



Energy Efficiency in Affordable Housing: Experiences, Opportunities and Need

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Illinois SAG Meeting -January 31, 2017



ELEVATE ENERGY

Smarter energy use for all



Agenda

- Who are we serving?
- Illinois housing stock and affordability
- Progress to date
- Program design/owner needs
- Case studies
- Partnerships and the need



Who are we serving?

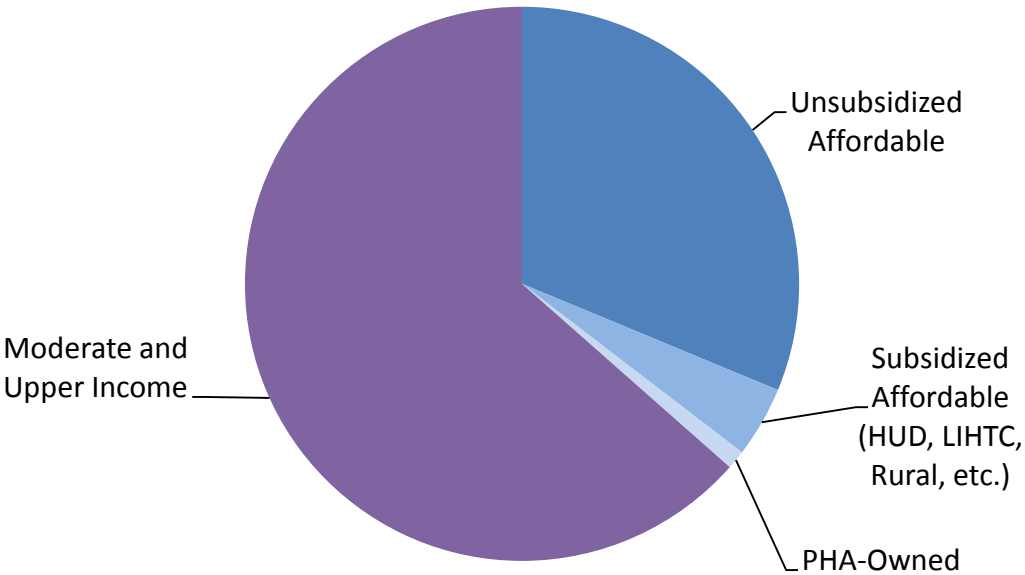
Affordable housing includes:

- Subsidized housing
 - Section 8; LIHTC, publically owned, privately owned
- Unsubsidized housing Market-rate
 - Affordable, but not subsidized, aka “naturally occurring affordable”
- Owner occupied 2-4 flat buildings
- Supportive living properties such as shelters, single room occupancy buildings, senior living facilities, etc.

<i>All Multifamily Housing</i>	<i>Upper Income Housing</i>	<i>Unsubsidized Affordable</i>	<i>Subsidized</i>
City of Chicago	49%	34%	17%
Illinois	50%	27%	23%



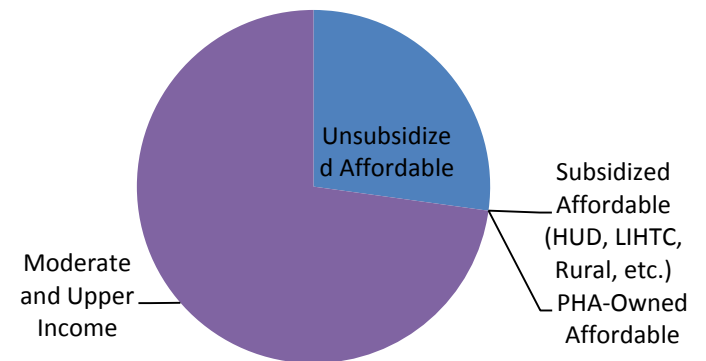
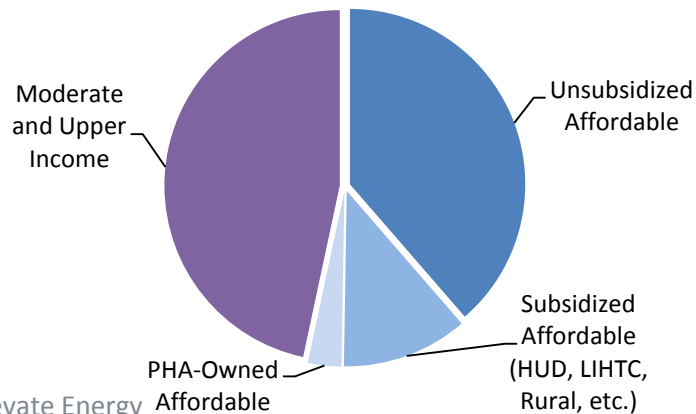
Illinois Housing Stock



Source: American Community Survey, 2013 5-Year Estimates

Illinois Multifamily (2+ Units) Housing Stock

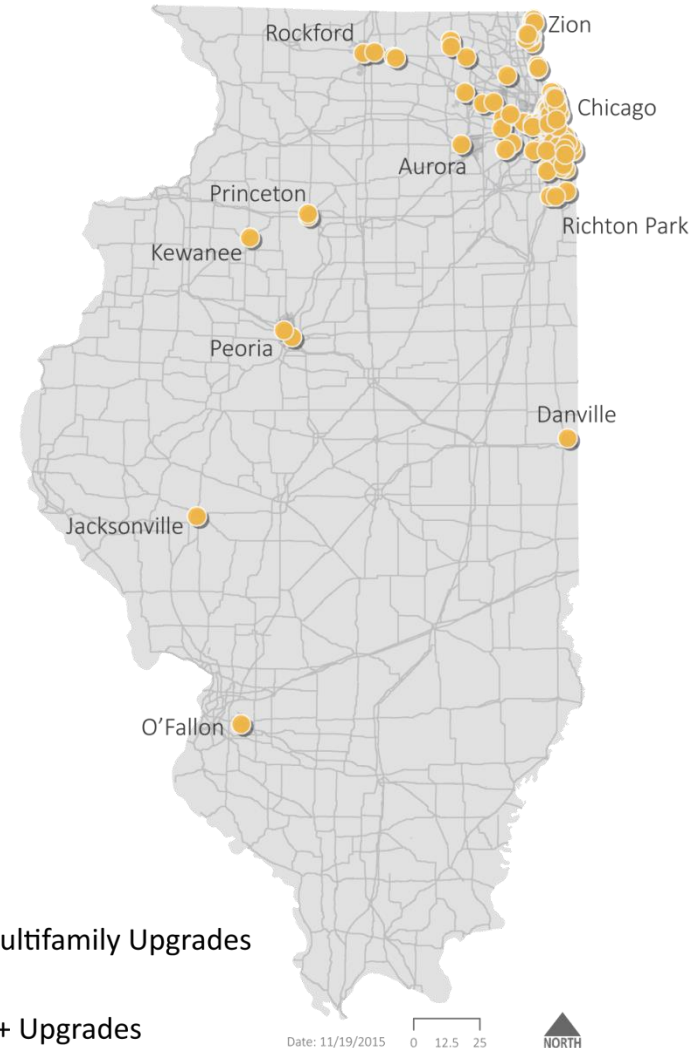
Illinois Single Family Housing Stock





Progress to Date

- 27,000 units retrofitted
- 6.5 million therms and 18 million kWh saved
- Typical savings 15-30%
- Over \$15 million in CIC loans
- \$15,000,000 in incentives processed





Program Design

Barriers

Key Program Design Elements

Limited awareness of applicable programs

Single point of contact to support owners throughout the energy upgrade process

Lack of energy use data and comparison benchmarks

Utility Benchmarking/Baselining

Lack of knowledge of cost-effective efficiency upgrades

Energy analysis, onsite building assessment, and cost-effective energy savings recommendations

Lack of access to low-cost capital and deeper rebates

Access to low-cost energy efficiency financing products and any available state, local, or utility incentives or grants

Lack of time and knowledge to oversee construction and ensure high quality work

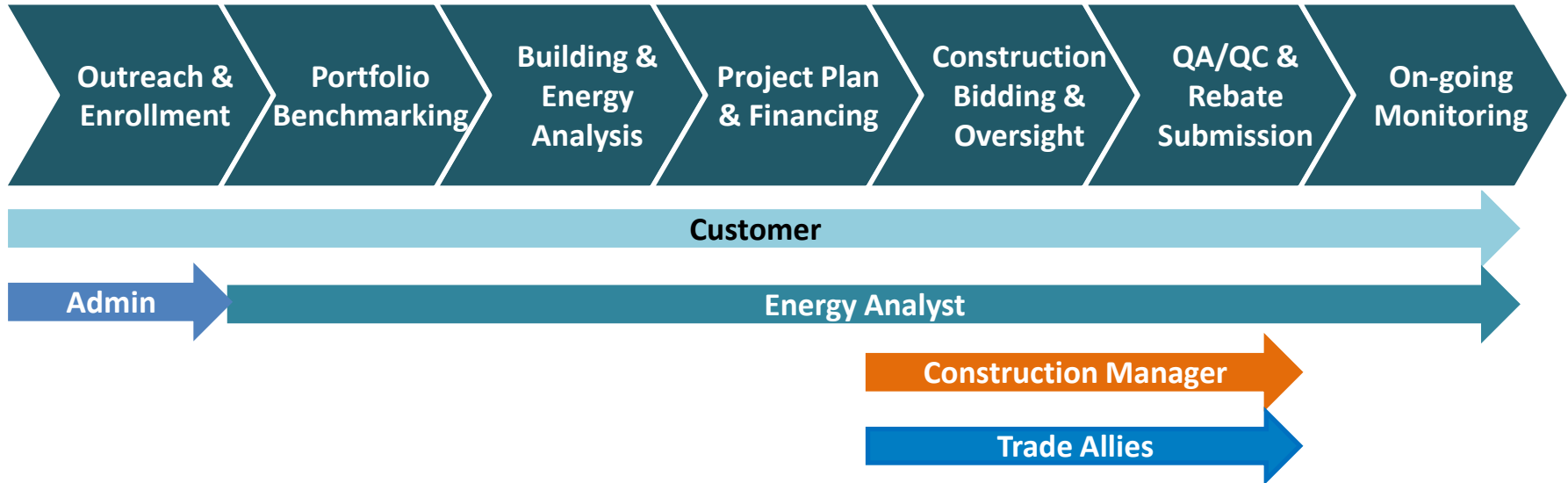
Contractor bid solicitation, construction oversight, and QA/QC provided

Lack of mechanisms to track post-retrofit savings

Post-retrofit energy use monitoring and reports



The Service Delivery Model



- **Robust data** to baseline energy use, estimate savings and monitor post-retrofit results
- High quality customer service through a **single point of contact**
- Strong construction management with **100% QA** of jobs



Three Critical Interactions

- **Building Site Visit and Energy Assessment**
- **Presenting the Building Energy Report and recommended improvements, costs and savings**
- **Managing proposal solicitation and construction oversight**





Getting to retrofit





Case Study – 7549 South Essex Ave, Chicago

Upgrades Completed

- Air sealing, roof cavity insulation
- Replaced aging, inefficient boiler
- Installed new boiler controls
- Water heater replaced with 95% efficiency rated unit
- Insulated heating and hot water pipes

From the Owner

“They did everything from inspecting the building and recommending the upgrades that could save the most money to helping me find qualified contractors and checking to make sure the work had been done right. On top of that, the financing options made it possible to make investments now that will pay off in the long term through lower energy bills.”



Building Overview

- 4-story, 23-unit
- Year of construction: 1925
- Heating system: natural gas fired steam boiler

Annual Savings: 37%/ \$9,600

Funding: \$85,000 low-cost loan from CIC



On not raising rents and the split-incentive

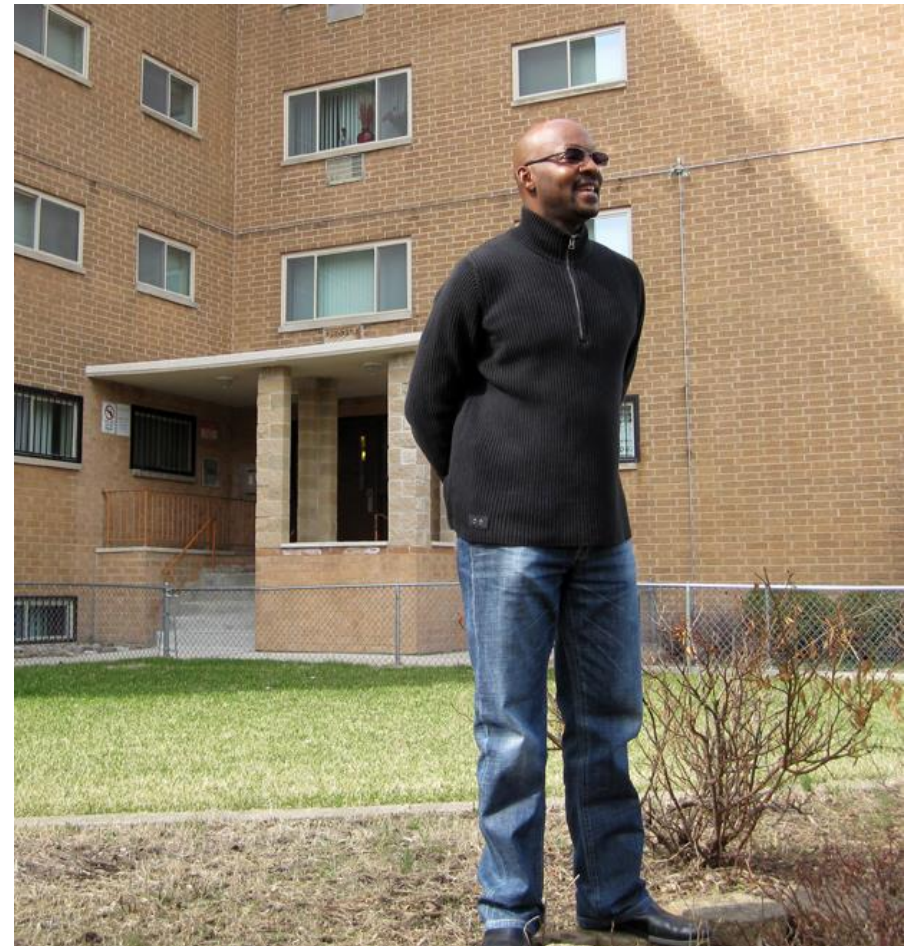
“You’ll have less turnover, you’ll be able to keep certain tenants for longer, even though they’re paying less rent...I would say that’s your biggest asset, is that it provides you stability...you have to have a core group of tenants, even in a troubled area. So I think it’s always important to...make it a little more affordable for them...”





Energy Efficiency facilitates capital improvements

“Two of the buildings that needed new parkways where I have parking, I ripped out all the concrete and put new parking pads. They’re parking for 5 cars, so it’s a big area... – around \$10,000 at each building. Which let me have the money to do that, just with the increased savings.”





Pipeline & partners

There are almost 2 million low income households in Illinois.
Reaching these household requires partnerships.



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A Rental Housing Strategy for Cook County

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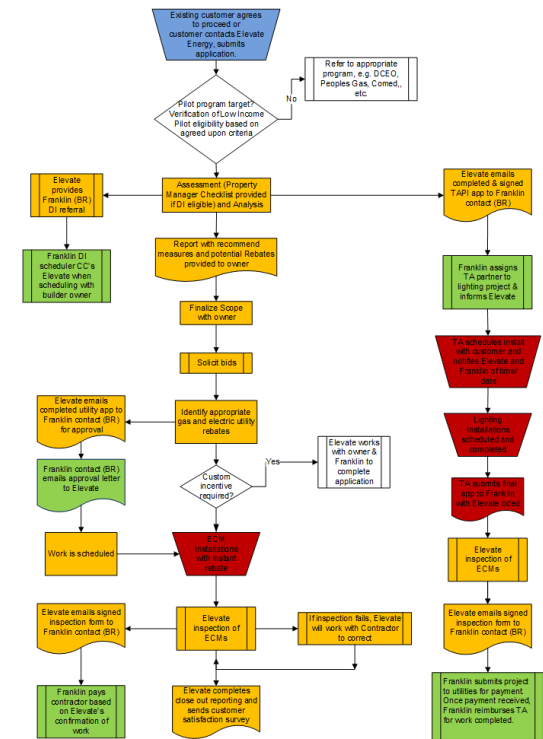
LISC
Building Sustainable
Communities



Current Low Income Pilot

- Started in January
- Target: 35 completed projects
- Close coordination with utility team on process, and customer care
- Conducting site visits in January and February
- Working to solicit proposals from contractors
- Customers following three paths, Trade Ally Program, Direct Install, Major Measures

Process flow: Peoples Gas and ComEd Low Income Pilot Multifamily Energy Efficiency Program



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Thank you, questions

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