Sandhills Community College

Accessibility in North Carolina Apartments

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Introduction

Over the past decade, North Carolina's population has substantially grown. A favorable cost of living, career and retirement prospects, attractive outdoors, and a variety of urban settings are all factors that contribute to our state's appeal. Housing is a top priority for many people, regardless of what stage of life they are in – and whether they are a new or long-time resident.

The apartment market is especially challenging, particularly for those who need mobility assistance devices. The purpose of this proposal is to offer ideas to help improve apartment housing conditions for those who require mobility assistance in North Carolina. North Carolina needs more accessible and affordable apartments (especially for people aged 55+), and improved architectural designs (for future buildings). This proposal will discuss some actions that the state government could take to help.

Personal Example

For David and Elizabeth¹, finding a suitable living situation has been challenging (David). Although their current apartment in Sanford, NC has a better design than previous places they've lived, they would prefer to find a more peaceful living situation. Both David and Elizabeth are retired and in their early 70's. Over the past decade, David has had increasingly difficult health issues that have affected his mobility and caused him to need a wheelchair.

Their current single-level and ground-floor apartment includes features such as: a wheelchair accessible bathroom, hardwood floors, wide doorways and hallways, and one no-step entrance. The bathroom does have reinforced walls and grab bars for support, although David says some support bars in the hallway or bedroom would also help. The kitchen is small and

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¹ Last name withheld by request.

designed with lower countertops, but it could use more space to accommodate a person using a wheelchair.

However, annual rent increases are a growing problem. "Apartments these days like to raise the rent yearly – a big hardship on those on fixed incomes", Elizabeth pointed out. The couple have been trying to find an apartment for renters aged 55+, hoping that would be quieter than their current situation.

Furthermore, traveling to visit family or friends is not usually possible for them, as most homes or apartments are not designed to accommodate someone who uses a wheelchair. Many people are in similar situations, whether their mobility difficulty is caused by age or medical issues.

More action needs to be taken to help people with accessibility challenges, which will in turn boost people's sense of well-being. After all, "accessibility is a civil right and improves the quality of life" (Maisel, et al, 8).

Visitability

"Visitability" is an accessibility cause whose goal is "...to provide a few basic accessibility features, thereby ensuring that, over the short term, a person with mobility limitations can use and visit the homes of friends and family and that, over the long term, few barriers interfere with adapting the home for long-term use by a person with such limitations" (Maisel, et al, vii).

For people with mobility challenges, a lack of "visitability" adds to feelings of isolation.

Most apartments are not built with wide enough doorways (for one external entrance and bathroom) to be wheelchair accessible. This prevents people with mobility difficulties from

comfortably visiting family or friends. Not only does social isolation reduce "quality of life", but it also damages physical health and longevity – especially for older people ("Social", 4).

Veterans

Another aspect to consider is that military veterans often need accessible apartments. NC ranks 7th nationwide for veteran populations, at more than 700,000 people ("Veteran"). And out of all NC residents, veterans are more likely to have a disability (Tippett). Within the veteran population, post-9/11 veterans are "the most likely to have a service-connected disability" which may be connected to not only conditions they experienced while serving, but also medical advancements since that time (Vespa, 11). Better treatment or surgical options have improved veterans' longevity compared to previous decades, which adds to the likelihood of having mobility difficulty.

ADA, Section 504, and The Fair Housing Act

Regulations from the Americans with Disabilities Act (ADA), Section 504, and the Fair Housing Act require either "reasonable accommodations" or "reasonable modifications" ("Reasonable"). These have helped with housing improvements, by protecting renters with disabilities from discrimination ("Reasonable"). However, the regulations are intentionally vague in the details – to allow for flexibility and prevent "undue financial and administrative burden" to landlords ("Reasonable"). But this can create conflict for the renter. Landlords can be unwilling to allow changes, and the renter may not be able to afford to cover costs or qualify for assistance.

Survey Results

A survey of people who have renting experience between the ages of 18-76, was performed by posting on social media, local Moore County bulletin boards, and in The Pilot Newspaper. Out of the 32 people polled in the survey, 88% of respondents either strongly or somewhat agreed that living environments can be affected by how an apartment is designed (Embree). For most people, a strong connection exists between a living environment and how that environment can affect quality of life.

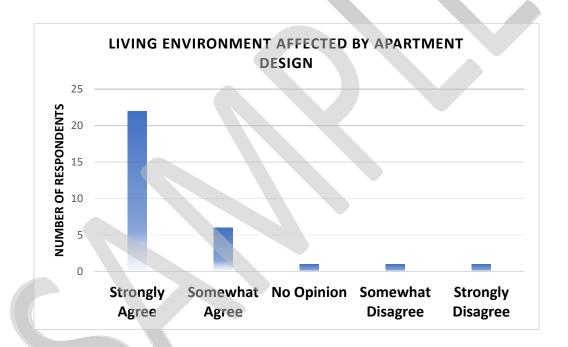


Figure 1. Survey results for how apartment design affects living environments.

This issue, accessibility in apartment design, is not unique for North Carolina residents. Most survey respondents are NC residents (84%), while 16% live in other states. And a 75% majority of respondents know people – whether family members, friends, or acquaintances – who need mobility assistance devices such as canes, braces, crutches, walkers, or wheelchairs.

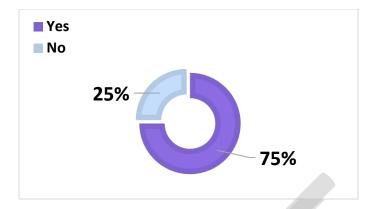


Figure 2. Survey results for familiarity with people who require mobility assistance devices (75%).

It is also challenging to try to move around in a typical apartment while using any mobility assistance device. A total of 81% of survey respondents view maneuverability as either very or somewhat difficult.

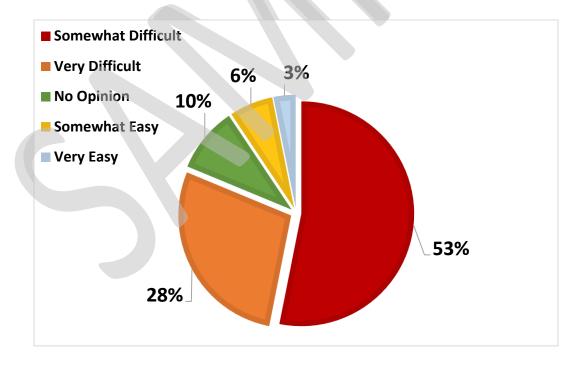


Figure 3. Survey results for the maneuverability with a mobility assistance device in an apartment.

Most survey respondents reported that landlords are typically not open to apartment modification – either landlords are extremely rarely open (28%) or are not often open (31%) to adaptations. The remaining respondents either had no opinion (25%), or responded that landlords are only sometimes (16%) open to modifications. No respondents answered that landlords are often willing to allow changes.

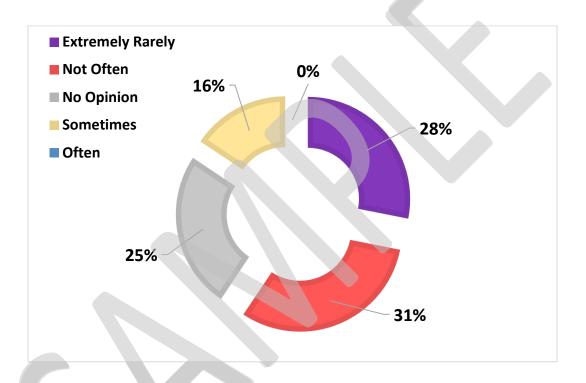


Figure 4. Survey results for how often landlords allow structural modifications in apartments to aid people with a disability.

North Carolina's Population Projection

Given that North Carolina's population will continue to grow, the need for housing is also going to increase. With a population of 10.6 million, NC ranks ninth nationwide in growth (1.3%) with a 95% majority coming from recent migration (Cline). This projected growth will

continue in the coming years. By 2041, NC's population is expected to grow by 23% and have substantial increases for the 65+ age demographic ("2021", 1).

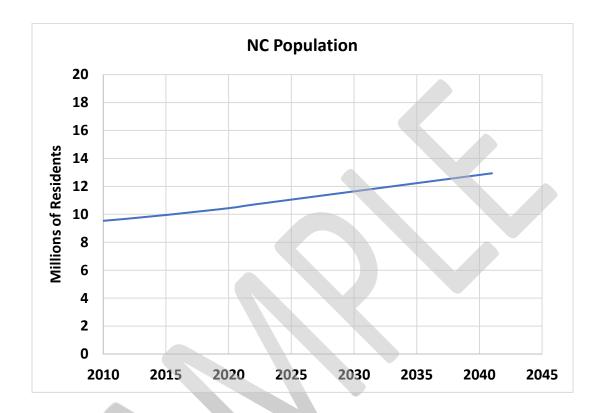


Figure 5. NC's projected population, based on data from the U.S. Census Bureau ("Quickfacts") and NC Department of Health and Human Services ("2021", 1).

With this growth, NC will also need more housing designed for accessibility. NC has a higher percentage of citizens with mobility disability status, at approximately 12.5% of the population compared to the national average of 11.1% ("Disability"). The number of Americans living with ambulatory difficulty in 2019 was 9.2 million for people between 18-64 years old, and 11.3 million for those 65+ years old ("Living"). Over the next 12 years, households that have an older person with a disability are predicted to increase nationally by 76% ("Projections", 8).

Renters will face extra challenges, as they "are more likely than owners to have mobility disabilities, but also have less control over modifying their units" ("Projections", 9). The following graph, **Figure 6**, is based on the Harvard study data ("Projections", 70 - 73). Although the projections were performed in 2015 – prior to the unexpected Covid-19 pandemic – they should still be considered valid. The Joint Center for Housing Studies of Harvard University has been conducting research on urban studies since 1959 ("JCHS").

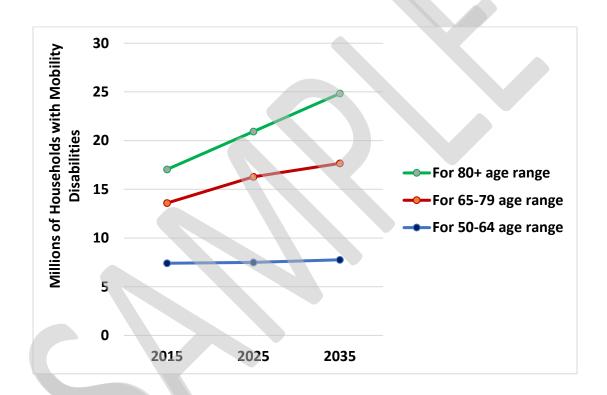


Figure 6. The projected increase of older people with disabilities, based on data from the Joint Center for Housing Studies of Harvard University ("Projections", 72-73).

Recommendations

Besides increasing the number of accessible apartments, it would be helpful to add a few new features to apartment designs. Any house with "visitability" features can help increase

comfort for those with disabilities (Maisel, et al, 1). Maisel, Smith, and Steinfeld state some recommendations for new housing design,

"A visitable home is marked by three core architectural conditions:

- One zero-step entrance at the front, back, or side of the house, depending on site conditions
- Doorways that provide thirty-two inches of clearance
- At least a half bath on the main floor" (Maisel, et al, 1).

These architectural conditions for houses could be modified for new apartment designs, improving living conditions for renters and their visitors. Widening the door clearances would not require the overall size of an apartment building to increase; just the door clearance can be widened within the same square footage of the building plan (Maisel, et al, 19). Within new apartment designs, one external entrance door (with a zero-step entrance) and one bathroom door could be widened to have a clearance of at least 32".

Typically, builders purchase doors in bulk orders from wholesalers, which discounts the cost during development (Maisel, et al, 19). As **Table 2** shows, the material prices for a 30", 32", or 36" interior door are only a few dollars' difference. In this example, the doors are Reliabilt ® 6-panel Hollow Core Primed Molded Composite Slab type.

Interior Door Size	Price Estimate
30" x 80"	\$69
32" x 80"	\$72
36" x 80"	\$76

Table 1. Cost analysis of interior door sizes, based on Lowe's Home Improvement website ("Lowe's").

For exterior door sizes – either 32" or 36" – the price does not change, as **Table 2** shows. In this example, the doors are Therma-Tru ® Benchmark type.

Exterior Door Size	Price Estimate
32" x 80"	\$259
36" x 80"	\$259

Table 2. Cost analysis of exterior door sizes, based on Lowe's Home Improvement website ("Lowe's").

Conclusion

North Carolina's state government could implement a new apartment development program, or make additions to existing programs (like state building codes), with the following design requirements:

- One external doorway, with at least 32" of clearance and a zero-step entrance
- o One bathroom doorway, with at least 32" of clearance
- New construction percentage quotas for senior (aged 55+) living apartments
- New construction percentage quotas for accessible apartments

The above-mentioned plans would greatly benefit veterans, older citizens, and people with a disability. Not only would these design changes help create better accessibility and "visitability" for people with mobility challenges, but it would benefit all apartment tenants and landlords. Anyone can have a sudden need for better maneuverability in their home, whether due to illness or injury. Wider doorways would ease activities like moving furniture, or remodeling or conducting repairs inside an apartment. By putting these plans in motion, our state can look to the future with the hope of improving the quality of life for many people.

Glossary

- "Ambulatory" definition: "Able to walk about and not bedridden; of, relating to, or adapted to walking" https://www.merriam-webster.com/dictionary/ambulatory Accessed 15 April 2023.
- "Disability" definition: "A long-lasting physical, mental, or emotional condition. This condition can make it difficult for a person to do activities such as walking, climbing stairs, dressing, bathing, learning, or remembering. This condition can also impede a person from being able to go outside the home alone or to work at a job or business."

 https://www.census.gov/glossary/?term=Disability Accessed 29 April 2023.
- "Visitability" definition: "A movement that seeks to increase the supply of accessible housing..." "The goal of visitability is to provide a few basic accessibility features, thereby ensuring that, over the short term, a person with mobility limitations can use and visit the homes of friends and family and that, over the long term, few barriers interfere with adapting the home for long-term use by a person with such limitations." https://assets.aarp.org/rgcenter/il/2008_14_access.pdf Accessed 29 April 2023.

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