

# **Aging as an Engine of Innovation, Business Development, and Job Creation in North Carolina**

**James H. Johnson Jr.**  
**Allan M. Parnell**  
**Huan Lian**

Research Brief #3  
Frank Hawkins Kenan Institute of Private Enterprise  
Kenan-Flagler Business School  
University of North Carolina at Chapel Hill  
October 2017

## Introduction

North Carolina is one of the nation's most rapidly growing states. Since 2000, the state's population has increased 25% or by nearly 2 million. Older adults—both long term residents who are aging in place and recent newcomer retirees—have played a major role in the state's growth. Over the past 15 years, the older adult population (65 and older) has increased 45% or by close to a half million, accounting for one fifth of state's total growth (Table 1). By 2015, North Carolina's elderly population had reached 1.4 million or 14% the total population, up from 969,000 or 12% in 2000.

In this research brief, we assert that aging can and should be a major engine of innovation, business development, and job creation in North Carolina. Everything in both the person-centered (i.e., residential) and the built environment (i.e., all public, private, and commercial spaces) must change to accommodate an aging population. Safety retrofits are needed in many homes of seniors, on the sidewalks of many cities, and in many retail spaces. Consequently, new ideas and innovations, including assistive technologies and the digital literacy training required to use them, are needed to support older adults as they strive to cope with their age-related difficulties while maintaining residence in their homes and their communities. In addition, new models of care are required to address the needs of the oldest old (85+ population).

We begin by providing an overview of aging in

North Carolina, focusing specifically on the geography and demography as well as the housing characteristics of the older adult population.<sup>1</sup> Next, we focus on the diverse living arrangements of the state's most vulnerable older adults—the group most in need of assistance with the types of long term services and supports that will enable them to live out their lives in their homes and communities. We then identify specific domains in the aging space where there are unique opportunities to innovate, facilitate business development, and create jobs. We conclude by discussing necessary policy interventions to foster and facilitate successful age-focused, entrepreneurially driven economic development in North Carolina.

## Overview of Aging in NC

### The Geographic Lens

In North Carolina, older adult population growth encompasses every region, every county-type, and all 100 counties. But the growth is not evenly distributed across these various geographical units, which poses major challenges for state leaders, especially when viewed within the broader context of overall population change within the state. Elderly population growth is not only more rapid, but also more dispersed geographically, than total population growth.

<sup>1</sup> To achieve this objective, we draw upon data on North Carolina older adults from the Public Use Microdata Sample (PUMS) file of the American Community Survey (ACS), a pooled data base of five of the most recent annual surveys, which represents roughly 5% of the U.S. population. Given our research objectives, this database was ideal because it contains a housing record, which includes detailed statistics on the characteristics of the surveyed housing unit, and a person record, which includes detailed statistics on every person in the surveyed housing unit. The two files are linked by a common serial number which makes possible "the study of people within the context of their families and other household members," that is, their living arrangements.

**Table 1:**  
**North Carolina Total and Older Adult Population Change, 2000-2015**

North Carolina	2015 Population	2000 Population	Absolute Change	Percent Change
<b>Total</b>	10,042,802	8,049,313	1,993,489	24.7
<b>65 +</b>	1,405,992	969,048	436,944	45.1

Source: American Community Survey

- At the regional level, while total growth is disproportionately concentrated in the Piedmont, there is significant elderly growth in both the Mountain and Coastal Plain (Figure 1A).

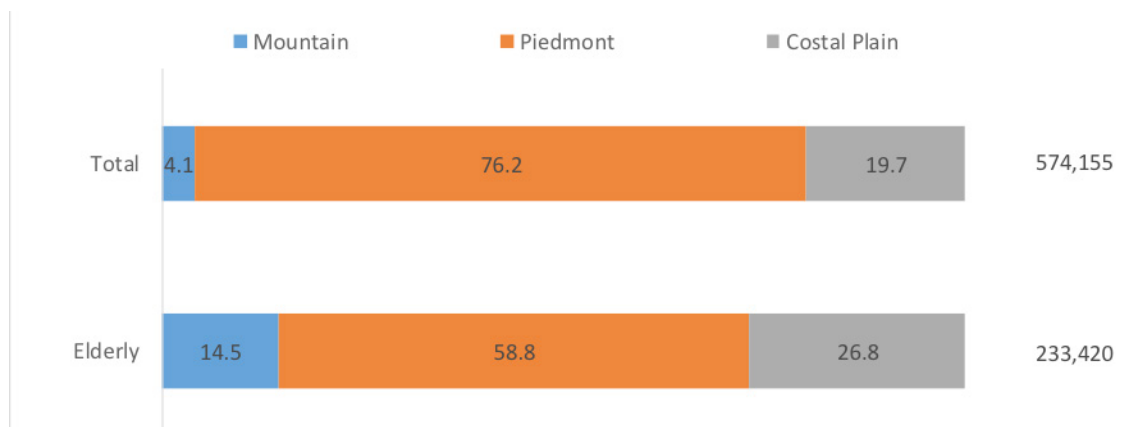
- At the census-defined county-type level,<sup>2</sup> while both total growth (94%) and elderly growth (77%) are highly concentrated in metropolitan counties, noteworthy elderly growth is also occurring in micropolitan (16% versus

6% of total growth) and rural (7% versus 0.2% of total growth) counties (Figure 1B).

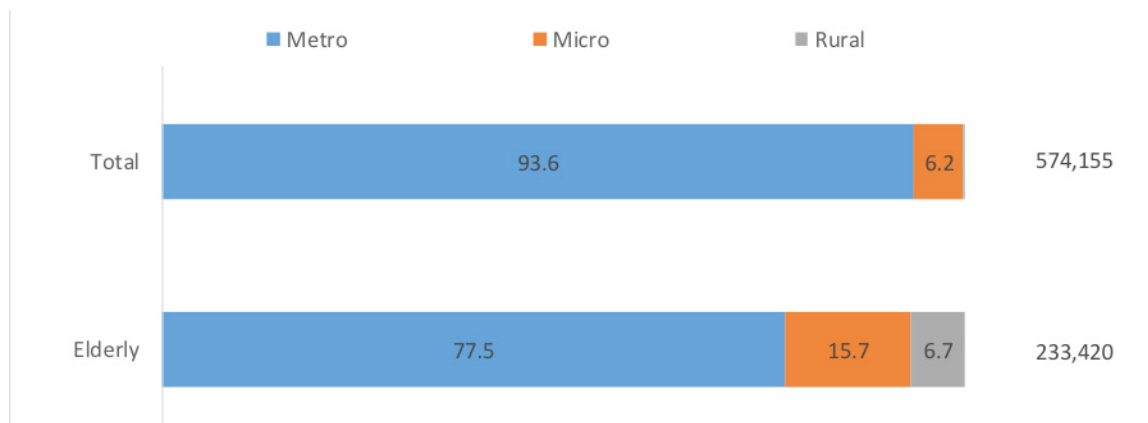
- At the individual county level, while two counties (Wake and Mecklenburg) are capturing nearly half and 33 counties two-thirds of total population growth, 11 counties are capturing half of elderly growth, 20 counties are capturing three quarters, and the balance is spread across 48 counties that are experiencing either very slow growth or overall population decline (Figures 2A and 2B).

How, then, given these somewhat disparate geographical patterns of total and elderly population change, is North Carolina's 1.4 million older

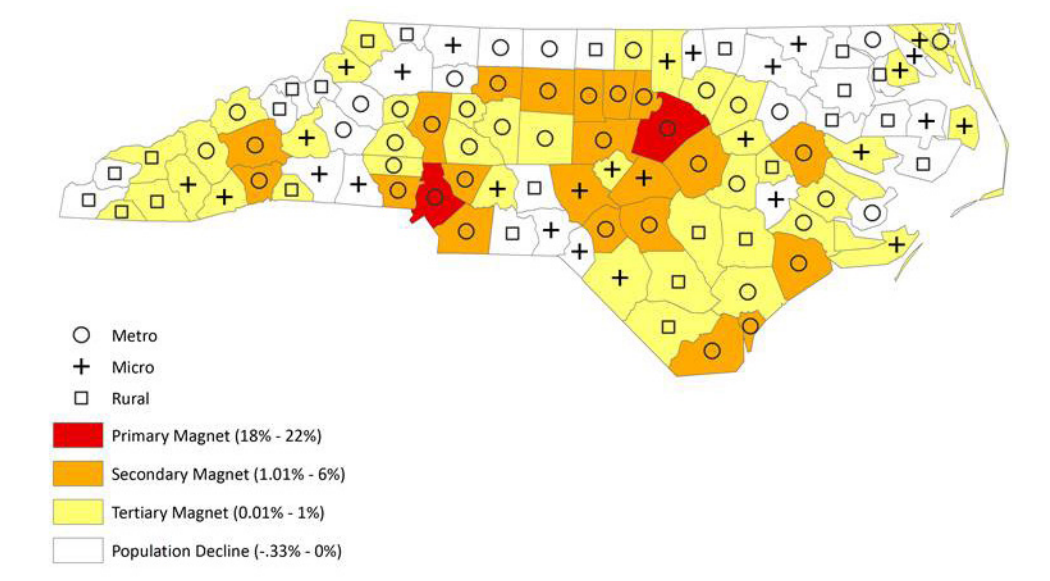
**Figure 1A:**  
**Shares of Total and Elderly Population Change by Region, 2010 - 2015**



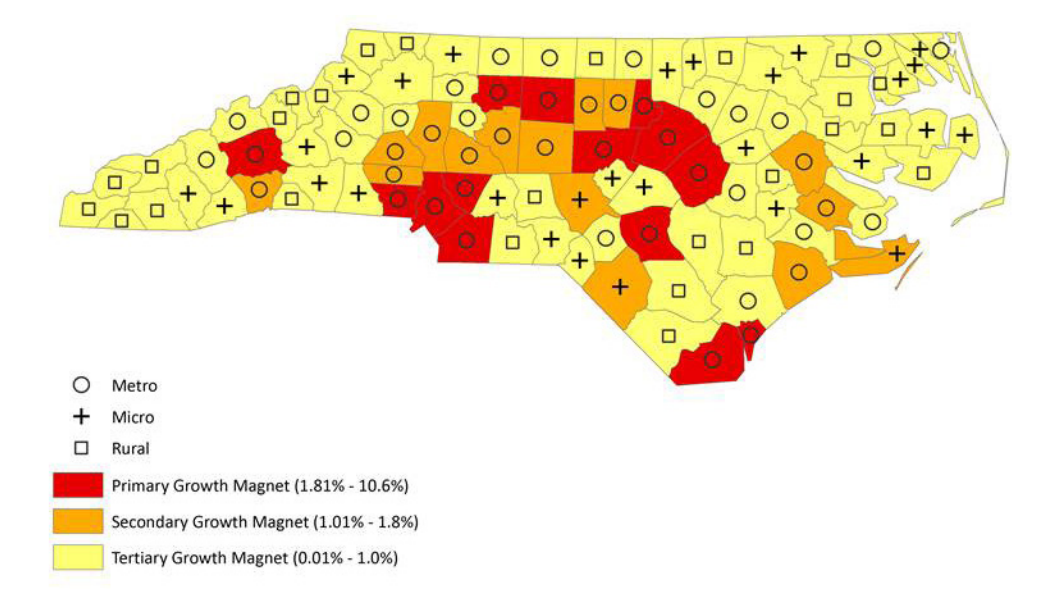
**Figure 1B:**  
**Shares of Total and Elderly Population Change by County Type, 2010 - 2015**



**Figure 2A**  
**Shares of Total Net Growth, NC, 2010 - 2015**



**Figure 2B**  
**Shares of Elderly Net Growth, NC, 2010 - 2015**



adults distributed within the state? Answers to this question appear in Figures 3A and 3B, which depict the distribution of older adults in terms of absolute numbers and percent of the total population at the county level, respectively.

In absolute numbers, one quarter of North Carolina's older adults (351,500) are concentrated in five metropolitan counties—Wake, Guilford, Forsyth, Mecklenburg, and Buncombe --which are the state's major hubs of economic and employment growth as well as social and cultural capital (primary concentrations). These counties are magnets for population growth across the life course. Over the past 15 years, the older adult population increased 33.4% while the total population grew 55.6%.

Another 30% (434,136) are more broadly dispersed in 16 metropolitan counties and one micropolitan county (Moore) which have attracted not only retirees but also immigrants and military families, among others (secondary concentrations). The balance—close to half of the state's older adults (45% or 634,661)—is spread even more broadly across the state's remaining 78 counties, which are a mix of census-defined metropolitan, micropolitan, and rural jurisdictions with high rates of aging in place by long term residents (tertiary concentrations).

While the largest *absolute number* of older adults are concentrated disproportionately in the state's major metropolitan counties, counties with the highest percentages of older adults (>20%) are a mix of census-defined metropolitan, micropolitan, and rural counties, which are mostly amenity rich retiree destinations. Most of these destinations are located near the coast in the eastern part of the state or are in or near the mountains in the western part of the state. In the Piedmont, Moore and Chatham Counties have planned communities, golf courses, and other cultural/recreational facilities as well as access to prominent medical facilities that attract and retain older adults.

A second group of counties, which has above average percentages of older adults (14%-19.9%), include a large number of micropolitan counties and rural counties that are losing total population (see Figures 2A and 3B). In the counties experiencing population loss, many in the prime working age population (18-44) have left in search of education, employment, and other life enriching opportunities elsewhere, leaving behind an older adult population that is aging in place--oftentimes without an adequate safety net of familial, community, and governmental supports.

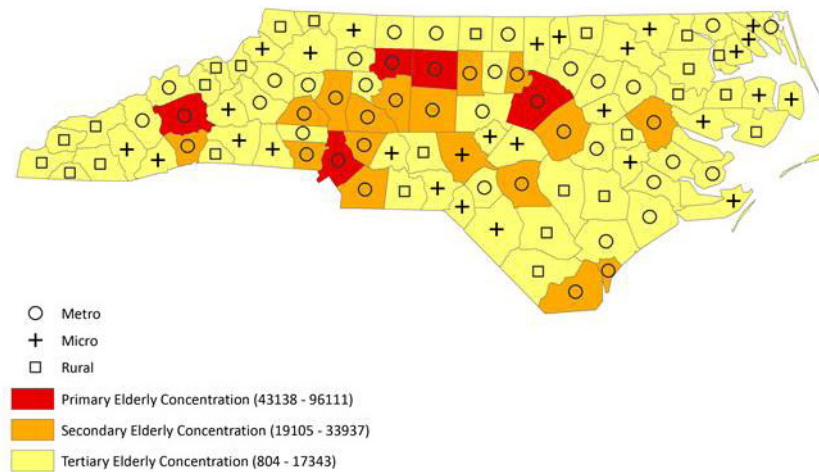
The balance of the counties, which has below average shares of older adults, tend to be the state's major metropolitan counties that are primary migration magnets for a diversity of race/ethnic and all age groups, including older adults. Access to world class health care and a host of university-based intellectual, social, and cultural resources are among the driving forces behind older adult population concentrations in these counties.

Old age dependency rates—defined as the ratio of older adults (65 and older) to prime work aging adults (18-64) in a community--are one indicator of the problem that North Carolina leaders face as a consequence of these uneven patterns of total and elderly population growth and distribution (Figure 3C). For the state as a whole, there are 25 older adults for every 100 prime working age adults. Across the state's 100 counties, the old age dependency rate ranges from .14 to .57.

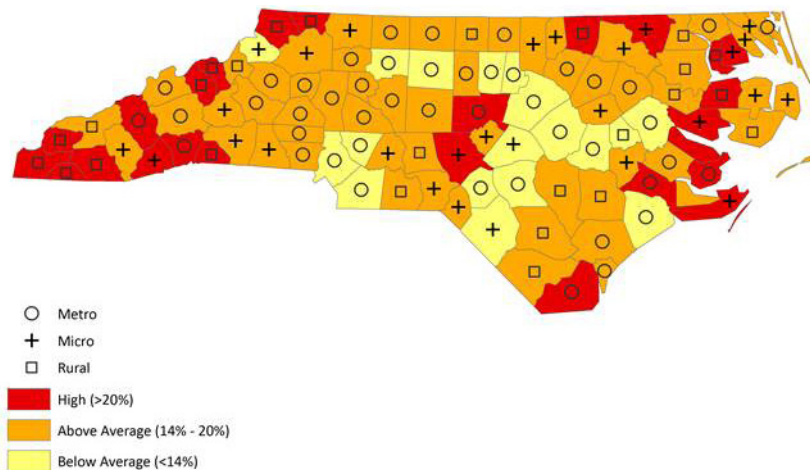
The counties with the highest old age dependency rates—those with 40 or more older adults for every 100 persons of working age—are mostly amenity rich retirement destinations. With an influx of relatively wealthy older adults, these counties probably have the tax base to finance essential services, although recruitment and retention of senior care workers may be problem in the future. In all likelihood, counties with medium old age dependency ratios—in the .25 to .39 range--pose the greatest challenge. In these mostly rural



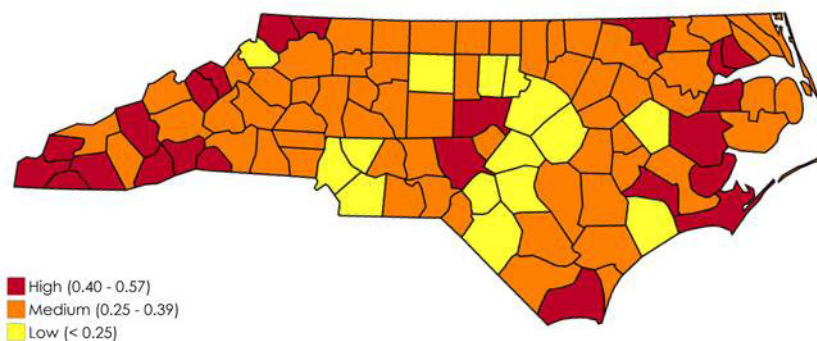
**Figure 3A**  
**Absolute Number of Elderly by County, NC, 2015**



**Figure 3B**  
**Percent Elderly by County, NC, 2015**



**Figure 3C**  
**Old Age Dependency Ratios by County, NC, 2016**



counties, most of the older adults are low wealth individuals who do not have the financial resources to invest in home modifications and other services that would allow them to successfully age in place. Moreover, as the tax base continues to erode coincident with plant closings and unabated prime working age population losses, hospital closings and the steady—and in some instances sharp—declines in the provision of essential services become the norm in these communities.

## The Demographic Lens

North Carolina's older adult population is disproportionately non-Hispanic white (80%). People of color make up only a one-fifth of the state's older adult population. Blacks account for 16%, Hispanics 2%, Asians 1%, and other people of color 1% (Figure 4A).<sup>3</sup>

The mean age of the North Carolina older adult population is 75, and the median age is 73. Over half (58.6%) are between the ages of 65 and 74—a group referred to as the young old. Thirty percent are between the ages of 75 and 84—a group referred to as the middle old. And 11% are 85 or older—a group referred to as the oldest old (Figure 4B).

Because men are more likely than women to die at every age (Figure 4C), a significant sex ratio imbalance characterizes the North Carolina older adult population, which is 57% female and 43% male. Not surprising, given this sex ratio imbalance, only slightly over half of North Carolina's older adults are married (56.4%). More than one quarter are widowed (26.6%), fourteen percent are either divorced or separated, and the remainder never married (3.9%) (Figure 4D).

Over one half million of North Carolina's 1.4 million older adults—39% or 546,059 of the total—has some type of age-related difficulty that

constrains their ability to fully engage in activities of daily living (ADL) or instrumental activities of daily living (IADL)(Figure 4E). One quarter—364,332—have physical difficulties and 18% (249,770) report difficulties going out. Between 7% and 15% report difficulties hearing (216,375), remembering (156,687), dressing (151,638), or seeing (106,764). A significant number suffer from more than one of these difficulties.<sup>4</sup>

## The Housing Lens

A majority of North Carolina's older adults live in either detached single family houses (76%) or apartments (10.5%). Notably, a higher percentage of North Carolina older adults (10% or 95,628), compared to their counterparts nationally (6% or 1.9 million), live in mobile homes or trailers (Figure 5A).

Thirty five percent of the housing units occupied by older adult North Carolinians were built in 1969 or earlier, and most of these dwellings are more than a half century old. Almost half (49%) were built between 1970 and 1999. These structures are on average 31 years old. Only 16% of the units occupied by the state's older adults were recently built—since 2000 (Figure 5B).

This age profile of the housing stock means that a majority of North Carolina's older adults most likely live in dwelling units with substantial health and safety hazards, including lead-based paint, mold, mildew, and other environmental risks, as well as structural deficiencies which can potentially cause life-threatening accidental slips and falls. Older adult accidental falls alone reportedly cost Medicare \$31 billion in 2015. These costs are likely to rise astronomically if we do not develop viable business models to ensure that the most vulnerable older adults have access to either substantially renovated or new housing that is age-friendly and environmentally safe.

<sup>3</sup> The nonwhite share of the older adult population will increase in the future as these groups, who are much younger on average than the non-Hispanic white population, continue to progress through the life course toward old age (Johnson and Parnell, 2016-17).

<sup>4</sup> Multiple difficulties are most pronounced among the age 70 and older population—among both genders and all races.

## Figures 4A - 4E

Figure 4A

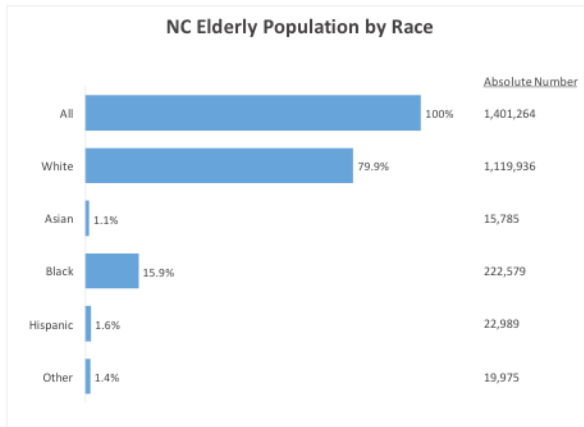


Figure 4B

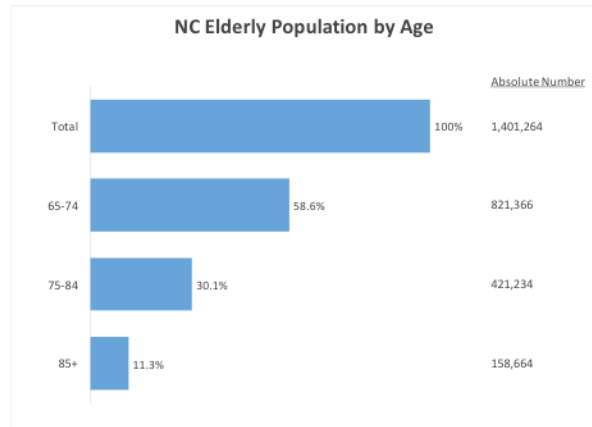


Figure 4C

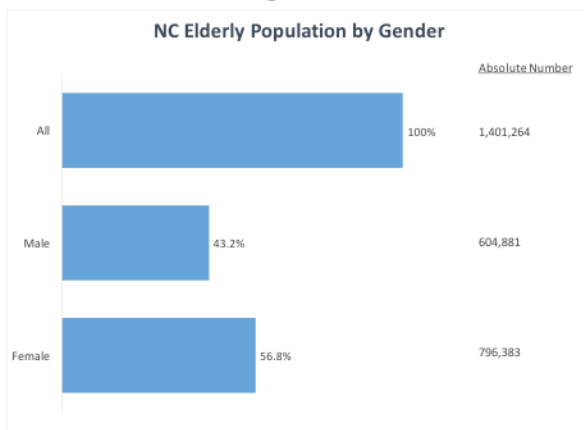


Figure 4D

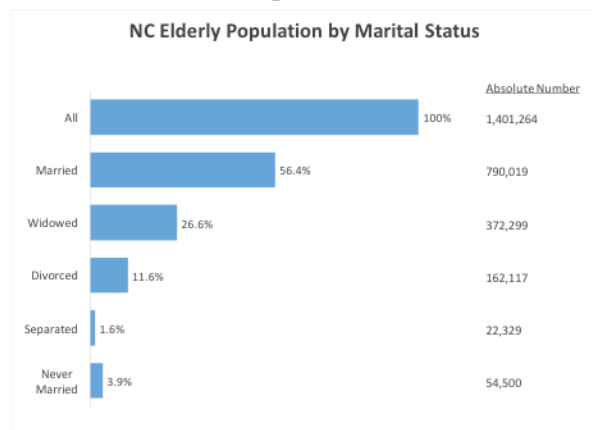
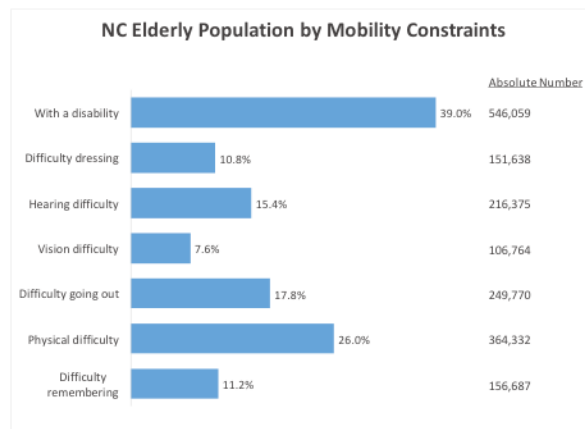
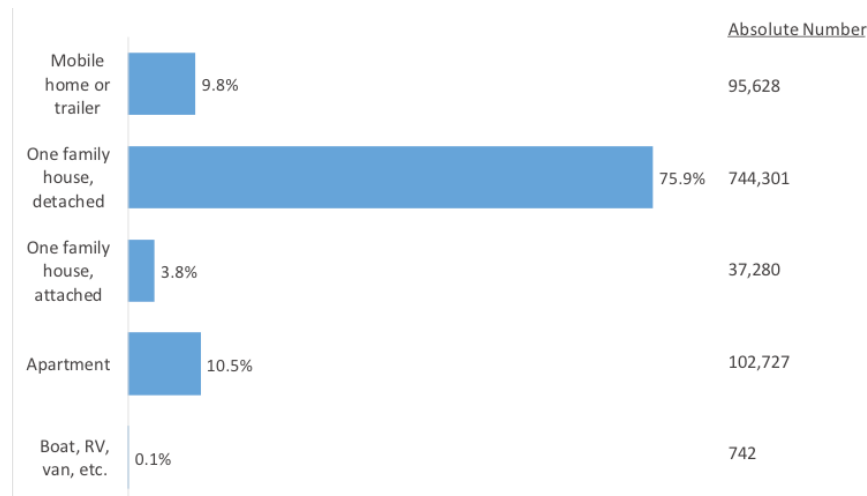


Figure 4E

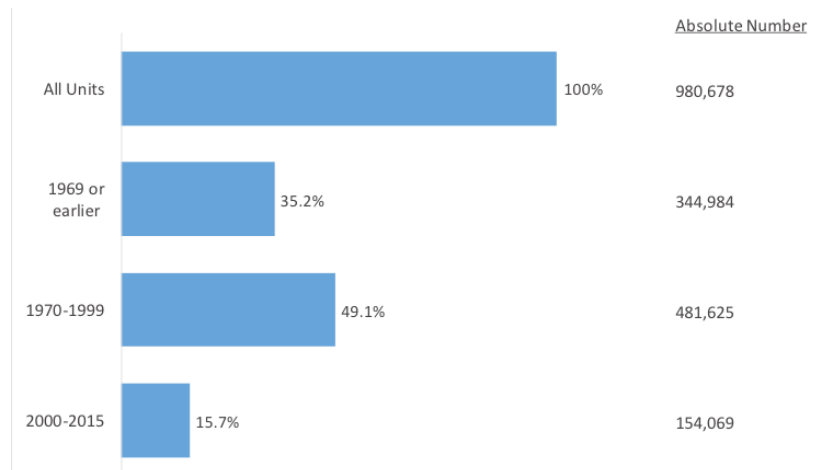




**Figure 5A**  
**Housing of the NC Elderly Population**  
*Number of Units by Type of Building*



**Figure 5B**  
**Housing of the NC Elderly Population**  
*Number of Units by Year Structure Built*



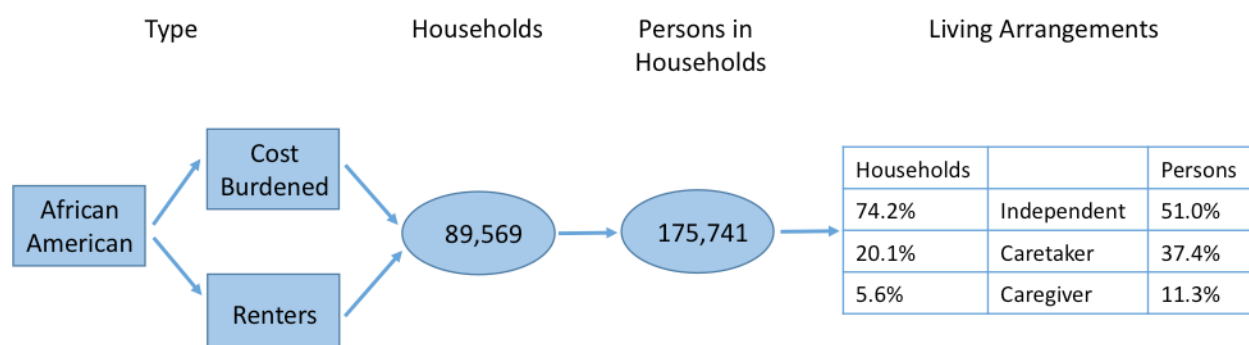
Some of North Carolina’s older adults have the financial resources to address these problems, but many do not. Included among the latter are three socio-demographic groups:

- Older adults who are financially burdened by excessive housing costs. They spend more than 30% of household income on mortgage or rent and what the Census Bureau defines as “selected monthly owner costs.”
- Older adults who rent their homes. Because

they rent, most must rely on landlords or property owners to make the necessary renovations that will allow them to safely age in place—an unlikely occurrence in the absence of proper incentives and/or government mandates.

- Older adults who are African American. Due to a legacy of discrimination in the labor market, housing, and other walks of life, African American older adults are more likely to live in poverty and therefore less likely to have the accumulated wealth to invest in age friendly

**Figure 6**  
**Households with Greatest Barriers to Aging in Place,**  
**North Carolina, 2011 - 2015**



Source: American Community Survey, PUMS, 2011-2015

home modifications.

Given the substantial overlap in these three groups, households where there is at least one African American who is 65 or older and where the head of household is either a renter or person financially burdened by excessive housing cost irrespective of whether they own or rent their dwelling unit will likely encounter the most difficulty dealing the environmental risks and structural deficiencies that characterize much of nation's older adult housing stock. There are 89,565 households—9.1% of all North Carolina older adult households (980,678)—that fit this definition, with 175,741 people—8.9% of all persons living in North Carolina older adult households (1,972,576)—living in these most vulnerable households.<sup>5</sup>

Below we develop an in depth socio-demographic and economic profile of these most vulnerable older adult households, highlighting both their diverse living arrangements and the characteristics of the housing units they occupy. The goal is to identify specific aging-related challenges and bar-

riers that are ripe for entrepreneurially-inspired traditional business venturing or social purpose venturing solutions.

### The State's Most Vulnerable Older Adults

North Carolina older adult households are made up of a diverse mix of relative and non-relative occupants (see Table 2). Peering into these relationships, we identified three unique living arrangements: households where older adults *live independently*;<sup>6</sup> households where older adults are *caretakers* of non-elderly family members;<sup>7</sup> and households where older adults live with non-elderly *caregivers*.<sup>8</sup> A summary snapshot of these most vulnerable older adult households, the number of person in such households, and their diverse living arrangements is presented in Figure 6.

<sup>6</sup> Vulnerable older adults living independently are highly concentrated in one generation, single person and married couple households. The remainder are in cohabitating and same sex couple households, as well as communal living arrangements, that is, households made up of a mix of older siblings, other relatives, and non-relatives living under one roof.

<sup>7</sup> Vulnerable caretaker households are the most diverse in terms of living arrangements. They include elderly single parents and elderly married couples who are supporting their own adult child (two generation households); elderly married couples and elderly female heads who are supporting their own adult child and grandchild or some other relative (three generation households); and elderly couples who are supporting a grandchild in their home and neither of the biological parents of the grandchild is present (missing generation households).

<sup>8</sup> Non-elderly caregivers make up the smallest share of the most vulnerable older adult households. These households are evenly split between married couples who are taking care of an older adult parent or parent in law (two generation household) and married couple so are supporting their own biological child and an older adult parent or parent-in law (three generation living arrangement).

**Table 2:**  
**Relationships within Older Adult Households, NC, 2011-2015**

Relationship	Absolute Number	Percent	Cumulative Percent
<b>All 65+ household members</b>	1,972,576	100	100
<b>Reference person</b>	980,758	49.7	49.7
<b>Husband/wife</b>	465,742	23.6	73.3
<b>Unmarried partner</b>	15,066	0.8	74.1
<b>Son or daughter*</b>	234,889	11.9	86.0
<b>Sibling</b>	22,574	1.1	87.1
<b>Father or mother</b>	59,096	3.0	90.1
<b>Grandchild</b>	91,411	4.6	94.8
<b>In-laws**</b>	29,539	1.5	96.3
<b>Other relatives</b>	36,564	1.9	98.1
<b>Non-relatives***</b>	36,937	1.9	100

Source: ACS, PUMS, 2011-2015

\*Includes biological, adopted, and stepchildren

\*\*Includes parent-in-law, son-in-law, and daughter-in-law

\*\*\*Includes roomer or boarder, housemate or roommate, foster child, other non-relative

What specific barriers do these individuals and families face, especially if the older adult(s) in these households desire to age in place? Answers to this question appear in Figures 7 through 9.

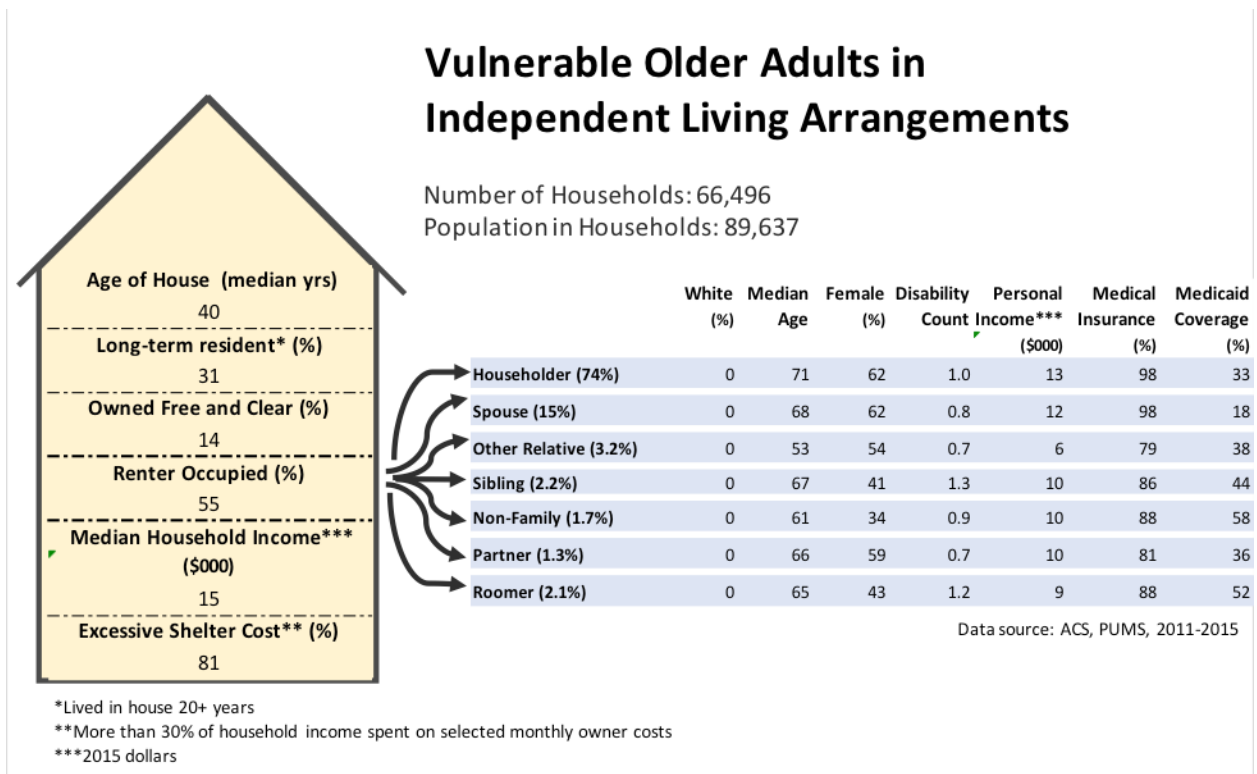
As Figure 7 shows, the most vulnerable older adults involved in independent living arrangements are predominantly renters (55%) who reside in mid-1970s era housing (median age 40 years). Only 14% own their dwelling units free and clear. Close to one third (31%) have lived in their current dwelling for 20 or more years. With a median household income of \$15,000, the majority (81%) spend in excess of 30% of their monthly income on housing.

These are households occupied primarily by single persons living alone—typically a woman in her early 70s who is beginning to experience age-related challenges (1.0 disability count) a long-term challenge to aging in place. A small share

are married couples (15%). In a few instances the householder shares the dwelling with a sibling (2.2%), roomer (2.1%), non-family member (1.7%), or partner (1.3%) who also is elderly and beginning to manifest age-related mobility constraints. A significant percentage of these older adults rely on Medicaid in addition to Medicare for at least part of their health coverage. Proposed cuts to the Medicaid program, if enacted into law, will like make matters much worse for these individuals and families.

In many respects, the circumstances of most vulnerable older adults who are involved in caretaker living arrangements are similar to those of their counterparts who live independently. They, too, as Figure 8 shows, live in some of the state's oldest housing stock (median housing age of 40 years), and over half are renters (51%) with little or no control over the quality of their living environment. Only 14% own their house free and

**Figure 7**  
**Vulnerable Older Adults in Independent Living Arrangements**



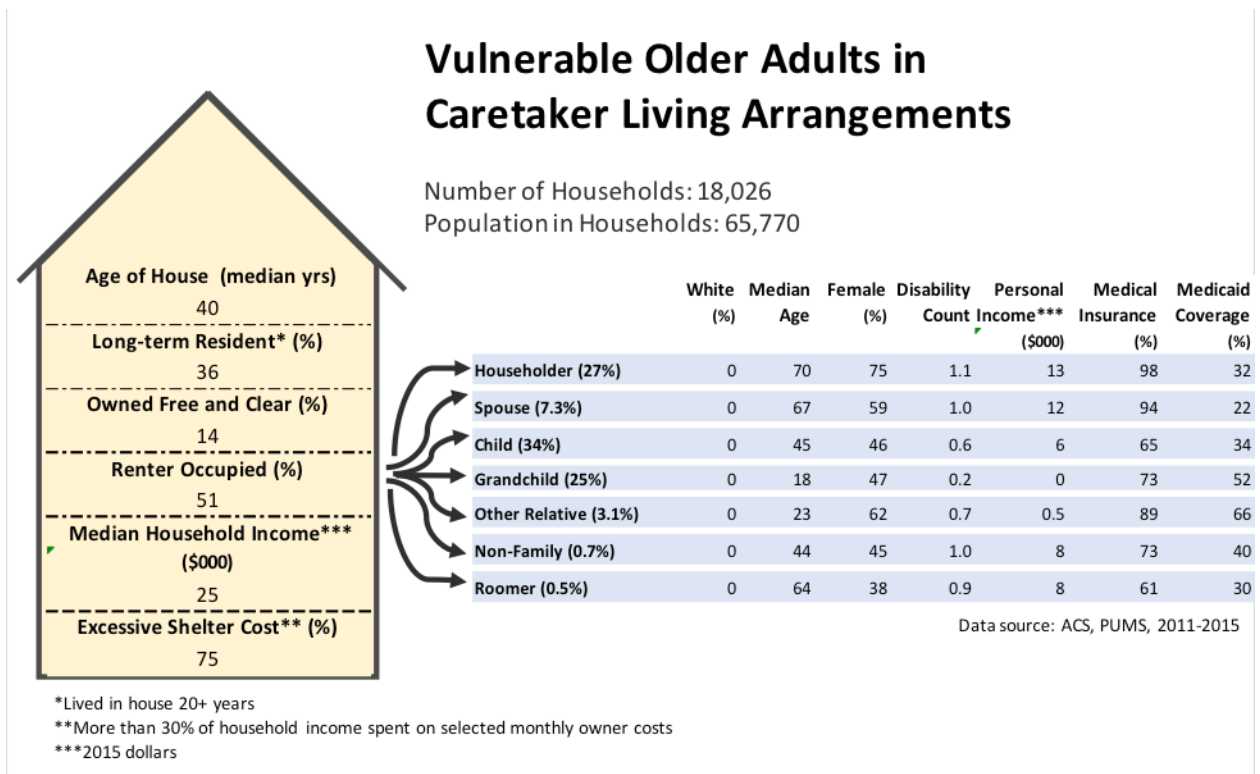
clear. Excessive housing cost is problem for the majority (75%).

In these caretaker households, the household head typically is a woman (75%) with a median age of 70 with increasing physical constraints (1.1 disability count). Nearly three quarters of these households are burdened by excessive housing cost in part because the older adult household head is taking care of one or more dependent relatives. The dependent relatives include their own adult child (54% male with a median age of 45) or grandchild (53% male with a median age of 18). In a few instances, the older adult head of household is caring for another adult relative (3.1%), non-relative (0.7%), or roomer (0.5%) who manifest one or more disabilities. The financial burden of these caretaker households rest largely on the shoulders of the older adult household head with a median personal income of \$13,000.

Like their counterparts who live independently and in caretaker households, the most vulnerable non-elderly caregiver households occupy some of the state's oldest housing (median house age of 40 years). A much smaller percentage of these caregiver households are long-term residents of their current dwelling (17% versus 31% for those living independently and 36% for caretakers). Further an even smaller percentage of caregiver households own their house free and clear (3%) compared to 34% of those living independently and 14% of caretakers. Like the most vulnerable older adults living independently and in caretaker households, the majority of these caregiver households are renters (62%) who are burdened by excessive housing cost (64%), that is, they spend 30% or more of household income on housing.

As Figure 9 shows, most non-elderly caregiver households are headed by a woman (69%) approaching middle age (median age 50) who is the

**Figure 8**  
**Vulnerable Older Adults in Caretaker Living Arrangements**



caregiver for an older adult parent—typically a female (81%) in the middle old elderly group (median age 76) and experiencing age-related mobility constraints (1.9 disability count). Others in these households include the caregivers’ own biological child (58% male with a median age of 16). In a few instances, a spouse (5.1%), adult sibling (4.8%), other adult relative (3.8%), or grandchild (2%) is present in the household. Except for instances where a spouse or sibling is present, the other household members either did not earn any personal income or earned only modest personal income. Reflective of their low economic status, some of the persons living in these households, most notably the grandchildren (78%), rely on Medicaid for at least part of their insurance coverage—another source of vulnerability in the current political climate.

## Strategic Opportunities

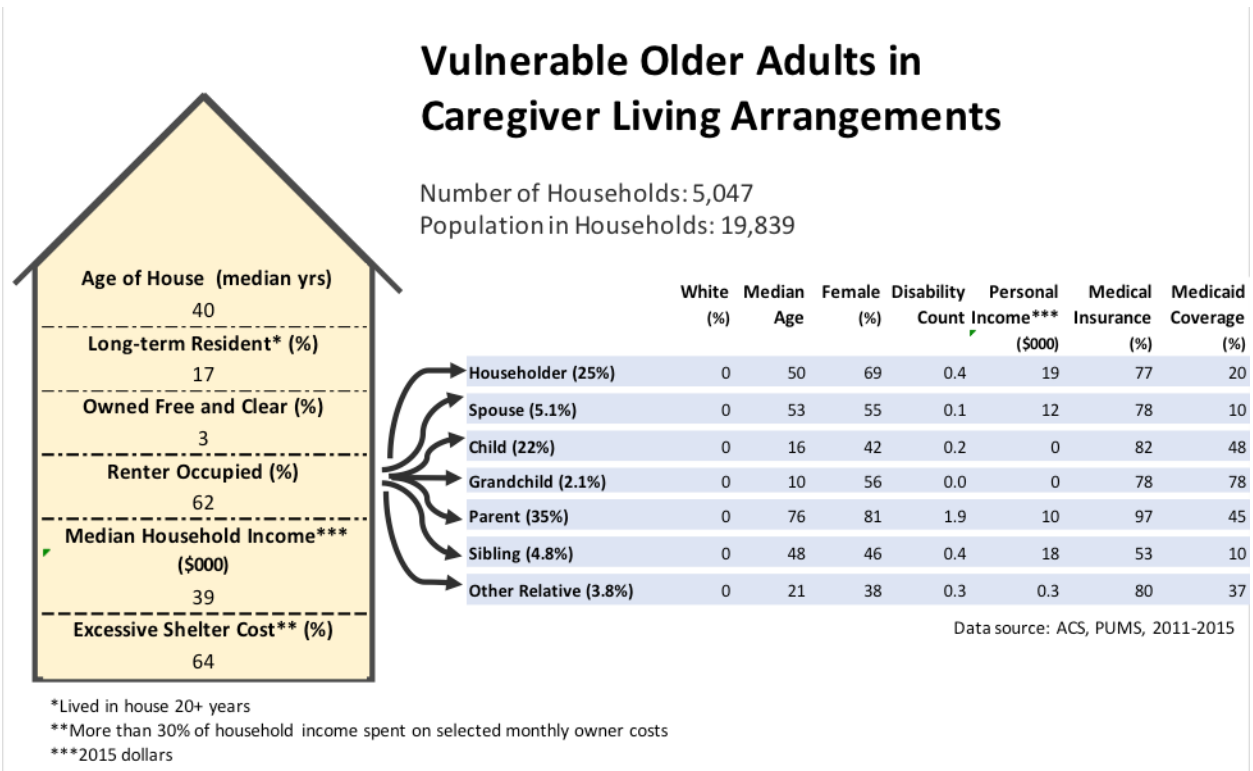
In North Carolina, older adult population growth is likely to continue to outpace total population growth well into the future. Population aging will affect all sectors of the North Carolina economy and all types of businesses. Unfortunately, few entrepreneurs and business owners are strategically positioned to take advantage of the opportunities that undergird population aging in our state. Accordingly, we highlight four specific areas in which BIG opportunities exist to innovate, build and expand businesses, and create jobs in the North Carolina economy.

### The Innovation Challenge: Big Opportunity #1

Most efforts to innovate in this space typically have focused on technological solutions that will enable the “rich and young at heart” elderly to live



**Figure 9**  
**Vulnerable Older Adults in Caretaker Living Arrangements**



independently for as long as possible. Both the “poor and weak-of-limb” elderly and the types of creative services that will facilitate successful aging in place have been ignored or neglected. Given the state’s nearly 90,000 vulnerable older adult households, dedicated business plan competitions and creative financing models—social purpose venture funds and philanthro-capitalism investment pools—are needed to support the design, development, testing and dissemination of innovative products and services for the poor elderly—a group that will likely grow rapidly in the future given the looming retirement crisis among nonwhite older adults.

Entrepreneurs aspiring to operate in this space must go to great lengths to develop products or services that align with the specific needs and desires of older adults, especially the poor.<sup>9</sup> Older adults are not a homogenous group. Innovation must be anchored in sound research on older

<sup>9</sup> For ongoing reviews and evaluations of technological innovations in aging, see the *Aging in Place Technology Watch* at <https://www.ageinplacetech.com/>.

adults’ diverse demographics, living arrangements, cultural orientations, and consumer perceptions, attitudes, and behaviors.

The design and development of products and services must be data-driven. That is, older adults either should be directly involved as active participants or simulations of their difficulties performing activities of daily living and instrumental activities of daily living should be incorporated in the innovation process. Many aging experts argue this approach, which is defined elsewhere as gerontechnology, will lead to the design and development of more age-friendly and culturally appropriate innovations.

Two critical constructs should drive this approach to successful aging-focused innovations: empathy and autonomy. In the design of both products and services, it is essential to carefully assess the needs of older consumers and empathize with their age-related challenges—a process called em-

pathic design. Products and services also should be designed to maximize autonomy, that is, to help older adults maintain or regain independence.<sup>10</sup>

Given the need for both empathy and autonomy in age-related innovations, an opportunity exists to strategically leverage the interests, concerns, and desires of a group of older adults who are taking proactive steps to become encore entrepreneurs. Many of these individuals have retired from successful careers. Their primary goal in pursuing an encore career as an entrepreneur is not just to make money; rather, they are keen on leveraging what has been popularly referred to as their double ESP—experience, expertise, seasoned judgment, and proven performance—to address pressing societal issues like poverty, racial inequality, illiteracy, and food insecurity. Encouraging more encore entrepreneurship, particularly age-related encore entrepreneurship, is likely to pay big dividends. Encore entrepreneurs reportedly not only start businesses at a higher rate but their newly launched enterprises also have a higher five-year survival rate than entrepreneurial ventures launched by any other demographic group, including the twenty-somethings.

### **Boomer Purchasing Power: Big Opportunity #2**

Most of North Carolina's older adults are not obsessing over arthritis, incontinence, or dementia. Rather, many are working past age 65 and a substantial share have both the active/healthy lifestyles and the purchasing power that makes them a formidable consumer market. The boomer segment of the older adult population—individuals born between 1946 and 1964—reportedly constitutes a \$15 trillion market globally and a \$3 trillion market here in the U.S. As a major retirement destination, a significant share of this boomer purchasing power is here in North Carolina.

---

10 The MIT AgeLab (<http://agelab.mit.edu/>) embraces these two constructs in its approach to developing age-friendly innovations.

To tap this consumer market successfully, North Carolina advertisers and marketers need to develop a deep understanding of this heterogeneous age group and adapt their product portfolios and sales approaches to meet the segment's evolving needs. In the words of The Boston Consulting Group, they must understand “the forces that motivate these consumers, formulate ways to meet their evolving needs, and set a goal to fully capture the opportunity that demographic shifts present.”

To succeed with older consumers, the North Carolina advertising industry must diversify its employee base by hiring older adults as “copywriters, graphic artists, producers, video directors, and creative directors.” If only people in their 20s and 30s are involved, the industry will “forfeit the natural sensibilities required to generate vital campaigns,” with an end result of mediocrity and outright failure to effectively tap the older adult market.

In addition to more demographic diversity, all advertising and marketing personnel must be trained to develop meaningful and respectful relations with older adult customers, especially those who are the most vulnerable. Such training, properly executed, will help them understand the aging consumer paradox: Older adults do not like to be singled-out and reminded that they are old, so “the company that does a great job of making products for seniors takes great pains not to make products for seniors.” It also will help North Carolina advertising and marketing personnel develop an appreciation of the diverse living arrangements of older adults which will reduce the likelihood of developing advertising and marketing campaigns that are rife with stereotypes.

Most North Carolina older adults live independently as single individuals or older couples. This is particularly the case for white older adult households. However, nonwhite older adults are far more likely than white older adults to live in multigenerational households. Properly under-

stood, this demographic reality creates opportunities for North Carolina-based architects, designers, homebuilders, and aging in place specialists. Multigenerational households are more likely than single-generation households to remodel. Moreover, the demand for new construction that will accommodate more than one generation of family members will rise as North Carolina's foreign born older adult population grows, and as the demand for more flexible space for different stages of life among all older adult multigenerational households grows.

Older adult households that contain multiple generations also create opportunities for North Carolina-food companies to “market healthy-style meals that appeal across the ages,” for North Carolina-based financial marketers to create products that “help [multigenerational] families manage budgets and shared expenses,” and for North Carolina-based ad agencies to develop advertisements that both reflect and appeal to multigenerational households.

To leverage the older adult consumer market fully, North Carolina businesses must design, label, and package products in a manner that is age friendly. Given the challenges of aging, including diminished hearing, vision, and other chronic conditions, packaging and labeling must be easy to read, easy to understand, easy to carry, easy to open, easy to enjoy, and safe to use.

### **Demand for Senior Care Workers: Big Opportunity #3**

An estimated 1.2 million additional senior care workers will be needed by 2025. Given that many senior care workers are foreign born, meeting this demand will likely be a major challenge owing, at least in part, to the federal government's unwillingness to create a path to citizenship for otherwise law-abiding undocumented immigrants in the U.S. Moreover, the current proposal to reduce by one-half the flow of legal immigrants into the

U.S., if enacted into law, will likely further exacerbate the senior care labor recruitment challenge. Individuals who could potentially fill senior care jobs would not be a priority under the proposed point scheme for entry that would favor well-educated, highly skilled workers.

There are enormous opportunities here in North Carolina for businesses that employ senior care workers, as well as existing and new HR staffing agencies, that are willing to develop recruitment and retention business models to address this need for both in home care providers and institutional care providers. Businesses that are able to overcome the cultural barriers, family challenges, and transportation constraints that senior care workers face will profit from older adult population growth. In addition, to meet forecasted labor demand, North Carolina businesses serving older adults will have to revise workplace policies and procedures to accommodate aging workers as well as their co-workers—both native- and foreign-born—who have elder care responsibilities of their own.

### **Fixing Spaces and Places: Big Opportunity #4**

To accommodate an aging population, major modifications are required in all types (commercial, residential, and public sector) and classes (A, B, and C) of North Carolina real estate. Considering the kinds of age-related challenges older adults face, existing facilities must be redesigned and new facilities must be designed in ways that substantially increase accessibility and substantially reduce the likelihood of costly and possibly life-threatening falls. It is almost certainly cheaper to invest in age-friendly designs and modifications than it is to pay for fall-related litigation and/or to cover the cost of hospitalizations, rehabilitation services, and long-term services and supports.

Huge B2B opportunities also exist to help busi-

ness enterprises in all sectors of the North Carolina economy to prepare internally for this demographic shift. In 2014, 24.2% of the 65-74 year old population and 6% of the 75+ population were still working. Constraints on immigration will likely tighten the labor supply and force North Carolina employers to rely even more so on older workers in the future than they do today. Moreover, the looming retirement crisis that many older adults face will force them to either remain in or return to the workforce out of necessity. North Carolina businesses will have to adapt their workplaces to accommodate these older workers and develop new products and services to address, among other issues, their personal age-related challenges and diverse living arrangements, which often-times include extended family responsibilities and obligations.

In addition to age-friendly facilities and institutions, substantial opportunities exist to create mixed income, multigenerational communities that would serve as an antidote to much of the gentrification that is currently pricing older adults out of many North Carolina's urban communities. Given that those most in need of aging-in-place assistance are predominantly older women who live alone, often in older houses that may be beyond rehabilitation, viable business plans are urgently needed to build clusters of affordable, age-friendly houses, including tiny home villages. Infill sites in North Carolina cities are ideal for such developments. The houses should be constructed around a community center that is designed to promote daily interaction and thereby combat the isolation, loneliness, and abuse problems that affect older adults who live alone today. Similar opportunities exist to develop affordable housing for senior care workers.

Finally, opportunities also exist to redesign/modify the physical infrastructure of North Carolina communities. Among other characteristics, age-friendly communities provide easy access to transport systems, offer pedestrian crosswalks

with extended walk times, have street signage that is large and readable, and feature older adult or multigenerational playgrounds and fitness parks. Major shifts in transportation and economic development policies and regulations for North Carolina towns, cities, and counties are required to generate the investment dollars required to create age-friendly public infrastructure. However, the long-term financial and social returns on such investments are likely to be substantial, not to mention the more immediate business development and job creation potential. Age-friendly communities, properly branded and marketed, can become major retiree destinations and magnets for tourism which will positively affect the local tax base in North Carolina communities.

## **Critical Success Factors**

Population aging will affect all sectors of the North Carolina economy and all types of businesses. For both existing businesses and aspiring entrepreneurs who are willing to gather the requisite business intelligence on the older adult market, unlimited opportunities exist to develop products and services as well as transform the built environment to accommodate our rapidly growing older adult population. In a word, aging can be a major source of both economic and social value creation in North Carolina.

To facilitate innovation, business development and employment growth in the so-called longevity economy, North Carolina government, nonprofit, and business leaders must aggressively pursue the following strategic actions.

First, North Carolina leaders and citizens must lobby the U.S. Congress to implement comprehensive immigration reform legislation, and vigorously enforce the recent U.S. Department of Labor ruling stipulating that homecare workers benefit from the same labor protections as other employees. These are strategic imperatives be-



cause immigrants will be needed to fill the projected demand for additional homecare and institutional care workers that will be needed to accommodate growth in North Carolina's senior population.

Second, North Carolina government and business leaders must ensure that current discussions about rebuilding our nation's crumbling infrastructure are broadened to reflect the realities of population longevity. Policy prescriptions and funding proposals should reflect the planning guidelines and checklists for creating age-friendly communities developed by the World Health Organization and AARP.

Third, North Carolina leaders should lobby the federal government to create an aging in place social innovation fund that would invest in social purpose business ventures that demonstrate the greatest potential or capacity for helping the most vulnerable older adults to age in their homes and in their communities, perhaps through the CMS Innovation Center. Such a fund could then be used in turn to leverage additional philanthropic and corporate dollars, including existing angel investment and social venture pools, to grow the fund. Given the magnitude of the problem here in North Carolina and beyond, dollars from all of these sources will be required to ensure that aging in place is an option for as many of our most vulnerable older adults as possible.

Fourth, following New York City's lead, the North Carolina State Legislature should create a guide for age friendly building upgrades in the multi-family rental market. This is important because older adults who are renters, including many for whom housing constitutes a cost-burden, do not control their local living environment and property owners or landlords are unlikely to make age friendly modifications without government incentives or mandates/directives. In addition to specific recommendations that building owners should follow to make their properties more age

friendly, the guide also should include information about existing federal financial incentives, including the Disabled Access Tax Credit and the Business Expense Tax Deduction, which cover at least some of the cost of making age friendly modifications to rental properties. The guide also should provide links to any state level incentives that may apply.

Fifth, North Carolina officials should encourage property and casualty insurance companies and their building owner clients to forge mutually-beneficial strategic alliances to facilitate aging in place for older adult tenants. As noted previously, a case can be made that it is cheaper for property and casualty insurance companies to invest in modifications through their charitable foundations than to pay for costly litigation and medical expenses after an accidental slip or fall has occurred. This type of philanthro-capitalism on the part of property and casualty insurers would constitute a win-win-win for all parties involved.

Sixth, North Carolina officials also should encourage the federal government to expand funding and streamline the application process for the USDA Section 504 Home Repair program that provides "grants to [rural] elderly very-low-income homeowners to remove health and safety hazards." In advocating for program expansion, North Carolina officials also should argue for a stipulation that renovations must be completed by certified aging in place contractors and according to the universal design guidelines recommended by the National Association of Homebuilders. In addition, North Carolina officials should lobby for an urban equivalent of this program to address the needs of elderly homeowners burdened by excessive housing costs, including those involved in multigenerational living arrangements. To fully scale such a program, North Carolina officials can leverage the capabilities and expertise of Habitat for Humanity, National Church Residences, and other nonprofits, including mega-churches, who are already engaged in efforts to provide safe housing



for older adults.

Finally, since a significant number of the most vulnerable older adult households rely on Medicaid for long term supports and services, North Carolina officials and senior advocates must make every effort to block proposed cuts and lobby forcefully for increased federal funding for the program. North Carolina must embrace Medicaid expansion, with a specific eye toward leveraging Medicaid Home and Community Based-Waivers Programs to complete home modifications that will facilitate aging in place for some of our most vulnerable older adults. Since Medicaid covers long-term care for many seniors, extension of aging in place will reduce these costs.