

Pairing Energy Efficiency and Home Safety Retrofits for the Aging Population

The City of Ann Arbor, Michigan, developed its <u>Aging in Place</u> <u>Efficiently</u> pilot program to help older adults in Ann Arbor continue to live in their own homes for as long as possible through improved safety, lower energy bills, and improved comfort. The program is part of Ann Arbor's <u>A²ZERO Carbon Neutrality Plan</u>, which charts a pathway for achieving a just transition to community-wide carbon neutrality by the year 2030. The program combines energy efficiency improvements with mobility and safety retrofits, helping reduce participants' energy bills and improve safety in their homes.

By combining energy efficiency improvements with services that help seniors age in place, the program increases the longevity of energy efficiency updates that might otherwise be removed when home ownership changes. All the program's home improvements are provided at no cost to the participants. Only the pilot program has been implemented so far, but program administrators are seeking additional funding sources to continue the program.

Aging in Place Efficiently is administered by Ann Arbor's Office of Sustainability and Innovations (OSI) and funded by the Ann Arbor Area Community Foundation and Partners for Places. OSI launched the pilot program in the Fall of 2021 with 17 participating homes. The first step to select participants was a prescreen to assess candidate eligibility, followed by a social worker home visit to assess individual needs as well as confirming income and asset limits. If a homeowner passed the initial assessment, the program conducted an occupational therapy assessment and an energy audit to determine aging-in-place and critical energy needs within the home and its

Fast Facts

Program scope: Home energy efficiency upgrades paired with mobility and safety retrofits for older residents.

Communities served: Low-income adults aged 60 years or older who own a single-family home.

Funding: Ann Arbor Community Foundation and Partners for Places provided funding for the pilot program with supplemental funding from OSI.

Key partners: Ann Arbor Area Community Foundation, Partners for Places, City of Ann Arbor, Michigan Saves, Meals on Wheels Ann Arbor, Housing Bureau for Seniors, Habitat for Humanity Huron Valley, University of Michigan, and Washtenaw County Office of Community and Economic Development.

Promising practices: Community engagement, holistic needs assessment, real-time improvements.

immediate surroundings. During the process, program staff asked each homeowner to share their main concerns and goals for the home to ensure their quality of life would be improved through the recommended services.



Improvements focused on three areas: comfort, lower energy bills, and home safety. Examples of home improvements include insulation in walls and attics, weatherization, appliance upgrades, grab bars in bathrooms, handrails and ramps, and improved lighting. After installation, the occupational therapist returned to the homes to check for proper installation and use by the resident.

Community History

This program serves Ann Arbor, a 29-square-mile city in southeastern Michigan. It is a relatively well-resourced community, which can make it difficult and stigmatizing for low-income people to come forward for help. Ann Arbor, like many communities in the United States, has a history of illegal practices that made it difficult for Black families to buy and retain homes.¹

The Aging in Place Efficiently program aimed to improve equity in Ann Arbor by helping incomequalified Black homeowners remain in and retain their homes, which can improve intergenerational stability of wealth. Thirty-five percent of the participants in the pilot program were Black, while only 7 percent of Ann Arbor's population is Black. The program also aimed to help low-income families: 47 percent of participants were at or below 200 percent of the federal poverty line and the remaining 53 percent were at or below 80 percent of the area median income, which was a qualification for program eligibility. In addition to the income cap, assets had to be below \$50,000, not including the value of the primary residence or any saved retirement funds.

Of the 17 homes that joined the pilot program, 65 percent reported having to keep their home at an uncomfortable temperature to save money and 47 percent had difficulty paying their utility bill in the prior year. Additionally, most of the people participating in this program rely on informal networks to stay in their homes: 82 percent rely on family for general support, 47 percent have an adult child or family member living in the home and assisting with activities of daily living, and 35 percent rely on a family member in the home to assist with activities of daily living and advanced medical care.

Community Engagement

OSI created a first come, first served online signup form for the pilot program. Before launching the online form, OSI reached out to the Ann Arbor community to identify seniors who could be good candidates for the program but might not be able to access the form online. OSI held an

¹ Jennifer Wolf, Ann Arbor Office of Sustainability and Innovations, 2023. Personal Communication.

² U.S. Census Bureau. QuickFacts: Ann Arbor city, Michigan.



outreach event with electronic devices that community members could use to sign up for the program. The city of Ann Arbor also advertised the program through other city-hosted social programs, such as food banks, and OSI asked community members to identify potential participants and spread program information through word of mouth.

Once OSI published the online signup form, the program became fully subscribed and the waitlist grew quickly. The long waitlist reflected the high demand and need for this service, but it created frustration among potential participants. So, once registrations were double the service capacity, outreach efforts were suspended. Administrators could process only a few homes at a time to ensure the residents qualified for the program and to assess the needs of each home. Once participants were chosen for the pilot program and the occupational therapist and contractors assessed priorities for the home, program administrators met with the participants to discuss their priorities from the identified list of improvements.

"To be able to access this program as someone who is elderly and is on a fixed income is a tremendous blessing. It affords us the opportunity to maintain independence, which, from an emotional standpoint, is key."

 Aging in Place Efficiently participant

Throughout the pilot program, OSI solicited feedback from program participants, contractors, and community partners and implemented improvements to the process in real time. For example, in response to feedback from contractors, the program implemented a phone call reminder to participants on the day of their scheduled appointments.

Key Partners

OSI built a diverse team of partners, including:

- Ann Arbor Area Community Foundation A philanthropic organization focused on enriching the life of residents in Washtenaw County.
- <u>Partners for Places</u> A nonprofit that provides matching grants to help enhance local capacity to build equitable and sustainable communities in the United States.
- <u>Michigan Saves</u> A nonprofit green bank offering financial programs that make energy improvements easy and affordable for Michigan residents.
- <u>Habitat for Humanity Huron Valley</u> A nonprofit that works to enrich Washtenaw County through a legacy of affordable homeownership for low-income families.



- Michigan Medicine An academic medical center at the University of Michigan.
 - Meals on Wheels A program of Michigan Medicine's Community Health
 Services that seeks to reduce hunger and food insecurity in the Ann Arbor area.
 - Housing Bureau for Seniors A program of Michigan Medicine's Community
 Health Services that seeks to stabilize housing for seniors in the Ann Arbor area.
- <u>University of Michigan School for Environment and Sustainability (SEAS) Program</u> An academic program focusing on the environment and sustainability.
- Washtenaw County Office of Community and Economic Development A service program offering a variety of supports including weatherization for qualified applicants.
- <u>City of Ann Arbor Office of Sustainability and Innovations</u> A municipal division tasked with implementing the A²ZERO Plan for community-wide carbon neutrality by 2030.

Ann Arbor Area Community Foundation and Partners for Places both funded the pilot program and Michigan Saves was the program's fiscal agent and contractor coordinator. The program's home upgrades utilized numerous service providers including Handyman Connection, Ecotelligent Homes, and EverGreen Energy Savers. Meals on Wheels from Michigan Medicine provided the social worker for this program and an independent contractor provided occupational therapy assessments. Additional contractors provided customized work such as hardscaping, pest removal, and roof repairs.

Funding Mechanism

The pilot program for Aging in Place Efficiently launched with funding totaling \$198,514—half from the Ann Arbor Area Community Foundation and half from Partners for Places.³ OSI contributed program management by providing half of the full-time equivalent staff through the duration of the pilot, as well as funding Certified Aging in Place Specialist trainings for employees, plus marketing, outreach, and engagement costs.³ Program partners also received a small stipend in recognition of their time and expertise. The Aging in Place Program also received donated materials and in-kind services from some of the contractors.¹ This combined funding allowed the program to provide the household improvements at no cost to participants. OSI administrators are now looking for additional funding sources to expand the program beyond the pilot stage. Grant funding is necessary to supplement any municipal support given the magnitude and types of improvements needing to be addressed.

³ MLive.com, 2021. Ann Arbor using grant funds to launch new program to help low-income seniors.



Program Impact

The energy efficiency upgrades implemented in 14 of the homes in the pilot program are projected to save a total of 113 metric tons of CO₂ and \$45,853 in energy costs over the lifetime of the energy efficiency improvements.⁴ Three homes received only mobility and safety upgrades because they had recently received energy-related services from the county and did not need energy efficiency upgrades. Additionally, two homes had electrical issues that prevented certain upgrades from being implemented, and so they received limited energy efficiency services. Looking to the future, and depending on availability of funding, OSI hopes to expand the program to serve 15 homes every year.

"The insulation has helped so much because of how cold it was in my house. My family and myself are much more comfortable than we have been in a long time."

> Aging in Place Efficiently participant

Barriers and Challenges

OSI originally intended for all services to be coordinated through a single contractor to help participants feel comfortable, but this was infeasible since multiple contractors were required to address the wide needs of participants. OSI shifted its model and became the consistent point of contact to coordinate services for participants. The program also encountered challenges due to the COVID-19 pandemic since home upgrades require in-person contact between contractors and participants. However, OSI successfully navigated the issue by implementing and monitoring written and verbal COVID-19 protocols for both contractors and participants.

A major challenge included cost barriers due to the depth of need and high costs of retrofits. For example, electrification efforts proved too costly in many cases. Finding appropriate energy-efficient appliances was also a barrier as participants were reluctant to adopt complicated interfaces and newer appliances include components that would be cost prohibitive to replace for someone on a fixed income. Additionally, the depth of need in each home was unanticipated. This is the main reason the number of homes retrofitted was adjusted from 25 to 17, as some homes ended up costing far more than anticipated to get the participant to a place of true stabilization. Even with this adjustment, most participants would have benefited from additional retrofits (e.g., a walk-in shower) that the program could not cover.

⁴ City of Ann Arbor, 2023. Aging in Place Efficiently.



Soliciting new funding has been difficult as traditional funders tend to look for metrics that define success in the near term and focus on numbers served as opposed to the long-term, beneficial impacts of helping seniors age in place. OSI administrators want funders to recognize that it is more cost-effective to implement comfort and safety improvements in tandem with energy efficiency upgrades. This is because the combined benefits make it more likely that residents will remain in their home, which will help avoid costly burdens of medical and nursing care, increase the utility of improvements, and stabilize housing within families and communities.

Recommendations from the Field

OSI has multiple recommendations for those seeking to create a similar program:

- Set benchmarks. Create benchmarks before beginning program implementation.
- Create a strong partner network. Partner expertise is invaluable to program success.
- Build trust. Building trust for a new program is easier when the program partners are
 recognizable to the community. Demonstrate willingness to earn the community's trust
 and be committed to delivering excellent customer service.
- Make outreach accessible. Ensure material design is accessible to all in terms of visuals, translations, audio, etc. Accommodate those who do not have internet access and those who have difficulties using the internet and/or digital communications.
- Maintain transparent and active communication. This can help assuage those with anxiety about having strangers in their home and is key to soliciting robust feedback.
- **Hire an interpreter**. Consider leaving room in the budget for an interpreter who can address language barriers between contractors and participants.
- Hire an occupational therapist. They help ensure useful mobility improvements.
- Collect and integrate feedback and lessons learned in real time. This allows for programmatic improvements at any point in the process.
- **Emphasize long-term financial savings.** To solicit funding, highlight financial savings for families by avoiding long-term care facilities, money saved through energy efficiency improvements, and the cost benefit of stabilizing a person's residence for 5 to 10 years.
- Address legal status of homes. Due to a secondary grant, OSI was able to do a legal review (e.g., titles, liens, deeds) of high-risk participant homes after the pilot ended to ensure that the home stays in their family as desired. This addresses intergenerational stability of homeownership and acknowledges that homes are assets.

For More Information

Aging in Place Efficiently