

2. Recommendations

This chapter presents recommendations for each mode of transportation in the 2017 Stokes County CTP as shown in Figure 1. More detailed information on each recommendation is tabulated in Appendix C.

NCDOT adopted a "Complete Streets¹" policy in July 2009. The policy directs the Department to consider and incorporate several modes of transportation when building new projects or making improvements to existing infrastructure. Under this policy, the Department will collaborate with cities, towns and communities during the planning and design phases of projects. Together, they will decide how to provide the transportation options needed to serve the community and complement the context of the area. The benefits of this approach include:

- Making it easier for travelers to get where they need to go;
- Encouraging the use of alternative forms of transportation;
- Building more sustainable communities;
- Increasing connectivity between neighborhoods, streets, and transit systems;
- Improving safety for pedestrians, cyclists, and motorists.

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

2.1 Unaddressed Deficiencies

The following deficiency was identified during the development of the CTP, but remains unaddressed:

US 311 (Main Street), STOK0001-H: from NC 65 to NC 89

US 311 (Main Street) is currently near or over capacity from NC 65 to Oldtown Road (SR 1918). By 2045, the section between NC 65 and NC 89 is projected to remain near or over capacity. Improvements are needed to relieve congestion on the existing facility such that a minimum of Level of Service (LOS) D can be achieved.

US 311 (Main Street) runs north-south through Walnut Cove and provides access to downtown Walnut Cove from Winston-Salem and other points south. This facility is a three-lane major thoroughfare with 12-foot lanes, a center turn lane, and on street

¹ For more information on Complete Streets, go to: <http://www.completestreetsnc.org/>

parking from Oldtown Street (SR 1918) to Seventh Street (SR 1950), and a three-lane major thoroughfare with 12 foot lanes and a center turn lane from Seventh Street (SR 1950) to NC 89. Annual Average Daily Traffic (AADT) on US 311 between NC 65 and Oldtown Street (SR 1918) is projected to increase from 12,000 vehicles per day (vpd) in 2015 to 13,500 vpd in 2045, compared to a LOS D capacity of 11,600 vpd. The AADT on US 311 between Eighth Street and NC 89 is projected to increase from 11,000 vpd in 2015 to 13,600 vpd in 2045, compared to a LOS D capacity of 12,900 vpd.

These sections of US 311 (Main Street) are mostly strip development with little to no access control. It is lined with numerous driveways and roadway access points. A crash assessment performed during the development of the CTP identified numerous intersections and roadway sections along this corridor that experienced a high number of crashes between January 1, 2011 and December 31, 2015. The proposed improvements may reduce the amount and severity of crashes at these locations by removing the left turn conflicts. Refer to Chapter 1 of the CTP report for more detailed information on these locations.

The CTP project proposal (STOK0001-H) is to study and implement transportation demand management strategies along this corridor. This includes improving First Street/ Oldtown Road (SR 1918) (STOK0026-H) as an alternate US 311 truck route and the intersection of US 311 and Oldtown Road (SR 1918) to accommodate truck traffic. Signing First Street/ Oldtown Road (SR 1918) as an alternate US 311 truck route may reduce through truck traffic in downtown Walnut Cove.

Transportation demand management strategies that promote other modes of transportation such as pedestrian, bicycle, transit and ridesharing are recommended for further study. Sidewalks and bicycle accommodations are recommended along the entire length of the proposed project. Other strategies to be considered include access management, modifying signal timing, intersection improvements, driveway connections for businesses, service routes to the business for alternate access, and any other strategies to reduce turning conflicts and improve safety. During the Stokes County CTP development process, the stakeholders and Yadkin Valley Economic Development District, Inc. (YVEDDI), proposed a fixed deviated route transportation service connecting King, Hanging Rock State Park, Danbury and Walnut Cove. A potential location for a park-and-ride lot was also identified in Walnut Cove.

The 2016-2025 STIP includes project R-5828 that is intended to improve the intersection of US 311 (North Main Street) and First Street (SR 1918). The 2016-2025 STIP also includes R-5768 that is intended to upgrade the intersection of US 311 and NC 65 along with improvements to the railroad crossing,

Additionally, during the development of the CTP, the town of Walnut Cove expressed the desire to keep the existing on-street parking along US 311 (Main Street). Based on the planning level environmental assessment using available GIS data, water and sewer pipes are located along this facility.

2.2 Implementation

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

Initiative for implementing the CTP rests predominately with the policy boards and citizens of Stokes 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 Northwest Piedmont RPO for regional prioritization and submittal to NCDOT. Refer to Appendix A for contact information on regional prioritization and funding. Local governments may use the CTP to guide development and protect corridors for the recommended projects. It is critical that NCDOT and local governments coordinate on relevant land development reviews and all transportation projects to ensure proper implementation of the CTP. Local governments and NCDOT share the responsibility for access management and the planning, design and construction of the recommended projects.

Recommended improvements shown on the CTP map represent an agreement of identified transportation deficiencies and potential solutions to address the deficiencies. While the CTP does propose recommended solutions, it may not represent the final location or cross section associated with the improvement. All CTP recommendations are based on high level systems analyses that seek to minimize impacts to the natural and human environment. Prior to implementing projects from the CTP, additional analysis will be necessary to meet the National Environmental Policy Act (NEPA) or the State Environmental Policy Act² (SEPA). During the NEPA/SEPA process, the specific project location and cross section will be determined based on environmental analysis and public input. This CTP may be used to support transportation decision making and provide transportation planning data in the NEPA/SEPA process.

2.3 Problem Statements

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

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

available information. Reference problem statements are developed for TIP projects where the purpose and need for the project has already been established.

DRAFT

HIGHWAY

First Street/ Oldtown Road (SR 1918), STOK0026-H

US 311 (Main Street) is a primary route in downtown Walnut Cove. By 2045, US 311 (Main Street) is projected to be near or over capacity based on providing LOS D capacity. Currently First Street/ Oldtown Road (SR 1918) serves as an alternative route to US 311 (Main Street). Improvements are needed to help relieve congestion on US 311 (Main Street) and improve mobility within downtown Walnut Cove.

The CTP project proposal (STOK0026-H) is to upgrade First Street/ Oldtown Road (SR 1918) to 12 foot lanes with paved shoulders to accommodate truck traffic. Improvements to the intersection of US 311 and Oldtown Road (SR 1918) are recommended to accommodate truck traffic. It is also recommended that First Street/ Oldtown Road (SR 1918) be signed as an alternate US 311 truck route. This may reduce the through truck traffic from the downtown Walnut Cove.

Based on a planning level environmental assessment using available GIS data, the proposed project is within water supply and watershed areas. This project directly connects to the US 311 (Main Street) transportation demand management strategies/ improvements (STOK0001-H) proposal.

Minor Widening Improvements:

The following routes are not expected to exceed capacity, but were identified as candidates for upgrading to NCDOT design standards. All facilities listed are recommended to have a minimum of 12 foot lanes with paved shoulders in order to improve mobility, safety and/or to accommodate bicycles. Additionally, some facilities may require improvements to the vertical and/or horizontal alignment. Implementation of the proposed projects should be coordinated through NCDOT's Highway Division 9 office (reference Appendix A for contact information).

- **NC 8, STOK0002-H:** from 0.1 miles north of NC 65 to Brook Cove Road (SR 1941)
- **NC 8 & NC 89, STOK0003-H:** from 0.5 miles east of Hanging Rock Park Road (SR 2015) to NC 8
- **NC 8, STOK0004-H:** from NC 89 to 0.3 miles north of NC 704
- **NC 65 , STOK0005-H:** from Winston Salem Metropolitan Planning Area Boundary/ Kiger Road (SR 1952) to Easley Road (SR 1933)
- **NC 66, STOK0006-H:** from Winston Salem Metropolitan Planning Area Boundary / Falkenberry Road (SR 1220) to NC 89
- **NC 89 , STOK0007-H:** from 0.46 miles west of Ring Road (SR 1211) to Asbury Road (SR 1400)

- **NC 89, STOK0008-H:** from US 311 (Main Street) to Dodgetown Road (SR 1695)
- **NC 268, STOK0009-H:** from Surry County Boundary/ 0.5 miles west of Grassy Knob Road (SR 1179) to Bud Tilley Road (SR 1192)
- **NC 704, STOK0010-H:** from NC 772 to 0.5 miles east of Dunlap Road (SR 1683)
- **NC 770, STOK0011-H:** from NC 704 to 0.25 miles east of Ralph Joyce Road (SR 1634)
- **Baux Mountain Road (SR 1949), STOK0012-H:** from 0.15 miles south of Manuel Road (SR 2111) to NC 65
- **Brims Grove Road (SR 2109), STOK0013-H:** from Volunteer Road (SR 1136) to Oscar Frye Road (SR 1182)
- **Brook Cove Road (SR 1935), STOK0014-H:** from Piney Mountain Road (SR 1935) to US 311 (Main Street)
- **Capella Road (SR 2008), STOK0015-H:** from NC 66 to Covington Road (SR 2009)
- **Coon Road (SR 1154), STOK0016-H:** from Old 52 Road (SR 1236) to Volunteer Road (SR 1136)
- **Covington Road (SR 2009), STOK0017-H:** from Capella Road (SR 2008) to Flat Shoals Road (SR 2019)
- **Easley Road (SR 1933), STOK0018-H:** from Forsyth County Boundary/ 1.29 miles south of NC 65 to NC 65
- **Flat Shoals Road (SR 2019), STOK0019-H:** from Covington Road (SR 2009) to Mountain Road (SR 2018)
- **Hanging Rock Park Road (SR 2015), STOK0020-H:** from Moores Spring Road (SR 1001) to NC 8 & NC 89
- **Moores Spring Road (SR 1001), STOK0021-H:** from NC 66 to Hanging Rock Park Road (SR 2015)
- **Mountain Road (SR 2018), STOK0022-H:** from Flat Shoals Road (SR 2019) to NC 8 & NC 89
- **Mountain View Road (SR 1974), STOK0023-H:** from Friendship Road (SR 1955) to NC 8
- **Mountain View Church Road (SR 1998), STOK0024-H:** from Winston Salem MPO Boundary/ 0.45 miles north of Robertson Ridge Road (SR 2006) to Flat Shoals Road (SR 2019)

- **Old 52 Road (SR 1236), STOK0025-H:** from Coon Road (SR 1154) to Volunteer Road (SR 1136)
- **Old Lynchburg Road (SR 1516), STOK0031-H:** from NC 268 to NC 66
- **Oscar Frye Road (SR 1182), STOK0027-H:** from Brims Grove Road (SR 2109) to NC 268
- **Piney Grove Church Road (SR 1496), STOK0028-H:** from NC 89 to Hart Road (SR 1497)
- **Snow Hill Church Road (SR 1651), STOK0029-H:** from Sisk Road (SR 1657) to NC 704
- **Volunteer Road (SR 1136), STOK0030-H:** from Winston Salem MPO Boundary/ Edwards Farm Road (SR 1224) to High Bridge Road (SR 1157)

PUBLIC TRANSPORTATION & RAIL

A public transportation and rail assessment was completed during the development of the CTP. There are no recommended improvements associated with rail. During the Stokes County CTP development process, the stakeholders and Yadkin Valley Economic Development District, Inc. (YVEDDI), proposed a fixed deviated route transportation service connecting King, Hanging Rock State Park, Danbury, and Walnut Cove. Potential locations for park-and-ride lots were identified in Danbury and Walnut Cove. Final locations would be subject to agreements with towns, property owners, etc.

These facilities are shown on the Public Transportation and Rail Map, Sheet 3 of Figure 1.

- **STOK0001-T: Fixed Deviated Route (King – Hanging Rock State Park – Danbury – Walnut Cove)**
- **Park-and-Ride locations:**
 - **STOK0002-T:** Downtown Danbury/ Arts museum
 - **STOK0003-T:** Downtown Walnut Cove

BICYCLE

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

- Curb & gutter sections require, at minimum, 5 foot bike lanes or 14 foot wide shoulder lanes.
- Shoulder sections require a minimum paved width of 4 feet.

- All bridges, along the roadways where bike facilities are recommended, shall be equipped with 54 inch high railings.

The following bicycle improvements were recommended during the development of the CTP:

- **US 311 (Main Street), STOK0001-H:** from NC 65 to NC 89
- **NC 8, STOK0004-H:** from NC 89 to NC 704
- **NC 8, STOK0001-B:** from Mountain View Road (SR 1974) to Dodgetown Road (SR 1695)
- **NC 8 & NC 89, STOK0002-B:** from Dodgetown Road (SR 1695) to 0.5 miles east of Hanging Rock Park Road (SR 2015)
- **NC 8 & NC 89, STOK0003-H:** from 0.5 miles east of Hanging Rock Park Road (SR 2015) to NC 8
- **NC 65, STOK0003-B:** from 0.2 miles north of Forsyth County Boundary/ Fisherman Road (SR 1923) to US 311 (Main Street)
- **NC 89, STOK0004-B:** from Asbury Road (SR 1400) to NC 704
- **NC 66, STOK0006-H:** from 0.3 miles south of Capella Road (SR 2008) to NC 89
- **NC 89, STOK0007-H:** from 0.5 miles west of Ring Road (SR 1211) to Asbury Road (SR 1400)
- **NC 89, STOK0008-H:** from US 311 (Main Street) to East Road (SR 1937)
- **NC 268, STOK0009-H:** from 0.4 miles west of Grassy Knob Road (SR 1179) to Bud Tilley Road (SR 1192)
- **NC 268, STOK0005-B:** from Bud Tilley Road (SR 1192) to NC 66
- **NC 704, STOK0006-B:** from NC 89 to NC 772
- **NC 770, STOK0011-H:** from NC 704 to 0.2 miles west of Ralph Joyce Road (SR 1634)
- **NC 772, STOK0007-B:** from US 311 to NC 704
- **Brims Grove Road (SR 2109), STOK0013-H:** from Volunteer Road (SR 1136) to Oscar Frye Road (SR 1182)
- **Capella Road (SR 2008), STOK0008-B:** from 0.4 miles south NC 66 to NC 66
- **Coon Road (SR 1154), STOK0016-H:** from Old 52 Road (SR 1236) to Volunteer Road (SR 1136)
- **Delta Church Road (SR 1647), STOK0009-B:** from Sheppard Mill Road (SR 1674) to NC 704
- **East Road (SR 1937) STOK0010-B:** from Piney Mountain Road (SR 1935) to NC 89
- **Fisherman Road (SR 1923), STOK0011-B:** from NC 65 (East) to Pine Hall Road (SR 1908)

- **Flat Shoals Road (SR 2019), STOK0018-H:** from Covington Road (SR 2009) to Mountain Road (SR 2018)
- **Flat Shoals Road (SR 2019), STOK0012-B:** from Mountain Road (SR 2018) to NC 8
- **Hanging Rock Park Road (SR 2015), STOK0020-H:** from Moores Spring Road (SR 1001) to NC 8 & NC 89
- **Hawkins Road (SR 1973), STOK0013-B:** from Friendship Road (SR 1955) to Flat Shoals Road (SR 2019)
- **Moir Farm Road (SR 1652), STOK0014-B:** from Delta Church Road (SR 1647) to NC 704
- **Moores Spring Road (SR 1001), STOK0021-H:** from NC 66 to Hanging Rock Park Road (SR 2015)
- **Old Winston Road (SR 1152), STOK0015-B:** from Patterson Farm Road (SR 1153) to 0.6 miles north of Patterson Farm Road (SR 1153)
- **Oscar Frye Road (SR 1182), STOK0027-H:** from Brims Grove Road (SR 2109) to NC 268
- **Pine Hall Road (SR 1908), STOK0016-B:** from 0.2 miles south of Fisherman Road (SR 1923) to US 311
- **Piney Mountain Road (SR 1935), STOK0017-B:** from NC 8 to East Road (SR 1937)
- **Rock House Road (SR 1187), STOK0018-B:** from NC 268 to Colonel Martin Road (SR 1186)
- **Rock House Road (SR 1175), STOK0019-B:** from Colonel Martin Road (SR 1186) to Taylor Road (SR 1188)
- **Sheppard Mill Road (SR 1674), STOK0020-B:** from NC 8 & NC 89 (Main Street) to Delta Church Road (SR 1647)
- **Taylor Road (SR 1188), STOK0021-B:** from Rock House Road (SR 1175) to NC 66

MULTI-USE

The Piedmont Triad Regional Council created local trail plans and also maintains a current database of existing trails and planned improvements. These facilities are shown on the Bicycle and Pedestrian maps on Sheets 4 and 5 of Figure 1.

Additionally, during the development of the CTP, the following facilities were recommended to have multi-use trail accommodations:

- **Scott Branch Creek, STOK0001-M:** alignment along Scott Branch Creek from Seven Island Road in Danbury to Sheppard Mill Road in Danbury

- **Sauratown Trail, STOK0002-M:** proposed trail alignment modified from 2006 Stokes County CTP to follow Sheep Rock Road and NC 8 & NC 89 through Danbury

PEDESTRIAN

The Piedmont Triad Regional Council maintains a sidewalk inventory of existing pedestrian facilities and planned improvements. These facilities are shown on the Pedestrian map on Sheet 5 of Figure 1.

Additionally, during the development of the CTP, the following facilities were recommended to have pedestrian accommodations:

Sidewalks – Recommended (Sidewalks needed on both sides of the facility)

Town of Danbury

- **NC 8 & NC 89, STOK0001-P:** from Crestview Road to Camping Creek Island Road
- **NC 8 & NC 89, STOK0013-P** from Bank Street to Shepperd Mill Road (SR 1674)

Town of Walnut Cove

- **US 311 (Main Street), STOK0002-P:** from NC 89 to Lakeside Drive
- **Lakeside Drive, STOK0003-P:** from Ninth Street to US 311 (Main Street)
- **Ninth Street, STOK0004-P:** from Summit Street to Lakeside Drive
- **Oldtown Road (First Street), STOK0005-P:** from US 311 (Main Street) to Summit Street
- **Summit Street, STOK0006-P:** from First Street to Third Street
- **Summit Street, STOK0007-P:** from Fifth Street to Ninth Street

Sidewalks – Needs Improvement (Sidewalks needed on one side of the facility)

Town of Walnut Cove

- **US 311 (Main Street), STOK0008-P:** from Fifth Street to NC 89
- **Brook Street, STOK0009-P:** from Dalton Street to Windmill Street
- **Sixth Street, STOK0010-P:** from School Street to US 311 (Main Street)
- **Summit Street, STOK0011-P:** from Third Street to Fifth Street
- **Windmill Street, STOK0012-P:** from Sixth Street to Brook Street