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Happy and Healthy at Home

Enable Safely Aging in Place



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HOME MODIFICATION REPORT

This work was produced under the direction of Prof. Mildred E. Warner in the Department of City and Regional Planning at Cornell University. Research was coordinated with the Tompkins County Office for the Aging. Partial funding support was provided by USDA NIFA grant #2019-68006-29674.

Home modifications for better aging-in-place in Tompkins County

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Abstract

Most older adults express a preference to age in place (AARP Bulletin, 2018). In Tompkins County, 79% of older adults are homeowners with a residence history of 10 years or more (Tompkins County Office of Aging, 2023). The condition of these homes becomes paramount in providing a safe space for homeowners who choose to age at home. However, the aging population in Tompkins County faces various challenges in modifying their homes, including a labor shortage, uncertainties related to home modification and increased property values, and a lack of local resident initiative. Our research employs a cost-benefit analysis to indicate that the benefits of home modification outweigh the associated costs, representing a pivotal step in enhancing the condition of residential housing for aging adults and supporting aging-in-place. Moreover, through nine semi-structured stakeholder interviews, the report found a weak relationship between increased property tax and home modifications.

Introduction

The Center for Disease Control defines "aging in place" as the ability to securely, autonomously, and comfortably reside in one's own home and community, regardless of age, income, or ability level. This approach enhances daily living for older adults and later provides dignity and comfort. Home modifications enable elder adults to age in place. Home modifications are defined as adaptive changes made to living spaces to meet the needs of individuals with physical limitations, enabling them to live independently and safely (Administration for Community Living, n.d.). It is a critical step in adapting housing to meet the evolving needs of the aging population (Tenenbaum & Kimmel, 2020). These modifications range from simple adjustments like replacing doorknobs with pull handles, to more extensive projects such as installing wheelchair ramps or widening doorways to be ADA friendly. The need for both small-scale (e.g., grab bars, accessible ramps, etc.) and large-scale (e.g., first level bathrooms) modifications become paramount to ensure the health, safety, privacy, and comfort of older residents within their homes (Iecovich, 2014).

Tompkins County residents want to age where they live. According to the 2023 Community Assessment Survey of Older Adults, 84% of older adults report their neighborhood is an excellent or good place to live. And 79% of older adults are homeowners with a residence history of 10 years or more (Tompkins County Office of Aging, 2023). But many homes are not designed for older residents, inhibiting their ability to safely and comfortably age where they are. A well-designed home, or one that has been modified to accommodate the needs of residents of all ages and abilities, can promote independence and satisfaction in retaining control over one's living space during the aging process.

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However, specific barriers have dampened initiatives for home modifications among older residents. The Tompkins County Office for Aging (COFA) has received concerns from the community regarding the viability of home modifications and the perceived increase in property assessed value, which could lead to higher property taxes. Additionally, the complexity of applying for a building permit for large-scale modifications, along with a regional labor shortage for contractors, adds to the challenges faced by residents. This report offers a thorough analysis of the implications, costs, and benefits of home modifications for older adults in Tompkins County, providing actionable solutions for the County Office for the Aging. A two-page issue brief for a general audience has also been developed. Through our research, we recognize the importance of streamlining the complete home modification process and provide available funding information to assist older adults in navigating the process and confidently interacting with various stakeholders. We have created a roadmap-style toolkit for this purpose.

Methodology

We employ semi-structured interviews, literature reviews, and cost-benefit analysis to illustrate the process of home modifications for older adults.

(1) Interviews

We conducted 9 semi-structured interviews. Interviewees include staff from the Tompkins County Office of the Aging, the Department of Assessment, the Department of Planning and Sustainability, and market contractors. Interviews occurred over six weeks and lasted between 30 and 45 minutes. See Appendix A for a complete list of interviewees.

(2) Literature review

We collected the Age-friendly Ithaca and Tompkins County Action Plan, 2023 Tompkins County Community Assessment Data, Tompkins County Office of Aging Fall Prevention Resource Guide, policy documents, community surveys² and consultant reports to spotlight the nuance for home modification in Tompkins County. These materials have been coded and included our cost-benefit analysis.

(3) Cost-benefit analysis

Our cost-benefit analysis conceptualizes the potential rewards (benefits) expected when older adults modifying their homes and compares them to existing barriers (costs). We develop the concepts through interviews and literature reviews.

Cost-Benefit Analysis

We conducted a cost-benefit analysis of home modifications for older adults in Tompkins County based on interviews and document analysis. While the home modification process involves material, labor, and time costs, it can bring crucial benefits including medical cost-saving, better livability, and physical and mental health for older adults. Also, local governments can save expenditures related to an aging population and better serve their needs. We find that benefits surpass the costs, but older adults still face several barriers when modifying their homes for aging in place. The costs, benefits, and barriers are detailed as follows.

² We collected the Age-friendly Ithaca and Tompkins County Action Plan, 2023 Tompkins County Community Assessment Data, Tompkins County Office of Aging Fall Prevention Resource Guide, policy documents, and consultant reports. `

1.1 Costs

(1) *Material costs*

- The material costs for home modifications can vary widely depending on the scale and type (Contractor, Sunny Brook Builders; Contractor, Northstar Lifts).
- Material costs for age-friendly home remodeling are generally lower than standard home renovations, primarily because these modifications prioritize practicality over aesthetics or luxury enhancements.

Private homeowners can acquire materials from building supply stores. We looked at Lowe's retailing website (Nov 2023) to estimate the average price for small-scale home modifications.

- (1) Grab bar: \$15-50
- (2) Pulldown shelf: \$50-100
- (3) Wheelchair ramp: \$100-400
- (4) Shower seat: \$100-300

(2) *Labor costs*

- In Tompkins County, labor shortage has led to increased costs for hiring professionals to carry out home modifications. A contractor from SunnyBrook Builders said a grab bar installation costs \$85/hour.
- The total labor costs are contingent upon the project's location and the scale of the modifications.

(3) *Time costs*

- The journey from the initial planning stages to the completed home modification spans several months.
- For large-scale home modifications³, select qualified contractors, meet with local code officers, and apply for building permits.
- For small-scale home modifications⁴, building permits are not necessary. This depends on the requirements in specific jurisdictions (Director, Tompkins County Department of Assessment).

1.2 Benefits

(1) *Happiness*

- Home modifications are conducive to people aging in place by making homes safer, comfortable, and sustainable/reliable (Morales-Bravo & Navarrete-Hernandez, 2022).
- Accessible home design can significantly enhance livability
- Quality of life is positively associated with the happiness of older adults (American Society on Community, 2020).

(2) *Independence*

- People want to age in their homes in an independent way (Wiles et al., 2012).
- Home modifications can facilitate older adults' sense of belonging, social interaction, and community engagement.

(3) *Physical and mental health*

- Home modifications are conducive to the improvement of physical and mental health.

³ Large-scale home modifications include a bathroom remodeling, flooring modification, widening doorways.

⁴ Small-scale home modifications include a grab bar, handrail and ramps installation, lighting improvement, replacing doorknobs with pull handles.

- Home safety can reduce accident risk and stress (Official, Office for the Aging).
- Greater accessibility and functionality of home can enhance social interaction.

(4) *Medical cost-saving*

- Age-friendly home modification is a cost-effective approach compared to nursing home stays.
- Fall prevention can avoid expensive medical expenses (Stevens and Lee, 2018).

(5) *Government expenditure saving*

- If older adults can maintain their independence and health, this can reduce demand for government-funded care services, which could offer cost-savings for local governments.
- Long-term savings for the community include reducing healthcare and nursing costs.

(6) *Mainstream aging-in-place*

- Age-friendly home modifications could be integrated into mainstream home remodeling to increase appeal.
- Home modifications can offer job opportunities.
- Home modifications help shape the public discourse for serving the aging demographics.



Abstract

This issue brief explores the cost-benefit analysis of home modifications for older adults in Tompkins County, assessing the financial implications and the broader societal impacts. While home modifications incur material, labor, and time costs, they offer substantial benefits including medical cost savings, improved quality of life, and enhanced physical and mental health. In many instances, these modifications can be integrated into existing property sales. Importantly, local governments can leverage these modifications to reduce elderly-related expenses and better serve their aging populations.

COSTS ANALYSIS

The costs associated with home modifications vary based on scope and requirements.

Item	Cost
Grab Bar	\$15-20
Walkway Shelf	\$50-100
Wheelchair Ramp	\$1,000-2,000
Shower Seat	\$100-300

Material Cost

Typically, material costs for age-friendly modifications are reasonable, ranging on a per-project basis. For example, data from Lowry's indicates:

Labor Cost

In Tompkins County, a labor shortage has raised the costs of professional home modification services. For instance, installing grab bars can exceed \$60 per hour. However, residents can access online guides for DIY options.

Time Cost

The entire process, from initial planning to completion, can span several months.

BENEFITS ANALYSIS

Happiness & Independence

Home modifications are conducive to people age in place by ensuring access, comfort, and convenience. We found that quality of life at home is positively related to the happiness and independence of older adults.

Physical & Mental Health

Home safety can reduce accident risk and stress, fostering better physical and mental health, and promoting social engagement.

Medical cost-saving

Home modifications offer a cost-effective alternative to nursing homes and care, with features like fall prevention helping to avoid substantial medical costs.

Government expenditure saving

As seniors maintain independence and health, the demand for government-funded care services decreases, leading to significant cost savings for local authorities.

Mainstreaming aging-in-place

Home modifications can stimulate local economies by creating jobs in related industries. They also bring aging-related discussions to the forefront, prompting the local demographic changes.

1.3 Barriers

(1) *Labor Shortages*

- Tompkins County currently faces a labor shortage in the construction and home modification sector (Contractor, Sunny Brook Builders).
- The number of Certified Aging-In-Place Specialists (CAPS) and contractors is limited, impacting the availability and efficiency of home modification services for aging adults (Contractor, NorthStar Lifts).

(2) *Lack of Awareness*

- Many older adults are not aware of the necessity for home modifications.

- 57% of older adults in Tompkins report not knowing what services and benefits are available to them as a minor, moderate, or major problem (Community Assessment Survey Older Adults 2023).

(3) Lack of Comprehensive Resources

- There is a need for comprehensive toolkits on how home modification can be done, in addition to the fall prevention toolkits for Tompkins County.
- Older adults need a holistic guide for home assessment, permit application, funding resources, and contractor identification (Official, Office for the Aging).

1.4 Supports

Older adults need support during home modification, including information, advice, and funding resources. In Tompkins County, there are community service organizations that can help meet their needs. These include:

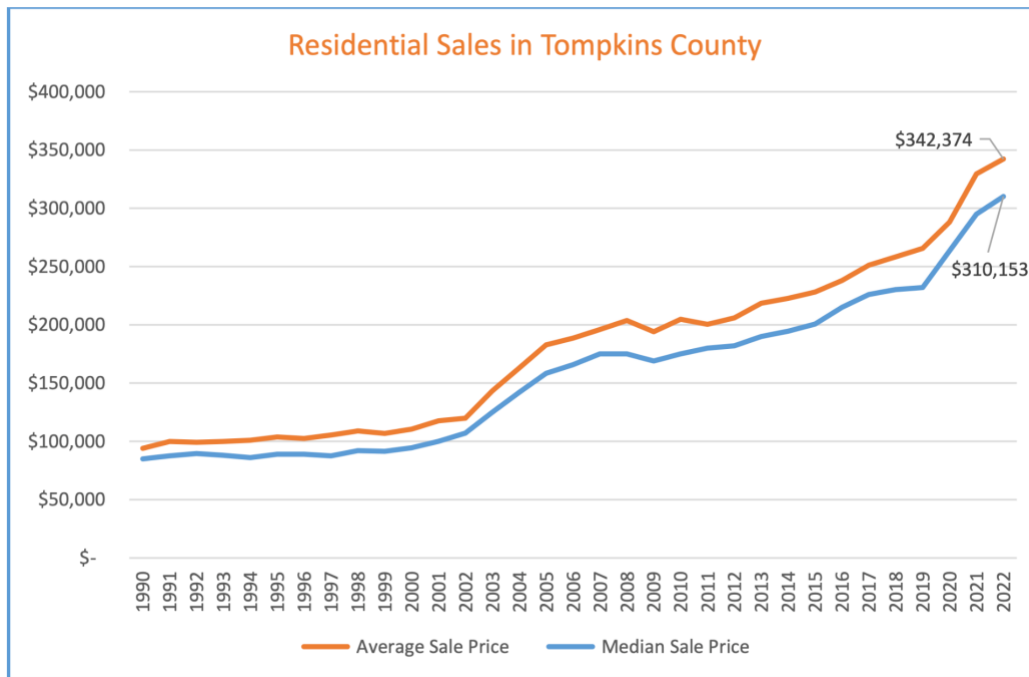
- Tompkins County Office of Aging (COFA) provides general information and assistance for older adults.
- The Certified Aging-In-Place Specialist (CAPS) program helps older adults identify qualified contractors for home modifications.
- Ithaca Neighborhood Housing Service (INHS) offers financial support and guidance.
- Finger Lakes Independence Center (FLIC) offers advice and assistive equipment to meet immediate needs

Discussion

1. Building Permits (and Building Code) as Tools, Not Barriers, to Home Modifications

Small-scale modifications (e.g., installing grab bars and adding accessible ramps) significantly improve safety but do not require building permits. However, obtaining a building permit is a crucial step for large-scale home modifications (e.g., adding first-floor bathrooms that will impact the existing plumbing and electricity system for the property. (Director, Town of Ithaca Code Enforcement and Zoning Office, 2023). Applying for a building permit should not deter anyone from making their homes safer. The inspection required for obtaining a permit serves as a comprehensive check-up for your house, ensuring that your renovation plan adheres to safety standards. Households should proactively consult with the code office in their jurisdictions to determine whether their specific scale of modification requires a permit. The waiting time for a permit is project-specific, contingent on factors like complexity and the review workload. Once the building permit is in hand, property owners are equipped with a list of required inspections. The Code Officer is available for clarification and guidance if there is any question. The Town of Ithaca employs its accessibility code, A117.1-2009, in conjunction with ADA standards for inspections and permit issuance. While local jurisdictions, including Ithaca, often develop their own building codes, these typically align with or are influenced by ADA standards. In cases where local codes and ADA guidelines differ, more stringent requirements are generally followed to ensure compliance with both local and federal accessibility requirements (Mid-Atlantic ADA Center, 2012; Northeast ADA Center, 2023a; Northeast ADA Center, 2023b).

2. Limited Impact of Home Modifications on Property Tax Increase



Source: Tompkins County Department of Assessments Memo, 2023

Concerns were raised about the possibility of home modifications leading to an increase in assessed property values and property taxes. To evaluate the precise impact of home improvements on property tax for individual households, we interviewed Mr. Jay Franklin and Mrs. Irene Kehoe, the director and assistant director of the Tompkins County Assessment Department. Through these interviews, we uncovered several explanations for the limited influence of home modifications on property tax.

In Tompkins County, property taxes are primarily influenced by two key factors: the annual tax rates and the overall market value of housing. The annual tax rate is calculated by dividing the total amount needed from property taxes (the tax levy) by the taxable property value. Annually, the county proposes a new tax levy, seeking approval from voters. Fluctuations in the tax levy and the total taxable amount directly impact the property tax rates.

Property tax payments are also influenced by the overall performance of the housing market. In Tompkins County, residential property values are determined through a comparison-based approach, where home values are closely tied to neighboring property values and average sales prices. This approach considers the continually growing inflation and the appreciating real estate market, impacting the assessment of property values (Crandall, *The Ithaca Voice*, 2023).

Modifying your home does not necessarily lead to an increase in the assessed property value, especially for small-scale changes that don't require a building permit. Concerns arise among property owners regarding large-scale modifications and whether obtaining a building permit triggers an increase in assessed property value. The Code and Zoning Enforcement Office, by law, shares record and notifies the assessment office upon the issuance of a building permit for home improvements. Due to the sales-comparison assessment approach, home modifications do not result in a dollar-by-dollar increase in the assessed value. Tax assessors evaluate the contributory value of the new improvement. For example, if

someone renovates a bathroom to enhance accessibility at a cost of \$30,000, it is considered a replacement for a bathroom with existing value. (Director, Tompkins County Department of Assessment).

Recommendation

To promote home modifications and offer effective support for households involves creating awareness about aging-in-place benefits and developing resources for aging-friendly living spaces. we recommend the following, under the leadership of the Tompkins County Office for Aging (COFA):

1. Toolkit as a Communication Strategy

Leverage the toolkit as a dynamic communication tool to actively promote and encourage households to undertake home modifications. Highlight the toolkit's function in offering details on funding, contacts, step-by-step guidance, serving as a valuable resource to motivate and assist residents throughout the modification process.

2. Flexible Funding Option for Community Campaign

Small grants can be directed towards initiatives like public media outreach or volunteer labor programs, specifically targeting the installation of vital features such as grab bars, small ramps, and accessible furniture. The availability on these grants can be communicated through the toolkit and other outreach channels.

3. Partnership Programs for Labor Shortage

Develop and implement strategic partnership programs to address the labor shortage for construction and small fixture installations. Collaborate with local workforce development to establish training programs and create market-based solutions such as partnering with Lowe's Livable Home Services program⁵.

Conclusion

Modifying homes to become aging-friendly is crucial for promoting the happiness of older adults, enhancing community well-being, and saving government costs. It should be leveraged as an essential tool to support aging-in-place. However, this effort can face obstacles due to multiple costs and barriers, prompting questions about the benefits and resources accessible to older adults, as well as how to make the home modification process more accessible in Tompkins County. Therefore, we conducted in-depth interviews with staff from the Tompkins County Office of Aging, the Department of Assessment, the Department of Planning and Sustainability, and various market contractors. These interviews allowed us to develop a cost-benefit analysis and a community toolkit to streamline the cost-effectiveness of home-modifications for older adults.

Our cost-benefit analysis reveals that while the home modification process entails material, labor, and time costs, it yields significant benefits, such as medical cost-saving, improved livability, and

⁵ Lowe's Livable Services program is a collaboration between AARP and home improvement chain Lowe's to help make living spaces more accessible for everyone and allow older adults to safely and comfortably age where they live (Davis, 2021). AARP and Lowe's built an online library of educational content on home improvement and design techniques as well as a "livable home" resource guide for distribution in stores. In addition, AARP provided Lowe's associates with training to better understand the needs of older adults when it comes to home fixes, upgrades, and renovations for aging in place (Davis, 2021). Trained associates can assist with age-friendly options. They are CAPS-certified and can provide consultation and installation services (Lowe's Livable Home Services, n.d.)

enhancements in physical and mental health for older adults. Moreover, local governments can reduce aging-related expenditures and better fulfill their social responsibilities. We conclude that the benefits outweigh the costs in Tompkins County.

We present a roadmap-style toolkit to emphasize the importance and benefits of home modifications for older adults. Our toolkit includes funding resources, government assistance, and rich information to help older adults access and navigate the home modification process.

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Appendix

A. List of interviewees.

Order	Interviewee(s)	Organization	Title/Position
1	Lisa Monroe and Caryn Bullis	Tompkins County Office of Aging (COFA)	Director Long-Term Care Specialist
2	Jay Franklin	Tompkins County Department of Assessment	Director of Assessment
3	Irene Kehoe	Tompkins County Department of Assessment	Assistant Director
4	Delia Yarrow	Ithaca Neighborhood Housing Service (INHS)	Director of Homeownership
5	Brian Yonkin	Finger Lakes Independence Center (FLIC)	Ramp Specialist / Architectural Accessibility Consultant
6	Dean Shea	Sunny Brook Builders	Vice President / Certified Aging-In-Place Specialist (CAPS)
7	Charles Freiberger	Northstar Lifts	President / CAPS
8	Abigail Conner	Tompkins County - Department of Planning and Sustainability	Environmental Planner
9	Marty Moseley	Town of Ithaca	Director of Code Enforcement and Zoning