

The NC FIRST Commission was created in March 2019 to evaluate North Carolina’s transportation investment needs. Their job is to advise the Secretary of Transportation of new or better ways to ensure that critical financial resources are available in the future. As part of this process, we’ll be looking for input from you, the people of North Carolina! This brief considers our rural communities and their transportation needs in light of current funding challenges.

# Rural Transportation Issues in North Carolina

## Overview

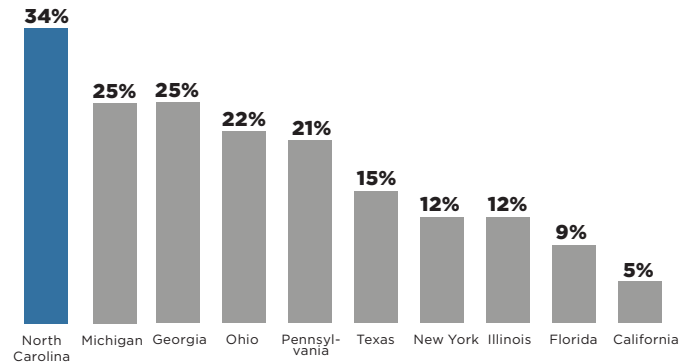
North Carolina’s diverse rural communities—much like our cities or suburban neighborhoods—rely on a range of transportation options to support quality of life, access to needed services, and economic viability. But rural communities also present distinctive travel patterns and needs that are important to keep in mind as the state considers how to pay for transportation into the future.

## What are “rural” communities in North Carolina?

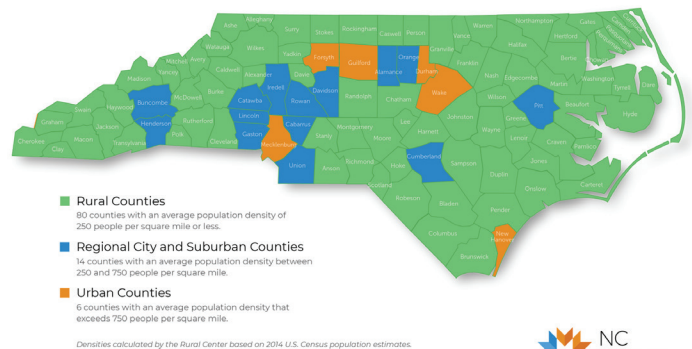
The term “rural” may bring many things to mind, from strollable main streets, to secluded mountain towns, coastal landscapes, or rolling farmland. But a precise definition can be hard to pin down, in part because researchers and government agencies use dozens of classification systems to distinguish “urban” from “rural” based on various criteria such as population density, geographic isolation, land use, or economic influence.<sup>1</sup> In transportation policy, for example, each urbanized area with a population over 50,000 is part of a designated regional “metropolitan planning area,” and everywhere else is “non-metropolitan.”<sup>2</sup>

Whichever definition you use, North Carolina is considerably rural. The U.S. Census Bureau ranks us as having the second largest rural population in the country, and as being the most rural of the nation’s ten most populous states (**Figure 1**).<sup>3</sup> The NC Rural Center counts 80 of the state’s 100 counties as rural based on population density (**Figure 2**).<sup>4</sup> And in transportation terms, non-metropolitan planning areas now cover almost half of the state’s population, over half its road miles, and more than 75 percent of its land area.<sup>5</sup>

**Figure 1: The Ten Most Populous States: Population Share Living in Rural Areas in 2010**



**Figure 2: North Carolina Counties by Population Density**



<sup>1</sup> UNC Charlotte Urban Institute; U.S. Department of Agriculture; North Carolina Center for Public Policy Research; U.S. Census Bureau.

<sup>2</sup> 23 U.S. Code §§134 and 135; N.C. Gen. Stat. §§136-200 et seq.

<sup>3</sup> North Carolina Department of Transportation using 2010 U.S. Census Bureau data.

<sup>4</sup> NC Rural Center.

<sup>5</sup> UNC Carolina Population Center; North Carolina Association of Rural Planning Organizations.

While “urban/rural” distinctions can be helpful, they risk hiding that most places are neither wide-open spaces nor towering cities, but fall somewhere in-between on a gradual rural-urban continuum. This is especially true in North Carolina, where rural areas tend to be more densely populated—and cities less densely populated—than in other states,<sup>6</sup> making it “a state of small towns.” Further, more than ever before, people, products, and information flow across regions in a complex web of interdependence. Whether it’s commuters going to work, families on vacation, or businesses moving materials and merchandise, real life largely ignores artificial rural-urban boundaries.<sup>7</sup> Because most of us travel in rural areas at least some of the time—or benefit from services, workers, and goods that do—rural transportation is an issue that concerns everyone.

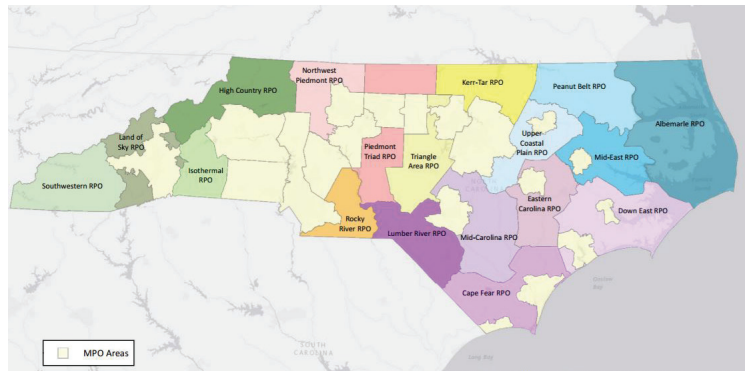
## How are rural transportation projects planned and paid for in North Carolina?

Transportation planning processes at the state level and in metropolitan areas are governed by federal law. Under federal law, each urbanized area must have a “metropolitan planning organization” that is composed largely of local officials, whose job it is to ensure that all transportation spending in metro areas is based on a continuing, cooperative, and comprehensive planning process.<sup>8</sup> In 2000, North Carolina recognized the need for more coordinated transportation planning in non-metropolitan areas, so the state went above and beyond federal requirements by enacting a state law that established “rural transportation planning organizations” (RPOs).<sup>9</sup> Today, North Carolina has 18 RPOs that serve every rural county in the state (**Figure 3**).<sup>10</sup>

To receive state or federal funding, all proposed transportation projects must go through a rigorous planning and selection process. First, RPOs work collaboratively with state and local entities to study and develop projects, which are then added to a Comprehensive Transportation Plan. Next, RPOs and division engineers from the state department of transportation choose projects from these plans to submit to the statewide strategic prioritization process (also known as Strategic Transportation Investments, or STI). Through this process, potential projects from rural and urban areas alike are scored using data-driven criteria and local input. Projects that are finally selected through this process become part of the state’s fiscally restrained ten-year spending and construction plan, known as the State Transportation Improvement Program (STIP).<sup>11</sup>

Under the strategic prioritization process, all proposed projects from across the state must compete for the same limited funding. Although each prioritization cycle involves RPOs and other stakeholders in improving the overall scoring process, rural projects have so far tended to have a harder time competing well for statewide funds because some of the scoring criteria—such as traffic volume and congestion—are less likely to apply to less traveled rural routes. Recent years have seen increased funding for rural projects, as well as examples of successful regional collaboration among RPOs and their metropolitan counterparts, but how best to address rural concerns through the statewide project selection process remains a challenge.<sup>12</sup>

**Figure 3: Rural Planning Organizations in North Carolina**



<sup>6</sup> NC Rural Center; North Carolina Office of State Budget and Management; UNC Carolina Population Center.

<sup>7</sup> National Association of Development Organizations; UNC School of Government.

<sup>8</sup> 23 U.S. Code §§134 and 135; North Carolina Association of Metropolitan Planning Organizations.

<sup>9</sup> N.C. Gen. Stat. §§136-210 et seq.; North Carolina Association of Rural Planning Organizations; North Carolina Department of Transportation.

<sup>10</sup> North Carolina Association of Rural Planning Organizations.

<sup>11</sup> N.C. Gen. Stat. §§136-189.10 et seq.; North Carolina Association of Rural Planning Organizations; North Carolina Department of Transportation.

<sup>12</sup> North Carolina Association of Metropolitan Planning Organizations; North Carolina Association of Rural Planning Organizations.

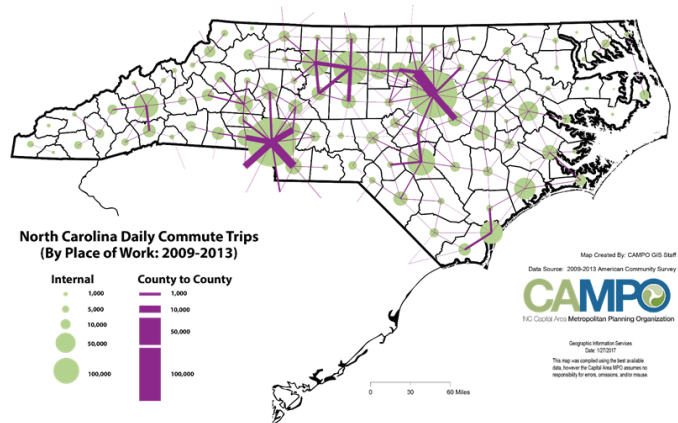
## What are the transportation needs of North Carolina's rural communities?

“Our nation’s transportation network is an integrated system,” notes the Federal Highway Administration, “with each segment, rural and urban, necessary to the whole, and accompanied with its own issues and needs.”<sup>13</sup> Today, rural North Carolina faces a number of distinctive transportation needs related to safety, connectivity, economic viability, and quality of life.

**Road and bridge safety.** In North Carolina, the rate of traffic fatalities on non-Interstate, rural roads is 3.5 times higher than on all other roads, and 12 percent of rural bridges are rated poor or structurally deficient—the ninth highest share in the nation. These statistics reflect broader trends; nationwide, rural roads and bridges are more likely to have significant deficiencies and deterioration, lack desirable safety features, and have higher rates of traffic fatalities.<sup>14</sup> Safety, maintenance, and modernization projects—such as adding paved shoulders or widening lanes on narrow roads—can help, but can also be expensive and difficult to fund.

**Strategic connectivity.** For rural communities, which tend to rely heavily on roads for their travel needs, economic vitality can depend on highway connections that bring goods to larger markets or make it easier for visitors to reach local tourist attractions. Access to efficient, interregional road networks can also help draw jobs to rural areas—as highway accessibility continues to be a top priority when businesses select sites for new or expanded facilities<sup>15</sup>—as well as help rural residents get to more distant jobs; today, a growing number of North Carolinians travel across county lines for work,<sup>16</sup> reflecting increasingly complex regional labor markets and commuting patterns (Figure 4).<sup>17</sup> More broadly, strategic highway corridors (as well as links to rail, regional airports, and other options) not only support the well-being of rural communities, but can also benefit urban centers that depend on rural commodities and labor.

**Figure 4: Commuting Patterns in North Carolina**



**Rural transit.** Public transit services exist in all of North Carolina’s 100 counties; in rural areas, transit can be a vital lifeline to healthcare, education, jobs, and community services, especially for people who lack other options.<sup>18</sup> But long distances and sparser populations can make rural transit costly and difficult to provide, leading to limited service in some areas, even as extended work commutes are on the rise. Adding to the strain, rural communities are aging ahead of the national curve while facing ongoing healthcare shortages, which is increasing the demand for paratransit and medical transportation services to get people of all ages to the care they need.<sup>19</sup>

**Active transportation for livability and place-making.** Rural areas, like urban centers, have shown growing interest in bicycle and pedestrian projects that offer residents and visitors enjoyable, safe, and active ways to get around. Such amenities can also support economic revitalization by showcasing the unique features of rural communities and making them more attractive places to live, visit, or open a business. The funding for these facilities, however, can be especially hard to find in tight rural budgets—a situation that has reportedly become more difficult since 2013, when the state ended its former policy of paying the 20 percent local match that is required to access federal funding for bicycle and pedestrian projects.<sup>20</sup>

<sup>13</sup> Federal Highway Administration.

<sup>14</sup> TRIP; U.S. Department of Transportation.

<sup>15</sup> Economic Development Partnership of North Carolina; Area Development.

<sup>16</sup> North Carolina Department of Commerce; North Carolina Department of Transportation.

<sup>17</sup> North Carolina Capital Area Metropolitan Planning Organization.

<sup>18</sup> North Carolina Department of Transportation.

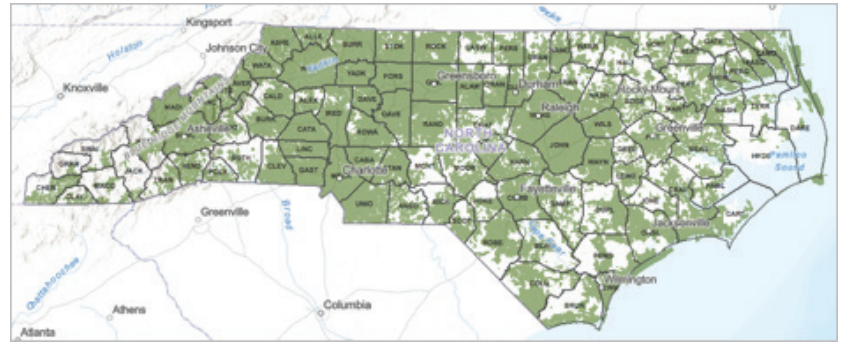
<sup>19</sup> NC Rural Center; North Carolina Office of Rural Health; UNC Sheps Center for Health Services Research; U.S. Department of Agriculture; North Dakota State University.

<sup>20</sup> 2013 N.C. Sess. Laws, Chap. 2013-183 (N.C. Gen. Stat. §136-189.11).

**Building local capacity.** When seeking federal or state funding through the strategic prioritization process, rural areas may lack the resources to make their transportation projects competitive with those from large urban centers. The state supports communities of all sizes by assigning engineers to help with the planning work, and also provides each rural planning organization with \$100,000 to \$135,000 per year in pass-through federal funding;<sup>21</sup> still, other challenges such as fewer local staff and limited local funds for preliminary project analysis mean that rural projects may still fall behind.

**Broadband internet access.** High-speed internet has transformed nearly every aspect of life in the 21st century, yet many rural communities are being left behind; 93.7 percent of North Carolina households have access to broadband internet, but 95 percent of unserved households are in rural areas (**Figure 5**).<sup>22</sup> While transportation remains critical to helping rural residents get to employment centers and needed services, internet access can do its part by making more health care, education, job opportunities, and other resources available to rural North Carolinians without leaving their homes. Broadband internet can not only supplement transportation systems, but also is becoming more essential to them; emerging transportation technologies—such as connected vehicles and “smart” roadways that communicate with each other to enhance mobility and safety—will also require expanded internet service. Several initiatives are underway to support broadband deployment across the state, including a new “Dig Once” policy to facilitate the installation of broadband infrastructure during road construction projects.<sup>23</sup>

**Figure 5: North Carolina Broadband Service Areas**



**Broadband service areas with at least 25mb/s download and 3mb/s upload speeds**

## How can state transportation funding decisions help rural communities thrive?

State decisions that affect how much funding is available for transportation projects, how it is spent, and where it comes from can all play a role in supporting rural communities. First, as traditional revenues such as gas taxes continue to decline, the state is working to bridge the gap with forward-thinking solutions. Ensuring there are enough state dollars to go around will be critical to meeting transportation needs in North Carolina’s rural, suburban, and urban areas alike. Policies that facilitate state funding for smaller projects—as well as for safety, maintenance, livability, or multimodal solutions—can also help rural communities, as can initiatives that encourage flexible, creative, collaborative, and regional problem-solving. Rural concerns are complex and may require a smart combination of economic development, housing, health care, technology, education, and other strategies in concert with transportation investments, so funding approaches that encourage partnerships and coordination among state agencies are worth exploring. Lastly, as North Carolina considers alternatives to the gas tax, decision makers will need to address how each funding option may affect rural-urban equity as well as the impact on those rural residents who may need to travel longer distances to reach work or other services and amenities.

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<sup>21</sup> NC Rural Center; North Carolina Association of Rural Planning Organizations.

<sup>22</sup> North Carolina Department of Information Technology.

<sup>23</sup> See also the governor’s Broadband Task Force on Connecting North Carolina that was launched in March 2019 by N.C. Executive Order 19-91, as

well as the Broadband Infrastructure Office of the North Carolina Department of Information Technology and the *Connecting North Carolina* state broadband plan that the office created in accordance with 2015 N.C. Sess. Laws, Chap. 2015-241.