



BRIDGES NOT BARRIERS

A Collaborative Bridge Bundle Replacement Project

PROJECT DESCRIPTION

Better Utilizing Investments to Leverage Development (BUILD) Grant Program

BRIDGES NOT BARRIERS

A Collaborative Bridge Bundle Replacement Project

Project Description

The North Carolina Department of Transportation (NCDOT) Division 10 is requesting \$22,437,075 in financial assistance from the Better Utilizing Investments to Leverage Development (BUILD) Grant Program to replace 15 critical bridges across the Division, which includes Anson, Cabarrus, Mecklenburg, Stanly, and Union Counties.

Table 1: Bridge Details

County	Bridge #	Federal #	Road Name	Crossing	Year Constructed	Sufficiency Rating
Anson	030148	0070148	Mills Rd.	Little Brown Creek	1945	41.1%
Anson	030265	0070265	Robinson Rd.	S. Fork of Jones Creek	1961	53.4%
Anson	030161	0070161	Lockhart Rd.	Goulds Fork Creek	1956	55.8%
Cabarrus	120173	0250173	Peach Orchard Rd.	McKee Creek	1961	51.5%
Cabarrus	120050	0250050	Penninger Rd.	UT to Cold Water Creek	1983	73.0%
Mecklenburg	590060	1190060	Robinson Church Rd.	UT to Reedy Creek	1981	63.4%
Stanly	830200	1670200	Bridgeport Rd.	Bear Creek	1958	63.9%
Stanly	830106	1670106	Booger Hollar Rd.	Bear Creek	1962	64.8%
Stanly	830081	1670081	Bridge Rd.	Little Bear Creek	1949	60.0%
Stanly	830012	1670012	Mountain Creek Rd.	Little Creek	1968	38.34%
Union	890170	1790170	Potters Rd.	Cane Creek	1973	49.1%
Union	890144	1790144	Stack Rd.	Little Richardson Creek	1963	48.5%



BRIDGES NOT BARRIERS

A Collaborative Bridge Bundle Replacement Project

County	Bridge #	Federal #	Road Name	Crossing	Year Constructed	Sufficiency Rating
Union	890074	1790074	Monroe-Ansonville Rd.	Meadow Branch	1963	56.0%
Union	890312	1790312	Shannon Rd.	E. Fork of Twelve Mile Creek	1962	72.3%
Union	890067	1790067	Austin Grove Church Rd.	Salem Creek	1982	72.6%

North Carolina is ranked 30th among all states for structurally deficient bridges, according to the [2023 Annual Highway Report from the Reason Foundation](#). All of the bridges included in this application are load restricted and located along rural yet key connections for local families, area farmers, and freight movement in Division 10. As depicted in **Table 1**, the bridges in this bundle are located across the Division 10 jurisdiction in the counties of Anson, Cabarrus, Mecklenburg, Stanly, and Union. Bridges included in this bundle range from 43 to 81 years old and are all at or near the end of their useful service life, requiring frequent and expensive maintenance to extend the life of the bridge. The sufficiency ratings range between 41 and 73 percent. Further Supplemental Information about the project can be referenced at <https://connect.ncdot.gov/resources/BUILD2026-Div10/Pages/default.aspx>.

Challenges Addressed by the Project

The challenges and maintenance costs associated with aging and the rural nature of these bridges emphasize their need for replacement. Nine of the fifteen bridges are known to have significant flooding and scour issues, five have significant drift issues, four are subject to low water, and two have only one travel lane. These bridges pose a multitude of safety, sustainability, and connectivity challenges to rural families, the local agricultural industry, and the movement of freight. There are few suitable alternate routes for travelers to utilize if any of the bridges were to fail. Replacing these bridges will maintain important connections, reduce reliance on detours, and increase the number of trips that can be taken with larger loads, ultimately providing economic and time-saving benefits to rural and impoverished families.

The project seeks to:

- Replace fifteen deteriorating, load-restricted bridges in NCDOT Division 10 across five counties providing key connections for North Carolina families and area farmers.
- Reduce long-term maintenance costs for aging bridge upkeep associated with issues such as scour, drift, low water, and flooding.



BRIDGES NOT BARRIERS

A Collaborative Bridge Bundle Replacement Project

- Prioritize bringing Division 10 bridges to a state of good repair while improving safety and accessibility for families and local businesses.

Scope of Work

The replacement of these structures will address several design deficiencies and condition issues, bringing the bridges into compliance with NCDOT and federal design standards. Bridges with an average daily trip (ADT) count of 2,000 or greater will include 6-foot-wide shoulders on either side. In accordance with the [NC Roadway Design Manual](#), structures between 400 and 2,000 ADT at the design year will include 3-foot-wide shoulders, and structures with less than 400 ADT will include 2-foot-wide shoulders on either side. Shoulder width can also be determined based on the spread of water during flooding events. Old materials will be replaced, including replacing concrete structures with concrete or steel at the completion of construction. Railing will be added to bridges that do not have them, and conduit will be implemented along the bridges to facilitate future growth. The two structures that are one lane bridges and will be upgraded to one lane in each direction. Specific improvements by bridge are detailed in **Figure 1**.



Figure 1 | Improvements by Structure

Project History

Many bridges in Division 10 are in rural and poverty-stricken areas and are at or near the end of their service life, creating a dire need for replacement and improvements. The bridges do not meet current standards, many with materials that would no longer be used in bridges constructed



BRIDGES NOT BARRIERS

A Collaborative Bridge Bundle Replacement Project

today. Bridges regularly have timber structures that experience decay and rot due to their frequent exposure to water and overtopping. In response to this, Division 10 identified bridges with the greatest needs, considering wear and tear, recurring maintenance costs, and vulnerability in storm events, and prioritized bridges in Areas of Persistent Poverty (APPs) when selecting the bridges included in this application.

Project Design Status

At present, four of the fifteen structure replacements have been assigned project numbers and are being evaluated by the North Carolina State Environmental Policy Act (SEPA) process, since they are entirely state funded. If federal funding becomes available, these projects would be evaluated in accordance with the NEPA process.

Project Location

This project includes the replacement of fifteen structures throughout NCDOT Division 10 as shown in **Figure 2**. Three are located in Anson County, two are in Cabarrus County, one is located in Mecklenburg County, four are in Stanly County, and five are located in Union County.

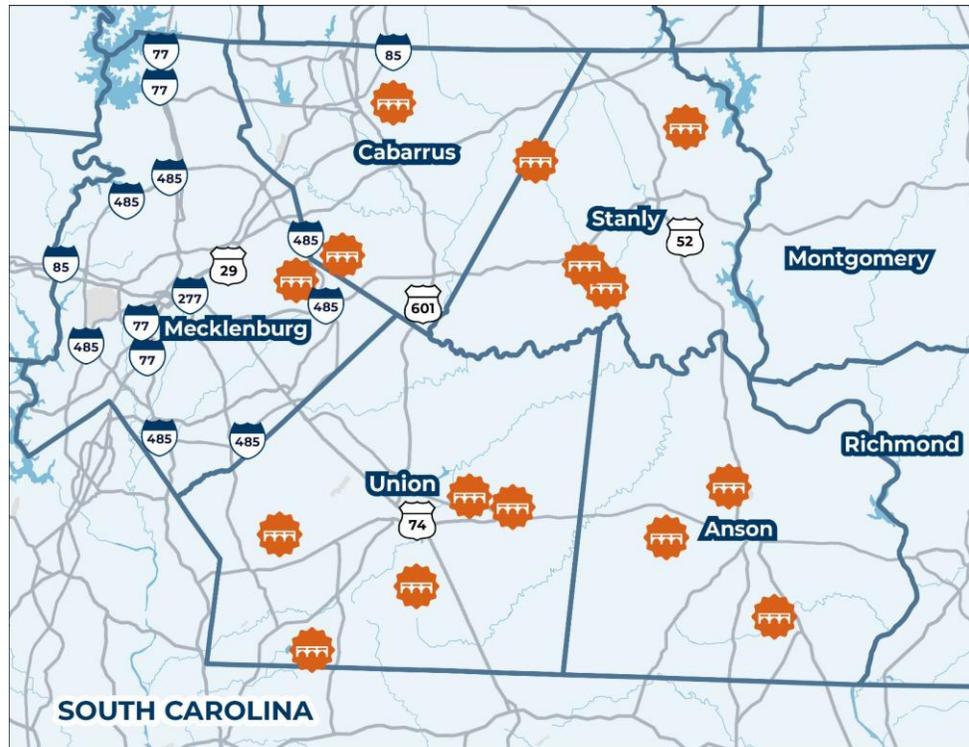


Figure 2 | Project Vicinity Map

Division 10 has a population of approximately 1,670,000 ([2020 Decennial Census](#)) and has a median household income of \$75,664 ([2023 ACS 1-Year Estimates](#)). Most notably, Division 10 is home to the Charlotte metropolitan area within Mecklenburg County which is the largest metropolitan area in North Carolina. Most of the bridges included in this bundle are located away from the urbanized area in rural sections of Division 10, serving as key connections for North Carolina families to daily destinations and community assets including medical facilities, community services, parks, grocery stores, retail, and schools. The bridges provide community connections to several key



BRIDGES NOT BARRIERS

A Collaborative Bridge Bundle Replacement Project

Interstates and Highways including I-485, I-85, US-29, US-52, US-74, US-601, NC-16, NC-27, NC-49, NC-84, and NC-75. More details about community accessibility and the impact of bridge failure would have on local families and businesses accessing these daily destinations can be found in the **Merit Criteria Section**.

Area of Persistent Poverty

Six of the bridges are located within Areas of Persistent Poverty (Census Tracts 207.01, 209.01, 209.02, 9307, and 9204) according to the [BUILD Grant Location Verification Tool](#).

Urban and Rural

Thirteen of the bridges are in rural areas as referenced in **Figure 3**. The other two are located in the Charlotte-Mecklenburg urbanized area.

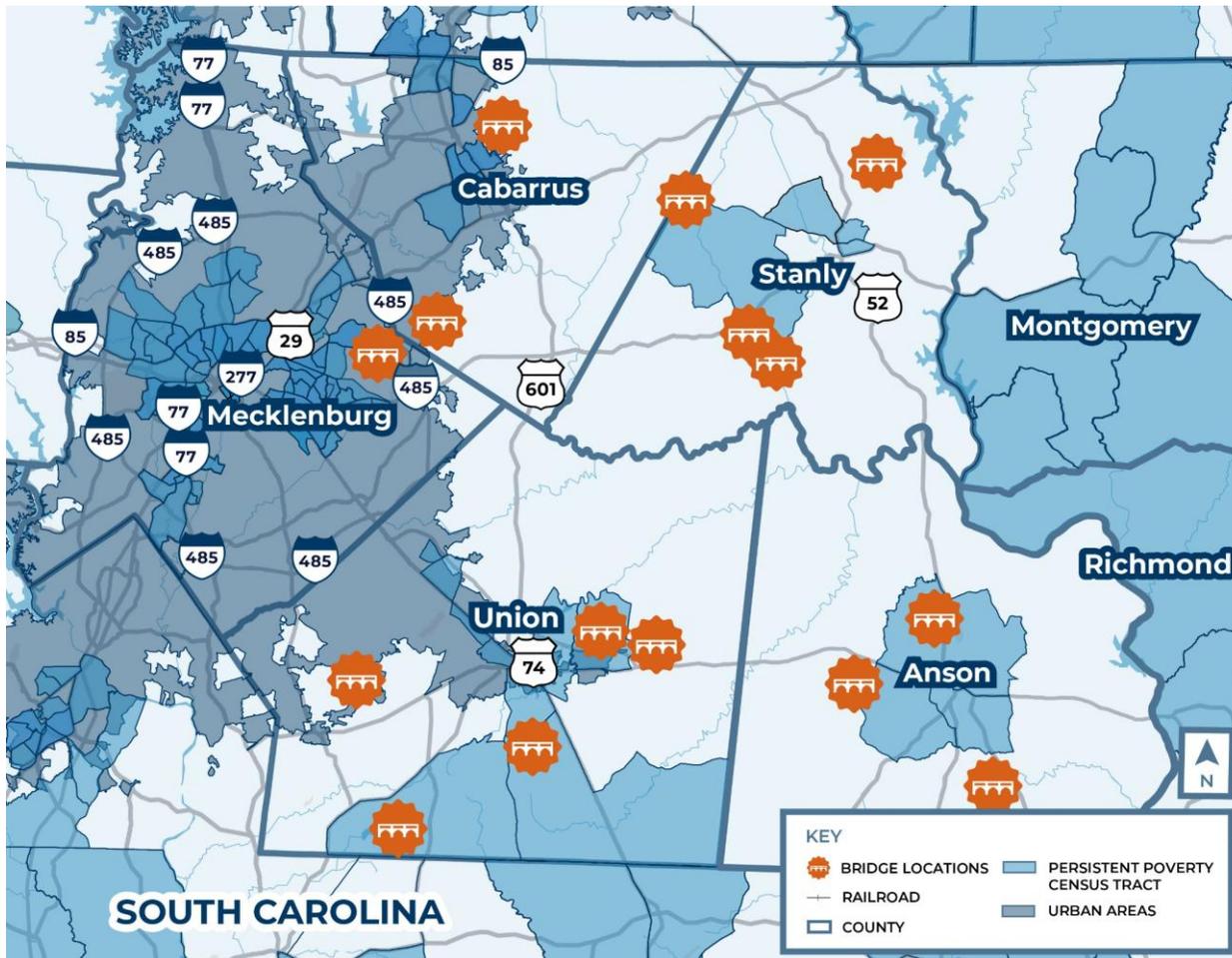


Figure 3 | Areas of Persistent Poverty and Urban Area

