RESEARCH REPORT

Housing for North Carolina's Future

Policy Tools that Support Rural, Suburban, and Urban Success

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Apartment Association of North Carolina
Blue Cross Blue Shield Foundation of North Carolina
Centrant Community Capital
DataWorks NC
Forsyth County
Habitat for Humanity NC
James River Capital
Joint Center for Housing Studies of Harvard University
Linden View
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NC Commission on Indian Affairs
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NC Department of Commerce

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NC Homebuilders Association

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Executive Summary

In rural, suburban, and urban counties throughout North Carolina, serious housing challenges undermine economic success and resident well-being. The urgency of these issues both preceded and is exacerbated by the economic and health risks caused by the COVID-19 pandemic. No county has enough affordable housing to meet the needs of its residents with the lowest incomes, leading to strained household budgets and elevated rental market risks. Building on pre-2020 population projections from the state demographer, we project a net growth of approximately 866,000 households statewide, with substantial growth in urban counties and more populous suburban counties; moderate growth in higher-cost rural counties, rural recreation economies, and less-populous suburban counties; and more modest growth in the more affordable rural counties. Unless stakeholders across the state work together toward a healthier housing market, current gaps in the low-cost housing supply, added household demand, and increased arrears related to the pandemic will combine to exacerbate affordability challenges for households while undermining the viability of the rental and homeownership markets.

Recommended Housing Policy Goals

- Preserve current affordability for renters and owners, especially
  - among housing with monthly costs of less than $700, and
  - in every county statewide.
- Produce more housing with a monthly cost of $700–$1,500, especially in
  - higher-cost or recreation-driven rural counties, and
  - populous metropolitan cities or counties.
- Protect households competing for residential stability and fair access to the housing market, especially
  - households with annual incomes less than $40,000

As the scope of the housing policy menus in this report will demonstrate, the state and its regions and localities can choose many different approaches to achieve these goals, and we recommend adopting a portfolio of housing policies.

An infusion of funding to support specific policies or—for easier adaptability as housing needs change—to build up a flexible source such as the state's housing trust fund is necessary, but such steps alone are insufficient for success on each of these goals. Changes to laws and regulations can further reduce the cost of preservation or production and address market failures to protect households from displacement, discrimination, and disaster. Finally, public leadership and visible collaboration are essential to align public, private, and nonprofit actors as partners toward a healthy housing market across all of North Carolina.

Recommended Actions

- For the governor's office:
  - » Convene a statewide and multisector task force to develop a playbook for preservation, production, and protection across rural, suburban, and urban housing markets, and designate a lead agency for housing policy implementation (box 5 provides details).
  - » Reinvigorate construction labor and firms through a workforce development program (box 6 provides details).
  - » Coordinate health and housing partnerships at the state level by replicating an evidence-based program for healthy aging through home repair assistance and health supports (box 4 provides details).
- For the state legislature:
  - » Allocate a historic infusion of resources to the housing trust fund for distribution among the housing priorities in the state's diverse market types (see page 32 for details).
  - » Establish a dedicated revenue source for the housing trust fund to improve sustainability (see pages 29–31 for details).
  - » Expand access to both short- and long-term rental subsidies, either through legislation that adds flexibility to the housing trust fund or through a separately funded program, to protect households in every county that face either sudden income loss or market conditions that impede affordability and stability (box 9 provides details).
- For the housing finance agency:
  - » Test the viability of filling market lending gaps through a micro-mortgage pilot (box 7 provides details).
  - » Develop or partner with banks and community development financial institutions to support the acquisition and preservation of unsubsidized rental housing (box 3 provides details).
  - » Enable preservation of manufactured home parks through a park acquisition fund (box 1 provides details).
- For counties and local governments:
  - » Pilot a title clearance program through the assessment process to ensure clear titles before disaster strikes (box 12 provides details).
  - » Encourage court-based eviction-prevention clinics to improve resolution through existing resources (box 10 provides details).
  - » Inventory currently affordable and/or publicly owned parcels to improve opportunities for both rental preservation and new housing production (see pages 41–42 for more details).
- For private and philanthropic organizations:
  - » Fund housing and health partnerships (box 8 provides details).
  - » Support organizational capacity-building activities related to housing production, preservation, and protection to facilitate successful implementation of the policy tools described in this report (box 5 provides details).

Building on the evidence and analysis presented in this report, North Carolinians can join together and commit to evidence-based actions everyone can take toward a healthy housing market that serves all the state's residents; supports an inclusive recovery from the COVID-19 pandemic; and promotes shared prosperity in rural, suburban, and urban counties.

Housing for North Carolina's Future

In 2019, the chief economist for Fannie Mae predicted that residential construction would be a key driver of US economic growth in 2020.[1] Though a pandemic has shaken the economic forecast, state and local actions remain essential for fostering a well-functioning housing market. The groundwork that state and local communities lay this year can support public health, enable a more effective recovery, and set the stage for economic prosperity in the coming decades. North Carolina's economy is complex, and the state has several distinct community profiles. Notwithstanding this diversity and complexity, three economic trends affect every community statewide.

First, talent availability and job growth are deeply connected. For companies making site-selection decisions, housing conditions and availability figure prominently (Rabianski, DeLisle, and Carn 2001). Communities that can address potential employers' demands for a strong talent pipeline and for housing suited to their workforce will have stronger appeal. In a national survey of 300 companies, two-thirds believe that a lack of nearby affordable housing has harmed their recruitment and retention of entry- and midlevel employees. And more than half indicate that they have experienced increased employee turnover because of long commutes (Wardrip, Williams, and Hague 2011). As we explain in this report, North Carolina currently has too few homes[2] (both single-family and multifamily) in all cost bands. The housing shortage is most severe for households with low and middle incomes. Meeting the housing needs for people across the income spectrum is critical for maintaining a diverse and thriving workforce.

Second, community economic stability is predicated on the availability of housing for residents across every income category. Rapidly rising housing prices are associated with employment declines in communities, and employment growth is slower in communities that lack sufficient housing for residents with median incomes (Glaeser 2006; Wardrip, Williams, and Hague 2011). Extrapolating from the North Carolina demographer's population projections, the state can expect to add 866,000 new households by 2030 (with substantial growth in its metropolitan areas), but the housing supply is not projected to meet the needs of these new residents. Economic instability is often created by housing shortages that restrict labor mobility and increase business costs. The added costs and lost revenue in communities with housing shortages drain the local economy through reductions in taxable economic activity; increases in unpaid bills; and avoidable costs to health systems, schools, emergency services, child welfare systems, and more.

Last, increasing affordable housing supply through new construction and preservation yields a tremendous return on investment, and communities are limiting their growth potential by not capitalizing on the economic boosts these projects can bring. The National Association of Home Builders estimates that affordable home construction projects can yield $7.9 million in local income, 122 local jobs, and $827,000 in local government revenue in the first year of construction alone (NAHB 2010. Moreover, research has found that children in families that benefit from affordable housing initiatives have 31 percent higher incomes and contribute more in tax revenue later in life. Research on North Carolina communities has shown that affordable housing has no impact on surrounding property values,[3] which contradicts a common argument from its opponents.

In this report, we provide a menu of policy tools based on the housing situation in North Carolina, our analysis of current and future housing needs, and a review of housing policies being deployed in other states and localities. We find that preservation of both subsidized and unsubsidized affordable housing is critical to meeting the state's housing needs. Production of new housing affordable at all income levels and increased resident protection will also be needed. We provide policy options for each strategy.

The Implications of Geographic Variation

Population, housing, and economic trends play out differently in each North Carolina community. Across the state, the health of housing markets and overall economic conditions vary tremendously. But every community needs to better align its housing policy and economic development strategies.

North Carolina has one of the largest rural populations in the US. The impacts of global economic trends (such as the globalization of manufacturing) are felt, mostly negatively, in local economies. Despite these impacts, rural communities are poised to improve economically by intensifying their focus on exports (Portugal et al. 2019). But without sufficient housing and a plan to address the labor and locational amenities employers need, rural communities will continue to lose out to other regions. Rural communities must have a housing policy that can contend with global economic trends and ensure they can benefit from the opportunities arising from the international economy.

The state's urban centers have some of the most dynamic economies in the nation. The challenge in these areas is ensuring that every neighborhood within thrives. Displacement as a function of rising housing costs, gentrification, and a decline in middle-income jobs are combining to create a growing crisis reflected in rising homelessness, increased poverty, and associated social challenges. The COVID-

19 pandemic will make this worse. The histories of other urban areas tell us that short-sighted housing policy can have dire implications for racial equity, worker retention, and economic development.

In between the urban cores and the rural expanses, varied community types are wrestling with their own housing challenges. Some are contending with the economic fluctuations of being a tourism economy with a high demand for short-term housing and how that affects residents' housing costs and property values. For these communities to simultaneously address the needs of a transient population, a rapidly aging population, and its service-sector workforce requires a delicate balance. Other areas face the challenge of crafting effective regional housing policies across state borders. North Carolina border communities' fortunes are driven as much by the economies of neighboring communities in Tennessee, Virginia, or South Carolina as by the state's own policies.

The complexities are immense, as is the pressure to seek new, innovative housing policies. Yet the scope and diversity of North Carolina's current and projected housing needs call for more than policy innovation and discrete housing policy changes. Ensuring economic prosperity for all of North Carolina will require strategically aligning housing policies with action from the state, its localities, and nongovernmental institutions. Adopting a comprehensive strategy to housing policy can build the type of economy that can propel the entire state forward.

North Carolina's Current and Future Housing Situation

In this section, we first describe six sets of counties in North Carolina that we grouped to provide more detailed analysis in this report and describe the current needs of households by income level. Using those groups, we analyze North Carolina's housing situation to understand households' current needs based on their incomes, the current housing supply, the distribution of homes by cost, and how households' needs and the supply align. We then turn to the future, projecting the income distribution of the expected growth in households in the state and their estimated housing needs based on 2018 projections from the State of North Carolina and the assumed continuation of recent trends leading up to 2018. This report uses the most recently available data when we began the analysis in fall 2019, which are primarily data from the 2013–17 American Community Survey. This source will not reflect changes in the housing markets and household needs across the state generated by Hurricane Florence in 2018 or the ongoing effects of the COVID-19 pandemic. We conclude this section by describing the housing preservation of the needs of the state.

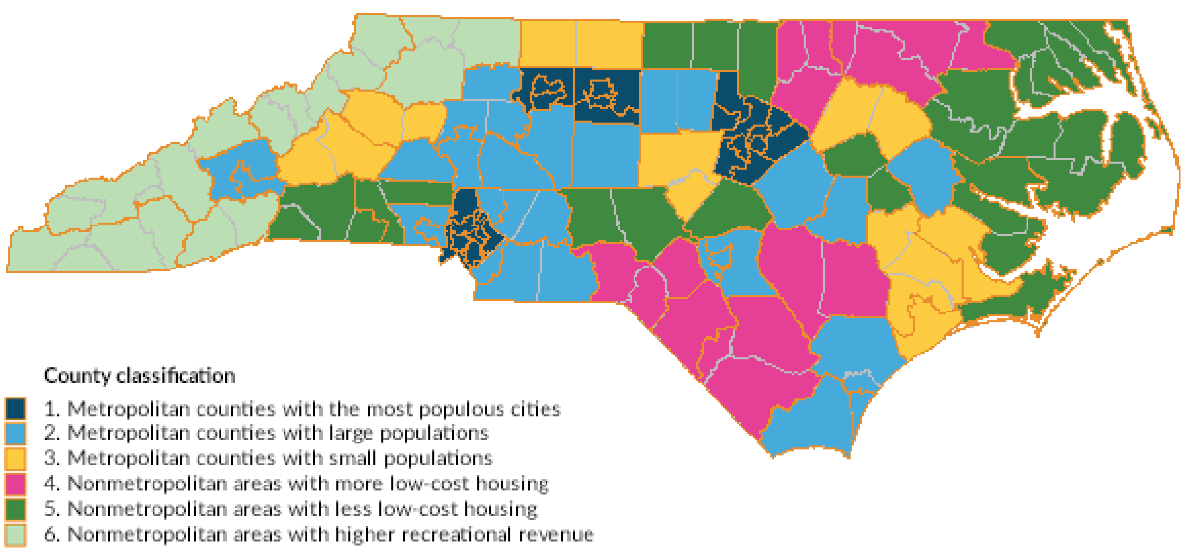
North Carolina's Housing Markets by Community Type

We summarize North Carolina's housing needs at the state level and create six groups of counties to further detail housing needs within those groups. These groups are designed to cluster counties of similar size and metropolitan status and to consider some unique characteristics of places that might affect the housing market. The county groupings are not clustered by geographic region.

The groups are shaped by the data used in this analysis, which are available for statistical geographies known as public-use microdata areas (PUMAs) created by the US Census Bureau. PUMAs are designed to contain at least 100,000 people.[4] Therefore, the US Census Bureau combines several less-populated counties to create one PUMA and some more densely populated counties may be split across PUMAs. For the unit of analysis, we use the county where possible (when PUMAs are smaller than or equivalent to counties); we use PUMAs for areas with smaller populations that needed to be combined. This method produces 45 geographic areas for our analysis (figure 1). Detailed data for each area are available in appendix A. Tables 1 and 2 provide descriptive demographic and housing profiles of the six mutually exclusive groups, which are described in the next section.[5]

FIGURE 1

Six Community Types in North Carolina



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Source: Urban Institute analysis of the 2013–17 American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org.

Note: Tan boundaries represent the boundaries of public use microdata areas; gray boundaries are counties.

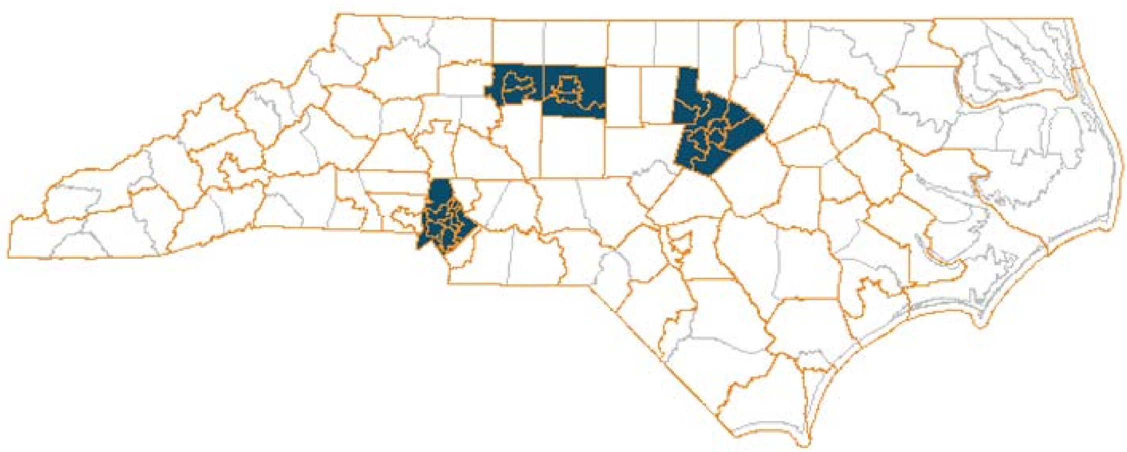
GROUP 1: METROPOLITAN COUNTIES WITH THE MOST POPULOUS CITIES[6]

This group, shown in figure 2, contains the five counties that contain North Carolina's five largest cities (Charlotte, Raleigh, Greensboro, Durham, and Winston-Salem). Group 1 has 3.2 million people and is more racially diverse than all groups except group 4. It has the lowest share of people age 65 and older and the highest median household income ($83,000). This group has the highest shares of renter-occupied units (42 percent) and multifamily units (29 percent) in the state and the lowest share of mobile homes or other unit types (3 percent). It has a relatively larger share of newer homes than other groups and has smaller shares of low-cost housing.[7]

- **Counties:** Durham, Forsyth, Guilford, Mecklenburg, and Wake

FIGURE 2

Group 1: Metropolitan Counties with the Most-Populous Cities



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Source: Urban Institute analysis of the 2013–17 American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org.

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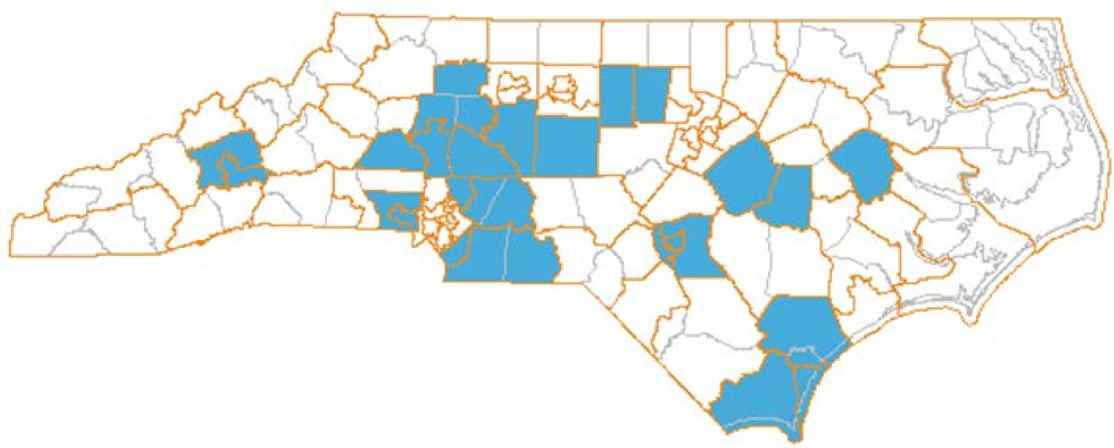
GROUP 2: METROPOLITAN COUNTIES WITH LARGE POPULATIONS

This group contains 17 areas, each of which contains a county that was in North Carolina's top quartile for population in 2015 (figure 3).[8] The largest group, representing more than 3.3 million people, is less diverse racially than group 1. It has a similar demographic profile to group 3 but with a higher median household income ($67,000) and the largest average household size in the state (2.43 people). This group has fewer multifamily homes (16 percent) than group 1, and 13 percent of homes are mobile homes or other unit types. After group 1, it has the highest share of higher-cost homes in the state.

- **Counties:** Alamance, Brunswick, Buncombe, Catawba, Cumberland, Davidson, Gaston, Johnston, Orange, Pitt, Randolph, Rowan, and Wayne
- **PUMAs and the counties contained:** Anson/Union, Cabarrus/Stanly, Davie/Iredell/Yadkin, New Hanover/Pender

FIGURE 3
Group 2: Metropolitan Counties with Large Populations



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Source: Urban Institute analysis of the 2013–17 American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org.
Note: Tan boundaries represent the boundaries of public use microdata areas; gray boundaries are counties.

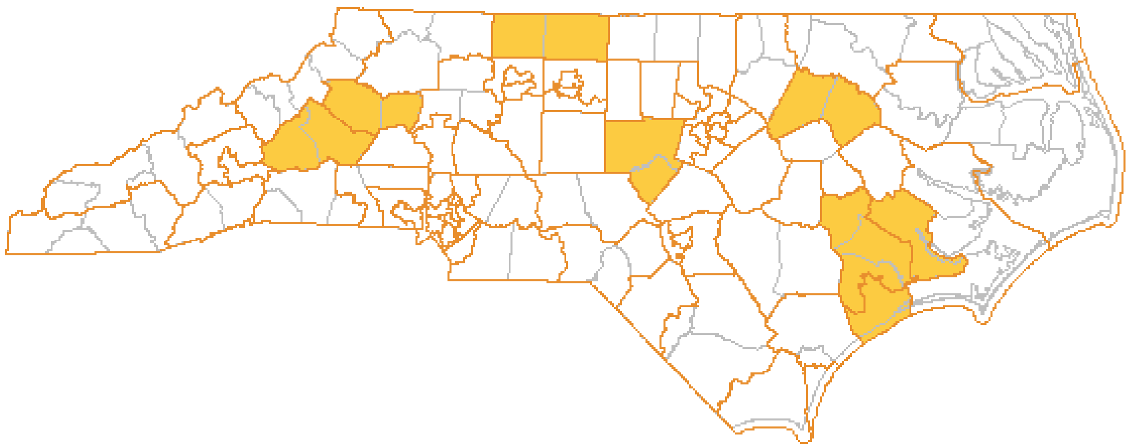
GROUP 3: METROPOLITAN COUNTIES WITH SMALL POPULATIONS

This group contains seven areas in metropolitan areas that have no county in the state's top quartile of population (figure 4). Group 3 represents over 1 million people with a similar demographic profile to group 2 but with a lower median household income ($57,000). Relative to groups 1 and 2, group 3 has larger shares of older homes and mobile homes and has a more affordable housing stock.[9]

- **County:** Craven
- **PUMAs and the counties contained:** Alexander/Caldwell, Burke/McDowell, Chatham/Lee, Edgecombe/Nash, Jones/Lenoir/Onslow, and Rockingham/Stokes

FIGURE 4

Group 3: Metropolitan Counties with Small Populations



Source: Urban Institute analysis of the 2013–17 American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org.
Note: Tan boundaries represent the boundaries of public use microdata areas; gray boundaries are counties.

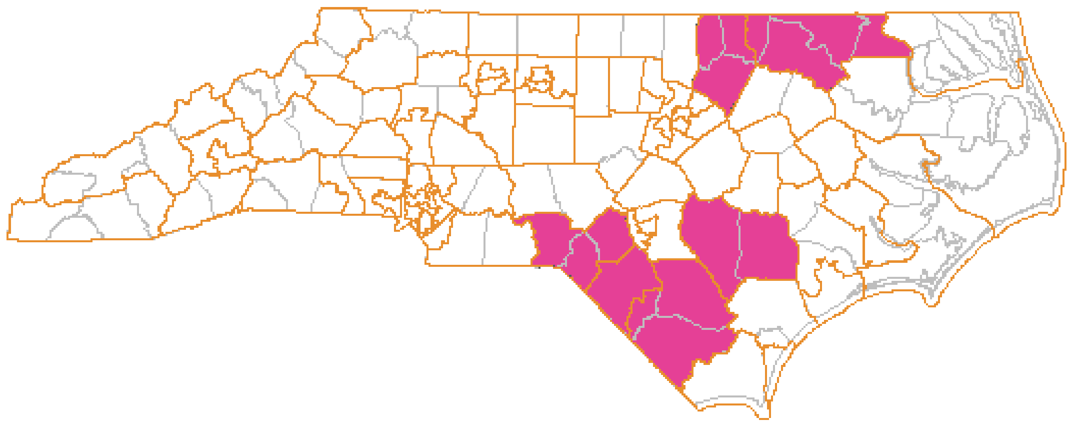
GROUP 4: NONMETROPOLITAN AREAS WITH MORE LOW-COST HOUSING

This group contains four areas located outside of metropolitan areas (figure 5). It represents 707,000 people and the majority are people of color. It has the lowest median household income in the state ($48,000). Group 4 has the lowest vacancy rate in the state (3.9 percent) and the highest share of mobile homes or other unit types, and it has at least 50 percent of homes with monthly costs of less than $700, the lowest-cost housing stock in the state.

- **PUMAs and the counties contained:** Bladen/Columbus/Robeson, Duplin/Sampson, Franklin/Halifax/Hertford/Northhampton/Vance/Warren, and Hoke/Richmond/Scotland

FIGURE 5

Group 4: Nonmetropolitan Areas with More Low-Cost Housing



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Source: Urban Institute analysis of the 2013–17 American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org.
Note: Tan boundaries represent the boundaries of public use microdata areas; gray boundaries are counties.

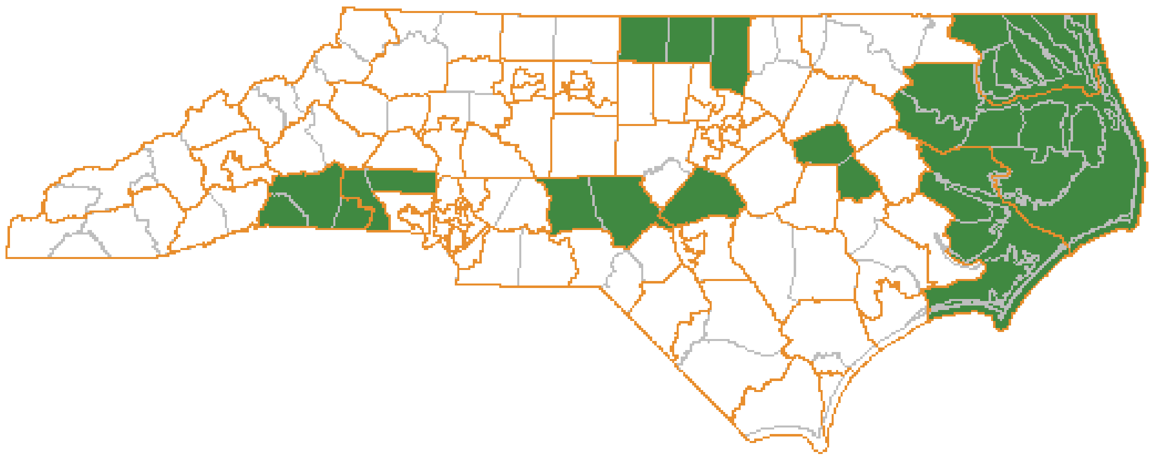
GROUP 5: NONMETROPOLITAN AREAS WITH LESS LOW-COST HOUSING

This group contains eight areas located outside metropolitan areas (figure 6). With over 1 million people, it has the smallest average area population (136,000) in the state but higher median household income ($59,000) than the other nonmetropolitan areas. This group has lower shares of low-cost homes than group 4. It also has a smaller share of mobile homes and larger share of single-family homes than group 4, but the housing stock is of similar age. Group 5 has a similar distribution of homes by type and cost to group 6, the nonmetropolitan areas with higher recreational revenue. Group 5 has the highest vacancy rate (5.8 percent) in the state.

- **Counties:** Harnett
- **PUMAs and the counties contained:** Beaufort/Carteret/Pamlico, Bertie/Dare/Hyde/Martin/Tyrrell/Washington, Camden/Chowan/Currituck/Gates/Pasquotank/Perquimans, Caswell/Granville/Person, Cleveland/Lincoln/Polk/Rutherford, Greene/Wilson, and Montgomery/Moore

FIGURE 6

Group 5: Nonmetropolitan Areas with Less Low-Cost Housing



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Source: Urban Institute analysis of the 2013–17 American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org.
Note: Tan boundaries represent the boundaries of public use microdata areas; gray boundaries are counties.

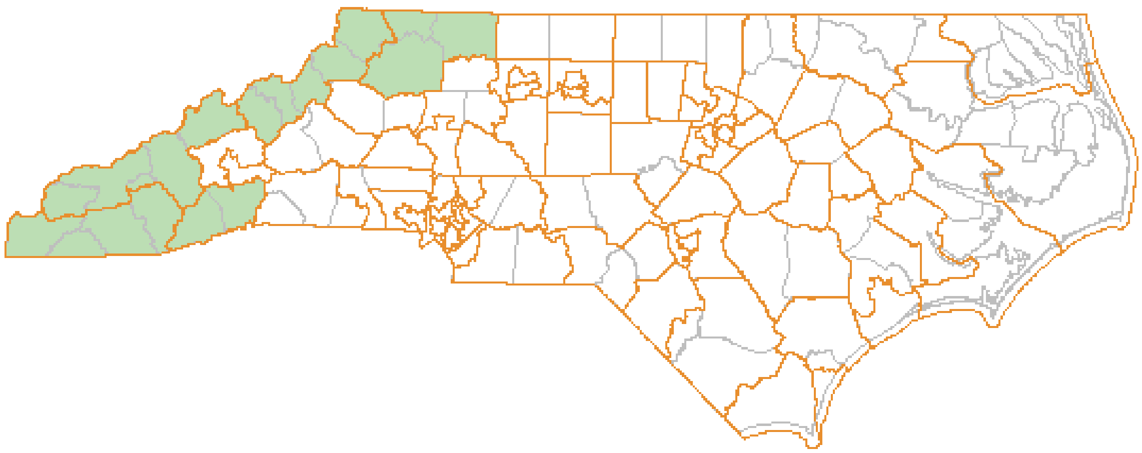
GROUP 6: NONMETROPOLITAN AREAS WITH HIGHER RECREATIONAL REVENUE

This group contains four areas located outside metropolitan areas that were defined by the US Department of Agriculture as recreation dependent (figure 7).[10] This group, containing 647,000 people, had the smallest average household size (2.25), the largest share of people age 65 and older (22 percent), and the highest share of white people (88 percent) in the state. Group 6 has the lowest share of renter-occupied units (29 percent) and a similar distribution of homes by cost and type to group 5.

- **PUMAs and the counties contained:** Alleghany/Surry/Wilkes, Ashe/Avery/Mitchell/Watauga/Yancey, Cherokee/Clay/Haywood/Graham/Jackson/Macon/Madison/Swain, and Henderson/Transylvania

FIGURE 7

Group 6: Nonmetropolitan Areas with Higher Recreational Revenue



URBAN INSTITUTE

Source: Urban Institute analysis of the 2013–17 American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org.

Note: Tan boundaries represent the boundaries of public use microdata areas; gray boundaries are counties.

TABLE 1

Demographic and Income Profile for North Carolina and Analysis Groups, 2015

	State	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
Total population	10,051,000	3,242,000	3,341,000	1,029,000	707,000	1,085,000	647,000
Average population for county/PUMA	223,000	648,000	197,000	147,000	177,000	136,000	162,000
% white	64%	53%	70%	69%	45%	69%	88%
% Black	21%	28%	17%	19%	34%	21%	2.5%
% Hispanic or Latino	9.1%	11%	8.7%	8.1%	8.9%	6.8%	6.1%
% Asian or Pacific Islander	2.6%	5.2%	2.0%	1.4%	0.6%	0.7%	0.7%
% American Indian or Alaska Native	1.1%	0.2%	0.4%	0.3%	9.6%	0.4%	1.7%
% other race or multiracial, non-Hispanic	2.3%	2.5%	2.2%	2.3%	2.2%	2.0%	1.5%
% under age 18	23%	24%	23%	22%	24%	22%	19%
% ages 18–64	62%	65%	62%	61%	60%	60%	59%
% age 65 and older	15%	12%	15%	17%	16%	19%	22%
Total households	3,819,000	1,227,00	1,260,000	387,000	260,000	419,000	265,000
Average household size	2.40	2.41	2.43	2.39	2.41	2.37	2.25
Median household income (2017 dollars)	$68,000	$83,000	$67,000	$57,000	$48,000	$59,000	$55,000

Source: Urban Institute analysis of the 2013–17 American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org.

Note: PUMA = public use microdata area.

TABLE 2

Housing Profile for North Carolina and Analysis Groups, 2015

	State	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
Total housing units	4,470,168	1,339,759	1,454,266	456,269	309,888	536,558	373,429
Vacancy rate	5.0%	4.8%	4.8%	5.3%	3.9%	5.8%	5.6%
% renter-occupied	37%	42%	35%	36%	34%	32%	29%
% seasonal or other vacant	10%	4%	9%	10%	13%	17%	25%
% single family	69%	68%	71%	69%	62%	71%	70%
% multifamily, 2–9 units in structure	9%	12%	9%	9%	7%	8%	7%
% multifamily, 10+ units in structure	9%	18%	7%	3%	2%	2%	3%
% mobile or other	12%	3%	13%	19%	29%	19%	20%
% units 0–30 years old	46%	50%	47%	41%	40%	42%	39%
% units 30–60 years old	39%	37%	37%	41%	42%	40%	43%
% units 60+ years old	15%	12%	16%	18%	18%	17%	18%
% occupied units with cost burden	30%	30%	30%	29%	31%	29%	27%
Eviction filing rate (2016)		15.2%	8.8%	5.6%	7.3%	6.7%	3.9%
Eviction judgment rate (2016)		5.4%	4.2%	3.1%	4.0%	3.5%	2.5%

Source: Urban Institute analysis of the 2013–17 American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org. For eviction filings and judgments, authors' calculations of Eviction Lab database, www.evictionlab.org

Note: Vacant units for seasonal or occasional use or otherwise vacant and held off the market are excluded from the shares of units by tenure, structure type, or age.

North Carolina Has Too Few Homes Affordable for Households with Low and Middle Incomes

Several studies have demonstrated that many households in North Carolina with low and middle incomes are struggling with high housing costs and are unable to meet basic needs (Anderson 2019; Nguyen et al. 2017; Rohe, Owen, and Kerns 2017).[11] Most households in the bottom 20 percent of the income distribution (those with incomes below $20,700) pay more than 30 percent of their income toward their rent or mortgage (table 3), a level the US Department of Housing and Urban Development considers burdensome. Households with lower incomes that are housing-cost burdened must make difficult trade-offs; they spend less on important essentials such as food, health care, and transportation, which can have negative effects on their health and well-being (JCHS 2019). Even for those households with incomes in the 20th to 40th percentile, almost half have housing-cost burdens. These two income groups include people with full-time jobs such as food preparation workers, cashiers, commercial drivers, or firefighters. Further, one in five households with middle incomes, with occupations such as flight attendants, human resource specialists, or paralegals, face housing costs higher than their incomes can affordably support. Across the state, roughly 2.7 million people live in households that are housing-cost burdened.

TABLE 3

Households in North Carolina by Annual Income Percentile for State, 2015

State income percentile	Approximate income range	Occupations with average wages meeting income level	Number of households	Share with housing cost burden
0–20th	Less than $20,700	Cashiers, food preparation workers, housekeeping cleaners	766,000	76%
20–40th	$20,700 to $39,100	Commercial drivers, community health workers, firefighters	767,000	46%
40–60th	$39,100 to $62,000	Flight attendants, human resource specialists, paralegals	760,000	19%
60–80th	$62,000 to $100,000	Loan officers, psychologists, mathematicians	763,000	6%
80–100th	More than $100,000	Lawyers, sales managers, software developers	763,000	2%
Total	**NA**	**NA**	**3,819,000**	**30%**

Source: Urban Institute analysis of the 2013–17 American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org. Occupations from the Bureau of Labor Statistics' Occupational Employment Statistics survey (2017) for North Carolina.

Notes: NA = not applicable. Columns may not sum to totals because of rounding. Income breaks represent the 20th, 40th, 60th, and 80th percentile for annual household income in North Carolina. Incomes are reported in 2017 dollars. Because incomes are often reported by survey respondents as rounded values, such as $20,000 or $60,000, the income distribution is not smooth, and several of the income breaks occur at those round numbers, leading to uneven quintiles. The number of households has been weighted to reflect the 2015 population estimates by the North Carolina Office of State Budget and Management.

Table 3 includes only households who are currently housed and does not account for the housing needs of households and people experiencing homelessness. According to the North Carolina Coalition to End Homelessness, an estimated 27,900 people in the state will have experienced homelessness in 2019.[12] Though permanent supportive housing may be needed for households who are chronically homeless, most needs can be met with less expensive housing options (Gubits et al. 2016; Kuhn and Culhane 1998).[13] Housing policies can address one of the economic drivers of homelessness, but other factors that contribute to homelessness require supports in addition to a home. This report addresses only the housing components, not other possible contributors to homelessness such as income and employment or physical, mental, or behavioral health.

Table 4 shows, across six cost bands, the distribution of all homes based on the monthly cost to the current occupants or listed monthly cost for vacant units, as well as vacant units held off the market. Monthly costs for renters are based on gross rent, which includes contract rent plus utilities. For homeowners, monthly costs are based on mortgage payments, real estate taxes, fees (such as for condominiums), and utilities. Of the 90 percent of homes that are not being used seasonally or otherwise held off the market, more than half have monthly costs of less than $1,000. Those homes would be considered affordable to a household with an annual income of $40,000, just above the 40th percentile statewide.[14]

TABLE 4

Housing Units in North Carolina by Cost Level, 2015

Monthly housing cost	Number of units	Share of units
$0–349	574,000	13%
$350–$699	951,000	21%
$700–$999	907,000	20%
$1,000–$1,499	910,000	20%
$1,500–2,499	514,000	11%
$2,500 or more	162,000	4%
Seasonal or otherwise vacant and not for rent or sale	452,000	10%
Total	**4,470,000**	**100%**

Source: Urban Institute analysis of the 2013–17 American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org.

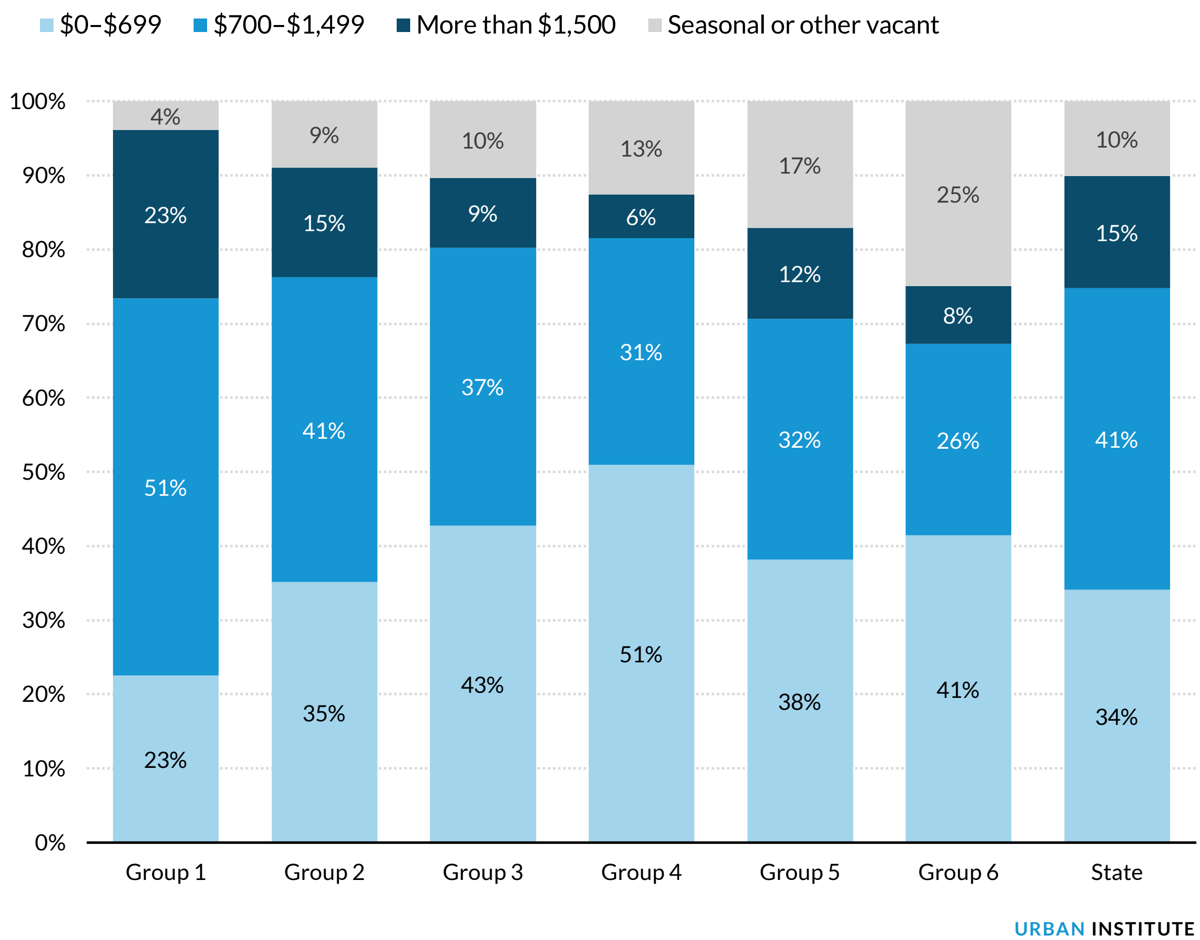
Notes: Columns may not sum to totals because of rounding. For occupied units, the monthly costs reflect the actual costs paid by the occupants. For vacant rental units, costs reflect the listed rent, but for vacant for-sale units the monthly cost reflects the mortgage, insurance, and tax cost of the unit to a first-time homebuyer. The number of occupied homes has been weighted to reflect the 2015 population estimates by the North Carolina Office of State Budget and Management.

Figure 8 collapses the six cost bands down into three and compares the distribution of housing costs across groups in North Carolina. In the denser, urban markets of group 1, less than a quarter of homes are in the lowest cost levels ($0–699). Group 1 also has a larger share of high-cost homes (above $1,500) than the other groups. A relatively smaller share of homes in group 1 are being held off the market or put to seasonal use. Group 4, nonmetropolitan areas with more low-cost housing, has the most affordable housing stock in the state, with more than half of the units in the lowest cost bands and only 6 percent in the highest cost bands. Group 6, nonmetropolitan areas with higher recreational revenue, has the highest share of the housing stock that is put to seasonal use or otherwise being held off the market. Narrowing in on seasonal or recreational homes, we find group 6 contains about 32 percent of all those units in the state, followed by groups 2 and 5 at 27 and 26 percent, respectively.

We compared the number of homes by cost band to the demand for housing from households, based on what they either can afford or are likely to prefer to pay. Based on households' income, we calculated what housing costs would be "affordable" for those with incomes eligible for housing assistance (30 percent of monthly income) or, if they had middle or higher incomes, what they were likely to pay—that is, "desired costs" (see appendix A for more details). As might be expected given the high rates of housing-cost burden for households shown in table 3, comparing households' housing needs (that is, what they can afford or are likely to pay as a share of income each month) to actual costs paid by the occupants of the housing stock reveals a serious mismatch (figure 9). At the bottom of the cost distribution, there are gaps of 299,000 units to meet the needs of households that can only afford the lowest-cost homes and a gap of 83,000 units for those who could afford homes in the $350–$699 range. Groups 1 and 2, with their large populations, have more than 60 percent of the state's gap in lowest cost homes, with each of the other groups representing 7 to 10 percent of the state's gap. The gap in the $350–$699 range is driven nearly entirely by a gap in homes to meet the demand in groups 1 and 2. Groups 3 (metropolitan counties with small populations) and 5 (nonmetropolitan areas with less low-cost housing) also have gaps of 2,000 to 3,000 units while groups 4 (nonmetropolitan areas with more low-cost housing) and 6 (nonmetropolitan areas with higher recreational revenue) have surplus units in this cost category.

FIGURE 8

Housing Units in North Carolina by Cost Level and Group, 2015

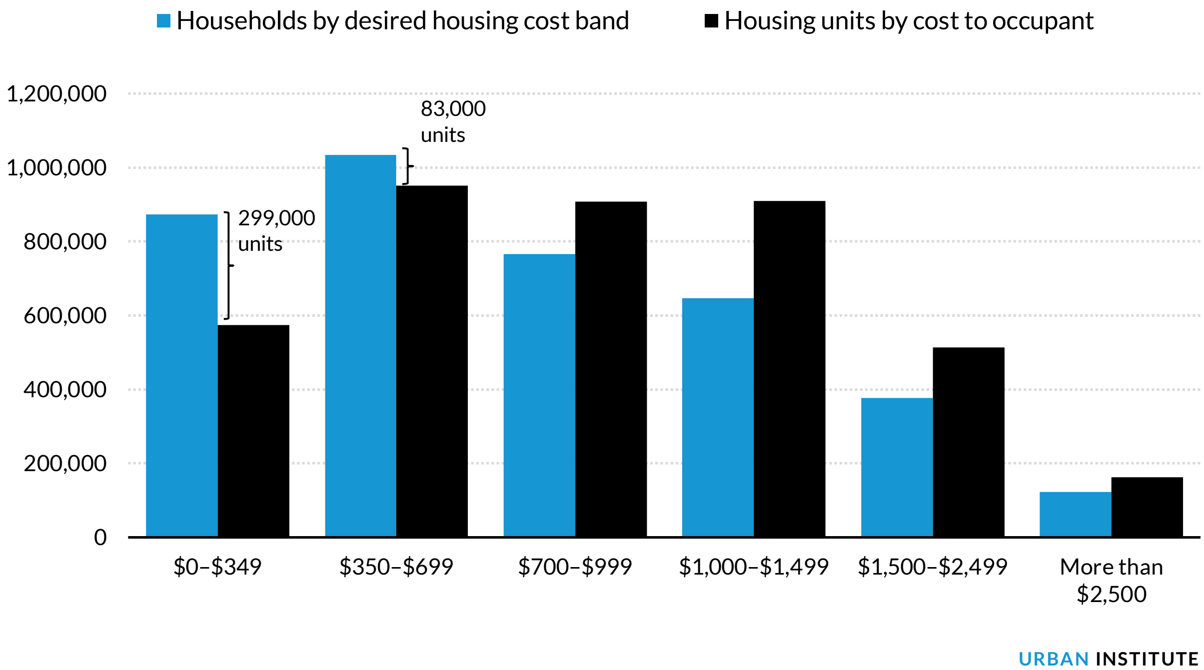


Source: Urban Institute analysis of the 2013–17 American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org.

Notes: For occupied units, the monthly costs reflect the actual costs paid by the occupants. For vacant rental units, costs reflect the listed rent, but for vacant for sale units the monthly cost reflects the mortgage, insurance, and tax cost of the unit to a first-time homebuyer. The number of occupied homes has been weighted to reflect the 2015 population estimates by the North Carolina Office of State Budget and Management.

FIGURE 9

Housing Unit Needs and Supply by Housing Cost Band in North Carolina, 2015

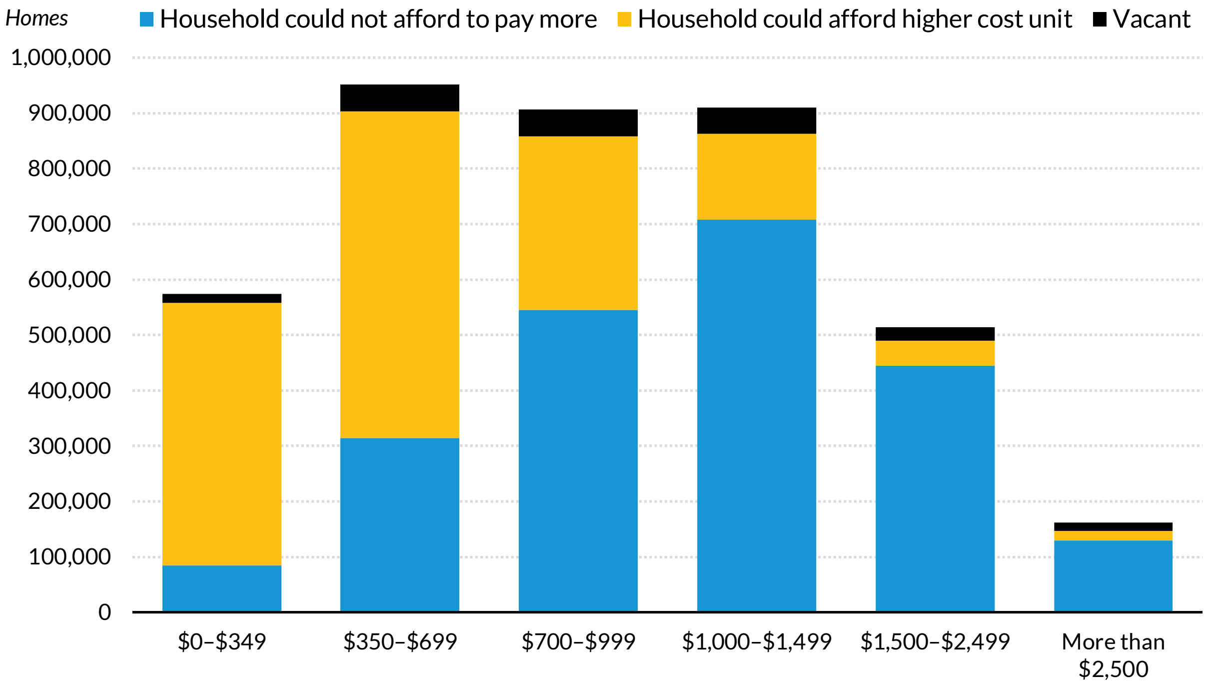


Source: Urban Institute analysis of the 2013–17 American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org.

Though table 4 and figure 9 show that many units in North Carolina have occupants who are paying relatively low housing costs, many of those households, based on their income, could afford to pay more for their housing (figure 10). This means that households with low and middle incomes face competition from households that may be able to pay more for housing. Eight in 10 households living in a home with costs below $350 could afford to pay more for housing, as could 6 in 10 households living in a home with costs to occupants of $350–$699. Similarly, 35 percent of households living in a home with costs between $700 and $999 and 17 percent of households in a home with costs between $1,000 and $1,499 could afford to pay more. These patterns generally hold across groups within the state. This competition for low-cost homes explains in part why many households with lower incomes are housing-cost burdened. It also indicates that over time, adding quality units in the $700–$1,499 cost range could relieve some of the competition for the lowest-cost homes.

FIGURE 10

Housing Stock by Occupants' Ability to Pay by Cost Band, 2015



Source: Urban Institute analysis of the 2013–17 American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org.

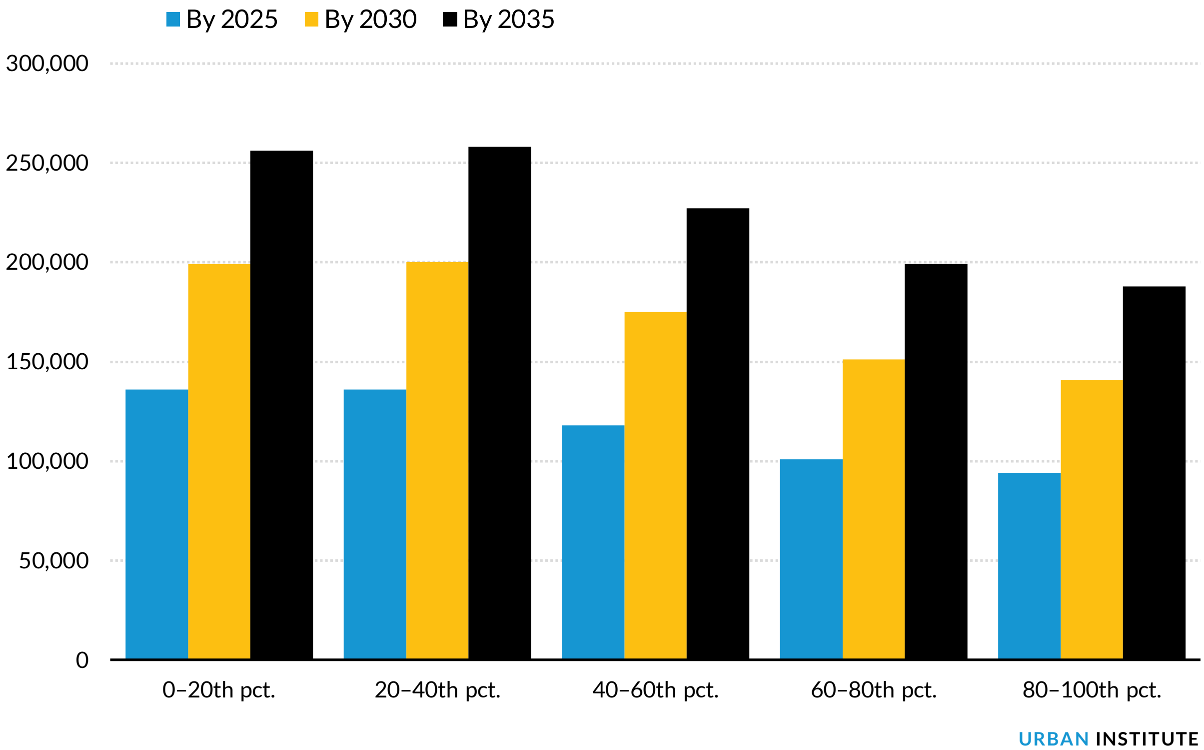
Notes: The number of occupied housing units has been weighted to reflect the 2015 population estimates by the North Carolina Office of State Budget and Management. See appendix A for details on the estimation of how much a household could afford to pay.

North Carolina Expects to Add 866,000 Households and 1.8 Million People by 2030, with Faster Growth of Households with Low Incomes

The most recent forecast by the North Carolina Office of State Budget and Management estimates that the state will grow from just over 10 million people in 2015 to 11.8 million by 2030.[15] To accurately plan for the state's future housing needs, we need to forecast how many households will form based on the expected population growth and understand (a) how much those households could afford to pay for housing and (b) how many units will be needed to accommodate them. Using recent demographic trends for rates of household formation by age and race, we project household growth for each income category. (For detailed information on the projection methodology, see appendix A.) We estimate that the number of households in North Carolina will grow by 866,000, from 3.8 million in 2015 to about 4.7 million by 2030 (a 23 percent increase), with higher rates of growth at the bottom of the income distribution (figure 11).

FIGURE 11

Projected North Carolina Households Added From 2015 by Income Percentile



Source: Urban Institute projections from American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org, and the North Carolina Office of Management and Budget.

Note: Pct. = percentile. The income quintiles are defined based on the income distribution in North Carolina in 2015 (shown in table 3). In subsequent years, these categories will have shifted slightly.

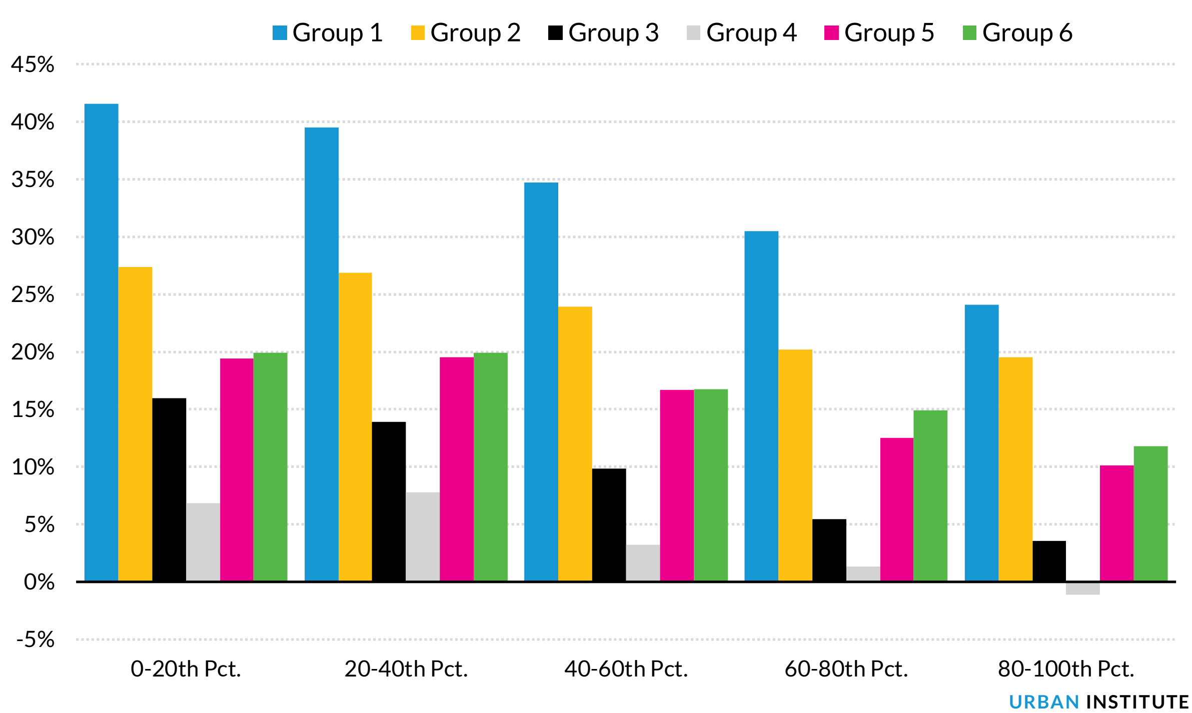
Our projections indicate that the number of households at the low end of the income spectrum will likely grow faster than the number with middle or high incomes. By 2030, for example, the number of households in the bottom quintile will grow 26 percent; the number in the top quintile will grow only 19 percent. Two trends drive this forecast. The first is the impending retirement of most of the baby boomers, who turn 65 between 2011 and 2029. In North Carolina, more than 1 million households are currently headed by baby boomers. As these households stop working, their incomes will fall, moving more households into the lower income categories.[16] How baby boomers' retirement will affect the housing market is very uncertain, and it depends on to what extent they work until older ages, want to or can afford to age in place, downsize, or need additional supportive assistance. The second trend is net in-migration of people of color, especially those ages 18 to 44. On average, households headed by people of color have lower incomes. These estimates represent our best simulation of household growth in North Carolina, and these projections assume no significant shifts in where households are deciding to live. And given the historic lack of economic mobility in the US and the legacy of structural racism, these estimates assume no major changes in households' ability to move up the income distribution (Chetty et al. 2020).

Household growth in North Carolina is expected to be driven by the large cities and counties in groups 1 and 2. By 2030, the number of households is expected to grow 33 percent in group 1 and 24 percent in group 2. In the metropolitan counties with smaller populations (group 3) the number of households is expected to grow 10 percent. Household growth in the counties outside of metropolitan areas with more low-cost housing (group 4) is expected to be the lowest, at 6 percent, while groups 5 and 6 have growth rates of 16 percent and 17 percent respectively.

Figure 12 shows the household growth rates between 2015 and 2030 by projected income percentile for each group. Each group shows faster growth in the bottom income quintile relative to the other quintiles. Group 1 household growth rates exceed 40 percent in the bottom two quintiles; group 2 household growth rates in these quintiles are expected to be 27 percent. Group 4 has the lowest expected growth rate across the income quintiles and is expected to see a loss of 1 percent of households in the top income quintile. The household growth rates of groups 3, 5, and 6 by income quintile follow similar trends to group 2 but are lower.

FIGURE 12

North Carolina Household Growth Rate by Group and Projected Income Percentile, 2015 to 2030



Source: Urban Institute projections from American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org, and the North Carolina Office of Management and Budget.

Note: The income quintiles are defined based on the income distribution in North Carolina in 2015 (see table 3). In subsequent years, these categories will have shifted slightly.

The Mix of Housing across Cost Bands Must Shift to Align with Future Households

Increased attention to and engagement on issues of housing affordability, preservation, and production in North Carolina creates an opportunity to plan to accommodate the state's future housing needs and better align the housing supply with household incomes in the state. Doing so will improve the functioning of the housing market and ensure that households at all income levels and regions have housing they can afford.

In North Carolina, 911,000 net additional homes are needed to accommodate the expected population and household growth and a proportional increase in vacant units to maintain vacancy rates between 2015 and 2030. As table 5 shows, the net production of 735,000 additional homes is needed in groups 1 and 2, and although smaller in magnitude, thousands of additional homes are also needed in groups 3 to 6.

TABLE 5

Housing Units Needed to Accommodate Household Growth from 2015 to 2030 by Group

	Estimated units
Group 1: Metropolitan counties with large cities	423,000
Group 2: Metropolitan counties with large populations	312,000
Group 3: Metropolitan counties with small populations	42,500
Group 4: Nonmetropolitan areas with more low-cost housing	12,500
Group 5: Nonmetropolitan areas with less low-cost housing	71,400
Group 6: Nonmetropolitan areas with higher recreational revenue	48,500
State	**911,000**

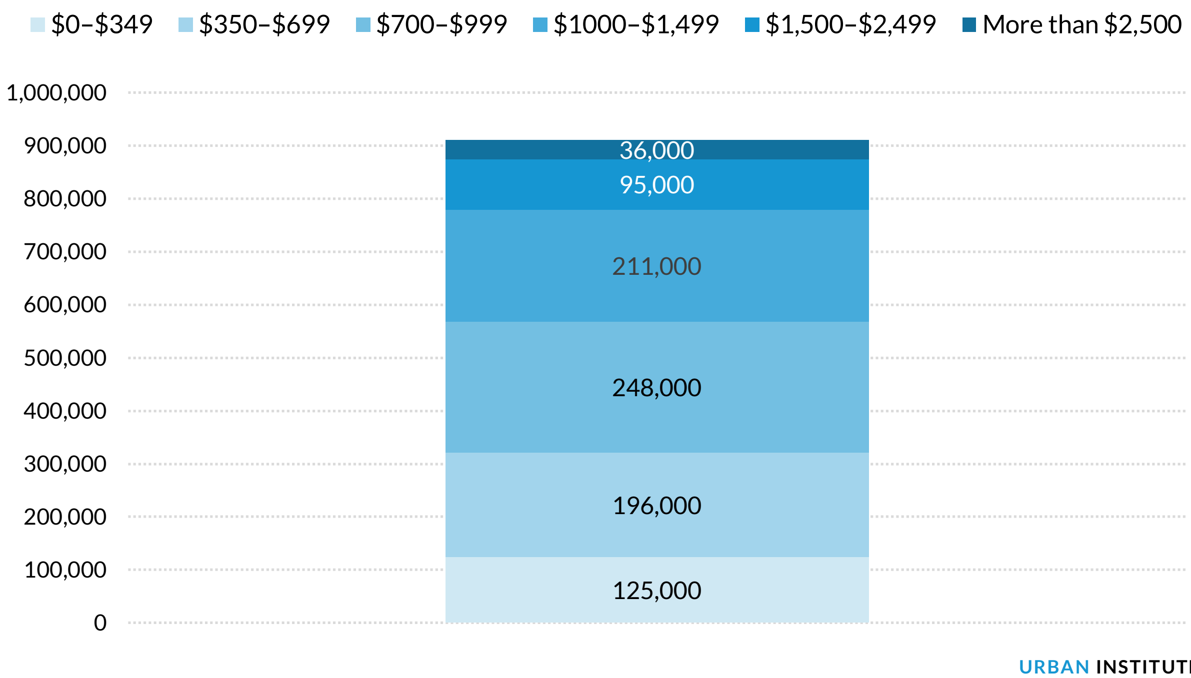
Source: Urban Institute projections from American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org, and the North Carolina Office of Management and Budget.

Notes: Growth in units that are vacant and for sale or for rent is assumed to match the overall growth in units needed to accommodate households to maintain current vacancy rates. Units that were seasonal or vacant and being held off the market at baseline are not included in this figure.

Figure 12 shows what that distribution of the 911,000 homes needed to accommodate household growth by 2030 would look like if it matched the housing needs of those households. To calculate this distribution, we assume that no households with incomes below 120 percent of the area median income (AMI) would need to pay more than 30 percent of their income for housing (that is, none of these households would be cost burdened; see appendix A for details). Half these homes would need to be in the middle cost band ($700–$1,499) a month, with another 35 percent in the low cost band ($0–$699 a month). If new homes were built mostly at higher cost levels, we assume that many of the 569,000 households in the bottom three cost bands would struggle with future housing costs.

FIGURE 13

Housing Units by Cost Band Needed to Accommodate North Carolina Household Growth from 2015 to 2030

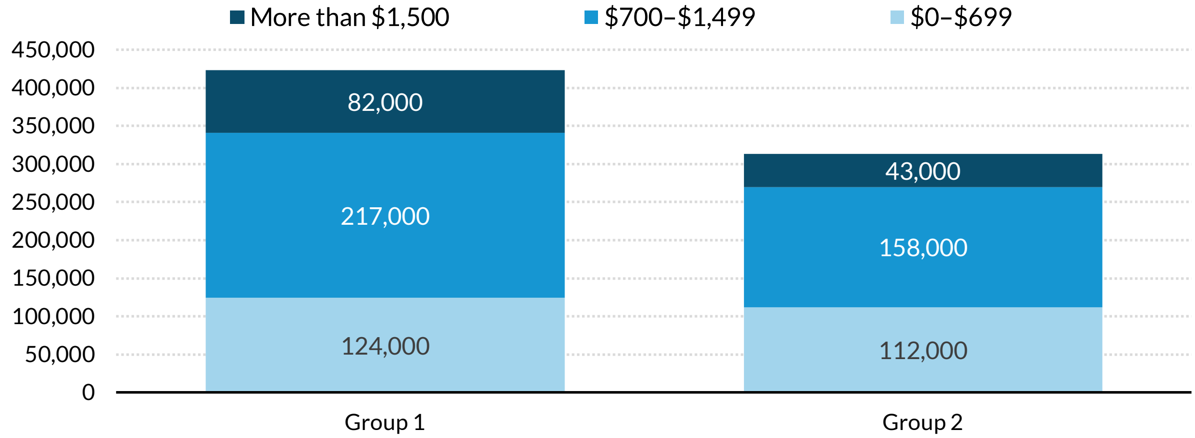


Source: Urban Institute projections from American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org, and the North Carolina Office of Management and Budget.
Notes: Growth in units that are vacant and for sale or for rent is assumed to match the overall growth in units needed to accommodate households to maintain current vacancy rates. Units that were seasonal or vacant and being held off the market at baseline are not included in this figure.

Figures 14 and 15 break out the cost distributions by group for the additional homes needed by 2030 in those areas, which would accommodate household growth and align costs to projected household incomes. In group 1, 51 percent of these homes would need to be in the middle cost bands ($700–$1,499 a month), with another 29 percent in the low cost bands ($0–$699 a month). Group 2 has a similar distribution, with 50 percent of these homes needed in the middle cost bands and another 36 percent in the low cost bands. Groups 5 and 6 have a similar distribution to group 2, with half of the homes needed in the middle cost bands. Groups 3 and 4 need more of their additional homes in the lowest cost bands relative to the other groups, with 53 and 64 percent respectively. Group 4 does not need additional homes in the highest cost bands.

FIGURE 14

Housing Units by Cost Band Needed to Accommodate Household Growth from 2015 to 2030 in Groups 1 and 2

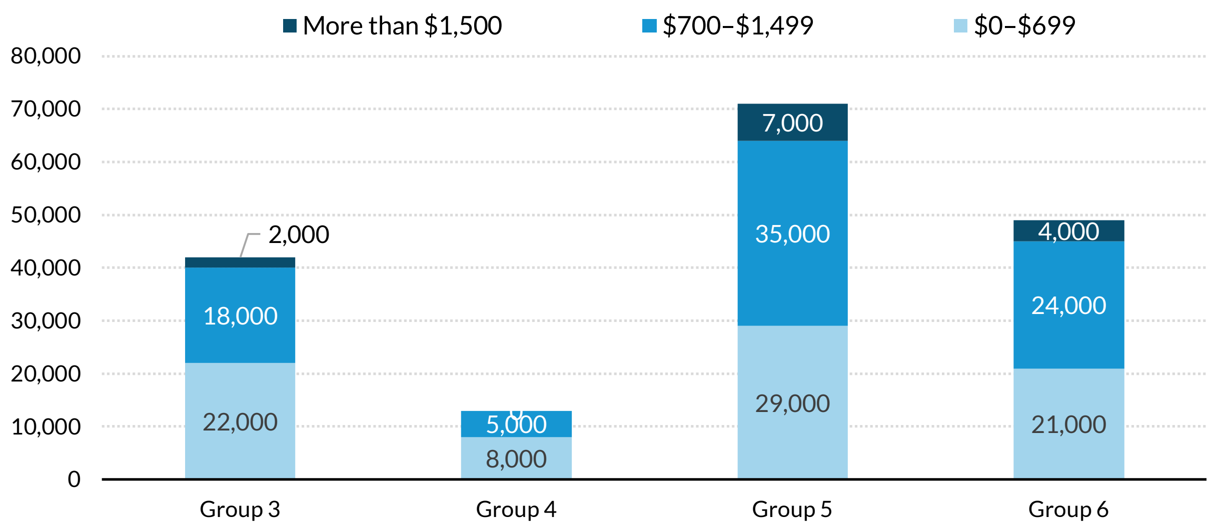


URBAN INSTITUTE

Source: Urban Institute projections from American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org, and the North Carolina Office of Management and Budget.
Notes: Growth in units that are vacant and for sale or for rent is assumed to match the overall growth in units needed to accommodate households to maintain current vacancy rates. Units that were seasonal or vacant and being held off the market at baseline are not included in this figure.

FIGURE 15

Housing Units by Cost Band Needed to Accommodate Household Growth from 2015 to 2030 in Groups 3 to 6



URBAN INSTITUTE

Source: Urban Institute projections from American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org, and the North Carolina Office of Management and Budget.
Notes: Growth in units that are vacant and on the market is assumed to match the overall growth in units needed to accommodate households to maintain current vacancy rates. Units that were seasonal or vacant and being held off the market at baseline are not included in this figure.

Preservation of Both Subsidized and Unsubsidized Affordable Housing Is Critical to Meeting Future Housing Needs

Our projections of households by income band indicate that by 2030, about 1.7 million households will need homes in the low cost bands (under $700 a month in 2017 dollars). At baseline, North Carolina has less than 1.5 million homes priced at this level. Preserving low-cost homes is cheaper than producing new ones at this cost level, and the market does not usually produce low-cost homes without public subsidies. Preservation strategies will be needed in all areas of the state to preserve rental housing with existing subsidies and to preserve unsubsidized low-cost rental homes as both age and to preserve owner-occupied homes so residents can age in place when appropriate. To meet North Carolina's future housing needs, the state must preserve as much of this low-cost stock as possible. This need is even more urgent given the economic crisis facing renters (and landlords and rental markets in turn) as they lose income because of the COVID-19 pandemic. An increase in rent arrears will especially destabilize the low-cost unsubsidized stock, leading to an increased risk of loss.

TABLE 6

Estimated Housing Units with Federal Subsidies in North Carolina, 2020

Subsidy type	Number of developments	Estimated units
Public housing	203	25,180
Public housing and other subsidies	20	1,703
Section 8 only	513	10,729
Section 8 and HUD mortgage (FHA or Section 236) only	201	12,804
Section 8 and other subsidy combinations	154	9,361
Total with deep subsidies	*1,091*	*59,777*
Low-income housing tax credit only	791	34,912
Low-income housing tax credit and other subsidies	434	21,994
HOME only	284	4,377
Rural housing subsidy only	300	10,803
HUD-insured mortgage only	21	3,422
All other subsidy combinations	7	290
Total federally subsidized units	**2,928**	**135,575**

Source: Urban Institute analysis of the National Housing Preservation Database.

Notes: FHA = Federal Housing Administration; HOME = the HOME Investment Partnerships program; HUD = the US Department of Housing and Urban Development. In some developments, multiple types of subsidies are used to provide affordable units. Whether those subsidies are applied to the same units or spread out across units is unknown. The total number of assisted units in the state may vary by 63. As noted in the text, information on units that are subsidized through the Indian Housing Block Grant or other programs was not available.

Federally subsidized housing plays a critical role in meeting the needs of households in the lowest cost bands. Table 6 shows that the state has only 59,777 federally assisted homes in public housing and Section 8 properties that are affordable to households with the lowest incomes. Another 74,735 homes have federal subsidies that make them affordable to households with slightly higher incomes. Additional homes are federally subsidized through the Indian Housing Block Grant and other programs, but no data were available to quantify the total stock of those units (or any subsidy expiration dates) owned by the Eastern Band of Cherokee, Lumbee, Haliwa-Saponi, or Coharie tribes.

About three in five federally subsidized homes are in groups 1 or 2; more than 50,000 subsidized homes are spread across the other areas of the state (table 7). All groups also have significant shares of subsidized homes with deep subsidies (public housing and Section 8) that make the homes affordable to households with the lowest incomes, ranging from 37 percent in group 1 to 50 percent in group 5.

TABLE 7

Estimated Housing Units with Federal Subsidies in North Carolina by Group, 2020

	Units with deep subsidies	Other subsidized units	Total
Group 1: Metropolitan counties with large cities	15,777	26,765	42,542
Group 2: Metropolitan counties with large populations	19,979	20,730	40,709
Group 3: Metropolitan counties with small populations	7,120	8,976	16,069
Group 4: Nonmetropolitan areas with more low-cost housing	6,275	7,070	13,345
Group 5: Nonmetropolitan areas with less low-cost housing	7,829	8,137	15,966
Group 6: Nonmetropolitan areas with higher recreational revenue	2,797	4,072	6,869

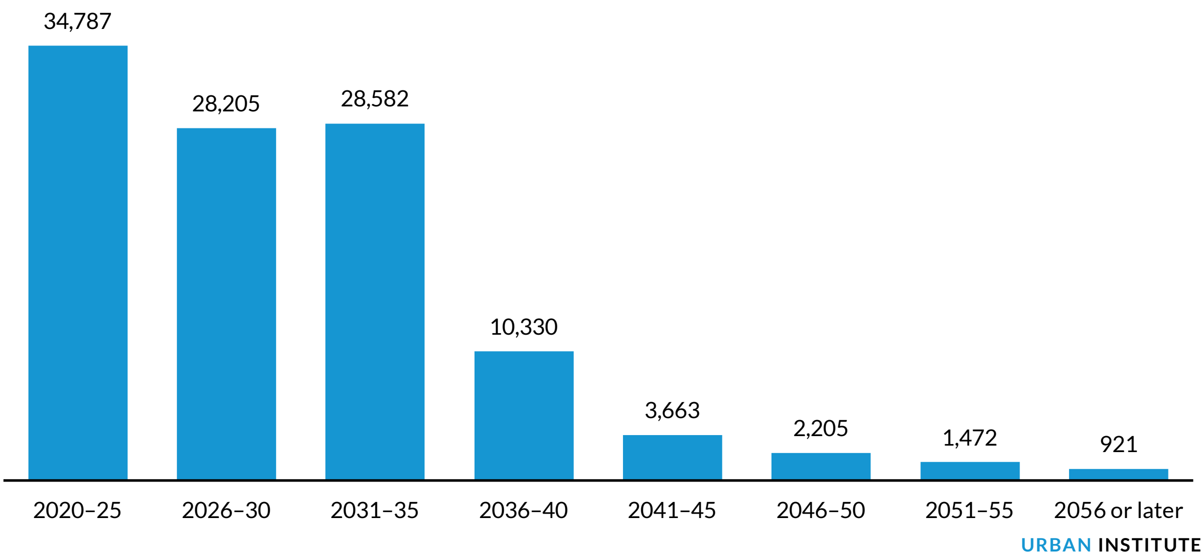
Source: Urban Institute analysis of the National Housing Preservation Database.

Notes: In some developments, several types of subsidies are used to provide affordable units. Whether those subsidies are applied to the same units or spread out across units is unknown. The total number of assisted units in the state may vary by 63.

By 2030, nearly 63,000 homes (47 percent) in the state's federally assisted housing stock will reach the end of their current affordability commitments, at which point some owners may choose to raise the property's rent or renovate and redevelop it to a market-rate development (figure 16). About 35 percent of the 35,000 homes set to expire before 2025 have Section 8 contracts. Most Section 8 property owners renew their contracts, but they typically do so for only one or two years, making these units vulnerable in housing markets with significant price appreciation.

FIGURE 16

Federally Assisted Housing Units in North Carolina by Year of Affordability Restriction Expiration



Source: Urban Institute analysis of National Housing Preservation Database.
Notes: Public housing does not have affordability restrictions that expire. Figure excludes 230 units missing data on expiration dates. Figure includes 30-year subsidy end dates for those units subsidized by the low-income housing tax credit with 15-year end dates that occurred before 2020 and 15-year end dates otherwise.

Table 8 shows that by 2030, each group in North Carolina will have 40 to 50 percent of their federally subsidized housing stock subject to the affordability restrictions expiring. With the growth in households expected in the bottom of the income distribution, especially in groups 1, 2, 5, and 6 preservation strategies will be critical in the face of increasing market pressure that may incentivize building owners to opt out of Section 8 contracts.

TABLE 8

Federally Assisted Housing Units in North Carolina by Group with Affordability Restrictions Expiring by 2030

	Units expiring by 2030	% of subsidized units in group
Group 1: Metropolitan counties with large cities	21,068	50
Group 2: Metropolitan counties with large populations	19,290	47
Group 3: Metropolitan counties with small populations	7,339	46
Group 4: Nonmetropolitan areas with more low-cost housing	5,915	44
Group 5: Nonmetropolitan areas with less low-cost housing	6,465	40
Group 6: Nonmetropolitan areas with higher recreational revenue	2,915	42

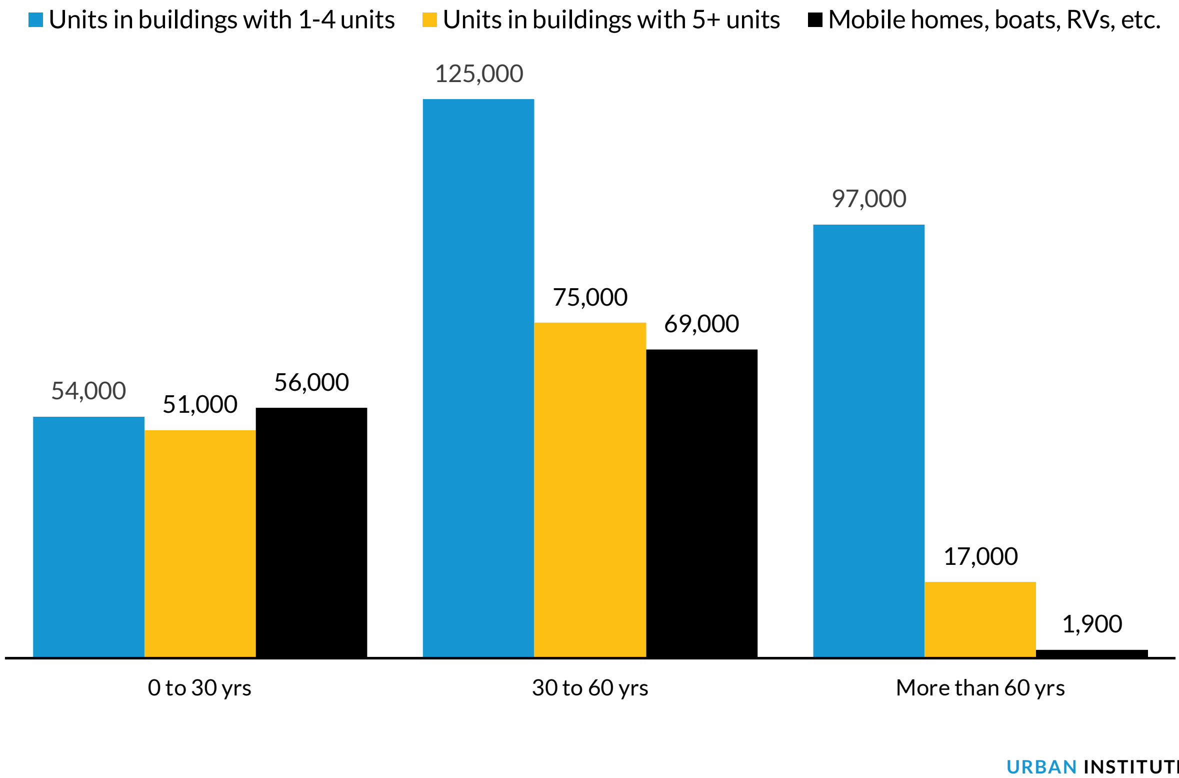
Source: Urban Institute analysis of National Preservation Database.
Notes: Public housing does not have affordability restrictions that expire. Figure excludes 230 units missing data on expiration dates. Figure includes 30-year subsidy end dates for those units subsidized by the low-income housing tax credit with 15-year end dates that occurred before 2020 and 15-year end dates otherwise.

Though affordability is not time limited for public housing units, the age, physical deterioration, and lack of capital for maintenance and renovations put these homes at risk of exiting the affordable housing stock. We estimate that about 16 percent of public housing units in the state were built at least 50 years ago and need major renovation. Another 61 percent of units were built at least 30 years ago and may also need system repairs and upgrades. Federal funding for public housing is widely acknowledged to have been insufficient to maintain and upgrade these properties.[17] As a result, much of the stock may be in poor condition, and many units may be uninhabitable.

The majority of the state's existing low-cost rental stock is unsubsidized, meaning no public funding is keeping the rents low. These homes play a critical role in meeting housing needs, and preserving them (at their current affordability levels) should be a priority, especially during the economy's recovery from the COVID-19 pandemic. Though data are not available to precisely define unsubsidized affordable rental housing, the North Carolina has 546,000 homes renting for less than $700.[18] We estimate a minimum of 47,000 of these homes are in buildings with five or more units that are not subsidized; 267,000 are in buildings with one to four units; and 127,000 are in mobile homes or other unit types, which are also unlikely to be subsidized. Most homes in low-cost rental buildings are more than 30 years old (figure 17). Twelve percent of units in buildings with five or more units and 35 percent in buildings with one to four units are more than 60 years old. As these units age, need major systems replaced, or physically deteriorate, they may be lost from the housing stock altogether, or they may be renovated and their rents raised to market levels. Rented mobile homes, officially called manufactured housing, are also at risk of exiting the affordable rental stock as they age; more than half are already over 30 years old. Manufactured housing faces two primary preservation risks: physical inadequacy of units built before 1995 (when new wind standards took effect) and the preservation of manufactured housing communities. The groups across the state all displayed similar patterns in the age and structure type of their affordable rental housing stock.

FIGURE 17

Units in North Carolina with Rents below $700 by Age and Type of Building, 2013–17



Source: Urban Institute analysis of the American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org.

Note: Includes subsidized units.

Many homeowners will also need to replace major systems and upgrade their units as they age. We are unable to estimate the quality of owner-occupied units based on age alone, but we expect that many of the 96,000 owner-occupied mobile homes with costs of less than $700 a month that are more than 30 years old will require repairs and upgrades.

We estimate that 405,000 rental units in North Carolina that are currently affordable to households at the lower end of the income distribution will likely require an intervention of some kind before 2030 to maintain affordability, such as renovation, major rehabilitation, subsidy renewals, or refinancing (table 9). Preserving as many homes as possible in both the subsidized and unsubsidized rental housing stock will be critical to better aligning the state's future housing to stock to meet the needs of its residents.

TABLE 9

Rental Units in North Carolina That May Need Intervention to Preserve Affordability before 2030

	Number of units
Federally assisted housing stock with subsidies expiring by 2030	63,000
Public housing units	27,000
Likely unsubsidized affordable units in 5+ unit buildings estimated to be older than 30 years	30,000
Likely unsubsidized affordable units in 1- to 4-unit buildings older than 30 years	214,000
Likely unsubsidized affordable units that are mobile homes, etc. older than 30 years	71,000
Total	**405,000**

Source: Urban Institute analysis of National Preservation Database and the American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org.

Notes: Data are rounded to the nearest thousand. Appendix A includes details on our assumptions for these estimates.

A Summary of Housing Resources in North Carolina

Although regulatory changes, coordination of public and private action, and new investments can address many of the housing challenges described, subsidies are essential to ensuring affordability at the lowest income levels. Different regulatory environments and marginal decisions can reduce the cost of housing construction, maintenance, and operations, but the development and rehabilitation costs to deliver homes that are habitable and safe require setting rents or home prices higher than many North Carolinians can afford. A complete housing market that serves households across the income spectrum requires subsidies.

The Federal Funding Role

The federal government plays a critical role in providing housing subsidies. Ideally, the federal government would provide significantly more resources to help close the gap at the bottom of the housing cost distribution. In fact, state and local governments may be unable to completely close that gap without an expanded federal contribution. But federal spending on housing subsidies for households with low incomes has decreased in real dollars since the mid-1990s (Theodos, Stacy, and Ho 2017). Therefore, it is critical that jurisdictions take full advantage of the federal resources available, such as preservation of existing public housing stock and strategic use of housing vouchers, HOME Investment Partnerships, Community Development Block Grant funding, and low-income housing tax credits. Appendix C provides a summary of federal community-development resources in North Carolina.

State and Local Funding Roles

States and local governments administer and distribute federal housing resources and add subsidies through direct allocation and tax expenditures. Housing trust funds provide a mechanism for collecting and distributing housing funds. The legislation authorizing a housing trust fund governs what types of subsidies and investments it can provide. For example, the limits on a housing trust fund may stipulate that it can distribute resources for property-level subsidies only, or a trust fund could aggregate resources for subsidies at both the property level and the household level. The purpose of North Carolina's housing trust fund is "to increase the supply of decent, affordable, and energy-efficient housing for low, very low, and moderate income residents of the state."[19]

Housing is part of a state's infrastructure, and funding to ensure housing affordability and quality is essential in both booms and busts. A dedicated revenue source gives housing trust funds a pool of funding that can better withstand budgetary debates, and special allocations to the trust fund through a bond or appropriations can quickly add funds to respond to a timely need.

Nearly every state has a housing trust fund, although their size and effectiveness vary.[20] Frequent sources of funding for state housing trust funds include the following:

- **Taxes:** The most common source for state housing trust funds is the real estate transfer tax or documentary stamp tax.[21] States with such a tax may collect a flat percentage of property value, tax at higher rates for higher property values, or limit the tax for first-time homebuyers. For example, Nevada uses a real property transfer tax of 10 cents per $500 of value. In 2015, the Nevada fund received $3.5 million.[22] Other state taxes that currently provide a dedicated revenue for housing trust funds include the smokeless tobacco tax, excise tax, and state income tax. Although taxes collected on real estate may offer reliable funds toward housing needs unmet by the market, they may reduce sale prices or the volume of sales for property types affected (Best and Kleven 2013; Kopczuk and Munroe 2015).
- **General appropriations:** The second most common source for state housing trust funds is general appropriations.[23] This funding can expand and retract based on the legislature's priorities, offering an unpredictable source likely to face sharper cuts during economic downturns than the ebbs in a dedicated source. In Texas, the state housing trust fund receives general fund appropriations. In 2020, the fund was allocated $5.1 million.[24]
- **Document recording fees:** The third most common source for state housing trust funds is a document recording fee.[25] Cities and counties often levy fees when home sellers or buyers submit documents, such as mortgages, deeds, or other legal records. These fees, although small

per document, provide a consistent source of revenue similar to real estate transfer taxes. In South Carolina, for example, the state charges a deed recording fee of $1.30 for every $500 of property value, $0.20 of which goes to the state housing trust. In fiscal year 2019, the fee generated more than $11 million for the housing trust fund.[26]

- **Bond proceeds:** Government bonds are used for a wide variety of capital projects, and some states have used bonds to add resources for housing trust funds. The bonds may support housing production, rehabilitation, or related infrastructure needs. As with appropriations, bond revenue does not provide a dedicated source for automatically supporting housing trust funds each year. They can, however, support large infusions of resources as needed. The Connecticut Housing Trust Fund for Growth and Opportunity is funded by general obligation bonds and in 2015 was allocated $30 million.[27]
- **Other dedicated revenue sources:** States may also dedicate resources from other reliable revenue vehicles to the housing trust fund. Arizona, for example, dedicates net revenue from the housing finance agency's single-family mortgage programs to the housing trust fund.[28] Unclaimed property in Arizona also fuels the trust fund.

Local governments may use all the sources listed as well as some locally specific options, including the following three:

- **Linkage fees:** Market-rate commercial or residential developments may pay linkage fees to help subsidize the creation or preservation of affordable units. Although linkage fees on commercial development ebb during development downturns, they can boost housing subsidies when commercial growth catalyzes an increase in housing demand.
- **Tax increment financing:** A method of funding infrastructure or development needs by borrowing against the projected increase in tax revenue within a specific geographic boundary. Allowable uses of tax increment financing may include subsidizing housing development or preservation.
- **Demolition fees:** Some communities may charge a fee when approving certain types of residential demolition, especially if demolition is expected to reduce affordability in the area.

The North Carolina Housing Finance Agency operates the state's housing trust fund. In 2017, the state provided $7.7 million in funding to the housing trust fund, down from an inflation-adjusted $22 million in 2007. According to the North Carolina Housing Finance Agency website, $1 million in the trust fund can assist 108 households.

Further, the state manages additional revenue sources, such as tax-exempt bonds, low-income housing tax credits, and federal block grants to nonentitlement jurisdictions; local governments may have federal block grant resources and housing authority programs. In each of these cases, state and local governments can prioritize and align decisions about revenue use toward policies that effectively preserve and produce affordable housing and protect residents from displacement.

Aligning Housing Strategies to Market Needs

No one policy can solve North Carolina's housing challenges; instead, the state and its local governments will need to pursue a collaborative portfolio of policy tools that ensure a suitable housing supply with adequate protections for residents across the income spectrum. The evidence about the state's current affordability challenges, projected household growth by income, different market characteristics, and rental preservation needs can inform what strategies it adopts. Efforts to identify and build policy tools without a sufficient sense of the need or the substantive differences between their strategic value can lead the state to pursue lauded policy innovations that generate weak results.

Equipped with strategies suited for North Carolina's most prominent or timely housing needs and capacities, local political and technical experts can help the state select effective combinations of policies that can address the scale of the need. Governments can choose to advance the same strategic goal through different types of policy tools, such as laws and regulations, funding, and leadership capacities. The mix of policies should aim to produce more housing in the locations and at the affordability levels needed; preserve existing affordability while improving quality; and protect households from housing discrimination, instability, and natural disasters. Experts in North Carolina's history and present have indispensable knowledge that can help policymakers move from general state and local targets and strategies to a narrow set of policy recommendations, calibrate each tool to state and local conditions, and assign responsibility.

The diversity of markets in the state differ in their housing characteristics and demand projections, and that may lead to different strategic goals for each market. The state can support the adoption of policy tools that align with local needs through a combination of enabling legislation, new funding streams, shifted funding priorities, and leadership that channels both energy and investment toward evidence-based housing policies. Given the statewide shortage of housing affordable to lower-income North Carolinians, tools to expand and preserve affordability can improve housing conditions in rural, suburban, and urban areas. Meanwhile, strategies to boost housing production align with growth projections in urban communities, while rural communities largely need investments to improve housing quality or catalyze demand.

Although housing policy experts emphasize the importance of aligning *preservation* and *production* solutions, more recent reports elevate *protection* as well (ChangeLab Solutions 2015). Each of the three contributes to meeting the needs of a healthy housing market. Preserving the current supply of low-cost housing ensures that supply loss does not lead to or exacerbate imbalances between supply and demand. Housing production, whether through new construction or adaptive reuse of nonresidential structures, can then go toward adding net new homes rather than just replacing lost supply. Meanwhile, protections against displacement and discrimination facilitate equitable access to the current and future supply.

Preserve Existing Housing Affordability

Conversations about filling the housing gap often focus on new construction, but preserving existing low- and moderate-cost units is an essential (and often cost-effective) complementary strategy. Supply gaps in the lowest cost bands underscore the importance of preservation to ensure the gaps do not widen. Under the right circumstances, preservation can retain affordability in areas with high land values, bypass criticism of new development, and prevent the displacement of current residents (Treskon and McTarnaghan 2016).

Produce More Housing across the Affordability Spectrum

Policy action to find and remove production impediments across affordability levels plays an essential role in parts of the state with supply gaps and/or rising demand. Building more homes (whether single-family or multifamily and whether rented or owned) can alleviate market pressures that lead to rents and home prices generally higher than current residents can afford. However, new housing production does not relieve market pressure across the board. For example, new production of low-middle- and middle-cost housing may shift market pressures for households with low, low-middle, and middle incomes, but it is unlikely to attract households with higher incomes or reduce supply pressures for households with the lowest incomes.[29] New production strategies will generate the greatest benefit if they are targeted to the housing cost levels and locations experiencing supply shortages, and some spillover benefits will emerge. When aligning supply to demand does not sufficiently bring down housing prices, policies can directly improve affordability by reducing the cost of development or offering project-level subsidies.

Protect Households from Housing Discrimination, Displacement, and Hazards

When fostering a housing market that can meet current and future needs, strategies and policy tools to protect households—particularly people with low incomes, people of color, and other marginalized groups—are as important as those to preserve and produce homes. Otherwise, discrimination, displacement, and substandard conditions will sustain and exacerbate inequities in the housing market that impede both individual and regional success (Galvez et al. 2017).[30] This strategy also includes improving disaster preparedness and resilience, which can better protect vulnerable geographies and their residents from financial and housing instability that results from natural disasters.

Regional Variation

Although our state typology shows distinct differences between the metropolitan county groups (groups 1, 2, and 3) and the rural county groups (groups 4, 5, and 6), no county in North Carolina has enough affordable housing to meet the needs of its lowest-income residents. Our projections of household growth, presented earlier in the report, include substantial growth in groups 1 and 2, moderate growth in groups 3, 5, and 6, and more modest growth in group 4. Unless stakeholders across the state work together toward a healthier housing market, current gaps in the low-cost housing supply will combine with added household demand to exacerbate affordability challenges. This section describes how preservation, production, and protection relate to the state's varied markets. The policy tables in the next section note the market conditions better suited for specific preservation, production, and protection strategies.

Preservation strategies are needed everywhere in the state but for different reasons. In counties projected to have little net increase in housing demand, preservation strategies can focus on improving quality and retaining supply in the lower cost bands. A lack of reinvestment in existing housing can lead to deterioration and either substandard housing or vacancy, issues that are already apparent in rural counties with more affordable housing markets. Statewide, low-income residents compete for too few affordable and decent-quality places to live. Losing any of the existing affordability would exacerbate these issues.

In counties with a projected substantial or moderate increase in demand, preservation strategies allow production policies to work at a lower cost. High demand, especially from relatively higher-income households, creates an incentive for property owners to sell or redevelop unsubsidized properties and increase the price in the process. Among units with rental assistance, loss occurs for similar reasons when a subsidy contract expires and/or the property owner decides to "opt out" of receiving assistance and instead rent the unit at a market rate. To maintain affordability in markets with rising demand, governments and other mission-driven organizations can acquire and operate either subsidized or unsubsidized units likely to shift to market-rate prices.

Production strategies are an important complement to preservation and protection across the state, but this is especially true in groups 1 and 2 because of their higher growth projections. Among the rural groups, we project the most growth in the recreation-driven group 6 and less affordable group 5, suggesting production policies in these areas have strong benefits. Policies that support new housing production can also meet localized demand that may be obscured in our groupings. For example, in rural recreation-oriented economies, housing production near attractions can enable job accessibility because short-term housing demand can add market pressure. New small-lot or multifamily development can bring mobility into communities where exclusionary land-use policies led to continued segregation. Housing and land-use restrictions increase the costs of housing development, constrain supply, and drive racial and economic segregation. The upward pressure on housing prices from land-use restrictions may be greater in areas with powerful economic magnets, such as the high-tech research triangle. Metropolitan counties with patterns of exclusionary land use or near specialized job centers may benefit from production strategies.

Protection strategies are needed statewide to address substandard housing, continued observations of discrimination in housing markets, and the displacement risks inherent when unsubsidized rents are too high for households in the lower income bands. Natural disasters, public health crises, and economic downturns add to a market's displacement risks, and these call for surges of additional protection resources and for a stronger underlying landscape of resident-protection policies. Strategies for preventing disaster-related damage and displacement rise among the housing policy goals in the eastern part of the state, but they remain relevant (though perhaps less prioritized) in other counties as well because heavy rains and storm surges overflowing the rivers also present substantial flood risks.

Developing and Narrowing the Menus of Policy Tools for North Carolina's Housing Needs

Strategic alignment of policy tools with evidence about current housing conditions and future growth projections can guide the state toward healthier housing markets that ensure suitable housing across the income spectrum. Political and technical experts in North Carolina can then assess the range of policy tools suited to advance a particular strategy and identify the set of policies the state, localities, and other stakeholders can most readily adopt, strengthen, or expand.

We began with a list of more than 50 types of housing policies that state and local governments have implemented to meet increasing demand and protect residents. Based on input from project advisors in North Carolina, we then reviewed the list to ensure inclusion of policy tools suited to the state's varied rural contexts and hurricane risks. Through this process, we added nearly 20 additional policy tools to our analysis. For each policy, we looked for evidence of preemption or other barriers to enactment, scanned for examples at the state or local level in North Carolina, supplemented our findings with examples from other locations, and drew on prior research related to policy efficacy. A complete menu of policies reviewed can be found in appendix B.

We then compared the policy research with the findings from the state and regional household market analysis. Although experts in North Carolina are best suited to convert this evidence into recommendations, we opted to apply the evidence from this report and insights from conversations with advisors in the state to create policy recommendations that emphasize the state's role. To develop the recommendations, we first narrowed the list of policy tools to those that can deliver on the substantial statewide preservation needs, enable lower-cost production, support both homeownership and renter stability, or improve preparedness for future disasters. We honed in further on those that we anticipate will have more resonance in the state, such as policies that leverage the private sector, rely on existing rights, and can work in rural contexts. We encourage policy advisors and advocates to examine other policy options related to the same housing strategies if the tools highlighted in this report seem either less effective than desired or not suitable to a particular political, legal, or market context. We did not review whether the combined challenges for renters and rental property owners during the COVID-19 pandemic may lead to unexpected alliances that improve the political feasibility of rental supports, nor did we assess the changing landscape for state and local budgets, philanthropy, and private investment.

Preserve Existing Housing Affordability

Every region of North Carolina can benefit from policy tools that preserve and reinvest in the quality and affordability of existing housing. Preserving affordability and quality ensures that property owners can reinvest in maintenance and repairs of either rented or owner-occupied housing without pricing residents out. In recreation areas, preservation retains livability for the local workforce and retirees, ensuring a stable base market that can accommodate short-term or seasonal spikes in demand.

Meanwhile, preserving currently affordable homes in growing markets leverages prior public and private investments to limit the need for subsidies.

This section covers the policy tools the state, counties, or municipalities can adopt, sustain, or strengthen in advancing three preservation strategies:

1. Empower mission-driven organizations to acquire properties for continued affordability
2. Maintain and improve the physical condition of low- and moderate-cost housing
3. Incentivize current rental property owners to maintain low or moderate rents

These strategies focus on different parts of the preservation goal, and policy tools under each strategy apply different capacities or methods to advance that strategy. After the policy menu, we describe the policies that our initial analysis suggests can meet preservation needs in North Carolina, including some examples in practice both in North Carolina and elsewhere.

TABLE 10

Policy Menu: Preserve Existing Housing Affordability

Strategies	Market conditions	Recommended policy tools for North Carolina
Empower mission-driven organizations to acquire properties for continued affordability	**Housing supply includes** ▪ subsidized rental buildings, ▪ manufactured home parks, and/or ▪ current or expected sharp demand increase **Mission-driven organizations have** ▪ sufficient capacity for property acquisition and asset management	**Public funding/resources** ▪ Provide financing for acquisition and/or rehabilitation to enable nimble and lower-cost acquisition. ▪ Create a manufactured home park acquisition fund to enable continued operation by nonprofits, public housing authorities, or cooperatives. **Voice/convening power** ▪ Create preservation networks and inventories to enable advance preparation by public and nonprofit actors. ▪ Convene private-sector partners for preservation investments to increase flexible resources for affordability without public subsidy.
Maintain and improve the condition of low- and moderate-cost housing	**Housing supply includes** ▪ properties built or substantially improved more than 30 years ago ▪ major or minor housing code violations, and/or ▪ disaster-prone locations **Owner types** ▪ Owner-occupants with little home equity ▪ Rental owners with moderate short-term return goals ▪ Any mission-driven landlord	**Public funding/resources** ▪ Fund and expand rehabilitation assistance to finance required improvements in rented or owned housing. ▪ Rehabilitate public housing to stop public housing units from going vacant because of disrepair. ▪ Provide manufactured-home replacement assistance to address repair needs and disaster risks. **Voice/convening power** ▪ Engage a multisector partnership to preserve housing quality and access to bolster both supply and demand in slower-growth or shrinking areas.
Incentivize current property owners to maintain low or moderate rents	**Housing supply includes** ▪ low unsubsidized rents, and/or ▪ expiring rental subsidies **Owners' returns** ▪ Long-term sale ▪ Moderate short-term ▪ Tax write-offs	**Laws and regulations** ▪ Identify preservation-oriented subsidy priorities to facilitate owners' commitment to low- and moderate-cost housing.

EMPOWER MISSION-DRIVEN ORGANIZATIONS TO ACQUIRE PROPERTIES AT RISK OF LOSS

When rental demand rises, multifamily property owners may opt to either redevelop or reposition apartments at higher rents. By acquiring lower-cost rental properties as they become available, mission-driven organizations, including nonprofit and for-profit affordable housing operators, can keep rents down to levels that households with lower incomes can afford. Although this strategy is mainly suited for older apartment complexes and subsidized rental buildings nearing the expiration of their affordability obligations, the stock of lower-cost single-family rentals could also call for mission-driven preservation. Policy tools that advance this strategy include the following.

Provide financing for acquisition and/or rehabilitation. Acquisition funds can employ housing trust fund dollars, private equity, or other funding sources to help nonprofit developers purchase and improve properties in exchange for continued or perpetual affordability (Grounded Solutions Network 2018). An effective property acquisition fund allows a mission-driven entity to compete with the capital speed of the private market (ChangeLab Solutions 2015; Williams 2015). Especially when the demand for rentals is rising, nimble acquisition funds can enable class B and C apartment buildings to remain modest and affordable rather than undergoing substantial upgrades and being repositioned for higher-income residents. Pooled resources from public, philanthropic, and private-sector organizations can effectively deliver capital to fill this gap.

In 2019, the City of Durham, in partnership with Self-Help Credit Union, Duke University, North Carolina Community Development Initiative, and SunTrust launched an Affordable Housing Loan Fund that can finance the full acquisition cost of existing single- and multifamily developments (or land for new production).[31] The acquisition loans intend to enable quicker action to secure properties for ongoing affordability, and they need complementary sources of low-cost permanent financing. In the same year, Durham residents passed a $95 million affordable housing bond—the largest in the state's history—to fund a combination of housing production and preservation activities, including the preservation of 800 units of rental housing from the subsidized and unsubsidized stock, including public housing.[32]

An analysis for Wake County also identified an acquisition and preservation fund (HR&A Advisors 2017) as a key priority for both acquisition and low-cost permanent financing for existing affordable multifamily rental properties.

Create a manufactured-home-park acquisition fund. Because manufactured home residents seldom own the land under their home, both owner-occupants and renters risk displacement when land values for manufactured home parks rise. There are roughly 50,000 manufactured housing communities across the United States, with rough estimates placing the number of communities in North Carolina at 4,000. Although not all manufactured homes are located in housing communities, about 50 percent of people living in a manufactured home live in a manufactured housing community. In most of these communities, residents rent the land under the homes, and the land owner can choose to sell to a new owner for redevelopment without residents' consent. Because manufactured housing is difficult to move, the sale of a community can lead to owners of manufactured homes losing their homes and to an unplanned move for both renters and owners of manufactured homes in the park. When park owners wish to sell, the residents of manufactured homes in the community can work with supporting organizations to match other offers and generate a mutually beneficial solution for the owners of the manufactured homes, the owner of the park, and other residents in the community.

To preserve long-term access to affordability through owning or renting a manufactured home, governments can create acquisition funds for manufactured home parks (box 1). Such policies can preserve an important source of low-cost housing, preserve the value of manufactured home owners' investment, and prevent displacement of both owners and renters.

BOX 1

Manufactured-Home Park Preservation

Recognizing the need to stabilize manufactured-housing communities, a few states are passing laws to preserve manufactured-home parks. In Oregon, HB 2896[a] set aside $9.5 million of the Housing and Community Services Department General Fund to create an acquisition fund that can be used to finance purchases of manufactured-home parks by nonprofits, public housing authorities, or manufactured-dwelling-park nonprofit cooperatives. The bill also put aside an additional $3 million for the Manufactured Dwelling Parks Account. Money from this fund can be granted to nonprofits for developing or improving infrastructure in a manufactured-dwelling park. Manufactured-housing preservation efforts in Oregon have expanded because high demand for housing in the state is pushing up costs. Agricultural workers especially rely on manufactured housing as a source of low-cost homes, but park closures have led to the loss of more than 2,700 homes (Treskon and McTarnaghan 2016).

Another way to stabilize manufactured-housing communities is to allow residents to purchase the manufactured housing property from their landlord. ROC USA is a national nonprofit that provides technical assistance and affordable financing so residents can form a resident-owned cooperative and purchase the land from the manufactured-home-park's owner. One successful example is in Duvall, Washington, where residents of the Duvall Riverside Village[b] received assistance from ROC USA and the Northwest Cooperative Development Center to become a resident-owned cooperative and purchase their land from their landlord.

Government role

- Governments can pass a right-of-first-refusal law so manufactured-housing community tenants have a right to purchase the property they live on before their landlord can sell it to someone else. States should also enact requirements that tenants be notified 60 days in advance of their park being sold.

- In Oregon, the state's Housing and Community Services Department General Fund set aside money for a manufactured-home-park acquisition fund.

Nonprofit role

- Nonprofits and resident-owned cooperatives can purchase manufactured-home parks at risk of being sold in the private market.
- ROC USA provided technical assistance and affordable financing so residents could purchase the land in their manufactured-home park.

[a] H.B. 2896, 80th Oregon Legislative Assembly (2019).
[b] Loren Berlin, "From Stigma to Housing Fix," *Land Lines* (Lincoln Institute of Land Policy), July 2015.

Create preservation networks and inventories. Advocates, nonprofits, government agencies, and other interested parties can use a preservation inventory to monitor the status of lower-rent buildings and intervene to preserve affordability when necessary. By working together as a network, stakeholders can coordinate their response and avoid duplicative efforts. Once an inventory is in place, policymakers will also have better information to assess the appropriate scope and scale of other preservation programs. Preservation networks in Chicago and Minnesota have generated inventories to enable strategic rental preservation and identified opportunities for investment, training, and policy change.[33]

Convene private-sector partners for preservation investments. Private, unsubsidized rental housing is a critical component of the nation's affordable rental housing. A 2011 study from the Joint Center for Housing Studies of Harvard University found that the majority of affordable housing was unsubsidized; 76 percent of the units that rented for less than $600 a month had no direct public subsidy (JCHS 2011. However, this housing stock is at risk of disappearing. Many properties may fall into disrepair because they are unable generate enough in rents to keep the units maintained. Further, low-cost units in rapidly gentrifying areas in both high-cost and lower-cost cities are being converted into higher-cost units (Schreiber 2018).[34] New tools and models, such as the Housing Partnership Equity Trust (box 2) and Community Development Trust, are demonstrating that private investors seeking modest but reliable returns will invest in affordable housing, and mission-driven housing providers can preserve housing in the low-middle and moderate cost bands without ongoing operating subsidies.

BOX 2

The Housing Partnership Equity Trust

The Housing Partnership Equity Trust (HPET), launched in 2013, is a social purpose real-estate investment trust that helps mission-driven nonprofit members who need financing. It attracts capital from philanthropic and for-profit institutions and combines that money with nonprofit housing partners to acquire and preserve unsubsidized affordable housing

Affordable housing often relies on government-backed subsidies and tax credit programs that help fund the acquisition or construction of the property. This process of putting together the financial structure from a range of government sources can be complex and time consuming. HPET makes it easier for nonprofits to acquire properties because it can invest directly and does not require government support. The investors in the trust are willing to accept a lower rate of return,[a] which makes it easier and cheaper for nonprofit partners to acquire properties that charge lower rents than other nearby properties. However, HPET works to manage properties effectively to reduce costs and ensure that residents have access to safe, quality housing. The original 12 members plus 2 later additions invested $200,000; HPN invested $400,000.[b] HPET has also received investments from the MacArthur Foundation and Ford Foundation as well as from Prudential, Citibank, and Morgan Stanley.

As of 2018, HPET has been able to acquire and preserve nearly 3,000 units in 15 properties.[c] HPET targets properties near employment, transit, and other community amenities to ensure that its residents are proximate to the opportunities needed to thrive. The typical tenant is earning between 60 and 80 percent of AMI and may be employed in the retail, construction or service sectors. HPET also targets properties in gentrifying neighborhoods to help preserve affordable housing in those communities.

Philanthropy role

- The MacArthur Foundation and Ford Foundation have made investments.

Nonprofit role

- The Housing Partnership Network provided an initial investment.
- Fourteen nonprofits are members of HPET: Aeon; AHC Inc.; Bridge Housing; Chicanos Por Causa, Inc.; CPDC; Eden Housing; Hispanic Housing Development Corporation; Homes for America; LINC Housing Corporation; Mercy Housing; Nevada Hand; NHP Foundation; NHT Communities; and the Preservation of Affordable Housing.

Private-sector role

- Several financial institutions have made investments, including Charles Schwab Bank, Citibank, Morgan Stanley, and Prudential.

[a] "Social-Purpose Real Estate Investment Trust Preserves Affordable Housing in Aurora," *Edge* (US Department of Housing and Urban Development, Office of Policy Research and Development), December 15, 2014.
[b] Noelle St. Clair, "Capital for Communities: Preserving Affordable Rental Housing through a Nonprofit Real Estate Investment Trust," *Cascade* (Federal Reserve Bank of Philadelphia) 95, Spring 2017.
[c] "Rental Solutions: Naturally Occurring Affordable Housing," Housing Partnership Equity Trust, accessed June 5, 2020, https://www.nhc.org/wp-content/uploads/2018/03/Housing-Partnership-Equity-Trust-slides.pdf.

MAINTAIN AND IMPROVE THE CONDITION OF LOW- AND MODERATE-COST HOUSING

Whether subsidized or unsubsidized, housing requires ongoing maintenance and periodic major repairs to stay viable. Most major housing systems need replacement on 10- to 20-year cycles, leading to high-cost years for owners of older properties as several systems near the end of their useful life. Changes in quality standards for manufactured housing also call for policy attention, especially for housing built before wind-load guidelines. Several policy tools can help cost-effectively address capital needs and prevent either deterioration or sharp price increases. Although most housing preservation tools focus on renters, homeowners with low incomes or low equity (often older adults) may also lack money for repairs, putting their housing security and health at risk and reducing the future stock of for-sale housing that is ready to be moved into.

Fund and expand rehabilitation assistance. Governments can help keep lower-cost housing viable and affordable through a range of assistance programs including small loans for minor repairs, low-cost loans and grants for more substantial repairs and capital reinvestment, and loans or grants for accessibility modifications. Rehabilitation loans, grants, and tax incentives often focus on single-family owner-occupied housing to prevent asset loss and on larger multifamily rental housing to keep the rents affordable despite expensive repair needs.

Opportunities for expanded rehabilitation-assistance policies include expanding eligibility to single-family rentals or small multifamily properties, addressing gaps in disaster-recovery funds, and offering a combination of repairs and home modifications to help owners age in place. Moreover, programs that allow property owners to seek small loans or grants can prevent hazards and preservation risks. Before housing needs major repairs, property owners with tight cash flow may defer routine maintenance to control expenses. Programs that eliminate the incentive for deferred maintenance can reduce the cost and gravity of repair needs in the future.

For owner-occupied single-family homes, the North Carolina Housing Finance Agency operates the Essential Single-Family Rehabilitation Loan Pool which, in 2020, proposes to give $8 million to eligible organizations operating at least at the county level for the rehabilitation of owner-occupied homes in most of the state. Several Habitat for Humanity affiliates across the state also operate repair programs for owners with incomes below 60 percent of AMI. Local governments often also offer assistance, such as Greensboro's Homeowner Housing Rehabilitation Program, which is available to households at or below 80 percent AMI, and their Disaster Relief Program, which assists with repairs and reconstruction of damaged properties if homeowners do not receive assistance from private insurance, the Federal Emergency Management Agency, or other programs.

The City of Greensboro also operates Rental Housing Improvement Program, which meets a less commonly addressed need by funding rehabilitation work for small multifamily developments (those with seven or fewer units).

Two variations on rehabilitation-assistance programs follow in boxes 3 and 4.

BOX 3

Small Multifamily Preservation through the Connecticut Housing Finance Agency

Although rentals are usually associated with large-scale apartments in the public's mind, buildings with fewer than 50 units account for over 90 percent of all rental units.[a] These small multifamily properties serve a critical role in communities across the country, helping promote income integration in suburban, rural, and even some urban communities by allowing people to live with a sustainable housing cost relative to their income. However, the viability and affordability of this housing type is not usually taken into account in traditional housing finance mechanisms. As a result, the Connecticut Housing Finance Authority (CHFA) created a three-pronged approach to help small multifamily properties thrive.

The Small Multifamily CDFI Loan Pool Program is the first part of the approach. This program works with three state community development financial institution (CDFI) partners—Greater New Haven Community Loan Fund (now Capital for Change), Hartford Community Loan Fund, and Housing Development Fund—to finance private investors to acquire, rehabilitate, or construct affordable housing. In particular, the program is designed to target vacant or blighted small multifamily properties by providing permanent financing for up to 20 years. The second program, Come Home to Downtown, focuses on properties with ground-floor retail and second-floor office or residential space that are typically thought of as traditional main street buildings. In five downtown communities in Connecticut, CHFA and Connecticut Main Street Center work with property owners to upgrade their properties and attract new residents. The final component is a Transit Oriented Development loan fund, developed in partnership with Connecticut's Department of Economic and Community Development and the Local Initiatives Support Corporation (LISC). It provides up to $3 million in financing per project for predevelopment and acquisition. Properties must be within a half mile of a transit stop and include some affordable housing.

CHFA reports that participating CDFIs have used $5.6 million to finance the rehabilitation of 44 properties resulting in 170 new affordable units under the Small Multifamily CDFI Loan Pool Program between 2014 and 2018.[b] Because of the low-cost funds, the program has saved property owners on average $230 a month. In addition, as of 2018, LISC has closed five loans for a total of over $6 million through the Transit-Oriented Development Capital Fund.

Government role

- The CHFA convened CDFIs to understand and identify challenges in financing for small multifamily properties.

- The CHFA dedicated $ 5 million in low-cost capital to the loan fund to support small multifamily financing.
- The CHFA partnered with Connecticut's Department of Economic and Community Development and the LISC to create a loan fund to support transit-oriented development and dedicated $1 million to the fund.

Nonprofit role

- Connecticut Main Street Center, through a contract with CHFA, offered technical assistance to individual communities and property owners and shared lessons learned with other towns that are undergoing similar types of mixed-use redevelopments.
- Greater New Haven Community Loan Fund, Hartford Community Loan Fund, and Housing Development Fund contributed to the loan fund program with a simple, private market–style approach.
- Connecticut's Department of Economic and Community Development and the LISC created a loan fund to support transit-oriented development.

[a] Brian An, Raphael W. Bostic, Andrew Jakabovics, Anthony W. Orlando, and Seva Rodnyansky, "Understanding the Small and Medium Multifamily Housing Stock," Enterprise Community Partners, March 30, 2017.
[b] Connecticut Housing Finance Authority, *2018 Summary Report* (Rocky Hill: Connecticut Housing Finance Authority, 2019).

BOX 4

CAPABLE Intervention: Home Repairs and Health Supports for Aging in Place

Community Aging in Place—Advancing Better Living for Elders (CAPABLE) is a home-based multifactorial intervention developed by the Johns Hopkins School of Nursing that partners a nurse, occupational therapist, and handy worker to support low-income seniors who wish to age in their homes. It was originally created as a demonstration project and tested from 2012 to 2015. Presently, Johns Hopkins offers workshops to train people who want to implement CAPABLE in their community.

The approach is centered around the notion that although diminished function is inevitable with aging, the home environment can be adapted to restore some functionality. In the five-month intervention, participants identify functional goals and the barriers that prevent them from achieving these goals. They then work with an occupational therapist to identify specific barriers and safety issues within their home. The occupational therapist requests necessary repairs from a handy worker, which can include installing grab bars, repairing railings, and lowering shelves. Within the intervention, the handy worker is permitted to make repairs totaling up to $1,300 a home. Lastly, a nurse visits the individual's home to help resolve challenges related to medication management, pain, depression, and communication with primary care providers. The initial demonstration was found to have improved the performance of activities of daily living (e.g., dressing, bathing, or walking) among 75 percent of participants across all demographic and chronic disease groups.

CAPABLE was replicated in Michigan as the MI-CAPABLE program. MI-CAPABLE is funded through a Home and Community Based Medicaid waiver and adds a social worker to the intervention. Because of the intervention's success, it is now being rolled out in all MI Choice Waiver programs across the state. Components of the CAPABLE program were also replicated by Bath Housing, a rural housing authority in Maine.

Government role

- The CAPABLE demonstration was funded by the Center for Medicare and Medicaid Innovation, and the MI-CAPABLE program was funded through a Medicaid waiver.
- In Maine, the Comfortably Home program is operated by the Bath Housing Authority.

Private-sector role

- For-profit and nonprofit entities are important implementation partners and can support gaps in health services or repair capacity.

Philanthropy role

- Philanthropy can fund implementation of one or more components.

Rehabilitate public housing. Public housing provides deeply subsidized apartments for households with the lowest incomes. But consistently insufficient federal funds for the public housing capital budget have led to diminishing housing quality and many units becoming uninhabitable, which in turn exacerbates affordable housing shortages. Jurisdictions can support public housing preservation through policy attention to ensure continued operations by reputable owners and vocal leadership to advance resident protections during rehabilitation. In some cases, jurisdictions may prioritize repairs and rehabilitation of the public housing stock when allocating their housing subsidy funds.

Currently, the federal response to public housing's capital needs backlog is the Rental Assistance Demonstration program. Rental Assistance Demonstration allows housing authorities to convert public housing and various legacy subsidy programs to project-based vouchers or rental assistance while retaining ongoing affordability requirements. Doing so allows properties to leverage public and private sources not available to public housing to rehabilitation and preserve the property as a source of affordable housing. Through the end of October 2018, housing authorities have raised $12.6 billion in financing for 103,000 units (Stout et al. 2019). Although this program has led to much-needed repairs, housing authorities and other stakeholders should plan and implement the program with care to minimize the risk of displacement and ensure that temporarily displaced residents have low barriers to return. The Rental Assistance Demonstration program was designed with several critical protections for residents, including a right to return to their unit or an equivalent unit and a provision that tenants continue to pay no more than 30 percent of their rent in most cases. Although some properties have had issues, overall most tenants reported that they were satisfied with the process and assistance they received. Seventy-five percent returned to their original unit, and 92 percent returned to the original property (Stout et al. 2019). According to 2016 US Department of Housing and Urban Development (HUD) data, 26 public housing properties in North Carolina with 4,459 total units were converted under the federal Rental Assistance Demonstration program.[35]

Provide manufactured home replacement assistance. As of 1976, manufactured home construction adheres to federal safety and quality standards, and subsequent updates to building practices and federal standards have increased quality further over the years. The addition of wind-zone standards and authorization for state regulation of home anchoring after Hurricane Andrew in 1994 have improved disaster resilience (Furman 2014). Homes built after 1994 are also substantially less likely than those built in earlier years to have inadequate conditions (Furman 2014).

Nonprofit housing organizations; the states of Oregon, Maine, and New York; and local governments from Florida to California operate manufactured-home replacement programs to help owners replace aging manufactured housing. Such programs often focus on helping owners replace pre-1976 stock. However, research on substandard manufactured homes has found similar levels of housing inadequacy between pre- and post-1976 homes still in use by 2011 (Furman 2014). This may reflect a combination of the loss of older poor-quality units, the use of weatherization programs to improve quality, the failure to limit new floodplain development, and insufficiently resilient materials and construction methods. Replacement assistance programs may be stronger if they are more flexible with their cut-off date or if they emphasize replacements of pre-1995 manufactured housing in high-wind areas.

Replacement assistance offers not only a way to preserve affordability and quality of the manufactured housing stock over time but also an opportunity for asset growth. Sales trend indices from the Federal Housing Finance Agency show that manufactured homes appreciate in value at around 3.4 percent annually compared with around 3.8 percent for site-built homes (though appreciation trends in North Carolina were more limited).[36]

Engage a multisector partnership to preserve housing quality and access. Markets with an aging housing stock and little reinvestment activity may face several barriers to preserving housing quality. In addition to needing rehabilitation funds, preservation in a slow-growth or shrinking market calls for activities that boost demand. Without these, rehabilitation may falter as high vacancy rates return.

States and local governments can work in concert with other sectors to strengthen the housing demand and improve the stock in areas with substantial reinvestment needs. Box 5 provides an example of such cross-sector collaboration.

BOX 5

The Detroit Neighborhood Housing Compact

The Detroit Neighborhood Housing Compact engages the public, private, nonprofit, and philanthropic sectors in collective action to build a healthier housing market and improve access to single-family homeownership. The Neighborhood Housing Compact serves as a regular forum focused on the implementation of specific programs and policies that work toward measurable goals. It is meant to be a complementary entity to the city's existing efforts and is composed of local private- and public-sector leaders, community development nonprofits, philanthropists, and residents.

The Compact was founded with two central goals. The first was to build the capacity of the renovation delivery system to renovate, maintain, and reuse single-family homes at the scale necessary to address Detroit's housing needs and aspirations. The second was to preserve Detroit's single-family housing stock to strengthen neighborhoods and retain current residents. In the years since the founding, several concepts emerged as ways to implement those goals. These include establishing a loan product to support code compliance of small landlords; build the capacity of community development organizations to acquire, rehabilitate, and resell properties; and establish pathways to homeownership for clients of the United Way and LISC's network of Centers for Working Families.

Detroit Future City, a nonprofit organization that oversees the implementation of Detroit's strategic framework, serves as the convener for the compact, which brings together more than 40 organizations monthly. The Compact has two working groups: one focuses on increasing the quality and stability of single-family rental homes, and the other focuses on increasing pathways to affordable homeownership of single-family homes.

Government role

- The City of Detroit and Land Bank participated on the steering committee and offered aligned strategies.

Philanthropy role

- Philanthropic grants supported the development and implementation of the compact work.

Nonprofit role

- The nonprofit Detroit Future City convenes the collective action effort.

Private-sector role

- Investors, such as Capital Impact Partners, fund renovation initiatives.

INCENTIVIZE CURRENT PROPERTY OWNERS TO MAINTAIN LOW OR MODERATE RENTS

Rising operating costs or expiring subsidy commitments may lead current property owners to raise rents beyond a level that their residents and other households with low incomes in the region can afford, particularly in markets with imbalanced supply and demand. Expiring subsidy commitments provide a particularly important preservation opportunity because the rents could otherwise increase substantially if owners opt out of ongoing participation. Preserving rental affordability through current owner incentives has benefits statewide, as affordable units, both subsidized and unsubsidized, are found across the state, including in rural regions.

Identify preservation-oriented subsidy priorities. Government agencies can prioritize preservation of affordability when establishing guidelines for existing programs. The North Carolina Housing Finance Agency has several opportunities to align and channel existing funding to meet key preservation needs. The qualified allocation plan for the low-income housing tax credit could assign more points to preservation. When markets for tax credits are strong, the state can leverage tax-exempt bonds for preservation and entitle projects to 4 percent low-income housing tax credits. The state can also prioritize preservation in allocating its resources from federal block grants and the housing trust fund.

The Wake County Department of Housing Affordability and Community Revitalization's FY2019–2020 County Annual Action Plan notes a goal of using Community Development Block Grant resources toward single- and multifamily property preservation and repairs (Wake County 2019).

Produce More Housing across the Affordability Spectrum

Policy action to find and remove production impediments can enable builders to deliver housing across all affordability levels with the lowest direct subsidy. Land-use regulations that restrict lower-cost homes, impede the market for walkable neighborhood densities, or lengthen the development process contribute to high costs and the call for public subsidies. When reducing production impediments and excessive cost drivers does not sufficiently bring down housing prices, policies can directly improve affordability through targeted incentives, such as fee waivers or density bonuses in targeted development areas, and direct project-based subsidies. Although production tools are most essential in markets with insufficient overall supply, governments can also pair housing production policies with economic development and transportation investments to ensure supply keeps up with new demand.

In markets with low vacancy rates, households that find insufficient options for homes and neighborhoods in their price range may look to other price points for substitutions. This crowds the market for habitable lower-cost housing, reducing the supply choices for households who cannot afford to pay more. In markets with low vacancies or rising demand, building more homes (whether single- or multifamily and whether rented or owned) can alleviate market pressures that impede affordability for adjacent demand segments. For example, new production of low-middle- and middle-cost housing may shift market pressures for households with low, low-middle, and middle incomes, but it is unlikely to attract households with higher incomes or reduce supply pressures for households with the lowest incomes.[37] New production strategies will generate the greatest benefit if they are targeted to the housing cost levels and locations experiencing supply shortages, and some spillover benefits will emerge. Channeling new homes and residents to parts of the state with stronger existing residential infrastructure and fewer disaster risks can improve preparedness for future crises and ensure adequate access to municipal services.

This section covers the policy tools the state, counties, or municipalities can adopt, sustain, or strengthen in advancing three production strategies:

1. Increase the locations and density of housing development
2. Shorten the timeline for delivering new housing
3. Support affordability and inclusion

TABLE 11

Policy Menu: Produce More Housing across the Income Spectrum

Strategies	Market conditions	Recommended policy tools for North Carolina
Increase the locations and density of housing development	**Housing market includes** ▪ low vacancy rate, ▪ expected demand increase, and/or ▪ low-density in high-demand areas	**Public funding/resources** ▪ Designate housing as a priority use for public land to allocate space for lower-cost housing in areas with severe needs. **Laws and regulations** ▪ Facilitate single-family conversions and accessory dwellings to increase density in keeping with community design.
Shorten the timeline for delivering new housing	**Housing market includes** ▪ slow conversion from building permits to occupancy certificates, and/or ▪ low vacancy rates, but few building permit requests	**Voice/convening power** ▪ Develop skilled labor and quicker construction options to improve productivity and reach move-in more quickly.
Support affordability and inclusion	**Housing market includes** ▪ new production limited to highest income levels, ▪ supply shortage for middle and low-middle income brackets, ▪ long commutes to major employers, and/or ▪ indicators of future demand increases, such as new public investment plans	**Laws and regulations** ▪ Reassess regulations related to manufactured housing. **Public funding/resources** ▪ Provide expanded financing options for manufactured housing and low-cost homes to increase loan availability and reduce costs. **Voice/convening power** ▪ Encourage hospitals, health systems, universities and other anchor institutions to invest in affordable housing development.

INCREASE THE LOCATIONS AND DENSITY OF HOUSING DEVELOPMENT

By adding incentives or removing barriers, local policies can support more housing in high-demand, convenient, or amenity-rich locations. Prime neighborhoods for added housing may be near job centers, transit, schools, health care facilities, and other vital services. This strategy is particularly applicable to jurisdictions with few available residential parcels or substantial single-family or low-density zoning.

Designate housing as a priority use for public land. The public sector owns or controls a significant number of parcels, whether as surface parking or real estate owned by government agencies or land banks. Because land acquisition is a large portion of development costs, the donation of publicly owned land is a sizeable subsidy at a low direct budgetary cost. When donating public land, governments can stipulate the terms, including a guarantee that the developer will build affordable housing or maintain affordable rents in perpetuity. To start, governments can inventory their real estate holdings and call for a statewide inventory, noting parcels in residential zones that are either buildable or can accommodate mixed-use redevelopment. Instead of donating public land, governments can pursue mixed-use development that includes a public agency site located with affordable housing.

Many larger cities and counties in North Carolina have created guidelines to use public land for affordable housing. The City of Charlotte identified this as a tool in their Housing Charlotte Framework and later developed guidelines to establish criteria for the use, reuse, or disposition of public land for affordable housing.[38] Similarly, the Wake County Affordable Housing Plan cites public land disposition as a cross-cutting tool that the county can use to support affordable housing development through discounted land sales or sale proceeds. HR&A Advisors (2017) estimate that public land disposition could produce over 5,000 affordable units in Wake County.

Facilitate single-family conversions and accessory dwellings. In neighborhoods with a large amount of single-family housing, owners could add new housing stock and generate an income stream by subdividing the residence into multiple homes or adding an accessory dwelling on the lot.[39] Both design approaches add density in ways that blend into single-family neighborhoods. Accessory dwellings and other conversions from a single-family lot to a multifamily one can enable household formation by new adults or people moving in and are a vital tool for older adults to downsize and age in their community. Many cities in North Carolina, including Durham and Charlotte, allow accessory dwelling units, although their implementation is limited by cost concerns and neighborhood resistance.[40]

SHORTEN THE TIMELINE FOR DELIVERING NEW HOUSING

A quicker and more predictable development process both reduces the cost of holding land before development and allows developers to produce more housing in a shorter time. Projects often go through several rounds of review as developers conduct impact assessments and seek permits and approvals from city or county commissions, neighborhood groups, and other interested entities. Once permitted, the construction methods (i.e., site-built versus factory-built) and availability of labor can also affect the timeline (Woetzel et al. 2016).

With the varying projections of demand and household growth in the state, we do not expect that construction timelines are a sufficiently common barrier to merit substantial state-level action. However, counties and localities in growing regions may benefit from reviewing and removing development barriers. Development of additional skilled labor, however, is a policy tool suited for application statewide.

Develop skilled labor and quicker construction options. Since the Great Recession, construction firms and labor availability have not rebounded. A strong construction workforce would enable existing firms to staff up projects more quickly, leading to increased supply and decreased costs (Woetzel et al. 2016). A boost in skilled labor can also support career development and foster entrepreneurship and the expansion of firms bidding for production and preservation work. Shortages of construction labor and firms affect both timelines and projects' bottom-lines: in Austin, Texas, one estimate reported that labor shortages and high demand caused 5 percent inflation on construction projects.[41]

In partnership with building and trades associations, North Carolina could convene a task force and build an action plan to revive this segment of the economy and contribute to both housing markets and economic success. The task force goals should include both building the pipeline of trained workers in high-demand trades and incubating new and expanded construction firms. The YouthBuild program (box 6) offers one approach to consider.

BOX 6

YouthBuild

YouthBuild is a nationwide program that provides construction industry training and high school completion options to young people who are out of school and out of work. It seeks to increase the incomes, employment outcomes, and educational attainment of 16- to 24-year-olds who have not completed high school. The program began in 1978 and has grown to 260 programs in the United States, operating across a diverse array of communities and geographies; another 100 programs operate internationally. YouthBuild's vocational training involves on-site construction training and, depending on the site, training for other in-demand nonconstruction industries, such as health care and computer technology. The types and delivery of supportive services vary by each YouthBuild site but typically include life-skills training, educational services, career placement services, community service, leadership programming, a modest stipend, and counseling and case management. The program is designed to increase economic outcomes for young people while also focusing on building emotional assets and creating a sense of community.

Each YouthBuild site has different construction curricula, educational formats, and leadership and community service opportunities depending on capacity and local context.[a] YouthBuild sites typically engage in a wide range of local partnerships to help provide construction materials and supplies or connections to childcare, housing, and other public assistance. YouthBuild's annual cost per participant is about $22,000. The program is primarily funded by the US Department of Labor with additional funding provided by the Corporation for National and Community Service, state or local governments, and private philanthropy.

YouthBuild has been the subject of several rigorous evaluations and process studies that have determined its positive impact on young people.[b] Youthbuild has been shown to increase the educational attainment, employment, and earnings of its participants.[c] As students learn on-site construction skills, many programs train students by building affordable housing in their communities. YouthBuild may be modest in its ability to create affordable housing, but it increases the number of young people trained in construction skills and increases their economic prospects through education and certification.

Government role

- YouthBuild programs across the country are primarily funded through grants from the US Department of Labor.
- State and local government can also provide funding YouthBuild programs.
- YouthBuild sites often partner with government agencies to provide services and supports, such as social service organizations that connect students to housing or other public assistance programs and law-enforcement or juvenile-justice agencies.

Philanthropy role

- Philanthropy has also funded YouthBuild programs.

Nonprofit role

- Nonprofits are often the ones implementing a YouthBuild program in concert with other services they provide.
- YouthBuild sites engage with other nonprofit partners, including organizations that support vocational or educational training or offer other supportive services.

Private-sector role

- The private sector can provide in-kind supports by donating tools or construction materials.
- Construction companies partner with YouthBuild sites to provide internships, access to job sites, or full-time employment after completion of the program.

[a] Andrew Wiegand et al., *Adapting to Local Context: Findings from the YouthBuild Evaluation Implementation Study* (New York: MDRC, 2015).
[b] "Youthbuild Evaluation," MDRC, accessed June 5, 2020, https://www.mdrc.org/project/youthbuild-evaluation#overview.
[c] Cynthia Miller, Danielle Cummings, Megan Millenky, Andrew Wiegand, and David Long, *Laying a Foundation: Four-Year Results from the National YouthBuild Evaluation* (New York: MDRC, 2018).

SUPPORT AFFORDABILITY AND INCLUSION

When reducing the barriers to housing production does not sufficiently improve affordability, the state and its communities can look to policy tools designed to bring costs down or ensure that lower-cost housing options exist throughout a region. Affordability and inclusion policy tools may enable increased use of lower-cost housing types (such as manufactured homes) or may offer subsidies and incentives to property owners willing to deliver reduced rents. (Policy tools that subsidize at the household level are covered separately in the next section, Protect Households from Housing Discrimination, Displacement, and Disaster.)

Reassess regulations related to manufactured housing. Manufactured homes are constructed in an off-site factory for delivery to and anchoring on a lot, either in a manufactured home park or in a neighborhood that has a mix of site-built and manufactured homes. Constructing manufactured housing can cost 35 to 47 percent less per square foot than conventional building, but some local zoning codes limit its locations and feasibility.[42] Nationally, regulatory barriers that can impede manufactured housing include exclusion of by-right use in single-family zones, siting requirements, design standards, landscaping requirements, public facility requirements, prohibition of manufactured housing as part of infill projects, and other burdensome regulatory reviews (Dawkins et al. 2011).

North Carolina is one of the five states with the largest markets for manufactured housing. Manufactured housing makes up approximately 13 percent of North Carolina's housing stock,[43] but the spread of manufactured housing through the state is uneven, in part because of the legacy of local siting restrictions.[44] A 2019 law prohibited cities from excluding manufactured homes from entire zoning jurisdictions or excluding manufactured homes based on the age of the home.[45] A comprehensive review of the law's implementation and the interaction of other land-use regulations with the placement of manufactured housing could help identify whether additional action can increase the locations offering this low-cost housing type.

Provide expanded financing options for manufactured housing and low-cost homes. The majority of manufactured-home purchases use personal loans rather than home mortgages, even when ownership would encompass both the home and the land. A recent survey of manufactured-home owners in Texas found that they may opt for personal loans to avoid using the land as part of their collateral.[46] Personal loans typically have a higher interest rate than mortgages and currently have little secondary market (Goodman and Ganesh 2018).[47] This limits the funds available for loans, adds costs for manufactured-home owners, and can make it tougher for owners to refinance when interest rates go down.

The University of North Carolina Center for Community Capital has been working with Freddie Mac to understand the market behavior of manufactured home owners. Freddie Mac hopes to use this information to provide greater liquidity to the manufactured-housing.[48] When buying both the home and the land, manufactured home buyers can currently obtain a mortgage underwritten by Freddie Mac or Fannie Mae.[49] For households considering a manufactured home purchase who would either rent the land or prefer not to put their land up as collateral, new policy development, perhaps through the state or CDFIs, could help fill a gap that improves loan affordability and access.

Compared with manufactured-home lending, similar challenges exist for home buyers seeking a mortgage of $70,000 or less (box 7 discusses micro-mortgages). As with personal loans, originators often retain small purchase loans in part because of a weak secondary market, which limits the volume of loans available. Around one in four small-value home purchases have a mortgage, compared with nearly 80 percent of homes sales in the $70,000 to $150,000 price range. Most of North Carolina's counties have home sales of $70,000 or less, and 20 of the 300 US counties with the highest shares of low-cost sales are in North Carolina (McCargo et al. 2018). Currently, cash buyers are the main source of home sales in this price range, so this unsubsidized affordable housing benefits higher-income households or investors.

BOX 7

Micro-mortgages

The micro-mortgage is a new loan product designed to make it easier and more affordable to obtain a mortgage for low-cost properties. Currently, there is a lack of smaller balance mortgages, because of high fixed costs, lower revenue, and rehabilitation needs (McCargo et al. 2018). A project team, consisting of the Urban Institute, Fahe (a Kentucky-based CDFI) and Homeownership Council of America is working to pilot a new loan product that will make it simple and affordable for lower income renters to purchase homes in their neighborhoods. This loan product would have lower up-front costs and open up access to credit to those not served by traditional financing. In the second round of development, there may be an additional rehabilitation loan that will provide much-needed financing to make capital improvements to homes at the lower end of the cost spectrum. This loan product is a market-based approach; it is not subsidized.

The micro-mortgage could fill a need in housing markets where a significant portion of the housing stock sells for less than $85,000 (or loan amounts up to $70,000). Local community-based lenders and CDFIs who are deeply familiar with market context would originate these loans. Currently, the loan is a portfolio product, but as the product grows and scales, additional capital may be sourced from the secondary market.

Many renters have high enough incomes to support purchasing their homes, and would often have lower monthly housing costs with a micro-mortgage than renting in the same neighborhood. Purchasing a home through a low-cost and sustainable loan can provide stability and asset-building opportunities.

Government role

- Housing finance agencies could fund CDFIs to offer these loans.

Philanthropy role

- Development of the product has been funded by philanthropic sources.

Nonprofit role

- The loan is primarily designed for CDFIs and nonprofit lenders as the source of capital.

Private sector role

- Secondary market sources (securitization) may come from national private sector organizations.
- Private-sector lenders could adopt similar products.

Encourage hospitals, health systems, universities, and other anchor institutions to invest in affordable housing development. To retain tax-exempt status, nonprofit hospitals and health systems are required to put resources toward activities that benefit their communities. Hospitals are increasingly investing in housing as a way to fulfill their legal obligations as well as to address upstream factors that affect health outcomes (Reynolds et al. 2019). For example, Denver Health is partnering with the Denver Housing Authority to repurpose a vacant hospital building into affordable senior housing. The hospital will provide supportive services to tenants, a preventive measure that is more cost effective than housing patients in hospital beds.[50] Nonprofit hospitals and health systems can use their financial position to issue loan guarantees for affordable housing developers to help reduce their overall borrowing costs. Nationwide Children's Hospital in Columbus, Ohio, created a $20 million loan fund to provide long-term funding for the acquisition costs, construction, and permanent financing of up to 170 units of single and multifamily rental housing serving low-income families (box 8).[51]

BOX 8

Nationwide Children's Hospital Housing Investment

Growing awareness that social and economic factors contribute to our health has prompted many nonprofit hospitals and health systems to identify and address health-related social needs for patients and communities. Nonprofit hospitals have traditionally focused their community benefit work on health improvement activities such as health education programs and free clinics. However, owing to the increasing understanding of how social determinants affect health, more nonprofit hospitals are examining upstream determinants, such as housing, to improve health outcomes for certain groups. Although investing in housing construction and rehabilitation is relatively new for most hospitals and health systems, their institutional assets, focus on health outcomes, and position as anchor institutions make them well-positioned to invest in affordable housing.

Although federal, state, and local government subsidies are available to create, preserve, and operate affordable apartments, these resources fall far short of the need. Hospitals and health systems are well positioned to help affordable housing developers meet the need for housing by filling financing gaps. In particular, they can (1) donate land or buildings or swap land with a housing developer, (2) use their financial position to enhance credit or provide direct loans for construction, renovation, or rehabilitation costs, or (3) contribute staff time or provide capital in the form of a grant to encourage others to invest in affordable housing.

There are many promising examples of hospitals and health systems investing in affordable housing construction and renovation. In Columbus, Ohio, Nationwide Children's Hospital began partnering with a local nonprofit organization, Community Development for All People. Together they formed a new organization, Healthy Homes, to revitalize the housing stock and living conditions in a 38-square-block area near the hospital. Since that time, with funding from Nationwide Children's, United Way of Central Ohio, and the City of Columbus's Department of Development, there have been 330 new builds, home improvements, and home renovations. These successful activities attracted additional capital from national and regional banks. In 2018, the hospital announced the South Side Renaissance Fund, a $20 million loan fund to provide long-term funding for the acquisition costs, construction, and permanent financing of up to 170 units of single- and multifamily rental housing serving low-income families.[a] The fund will be administered by the Ohio Capital Finance Corporation, a local nonprofit organization and CDFI. Nationwide has provided a loan guarantee for the fund to ensure that the Ohio Capital Finance Corporation can provide below-market financing, reducing the costs of development. Since 2005, the partnership has invested over $70 million in affordable housing.

Government role

- The City of Columbus Department of Development assembled scattered site lots by buying and demolishing substandard houses and invited the partnership to apply for $10 million in low-income housing tax credits to build new single-family homes.
- The US Department of Housing and Urban Development granted the City of Columbus Neighborhood Stabilization Program funds. Some of these funds were allocated to this project.

Philanthropy role

- The United Way of Central Ohio and the "South Side Champions" (a group of wealthy individuals who had grown up in the neighborhood) contributed investments that accelerated the redevelopment of properties.

Nonprofit role

- Nationwide Children's Hospital, a nonprofit hospital, led the formation of the Healthy Neighborhoods, Healthy Families Realty Collaborative and initially pledged $3-5 million to launch the initiative. They eventually hired four staff members to execute the Healthy Homes portion of the collaborative. Later on the hospital worked with partners and the Ohio Capital

Corporation for Housing to establish a $20 million South Side Renaissance Fund for acquisition, financing, and construction costs. The hospital provided a loan guarantee to the fund.

- Community Development for All People was the community housing development organization that partnered with the hospital to lead the HNHF initiative. They employ the HNHF staff, but the staff's salaries come from the hospital.
- The Ohio Capital Finance Corporation administers the South Side Renaissance Fund.

Private-sector role

- Several local banks, including Fifth Third, First Financial Bank, First Merchants Bank, Huntington Bank, JPMorgan Chase, PNC Bank, and Union Bank contributed to the South Side Renaissance Fund.

[a] "The South Side Renaissance Fund Expanding Healthy Homes and South Side Renaissance Homes," news release, Nationwide Children's Hospital, July 20, 2018.

Protect Households from Housing Discrimination, Displacement, and Disaster

When fostering a housing market that meets current and future needs, strategies and policy tools to protect households from risks and ensure a fair and accessible market are as important as those to preserve and produce homes. Absent sufficient protections, discrimination, displacement, and substandard conditions will impede both individual and regional success (Galvez et al. 2017).[52] Further, risks in the housing market often accrue more to households with limited choices because they have less buying power and economic cushion and higher incidence of denials and unfair treatment because of family status, race, or other protected factors.

This section covers the policy tools the state, counties, or municipalities can adopt, sustain, or strengthen in advancing four protection strategies:

1. Reducing instability and displacement pressure
2. Enabling fair and equitable access to housing
3. Preventing hazardous and unhealthy living conditions
4. Increase disaster preparedness

TABLE 12

Policy Menu: Protect Households from Discrimination, Displacement, and Disaster

Strategies	Market conditions	Policy tools
Reduce instability and displacement pressure	**Housing market includes** ▪ rental supply shortage in the middle income band and below, ▪ housing with repeat disaster damage, and/or ▪ high or rising eviction rate **Residents are** ▪ cost-burdened because of rising ownership costs, ▪ mortgage-ready and seeking stability yet remaining in rental market, and/or ▪ cost-burdened renters	**Public funding/resources** ▪ Provide home purchase assistance to increase residential stability among households with low incomes and first-time owners. ▪ Fund tenant-based rental assistance to supplement federal vouchers for people with extremely limited means. ▪ Fund emergency rental assistance to reduce evictions. ▪ Provide mediation and legal services to provide renters with low incomes with a right to mediation and/or a publicly-funded attorney for eviction matters.
Enable fair and equitable access to housing	**Housing market includes** ▪ new rental owners, ▪ disproportionate housing or mortgage denials based on household identity—whether current protected classes or other factors, ▪ reports of steering or discrimination in marketing, and/or ▪ low utilization rates for rental vouchers	**Voice/convening power** ▪ Support fair housing education programs to increase voluntary compliance. ▪ Conduct landlord outreach to improve housing access by people with rent vouchers.
Prevent hazardous and unhealthy living conditions	**Housing market includes** ▪ low vacancy rates, ▪ housing code complaints, ▪ homelessness, ▪ rental supply shortage in the lowest cost bands, ▪ rental demand squeezing into the lowest cost bands, and/or ▪ high or rising eviction rate	**Laws and regulations** ▪ Establish proactive rental inspections to reduce conflict and retaliation when renters press for essential repairs. **Public funding/resources** ▪ Provide rapid rehousing assistance to identify and house people as they become homeless.
Increase disaster preparedness	**Housing market includes** ▪ residential neighborhoods in floodplains and other disaster risk areas, and/or ▪ housing with repeat disaster damage	**Laws and regulations** ▪ Clear titles on heirs' property to facilitate smooth disaster claims and relocation programs **Public funding/resources** ▪ Fund mitigation and relocation efforts to reduce the risk of damage in floodplains

REDUCE INSTABILITY AND DISPLACEMENT PRESSURE

The fear of losing one's home or becoming uprooted from a community imposes burdens on people living in markets with high costs and/or an accelerated pace of change. Households without an ownership stake in the land have little control over their continued residency, so avenues that sustainably increase homeownership can reduce residential instability. Instability and displacement pressure also affect communities and regions, leading to productivity and retention problems in the workforce and potentially exacerbating economic or racial tensions in changing neighborhoods.

Provide home-purchase assistance. Homeownership can provide residential stability that households with low incomes often struggle to attain. Public agencies and nonprofits may offer down-payment assistance, low-interest loans, financial education, or other supports for new home buyers.[53] For agencies seeking ways to recycle subsidy dollars, low-cost loans repayable on resale can ensure access to home purchase assistance both for current and future buyers.

The North Carolina Housing Finance Agency's NC Home Advantage Mortgage offers up to 5 percent in down-payment assistance for first-time homebuyers and buyers looking to get into a new home. This program restricts eligibility to households whose income is below $89,500. First-time homebuyers and military veterans, as well as those buying homes in targeted census tracts, are eligible for an additional $8,000 in down-payment assistance through the NC 1st Home Advantage Down Payment program. This down payment serves as a 0 percent, deferred second mortgage that is forgiven after 15 years.

Fund tenant-based rental assistance. Ongoing rental assistance with income-based affordability guidelines has proven benefits for reducing family homelessness and housing instability (Fischer 2015). Adding local tenant-based assistance, seeking expanded federal rental assistance, and facilitating the use of federal housing vouchers are the primary evidence-based ways to close the affordability gap for households at the low and lowest income levels. Only a few jurisdictions nationwide fund the type of long-term rental assistance available through federal housing vouchers. A new state or locally funded long-term rental subsidy could reduce the risks of extreme hardship for local residents near the bottom of the income spectrum (box 9). As with subsidies on the development side, administrative burdens for prospective residents, property owners, and administering agencies can add costs and affect the likelihood of broad support for the program. To help households maintain stability during the lengthy wait for federal rental assistance, states and localities could instead fund multiyear temporary rental subsidies.

BOX 9

Minnesota Housing Trust Fund Ending Homelessness Initiative Fund Rental Assistance Program

The Minnesota Housing Trust Fund was established in 1998 to support the development of affordable housing for low-income households, with funds and revenue from the interest earnings on real estate broker's trust accounts; interest accrued on revenue bond application fees and forfeited fees; and state appropriated funds. In 2001, at the request of Minnesota Housing Finance Agency, the state passed legislation to allow the fund to expand activities that go beyond development and rehabilitation, including operating subsidy and up to five years of rental assistance.

In 2005, Minnesota Housing Finance Agency established the Ending Long Term Homelessness Initiative Fund for permanent rental housing that will serve households experiencing long-term homelessness and is administered through the housing trust fund rules. The HTF/ELHIF fund anticipates awarding up to $23 million in grant funds for tenant-based rental assistance programs for the period of October 1, 2019, through September 30, 2021, and could be used to provide tenant based rental assistance such as rental subsidies, security deposits and other housing related expenses, with a priority to housing stability of the homeless. The program offers more flexibility than many other housing programs, for example allowing funds to households who would not meet the eligibility limits for rental assistance through housing choice vouchers. According to a budget narrative report of the Minnesota Housing Finance Agency, more than 1,674 households received rental assistance through the housing trust fund with an average annual assistance of $7400 in 2017.[a]

In 2017, Minnesota also became the 14th state to pass state enabling legislation for local housing trust funds.[b] The legislation will allow local governments to assign the administration of the housing trust fund to a nonprofit organization and provide funds for rental assistance, homeowner assistance, and the development and preservation of affordable housing.

Government role

- The state housing trust fund provides the funding for the program, and the housing finance agency operates the program.
- State elected officials expanded the eligible trust fund activities to enable rental assistance and passed enabling legislation for local housing trust fund operations.

Nonprofit role

- Nonprofits are an implementing partner for the program.

[a] "Housing Finance Fiscal Year 2020–21 Budget Narratives," Minnesota Housing Finance Agency, October 2018, https://mn.gov/mmb-stat/documents/budget/research-and-data/summary-of-agencies-programs-activities/housing-finance-agency.pdf.

[b] 2019 Minnesota Statutes, section 462C.16, "Housing Trust Funds for Local Housing Development."

Fund emergency rental assistance. Many communities use emergency financial assistance funds, often through Temporary Assistance for Needy Families or the Emergency Solutions Grants program, to pay past-due rent and help renters avoid eviction. When an eviction risk comes from a small amount of past-due rent or a temporary, resolvable crisis, an emergency assistance loan fund can address the crisis while also providing a credit-building opportunity. In North Carolina, the Emergency Solutions Grants program funds nonprofits and local governments to offer a variety of homelessness prevention activities, including a one-time payment to cover past-due rent or utilities (NC HHS 2020).

Provide mediation and legal services. Renters often face information and power imbalances in landlord-tenant disputes, leading to unnecessary court hearings and disparities in outcomes. Jurisdictions across the country are seeking ways to remedy this, including offering mediation as an alternative to the typical court process or increasing resources for tenant legal representation. Housing mediation is an allowable use of federal Emergency Solutions Grant funds.

Courts in the Twin Cities region have begun providing both mediation and legal services in on-site space to improve settlements in eviction cases, but legal assistance programs have more research on their results (box 10). In a randomized controlled trial of free legal assistance in New York City, tenants who received legal assistance were twice as likely to avoid displacement (Galvez et al. 2017). Legal services can reduce municipal costs by more than $12 for every $1 spent on legal assistance (Stout Risius Ross 2018).

BOX 10

Housing Court Clinic in Ramsey County, Minnesota

To help tenants facing eviction, Ramsey County, Minnesota, launched a Housing Clinic to make legal services, financial assistance, and mediation available inside the courthouse.[a] The Housing Clinic brings together three critical services for tenants: pro-bono lawyers to help walk tenants through their rights and responsibilities; landlord-tenant mediators to help resolve the dispute outside the courtroom if possible; and emergency financial assistance to resolve or reduce the past-due rent. Because of these services, the Housing Clinic can settle many disputes between landlords and tenants without proceeding to a judgment. Disputes addressed through the clinic have also resulted in settlements that allow an expungement if the terms are met.

The Housing Clinic pilot was funded by the McKnight Foundation and the National Center for State Courts to explore opportunities for strengthening access to legal, financial, and social services upon entering court. Convened by Chief Judge John Guthman, the Housing Clinic offers space in the courthouse and near the courtroom for tenants to speak with financial assistance providers and attorneys—and for tenants and landlords to meet with mediators to seek a mutually viable resolution.[b]

Although the Housing Clinic was only launched in 2018, the initial results have been promising.[c] First and foremost, the court has seen an 18 percent reduction in eviction judgments, a doubling of expungements, and an increase in settlement agreements. Moreover, anecdotal evidence suggests that there appears to be a greater understanding among landlords and tenants about the court process. Many appeared in court without a clear understanding of how to navigate it, but through the clinic's support, judges have noted that tenants are better prepared and less anxious about the process.

Government role

- The Second Judicial District (Ramsey County) provides onsite meeting space and information for tenants to learn more about community-based services.
- Ramsey County Financial Assistance Services provides financial assistance, typically funded through Temporary Assistance for Needy Families resources, to tenants.

Philanthropy role

- The McKnight Foundation provided financial support to launch the Housing Clinic Pilot.
- The Family Housing Fund helped convene the original working group and provided support to expand the clinic to a community based location.

Nonprofit role

- South Minnesota Regional Legal Services and the Volunteer Lawyers Network recruit and provide lawyers who work directly with tenants.
- Dispute Resolution Center provides mediators who work with landlords and tenants.
- Neighborhood House, a local social services organization, provides supplemental funding to tenants who have exhausted or are ineligible for the county Temporary Assistance for Needy Families funds, and has case managers who can help tenants navigate the process.

[a] Minnesota Judicial Branch, *Report to the Community: The 2018 Annual Report of the Minnesota Judicial Branch* (St. Paul: Minnesota Judicial Branch, 2019).
[b] Minnesota Judicial Branch, *Report to the Community: The 2017 Annual Report of the Minnesota Judicial Branch* (St. Paul: Minnesota Judicial Branch, 2018).
[c] Emily Peiffer, "Why We Need to Stop Evictions before They Happen," Urban Institute, July 25, 2018.

ENABLE FAIR AND EQUITABLE ACCESS TO HOUSING

Even when the housing supply is well-aligned with demand, many households face serious access barriers. Despite more than 50 years of fair housing protections, discrimination by race, national origin, family status, disability, and other factors persists.[54] State and local governments can support federal laws through education or other localized action to protect households and ensure more equitable access to housing.

Support fair-housing education programs. Fair-housing education programs inform parties to a real estate transaction about how to recognize and report discrimination.[55] Individuals on both sides of a real estate transaction may be unaware of fair-housing protections, such as the rights of families with children to live throughout a development. Jurisdictions can distribute educational materials or host workshops to increase knowledge about fair-housing requirements and protections. Governments could also require completion of fair-housing education for property owners and developers seeking public subsidy, including tax incentives.

Conduct landlord outreach. Direct outreach to landlords may improve their willingness to rent to people with housing vouchers, and outreach can inform the development of programs to reduce property owners' risks when renting to households with weak or troubled rental histories. Housing authorities in some jurisdictions pair outreach with incentives. Pittsburgh operates a preferred-owners program in which landlords get vacancy payments between tenants and have quicker and less frequent inspections.[56] Marin County, California, for example, boosts security deposits with an additional loss mitigation guarantee.[57]

PREVENT HAZARDOUS AND UNHEALTHY LIVING CONDITIONS

People with low incomes face a trade-off between substandard housing conditions and the risk of displacement or homelessness when they lack the credit, income, assets, or background to compete for available homes. The only housing available at the bottom of the market may have lax maintenance, health or safety hazards, or other deficiencies; yet, people with weak credit or a prior eviction filing may see few other options. Meanwhile, people experiencing homelessness face extreme hazards whether living in the shelter system or in places not meant for habitation.

Establish proactive rental inspections. Complaint-driven code enforcement can create landlord-tenant conflict. As an alternative, many jurisdictions conduct regular proactive rental inspections (Housing Development Consortium 2016). Proactive rental inspections not only enable positive relationships between landlords and tenants, they can also significantly reduce the amount of substandard housing and health-related violations (Stacy et al. 2018). A rental registration program in Greensboro, North Carolina, reduced housing code complaints 61 percent, from 1,427 in 2005 to 871 complaints in 2007 (Way, Trinh, and Wyatt 2013).

Provide rapid rehousing assistance. Rapid rehousing is a short- to mid-term crisis intervention for individuals or families who might otherwise experience homelessness. Assistance, which includes rent subsidy and services, usually lasts between 3 and 24 months. Because the quick turnaround for initiating new housing requires an adequate rental supply, most markets in the state are well-suited to expand this approach to ending homelessness. The National Alliance to End Homelessness's Rapid

Rehousing Toolkit has resources for landlord recruitment specifically for rapid rehousing units (National Alliance to End Homelessness 2016).

INCREASE DISASTER PREPAREDNESS AND RESILIENCE

Disaster resilience and recovery efforts protect both renters and owners from displacement and loss. Through proactive funding and legislation and enforcement of zoning codes designed to limit construction in floodplains, public-sector agencies through the state can offer residents greater protection and reduce the losses and costs related to future recovery efforts.

Fund mitigation and relocation efforts. Severe flooding can cause damage to physical infrastructure, displace households and businesses, and destabilize local economies. As changes to the climate increase the frequency of extreme weather events and the risk of severe floods,[58] states and localities across the United States are looking for ways to build resilience and brace for disaster (box 11). Research from the National Institute of Building Sciences suggests that spending on preventive solutions is much more cost effective than spending recovery efforts after a disaster: each $1 spent on risk reduction saves up to $6 in relief.[59]

Incentivizing residents to relocate out of floodplains and enforcing zoning codes designed to limit new construction in floodplains are the most effective risk-prevention strategies for future storms, but governments can also mitigate risks by funding flood-control programs. For relocation planning and outreach, jurisdictions can use geographic information systems to assess the number and value of homes in the most at-risk zones and can conduct outreach with those residents to understand their concerns and preferences.

BOX 11

Indiana's Flood Control Revolving Fund

In 1937, severe flooding of the Ohio River across midwestern states left nearly a million people homeless, claimed 385 lives, and caused approximately $3.3 billion in damage in 2019 dollars. In response, Indiana state officials created a Flood Control Revolving Fund to support efforts that could reduce the frequency of minor floods and mitigate the damage of major flooding. Nearly seven decades later, the fund continues to provide low-interest loans to local entities implementing flood mitigation projects. Operated by the Indiana Financing Authority,[a] the fund relies entirely on state resources. Eligible applicants—including regional water, sewage, solid waste, and conservancy districts—can apply for loans of up to $250,000 and choose between an interest rate of 2 percent for 1 to 5 years or 2.5 percent for 5 to 10 years. As the loans are repaid, the fund is replenished, and those dollars are made available for new projects. Since its establishment, the fund has distributed an estimated $11 million in flood control project loans to almost 150 projects.[b] Although individual loans are often small, they provide critical support to communities that lack access to resources, enabling them to implement fiscally sustainable flooding solutions and build community resilience.

The fund's success has inspired replication at the federal level. The fund served as a model for the federal Clean Water Revolving Loan Fund established by Congress in the 1970s and in 2019, bipartisan bills in both the House and the Senate have proposed to establish a federal Flood Control Revolving Loan Fund as part of the reauthorization the National Flood Insurance Program. The new federal fund would provide capitalization grants to help states create their own flood control revolving funds. These resources would be used to provide financial assistance to National Flood Insurance Program participating homeowners, businesses, nonprofits, and local governments seeking to implement elevation projects, flood-proofing activities, relocation or removal of buildings, environmental restoration, acquiring property, and obtaining protective easements. The legislation also includes a provision that would allow states to provide additional subsidies to low-income homeowners and recipients of financial assistance in low-income areas.

Government role

- The federal government provides capitalization grants to states to help seed new revolving loan funds or enhance existing funds.
- The state government finances and operates the revolving fund by setting aside seed funding soliciting project applications, prioritizing and selecting projects, distributing loans, and monitoring spending.
- Local governments conduct research and support early state project design and development to identify priority projects, encourage eligible applicants to apply for funding, and provide matching funds where possible.

Philanthropy role

- Support efforts to research and identify effective local mitigation strategies.
- Provide planning and development grants to support eligible applicants identify well-suited projects and apply for local and state grants and loans.
- Provide gap financing to high impact projects that are applying or received loans from the revolving fund.
- Convene local actors to facilitate cross-sector collaboration on developing a cohesive resilience strategy, aligning existing efforts, and identifying priority projects.

Private sector role

- Both for-profit and nonprofit organizations support the efforts through research to identify effective local mitigation strategies and direct assistance to localities in the design and development of flood control projects.

[a] "Fact Sheet: Flood Control Revolving Fund Program," Indiana Finance Authority, January 2020.
[b] "Indiana's Flood Control Revolving Fund Makes Resources Available to Communities," Pew Charitable Trusts, November 19, 2019.

Clear titles on heirs' property. The title to a property provides proof of ownership and affects owners' ability to transfer the asset to a new owner with full rights to leverage the asset for investments or other purposes. Having a muddied title can also affect a person's ability to claim disaster assistance. Title clearance can be challenging when properties transfer informally or through inheritance with multiple potential claims. State and local governments can apply a combination of laws, convening power, and funds to improve title clearance (box 12). So far, evidence is limited about which programs are the most promising for title clearance. Potentially effective approaches merit a pilot with evaluation. For example, county assessors can help identify differences between the owners and potential title holders and use the assessment process to notify owners to clear their titles before a disaster.

BOX 12

Title Clearance Programs

During Hurricane Maria in Puerto Rico 2017, the combination of legacy legal rules and customs of informal ownership transfers left residents with challenges in proving eligibility for FEMA emergency funds and other assistance. The Community Development Block Grant Disaster Response Funds Title Clearance Program was created in 2018 to assist households who were denied by FEMA or other assistance due to title problems. The program assisted low to moderate income homeowners to aggregate evidence, such as tax statements, to support their ownership claims and with further services as needed, such as title investigation, case management, appraisals, engineering, filing of legal documentation, and solving non-contentious legal issues in court.

The Quiet Title Program from the Wayne County Land Bank in Michigan takes a related approach of owner support. The land bank works with owners, government agencies, nonprofits, and developers to file expedited quiet title actions in Wayne County Circuit Court to expedite the title clearance process.

In 2019, New York became the latest of a growing list of states and territories to enact the Uniform Partition of Heirs' Property Act. The Uniform Partition of Heirs' Property Act stipulates a process for fairly dividing heirs' property ownership, including appraising the property value, allowing buyouts of other heirs, and other approaches to improve heirs' ability to sell a property (or their share of it) without displacing existing residents. If heirs do not attempt to sell or divide the asset, the act may have little ability to address title disputes after a disaster.

Government role

- The Puerto Rico Department of Housing administered the HUD Community Development Block Grant Disaster Recover funds and created the Title Clearance Program with 40 million dollars in funding to assist families with title clearance after Hurricane Maria.

- New York State passed the Uniform Partition of Heirs Property Act to prevent predatory partition and forced below-market-price sale of heirs' properties.
- Wayne County Land Bank created quiet title program to assist with clearing any interest or ownership disputes that may cloud the property's chain of title.

Nonprofit role

- The nonprofit law firm The Center for Heirs' Property Preservation in South Carolina provides legal aid and education for heirs' property owners to clear and maintain clear title and probate estates.

Recommended Actions for North Carolina

To welcome the estimated 866,000 new households forming throughout North Carolina and recover from the COVID-19 pandemic's effects on housing markets, the state and its regions need to come together to support bold and mutually reinforcing policies toward housing preservation, production, and protection. Evidence from the population projections from the state demographer, household distribution patterns by county, and trends in income by demographic group suggest that state elected officials and agencies prioritize housing policies that

- preserve current affordability in every county statewide, especially of housing that costs less than $700 a month;
- produce more housing in the $700–$1500 monthly cost range, especially in higher-cost or recreation-driven rural counties and populous metropolitan cities or counties, and
- protect households, especially those with annual incomes less than $40,000, in obtaining residential stability and fair access to the housing market.

As the housing policy menus in this report demonstrate, the state and its regions and localities can choose many different approaches to achieve these goals, and we recommend adopting a portfolio of housing policies to do so.

An infusion of new funding to support specific policies or to a flexible source such as the state's housing trust fund (for easier adaptability as housing needs change in the future) is necessary but alone is not sufficient for success on each of these goals. Shifts in laws and regulations can also reduce the cost of preservation or production and address market failures in protecting households from displacement, discrimination, and disaster. Finally, to align public, private, and nonprofit actors as partners toward a healthy housing market across all of North Carolina, public leadership and visible collaboration are essential.

For the governor's office, we recommend three actions that would channel executive powers toward strategic statewide housing progress and leverage interconnected sectors:

1. Convening a statewide and multisector task force to develop a playbook for preservation, production, and protection across rural, suburban, and urban housing markets, and designate a lead agency for housing policy implementation (box 5 offers ideas).
2. Reinvigorating construction labor and firms through a workforce development program (box 6 provides details).
3. Coordinating health and housing partnerships at the state level, such as the replication of an evidence-based program for healthy aging through home repair assistance and health supports (box 4 provides details).

For the state legislature, we recommend three actions that ensure state funds for housing can nimbly and effectively address opportunities and challenges in rural, suburban, and urban areas:

1. Allocating a historic infusion of resources to the housing trust fund for distribution among the housing priorities in the state's diverse market types (see page 32 for details).
2. Establishing a dedicated revenue source for the housing trust fund to improve sustainability (see pages 29–31 for details).
3. Expanding access to both short-term and ongoing rental subsidy, either through legislation that adds flexibility to the housing trust fund or as a separately funded program, to protect households in every county who face either sudden income loss or market conditions that impede affordability and stability (box 9 provides details).

For the housing finance agency, we recommend three actions that would apply financial and technical expertise to address a misalignment between traditional housing-finance tools and current and future housing needs:

1. Testing the viability of filling market lending gaps through a micro-mortgage pilot (box 7 offers details).
2. Developing or partnering with banks and CDFIs to support the acquisition and preservation of unsubsidized rental housing (box 3 discusses an example).

3. Enabling preservation of manufactured home parks through a park acquisition fund (box 1 provides details).

For counties and local governments, we recommend three actions that apply localized administrative capacities and knowledge:

1. Piloting a title clearance program through the assessment process to ensure clear titles before a disaster event (box 12 discusses details).
2. Encouraging court-based eviction-prevention clinics to improve resolution using existing resources (box 10 discusses details).
3. Inventorying currently affordable and/or publicly owned parcels to improve opportunities for both rental preservation and new housing production (pages 41–42 provide more information).

For private and philanthropic organizations, we recommend two actions that seed emerging programs and support effective cross-sector partnership:

1. Funding housing and health partnerships (see box 8).
2. Supporting organizational capacity-building activities related to housing production, preservation, and protection to enable successful implementation of the policy tools described in the report (box 5 provides an example).

A combination of public, private, and philanthropic capital is required to fully address the housing affordability gaps across the state. With 911,000 more homes needed to keep up with projected household growth statewide, the policy tools cannot be small and will take extensive political capital. In total, 321,000 of the net new homes would serve owners or renters who can afford between $0 and $700 a month. If the average subsidy needed by these households is $300 a month (or $3,600 a year), the total subsidy to eliminate an affordability gap for the bottom two cost bands would exceed $1 billion a year. The COVID-19 pandemic will likely worsen affordability challenges but also increase awareness that renters and landlords share a fate when rental markets are imbalanced. Lowering the subsidy need to support a healthy and balanced housing market would call for reducing regulations that add unnecessary costs, adding and enforcing regulations that protect residents, boosting incomes or reducing income inequality, and ensuring a strong federal role in providing housing assistance for the lowest-income households.

In this report, we highlight strategies that have effectively blended different sources of capital to create the greatest leverage and efficient use of public resources. We recommend a process of stakeholder engagement to test the appetite and support for these strategies and opportunities for public and private investment.

Appendix A. Methodology and Detailed Tables

Methods for "North Carolina's Housing Markets by Community Type"

We sought to develop mutually exclusive geographic categories to reflect changing housing needs and the different natures of housing markets across the state. The six categories we created were based on three factors:

1. Presence inside or outside a metropolitan area to capture higher-density areas and economic connections
2. Total population in each county and share of housing by cost level
3. The US Department of Agriculture Economic Research Service's economic-dependence county indicator, to identify key industries that may affect housing needs

To identify the six groups of geography, we used 2013–17 American Community Survey county population, combined with the Economic Research Service's metropolitan/nonmetropolitan county definition to identify metropolitan counties. We are referring to metropolitan or nonmetropolitan counties as those in metropolitan statistical areas defined by the US Office of Management and Budget. In some cases, because the US Census Bureau combined small counties into PUMAs, a metropolitan county may be grouped with nonmetropolitan counties and designated as nonmetropolitan.

- Group 1: Metropolitan counties with the most populous cities. Contains the counties with the state's five largest cities (Charlotte, Raleigh, Greensboro, Durham, and Winston-Salem).
- Group 2: Metropolitan counties with large populations. This group contains metropolitan counties with a population in the state's top 25th percentile and not included in group 1.
- Group 3: Metropolitan counties with small populations. This group contains the remaining metropolitan counties that are not in the top 25th percentile for population.

- Group 4: Nonmetropolitan areas with more affordable low-cost housing. These areas have the lowest-cost housing stock in the state; more than 50 percent of housing has monthly costs to occupants of less than $700.
- Group 5: Nonmetropolitan areas with less affordable low-cost housing: This group contains the counties outside metropolitan areas that are not in group 4 or group 6.
- Group 6: Nonmetropolitan areas with higher recreational revenue. The group contains areas located outside of metropolitan areas that were defined by the US Department of Agriculture as recreation dependent. Employment and income in sectors related to recreation as well as the share of vacant units intended for seasonal use is factored into this determination.[60]

TABLE A.1

Demographic and Income Profile for North Carolina by Area and Group, 2015

Group 1

County	Total population	% white	% people of color	% < 18	% 18–64	% 65 +	Median household income	Average household size
Wake	1,023,200	60	40	25	65	10	$106,000	2.5
Durham	300,600	42	58	22	67	12	$86,300	2.3
Guilford	516,800	52	48	23	63	14	$77,300	2.4
Forsyth	368,600	57	43	24	62	15	$76,800	2.3
Mecklenburg	1,033,200	48	52	24	65	10	$98,000	2.4
Group 1 total	**3,242,300**	**53**	**47**	**24**	**65**	**12**	**$82,800**	**2.4**

Group 2

Counties	Total population	% white	% people of color	% < 18	% 18–64	% 65 +	Median household income	Average household size
Johnston	186,800	68	32	26	61	13	$72,800	2.7
Orange	141,800	69	31	20	68	12	$119,900	2.4
Alamance	158,000	65	35	23	61	16	$65,700	2.4
Davie, Iredell, Yadkin	249,600	79	21	23	61	16	$80,900	2.4
Buncombe	253,000	84	16	19	62	18	$75,300	2.2
Catawba	155,600	76	24	23	61	17	$69,100	2.4
Gaston	214,300	74	26	23	62	15	$67,500	2.5
Cabarrus, Stanly	257,700	71	29	25	61	14	$83,700	2.6
Rowan	139,400	73	27	23	61	17	$64,900	2.4
Davidson	164,500	81	19	23	60	17	$63,700	2.4
Randolph	143,000	80	20	23	60	17	$61,100	2.4
Wayne	124,300	54	46	24	61	15	$62,200	2.5
Pitt	176,700	55	45	22	66	12	$67,200	2.4
New Hanover, Pender	277,700	76	24	20	64	16	$83,100	2.3
Brunswick	123,000	82	18	17	55	29	$72,200	2.2
Cumberland	327,200	44	56	25	63	11	$62,900	2.4

Counties	Total population	% white	% people of color	% < 18	% 18–64	% 65 +	Median household income	Average household size
Anson, Union	248,200	70	30	27	60	12	$101,200	2.8
Group 2 total	**3,340,800**	**70**	**30**	**23**	**62**	**15**	**$66,700**	**2.4**

Group 3

Counties	Total population	% white	% people of color	% < 18	% 18–64	% 65+	Median household income	Average household size
Rockingham, Stokes	137,800	79	21	20	60	19	$57,700	2.4
Edgecombe, Nash	148,400	46	54	23	60	17	$60,300	2.4
Chatham, Lee	129,800	65	35	23	57	20	$83,700	2.4
Alexander, Caldwell	118,900	88	12	21	61	18	$59,600	2.4
Burke, McDowell,	134,500	84	16	20	61	19	$58,100	2.4
Jones, Lenoir, Onslow	256,400	63	37	25	64	11	$60,100	2.5
Craven	103,600	66	34	22	60	17	$69,200	2.3
Group 3 total	**1,029,300**	**69**	**31**	**22**	**61**	**17**	**$56,600**	**2.4**

Group 4

Counties	Total population	% white	% people of color	% < 18	% 18–64	% 65+	Median household income	Average household size
Franklin, Halifax, Hertford, Northampton, Vance, Warren	225,500	45	55	22	60	18	$55,800	2.3
Duplin, Sampson	123,100	52	48	25	59	16	$55,200	2.5
Bladen, Columbus, Robeson	224,700	39	61	24	60	16	$51,600	2.4
Hoke, Richmond, Scotland	133,500	47	53	25	61	13	$51,900	2.4
Group 4 total	**706,700**	**45**	**55**	**24**	**60**	**16**	**$47,600**	**2.4**

Group 5

Counties	Total population	% white	% people of color	% < 18	% 18–64	% 65+	Median household income	Average household size
Caswell, Granville, Person	121,700	61	39	21	62	17	$65,000	2.4
Camden, Chowan, Currituck, Gates, Pasquotank, Perquimans	115,100	68	32	21	60	18	$68,100	2.5
Bertie, Dare, Hyde, Martin, Tyrrell, Washington	100,100	62	38	19	61	21	$62,400	2.3
Greene, Wilson	102,800	47	53	23	61	16	$59,500	2.4
Cleveland, Lincoln, Polk, Rutherford	265,000	81	19	21	60	19	$63,400	2.3
Montgomery, Moore	121,900	74	26	22	56	23	$78,000	2.3

Counties	Total population	% white	% people of color	% < 18	% 18–64	% 65+	Median household income	Average household size
Harnett	128,800	62	38	27	62	11	$63,500	2.6
Beaufort, Carteret, Pamlico	129,300	77	23	19	58	23	$68,300	2.2
Group 5 total	**1,084,600**	**69**	**31**	**22**	**60**	**19**	**$59,100**	**2.4**

Group 6

Counties	Total population	% white	% people of color	% under 18	% 18–64	% 65 or older	Median household income	Average household size
Ashe, Avery, Mitchell, Watauga, Yancey	129,800	92	8	16	65	20	$60,600	2.2
Alleghany, Surry, Wilkes	153,300	86	14	21	59	20	$57,400	2.4
Cherokee, Clay, Graham, Haywood, Jackson, Macon, Madison, Swain	218,400	88	12	18	58	23	$60,500	2.2
Henderson, Transylvania	145,900	84	16	19	56	25	$68,400	2.2
Group 6 total	**647,300**	**88**	**12**	**19**	**59**	**22**	**$54,900**	**2.2**

Source: Urban Institute analysis of the 2013–17 American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org.

Notes: Numbers may not sum to totals because of rounding.

TABLE A.2

Housing Profile for North Carolina by Area and Group, 2015

Group 1

County	Total housing units	% renter-occupied	% single-family	% occupied units with cost burden	% vacant	% other/ seasonal vacant
Wake	404,500	36	70	26	4	3
Durham	124,000	47	64	32	4	3
Guilford	223,000	42	68	33	6	5
Forsyth	159,600	38	71	31	5	5
Mecklenburg	428,500	44	66	32	4	3
Group 1 total	**1,339,700**	**41**	**68**	**30**	**5**	**4**

Group 2

Counties	Total housing units	% renter-occupied	% single-family	% occupied units with cost burden	% vacant	% other/ seasonal vacant
Johnston	70,500	28	75	26	3	6
Orange	57,700	39	66	29	4	4
Alamance	67,400	35	70	30	4	5
Davie, Iredell, Yadkin	107,100	27	75	24	5	7
Buncombe	117,200	36	66	30	3	9
Catawba	67,900	32	70	25	4	8
Gaston	89,300	35	74	30	4	7

Counties	Total housing units	% renter-occupied	% single-family	% occupied units with cost burden	% vacant	% other/ seasonal vacant
Cabarrus, Stanly	103,200	28	82	27	4	6
Rowan	60,000	32	73	26	5	11
Davidson	72,800	30	74	26	4	9
Randolph	60,500	29	68	25	3	7
Wayne	53,800	40	61	31	4	8
Pitt	76,700	47	59	36	5	6
New Hanover, Pender	134,600	38	70	36	5	12
Brunswick	82,100	24	70	31	5	33
Cumberland	144,000	49	68	37	8	6
Anson, Union	89,300	21	87	25	2	6
Group 2 total	**1,454,200**	**34**	**71**	**30**	**4**	**9**

Group 3

Counties	Total housing units	% renter-occupied	% single-family	% occupied units with cost burden	% vacant	% other/ seasonal vacant
Rockingham, Stokes	65,600	29	74	26	4	10
Edgecombe, Nash	68,000	39	62	33	4	10
Chatham, Lee	54,400	28	75	26	4	6
Alexander, Caldwell	54,100	28	69	24	3	13
Burke, McDowell	60,600	29	65	24	3	13
Jones, Lenoir, Onslow	109,500	45	68	34	7	11
Craven	44,000	36	74	31	5	7
Group 3 total	**456,200**	**35**	**69**	**29**	**5**	**10**

Group 4

Counties	Total housing units	% renter-occupied	% single-family	% occupied units with cost burden	% vacant	% other/ seasonal vacant
Franklin, Halifax, Hertford, Northampton, Vance, Warren	106,800	34	66	32	3	16
Duplin, Sampson	52,000	30	59	30	3	12
Bladen, Columbus, Robeson	95,400	34	55	30	3	11
Hoke, Richmond, Scotland	55,500	36	68	34	4	10
Group 4 total	**309,700**	**33**	**62**	**32**	**3**	**13**

Group 5

Counties	Total housing units	% renter-occupied	% single-family	% occupied units with cost burden	% vacant	% other/ seasonal vacant
Caswell, Granville, Person	52,600	27	68	29	3	11
Camden, Chowan, Currituck, Gates, Pasquotank, Perquimans	55,100	29	74	31	6	17

Counties	Total housing units	% renter-occupied	% single-family	% occupied units with cost burden	% vacant	% other/ seasonal vacant
Bertie, Dare, Hyde, Martin, Tyrrell, Washington	68,000	30	71	34	8	30
Greene, Wilson	43,800	38	65	33	3	8
Cleveland, Lincoln, Polk, Rutherford	123,700	29	73	27	4	12
Montgomery, Moore	61,400	28	74	27	5	15
Harnett	48,900	36	72	30	5	7
Beaufort, Carteret, Pamlico	83,200	29	68	29	5	30
Group 5 total	**536,700**	**30**	**71**	**30**	**5**	**17**

Group 6

Counties	Total housing units	% renter-occupied	% single-family	% occupied units with cost burden	% vacant	% other/ seasonal vacant
Ashe, Avery, Mitchell, Watauga, Yancey	84,300	30	67	29	5	33
Alleghany, Surry, Wilkes	74,500	27	68	26	4	13
Cherokee, Clay, Graham, Haywood, Jackson, Macon, Madison Swain	139,600	27	72	28	4	31
Henderson, Transylvania	75,200	28	73	26	3	16
Group 6 total	**373,500**	**28**	**70**	**27**	**4**	**25**

Source: Urban Institute analysis of the 2013–17 American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org.

Notes: Numbers may not sum to totals because of rounding. Vacant units for seasonal or occasional use or otherwise vacant and held off the market are excluded from the shares of units by tenure or structure type.

North Carolina Has Too Few Homes Affordable for Households with Low and Middle Incomes

To calculate housing cost needs—the cost that households desire or could afford—we used the actual costs paid for households who were not housing cost burdened and, for those who were cost burdened, a maximum affordable cost based on income using the 2017 HUD Income Limits, AMI bands, and the following assumptions:

- 0–80 percent of AMI: 30 percent of monthly income
- 80–120 percent of AMI: 20.8 percent of monthly income (the band average)
- 120–200 percent of AMI: 15.9 percent of monthly income (the band average)

- Above 200 percent of AMI: 11.2 percent of monthly income (the band average).
- If a household above 120 percent of AMI was spending more than the average for its AMI band, its maximum desired housing cost was assumed to be its current housing cost, regardless of housing cost burden.

Ability to pay (page 16). Using the maximum housing cost defined by the housing cost need above, if a household's current monthly payment plus 10 percent was less than the maximum they could pay, that household was considered able to spend more on housing.

TABLE A.3

Households in North Carolina by Annual Income Quintile for State by Area and Group, 2015

Group 1

County	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Wake	41,300	53,600	68,600	80,500	130,700	374,700
Durham	20,800	21,200	21,800	23,100	27,600	114,500
Guilford	41,500	41,500	39,200	37,700	38,700	198,600
Forsyth	31,400	29,500	27,400	27,700	26,900	142,900
Mecklenburg	59,700	69,100	74,300	80,200	112,600	395,900
Group 1 total	**194,700**	**214,900**	**231,200**	**249,300**	**336,500**	**1,226,600**

Group 2

Counties	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Johnston	10,100	12,100	13,800	14,800	13,300	64,000
Orange	7,600	7,600	9,400	9,800	18,300	52,700
Alamance	13,900	14,800	11,400	11,600	9,900	61,600
Davie, Iredell, Yadkin	14,800	20,200	18,800	21,300	19,000	94,100
Buncombe	19,900	21,300	22,100	19,900	20,000	103,200
Catawba	12,300	13,100	12,300	12,600	9,200	59,500
Gaston	17,800	16,700	16,000	15,700	13,000	79,200
Cabarrus, Stanly	14,300	17,600	20,100	19,600	21,600	93,200
Rowan	11,000	10,500	10,900	10,900	7,500	50,800
Davidson	13,300	14,900	12,800	13,200	9,100	63,400
Randolph	11,700	12,500	12,800	10,200	7,200	54,300
Wayne	11,000	11,800	8,800	9,500	6,500	47,600
Pitt	17,200	13,600	13,000	12,500	11,600	67,900
New Hanover, Pender	23,200	21,300	21,500	21,500	24,500	111,900
Brunswick	9,700	10,000	10,900	10,400	9,800	50,900
Cumberland	26,600	27,900	26,400	24,500	18,000	123,500
Anson, Union	10,900	12,700	15,000	18,200	25,800	82,600
Group 2 total	**245,400**	**258,400**	**256,000**	**256,100**	**244,500**	**1,260,400**

Group 3

Counties	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Rockingham, Stokes	13,800	12,200	12,600	11,400	6,200	56,200
Edgecombe, Nash	15,300	13,100	12,200	10,400	7,300	58,200
Chatham, Lee	9,400	9,400	9,300	9,900	11,000	49,100
Alexander, Caldwell	11,300	10,700	9,500	8,900	4,700	45,100

Counties	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Burke, McDowell	13,300	11,700	10,900	9,700	5,200	50,800
Jones, Lenoir, Onslow	17,900	19,100	21,500	19,100	11,900	89,500
Craven	7,200	7,500	9,300	8,100	6,300	38,500
Group 3 total	**88,200**	**83,700**	**85,400**	**77,600**	**52,600**	**387,500**

Group 4

Counties	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Franklin, Halifax, Hertford, Northampton, Vance, Warren	26,000	20,300	16,000	14,700	10,100	87,000
Duplin, Sampson	11,900	11,400	9,000	7,000	4,600	43,900
Bladen, Columbus, Robeson	26,100	19,300	14,900	14,000	7,600	81,800
Hoke, Richmond, Scotland	13,700	11,300	9,200	8,700	5,000	47,800
Group 4 total	**77,700**	**62,200**	**49,000**	**44,300**	**27,300**	**260,500**

Group 5

Counties	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Caswell, Granville, Person	10,400	9,100	9,300	9,500	7,000	45,400
Camden, Chowan, Currituck, Gates, Pasquotank, Perquimans	8,300	9,000	8,400	9,400	7,900	42,900
Bertie, Dare, Hyde, Martin, Tyrrell, Washington	10,400	9,000	9,400	7,700	5,300	41,700
Greene, Wilson	9,500	9,200	8,000	7,700	4,600	39,000
Cleveland, Lincoln, Polk, Rutherford	25,300	23,500	21,700	18,900	14,700	104,100
Montgomery, Moore	10,600	9,400	9,000	9,800	10,100	48,900
Harnett	8,600	8,500	9,700	9,300	7,100	43,200
Beaufort, Carteret, Pamlico	12,300	10,900	10,400	11,000	9,200	53,800
Group 5 total	**95,300**	**88,600**	**85,900**	**83,300**	**65,800**	**418,800**

Group 6

Counties	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Ashe, Avery, Mitchell, Watauga, Yancey	15,300	10,700	9,800	9,400	6,600	51,900
Alleghany, Surry, Wilkes	17,100	14,300	11,600	11,600	6,600	61,300
Cherokee, Clay, Graham, Haywood, Jackson, Macon, Madison, Swain	22,800	21,300	19,000	16,800	10,900	90,800
Henderson, Transylvania	11,800	13,200	13,200	13,500	9,100	60,900
Group 6 total	**67,100**	**59,500**	**53,600**	**51,300**	**33,300**	**264,800**

Source: Urban Institute analysis of the 2013–17 American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org. Occupations from the Bureau of Labor Statistics' Occupational Employment Statistics survey (2017) for the North Carolina.

Notes: Numbers may not sum to totals because of rounding. Income breaks represent the 20th, 40th, 60th, and 80th percentile for annual household income in North Carolina. Incomes are reported in 2017 dollars. Because incomes are often reported by survey respondents as rounded values, such as $20,000 or $60,000, the income distribution is not smooth, and several income breaks occur at those round numbers, resulting in uneven quintiles. The number of households has been weighted to reflect the 2015 population estimates by the North Carolina Office of Budget and Management.

TABLE A.4

Housing Units in North Carolina Cost Level by Area and Group, 2015

Group 1

County	$0–$349	$350–699	$700–$999	$1,000–$1,499	$1,500–$2,499	$2,500+	Total
Wake	15,400	25,200	86,200	113,200	91,500	43,200	374,700
Durham	6,500	14,800	33,900	35,200	17,900	6,100	114,400
Guilford	14,400	49,100	64,400	40,300	21,200	9,200	198,600
Forsyth	12,900	37,700	45,600	27,300	13,100	6,200	142,800
Mecklenburg	17,000	52,200	104,800	114,500	67,600	39,700	395,800
Group 1 total	**66,300**	**178,900**	**335,000**	**330,600**	**211,300**	**104,500**	**1,226,600**

Group 2

Counties	$0–$349	$350–$699	$700–$999	$1,000–$1,499	$1,500–$2,499	$2,500+	Total
Johnston	6,700	15,000	19,000	15,400	6,000	1,900	64,000
Orange	3,200	4,200	10,700	13,300	12,000	9,400	52,800
Alamance	7,900	16,900	18,000	11,300	5,500	1,900	61,500
Davie, Iredell, Yadkin	11,400	23,600	20,500	19,400	11,900	7,400	94,200
Buncombe	9,500	16,400	21,800	28,100	17,900	9,500	103,200
Catawba	7,400	18,900	16,700	8,700	5,200	2,600	59,500
Gaston	9,700	24,800	24,900	12,200	5,500	2,200	79,300
Cabarrus, Stanly	7,400	21,900	24,800	20,300	14,600	4,100	93,100
Rowan	6,900	17,000	13,500	8,100	4,100	1,300	50,900
Davidson	8,400	21,000	17,100	10,200	5,000	1,600	63,300
Randolph	8,700	19,600	14,600	7,500	2,800	1,200	54,400
Wayne	8,800	13,900	12,900	8,600	2,800	500	47,500
Pitt	8,700	20,900	18,000	13,100	5,800	1,400	67,900
New Hanover, Pender	9,100	14,600	28,300	29,200	20,800	9,900	111,900
Brunswick	5,400	8,200	11,300	10,700	10,300	5,000	50,900
Cumberland	12,300	33,700	37,000	29,800	8,900	1,900	123,600
Anson, Union	7,100	11,900	18,200	18,900	17,400	9,200	82,700
Group 2 total	**138,700**	**302,500**	**327,200**	**264,600**	**156,400**	**71,100**	**1,260,500**

Group 3

Counties	$0–$349	$350–$699	$700–$999	$1,000–$1,499	$1,500–$2,499	$2,500+	Total
Rockingham, Stokes	9,300	21,500	13,800	7,500	3,300	800	56,200
Edgecombe, Nash	11,700	21,400	13,400	7,800	2,800	1,100	58,200
Chatham, Lee	7,000	10,400	10,600	8,100	7,800	5,200	49,100
Alexander, Caldwell	8,200	17,700	10,200	5,400	2,600	1,000	45,100
Burke, McDowell	10,400	18,400	11,700	6,000	2,900	1,500	50,900
Jones, Lenoir, Onslow	11,900	20,300	26,700	22,500	6,400	1,600	89,400
Craven	4,900	7,100	11,500	9,500	3,800	1,600	38,400
Group 3 total	**63,400**	**116,800**	**97,900**	**66,900**	**29,600**	**13,000**	**387,500**

Group 4

Counties	$0–$349	$350–$699	$700–$999	$1,000–$1,499	$1,500–$2,499	$2,500+	Total
Franklin, Halifax, Hertford, Northampton, Vance, Warren	20,400	29,700	19,700	9,600	5,800	1,800	87,000
Duplin, Sampson	12,200	16,000	8,400	4,700	1,800	800	43,900
Bladen, Columbus, Robeson	27,200	30,300	14,100	6,300	2,900	1,100	81,900
Hoke, Richmond, Scotland	10,700	17,600	10,400	6,400	2,100	500	47,700
Group 4 total	**70,500**	**93,600**	**52,600**	**27,000**	**12,600**	**4,100**	**260,400**

Group 5

Counties	$0–$349	$350–$699	$700–$999	$1,000–$1,499	$1,500–$2,499	$2,500+	Total
Caswell, Granville, Person	7,000	14,800	11,500	6,800	4,100	1,200	45,400
Camden, Chowan, Currituck, Gates, Pasquotank, Perquimans	5,900	9,000	9,400	9,100	7,400	2,100	42,900
Bertie, Dare, Hyde, Martin, Tyrrell, Washington	8,900	10,600	7,300	7,200	5,300	2,400	41,700
Greene, Wilson	6,300	13,400	11,000	5,400	2,100	700	38,900
Cleveland, Lincoln, Polk, Rutherford	16,600	35,100	22,200	14,900	9,800	5,400	104,000
Montgomery, Moore	6,500	10,600	9,300	8,900	9,100	4,400	48,800
Harnett	5,500	11,400	10,800	10,200	4,500	700	43,100
Beaufort, Carteret, Pamlico	8,700	11,600	11,000	10,900	8,100	3,400	53,700
Group 5 total	**65,500**	**116,700**	**92,700**	**73,500**	**50,300**	**20,200**	**418,900**

Group 6

Counties	$0–$349	$350–$699	$700–$999	$1,000–$1,499	$1,500–$2,499	$2,500+	Total
Ashe, Avery, Mitchell, Watauga, Yancey	8,700	12,300	10,000	10,200	7,700	3,000	51,900
Alleghany, Surry, Wilkes	12,800	20,400	12,800	9,000	4,800	1,500	61,300
Cherokee, Clay, Graham, Haywood, Jackson, Macon, Madison, Swain	14,300	22,800	19,200	17,600	11,900	5,000	90,800
Henderson, Transylvania	7,200	11,000	12,500	15,500	9,700	5,000	60,900
Group 6 total	**43,000**	**66,500**	**54,500**	**52,300**	**34,100**	**14,400**	**264,800**

Source: Urban–Greater DC analysis of the 2013–17 American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org.

Notes: Numbers may not sum to total because of rounding. For occupied units the monthly costs reflect the actual costs paid by the occupants. For vacant rental units, costs reflect the listed rent, but for vacant for sale units the monthly cost reflects the mortgage, insurance, and tax cost of the unit to a first-time homebuyer. The number of occupied housing units has been weighted to reflect the 2015 population estimates by the North Carolina Office of Budget and Management.

North Carolina Expects to Add 866,000 Households by 2030, with Faster Growth of Households with Low Incomes

The North Carolina population projections, household projections, and household income projections are calculated by area for midyear 2025, 2030, and 2035. The population projections are constructed by age and by race or ethnicity. The household projections and household income projections are based on projected age and racial or ethnic populations, combined with current data on householder/household income distributions conditional on age and race or ethnicity. These projections allow users to simulate additional demand for housing at different cost levels.

POPULATION PROJECTIONS

We produced population projections for each county in North Carolina by projection year, racial or ethnic group, and age category. Projections are produced for 2015, 2020, 2025, 2030, and 2035. We use the following definitions for races and ethnic groups :

- Hispanic ethnicity, any race
- not Hispanic ethnicity, white only race
- not Hispanic ethnicity, black only race
- not Hispanic ethnicity, American Indian and Alaska Native only race, Asian only race. Hawaiian and Pacific Islander only race, or two or more race categories selected.

We use the following age groups :

- 0–17
- 18–24
- 25–44
- 45–64
- 65+

The geographic, age, race and ethnicity data we use to make population projections come from multiple sources. The base population projections by race, age, and county come from the North Carolina Office of State Budget and Management 2018 NC County and State Population Projections. The Office of State Budget and Management periodically updates their projections. The main data source file for [61]Sex, Race, Age Groups (2000-2038) is NCprojectionsbyagegrp2018.csv. This file did not include designations by Hispanic origin. Projections from the file for Hispanic Origin by Race (2010-2038), NCprojectionsbyhisp2018.csv, included Hispanic Projections by year and county but not by age or specific racial group (only white and nonwhite). To assign the Hispanic proportions of each county by race, age, and year, we used the yearly projected Hispanic population by Single Year of Age, Sex, Race, and Hispanic Origin for the United States: 2016 to 2060. This information came from US Census Bureau population projections series from 2017.[62] We then took the North Carolina Office of State Budget and Management population projections by Race and Age group and expanded the Race categories to include a mix of racial and ethnic groups. Data for householder status, and for household income to make household projections and household income projections, are from the 2013–17 single-year estimates for American Community Survey microdata from IPUMS-USA at the University of Minnesota.

In the first step of this process, we assigned proportions of Hispanic and non-Hispanic people to each race group in each county in the North Carolina Office of State Budget and Management projections, using the US Census Bureau's projected proportion Hispanic for each Race group and age group for each projection year. The sums of all projected Hispanic populations for all race and age groups for all of North Carolina came to a total that differed slightly from the projected Hispanic population of the state specified by the North Carolina Office of State Budget and Management, so we identified a calibration factor for each (projection year) × (race group) × (age group), or 100 total calibration factors applied to each county in the state. Applying these calibration factors meant that our population projections compared with the North Carolina Office of Management and Budget had the same race counts (although the "non-Hispanic" race counts were of course lower), the same age counts, and the same Hispanic population counts. Our projections also had distributions of ethnic groups within each racial and age group that approximated the US Census Bureau's nation projections as closely as possible within the constraints imposed by North Carolina's projections.

To match the county population projections data with (PUMA-based) household estimates from the American Community Survey, we used the Geographic Correspondence Engine provided by the Missouri Census Data Center.[63] The PUMA-county matched file provides population projections aggregated from the 100 counties for 45 geographical units, each of which represents a group of one or more PUMAs for whom the exact population projection can be obtained from the state's county projections.

- eight counties that contain all the population in multiple PUMAs.
- twelve counties with populations that correspond exactly to a single PUMA

- nine units consisting of a county that overlaps two PUMAs, plus additional smaller counties contained entirely within either of the two PUMAs.
- sixteen PUMAs that each contain the entire populations of two or more small counties.

TABLE A.5

PUMA Identifiers for Each Analytic Area

Group	PUMAs	Counties
1	1201,1202, 1203, 1204, 1205, 1206, 1207, 1208	Wake
1	1301, 1302	Durham
1	1701, 1702, 1703, 1704	Guilford
1	1801, 1802, 1803	Forsyth
1	3101, 3102, 3103, 3104, 3105, 3106, 3107, 3108	Mecklenburg
2	1100	Johnston
2	1400	Orange
2	1600	Alamance
2	1900, 2900	Davie, Iredell, Yadkin
2	2201, 2202	Buncombe
2	2800	Catawba
2	3001, 3002	Gaston
2	3200, 3300	Cabarrus, Stanly
2	3400	Rowan
2	3500	Davidson
2	3600	Randolph
2	4000	Wayne
2	4200	Pitt
2	4600, 4700	New Hanover, Pender
2	4800	Brunswick
2	5001, 5002, 5003	Cumberland
2	5300, 5400	Anson, Union
3	0300	Rockingham, Stokes
3	0900	Edgecombe, Nash
3	1599	Chatham, Lee
3	2000	Alexander, Caldwell
3	2100	Burke, McDowell
3	4100, 4500	Jones, Lenoir, Onslow
3	4300	Craven
4	0500, 0600	Franklin, Halifax, Hertford, Northampton, Vance, Warren
4	3900	Duplin, Sampson
4	4900, 5100	Bladen, Columbus, Robeson
4	5200	Hoke, Richmond, Scotland
5	0400	Caswell, Granville, Person
5	0700	Camden, Chowan, Currituck, Gates, Pasquotank, Perquimans
5	0800	Bertie, Dare, Hyde, Martin, Tyrrell, Washington
5	1000	Greene, Wilson
5	2600, 2700	Cleveland, Lincoln, Polk, Rutherford
5	3700	Montgomery, Moore
5	3800	Harnett
5	4400	Beaufort, Carteret, Pamlico
6	0100	Ashe, Avery, Mitchell, Watauga, Yancey
6	0200	Alleghany, Surry, Wilkes

Group	PUMAs	Counties
6	2300, 2400	Cherokee, Clay, Graham, Haywood, Jackson, Macon, Madison, Swain
6	2500	Henderson, Transylvania

A few issues should be kept in mind: The proportional allocation of Hispanic population by race and age and the subsequent calibration to Hispanic population totals at the county level produced noninteger population counts that had to be rounded. As a result of rounding error, the population counts in our files do not precisely match the Hispanic, race-group, and age-group totals from the state's source files they were based upon. Table A.6 shows how the calibrated population projections match the original population projections at the total level.

TABLE A.6

Comparison of Calibrated Population Projections

Year	Official NC statewide population projection	Our calibrated population projection	Difference
2015	10,041,966	10,041,968	+2 too high
2020	10,647,005	10,647,993	- 12 too low
2025	11,248,928	11,248,934	+6 too high
2030	11,847,719	11,847,711	-8 too low
2035	12,445,902	12,445,907	+5 too high

Because the state's projections for Hispanic populations at the county and even the state level are not age specific, they are subject to some error in counties where the relative age difference between Hispanic people and non-Hispanic people in the county differs substantially from the relative age difference between Hispanic people and non-Hispanic people in the overall US population.

The state's population projection files suppressed data from public use when the population projections for any race and age group were considered small enough to create a danger that individuals might be identified. This problem never arose for the white population of any given county, but it often occurred for the Asian/Pacific Islander population and occasionally occurred for other racial groups. We created synthetic values for missing cells based on an assumption that within a given county and projection year, the distribution of very small populations of color is comparably distributed by age groups.

To prepare projections for household incomes, we generated the current share of the population in each age–racial or ethnic category who is a head of household for each of the 45 areas using the American Community Survey microdata from 2013 to 2017. We did not attempt to project future trends in whether a person of a given age–racial or ethnic category is more or less likely to be a household head, such as marriage trends or factors influencing household formation rates, like the economic crisis caused by the global pandemic. We used this fraction to create a matrix of household income deciles by age group and race or ethnicity of householder for each household by their current income decile. Then we multiply the household income cell category percentages from the 2013–17 American Community Survey by the projected row counts from our population projections to produce our projections of households by household income category. The projected number of household heads is the same as the projected number of households, and the future distribution of household incomes within each income decile is the same as the American Community Survey distribution of current incomes reported by householders within each current income decile.

Projecting future households by income level then categorizing them relative to the median or deciles creates some uncertainty about how the median or the deciles themselves are defined relative to present and future household income distributions. Our projections accurately describe how demographics will affect the income distribution, but the future median and deciles will have shifted from their current values with the projected changes in the income distribution. Our demographic projections suggest that by 2035, about 51.5 percent of households in North Carolina will have incomes below the currently defined median. We make no assumptions about future economic growth or recessions that would affect household incomes, only demographic change.

TABLE A.7

Projected Additional Households by Income Quintile by 2030 by Area and Group

Group 1

County	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Wake	22,900	28,800	31,300	33,200	43,700	160,000
Durham	6,400	5,700	6,000	4,600	4,300	27,100
Guilford	12,700	11,200	8,800	6,800	3,000	42,500
Forsyth	8,600	7,000	5,200	3,800	1,800	26,400
Mecklenburg	30,400	32,100	28,900	27,500	28,300	147,200
Group 1 total	**80,900**	**84,900**	**80,200**	**76,000**	**81,100**	**403,200**

Group 2

Counties	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Johnston	5,800	6,200	6,800	5,700	4,600	29,100
Orange	1,700	1,900	2,300	2,300	3,600	11,700
Alamance	4,100	4,700	3,300	2,400	1,800	16,300
Davie, Iredell, Yadkin	5,000	6,800	5,500	5,600	4,200	27,000
Buncombe	6,100	5,600	4,600	4,100	3,700	24,100
Catawba	2,300	2,100	1,100	700	100	6,300
Gaston	4,600	3,800	2,700	2,100	1,300	14,600
Cabarrus, Stanly	5,900	7,400	7,200	5,900	6,000	32,400
Rowan	1,800	2,200	1,500	1,000	200	6,700

Counties	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Davidson	2,200	2,800	1,700	900	600	8,100
Randolph	1,300	1,400	800	100	-200	3,400
Wayne	2,100	1,700	1,000	500	200	5,500
Pitt	3,200	2,900	2,400	1,700	1,300	11,500
New Hanover, Pender	8,300	7,600	7,800	7,100	7,600	38,300
Brunswick	5,100	5,400	5,600	5,200	4,700	25,900
Cumberland	2,300	1,000	500	-500	-700	2,600
Anson, Union	5,300	6,100	6,500	7,100	8,700	33,700
Group 2 total	**67,100**	**69,400**	**61,300**	**51,700**	**47,800**	**297,400**

Group 3

Counties	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Rockingham, Stokes	1,400	700	200	-600	-400	1,200
Edgecombe, Nash	1,700	800	300	-100	-700	2,000
Chatham, Lee	3,500	4,100	3,400	3,000	2,300	16,400
Alexander, Caldwell	1,800	1,400	1,100	600	200	5,100
Burke, McDowell	2,700	1,900	1,300	900	200	6,900
Jones, Lenoir, Onslow	2,700	2,500	2,200	900	800	9,200
Craven	200	300	0	-500	-500	-500
Group 3 total	**14,100**	**11,700**	**8,400**	**4,200**	**1,900**	**40,300**

Group 4

Counties	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Franklin, Halifax, Hertford, Northampton, Vance, Warren	2,300	2,000	900	500	100	5,800
Duplin, Sampson	400	500	-100	-500	-400	-100
Bladen, Columbus, Robeson	0	100	-600	-500	-600	-1,600
Hoke, Richmond, Scotland	2,600	2,200	1,400	1,100	500	7,900
Group 4 total	**5,300**	**4,800**	**1,600**	**600**	**-300**	**12,000**

Group 5

Counties	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Caswell, Granville, Person	2,300	2,300	1,800	1,400	700	8,500
Camden, Chowan, Currituck, Gates, Pasquotank, Perquimans	1,300	1,400	1,200	900	700	5,500
Bertie, Dare, Hyde, Martin, Tyrrell, Washington	300	500	400	0	-100	1,200
Greene, Wilson	2,100	1,900	900	300	-100	5,200
Cleveland, Lincoln, Polk, Rutherford	4,800	4,300	3,800	2,500	1,300	16,900
Montgomery, Moore	2,800	2,500	2,000	2,200	2,000	11,500
Harnett	3,100	3,000	3,100	2,300	1,800	13,400
Beaufort, Carteret, Pamlico	1,600	1,400	1,100	700	400	5,200
Group 5 total	**18,500**	**17,300**	**14,400**	**10,400**	**6,700**	**67,300**

Group 6

Counties	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total

Ashe, Avery, Mitchell, Watauga, Yancey	3,100	2,100	1,600	1,500	800	9,100
Alleghany, Surry, Wilkes	1,900	1,000	900	200	-100	4,000
Cherokee, Clay, Graham, Haywood, Jackson, Macon, Madison, Swain	5,400	5,000	3,700	3,000	1,600	18,700
Henderson, Transylvania	3,000	3,700	2,800	2,900	1,700	14,100
Group 6 total	**13,400**	**11,900**	**9,000**	**7,700**	**3,900**	**45,800**

Source: Urban Institute projections from American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org, and the North Carolina Office of Management and Budget.

Notes: Data are rounded to the nearest 100. Numbers may not sum to totals because of rounding. The income quintiles are defined based on the income distribution in North Carolina in 2015 (shown in table 3). In subsequent years, these categories will have shifted slightly. The Mix of Housing across Cost Bands Would Need to Shift to Align with Future Households

To estimate future housing cost needs, we used the current distribution of households and the maximum housing costs each household could afford or would desire to pay based on their income and applied it to the number of households expected to be added in each income quintile. This distribution does differ from that presented in current housing needs as it places *every* household in the housing cost category appropriate to their income level rather than only those households who are cost burdened; the current housing needs assumes the actual housing costs of those not cost burdened are their desired costs. The following assumptions, which incorporate the 2017 HUD Income Limits, were used to calculate the maximum that a household could or would pay to determine future needs:

- 0–80 percent of AMI: 30 percent of monthly income
- 80–120 percent of AMI: 20.8 percent of monthly income (the band average)
- 120–200 percent of AMI: 15.9 percent of monthly income (the band average)
- Above 200 percent of AMI: 11.2 percent of monthly income (the band average).
- If a household above 120 percent of AMI was spending more than the average for its AMI band, its maximum desired housing cost was assumed to be its current housing cost, regardless of housing cost burden.
- The number of additional units by group reported in figures 14 and 15 were calculated at the group level and were not a summarization of the individual calculations of the geographic units within a group. Because each unit has a different distribution of housing costs and a different household growth rate for each income band, group totals for each cost band derived from adding up the units within a group will differ from those derived for the group overall.

TABLE A.8

Housing Units by Cost Band Needed to Accommodate Household Growth from 2015 to 2030 by Area and Group

Group 1

County	$0–$349	$350–$699	$700–$999	$1000–$1,499	$1,500–$2,499	$2,500+	Total
Wake	14,200	20,100	28,400	57,400	35,200	12,100	167,500
Durham	4,200	5,600	8,200	6,100	3,200	1,100	28,300
Guilford	7,700	12,300	14,600	7,300	2,300	900	45,200
Forsyth	5,200	8,300	8,200	4,500	1,300	500	28,000
Mecklenburg	18,200	25,300	37,800	43,500	20,000	9,000	153,800

Group 2

Counties	$0–$349	$350–$699	$700–$999	$1000–$1,499	$1,500–$2,499	$2,500+	Total
Johnston	3,600	5,000	5,400	11,000	4,400	600	30,000
Orange	1,200	1,700	3,000	2,800	1,900	1,700	12,300
Alamance	2,300	5,400	5,200	2,800	1,000	300	16,900
Davie, Iredell, Yadkin	3,200	5,900	8,100	7,400	2,700	1,300	28,600
Buncombe	3,400	5,800	6,900	5,400	2,400	1,100	25,000
Catawba	1,300	2,600	1,800	600	100	100	6,500
Gaston	2,900	3,600	3,800	3,800	900	200	15,300
Cabarrus, Stanly	3,400	6,300	9,500	9,200	4,200	1,100	33,800
Rowan	1,100	1,800	2,200	1,700	200	100	7,100
Davidson	1,300	2,700	2,700	1,300	400	100	8,500
Randolph	700	1,300	1,400	200	-100	0	3,500
Wayne	1,300	2,300	1,400	500	200	0	5,800
Pitt	2,100	3,100	3,700	1,900	800	300	11,900
New Hanover, Pender	5,500	6,600	10,100	10,400	5,100	2,700	40,400
Brunswick	3,000	5,300	8,100	5,700	3,400	1,700	27,300
Cumberland	1,500	1,700	600	-500	-300	-100	2,900
Anson, Union	3,200	4,600	6,800	11,000	5,900	2,800	34,400

Group 3

Counties	$0–$349	$350–$699	$700–$999	$1000–$1,499	$1,500–$2,499	$2,500+	Total
Rockingham, Stokes	900	1,000	300	-600	-200	0	1,300
Edgecombe, Nash	1,100	1,300	400	-300	-300	-100	2,100
Chatham, Lee	2,100	4,000	5,300	3,400	1,500	800	17,000
Alexander, Caldwell	1,200	1,900	1,400	600	100	0	5,400
Burke, McDowell	1,600	2,500	2,100	700	200	0	7,100
Jones, Lenoir, Onslow	1,700	2,500	3,300	1,700	600	100	10,000
Craven	100	200	0	-500	-300	-100	-600

Group 4

Counties	$0–$349	$350–$699	$700–$999	$1000–$1,499	$1,500–$2,499	$2,500+	Total
Franklin, Halifax, Hertford, Northampton, Vance, Warren	1,500	1,800	1,700	900	200	0	6,100

Duplin, Sampson	300	300	0	-500	-200	-100	-100
Bladen, Columbus, Robeson	0	0	-500	-800	-200	-100	-1,700
Hoke, Richmond, Scotland	1,900	2,300	2,300	1,500	300	100	8,300

Group 5

Counties	$0–$349	$350–$699	$700–$999	$1000–$1,499	$1,500–$2,499	$2,500+	Total
Caswell, Granville, Person	1,400	2,300	2,900	1,500	600	100	8,800
Camden, Chowan, Currituck, Gates, Pasquotank, Perquimans	800	1,400	1,800	1,100	600	200	5,800
Bertie, Dare, Hyde, Martin, Tyrrell, Washington	200	400	600	100	0	0	1,400
Greene, Wilson	1,300	1,800	1,800	400	0	0	5,300
Cleveland, Lincoln, Polk, Rutherford	2,900	4,400	5,200	3,800	1,000	300	17,700
Montgomery, Moore	1,700	2,700	3,400	2,500	1,400	600	12,200
Harnett	2,000	3,000	4,200	3,400	1,300	200	14,100
Beaufort, Carteret, Pamlico	900	1,500	1,800	900	300	100	5,600

Group 6

Counties	$0–$349	$350–$699	$700–$999	$1000–$1,499	$1,500–$2,499	$2,500+	Total
Ashe, Avery, Mitchell, Watauga, Yancey	2,200	2,300	2,900	1,600	700	300	9,900
Alleghany, Surry, Wilkes	1,100	1,400	1,300	400	0	0	4,200
Cherokee, Clay, Graham, Haywood, Jackson, Macon, Madison, Swain	3,300	5,100	6,500	3,400	1,100	400	19,800
Henderson, Transylvania	1,800	3,300	4,600	3,300	1,100	400	14,500

Source: Urban Institute projections from American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org, and the North Carolina Office of Management and Budget.

Notes: Growth in units that are vacant and for sale or for rent is assumed to match the overall growth in units needed to accommodate households to maintain current vacancy rates. Units that were seasonal or vacant and being held off the market at baseline are not included in this table.

TABLE A.9

Estimated Housing Units with Federal Subsidies in the North Carolina by Area by Group, 2020

Group 1

County	Units with deep subsidies	Other subsidized units	Total
Wake	3,060	8,948	12,008
Durham	2,765	3,461	6,226
Guilford	3,670	4,140	7,810
Forsyth	2,814	3,374	6,188
Mecklenburg	2,462	7,848	10,310
Group 1 total	**14,771**	**27,771**	**42,542**

Group 2

Counties	Units with deep subsidies	Other subsidized units	Total
Johnston	1,164	1,242	2,406
Orange	644	685	1,329
Alamance	1,452	1,186	2,638
Davie, Iredell, Yadkin	261	556	817
Buncombe	1,241	2,216	3,457
Catawba	1,858	1,766	3,624
Gaston	934	1,549	2,483
Cabarrus, Stanly	959	2,101	3,060
Rowan	1,061	551	1,612
Davidson	696	814	1,510
Randolph	661	592	1,253
Wayne	2,091	799	2,890
Pitt	1,791	1,580	3,371
New Hanover, Pender	1,576	2,018	3,594
Brunswick	36	644	680
Cumberland	4,172	4,240	8,412
Anson, Union	707	260	967
Group 2 total	**21,304**	**22,799**	**44,103**

Group 3

Counties	Units with deep subsidies	Other subsidized units	Total
Rockingham, Stokes	3,206	1,722	4,928
Edgecombe, Nash	4,985	1,265	6,250
Chatham, Lee	2,404	1,270	3,674
Alexander, Caldwell	1,810	752	2,562
Burke, McDowell	2,177	921	3,098
Jones, Lenoir, Onslow	3,206	690	3,896
Craven	2,957	1,147	4,104
Group 3 total	**20,745**	**7,767**	**28,512**

Group 4

Counties	Units with deep subsidies	Other subsidized units	Total
Franklin, Halifax, Hertford, Northampton, Vance, Warren	1,996	2,030	4,026
Duplin, Sampson	525	913	1,438
Bladen, Columbus, Robeson	594	1,356	1,950
Hoke, Richmond, Scotland	1,138	1,447	2,585
Group 4 total	**4,253**	**5,746**	**9,999**

Group 5

Counties	Units with deep subsidies	Other subsidized units	Total
Caswell, Granville, Person	921	854	1,775
Camden, Chowan, Currituck, Gates, Pasquotank, Perquimans	1,039	775	1,814
Bertie, Dare, Hyde, Martin, Tyrrell, Washington	922	584	1,506
Greene, Wilson	1,219	1,049	2,268
Cleveland, Lincoln, Polk, Rutherford	1,507	1,836	3,343
Montgomery, Moore	629	846	1,475
Harnett	560	852	1,412
Beaufort, Carteret, Pamlico	1,663	2,550	4,213
Group 5 total	**8,460**	**9,346**	**17,806**

Group 6

Counties	Units with deep subsidies	Other subsidized units	Total
Ashe, Avery, Mitchell, Watauga, Yancey	371	808	1,179
Alleghany, Surry, Wilkes	872	1,366	2,238
Cherokee, Clay, Graham, Haywood, Jackson, Macon, Madison, Swain	870	980	1,850
Henderson, Transylvania	684	918	1,602
Group 6 total	**2,797**	**4,072**	**6,869**

Source: Urban Institute analysis of the National Housing Preservation Database.

Notes: In some developments, multiple types of subsidies are used to provide affordable units. Whether those subsidies are applied to the same units or spread out across units is unknown. The total number of assisted units in the state may vary by 63. As noted in the text, information on units subsidized through the Indian Housing Block Grant or other programs was not available.

TABLE A.10

Federally Assisted Housing Units in North Carolina by Year of Affordability Restriction Expiration by Area by Group

Group 1

County	2020–30	2030–40	2040–50	2050 or later	Total
Wake	4,464	7,167	218	159	12,008
Durham	2,173	4,015	38	0	6,226
Guilford	2,427	4,243	1,140	0	7,810
Forsyth	2,035	3,387	646	120	6,188
Mecklenburg	4,167	5,206	200	737	10,310
Group 1 total	**15,266**	**24,018**	**2,242**	**1,016**	**42,542**

Group 2

Counties	2020–30	2030–40	2040–50	2050 or later	Total
Johnston	1,549	809	48	0	2,406
Orange	1,046	231	46	6	1,329
Alamance	1,577	690	131	240	2,638
Davie, Iredell, Yadkin	387	404	20	6	817
Buncombe	2,311	1,053	93	0	3,457
Catawba	2,334	1,139	83	68	3,624
Gaston	1,593	546	135	209	2,483
Cabarrus, Stanly	1,975	984	101	0	3,060
Rowan	852	698	44	18	1,612
Davidson	822	557	31	100	1,510
Randolph	838	389	26	0	1,253
Wayne	2,042	848	0	0	2,890
Pitt	2,055	1,145	171	0	3,371
New Hanover, Pender	2,699	895	0	0	3,594
Brunswick	393	287	0	0	680
Cumberland	6,032	1,784	524	72	8,412
Anson, Union	667	228	72	0	967
Group 2 total	**29,172**	**12,687**	**1,525**	**719**	**44,103**

Group 3

Counties	2020–30	2030–40	2040–50	2050 or later	Total
Rockingham, Stokes	1,334	843	239	48	2,464
Edgecombe, Nash	2,058	857	210	0	3,125
Chatham, Lee	1,425	340	32	40	1,837
Alexander, Caldwell	814	419	48	0	1,281
Burke, McDowell	918	503	68	60	1,549
Jones, Lenoir, Onslow	1,509	439	0	0	1,948
Craven	1,112	814	126	0	2,052
Group 3 total	**9,170**	**4,215**	**723**	**148**	**14,256**

Group 4

Counties	2020–30	2030–40	2040–50	2050 or later	Total
Franklin, Halifax, Hertford, Northampton, Vance, Warren	2,718	1,045	263	0	4,026
Duplin, Sampson	786	562	90	0	1,438
Bladen, Columbus, Robeson	1,392	463	95	0	1,950
Hoke, Richmond, Scotland	1,504	937	106	38	2,585
Group 4 total	**6,400**	**3,007**	**554**	**38**	**9,999**

Group 5

Counties	2020–30	2030–40	2040–50	2050 or later	Total
Caswell, Granville, Person	1,065	512	142	56	1,775
Camden, Chowan, Currituck, Gates, Pasquotank, Perquimans	1,341	473	0	0	1,814
Bertie, Dare, Hyde, Martin, Tyrrell, Washington	1,135	347	24	0	1,506
Greene, Wilson	1,656	598	14	0	2,268
Cleveland, Lincoln, Polk, Rutherford	2,248	858	141	96	3,343
Montgomery, Moore	664	595	198	18	1,475
Harnett	839	479	94	0	1,412
Beaufort, Carteret, Pamlico	2,902	1,173	138	0	4,213
Group 5 total	**11,850**	**5,035**	**751**	**170**	**17,806**

Group 6

Counties	2020–30	2030–40	2040–50	2050 or later	Total
Ashe, Avery, Mitchell, Watauga, Yancey	820	232	127	0	1,179
Alleghany, Surry, Wilkes	1,266	808	0	164	2,238
Cherokee, Clay, Graham, Haywood, Jackson, Macon, Madison, Swain	1,334	454	62	0	1,850
Henderson, Transylvania	1,158	296	10	138	1,602
Group 6 total	**4,578**	**1,790**	**199**	**302**	**6,869**

Source: Urban Institute analysis of National Housing Preservation Database.

Notes: Public housing does not have affordability restrictions that expire. Figure excludes 230 units missing data on expiration dates. Figure includes 30-year subsidy end dates for units subsidized by the low-income housing tax credit with 15-year end dates that occurred before 2020 and 15-year end dates otherwise.

TABLE A. 11

Units in North Carolina with Rents below $700 by Age and Type of Building, 2013–17

Units in buildings with 1–4 units

Counties	% 0–30 years old	% 30–60 years old	% 60+ years old	Total units
Group 1				
Wake	36	43	21	6,400
Durham	40	48	13	2,800
Guilford	35	59	6	6,300
Forsyth	32	59	10	4,000
Mecklenburg	31	63	6	8,400
Group 1 total	*34*	*55*	*11*	*27,900*
Group 2				
Johnston	34	14	52	2,300
Orange	45	32	23	1,300
Alamance	37	34	29	2,800
Davie, Iredell, Yadkin	37	16	47	3,200
Buncombe	27	27	46	4,400
Catawba	27	40	33	3,000
Gaston	32	34	34	3,100
Cabarrus, Stanly	46	29	25	3,200
Rowan	26	31	43	2,700
Davidson	54	16	30	3,600
Randolph	34	28	39	3,400
Wayne	28	21	51	2,500
Pitt	15	70	15	9,200
New Hanover, Pender	38	42	21	3,600
Brunswick	23	24	53	2,000
Cumberland	28	48	24	6,200
Anson, Union	55	11	34	2,400
Group 2 total	*32*	*36*	*32*	*58,700*
Group 3				
Rockingham, Stokes	25	27	47	3,100
Edgecombe, Nash	39	27	34	4,100
Chatham, Lee	49	25	26	2,700
Alexander, Caldwell	36	9	55	2,700
Burke, McDowell	22	18	60	3,100
Jones, Lenoir, Onslow	42	20	37	3,700
Craven	12	45	43	1,200
Group 3 total	*34*	*23*	*43*	*20,600*
Group 4				
Franklin, Halifax, Hertford, Northampton, Vance, Warren	30	18	52	5,500
Duplin, Sampson	27	8	65	3,600
Bladen, Columbus, Robeson	29	12	59	7,800
Hoke, Richmond, Scotland	35	19	46	2,900
Group 4 total	*30*	*14*	*56*	*19,800*
Group 5				
Caswell, Granville, Person	37	18	45	1,800
Camden, Chowan, Currituck, Gates, Pasquotank, Perquimans	56	20	24	1,100
Bertie, Dare, Hyde, Martin, Tyrrell, Washington	42	6	52	1,500

Counties	% 0–30 years old	% 30–60 years old	% 60+ years old	Total units
Greene, Wilson	51	15	34	2,000
Cleveland, Lincoln, Polk, Rutherford	34	21	45	6,200
Montgomery, Moore	38	29	33	2,100
Harnett	37	14	50	2,900
Beaufort, Carteret, Pamlico	40	27	33	2,600
Group 5 total	*39*	*20*	*41*	*20,400*
Group 6				
Ashe, Avery, Mitchell, Watauga, Yancey	30	36	34	2,900
Alleghany, Surry, Wilkes	30	18	53	3,100
Cherokee, Clay, Graham, Haywood, Jackson, Macon, Madison, Swain	39	21	40	5,500
Henderson, Transylvania	37	29	35	2,300
Group 6 total	*35*	*25*	*41*	*13800*

Units in building with 5+ units

Counties	% 0–30 years old	% 30–60 years old	% 60+ years old	Total units
Group 1				
Wake	40	45	16	8,300
Durham	44	53	3	6,500
Guilford	41	54	6	16,900
Forsyth	32	63	5	16,500
Mecklenburg	34	58	8	15,500
Group 1 total	*37*	*56*	*7*	*63,700*
Group 2				
Johnston	51	13	36	3,000
Orange	39	39	22	1,800
Alamance	55	23	22	4,500
Davie, Iredell, Yadkin	49	13	38	6,500
Buncombe	40	21	39	5,600
Catawba	48	32	20	6,200
Gaston	42	34	24	6,600
Cabarrus, Stanly	48	24	28	4,000
Rowan	46	20	34	3,400
Davidson	55	14	31	5,400
Randolph	49	24	26	5,400
Wayne	50	15	35	4,800
Pitt	49	37	15	5,100
New Hanover, Pender	45	35	20	5,500
Brunswick	33	8	59	2,200
Cumberland	50	29	21	10,600
Anson, Union	63	14	22	3,200
Group 2 total	*48*	*24*	*28*	*83,800*
Group 3				
Rockingham, Stokes	48	17	35	5,000
Edgecombe, Nash	46	31	23	6,400
Chatham, Lee	62	13	25	3,400
Alexander, Caldwell	42	22	36	4,900
Burke, McDowell	39	13	48	5,500

Counties	% 0–30 years old	% 30–60 years old	% 60+ years old	Total units
Jones, Lenoir, Onslow	48	14	37	8,000
Craven	47	27	26	2,700
Group 3 total	*47*	*19*	*34*	*35,800*
Group 4				
Franklin, Halifax, Hertford, Northampton, Vance, Warren	53	14	32	8,600
Duplin, Sampson	50	10	40	4,400
Bladen, Columbus, Robeson	51	11	38	9,900
Hoke, Richmond, Scotland	56	11	33	5,800
Group 4 total	*52*	*12*	*36*	*28,700*
Group 5				
Caswell, Granville, Person	61	17	22	4,300
Camden, Chowan, Currituck, Gates, Pasquotank, Perquimans	52	12	36	2,800
Bertie, Dare, Hyde, Martin, Tyrrell, Washington	63	10	26	3,600
Greene, Wilson	56	16	28	3,100
Cleveland, Lincoln, Polk, Rutherford	62	10	27	9,900
Montgomery, Moore	38	24	38	3,400
Harnett	48	11	41	2,800
Beaufort, Carteret, Pamlico	40	13	48	4,200
Group 5 total	*54*	*14*	*32*	*34,000*
Group 6				
Ashe, Avery, Mitchell, Watauga, Yancey	43	30	27	4,500
Alleghany, Surry, Wilkes	40	20	40	7,500
Cherokee, Clay, Graham, Haywood, Jackson, Macon, Madison, Swain	53	11	36	7,200
Henderson, Transylvania	53	10	37	4,000
Group 6 total	*47*	*17*	*36*	*23,300*

Mobile homes, boats, RVs, etc.

Counties	% 0-30 years old	% 30-60 years old	% 60+ years old	Total units
Group 1				
Wake	71	26	3	3,100
Durham	79	21	0	3,800
Guilford	75	24	1	7,800
Forsyth	72	27	1	4,600
Mecklenburg	69	30	1	4,500
Group 1 total	*73*	*26*	*1*	*23,700*
Group 2				
Johnston	90	7	4	1,900
Orange	75	25	0	600
Alamance	85	14	1	2,800
Davie, Iredell, Yadkin	92	8	0	3,300
Buncombe	61	36	2	2,800
Catawba	94	6	0	2,000
Gaston	87	11	2	3,300
Cabarrus, Stanly	91	9	0	3,500

Counties	% 0-30 years old	% 30-60 years old	% 60+ years old	Total units
Rowan	90	9	1	2,800
Davidson	90	10	0	3,200
Randolph	91	7	2	1,600
Wayne	87	10	2	2,300
Pitt	86	12	2	1,600
New Hanover, Pender	82	18	0	2,700
Brunswick	77	0	23	200
Cumberland	91	7	2	2,900
Anson, Union	90	8	2	1,400
Group 2 total	*87*	*12*	*1*	*39,000*
Group 3				
Rockingham, Stokes	85	15	0	3,700
Edgecombe, Nash	90	9	1	3,000
Chatham, Lee	79	17	4	1,500
Alexander, Caldwell	85	12	3	2,100
Burke, McDowell	94	5	1	2,300
Jones, Lenoir, Onslow	78	20	3	3,600
Craven	67	33	1	1,000
Group 3 total	*84*	*14*	*2*	*17,300*
Group 4				
Franklin, Halifax, Hertford, Northampton, Vance, Warren	91	9	1	4,600
Duplin, Sampson	95	4	2	1,500
Bladen, Columbus, Robeson	91	7	3	3,800
Hoke, Richmond, Scotland	82	14	4	2,300
Group 4 total	*90*	*8*	*2*	*12,100*
Group 5				
Caswell, Granville, Person	93	2	5	1,200
Camden, Chowan, Currituck, Gates, Pasquotank, Perquimans	83	16	1	1,900
Bertie, Dare, Hyde, Martin, Tyrrell, Washington	93	7	0	1,400
Greene, Wilson	93	7	0	2,400
Cleveland, Lincoln, Polk, Rutherford	90	9	1	3,700
Montgomery, Moore	91	4	5	1,100
Harnett	92	8	0	1,000
Beaufort, Carteret, Pamlico	91	5	4	1,400
Group 5 total	*90*	*8*	*2*	*14,100*
Group 6				
Ashe, Avery, Mitchell, Watauga, Yancey	82	16	2	1,900
Alleghany, Surry, Wilkes	76	16	8	2,700
Cherokee, Clay, Graham, Haywood, Jackson, Macon, Madison, Swain	89	6	5	3,300
Henderson, Transylvania	88	12	1	1,700
Group 6 total	*84*	*12*	*4*	*9,600*

Source: Urban Institute analysis of the American Community Survey microdata from IPUMS-USA, University of Minnesota, www.ipums.org.

Note: Data are rounded to the nearest hundred. Includes subsidized units.

Appendix B. Policy Options and Criteria

For each of the preserve, produce, and protect goals, we started with a wide-ranging list of tools that includes ones in use in North Carolina, ones with evidence of impact in other states and localities, and ones with more limited empirical evidence. The effectiveness of any given policy tool depends on several factors, including how the policy designers calibrate the tool, the funding level provided, and its interactions with other aspects of the market and policy context. Therefore, our decisions about how to narrow the initial broad list of tools and the recommended tools build on data about the problem and its components, rather than rigorous evidence about the solution. As a result, contextual changes, specialized knowledge of local markets or politics, or other factors may lead readers to disagree with our decisions about narrowing the tools.

To enable readers to select their own subset of policy tools for advancing the overarching strategies described in this report, we have listed the full array of initial tools under consideration in this appendix. Following the lists of tools, we will describe the criteria we used in selecting recommendations.

Preserve Existing Housing Affordability

TABLE B.1

Initial Policy Menu: Preserve Existing Housing Affordability

Strategies	Policy tools
Empower mission-driven organizations to acquire properties for continued affordability	**Laws and regulations** ▪ Enact right of first refusal—to allow mission-driven organizations an advance window to acquire properties. **Public funding/resources** ▪ Provide financing for acquisition and/or rehabilitation—to enable nimble and lower-cost acquisition. ▪ Create a manufactured home park acquisition fund— to enable continued operation by nonprofits, public housing authorities, or cooperatives. **Voice/convening power** ▪ Create preservation networks and inventories—to enable advance preparation by public and nonprofit actors. ▪ Convene private-sector partners for preservation investments—to increase flexible resources for affordability without public subsidy.

Strategies	Policy tools
Maintain and improve the physical condition of low- and moderate-cost housing	**Public funding/resources** ▪ Fund light rehabilitation programs—to finance required improvements in rented or owned housing. ▪ Fund moderate to substantial rehabilitation programs—to address deferred maintenance and extensive repairs. ▪ Create energy-efficiency programs—to reduce ongoing operating costs and enable spending on upkeep. ▪ Rehabilitate public housing—to stop public housing units from going vacant because of disrepair. ▪ Provide manufactured home replacement assistance—to address repair needs and disaster risks. **Voice/convening power** ▪ Engage a multisector partnership to preserve housing quality and access —to bolster both supply and demand in slower-growth or shrinking areas. ▪ Provide technical assistance and training—to help property owners identify feasible solutions. ▪ Support local code enforcement capacity—to enforce existing habitability standards
Incentivize current property owners to maintain low or moderate rents	**Laws and regulations** ▪ Identify preservation-oriented subsidy priorities—to facilitate owners' commitment to low- and moderate-cost housing. **Public funding/resources** ▪ Enact property tax incentives for preservation—to reduce landlord costs in return for rent limits.

Produce More Housing across the Income Spectrum

TABLE B.2

Initial Policy Menu: Produce More Housing across the Income Spectrum

Strategies	Policy tools
Increase the locations and density of housing development	**Public funding/resources** ▪ Designate housing as a priority use for public land—to increase available space for housing. **Laws and regulations** ▪ Establish land value taxation—to create a disincentive for speculative land holding, especially of vacant parcels. ▪ Implement infill authorization or incentives—to put more parcels to use. ▪ Enact regulations that promote density—to enable more housing production. ▪ Prioritize added density in approved areas—to use more parcels to their allowable density. ▪ Facilitate single-family conversions and accessory dwellings in every neighborhood—to increase density in keeping with community design.

Strategies	Policy tools
Shorten the timeline for delivering new housing	**Laws and regulations** ▪ Streamline impact assessments and environmental review—to improve the timeline without losing essential reviews. ▪ Expedite permitting for designated housing types—to prioritize development of needed homes. ▪ Increase predictability of approvals—to reduce costly delays. **Voice/convening power** ▪ Develop skilled labor and quicker construction options—to improve productivity and reach move-in more quickly.
Support affordability and inclusion	**Laws and regulations** ▪ Reassess regulations related to manufactured housing—to expand access to a low-cost housing option. ▪ Eliminate or reduce parking requirements—to allow developers to build demand-based parking and remove added development costs. ▪ Enable inclusionary zoning—to require low- or moderate-cost units with new residential development. ▪ Create developer incentives—to waive fees, increase allowable greater density, or offer other incentives in exchange for the production of low- or moderate-cost units. ▪ Enact fair share requirements—to establish, monitor, and enforce targets for including lower-cost housing. ▪ Enable bundling of properties in low-income housing tax credit applications—to make applications from rural areas more competitive. ▪ Use funding formulae to prioritize housing and land-use reform—to distribute current funding toward jurisdictions that are reducing development costs. **Public funding/resources** ▪ Allocate gap funding for development subsidies—to support the production and operation of housing at low or moderate rent levels. ▪ Fund transit-oriented development—to bring down the minimum feasible rents near transit. ▪ Provide committed project-based subsidies—to improve financial viability of development that serves lower incomes. ▪ Provide expanded financing options for manufactured housing and low-cost homes—to increase loan availability and reduce costs. ▪ Allow public purchase of incentivized below-market units—to enable very low–cost housing in scattered sites. ▪ Provide incentives to developers in jurisdictions outside Community Reinvestment Act assessment areas—to bring capital to underserved rural communities. ▪ Use public underwriting, guarantees, and other tools to reduce investment risks—to reduce the cost of attracting private capital to innovative or lower-return deals. **Voice/convening power** ▪ Encourage hospitals, health systems, universities and other anchor institutions to invest in affordable housing development. ▪ Provide technical assistance to developers in high-need areas—to build capacity with complex financing and subsidy options.

Protect Households from Discrimination, Displacement, and Disaster

TABLE B.3

Initial Policy Menu: Protect Households from Discrimination, Displacement, and Disaster

Strategies	Policy tools
Reduce instability and displacement pressure	**Laws and regulations** ▪ Enable local rent stabilization—to establish limits on annual rent increases. ▪ Establish lease term and renewal rights—to increase the opportunities for stability among renters in good standing. ▪ Add tenant relocation assistance requirements—to create a disincentive for displacing renters. ▪ Limit short-term rentals—to balance periodic income support with the need for a year-round housing supply. ▪ Pause evictions and utility disconnects during storm season—to protect vulnerable populations during times of elevated risk. **Public funding/resources** ▪ Provide home purchase assistance—to increase residential stability among households with low incomes and first-time owners. ▪ Allow land trust, co-op, and/or shared equity homeownership—to open the door to homeownership in extremely high-cost areas. ▪ Create assessment limits—to reduce owners' displacement pressures from rising property tax bills. ▪ Fund tenant-based rental assistance—to supplement federal vouchers for people with extremely limited means. ▪ Fund emergency rental assistance—to reduce evictions. ▪ Provide mediation and legal services—to provide renters with low incomes with a right to mediation and/or a publicly funded attorney for eviction matters. ▪ Provide housing counseling for renters, buyers, and owners —to equip residents with reliable information to make housing-related decisions.
Enable fair and equitable access to housing	**Laws and regulations** ▪ Expand antidiscrimination protections—to ensure fair housing for groups that face access disparities. **Public funding/resources** ▪ Increase testing and enforcement of fair housing laws—to reduce barriers for renters and home buyers. **Voice/convening power** ▪ Support fair housing education programs—to increase voluntary compliance. ▪ Conduct landlord outreach—to reduce discrimination against people with rent vouchers.

Strategies	Policy tools
Prevent hazardous and unhealthy living conditions	**Laws and regulations** ▪ Commit to ending homelessness—to make explicit commitments and fund proven strategies to achieve the goal. ▪ Establish proactive rental inspections—to reduce conflict and retaliation when renters press for essential repairs. ▪ Require rental registration and licensing—to improve accountability and enforcement capacity. **Public funding/resources** ▪ Provide rapid rehousing assistance—to identify and house people as they become homeless.
Increase disaster preparedness	**Laws and regulations** ▪ Clear titles on heirs' property—to facilitate smooth disaster claims and relocation programs. **Public funding/resources** ▪ Fund mitigation and relocation efforts—to reduce the risk of damage in floodplains. ▪ Partner with local banks to offer matched savings for household rainy day funds— to encourage residents to budget for added housing expenses related to disasters. **Voice/convening power** ▪ Encourage assessors to flag properties with potential estate issues—to enable proactive title clearance.

Criteria for Narrowing the Policy Tools

We assessed policy tools' potential contribution to the region's needs using several criteria. Specifically, we applied the following criteria for reviewing and comparing each policy tool:

- How much would this policy tool contribute to one of the three overarching goals?
- What is the scope of the need that this policy tool addresses?
- Does this policy directly address a critical issue with a limited time window for action or offer amplification benefits for other policies?
- Are similar policies in place, and are they considered effective?
- Is the policy feasible in North Carolina, and does feasibility extend to rural, suburban, and urban contexts?
- Which income groups would the policy tool directly assist?
- Does the approach leverage the private sector?

For each of the three strategies (preserve, produce, protect), we used these criteria to select policy tools with high potential to meet the region's needs, whether through implementation, expansion, or strengthening.

Because the expected contribution of each policy only partially relates to funding, we did not produce an estimate of the funds required for any policy tool. Instead, we offer an approximate magnitude of the overall cost. The public sector costs of adding 911,000 homes for the full income spectrum will vary depending on the affordability lost or preserved, the market and regulatory landscape, and the alignment of policies with strategic needs. The assessment of current housing challenges at the lowest income levels and projections of future household growth in the lowest income bands both suggest a need for substantial subsidy from a combination of federal, state, and local governments to ensure a strong and healthy housing future for North Carolinians of all income bands.

Appendix C. How Are North Carolina Counties Doing in Accessing Community Development Funding?

Brett Theodos and Brady Meixell

Capital is vital for communities. Businesses depend on it to expand. Families need it to be safely and stably housed. Consumers need it to find affordable groceries. And cities need it to pave streets and update sewers.

To make up for shortfalls in private capital markets, the federal government sponsors and provides incentives for community development capital in areas that most need them. Our tool, “Community Development Financial Flows,” tracks these federal flows to US counties with more than 50,000 residents across housing, small business, impact finance, and other community development.[64] Note that we had to exclude smaller counties because of data availability. This means that we are able to generate capital flows information for just over half of North Carolina’s counties—54 that meet our population threshold. Our population coverage is better than this share might imply, however, because the counties in our analysis contain 88 percent of state residents.

To account for differing county sizes, we scaled each dimension by a per capita denominator (either the number of people who earn below 200 percent of the federal poverty level or the number of people working in small businesses). The tool explores—across the dimensions of federal housing support, small business financing, CDFI and New Markets Tax Credit financing (“impact financing”) and other federal community development funding—how well community development finance flows target areas that need them. The tool has additional information on what sources are included in these capital flows and how the metrics are defined.

We find that community development funding widely varies among North Carolina’s mid-size and large counties. When ranked against all other such counties in the US, only 3 North Carolina counties place higher than the quarter nationwide; 18 fall in the bottom quarter. The average North Carolina county is in the 40th percentile on combined community development funding. This means that on the whole, the state’s counties are below the national average in capital access along these dimensions.

TABLE C.1

National Percentile for North Carolina Counties in Federal Community Development Funding, 2011–15

County	Combined	Housing	Small business	Impact finance	Other community development
Durham	81st	50th	68th	97th	49th
Chatham	80th	92nd	87th	69th	1st
Wake	78th	67th	93rd	74th	48th
Buncombe	74th	75th	86th	66th	52nd
Cabarrus	74th	89th	71st	40th	54th
Forsyth	70th	22nd	97th	75th	35th
Mecklenburg	66th	53rd	95th	51st	29th
Guilford	66th	45th	90th	82nd	30th
Alamance	65th	30th	96th	45th	37th
Orange	62nd	57th	80th	66th	47th
Wilkes	62nd	48th	93rd	77th	1st
Sampson	60th	20th	89th	91st	1st
Moore	59th	18th	97th	48th	21st
New Hanover	58th	39th	88th	57th	39th
Wilson	58th	42nd	92nd	72nd	1st
Pitt	56th	32nd	94th	32nd	25th
Davidson	55th	1st	97th	37th	1st
Cumberland	52nd	53rd	77th	28th	41st
Iredell	50th	43rd	87th	56th	17th
Union	49th	18th	94th	45th	1st
Lee	49th	32nd	91st	51st	1st
Onslow	44th	63rd	68th	26th	30th
Craven	43rd	38th	88th	16th	1st
Wayne	42nd	23rd	82nd	39th	29th
Johnston	42nd	19th	86th	65th	1st
Catawba	40th	1st	86th	33rd	24th
Rockingham	38th	25th	76th	29th	31st
Nash	37th	21st	72nd	43rd	36th
Carteret	36th	28th	83rd	29th	1st
Lenoir	34th	1st	84th	44th	16th
Caldwell	33rd	47th	72nd	23rd	1st
Randolph	33rd	27th	79th	36th	1st
Gaston	28th	40th	66th	27th	18th
Watauga	28th	1st	80th	12th	1st
Franklin	28th	1st	76th	36th	15th
Columbus	27th	37th	62nd	49th	17th
Burke	25th	23rd	68th	31st	18th
Edgecombe	24th	49th	32nd	75th	23rd
Granville	24th	1st	65th	63rd	1st
Brunswick	24th	1st	65th	60th	1st
Harnett	24th	30th	63rd	39th	1st
Henderson	23rd	46th	43rd	70th	1st
Halifax	21st	62nd	43rd	23rd	1st
Cleveland	20th	24th	59th	48th	1st
Surry	19th	26th	62nd	19th	1st
Lincoln	19th	16th	62nd	44th	1st
Rowan	17th	34th	42nd	48th	21st
Pender	16th	1st	61st	19th	1st
Rutherford	15th	16th	56th	37th	1st

County	Combined	Housing	Small business	Impact finance	Other community development
Hoke	14th	27th	52nd	18th	1st
Duplin	11th	23rd	24th	76th	1st
Haywood	9th	34th	26th	35th	1st
Robeson	8th	18th	17th	82nd	1st
Stanly	4th	1st	20th	27th	22nd

Source: "Community Development Financial Flows," Urban Institute, June 26, 2018, https://apps.urban.org/features/community-development-financing/

On average, as is the case nationally, counties with larger populations and encompassing urban areas receive more federal community development funding per capita than do smaller ones. All five of the largest cities in North Carolina are in counties that rank in the top 10 of the state's counties for federal community development funding.

But combined investment levels don't tell the entire story. To fully understand a given county's federal community development resources, it's useful to examine flows by type. North Carolina demonstrates a relatively strong performance on small business funding, with 23 counties above the 80th percentile nationally and the state well above the national average. The state struggles in accessing federal housing dollars, with 16 counties falling in the bottom 20 percent of counties nationally. North Carolina counties fare even worse on other community development funding (HUD Community Development Block Grant, HUD Section 108 lending, and US Department of Education Promise Neighborhoods awards). No county in the state fares better than the 54th percentile in this category, and 27 counties rank in the 1st percentile.

Even for counties that rank highly on combined flows, there are still, more often than not, areas where they punch below their weight. These sectors can be targeted by local government and philanthropy looking to build capacity. For example, while Durham County ranks in the 81st percentile nationally on combined funding, it has middling levels of housing funding (50th percentile) and other community development funding (49th percentile). At the other end of the spectrum, Robeson County ranks near the bottom on combined funding (8th percentile) but exhibits a robust impact sector (82nd percentile).

In comparing North Carolina counties with other counties nationally, we can better understand where federal community development funding is going and assess whether these investments are properly targeted. Local actors can look at their county's federally motivated activity and direct their own efforts to fill gaps accordingly.

Notes

[1] Kathleen Howley, "Housing to Recession-Proof US Economy in 2020," *Housing Wire*, December 18, 2019, https://www.housingwire.com/articles/housing-to-recession-proof-economy-in-2020/.

[2] We use "home" and "housing unit" interchangeably. Homes include any residence outside a congregate living facility. This includes rented and owned housing and encompasses single-family detached homes, single-family attached homes, apartments, condominiums, and manufactured housing.

[3] "The Low-Income Housing Tax Credit and Neighborhood Property Values in North Carolina," North Carolina Housing Finance Agency, May 2018, https://www.nchfa.com/sites/default/files/page_attachments/LIHTCPolicyBrief2.pdf.

[4] See "Public Use Microdata Areas," US Census Bureau, last revised April 10, 2018, https://www.census.gov/programs-surveys/geography/guidance/geo-areas/pumas.html.

[5] We do not summarize housing challenges by racial or ethnic groups in this report. Rather, we provide this information in the demographic profile for descriptive purposes and because race and ethnicity are used as one input to our estimates of household growth rates by income group. See appendix A for details.

[6] We refer to metropolitan or nonmetropolitan counties in metropolitan statistical areas defined by the US Office of Management and Budget. In some cases, because the US Census Bureau combines counties into PUMAs because of their size, a metropolitan county may be grouped with other nonmetropolitan counties and designated as nonmetropolitan.

[7] See figure 7 for more detail on the distribution of units by cost.

[8] Using the American Community Survey's 2013–17 five-year estimates.

[9] Transportation costs also play a role in the relative affordability of a location. This report does not assess whether places with more-affordable housing stock are likely to have higher transportation costs.

[10] This determination relies in part on employment and income in sectors related to recreation as well as the share of vacant units intended for seasonal use. For the full definition, see "County Typology Codes," US Department of Agriculture, last updated October 23, 2019, http://www.ers.usda.gov/data-products/county-typology-codes.aspx.

[11] See also "County Profiles," North Carolina Housing Coalition, accessed June 5, 2020, https://nchousing.org/county-fact-sheets/.

[12] "Data on Homelessness," NC Coalition to End Homelessness," accessed June 5, 2020, https://www.ncceh.org/datacenter/dataonhomelessness/.

[13] Efforts to raise households' income levels would also address instances of homelessness caused by economic factors.

[14] Because of the variation in limits and costs across the state's urban and rural housing markets, we did not tie any of the cost breaks to income limits based on the US Department of Housing and Urban Development.

[15] "Population Overview, 2010–2039," North Carolina Office of State Budget and Management, last updated November 15, 2019, https://files.nc.gov/ncosbm/demog/countytotals_populationoverview.html.

[16] The retirement of the baby boomers is expected to cause significant changes in housing markets nationwide as preferences, housing needs, and income levels change. See JCHS (2016) for a discussion of the issue nationally.

[17] Susan J. Popkin, Diane K. Levy, and Corianne Payton Scally, "America's Public Housing Program Faces an Uncertain Future," *Urban Wire* (blog), December 17, 2018, https://www.urban.org/urban-wire/americas-public-housing-program-faces-uncertain-future.

[18] Unsubsidized affordable housing, our preferred term, may be referred to as "naturally occurring affordable housing (NOAH)," as "currently unsubsidized but affordable (CUBA)," or as class C apartment buildings.

[19] North Carolina General Statutes, Chapter 122E, "North Carolina Housing Trust and Oil Overcharge Act" (1987).

[20] "State and Local Housing Trust Funds 2020," Housing Trust Fund Project, accessed March 12, 2020, https://housingtrustfundproject.org/housing-trust-funds/.

[21] "Revenue Sources," Housing Trust Fund Project, accessed March 12, 2020, https://housingtrustfundproject.org/housing-trust-funds/.

[22] "State and City Funded Rental Housing Programs," National Low Income Housing Coalition, accessed March 12, 2020, https://reports.nlihc.org/rental-programs/catalog/nevada-low-income-housing-trust-fund.

[23] "Revenue Sources," Housing Trust Fund Project, accessed March 12, 2020, https://housingtrustfundproject.org/housing-trust-funds/.

[24] "Funding Sources & Background," Texas Department of Housing and Community Affairs, accessed March 12, 2020, https://www.tdhca.state.tx.us/htf/background.htm.

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