

Illinois Weatherization Assistance Program

Keys to Success in Multi-Family Weatherization



Grantee:



Illinois
Department of Commerce
& Economic Opportunity
OFFICE OF COMMUNITY ASSISTANCE



Subgrantee:

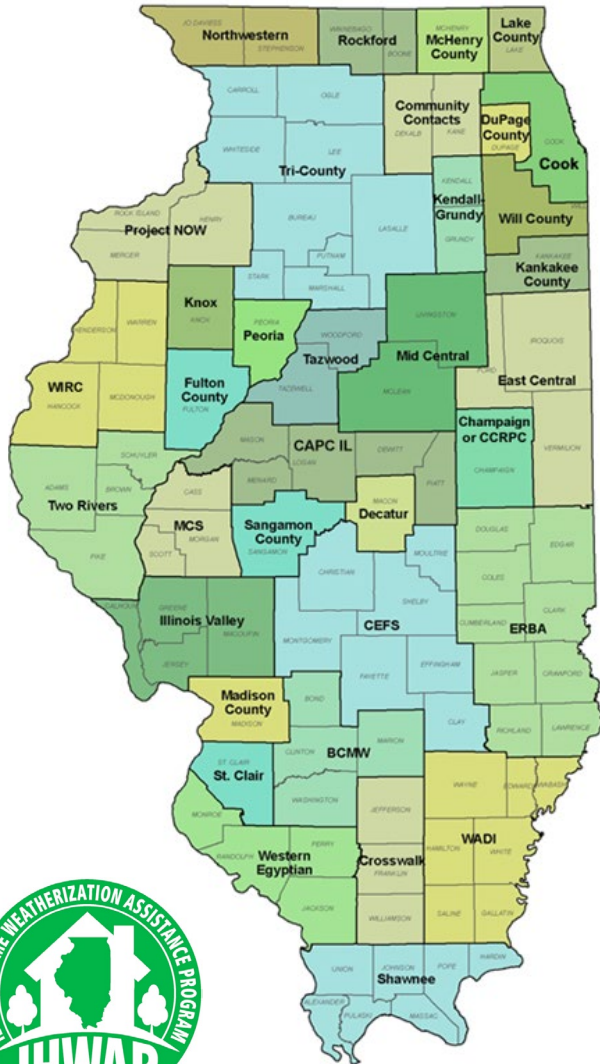


Weatherization in Illinois

Illinois Home Weatherization Assistance Program (IHWAP) Administered by:



Illinois
Department of Commerce
& Economic Opportunity
OFFICE OF COMMUNITY ASSISTANCE



- 30 Local Area Agencies (LAAs)
- Funding from U.S. DOE, HHS, State of Illinois, Utilities
- ~3,000 total units per year (2015-2024)
 - 76% single family (including mobile home and 2-4 units)
 - 24% multi-family (5+ units)
- \$50-\$55M annually
- Cook County (including Chicago), is largest recipient of funds based on formula allocation (population)



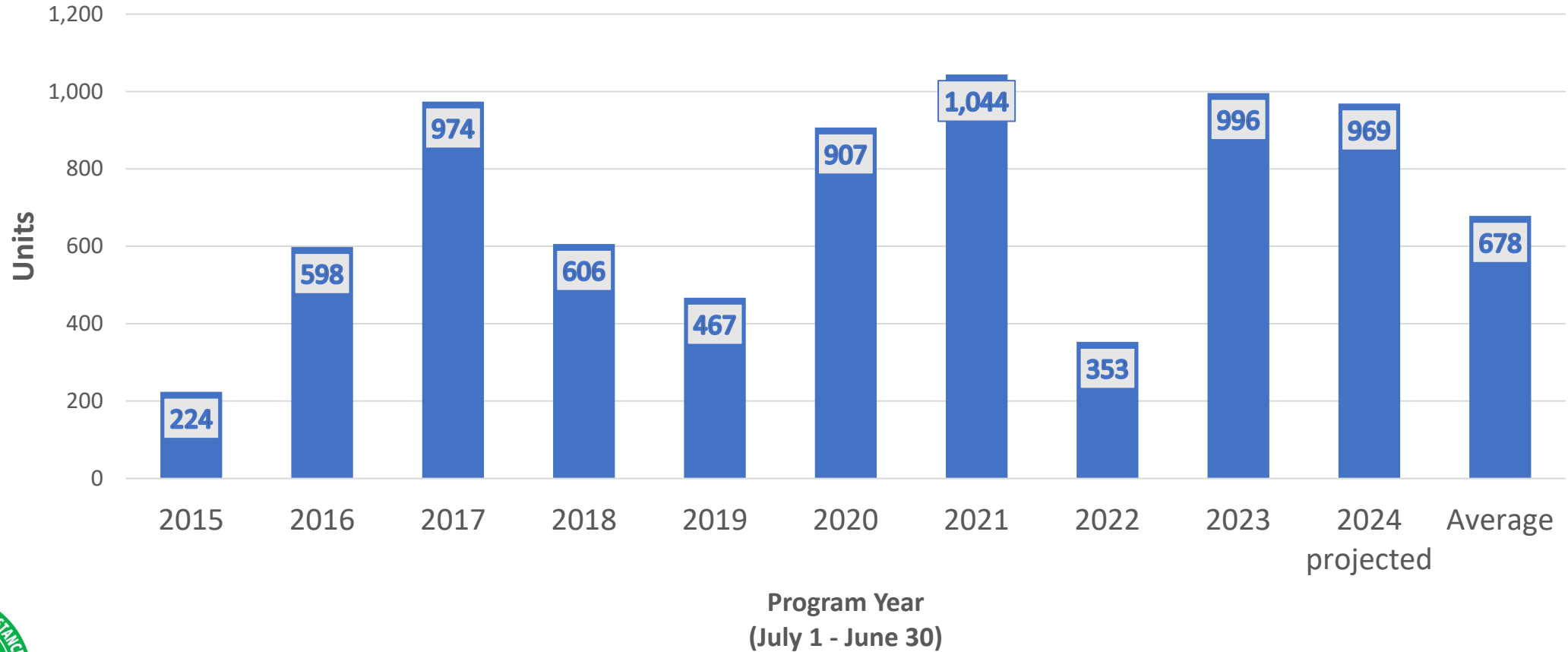
Multi-Family Weatherization in Illinois

- All agencies highly encouraged to serve Single *and Multi-Family* properties.
 - **Supports 10 CFR 440.1** “...implements a weatherization assistance program to increase the energy efficiency of dwellings owned or occupied by low-income persons...”
 - **Supports DOE WPN 22-12**, “To meet the purpose of WAP, Grantees should ensure weatherization services are provided to low-income persons that live in **all types of housing** (i.e., site built single-family, manufactured housing units, and **multifamily buildings**”
- Illinois can approve its own multi-family projects, subject to DOE requirements.
- About five agencies currently serving 5+ unit Multi-Family properties in Illinois.
- More agencies beginning to approach Multi-Family
 - Low-Rise Priority List Opportunities (WPN 22-8, Attachment 3)
 - Illinois’ plan approved in 2023
 - Removes engineering requirements and reduces complexity



Multi-Family Weatherization in Illinois

Multi-Family (5+ Units) Served in Illinois
2015-2024



Multi-Family Weatherization in Illinois

Illinois Multi-Family Production (2020-2024)



Program Year	Tenant units	Total Grant Expenditures	Avg. Cost/Unit
2020	907	\$6,555,770	\$7,228
2021	1,044	\$5,348,167	\$5,123
2022	353	\$1,866,285	\$5,287
2023	996	\$4,459,929	\$4,478
2024**	969	\$9,479,754	\$9,783

**Includes DOE, HHS, and State funds*

***Project numbers and includes ~\$3M in DOE BIL Spend*

5-year Average	854	\$5,541,981	\$6,380
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Multi-Family Weatherization in Illinois

First Low-Rise Priority List Housing Project in Illinois



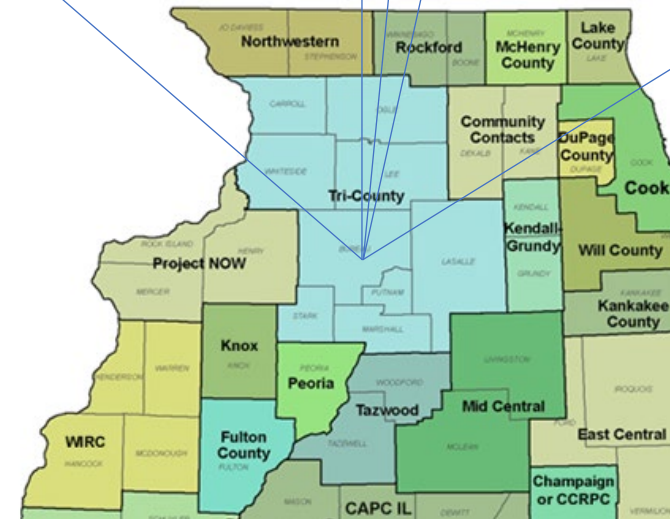
PY24 and PY25 completion
68 Occupiable Units

6-unit buildings (6)

7-unit buildings (4)

One - 4 unit building (separately modeled)

~\$1.2 M Forecasted Spend



Multi-Family Weatherization in Illinois



PY 2024 Highlights

\$12.2 Million Invested

\$8.7M - Grants & Utility funds

22% increase over PY2023

43% increase in spend per unit

\$3.5M - Owner Contributions

Comprehensive Improvements - Energy Efficiency & Health and Safety

- Building Shell (Air Sealing, Insulation)
- Boilers Replacements / Furnace Tune-ups
- Domestic Hot Water Systems
- Refrigerators
- Air Conditioning & Ventilation
- Lighting
- Smoke and Carbon Monoxide Detectors
- Special Window Project



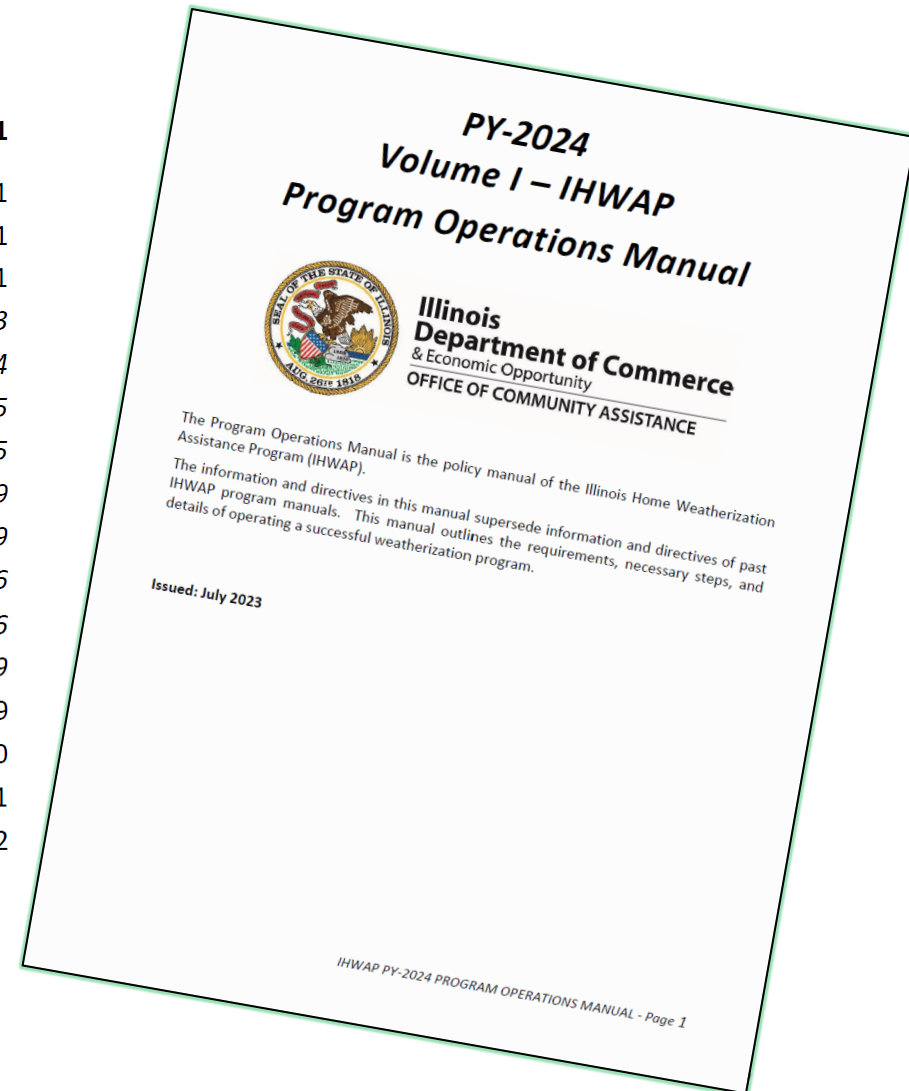
912 Units Served
41 Buildings
4 Projects



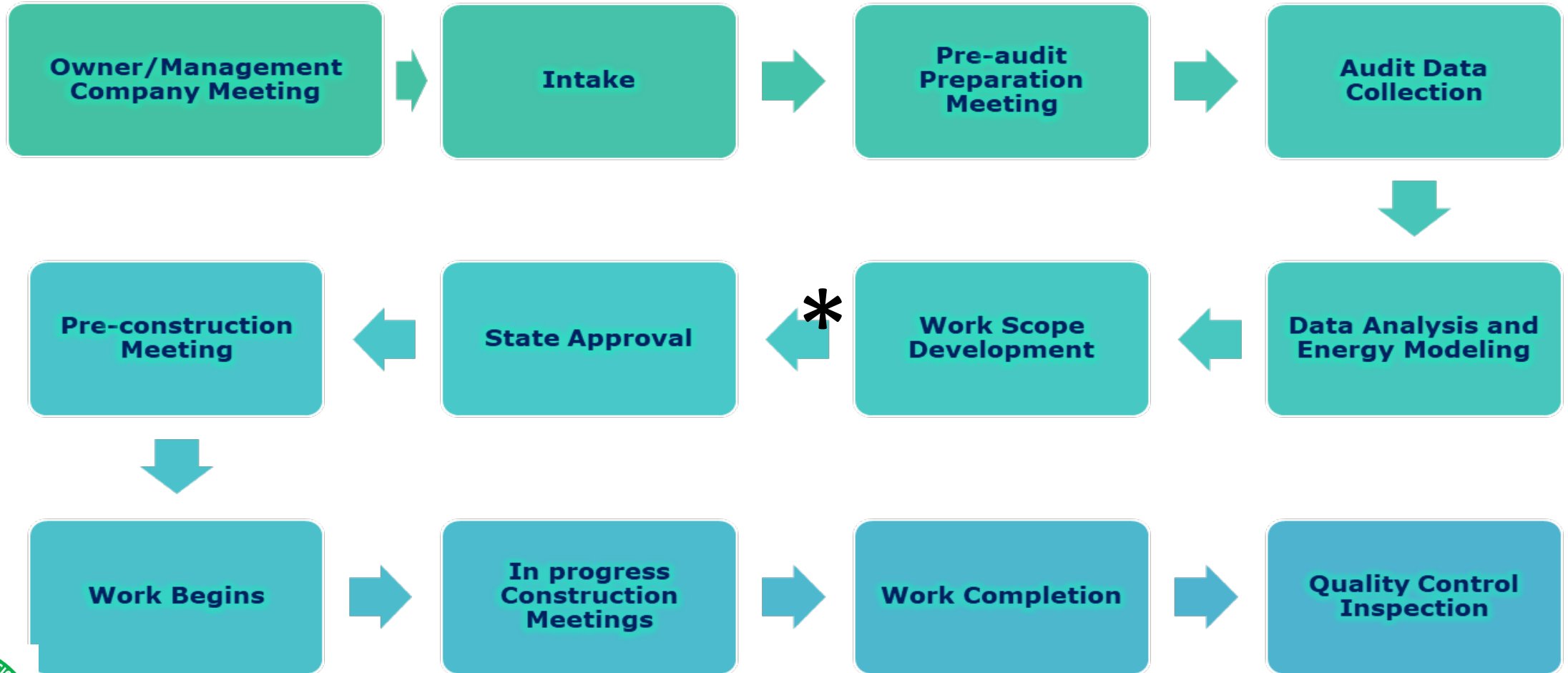
Multi-Family Weatherization in Illinois

30+ Pages of Guidance and Forms for Agencies

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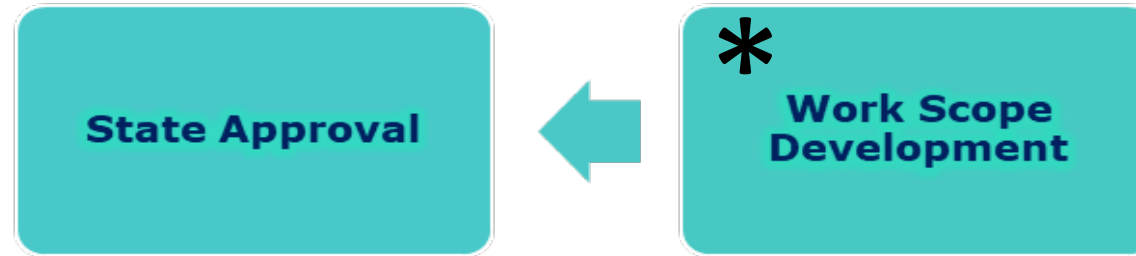
Multi-Family Weatherization Process



Multi-Family Weatherization Process

Owner Agreement and Contribution

Owner Contribution may be essential to project viability / SIR requirements to finalize scope



Letter of Agreement

- **Scope of Work / Specifications**
- **Points of contact**
- **Contractors**
- **Owner Contribution if applicable**
- **Final work authorization**



Illinois Weatherization Assistance Program

Keys to Success in Multi-Family Weatherization

- **Build partnerships** --> Create trust and build your reputation
 - Relationships with cooperative and capable building owners, property managers, can lead to continued work
- **Consider project viability considerations**
- **Know your limits, but consider scaling up and available tools**
 - Utilize DOE Low-Rise Priority List
- **Use resources from your state and other states**
 - More than 30 pages of guidance in Illinois Operations Manual
 - Seek guidance and input from more experienced partners



Keys to Success in Multi-Family Weatherization

Partnerships Create Program Success

Benefits of Partnerships

Builds Trust – Creates ongoing relationship for more projects. Can help secure new partners through reputation.

Enhances - lead development, long-term planning, efficiency through formal agreements.

Mutually beneficial- Brings grant dollars and other financing to table. Leverage funding.



Keys to Success in Multi-Family Weatherization

Partnership Example: Serving Tenants and Saving Resources



&



- **35 CHA properties served**
- **8 years and thousands of tenant units served**
- **More than \$30+ million invested from IHWAP (DOE, HHS, State) and \$6M Utilities**
- **20% total contribution from Chicago Housing Authority for low SIR measures**
- **5 Year MOU to support projects**
- **Estimated 20-30 percent average energy savings on each project**
- **3,213 Megawatt hours of electricity and 649K natural gas Therms saved**



Keys to Success in Multi-Family Weatherization

Private Project Highlight: Olympic Village Apartments



CHICAGO HEIGHTS,
ILLINOIS



FEBRUARY – JUNE
2021



Partnership Approach:
IHWAP, ComEd (Electric Utility), Nicor (Gas Utility), NHPH (Owner)

Keys to Success in Multi-Family Weatherization

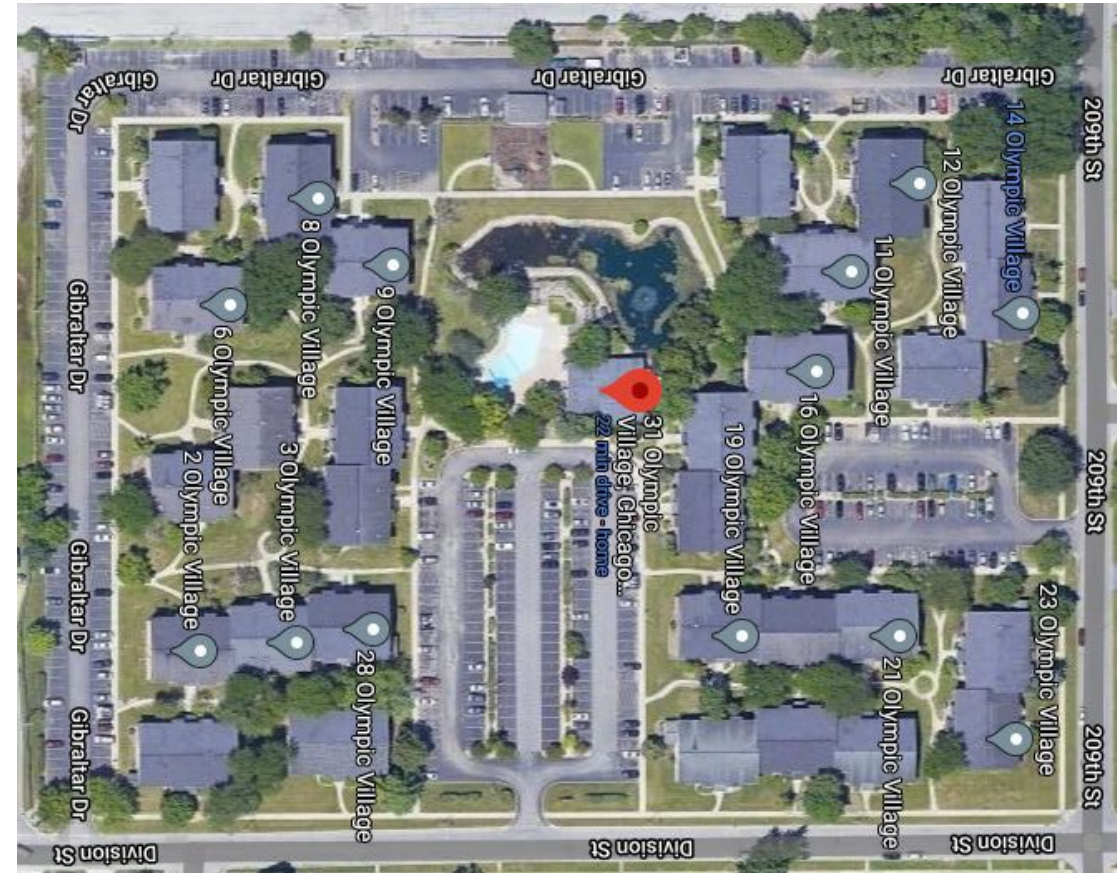
Project Highlight: Olympic Village Apartments – Chicago Heights, IL

Mechanical - 15 boiler rooms

- Heating plant and domestic hot water replacement ~78% → ~95% AFUE
- Domestic hot water improvement – replaced stand-alone natural draft system with indirect

Architectural - 30 Common areas & 320 Tenant units

- Air sealing (attics and tenant unit fenestrations)
- Attic insulation (blown fiberglass)
- LED lighting (laundry rooms, hallway/stairwell, boiler rooms, bathrooms)
- Refrigerators (Energy Star rated)
- Wall air conditioners (Energy Star rated)
- Carbon Monoxide Detectors
- Bathroom exhaust fans (ASHRAE 62.2 compliant)



Keys to Success in Multi-Family Weatherization

Project Highlight: Olympic Village Apartments – Chicago Heights, IL

- 242,916 kWh of reduced electricity consumption
- 49,843 Therms of reduced natural gas consumption
- Total Project Cost - \$3.6 Million
- \$1.37 Million - Utilities - ComEd, Nicor Gas
- \$1.37 Million - Illinois Home Weatherization Assistance Program
- \$850K – Property Owner - National Preservation Housing Partners
- CEDA Contractors: DNR Construction, A. Lugan / Regan Heating, Crowley Engineering



- ✓ Improved comfort to tenants
- ✓ Health & safety improvements
- ✓ Reduced Energy bills

Keys to Success in Multi-Family Weatherization

Best Practices in Developing a Multi-Family Program

- **Larger agencies / Areas with many Multi-Family buildings**
 - Conduct separate Multi-Family Contractor RFQs (Arch, Mech, Engineers)
 - Develop in-agency resources to assess, inspect, and project manage
 - Build strong partnerships and have efficient processes
- **Smaller agencies**
 - Utilize the Low-Rise Priority List, approved by DOE to reduce the complexity of Multi-Family Implementation
 - Contract out resources as necessary (energy modeling, assessments, installation)



Keys to Success in Multi-Family Weatherization

Project Viability Considerations

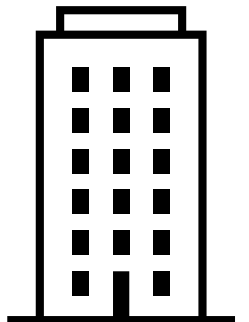
Primary Considerations (Make it or break it)

- Income Eligibility
- Building Type, Condition, and Planned Activities
- Cooperation from Property Manager (data access, support, continuity/experience)
- Energy Savings Opportunities
- Financial (grant and/or utility funding sources, owner contribution)

Secondary Considerations (Very important)

- Control of timelines (HUD, State Housing Agency financing arrangements, Underwriters, etc.)
- Staff time investment
- Engineering costs
- Capacity, Expertise of agency, contractors, etc.
- Timeline Considerations

All important.



Keys to Success in Multi-Family Weatherization

Outreach: Multi-Family Buildings

Maximize efforts to inform building owners, neighborhood organizations, potential clients, and local government units about the program.

Distribution of weatherization brochures and local agency printed information shall be done to encourage applicants who live in multi-family buildings.

Outreach to potential clients on an equitable basis to all targeted communities in the local agency service area.



UPGRADE YOUR MULTI-FAMILY BUILDING

With the Illinois Home Weatherization Assistance Program (IHWAP) in Chicago and Suburban Cook County

HOW DOES IHWAP WORK?

IHWAP is a federally and state funded program that helps to make low-income housing more energy efficient, safe and comfortable.

Weatherization measures are identified during an energy audit conducted by CEDA's state-certified assessors.

Weatherization Measures Include

- Insulation
- Lighting Improvements
- Air Sealing
- Heating & Cooling System Improvements
- Health and Safety Measures
- Energy Star Appliances

Program Requirements

66% or more tenants must be income eligible
Services are free to households that:

- Are eligible for the Low Income Home Energy Assistance Program (LIHEAP)
- Have an occupant receiving Supplemental Security Income (SSI), Aid to Aged, Blind or Disabled (AABD) or Temporary Assistance to Needy Families (TANF)
- Are at or below the annual income on the chart shown on the reverse.

What are the benefits?

- Energy savings that reduce gas and electricity consumption
- Added value to your property
- Improved building durability with lower maintenance
- Improved health and safety conditions
- Greater comfort and temperature control
- Lower tenant turnover
- Professional construction management and quality control
- Better Air Quality



What Do You Need to Proceed?

- Proof of ownership
- List of tenants, their estimated income, and the number of vacant units
- Assessment of the building to determine the best measures to reduce energy use and maintenance costs

Keys to Success in Multi-Family Weatherization

Outreach: Multi-Family Buildings



Relationships are key!



Build Trust and Confidence



Keys to Success in Multi-Family Weatherization

Energy Auditing – Multi vs. Single Family

- Assessment and data entry processes more complex.
- Buildings may have one or more centralized heating systems
- **HVAC Site Evaluation –**
 - *Important!* Engineer needed for more complex boiler/HVAC system evaluations.
 - HVAC Scope development for complex boiler systems must be done by an engineer.
- ASHRAE requirements – Rooftop fans / exhaust ducting considerations
- Domestic hot water delivery can be complex.
- Some multi-family buildings may have individual heating systems within each unit.
- Certain buildings may contain a combo heating and cooling system in each unit.



Keys to Success in Multi-Family Weatherization

Multi-Family Energy Audit Goals

Data collection, modeling, and analysis – necessary to meet regulations and ensure viability.

Collect data on:

- Existing building and its energy systems
- Conditions affecting the energy use of the building
- Current energy use profiles
- Health and safety considerations as they relate to weatherizing the building.



Determine Recommended energy conservation measures related to:

- Building enclosure
- Heating, cooling, and ventilation system equipment
- Lighting, appliances, water heating and water conservation measures

Audit process provides input on final determination of energy savings, costs, the economics of the recommended energy conservation measures.



Keys to Success in Multi-Family Weatherization

Energy Auditing Tools Available

- Low-Rise Priority List – DOE Guidance
- HUD Pre-eligibility list
- TREAT Software
- Local – Software Tools
 - State Data Tracking system (Illinois IWx System)
 - Project Management Tools / CRM
 - (e.g. Monday.com / Salesforce / Microsoft Project)
 - Photo / Reporting Tools (e.g. Raken)

