

Illinois Home Weatherization Assistance Program (IHWAP)

Program Overview

Illinois Energy Efficiency Stakeholder Advisory Group

January 31, 2017

Mick Prince

IHWAP Manager



Illinois
Department of Commerce
& Economic Opportunity
OFFICE OF COMMUNITY ASSISTANCE

IHWAP and Community Action

IHWAP partners with The Illinois Association of Community Action Agencies (IACAA) and 34 of its local providers to administer weatherization grants throughout the state of Illinois.

Our network provides excellent outreach and a multitude of services for the low income population in Illinois.

Together it is our goal to provide comprehensive weatherization services to the low income clients of Illinois.



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IHWAP and Energy Efficiency Portfolio Electric Savings

Table 2-6 Summary of kWh Savings by Measure for Weatherization

Measure	TRM-Calculated		TRM-Calculated (Errata Corrected)		ADM-Calculated		Net-to-Gross Ratio
	Gross Ex Post KWh Savings	Net Ex Post KWh Savings	Gross Ex Post KWh Savings	Net Ex Post KWh Savings	Gross Ex Post KWh Savings	Net Ex Post KWh Savings	
Air Sealing	2,646,573	2,646,573	2,646,573	2,646,573	2,646,573	2,646,573	100%
Air Source Heat Pump	133,837	133,837	133,837	133,837	133,837	133,837	100%
Attic Insulation	828,823	828,823	828,823	828,823	828,823	828,823	100%
Central AC w/ PT	43,554	43,554	43,554	43,554	43,554	43,554	100%
CFLs	279,306	279,306	279,306	279,306	279,306	279,306	100%
Furnace	437,347	437,347	437,347	437,347	437,347	437,347	100%
Refrigerator	446,334	446,334	446,334	446,334	446,334	446,334	100%
Room AC	1,782	1,782	1,782	1,782	1,782	1,782	100%
Wall Insulation	94,271	94,271	94,271	94,271	94,271	94,271	100%
Total	4,911,828	4,911,828	4,911,828	4,911,828	4,911,828	4,911,828	100%

IHWAP and Energy Efficiency Portfolio Natural Gas Savings

Table 2-11 Summary of Therm Savings by Measure for Weatherization

Measure	TRM-Calculated		TRM-Calculated (Errata Corrected)		ADM-Calculated		Net-to-Gross Ratio
	Gross Ex Post Therm Savings	Net Ex Post Therm Savings	Gross Ex Post Therm Savings	Net Ex Post Therm Savings	Gross Ex Post Therm Savings	Net Ex Post Therm Savings	
Air Sealing	375,878	375,878	375,878	375,878	375,878	375,878	100%
Attic Insulation	168,487	168,487	168,487	168,487	168,487	168,487	100%
Furnace	143,342	143,342	143,342	143,342	143,342	143,342	100%
Wall Insulation	16,578	16,578	16,578	16,578	16,578	16,578	100%
Total	704,286	704,286	704,286	704,286	704,286	704,286	100%

IHWAP Training

Together with our training partners at the University of Illinois – the IREC-accredited, Indoor Climate and Research Training Center – IHWAP has developed curriculum to meet the needs of the ever-evolving building science industry.

IHWAP has taken many steps to improve quality and has mandated that all final inspection staff obtain the BPI Quality Control Inspector Certification.



™



TEST CENTER



A group of HVAC contractors in our state-of-the-art Mobile Furnace Lab

IHWAP Training U of I Training Center



IHWAP Training and Certification Program

TCP Certification Curriculum

- Weatherization 101
- Heat Transfer
- Building Fundamentals
- Building Diagnostics (Blower Door)
- Infrared and Mid-Course Assessment
- Heating Systems (Basic)
- Heating Systems (Advanced)
- Air Conditioning and Heat Pumps
- Health and Safety
- Comprehensive Building Assessment and Final Exam



IHWAP Quality Control Inspections

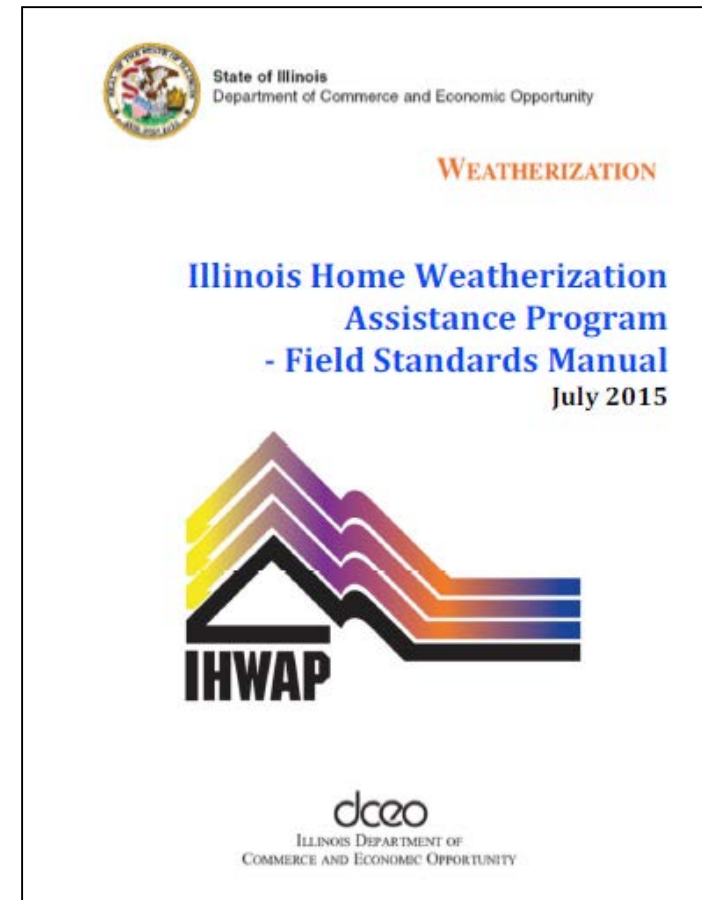
- All IHWAP final inspectors must obtain a Building Performance Institute (BPI) Quality Control Inspector Certification.
- All areas of the home are inspected to ensure that quality work was performed and that no qualifying measures were left out of the original scope of work.
- A multitude of health and safety tests are also completed before the home can pass a final inspection.



**CERTIFIED
PROFESSIONAL**

IHWAP Field Standards & Expectations for Quality

- IHWAP was one of the first states to implement a weatherization Field Standards Manual.
- The US Department of Energy has followed suit with the Standard Work Specifications.
- These documents set the minimum standards for all IHWAP weatherization work.



The Big 4 Energy Efficient Retrofits

Will Budgets Allow?

1. Air seal from top to bottom
2. Attic insulation
3. Wall insulation
4. High efficiency heating system replacement



Difficult Housing Stock

Solving efficiency issues in the Chicago Bungalow

- Injection foam wall insulation
- Proper finished attic air sealing



Difficult Housing Stock

Solving efficiency issues in mobile homes

- Insulation
- Duct sealing



Health and Safety

- ASHRAE 62.2
- Ground Moisture Barrier
- Correction of Combustion Appliance Venting
- Correction of Site Drainage Issues (Gutter Repairs and Sump Pump Replacement)
- Water Heater Replacement



Worker Health and Safety

- OSHA confined space
- Lead safe work practices
 - Protect the worker and the occupants
- Correction of minor issues to ensure worker safety
 - Stair repair, hand railing



Challenges of Working on Low Income Properties



Over 600 Deferrals in Cook County in PY 2016

- Dilapidated housing stock
- Existing mold and or moisture concerns
- Budgets don't always allow us to mend all of the ailments of a home
- Code compliance issues (municipality)
- Overcrowded or cluttered homes



Multi-Family Building Weatherization

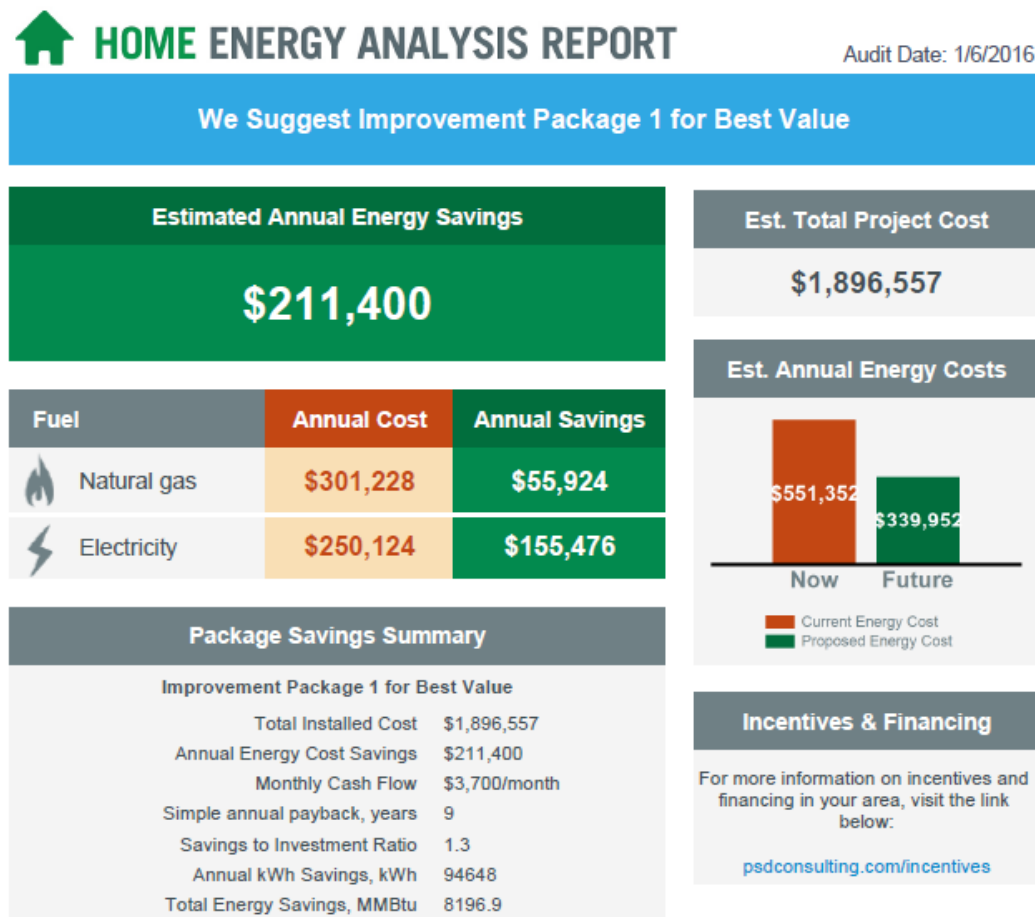
25% of IHWAP's annual production is comprised of 5+ unit multi-family buildings.

We are seeing some great results.



United Winthrop Cooperative

4848 North Winthrop, Chicago

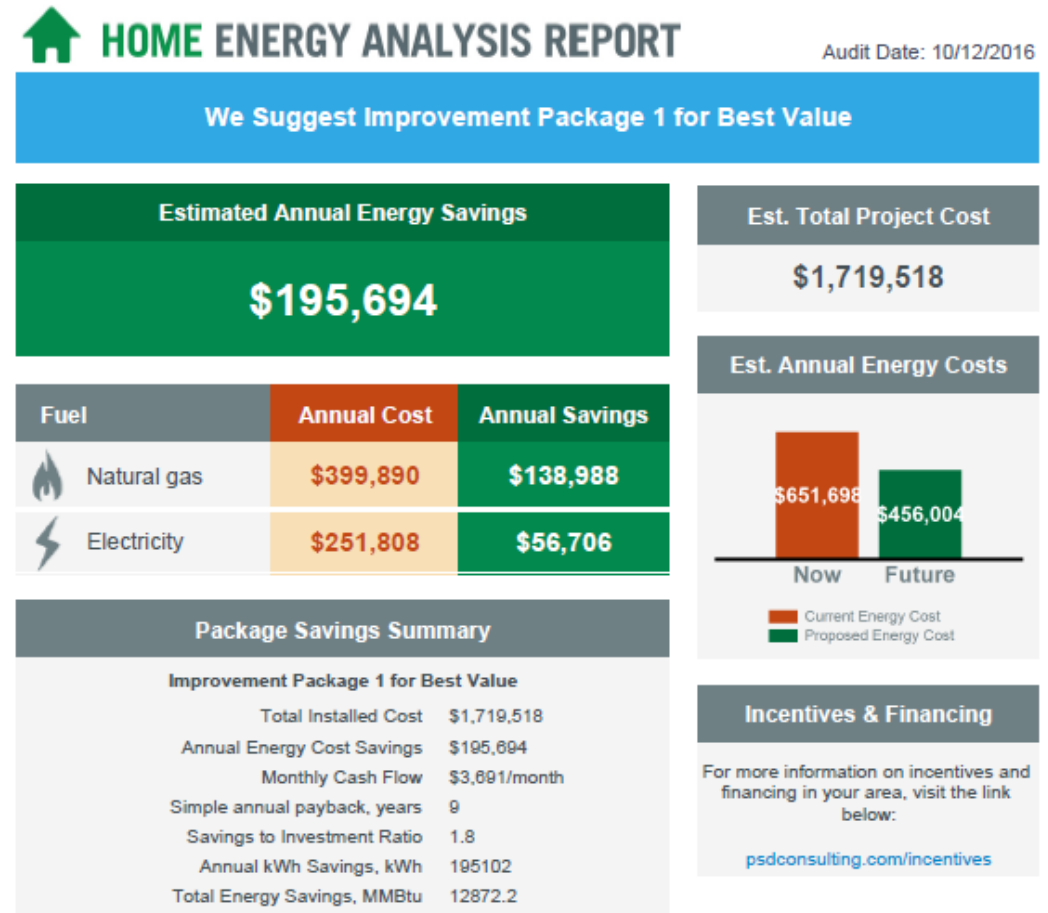


Multi-Family Building Weatherization

Another large Chicago Multi-Family project



707 West Waveland, Chicago



For more information

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