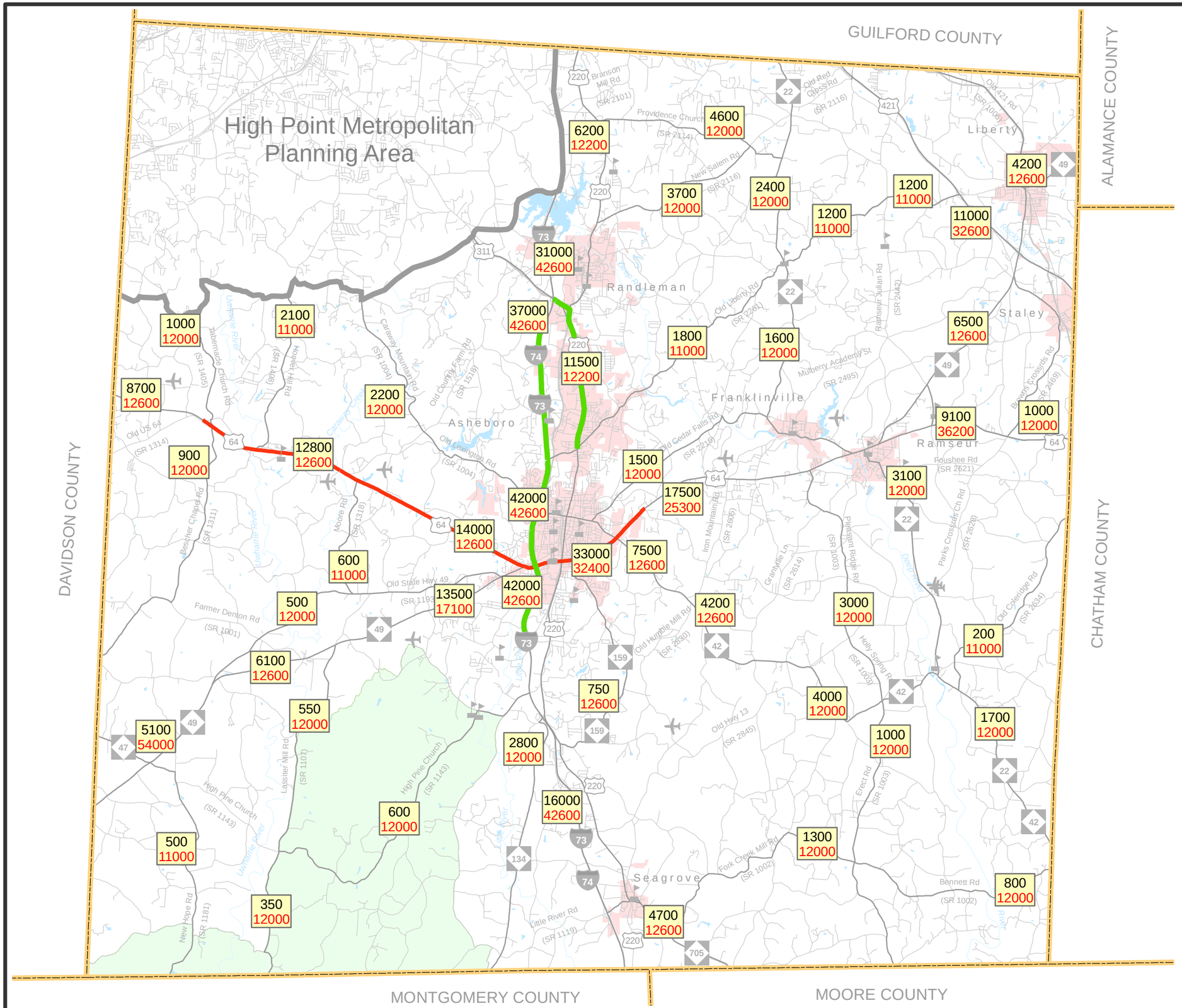
The NCDOT Bridge Maintenance Unit inspects all bridges in North Carolina at least once every two years. Bridges having the highest priority are replaced as Federal and State funds become available. Eighty-five deficient bridges were identified within the planning area and are illustrated in Figure 5. Refer to Appendix G for more detailed information.

FIGURE 2

2009 VOLUMES AND CAPACITY DEFICIENCIES

Randolph County

Comprehensive Transportation Plan



- Near Capacity
- Over Capacity
- 000 / 000 — 2009 Volumes (AADT) / 2009 Capacity
- Schools
- Airports
- Study Roads
- Roads
- Railroads
- Rivers and Streams
- Water Bodies
- Municipal Boundary
- National Forest
- Planning Boundary
- County Boundary

Miles
0 0.5 1 2 3

N W E S

Base map date: December 2009

FIGURE 3

2035 VOLUMES AND CAPACITY DEFICIENCIES

Randolph County

Comprehensive Transportation Plan

GUILFORD COUNTY

ALAMANCE COUNTY

DAVIDSON COUNTY

CHATHAM COUNTY

MONTGOMERY COUNTY

MOORE COUNTY

High Point Metropolitan Planning Area

Asheboro

Randleman

Liberty

Staley

Franklinville

Ramseur

Seagrove

1400 12000	6000 11000
13000 12600	3100 12000
1300 12000	20500 12600
900 11000	23500 12600
800 12000	10000 17100
8100 12600	800 12000
7800 54000	800 12000
800 11000	400 12000
9300 12200	9000 12000
7500 12000	2800 12000
2800 11000	2000 11000
4300 12600	21000 32600
57500 42600	65000 42600
2600 11000	1900 12000
7800 12600	14900 12200
14000 36200	1200 12000
1800 12000	64000 42600
27000 25300	2600 12000
48000 32400	10000 12600
52000 42600	5600 12600
5200 12000	500 11000
1400 12600	5200 12000
2300 12000	1500 12000
4900 12000	32000 42600
2000 12000	1000 12000
5700 12600	

Schools

Airports

Study Roads

Roads

Railroads

Rivers and Streams

Water Bodies

Municipal Boundary

National Forest

Planning Boundary

County Boundary

000 000 2035 Volumes (AADT) 2009 Capacity

Near Capacity

Over Capacity

0 0.5 1 2 3 Miles

N W E S

Base map date: December 2009

FIGURE 4

Crash Locations

January 1, 2007 - December 31, 2009

Randolph County

Comprehensive Transportation Plan

GUILFORD COUNTY

ALAMANCE COUNTY

DAVIDSON COUNTY

CHATHAM COUNTY

MOORE COUNTY

High Point Metropolitan Planning Area

Asheboro

Randleman

Liberty

Staley

Franklinville

Ramseur

Seagrove

INSET

Legend

- Crash Location (# Map Index)
- Schools
- Airports
- Study Roads
- Roads
- Railroads
- Rivers and Streams
- Water Bodies
- Municipal Boundary
- National Forest
- Planning Boundary
- County Boundary

0 0.5 1 2 3 Miles

N W E S

Base map date: December 2009

Refer to Appendix F for more details

FIGURE 5

Deficient Bridges

Randolph County

Comprehensive
Transportation Plan

Legend

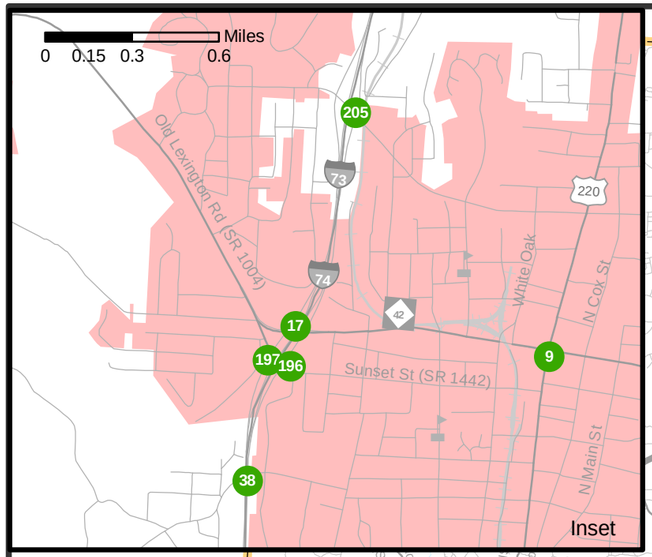
- # Deficient Bridges (# Bridge Number)
- Schools
- Airports
- Study Roads
- Roads
- Railroads
- Rivers and Streams
- Municipal Boundary
- National Forest
- Planning Boundary
- County Boundary

Miles
0 0.5 1 2 3

N
W E
S

Base map date: December 2009

Refer to Appendix G for more details



Public Transportation and Rail

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

Public Transportation

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

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

An inventory of existing and planned fixed public transportation routes for the planning area is presented on Sheet 3 of Figure 1. There is currently one fixed-route bus service in Randolph County, Route 10, which is operated by the Piedmont Authority Regional Transporportation (PART). This route comes from Greensboro, along US 220 and has a final destination at the NC Zoo. Additionally the Regional Coordinated Area Transportation System (RCATS) provides public transportation service to all Randolph County residents on an advance reservation basis.

In 2009, the Piedmont Triad Rural Planning Organization (PTRPO) served as the lead planning agency in developing a Locally Coordinated Public Transit-Human Service Transportation Plan. This plan identified the top service priority as fixed route services between major population, education and employment centers in bordering MPO’s and Asheboro. The acquisition of

routing software was identified also as a top capital improvement priority. The recommendation from this plan is for two Asheboro circulator routes and the provision of on-board attendants to accompany persons using RCATS door-to-door service.

All recommendations for public transportation were coordinated with the local governments and the Public Transportation Division of NCDOT. Refer to Appendix A for contact information.

Rail

Today North Carolina has 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.

The North Carolina Department of Transportation sponsors two passenger trains, the Carolinian and Piedmont. The Carolinian runs between Charlotte and New York City, while the Piedmont train carries passengers from Raleigh to Charlotte and back everyday. Combined, the Carolinian and Piedmont carry more than 200,000 passengers each year.

There are two major freight railroad companies that operate in North Carolina, CSX Transportation and Norfolk Southern Corporation. Also, there are more than 20 smaller freight railroads, known as shortlines.

An inventory of existing and planned rail facilities for the planning area is presented on Sheet 3 of Figure 1. Within the county, there are currently two active rail lines operated by Norfolk Southern; one is in the central portion of the county and ends south of Asheboro, and the other is in the northeast corner of the county traversing Liberty and Staley. There are no rail improvements proposed in this plan. All recommendations for rail are coordinated with the local governments and the Rail Division of NCDOT. Refer to Appendix A for contact information.

Bicycles & Pedestrians

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

NCDOT's Bicycle Policy, updated in 1991, clarifies responsibilities regarding the provision of bicycle facilities upon and along the 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 the NCDOT are based upon this policy.

The 2000 NCDOT Pedestrian Policy Guidelines specifies that NCDOT will participate with localities in the construction of sidewalks as incidental features of highway improvement projects. At the request of a locality, state funds for a sidewalk are made available if matched by the requesting locality, using a sliding scale based on population.

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

Inventories of existing and planned bicycle and pedestrian facilities for the planning area are presented on Sheets 4 and 5 of Figure 1. The 2003 Bicycling Randolph County study and the

2007 Piedmont Triad RPO Sidewalk Inventory were utilized in the development of these elements of the CTP. All recommendations for bicycle and pedestrian facilities were coordinated with the local governments and the NCDOT Division of Bicycle and Pedestrian Transportation. Refer to Appendix A for contact information.

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 2009 Randolph County Growth Management Plan was used to meet this requirement and is illustrated in Figures 6 and 7.

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.

The 2009 Randolph County Growth Management Plan establishes growth in six distinct growth areas as depicted in Figure 7. Areas identified as primary growth areas include the US 64/NC 49 corridor between Asheboro and Staley; the I-73/74 corridor north and south of Asheboro and along the proposed site for the Asheboro Southern Bypass. A brief summary of each growth area is listed below:

- Primary Growth Area: Includes areas that are likely to have access to urban infrastructure services, such as water and sewer, within the foreseeable future. Predominately mixed use that will include residential, commercial and industrial development. Higher urban type density level can be anticipated in this area.

- Secondary Growth Area: Transitional residential development is predominant in this area with major subdivisions scattered between agricultural and commercial land use patterns. Both public water and sewer infrastructure access is unlikely within the immediate future. The availability of large undeveloped tracts can substantially alter the development character of established residential areas.

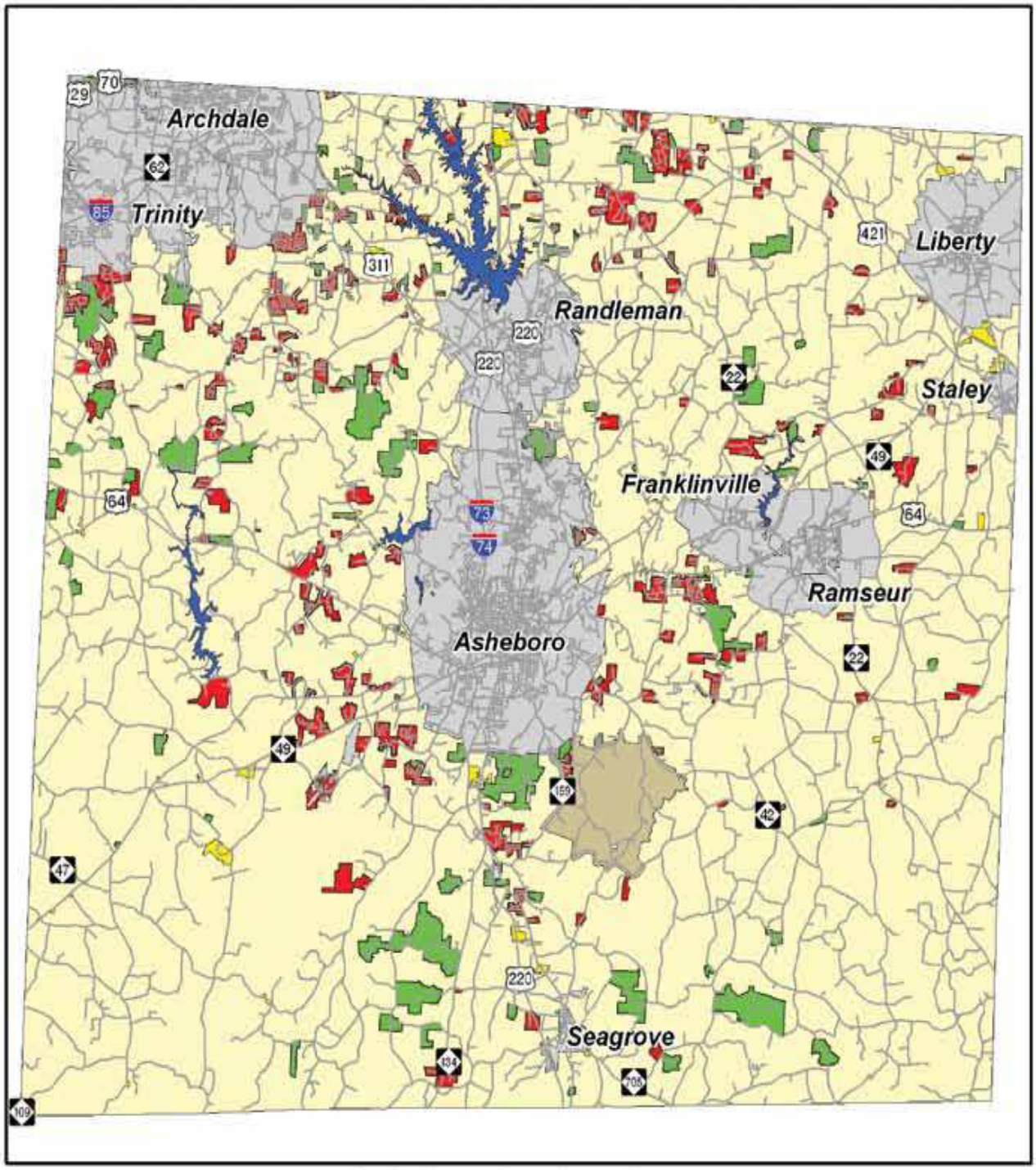
- Rural Growth Area: Characterized by traditional agricultural operations, pasture land, forestry, rural lot residential subdivisions, and open space scattered non-farm residences on large tracts of land. Contains scenic, historic, and other natural heritage assets that contribute to the unique characteristics of the land. Large lot residential subdivisions are anticipated with special designs to sustain groundwater recharge capacity, stormwater retention, and rural character.

- Watershed Environmental Area: Mixed density and impervious surface coverage. Primary development considerations are to protect public drinking water supplies. Unlike other growth areas, Watershed Environmental Areas overlay parts of all the other growth management designations.

- Zoological Park Environmental Area: Established in 1973 and includes the property occupied by the N.C. Zoo, and a special zoning area extending from one or two miles from the Zoo boundary. Includes a mixture of relatively low-density land uses emphasizing the retention of natural features and the preservation of a rural setting. Land uses in this area are intended to enhance and preserve the character of the Zoo site.

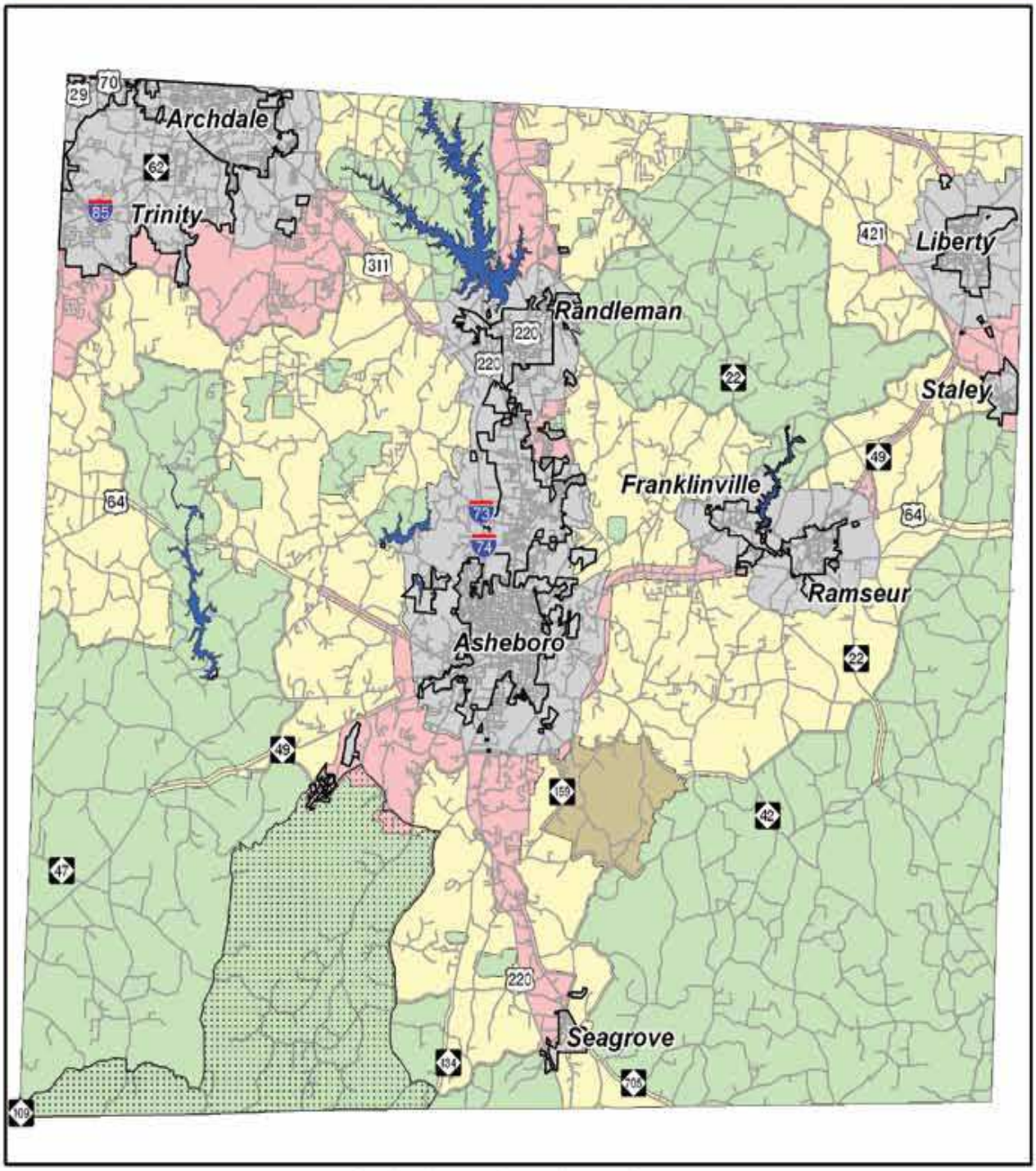
- Municipal Growth Area: Contained within the corporate limits or extraterritorial planning & zoning jurisdictions of municipalities. Mixed high-density urban growth is anticipated

FIGURE 6 – RANDOLPH COUNTY EXISTING LAND USE



Back of Figure

FIGURE 7 – RANDOLPH COUNTY GROWTH MANAGEMENT AREAS



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Consideration of Natural and Human Environment

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

A full listing of environmental features that were examined as a part of this study is shown in the following tables utilizing the best available data. Environmental features occurring within Randolph County are shown in Figures 8 and 9.

Table 1 – Environmental Features

- Airport Boundaries
- Anadromous Fish Spawning Areas
- Beach Access Sites
- Bike Routes (NCDOT)
- Coastal Marinas
- Colleges and Universities
- Conservation Tax Credit Properties
- Emergency Operation Centers
- Federal Land Ownership
- Fisheries Nursery Areas
- Geology (including Dikes and Faults)
- Hazardous Substance Disposal Sites
- Hazardous Waste Facilities
- High Quality Water and Outstanding Resource Water Management Zones
- Hospital Locations
- Hydrography (1:24,000 scale)
- Land Trust Priority Areas
- National Heritage Element Occurrences
- National Wetlands Inventory
- North Carolina Coastal Region Evaluation of Wetland Significance (NC-CREWS)
- Paddle Trails – Coastal Plain
- Railroads (1:24,000 scale)
- Recreation Projects – Land and Water Conservation Fund
- Sanitary Sewer Systems – Discharges, Land Application Areas, Pipes, Pumps and Treatment Plants
- Schools – Public and Non-Public
- Shellfish Strata
- Significant Natural Heritage Areas
- State Parks
- Submersed Rooted Vasculars
- Target Local Watersheds - EEP
- Trout Streams (DWQ)
- Trout Waters (WRC)
- Water Distribution Systems – Pipes, Pumps, Tanks, Treatment Plants, and Wells
- Water Supply Watersheds
- Wild and Scenic Rivers

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

Table 2 – Restricted Environmental Features

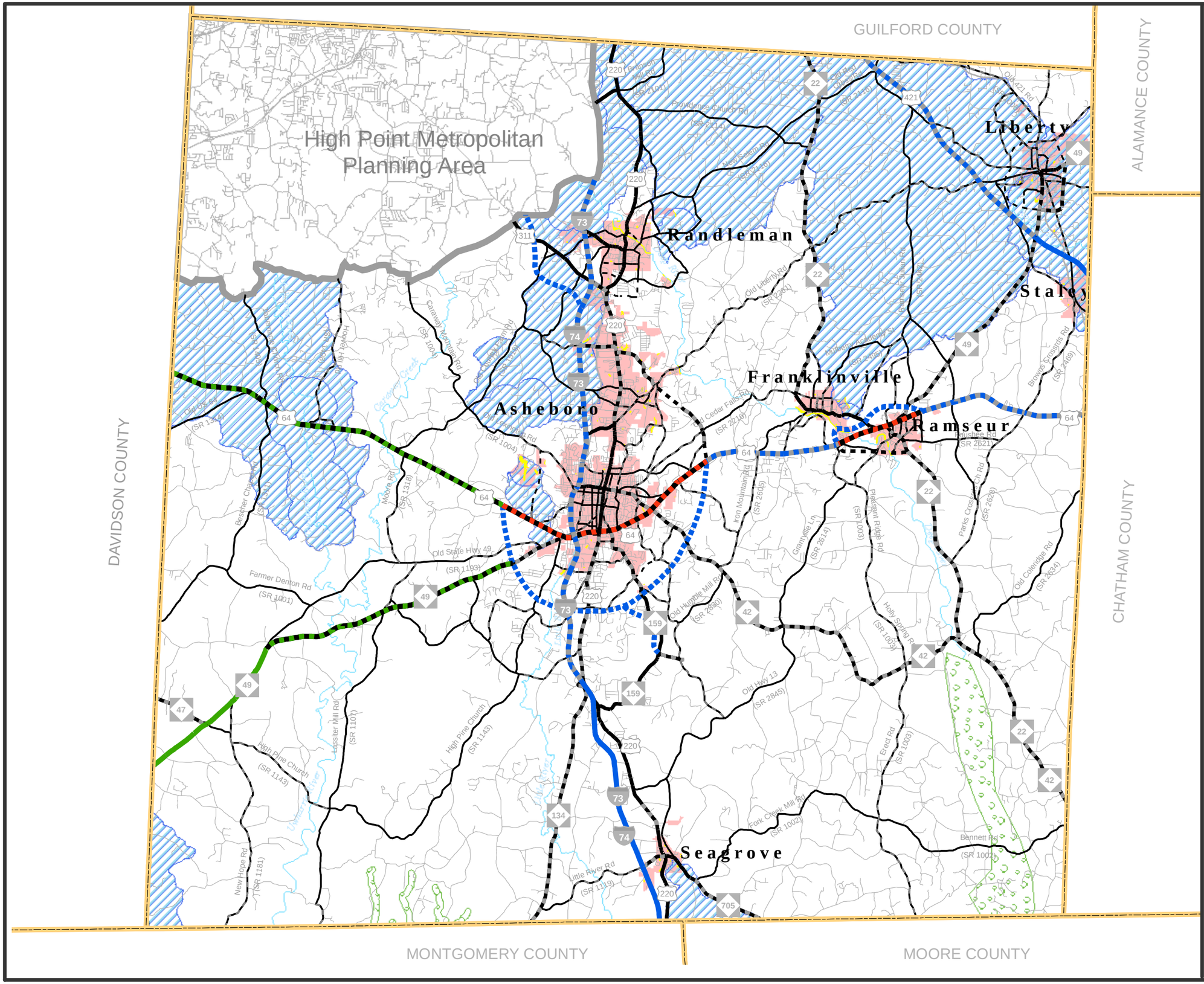
- Archaeological Sites
- Historic National Register Districts
- Historic National Register Structures
- Macrosite Boundaries
- Managed Areas
- Megasite Boundaries

FIGURE 8

Environmental Features

Randolph County

Comprehensive Transportation Plan



Legend

- National Wetland Inventory
- Land Trust Priority Areas
- Water Supply Watersheds
- Roads
- Railroads
- Rivers and Streams
- Municipal Boundary
- Planning Boundary
- County Boundary

0 0.5 1 2 3 Miles

N W E S

Base map date: December 2009

FIGURE 9

Environmental Features

Randolph County

Comprehensive Transportation Plan

GUILFORD COUNTY

ALAMANCE COUNTY

DAVIDSON COUNTY

CHATHAM COUNTY

MONTGOMERY COUNTY

MOORE COUNTY

High Point Metropolitan Planning Area

Liberty

Randleman

Staley

Asheboro

Franklinville

Ramseur

Seagrove

Legend

- Hospital Locations
- Airport Boundaries
- Bike Route (NCDOT)
- Hazardous Substance Disposal Site
- Recreation Projects Land Water
- Targeted Local Watershed
- Roads
- Railroads
- Rivers and Streams
- Municipal Boundary
- Planning Boundary
- County Boundary

0 0.5 1 2 3 Miles

N W E S

Base map date: December 2009

Public Involvement

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

A meeting was held with the Randolph County Board of Commissioners in April 2006 to formally initiate the study, provide an overview of the transportation planning process, and to gather input on area transportation needs.

Throughout the course of the study, the Transportation Planning Branch cooperatively worked with the CTP steering committee, which included a representative from each municipality, county staff, and the Piedmont Triad RPO to provide information on current local plans, to develop transportation vision and goals, to discuss population and employment projections, and to develop 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 two public drop-in sessions in Randolph County to present the proposed Comprehensive Transportation Plan to the public and solicit comments. The first meeting was held on December 1, 2009 at the Randolph County Office Building from 5:30-8:00 pm and the second meeting was held on August 16, 2010 at the Randolph County Office Building from 5:00-7:00pm. Each session was publicized in the local newspaper. No comment forms were submitted during either session.

Public hearings were held for all jurisdictions within Randolph County as listed below:

- Asheboro Council Meeting – September 9, 2010
- Franklinville Council Meeting – September 14, 2010
- Liberty Council Meeting – September 27, 2010
- Ramseur Council Meeting – September 13, 2010
- Randleman Council Meeting – September 7, 2010
- Seagrove Council Meeting – September 7, 2010
- Staley Council Meeting – September 14, 2010
- Randolph County Board of Commissioner's Meeting – November 1, 2010

The purpose of these meetings was to present the recommendations and to solicit input from the public. The CTP was adopted at each of these meetings.

The Piedmont Triad RPO endorsed the CTP on December 15, 2010. The North Carolina Board of Transportation voted to mutually adopt the Randolph County CTP on January 6, 2011.

II. Recommendations

This report documents the development of the 2011 Randolph County CTP as shown in Figure 1. This chapter presents recommendations for each mode of transportation in Randolph County. Refer to Appendix I for recommendations from existing plans that were incorporated as part of this CTP.

Implementation

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

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

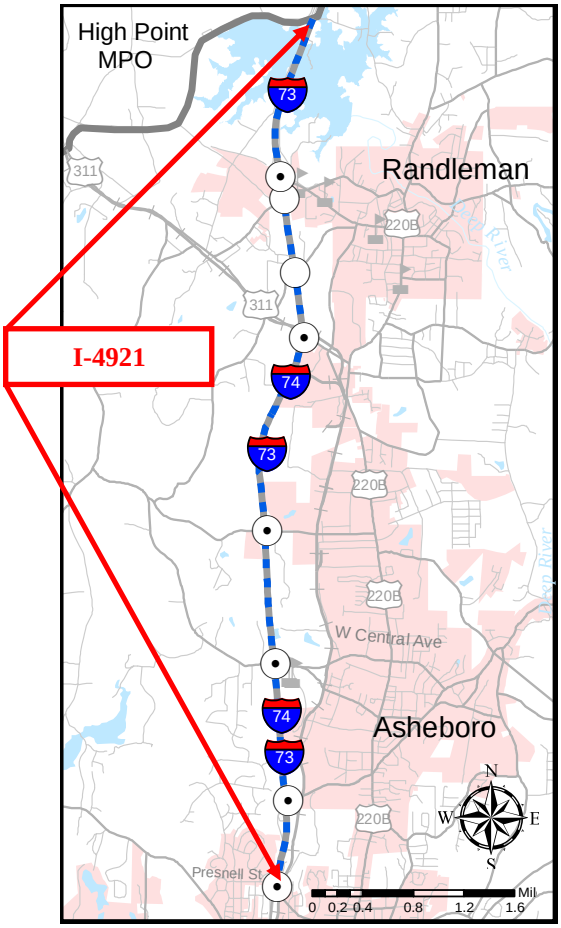
Prior to implementing projects from the CTP, additional analysis will be necessary to meet the National Environmental Policy Act (NEPA) or the North Carolina (or State) Environmental Policy Act (SEPA). This CTP may be used to provide information in the NEPA/SEPA process.

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

Problem Statements

HIGHWAY

I-73/74/US 220 Proposed improvements from the HPMPO boundary north of Randleman Lake to West Presnell Street (SR 1462) | **Local ID: I-4921** | **Last updated: 08/11/11**



Identified Problem

I-73/74/US 220 is projected to be over capacity by 2035 from the High Point MPO boundary north of Randleman Lake to West Presnell Street (SR 1462) in Asheboro. The primary purpose of this project is to relieve congestion on the existing facility such that a minimum Level of Service (LOS) D can be achieved.

Justification of Need

I-73/74/US 220 is a major north-south corridor in Randolph County, connecting Randleman and Asheboro with rural areas in the northern and southern parts of the county. The facility is a vital artery in moving people and goods through North Carolina, ultimately connecting North Carolina to South Carolina and Virginia.

I-73/74/US 220 is currently a 4-lane freeway with 12-foot lanes and is part of the statewide tier of the NC Multimodal Investment Network (NCMIN). I-73/74/US 220 is also part of the North Carolina Intrastate System and is intended to provide high-speed, safe travel service throughout the State.

By 2035, this facility is projected to be over capacity from the High Point MPO boundary north of Randleman Lake to West Presnell Street (SR 1462) based on providing a LOS D. Traffic is projected to range from 31,000 to 42,000 vehicles per day (vpd) in 2009 to 51,000 to 65,000 vpd in 2035, compared to a LOS D capacity of 42,600 vpd.

Community Vision and Problem History

Due to anticipated high traffic volumes in the future years, local officials have the desire to maintain the integrity of I-73/74; which is vital to the continued success of tourism for this area. This facility is the primary route used to access the NC Zoo, potteries in the Seagrove area south of Asheboro, and beaches in southern North Carolina and South Carolina.

The 2001 Asheboro Thoroughfare Plan identified this segment of road as deficient in the design year of 2025.

CTP Project Proposal

Project Description and Overview

The CTP project proposal (TIP No. I-4921) is part of TIP project I-4921 which includes widening the existing facility from four to six-lanes and upgrading to interstate standards from West Presnell Street (SR 1462) in Asheboro to I-85 in Greensboro.

The proposed improvements will help to reduce congestion along this facility. Additionally, it will fulfill the SHC vision, which recommends I-73/74 be upgraded to interstate standards.

Natural & Human Environmental Context

Based on a planning level environmental assessment using available GIS data, parts of this project are within the water supply and the targeted local watersheds. This facility also has three deficient bridges; bridges 235 & 236 cross Randleman Lake and are functionally obsolete; and bridge 205 crosses West Presnell Street (SR 1462) and is structurally deficient.

Relationships to Land Use Plans

The 2009 Randolph County Growth Management Plan recognizes that Asheboro and Randolph County are anticipating an influx of both urban and suburban residential growth. The residential growth is anticipated to spread outwards from the core of Asheboro to the northern, western and eastern boundaries of Randolph County. A future Interstate (I-73/I-74) along the current routing of US 220 and Asheboro's Southern Bypass (R-2536) will change land use patterns in the southern part of the county by attracting high intensity uses (retail and employment) at major intersections.

Linkages to Other Plans and Proposed Project History

Interstates 73 and 74 were initially authorized by the Intermodal Surface Transportation and Efficiency Act (ISTEA) of 1991, as one of several high priority transportation corridors to be designated across the country. I-73/74/US 220 is designated as a freeway on NCDOT's Strategic Highway Corridor (SHC) Vision Plan.

This project directly connects to the proposed US 311 Bypass (R-2606) and to the I-73/74/US 220 improvements (I-4407) which includes upgrading the facility to interstate standards. This project continues into the High Point MPO planning area as TIP project I-4921. Improvements to this section of I-73/74/US 220 were identified in the 2001 Asheboro Thoroughfare Plan.

Multi-modal Considerations

The Piedmont Authority of Regional Transportation (PART) has an existing bus route from Guilford County to Randolph County, using the I-73/74 corridor. Additionally, PART has service enhancements that are being considered, which are directly connected to this project: US-311 Express, Park-n-Ride lot west of Randleman, and Asheboro Circular Routes/Local Transit Services.

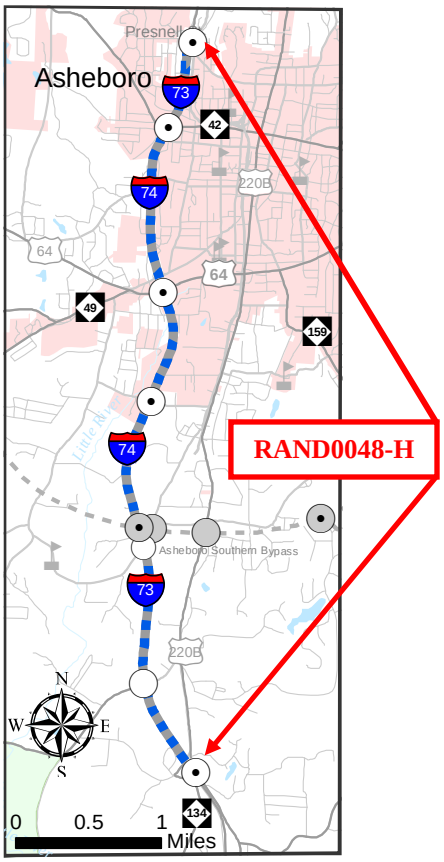
There is currently one active rail line in the project study area, which is operated by Norfolk Southern. The proposed project crosses this rail line near US 311 and is grade separated.

Public/ Stakeholder Involvement

No significant issues associated with this project were identified during the public/stakeholder involvement process.

I-73/74/US 220 Proposed improvements from West Presnell Street (SR 1462) in Asheboro to NC 134/ US 220 Business

Local ID: RAND0048-H
Last updated: 11/21/11



Identified Problem

I-73/74/US 220 is projected to be over capacity by 2035 from West Presnell Street (SR 1462) in Asheboro to NC 134/US 220 Business. The primary purpose of this project is to relieve congestion on the existing facility such that a minimum Level of Service (LOS) D can be achieved.

Justification of Need

I-73/74/US 220 is a major north-south corridor in Randolph County, connecting Randleman and Asheboro with rural areas in the northern and southern parts of the county. The facility is a vital artery in moving people and goods through North Carolina, ultimately connecting North Carolina to South Carolina and Virginia.

I-73/74/US 220 is currently a 4-lane freeway with 12-foot lanes and is part of the statewide tier of the NC Multimodal Investment Network (NCMIN). I-73/74/US 220 is also part of the North Carolina Intrastate System and is intended to provide high-speed, safe travel service throughout the State.

By 2035, this facility is projected to be over capacity from West Presnell Street (SR 1462) to Southmont Drive (SR 1145) based on providing a LOS D. Traffic is projected to increase from 42,000 vpd (vehicles per day) in 2009 to 64,000 vpd in 2035, compared to a LOS D capacity of 42,600 vpd.

Community Vision and Problem History

Due to anticipated high traffic volumes in the future years, local officials have the desire to maintain the integrity of I-73/74; which is vital to the continued success of tourism for this area. This facility is the primary route used to access the NC Zoo, potteries in the Seagrove area south of Asheboro, and beaches in southern North Carolina and South Carolina.

CTP Project Proposal

Project Description and Overview

The CTP project proposal (Local ID. RAND0048-H) is to widen the existing facility from four to six-lanes from West Presnell Street (SR 1462) in Asheboro to NC 134/US 220 Business.

Natural & Human Environmental Context

Based on a planning level environmental assessment using available GIS data, parts of this project area are within the water supply and the targeted local watersheds. This facility also has two deficient bridges; bridges 21 & 27 cross NC 134/US 220 Business and are functionally obsolete.

Relationships to Land Use Plans

The 2009 Randolph County Growth Management Plan recognizes that Asheboro and Randolph County are anticipating an influx of both urban and suburban residential growth. The residential growth is anticipated to spread outwards from the core of Asheboro to the northern, western and eastern boundaries of Randolph County. A future Interstate highway corridor (I-73/I-74) along the current routing of US 220 and Asheboro's Southern Bypass (R-2536) will change land use patterns in the southern part of the county by attracting high intensity uses (retail and employment) at major intersections.

Linkages to Other Plans and Proposed Project History

Interstates 73 and 74 were initially authorized by the Intermodal Surface Transportation and Efficiency Act (ISTEA) of 1991, as one of several high priority transportation corridors to be designated across the country. I-73/74/US 220 is designated as a freeway on NCDOT's Strategic Highway Corridor (SHC) Vision Plan.

This project directly connects to the proposed Asheboro Southern Bypass (R-2536) and to the I-73/74/US 220 improvements (I-4407 & I-4921).

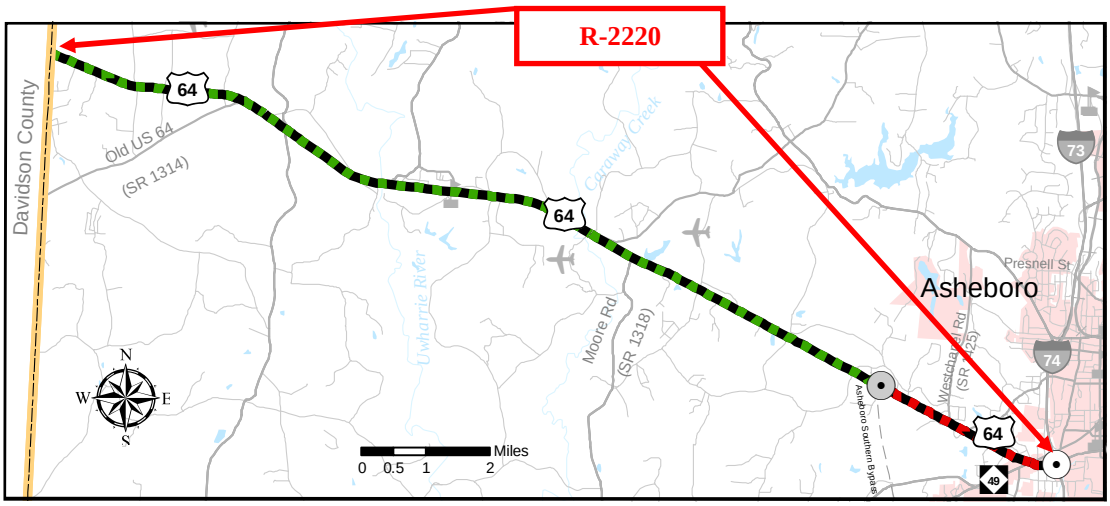
Multi-modal Considerations

The Piedmont Authority of Regional Transportation (PART) has an existing bus route from Guilford County to Randolph County, using the I-73/74 corridor. Additionally, PART has service enhancements that are being considered, which connect to this project: US-311 Express, Park-n-Ride Lot west of Randleman, and Asheboro Circular Routes/Local Transit Services.

Public/ Stakeholder Involvement

No significant issues associated with this project were identified during the public/stakeholder involvement process.

US 64 Proposed improvements from I-73/74 (US 220 Bypass) to Davidson County	**Local ID: R-2220** **Last updated: 08/11/11**



Identified Problem

US 64 is projected to be over capacity by 2035 from Davidson County to I-73/74 (US 220 Bypass). The primary purpose of this project is to relieve congestion on the existing facility so that a minimum of Level of Service (LOS) D can be achieved.

Justification of Need

US 64, a major east-west corridor through Randolph County, connects the county seat of Asheboro with the eastern and western parts of the county. This facility is a vital artery in connecting major cities and moving people and goods throughout central North Carolina.

US 64 is currently a two-lane facility, with 12-foot lanes from Davidson County to Westchapel Road (SR 1425); three-lanes with a center turn lane from Westchapel Road (SR 1425) to NC 49; and a four-lane divided facility from NC 49 to I-73/74 (US 220 Bypass). The US 64 corridor is vital to regional and statewide mobility and connectivity throughout the state. It is part of the statewide tier of the NC Multimodal investment Network (NCMIN).

By 2035 the facility is projected to be over capacity based on the providing a LOS D. Traffic from Davidson County to I-73/74 (US 220 Bypass) in Asheboro is projected to increase in range from 8,700 to 14,000 vpd in 2009 to 13,000 to 23,500 vpd in 2035, compared to a LOS D capacity ranging from 12,600 to 15,000 vpd.

Community Vision and Problem History

US 64 is the primary route between Asheboro and Lexington, the county seats of Randolph County and Davidson County respectively. This roadway was first identified as an alternative to I-40/I-85 between the western part of the state and Raleigh in the US 64-NC 49 Corridor Study Report. This

study which was conducted by NCDOT Transportation Planning Branch in 2005, focused on the entire US 64-NC49 corridors between Charlotte, Statesville, and Raleigh. The study included extensive public involvement and stakeholder outreach, and ultimately provided a broad vision and strategy for the future of the corridor. This study only represents Phase 1 of the US 64-NC 49 improvements, which is primarily the vision for the corridor. Further study is intended to carry the project from vision to location specific implementation. As traffic reaches capacity on I-40, travelers look to US 64 as a viable alternative when traveling through central North Carolina.

This problem was not identified in any previous transportation plan.

CTP Project Proposal

Project Description and Overview

The CTP project proposal (TIP No. R-2220) is to improve US 64 to an expressway from Davidson County to the proposed Asheboro Southern Bypass at Emerald Park Road (SR 1325) by widening the existing facility to four-lanes with a median and improving US 64 to boulevard standards from the proposed Asheboro Southern Bypass to I-73/74/US 220. Additionally, it will fulfill the SHC Vision Plan, which recommends US 64 be upgraded to an expressway from the Asheboro Southern Bypass to Davidson County.

Natural & Human Environmental Context

Based on a planning level environmental assessment using available GIS data, parts of this project area are within the water supply and the targeted local watersheds. This facility also crosses the Uwharrie River, Caraway Creek and Back Creek, where the bridges are rated as functionally obsolete; Bridges 33, 98 & 131 respectively.

Relationship to Land Use Plans

The current land use along US 64 is mixed use development. It is heavily developed and consists of commercial and industrial uses right outside of and within the Asheboro city limits then transitions to rural residential near Davidson County. The 2009 Randolph County Growth Management Plan categorizes this corridor into Secondary and Rural Growth Management Areas. These areas are likely to have water and sewer infrastructure in the foreseeable future or will predominately be mixed in use that will include residential, commercial and industrial developments. Implementation of the proposed Asheboro Southern Bypass will likely intensify these types of development west and south of Asheboro. From the city limits, transitional residential development is expected with major subdivisions scattered between agricultural and commercial land use patterns.

Linkages to Other Plans and Proposed Project History

This project directly connects with the proposed Asheboro Southern Bypass (R-2536), the I-73/74 (I-4407) improvements, and the Mack Road (SR 1144) realignment (U-5305). The proposed improvements were also identified in the NCDOT's SHC Vision Plan to improve connectivity and mobility. Additionally, the 2011 Davidson County CTP, recommends US 64 to be upgraded from a two-lane major thoroughfare to a four-lane expressway from Randolph County to I-85 in Lexington.

The US 64 corridor was also identified as an alternative to I-40 between the western part of the state and Raleigh in the 2005 US 64-NC 49 Corridor Study Report. The US 64-49 Corridor study can be viewed at the following website: http://www.ncdot.org/projects/us64phase1/
This project was not identified in any previous transportation plan.

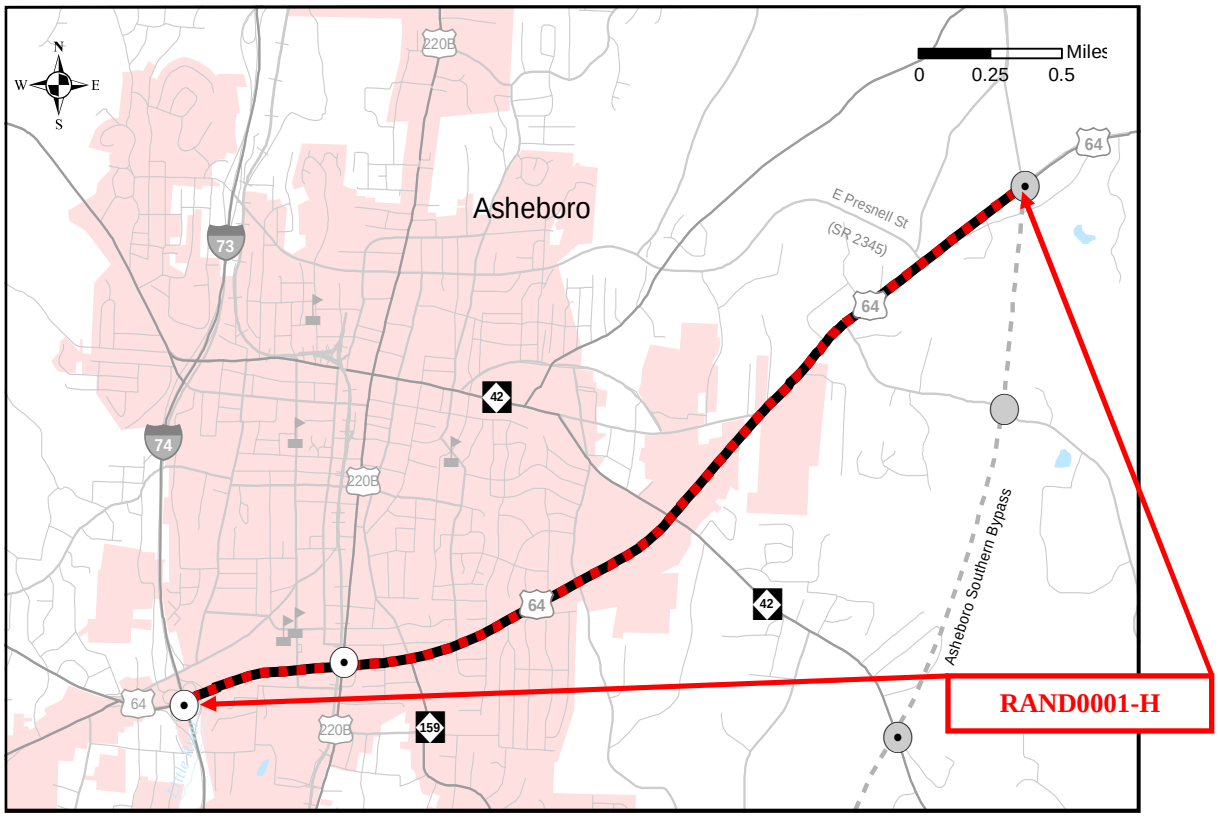
Multi-modal Considerations

The CTP includes recommendations for bicycle, pedestrian and public transportation. However, there are no additional modes of transportation associated with this project.

Public/ Stakeholder Involvement

Improvements to US 64 were identified most frequently as a key transportation issue in the county by the respondents to the transportation survey conducted in conjunction with the CTP study. Respondents ranked US 64 as their number one concern on the following issues: safety (particularly at intersections with other US and NC routes), truck traffic, congestion and access.

US 64 (Dixie Drive) Proposed improvements from I-73/74/US 220 Bypass to the proposed Asheboro Southern Bypass	Local ID: RAND0001-H Last updated: 08/11/11



Identified Problem

US 64 (Dixie Drive) is projected to be over capacity by 2035 from I-73/74 (US 220 Bypass) to the proposed Asheboro Southern Bypass, approximately 0.5 miles east of East Presnell Street (SR 2345). The primary purpose of this project is to relieve congestion on the existing facility such that a minimum of Level of Service (LOS) D can be achieved.

Justification of Need

US 64, a major east-west corridor through Randolph County connects the county seat of Asheboro with the eastern and western parts of the county. This facility is a vital artery in connecting major cities and moving people and goods throughout central North Carolina.

US 64 is a five-lane major thoroughfare with 12-foot lanes from I-73/74 (US 220 Bypass) to east of the East Presnell Street (SR 1462) at the proposed Asheboro Southern Bypass. It is part of the statewide tier of the NCMIN.

By 2035 the facility is projected to be over capacity based on the capacity of providing a LOS D. Traffic through Asheboro is projected to increase from 17,500 to 33,000 vpd in 2009, to 27,000 to 43,000 vpd in 2035, compared to a LOS D capacity of 25,300 vpd.

Community Vision and Problem History

US 64 is the primary east-west route through Asheboro and Randolph County. This corridor is a heavily strip developed facility. While much of the business activity in the Asheboro area is located in its historic downtown along Fayetteville Street (US 220 Business) and Salisbury Street (NC 42), the majority of commercial businesses are located along this portion of the US 64 corridor. Given the total economic impact that these businesses provide to the community, it is clear that any improvements that take place along the corridor should also preserve and enhance its economic vitality.

US 64 was also identified as an alternative route to I-40 between the western part of the state and Raleigh in the 2005 US 64-NC 49 Corridor Study Report. As traffic reaches capacity on I-40, travelers look to US 64 as a viable alternative when traveling through central North Carolina.

This problem has not been identified in any other transportation plan.

CTP Project Proposal

Project Description

The CTP project proposal (Local ID RAND0001-H) is to upgrade US 64 (Dixie Drive), from I-73/74 (US 220 Bypass) to east of East Presnell Street (SR 1462) at the proposed Asheboro Southern Bypass (R-2536), to boulevard standards by converting the existing five-lane facility into a four-lane, median divided facility. Additionally, sidewalks are recommended along this facility from US 220(I-73/74) to the Randolph Mall (located immediately east of NC 42).

A crash assessment performed during the CTP identified twelve locations along this corridor that experienced a high number of crashes between January 1, 2007 and December 31, 2009.

Intersection	Average Severity	Total Collisions
US 64 and NC 42	3.8	52
US 64 and US 220	3.07	43
US 64 and Park Drive (SR 1451)	2.62	32
US 64 and Shamrock Road (SR 2198)	2.48	25
US 64 and Kenmore Street	3.82	22
US 64 and Cliff Road (SR 2203)	4.88	22
US 64 and Arrowwood Road	4.12	21
US 64 and Cox Street (SR 2327)	3.88	20
US 64 and Executive Way	3.47	19
US 64 and Shannon Road	4.24	18
US 64 and 3rd Street	3.28	13
US 64 and Dublin Road (SR 2197)	3.69	11

Improving the existing facility may reduce the amount and severity of crashes at these locations.

Natural & Human Environmental Context

Based on a planning level environmental assessment using available GIS data, a small part of this project near US 220 (I-73/74) is within the targeted local watershed. This facility also crosses one river and has one rail crossing. The rail line is operated by Norfolk Southern and the bridge (#173) crosses the Little River is rated as structurally deficient.

Relationship to Land Use Plans

This section of US 64 is heavily developed, consisting primarily of businesses, retail developments, service establishments and commercial enterprises. The 2009 Randolph County Growth Management Plan indicates an influx of both urban and suburban residential growth in the project area. The residential growth is anticipated to spread outwards from the core of Asheboro to the northern, western, and eastern boundaries of Randolph County. The future interstate highway corridor (I-73/74) along the current routing of US 220 and the proposed Asheboro Southern Bypass (TIP Project R-2536) will change land use patterns in the southern part of the county by attracting high intensity uses (retail and employment) at major intersections.

The US 64 project area falls into the Primary and Municipal Growth Management Areas, as identified in the 2009 Randolph County Growth Management Plan. Mixed high density urban growth that will include residential, commercial, and industrial development is anticipated in these areas.

Linkages to Other Plans and Proposed Project History

The improvement proposal for US 64 (Dixie Drive) directly connects with improvements for the proposed Asheboro Southern Bypass (R-2536), US 64 (R-2220), and NC 49 (R-2535).

In 2005, NCDOT conducted a corridor study (US 64 – NC 49 Corridor Study) to evaluate the transportation, safety, mobility, and land use decisions between Raleigh and Charlotte/ Mocksville. The Department coordinated with the Piedmont Triad Rural Planning Organization (RPO) and the City of Asheboro. The 2005 US 64 – NC 49 Corridor study can be viewed at the following website: http://www.ncdot.org/projects/us64phase1/.

In 2007-2008 NCDOT, in partnership with the City of Asheboro, Randolph County, and the Piedmont Triad RPO, did a more in depth study of US 46 – NC 49 from East Presnell Street to I-73/US 220 Bypass. This study evaluated the purpose and functionality of the US 64 corridor and developed a concise set of recommendations that enhance mobility, improve safety, and preserve the economic vitality along the corridor. The corridor study report can be viewed at the following website: http://www.ncdot.org/doh/preconstruct/tpb/SHC/studies/US64/Report/asheboro.html.

This project has not been identified in any previous transportation plan.

Multi-modal Considerations

The CTP includes recommendations for pedestrian and public transportation facilities throughout the study area. PART anticipates providing fixed route bus services along this corridor from US 220 Business to NC 42. This is part of the proposed circulator route that would tie into existing service routes. Sidewalks are also recommended along this facility from I-73/74 (US 220 Bypass) to the Randolph Mall (located immediately east of NC 42).

Public/ Stakeholder Involvement

Improvements to US 64 were identified most frequently as a key transportation issue in the county by the respondents to the transportation survey conducted in 2010 in conjunction with the CTP study. Respondents ranked US 64 as their number one concern on the following issues: safety (particularly at intersections with other US and NC routes), truck traffic, congestion and access. Additionally, US 64 was identified as desirable for providing bicycle and pedestrian facilities.

I-73/74/US 220 Bypass, TIP No. I-4407

I-73/74/US 220 from West Presnell Street (SR 1462) to Southmont Drive (SR 1145) is projected to be over capacity by 2035. The 2012-2018 TIP includes project I-4407 which upgrades the facility to interstate standards from NC 134/US 220 Business to West Presnell Street (SR 1462) in Asheboro. This is currently under construction. For additional information about this project, including the Purpose and Need, contact NCDOT's Project Development and Environmental Analysis Branch.

US 421, Local ID: RAND0002-H

Based on North Carolina's vision for mobility and connectivity, US 421 from NC 49 to Guilford County does not meet the future mobility and connectivity needs in central North Carolina.

This facility is intended to provide mobility in Randolph County and, ultimately, connectivity between Wytheville, VA and Fayetteville, NC. US 421 is part of the Strategic Highway Corridor Vision (SHC) Plan adopted by NCDOT on September 2, 2004 and last updated on July 10, 2008.

The existing facility is currently an expressway and is proposed to be upgraded to a freeway by implementing full control of access along the facility. An interchange is recommended at Deviney Road/Shiloh Road (SR 2407) and grade separations are recommended at Starmount Road/Shiloh Road (SR 2407), and Troy Estate Road (SR 2434). As development occurs along this corridor every effort should be made to limit access in order to maintain mobility and connectivity.

US 311 Bypass, TIP No. R-2606

Based on North Carolina's vision for mobility and connectivity, the proposed US 311 Bypass (Future I-74), from south of Tuttle Road (SR 1920) in the High Point MPO to US 220 north of Asheboro, is needed to meet the future mobility and connectivity needs in central North Carolina.

This facility is intended to provide mobility in Randolph County and, ultimately, connectivity within North Carolina and into South Carolina and Virginia via the I-74 corridor. The US 311 Bypass is part of the Strategic Highway Corridor Vision (SHC) Plan adopted by NCDOT on September 2, 2004 and last updated on July 10, 2008. The proposed facility is recommended to be a four-lane divided freeway.

US 64 (Asheboro Southern Bypass), TIP No. R-2536

US 64 through Asheboro is projected to be over capacity by 2035. The 2012 – 2018 TIP includes project R-2536 that is intended to address this problem. This project includes constructing a four-lane freeway on new location from US 64 west of Asheboro at Emerald Rock Road (SR 1325) to US 64 east of Asheboro near Madison Circle. This project is currently in the planning and design phase as a design-build project. For additional information about this project, including Purpose and Need, contact the NCDOT Project Development and Environmental Analysis Branch.

US 64, Local ID: RAND0003-H

Based on North Carolina's vision for mobility and connectivity, US 64 from the proposed Asheboro Southern Bypass to Chatham County does not meet the future mobility and connectivity needs in central North Carolina.

This facility is intended to provide mobility in Randolph County and, ultimately, connectivity within North Carolina and into Tennessee. US 64, is part of the Strategic Highway Corridor Vision (SHC) Plan adopted by NCDOT on September 2, 2004 and last updated on July 10, 2008.

The project proposal is to upgrade the existing four-lane divided facility to freeway standards from the eastern terminus of the proposed Asheboro Southern Bypass (R-2536) to Pleasant Ridge Road (SR 1003) by implementing full control of access along the facility. From Pleasant Ridge Road (SR 1003) to Reed Creek Road (SR 2668) upgrade to boulevard standards by converting the existing five-lanes into a four-lane median divided facility; and, upgrade the existing four and five-lane facility from Reed Creek Road (SR 2668) to Chatham County to freeway standards by converting the existing five-lanes into a four-lane median divided facility and implementing full control of access. Grade separations are recommended at Iron Mountain Road (SR 2605) and Lee Layne Road (SR 2626). An interchange is recommended at Browns Crossroad Road (SR 2469).

Additionally, construction of a four-lane freeway on new location is recommended from US 64 near Pleasant Ridge Road (SR 1003) to US 64 east of Ramseur at Reed Creek Road (SR 2668). Interchanges are proposed at NC 22, NC 49 and both the western and eastern termini. A grade separation is proposed at Brady Street.

As development occurs along this corridor, every effort should be made to limit access in order to maintain mobility and connectivity

NC 49, TIP No. R-2535

Based on North Carolina's vision for mobility and connectivity, NC 49 from Waynick Meadow Road (SR 1174) west of Farmer to the proposed Asheboro Southern Bypass (R-2536) west of Old NC 49 (SR 1193) does not meet the future mobility and connectivity needs in central North Carolina. Additionally, NC 49 from Tot Hill Farm Road (SR 1163) to the proposed Asheboro Southern Bypass (R-2536) is projected to be over capacity by 2035 based on providing a LOS D.

This facility is intended to provide mobility in Randolph County and, ultimately, connectivity between Charlotte and Raleigh. NC 49 is part of the Strategic Highway Corridor Vision (SHC) plan adopted by NCDOT on September 2, 2004 and last updated on July 10, 2008. The existing facility is a 2-lane major thoroughfare with 12-foot lanes. The 2009 Annual Average Daily Traffic (AADT) ranges from 6,100 to 13,500 vpd. By 2035, the AADT is projected to range from 8,100 to 10,000 vpd compared to a LOS D capacity of 12,600 for western portion of the facility and 17,100 vpd for the existing cross section closer to Asheboro. The project proposal (R-2535) is to widen the existing facility to a four-lane divided expressway from Waynick Meadow Road (SR 1174) west of Farmer to the proposed Asheboro Southern Bypass (R-2536) west of Old NC 49 (SR 1193). As development occurs along this corridor every effort should be made to limit access in order to maintain mobility and connectivity.

Minor Widening Improvements

The following routes do not have capacity issues, but are recommended to be upgraded to 12-foot lanes with 2-foot paved shoulders.

- **RAND0004-H:** US 220 Business - from Burny Road (SR 1127) to Oakview Road (SR 2910) north of Seagrove and from I-73/74 to US 64/NC 49 in Asheboro.
- **RAND0005-H:** NC 705 - from I-73/74 to US 220 Business and from Old US 220 Business to Moore County.
- **RAND0006-H:** NC 159 - US 64/NC 49 to the proposed Asheboro Southern Bypass.
- **RAND0007-H:** NC 159 Spur - from NC 159 to the Asheboro Zoo entrance.
- **RAND0008-H:** NC 134 - from US 220 Business to Montgomery County.
- **RAND0009-H:** NC 49 - from Alamance County to South Valley Street and from the West Patterson Avenue in Liberty to US 64 in Ramseur.
- **RAND0010-H:** NC 47 - from NC 49 to Davidson County.
- **RAND0011-H:** NC 42 - from Cox Street (SR 2327) in Asheboro to Chatham County.
- **RAND0012-H:** NC 22 - from Guilford County to Clark Avenue in Franklinville and from Main Street in Ramseur to Chatham County.
- **RAND0013-H:** Academy Road Extension (SR 2500) - from NC 22 to Butlers Chapel Road (SR 2499).
- **RAND0014-H:** Andrew Hunter Road (SR 2235) - from NC 22 to US 64.
- **RAND0015-H:** Bell Simmons Road (SR 1146) - from Southmont Drive (SR 1145) to US 220 Business.
- **RAND0016-H:** Browers Chapel Road (SR 2826) - from US 64 to NC 42.
- **RAND0017-H:** Browns Crossroads Road (SR 2469) - from NC 49 to US 64.
- **RAND0018-H:** Burny Mill Road (SR 1105) - from Lassiter Mill Road (SR 1107) to Montgomery County.
- **RAND0019-H:** Crestview Church Road (SR 2820) - US 220 Business to NC 159.
- **RAND0020-H:** Danny Bell Road (SR 1162) - from Mack Road (SR 1144) to Hopewell Friends Road (SR 1142).
- **RAND0021-H:** Erect Road (SR 1003) - from Holly Spring Road (SR 1003) to Moore County.
- **RAND0022-H:** Faith Rock Road (SR 2207) - from Andrew Hunter Road (SR 2226) to US 64/ NC 49.
- **RAND0023-H:** Ferguson Road (SR 2479) - from Brady Street Extension to Ramseur Julian Road (SR 2442).
- **RAND0024-H:** Foushee Road (SR 2621) - from Parks Crossroads Church Road (SR 2628) to NC 22.
- **RAND0025-H:** Henley Country Road (SR 2215) - from East Presnell Street (SR 1462) to the proposed Northeast Boulevard.
- **RAND0026-H:** High Pine Church Road (SR 1143) - from New Hope Road (SR 1181) to Lassiter Mill Road (SR 1107).
- **RAND0027-H:** Holly Spring Road (SR 1003) - from Erect Road (SR 1003) to Pleasant Ridge Road (SR 1003).
- **RAND0028-H:** Hoover Hill Road (SR 1408) - from the High Point MPO to US 64.
- **RAND0029-H:** Iron Mountain Road (SR 2605) - from NC 42 to US 64/NC 49.
- **RAND0030-H:** Lassiter Mill Road (SR 1107) - from Old State Hwy 49 to NC 49.
- **RAND0031-H:** Liberty Grove Road (SR 2417) - from Old 421 Road to Guilford County.
- **RAND0032-H:** Little River Road (SR 1119) - from Center Cross Church Road (SR 1115) to I-73/74.
- **RAND0033-H:** Luck Road (SR 2604) - from US 64 to Iron Mountain Road (SR 2605).

- **RAND0034-H:** Moore Road (SR 1318) - from Old State NC 49 to Sawyersville Road (SR 1328).
- **RAND0035-H:** New Hope Road (SR 1181) - from NC 49 to Montgomery County.
- **RAND0036-H:** Old 421 Road (SR 1006) - from North Greensboro Street (SR 1006) to Guilford County.
- **RAND0037-H:** Old Cox Road (SR 2834) - from NC 159 to Old Hwy 13 (SR 2845).
- **RAND0038-H:** Old Liberty Road (SR 2261) - from US 421 to US 220 Business.
- **RAND0039-H:** Old NC Hwy 49 (SR 1193) - from NC 49 to Union Church Road (SR 1163).
- **RAND0040-H:** Otis Road (SR 1633) - from US 64 to the proposed Western Loop (New Location).
- **RAND0041-H:** Parks Crossroads Church Road (SR 2628) - from US 64 to NC 22.
- **RAND0042-H:** Patterson Grove Road (SR 2491) - from NC 22 to Ramseur Julian Road (SR 2442).
- **RAND0043-H:** Pentecostal Church Road (SR 2228) - from Pleasant Cross Road (SR 2224) to Andrew Hunter Road (SR 2235).
- **RAND0044-H:** Pine Hill Road (SR 2824) - from Browers Chapel Road (SR 2826) to Old Cox Road.
- **RAND0045-H:** Pisgah Covered Bridge Road (SR 1114) - from High Pine Church Road (SR 1143) to US 220 Business.
- **RAND0046-H:** Pleasant Ridge Road (SR 1003) - from US 64 to Holly Springs (SR 1003).
- **RAND0047-H:** Southmont Drive (SR 1145) - from Mack Road (SR 1144) to US 220 Business.

PUBLIC TRANSPORTATION AND RAIL

Identified Problem

The Piedmont Authority for Regional Transportation (PART) operates one fixed route bus service in Randolph County, which runs from the Greensboro Depot to the NC Zoo. This service has 6 stops that include 3 park-n-ride lots in Randolph County. Many residents of Randolph County commute to the Triad Metropolitan Area each day for work, shopping, higher education opportunities, and medical purposes. The primary purpose of proposing additional transit services in Randolph County is to provide additional services into and around Asheboro.

CTP Project Proposal

The CTP project proposal (Local ID RAND0001-T) is to provide public transit along US 220 Business in Asheboro. It is recommended that two routes be established through PART in collaboration with the Regional Coordinated Area Transportation System (RCATS) to connect areas in Asheboro with the current route (Route 10). Both routes also would provide service linking residential areas with key destinations in Asheboro.

The CTP project proposal (Local ID RAND0002-T) is to provide a new express service along US-311 and to re-locate the park and ride lot that is currently located in the Wal-Mart parking lot in Randleman to a PART owned site located along Cedar Square Road (SR 1928) between existing US 311 and the proposed US 311 Bypass, inside the High Point MPO Planning Area.

Additionally PART is working on some service enhancements that will increase use of the existing park and ride lots. This will increase the number of weekday trips to Guilford and Forsyth counties

along US 220 and it will expand the existing services, encouraging “choice” riders to use PART for their daily commutes.

Public/ Stakeholder Involvement

During interviews with Randolph County stakeholders, the need for express bus service, particularly from new residential areas near Randleman Lake, with destinations in Winston-Salem were identified.

Another route identified in the transportation survey for new transit service was the proposed US 311 Bypass in Randolph County. This new facility will provide an opportunity to establish new express bus service along this corridor to destinations in Guilford County.

BICYCLE

There is currently one state designated bicycle route that traverses Randolph County, NC Bike Route 6 (Piedmont Spur). Additionally, the 2003 Bicycling Randolph County was used to identify additional bicycle routes throughout the county. The 2011 Piedmont Triad Regional Trail Plan and Inventory (Final Report) was used to identify mulit-use trails throughout the county. These facilities are shown on the Bicycle Map, Sheet 4 of Figure 1.

PEDESTRIAN

The 2007 Sidewalk Inventory, published by the Piedmont Triad Rural Planning Organization, identified recommended sidewalks for pedestrians throughout the county. The 2011 Piedmont Triad Regional Trail Plan and Inventory (Final Report) was used to identify mulit-use trails throughout the county. These features are shown on the Pedestrian Map, Sheet 5 of Figure 1.

APPENDICES

Appendix A
Resources and Contacts

North Carolina Department of Transportation

Customer Service Office

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

1-877-DOT-4YOU
(1-877-368-4968)
https://apps.dot.state.nc.us/dot/directory/authenticated/ToC.aspx

Secretary of Transportation

Eugene A. Conti, Jr., Ph.D.
1501 Mail Service Center
Raleigh, NC 27699-1501
(919) 733-2520
gconti@ncdot.gov
http://www.ncdot.org/about/leadership/secretary.html

Board of Transportation Member

David L. Burns
1204 Shepherd Ave.
Laurinburg, NC 28352
(910) 462-2122
david@zvpate.com
http://www.ncdot.gov/about/board/default.html

Highway Division Engineer

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

Richard Hancock, PE
902 N Sandhills Blvd.
PO Box 1067
Aberdeen, NC 28315
(910) 944-2344
rwhancock@ncdot.gov

http://www.ncdot.gov/doh/operations/division8/

Division Project Manager

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

L. Alison Whitesell, PE
902 N Sandhills Blvd.
PO Box 1067
Aberdeen, NC 28315
(910) 944-2344
awhitesell@ncdot.gov

Division Construction Engineer

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

John R.G. Olinger, PE
902 N Sandhills Blvd.
PO Box 1067
Aberdeen, NC 28315
(910) 944-2344
jolinger@ncdot.gov

Division Traffic Engineer

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

David B. Willett
902 N Sandhills Blvd.
PO Box 1067
Aberdeen, NC 28315
(910) 947-3930
dbwillett@ncdot.gov

Division Operations Engineer

Contact the Division Operations Engineer for information concerning facility operations.

Robert W. Stone II, PE
902 N Sandhills Blvd.
PO Box 1067
Aberdeen, NC 28315
(910) 944-2344
robstone@ncdot.gov

Division Maintenance Engineer

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

Jeff Picklesimer, PE, PLS
902 N Sandhills Blvd.
PO Box 1067
Aberdeen, NC 28315
(910) 944-2344
jpicklesimer@ncdot.gov

District Engineer

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

Reuben E. Blakley, PE
300 DOT Drive
PO Box 1164
Asheboro, NC 27204
(336) 318-4000
rblakley@ncdot.gov

Transportation Planning Branch (TPB)

Contact the Transportation Planning Branch for information on long-range multi-modal planning services, including Strategic Highway Corridors.

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

Piedmont Triad Rural Planning Organization (RPO)

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

Hanna Cockburn
2216 West Meadowview Rd, Suite 201
Greensboro, NC 27407-3480
(336) 294-4950
hcockburn@ptcog.org
http://www.ptcog.org/planning_services/transportation/RPO/index.php

Strategic Planning Office

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

Don Voelker
1501 Mail Service Center
Raleigh, NC 27699-1501
(919) 715-0951
djvoelker@ncdot.gov
https://apps.dot.state.nc.us/dot/directory/authenticated/UnitPage.aspx?id=11054

Project Development & Environmental Branch (PDEA)

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

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

Secondary Roads Office

Contact the Secondary Roads Office for information regarding the status for unpaved roads to be paved, additions and deletions of roads to the State maintained system and the Industrial Access Funds program.

1535 Mail Service Center
Raleigh, NC 27699-1535
(919) 733-3250
http://www.ncdot.gov/doh/operations/secondaryroads/

Program Development Branch

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

1534 Mail Service Center
Raleigh, NC 27699-1534
(919) 733-2039
http://www.ncdot.org/planning/development/

Public Transportation Division

Contact the Public Transportation Division for information public transit systems.

1550 Mail Service Center
Raleigh, NC 27699-1550
(919) 733-4713
http://www.ncdot.org/transit/nctransit/

Rail Division

Contact the Rail Division for rail information throughout the state.

1553 Mail Service Center
Raleigh, NC 27699-1553
(919) 733-7245
http://www.bytrain.org/

Division of Bicycle and Pedestrian Transportation

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

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

Bridge Maintenance Unit

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

1565 Mail Service Center
Raleigh, NC 27699-1565
(919) 733-4362
http://www.ncdot.gov/doh/operations/dp_chief_eng/maintenance/bridge/

Highway Design Branch

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

1584 Mail Service Center
Raleigh, NC 27699-1584
(919) 250-4001
http://www.ncdot.gov/doh/preconstruct/highway/

Other State Government Offices

Department of Commerce – Division of Community Assistance

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

http://www.nccommerce.com/en/CommunityServices/

Appendix B
Comprehensive Transportation Plan Definitions

Highway Map

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

Facility Type Definitions

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

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

- **Boulevards**
  - Functional purpose – moderate mobility; moderate access, moderate volume, medium speed
  - Posted speed – 30 to 55 mph
  - Cross section – two or more lanes with median (median breaks allowed for 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, or system continuity. The improvement to the facility may be widening, other operational strategies, increasing the level of access control along the facility, or a combination of improvements and strategies. *"Needs improvement" does not refer to the maintenance needs of existing facilities.*
- **Recommended** – Roadway facilities on new location that are needed in the future.
- **Interchange** – Through movement on intersecting roads is separated by a structure. Turning movement area accommodated by on/off ramps and loops.
- **Grade Separation** – Through movement on intersecting roads is separated by a structure. There is no direct access between the facilities.
- **Full Control of Access** – Connections to a facility provided only via ramps at interchanges. No private driveway connections allowed.
- **Limited Control of Access** – Connections to a facility provided only via ramps at interchanges (major crossings) and at-grade intersections (minor crossings and service roads). No private driveway connections allowed.
- **Partial Control of Access** – Connections to a facility provided via ramps at interchanges, at-grade intersections, and private driveways. Private driveway connections shall be defined as a maximum of one connection per parcel. One connection is defined as one ingress and one egress point. These may be combined to form a two-way driveway (most common) or separated to allow for better traffic flow through the parcel. The use of shared or consolidated connections is highly encouraged.
- **No Control of Access** – Connections to a facility provided via ramps at interchanges, at-grade intersections, and private driveways.

Public Transportation and Rail Map

- **Bus Routes** – The primary fixed route bus system for the area. Does not include demand response systems.
- **Fixed Guideway** – Any transit service that uses exclusive or controlled rights-of-way or rails, entirely or in part. The term includes heavy rail, commuter rail, light rail, monorail, trolleybus, aerial tramway, included plane, cable car, automated guideway transit, and ferryboats.

- **Operational Strategies** – Plans geared toward the non-single occupant vehicle. This includes but is not limited to HOV lanes or express bus service.
- **Rail Corridor** – Locations of railroad tracks that are either active or inactive tracks. These tracks were used for either freight or passenger service.
  - Active – rail service is currently provided in the corridor; may include freight and/or passenger service
  - Inactive – right of way exists; however, there is no service currently provided; tracks may or may not exist
  - Recommended – It is desirable for future rail to be considered to serve an area.
- **High Speed Rail Corridor** – Corridor designated by the U.S. Department of Transportation as a potential high speed rail corridor.
  - Existing – Corridor where high speed rail service is provided (there are currently no existing high speed corridor in North Carolina).
  - Recommended – Proposed corridor for high speed rail service.
- **Rail Stop** – A railroad station or stop along the railroad tracks.
- **Intermodal Connector** – A location where more than one mode of transportation meet such as where light rail and a bus route come together in one location or a bus station.
- **Park and Ride Lot** – A strategically located parking lot that is free of charge to anyone who parks a vehicle and commutes by transit or in a carpool.
- **Existing Grade Separation** – Locations where existing rail facilities and are physically separated from existing highways or other transportation facilities. These may be bridges, culverts, or other structures.
- **Proposed Grade Separation** – Locations where rail facilities are recommended to be physically separated from existing or recommended highways or other transportation facilities. These may be bridges, culverts, or other structures.

Bicycle Map

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

- **Off Road-Existing** – A facility that accommodates only bicycle transportation and is physically separated from a highway facility either within the right-of-way or within an independent right-of-way.
- **Off Road-Needs Improvement** – A facility that accommodates only bicycle transportation and is physically separated from a highway facility either within the right-of-way or within an independent right-of-way that will not adequately serve future bicycle needs. Improvements may include but are not limited to, widening, paving (not re-paving or other maintenance activities), and improved horizontal or vertical alignment.
- **Off Road-Recommended** – A facility needed to accommodate only bicycle transportation and is physically separated from a highway facility either within the right-of-way or within an independent right-of-way.
- **Multi-use Path-Existing** – An existing facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that serves bicycle and pedestrian traffic. Sidewalks should not be designated as a multi-use path.
- **Multi-use Path-Needs Improvement** – An existing facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that serves bicycle and pedestrian traffic that will not adequately serve future needs. Improvements may include but are not limited to, widening, paving (not re-paving or other maintenance activities), and improved horizontal or vertical alignment. Sidewalks should not be designated as a multi-use path.
- **Multi-use Path-Recommended** – A facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that is needed to serve bicycle and pedestrian traffic. Sidewalks should not be designated as a multi-use path.
- **Existing Grade Separation** – Locations where existing “Off Road” facilities and “Multi-use Paths” are physically separated from existing highways, railroads, or other transportation facilities. These may be bridges, culverts, or other structures.
- **Proposed Grade Separation** – Locations where “Off Road” facilities and “Multi-use Paths” are recommended to be physically separated from existing or recommended highways, railroads, or other transportation facilities. These may be bridges, culverts, or other structures.

Pedestrian Map

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

- **Sidewalk-Needs Improvement** – Improvements are needed to provide paved paths on both sides of a highway facility. The highway facility may or may not need improvements. Improvements do not include re-paving or other maintenance activities but may include: filling in gaps, widening sidewalks, or meeting ADA (Americans with Disabilities Act) requirements.
- **Sidewalk-Recommended** – At the systems level, it is desirable for a recommended highway facility to accommodate pedestrian transportation **or** to add sidewalks on an existing facility where no sidewalks currently exist. The highway should be designed and built to safely accommodate pedestrian traffic.
- **Off Road-Existing** – A facility that accommodates only pedestrian traffic and is physically separated from a highway facility usually within an independent right-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 '(ft)' is the approximate width of the roadway from edge of pavement to edge of pavement. Listed under 'lanes' is the total number of lanes, with the letter 'D' if the facility is divided.

- **Existing ROW:** The estimated existing right-of-way is based on the NCDOT Roadway Characteristics Shapefile and NCDOT Division 8 information. These right-of-way amounts are approximate and may vary.

- **Existing and Proposed Capacity:** The estimated capacities are given in vehicles per day (vpd) based on LOS D for existing facilities and LOS C for new facilities. These capacity estimates were developed using the NCLOS Program, as documented in Chapter I.

- **Existing and Proposed AADT** (Annual Average Daily Traffic) volumes, given in vehicles per day (vpd), are estimates only based on a systems-level analysis. The '2035 AADT E+C' is an estimate of the volume in 2035 with only existing plus committed projects assumed to be in place, where committed is defined as projects programmed for construction in the years 2012-2018 Transportation Improvement Program (TIP). The '2035 AADT with CTP' is an estimate of the volume in 2035 with all proposed CTP improvements assumed to be in place. The '2035 AADT with CTP' is shown in bold if it exceeds the proposed capacity, indicating an unmet need. For additional information about the assumptions and techniques used to develop the AADT volume estimates, refer to Chapter I.

- **Proposed Cross-section:** The CTP recommended cross-sections are listed by code; for depiction of the cross-section, refer to Appendix D. An entry of 'ADQ' indicates the existing facility is adequate and there are no improvements recommended as part of the CTP.

- **CTP Classification:** The CTP classification is listed, as shown on the adopted CTP Maps (see Figure 1). Abbreviations are F= freeway, E= expressway, B= boulevard, Maj= other major thoroughfare, Min= minor thoroughfare.

- **Tier:** Tiers are defined as part of the North Carolina Mulitmodal Investment Network (NCMIN). Abbreviations are Sta= statewide tier, Reg= regional tier, Sub= subregional tier.

- **Other Modes:** If there is an improvement recommended for another mode of transportation that relates to the given recommendation, it is indicated by an alphabetic code (H=highway, T= public transportation, R= rail, B= bicycle, and P= pedestrian).

CTP INVENTORY AND RECOMMENDATIONS

HIGHWAY																			
					2009 Existing System						2035 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
I-4921	**I-73/US 220**	High Point MPO Area - proposed US 311 Bypass (I-74)	Randolph Co.	4.3	64	4D	130	65	42600	31000	57500	57500	96500	6A	300	F	Sta	T
I-4921	**I-73/I-74 (US-220 Bypass)**	Proposed US 311 Bypass (I-74) - West Presnell St (SR 1462)	Randolph Co.	5.2	64	4D	130	65	42600	31000	57500	57500	96500	6A	300	F	Sta	T
RAND0048-H	**I-73/I-74 (US-220 Bypass)**	West Presnell St (SR 1462) - US 64/NC 49	Randolph Co.	2.4	64	4D	130	55	42600	42000	64000	64000	96500	6A	300	F	Sta	T
RAND0048-H	**I-73/I-74 (US-220 Bypass)**	US 64/NC 49 - Proposed Asheboro Southern Bypass	Randolph Co.	2.6	64	4D	130	55	42600	42000	52000	52000	96500	6A	300	F	Sta	T
RAND0048-H	**I-73/I-74 (US-220 Bypass)**	Proposed Asheboro Southern Bypass - NC 134	Randolph Co.	2.5	64	4D	130	55	42600	20000	35000	35000	96500	6A	300	F	Sta	
	I-73/I-74	NC 134 - Montgomery County	Randolph Co.	8.1	48	4D	155	55	42600	16000	32000	32000	42600	ADQ	ADQ	F	Sta	
RAND0003-H	**US 64**	Chatham County - Crestwick Rd (SR 2484)	Randolph Co.	5.0	48	4D-5	130	55-65	36200	9100	14000	14000	62700	4A	180	F	Sta	
RAND0003-H	**US 64**	Crestwick Rd (SR 2484) - Reed Creek Rd (SR 2668)	Randolph Co.	0.2	60	5	130	45	36200	9100	14000	14000	43500	4D	150	B	Sta	
RAND0003-H	**US 64**	Reed Creek Rd (SR 2668) - Proposed US 64 Bypass	Randolph Co.	2.8	60	5	130	35	34000	9100	14000	14000	43500	4D	150	B	Sta	
RAND0003-H	**US 64**	Proposed US 64 Bypass - Proposed Asheboro Southern Bypass	Randolph Co.	4.8	48	4D	130	55	25300	17500	27000	27000	61200	4A	180	F	Sta	
RAND0001-H	**US 64**	Proposed Asheboro Southern Bypass - I-73/74 (US 220 Bypass)	Asheboro	4.9	64	5	150	45	32400	33000	43000	43000	47900	4D	150	B	Sta	T, P
R-2220	**US 64**	I-73/74 (US 220 Bypass) - NC 49	Asheboro	0.4	48	4D	150	45	30700	33000	43000	43000	47900	4D	150	B	Sta	
R-2220	**US 64**	NC 49 - Westchapel Rd (SR 1633)	Asheboro	1.1	64	3	150	55	15000	15100	24000	24000	47900	4D	150	B	Sta	
R-2220	**US 64**	Westchapel Rd (SR 1425) - Proposed Asheboro Southern Bypass	Randolph Co.	1.0	48	2	150	55	12600	14000	23500	23500	47900	4D	150	B	Sta	
R-2220	**US 64**	Proposed Asheboro Southern Bypass - Davidson County	Randolph Co.	11.4	64	2	150	55	12600	12800	20500	20500	50000	4B	150	E	Sta	
R-2536	**Asheboro Southern Bypass**	US 64 west of Asheboro - NC49	Randolph Co.	1.82	-	-	-	-	-	-	8000	8000	64800	4A	300	F	Sta	
R-2536	**Asheboro Southern Bypass**	NC 49 - I- 73/74	Randolph Co.	2.4	-	-	-	-	-	-	15000	15000	64800	4A	300	F	Sta	
R-2536	**Asheboro Southern Bypass**	I-73/74 - Zoo Connector	Randolph Co.	2.1	-	-	-	-	-	-	20000	20000	64800	4A	300	F	Sta	T

HIGHWAY																			
					2009 Existing System						2035 Proposed System							
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
R-2536	**Asheboro Southern Bypass - Zoo Connector**	Zoo Connector interchange - NC 159 Spur (Zoo Parkway)	Randolph Co.	2.06	-	-	-	-	-	-	18000	18000	64800	4A	300	F	Sta	T
R-2536	**Asheboro Southern Bypass**	Zoo Connector - NC 159	Randolph Co.	0.9	-	-	-	-	-	-	20600	20600	64800	4A	300	F	Sta	
R-2536	**Asheboro Southern Bypass**	NC 159 - NC 42	Randolph Co.	2.3	-	-	-	-	-	-	6400	6400	64800	4A	300	F	Sta	
R-2536	**Asheboro Southern Bypass**	NC 42 - US 64 east of Asheboro	Randolph Co.	2.6	-	-	-	-	-	-	18000	18000	64800	4A	300	F	Sta	
RAND0003-H	**US 64 Bypass**	US 64 to NC 49	Randolph Co.	0.5	-	-	-	-	-	-	13000	13000	64800	4A	300	F	Sta	
RAND0003-H	**US 64 Bypass**	NC 49 to Brady Street Extention (SR 2489)	Randolph Co.	0.5	-	-	-	-	-	-	13000	13000	64800	4A	300	F	Sta	
RAND0003-H	**US 64 Bypass**	Brady Street Extention (SR 2489) to NC 22	Randolph Co.	1.0	-	-	-	-	-	-	13000	13000	64800	4A	300	F	Sta	
RAND0003-H	**US 64 Bypass**	NC 22 to US 64	Randolph Co.	1.5	-	-	-	-	-	-	13000	13000	64800	4A	300	F	Sta	
	US 220 Bus	High Point MPO - Branson Mill Road (SR 2101)	Randolph Co.	0.8	24	2	150	55	12600	6200	9300	9300	12600	ADQ	ADQ	Maj	Reg	B
	US 220 Bus	Branson Mill Rd (SR 2101) - New Salem Rd (SR 2116)	Randolph Co.	4.0	24	2	60	45	12200	6200	9300	9300	12200	ADQ	ADQ	Maj	Reg	B
	US 220 Bus	New Salem Rd (SR 2116) - Coble St (SR 1959)	Randleman	0.4	24-44	2	60	45	12200	6200	9300	9300	12200	ADQ	ADQ	Maj	Reg	B
	US 220 Bus	Coble St (SR 1959) - Old High Point St (SR 1952)	Randleman	0.5	30-52	2-3	120	35, 45	12200	6200	9300	9300	12200	ADQ	ADQ	Maj	Reg	B
	US 220 Bus	Old High Point St (SR 1952) - W Academy St (SR 1950)	Randleman	0.4	44-52	2-4	120	20, 35	12200	6200	9300	9300	12200	ADQ	ADQ	Maj	Reg	B
	US 220 Bus	W Academy St (SR 1950) - Church	Randleman	0.1	44	2	60	35	12200	6200	9300	9300	12200	ADQ	ADQ	Maj	Reg	B
	US 220 Bus	Church St - E Brown St	Randleman	0.1	44	2	60	35	12200	6200	9300	9300	12200	ADQ	ADQ	Maj	Reg	B
	US 220 Bus	E Brown St - Swaim St (SR 2236)	Randleman	0.2	44	2	60	35	12200	6200	9300	9300	12200	ADQ	ADQ	Maj	Reg	B
	US 220 Bus	Swaim St (SR 2236) - Honeycutt St	Randleman	0.1	44	2	60	35	12200	6200	9300	9300	12200	ADQ	ADQ	Maj	Reg	B
	US 220 Bus	Honeycutt St - Mccollum St (SR 1956)	Randleman	0.2	24	2	60	35	12200	6200	9300	9300	12200	ADQ	ADQ	Maj	Reg	B
	US 220 Bus	Mccollum St (SR 1956) - Homer Ln	Randleman	0.1	26	2	60	35, 45	12200	6200	9300	9300	12200	ADQ	ADQ	Maj	Reg	B
	US 220 Bus	Homer Ln - Worthville Rd (SR 2122)	Randleman	0.1	26	2	60	45	12200	6200	9300	9300	12200	ADQ	ADQ	Maj	Reg	B
	US 220 Bus	Worthville Rd (SR 2122) - Forest Dr (SR 2244)	Randleman	0.1	26	2	60	45	12200	6200	9300	9300	12200	ADQ	ADQ	Maj	Reg	B
	US 220 Bus	Forest Dr (SR 2244) - US 311 Ext	Randleman	0.5	26	2	60	35, 45	12200	6200	9300	9300	12200	ADQ	ADQ	Maj	Reg	B
U-3600	**US 220 Bus**	US 311 Ext - Old Liberty Rd (SR	Asheboro	4.3	26	2	100	45	12200	11500	14900	14900	18200	3B	100	Maj	Reg	T, B

HIGHWAY																			
					2009 Existing System						2035 Proposed System							
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	US 220 Bus	Old Liberty Rd (SR 2261) - US 64/NC 49	Asheboro	3.4	64	4	100	35	27500	17000	19000	19000	27500	ADQ	ADQ	Maj	Reg	B, P
RAND0004-H	**US 220 Bus**	US 64/NC 49 - I-73/74	Asheboro	4.9	22	3	100	45	14500	9500	10000	10000	19700	3A	100	Maj	Reg	P
	US 220 Bus	I-73/74 - Oakview Ln (SR 2910)	Randolph Co.		24	2	100	45	12200	4500	6500	6500	12200	ADQ	ADQ	Maj	Reg	B
RAND0004-H	**US 220 Bus**	Burny Rd (SR 1127) - Oakview Ln(SR 2910)	Randolph Co.	1.0	22	2	100	55	12600	4100	4500	4500	15800	2A	100	Maj	Reg	B
	US 220 Bus	Oakview Ln (SR 2910) - Montgomery County	Randolph Co.	3.0	24	2	100	55	12600	4500	4600	4600	12600	ADQ	ADQ	Maj	Reg	B,P
	US 311	High Point MPO - I-73/I-74	Randolph Co.	3.2	36	2	80	55	17100	11800	16000	14800	17100	ADQ	ADQ	Maj	Sta	T
U-3600	**US 311 Extention**	I-73/I-74 to US 220 Bus	Randolph Co.	0.7	33	2-3	60	35	12200	8900	12000	12000	17000	3A	80	Maj	Sta	
R-2606	**Proposed US 311 Bypass (I-74)**	HPMPO - I-73/74 (US 220 Bypass)	Randolph Co.	3.7	-	-	-	-	-	-	10000	10000	64800	4A	300	F	Sta	
	US 421	Chatham County - NC 49	Randolph Co.	2.1	48	4D	175	65	32600	11000	21000	21000	32600	ADQ	ADQ	F	Sta	
RAND0002-H	**US 421**	NC 49 to Guilford County	Randolph Co.	8.0	48	4D	175	55	32600	11000	21000	21000	32600	4A	300	F	Sta	
RAND0012-H	**NC 22**	Guilford County - Old Red Cross Rd (SR 2403)	Randolph Co.	1.5	20	2	100	55	12200	2400	2800	2800	15800	2A	100	Maj	Reg	
RAND0012-H	**NC 22**	Old Red Cross Rd (SR 2403) - Providence Church Rd (SR 2114)	Randolph Co.	1.7	20	2	100	55	12200	2400	2800	2800	15800	2A	100	Maj	Reg	
RAND0012-H	**NC 22**	Providence Rd (SR 2114) - Old Liberty Rd (SR 2261)	Randolph Co.	3.2	20	2	100	55	12200	2400	2800	2800	15800	2A	100	Maj	Reg	
RAND0012-H	**NC 22**	Old Liberty Rd (SR 2261) - Academy Rd Ext (SR 2500)	Randolph Co.	3.4	20	2	100	35	12200	1600	1900	1900	13800	2A	100	Maj	Reg	
RAND0012-H	**NC 22**	Academy Rd Ext (SR 2500) - Old Cedar Falls Rd (SR 2216)	Randolph Co.	1.6	18	2	100	35	12200	1600	1900	1900	13800	2A	100	Maj	Reg	
	NC 22	Old Cedar Falls Rd (SR 2216) - Allred St (SR 1491)	Franklinville	0.5	24	2	60	35	12200	1600	1900	1900	12200	ADQ	ADQ	Maj	Reg	
	NC 22	Allred St (SR 1491) - US 64/NC 22	Franklinville/ Randolph Co.	2.3	24	2	60	35	12200	1600	1900	1900	12200	ADQ	ADQ	Maj	Reg	P
	NC 22	US 64/NC 22 - Main Street	Ramseur	0.2	26	2	100	35	12200	2900	2600	2600	12200	ADQ	ADQ	Maj	Reg	P
RAND0012-H	**NC 22**	Main Street - Parks Crossroads Church Rd (SR 2628)	Ramseur/ Randolph Co.	5.0	18	2	100	35	12200	2200	2800	2800	13800	2A	100	Maj	Reg	P
RAND0012-H	**NC 22**	Parks Crossroads Church Rd (SR 2628) - NC 42	Randolph Co.	2.5	20	2	100	55	12200	3100	2600	2600	15800	2A	100	Maj	Reg	
RAND0012-H	**NC 22**	NC 42 - Old Coleridge Rd (SR 2634)	Randolph Co.	0.8	20	2	100	55	12200	1700	2300	2300	15800	2A	100	Maj	Reg	
RAND0012-H	**NC 22/NC42**	Old Coleridge Rd (SR 2634) - Chatham County	Randolph Co.	5.6	20	2	100	55	12200	1700	2300	2300	15800	2A	100	Maj	Reg	

HIGHWAY																			
					2009 Existing System						2035 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
15800	**NC 42**	Chatham County - NC 22	Randolph Co.	Concurrent with NC 22														
RAND0011-H	**NC 42**	NC 22 - Holly Springs Rd (SR 1003)	Randolph Co.	2.0	20	2	60	55	12000	4000	5200	5200	15800	2A	60	Maj	Reg	
RAND0011-H	**NC 42**	Holly Springs Rd (SR 1003) - Grantville Ln (SR 2614)	Randolph Co.	5.0	20	2	60	55	12000	4000	5200	5200	15800	2A	60	Maj	Reg	B
RAND0011-H	**NC 42**	Grantville Ln (SR 2614) - Old Humble Mill Road (SR 2830)	Randolph Co.	0.2	20	2	150	55	12600	4200	5600	5600	15800	2A	150	Maj	Reg	
RAND0011-H	**NC 42**	Old Humble Mill Road (SR 2830) - Proposed Asheboro Bypass	Randolph Co.	2.0	20	2	150	55	12600	4200	5600	5600	15800	2A	150	Maj	Reg	
RAND0011-H	**NC 42**	Proposed Asheboro Bypass - US 64/NC49 (Dixie Dr)	Randolph Co.	0.1	20	2	150	55	12600	7500	10000	10000	15800	2A	150	Maj	Reg	P
RAND0011-H	**NC 42**	US 64/NC49 (Dixie Dr) - Salisbury St (SR 2237)	Randolph Co.	0.8	24	2	150	45	12600	7500	10000	10000	15800	2A	150	Maj	Reg	T, P
RAND0011-H	**NC 42**	Salisbury St (SR 2237) - Cox St	Asheboro	0.8	32	2-3	60	45	18200	11000	15700	15700	19700	3A	80	Maj	Reg	T, P
	NC 42	Cox St - I-73/74	Asheboro	1.0	32	3	60	35	17000	10000	13500	13500	17000	ADQ	ADQ	Maj	Reg	T, P
RAND0010-H	**NC 47**	NC 49 - Davidson County	Randolph Co.	1.8	20	2	60	55	12600	1100	7800	7800	15800	2A	60	Maj	Reg	
RAND0009-H	**NC 49**	Alamance County - S Valley St	Randolph Co.	1.4	24	2	100	55	12600	4200	7800	7800	15800	2A	100	Maj	Reg	
	NC 49	S Valley St - N Fayetteville St	Liberty	0.5	44	2	60	35	10600	4400	5000	5000	10600	ADQ	ADQ	Maj	Reg	P
	NC 49	N Fayetteville St - W Patterson Ave	Liberty	0.5	24	2	60	35	10600	4100	5000	5000	10600	ADQ	ADQ	Maj	Reg	P
RAND0009-H	**NC 49**	W Patterson Ave - US 421	Liberty	1.6	24	2	100	55	12600	4200	7800	7800	15800	2A	100	Maj	Reg	
RAND0009-H	**NC 49**	US 421 - US 64 (Franklinville)	Randolph Co.	7.3	24	2	100	55	12600	6500	7000	7000	15800	2A	100	Maj	Reg	B
	NC 49	US 64 (Franklinville) - US 64 (Ashehboro)	Randolph Co.	Concurrent with US 64														
	NC 49	US 64 (Asheboro) - Old NC Hwy 49 (SR 1193)	Asheboro	0.8	24	2-3	150	45-55	17100	13500	10000	10000	17100	ADQ	ADQ	Maj	Reg	
	NC 49	Old NC Hwy 49 (SR 1193) - Proposed Asheboro Southern Bypass	Asheboro	1.0	24	2	190	55	17100	12000	12000	17100	17100	ADQ	ADQ	Maj	Reg	
R-2535	**NC 49**	Proposed Asheboro Southern Bypass - Lassiter Mill Rd (SR 1107)	Randolph Co.	8.3	24	2	190	55	12600	8000	19000	19000	54000	4B	400	E	Sta	
R-2535	**NC 49**	Lassiter Mill Rd (SR 1107) - Old State Hwy 49 (SR 1193)	Randolph Co.	4.0	24	2	190	55	12600	8000	19000	19000	54000	4B	400	E	Sta	
	NC 49	Old State Hwy 49 (SR 1193) - NC 47	Randolph Co.	3.2	48	4D	400	55	54000	6100	8100	8100	54000	ADQ	ADQ	E	Sta	
	NC 49	NC 47 - Davidson County	Randolph Co.	2.1	48	4D	400	55	54000	5100	7800	7800	54000	ADQ	ADQ	E	Sta	
RAND0008-H	**NC 134**	US 220 BUS - Montgomery County	Randolph Co.	8.1	20	2	60	55	12000	2800	4900	4900	15800	2A	60	Maj	Reg	B
RAND0006-H	**NC 159**	US 64/NC 49 - Proposed Asheboro Southern Bypass	Asheboro	2.4	20	2	60	45	12600	750	1400	1400	16600	2A	60	Maj	Reg	
	NC 159	Proposed Asheboro Southern Bypass - US 220 Bus	Randolph Co.	5.0	24	2	60	55	17100	10000	13700	13700	17100	ADQ	ADQ	Maj	Reg	

HIGHWAY																			
					2009 Existing System						2035 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
RAND0007-H	**NC 159 Spur**	NC 159 - Asheboro Zoo entrance	Randolph Co.	0.7	24	2	500	35	10600	750	1400	1400	14800	2C	500	Maj	Reg	
RAND0005-H	**NC 705**	I-73/74 - US 220 Bus	Seagrove	0.7	20	2	60	35	12600	4700	5700	5700	14800	2E	60	Maj	Reg	B, P
	NC 705	US 220 Bus - Old Plank Rd (SR 2846)	Seagrove	0.3	44	2	80	20	11900	5300	6000	6000	11900	ADQ	ADQ	Maj	Reg	B
	NC 705	Old Plank Rd (SR 2846) - US 220 Hwy (SR 2859)	Seagrove	0.9	24	2	80	55	12600	1300	5700	5700	12600	ADQ	ADQ	Maj	Reg	B
RAND0005-H	**NC 705**	Old US 220 Hwy (SR 2859) - Moore County	Randolph Co.	2.4	20	2	60	35	12600	4700	5700	5700	14800	2C	50	Min	Reg	
RAND0013-H	**Academy Rd Extension (SR 2500)**	NC 22 - Butlers Chapel Rd (SR 2499)	Randolph Co.	0.8	16	2	60	55	7700	760	1000	1000	15800	2A	60	Min	Sub	
RAND0014-H	**Andrew Hunter Rd (SR 2235)**	NC 22 - US 64	Randolph Co.	1.8	20	2	60	45	8800	2500	1800	1800	15300	2A	60	Min	Sub	
	Bombay School Rd (SR 1178)	NC 49 - New Hope Rd (SR 1181)	Randolph Co.	0.8	18	2	60	55	12600	500	800	800	12600	ADQ	ADQ	Min	Sub	
RAND0015-H	**Bell Simmons Rd (SR 1146)**	Southmont Dr (SR 1145) - US 220 BUS	Randolph Co.	2.6	18	2	60	45	11000	800	1600	1600	15300	2A	60	Min	Sub	
	Bennett Rd (SR 1002)	Chatham County - Erect Rd (SR 1003)	Randolph Co.	6.8	18-20	2	60	55	12000	800	1000	1000	12000	ADQ	ADQ	Min	Sub	B
	Bescher Chapel Rd (SR 1311)	Farmer Denton Rd (SR 1001) - US 64	Randolph Co.	5.7	20	2	60	55	12000	900	1300	1300	12000	ADQ	ADQ	Min	Sub	
	Branson Mill Rd (SR 2101)	Guilford County - US 220	Randolph Co.	2.5	20	2	60	55	12000	3000	5600	5600	12000	ADQ	ADQ	Min	Sub	B
RAND0016-H	**Browers Chapel Rd (SR 2826)**	US 64 - NC 42	Randolph Co.	2.9	20	2	60	55	11000	750	1700	1700	15800	2A	60	Min	Sub	
RAND0017-H	**Browns Crossroads Rd (SR 2469)**	NC 49 - US 64	Randolph Co.	6.1	18-20	2	60	55	12000	1200	1600	1600	15800	2A	60	Min	Sub	B
RAND0018-H	**Burny Mill Rd (SR 1105)**	Lassiter Mill Rd (SR 1107) - Montgomery County	Randolph Co.	0.9	18	2	60	55	10000	700	1000	1000	15800	2A	60	Min	Sub	

HIGHWAY																		
					2009 Existing System						2035 Proposed System							
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	Caraway Mountain Rd (SR 1004)	Old County Farm Rd (SR 1415) - High Point MPO	Randolph Co.	5.0	24	2	60	55	12000	2200	3100	3100	12000	ADQ	ADQ	Min	Sub	
	Cedar Falls Rd (SR 2226)	Old Cedar Falls Rd (SR 2216) - NC 22	Randolph Co.	1.9	20	2	60	35	12000	2500	2000	2000	13800	2A	60	Min	Sub	B
RAND0019-H	**Crestview Church Rd (SR 2820)**	US 220 BUS - NC 159	Randolph Co.	2.0	20	2	60	35, 55	12000	1300	2000	2000	15800	2A	60	Min	Sub	
RAND0020-H	**Danny Bell Rd (SR 1162)**	Mack Rd (SR 1144) - Hopewell Friends Rd (SR 1142)	Randolph Co.	2.6	20	2	60	55	12000	1300	1400	1400	15800	2A	60	Min	Sub	
RAND0021-H	**Erect Rd (SR 1003)**	Holly Spring Rd (SR 1003) - Moore County	Randolph Co.	8.7	20-23	2	60	55	12000	400	750	750	15800	2A	60	Min	Sub	B
RAND0022-H	**Faith Rock Rd (SR 2207)**	Andrew Hunter Rd (SR 2226) - US 64/ NC 49	Randolph Co.	2.0	16	2	60	55	12000	1300	1400	1400	15800	2A	60	Min	Sub	
	Farmer Denton Rd (SR 1001)	Davidson County - Bescher Chapel Rd (SR 1311)	Randolph Co.	3.0	20	2	60	55	12000	810	1000	1000	12000	ADQ	ADQ	Min	Sub	
	Farmer Denton Rd (SR 1001)	Bescher Chapel Rd (SR 1311) - Old State Hwy 49	Randolph Co.	3.1	20	2	60	55	12000	710	1000	1000	12000	ADQ	ADQ	Min	Sub	
RAND0023-H	**Ferguson Rd (SR 2479)**	Brady St Extension - Ramseur Julian Rd (SR 2442)	Randolph Co.	0.6	18	2	60	55	12000	500	600	600	15800	2A	60	Min	Sub	
	Fork Creek Mill Rd (SR 1002)	Erect Rd (SR 1003) - NC 705	Randolph Co.	7.9	20-22	2	60	55	12000	1300	2000	2000	12000	ADQ	ADQ	Min	Sub	B
RAND0024-H	**Foushee Rd (SR 2621)**	Parks Crossroads Church Rd (SR 2628) - Lee Layne Rd (SR 2626)	Randolph Co.	1.4	16	2	60	25	7700	390	1500	1500	11900	2A	50	Min	Sub	P
	Grantville Ln (SR 2614)	NC 42 - Pleasant Ridge Rd (SR 1003)	Randolph Co.	5.3	20	2	60	55	12000	1200	2000	2000	12000	ADQ	ADQ	Min	Sub	
	Green Farm Rd (SR 1415	Old Lexington Rd (SR 1416) - Caraway Mountain Rd (SR 1004)	Randolph Co.	1.0	20	2	60	55	12000	1000	1800	1800	12000	ADQ	ADQ	Min	Sub	
	Greensboro St (SR 1006)	Kinro Rd (SR 2427) - US 64	Randolph Co.	2.9	20	2	60	55	15000	3800	3800	3800	15800	2A	60	Min	Sub	

HIGHWAY																			
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Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
RAND0025-H	**Henley Country Rd (SR 2215)**	E Presnell St (SR 1462) - the proposed Northeast Blvd	Randolph Co.	1.0	20	2	50	55	12000	1000	1100	1100	15800	2A	60	Min	Sub	
RAND0026-H	**High Pine Church Rd (SR 1143)**	New Hope Rd (SR 1181) - Lassiter Mill Rd (SR 1107)	Randolph Co.	4.0	18	2	60	55	12000	600	800	800	15800	2A	60	Min	Sub	
	High Pine Church Rd (SR 1143)	Lassiter Mill Rd (SR 1107) - Hopewell Friends Rd (SR 1142)	Randolph Co.	9.6	22	2	60	55	12000	1200	1700	1700	12000	ADQ	ADQ	Min	Sub	B
RAND0027-H	**Holly Springs Rd (SR 1003)**	Pleasant Ridge Rd to NC 42	Randolph Co.	4.1	20-23	2	60	55	12000	400	750	750	15800	2A	60	Min	Sub	B
RAND0028-H	**Hoover Hill Rd (SR 1408)**	High Point MPO - US 64	Randolph Co.	5.4	18	2	60	55	11000	2100	6000	6000	15800	2A	60	Min	Sub	B
RAND0029-H	**Iron Mountain Rd (SR 2605)**	NC 42 - US 64/NC 49	Randolph Co.	4.0	18-19	2	60	55	11000	1100	1500	1500	15800	2A	60	Min	Sub	
	Lake Park Rd (SR 1409)	Hoover Hill Rd (SR 1408) - US 64	Randolph Co.	0.4	20	2	60	55	11000	2100	4500	4500	1100	ADQ	ADQ	Min	Sub	
RAND0030-H	**Lassiter Mill Rd (SR 1107)**	Old State Hwy 49 - NC 49	Randolph Co.	1.9	18	2	60	55	12000	550	800	800	15800	2A	60	Min	Sub	B
	Lassiter Mill Rd (SR 1107)	NC 49 - Burney Mill Rd (SR 1105)	Randolph Co.	6.9	16-20	2	60	55	12000	350	400	400	12000	ADQ	ADQ	Min	Sub	
RAND0031-H	**Liberty Grove Rd (SR 2417)**	Old 421 Rd - Guilford County	Randolph Co.	2.0	20	2	60	55	12000	1000	1500	1500	15800	2A	60	Min	Sub	
	Little River Rd (SR 1119)	NC 134 - Center Cross Church Rd (SR 1115)	Randolph Co.	1.1	20	2	60	55	11000	1000	2000	2000	11000	ADQ	ADQ	Min	Sub	
RAND0032-H	**Little River Rd (SR 1119)**	Center Cross Church Rd (SR 1115) - I-73/74	Randolph Co.	3.0	16	2	50	55	11000	4800	10000	10000	15800	2A	60	Min	Sub	B
	Low Bridge Rd (SR 2481)	US 64 - Ramseur Julian Rd (SR 2442)	Randolph Co.	3.1	20	2	60	55	12000	2400	3800	3800	12000	ADQ	ADQ	Min	Sub	B
RAND0033-H	**Luck Rd (SR 2604)**	US 64 - Iron Mountain Rd (SR 2605)	Randolph Co.	2.8	18-34	2	60	55	12000	1500	2300	2300	15800	2A	60	Min	Sub	

HIGHWAY																		
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Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	Main St (Staley)	Park St - Staley Cove Dr	Staley	1.2	18	2	60	35	11000	1000	2200	2200	13800	2A	60	Min	Sub	
RAND0034-H	**Moore Rd (SR 1318)**	Old State NC 49 - Sawyersville Rd (SR 1328)	Randolph Co.	2.0	18	2	60	55	11000	600	900	900	15800	2A	60	Min	Sub	B
	Moore Rd (SR 1318)	Sawyersville Rd (SR 1328) - US 64	Randolph Co.	1.8	20	2	60	55	11000	600	900	900	11000	ADQ	ADQ	Min	Sub	B
	Mulberry Academy St (SR 2495)	Academy St - Patterson Grove Rd (SR 2491)	Randolph Co.	2.5	20	2	60	55	12000	1400	2500	2500	12000	ADQ	ADQ	Min	Sub	
RAND0035-H	**New Hope Rd (SR 1181)**	NC 49 - Montgomery County	Randolph Co.	7.8	18	2	60	55	11000	500	800	800	15800	2A	60	Min	Sub	
	New Salem Rd (SR 2116)	NC 22 - US 220	Randolph Co.	7.1	18-22	2	60	55	12000	3700	7500	7500	12000	ADQ	ADQ	Min	Sub	B
RAND0036-H	**Old 421 Rd (SR 1006)**	N Greensboro St - Guilford County	Liberty/ Randolph Co.	4.2	20	2	60	55	15000	4000	4700	4700	15800	2A	60	Min	Sub	
	Old Cedar Falls Rd (SR 2216)	Henley Country Rd (SR 2215) - Loflin Pond Rd (SR 2221)	Randolph Co.	1.9	18-24	2	60	35	12000	2500	2000	2000	12000	ADQ	ADQ	Min	Sub	B
	Old Coleridge Rd (SR 2634)	NC 22-42 - Chatham County	Randolph Co.	7.1	18-20	2	60	55	11000	200	500	500	11000	ADQ	ADQ	Min	Sub	
	Old County Farm Rd (SR 1415)	Old Lexington Rd (SR 1416) - Lake Lucas Rd (SR 1518)	Randolph Co.	2.7	18	2	60	55	11000	2500	2700	2700	11000	ADQ	ADQ	Min	Sub	
RAND0037-H	**Old Cox Rd (SR 2834)**	NC 159 - Old Hwy 13 (SR 2845)	Randolph Co.	5.7	20	2	60	55	15000	3200	4200	4200	15800	2A	60	Min	Sub	
	Old Hwy 13 (SR 2845)	US 220 - NC 42	Randolph Co.	8.6	22	2	60	55	12000	1500	2500	2500	12000	ADQ	ADQ	Min	Sub	B
RAND0038-H	**Old Liberty Rd (SR 2261)**	US 421 - Ramseur Julian Rd (SR 2442)	Randolph Co.	2.5	18	2	60	55	11000	1800	2600	2600	15800	2A	60	Min	Sub	
RAND0038-H	**Old Liberty Rd (SR 2261)**	Ramseur Julian Rd (SR 2442) - NC 22	Randolph Co.	4.0	18	2	60	55	11000	1800	2600	2600	15800	2A	60	Min	Sub	
RAND0038-H	**Old Liberty Rd (SR 2261)**	NC 22 - US 220 Bus	Randolph Co.	9.0	20	2	60	35, 55	11000	1800	2600	2600	15800	2A	60	Min	Sub	

HIGHWAY																		
					2009 Existing System						2035 Proposed System							
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	Old Lexington Rd (SR 1416)	US 64 - Green Farm Rd (SR 1415)	Randolph Co.	0.4	20	2	60	55	11000	900	1500	1500	11000	ADQ	ADQ	Min	Sub	
RAND0039-H	**Old NC Hwy 49 (SR 1193)**	NC 49 - Union Church Rd (SR 1163)	Randolph Co.	2.4	20	2	60	55	12000	4300	6500	6500	15800	2A	60	Min	Sub	
	Old NC Hwy 49 (SR 1193)	Union Church Rd (SR 1163) - NC 49	Randolph Co.	5.2	18	2	60	55	12000	500	800	800	12000	ADQ	ADQ	Min	Sub	B
	Old Red Cross Rd (SR 2403)	Harold Meadow Rd (SR 2404) - NC 22	Randolph Co.	2.0	18	2	60	55	11000	1000	1300	1300	11000	ADQ	ADQ	Min	Sub	
	Old US 64 (SR 1314)	US 64 (SR 1314) - Davidson County	Randolph Co.	3.2	20	2	60	55	12000	980	1500	1500	12000	ADQ	ADQ	Min	Sub	
RAND0040-H	**Otis Rd (SR 1633)**	Westchapel Rd (SR 1425) - proposed Western Loop (New	Randolph Co.	0.3	20	2	60	55	11000	980	1200	1200	15800	2A	60	Min	Sub	
RAND0041-H	**Parks Crossroads Church Rd (SR 2628)**	US 64 - NC 22	Randolph Co.	5.5	18	2	60	55	12000	1100	1700	1700	15800	2A	60	Min	Sub	B
RAND0042-H	**Patterson Grove Rd (SR 2491)**	NC 22 - Ramseur Julian Rd (SR 2442)	Randolph Co.	3.0	20	2	60	55	12000	800	1300	1300	15800	2A	60	Min	Sub	
RAND0043-H	**Pentencostal Church Rd (SR 2228)**	Pleasant Cross Rd (SR 2224) - Andrew Hunter Rd (SR 2235)	Randolph Co.	0.4	20	2	60	55	12000	200	1000	1000	15800	2A	60	Min	Sub	
RAND0044-H	**Pine Hill Rd (SR 2824)**	Browers Chapel Rd (SR 2826) - Old Cox Rd (SR 2834)	Randolph Co.	1.6	20	2	60	55	12000	790	1200	1200	15800	2A	60	Min	Sub	
RAND0045-H	**Pisgah Covered Bridge Rd (SR 1114)**	Hopewell Friends Rd (SR 1142) - US 220 BUS	Randolph Co.	1.5	18	2	60	55	12000	1300	2600	2600	15800	2A	60	Min	Sub	B
RAND0046-H	**Pleasant Ridge Rd (SR 1003)**	US 64 - Holly Springs (SR 1003)	Randolph Co.	3.9	24	2	80	55	12000	3000	5200	5200	15800	2A	80	Min	Sub	B

HIGHWAY																		
					2009 Existing System						2035 Proposed System							
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	Providence Church Rd (SR 2114)	NC 22 - US 220	Randolph Co.	5.9	20	2	60	55	12000	4600	9000	9000	12000	ADQ	ADQ	Min	Sub	B
	Ramseur Julian Rd (SR 2442)	NC 49 - Shiloh Rd (SR 2407)	Randolph Co.	9.7	20	2	60	55	12000	1900	3200	3200	12000	ADQ	ADQ	Min	Sub	B
	Randleman Rd (SR 1007)	Branson Mill Rd (SR 2101)- Guilford County	Randolph Co.	1.6	24	2	60	45	12000	3000	5600	5600	12000	ADQ	ADQ	Min	Sub	
	Seagrove Plank Rd (SR 2846)	Old Hwy 13 (SR 2845) - NC 705	Randolph Co.	2.7	20	2	60	55	12600	3000	4500	4500	12600	ADQ	ADQ	Min	Sub	
	Shiloh Rd (SR 2407)	Guilford Counkty - US 421	Randolph Co.	0.5	22	2	60	55	12600	900	1500	1500	12600	ADQ	ADQ	Min	Sub	
	Shiloh Rd (SR 2407)	US 421 - Ramseur Julian Rd (SR 2442)	Randolph Co.	1.8	22	2	60	55	12600	800	1000	1000	12600	ADQ	ADQ	Min	Sub	
	Shiloh Rd (SR 2407)	Ramseur Julian Rd (SR 2442) -US 421	Randolph Co.	0.8	22	2	60	55	12600	800	1000	1000	12600	ADQ	ADQ	Min	Sub	B
RAND0047-H	**Southmont Dr (SR 1145)**	Mack Rd (SR 1144) - US 220 BUS	Randolph Co.	2.8	18-20	2	60	35, 55	12000	1300	2900	2900	15800	2A	60	Min	Sub	
	Tabernacle Church Rd (SR 1405)	HPMPO - Tabernacle Church Rd EXT (SR 1311)	Randolph Co.	3.6	20	2	60	55	12000	1000	1400	1400	12000	ADQ	ADQ	Min	Sub	
	Tabernacle Church Rd EXT (SR 1311)	Gallimore Town Rd (SR 1390) - US 64	Randolph Co.	0.2	20	2	60	55	12000	1000	1400	1400	12000	ADQ	ADQ	Min	Sub	
	Tot Hill Farm Rd (SR 1163)	NC 49 - Lassiter Mill Rd (SR 1107)	Randolph Co.	4.7	20	2	60	55	12000	1500	2500	2500	12000	ADQ	ADQ	Min	Sub	B
	Westchapel Rd (SR 1425)	US 64 - Otis Rd (SR 1633)	Randolph Co.	0.2	20	2	60	55	11000	980	1200	1200	15800	2A	60	Min	Sub	

PUBLIC TRANSPORTATION AND RAIL

PUBLIC TRANSPORTATION[1]							
			Speed		Existing System	Proposed System	
Local ID	Facility/ Route	Section (From - To)	Limit (mph)	Distance (mi)	Type	Type	Other Modes
RAND0001-T	**US 220 Bus**	Downtown Greensboro(I-73/74) - Asheboro Zoo	20-70	33.8	Bus	Bus	H
RAND0002-T	**US 311 Express (NEW)**	Randleman Lake Community - Winston Salem	20-70	--	--	Bus	H

[1]Only major public transportation routes and proposals are shown here. For further documentation of the public transportation system, refer to the PART website.

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
	Norfork Southern	High Point MPO - South of Southmont Dr (SR 1145)	I	5-30	14.9	Freight	25-100	<5	--	--	--	--
	Norfork Southern	Guilford County - Chatham County	I	5-30	12.3	Freight	25-100	<5	--	--	--	--

Appendix D
Typical Cross Sections

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

The typical cross sections were updated on December 7, 2010 to support the Department's "Complete Streets" policy that was adopted in July 2009. This guidance established design elements that emphasize safety, mobility, and accessibility for multiple modes of travel. These "typical" cross sections should be used as preliminary guidelines for comprehensive transportation planning, project planning and project design activities. The specific and final cross section details and right of way limits for projects will be established through the preparation of the National Environmental Policy Act (NEPA) documentation and through final plan preparation.

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

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

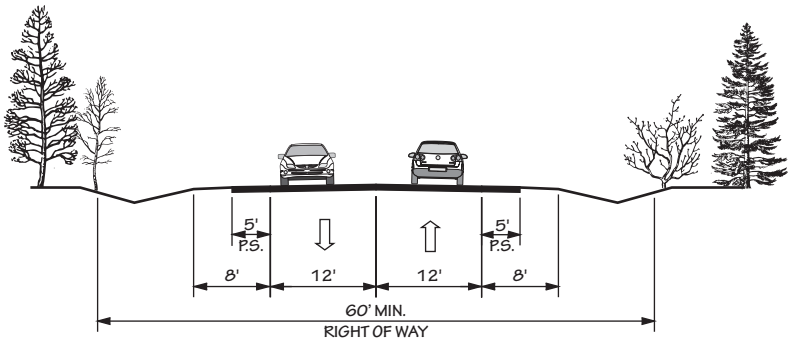
FIGURE 10

TYPICAL HIGHWAY CROSS SECTIONS

2 LANES

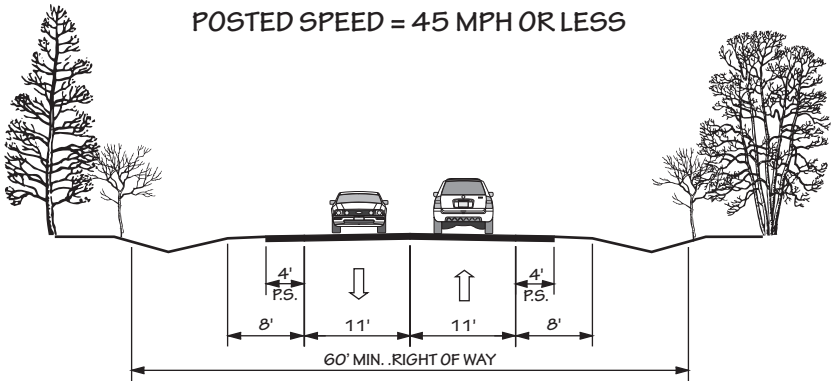
2 A

WIDE PAVED SHOULDERS
POSTED SPEED = 55 MPH



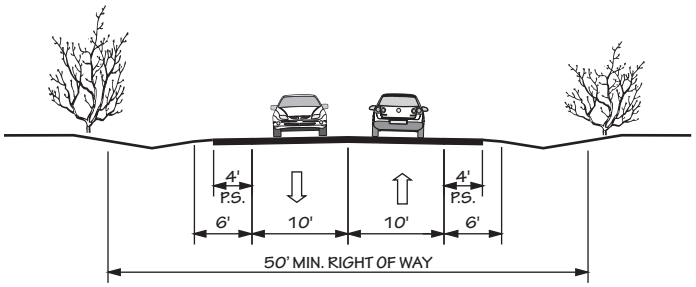
2 B

WIDE PAVED SHOULDERS
POSTED SPEED = 45 MPH OR LESS



2 C

WIDE PAVED SHOULDERS
POSTED SPEED = 35 MPH OR LESS



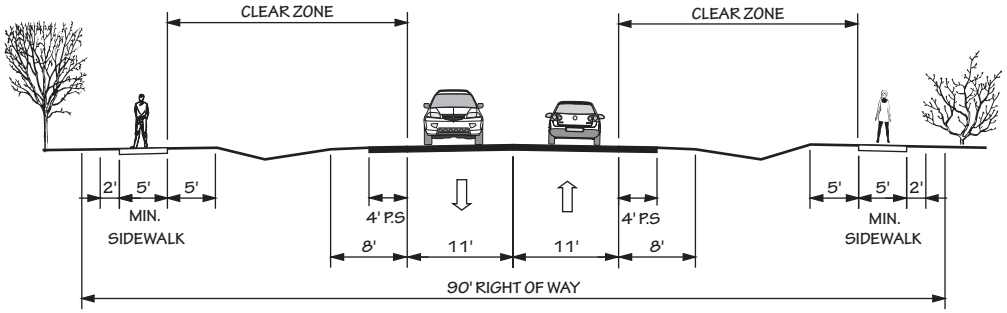
Revised 12/07/2010

TYPICAL HIGHWAY CROSS SECTIONS

2 LANES

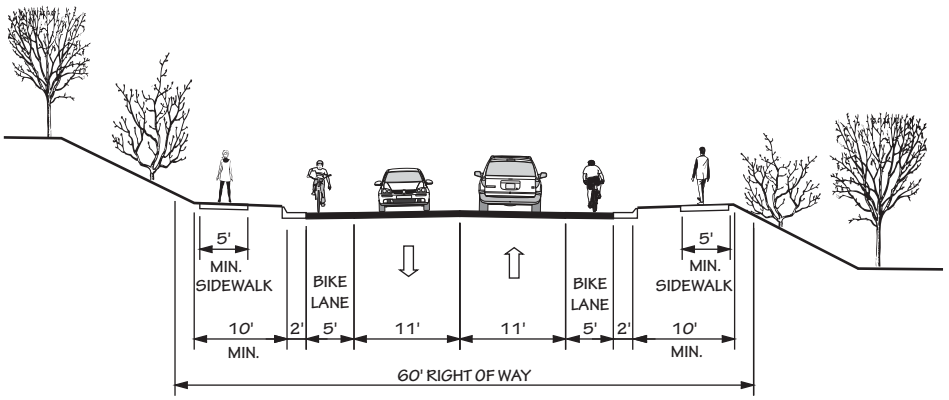
2 D

SIDEWALK PLACEMENT BEHIND A ROADWAY DITCH



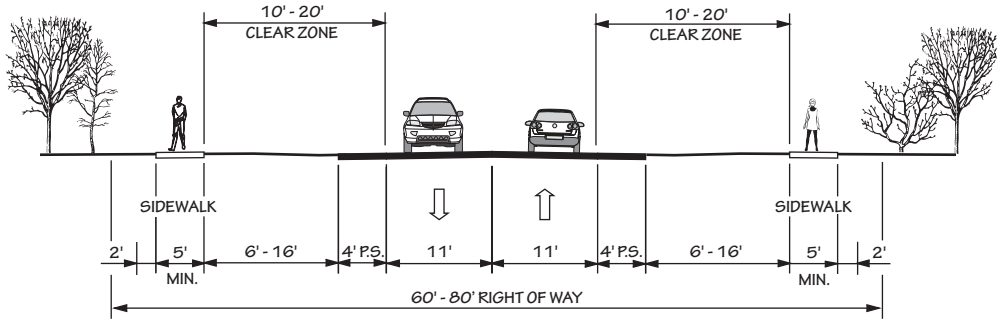
2 E

CURB AND GUTTER
WITH BIKE LANES AND SIDEWALKS



2 F

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



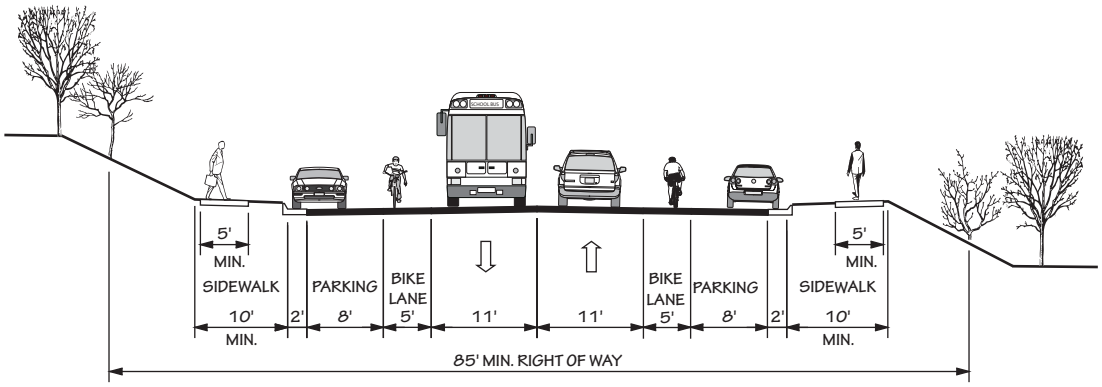
Revised 12/07/2010

TYPICAL HIGHWAY CROSS SECTIONS

2 LANES

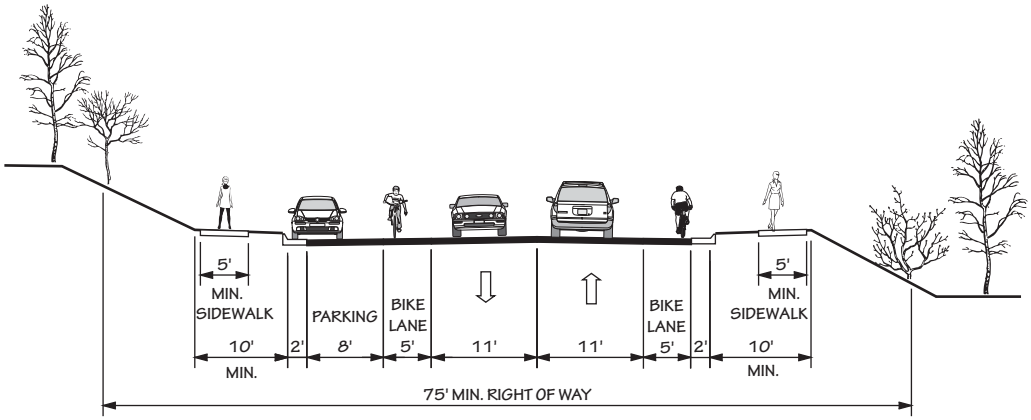
2 G

CURB & GUTTER - PARKING ON EACH SIDE



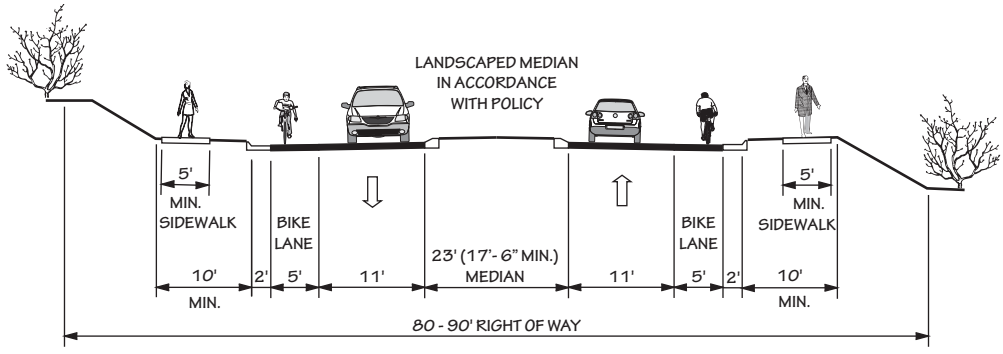
2 H

CURB & GUTTER - PARKING ON ONE SIDE



2 I

RAISED MEDIAN WITH CURB & GUTTER



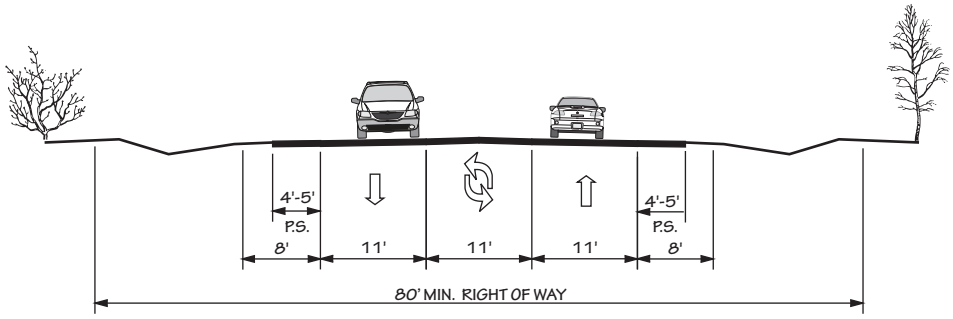
Revised 12/07/2010

TYPICAL HIGHWAY CROSS SECTIONS

3 LANES

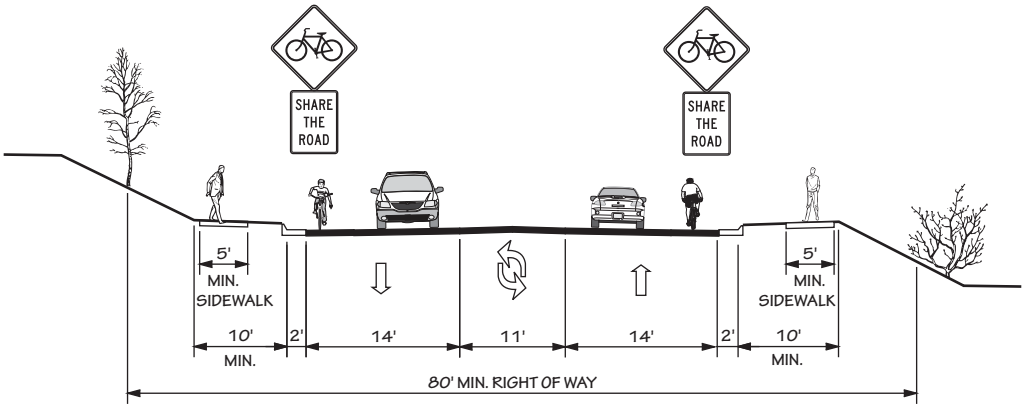
3 A

WIDE PAVED SHOULDERS



3 B

CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS

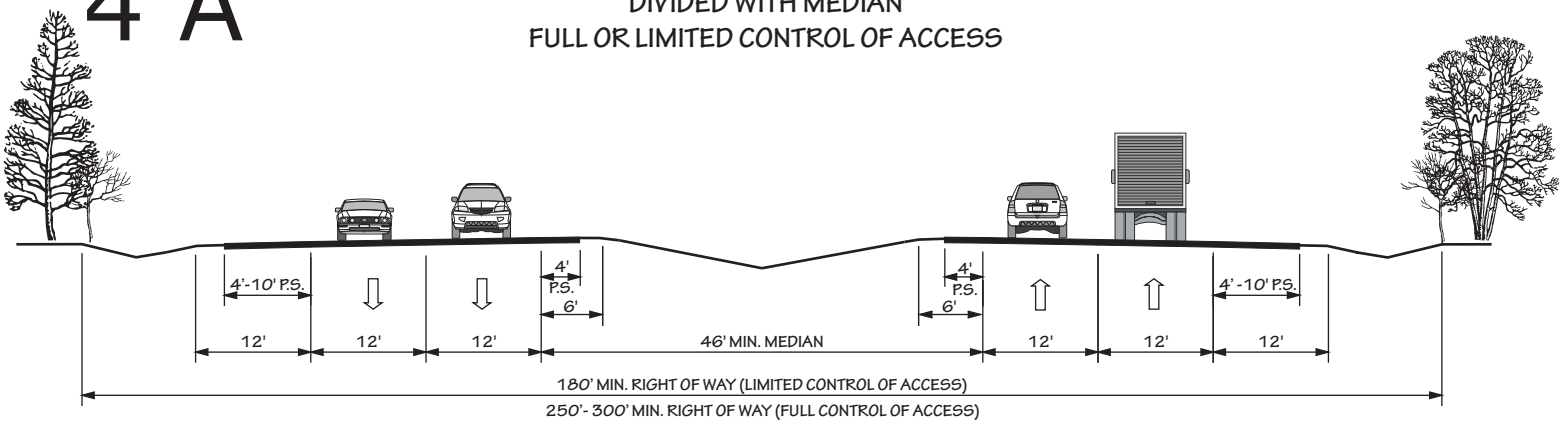


TYPICAL HIGHWAY CROSS SECTIONS

4 LANES

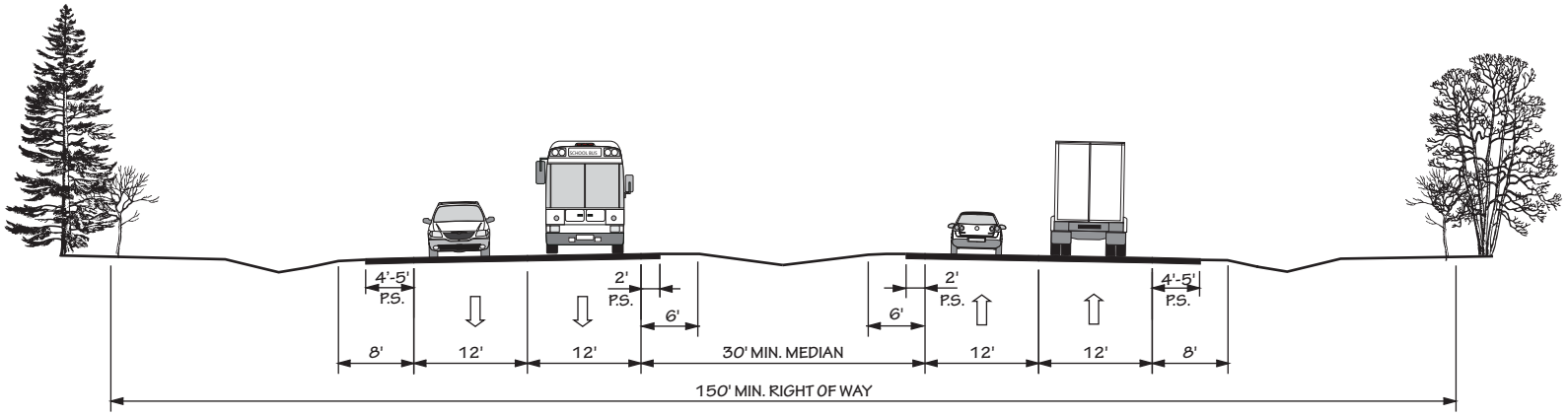
4 A

DIVIDED WITH MEDIAN
FULL OR LIMITED CONTROL OF ACCESS



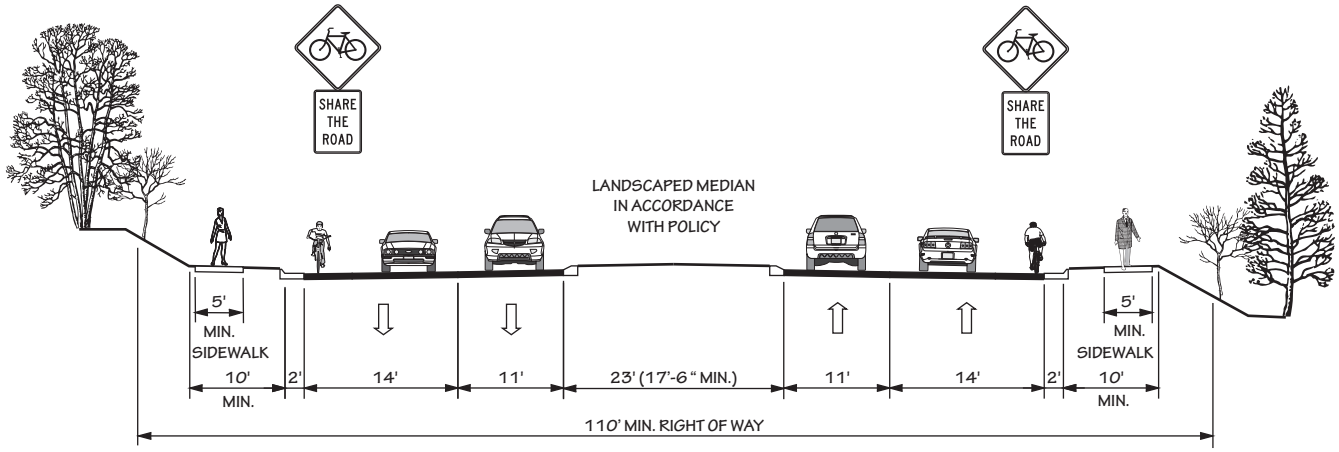
4 B

DIVIDED WITH MEDIAN - NO CURB & GUTTER
PARTIAL CONTROL OF ACCESS



4 C

RAISED MEDIAN WITH WIDE OUTSIDE LANES AND SIDEWALKS



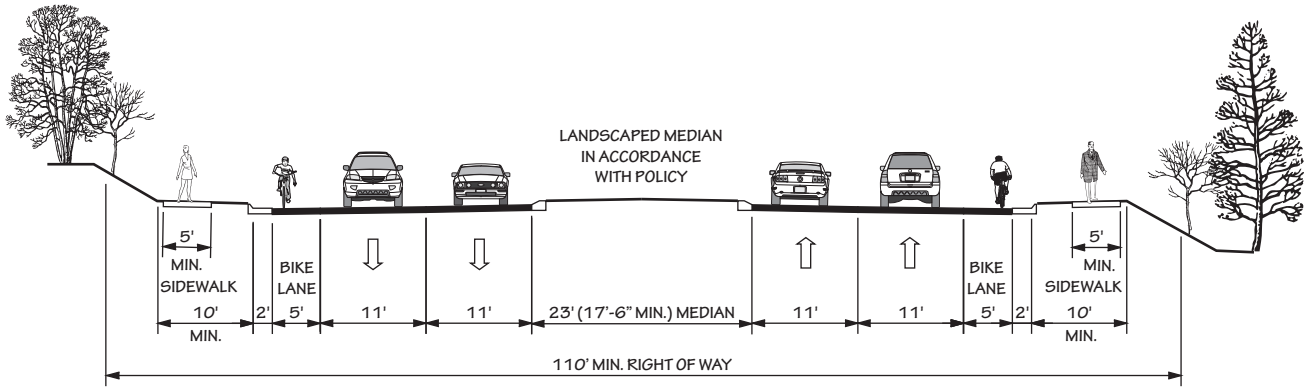
Revised 12/07/2010

TYPICAL HIGHWAY CROSS SECTIONS

4 LANES

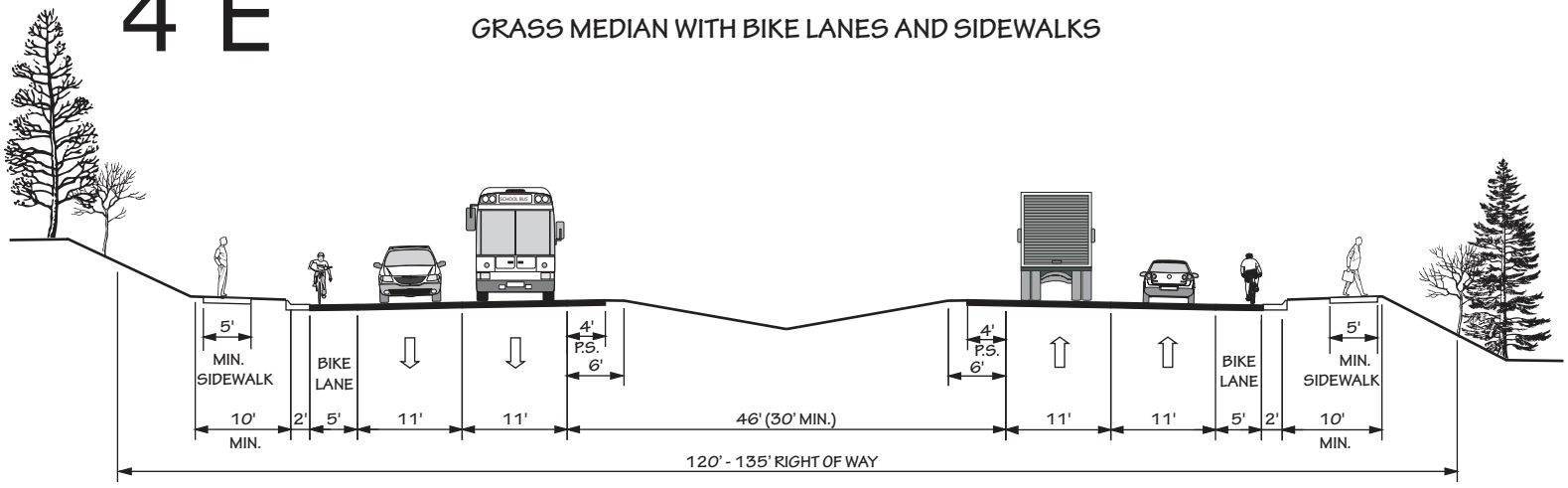
4 D

RAISED MEDIAN - CURB & GUTTER WITH BIKE LANES AND SIDEWALKS



4 E

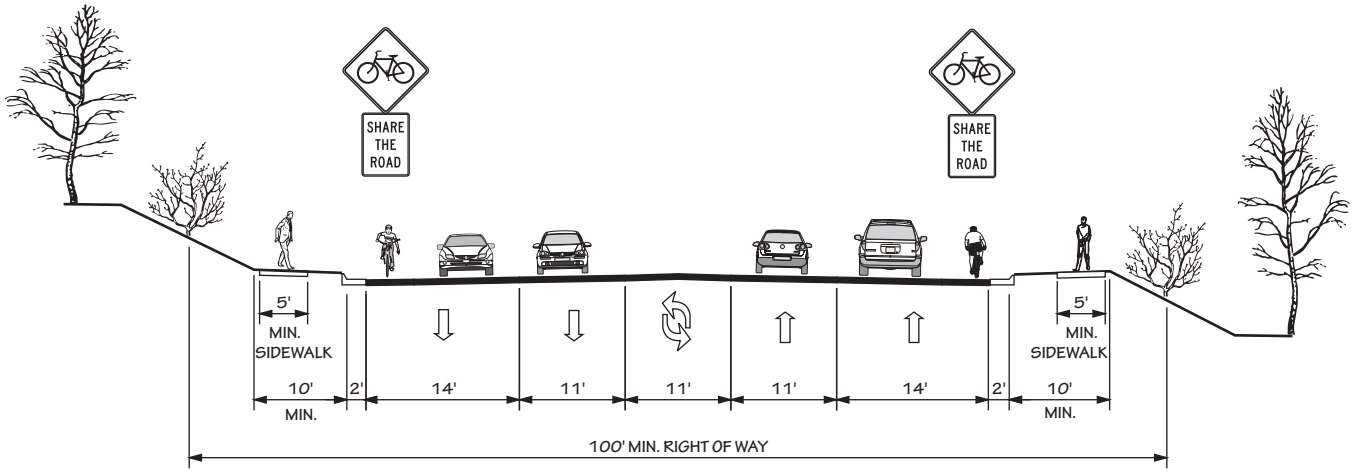
GRASS MEDIAN WITH BIKE LANES AND SIDEWALKS



5 LANES

5 A

WIDE OUTSIDE LANES

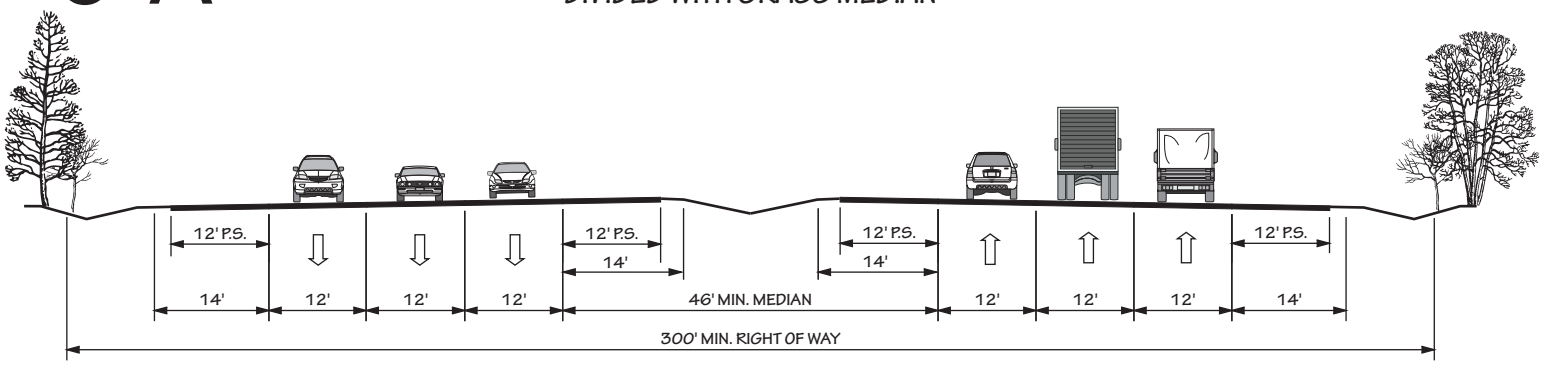


TYPICAL HIGHWAY CROSS SECTIONS

6 LANES

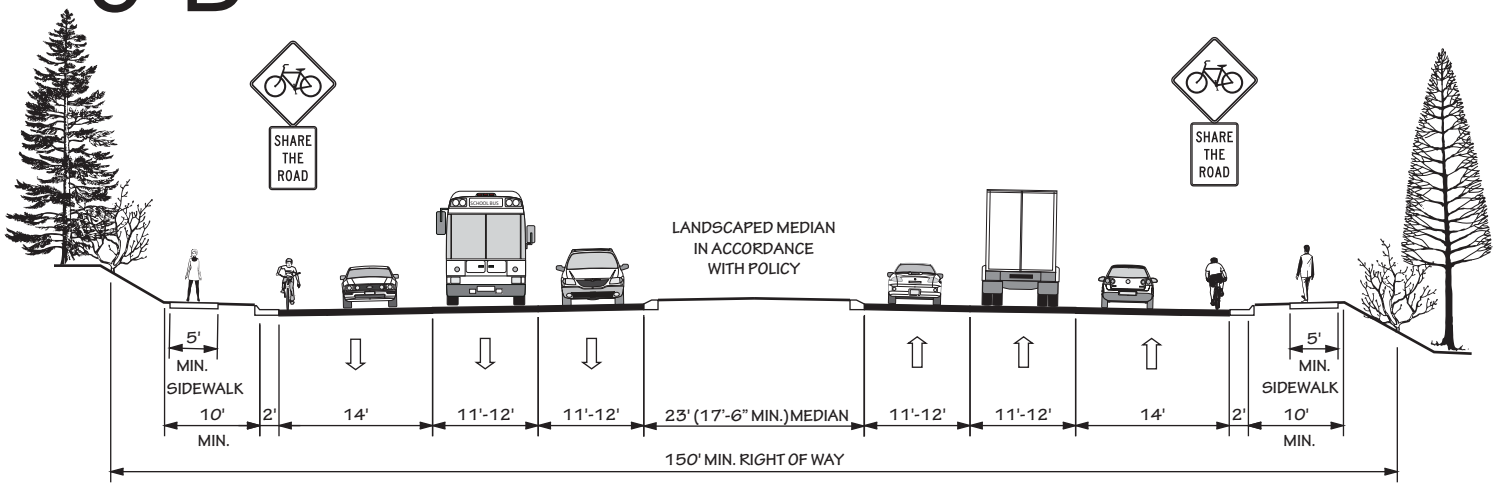
6 A

DIVIDED WITH GRASS MEDIAN



6 B

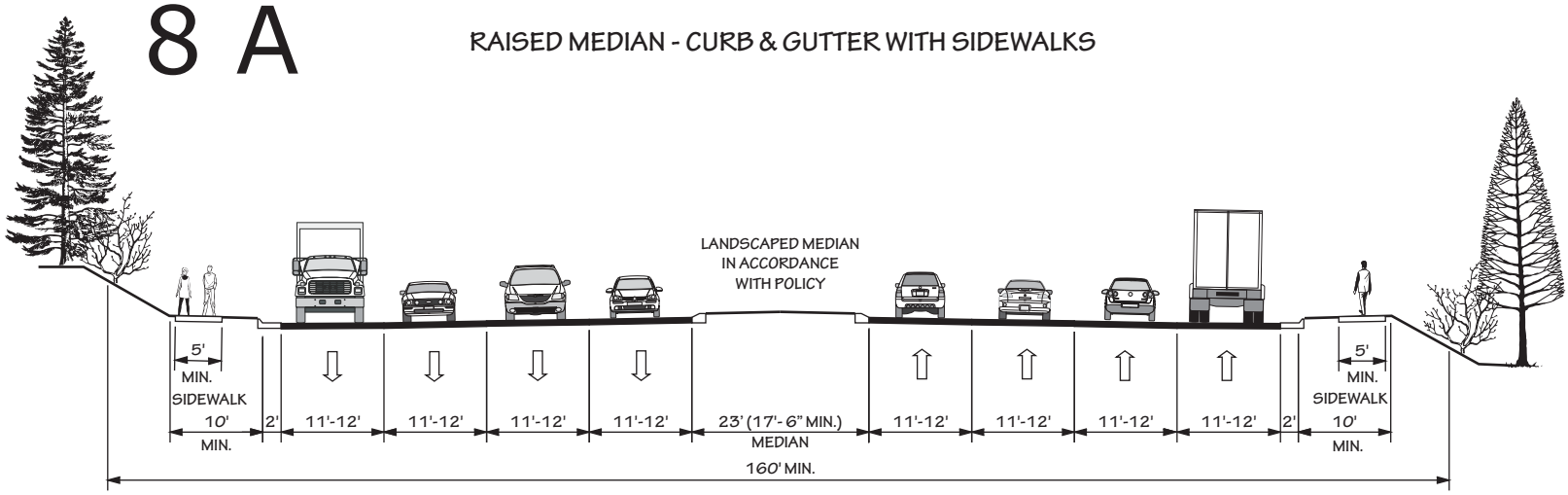
RAISED MEDIAN - CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS



8 LANES

8 A

RAISED MEDIAN - CURB & GUTTER WITH SIDEWALKS

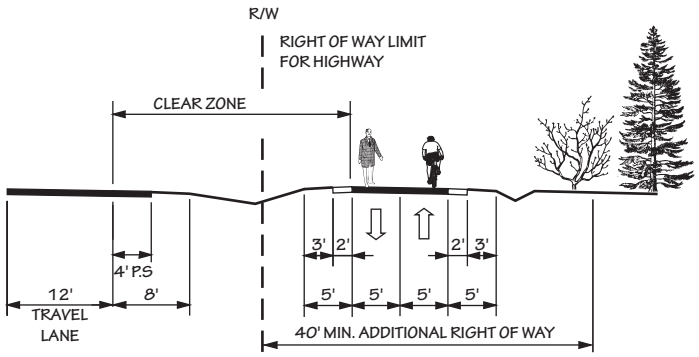


Revised 12/07/2010

TYPICAL MULTI - USE PATH

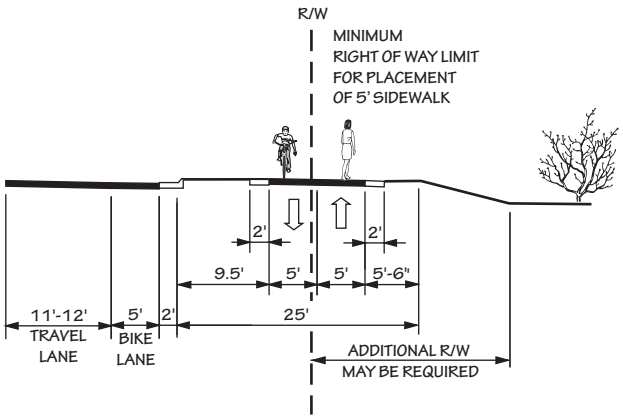
MULTI - USE PATH
ADJACENT TO RIGHT OF WAY OR SEPARATE PATHWAY

M A



MULTI - USE PATH ADJACENT TO CURB AND GUTTER

M B



Appendix E
Level of Service Definitions

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

Design requirements for roadways vary according to the desired capacity and level of service. LOS D indicates "practical capacity" of a roadway, or the capacity at which the public begins to express dissatisfaction. Recommended improvements and overall design of the transportation plan were based upon achieving a minimum LOS D on existing facilities and a LOS C on new facilities. The six levels of service are described below and illustrated in Figure 10.

- **LOS A**: Describes primarily free flow conditions. The motorist experiences a high level of physical and psychological comfort. The effects of minor incidents of breakdown are easily absorbed. Even at the maximum density, the average spacing between vehicles is about 528 ft, or 26 car lengths.
- **LOS B**: Represents reasonably free flow conditions. The ability to maneuver within the traffic stream is only slightly restricted. The lowest average spacing between vehicles is about 330 ft, or 18 car lengths.
- **LOS C**: Provides for stable operations, but flows approach the range in which small increases will cause substantial deterioration in service. Freedom to maneuver is noticeably restricted. Minor incidents may still be absorbed, but the local decline in service will be great. Queues may be expected to form behind any significant blockage. Minimum average spacing is in the range of 220 ft, or 11 car lengths.
- **LOS D**: Borders on unstable flow. Density begins to deteriorate somewhat more quickly with increasing flow. Small increases in flow can cause substantial deterioration in service. Freedom to maneuver is severely limited, and the driver experiences drastically reduced comfort levels. Minor incidents can be expected to create substantial queuing. At the limit, vehicles are spaced at about 165 ft, or 9 car lengths.
- **LOS E**: Describes operation at capacity. Operations at this level are extremely unstable, because there are virtually no usable gaps in the traffic stream. Any disruption to the traffic stream, such as a vehicle entering from a ramp, or changing lanes, requires the following vehicles to give way to admit the vehicle. This can establish a disruption wave that propagates through the upstream traffic flow. At capacity, the traffic stream has no ability to dissipate any disruption. Any incident can be expected to produce a serious breakdown with extensive queuing. Vehicles are spaced at approximately 6 car lengths, leaving little room to maneuver.

- **LOS F**: Describes forced or breakdown flow. Such conditions generally exist within queues forming behind breakdown points.

Figure 11 - Level of Service Illustrations

Level of Service A

Driver Comfort: High

Maximum Density:

12 passenger cars per mile per lane

Level of Service B

Driver Comfort: High

Maximum Density:

20 passenger cars per mile per lane

Level of Service C

Driver Comfort: Some Tension

Maximum Density:

30 passenger cars per mile per lane

Level of Service D

Driver Comfort: Poor

Maximum Density:

42 passenger cars per mile per lane

Level of Service E

Driver Comfort: Extremely Poor

Maximum Density:

67 passenger cars per mile per lane

Level of Service F

Driver Comfort: The lowest

Maximum Density:

More than 67 passenger cars per mile per lane

Source: 2000 Highway Capacity Manual

Appendix F
Traffic Crash Analysis

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

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

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

Table 4 depicts a summary of the crashes occurring in the planning area between January 1, 2007 and December 31, 2009. The data represents locations with 10 or more crashes and/or a severity average greater than that of the state's 4.56 index. The "Total" column indicates the total number of accidents reported within 150-ft of the intersection during the study period. The severity listed is the average crash severity for that location.

Table 4 - Crash Locations

Map Index	Intersection	Average Severity	Total Collisions
1	US 64 and NC 42	3.8	52
2	Academy and High Point	2.8	44
3	US 64 and US 220	3.07	43
4	US 64 and SR 1451	2.62	32
5	US 64 and NC 159	2.71	28
6	US 64 and Shamrock	2.48	25
7	US 220B and NC 42	4.7	25

Map Index	Intersection	Average Severity	Total Collisions
8	US 64 and Kenmore	3.82	22
9	US 64 and SR 2203	4.88	22
10	US 220 and NC 42	3.34	22
11	US 64 and Arrowwood	4.12	21
12	US 64 and SR 2327	3.88	20
13	US 64 and Executive	3.47	19
14	US 64 and SR 2611	4.12	19
15	US 64 and Shannon	4.24	18
16	NC 42 and Elm	2.23	18
17	US 220 and US 311	2.95	17
18	US 64 and SR 2235	8.52	16
19	SR 1707 and Wainman	8.53	14
20	US 64 and SR 2345	5.32	13
21	US 64 and SR 2808	3.28	13
22	US 220B and Ward	5.55	13
23	US 220B and SR 2344	3.85	13
24	NC 49 and SR 1144	3.28	13
25	US 64 and Brady	5.04	12
26	US 311 and US 220B	2.71	12
27	US 220B and McArthur	4.7	12
28	US 64 and SR 2197	3.69	11
29	US 64 and SR 2626	10.25	11
30	US 220B and Wesleyan	2.35	11
31	US 220B and SR 1504	4.36	11
32	US 220B and SR 2114	4.36	11
33	NC 42 and SR 1707	5.04	11
34	SR 1707 and Sunset	3.22	10
35	SR 1451 and Wainman	2.23	10
36	SR 1451 and SR 1453	3.96	10
37	US 64 and NC 22	2.59	10
38	US 64 and SR 2221	3.22	10
39	US 64 and 2481	1.74	10
40	US 311 and SR 1952	3.22	10
41	US 421 and SR 2407	11.54	10
42	US 220B and Taft	3.02	10

The NCDOT is actively involved with investigating and improving many of these locations. To request a more detailed analysis for any of the locations listed in Table 4, or other intersections of concern, contact the Division Traffic Engineer. Contact information for the Division Traffic Engineer is included in Appendix A.

Appendix G
Bridge Deficiency Assessment

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

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

A bridge must be classified as deficient in order to quality for Federal replacement funds. Additionally, the sufficiency rating must be less than 50% to qualify for replacement or less than 80% to qualify for rehabilitation under federal funding. Deficient bridges within the planning area are listed in Table 5.

Table 5 - Deficient Bridges

Bridge Number	Facility	Feature	Condition	(Local ID)
4	SR1114	LITTLE RIVER	Functionally Obsolete	B-4797
9	NC42	US220 SBL	Structurally Deficient	
14	SR1163	MCGEE'S CREEK	Structurally Deficient	
16	SR1163	TAYLOR CREEK	Structurally Deficient	B-4609
17	NC42	US220 NBL	Functionally Obsolete	
18	SR1107	BETTIE MCGEES CRE	Structurally Deficient	B-4794
21	US220 NBL	US220BUS.,NC134	Functionally Obsolete	RAND0048-H
24	SR1114	CREEK	Structurally Deficient	B-4796
25	SR1112	CREEK	Functionally Obsolete	B-4795
27	US220 SBL	NC134	Functionally Obsolete	RAND0048-H
29	SR1105	UWHARRIE RIVER	Structurally Deficient	B-4793
33	US64	UWHARRIE RIVER	Structurally Deficient	R-2220
37	SR1311	JACKSON'S CREEK	Structurally Deficient	B-4799
38	SR3255	CEDAR CREEK	Structurally Deficient	
43	SR1312	JACKSON CREEK	Structurally Deficient	B-4800
50	SR1004	CARAWAY CREEK	Structurally Deficient	
58	SR1404	CREEK	Functionally Obsolete	B-5128
65	NC49	TOM'S CREEK	Functionally Obsolete	
70	SR1502	CREEK	Structurally Deficient	
73	SR1518	LAKE LUCAS	Structurally Deficient	B-4610
75	SR1511	PRONG OF BACK CREEK	Functionally Obsolete	
98	US64	CARAWAY CREEK	Functionally Obsolete	R-2220
105	NC49	UWHARRIE RIVER	Functionally Obsolete	
106	SR2103	CREEK	Structurally Deficient	
117	SR1114	US220	Functionally Obsolete	
122	SR2111	POLECAT CREEK	Structurally Deficient	
125	SR2106	LITTLE POLECAT CREEK	Structurally Deficient	
129	SR2407	BRANCH OF SANDY CREEK	Functionally Obsolete	
131	US64	BACK CREEK	Functionally Obsolete	R-2220
135	SR1145	US220	Functionally Obsolete	
137	SR1107	NC49	Structurally Deficient	
140	SR2215	CREEK	Functionally Obsolete	B-4244
146	SR2226	BUSH CREEK	Structurally Deficient	
149	SR2141	CREEK	Structurally Deficient	
151	SR2453	SANDY CREEK	Functionally Obsolete	
152	SR2448	SANDY CREEK	Structurally Deficient	
154	SR2440	SANDY CREEK BRANCH	Structurally Deficient	B-4969
156	NC49	SR1193 EBL	Functionally Obsolete	
157	SR1150	US220	Functionally Obsolete	

Bridge Number	Facility	Feature	Condition	(Local ID)
164	SR2642	CREEK	Functionally Obsolete	
171	SR1713	US64 & NC49	Structurally Deficient	
173	US64	US220 BUS. & CONW RR	Structurally Deficient	RAND0001-H
177	SR1713	US220	Structurally Deficient	
184	SR2660	CREEK	Structurally Deficient	
185	SR2605	CREEK	Functionally Obsolete	
194	SR2876	CREEK	Structurally Deficient	
196	SR1442	US220 NBL	Functionally Obsolete	
197	SR1442	US220 SBL	Functionally Obsolete	
198	SR2873	CREEK	Structurally Deficient	
205	SR1462	US220	Functionally Obsolete	I-4921
206	SR1002	FORK CREEK	Structurally Deficient	
208	SR1003	FORK CREEK	Structurally Deficient	B-4608
210	SR2869	MEADOW CREEK	Functionally Obsolete	
215	SR2903	BACHELOR CREEK	Structurally Deficient	
218	SR2845	RICHLAND CREEK	Functionally Obsolete	
220	SR2849	BACHELOR CREEK	Structurally Deficient	
232	SR1107	HIGH PINE CREEK	Structurally Deficient	
235	US220 NBL	DEEP RIVER	Structurally Deficient	I-4921
236	US220 SBL	DEEP RIVER	Structurally Deficient	I-4921
261	SR1111	CREEK	Functionally Obsolete	
307	SR2481	MOUNT PLEASANT CREEK	Structurally Deficient	
318	SR2640	CREEK	Functionally Obsolete	
324	SR1174	UWHARRIE RIVER	Structurally Deficient	
330	SR1400	BRANCH OF PLUMMER CK.	Functionally Obsolete	
342	SR1175	SECOND CREEK	Structurally Deficient	
346	SR1179	LANIERS CREEK	Structurally Deficient	
354	SR2613	MILL CREEK	Structurally Deficient	
366	SR1311	CREEK	Structurally Deficient	
372	SR1133	REED CREEK	Structurally Deficient	
373	SR1115	CREEK	Structurally Deficient	
374	SR2481	SANDY CREEK	Structurally Deficient	
375	SR1004	BACK CREEK	Functionally Obsolete	
384	SR1002	BRANCH	Structurally Deficient	
411	SR1193	CARAWAY CREEK	Functionally Obsolete	
412	SR1193	UWHARRIE RIVER	Functionally Obsolete	
415	SR2873	FORK CREEK	Structurally Deficient	B-4613
419	SR2159	CREEK	Structurally Deficient	
430	SR1163	BETTIE MCGEES CREEK	Structurally Deficient	
433	SR2261	HASKETTS CREEK	Functionally Obsolete	
438	SR2261	BRUSH CREEK	Functionally Obsolete	
439	SR2261	BRANCH SANDY CREEK	Functionally Obsolete	

Bridge Number	Facility	Feature	Condition	(Local ID)
440	SR2261	PRONG CREEK	Functionally Obsolete	
442	SR2261	CREEK	Functionally Obsolete	
443	SR2261	SANDY CREEK	Functionally Obsolete	
447	SR2269	CARO.&NORTHWESTER RR	Structurally Deficient	

Appendix H
Public Involvement

This appendix includes: a listing of committee members; vision statement; G/O survey with summary of results; and summary of each public involvement opportunity including the types of information presented, number of attendees, and any major/potentially controversial issues.

CTP steering committee members;

Richard Wells, Randolph County Manager
Hal Johnson, Director of Planning and Zoning, Randolph County
John Ogburn, City Manager, City of Asheboro
Reynolds Neely, Director of Community Development, City of Asheboro
Sheila Vince, Clerk, Town of Franklinville
Roger Davis, Manager, Town of Liberty
Kevin Franklin, Manager, Town of Ramseur
Tony Sears, Manager, City of Randleman
Greg Patton, Planning & Zoning Director, City of Randleman
Cathy McCaskill, Clerk, Town of Seagrove
Lonna Hart, Clerk, Town of Staley

Vision statement;

The vision and goals statements below are derived from the adopted growth management plan as well as public input received through workshops, stakeholder meetings and public survey tools. The plan outlines Randolph County's anticipated multimodal transportation needs including roadway, bicycle, pedestrian and transit facilities.

The vision for this plan is…

To provide a safe, efficient and sustainable transportation system for residents, visitors and the traveling public that will support economic vitality, resource conservation and a high quality of life and provides legitimate transportation choices.

The goals for this plan are to…

- Provide comprehensive strategies to improve transportation infrastructure and operations throughout Randolph County;

- Identify the short-term and long-term transportation improvements to support quality, sustainable growth throughout the county;

- Balance the demand for transportation facilities against the need to preserve the County's rural heritage and natural resources;

- Recognize the connections between transportation, land use, economic vitality and quality of life.

G/O survey with summation of results

Randolph County
Comprehensive Transportation Plan Survey Results

From December 2009 to May 2010, a transportation needs survey was distributed to transportation stakeholders and the public throughout Randolph County. 296 responses were received. Below is a brief summary of the results.

Transportation Goals

Total respondents ranking each goal as 'Important' or 'Very Important', in rank order.

Goals	Responses	Percentage
Support economic growth	285	98.27%
Protect the environment	280	97.56%
Improve services for special needs populations	268	93.37%
Preserve community and rural character	269	92.75%
Improve automobile travel times	257	90.49%
Improve facilities for walking and biking	250	85.32%
Increase access to local (RCATS) and regional (PART) transit service	230	79.86%
Increase access to park and ride lots	215	73.63%

Strategies for increasing road capacity

Total respondents ranking each strategy as 'Important' or 'Very Important', in rank order.

Strategies	Responses	Percentage
Make intersection improvements like turn lanes and better signal timing	279	96.53%
Build additional travel lanes on major roads	249	86.75%
Control the number and location of driveways and cross-streets that access major roads	230	80.13%
Control to location of left turns with medians	223	77.43%

Key transportation issues

195 respondents identified the key transportation issues facing Randolph County. The top four 'themes' found in the open-ended responses are listed below.

Rank	Issue
1	Address congestion on major roadways and key intersections
2	Broaden transportation choices by providing more transit, walking and biking accommodations
3	Improve road conditions
4	Improve signalization

Safety concerns

71% of respondents indicated they had safety concerns about specific locations in the county. Of the locations identified by respondents, the top four are listed below.

Rank	Location
1	US 64, particularly at intersections with other NC and US routes
2	Business US 220
3	Zoo Parkway
4	NC 49

Truck Traffic concerns

33% of respondents indicated they had concerns about truck traffic in the county. Of the examples provided by respondents, the top four areas of concern are listed below.

Rank	Location
1	US 64
2	US 220, particularly at interchanges
3	NC 49
4	US 134

Mobility concerns

21% of respondents indicated they had concerns about the lack of direct routes to destinations in the county. The top three corridors and destinations provided by respondents are listed below.

Rank	Corridor or Destination
1	East-West routes between Liberty, Asheboro and High Point
2	North-South routes between Seagrove, , Asheboro and Randleman
3	The North Carolina Zoo

Congestion concerns

54% of respondents indicated they had concerns about congestion in the county. Of the examples provided by respondents, the top four areas of congestion are listed below.

Rank	Location
1	US 64
2	Zoo Parkway
3	NC 49 at Mack Road
4	Business US 220

Regional Accessibility

Total respondents raking the location or corridor as 'Very Desirable' or 'Desirable' for improved access, in rank order.

Areas	Responses	Percentage
High Point	182	79.8
Greensboro	169	75.1
Raleigh/Durham	120	54.7
Winston-Salem	118	53.4
Charlotte	117	51.4

Roads	Responses	Percentage
US 64	193	78.7
US 220	173	74.2
US 311	166	73.4
Interstate 40	144	66.9
NC 49	136	61.8
NC 42	103	48.5

Alternative Modes

Respondents were asked about their usage and desire for more pedestrian, bicycle and transit services in the County.

48% of respondents identified locations for sidewalk improvements. Below are the most commonly suggested locations for improvements.

New Sidewalks
US 64 in Asheboro, Ramseur
Zoo Parkway
Academy Street in Randleman
In proximity to schools, including the community college campus

61% of respondents indicated they would use off-road trails and greenways. Below are the most commonly suggested locations for improvements.

New Trails and Greenways
Anywhere
Corridor between Randleman, Asheboro, the North Carolina Zoo and Seagrove
Deep River (Franklinville Rail Trail)
Birkhead Wilderness Area, Pisgah Covered Bridge, Lake Lucas

38% of respondents indicated they would use on-road bicycling facilities if provided. Below are the most commonly suggested locations for improvements.

New On-Road Bicycle Accommodations
Business US 220
US 64
Zoo Parkway
In proximity to schools, including the community college campus

Several questions were asked regarding the local and regional transit services currently available in the County.

- 14.6% of respondents have utilized the PART Express service and the Park and Ride lots.
- 4.7% of respondents have utilized RCATS transit services.
- 5.1% of respondents have utilized PART service to the North Carolina Zoo

17.5% of respondents indicated a desire for additional transit services or destinations served by transit. Below are the most commonly listed services and destinations.

Desired Transit Services
Local service within Asheboro, including the community college campus, shopping destinations and downtown
Service to Charlotte
Service to Raleigh
Weekend service

More Information

If you would like to review the survey results in their entirely, please visits the project webpage at: www.ptcog.org/planning_services/transportation/RPO/randolphcountytransportationplan.htm

Summary of public involvement opportunities;

- **Public Workshop #1 at the Randolph County Administration Building**
  The first public workshop took place at the Randolph County Administration Building on December 1, 2009 from 5:30-8:00 pm. This workshop introduced the CTP process as well as what could be expected of the final plan. Approximately fifteen citizens were in attendance. They were divided into workgroups to help identify and prioritize the needs of the different modes of transportation in the county. Many of the workgroups identified the need for improved transit and pedestrian facilities in the county.

- **Public Workshop #2 at Randolph County Administration Building**
  The second public workshop took place at Randolph County Administration Building on August 16, 2010 from 5:00-7:00 pm. There was a presentation that detailed the preliminary recommendations of the Randolph County CTP. Ten citizens were in attendance. They were given the opportunity to look through the recommendations and give additional feedback if anything needed to be added, removed, or changed. There was no additional feedback upon conclusion of this workshop.

- **Public Hearings held within Randolph County**
  - Asheboro Council Meeting – September 9, 2010
  - Franklinville Council Meeting – September 14, 2010
  - Liberty Council Meeting – September 27, 2010
  - Ramseur Council Meeting – September 13, 2010
  - Randleman Council Meeting – September 7, 2010
  - Seagrove Council Meeting – September 7, 2010
  - Staley Council Meeting – September 14, 2010
  - Randolph County Board of Commissioner's Meeting – November 1, 2010

  The purpose of these meetings was to present the recommendations and to solicit input from the public. The CTP was adopted at each of these meetings.

Appendix I
Existing Transportation Plans

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

- **The High Point MPO CTP:**

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

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

- **2001 City of Asheboro Thoroughfare Plan**
  http://www.ncdot.gov/doh/preconstruct/tpb/PDF/AsheboroThoroughfarePlan.pdf

- **2001 Towns of Franklinville and Ramseur Thoroughfare Plan**
  http://www.ncdot.gov/doh/preconstruct/tpb/PDF/FranklinvilleRamseurThroughfarePlan.pdf

- **1993 Town of Randleman Thoroughfare Plan Technical Report**
  http://www.ncdot.gov/doh/preconstruct/tpb/PDF/RandlemanThroughfarePlan.pdf

- **1991 Town of Liberty Thoroughfare Plan**
  http://www.ncdot.gov/doh/preconstruct/tpb/PDF/LibertyThoroughfarePlan.pdf