

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 is the first in a “Disruptor Series” that will examine technological and societal trends impacting our transportation system. This edition examines the state’s changing demographics and how they could affect the future of transportation in North Carolina.

DISRUPTOR SERIES: PART 1

Changing Demographics and the Future of Transportation in North Carolina

Overview

North Carolinians are changing: who we are, where we live, what we do and even how we get around. Recent demographic shifts have the potential to transform the future of transportation in the state—not only how people will travel from place to place, but as current funding models like gasoline taxes become outdated, how we secure critical resources for investment in our transportation system.

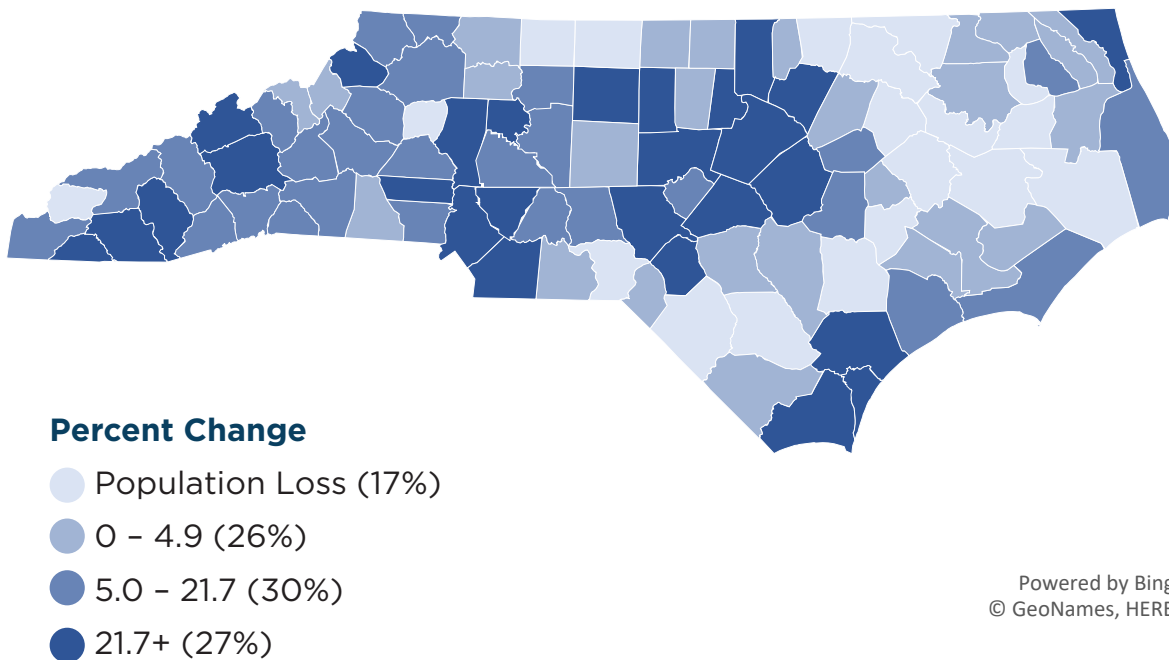


What demographic changes could affect travel trends in North Carolina?

Our population is growing. At 10.4 million, North Carolina's population is the ninth largest in the nation, and it's quickly growing. Since 2010, the state has gained about 848,000 people and by 2038 the total population is expected to reach 12.8 million—nearly a quarter larger than it is today. Most of this growth is due to people moving here from other states for school, jobs and retirement.¹ Population growth means there will be more drivers on the road as well as more demand on other modes of transportation such as public transit and air travel.

More of us are living in urban areas. Although North Carolina has more rural residents than any other state but Texas, about two-thirds of the state's population—and almost all population growth—is in major urban areas. In the next two decades, more than half of the state's growth will be in Charlotte and in the Triangle, and by 2050, 82 percent of our residents will be urban.² Continued urbanization is likely to worsen traffic congestion along major corridors and spark greater demand for public transit and other travel options. On the other hand, some rural communities will shrink in population yet will still need reliable, long-distance transportation networks and connections to maintain their economic well being (see **Figure 1**).

Figure 1: Projected Population Change by County from 2019 to 2038³



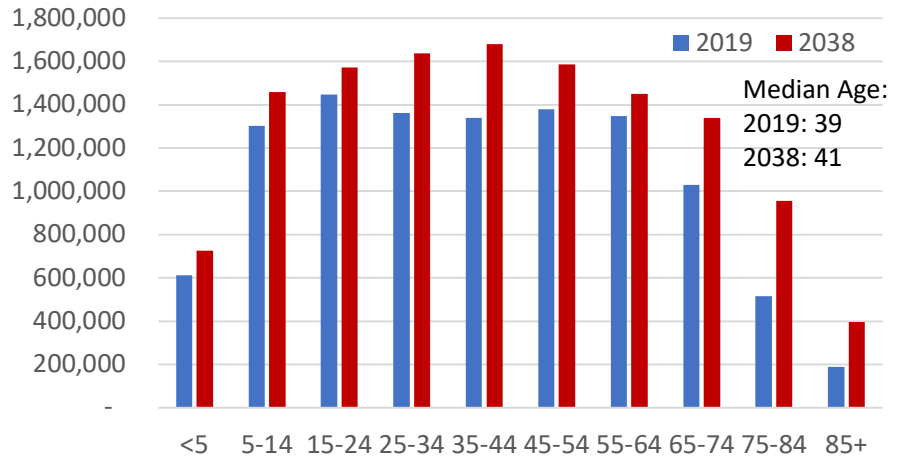
¹ North Carolina Office of State Budget and Management; Carolina Population Center at UNC-Chapel Hill

² Ibid.; U.S. Census Bureau

³ North Carolina Office of State Budget and Management

Two big generations are having big effects. As the youngest of the Baby Boom generation turns 65 in 2030, older adults will make up a greater share of the population (see **Figure 2**). By 2030, one in five North Carolinians will be at least 65 years old, and by 2035, for the first time in U.S. history, older adults will outnumber children.⁴ The older population now includes diverse groups with different lifestyles and travel needs. Adults over 65 are more likely to have disabilities and need medical transportation, paratransit and other accessible alternatives to driving. At the same time, many older adults are staying in the workforce longer or choosing to “age in place” in suburban or rural homes, at least for now. These trends could place new and complex demands on existing state and local transportation systems.

Figure 2: Projected State Population by Age in 2019 and 2038 ⁵



Meanwhile, Millennials—soon to be the nation’s largest living adult generation—are also influencing transportation trends. Studies indicate that this connected and tech-savvy generation is more flexible in how they travel, choosing to drive, hail a ride, take public transit, bike or walk based on what works best for each trip. They also tend to prefer urban environments, walkable communities, and short commutes, and to see cars as just one mobility option among many.⁶ These inclinations may be influencing a national trend toward less driving overall, although the long-term effects are uncertain.

We are more diverse. North Carolina is continuing to become more ethnically diverse. In the next two decades, minorities will account for 63 percent of the state’s population growth and by 2038, 29 of North Carolina’s 100 counties are expected to be “majority minority.”⁷ This affects travel trends as studies indicate that among urban dwellers, people of color and foreign-born residents are more likely to use public transit on a regular basis.⁸

⁴ Ibid.; Carolina Population Center at UNC-Chapel Hill; U.S. Census Bureau
⁵ North Carolina Office of State Budget and Management
⁶ American Public Transportation Association

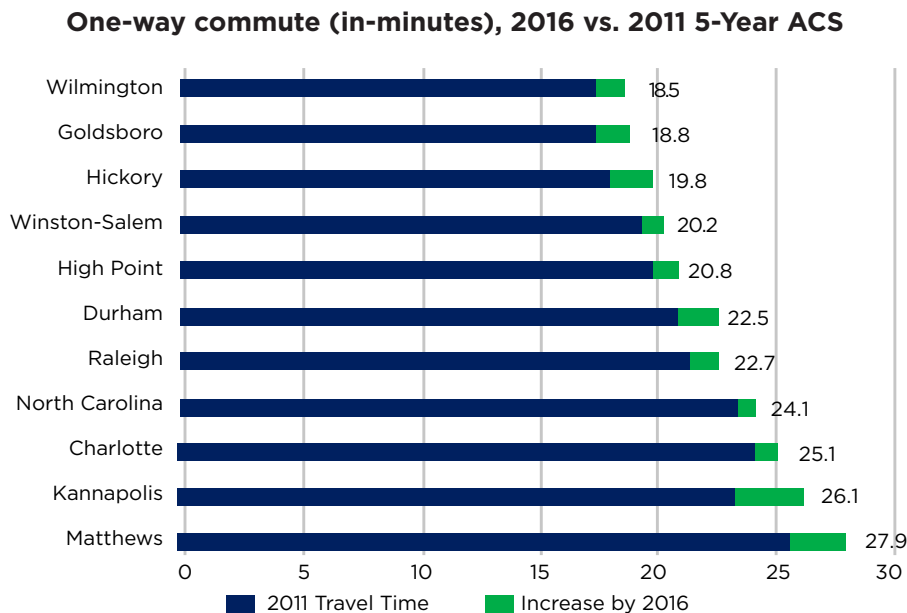
⁷ U.S. Census Bureau
⁸ Pew Research Center

How else could these changes affect the future of our transportation system?

Together, population growth, urbanization, generational effects and increasing ethnic diversity are putting more drivers on already overburdened roads, especially in key corridors, while also calling for more travel alternatives for people who cannot or choose not to drive (see Figure 3). As these demographic trends—along with factors such as ride-hailing apps, other on-demand mobility services and new vehicle technologies—transform how we travel, they will also shape the transportation system we use to get around. Even now, public agencies like NCDOT are considering how to respond to these challenges with diverse, strategic investments that will help people across the state get where they're going.

At the same time, these demographic shifts could also affect how much funding is available for transportation investments. Today, the lion's share of funding for transportation in North Carolina comes from gas taxes, and most of the rest is from driver and vehicle fees, plus a tax on vehicle sales. Each of these revenues is tied to long-standing assumptions about how many of us drive, how much we drive, what kinds of vehicles we drive and how we purchase and acquire goods and services. The dynamic changes on the horizon will challenge those assumptions and, in turn, call for new or better ways to ensure that critical financial resources are available in the future.

Figure 3: Average commute times increasing ⁹



⁹ Carolina Population Center at UNC-Chapel Hill