

# WEATHERIZATION PROGRAM

## COMMUNITY IMPACT REPORT



MID-OHIO REGIONAL  
**MORPC**  
PLANNING COMMISSION

## OVERVIEW

Since 1988, MORPC has provided in-kind energy efficiency (weatherization) and safety services to nearly 20,000 low-income Franklin County households to increase their energy efficiency and safety. This Weatherization Program is designed to offer no-cost services to qualifying residents—those who are either homeowners or rent homes in Franklin County, and whose total household income during the preceding 12 months is equal to or less than 150–200% of the federal poverty guidelines.

From 2017–2022, MORPC and partners Columbia Gas of Ohio, Ohio Department of Development, AEP Ohio, and ENERGY STAR, have invested an estimated \$5.1 million on health and safety, plus an additional \$4.3 million in energy efficiency—all on parts and equipment that remain in the homes. This report demonstrates how this program has improved the economic stability of households, achieved community-wide savings, improved the safety of our residents, while also reducing the County's impact on the environment.

### Services Provided

From inspections and safety checks to repairs and replacements, the Weatherization Program's home improvement services include:

- **Natural gas furnaces**
- **Water heaters**
- **Insulation and sealing** (attic, side wall, doors, windows, and more)
- **Safety checks and repairs** (electrical wiring, carbon monoxide, gas leaks, flue vent repair, and more)

## HOUSEHOLD IMPACT

Low-income households spend an average of 16.3% of their annual income on energy costs, compared to 3.5% for other households (2014 ORNL).<sup>1</sup> What's more, this imbalance of income-to-energy costs forces low-income families to make sacrifices when it comes to other essential basic needs that have a direct impact on families' ability to thrive, such as health care, medicine, food, and childcare. **In Franklin County, this imbalance disproportionately impacts minority households.** As of 2021, more than 180,000 (14.2%) of Franklin County Residents were living in poverty, of whom 24.1% were Black or African American, while 10.3% were white. In fact, with the exception of individuals identifying as Asian, all minority groups continue to experience poverty at significantly higher levels.<sup>2</sup>



**MORPC installed equipment and materials totaling \$4.3 million for energy efficiency and \$5.1 million for health and safety in Franklin County homes from 2017–2022, an average of about \$3,700 per home.**



**According to natural gas usage from households served by MORPC, it's estimated that households will save an average of \$262 to \$363 annually on their natural gas bills alone over the next five years.**

According to natural gas usage from eligible, low-income households served by MORPC, it's estimated that households will save an average of \$262 to \$363 annually on their natural gas bills alone over the next five years. This is comparable to the national average total annual savings for weatherizing a home estimated by the U.S. Department of Energy's Weatherization Assistance Program. They estimated that through weatherization programs, households save on average \$372 or more a year, which includes all utilities affected by weatherization.<sup>3</sup> In addition to saving families and individuals in Franklin County upwards of \$20 on natural gas alone each month, MORPC is improving the value and longevity of these homes. These savings positively impact household budgets, and often have a lasting effect of 15 years or more.

<sup>1</sup> Department of Energy Office of Energy Efficiency & Renewable Energy (2018). Weatherization Works! Fact Sheet. [https://www.energy.gov/sites/prod/files/2018/03/f49/WAP-fact-sheet\\_final.pdf](https://www.energy.gov/sites/prod/files/2018/03/f49/WAP-fact-sheet_final.pdf)

<sup>2</sup> U.S. Census Bureau (2022). Poverty Status in the Past 12 Months, 2021 American Community Survey 1-year Estimates Subject Table. The Census Bureau. <https://data.census.gov/table?q=poverty+in+Franklin+County,+Ohio&tid=ACSST1Y2021.S1701>

<sup>3</sup> Office of State and Community Energy Programs. About the Weatherization Assistance Program.

<https://www.energy.gov/scep/wap/weatherization-assistance-program>

In addition to direct savings in natural gas and energy usage, a national evaluation of the U.S. Department of Energy’s Weatherization Program found that weatherization of a home has non-energy benefits to families as well. **According to this evaluation conducted in 2015, program participants’ homes were healthier and more livable, resulting in fewer missed days of work, as well as out-of-pocket savings for health care (i.e., sick days, doctor visits), averaging \$514 per household. Likewise, MORPC’s Weatherization Program contributes to healthier, safer families in Franklin County.**<sup>4</sup>

## SAFETY

Of the 2,537 households served from 2017 through 2022...



**52**

**gas leaks repaired.**

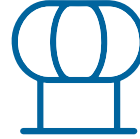
- Eliminated risk of natural gas poisoning and reduced risk of fires.



**189**

**wiring safety issues repaired.**

- Reduced risk of permanent damage to appliances stemming from electrical surges, which can lead to expensive replacement or repair costs.
- Reduced risk of house fires.



**2,148**

**flue vents repaired.**

- Increased energy efficiency from proper insulation.
- Reduced risk of build-up of flammable gases in vents.
- Leaks can lead to carbon monoxide in homes.



**757**

**cracks in furnace heat exchanger repaired.**

- Reduced risk of serious illness or death resulting from poisonous gas leaks, such as carbon monoxide.

## COMMUNITY IMPACT

Of the nearly 20,000 Franklin County households served to date, MORPC has provided services to a concentration of over 4,000 households in the 43211 (South Linden) and 43207 (South Columbus to Obetz) ZIP codes alone. Approximately 32% of these households had at least one elderly occupant, 35% had at least one disabled occupant, 5% had at least one Veteran occupant, and one or more children were living in 42% of these households.

From 2017 through 2022, MORPC served approximately 2,357 households in Franklin County. Using a five-year average fixed rate for natural gas derived from a linear forecast of natural gas prices for 2023-2027, this cohort is estimated to save \$663,760 to \$921,889 annually in natural gas costs, based on a range of 18% to 25% savings in natural gas usage. If you extend this annual estimate five years in the future, this cohort is expected to have saved \$3.3 million to \$4.6 million. This does not include savings related to energy expenditure as a whole, affected by improvements such as new water heaters or better insulated homes retaining cool air in the summer, which will inevitably lead to additional savings for each household.

Additionally, MORPC’s Weatherization Program is having a positive impact on the broader community. By lowering the demand for natural gas, suppliers’ rates for the overall community go down. Also, many of the low-income households that MORPC serves utilize Percentage of Income Payment Plan (PIPP) programs offered by energy companies. These programs help Ohioans manage their energy bills year-round by basing their payments on a percentage of their household incomes. Therefore, by reducing these households’ energy bills, fewer taxpayer dollars are needed to subsidize these programs through the State of Ohio. The U.S Department of Energy estimated in 2015 that for every \$1.00 invested in their Weatherization Program, \$2.78 in non-energy benefits was returned to the community, based on spurred economic growth and reducing the environmental impact of these homes.<sup>5</sup>

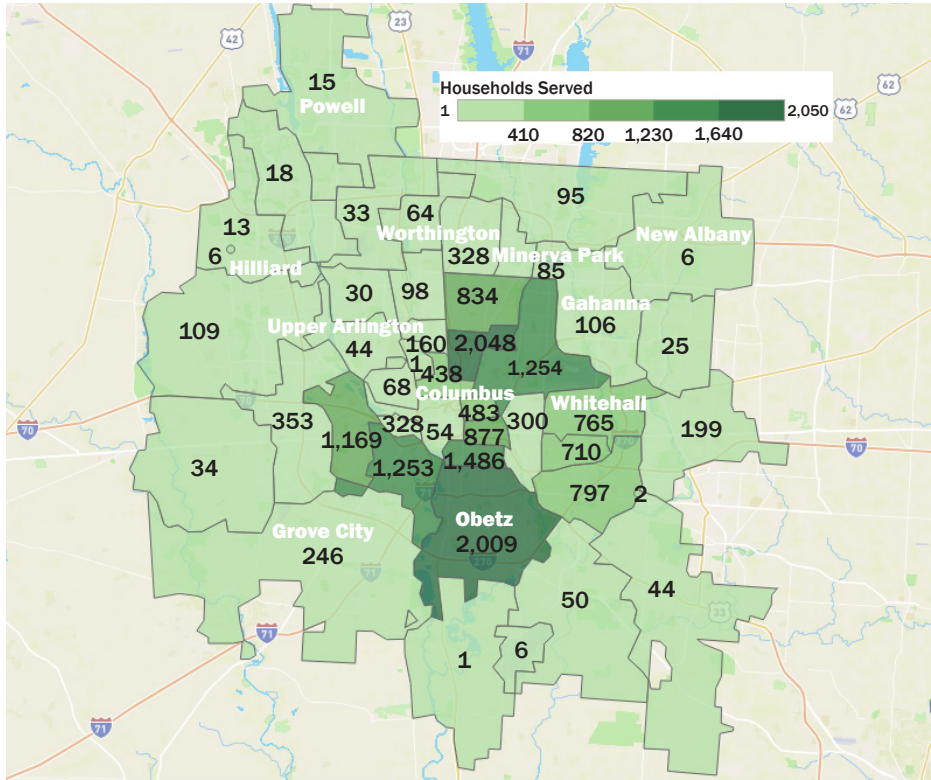


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## Number of Franklin County Households Served by ZIP Code



Since 1988, MORPC has served over 10,000 households in critical impact neighborhoods like North Linden, South Linden, Hilltop, Valleyview, and South Columbus.

## ENVIRONMENT & CLIMATE IMPACT

The U.S. Department of Energy estimates that new furnaces use approximately 10% less energy than older models. Additionally, inefficient furnaces lead to excess methane, carbon dioxide, and nitrogen dioxide emissions.<sup>6</sup> Through MORPC’s Weatherization Program, old furnaces are replaced with new, more efficient furnaces with 90–96% annual fuel utilization efficiency (AFUE). By comparison, older, low-efficiency furnaces typically fall within the 55–70% AFUE range. An 80% AFUE unit wastes \$0.20 of every dollar spent. By replacing old units, MORPC is reducing the household emissions from heating by 25% to 40%, while also reducing energy bills.

Based on reports from the U.S. Department of Energy, The Office of the Ohio Consumers’ Counsel, and Weatherization experts at MORPC, the estimated range of natural gas savings for a household participating in the weatherization program is 18% to 25%. Using these estimates and the average natural gas usage by household from 2017–2022, it’s estimated that if MORPC serves on average 500 households a year, the amount of carbon dioxide prevented from polluting the atmosphere is equivalent to removing 85 to 118 personal vehicles from Columbus roads each year.

If MORPC serves on average 500 households a year, the amount of carbon dioxide prevented from polluting the atmosphere is equivalent to:



removing  
**85–118**  
personal vehicles

— OR —



planting between  
**20,000–28,000**  
mature trees