

## 2. Recommendations

This chapter presents recommendations for each mode of transportation in the 2014 Yadkin County CTP as shown in Figure 1. More detailed information on each recommendation is tabulated in Appendix C. For information on recommendations that were incorporated as a part of this CTP but not documented in this report, refer to the 2012 Elkin and Jonesville CTP<sup>1</sup>.

NCDOT adopted a "Complete Streets<sup>2</sup>" policy in July 2009. The policy directs the Department to consider and incorporate several modes of transportation when building new projects or making improvements to existing infrastructure. Under this policy, the Department will collaborate with cities, towns and communities during the planning and design phases of projects. Together, they will decide how to provide the transportation options needed to serve the community and complement the context of the area. The benefits of this approach include:

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

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

### 2.1 Implementation

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

Initiative for implementing the CTP rests predominately with the policy boards and citizens of the county and its municipalities. As transportation needs throughout the state exceed available funding, it is imperative that the local planning area aggressively

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<sup>1</sup> To view this plan, go to: [https://connect.ncdot.gov/projects/planning/Pages/CTP-Details.aspx?study\\_id=Elkin-Jonesville](https://connect.ncdot.gov/projects/planning/Pages/CTP-Details.aspx?study_id=Elkin-Jonesville).

<sup>2</sup> For more information on Complete Streets, go to: <http://www.completestreetsnc.org/>

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.

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<sup>3</sup> (SEPA). This CTP may be used to provide information in the NEPA/SEPA process.

## **2.2 Problem Statements**

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

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<sup>3</sup> For more information on SEPA, go to: <http://www.doa.nc.gov/clearing/faq.aspx>.

## HIGHWAY

**NC 67 proposed improvements from I-77 to 0.3 miles east of Deer Run Road**

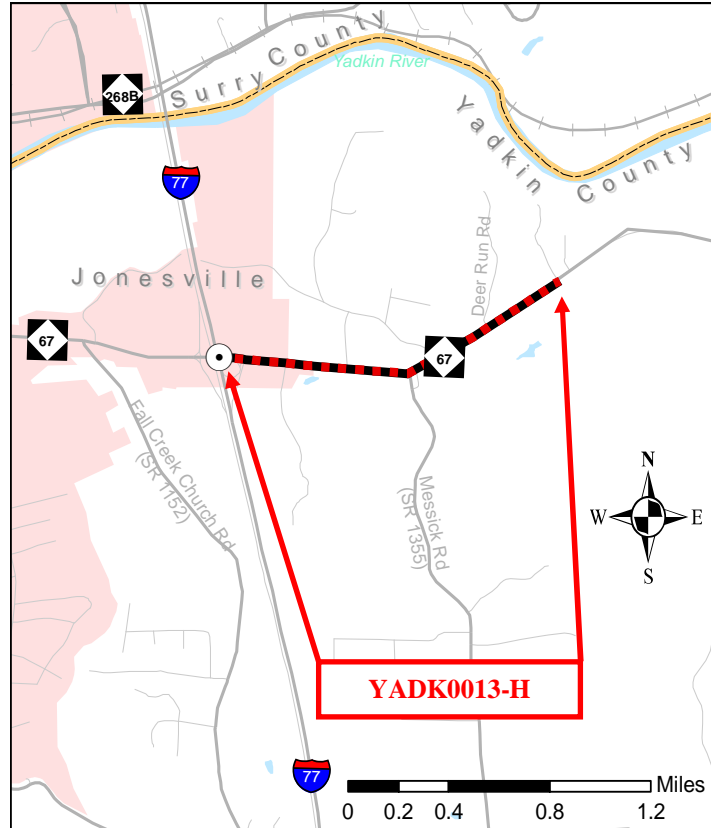
**Local ID: YADK0013-H  
Last updated: 11/25/13**

### Identified Problem

NC 67 (Winston Road) is projected to be over capacity by 2040 from I-77 to 0.3 miles east of Deer Run Road. Improvements are needed to accommodate projected traffic volumes such that a minimum of Level of Service (LOS) D can be achieved.

### Justification of Need

NC 67 is a major east-west corridor through Yadkin County. This facility is on the regional tier of the NC Multimodal Investment Network (NCMIN), connecting major population centers and serving local land uses. Within Yadkin County, NC 67 connects the towns of Jonesville, Boonville and East Bend to NC 601 and I-77.



NC 67 is a three lane major thoroughfare with 12 foot lanes from I-77 to 0.3 miles east of Deer Run Drive Road. By 2040 the facility is projected to be over capacity from I-77 to 0.3 miles east of Deer Run Road. Annual Average Daily Traffic (AADT) is projected to increase from 15,000 vehicles per day (vpd) in 2010 to 21,000 vpd in 2040, compared to a LOS D capacity of 19,700 vpd.

### Community Vision and Problem History

Currently NC 67 is the primary east-west route between Jonesville and Boonville. The facility is used for inter-county travel, collecting traffic from surrounding areas and providing direct access to I-77 and US 601. Improvements along the corridor should preserve and enhance the communities' economic vitality. This facility was identified as deficient in the 2012 Elkin and Jonesville CTP<sup>4</sup> plan.

<sup>4</sup> To view this plan, go to: [https://connect.ncdot.gov/projects/planning/Pages/CTP-Details.aspx?study\\_id=Elkin-Jonesville](https://connect.ncdot.gov/projects/planning/Pages/CTP-Details.aspx?study_id=Elkin-Jonesville).

## **CTP Project Proposal**

### **Project Description and Overview**

The CTP project proposal (Local ID: YADK0013-H) is to upgrade NC 67 (Winston Road), from I-77 to 0.3 miles east of Deer Run Road, to boulevard standard by widening the existing three lane facility to a four lane median divided facility.

### **Natural & Human Environmental Context**

Based on a planning level environmental assessment using available GIS data, this project is within the targeted local watershed. Island Ford Cemetery is adjacent to NC 67 on the northeast end of the project.

### **Relationship to Land Use Plans**

The existing land use along this corridor is a mixture of commercial and residential development. The commercial land development is primarily clustered near the I-77 interchange. The 2010 Jonesville Land Use Plan indicates that future land use in areas near the corridor will be more commercial with industrial moving in to replace the residential land uses.

### **Linkages to Other Plans and Proposed Project History**

The proposed project was first identified in the 2012 Elkin and Jonesville CTP.

### **Multi-modal Considerations**

The Piedmont Authority for Regional Transportation (PART) has a Regional Transit Development Plan<sup>5</sup> (2010) that includes a regional transit vision for 2025. Included in the 2025 vision for Yadkin County is the NC 67 Express, a proposed commuter bus route along NC 67 from I-77 continuing into Winston-Salem in Forsyth County. The route also includes a proposed park and ride lot in Boonville and one in East Bend.

### **Public/ Stakeholder Involvement**

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

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<sup>5</sup> For more information on the 2010 Regional Transit Development Plan, go to: <http://www.partnc.org/rtdp.html>.

### **US 601 (State Street), Local ID: YADK0018-H**

Sections of US 601 (State Street) from Tennessee Street (SR 1500) to Walnut Drive are projected to be near capacity by 2040. Improvements are needed to improve mobility and to accommodate projected traffic volumes such that a minimum of LOS D can be achieved.

US 601 (State Street) between Tennessee Street (SR 1500) and Walnut Drive has the following characteristics:

<b>Section</b>	<b># Lanes</b>	<b>2012 AADT (vpd)</b>	<b>2040 AADT (vpd)</b>	<b>2012 Capacity (vpd)</b>
Tennessee Street (SR 1500) to Hemlock Street	3 - 11 foot lanes	8,100	10,400	12,900
Hemlock Street to E. Lee Avenue (SR 1146)	4 - 10 foot lanes (undivided)	10,000	13,200	23,500
E. Lee Avenue (SR 1146) to US 421	4 - 12 foot lanes (undivided)	17,000	22,500	23,500
US 421 to Walnut Drive	3 - 10 foot lanes	7,900	10,400	12,900

The CTP project proposal (Local ID: YADK0018-H) is to upgrade the existing facility to a two lane boulevard with roundabouts at the major intersections.

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, 2007 and December 31, 2011. The intersection of US 601 and Beroth Drive (SR 1415) experienced 50 or more crashes during this time period. There were also two other intersections that experienced 10 to 19 crashes during the same period. 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.

Based on a planning level environmental assessment using available GIS data, the proposed improvement may potentially impact the water supply watershed and wetland areas at Haw Branch.

### **Hugh Chatham Bridge Replacement, TIP No. B-4820**

NCDOT's Structures Management Unit has identified bridge #338 (Hugh Chatham Bridge) as structurally deficient and is currently closed to traffic. TIP No. B-4820 is intended to address this deficiency and to improve traffic safety and operations in the area.

NCDOT's June 27, 2007 feasibility study of the project identified five alternatives. The project proposal included in this CTP is Alternative 3 from the feasibility study. The proposed project is to replace bridge #338 on new location approximately 1.4 miles east of the existing structure. A new connector is proposed from NC 67 at Valley Road (SR

1403) in Yadkin County to Parkwood Drive in Surry County utilizing the existing Johnson Ridge Road (SR 1144) with the remainder on new location, a distance of approximately 1.3 miles.

Based on a planning level environmental assessment using available GIS data, the proposed project includes a new crossing of the Yadkin River and the Yadkin Valley Railroad.

### **Proposed Beamer Road Connector & US 421 Interchange, Local ID: YADK0003-H**

US 421 is an east-west freeway through central Yadkin County. It is the primary connection to Winston-Salem and Forsyth County to the east and Wilkes County to the west. Access along US 421 is fully controlled by interchanges and grade separations. Improvements are needed west of Yadkinville to provide access in order to serve future development.

Existing land use west of Yadkinville and in the vicinity of Billy Reynolds Road (SR 1134), Beamer Road (SR 1415) and US 421 is primarily comprised of farmland, but also includes residential development and a commercial metal recycling center. The 2011 Yadkin County Land Use Plan<sup>6</sup> classifies this area as a 'Primary Growth Area', which would be predominantly mixed use and include residential, commercial, and industrial land uses. Higher density development levels can be anticipated in primary growth areas. The 2025 Yadkinville Land Development Plan<sup>7</sup> (2005) also indicates land use in this area is envisioned to be moderate density residential with general commercial development along Beamer Road (SR 1415).

The CTP project proposal (Local ID: YADK0003-H) is to construct a new two lane minor thoroughfare with 12 foot lanes from Beamer Road (SR 1415) to US 421 with a new interchange on US 421 at proposed connector.

Based on a planning level environmental assessment using available GIS data, the proposed project may potentially impact residential property in the area.

This project recommendation was identified in the 2011 Town of Yadkinville CTP.

### **Proposed I-77/Asbury Church Road Interchange, Local ID: YADK0019-H**

I-77 is a north-south interstate through western Yadkin County and North Carolina. It is the primary connection between Surry and Iredell counties, continuing north into Virginia and south to Charlotte and into South Carolina. Access along I-77 is fully controlled by interchanges and grade separations. An interchange currently exists at US 421 and I-77. Travelling southward, the next access point is approximately 8 miles at the NC 901 interchange in Iredell County. Improvements are needed south of US 421 to provide access to southwestern Yadkin County in order to serve future development.

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<sup>6</sup> To view the 2011 Yadkin County Land Use Plan, go to: <http://www.yadkincountync.gov/>.

<sup>7</sup> To view the 2025 Yadkinville Land Development Plan, go to: <http://www.yadkinville.org>.

Currently Asbury Church Road (SR 1125) is separated from I-77 by a grade separation (bridge). Existing land use in the immediate vicinity is comprised of farmland, a storage facility and residential development. The 2011 Yadkin County Land Use Plan classifies this area as 'Rural/Agricultural', which is characterized by traditional agricultural operations, pasture land, forestry, rural residential subdivisions, and scattered nonfarm residences on large tracts of land. Rural/Agricultural areas contain scenic, historic, and other natural heritage assets that contribute to the unique characteristics of the land. Rural/Agricultural areas also provide for agriculture, forestry, mineral extraction, and other allied uses that require large open farm land and forest areas for the necessary production of food and fiber.

The 2011 Yadkin County Land Use Plan classifies areas just north of Asbury Church Road (SR 1125) and along US 421 as 'Economic Development Areas' and west as 'Agri-Tourism Areas'. Economic Development Areas are locations where significant industrial or other job-creating activities are located and where additional industrial/commercial activity may be encouraged. Agri-Tourism Areas are located in the vicinity of vineyards, wineries, equestrian centers, and other agri-tourism attractions, which make up a large percentage of the county's tourist attractions. These areas are primarily intended for agricultural uses that maintain the county's rural character, but are also appropriate for limited commercial uses that support and complement agri-tourism attractions such as arts and crafts studios, farmer's markets, bed and breakfast inns, and locally owned restaurants.

The CTP project proposal (Local ID: YADK0019-H) is to convert the existing grade separation at Asbury Church Road (SR 1125) into an interchange. The proposed interchange will provide an alternate access point on I-77 to serve existing and future businesses, their employees and local residents. Additionally, in anticipation of changes to traffic patterns associated with the proposed change of access, minor widening improvements are recommended for Buck Shoals Road (SR 1103), YADK0020-H, and Asbury Church Road (SR 1125), YADK0022-H.

Based on a planning level environmental assessment using available GIS data, the proposed project is within the water supply watershed area. The proposed project may also potentially impact residential properties in the area.

The proposed project has not been identified on any previous transportation plan.

### **Minor Widening Improvements**

The following routes are not expected to exceed capacity, but are recommended to be upgraded to 12 foot lanes with paved shoulders in order to improve mobility, safety and/or to accommodate bicycles.

- **US 21 Business, Local ID: YADK0014-H** – From Center Road (SR 1331) to Longtown Road (SR 1338).
- **Asbury Church Road (SR 1125), Local ID: YADK0022-H** – From Old Hwy 421 (SR 1314) to Buck Shoals Road (SR 1103).

- **Billy Reynolds Road (SR 1134), Local ID: YADK0011-H** – From W Lee Avenue (SR 1146) to Fleming Road (SR 1142).
- **Buck Shoals Road (SR 1103), Local ID: YADK0020-H** – From Old Hwy 421 (SR 1314) to Iredell County.
- **Center Road (SR 1331), Local ID: YADK0015-H** – From US 21 Business to Little Mountain Road (SR 1350).
- **Flint Hill Road (1549), Local ID: YADK0021-H** – From NC 67 to Mt. Bethel Church Road (SR 1578).
- **E Lee Avenue (SR 1134), Local ID: YADK0017-H** – From Cross Creek Drive (SR 1700) to Unifi Ind Drive (SR 1765).
- **W Lee Avenue (SR 1134/1146), Local ID: YADK0016-H** – From US 601 to W Main Street (SR 1314).
- **W Main Street (SR 1314), Local ID: YADK0007-H** – From W Lee Avenue (SR 1134) to Fleming Road (SR 1142).

### **Other Improvements**

During the development of the CTP, the following improvement was also identified.

- **US 601/NC 67 Intersection Modification (Boonville):** Turning lanes are recommended to be installed on NC 67 at the intersection of US 601. These improvements are needed to maintain mobility along the corridor and through the intersection.

## **PUBLIC TRANSPORTATION AND RAIL**

A public transportation and rail assessment was completed during the development of the CTP. There are currently no rail services within Yadkin County. However, during the development of the CTP, a county commissioner expressed an interest for Yadkin County to coordinate with the NCDOT Rail Division on a potential freight rail route from within Iredell County to the Elkin planning area. Further coordination is recommended to determine if providing service to the area is feasible.

The Piedmont Authority for Regional Transportation's (PART) 2010 Regional Transit Development Plan<sup>8</sup> was identifies future public transportation services within Yadkin County. These recommendations were incorporated into the CTP and are shown on the Public Transportation and Rail Map (Figure 1 – Sheet 5).

## **BICYCLE**

The 2005 Yadkin County CTP, the 2010 Jonesville Land Use Plan and the 2010 Yadkinville Comprehensive Pedestrian Master Plan were used to identify existing and recommended bicycle facilities throughout the planning area. Additionally, the

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<sup>8</sup> For more information on the 2010 Regional Transit Development Plan, go to: <http://www.partnc.org/rtdp.html>.



Northwest Piedmont Rural Planning Organization and local stakeholders identified facilities that need improvement to accommodate bicycles. These features are shown on the Bicycle Map, Sheet 4 of Figure 1, as recommended multi-use paths or on-road bicycle facilities that need improving.

- **NC Bicycle Route 2:**
  - **Joyner Road (SR 1156), YADK0013-B:** from Iredell County to Lone Hickory Road (SR 1002).
  - **Lone Hickory Road (SR 1002), YADK0012-B:** from Joyner Road (SR 1156) Fish Brandon Road (SR 1165).
  - **Fish Brandon Road (SR 1165), YADK0014-B:** from Lone Hickory Road (SR 1002) to US 601.
  - **Courtney-Huntsville Road (SR 1001), YADK0016-B:** from US 601 to Dinkins Bottom Road (SR 1570).
  - **Shallowford Road (SR 1001), YADK0017-B:** from Dinkins Bottom Road (SR 1570) to Forsyth County.
- **US 21, YADK0011-B:** from Hamptonville Road (SR 1102) to Lone Hickory Road (SR 1002).
- **US 21 Business, YADK0001-B:** from Swan Creek Bypass (SR 1386) to Center Road (SR 1331).
- **US 21 Business, YADK0014-H:** from Howell School Road (SR 1313) to Little Mountain Road (SR 1350).
- **NC 67, YADK0002-B:** from US 21 Business to Valley Road (SR 1403).
- **Bethel Road (SR 1308), YADK0003-B:** from Wilkes County to Swan Creek Road (SR 1300)
- **Center Road (SR 1331), YADK0015-H:** from US 21 Business to Little Mountain Road (SR 1350).
- **Dinkins Bottom Road (SR 1570), YADK0019-B:** from Old Hwy 421 (SR 1001) to Courtney-Huntsville Road (SR 1001).
- **Hamptonville Road (SR 1102), YADK0010-B:** from Hunting Creek Church Road (SR 1100) to US 21.
- **Howell School Road (SR 1313), YADK0004-B:** from Swan Creek Road (SR 1300) to US 21 Business.
- **Hunting Creek Church Road (SR 1100), YADK0009-B:** from Iredell County to Hamptonville Road (SR 1102).
- **Little Mountain Road (SR 1350), YADK0005-B:** from US 21 Business to Center Road (SR 1331).
- **Lone Hickory Road (SR 1002), YADK0012-B:** from Joyner Road (SR 1156) to US 21.

- **Old Hwy 421 (SR 1605), YADK0018-B:** from Forsyth County to Dinkins Bottom Road (SR 1570).
- **Swan Creek Bypass (SR 1386), YADK0006-B:** from Swan Creek Road (SR 1300) to US 21 Business.
- **Swan Creek Road (SR 1300), YADK0007-B:** from Bethel Road (SR 1308) to Howell School Road (SR 1313).
- **Valley Road (SR 1403), YADK0008-B:** from US 21 Business to NC 67.

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

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

## **PEDESTRIAN**

The 2010 Jonesville Land Use Plan, the 2010 Yadkinville Comprehensive Pedestrian Master Plan, and the 2011 Yadkin County Land Use Plan were used to identify existing and recommended pedestrian facilities throughout the planning area. These facilities are shown on the Pedestrian Map (Figure 1- Sheet 5). In August of 2013, NCDOT's Division of Bicycle and Pedestrian Transportation awarded Jonesville a bicycle and pedestrian planning grant to develop a bicycle/pedestrian plan for the Jonesville area. The Piedmont Triad Regional Council will assist with the development of the plan. In addition, the county is working with NCDOT to pursue several safety related crosswalks.

Additional facilities not included in the plans listed above that are recommended to have sidewalks are listed below.

### **Boonville**

- **YADK0002-P:** NC 67 (W. Main Street) from Reece Avenue to Lake Drive.
- **YADK0003-P:** NC 67 (W. Main Street) from Hayes Street to River Road.
- **YADK0010-P:** River Road (SR 1367) from NC 67 (Main Street) to Sunrise Lane.

### **East Bend**

- **YADK0004-P:** Brewer Circle from Union Hill Road (SR 1550) to Main Street (SR 1545)
- **YADK0005-P:** Fairground Road (SR 1541) from Main Street (SR 1545) to 0.1 mile north of Burchette Road.

- **YADK0006-P:** Flint Hill Road (SR 1549) from School Street to Pool Street.
- **YADK0007-P:** Main Street (SR 1545) from Union Hill Road (SR 1550) to Brewer Circle.
- **YADK0008-P:** Union Hill Road (SR 1550) from Main Street (SR 1545) to Marler Road (SR 1103).

Jonesville

- **YADK0001-P:** NC 67 from Elm Street to 0.02 miles east of PVH Way.

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