

## CHAPTER 2

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Social & Economic Factors  
That Affect How We  
Experience Aging



### GOING UPSTREAM TO UNDERSTAND HEALTHY AGING

*“Imagine a large river with a high waterfall. At the bottom of this waterfall hundreds of people are working frantically trying to save those who have fallen into the river and have fallen down the waterfall, many of them drowning. As the people along the shore are trying to rescue as many as possible, one individual looks up and sees a seemingly never-ending stream of people falling down the waterfall and begins to run upstream. One of other rescuers hollers, ‘Where are you going? There are so many people that need help here.’ To which the man replies, ‘I’m going upstream to find out why so many people are falling into the river.’”*

– *Attributed to Saul Alinsky in Sheldon RG, Macallair D. Juvenile Justice in America: Problems and Prospects. Long Grove, IL: Waveland Press; 2008.*

Just as a “seemingly never-ending” number of people fell down the waterfall in the parable above, millions of older adults experience poverty, food insecurity, and unmet housing needs. The experience of older adulthood is the culmination of experiences in childhood, adolescence, and early adulthood and a multitude of political, social, and economic factors. Some older adults may not have adequate wealth and income in their retirement due to historic and ongoing racial disparities in education, employment, and housing. Some may have spent less time in the workforce due to caregiving responsibilities. Similarly, one’s marital status or family structure may influence their access to social support and assistance in older adulthood.

### EQUITY IN OPPORTUNITIES FOR HEALTHY AGING

Health equity is defined as “the attainment of the highest level of health for all people” and requires efforts to address preventable inequities that stem from historical and contemporary injustices. Health disparities adversely impact groups of people who have experienced prejudice and systematic oppression due to their racial or ethnic group, religion, socioeconomic status, gender, sexual orientation, geographic location, or disability.<sup>1</sup> In order to achieve equitable opportunities for healthy aging in North Carolina, we must understand disparities in the context of our country and state’s history. Similarly, we must consider how gender and sexual orientation can influence older adults’ access to material resources and social support in later life.

In 2017 in the United States, almost half of older Black and Hispanic adults had incomes below 200% of the poverty line compared to a quarter of older White adults.<sup>2</sup> As of 2016, older women received approximately \$9,900 less annually, on average, in retirement from sources including Social Security income and pension earnings than older men due to lower lifetime earnings, time taken off for caregiving, and other issues.<sup>3</sup> The gender pay gap widens as women age,<sup>4</sup> and the majority of family caregivers (60%) are women.<sup>5</sup> LGBTQ+ elders are more likely to be single and live alone and less likely to have children compared to their heterosexual and cisgender counterparts.<sup>6</sup> A lack of family support may necessitate LGBTQ+ older adults to seek services from organizations that may or may not be welcoming or inclusive. In a national AARP survey, 85% of older LGBTQ+ individuals reported being concerned about discrimination, including housing discrimination, based on sexual orientation.<sup>7</sup> Older adults who live in rural communities may also be disproportionately impacted by aging compared to those who live in more urban areas. For instance, while many aging people rely on their children for care and transportation, young people from rural communities are leaving these areas.<sup>8</sup> Issues related to isolation, including falls, may be compounded by sparse resources in rural areas.

A The Social Vulnerability Score of a neighborhood is calculated across 16 measures: Socioeconomic Measures – poverty, unemployment, per capita income, education, health insurance; Population Vulnerability Measures – children, elderly, disability, single parent, minority, limited English; Housing/Transportation Vulnerability Measures – large apartment buildings, mobile homes, crowding, no vehicle, group quarters. [https://www.healthvermont.gov/sites/default/files/documents/2016/12/ENV\\_EPHT\\_SocialVulnerabilityIndex.pdf](https://www.healthvermont.gov/sites/default/files/documents/2016/12/ENV_EPHT_SocialVulnerabilityIndex.pdf)

Throughout this report, we present composite stories to illustrate how the life experiences of different populations can influence their opportunities for healthy aging. Some examples of policies that have historically impacted today’s older adults and continue to have societal reverberations are presented here and in the graphic on the next page.

**Residential segregation** – “Racial residential segregation [was] initially created by the deliberate and explicit racism codified in Jim Crow laws. Although segregation has declined since the Fair Housing Act of 1968 outlawed racial discrimination in housing, the United States remains highly segregated. Racial segregation is almost always accompanied by concentrated economic disadvantage and limited opportunities for upward mobility, such as good employment options and good schools. Because of segregation, African American and Latino people are more likely than White people with similar household incomes to live in neighborhoods with concentrated disadvantage, whose adverse health effects have repeatedly been demonstrated.”<sup>9</sup>

Impacts of these policies resonate today in North Carolina communities. The National Community Reinvestment Coalition compared the grades given by the Home Owners’ Loan Corporation (HOLC) to neighborhoods in five North Carolina cities in 1930 to the Social Vulnerability Index (SVI)<sup>10</sup> of those neighborhoods today.<sup>11</sup> Neighborhoods graded with a “D” in 1930 were considered “hazardous” for lending and typically contained majority non-White or immigrant populations – communities that today we identify as having been “redlined.” The neighborhoods with the lowest 1930 HOLC “D” scores in Asheville, Durham, Greensboro, and Winston-Salem have the highest or nearly the highest SVI scores today of all the neighborhoods in those cities.<sup>11-14</sup> A high SVI score is associated with being “especially at risk during public health emergencies because of factors like socioeconomic status, household characteristics, racial and ethnic minority status, or housing type and transportation.”<sup>15</sup>

**Discriminatory financial practices** – “Home ownership is the principal form of wealth for most Americans of modest means. Beginning in the 1930s bank lending guidelines from the federal Home Owners’ Loan Corporation were later adopted by private banks. The guidelines explicitly used neighborhood racial and ethnic composition and income data in assessing mortgage lending risks. During decades when federal loan programs greatly expanded Whites’ homeownership (and thus, wealth), non-White and low-income areas were disproportionately “redlined”—a practice whose name refers to the red shading on Home Owners’ Loan Corporation maps of neighborhoods that were deemed hazardous for lending. Racial and ethnic differences in homeownership, home values, and credit scores in formerly redlined areas persist.”<sup>16</sup>

A 2010 study of the wealth of North Carolinians found that total wealth of Black North Carolinians aged 65 and older was \$41,806 compared with that of White North Carolinians at \$165,000.<sup>16</sup> Lower levels of wealth in older adulthood contribute directly to difficulty affording adequate housing, purchasing food and medical care, accessing transportation, and using other resources for health and well-being.

**Environmental injustice** – “Racially segregated communities have often experienced the damaging health effects of environmental injustice. Examples include well-documented patterns of selectively locating coal-fired power plants and hazardous waste disposal in or near communities of color, with adverse effects on the population’s health.”<sup>17</sup>



In North Carolina, environmental injustice is illuminated by the proximity of groups to pollutants. A quarter of North Carolinians (24%) live within a mile of an EPA-registered polluting site;<sup>8</sup> 41% of people living in predominately Latino communities and 44% of people in Black communities live within a mile of such sites.<sup>17</sup> Similarly, residents of majority-Black communities are twice as likely to live within a mile of a solid-waste facility.<sup>17</sup> Residents who live near these types of sites have a “high risk for life-long and long-term mental and physical health challenges, including cancer, birth defects, developmental disabilities” and lower life expectancy.<sup>18</sup>

## LOOKING UPSTREAM

Many of these “upstream” issues faced by older adults can be addressed through thoughtful and coordinated action. The recommendations and strategies from the Task Force on Healthy Aging that are presented in this chapter seek to address some of the social and economic needs of those who are currently older adults and those who will age into older adulthood in the future. Meeting these needs is a necessary step toward ensuring that all people in North Carolina have an opportunity to experience healthy aging.

This chapter presents three recommendations and related strategies to address the upstream factors that impact older adults’ ability to experience healthy aging. Full text of all recommendations and strategies can also be found in Appendix A:

### Recommendation 1 – Help Older Adults Retain More Financial and Material Resources to Support Healthy Aging

- Strategy 1 - Help More North Carolinians Plan and Save for Retirement
- Strategy 2 - Increase Employment Opportunities for Older Adults
- Strategy 3 - Update Tax Policy to Help Older Adults with Lower Incomes
- Strategy 4 - Increase Uptake of Food and Nutrition Services
- Strategy 5 - Reduce the Costs of Health Care Coverage
- Strategy 6 - Increase Awareness and Protections from Fraud for Older Adults

### Recommendation 2 - Ensure Safe and Affordable Housing for Older Adults

- Strategy 7 - Ensure Statewide Focus on Housing Availability, Affordability, and Supports for Older Adults
- Strategy 8 - Enhance Learning Opportunities Related to Housing Programs and Services

### Recommendation 3 – Ensure Digital Equity for Older Adults

- Strategy 9 - Increase Access to Broadband Internet across the State
- Strategy 10 - Increase Digital Literacy for Older Adults

## HOW POLICY AND LEGISLATION SHAPED THE LIVES OF OLDER ADULTS IN NORTH CAROLINA

**William, age 75,** was 18 when the 1965 Voting Rights Act was passed to outlaw practices that would have limited his right to vote based on his race

**Miguel, age 70,** faced barriers to accessing places like buses, parks, and libraries throughout his early life due to his disability, and at age 37 the Americans with Disabilities Act brought more accessibility to public life

**Anita, age 75,** was 12 years old when she was one of the first Black students to integrate her town’s schools

**Sarah, age 80,** attended a Federal Indian boarding school as a child, living apart from her family for several years and limiting her ability to speak her language and learn tribal culture

**John and Eric, both age 68,** were able to marry after marriage equality became law when they were both 60

**Jane, age 78,** was 30 years old when the Equal Credit Opportunity Act granted her access to a credit card under her name for the first time

<sup>8</sup> EPA-registered polluting sites include “hazardous waste sites, major discharges of air pollution, and major point-source-pollution water sources.” <http://www.uncinclusionproject.org/documents/stateofexclusion.pdf>



## RECOMMENDATION 1

### Help Older Adults Retain More Financial and Material Resources to Support Healthy Aging

#### FINANCIAL HEALTH IN LATER LIFE

Older Americans are facing a different retirement landscape compared to previous generations. Life expectancies are longer, retirement age has gone up, and the population of older adults is rapidly increasing.

#### NATIONAL STATISTICS ON AGING AND RETIREMENT

Additional years of life expectancy for those aged 65	
<b>1960</b> Men: 13.1 more years Women: 17.4 more years	<b>2019</b> Men: 18.2 more years Women: 20.8 more years
Average age of retirement	
<b>1980</b> Men: 65 years Women: 56 years	<b>2016</b> Men: 66 years Women: 63 years
Number of adults aged 65 and over	
<b>1980</b> 26.1 million	<b>2021</b> 55.8 million

Source: US Social Security Administration. *Life Expectancy for Social Security*. <https://www.ssa.gov/history/lifeexpect.html>; Center for Retirement Research at Boston College. *Frequently Requested Data*. [https://crr.bc.edu/wp-content/uploads/2015/10/Avg\\_ret\\_age\\_men.pdf](https://crr.bc.edu/wp-content/uploads/2015/10/Avg_ret_age_men.pdf); America's Health Rankings analysis of CDC WONDER, Single-Race Population Estimates, United Health Foundation, <https://www.americashealthrankings.org/>.

Currently, about one in three adults aged 65 and older is economically insecure – living at 200% of the federal poverty line and below. In North Carolina, 9.2% of older adults live below poverty and 21.8% live between 100% and 199% of the poverty line.<sup>19</sup> In both the United States and North Carolina, American Indian, Asian, Black, and Hispanic older adults are more likely to live in poverty compared to White older adults.<sup>20</sup>

Affording basic expenses like housing, transportation, health care, and food may be more difficult in later life due to sparse personal savings, a reduction in work hours or unemployment, disability, chronic illness, and the need for home modification. For many families with adults aged 65 and older, household expenditures exceed household income. The average Social Security benefit for older North Carolina families is \$21,000 per year, and these families spend an average of \$22,000 on food, utilities, and health care alone. This number does not include housing and transportation expenses. In North Carolina, Social Security makes up 90% of the income of over a quarter of people receiving benefits.<sup>21</sup>

Another source of retirement security is employer-sponsored retirement plans and personal savings. Some Americans, however, are not eligible for a retirement savings plan at work because they work for small businesses,

work part-time, or are self-employed. Many workers without a workplace plan simply do not save for retirement on their own.<sup>22</sup> In 2020, only 58.1% of those aged 56-64 reported having retirement savings.

Some older adults may continue to work past their planned retirement age. In 2021, 1 in 4 American workers was aged 55 years or older.<sup>23</sup> The Bureau of Labor Statistics predicts that 11.7% of those aged 75 years or older will participate in the civilian workforce in 2030.<sup>24</sup> This demographic shift supports the need for employers to understand and support older adults in the workplace.

Both working adults and retirees worry about having enough money to live comfortably in later life due to having little-to-no retirement savings and inflated costs of living.<sup>25</sup> These factors, in addition to a reduction in income and an increase in expenses with age, create financial strain among older adults. Addressing retirement security and employment among older adults in North Carolina can help workers retain financial and material resources in later life. **See Strategies 1 (Page 30), 2 (Page 32), and 3 (Page 33).**

#### FOOD & NUTRITION

The North Carolina Department of Health and Human Services reports that 177,967 (7.5%) adults aged 60 and older in North Carolina were food insecure – defined as a “household-level economic and social condition of limited or uncertain access to adequate food.”<sup>26,27</sup> Further, up to 1 in 2 older adults is at risk for malnutrition, defined as “deficiencies, excesses, or imbalances in a person’s intake of energy and/or nutrients.” While food insecurity and malnutrition are different measures, inadequate access to food caused by either condition can lead to nutrient and vitamin deficiency.<sup>28,29</sup> Poor health is both a cause and consequence of food insecurity and malnutrition. Poor health may lead to employment instability, decline in income, and subsequent food insecurity. Food insecurity can, in turn, exacerbate health problems. Food-insecure seniors are more likely to experience depression, asthma, diabetes, congestive heart failure, and heart attack compared to those who are not food insecure.<sup>30</sup> Malnutrition also increases an older adult’s risks of surgical complications, falls, extended hospital stays, and re-admissions.<sup>27,31</sup>

North Carolina has multiple programs across the state addressing food insecurity, including the Senior Nutrition Program, the Supplemental Nutrition Assistance Program, the Commodity Supplemental Food Program, food banks and pantries, farmers markets and community gardens, local food policy councils, and faith-based initiatives.<sup>26</sup> In 2020, the Older Americans Act Nutrition Program served 43,006 seniors in North Carolina. Expanding awareness and uptake of these various programs and services can greatly reduce the number of older adults experiencing food insecurity and malnutrition. **See Strategy 4 on Page 34.**





### HEALTH CARE

Another source of financial strain in later life is the cost of health care. In general, older adults have more chronic conditions and take more medication than younger adults. In 2014, the Agency for Healthcare Research and Quality found that children under age 18 accrued an average of \$288 in annual out-of-pocket health care expenses compared to \$1,253 for adults aged 65 years and older.<sup>32</sup> When including health insurance costs, the United States Administration for Community Living found that adults aged 65 years and older spent an average of \$6,833 on health expenditures in 2019.<sup>33</sup> Many older adults, particularly those too young for Medicare, sacrifice basic needs due to health care costs; 5.2 million older adults in the United States experienced food insecurity in 2020.<sup>34</sup> **See Strategy 5 on Page 36.**

### FINANCIAL EXPLOITATION & FRAUD

The United States Department of Justice defines financial exploitation as the “illegal or improper use of use of an older adult’s funds or property” and elder fraud as “an act targeting older adults in which attempts are made to deceive with promises of goods, services, or financial benefits that do not exist, were never intended to be provided, or were misrepresented.”<sup>35</sup> The National Council on Aging reports that financial exploitation and fraud toward older adults results in \$36.5 billion in losses every year.<sup>36</sup> Financial losses can be particularly devastating for older adults because they may be retired or working limited hours, reducing the likelihood that they can recover losses. Financial exploitation is also a form of elder abuse, and only 1 in 24 elder abuse cases is reported to authorities.<sup>37</sup>

Older adults are common targets of fraud for various reasons. For instance, older adults have had more time to build wealth relative to younger adults. Additionally, some are vulnerable due to both the normal cognitive changes associated with aging and the development of diseases like dementia. Older adults are less likely to report fraud relative to younger adults – 43% of fraud victims aged 20-29 reported their loss (median loss \$250) compared to just 22% of fraud victims aged 80+ (median loss \$1,500). Between 2017 and 2021, elder fraud losses increased by 391%.<sup>38</sup>

Protection from financial exploitation and fraud would help older adults retain more financial and material resources in later life. **See Strategy 6 on Page 37.**

## STRATEGY 1

### Help More North Carolinians Plan and Save for Retirement

- a. The North Carolina Office of State Human Resources should identify opportunities to assist state employees with comprehensive pre-retirement education and planning related to finances, housing, and transportation needs for aging.
- b. The North Carolina General Assembly should establish a state-facilitated program to help businesses offer paycheck deductions for retirement savings if they are currently not offering a retirement plan.

**Desired Result** - Increase access to, knowledge about, and participation in retirement savings to improve the financial well-being of North Carolinians as they age.

#### Why does the task force recommend this strategy? -

While retirement savings is an issue that applies to all North Carolinians, there are limited levers for statewide action and policy. One opportunity for direct state action is to increase opportunities for pre-retirement education and planning for state employees, including planning for housing and transportation needs. At the policy level, implementation of a state-facilitated paycheck deduction retirement savings program would provide better access to retirement savings for employees of businesses that do not currently offer that option.

**Context** - A 2018 report from the National Institute on Retirement Security found that the average American worker has no retirement savings, and even those with some savings were typically not on track to maintain their standard of living for retirement.<sup>39</sup> Those who do not have adequate retirement savings often have to rely on Social Security for a large portion of their income. In North Carolina, over a quarter of beneficiaries receive 90% or more of their income from Social Security.<sup>21</sup> However, Social Security may be strained in coming years with fewer workers contributing to the system per retiree, possibly requiring future policy changes related to benefits.

**Helping state employees plan for retirement** - There are over 74,000 current state agency and university employees in North Carolina, representing thousands of individual family members.<sup>40</sup> The average age of a North Carolina state employee is 46 years and average income is slightly over \$57,000.<sup>40</sup> Currently, the Office of State Human Resources provides financial retirement planning services in conjunction with North Carolina Retirement Systems, a division of the Department of State Treasurer. This educational service could be used to increase awareness and knowledge about other needs as we age, such as housing and transportation, and how to include those needs in planning for retirement. Beyond cost of living, this education can encourage people to think about their ability to get around safely in their home and community as they age and develop strategies to plan for those needs.

Increasing the proportion of North Carolinians with retirement savings can provide substantial economic benefits to the state. A University of North Carolina-Wilmington study found that if low- and middle-income workers raised their retirement savings by 3% of their income, North Carolina would save \$448 million in state expenditures between 2018 and 2030, and \$20 million in combined state and county expenditures on special assistance for adults during that time period.<sup>41</sup> This study does not consider the boost that higher savings would yield to the economy via increased spending and

tax revenue and the financial padding that older adults would have given projected low worker-to-beneficiary Social Security ratios.<sup>42,43</sup>

“ Over 48 percent of North Carolina private sector workers ages 18 to 64 in 2020 were employed by businesses that do not offer any type of retirement plan. ”

- AARP Fact Sheet – North Carolina. <https://www.aarp.org/content/dam/aarp/ppi/2022/state-fact-sheets/north-carolina.doi.10.26419-2Fppi.00164.035.pdf>

#### Paycheck deductions for retirement savings –

Access to direct payroll deduction programs can make people up to 15 times more likely to save for retirement. Yet, over 1.8 million people in North Carolina are not covered by a workplace retirement plan. People of color, those with lower incomes, and those who work for smaller businesses are less likely to be covered by a retirement plan through their employer:

#### NORTH CAROLINIANS NOT COVERED BY SMALL BUSINESS RETIREMENT PLAN:

<b>BY RACE &amp; ETHNICITY</b>	Hispanic	67%
	Asian	54%
	Black (Non-Hispanic)	53%
	White (Non-Hispanic)	42%
<b>BY INCOME</b>	\$18,001 to \$31,000 (per year)	65%
	\$31,001 to \$50,000 (per year)	44%
	\$50,001 to \$78,000 (per year)	29%
<b>BY BUSINESS SIZE</b>	Less than 10 employees	79%
	10–24 employees	67%
	25–99 employees	55%
	1,000 or more employees	34%

Source: AARP Fact Sheet: North Carolina. Payroll Deduction Retirement Programs Build Economic Security. <https://www.aarp.org/content/dam/aarp/ppi/2022/state-fact-sheets/north-carolina.doi.10.26419-2Fppi.00164.035.pdf>



In December 2020, the Joint Legislative Study Committee on Small Business Retirement Options published its findings and recommendations on options for small businesses in North Carolina to offer payroll deduction retirement savings options for employees. The Study Committee concluded that “the simplest and most effective program would be a state-facilitated Auto IRA program using Individual Retirement Accounts, developed and operated in partnership with private sector partners for administration and investments.”<sup>44</sup> In 2023, 16 states and two cities had implemented Auto IRA programs, including Virginia, Maryland, Delaware, and Illinois.<sup>46</sup>

### How would this impact the health of older adults?



Planning for the cost and type of housing needed in older age can help reduce the risk of falls by encouraging consideration of home environments with fewer hazards.



Planning for future housing needs in older age can help improve access to transportation and opportunities for physical activity.



Having more income in retirement will improve older adults’ ability to purchase enough nutritious foods to maintain our health.



Planning for where to live in retirement can have a direct impact on access to and ability to maintain social connections.



James worked most of his life as a mechanic and was proud to use his minimal savings to help his daughter attend college. He relies on his monthly Social Security check of \$914 to cover most of his living expenses. He has several chronic health conditions and does not have access to a car, so he uses ridesharing services for his transportation to doctor’s appointments and exercise classes at the local senior center. Any increase in food prices, housing costs, or other unexpected expenses means that James must decide what he needs to eliminate. This can mean hard choices that impact his health – like purchasing less food, skipping doctor’s appointments or medications, or forgoing trips to the senior center for exercise and socialization.

*\*Note – This is a composite story based on the experiences highlighted in the article by ABC News, ‘I would have nothing’: Low-income older people fear debt default that stops Social Security, <https://abcnews.go.com/US/low-income-older-people-fear-debt-default-stops/story?id=99626529>*



## STRATEGY 2

### Increase Employment Opportunities for Older Adults

- a. The Department of Commerce (including the NCWorks Commission), North Carolina Chamber of Commerce, local Chambers of Commerce, North Carolina Community Colleges System, University of North Carolina System (including Schools of Business and lifelong learning programs), and local Workforce Development Boards should collaborate to identify best practices and provide education to business owners and employers about:
  - i. Benefits and methods of attracting and retaining older adult employees, and
  - ii. Opportunities to retool the skills of older adults to meet employment needs.
- b. The North Carolina Division of Aging and Adult Services and other administrators of the Senior Community Services Employment Program (SCSEP) should work with partners and organizations where older adults become connected to SCSEP to reach the capacity of the program.
- c. Unite Us should work to develop connections with senior services providers to increase the use of the NCCARE360 statewide resource network to support older North Carolinians in areas like employment and income assistance.

**Desired Result** - Increase opportunities for older adults wishing to participate in the workforce for financial security and/or to remain engaged in employment.

#### Why does the task force recommend these strategies? -

There are few organizations that consider age as a dimension of a diverse workforce, yet the pool of traditional working-age individuals is shrinking as birth rates continue to decline.<sup>47</sup> At the same time, fewer workers are choosing full-time retirement as an immediate transition from working full-time; rather, many workers are transitioning to part-time or becoming self-employed.<sup>48</sup> The labor force for those who are aged 75 and older is expected to increase more than 96% between 2020 and 2030.<sup>47</sup> The growth rate of those aged 55 and older is expected to overshadow all other age groups in this same time period.<sup>47</sup>

Retaining older workers instead of losing them to retirement helps employers keep those with valuable skillsets.<sup>49</sup> Continued employment also allows for necessary social connectedness for older adults, improving feelings of well-being and better health.<sup>50</sup> Support between coworkers is an effective way to address social isolation and loneliness and strengthen feelings of belonging.<sup>50</sup>

#### Context -

##### Older Adults in the Workforce

A 2018 report shared that older adult workers show higher job engagement, can demonstrate stronger organizational behavior, and may provide higher-quality work than younger workers. Flexibility in scheduling, such as part-time or alternative working hours, may provide the incentives necessary to retain older workers and avoid worker shortages. Setting up mentorship programs between older adults and younger workers can also boost morale and help older workers to feel a greater sense of usefulness.<sup>51</sup>

The **North Carolina Workforce Development Boards** are made up of community leaders who are responsible for developing local plans for Workforce Innovation & Opportunity Act funds and planning workforce programs and services.

The **NC Works Commission** works to build adaptable, skilled employees who have access to education and skills training.

##### Senior Community Services Employment Program (SCSEP)

SCSEP is the only federally mandated job program that targets low-income older adults.<sup>52</sup> This program allows for work-based job training for older adults in a variety of community service activities, such as daycare centers and schools. Older adults who participate work an average of 20 hours a week and are paid the highest minimum wage at federal, state, or local levels.<sup>53</sup> Participants in SCSEP must be at least age 55, unemployed, and have an income less than 125% of the federal poverty level. Increasing participation in SCSEP helps older adults

gain new skills in a setting that will allow them to acquire work experience and maintain financial stability. In North Carolina, SCSEP works with organizations such as AARP, the National Council on Aging, the Centers for Workforce Inclusion, and the Division of Aging and Adult Services.

##### Local Workforce Development Boards

Workforce Development Boards are appointed by local officials and are responsible for planning and oversight of workforce programs and services in the community. North Carolina has 20 of these local boards that do the following:<sup>54</sup>

- Develop local plans for the use of federal Workforce Innovation & Opportunity Act funds
- Oversee local service delivery
- Coordinate activities with economic development entities and employers in local areas

##### NCCARE360

NCCARE360 is an online platform designed to bring health care and community-based organizations together through connected care networks that can track outcomes and identify service gaps. Once a network partner identifies the need(s) of an older adult, an electronic referral can be sent to the appropriate community partner to connect someone to needed services.

NCCARE360 allows resource teams to gather information from screenings of non-medical needs for people in North Carolina, such as lack of access to food, employment, income assistance, and transportation. Expanding the connections with community-based organizations on NCCARE360 will increase opportunities to connect older adults with employment and income assistance programs.

#### How would this impact the health of older adults?



Older adults who are actively working are generally more physically active and less likely to develop the bodily weakness associated with an increased risk of falls.



The increased physical activity associated with working can help older adults to maintain mobility longer and have a reason to do so.



Older adults who maintain an active income are more likely to be able to afford nutritious food.



Working provides opportunities to interact with coworkers, decreasing the chances of loneliness or social isolation.



## STRATEGY 3

### Update Tax Policy to Help Older Adults with Lower Incomes

The North Carolina General Assembly should review and update income and property tax policies related to older adults to provide tax relief for those most in need. Tax policies to be reviewed include the Homestead Property Tax Exclusion, Circuit Breaker Tax Deferment, Refundable Earned Income Tax Credit, and the income and age brackets currently in place for older adults..

**Desired Result** - Older adults most in need will have more money available to help pay for housing, food, transportation, health care, and other essentials.

#### Why does the task force recommend this strategy? -

Financial resources are a key factor in the ability of older adults to live in a safe home environment, purchase nutritious foods, and maintain their ability to move around in the community. With strained state budgets, targeting tax benefits to lower- and middle-income older adults helps to ensure that public funds are helping those most impacted by limited income and rising housing costs.

**Context** - Older adults often receive tax benefits from both the federal and state levels. Federal tax benefits for older adults include a limit on the amount of Social Security income that is taxed,<sup>d</sup> a larger standard deduction, and subsidies on certain retirement savings. North Carolina and many other states exempt all Social Security income from state taxes, regardless of income.<sup>55</sup> Ten other states exempt Social Security income taxes for some families depending on income or follow the federal standards.<sup>55</sup>

Property tax can also be a challenge for older adults, even those who own their homes, as some become “house rich, but cash poor” when income decreases but property value increases. Research indicates a direct relationship between increased property tax burden and older adults moving from their homes.<sup>56</sup>

There are currently three property tax relief programs in North Carolina. Participants may enroll in only one of the three programs at a time.

- 1. Elderly or Disabled Exclusion (Homestead Property Exemption)<sup>f</sup>** - excludes the greater of the first \$25,000 or 50% of the appraised value of the permanent residence of a qualifying owner; income eligibility of \$33,800 or less for the 2023 tax year
- 2. Disabled Veteran Exclusion<sup>g</sup>** - excludes up to the first \$45,000 of the appraised value of the permanent residence of a disabled veteran
- 3. Circuit Breaker Tax Deferment** - taxes limited to 4% of income; must be aged 65 or older or disabled; income eligibility limit \$33,800 for 2023 tax year for full benefit; taxes limited to 5% of income for those up to 150% of the income eligibility limit (\$50,700 for 2023)<sup>57</sup>

Despite the availability of these property tax reduction programs, the AARP Foundation estimates that only 8% of eligible older adults are participating.<sup>58</sup> County tax administration offices and housing departments typically provide information about these programs on their websites. The AARP Property Tax-Aide program provides help to eligible homeowners and renters who want to

apply for available property tax relief. The program is currently available in six states and is being developed in North Carolina.

#### How would this impact the health of older adults?



Increased financial resources can be used to help maintain a safe home environment to reduce the risk of falls.



Increased financial resources can help maintain access to transportation into older age, whether that means maintaining a car or using community transportation options.



Increased financial resources will improve older adults’ ability to purchase enough nutritious foods to maintain good health.



Increased financial resources can have a direct impact on older adults’ ability to maintain social connections through access to broadband internet service or participation in community activities.

<sup>D</sup> “People with incomes below \$25,000 (\$32,000 for married couples) are fully exempt from paying taxes on Social Security benefits.... For people with incomes between \$25,000 and \$34,000 (\$32,000 and \$44,000 for married couples) up to 50 percent of benefits are taxable and for higher incomes up to 85 percent is subject to tax.” <https://itep.org/state-income-tax-subsidies-for-seniors-2023/>

<sup>E</sup> Connecticut, Kansas, Minnesota, Missouri, Montana, Nebraska, New Mexico, Rhode Island, Utah, and Vermont.

<sup>F</sup> G.S. 105-277.1 Elderly or disabled property tax homestead exclusion. [https://www.ncleg.net/enactedlegislation/statutes/html/bysection/chapter\\_105/gs\\_105-277.1.html](https://www.ncleg.net/enactedlegislation/statutes/html/bysection/chapter_105/gs_105-277.1.html)

<sup>G</sup> G.S. 105-277.1C

## STRATEGY 4

### Increase Uptake of Food and Nutrition Services

- a.** North Carolina philanthropies should provide additional financial support for outreach contractors to increase awareness of the eligibility and enrollment process for Food and Nutrition Services (also known as the Supplemental Nutrition Assistance Program - SNAP), particularly in historically underserved communities. Financial support should also include sensitivity and cultural awareness training for outreach contractors on methods to reduce stigma for consumers accessing Food and Nutrition Services.
- b.** Outreach contractors should consult with the North Carolina Division of Social Services, Division of Aging and Adult Services, County Departments of Social Services, and Area Agencies on Aging on effective outreach methods in North Carolina's diverse communities to ensure all eligible individuals have the opportunity to enroll in the program.
- c.** The North Carolina Department of Health and Human Services should ensure that the Division of Child and Family Well-Being, Food and Nutrition Services Section is able to complete transition from the 1-year client recertification period to a 3-year client recertification period for USDA's Food and Nutrition Service/SNAP as soon as possible.
- d.** The North Carolina Department of Health and Human Services should provide guidance on establishing partnerships between the health and medical community and health care payers to promote food prescription programs, the Senior Farmers' Market Nutrition Program, Commodity Supplements (senior boxes), and food programs for veterans and military families.

**Desired Result** - Increase knowledge of, access to, and participation in nutrition support services for older adults most in need.

#### **Why does the task force recommend this strategy?**

The Supplemental Nutrition Assistance Program (SNAP) is a federal program administered by state agencies that provides benefits to increase the food budget of households in need so they can afford healthier food options. In North Carolina, this program is referred to as Food and Nutrition Services (FNS). While this program is currently available in all 100 counties, only around 26% of older adults who are eligible for this means-tested program participate in it.<sup>59</sup> Among the reasons given for low participation include a confusing application process and the daunting requirement of reapplying every year.<sup>60</sup> Other available resources, such as food prescription programs, rely on state and federal funding that often require providers of the programs to contribute matching funds.

**Context** - Malnutrition in older adults leads to worse health outcomes and higher costs for medical care. Those who are malnourished have three times as many hospital admissions, have longer hospital stays, and see their primary care physician twice as often as those who are well-nourished.<sup>61</sup> Increased enrollment in programs such as SNAP/FNS is associated with fewer hospital and emergency room visits as well as higher rates of medication adherence.<sup>62</sup>

#### **SNAP/FNS Outreach**

Outreach contractors are responsible for connecting organizations with local communities through education, information, and assistance. The North Carolina Department of Health and Human Services identifies the role of outreach contractors as "rais[ing] awareness of the nutrition benefits of SNAP/FNS, eligibility rules, and how to apply. SNAP Outreach corrects myths and misperceptions about SNAP/FNS and enables potentially eligible people to make an informed decision to participate."<sup>63</sup> Contractors must share in 50% of the costs of their work, with the other 50% reimbursed by the United States Department of Agriculture (USDA).<sup>63</sup>

Targeted outreach to older adults may motivate those currently unsure of their eligibility in the program to enroll. By helping connect older adults with information about how and where to apply for benefit programs, barriers such as transportation, mobility, and stigma can be breached. One such program, More in My Basket (MIMB) based at North Carolina State University, connects

North Carolina residents to education about SNAP/FNS through community presentations and resource fairs. MIMB staff and agents also provide assistance with completing and submitting the SNAP/FNS application.<sup>64</sup>

The National Council on Aging (NCOA) Benefits CheckUp is a national resource website that "connects millions of older adults and people with disabilities with benefits programs that can help pay for health care, medicine, food, utilities, and more."<sup>65</sup> The site helps people understand what benefits they may be eligible for and how to apply.

#### **Disparities in Food Security**

Black and Hispanic older adults are twice as likely as White older adults to suffer from food insecurity and are also more likely to experience negative health outcomes associated with malnutrition, such as high blood pressure and diabetes.<sup>66,67</sup> Among Black populations, the most prevalent nutritional risks reported include low levels of fruit and vegetable intake, as well as eating fewer than two meals a day.<sup>68</sup> Other determinants include limited access to grocery stores and fresh produce, which disproportionately affects Black and Hispanic communities.<sup>67</sup> In Hispanic populations, food insecurity aligns closely with unemployment rates, which lead to lower incomes.<sup>69</sup> For households with undocumented residents, programs designed to improve nutrition may be inaccessible.<sup>70</sup>

In May 2023, the USDA issued a memorandum to remind state agencies that they are obligated to provide appropriate communication for those with limited English proficiency and those with disabilities.<sup>71</sup> The memo also referenced an executive order that called for government agencies to address barriers that prohibit access to federal benefits, services, and programs.<sup>71</sup> For fiscal year 2024, priority outreach groups include students, veterans, immigrant households, and older adults.<sup>72</sup> SNAP/FNS participation rates – the share of people per state who are eligible and receive benefits – vary widely state by state, in part due to the varying state policies of eligibility.<sup>73</sup> North Carolina ranked below the national average participation rate by six percentage points.<sup>74</sup> A 2022 AARP study found that many older adults did not enroll due to a perception that they would not receive a large enough benefit.<sup>74</sup> Cultural barriers can also be a factor in participation in programs like SNAP/FNS. For example, a USDA study found that in some Hispanic and Asian cultures, there is a belief that family members should take care of their elders rather than allowing these family members to enroll in government assistance.<sup>75</sup>





## SNAP/FNS Recertification

Traditionally, people enrolled in the FNS program must prove their eligibility through an annual recertification process that verifies continued eligibility and typically mirrors the initial certification process. While the initial application for the program can be done online, recertification must be completed via a paper application that can be filled out in person or by mail. To reduce the number of people who lose enrollment through this process – not because of a change in eligibility, but because of challenges completing paperwork – other modes of recertification (e.g., phone and internet) or longer recertification periods can be implemented. State FNS programs have identified a longer recertification period as a useful strategy to reduce financial burdens on households and administrative burdens on agencies. This could alleviate a condition known as “churn” caused by households exiting and re-entering services within the span of several months. Extended recertification periods could raise participation among older adults who may view the reapplication process as difficult to complete.

The North Carolina Division of Child and Family Well-Being, Food and Nutrition Services Section has received approval for a waiver to implement the Elderly Simplified Application Project (ESAP) for households with older adults. Implementation of a simplified recertification process that would take place every three years instead of annually has been delayed due to staffing limitations in making changes to the application technology.<sup>H</sup>

## Other Sources of Food Assistance

The National Produce Prescription Collaborative recommends providing a produce prescription benefit within Medicaid as well as funding federal research examining the impact of these prescriptions. Currently, North Carolina is one of four states that uses a Medicaid Demonstration Waiver to cover services like produce prescriptions that are not typically covered under federal regulation. Designating older adults as targeted beneficiaries of these services may increase awareness of the programs and improve utilization.

As part of its 2023-2024 initiative, NCDHHS aims to expand the Senior Farmers’ Market Nutrition Program.

### Other Sources of Food Assistance

Meal services for older adults include:

**Congregate nutrition program** - meals provided at no cost in group settings (requires eligibility)

**Meals on Wheels** - delivers fully cooked meals to homes (requires eligibility)

**Faith-based programs such as the Inter-Faith Food Shuttle Seniors Eating Well** which serves almost 2,000 North Carolina older adults annually

Assistance with purchasing more nutritional foods includes:

**Senior Farmers’ Market Nutrition Program** - provides a coupon to purchase fresh fruit and vegetables at local farmers’ markets

## How would this impact the health of older adults?



Adequate nutrition is an important factor in maintaining health and reducing the risk of falls.



Adequate nutrition can help maintain health and mobility for older adults for longer.



Food and nutrition assistance programs are vital to helping older adults most in need to maintain adequate nutrition.



Adequate nutrition can help maintain the health of older adults, thus supporting their ability to maintain connections in the community.



Rose is a proud grandmother of three. She helps care for some of her grandchildren every day when her daughter and son-in-law go to work. Her income is mostly from Social Security and she didn’t think she would meet the criteria for Food and Nutrition Services (FNS) benefits. She received help applying for benefits a long time ago and she wasn’t eligible for FNS at that time. Her daughter recently helped her use the online BenefitsCheckup tool to check her eligibility and found out she is qualified to receive benefits. Now she receives \$112 per month to help buy groceries, which allows her to purchase the nutritious foods she likes to eat and enjoys cooking.

*\*Note – This is a composite story based on the experiences highlighted in the article by the National Council on Aging, ‘Lifting Barriers to SNAP: Real Stories from Older Adults.’ <https://www.ncoa.org/article/lifting-barriers-to-snap-real-stories-from-older-adults>*

<sup>H</sup> Information based on discussion with staff members from the North Carolina Division of Child and Family Well-Being, Food and Nutrition Services Section.

## STRATEGY 5

### Reduce the Costs of Health Care Coverage

The North Carolina General Assembly should increase access to health insurance and reduce costs to older adults with lower incomes by:

- a. Using its authority to reduce eligibility requirements for income and assets for the Medicare Savings Programs for lower income adults.
- b. Increasing funding for outreach to inform consumers of opportunities for Medicare Savings Programs and the Part D “Extra Help” benefits for those with limited incomes, particularly in underserved communities and those where distrust of government programs or lack of knowledge about them may be more common.
- c. Supporting outreach to older adults who are newly eligible for Medicaid due to the state’s expansion of Medicaid eligibility.

**Desired Result** – Older adults most in need will have better access to health care services and decreased health care expenses to help them pay for housing, food, transportation, and other essentials.

**Why does the task force recommend this strategy?** – While the federal Medicare program covers most adults over age 65, there are still expenses related to maintaining that coverage and accessing care. States set the eligibility rates for programs that reduce the cost of Medicare for lower-income older adults and also determine eligibility and access to the Medicaid program. Helping more older adults access these programs will improve access to health care services, thus improving the health status of lower-income older adults and reducing the amount of money they must spend on those services.

**Context** – The Medicare Savings Program (MSP) is a program available to older adults with low incomes that helps pay for Medicare premiums, and in some cases cost-sharing for services.<sup>76</sup> States have authority over the income threshold and asset limits that are used to qualify for MSP benefits. Standard asset limits for partial eligibility (i.e., coverage of Medicare premiums only) are \$8,400 for an individual and \$12,600 for a couple, while limits for full eligibility (i.e., coverage of Medicare premiums and cost-sharing) are \$2,000 for an individual and \$3,000 for a couple.<sup>76</sup> However, 16 states have chosen to increase or eliminate the assets limit to qualify for MSP benefits, including our Southern neighbors Alabama, Louisiana, and Mississippi, which have eliminated asset limits completely.<sup>76</sup>

**Medicare** – Federal program for health care coverage available to most people aged 65 and older regardless of income. Recipients must pay premiums for coverage of outpatient care and prescription drugs, as well as cost-sharing for health care services and prescriptions.

**Medicaid** – State program for health care coverage available for various groups with lower incomes depending on their category of eligibility (e.g., aged 65 and older, disabled, or parent of dependent child).

Monthly costs associated with Medicare that MSP benefits can assist with may include:

- Part B premium for outpatient care – \$164.90 per month
- Part B deductible – \$226
- Physician and mental health services, outpatient therapy, and durable medical equipment – 20% co-pay for all services, no limit
- Part D premium for prescription drugs – \$34.71 per month (basic premium)
- Part D deductible – \$505
- Part D copayments – vary from plan to plan<sup>76</sup>

Consider these costs and the number of older adults living in poverty in our state: 10.2% of North Carolinians aged 65+ live at or below the poverty level and poverty impacts people of color the most (8.3% of White North Carolinians aged 65+ live in poverty, compared to 17.5% Black, 15.7% American Indian, 14.8% Hispanic, and 12.8% Asian).<sup>77</sup>

For the median retiree, out of pocket expenses for health care account for 25% of their Social Security income.<sup>78</sup> High out of pocket expenses combined with reduced income means that many older Americans limit the use of health care. According to a 2021 Commonwealth Fund survey, in the previous year:

- 7% did not consult/visit a doctor when they had a medical problem because of the cost
- 8% skipped a medical test or treatment because of the cost
- 9% did not fill a prescription or skipped a dose of medication because of the cost.<sup>79</sup>

Despite the challenges low-income older adults experience with health care expenses, many who are eligible for MSP benefits do not participate. Depending on the specific MSP program, as little as 15% of eligible older adults participate.<sup>80</sup>

Another program called Part D Low Income Subsidy (LIS, also called Extra Help) can also help Medicare enrollees with lower income and assets pay for prescription drugs. Half of those eligible for LIS are automatically eligible because they are a recipient of Medicaid, MSP, or Supplemental Security Income, with nearly all (99%) of those who are automatically eligible enrolling.<sup>81</sup> However, only 33% of those who are eligible but not auto-enrolled participate.<sup>81</sup> Enrollment in LIS would automatically increase with increased eligibility and enrollment in MSP. Studies also show that lack of awareness of LIS is the primary reason for not enrolling.<sup>81</sup>

#### Seniors’ Health Insurance Information Program (SHIIP)

Older adults can get help from volunteer counselors through their local SHIIP. This program “counsels Medicare beneficiaries and caregivers about Medicare, Medicare supplements, Medicare Advantage, Medicare Part D, and long-term care insurance.”<sup>82</sup>

#### How would this impact the health of older adults?



Access to needed health services can help older adults identify and address risk factors for falls.



Maintaining good health will help older adults maintain mobility longer.



Health care providers can help older adults identify issues that may affect their ability to maintain adequate nutrition, such as oral health or side effects from prescription drugs.



Maintaining good physical and mental health will help older adults sustain social connections in the community longer.



## STRATEGY 6

### Increase Awareness of and Protections from Fraud for Older Adults

The State Attorney General's Office should continue collaboration with the North Carolina Division of Aging and Adult Services and the North Carolina Consumer Fraud Task Force to:

- a. Work with the North Carolina Bankers Association, Carolinas Credit Union League, and North Carolina Retail Merchants Association to promote education and training of bank and retail employees on identification of possible victims of fraud and how to intervene in potential instances of fraud.
- b. Evaluate what groups of older adults may be most vulnerable to fraud and identify opportunities for additional outreach.

**Desired Result** – Reduce the occurrence of older adults becoming victims of fraud.

#### Why does the task force recommend this strategy? –

Fraudulent activity perpetrated against older adults can be committed by strangers or by someone close to the older adult, such as a caregiver or family member. It is estimated that each year, 1 in 20 older adults is financially exploited by a family member or caregiver.<sup>83</sup>

According to the Federal Bureau of Investigation, in 2021, 90,000 victims of fraud were over age 60, accounting for \$1.7 billion in losses – a 74% increase in losses from 2020.<sup>84</sup> This includes more than 7,600 cases of romance fraud, 3,100 cases of credit card fraud and 2,100 cases of investment fraud.<sup>84</sup> North Carolina ranked 15th in the country for fraud victims over age 60.<sup>84</sup> This only accounts for reported cases, with the majority of older adult fraud cases going unreported.<sup>85</sup> This may be due to a lack of understanding of the reporting process, or embarrassment and fear of losing financial independence.<sup>86</sup> While adults aged 18-59 tend to be frequent targets of fraud, those over age 65 report losing the most money in the case of a scam.<sup>87,88</sup>

**Context** – The Fraud and Scam Prevention Act, a part of the federal 2022 omnibus appropriations bill, aims to raise awareness of and combat attempts to defraud consumers, particularly older adults.<sup>89</sup> The legislation also created the Senior Scam Prevention Advisory Group, a task force that seeks to study and upgrade existing educational materials, including how to recognize scams and prevent fraud from occurring.<sup>90</sup>

The Financial Exploitation Act of 2023, which passed in the US House and was awaiting Senate approval as of August 2023, seeks to allow open-ended investment companies, such as mutual funds, to postpone a requested payout for up to 25 days if the agent believes that exploitation is the likely scenario.<sup>91</sup> This bill would apply to those who are aged 65 or older, as well as adults who may be unable to protect their own interests.

#### Financial Exploitation Through Banking

According to a 2021 report by the American Bankers Association, US residents born before 1965 hold 65% of the bank deposits in the country.<sup>92</sup> And although many banks train employees to spot financial exploitation of older adults, there are reports of confusion about reporting due to privacy concerns.<sup>92</sup> A study by AARP showed that bank tellers who underwent AARP's BankSafe training

“We've found that bankers are often the first line of defense against elder financial fraud from educating and advising customers to spotting the signs of abuse.”

–Peter Gwaltney, president & CEO, NCBA  
<https://ncbankers.org/north-carolina-bankers-association-joins-the-american-bankers-association-foundations-safe-banking-for-seniors-campaign/>

reported on average five times the number of suspected instances of fraud or exploitation.<sup>92,93</sup> In 2022, The North Carolina Bankers Association joined the American Bankers Association Foundation's Safe Banking for Seniors campaign. Education for registered bankers focused on four topics: identifying and avoiding scams; protecting assets by preventing identity theft; choosing a financial caregiver; and acting as a responsible financial caregiver.<sup>94</sup>

#### Groups At Higher Risk

Some older adults may be more vulnerable to fraud.<sup>95</sup> Older adults who rely on assistance due to physical or cognitive decline are more likely to become victims of exploitation. Financial oversight as a shared responsibility among family members can create a checks-and-balances system to limit fraud. Older adults may be more vulnerable to fraud due to physical changes in the brain; these changes have been linked to increased susceptibility to believing a story someone shares.<sup>96,97</sup> This applies to adults without dementia-related diseases like Alzheimer's; however those affected by Alzheimer's and other dementias are at more risk due to decreased capacity for decision-making.<sup>97,98</sup>

Immigrants may be targeted due to language barriers and less awareness of culture norms. For some communities, there may also be a lack of trust in law enforcement, making the individual less likely to report the crime.<sup>99</sup>

Older adults who report loneliness or social isolation are more likely to be vulnerable to financial exploitation.<sup>100</sup> This is due in part to the reduced likelihood of having anyone with whom to discuss the proposed investment.<sup>101</sup> Those who report themselves as socially isolated or lonely are also more likely to fall for certain types of fraud, such as romance and technical support fraud.<sup>101</sup>

#### How would this impact the health of older adults?



Protection of financial resources helps older adults to maintain a safe home environment and access to food and transportation resources – thus reducing falls risk, maintaining mobility and social connections, and ensuring adequate nutrition.



## RECOMMENDATION 2

### Ensure Safe and Affordable Housing for Older Adults

**“Housing is the basis of stability and security for an individual or family. The center of our social, emotional, and sometimes economic lives, a home should be a sanctuary – a place to live in peace, security, and dignity.”** – Office of the United Nations High Commissioner for Human Rights<sup>102</sup>

Housing is a basic need essential to survival. When one’s basic needs – like housing, food, and water – are not met, it is impossible or exceedingly difficult to meet more complex needs (e.g., employment or health).<sup>103</sup> While some use the terms “housing” and “shelter” interchangeably, housing denotes more than four walls and a roof. Housing refers to a permanent, stable, autonomous living situation – a self-contained space where all basic needs can be met (e.g., cooking/storing food, plumbing for hygiene and waste management, etc.).<sup>104</sup>

#### HOUSING AS A DRIVER OF HEALTH

We can characterize housing and its influence on health through various mechanisms, including stability, affordability, quality, and location. Stability can refer to housing tenure or permanence. Affordability relates to the cost burden of housing. A commonly cited guideline is that no more than 28% to 30% of one’s income should go toward a rental or mortgage payment.<sup>105,106</sup> Quality refers to various aspects of habitability and accessibility. For example, adequate housing should protect inhabitants from cold, heat, damp, rain, and wind.<sup>107</sup> It should also be free from adverse environmental exposures (e.g., lead, mold, pests, etc.) and meet the specific health and mobility needs of its inhabitants.<sup>102,107</sup> Finally, location impacts health and well-being through the proximity of one’s home to resources, services, and adverse environmental exposures.

Overall, people who are chronically unhoused experience substantially higher morbidity and mortality relative to those who have reliable housing.<sup>108–110</sup>

Housing instability – like eviction, foreclosure, or “couch-surfing” – is similarly associated with poor physical and mental health outcomes.<sup>111,112</sup> Not having a stable home may also decrease treatment adherence due to the inability to properly store medications.<sup>113</sup> Exposures to extremely high or low temperatures have resulted in deaths, especially among those aged 65 and older.<sup>114,115</sup> Those who are cost-burdened by housing are more likely to report difficulty purchasing food and health services.<sup>116,117</sup> Proximity to grocery stores and safe spaces to exercise is associated with health-promoting behaviors like greater vegetable intake and physical activity.<sup>118–120</sup>

Disparate access to adequate housing is a reflection of a century of housing policy and patterns in the United States.

#### HOUSING HISTORY

Older adults today have likely been impacted by 20th century housing and development policies. In 1934, the Federal Housing Administration (FHA) was established and codified redlining – the practice of refusing to insure mortgages in or near predominantly Black neighborhoods.<sup>121</sup> At the same time, the FHA rapidly developed new majority-White subdivisions. This policy

contributed to residential and school segregation and left Black families vulnerable to predatory lending practices.<sup>122–124</sup> In 1944, the United States enacted the Servicemen’s Readjustment Act (or “the G.I. Bill”) to support a range of benefits for returning World War II veterans, including access to low-interest mortgages and other loans. However, banks wouldn’t provide loans for housing in “hazardous” neighborhoods (i.e., Black neighborhoods), and many subdivisions would exclude Black families via covenant deeds.<sup>125–128</sup>

In 1968, the Fair Housing Act prohibited discrimination by “direct providers of housing” (e.g., landlords, real estate companies, insurance companies, banks, municipalities, etc.) based on a person’s race or color, religion, sex, national origin, familial status, or disability.<sup>129</sup> However, racial discrimination and inequities in housing persist. For example, a study from the National Bureau of Economic Research found that property managers are less likely to respond to prospective Black and Hispanic renters when they inquire about listings.<sup>130</sup> Similarly, a 2012 Department of Housing and Urban Development (HUD) study found that people of color are, on average, shown fewer homes and apartments by agents compared to their White counterparts.<sup>131</sup> In 2020, 27% of mortgage applications from Black borrowers were denied compared to only 14% percent of White borrowers.<sup>132</sup>

#### HOUSING AND AGING

Older households – those headed by someone aged 65 or older – are projected to increase from 34 million to 48 million between 2020 and 2040.<sup>132</sup> While older adults maintain a higher home ownership rate (79% of those aged 65 and older at the start of 2023) compared to other age groups, older adults make up an increasing share of renters relative to previous decades.<sup>133</sup> Adults aged 55 and older contributed to approximately two-thirds of rental housing growth between 2004 and 2019 and constitute 30% of all renter households.<sup>134</sup>

Fifty-three percent of renters aged 62 years and older are cost-burdened, with a greater proportion of Black (58%) and Hispanic (57%) renters reporting cost burden compared to White renters (51%).<sup>135</sup> Additionally, seniors and people with disabilities comprise almost half of all extremely low-income households (income between 0% and 30% of the federal poverty level), and 86% of these households are cost-burdened.<sup>135</sup> Black (18%), Latino (17%), Asian (14%), and American Indian/Alaskan Native (13%) seniors are more likely to live in extremely low-income households compared to White seniors (5%).<sup>135</sup> In 2019, North Carolina had 347,275 extremely low-income renter households and only 156,365 affordable and available rental housing units.<sup>136</sup>

#### ACCESSIBILITY AND HOME MODIFICATION

As homeowners and renters age, they may also realize that their home is no longer comfortable and may even be hazardous to their safety. Falls are a primary cause of injury and death among older adults, and more than half of all falls occur in the home.<sup>137,138</sup> Falls that do not result in injury may impact one’s confidence in their movement. A reduction in movement may weaken muscles, affect balance, and lead to additional falls.<sup>139</sup>



Falls in the home are preventable. For example, housing developers can build homes using the principles of universal design – “the design of products or environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.”<sup>140</sup> These principles often overlap with aging-in-place guidelines and include the construction of one-story homes with no-step entryways, wide doorways and halls, and extra floor space. Families and individuals can also make modifications to their existing homes. Some of these modifications are simple: replacing doorknobs with lever-style handles, placing solid surface doormats at home entrances, removing throw rugs, or purchasing chairs with armrests for support. Other modifications, however, may be time-consuming and costly.<sup>141</sup> For example, someone in a wheelchair who owns their home may need to remove walls to create wider hallways or completely renovate their bathroom. If this person was a renter, they may need to move themselves (and their family) to a different unit or complex altogether.

There are a few government-sponsored, private, and voluntary programs that help seniors modify their homes for accessibility. For instance, modification and repair funds are provided by the Older Americans Act and distributed by local Area Agencies on Aging.<sup>141</sup> Volunteer organizations like Rebuilding Together, Inc. can complete some repairs for low-income seniors through local affiliates.<sup>142</sup> Additionally, some lenders allow homeowners to leverage home equity to complete modifications.<sup>143</sup>

North Carolina’s older adult population will continue to grow. To meet the needs of this population and their families, further attention to the current state of housing and housing-related programs is needed to shape future actions that support aging-in-place goals.



Clara and Robert have been married for 45 years. They have many close friends that live nearby who they enjoy sharing meals and conversation with and they attend a church down

the street from their home. Their income was never high enough to allow them to qualify for a home loan, so they rent their current home. They live on a limited retirement income and Robert has a part-time job to help supplement it. Recently, developers have come into their neighborhood to purchase homes and businesses for redevelopment. This has led to increased rental costs and concerns that they will need to move out of the community to seek out more affordable housing. They hope they can find something close enough to their current community to maintain connections with their friends, church, and access to bus service that is convenient to get to Robert’s job. Clara has some difficulty with mobility issues, such as climbing stairs, so any new housing they find will need to be accessible for her.

*\*Note – This is a composite story to depict the real-life experiences of many older adults.*

## STRATEGY 7

### Ensure Statewide Focus on Housing Availability, Affordability, and Supports for Older Adults

- a. The North Carolina Department of Health and Human Services should fulfill the recommendation of the Governor's Advisory Council on Aging to conduct, or identify another entity to conduct, a statewide comprehensive needs assessment of 1) current and future housing needs and 2) programs to address home building and home modification for older adults. The review should identify differences in the availability and cost of housing by race, ethnicity, physical and sensory disability status, geography, and income. The review should also consider and discuss variations in cost of utilities among these groups, adequacy of public funding for home modification and repair services, challenges related to falls prevention for homeowners vs. renters, and opportunities for increasing social connections for older adults through planned community/housing environments. The review process should include representation from community members and advocacy groups most impacted by housing issues to provide input on context and important considerations.
- b. The North Carolina General Assembly, the Office of the Governor, and the North Carolina Housing Finance Agency should work together to:
  - i. Review results of the housing needs assessment recommended in 7a and appoint a task force to:
    1. Identify policy options to address a) inadequate supply of housing, b) access to home modifications, and c) disparities in access to safe and affordable housing.
    2. Identify effective incentives (e.g., inclusionary zoning, density bonuses) for home builders and buyers to develop and purchase homes built with universal design characteristics and increase available tax credits for home modifications to help older adults stay in their homes regardless of their income.
    3. Identify opportunities to increase the service area for Centers for Independent Living across the state to support stable housing options for people with disabilities.
  - ii. Increase funding to support and sustain the North Carolina Housing Trust Fund.

#### RECOMMENDATION OF THE GOVERNOR'S ADVISORY COUNCIL ON AGING

Like other states, North Carolina has a serious dearth of affordable housing. This problem will worsen for older people as a group, due to our rapidly increasing numbers. North Carolina has several good programs to address this problem, but we do not have a good handle on the extent and where needs exist and will exist. We need to know this information to properly plan and justify requests for needed funding. As the Department of Health and Human Services contemplates consolidating its housing efforts, we recommend:

1. A comprehensive needs assessment concerning independent housing for older adults, and, in the interim,
2. A housing survey using data from Area Agencies on Aging.

We recommend that funding be identified or sought for the comprehensive needs assessment.

**Desired Result** – Older adults in North Carolina will be able to find safe and affordable housing that meets their needs as they age or modify their homes to address accessibility needs.

**Why does the task force recommend this strategy?** – As the Governor's Advisory Council on Aging recommendation states, North Carolina's growing aging population will need access to safe and affordable housing. Housing has a very real and direct impact on the ability of older adults to age in place, prevent falls, maintain adequate nutrition, and remain mobile and connected in their communities. Not enough data are available to determine the current status of safe, affordable, and accessible housing supply and whether it will meet the needs of older adults. A study is needed to articulate the current and future needs and identify geographic and demographic gaps in housing availability, in addition to the effectiveness of home-modification programs in meeting the growing need for these services. This information can help to target limited resources and prioritize efforts based on those areas and groups most in need. The North Carolina General Assembly, the Office of the Governor, the North Carolina Housing Finance Agency, and other relevant groups will need to come together to review the data and recommendations from the study and move policy and programmatic actions forward to address identified needs.

**Context** – In North Carolina, 14% of housing units either lack a complete kitchen, lack plumbing, are overcrowded, are cost-burdened, or have a combination of these issues.<sup>144</sup> People from different racial and ethnic groups experience these issues at different rates, with 11% of White, 17% of Asian/Pacific Islander and American Indian, 21% of Black, and 25% of Hispanic North Carolinians living with severe housing problems.<sup>144</sup> For those aged 62 and older, 29% of households in North Carolina face these issues.<sup>144</sup>

Housing costs can be a challenging issue in many areas of the state, particularly for those who rent:

- **Homeowners** – In nine metro areas of the state (*Asheville, Charlotte-Concord-Gastonia, Durham-Chapel Hill, Fayetteville, Greensboro-High Point, Raleigh, and Winston-Salem*) 20%–30% of homeowners aged 65 and older are cost-burdened; in two metro areas (*Rocky Mount and Greenville*) the number rises to 30%–40%.<sup>145</sup>
- **Home Renters** – In two metro areas of the state (*New Bern and Wilmington*) 30%-40% of home renters aged 65 and older are cost-burdened, in six metro areas (*Burlington, Goldsboro, Greenville, Hickory-Lenoir-Morganton, Jacksonville, and Rocky Mount*) the percentage is 40%–50%; in nine metro areas (*Asheville, Charlotte-Concord-Gastonia, Durham-Chapel Hill, Fayetteville, Greensboro-High Point, Raleigh, Winston-Salem, and parts of northeast and southeast North Carolina*) the number rises to 50% or more.<sup>145</sup>

#### Why Housing Matters for Older Adults

“Older adults are the most vulnerable to the effects of poor housing. Poor housing quality may cause injury and diseases, and other housing-related factors such as neighborhood environment and overcrowding can negatively affect mental and physical health....

Hazards in the home, such as lead paint, allergens, water leaks, poor ventilation and inadequate heating, cooling and plumbing, can lead to poor respiratory health and disease and increased risk of cardiovascular conditions. Overcrowding, defined as having more than one person per room in a residence, is associated with increased risk of poor mental health and physical illnesses such as tuberculosis and other infectious diseases.

Housing costs and affordability among older adults are of particular concern. Cost-burdened households may have difficulty affording other basic needs such as health care, food, and heat.”

America's Health Rankings. [https://www.americashealthrankings.org/explore/measures/severe\\_housing\\_problems\\_62plus/NC](https://www.americashealthrankings.org/explore/measures/severe_housing_problems_62plus/NC)





Programs that help older adults and others with low incomes access rental housing include the Housing Choice Voucher Program (formerly known as Section 8) through the United States Department of Housing and Urban Development and public housing, which consists of state-owned, affordable rental houses or apartments.<sup>146</sup> According to the Governor’s Advisory Council on Aging, “North Carolina has several good programs to address this problem; the issue may be more one of generating awareness among older adults (and their families) who qualify for and would benefit from such programs.”<sup>147</sup>

## HOME MODIFICATIONS

Even for those who do not experience the severe housing issues just described, aging brings the need to modify homes to maintain the safest environment. As one expert writes, “We all experience changes in our hearing, vision, mobility, strength, stamina, flexibility, reach, and balance. These changes mean that the stairs, storage, and bathrooms that we didn’t even think about at age 35 may no longer work for us in our 60s, 70s, and beyond.”<sup>148</sup> External and interior stairs, hallways, bathrooms, lighting, and kitchens can all pose challenges to people as they age and limit their ability to function within or leave their home.<sup>148</sup>

Home modification programs help people identify barriers to accessibility or risks to their safety and options for modifying the home environment. Programs available in North Carolina include:

- **Housing and Home Improvement Assistance** – Available to people aged 60 or older; can include “security enhancements, minor home repairs, mobility and accessibility improvements, and basic household furnishings or appliance repair;” services offered by local service providers paid through the Home and Community Care Block Grant; limited to \$7,000 per individual.<sup>149</sup> This program may be limited or unavailable depending on location.
- **Single Family Rehabilitation Program** – Available to homeowners with 80% or less of their area’s median income and who are in one of several eligibility categories; pays for repairs to extend the usable life of homes; loans of up to \$50,000 with 0% interest forgiven in 10–20 years depending on loan amount; funded by the North Carolina Housing Finance Agency and county funds.<sup>150</sup>
- **Urgent Repair Program** – Available to individuals with lower income who are in one of several eligibility categories; for emergency, urgent, or critical repairs; loans of up to \$12,000 with 0% interest forgiven at rate of \$2,000 per year; funded by the North Carolina Housing Finance Agency and County funds.<sup>151,152</sup>

## UNIVERSAL DESIGN

Rather than modifying homes as people age or experience changes in their physical abilities, the concept of universal design seeks to “design products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.”<sup>140</sup> In home construction, this can include homes that are one level and the use of wide doorways, even thresholds, accessible bathrooms, levers to open doors, and lower cabinetry and countertops.

This concept has not yet become common in most new home building outside of age-targeted or age-restricted communities, primarily because “an insufficient number of home seekers are acting in the marketplace (‘voting with their dollars’) to change the behavior and design standards of newly built

homes. While there is evidence that the demand for new universally designed homes is slowly increasing, there is insufficient demand in this housing sector to dramatically affect the way homes are being built in most parts of the country.”<sup>148</sup> Greater awareness and demand by buyers and incentives for home builders are needed to increase the prevalence of this building concept that could be beneficial for everyone.

## NORTH CAROLINA HOUSING FINANCE AGENCY

The North Carolina Housing Finance Agency’s mission is to “provide safe, affordable housing opportunities to enhance the quality of life of North Carolinians.”<sup>153</sup> The agency was created by the North Carolina General Assembly and has financed nearly 300,000 affordable homes and apartments, totaling over \$29 billion, through “the sale of tax-exempt bonds and management of federal tax credit programs, the federal HOME Program, the state and national Housing Trust Funds, and other programs.”<sup>153</sup> They offer low-cost mortgages, finance housing development, repairs, and rehabilitation, housing counseling services, and administer rental assistance contracts such as the Housing Choice Voucher Program (formerly known as Section 8).<sup>153</sup>

### How would this impact the health of older adults?



Safe homes are a key strategy to prevent falls and other injuries.



Homes that have been built or modified to allow for ease of movement and safe entry and exit will help older adults and people with physical and sensory disabilities maintain their independence within the home and more easily move about the community.



Safe and accessible kitchens can help older adults and people with physical and sensory disabilities prepare food and maintain healthy nutrition.



Homes that have safe entry and exit allow older adults and people with physical and sensory disabilities to get out into the community and maintain their social connections.

## STRATEGY 8

### Enhance Learning Opportunities Related to Housing Programs and Services

- a. The North Carolina Falls Prevention Coalition should partner with statewide and local housing organizations to host annual summits rotated to different regions that include education for interested and responsible parties and consumers about what can be done to reduce the risk of falls in the home and community. The summits should include a focus on housing considerations and issues for people in rural areas, people with physical and sensory disabilities, people who live in public or rental housing, and other groups who may be underserved.
- b. The North Carolina Division of Aging and Adult Services and Area Agencies on Aging should identify opportunities to support learning and enhance efficiencies for older adult community service providers about possible uses for Home and Community Care Block Grant (HCCBG) funds when there is an increase in funding availability, other funding sources, and available community resources to help ensure safe and affordable housing for older adults (e.g., home modification programs). All trainings/presentations/efforts should include a focus on housing considerations and issues for people in rural areas, people with disabilities, people who live in public or rental housing, and other groups who may be underserved.
- c. The North Carolina Statewide Independent Living Council, local Centers for Independent Living, and state and local housing coalitions should partner to develop educational opportunities for local Housing Authorities and Housing Choice Voucher Program (formerly known as Section 8) landlords on the needs of older adults and people with disabilities related to home modifications and how universal design features can support the aging population and people with physical and sensory disabilities.

**Desired Result** – North Carolinians will have access to housing that meets their needs and helps prevent injury because of increased knowledge and partnership related to safe housing for older adults.

**Why does the task force recommend this strategy?** – As stated in Strategy 7, “Housing has a very real and direct impact on the ability of older adults to age in place, prevent falls, maintain adequate nutrition, and remain mobile and connected in their communities.” The task force recommends the activities in Strategy 8 to increase the knowledge of those working in the housing sector about the needs of older adults, deepen connections between the housing and aging sectors, and catalyze partnerships to improve access to safe housing for older adults.

**Context** – See Strategy 7, Pages 40 and 41 for information about home modification and universal design.

Home modification programs can be an effective method of helping older adults and people with physical and sensory disabilities continue to live in their homes safely. However, the circumstances from which individuals come and in which they live may impact their ability to access those modifications. For renters, partners in the housing sector, such as landlords, have an important role in determining whether older adults can make modifications to their homes to make them safer and more accessible.

“ [There is a] real issue when it comes to rental properties if the landlord agrees to home modifications. [Often the] burden falls on the individual to pay for it. Some [assistance] programs require the person to be the homeowner to get funding. Some landlords we worked with would allow grab bars and the material of shower required glue to be used for the bar, but the landlord wanted it to be removed when the person moves [which can be difficult to do without damaging the shower]. We try to do education around some of the benefits of doing these adjustments. ”

- Director of a housing advocacy group

Even if the person owns their home, some modification programs require a portion of the repair to be paid by the homeowner over time. Unpaid funds after a program participant passes away can create a lien on the property, making surviving family members responsible. To protect family from taking on that responsibility, some people choose not to accept funds for necessary home repairs. These issues highlight the importance of education for housing partners and inclusion of community members and advocacy groups that represent historically marginalized communities in the process of program development and policymaking.

## PARTNERS

**NC Falls Prevention Coalition** - The NC Falls Prevention Coalition is made up of seven regional coalitions that cover 77 counties. Their mission is to “bring together researchers, planners, health care providers, housing specialists, aging services providers, and many others to work together to reduce the number of falls and fall-related injuries among North Carolinians.”<sup>154</sup> The Coalition hosted a March 2023 summit on the topic of Powerful Innovative Practices to Prevent Falls, which included discussions of universal design, among other topics.<sup>155</sup>

**North Carolina Statewide Independent Living Council (NC SILC) and Local Centers for Independent Living** – The NC SILC is “a federally-mandated, not-for-profit, Governor-appointed council. A majority of council members must be people with a disability. By federal law, the SILC is charged with:

- Developing a state plan and provisioning statewide independent living services (SPIL).
- Developing and supporting a statewide network of Centers for Independent Living (CILs)
- Monitoring, reviewing, and evaluating the state plan (SPIL)<sup>156</sup>

There are eight local Centers for Independent Living (CIL) that provide services for people with disabilities in 42 counties.<sup>156</sup> Each CIL is an independent nonprofit with funding largely from the federal Administration for Community Living. CIL services include guidance and counseling, rehabilitation



engineering, home and vehicle modifications, independent living skills training, certain equipment purchases, assistance with leisure activities, personal assistance services, and service animals for people with disabilities.<sup>157</sup>

**State and local housing coalitions** – The North Carolina Housing Coalition’s (NCHC) mission is to “lead a movement to ensure that every North Carolinian has a home in which to live with dignity and opportunity.”<sup>158</sup> It conducts legislative advocacy and coalition projects and hosts the Housing Counseling Network and Homeowner Assistance Program, among other work. NCHC also helps to build capacity for local housing coalitions across the state. Local coalitions have specialized knowledge of local drivers of housing challenges and local housing supports.

**Local Housing Authorities** – North Carolina law gives counties and local governments jurisdiction to create local housing authorities. The role of these entities is to:

- “Prepare, carry out and operate housing projects, both rental and homeownership;
- Acquire property or interests therein, including by eminent domain;
- Own, hold, clear, and improve property;
- Sell, exchange, or assign property; and
- Provide for the construction, reconstruction, improvement, alteration or repair of any housing project or any part thereof.”<sup>158</sup>

There are 15 housing authorities in North Carolina with information available online.<sup>159</sup>

**Housing Choice Voucher Program (formerly known as Section 8)** – “Section 8 or housing choice vouchers are rental assistance from the federal government that can be obtained from a local housing authority.”<sup>159</sup>

**Home and Community Care Block Grant (HCCBG)** – HCCBG funds are administered by the North Carolina Division of Aging and Adult Services and help to provide in-home and community-based services for older adults. County Commissioners determine how their local allotment of HCCBG funds will be used. Housing and home improvement is one of the services allowed to use HCCBG funds.

### How would this impact the health of older adults?



Safe and accessible homes are a key strategy to prevent falls.



Homes that have been built or modified to allow for ease of movement and safe entry and exit will help older adults maintain their independence within the home and more easily move about the community.



Safe and accessible kitchens can help older adults prepare food and maintain healthy nutrition.



Homes that have safe entry and exit allow older adults to get out into the community and maintain their social connections.

## RECOMMENDATION 3

### Ensure Digital Equity for Older Adults

The societal shift from the use of analog or mechanical technology to digital technology has drastically changed the way we learn, work, seek services, and establish community. Today, 93% of American adults report using the internet, and 77% report having a broadband connection at home.<sup>160</sup> However, despite the incredible expansion of information technology, some communities and locales have been underserved, especially in regard to broadband internet access. Those who are Black or Hispanic, those with lower incomes, and those who live in rural areas are less likely to report having a broadband connection at home.<sup>160</sup>

This digital divide can have devastating consequences for those without access to or the ability to use internet-enabled technology, which is a necessity for much of modern everyday life. Today, people use the internet to search for and apply for jobs. Many adults work from home using the internet. Some apply for government assistance online. Local governments and news organizations also use the internet to communicate important or urgent information to community members. For example, during the height of the COVID-19 pandemic, multiple government entities kept Americans updated about preventive health behaviors, community spread, and vaccination through their websites and social media pages. Since the pandemic, many health providers have maintained telehealth services, which require an internet connection, for their patients.

Older adults have experienced a rapidly innovating technological landscape, from the introduction of the home computer in the 1970s to the ubiquity of smartphone ownership today. It is imperative that members of this population are supported in their right to access and use information technology.

#### **Digital Equity, Literacy, and Inclusion**

Digital equity is defined as “a condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy.”<sup>161</sup> Digital literacy is defined as “the ability to use information and communication technologies to find, evaluate, create, and communicate information,” which requires both cognitive and technical skills.<sup>161</sup> There are established gaps in internet access and use by age group. Digital technologies may also present accessibility challenges to older adults (e.g., small text sizes, few accessibility settings, reliance on touchscreens).<sup>162</sup>

Beyond the practical economic and educational impacts, providing older adults with opportunities to access and use information technology can support social connection. In 2020, AARP reported evidence of this after providing technology access, devices, and training to 10,000 older adults living in New York City public housing.<sup>163</sup> More than half of participants in that program reported less frequent feelings of loneliness.<sup>163</sup>

## FEDERAL SUPPORT FOR DIGITAL EQUITY GOALS

### **Bipartisan Infrastructure Law**

In 2021, President Joe Biden signed the Bipartisan Infrastructure Investment and Jobs Act, which included the \$2.75 billion Digital Equity Act, into law.<sup>164</sup> This act seeks to ensure that all communities have access to high-speed internet through three federal grant programs.<sup>165</sup> These programs focus on expanding coverage to the following covered populations:

- individuals who live in covered households (household income is not more than 150% of the federal poverty level)
- individuals aged 60 years and older
- incarcerated individuals
- veterans
- individuals with disabilities
- individuals with language barriers
- individuals who are members of a racial or ethnic minority group
- individuals who primarily reside in a rural area<sup>166</sup>

The Bipartisan Infrastructure Act also funded the Broadband Equity, Access, and Deployment (BEAD) Program – a \$42.45 billion investment to expand high-speed internet access through planning, infrastructure deployment, equity, and adoption programs.<sup>166</sup> The BEAD Program’s primary objective is to provide broadband services to locations unserved or underserved by broadband access.<sup>166</sup>

### **Consolidated Appropriations Act**

The Consolidated Appropriations Act of 2021 included various provisions to “increase broadband availability and accessibility for underserved areas and populations of the United States.”<sup>167</sup> The act also required the establishment of an Office of Minority Broadband Initiatives within the National Telecommunications and Information Administration to collaborate with many government and local partners to promote initiatives related to broadband connectivity and access.<sup>167</sup>

Both the Bipartisan Infrastructure Law and the Consolidated Appropriations Act created the Tribal Broadband Connectivity Program – a \$3 billion program to support tribal governments in “bringing high-speed Internet to Tribal lands, including telehealth, distance learning, affordability, and digital inclusion initiatives.”<sup>168</sup>





## FEDERAL GRANT ALLOCATIONS TO NORTH CAROLINA

Program	Total Amount Awarded
Broadband Equity, Access, and Deployment (BEAD) Program	\$1,532,999,481.15
State Digital Equity Planning Grant	\$1,415,614.32
Broadband Infrastructure Program	\$29,985,800
Connecting Minority Communities Pilot Program	\$27,108,724
Tribal Broadband Connectivity Program	\$500,000

Source: Internet for All. Funding by State/Territory. [https://internetforall.gov/funding-recipients?program\\_status=0&state=NC&form\\_build\\_id=form-eiGjCAvSoGI0CGQvZJCW5D83htwbijdA0YQltKkmQ4E&form\\_id=ntia\\_interactive\\_map\\_state\\_and\\_program\\_selection](https://internetforall.gov/funding-recipients?program_status=0&state=NC&form_build_id=form-eiGjCAvSoGI0CGQvZJCW5D83htwbijdA0YQltKkmQ4E&form_id=ntia_interactive_map_state_and_program_selection). Accessed July 15, 2023.

## STATE ACTIONS FOR DIGITAL EQUITY

Approximately 1.1 million North Carolina households lack access to high-speed internet, cannot afford high-speed internet, or do not have the skills to engage with the digital economy.<sup>169</sup> A variety of state initiatives are leveraging the challenges and resources posed by the COVID-19 pandemic to address this key issue.

In 2021, the NC Department of Information and Technology created the Division of Broadband and Digital Equity to support Governor Roy Cooper's plan to address the digital divide in North Carolina. This division strives to address digital equity by expanding affordable high-speed internet and broadband access across the state and increasing digital literacy among North Carolinians.<sup>170</sup>

Governor Cooper's plan includes using \$1 billion in federal American Rescue Plan Act funds and \$30 million in state funds to address crucial broadband infrastructure and access, digital literacy, and internet affordability.<sup>169</sup> It also established the NC Digital Equity and Inclusion Collaborative – a partnership of equity and inclusion-focused state and local agencies, nonprofit organizations, coalitions, and individuals that provide feedback to policymakers, design digital equity strategies, and educate residents on the digital divide and the importance of digital equity.<sup>171</sup>

While digital equity is important for all North Carolinians, it is particularly important that we include an aging lens in our actions. Older adults have seen technology progress throughout their lifetimes, and they, like all people, would benefit by taking full advantage of information and communication innovations. With appropriate strategies to address broadband access and digital literacy, older adults can have full participation and engagement in the digital sphere.

## STRATEGY 9

### Increase Access to Broadband Internet across the State

In developing and implementing digital inclusion plans, local governments should work with community partners – including senior centers, libraries, faith-based groups, health care providers, and university and community college facilities (among other possible partners) – to ensure community members and smaller organizations serving older adults have access to reliable and affordable broadband internet service. Strategies may include increasing uptake of subsidized internet services and expanding programs that provide low-cost access to internet services and devices that are appropriate for the needs and abilities of older adults.

**Desired Result** – More older adults will have access to the internet to increase opportunities related to health, employment, continuing education, needed services, and social connection.

#### Why does the task force recommend this strategy? –

The Federal Communications Commission describes broadband access as a “super” determinant of health, which means it plays a large role in health care outcomes and influences the more recognizable drivers of health, such as education and health care access.<sup>172</sup> Older adults are the largest group in the United States without connection to the internet. This limitation presents barriers to accessing health information and leads to decreased rates of social support and higher rates of social isolation.<sup>173</sup> The presence of community partners to help older adults access free or affordable internet service will allow them to better participate in meaningful life activities.

**Context** – There are public and private assistance programs for those who live in places with broadband internet connections but have financial restraints on accessing the service. The Affordable Connectivity Program (ACP) is a federal program that offers a discount of up to \$30 for eligible older adults.<sup>174</sup> It also includes a discount of up to \$100 for a laptop, tablet, or desktop computer. Participants enrolled in SNAP or Medicaid are eligible. Companies like Comcast have programs like Xfinity Internet Essentials, which offers internet services for free or low cost for qualified older adults, such as those who participate in SNAP or Medicaid and have enrolled in the Affordable Connectivity Program.

Pairing an older adult with the correct device is an important part of technological adaptation. Accommodating the unique needs of older adults leads to higher usage.<sup>175</sup> As of 2021, 30% of older adults owned a cell phone but not a smartphone, many citing problems with understanding how to use a smartphone.<sup>176</sup> Health-related problems such as arthritis may affect a person’s ability to use smaller screens.<sup>177</sup> Laptops and tablets may be easier to navigate, especially with the creation of tablets designed for older adults that have larger screens and fewer applications.<sup>178</sup> Older-adult friendly features such as adjustable font size and voice assistant technology also increase confidence.<sup>179</sup> Resources in North Carolina for access to devices include the Kramden Institute and E2D, nonprofits that provide low-cost refurbished computers for adults with lower incomes.

The North Carolina Division of Broadband and Digital Equity was created in 2021 within the North Carolina Department of Information Technology (NCDIT) to help close the digital divide and serve as a resource for broadband access and digital inclusion. Part of Governor Roy Cooper’s plan for digital equity includes \$50 million to be spent by the end of 2026 to support digital literacy and skills training. NCDIT is partnering with state library systems to develop a scalable model to equip libraries with broadband access and digital literacy training.<sup>180</sup>

#### Access to and Adoption of Internet Services in North Carolina

Two measures illustrate the geographic differences in North Carolina in terms of access to and adoption of internet service. See Figures 4 and 5 on next page that illustrate which counties in North Carolina may experience the greatest challenges to ensuring digital equity.

- **Broadband Availability Index (Figure 4)** - A higher score indicates better availability and quality of services. Factors that are considered for the score include percent of population with access to broadband and fiber service, speed of services, population density, and the age of homes.
- **Broadband Adoption Index (Figure 5)** - A higher score indicates greater potential for adoption. Factors that are considered for the score include percent of households with subscription to internet service, population age, education level, disability status, limited English proficiency, presence of children, prevalence of people working from home, and access to internet service and devices.

#### How would this impact the health of older adults?



Home-based exercise, aided by digital technology for online classes, can be instrumental in preventing falls.



Older adults can use internet-based applications for ride-hailing and other services that improve their ability to move around the community and to access health services through telehealth and telepsychiatry.



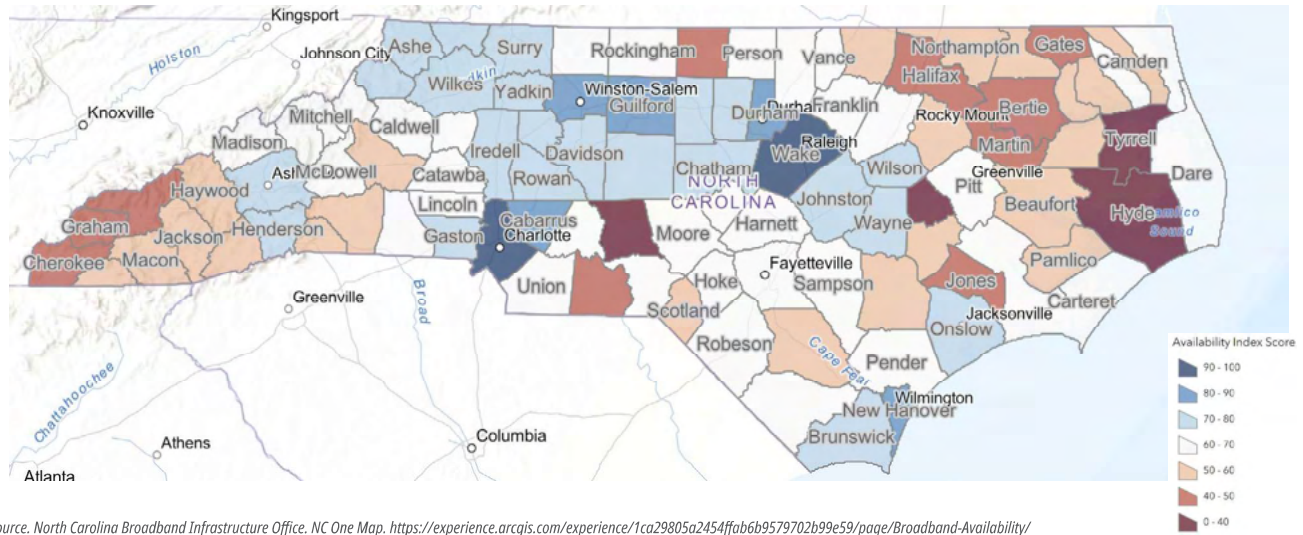
Older adults can use internet-based applications that help them shop for groceries, a resource that can be important for those who are unable or prefer not to leave their homes to shop.



Access to digital technology will allow older adults to stay in communication with loved ones and health care providers, reducing social isolation.

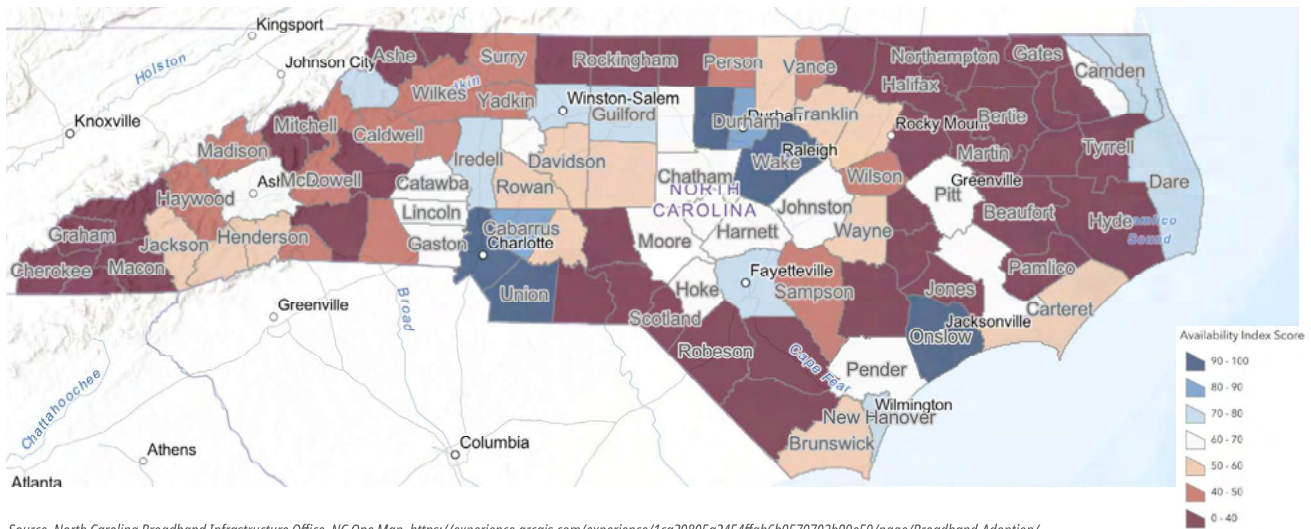


FIGURE 4. North Carolina Broadband Availability Index



Source. North Carolina Broadband Infrastructure Office. NC One Map. <https://experience.arcgis.com/experience/1ca29805a2454ffab6b9579702b99e59/page/Broadband-Availability/>

FIGURE 5. North Carolina Broadband Adoption Index



Source. North Carolina Broadband Infrastructure Office. NC One Map. <https://experience.arcgis.com/experience/1ca29805a2454ffab6b9579702b99e59/page/Broadband-Adoption/>

## STRATEGY 10

### Increase Digital Literacy for Older Adults

The North Carolina Division of Aging and Adult Services should work with aging services partners and funders to:

- a. Identify opportunities to sustain the work that will be done through the digital literacy grant along with other grantees of the North Carolina Department of Information Technology's Division of Broadband and Digital Equity.
- b. Increase awareness of digital literacy services offered at various community locations (e.g., senior centers, libraries, cooperative extension, local school systems, and community colleges, programs that pair youth with older adults for mutual mentorships).

**Desired Result** – More older adults will have the skills to access and navigate information and services available on the internet.

**Why does the task force recommend this strategy?** – Digital literacy is the “ability to use information and communication technologies to find, evaluate, create and communicate information, requiring both cognitive and technical skills.”<sup>181,182</sup> Digital inclusion relies on individual and community access to high-speed internet, access to devices that meet technological and internet needs and accommodate sensory differences (e.g., vision or hearing), and the skills necessary to take part in the digital world. Technology can facilitate aging in place through access to health information and social inclusion, but that capability is only beneficial if the individual knows how to access and effectively use those resources.<sup>182</sup>

For those able to take advantage of telehealth, digital platforms can provide access to remote medical help or education and assist with managing illness. Social connections can be improved through networking online and video calls with family and friends. Virtual exercise regimens can increase physical function. Internet use has also been shown to reduce the likelihood of depression and loneliness in older adults. Digital skills can be used to actively contribute to the community and participate in the workforce.

**Context** – The North Carolina Department of Information Technology's Office of Digital Equity has granted funds to state agencies to support digital equity solutions that “positively impact target populations identified in the Digital Equity Act,” including older adults.<sup>183</sup> With funds from the American Rescue Plan Act, the grant will help fund distribution of digital devices, workforce development programs, and digital literacy training. Of the \$9.9 million in awarded dollars, approximately \$1.1 million was given to the North Carolina Department of Health and Human Services, Division of Aging and Adult Services (DAAS). Other grantees include the Department of Health and Human Services, Office of Rural Health, and NC State University Institute for Emerging Issues.<sup>184</sup>

#### Resources for Digital Literacy

Senior centers around the state offer opportunities for digital learning in group classes taught by volunteers. Libraries are also a common resource for digital literacy training, sometimes targeted to older adults. One example is the Blue Ridge Literacy Council's partnership with Carolina Village in Hendersonville. This initiative offers a six-week digital literacy course that covers differences between a laptop and PC, setting up email, navigating the internet, online purchases, using a smartphone, accessing health care information, and avoiding risks and scams.<sup>185</sup>

Other independent organizations and businesses work to address digital literacy for older adults as well. Raleigh Senior TechEd is an all-volunteer organization that educates older adults on computer technology. Workshops are held twice a week throughout the Raleigh area. Since its 1996 inception, it has provided technological education to more than 4,700 students. Aging Connected, a nationwide campaign to get older adults across the country connected with the internet, was founded in 2018. Established by Older Adults Technology Services (OATS) and Humana, Aging Connected seeks to improve social connections through technology classes designed for older learners and provides an online search tool for low-cost internet services.

Intergenerational digital literacy programs that pair youth with older adults can engage this population on a more personalized level. Outcomes include reduced fear of technology, increased interest in technology, and better health literacy.<sup>186</sup> Programs such as Cyber Seniors provide older adults with training in the use of various devices with the assistance of younger adult volunteers. Benefits are seen for both age groups, such as increased self-esteem and reduced anxiety.<sup>187</sup>

#### How would this impact the health of older adults?



Home-based exercise, aided by digital technology, can be instrumental in preventing falls.



Older adults can use internet-based applications for ride-hailing and other services that improve their ability to move around the community and to access health services through telehealth and telepsychiatry.



Older adults can use internet-based applications that help them shop for groceries, a resource that can be important for those who are unable or prefer not to leave their homes to shop.



Access to digital technology will allow older adults to stay in communication with loved ones and health care providers, reducing social isolation.





## ADDITIONAL RESOURCES:

### Strategy 1 - Help More North Carolinians Plan and Save for Retirement:

- [Retirement Security in North Carolina Findings and Recommendations](#)
- [Aging Has Economic Costs to North Carolina Workers, Taxpayers, and Small Business Owners](#)
- [North Carolina Work and Save Act](#)

### Strategy 2 - Increase Employment Opportunities for Older Adults

- [Unite Us](#)
- [Senior Community Services Employment Program](#)
- [NCCARE360](#)
- [Workforce Development Boards](#)

### Strategy 3 - Update Tax Policy to Help Older Adults with Lower Incomes

- [Institute on Taxation and Economic Policy – Report: State Income Tax Subsidies for Seniors](#)
- [Lincoln Institute of Land Policy – Policy report examining property tax relief for homeowners](#)
- [Center on Budget and Policy Priorities - Analysis of state tax policies for older adults and recommendations for ways to target policies to increase benefits to lower-income older adults](#)

### Strategy 4 - Increase Uptake of Food and Nutrition Services

- [NCDHHS State Action Plan for Nutrition Security 2023-2024](#)
- [Food and Nutrition Services](#)
- [Senior Farmers' Market Nutrition Program](#)
- [Commodity Supplemental Food Program](#)
- [Issue Brief: Malnutrition & Older Adults in North Carolina](#)

### Strategy 5 – Reduce the Costs of Health Care Coverage

- [Medicare Payment Advisory Commission and the Medicaid and CHIP Payment and Access Commission – Data Book: Beneficiaries Dually Eligible for Medicare and Medicaid](#)
- [National Council on Aging: Prescription Assistance for Older Adults](#)
- [Find a SHIP Counselor](#)

### Strategy 6 - Increase Awareness of and Protections from Fraud for Older Adults:

- [NC Department of Justice: Protecting Consumers](#)
- [Protecting Older Consumers 2021-2022: A Report of the Federal Trade Commission](#)
- [Elder Fraud Report 2021](#)
- [Consumer Financial Protection Bureau: Protecting Older Adults from Fraud and Financial Exploitation](#)

### Strategy 7 - Ensure Statewide Focus on Housing Availability, Affordability, and Supports for Older Adults

- [North Carolina Medical Journal – The Housing Dilemma for Older Adults: The Quiet Crisis](#)
- [Urban Institute - Housing for North Carolina's Future Policy Tools that Support Rural, Suburban, and Urban Success](#)

### Strategy 8 – Enhance Learning Opportunities Related to Housing Programs and Services

- [NC Falls Prevention Coalition](#)
- [North Carolina Statewide Independent Living Council](#)

### Strategy 9 - Increase Access to Broadband Internet across the State

- [North Carolina Department of Information Technology](#)
- [North Carolina Assistive Technology Program](#)
- [Connect2HealthFCC](#)
- [Affordable Connectivity Plan](#)
- [NC Broadband Adoption Index](#)

### Strategy 10 - Increase Digital Literacy for Older Adults

- [North Carolina Department of Information Technology](#)
- [NC State Cooperative Extension](#)
- [Cyber Seniors](#)
- [Aging Connected](#)

1. United States Department of Health and Human Services. Health Equity in Healthy People 2030. Accessed August 1, 2023. <https://health.gov/healthypeople/priority-areas/health-equity-healthy-people-2030>
2. Cubanki J, Koma W, Damico A, Neuman T. How many seniors live in poverty? KFF. Published November 19, 2018. Accessed August 1, 2023. <https://www.kff.org/report-section/how-many-seniors-live-in-poverty-issue-brief/>
3. Weller CE, Saad-Lessler J, Bond T. Still shortchanged: An update on women's retirement preparedness. National Institute on Retirement Security. Published May 2020. Accessed August 1, 2023. <https://www.nirsonline.org/reports/stillshortchanged/>
4. Dowell EKP. Gender pay gap widens as women age. United States Census Bureau. Published January 27, 2022. Accessed August 1, 2023. <https://www.census.gov/library/stories/2022/01/gender-pay-gap-widens-as-women-age.html>
5. AARP. Caregiving in the U.S. Published June 2015. Accessed August 1, 2023. <http://www.aarp.org/content/dam/aarp/ppi/2015/caregiving-in-the-united-states-2015-report-revised.pdf>
6. SAGE. The facts on LGBT aging. Published May 2018. Accessed August 1, 2023. <https://www.sageusa.org/wp-content/uploads/2018/05/sageusa-the-facts-on-lgbt-aging.pdf>
7. AARP. Cantave C. Dignity 2022: The experience of LGBTQ older adults. Published June 2022. Accessed August 1, 2023. <https://www.aarp.org/research/topics/life/info-2022/lgbtq-community-dignity-2022.html>
8. Parker K, Horowitz JM, Brown A, Fry R, Cohn D, Igielnik R. Demographic and economic trends in urban, suburban and rural communities. Pew Research Center. Published May 22, 2018. Accessed August 1, 2023. <https://www.pewresearch.org/social-trends/2018/05/22/demographic-and-economic-trends-in-urban-suburban-and-rural-communities/>
9. Braveman PA, Arkin E, Proctor D, Kauh T, Holm N. Systemic and structural racism: Definitions, examples, health damages, and approaches to dismantling. *Health Affairs*. 2022;41(2):171-178. Accessed August 1, 2023. <https://www.healthaffairs.org/doi/10.1377/hlthaff.2021.01394>. doi:10.1377/HLTHAFF.2021.01394
10. Richardson J, Mitchell BC, Meier HCS, Lynch E, Edlebi J. Redlining and neighborhood health. National Community Reinvestment Coalition. Accessed August 1, 2023. <https://nccr.org/holc-health/>
11. University of Richmond. Not even past: Social vulnerability and the legacy of redlining. Accessed August 1, 2023. <https://dsl.richmond.edu/socialvulnerability/map/#loc=11/36.076/-79.797&city=greensboro-nc&area=93-D3>
12. University of Richmond. Not even past: Social vulnerability and the legacy of redlining. Accessed August 1, 2023. <https://dsl.richmond.edu/socialvulnerability/map/#loc=11/36.096/-80.244&city=winston-salem-nc>
13. University of Richmond. Not even past: Social vulnerability and the legacy of redlining. Accessed August 1, 2023. <https://dsl.richmond.edu/socialvulnerability/map/#loc=11/35.585/-82.561&city=asheville-nc>
14. University of Richmond. Not even past: Social vulnerability and the legacy of redlining. Accessed August 1, 2023. <https://dsl.richmond.edu/socialvulnerability/map/#loc=11/35.999/-78.906&city=durham-nc&area=92-D6>
15. Agency for Toxic Substances and Disease Registry. At a glance: CDC/ATSDR social vulnerability index. Published 2022. Accessed August 1, 2023. [https://www.atsdr.cdc.gov/placeandhealth/svi/at-a-glance\\_svi.html](https://www.atsdr.cdc.gov/placeandhealth/svi/at-a-glance_svi.html)
16. Center on Poverty, Work and Opportunity. Racial wealth disparity in North Carolina. University of North Carolina Chapel Hill. Published September 1, 2010. Accessed August 1, 2023. <https://www.zsr.org/sites/default/files/documents/Racial%20Wealth%20Disparity%20in%20NC.pdf>
17. Gilbert P. The State of exclusion: An empirical analysis of the legacy of segregated communities in North Carolina. University of North Carolina Chapel Hill. Published 2013. Accessed August 1, 2023. [www.uncinclusionproject.org](http://www.uncinclusionproject.org)
18. Taylor A. Millions of Americans live near toxic waste sites: How does this affect their health? *Housing Matters*. Published online February 16, 2022. Accessed August 1, 2023. <https://housingmatters.urban.org/articles/millions-americans-live-near-toxic-waste-sites-how-does-affect-their-health>
19. North Carolina Department of Health and Human Services. North Carolina is aging! Accessed August 1, 2023. <https://www.ncdhhs.gov/nc-state-aging-profile-2020pdf/open>
20. America's Health Rankings. Poverty racial disparity: Ages 65+ in North Carolina. Accessed August 1, 2023. [https://www.americashealthrankings.org/explore/measures/PovertySr\\_disparity/NC](https://www.americashealthrankings.org/explore/measures/PovertySr_disparity/NC)
21. United States Bureau of Labor Statistics. Consumer expenditures in 2020. Published December 2021. Accessed August 1, 2023. <https://www.bls.gov/opub/reports/consumer-expenditures/2020/>
22. Copeland C. Retirement plan participation: Survey of income and program participation (SIPP) Data, 2006. Employee Benefit Research Institute. Published February 9, 2009. Accessed August 1, 2023. [https://www.ebri.org/content/retirement-plan-participation-survey-of-income-and-program-participation-\(sipp\)-data-2006-4176](https://www.ebri.org/content/retirement-plan-participation-survey-of-income-and-program-participation-(sipp)-data-2006-4176)
23. United States Bureau of Labor Statistics. 2021 Annual Averages - Household Data - Tables from Employment and Earnings. Published 2021. Accessed August 1, 2023. [https://www.bls.gov/cps/cps\\_aa2021.htm](https://www.bls.gov/cps/cps_aa2021.htm)
24. United States Bureau of Labor Statistics. Number of people 75 and older in the labor force is expected to grow 96.5 percent by 2030. Published November 4, 2021. Accessed August 1, 2023. <https://www.bls.gov/opub/ted/2021/number-of-people-75-and-older-in-the-labor-force-is-expected-to-grow-96-5-percent-by-2030.htm>
25. Employee Benefit Research Institute and Greenwald Research. 2023 Retirement Confidence Survey. Published April 27, 2023. Accessed August 1, 2023. [https://www.ebri.org/docs/default-source/rcs/2023-rcs/2023-rcs-short-report.pdf?sfvrsn=7c8d392f\\_6](https://www.ebri.org/docs/default-source/rcs/2023-rcs/2023-rcs-short-report.pdf?sfvrsn=7c8d392f_6)
26. North Carolina Department of Health and Human Services. The state of older adult food insecurity and malnutrition in North Carolina. Published June 2022. Accessed August 28, 2023. <https://www.ncdhhs.gov/state-older-adult-food-insecurity-and-malnutrition-ncpdf/open>
27. United States Department of Agriculture. Definitions of Food Security. October 2022. Accessed August 28, 2023. <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/definitions-of-food-security/>
28. World Health Organization. Malnutrition. Published online April 15, 2020. Accessed August 28, 2023. <https://www.who.int/news-room/questions-and-answers/item/malnutrition>
29. Lumen Learning. Growing old. Accessed July 27, 2023. <https://courses.lumenlearning.com/wm-introductiontosociology/chapter/growing-old/>
30. Feeding America. Facts about senior hunger in America. Accessed July 27, 2023. <https://www.feedingamerica.org/hunger-in-america/senior-hunger-facts>
31. Ziliak JP, Gundersen C. The state of senior hunger in America in 2019: An annual report. *Feeding America*. Accessed August 28, 2023. <https://www.feedingamerica.org/research/senior-hunger-research>
32. Gwet P, Anderson J, Machlin SR. Out-of-Pocket health care expenses in the U.S.: Civilian noninstitutionalized population by age and insurance coverage, 2014. *Medical Expenditure Panel Survey*. Published October 2016. Accessed August 1, 2023. [https://meps.ahrq.gov/data\\_files/publications/st495/stat495.shtml](https://meps.ahrq.gov/data_files/publications/st495/stat495.shtml)
33. The Administration for Community Living. 2020 profile of older Americans. Published May 2021. Accessed August 1, 2023. [https://acl.gov/sites/default/files/Aging%20and%20Disability%20in%20America/2020ProfileOlderAmericans.Final\\_.pdf#:~:text=an%20increase%20of%2041%20since%202009](https://acl.gov/sites/default/files/Aging%20and%20Disability%20in%20America/2020ProfileOlderAmericans.Final_.pdf#:~:text=an%20increase%20of%2041%20since%202009)
34. National Council on Aging. Get the facts on food insecurity and older adults. Published April 15, 2022. Accessed August 1, 2023. <https://ncoa.org/article/what-is-food-insecurity-get-the-facts>
35. Financial Fraud Enforcement Task Force. Elder fraud and financial exploitation. Published December 6, 2018. Accessed August 28, 2023. <https://www.justice.gov/archives/stopfraud-archive/elder-fraud-and-financial-exploitation>
36. National Council on Aging. Get the facts on elder abuse. Published February 23, 2021. Accessed August 28, 2023. <https://www.ncoa.org/article/get-the-facts-on-elder-abuse>
37. Storey JE. Risk factors for elder abuse and neglect: A review of the literature. *Aggression and Violent Behavior*. 2020;50:101339. Accessed August 1, 2023. <https://www.sciencedirect.com/science/article/abs/pii/S1359178918303471>. doi:10.1016/J.AVB.2019.101339



38. Federal Trade Commission. Consumer sentinel network data book 2022. Published online February 2023. Accessed August 1, 2023. <https://www.ftc.gov/reports/consumer-sentinel-network-data-book-2022>
39. Brown JE, Saad-Lessler J, Oakley D. Retirement in America: Out of reach for working Americans? National Institute on Retirement Security. Published September 2018. Accessed August 1, 2023. <https://www.nirsonline.org/wp-content/uploads/2018/09/FINAL-Report-.pdf>
40. North Carolina Office of Human Resources. Current state employee statistics. Published 2023. Accessed August 2, 2023. <https://oshr.nc.gov/work-nc/employee-statistics/current-state-employee-statistics>
41. Galbraith CS. Fiscal benefits of increasing the savings rates of North Carolina's aging population: Impact on state expenditures for retirees. University of North Carolina Wilmington. Published online December 2016. [https://cri.georgetown.edu/wp-content/uploads/2020/12/Final\\_Retirement-Security-in-North-Carolina\\_Tear-Sheet\\_Print-1.pdf](https://cri.georgetown.edu/wp-content/uploads/2020/12/Final_Retirement-Security-in-North-Carolina_Tear-Sheet_Print-1.pdf)
42. Econsult Solutions. The impact of insufficient retirement savings on the Commonwealth of Pennsylvania. Published January 25, 2018. Accessed August 2, 2023. <https://patreasury.gov/pdf/Impact-Insufficient-Retirement-Savings.pdf>
43. Econsult Solutions. The fiscal impacts of insufficient retirement savings in Colorado. Published December 20, 2019. Accessed August 2, 2023. <https://treasury.colorado.gov/sites/treasury/files/The%20Fiscal%20Impacts%20of%20Insufficient%20Retirement%20Savings%20in%20Colorado%20Final.pdf>
44. Joint Legislative Study Committee on Small Business Retirement Options. Retirement security in North Carolina: Findings and recommendations. Published December 1, 2020. Accessed August 2, 2023. <https://webservices.ncleg.gov/ViewDocSiteFile/34751>
45. John D, Koenig G, Malta M. Payroll deduction retirement programs build economic security. AARP. Published online August 2022. Accessed August 2, 2023. <https://www.aarp.org/content/dam/aarp/ppi/2022/state-fact-sheets/north-carolina.doi.10.26419-2Fppi.00164.035.pdf>
46. Georgetown University. State programs 2023: More programs are open and enrolling workers, states actively explore partnerships, and four states (MN, MO, NV and VT) have enacted new programs. Published 2022. Accessed August 2, 2023. <https://cri.georgetown.edu/states/>
47. SHRM. Employing older workers. Published online 2022. Accessed August 2, 2023. <https://www.shrm.org/resourcesandtools/tools-and-samples/toolkits/pages/employingolderworkers.aspx>
48. Reddy S, Venkataganesan D. Running the numbers: How North Carolina's population is changing and why it matters. *North Carolina Medical Journal*. 2023;84(2). Accessed August 2, 2023. <https://ncmedicaljournal.com/article/73019-running-the-numbers-how-north-carolina-s-population-is-changing-and-why-it-matters>
49. Collins SM, Casey Jr RP. America's aging workforce: Opportunities and challenges. Published December 2017. Accessed August 2, 2023. <https://www.aging.senate.gov/imo/media/doc/Aging%20Workforce%20Report%20FINAL.pdf>
50. Foundation for Social Connection. Systems of cross-sector integration and action across the lifespan (SOCIAL) framework: The work, employment, and labor (WEL) Sector. Published 2023. Accessed August 2, 2023. <https://www.social-connection.org/wp-content/uploads/2023/02/The-SOCIAL-Framework-Work-Employment-Labor-Winter-2023.pdf>
51. McAneny M. Talent shortage? Here's an older solution to a newer problem. Deloitte. Published online January 25, 2023. Accessed August 2, 2023. <https://action.deloitte.com/insight/3098/talent-shortage-heres-an-older-solution-to-a-newer-problem>
52. Collins SM, Casey Jr RP. America's aging workforce: Opportunities and challenges. Published December 2017. Accessed August 2, 2023. <https://www.aging.senate.gov/imo/media/doc/Aging%20Workforce%20Report%20FINAL.pdf>
53. United States Department of Labor. Senior Community Service Employment Program. Accessed August 2, 2023. <https://www.dol.gov/agencies/eta/seniors>
54. North Carolina Department of Commerce. Workforce Development Boards. Accessed August 2, 2023. <https://www.commerce.nc.gov/jobs-training/workforce-professionals-tools-resources/workforce-development-boards>
55. Davis C, Byerly-Duke E. State income tax subsidies for seniors. Institute on Taxation and Economic Policy. Published March 23, 2023. Accessed August 2, 2023. <https://itep.org/state-income-tax-subsidies-for-seniors-2023/>
56. Sabia JJ. There's no place like home: A hazard model analysis of aging in place among older homeowners in the PSID. *Research on Aging*. 2008;30(1). Accessed August 2, 2023. doi: <https://doi.org/10.1177/0164027507307919>
57. North Carolina Department of Revenue. North Carolina property tax relief program. Published online July 2022. <https://www.ncdor.gov/2023-av-9-securedpdf/open>
58. AARP. More AARP tax assistance for North Carolina residents. Published March 1, 2023. Accessed August 2, 2023. <https://states.aarp.org/north-carolina/more-aarp-tax-assistance-for-north-carolina-residents>
59. Dean O, Gothro A, Reynolds M. Access: Who are the low-income and unenrolled? A state-level look. AARP. Published July 2022. Accessed August 2, 2023. <https://www.aarp.org/content/dam/aarp/ppi/2022/07/access-who-are-low-income-but-unenrolled.doi.10.26419-2Fppi.00166.002.pdf>
60. Dean O, Bleiweiss-Sande R, Gothro A. Solutions: State policies associated with higher participation. AARP. Published July 2022. Accessed August 2, 2023. <https://www.aarp.org/content/dam/aarp/ppi/2022/07/solutions-state-policies-associated-higher-participation.doi.10.26419-2Fppi.00166.003.pdf>
61. Willis H. Malnutrition in the elderly. *Independent Nurse*. Published October 20, 2016. Accessed August 2, 2023. <https://www.independentnurse.co.uk/content/clinical/malnutrition-in-the-elderly>
62. North Carolina Department of Health and Human Services. State action plan for nutrition security. Published April 2023. Accessed August 2, 2023. <https://www.ncdhhs.gov/ncdhhs-state-action-plan-nutrition-security-2023-2024/open>
63. North Carolina Department of Health and Human Services. Request for application 2020 Food and Nutrition Services (FNS) funding. <https://www.ncdhhs.gov/divisions/child-and-family-well-being/food-and-nutrition-services-food-stamps/apply-food-and-nutrition-services-food-stamps>
64. NC Extension. More in my basket. Accessed August 2, 2023. <https://moore.ces.ncsu.edu/more-in-my-basket-2/>
65. National Council on Aging. Worry less and age better with BenefitsCheckUp. Accessed August 2, 2023. <https://benefitscheckup.org/>
66. Feeding America. Connecting health and food access. Feeding America. Accessed August 2, 2023. <https://www.feedingamerica.org/our-work/nutrition-health>
67. Odoms-Young AM. Examining the impact of structural racism on food insecurity: Implications for addressing racial/ethnic disparities. *Family Community Health*. Published April 1, 2018. Accessed August 2, 2023. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5823283/>. doi: <https://doi.org/10.1097%2Ffch.0000000000000183>
68. Sadarangani TR, Missaelides L, Yu G, Trinh-Shevrin C, Brody A. Racial disparities in nutritional risk among community-dwelling older adults in adult day health care. *Journal of Nutrition in Gerontology and Geriatrics*. 219AD;38(4). Accessed August 2, 2023. doi: [10.1080/21551197.2019.1647327](https://doi.org/10.1080/21551197.2019.1647327). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6813810/>
69. Varela EG, McVay MA, Shelnett KP, Mobley AR. The determinants of food insecurity among Hispanic/Latinx households with young children: A narrative review. *Advances in Nutrition*. 2023;14(1):190. Accessed August 2, 2023. <https://pubmed.ncbi.nlm.nih.gov/36811589/>. doi: [10.1016/J.ADVNUT.2022.12.001](https://doi.org/10.1016/J.ADVNUT.2022.12.001)
70. National Council on Aging. Can I get food stamps? A non-citizen's guide to SNAP benefits. Published September 30, 2022. Accessed August 2, 2023. <https://ncoa.org/article/can-i-get-food-stamps-a-non-citizens-guide-to-snap-benefits>
71. United States Department of Agriculture Food and Nutrition Service. Ensuring language access and effective communication in consideration of the unwinding of the SNAP emergency allotments and COVID-19- program flexibilities. Published May 23, 2023. Accessed August 2, 2023. <https://www.fns.usda.gov/cr/unwinding-snap-ea>
72. United States Department of Agriculture Food and Nutrition Service. FY 2024 priority areas for state outreach plans. Published February 1, 2023. Accessed August 2, 2023. <https://www.fns.usda.gov/snap/fy-2024-priority-areas-state-outreach-plans>
73. Dean O, Gothro A, Reynolds M. Access: Who are the low-income and unenrolled? A state-level look. AARP. Published July 2022. Accessed August 2, 2023. <https://www.aarp.org/content/dam/aarp/ppi/2022/07/access-who-are-low-income-but-unenrolled.doi.10.26419-2Fppi.00166.002.pdf>



74. Dean O, Gothro A, Reynolds M. Access: Who are the low-income and unenrolled? A state-level look. AARP. Published July 2022. Accessed August 2, 2023. <https://www.aarp.org/content/dam/aarp/ppi/2022/07/access-who-are-low-income-but-unenrolled.doi.10.26419-2Fppi.00166.002.pdf>
75. United States Department of Agriculture. What prevents seniors from enrolling in SNAP? Accessed August 2, 2023. <https://www.budget.senate.gov/imo/media/doc/Addressing%20Barriers%20and%20Challenges%20-%20Seniors.pdf>
76. Medicaid and CHIP Payment and Access Commission. Beneficiaries dually eligible for Medicare and Medicaid. Published online February 2023. Accessed August 2, 2023. <https://www.macpac.gov/publication/data-book-beneficiaries-dually-eligible-for-medicare-and-medicaid-3/>
77. America's Health Ranking. Poverty: Ages 65+ in North Carolina. Accessed August 28, 2023. [https://www.americashealthrankings.org/explore/measures/poverty\\_sr/NC](https://www.americashealthrankings.org/explore/measures/poverty_sr/NC)
78. Mcinerney M, Rutledge MS, King SE. How much does health spending eat away at retirement income? Center for Retirement Research at Boston College. Published online August 2022. Accessed August 28, 2023. [https://crr.bc.edu/wp-content/uploads/2022/07/IB\\_22-12.pdf](https://crr.bc.edu/wp-content/uploads/2022/07/IB_22-12.pdf)
79. Jacobson G, Cicchiello A, Shah A, Doty MM, Williams RD. When costs are a barrier to health care: Older adults in 11 countries. The Commonwealth Fund. Published Oct 1, 2021. Accessed August 29, 2023. <https://www.commonwealthfund.org/publications/surveys/2021/oct/when-costs-are-barrier-getting-health-care-older-adults-survey>
80. Caswell KJ, Waidmann TA. Medicare savings program enrollees and eligible non-enrollees. Medicaid and CHIP Payment and Access Commission. Published online June 2017. Accessed August 29, 2023. <https://www.macpac.gov/wp-content/uploads/2017/08/MSP-Enrollees-and-Eligible-Non-Enrollees.pdf>
81. National Council on Aging. Take-up rates in Medicare savings programs and the Part D low-income subsidy. Published September 9, 2022. Accessed August 29, 2023. <https://www.ncoa.org/article/take-up-rates-in-medicare-savings-programs-and-the-part-d-low-income-subsidy>
82. North Carolina Department of Insurance. Contact Seniors' Health Insurance Information Program (SHIIP). Accessed August 29, 2023. <https://www.ncdoi.gov/consumers/medicare-and-seniors-health-insurance-information-program-shiip/contact-seniors-health-insurance-information-program-shiip>
83. DiGirolamo M. Protecting your loved ones from elder financial fraud. MoneyGeek. Accessed August 29, 2023. <https://www.moneygeek.com/seniors/resources/elder-financial-abuse-prevention-guide/>
84. Federal Bureau of Investigation. Elder Fraud Report 2021. Published online 2021. Accessed August 29, 2023. <https://www.justice.gov/file/1523276/download>
85. Federal Trade Commission. Protecting older consumers. Published October 18, 2022. Accessed August 29, 2023. [https://www.ftc.gov/system/files/ftc\\_gov/pdf/P144400OlderConsumersReportFY22.pdf](https://www.ftc.gov/system/files/ftc_gov/pdf/P144400OlderConsumersReportFY22.pdf)
86. Gill M. Senior scam statistics: 2019-2021. CompariTech. Published October 7, 2022. Accessed August 29, 2023. <https://www.comparitech.com/identity-theft-protection/senior-scam-statistics/>
87. Federal Trade Commission. Who experiences scams? A story for all ages. Published December 8, 2022. Accessed August 29, 2023. <https://www.ftc.gov/news-events/data-visualizations/data-spotlight/2022/12/who-experiences-scams-story-all-ages>
88. Consumer Financial Protection Bureau. Fraud and scams. Accessed August 29, 2023. <https://www.consumerfinance.gov/consumer-tools/fraud/>
89. Federal Trade Commission. Fraud and Scam Reduction Act. Accessed August 29, 2023. <https://www.ftc.gov/legal-library/browse/statutes/fraud-scam-reduction-act>
90. Wells SJ. Fighting senior fraud before it happens. Kiplinger. Published October 6, 2022. Accessed August 29, 2023. <https://www.kiplinger.com/retirement/fighting-senior-fraud-before-it-happens>
91. Congress.gov. H.R.500: Financial Exploitation Prevention Act of 2023. Accessed August 29, 2023. <https://www.congress.gov/bill/118th-congress/house-bill/500>
92. Huddleston C. 5 things banks can do right now to protect older customers. Bank Director. Published ma 31, 2022. Accessed August 29, 2023. <https://www.bankdirector.com/issues/retail/5-things-banks-can-do-right-now-to-protect-older-customers/>
93. AARP. Bank tellers can help fight financial exploitation, study finds. Published October 19, 2019. Accessed August 29, 2023. <https://www.aarp.org/money/scams-fraud/info-2019/bank-tellers-prevent-financial-fraud.html>
94. NC Bankers Association. North Carolina Bankers Association joins The American Bankers Association Foundation's Safe Banking For Seniors Campaign. Published 2022. Accessed August 29, 2023. <https://ncbankers.org/north-carolina-bankers-association-joins-the-american-bankers-association-foundations-safe-banking-for-seniors-campaign/>
95. Carman KG, Smucker S. Protecting the elderly from financial exploitation. RAND Corporation. Accessed August 29, 2023. <https://www.rand.org/blog/2021/10/protecting-the-elderly-from-financial-exploitation.html>
96. Shang Y, Wu Z, Du X, Jiang Y, Ma B, Chi M. The psychology of the internet fraud victimization of older adults: A systematic review. *Frontiers in Psychology*. 2022;13:912242. Accessed August 29, 2023. <https://www.frontiersin.org/articles/10.3389/fpsyg.2022.912242/full>. doi:10.3389/FPSYG.2022.912242/BIBTEX
97. Kemp S, Erades Pérez N. Consumer fraud against older adults in digital society: Examining victimization and its Impact. *International Journal of Environmental Research and Public Health*. 2023;20(7). Accessed August 29, 2023. <https://pubmed.ncbi.nlm.nih.gov/37048017/> doi:10.3390/IJERPH20075404
98. Kapasi A, Schneider JA, Yu L, Lamar M, Bennett DA, Boyle PA. Association of stroke and cerebrovascular pathologies with scam susceptibility in older adults. *JAMA Neurology*. 2023;80(1):49-57. Accessed August 29, 2023. <https://pubmed.ncbi.nlm.nih.gov/36315115/>. doi:10.1001/Jamaneurol.2022.3711
99. Daniel L, De Puy A, Harel Y, Kim SH, Prempeh, D. Protecting the public and vulnerable populations from fraudulent scams on social media. National Association of Attorneys General. Published 2019. Accessed August 29, 2023. <https://www.naag.org/attorney-general-journal/protecting-the-public-and-vulnerable-groups-from-fraudulent-scams-on-social-media/>
100. Blanton K. Lonely seniors are more vulnerable to fraud. Center for Retirement Research at Boston College. Published July 5, 2022. Accessed August 29, 2023. <https://crr.bc.edu/lonely-seniors-are-more-vulnerable-to-fraud/>
101. Financial Industry Regulatory Authority. Social isolation and the risk of investment fraud. Published February 09, 2021. Accessed August 29, 2023. <https://www.finra.org/investors/insights/social-isolation-and-risk-investment-fraud>
102. United Nations Human Rights Office of the High Commissioner. The human right to adequate housing. Accessed August 29, 2023. <https://www.ohchr.org/en/special-procedures/sr-housing/human-right-adequate-housing>
103. Maslow AH. A theory of human motivation. *Psychological Review*. 1943;50(4):370-396. Accessed August 29, 2023. <https://psycnet.apa.org/record/1943-03751-001>. doi:10.1037/H0054346
104. Housing Matters. Words matter: Housing vs. Shelter. Accessed August 29, 2023. <https://housingmatterssc.org/words-matter-housing-vs-shelter/>
105. Tarpley, LG. The 28/36 rule lays out how much debt you can have and still qualify for most mortgages. Business Insider. Published November 3, 2022. Accessed August 29, 2023. <https://www.businessinsider.com/personal-finance/28-36-rule-mortgages>
106. HUD User. Rental burdens: Rethinking affordability measure. Accessed August 29, 2023. [https://www.huduser.gov/portal/pdredge/pdr\\_edge\\_featd\\_article\\_092214.html](https://www.huduser.gov/portal/pdredge/pdr_edge_featd_article_092214.html)
107. Taylor LA. Housing and health: An overview of the literature. *Health Affairs*. Published June 7, 2018. Accessed August 29, 2023. <https://www.healthaffairs.org/doi/10.1377/hpb20180313.396577/>
108. Maness DL, Khan M. Care of the homeless: an overview. *American Family Physician*. 2014 Apr 15;89(8):634-40. Accessed August 29, 2023. <https://pubmed.ncbi.nlm.nih.gov/24784122/>
109. Morrison DS. Homelessness as an independent risk factor for mortality: results from a retrospective cohort study. *International Journal of Epidemiology*. 2009;38(3):877-883. doi:10.1093/IJE/DYP160
110. Logan I, Meyer BD, Wyse A. The mortality of the US homeless population. Becker Friedman Institute. Published March 27, 2023. Accessed August 29, 2023. <https://bfi.uchicago.edu/insight/research-summary/the-mortality-of-the-us-homeless-population/>





111. Kim H, Burgard SA. Housing instability and mental health among renters in the Michigan recession and recovery study. *Public Health*. 2022;209:30-35. Accessed August 29, 2023. <https://pubmed.ncbi.nlm.nih.gov/35780516/>. doi:10.1016/j.puhe.2022.05.015
112. Gu KD, Faulkner KC, Thorndike AN. Housing instability and cardiometabolic health in the United States: A narrative review of the literature. *BMC Public Health*. Accessed August 29, 2023. <https://bmcpublihealth.biomedcentral.com/articles/10.1186/s12889-023-15875-6>. doi:10.1186/s12889-023-15875-6
113. Maqbool N, Viveiros J, Ault M. The impacts of affordable housing on health: A research summary. Center for Housing Policy. Published online April 2015. Accessed August 29, 2023. <https://nhc.org/wp-content/uploads/2017/03/The-Impacts-of-Affordable-Housing-on-Health-A-Research-Summary.pdf>
114. Lane K, Ito K, Johnson S, Gibson EA, Tang A, Matte T. Burden and risk factors for cold-related illness and death in New York City. *International Journal of Environmental Research and Public Health*. 2018;15(4). Accessed August 29, 2023. <https://pubmed.ncbi.nlm.nih.gov/29601479/>. doi:10.3390/IJERPH15040632
115. Liu J, Varghese BM, Hansen A, et al. Heat exposure and cardiovascular health outcomes: a systematic review and meta-analysis. *Lancet Planetary Health*. 2022;6(6):e484-e495. Accessed August 29, 2023. [https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196\(22\)00117-6/fulltext](https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(22)00117-6/fulltext). doi:10.1016/S2542-5196(22)00117-6
116. Joint Center for Housing Studies of Harvard University. The state of the nation's housing 2017. Published online 2017. Accessed August 29, 2023. <https://www.jchs.harvard.edu/state-nations-housing-2017>
117. Kushel MB, Gupta R, Gee L, Haas JS. Housing instability and food insecurity as barriers to health care among low-income Americans. *Journal of General Internal Medicine*. 2006;21(1):71-77. Accessed August 29, 2023. <https://pubmed.ncbi.nlm.nih.gov/16423128/>. doi:10.1111/j.1525-1497.2005.00278.x
118. Fiechtner L, Kleinman K, Melly SJ, et al. Effects of proximity to supermarkets on a randomized trial studying interventions for obesity. *American Journal of Public Health*. 2016;106(3):557-562. Accessed August 29, 2023. <https://pubmed.ncbi.nlm.nih.gov/26794159/>. doi:10.2105/AJPH.2015.302986
119. Knobel P, Maneja R, Bartoll X, et al. Quality of urban green spaces influences residents' use of these spaces, physical activity, and overweight/obesity. *Environmental Pollution*. 2021;271:116393. Accessed August 29, 2023. <https://pubmed.ncbi.nlm.nih.gov/33388678/>. doi:10.1016/j.envpol.2020.116393
120. Gianfredi V, Buffoli M, Rebecchi A, et al. Association between urban greenspace and health: A systematic review of literature. *International Journal of Environmental Research and Public Health*. 2021;18(10). Accessed August 29, 2023. <https://www.mdpi.com/1660-4601/18/10/5137> doi:10.3390/IJERPH18105137
121. Rothstein R. The color of law: A forgotten history of how our government segregated America. Perfection Learning Corporation. 2019, p. 345.
122. Monarrez T, Chien C. Dividing lines: Racially unequal school boundaries in US public school systems. Urban Institute. Published online September 1, 2021. Accessed August 29, 2023. <https://www.urban.org/research/publication/dividing-lines-racially-unequal-school-boundaries-us-public-school-systems>
123. Carrillo S, Salhorta P. The U.S. student population is more diverse, but schools are still highly segregated. NPR. Published July 14, 2022. Accessed August 29, 2023. <https://www.npr.org/2022/07/14/1111060299/school-segregation-report>
124. United States Department of Justice Civil Rights Division. Housing And civil enforcement cases documents. Accessed August 29, 2023. <https://www.justice.gov/crt/housing-and-civil-enforcement-cases-documents-231>
125. Bolté CG. Our Negro veterans. Published 1947. Accessed August 29, 2023. <https://archive.org/details/ournegroveterans00bolt>
126. Herbold H. Never a level playing field: Blacks and the GI Bill. *The Journal of Blacks in Higher Education*. 1994;(6):104. <https://www.jstor.org/stable/2962479>. doi:10.2307/2962479
127. Mapping Prejudice. What is a covenant? Accessed August 29, 2023. <https://mappingprejudice.umn.edu/racial-covenants/what-is-a-covenant>
128. Martinez R. Uncovering racist housing practices, one deed at a time. Published May 26, 2021. WUNC. Accessed August 29, 2023. <https://www.wunc.org/race-demographics/2021-05-26/uncovering-racist-housing-practices-deed-durham-tested>
129. United States Department of Justice Civil Rights Division. Fair Housing Act. Accessed August 29, 2023. <https://www.justice.gov/crt/fair-housing-act-1>
130. Christensen P, Sarmiento-Barbieri I, Timmins C. Racial discrimination and housing outcomes in the United States rental market. National Bureau of Economic Research. Published November 2021. Accessed August 29, 2023. <https://www.nber.org/papers/w29516>
131. Turner MA, Levy DK, Wissoker DA, Aranda CL, Pitingolo R, Santos R. Housing discrimination against racial and ethnic minorities 2012. United States Department of Housing and Urban Development. Published online June 11, 2013. Accessed August 29, 2023. [https://www.huduser.gov/portal/publications/fairhsg/hsg\\_discrimination\\_2012.html](https://www.huduser.gov/portal/publications/fairhsg/hsg_discrimination_2012.html)
132. Choi JH, Mattingly PJ. What different denial rates can tell us about racial disparities in the mortgage market. Urban Institute. Published January 13, 2022. Accessed August 29, 2023. <https://www.urban.org/urban-wire/what-different-denial-rates-can-tell-us-about-racial-disparities-mortgage-market>
133. United States Census. Quarterly residential vacancies and homeownership, second quarter 2023. Published online August 2, 2023. Accessed August 29, 2023. <https://www.census.gov/housing/hvs/files/currentsvspress.pdf>
134. Joint Center for Housing Studies of Harvard University. The state of the nation's housing 2020. Published 2020. Accessed August 29, 2023. <https://www.jchs.harvard.edu/state-nations-housing-2020>
135. Justice In Aging. Low-income older adults face unaffordable rents, driving housing instability and homelessness. Published February 16, 2021. Accessed August 29, 2023. <https://justiceinaging.org/issue-brief-low-income-older-adults-face-unaffordable-rents-driving-housing-instability-and-homelessness/#:~:text=Older%20adults%20are%20at%20the,of%20housing%20instability%20and%20homelessness>.
136. National Low Income Housing Coalition. North Carolina. Accessed August 29, 2023. <https://reports.nlihc.org/gap/2019/nc>
137. Jayasinghe N. Addressing falls prevention among older adults, part I: Understanding why falls happen. Hospital for Special Surgery. Accessed August 29, 2023. [https://www.hss.edu/conditions\\_addressing-falls-prevention-older-adults-understanding.asp](https://www.hss.edu/conditions_addressing-falls-prevention-older-adults-understanding.asp)
138. Centers for Disease Control and Prevention. Keep on your feet—preventing older adult falls. Published online March 24, 2023. Accessed August 29, 2023. <https://www.cdc.gov/injury/features/older-adult-falls/index.html>
139. Vellas BJ, Wayne SJ, Romero LJ, Baumgartner RN, Garry PJ. Fear of falling and restriction of mobility in elderly fallers. *Age and Ageing*. 1997;26(3):189-193. Accessed August 29, 2023. <https://pubmed.ncbi.nlm.nih.gov/9223714/>. doi:10.1093/AGEING/26.3.189
140. National Association of Home Builders. What is universal design? Accessed August 29, 2023. <https://www.nahb.org/other/consumer-resources/what-is-universal-design>
141. Eldercare Locator. Home Improvement Assistance. Accessed August 29, 2023. [https://eldercare.acl.gov/public/resources/factsheets/home\\_modifications.aspx](https://eldercare.acl.gov/public/resources/factsheets/home_modifications.aspx)
142. Rebuilding Together. Find your local affiliate. Accessed August 29, 2023. <https://rebuildingtogether.org/find-your-local-affiliate>
143. National Council on Aging. Use your home to stay at home. Published online November 23, 2021. Accessed August 29, 2023. <https://www.ncoa.org/article/use-your-home-to-stay-at-home>
144. America's Health Rankings. Severe housing problems. Accessed August 29, 2023. [https://www.americashealthrankings.org/explore/measures/severe\\_housing\\_problems](https://www.americashealthrankings.org/explore/measures/severe_housing_problems)
145. Joint Center for Housing Studies. Cost burdens among older adults are at an all-time high. Published 2017. Accessed August 29, 2023. <https://www.jchs.harvard.edu/cost-burdens-among-older-adults-are-all-time-high>
146. NC 211. Housing for older adults. Published online January 31, 2023. Accessed August 29, 2023. <https://nc211.org/housing-for-older-adults/>
147. Governor's Advisory Council on Aging. 2022 Annual Report to the Governor. Published 2022. <https://www.ncdhhs.gov/divisions/daas/daas-council-committee>
148. Duncan R. The housing dilemma for older adults: The quiet crisis. *North Carolina Medical Journal* 2023;84(2). Accessed August 29, 2023. <https://ncmedicaljournal.com/article/73004-the-housing-dilemma-for-older-adults-the-quiet-crisis>. doi:10.18043/001C.73004
149. North Carolina Department of Health and Human Services. Housing and home improvement assistance. Accessed August 29, 2023. <https://www.ncdhhs.gov/divisions/aging-and-adult-services/housing-and-home-improvement-assistance>.

150. Orange County North Carolina. Home repair programs. Accessed August 29, 2023. <https://orangecountync.gov/2211/Home-Repair-Programs>.
151. North Carolina Housing Finance Agency. Urgent repair program. Accessed August 29, 2023. <https://www.nchfa.com/home-ownership-partners/community-partners/community-programs/urgent-repair-program>
152. Orange County North Carolina. Home repair programs. Accessed August 29, 2023. <https://orangecountync.gov/2211/Home-Repair-Programs>.
153. North Carolina Housing Finance Agency. About us. Accessed August 29, 2023. <https://www.nchfa.com/about-us>
154. North Carolina Falls Prevention Coalition. 2021-2025 action plan. Accessed August 29, 2023. <https://ncfallsprevention.org/2021-2025-action-plan/>
155. NC Falls Prevention Coalition. NC summits. Accessed August 29, 2023. <https://ncfallsprevention.org/nc-summits/>
156. NC Statewide Independent Living Council. About us. Accessed August 29, 2023. <https://nc-silc.org/>
157. North Carolina Department of Health and Human Services. Independent living for people with disabilities. Accessed August 29, 2023. <https://www.ncdhhs.gov/assistance/disability-services/independent-living-for-people-with-disabilities>
158. Mulligan T. Local government support for privately owned affordable housing. Coates' Canons NC Local Government Law. Published May 16, 2022. Accessed August 29, 2023. <https://canons.sog.unc.edu/2022/05/local-government-support-for-privately-owned-affordable-housing/>
159. North Carolina Housing Coalition. Section 8 and public housing. Accessed August 29, 2023. <https://nchousing.org/resources-referrals/section-8-public-housing/>
160. Pew Research Center. Demographics of internet and home broadband usage in the United States. Published April 7, 2021. Accessed August 29, 2023. <https://www.pewresearch.org/internet/fact-sheet/internet-broadband/?tabId=tab-cf1ede57-7a4b-489e-8bc8-de1f4a6e643c>
161. National Digital Inclusion Alliance. The Words Behind Our Work: The Source for Definitions of Digital Inclusion Terms. Accessed August 29, 2023. <https://www.digitalinclusion.org/definitions/>
162. Berenguer A, Goncalves J, Hosio S, Ferreira D, Anagnostopoulos T, Kostakos V. Are smartphones ubiquitous?: An in-depth survey of smartphone adoption by seniors. *IEEE Consumer Electronics Magazine*. 2017;6(1):104-110. Accessed August 29, 2023. <https://ieeexplore.ieee.org/document/7786986>. doi:10.1109/MCE.2016.2614524
163. AARP. How technology and training drive social engagement for low-income seniors. Published October 2022. Accessed August 29, 2023. <https://www.aarp.org/research/topics/technology/info-2022/2022-technology-trends-older-americans.html>
164. Congress.gov. H.R.1841: Digital Equity Act of 2021. Accessed August 29, 2023. <https://www.congress.gov/bill/117th-congress/house-bill/1841>
165. Internet for All. Digital Equity Act Programs Overview. Published online May 2022. Accessed August 29, 2023. <https://www.internetforall.gov/programs>
166. Internet for All. Digital Equity Act: State Capacity Grant Program, Planning Grants, and Competitive Grant Frequently Asked Questions (FAQs). Accessed August 29, 2023. <https://www.internetforall.gov/program/digital-equity-act-programs>
167. Congressional Research Service. The Consolidated Appropriations Act, 2021 broadband provisions: In brief. Published March 2, 2021. Accessed August 29, 2023. <https://crsreports.congress.gov/product/pdf/R/R46701#:~:text=The%20act%20requires%20the%20FCC,maps%20required%20under%20the%20act.&text=features%2C%20such%20as%20roads%2C%20streams%2C%20and%20transmission%20lines>.
168. National Telecommunications and Information Administration. Tribal Broadband Connectivity Program. Accessed August 29, 2023. <https://ntia.gov/category/tribal-broadband-connectivity-program>
169. North Carolina Division of Broadband & Digital Equity. Accessed August 29, 2023. <https://www.ncbroadband.gov/>
170. North Carolina Department of Information Technology Division of Broadband and Digital Equity. About us. Accessed August 29, 2023. <https://www.ncbroadband.gov/about-us>
171. North Carolina Department of Information Technology Division of Broadband and Digital Equity. Digital Equity Collaborative. Accessed August 29, 2023. <https://www.ncbroadband.gov/digital-divide/digital-equity-collaborative>
172. Community Tech Network. Older Americans month: Seniors' lack of internet access and the resulting public health crisis. Published May 10, 2022. Accessed August 29, 2023. <https://communitytechnetwork.org/blog/older-americans-month-seniors-lack-of-internet-access-and-the-resulting-public-health-crisis/>
173. Aging Connected. About us. Accessed August 29, 2023. <https://agingconnected.org/about-us/>
174. Stanley M. Best internet service for seniors in 2023. SeniorLiving.org. Published August 2, 2023. Accessed August 29, 2023. <https://www.seniorliving.org/internet/best/>
175. Grimaldi J. Senior use of smartphones, computers, and iPads is on the rise. Association of Mature American Citizens. Published online March 4, 2022. Accessed August 29, 2023. <https://amac.us/amac-in-the-media/senior-use-of-smartphones-computers-and-ipads-is-on-the-rise/>
176. Pew Research Center. Demographics of mobile device ownership and adoption in the United States. Published April 7, 2021. Accessed August 29, 2023. <https://www.pewresearch.org/internet/fact-sheet/mobile/>
177. Goldsmith T. Declining tech literacy among seniors can be a disadvantage. NC Health News. Published July 21, 2022. Accessed August 29, 2023. <https://www.northcarolinahealthnews.org/2022/07/21/declining-tech-literacy-among-seniors-can-put-them-at-a-disadvantage/>
178. Gustke C. Making technology easier for older people to use. *The New York Times*. Published March 11, 2016. Accessed August 30, 2023. <https://www.nytimes.com/2016/03/12/your-money/making-technology-easier-for-older-people-to-use.html>
179. Kim S, Yao W, Du X. Exploring older adults' adoption and use of a tablet computer during COVID-19: Longitudinal qualitative study. *JMIR Aging*. 2022;5(1). Accessed August 30, 2023. <https://pubmed.ncbi.nlm.nih.gov/35134747/>. doi:10.2196/32957
180. North Carolina Department of Information Technology Division of Broadband and Digital Equity. Public Libraries. Accessed August 30, 2023. <https://www.ncbroadband.gov/digital-divide/what-digital-divide/public-libraries>
181. North Carolina Department of Information Technology Division of Broadband and Digital Equity. Digital Literacy. Accessed August 30, 2023. <https://www.ncbroadband.gov/digital-divide/what-digital-divide/digital-literacy>
182. Lobocono D, Leedahl SN, Maiocco E. Older adults learning technology in an intergenerational program: Qualitative analysis of areas of technology requested for assistance. Rowan University. Accessed August 30, 2023. <https://www.researchwithrowan.com/en/publications/older-adults-learning-technology-in-an-intergenerational-program-.doi:10.4017/gt.2019.18.2.004.00>
183. North Carolina Office of the Governor. State Office of Digital Equity and Literacy launches \$24M Digital Equity Grant Program. Published online September 27, 2022. Accessed August 30, 2023. <https://governor.nc.gov/news/press-releases/2022/09/27/state-office-digital-equity-and-literacy-launches-24m-digital-equity-grant-program>
184. North Carolina Department of Information Technology Division of Broadband and Digital Equity. State awards \$9.9M in grants to expand digital equity and literacy initiatives. Published online January 18, 2023. Accessed August 30, 2023. <https://www.ncbroadband.gov/news/press-releases/2023/01/18/state-awards-99m-grants-expand-digital-equity-and-literacy-initiatives>
185. Literacy Connection. Accessed August 30, 2023. <https://www.litconnection.org/>
186. Lee DEK, Kim DH. Bridging the digital divide for older adults via intergenerational mentor-up. *Research on Social Work Practice*. Accessed August 30, 2023. <https://doi.org/10.1177/1049731518810798>. 2018;29(7):786-795.
187. Juris JJ, Bouldin ED, Uva K, Cardwell CD, Schulhoff A, Hiegl N. Virtual intergenerational reverse-mentoring program reduces loneliness among older adults: Results from a pilot evaluation. *International Journal of Environmental Research and Public Health*. 2022;19(12). doi:10.3390/IJERPH1912121/S1