

NC Strategic Transportation Corridors: Vision Plan

Transportation Facilities Inventory Technical
Memorandum

NCDOT

06 January 2020

Corridor D: US 321
Corridor U: US 74



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1. Introduction

In 2015, the NCDOT identified a network of key multimodal transportation corridors called Strategic Transportation Corridors (STC) to support smart planning, help set long-term investment decisions, and ensure that North Carolina's economic prosperity goals are achieved. The STCs are intended to promote transportation system connectivity, provide high levels of mobility, and improve access to important state and regional activity centers. A key element in the advancement of the STCs is the development of corridor master plans, with identification of a high-level corridor mobility vision and associated corridor improvement action strategies.

The purpose of the master plan is to:

- identify a mobility vision and broad improvement strategies for an entire corridor,
- guide improvements and development in a manner that defines a long-term vision and performance level for the corridor, and
- help protect the corridor's key functions as defined in the corridor profiles.

NCDOT has initiated the development of master plan visions for STCs D and U. Corridor D – US 321 runs from the South Carolina state line to the Tennessee state line and Corridor U – US 74 runs from I-26 in Polk County to US 117 in Wilmington.

Accurate data will serve as the foundation for master plan vision developments. The information available to define the corridors and their needs depends on the availability of complete, current, and reliable data. The inventory data collected for the US 321 and US 74 corridors will identify existing roadway and rail network conditions of the transportation system.

2. Methodology

Transportation facilities inventory data was collected along the US 321 and US 74 corridors using NCDOT GIS layers and shapefiles. Highway assets inventory information was collected including number of travel lanes, functional class, and access control. All at-grade railroad crossings and bridges along both corridors were also compiled.

The highway assets inventory was compiled by including all segments within 100 feet of the US 321 and US 74 corridors in GIS, then further refining the selected datasets to remove unnecessary segments such as nearby roads and ramps and to ensure all relevant segments were included. The resulting datasets for the US 321 and US 74 corridors were then evaluated by county and direction because the milepost lengths restart at each county line. The corridors were divided into logical segment breaks based on number of travel lanes, functional class, and access control. The total mileage was measured for each corridor segment.

The at-grade railroad crossings and bridge inventories were collected in the same way as the highway assets inventory, first by including all segments within 100 feet of the US 321 and US 74 corridors and then by refining the selected datasets to include all relevant segments. Any railroad crossings that were grade-separated were also duplicated in the bridge dataset, so they were eliminated from the at-grade railroad crossings inventory after confirming that they referred to the same location in the bridge dataset. Along the US 321 and US 74 corridors, any intersection in which the cross street intersected an at-grade railroad crossing immediately adjacent to the main corridor was also included in the at-grade railroad crossings inventory.

Base maps were created as part of the transportation facilities inventory for the US 321 and US 74 corridors. Vicinity maps for the US 321 and US 74 corridors, shown in **Figures 1** and **2** respectively, were created to show the entire corridor with municipalities and major roads on one sheet. Study Area Maps for the US 321 and US 74

corridors, shown in **Figures 3A-3G** and **4A-4M** respectively, were created showing municipalities, streams, state/national parks, and major airports/ports for each county along the corridors.

3. Corridor US 321

3.1. Road Network

The total length of the US 321 corridor alone, not including adjacent highways or alternate routes, is approximately 106 miles. The portion from I-85 in Gastonia to the Tennessee state line is included in the National Highway System (NHS), including US 221 between Blowing Rock and Boone. The portion of the US 321 corridor from the South Carolina state line to I-85 was included in the Moving Ahead for Progress in the 21st Century Act (MAP-21). The route is federally designated as a truck route from the South Carolina state line to I-85 in Gastonia and from I-40 in Hickory to US 64 in Lenoir. The highway assets inventory for the US 321 corridor is shown below in **Table 1** for the northbound direction and **Table 2** for the southbound direction. For functional class and access control definitions, please refer to **Appendix A: Transportation Facilities Inventory Terminology**.

Table 1. US 321 Northbound Highway Assets Inventory

County	Route	Length (mi)	Access Control	Functional Class	Travel Lanes
Gaston	US 321	7.7	Partial	Other Principal Arterial	2
	US 321	0.4	Partial	Other Principal Arterial	3
	US 321	1.3	Partial	Other Principal Arterial	2
	US 321	0.7	Partial	Other Principal Arterial	3
	US 321	0.8	Full	Other Freeway	2
	US 321	0.8	Full	Other Freeway	3
	US 321	6.7	Full	Other Freeway	2
Lincoln	US 321	11.1	Full	Other Freeway	2
Catawba	US 321	14.3	Full	Other Freeway	2
	US 321	2.1	Partial	Other Principal Arterial	2
Burke	US 321	0.3	Partial	Other Principal Arterial	2
Caldwell	US 321	30.7	Partial	Other Principal Arterial	2
	US 321	1.9	Partial	Other Principal Arterial	1
Watauga	US 321	1.9	Partial	Other Principal Arterial	1
	US-221	6.3	Partial	Other Principal Arterial	2
	US 321	0.9	Partial	Minor Arterial	2
	US 321	15.3	Partial	Other Principal Arterial	1
Avery	US 321	2.4	Partial	Other Principal Arterial	1

Table 2. US 321 Southbound Highway Assets Inventory

County	Route	Length (mi)	Access Control	Functional Class	Travel Lanes
Gaston	US 321	7.8	Limited	Other Principal Arterial	2
	US 321	0.4	Limited	Other Principal Arterial	3
	US 321	1.2	Limited	Other Principal Arterial	2
	US-221	0.4	Limited	Other Principal Arterial	3
	US 321	8.5	Partial	Other Freeway	2
Lincoln	US 321	11.1	Full	Other Freeway	2
Catawba	US 321	14.3	Full	Other Freeway	2
	US 321	2.1	Partial	Other Principal Arterial	2
Burke	US 321	0.3	Partial	Other Principal Arterial	2
Caldwell	US 321	30.7	Partial	Other Principal Arterial	2
	US 321	1.9	Partial	Other Principal Arterial	1
Watauga	US 321	1.9	Partial	Other Principal Arterial	1
	US 321	6.3	Partial	Other Principal Arterial	2
	US 321	0.9	Partial	Minor Arterial	2
	US 321	15.3	Partial	Other Principal Arterial	1
Avery	US 321	2.4	Partial	Other Principal Arterial	1

3.2. Rail Network

The primary CSX Transportation rail corridor consists of approximately 131 miles of track within the Blue Ridge subdivision. The Blue Ridge subdivision runs from Erwin, Tennessee to Spartanburg, South Carolina. The corridor includes 118 miles of mainline track, 2.1 miles of non-mainline track, 8.6 miles of siding, and 2.6 miles of track within rail yards. The corridor is part of the Strategic Rail Corridor Network (STRACNET).

Within Corridor US 321 counties, there is roughly 396 miles of active track across six rail networks: CSX Transportation (222.7 miles), Caldwell County RR (21.8 miles), Norfolk Southern (NS) (123.3 miles), Piedmont & Northern Railway (15.5 miles), Thermal Belt Railway (8.5 miles), and 3.7 miles of private rail at a Duke Energy facility. There is a total of five rail facilities within Corridor US 321 counties. One is located on the rail corridor and four are located on the wider rail network:

- CSX Bostic Yard
- Granite Falls Transload (NS)
- Luckey Trucking Transload (NS)
- North Hickory Transload (Caldwell County RR)
- NS Hickory Yard

The at-grade railroad crossings inventory for the US 321 corridor is shown below in **Table 3**. There are nine at grade-crossings total, eight of which are along a separate road which intersects US 321 immediately adjacent to the crossings.

Table 3. US 321 At-Grade Railroad Crossings Inventory

County	Crossing ID	Route	Railroad
Gaston ¹	729955W	Hudson Blvd	Norfolk Southern (NS)
Gaston ¹	729956D	Bush St	Norfolk Southern (NS)
Gaston ¹	729966J	Little Mountain Rd	Norfolk Southern (NS)
Gaston ¹	729967R	Old York Rd	Norfolk Southern (NS)
Gaston ¹	729968X	Telegraph Dr	Norfolk Southern (NS)
Gaston ¹	729974B	Forbes Rd	Norfolk Southern (NS)
Gaston ¹	729977W	Community Dr	Norfolk Southern (NS)
Gaston ¹	729978D	Wolfpack Rd	Norfolk Southern (NS)
Burke	729843X	US 321	Caldwell County (CWCY)

1. At-grade crossing is immediately adjacent to US 321 at intersections with local roads.

3.3. Bridges

The bridges inventory for the US 321 corridor is shown below in **Table 4**. There are 67 bridges along the corridor crossing other roadways, rail corridors, and bodies of water. Three bridges were classified as structurally deficient, and twelve bridges were classified as functionally obsolete. For structurally deficient and functionally obsolete definitions, please refer to **Appendix A: Transportation Facilities Inventory Terminology**.

Table 4. US 321 Bridges Inventory

County	Bridge ID	Feature Below	Feature Above	Structurally Deficient	Functionally Obsolete
Gaston	350032	Crowders Creek	US 321 NB	No	Yes
Gaston	350033	Crowders Creek	US 321 SB	No	No
Gaston	350068	Long Creek	US 321 NB	No	No
Gaston	350070	Long Creek	US 321 SB	No	No
Gaston	350120	US 321	I-85	No	No
Gaston	350336	US 321	SR 1336	No	No
Gaston	350337	US 321	SR 1806	No	No
Gaston	350338	US 321	US 321 BUS, NC 275/279	No	No
Gaston	350339	SR 1848	US 321 SB	No	No
Gaston	350340	SR 1848	US 321 NB	No	No
Gaston	350341	US 321	SR 1804	No	No
Gaston	350344	US 321	SR 1607	No	No
Gaston	350345	US 321	US 321 BUS	No	No
Gaston	350347	US 321	SR 1607	No	No
Gaston	350348	South Fork Catawba River	US 321 NB	No	No
Gaston	350349	South Fork Catawba River	US 321 SB	No	No
Gaston	350351	Southern Railway	US 321 NB	No	Yes
Gaston	350381	Southern Railway	US 321 SB	No	Yes

Table 4. US 321 Bridges Inventory

County	Bridge ID	Feature Below	Feature Above	Structurally Deficient	Functionally Obsolete
Lincoln	540264	US 321	SR 1282	No	No
Lincoln	540265	US 321	SR 1338	No	No
Lincoln	540266	US 321	SR 1267	No	No
Lincoln	540267	US 321	US 321 BUS	No	No
Lincoln	540268	US 321	SR 1294	No	No
Lincoln	540269	US 321 BUS, NC155	US 321 NB	No	No
Lincoln	540270	US 321 BUS, NC155	US 321 SB	No	No
Lincoln	540271	SR 1262	US 321 NB	No	No
Lincoln	540272	SR 1262	US 321 SB	No	No
Lincoln	540273	US 321	SR 1274	No	No
Lincoln	540277	US 321	NC 27 & NC 150	No	No
Catawba	170003	Henry Fork River	US 321 NB	No	No
Catawba	170005	Henry Fork River	US 321 SB	No	No
Catawba	170035	US 321	US70, US 321 BUS	No	No
Catawba	170066	US 321	SR 2959	No	No
Catawba	170077	US 321	I-40 EB	No	No
Catawba	170078	US 321	I-40 WB	No	No
Catawba	170104	US 321	I-40 Collector EB	No	No
Catawba	170106	US 321	I-40 Collector WB	No	No
Catawba	170110	US 321	7th Ave	No	Yes
Catawba	170133	US 321	SR 2231, 14th St	No	Yes
Catawba	170142	US 321	SR 1692	No	Yes
Catawba	170315	US 321	SR 1005	No	No
Catawba	170316	US 321	SR 1143	No	No
Catawba	170317	Clarks Creek	US 321 SB	No	No
Catawba	170318	Clarks Creek	US 321 NB	No	No
Catawba	170319	US 321	SR 2019	No	No
Catawba	170320	US 321	SR 1144	No	No
Catawba	170321	US 321	NC 127	No	No
Catawba	170322	NC 10	US 321 SB	No	No
Catawba	170323	NC 10	US 321 NB	No	No
Catawba	170324	Henry Fork River	US 321 SB	No	No
Catawba	170325	Henry Fork River	US 321 NB	No	No
Caldwell	130012	US 321	SR 1107	No	No
Caldwell	130013	SR 1002	US 321 NB	No	No
Caldwell	130014	SR 1002	US 321 SB	No	Yes
Caldwell	130032	Gunpowder Creek	US 321 NB	No	No

Table 4. US 321 Bridges Inventory

County	Bridge ID	Feature Below	Feature Above	Structurally Deficient	Functionally Obsolete
Caldwell	130033	Gunpowder Creek	US 321 SB	No	Yes
Caldwell	130051	US 321	SR 1178	No	No
Caldwell	130366	Lake Hickory	US 321 NB	Yes	No
Caldwell	130367	Lake Hickory	US 321 SB	Yes	Yes
Caldwell	130369	SR 1933	US 321 NB	No	No
Caldwell	130370	SR 1933	US 321 SB	No	No
Caldwell	130049	US 321	Countryside Dr SW	No	No
Watauga	940029	Cove Creek	US 321	No	No
Watauga	940061	Watauga River	US 321	No	No
Watauga	940067	Winkler Creek	US 221,321	No	Yes
Watauga	940278	Middle Fork S. Fork New River	SR 1540	Yes	Yes
Watauga	940007	US 221, US 321	Blue Ridge Pkwy	No	Yes

4. Corridor US 74

4.1. Road Network

The total length of the US 74 corridor alone, not including adjacent highways or alternate routes, is approximately 284 miles. With few exceptions, the US 74 corridor's segments are either included in the NHS, classified as being a Congressional High Priority, or included in MAP-21. The entire route is federally designated as a truck route. The highway assets inventory for the US 74 corridor is shown below in **Table 5** for the eastbound direction and **Table 6** for the westbound direction. For functional class and access control definitions, please refer to **Appendix A: Transportation Facilities Inventory Terminology**.

Table 5. US 74 Eastbound Highway Assets Inventory

County	Route	Length (mi)	Access Control	Functional Class	Travel Lanes
Polk	US 74	12.7	Full	Other Freeway	2
Rutherford	US 74	16.8	Full	Other Freeway	2
Cleveland	US 74	4.1	Full	Other Freeway	2
	US 74	15.4	Partial	Other Principal Arterial	2
	US 74	5.3	Full	Other Freeway	2
Gaston	US 74	0.2	Full	Other Freeway	2
	US 74	0.4	Full	Other Freeway	3
	US 74	1	Full	Other Principal Arterial	2
	I-85	16	Full	Interstate	3
	I-85	1.5	Full	Interstate	4
Mecklenburg	I-85	2.7	Full	Interstate	4
	I-485	0.7	Full	Interstate	3
	US 74	0.1	Partial	Other Principal Arterial	3
	US 74	0.8	Partial	Other Principal Arterial	2
	US 74	4.9	Partial	Other Principal Arterial	3
	US 74	0.3	Full	Interstate	2
	I-277	2.4	Full	Interstate	3
	US 74	0.4	Full	Interstate	2
	US 74	3.2	Full	Other Freeway	4
	US 74	3.4	Partial	Other Freeway	3
	US 74	3.5	Partial	Other Principal Arterial	2
	US 74	0.5	Partial	Other Principal Arterial	3
	US 74	1.2	Partial	Other Principal Arterial	4
Union	US 74	9.4	Partial	Other Principal Arterial	2
	US 74	4	Partial	Other Principal Arterial	3
	US 74	12.2	Partial	Other Principal Arterial	2
Anson	US 74	25.6	Partial	Other Principal Arterial	2
Richmond	US 74	16.5	Full	Other Freeway	2
	US 74	1.3	Partial	Other Freeway	2

Table 5. US 74 Eastbound Highway Assets Inventory

County	Route	Length (mi)	Access Control	Functional Class	Travel Lanes
Scotland	US 74	8.3	Partial	Other Freeway	2
	US 74	10.3	Full	Other Freeway	2
Robeson	I-74	19.2	Full	Interstate	2
	US 74	6.3	Full	Other Freeway	2
	US 74	4.7	Partial	Other Freeway	2
Columbus	US 74	11.8	Partial	Other Freeway	2
	US 74	12.1	Full	Other Freeway	2
	US 74	11.7	Partial	Other Freeway	2
	US 74	11.9	Partial	Other Principal Arterial	2
Brunswick	US 74	7.5	Partial	Other Principal Arterial	2
	US 74	8.2	Full	Other Freeway	2
New Hanover	US 74	1.5	Full	Other Principal Arterial	2
	US 74	0.4	Full	Other Freeway	1
	US 74	1.7	Full	Other Freeway	2
	US 74	2.8	Partial	Other Principal Arterial	3

Table 6. US 74 Westbound Highway Assets Inventory

County	Route	Length (mi)	Access Control	Functional Class	Travel Lanes
Polk	US 74	12.7	Full	Other Freeway	2
Rutherford	US 74	16.8	Full	Other Freeway	2
Cleveland	US 74	3.9	Full	Other Freeway	2
	US 74	15.6	Partial	Other Principal Arterial	2
	US 74	5.3	Full	Other Freeway	2
Gaston	US 74	0.2	Full	Other Freeway	2
	US 74	1.1	Full	Other Principal Arterial	3
	US 74	0.3	Full	Other Principal Arterial	2
	I-85	16.1	Full	Interstate	3
	I-85	1.4	Full	Interstate	4
Mecklenburg	I-85	2.7	Full	Interstate	4
	I-485	0.7	Full	Interstate	3
	US 74	0.7	Partial	Other Principal Arterial	2
	US 74	5.3	Full	Other Principal Arterial	3
	US 74	0.2	Full	Other Freeway	2
	I-277	2.2	Full	Interstate	3
	US 74	0.6	Full	Other Freeway	2
	US 74	3.4	Full	Other Freeway	4
US 74	3.4	Partial	Other Principal Arterial	3	

Table 6. US 74 Westbound Highway Assets Inventory

County	Route	Length (mi)	Access Control	Functional Class	Travel Lanes
Mecklenburg	US 74	3.7	Partial	Other Principal Arterial	2
	US 74	1.3	Partial	Other Principal Arterial	3
	US 74	0.1	Partial	Other Principal Arterial	4
Union	US 74	0.1	Partial	Other Principal Arterial	4
	US 74	9.0	Partial	Other Principal Arterial	2
	US 74	4.1	Partial	Other Principal Arterial	3
	US 74	12.3	Partial	Other Principal Arterial	2
Anson	US 74	25.2	Partial	Other Principal Arterial	2
Richmond	US 74	16.3	Full	Other Freeway	2
	US 74	1.5	Partial	Other Freeway	2
Scotland	US 74	8.4	Partial	Other Freeway	2
	US 74	10.2	Full	Other Freeway	2
Robeson	I-74	19.2	Full	Interstate	2
	US 74	6.3	Full	Other Freeway	2
	US 74	4.7	Partial	Other Freeway	2
Columbus	US 74	11.8	Partial	Other Freeway	2
	US 74	12.1	Full	Other Freeway	2
	US 74	11.7	Partial	Other Freeway	2
	US 74	11.9	Partial	Other Principal Arterial	2
Brunswick	US 74	7.5	Partial	Other Principal Arterial	2
	US 17	7.4	Full	Other Freeway	2
	US 74	0.5	Full	Other Principal Arterial	2
New Hanover	US 74	1.5	Full	Other Principal Arterial	2
	US 74	1.9	Full	Other Freeway	2
	US 74	2.9	Partial	Other Principal Arterial	3

4.2. Rail Network

The primary CSX Transportation rail corridor consists of approximately 515.5 miles of active track within the Charlotte, Monroe, and Wilmington subdivisions among others. The corridor includes 268.8 miles of mainline track, 268.6 miles of non-mainline track, 1.2 miles of siding, and 69 miles of track within rail yards (Charlotte Transflo, Davis, Federal, Monroe, and Pinoca), and 88 miles of industrial lead track. The corridor is part of the Strategic Rail Corridor Network (STRACNET).

Within Corridor US 74 counties, there is roughly 1,158 miles of active track across 11 rail networks: Aberdeen Carolina & Western Railway (14.0 miles), CSX Transportation (708.2 miles), Laurinburg & Southern Company (23.8 miles), Norfolk Southern (247.6 miles), Piedmont & Northern Railway (15.5 miles), RJ Corman Railroad Co. (32.9 miles), Red Springs & Northern Railway (7.7 miles), Thermal Belt Railway (8.6 miles), Winston-Salem Southbound Railway (0.1 miles), 13.1 miles of Wilmington Terminal railroad track servicing the Port of Wilmington, and 87 miles of Department of Defense railroad track at the Military Ocean Terminal at Sunny Point.

Corridor US 74 provides access to three intermodal ramps:

- CSX in Charlotte
- CSX in Wilmington
- NS in Charlotte

There is a total of 27 rail facilities within Corridor US 74 counties:

- Bluelinx Corp., CSX Transload
- Cape Fear Bonded, CSX Transload
- Carolinas Reload, CSX Transload
- Cenco, Inc., CSX Transload
- Charlotte – FG West, CSX Transload
- Charlotte – GP East, CSX Transload
- Colonial Terminals, CSX Transload
- CSX Bostic Yard
- CSX Charlotte Terminal
- CSX Hamlet Yard
- CSX Monroe Yard
- CSX Pinoca Yard
- CSX Wilmington Yard
- MCO Distribution & Logistics, CSX Transload
- Nordic – Lumberton Distribution Center, CSX Transload
- North Carolina State Port Authority, CSX Transload
- Total Distribution Inc., CSX Transload
- Transflo – Wilmington, CSX Transload
- United States Cold Storage Inc., CSX Transload
- Laurinburg & Southern Company Transload
- Chem-Way Corporation, NS Transload
- Distribution Technology Inc., NS Transload
- Nordic Cold – Charlotte Distribution Center, NS Transload
- NS Charlotte Yard
- NS Thoroughbred Bulk Transfer Terminal, NS Transload
- PAX Industries Inc., NS Transload
- West Logistics, NS Transload

The at-grade railroad crossings inventory for the US 74 corridor is shown below in **Table 7**. There are three at grade-crossings total, each of which are along a separate road which intersects US 74 immediately adjacent to the crossings.

Table 7. US 74 At-Grade Railroad Crossings Inventory

County	Crossing ID	Route	Railroad
Scotland ²	630905N	Old Wire Rd	CSX
Scotland ²	630906V	Morgan St	CSX
Brunswick ²	629193T	Malmo Loop Rd NE	CSX

2. At-grade crossing is immediately adjacent to US 74 at intersections with local roads.

4.3. Bridges

The bridges inventory for the US 74 corridor is shown below in **Table 8**. There are 304 bridges along the corridor crossing other roadways, rail corridors, and bodies of water. Six bridges were classified as structurally deficient, and 91 bridges were classified as functionally obsolete. For structurally deficient and functionally obsolete definitions, please refer to **Appendix A: Transportation Facilities Inventory Terminology**.

Table 8. US 74 Bridges Inventory

County	Bridge ID	Feature Below	Feature Above	Structurally Deficient	Functionally Obsolete
Polk	740039	Ramp I-26	US 74 EB	No	No
Polk	740040	Ramp I-26 WB	US 74 WB	No	No
Polk	740042	SR 1137	US 74 EB	No	No
Polk	740046	SR 1137	US 74 WB	No	No
Polk	740082	I-26	I-26 (Ramp A)	No	No
Polk	740103	US 74	SR 1531	No	No
Polk	740218	US 74	NC 9	No	No
Polk	740219	SR 1526	US 74 EB	No	No
Polk	740220	SR 1526	US 74 WB	No	No
Polk	740221	NC 108	US 74 EB	No	No
Polk	740222	NC 108	US 74 WB	No	No
Polk	740223	US 74	SR 1326	No	No
Polk	740224	Green River; Private Rd	US 74 EB	No	No
Polk	740225	Green River; Private Rd	US 74 WB	No	No
Polk	740226	SR 1330	US 74 EB	No	No
Polk	740227	SR 1330	US 74 WB	No	Yes
Rutherford	800012	US 74 Byp	NC 120	Yes	Yes
Rutherford	800044	Clinchfield RR	US 74 Byp	No	No
Rutherford	800047	Clinchfield RR	US 74 Byp	No	Yes
Rutherford	800081	US 74 Byp	SR 1901	No	No
Rutherford	800084	Second Broad River	US 74 Byp WB	No	Yes
Rutherford	800091	US 74 Byp	US 221A	No	No
Rutherford	800092	Webbs Creek	US 74 EB Byp	No	No
Rutherford	800093	Webbs Creek	US 74 WB Byp	No	No
Rutherford	800119	US 74 Byp	SR 1920	No	Yes
Rutherford	800123	US 74 Byp	SR 1921	No	No
Rutherford	800630	US 74	SR 2159	No	No
Rutherford	800631	US 74	US 221	No	No
Rutherford	800632	US 74	SR 2213	No	No
Rutherford	800633	US 74 Alt	US 74 EB	No	No
Rutherford	800634	US 74 Alt	US 74 WB	No	No
Rutherford	800635	SR 2169	US 74 EB	No	No
Rutherford	800636	SR 2169	US 74 WB	No	No

Table 8. US 74 Bridges Inventory

County	Bridge ID	Feature Below	Feature Above	Structurally Deficient	Functionally Obsolete
Rutherford	800637	US 74	SR 1004	No	No
Rutherford	800638	SR 1153	US 74	No	No
Rutherford	800639	SR 1153	US 74	No	No
Rutherford	800646	French Broad River, SR 1005	US 74	No	No
Rutherford	800647	French Broad River, SR 1005	US 74 EB	No	No
Rutherford	800648	SR 1148	US 74 WB	No	No
Rutherford	800649	SR 1148	US 74 EB	No	No
Rutherford	800083	Second Broad River	US 74 Byp EB	No	Yes
Cleveland	220006	RR (Abandoned)	US 74 EB	No	No
Cleveland	220008	RR (Abandoned)	US 74 WB	No	No
Cleveland	220021	US 74	SR 1167	No	No
Cleveland	220032	US 74, NC 226	NC18	No	No
Cleveland	220048	Sandy Run Creek	US 74 EB	Yes	Yes
Cleveland	220049	Sandy Run Creek	US 74 WB	Yes	Yes
Cleveland	220060	Beaverdam Creek	US 74 WB	No	Yes
Cleveland	220073	Brushy Creek	US 74 EB	No	Yes
Cleveland	220074	Brushy Creek	US 74 WB	No	Yes
Cleveland	220079	First Broad River	US 74 EB	No	Yes
Cleveland	220080	First Broad River	US 74 WB	No	Yes
Cleveland	220088	US 74	Morgan St	No	No
Cleveland	220101	Buffalo Creek	US 74 EB	No	Yes
Cleveland	220102	Buffalo Creek	US 74 WB	No	Yes
Cleveland	220107	US 74	US 74 Bus	No	Yes
Cleveland	220424	US 74	SR 2026	No	No
Cleveland	220425	US 74	SR 2034	No	No
Cleveland	220432	SR 2025	US 74 EB	No	No
Cleveland	220433	SR 2025	US 74 WB	No	No
Cleveland	220435	NC161	US 74 EB	No	No
Cleveland	220436	NC161	US 74 WB	No	No
Cleveland	220438	US 74	NC 216	No	No
Cleveland	220451	US 74	SR 1162	No	No
Gaston	350002	I-85	NC 279	No	Yes
Gaston	350034	I-85	NC 273	No	No
Gaston	350038	I-85	NC 274	No	No
Gaston	350046	I-85 NB	US 29 & US 74	No	No
Gaston	350053	US 74 EB	I-85/US 29 SB	No	No

Table 8. US 74 Bridges Inventory

County	Bridge ID	Feature Below	Feature Above	Structurally Deficient	Functionally Obsolete
Gaston	350059	I-85	NC 7	No	Yes
Gaston	350073	I-85	NC 7	No	Yes
Gaston	350086	I-85 NB	US 74 EB	No	Yes
Gaston	350096	I-85	SR 1302	No	No
Gaston	350101	I-85	SR 1307	No	Yes
Gaston	350103	SR 1312	I-85	No	No
Gaston	350107	I-85	SR 1135	No	Yes
Gaston	350118	I-85	SR 1327	No	Yes
Gaston	350125	I-85	SR 2278	No	No
Gaston	350126	I-85	N Modena St	No	Yes
Gaston	350134	I-85	SR 2200	No	Yes
Gaston	350136	I-85	SR 2339	No	Yes
Gaston	350137	I-85	SR 2329	No	No
Gaston	350142	I-85	SR 2213	No	Yes
Gaston	350143	South Fork Catawba River	I-85	No	No
Gaston	350146	I-85	SR 2000	No	No
Gaston	350149	I-85	SR 2093	No	Yes
Gaston	350159	Catawba River	I-85	No	No
Gaston	350314	I-85 SB	US 29 & US 74 SB	No	No
Gaston	350325	US 74	US 74 Bus WB	No	Yes
Gaston	350117	I-85	Northwest Blvd	No	Yes
Gaston	350133	I-85	Aberdeen Blvd	No	Yes
Mecklenburg	590028	I-85	SR 1601	No	No
Mecklenburg	590044	I-77, US 21	I-277 NB, US 74 EB	No	Yes
Mecklenburg	590047	I-277 NB	I-277 Ramp	No	Yes
Mecklenburg	590048	I-77, US 21	I-277 SB, US 74 WB	No	Yes
Mecklenburg	590067	I-85	SR 1625	No	No
Mecklenburg	590078	Clarkson St	I-277	No	No
Mecklenburg	590122	US 74	SR 4886	No	Yes
Mecklenburg	590173	US 74	NC 27 WB	No	Yes
Mecklenburg	590175	Seaboard Coastline RR	US 74, NC 27	No	No
Mecklenburg	590182	US 74	SR 2940	No	Yes
Mecklenburg	590187	McAlpine Creek	US 74 EB	No	Yes
Mecklenburg	590188	McAlpine Creek	US 74 WB	No	Yes

Table 8. US 74 Bridges Inventory

County	Bridge ID	Feature Below	Feature Above	Structurally Deficient	Functionally Obsolete
Mecklenburg	590309	I-277, NC 16, NC 27, US 74 SB	US 74 WB	No	No
Mecklenburg	590404	I-277 & NC 16, US 74 EB, Ramp	NC 27	No	No
Mecklenburg	590448	NC 16 SB	I277, US 74	No	No
Mecklenburg	590449	NC 16 NB	I277 & US 74	No	No
Mecklenburg	590450	Elizabeth Ave	I277 & US 74	No	No
Mecklenburg	590451	5th St	US 74 WB Ramp	No	Yes
Mecklenburg	590452	5th St	I-277	No	No
Mecklenburg	590459	US 29 & US 74	SR 5901 NB	No	No
Mecklenburg	590460	US 29 & US 74	SR 5901 SB	No	No
Mecklenburg	590478	Stonewall St	I-277 & US 74 NB	No	No
Mecklenburg	590479	Stonewall St	I-277 & US 74 SB	No	No
Mecklenburg	590487	NC 27 (S McDowell St)	I-277 NB	No	No
Mecklenburg	590488	NC 27 (S McDowell St)	I-277 SB, US 74 WB	No	No
Mecklenburg	590489	I-277 & US 74	SR 3998	No	Yes
Mecklenburg	590505	Southern Railroad	I-277 NB	No	No
Mecklenburg	590506	Southern Railroad	I-277 SB	No	No
Mecklenburg	590507	US 29 & NC 27	I-277 NB	No	No
Mecklenburg	590508	US 29 & NC 27	I-277 SB	No	No
Mecklenburg	590509	US 29 & NC 49	I-277 NB	No	Yes
Mecklenburg	590510	US 29 & NC 49	I-277 SB	No	Yes
Mecklenburg	590515	I-277, US 74	Church St	No	Yes
Mecklenburg	590516	I-277, US 74	Tryon St	No	Yes
Mecklenburg	590517	I-277	College St	No	Yes
Mecklenburg	590619	US 74 & Edwards Branch	Briar Creek Rd	No	Yes
Mecklenburg	590668	US 74	NC 51 NB	No	No
Mecklenburg	590669	US 74	NC 51 SB	No	No
Mecklenburg	590742	Pecan Ave	US 74 & NC 27	No	No
Mecklenburg	590746	I-485	US 74	No	No
Mecklenburg	590748	US 74 Ramp	US 74	No	No
Mecklenburg	590808	US 74	Hawthorne Ln	No	Yes
Mecklenburg	590403	US 74, I-277 Ramp	Central Ave	No	Yes
Mecklenburg	590819	I-485	I-85	No	No
Mecklenburg	590831	US 29, US 74	I-485 NB Collector	No	No
Mecklenburg	590832	US 29, US 74	I-485 NB	No	No

Table 8. US 74 Bridges Inventory

County	Bridge ID	Feature Below	Feature Above	Structurally Deficient	Functionally Obsolete
Mecklenburg	590833	US 29, US 74	I-485 SB	No	No
Mecklenburg	590834	US 29, US 74	I-485 SB Collector	No	No
Mecklenburg	590981	Pierson Dr	US 74 WB, NC 27 NB	No	No
Mecklenburg	590982	Pierson Dr	US 74 EB, NC 27 SB	No	No
Mecklenburg	590983	NC 27 NB, HOV	US 74 WB, HOV	No	Yes
Mecklenburg	591173	US 74	Conference Dr	No	Yes
Mecklenburg	591172	US 74	Idlewild Rd	No	No
Mecklenburg	591171	US 74	N Sharon Amity Rd	No	Yes
Union	890034	US 74, NC 200	Concord Ave	Yes	Yes
Union	890038	US 74, NC 200, US 601	US 601 & NC 207	No	Yes
Union	890042	Bearskin Creek	US 74 EB, US 601 SB, NC 200 NB	No	No
Union	890043	Bearskin Creek	US 74 WB, US 601 NB, NC 200 SB	No	No
Union	890065	Seaboard Coastline RR	US 74 EB, US 601 SB	No	No
Union	890068	Seaboard Coastline RR	US 74 WB	No	No
Union	890085	Richardson Creek	US 74 EB	No	Yes
Union	890086	Richardson Creek	US 74 WB	No	No
Anson	30003	Lanes Creek	US 74 EB	No	No
Anson	30004	Lanes Creek	US 74 WB	No	No
Anson	30028	US 74	SR 1240	No	Yes
Anson	30032	Brown Creek	US 74 EB	No	No
Anson	30033	Brown Creek	US 74 WB	No	No
Anson	30049	Goulds Fork Creek	US 74 EB	No	No
Anson	30050	Goulds Fork Creek	US 74 WB	No	Yes
Anson	30064	Relief	US 74	No	No
Anson	30072	US 74	SR 1734	No	No
Anson	30073	Seaboard Coastline RR	US 74 EB	No	No
Anson	30074	Seaboard Coastline RR	US 74 WB	No	No
Anson	30078	Pee Dee River	US 74 EB	No	Yes
Anson	30081	Pee Dee River	US 74 WB	No	No
Richmond	760178	US 74	SR 1108	No	No
Richmond	760179	US 74	SR 1103	No	No
Richmond	760187	US 74	SR 1109	No	No

Table 8. US 74 Bridges Inventory

County	Bridge ID	Feature Below	Feature Above	Structurally Deficient	Functionally Obsolete
Richmond	760188	US 74	NC 177	No	No
Richmond	760189	US 74	SR 1615	No	No
Richmond	760190	NC 38	US 74 EB	No	No
Richmond	760191	NC 38	US 74 WB	No	No
Richmond	760194	US 74	US 1	No	No
Richmond	760195	US 74	US 74 Bus EB	No	No
Richmond	760202	US 74	SR 1900	No	No
Richmond	760203	CSX Railroad	US 74 WB	No	No
Richmond	760204	CSX Railroad	US 74 EB	No	No
Richmond	760205	SR 1825	US 74 WB	No	No
Richmond	760206	SR 1825	US 74 EB	No	No
Richmond	760207	Marks Creek	US 74 WB	No	No
Richmond	760208	Marks Creek	US 74 EB	No	No
Richmond	760209	NC 381, CSX RR	US 74 WB	No	No
Richmond	760210	NC 381 & CSX RR	US 74 EB	No	No
Richmond	760211	CSX RR	US 74 WB	No	No
Richmond	760212	CSX RR	US 74 E	No	No
Richmond	760213	US 74 Bus EB Connector	US 74 WB	No	No
Richmond	760214	US 74 Bus EB Connector	US 74 EB	No	No
Richmond	760215	CSX RR, Hitchcock Cr	US 74 W	No	No
Richmond	760216	CSX RR, Hitchcock Cr	US 74 EB	No	No
Richmond	760221	US 74	US 74 EB Bus Ramp	No	Yes
Scotland	820009	CSX RR	US 74 EB	No	No
Scotland	820015	US 74 WB	US 74 Bus EB	No	Yes
Scotland	820016	SCLRR	US 74 WB	No	No
Scotland	820022	Gum Swamp Creek	US 74 EB	No	No
Scotland	820023	Gum Swamp Creek	US 74 W	No	No
Scotland	820024	US 74, US 501	US 501 Bus	No	Yes
Scotland	820026	US 74	NC 79	No	Yes
Scotland	820035	US 74	SR 1105	No	Yes
Scotland	820040	US 74	SR 1108	No	Yes
Scotland	820042	US 15/ US 401/ US 501	US 74 EB	No	Yes
Scotland	820045	US 15/ US 401/ US 501	US 74/ US 501 WB	No	Yes
Scotland	820049	US 15 Bus/ US 401 Bus	US 74 EB	No	Yes

Table 8. US 74 Bridges Inventory

County	Bridge ID	Feature Below	Feature Above	Structurally Deficient	Functionally Obsolete
Scotland	820051	US 15 Bus/ US 401 Bus	US 74 WB	No	Yes
Scotland	820055	US 74	US 501	No	Yes
Scotland	820056	US 74	SR 1601	No	Yes
Scotland	820057	Southern Railroad	US 74 EB	No	Yes
Scotland	820060	Southern Railroad	US 74 WB	No	Yes
Scotland	820068	US 74	SR 1323	No	No
Scotland	820071	Little Creek	US 74 EB	No	No
Scotland	820072	Little Creek	US 74 WB	No	No
Scotland	820073	US 74 Bus & CSX Railroad	US 74 WB	No	No
Scotland	820093	US 74	SR 1369	No	No
Scotland	820094	US 74 Bus & CSX Railroad	US 74 EB	No	No
Scotland	820095	Big Shoe Heel Creek	US 74 EB	No	No
Scotland	820096	Big Shoe Heel Creek	US 74 WB	No	No
Scotland	820097	SR 1436 & CSX Railroad	US 74 EB	No	No
Scotland	820098	SR 1436 & CSX Railroad	US 74 WB	No	No
Robeson	770070	NC 41	US 74 EB	No	No
Robeson	770072	NC 41	US 74 WB	No	No
Robeson	770110	Lumber River Overflow	US 74 WB, NC 130 WB	No	No
Robeson	770118	Lumber River	US 74 WB	No	No
Robeson	770447	US 74 EB	SR 1303	No	No
Robeson	770452	NC 71	US 74 Byp EB	No	No
Robeson	770453	NC 71	US 74 Byp WB	No	No
Robeson	770454	CSX RR	US 74 Byp EB	No	No
Robeson	770455	CSX RR	US 74 Byp WB	No	No
Robeson	770456	CSX RR	US 74 Byp EB	No	No
Robeson	770457	CSX RR	US 74 Byp WB	No	No
Robeson	770465	Lumber River Overflow	US 74 EB/ NC 130 EB	No	No
Robeson	770466	Lumber River	US 74 EB, NC 130 EB	No	No
Robeson	770482	I-74, US 74	SR 1155	No	Yes
Robeson	770483	I-74	SR 1003	No	Yes
Robeson	770484	I-74, US 74	SR 1164	No	No
Robeson	770488	I-74	SR 2418	No	No

Table 8. US 74 Bridges Inventory

County	Bridge ID	Feature Below	Feature Above	Structurally Deficient	Functionally Obsolete
Robeson	770487	I-95	I-74 EB	No	Yes
Robeson	770480	CSX RR	I-74 WB, US 74 WB	No	No
Robeson	770481	CSX RR	I-74 EB, US 74 EB	No	No
Robeson	770485	US 74	SR 1207	No	No
Robeson	770490	US 74	SR 2210	No	No
Robeson	770476	US 74	US 74 Bus	No	Yes
Robeson	770477	I-74	SR 1166	No	No
Robeson	770478	NC 710	I-74 WB	No	No
Robeson	770479	NC 710	I-74, US 74	No	No
Robeson	770486	I-95	I-74, US 74	No	Yes
Robeson	770489	I-74	SR 2505	No	No
Columbus	230017	US 74 Byp, US 76 Byp	US 701 Bus	No	No
Columbus	230018	Lumber River Overflow	US 74 WB	No	No
Columbus	230030	US 74/ 76 Byp	SR 1005	No	No
Columbus	230034	US 74/ 76 Byp	SR 1585	No	No
Columbus	230050	US 74/ 76 Byp	SR 1552	No	No
Columbus	230051	US 701 Byp	US 74/ 76 Byp EB	No	No
Columbus	230052	US 701 Byp	US 74/ 76 Byp WB	No	Yes
Columbus	230053	White Marsh Swamp	US 74/ 76 EB	No	No
Columbus	230054	White Marsh Swamp	US 74/ 76 WB	No	No
Columbus	230056	US 74	US 76 WB	No	No
Columbus	230083	Livingston Creek	US 74/ 76 EB	No	Yes
Columbus	230086	Livingston Creek	US 74/ 76 WB	No	No
Columbus	230381	SR 1700	US 74/ 76 EB	No	No
Columbus	230382	SR 1700	US 74/ 76 WB	No	No
Columbus	230397	Lumber River	US 74 EB	No	No
Columbus	230398	Lumber River	US 74 EB, NC 130 EB	No	No
Columbus	230400	US 74/ NC 130	NC 410	No	Yes
Columbus	230004	Lumber River Overflow	US 74 WB, NC 130	No	No
Columbus	230383	Friar Swamp	US 74, US 76 EB	No	No
Columbus	230384	Friar Swamp	US 74, US 76 EB	No	No
Columbus	230385	Friar Swamp	US 74, US 76 WB	No	No
Columbus	230386	Friar Swamp	US 74, US 76 EB	No	No
Columbus	230387	Friar Swamp	US 74, US 76 WB	No	No
Columbus	230388	Friar Swamp	US 74, US 76 EB	No	No

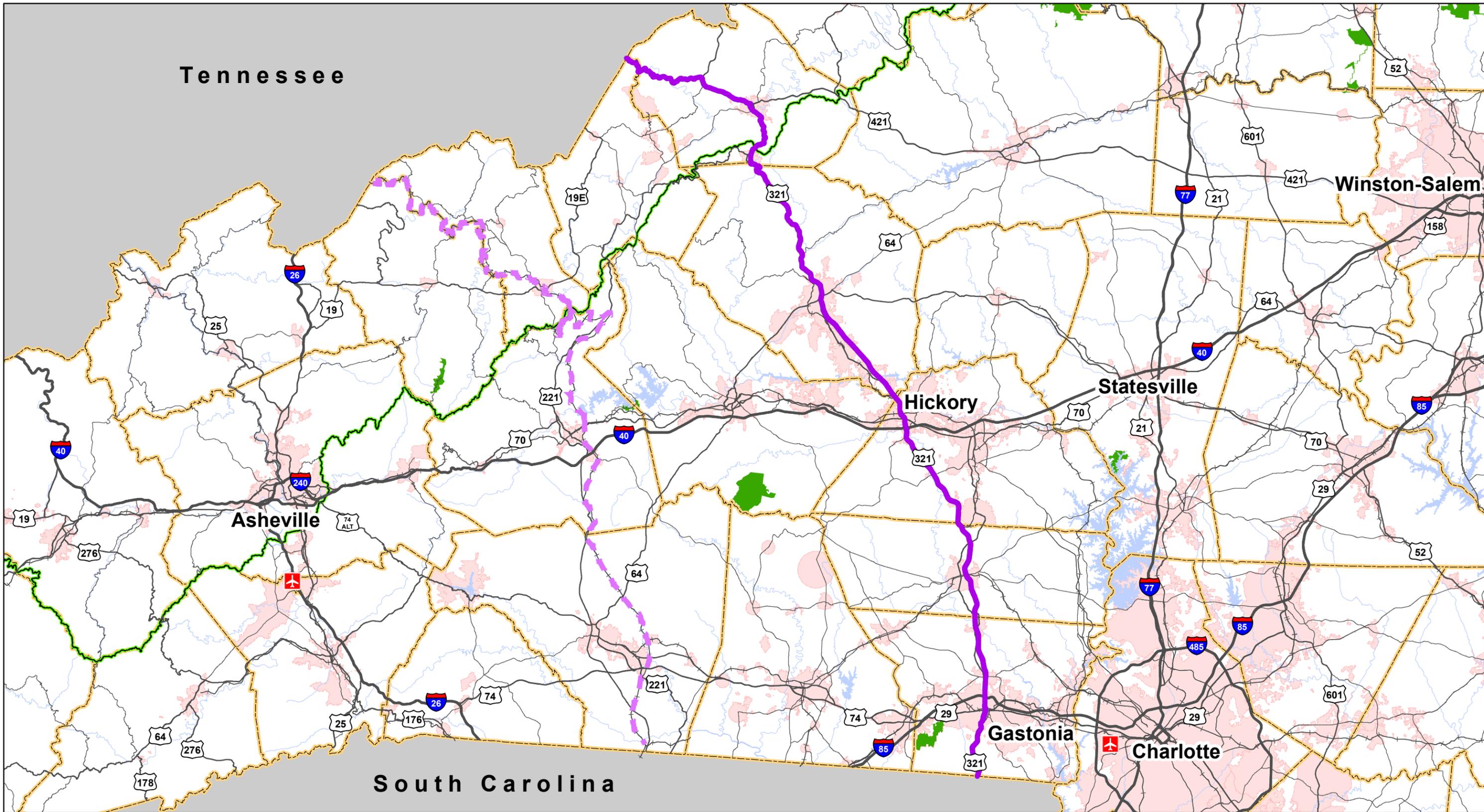
Table 8. US 74 Bridges Inventory

County	Bridge ID	Feature Below	Feature Above	Structurally Deficient	Functionally Obsolete
Columbus	230408	US 74/ 76	NC 211	No	No
Columbus	230411	US 74/ NC 130	NC 242	No	No
Columbus	230412	US 74/ NC 130	SR 1574	No	No
Brunswick	90004	Hoods Creek	US 74, US 76 EB	No	No
Brunswick	90005	Hoods Creek	US 74, US 76 WB	No	Yes
Brunswick	90007	US 76	US 17	Yes	Yes
Brunswick	90018	US 74/ US 76	SR 1426	No	No
Brunswick	90029	SR 1472, CSX RR	US 74, US 76 EB	No	No
Brunswick	90036	SR 1472, CSX RR	US 74, US 76 WB	No	No
Brunswick	90043	US 74/ US 76	SR 1437	No	No
Brunswick	90096	US 74/ US 76	US 17	No	Yes
Brunswick	90098	NC 133, SR 1472	US 17, US 74, US 76	No	No
Brunswick	90099	SR 1472	US 17/ US 74/ US 76	No	No
Brunswick	90103	Brunswick River	US 17, US 64, US 76, NC 133	No	No
Brunswick	90107	Alligator Creek	US 17/ US 74/ US 76 NB	No	No
Brunswick	90108	Alligator Creek	US 17, US 64, US 76, NC 133	No	No
Brunswick	90248	CSX RR, US 74, US 76	I-140 WB	No	No
Brunswick	90247	CSX RR, US 74, US 76	I-140	No	No
New Hanover	640011	NE Cape Fear River & Ramp	US 74	Yes	No
New Hanover	640027	Cape Fear River	US 17, US 74, US 421, NC 133	No	No
New Hanover	640108	Ramp (US 74)	US 74 (Smith Creek)	No	Yes
New Hanover	640109	Wetlands	NC 133, Ramp A	No	No
New Hanover	640110	Wetlands	US 74 Ramp	No	No
New Hanover	640111	US 74, NC 133	SR 1627 Ramp B	No	Yes
New Hanover	640112	McRae St, CSX RR, Smith Cr	US 74 EB, NC 133	No	Yes
New Hanover	640113	McRae St, CSX RR, Smith Cr	US 74 WB, NC 133 WB	No	Yes
New Hanover	640126	US 74 (Ramp D)	US 74 WB	No	Yes
New Hanover	640127	US 74 (Ramp D)	US 74 EB	No	Yes
New Hanover	640128	CSX RR	US 74 WB	No	No
New Hanover	640129	CSX RR	US 74 EB	No	No

Table 8. US 74 Bridges Inventory

County	Bridge ID	Feature Below	Feature Above	Structurally Deficient	Functionally Obsolete
New Hanover	640131	SR 1302, Smith Creek	US 74 WB	No	Yes
New Hanover	640132	SR 1302, Smith Creek	US 74 EB	No	No
New Hanover	640133	Wetlands	US 74 Ramp B WB	No	Yes
New Hanover	640134	Wetlands	US 74 Ramp Loop B	No	No

Vicinity Maps



Tennessee

Winston-Salem

Asheville

Hickory

Statesville

Gastonia

Charlotte

South Carolina



**NC STRATEGIC
TRANSPORTATION
CORRIDORS (STC)**

JANUARY 2020

Source: NCOneMap, NCDOT GIS, ESRI

Legend

STC Highway Corridor D (US 321)	Interstate	Blue Ridge Pkwy	Counties
STC Rail Corridor D (CSX)	US Route	State Parks	NC Seaports
Municipal Boundaries	NC Highway	Major Rivers/Streams	NC Int'l or Major Freight Airports
	Rail	Major Water Bodies	

0 5 10 20 30 40 50 60 70 80 Miles

**STRATEGIC
TRANSPORTATION CORRIDORS
VICINITY MAP**

CORRIDOR D (US 321)

FIGURE 1



South Carolina



NC STRATEGIC TRANSPORTATION CORRIDORS (STC)

JANUARY 2020

Source: NCOneMap, NCDOT GIS, ESRI

Legend

- STC Highway Corridor U (US 74W/US 74E)
- STC Rail Corridor U (CSX)
- Municipal Boundaries
- Interstate
- US Route
- NC Highway
- +— Rail
- Blue Ridge Pkwy
- State Parks
- Major Rivers/Streams
- Major Water Bodies
- Counties
- ⚓ NC Seaports
- ✈ NC Int'l or Major Freight Airports



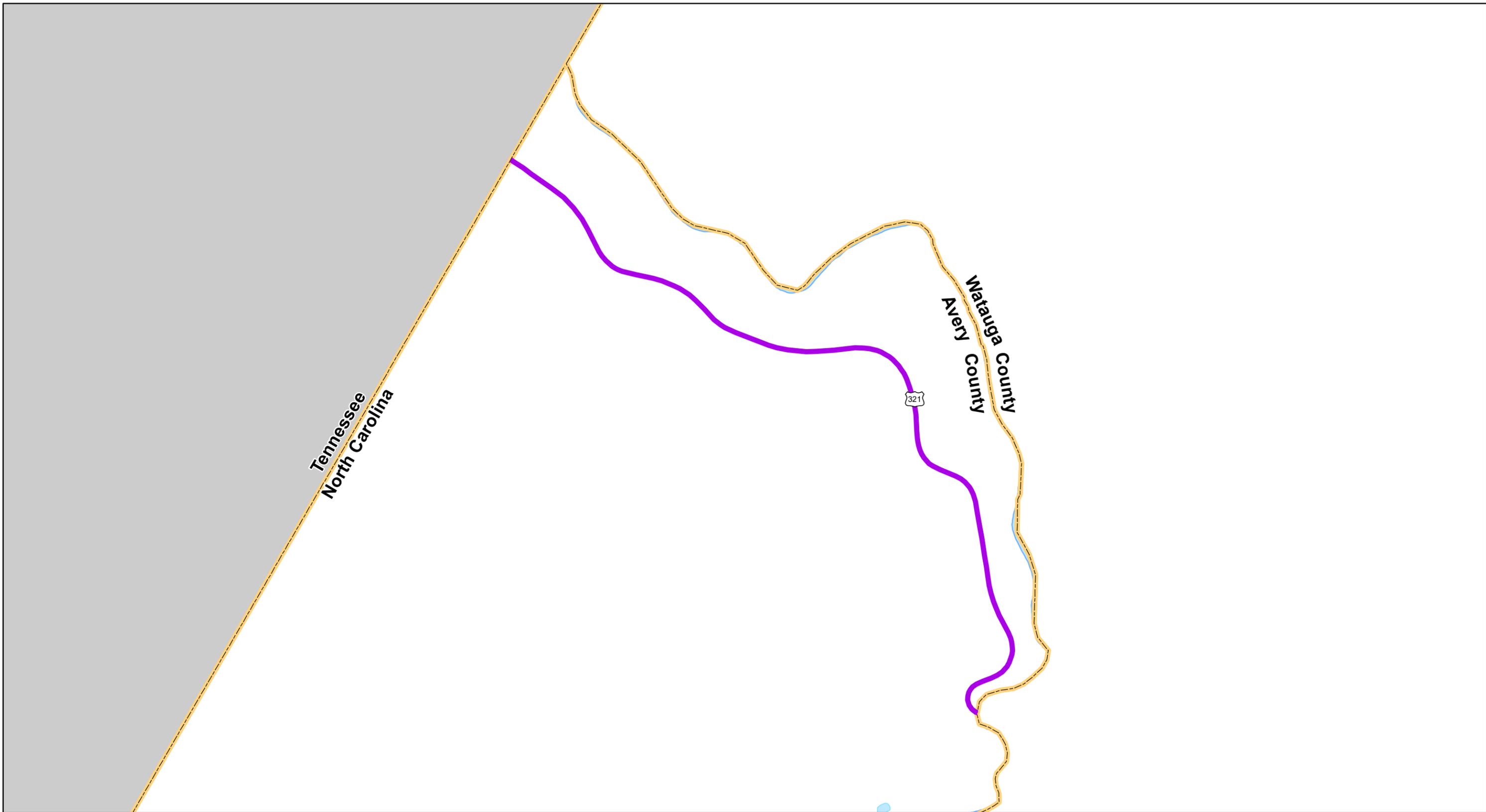
STRATEGIC TRANSPORTATION CORRIDORS VICINITY MAP

CORRIDOR U (US 74)

FIGURE 2

US 321 Corridor Study Area Maps





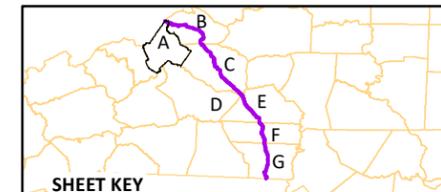
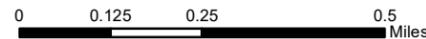
**NC STRATEGIC
TRANSPORTATION
CORRIDORS (STC)**

JANUARY 2020

Source: NCOneMap, NCDOT GIS, ESRI

Legend

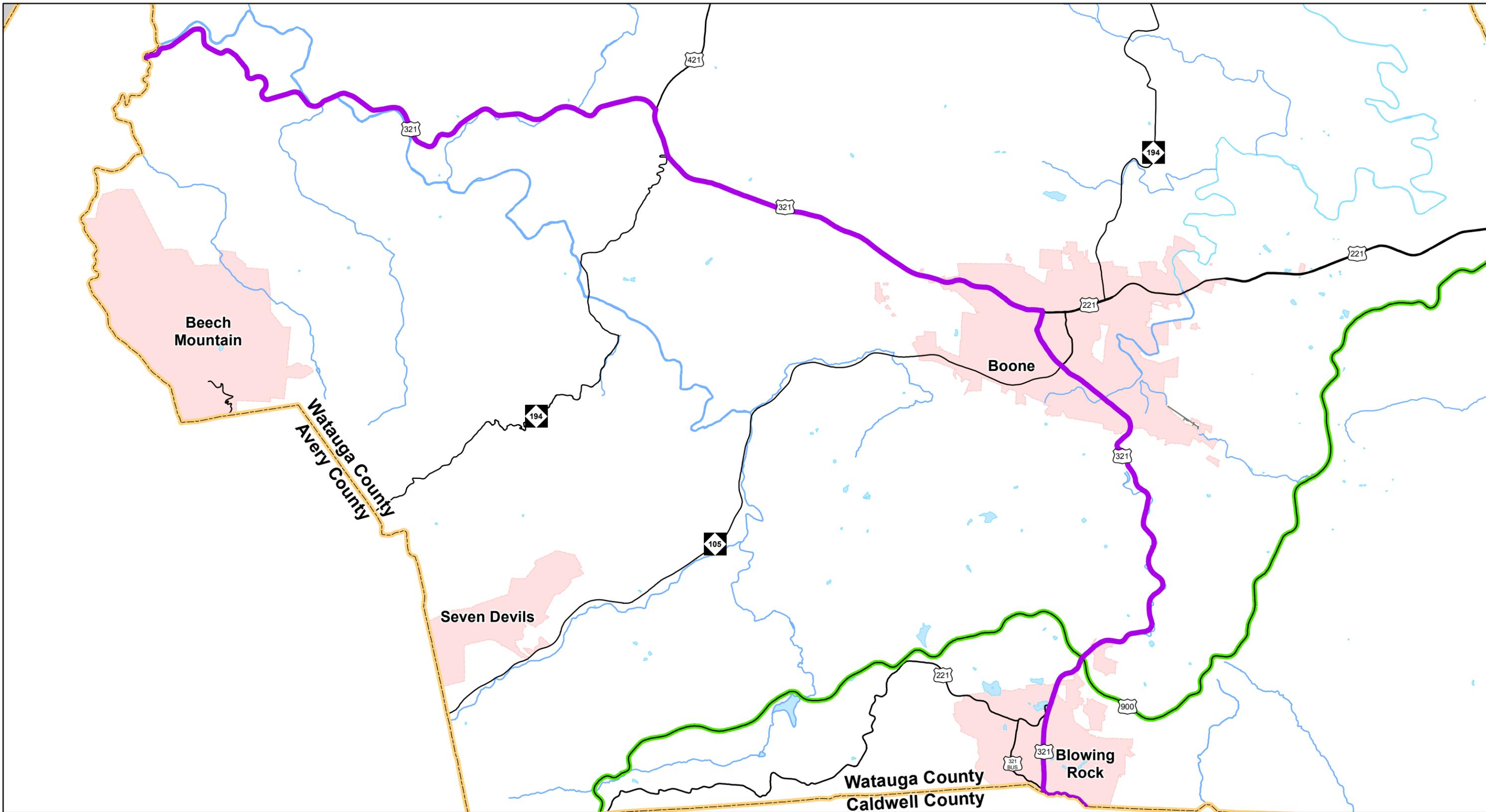
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|---------------------------------|------------------------------------|--------------------|
| STC Highway Corridor D (US 321) | Interstate | Waterbodies |
| STC Rail Corridor D (CSX) | US Route | Rivers & Streams |
| Rail | NC Highway | Airport Boundaries |
| Counties | NC Int'l or Major Freight Airports | State Parks |
| Municipal Boundaries | Blue Ridge Parkway | |



**STRATEGIC
TRANSPORTATION CORRIDORS
STUDY AREA MAP**

CORRIDOR D (US 321)

FIGURE 3A



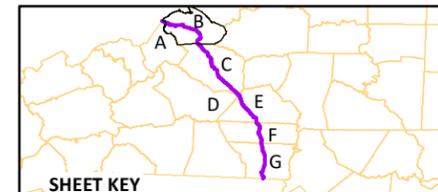
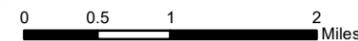
**NC STRATEGIC
TRANSPORTATION
CORRIDORS (STC)**

JANUARY 2020

Source: NCOneMap, NCDOT GIS, ESRI

Legend

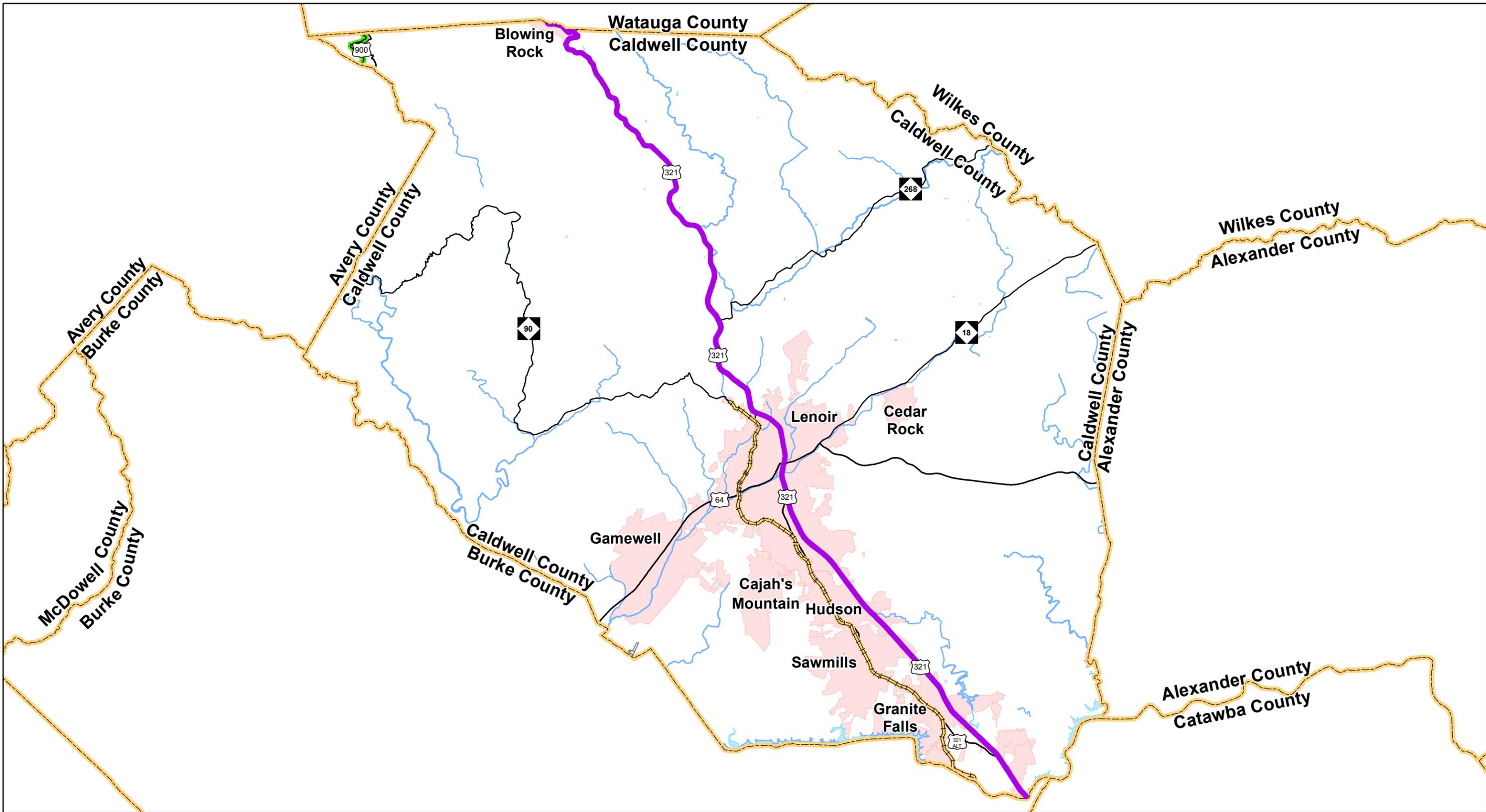
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|---------------------------------|------------------------------------|--------------------|
| STC Highway Corridor D (US 321) | Interstate | Waterbodies |
| STC Rail Corridor D (CSX) | US Route | Rivers & Streams |
| Rail | NC Highway | Airport Boundaries |
| Counties | NC Int'l or Major Freight Airports | State Parks |
| Municipal Boundaries | | Blue Ridge Parkway |



**STRATEGIC
TRANSPORTATION CORRIDORS
STUDY AREA MAP**

CORRIDOR D (US 321)

FIGURE 3B



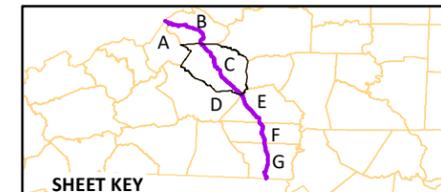
**NC STRATEGIC
TRANSPORTATION
CORRIDORS (STC)**

JANUARY 2020

Source: NCOneMap, NCDOT GIS, ESRI

Legend

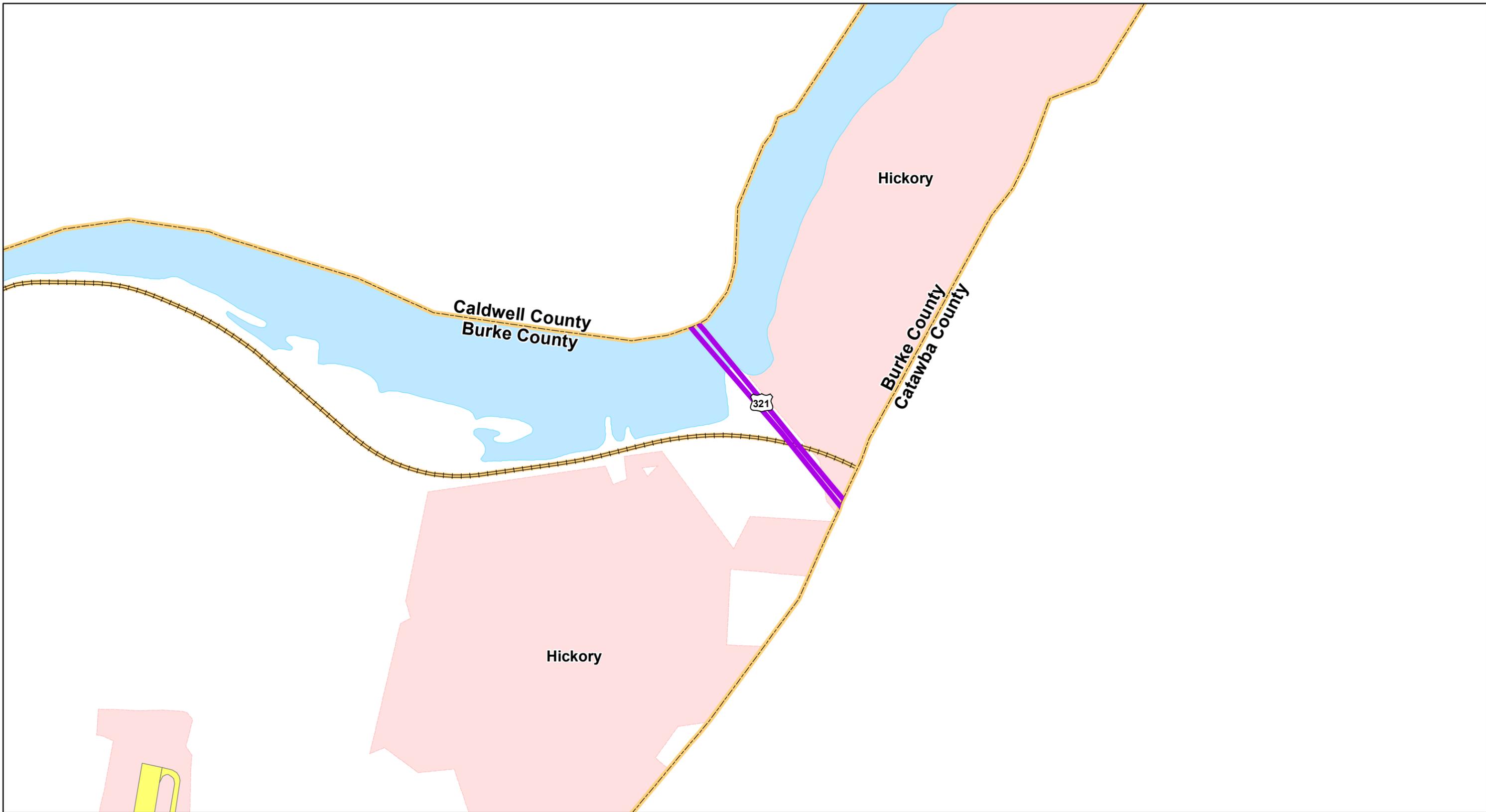
- | | | |
|---------------------------------|------------------------------------|--------------------|
| STC Highway Corridor D (US 321) | Interstate | Waterbodies |
| STC Rail Corridor D (CSX) | US Route | Rivers & Streams |
| Rail | NC Highway | Airport Boundaries |
| Counties | NC Int'l or Major Freight Airports | State Parks |
| Municipal Boundaries | Blue Ridge Parkway | |



**STRATEGIC
TRANSPORTATION CORRIDORS
STUDY AREA MAP**

CORRIDOR D (US 321)

FIGURE 3C



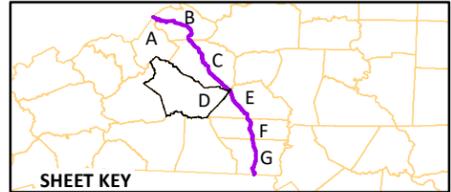
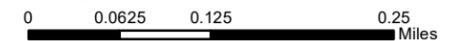
**NC STRATEGIC
TRANSPORTATION
CORRIDORS (STC)**

JANUARY 2020

Source: NCOneMap, NCDOT GIS, ESRI

Legend

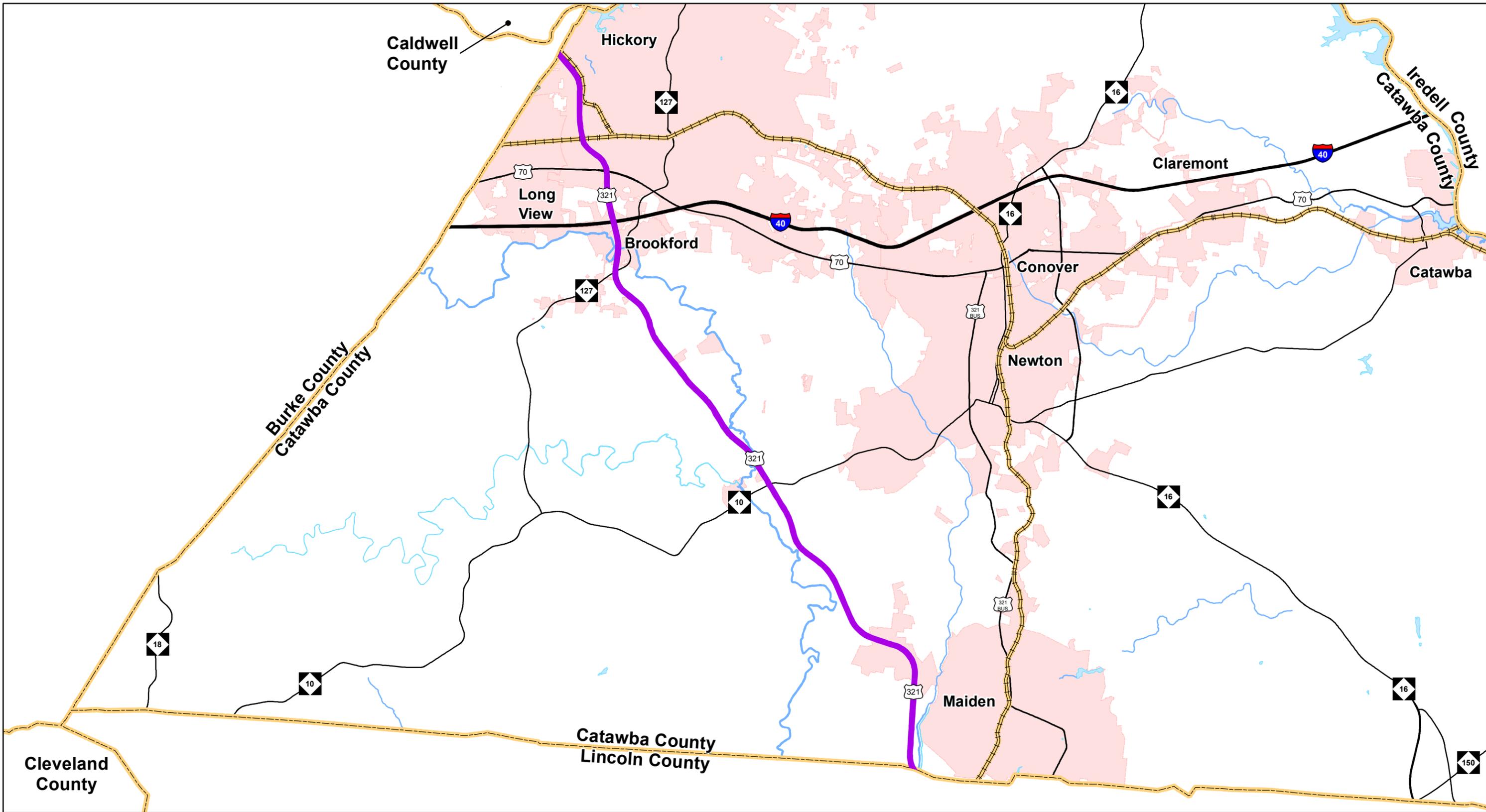
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- STC Rail Corridor D (CSX)
- Rail
- Counties
- Municipal Boundaries
- Interstate
- US Route
- NC Highway
- NC Int'l or Major Freight Airports
- Waterbodies
- Rivers & Streams
- Airport Boundaries
- State Parks
- Blue Ridge Parkway



**STRATEGIC
TRANSPORTATION CORRIDORS
STUDY AREA MAP**

CORRIDOR D (US 321)

FIGURE 3D



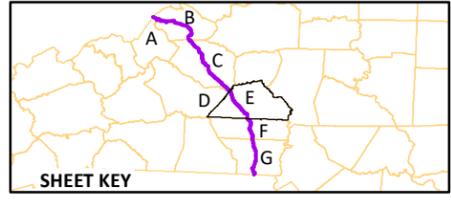
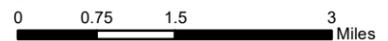
**NC STRATEGIC
TRANSPORTATION
CORRIDORS (STC)**

JANUARY 2020

Source: NCOneMap, NCDOT GIS, ESRI

Legend

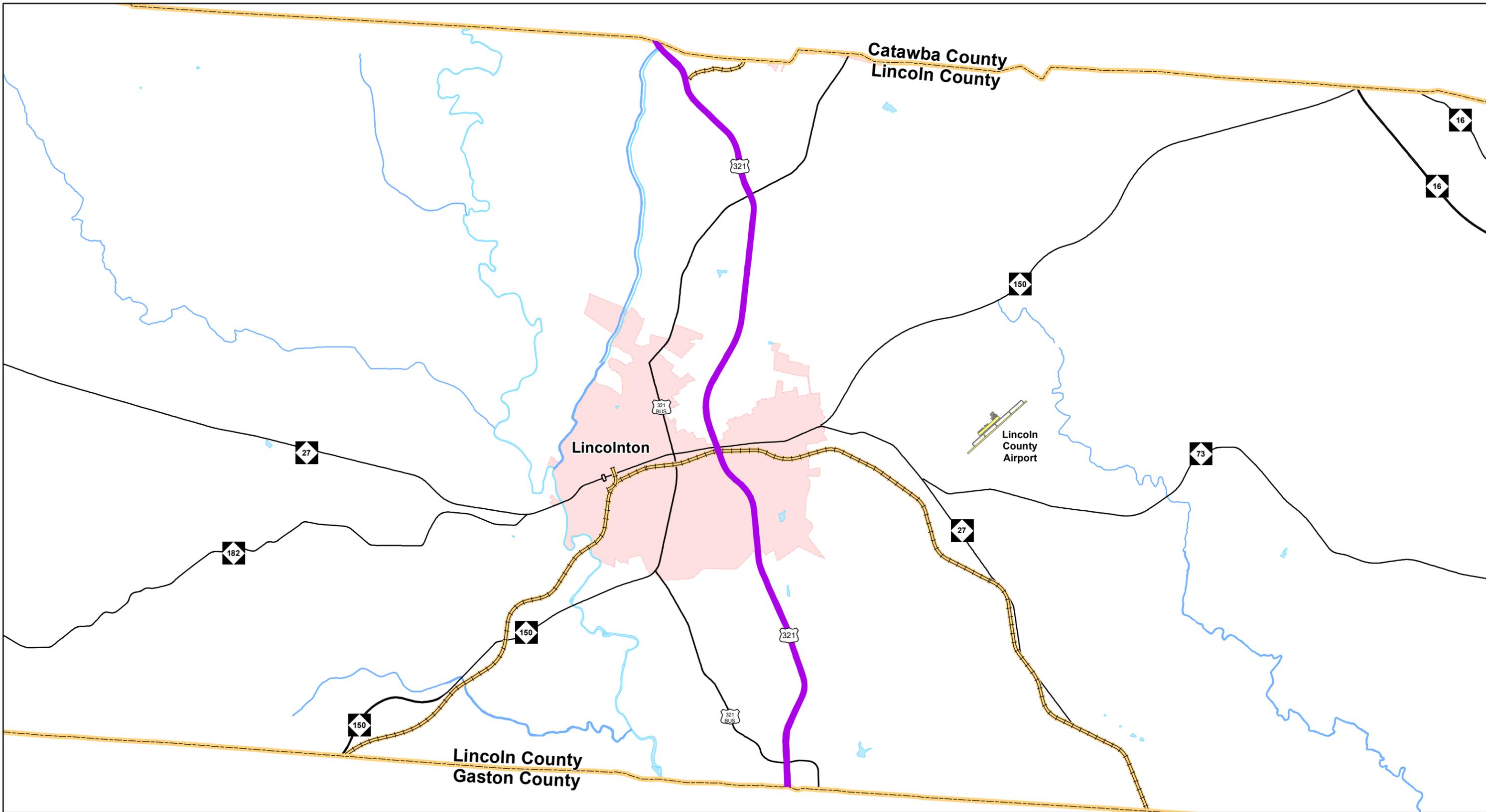
- STC Highway Corridor D (US 321)
- STC Rail Corridor D (CSX)
- Rail
- Counties
- Municipal Boundaries
- Interstate
- US Route
- NC Highway
- NC Int'l or Major Freight Airports
- Waterbodies
- Rivers & Streams
- Airport Boundaries
- State Parks
- Blue Ridge Parkway



**STRATEGIC
TRANSPORTATION CORRIDORS
STUDY AREA MAP**

CORRIDOR D (US 321)

FIGURE 3E



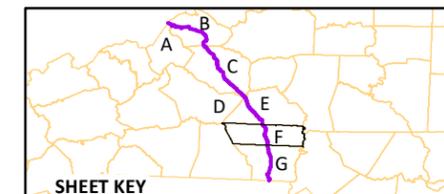
**NC STRATEGIC
TRANSPORTATION
CORRIDORS (STC)**

JANUARY 2020

Source: NCOneMap, NCDOT GIS, ESRI

Legend

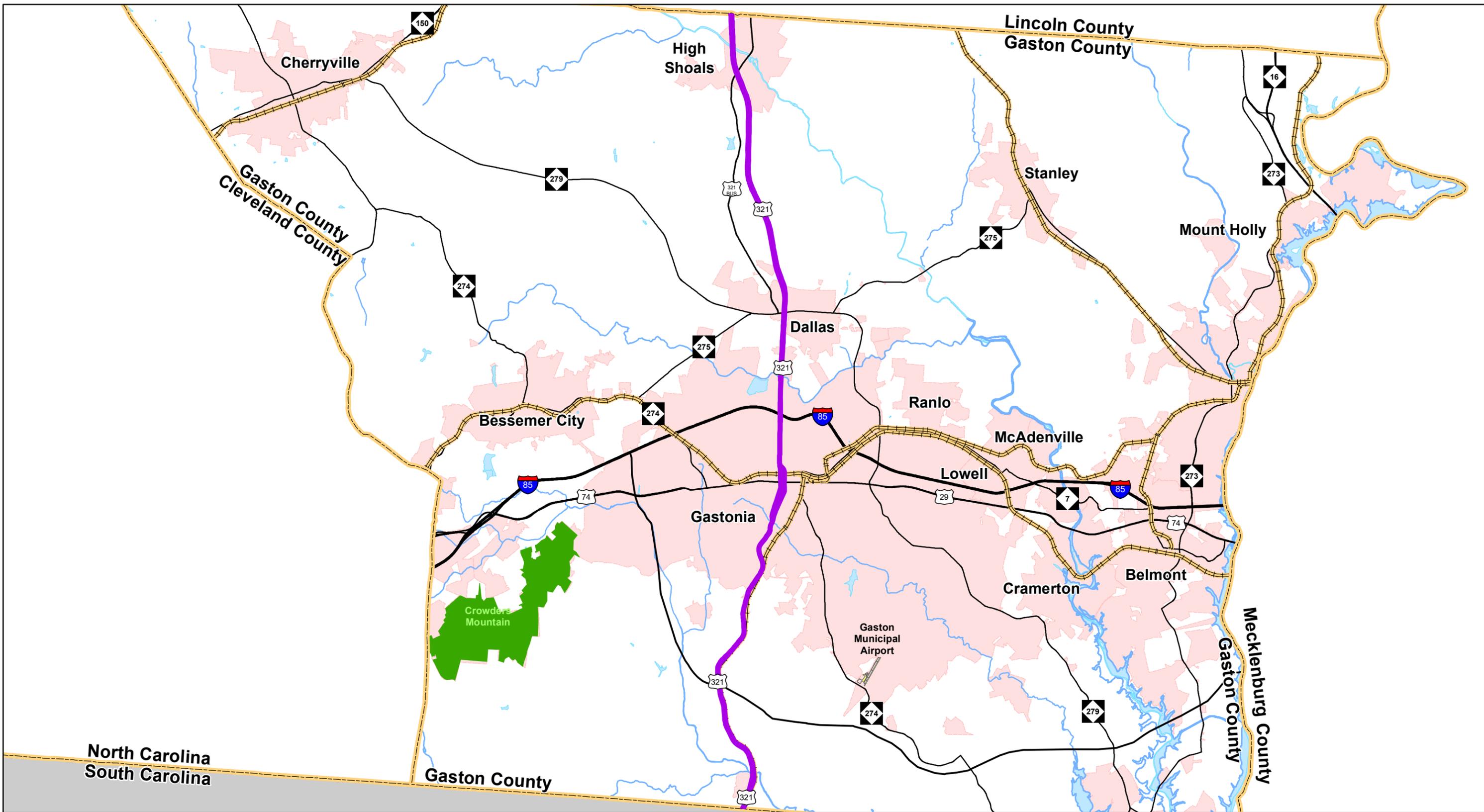
- | | | |
|---------------------------------|------------------------------------|--------------------|
| STC Highway Corridor D (US 321) | Interstate | Waterbodies |
| STC Rail Corridor D (CSX) | US Route | Rivers & Streams |
| Rail | NC Highway | Airport Boundaries |
| Counties | NC Int'l or Major Freight Airports | State Parks |
| Municipal Boundaries | Blue Ridge Parkway | |



**STRATEGIC
TRANSPORTATION CORRIDORS
STUDY AREA MAP**

CORRIDOR D (US 321)

FIGURE 3F



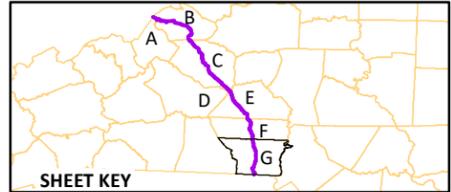
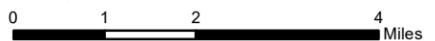
**NC STRATEGIC
TRANSPORTATION
CORRIDORS (STC)**

JANUARY 2020

Source: NCOneMap, NCDOT GIS, ESRI

Legend

- STC Highway Corridor D (US 321)
- STC Rail Corridor D (CSX)
- Rail
- Counties
- Municipal Boundaries
- Interstate
- US Route
- NC Highway
- NC Int'l or Major Freight Airports
- Waterbodies
- Rivers & Streams
- Airport Boundaries
- State Parks
- Blue Ridge Parkway



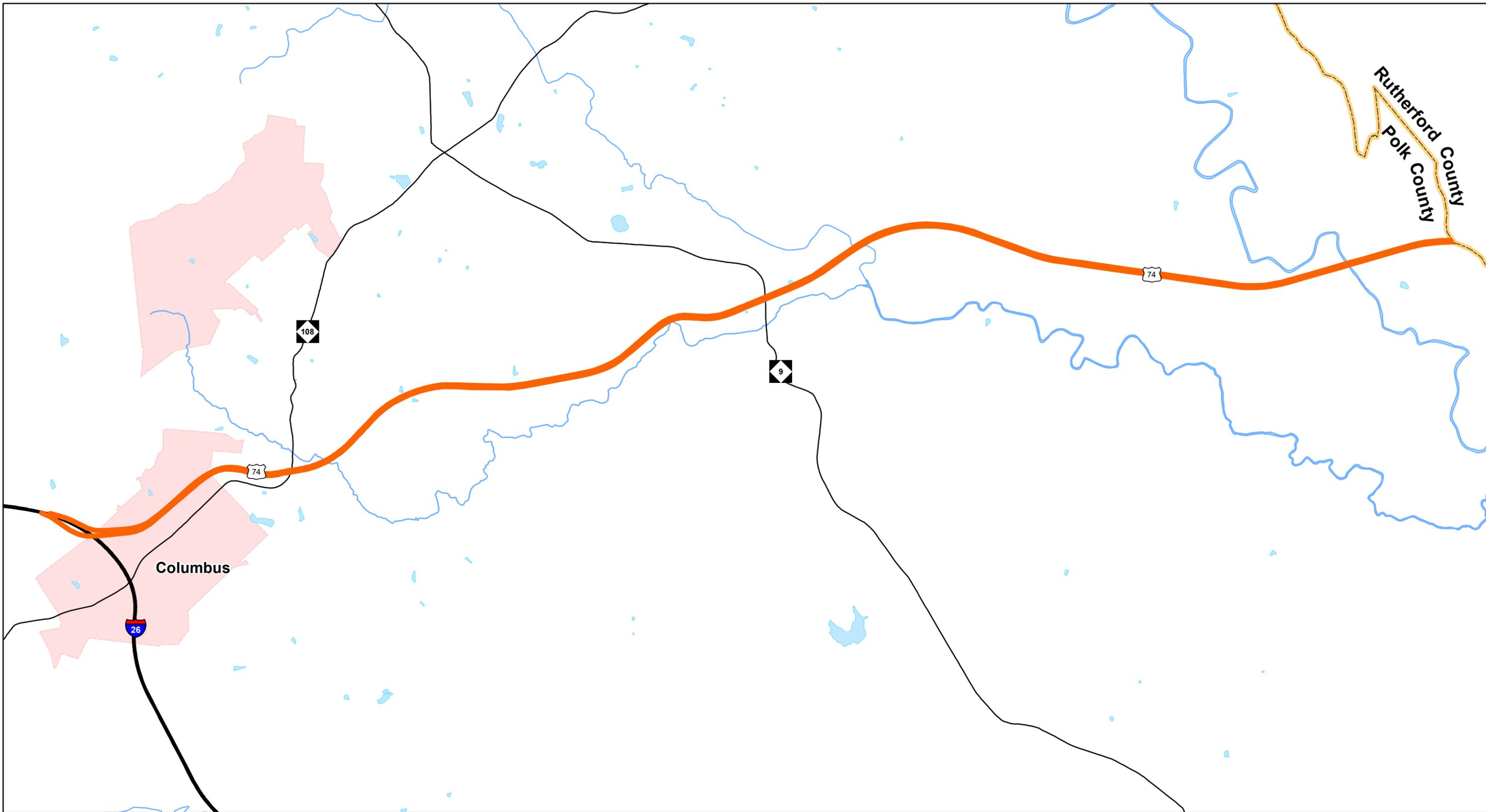
**STRATEGIC
TRANSPORTATION CORRIDORS
STUDY AREA MAP**

CORRIDOR D (US 321)

FIGURE 3G

US 74 Corridor Study Area Maps





**NC STRATEGIC
TRANSPORTATION
CORRIDORS (STC)**

JANUARY 2020

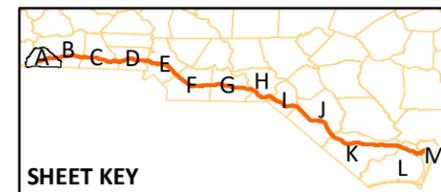
Source: NCOneMap, NCDOT GIS, ESRI

Legend

- STC Highway Corridor U (US 74W/US 74E)
- STC Rail Corridor U (CSX)
- Rail
- Counties
- Municipal Boundaries

- Interstate
- US Route
- NC Highway
- NC Int'l or Major Freight Airports

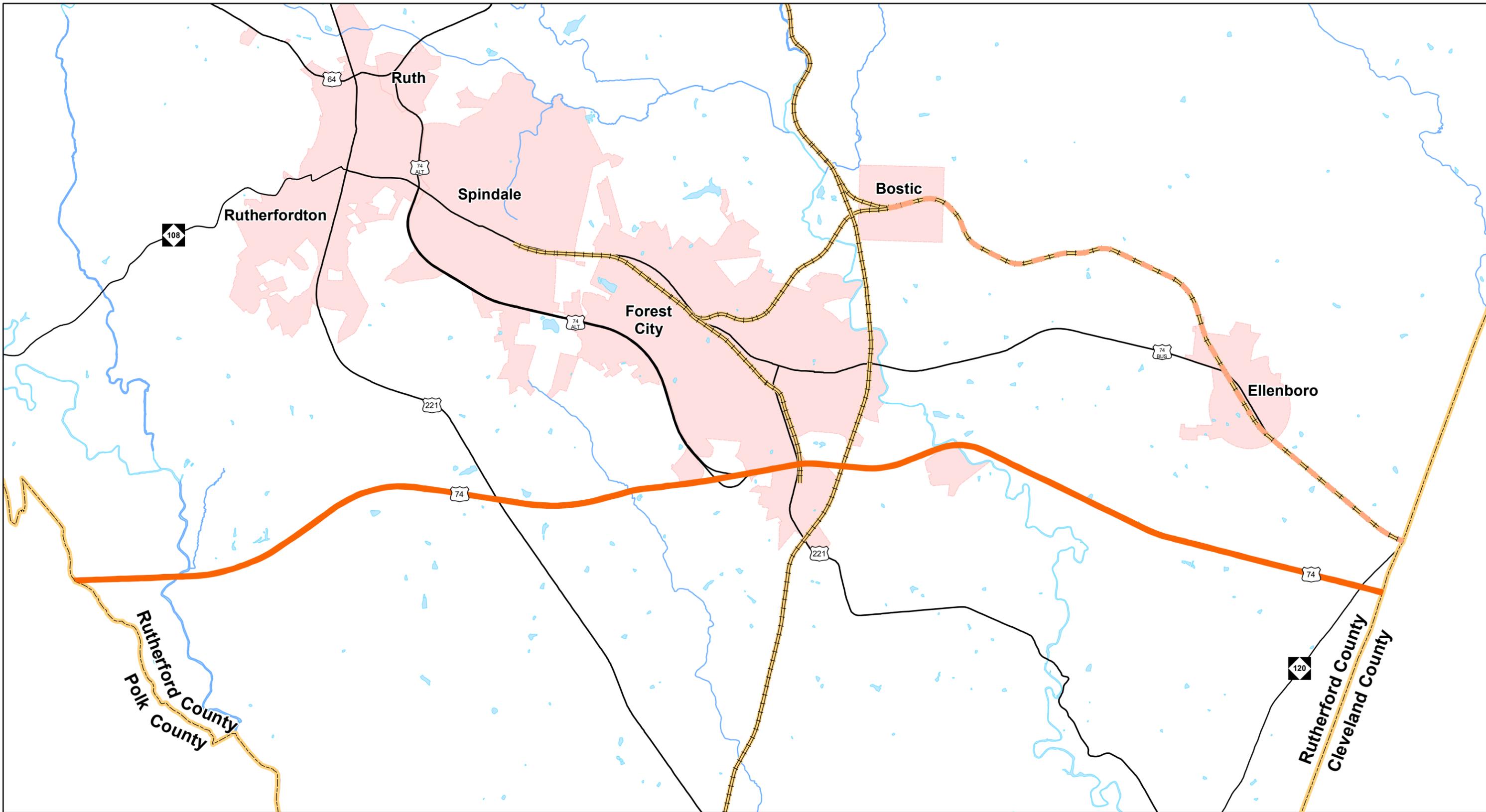
- Waterbodies
- Rivers & Streams
- Airport Boundaries
- State Parks



**STRATEGIC
TRANSPORTATION CORRIDORS
STUDY AREA MAP**

CORRIDOR U (US 74)

FIGURE 4A



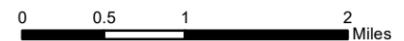
**NC STRATEGIC
TRANSPORTATION
CORRIDORS (STC)**

JANUARY 2020

Source: NCOneMap, NCDOT GIS, ESRI

Legend

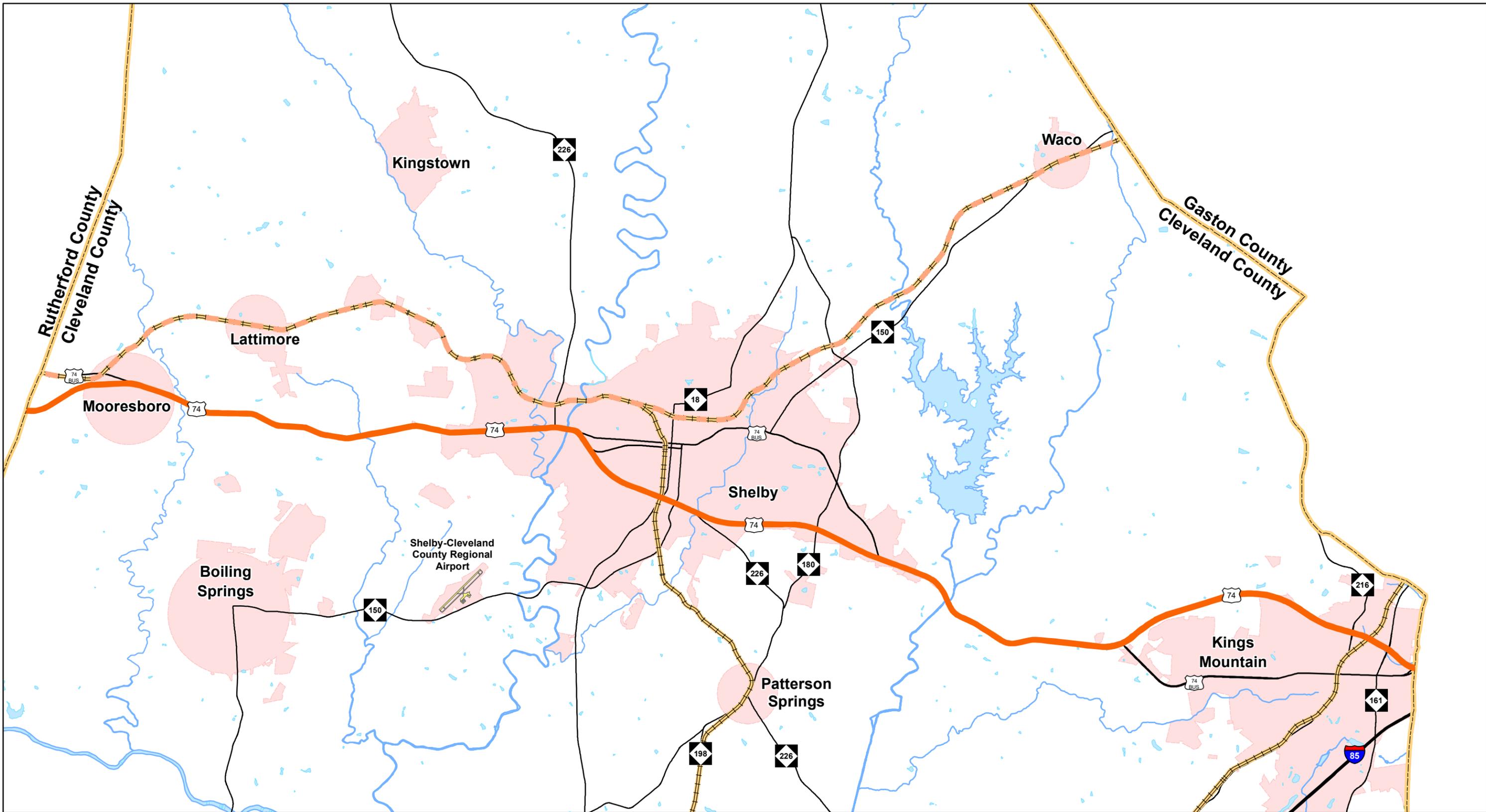
- STC Highway Corridor U (US 74W/US 74E)
- STC Rail Corridor U (CSX)
- Rail
- Counties
- Municipal Boundaries
- Interstate
- US Route
- NC Highway
- NC Int'l or Major Freight Airports
- Waterbodies
- Rivers & Streams
- Airport Boundaries
- State Parks



**STRATEGIC
TRANSPORTATION CORRIDORS
STUDY AREA MAP**

CORRIDOR U (US 74)

FIGURE 4B



**NC STRATEGIC
TRANSPORTATION
CORRIDORS (STC)**

JANUARY 2020

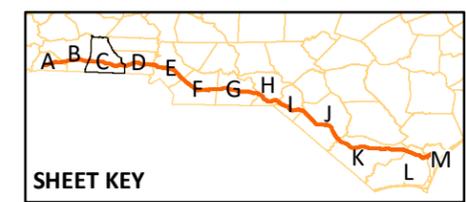
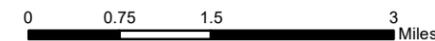
Source: NCOneMap, NCDOT GIS, ESRI

Legend

- STC Highway Corridor U (US 74W/US 74E)
- STC Rail Corridor U (CSX)
- Rail
- Counties
- Municipal Boundaries

- Interstate
- US Route
- NC Highway
- NC Int'l or Major Freight Airports

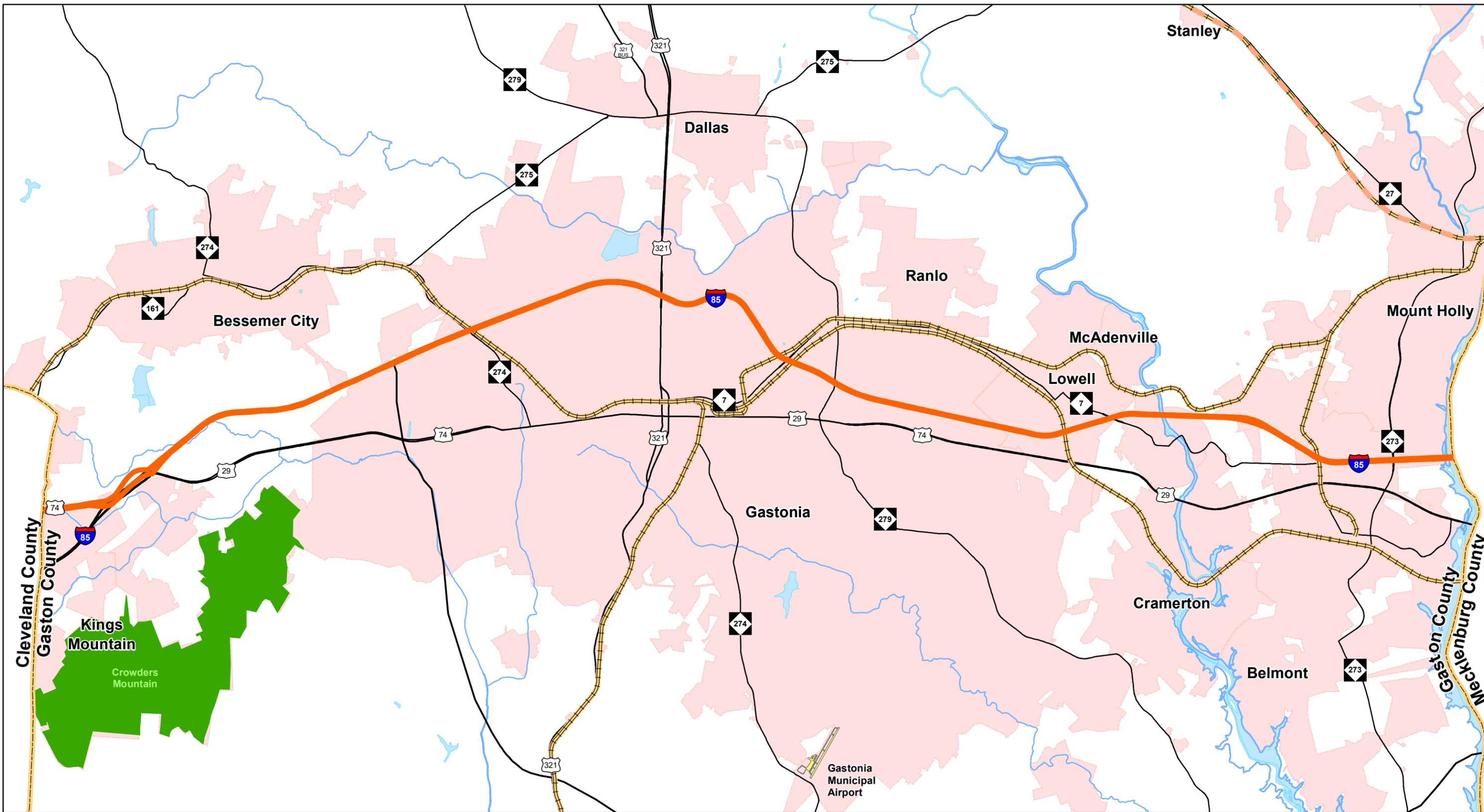
- Waterbodies
- Rivers & Streams
- Airport Boundaries
- State Parks



**STRATEGIC
TRANSPORTATION CORRIDORS
STUDY AREA MAP**

CORRIDOR U (US 74)

FIGURE 4C



NC STRATEGIC TRANSPORTATION CORRIDORS (STC)

JANUARY 2020

Source: NCOneMap, NCDOT GIS, ESRI

Legend

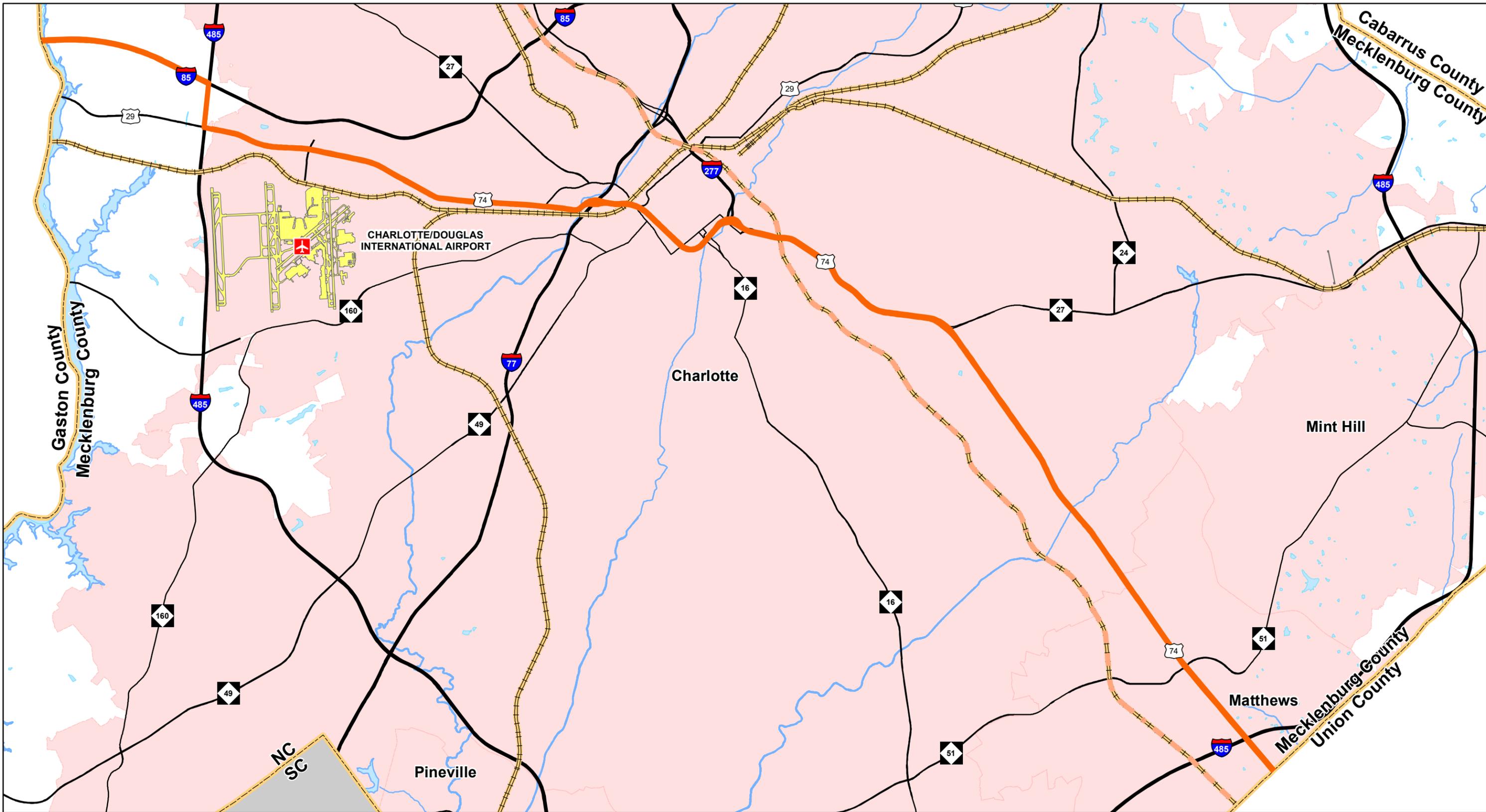
- STC Highway Corridor U (US 74W/US 74E)
- - - STC Rail Corridor U (CSX)
- Rail
- Counties
- Municipal Boundaries
- Interstate
- US Route
- NC Highway
- NC Int'l or Major Freight Airports
- Waterbodies
- Rivers & Streams
- Airport Boundaries
- State Parks



STRATEGIC TRANSPORTATION CORRIDORS STUDY AREA MAP

CORRIDOR U (US 74)

FIGURE 4D



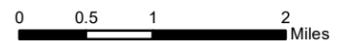
**NC STRATEGIC
TRANSPORTATION
CORRIDORS (STC)**

JANUARY 2020

Source: NCOneMap, NCDOT GIS, ESRI

Legend

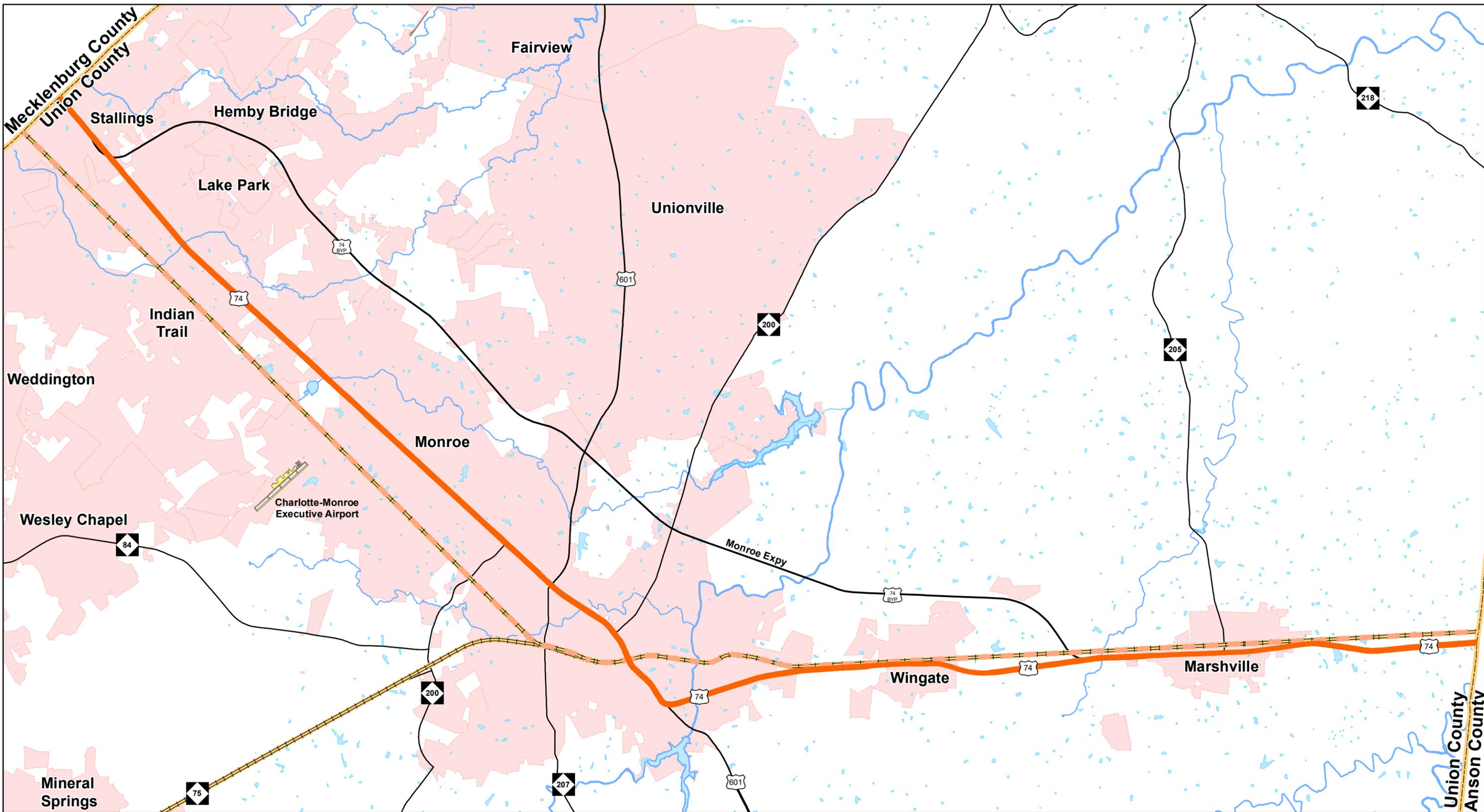
- STC Highway Corridor U (US 74W/US 74E)
- STC Rail Corridor U (CSX)
- Rail
- Counties
- Municipal Boundaries
- Interstate
- US Route
- NC Highway
- ✈ NC Int'l or Major Freight Airports
- Waterbodies
- Rivers & Streams
- Airport Boundaries
- State Parks



**STRATEGIC
TRANSPORTATION CORRIDORS
STUDY AREA MAP**

CORRIDOR U (US 74)

FIGURE 4E



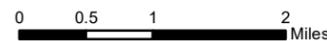
**NC STRATEGIC
TRANSPORTATION
CORRIDORS (STC)**

JANUARY 2020

Source: NCOneMap, NCDOT GIS, ESRI

Legend

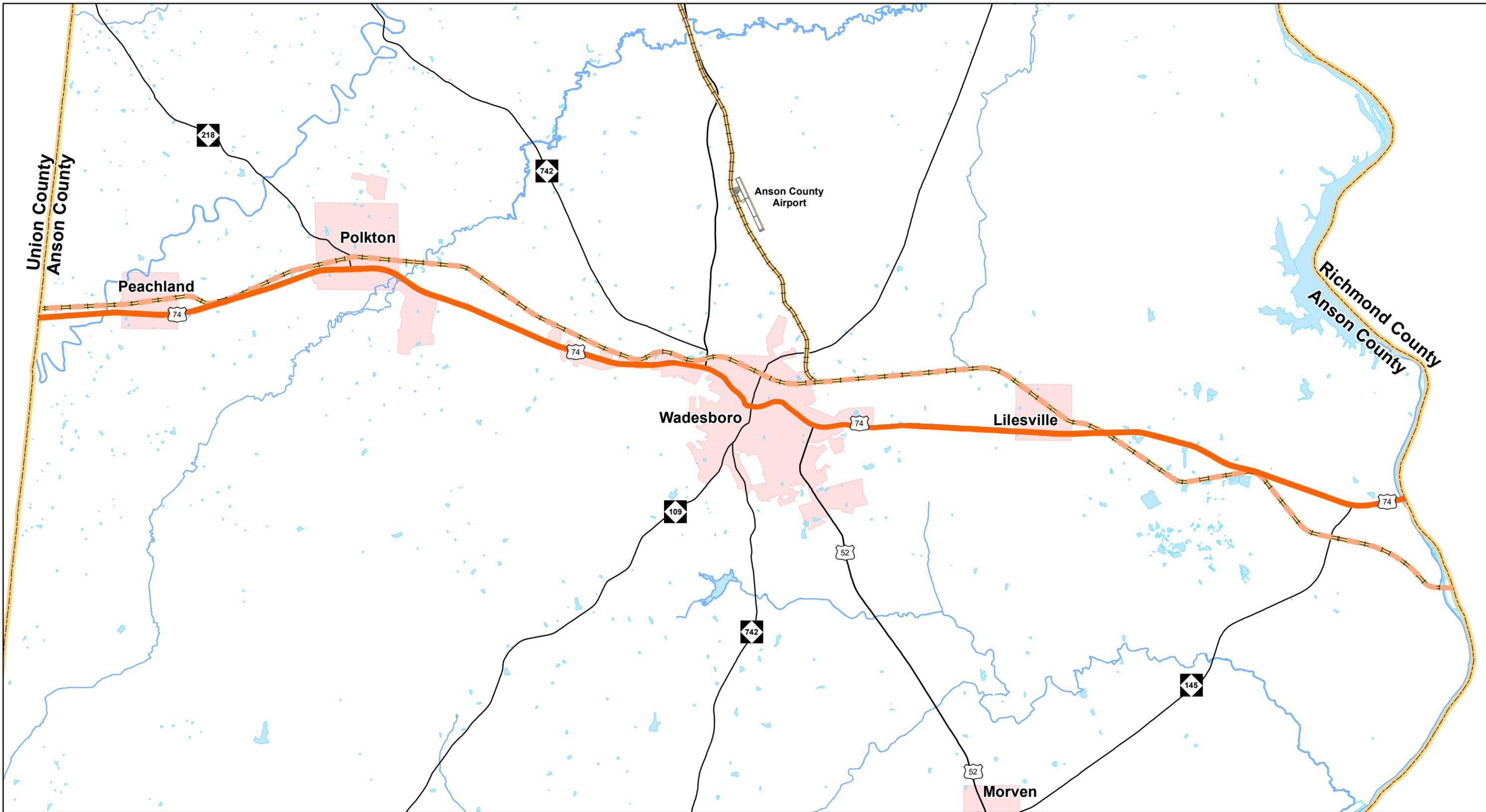
- STC Highway Corridor U (US 74W/US 74E)
- - - STC Rail Corridor U (CSX)
- Rail
- Counties
- Municipal Boundaries
- Interstate
- US Route
- NC Highway
- NC Int'l or Major Freight Airports
- Waterbodies
- Rivers & Streams
- Airport Boundaries
- State Parks



**STRATEGIC
TRANSPORTATION CORRIDORS
STUDY AREA MAP**

CORRIDOR U (US 74)

FIGURE 4F



**NC STRATEGIC
TRANSPORTATION
CORRIDORS (STC)**

JANUARY 2020

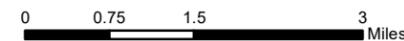
Source: NCOneMap, NCDOT GIS, ESRI

Legend

- STC Highway Corridor U (US 74W/US 74E)
- STC Rail Corridor U (CSX)
- Rail
- Counties
- Municipal Boundaries

- Interstate
- US Route
- NC Highway
- NC Int'l or Major Freight Airports

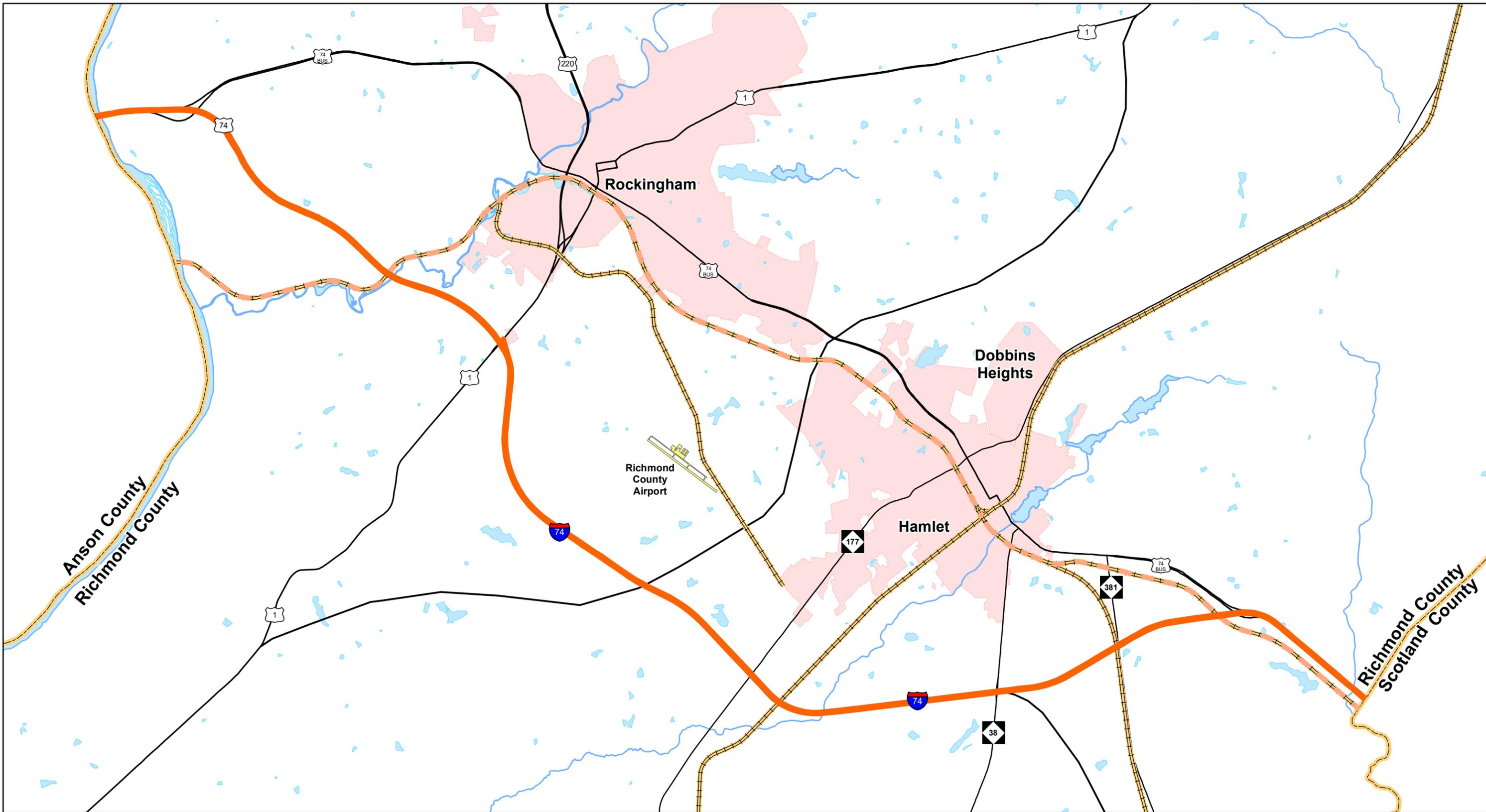
- Waterbodies
- Rivers & Streams
- Airport Boundaries
- State Parks



**STRATEGIC
TRANSPORTATION CORRIDORS
STUDY AREA MAP**

CORRIDOR U (US 74)

FIGURE 4G



**NC STRATEGIC
TRANSPORTATION
CORRIDORS (STC)**

JANUARY 2020

Source: NCOneMap, NCDOT GIS, ESRI

Legend

- | | | | | | |
|--|--|--|---------------------------------------|--|--------------------|
| | STC Highway Corridor U (US 74W/US 74E) | | Interstate | | Waterbodies |
| | STC Rail Corridor U (CSX) | | US Route | | Rivers & Streams |
| | Rail | | NC Highway | | Airport Boundaries |
| | Counties | | NC Int'l or Major
Freight Airports | | State Parks |
| | Municipal Boundaries | | | | |

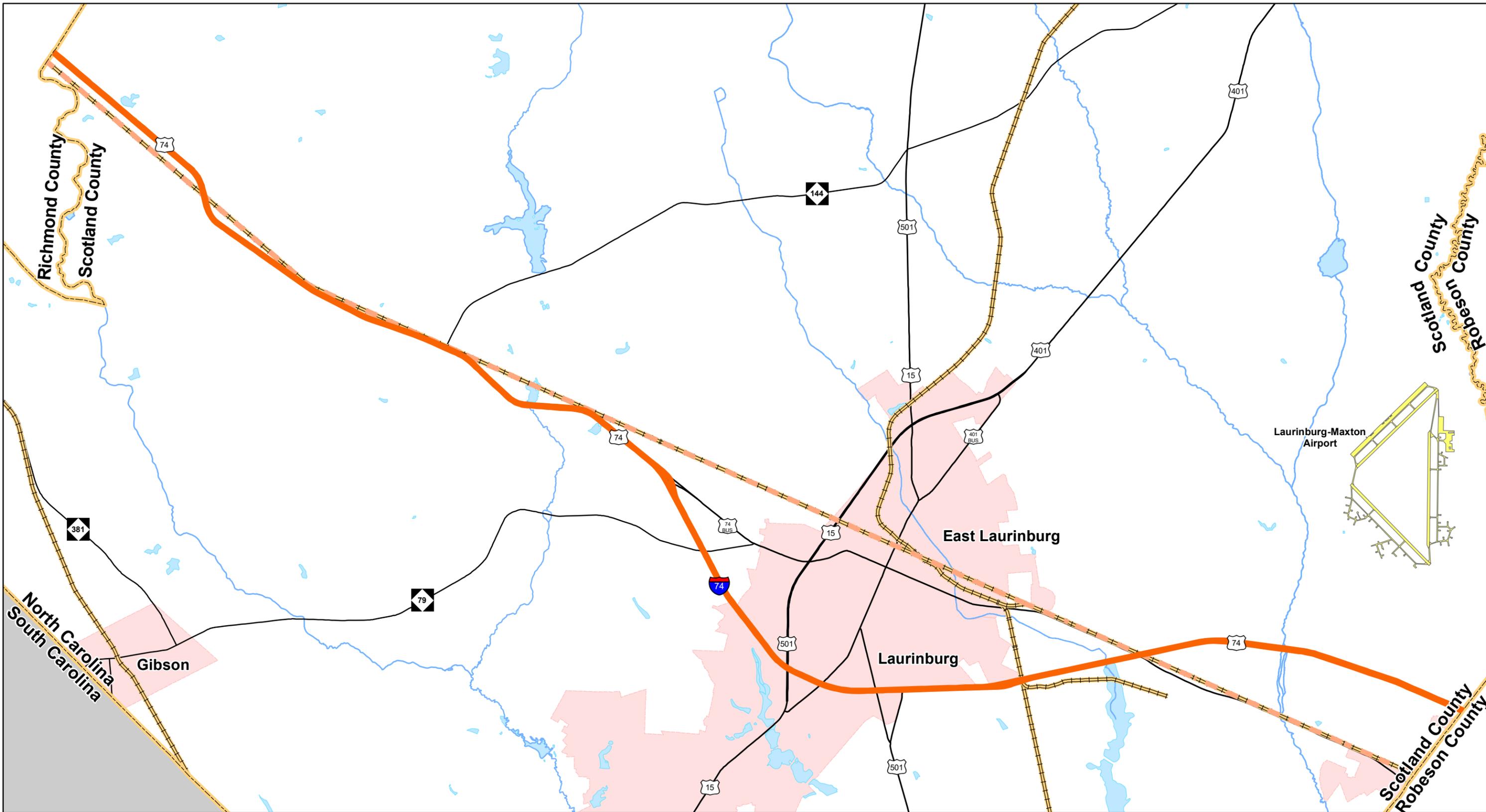
0 0.5 1 2 Miles



**STRATEGIC
TRANSPORTATION CORRIDORS
STUDY AREA MAP**

CORRIDOR U (US 74)

FIGURE 4H



**NC STRATEGIC
TRANSPORTATION
CORRIDORS (STC)**

JANUARY 2020

Source: NCOneMap, NCDOT GIS, ESRI

Legend

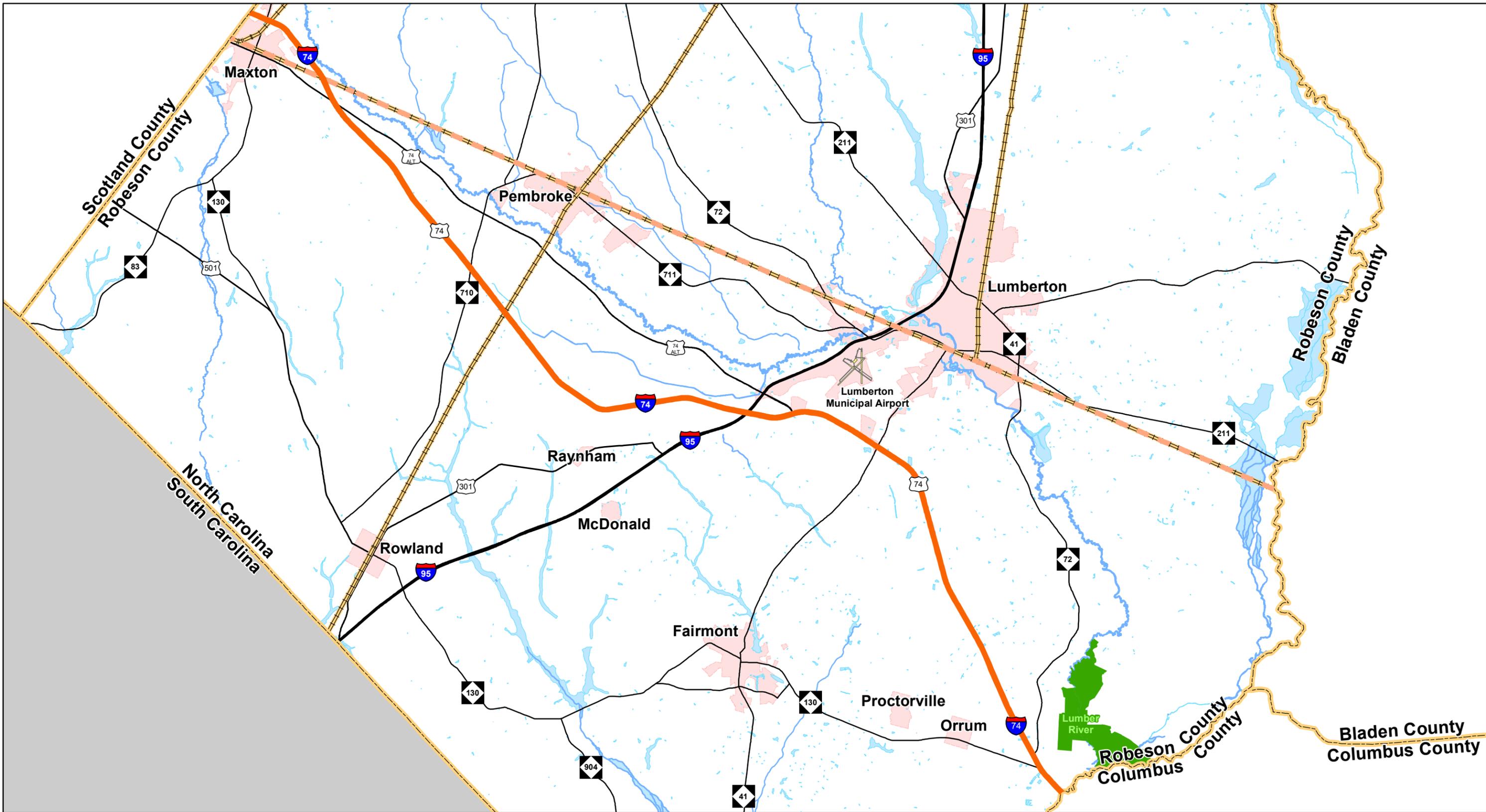
- STC Highway Corridor U (US 74W/US 74E)
- STC Rail Corridor U (CSX)
- Rail
- Counties
- Municipal Boundaries
- Interstate
- US Route
- NC Highway
- NC Int'l or Major Freight Airports
- Waterbodies
- Rivers & Streams
- Airport Boundaries
- State Parks



**STRATEGIC
TRANSPORTATION CORRIDORS
STUDY AREA MAP**

CORRIDOR U (US 74)

FIGURE 4I



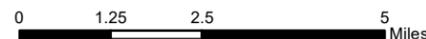
**NC STRATEGIC
TRANSPORTATION
CORRIDORS (STC)**

JANUARY 2020

Source: NCOneMap, NCDOT GIS, ESRI

Legend

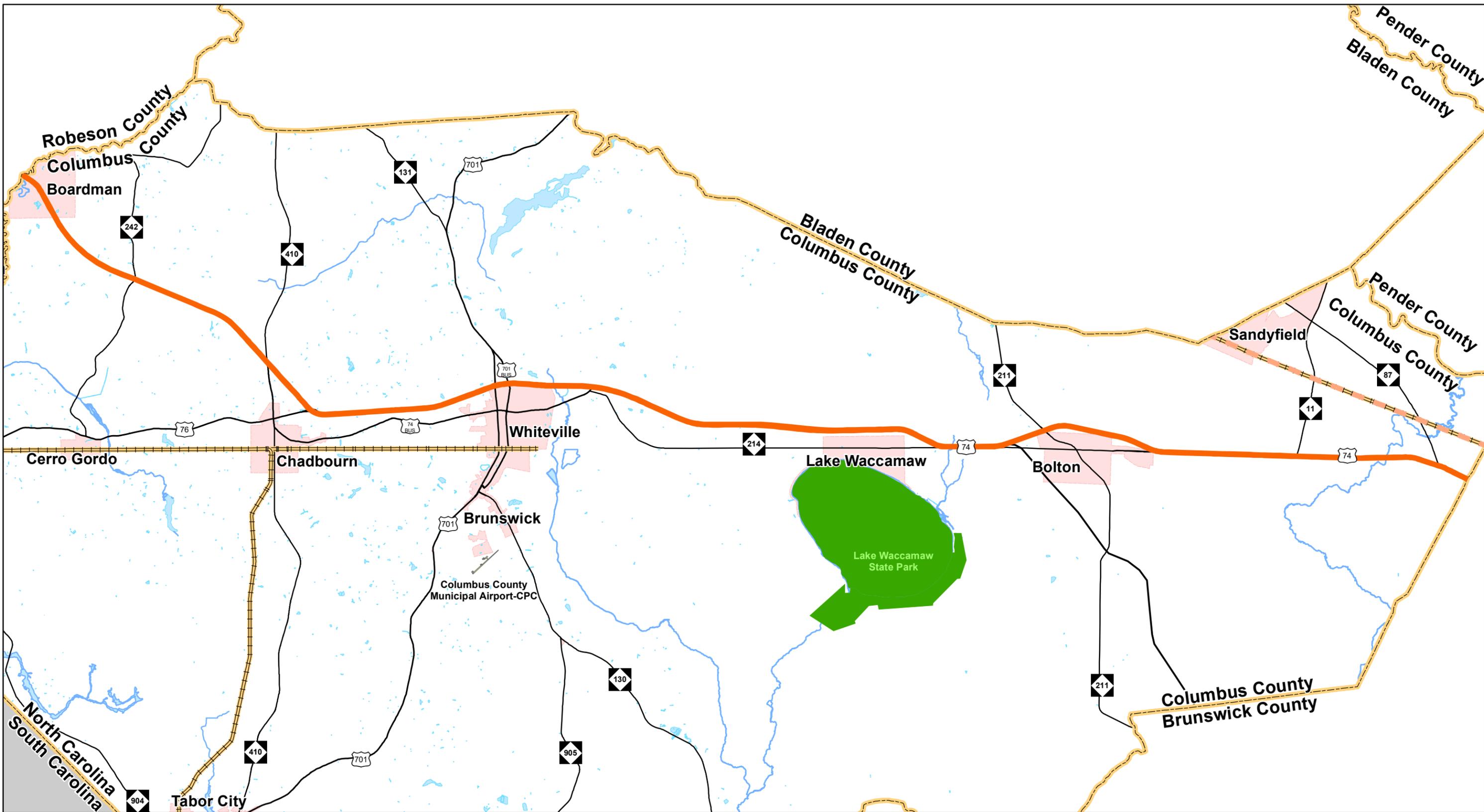
- STC Highway Corridor U (US 74W/US 74E)
- - - STC Rail Corridor U (CSX)
- Rail
- Counties
- Municipal Boundaries
- Interstate
- US Route
- NC Highway
- NC Int'l or Major Freight Airports
- Waterbodies
- Rivers & Streams
- Airport Boundaries
- State Parks



**STRATEGIC
TRANSPORTATION CORRIDORS
STUDY AREA MAP**

CORRIDOR U (US 74)

FIGURE 4J



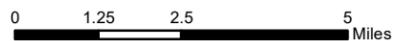
**NC STRATEGIC
TRANSPORTATION
CORRIDORS (STC)**

JANUARY 2020

Source: NCOneMap, NCDOT GIS, ESRI

Legend

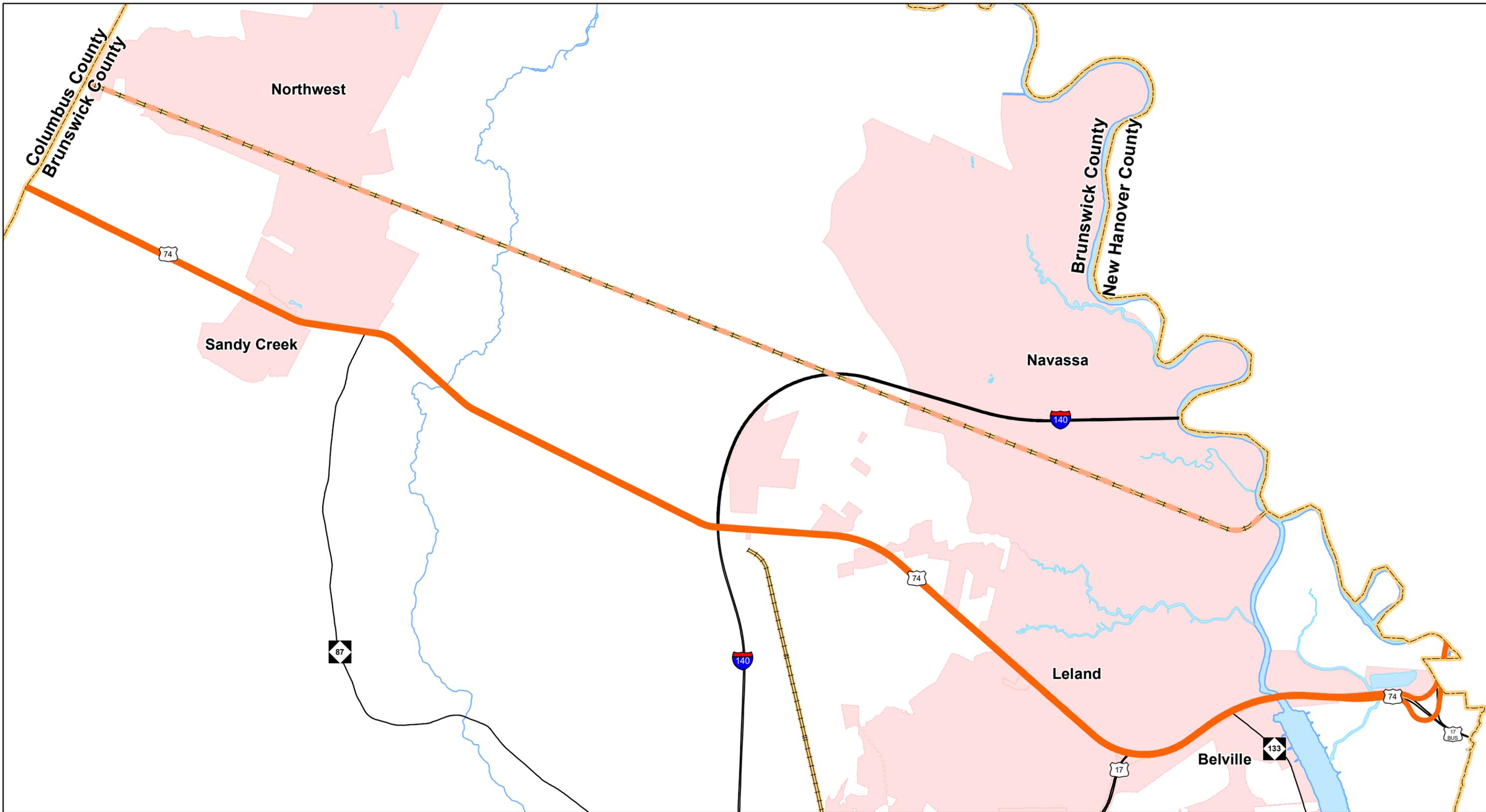
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- - - STC Rail Corridor U (CSX)
- Rail
- Counties
- Municipal Boundaries
- Interstate
- US Route
- NC Highway
- NC Int'l or Major Freight Airports
- Waterbodies
- Rivers & Streams
- Airport Boundaries
- State Parks



**STRATEGIC
TRANSPORTATION CORRIDORS
STUDY AREA MAP**

CORRIDOR U (US 74)

FIGURE 4K



**NC STRATEGIC
TRANSPORTATION
CORRIDORS (STC)**

JANUARY 2020

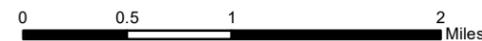
Source: NCOneMap, NCDOT GIS, ESRI

Legend

- STC Highway Corridor U (US 74W/US 74E)
- STC Rail Corridor U (CSX)
- Rail
- Counties
- Municipal Boundaries

- Interstate
- US Route
- NC Highway
- ✈ NC Int'l or Major Freight Airports

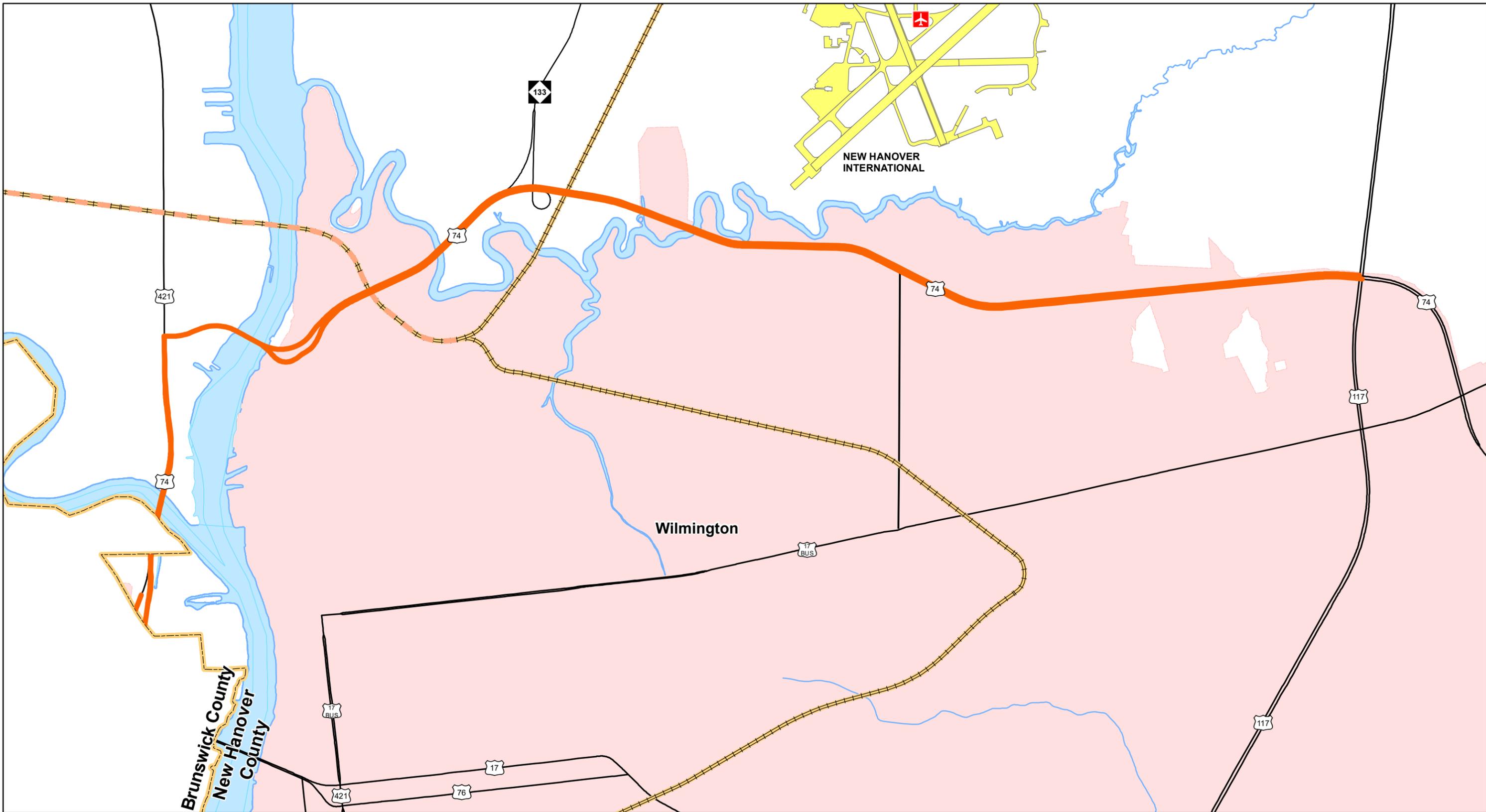
- Waterbodies
- Rivers & Streams
- Airport Boundaries
- State Parks



**STRATEGIC
TRANSPORTATION CORRIDORS
STUDY AREA MAP**

CORRIDOR U (US 74)

FIGURE 4L



**NC STRATEGIC
TRANSPORTATION
CORRIDORS (STC)**

JANUARY 2020

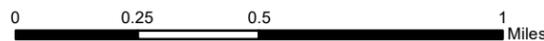
Source: NCOneMap, NCDOT GIS, ESRI

Legend

- STC Highway Corridor U (US 74W/US 74E)
- STC Rail Corridor U (CSX)
- Rail
- Counties
- Municipal Boundaries

- Interstate
- US Route
- NC Highway
- NC Int'l or Major Freight Airports

- Waterbodies
- Rivers & Streams
- Airport Boundaries
- State Parks

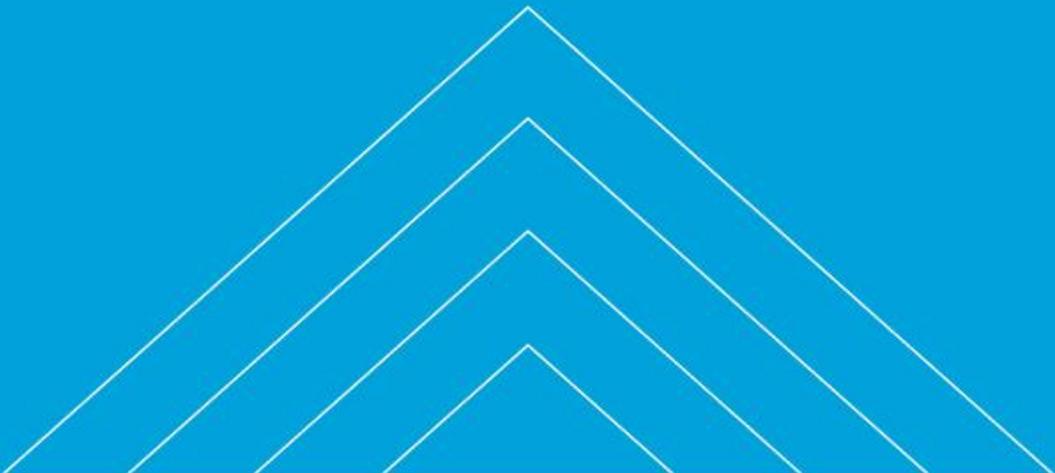


**STRATEGIC
TRANSPORTATION CORRIDORS
STUDY AREA MAP**

CORRIDOR U (US 74)

FIGURE 4M

Appendices



Appendix A. Transportation Facilities Inventory Terminology

A.1. Highway Functional Class

Roadways are broken down into Federal functional classification categories to stratify the range of mobility and access functions that they can serve. These functional classes are listed below in **Table A-1**.

Table A-1. Highway Functional Class Definitions

Classification	Description	Access	Mobility
Interstate	Officially designated by the Secretary of Transportation, includes all routes that comprise the Dwight D. Eisenhower National System of Interstate and Defense Highways. Divided highways with access provided at on- and off-ramp locations. Designed and constructed with mobility and long-distance travel in mind, linking the major urban areas of the United States.	Low	High
Other Freeway (Expressway)	Very similar to Interstates. Directional travel lanes usually separated by a physical barrier, access and egress points are limited to on- and off-ramp locations or a very limited number of at-grade intersections. Designed and constructed to maximize mobility, abutting land uses not directly served.	Low	High
Other Principal Arterial	Provide a high degree of mobility while also providing access to adjacent land uses including driveways and at-grade intersections with other roadways. Serve major centers of metropolitan areas as well as major rural corridors.	Medium	High
Minor Arterial	Provide service for trips of moderate length, serve geographic areas smaller than higher Arterial classifications and offer connectivity to the higher arterial system. Provide intra-community continuity and may carry local bus routes. Provide more land access than Principal Arterials.	Medium	Medium
Major Collector	Gather traffic from Local Road network to funnel into Arterial network. Generally longer in length, less land access, higher speeds, higher volumes, greater spacing, and more travel lanes than Minor Collectors.	Medium	Medium
Minor Collector	Gather traffic from Local Road network to funnel into Arterial network. Generally shorter in length, more land access, lower speeds, lower volumes, less spacing, and less travel lanes than Major Collectors.	Medium	Medium

Table A-1. Highway Functional Class Definitions

Classification	Description	Access	Mobility
Local Road	Account for the largest percentage of all roadways in terms of mileage. Not intended for long distance travel and often designed to discourage traffic, provide direct access to abutting land. Generally do not carry bus routes. All roadways not classified as Arterials or Collectors are classified as Local Roads by default.	High	Low

Information taken from FHWA Highway Classification Concepts, Criteria, and Procedures
https://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/section03.cfm

A.2. Highway Access Control

Roadways are categorized into different levels of control of access describing the amount of connectivity provided to adjacent land uses and other roadways. These levels are listed below in **Table A-2** in order of mobility function.

Table A-2. Control of Access Definitions

Classification	Description
Full Control	Connectivity provided only via ramps at interchanges. All cross-streets are grade separated and no driveway connections are allowed. A control of access fence is placed along the entire length of the facility and at a minimum of 1000 feet beyond the ramp intersections on the minor facility at interchanges if possible.
Limited Control	Connectivity provided only via ramps at interchanges for major crossings and at-grade intersections for minor crossings and service roads. No driveway connections allowed. A control of access fence is placed along the entire length of the facility, except at intersections, and at a minimum of 1000 feet beyond the ramp intersections on the minor facility at interchanges if possible.
Partial Control	Connectivity provided via ramps at interchanges, at-grade intersections, and driveways. Private driveway connections are generally at a maximum of one per parcel. The use of shared or consolidated connections is highly encouraged, and connections may be restricted or prohibited if alternate access is available through adjacent public facilities. A control of access fence is placed along the entire length of the facility, except at intersections and driveways, and at a minimum of 1000 feet beyond the ramp terminals on the minor facility at interchanges if possible.
No Control	Connectivity provided via ramps at interchanges, at-grade intersections, and driveways. No physical restrictions (i.e., a control of access fence) exist. Private driveway connections are generally at a maximum of one per parcel. Additional connections may be considered if they are justified and if such connections do not negatively impact traffic operations and public safety.

Information taken from NCDOT Facility Type & Control of Access Definitions
<https://connect.ncdot.gov/projects/planning/TPB%20Documents/NCDOT%20Facility%20Types%20-%20Control%20of%20Access%20Definitions.pdf>

A.3. Structurally Deficient & Functionally Obsolete Bridges

A bridge is considered deficient if it is either Structurally Deficient or Functionally Obsolete. To be classified as Structurally Deficient or Functionally Obsolete, a bridge must be at least 10 years old and must be a highway bridge. A bridge cannot be classified as both categories – Structurally Deficient trumps Functionally Obsolete. These concepts are described below in **Table A-3**.

Table A-3. Structurally Deficient & Functionally Obsolete Definitions

Classification	Description	Required Condition (one or more)	Required Rating
Structurally Deficient	Bridge is in relatively poor condition or has insufficient load-carrying capacity due to original design or deterioration.	Deck Condition	4 or less
		Superstructure Condition	4 or less
		Substructure Condition	4 or less
		Culvert Condition	4 or less
		Structural Evaluation	2 or less
		Waterway Adequacy	2 or less
Functionally Obsolete	Bridge is narrow, has inadequate under-clearances, has insufficient load-carrying capacity, is poorly aligned with the roadway, and can no longer adequately service today's traffic.	Structural Evaluation	3
		Deck Geometry	3 or less
		Under-clearance, vertical & horizontal	3 or less
		Waterway Adequacy	3
		Approach Roadway Alignment	3 or less

Information taken from NCDOT Structurally Deficient and Functionally Obsolete Definitions
<https://connect.ncdot.gov/resources/Environmental/PDEA%20Consultants/Structural%20Deficient%20and%20Functionally%20Obsolete%20Definitions.doc>

Tyler Bray
WS Atkins, Inc.
1616 East Millbrook Road
Suite 310
Raleigh, NC 27609-4968

Tel: +1 919 876 6888
Fax: +1 919 876 6848

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