

OUTREACH PILOT LEVERAGING BENCHMARKING OF INCOME ELIGIBLE MULTI-FAMILY PROPERTIES EXECUTIVE SUMMARY

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I.0 EXECUTIVE SUMMARY

In the City of Chicago (the City), large multifamily residential properties are subject to the Chicago Building Energy Use Benchmarking Ordinance¹. This ordinance calls on existing commercial, institutional, and residential buildings larger than 50,000 square feet to track whole-building energy use, report to the City annually, and verify data accuracy every three years. The mandate covers less than 1% of the City's buildings, which account for approximately 20% of total energy used by all buildings. This reporting process has revealed that many of these properties that are in income eligible areas have low energy performance relative to the Chicago median and could therefore benefit from undertaking energy efficiency improvements. The objective of this pilot was to determine if implementing an outreach strategy targeting underperforming properties subject to the City's benchmarking ordinance would lead to energy improvement projects through the utility incentive and rebate programs.

The Income Eligible Multifamily Savings (IEMS) program², a joint offering from ComEd, Peoples Gas, and North Shore Gas, provides for the installation of energy saving measures at low and no-cost to property owners. ComEd partnered with Elevate Energy (Elevate), a local nonprofit organization, to conduct targeted marketing and outreach and provide enhanced support to property owners interested in making energy efficiency improvements through offerings from the IEMS program. Elevate is also the Implementation Contractor (IC) for the IEMS program on behalf of ComEd, Peoples Gas, and North Shore Gas, and supports the City, an additional project partner, with the implementation of the Chicago Energy Benchmarking Ordinance.

The pilot's research design was similar to a randomized controlled trial to create the treatment and control groups. The hypothesis was that increased outreach efforts would motivate more property owners with low scores to improve their buildings' energy efficiency (treatment group), as compared with other low scoring properties not receiving similar outreach (control group). The outreach approach to treatment group properties focused on leveraging buildings' poor energy performance scores, in relation to the newly implemented Chicago Energy Rating System (ERS) requirements³.

Through this initiative, Elevate developed outreach plans and materials, including scripts and Frequently Asked Questions (FAQs), utilized by Elevate's call center. Elevate

¹ City of Chicago (2017). Office of the City Clerk. Amendment of Municipal Code Chapter 18-14 regarding energy benchmarking and implementation of energy performance rating system. Link: <https://www.chicago.gov/content/dam/city/progs/env/EnergyBenchmark/SO2017-7060.pdf>

² Elevate Energy (2020). Multifamily Energy Efficiency. Link: <https://www.elevateenergy.org/programs/multifamily-energy-efficiency/>

³ Through this new system, properties subject to the ordinance received an energy rating between zero and four stars (corresponding with ENERGY STAR scores). In addition, each property received their rating on a Chicago Energy Rating Placard via mail in late-September 2019. Through new mandates added to the existing ordinance, property owners are now required to (1) Post their placard in a prominent location at their property, and (2) Share the rating at the time of listing the property for sale or lease.

conducted outreach by mail, email, and phone to enroll interested properties in energy assessments and retrofits through the IEMS program, provided enhanced customer support, and closely monitored progress on property actions and related activity (i.e. follow-ups) during the test period from July 2019 to February 2020; during this period Elevate tracked participation in utility incentive programs, progress of projects implemented, and resulting energy savings.

These outreach efforts resulted in (1) nine total properties taking initial action in submitting an application to receive an energy assessment, and (2) conducting free energy assessments at seven of these properties. One multifamily property that submitted an application was found to not be in an income eligible census tract and forwarded to the appropriate market segment program provider (Franklin Energy). Another property submitted an application in the final week of the test period and is in review. As part of the evaluation criteria it was determined the hypothesis would be supported if Elevate (1) administered free energy assessments at up to 19 properties (approximately 27% of 69 total treatment group properties; or twice the observed engagement rate from the twelve months prior to the study) or (2) achieved a substantially higher engagement rate than the control group. The former was based on the assumption that during the test period the control group would see similar engagement rates observed for this target audience in the twelve months leading up to the initiation of this pilot (approximately 13%), which was not evident during the test period (approximately 2%). Thus while the nine total engaged properties to date (approximately 13%) is smaller than anticipated, this engagement rate is substantially higher than the 2% engagement rate in the control group in the same time frame. This supports the hypothesis that increased outreach efforts would motivate more property owners with low scores to improve their buildings' energy efficiency.

Table 1 below highlights metrics discussed as part of the research design evaluation as well as other available/relevant metrics for the treatment group compared to the control group for this test period.

Table 1. Treatment vs Control Group Metrics

Metric		Treatment	Control
Total Properties		69	55
Applications Submitted (% of Total Properties)		9 (13.0%)	1 (1.8%)
SERVICE STAGE	Application in Review	1	1
	Cancelled	1	0
	Assessment and Analysis	5	0
	Soliciting Contractors	2	0
	Construction and Oversight	0	0
Number of Residential Units (Assessed)		913	0
Identified kWh Savings		152,757	N/A
Identified Therm Savings		29,986	N/A
In Process kWh Savings		20,631	N/A
In Process Therm Savings		N/A	N/A
Completed kWh Savings		N/A	N/A
Completed Therm Savings		N/A	N/A
Completed Project Costs		N/A	N/A
Completed Total Incentive		N/A	N/A

Additional information on pilot effectiveness was gauged through qualitative review of the positive impacts through a quick one-question survey (Table 2) issued to contacts that moved forward with receiving an energy assessment and/or projects recommended. This survey was requested from property contacts at the completion of having received an energy assessment and/or project recommendation. The survey was issued to five total property contacts (representing the seven total properties to have received their energy assessment at the conclusion of the test period), yielding three total responses.

Table 2. Participant Survey Results

What was the primary (and secondary if applicable) motivating factor for you to take part in this program?	
A) To improve ENERGY STAR® score/Energy Rating	1
B) To lower my utility bills	2
C) No or low-cost offering	1
D) Special attention/catered service	0
E) Past relationship with Elevate	1
F) Other (please provide details as needed)	0

The most common primary motivating factor for taking part in the program was found to be lowering utility bills, with one contact stating- "I believe the true reasons for Sandwich Manor to participate in this program was a mixture of A and B. We updated fixtures to be more energy efficient and since then have seen a reduction of the cost of our ComEd bill. Thank you for this service."

Two key factors that limited a higher success potential for this pilot were the size and quality of the outreach list. Elevate started with a list of 1,391 total benchmarking multifamily properties. Elevate then filtered for energy performance below an ENERGY STAR score of 75 (523 total multifamily properties), thereafter for income eligible census tracts, resulting in 171 total income eligible multifamily properties with ENERGY STAR scores below 75. After filtering out properties which had recently participated in utility rebate or incentive programs (24 total), properties with ongoing work (13 total), and properties with ENERGY STAR scores exceeding 75 for the following reporting year (10 total), this led to a reduced list of 124 total target properties (Figure 1) to be split in the treatment and control groups. The decision to adjust the criteria from ENERGY STAR scores at or below 64 (the Chicago median) to below 75 was made in an effort to increase the size of this list, after these same filters were applied for income eligible multifamily properties with ENERGY STAR scores at or below 64, resulting in an initially reduced list of 111 total target properties.

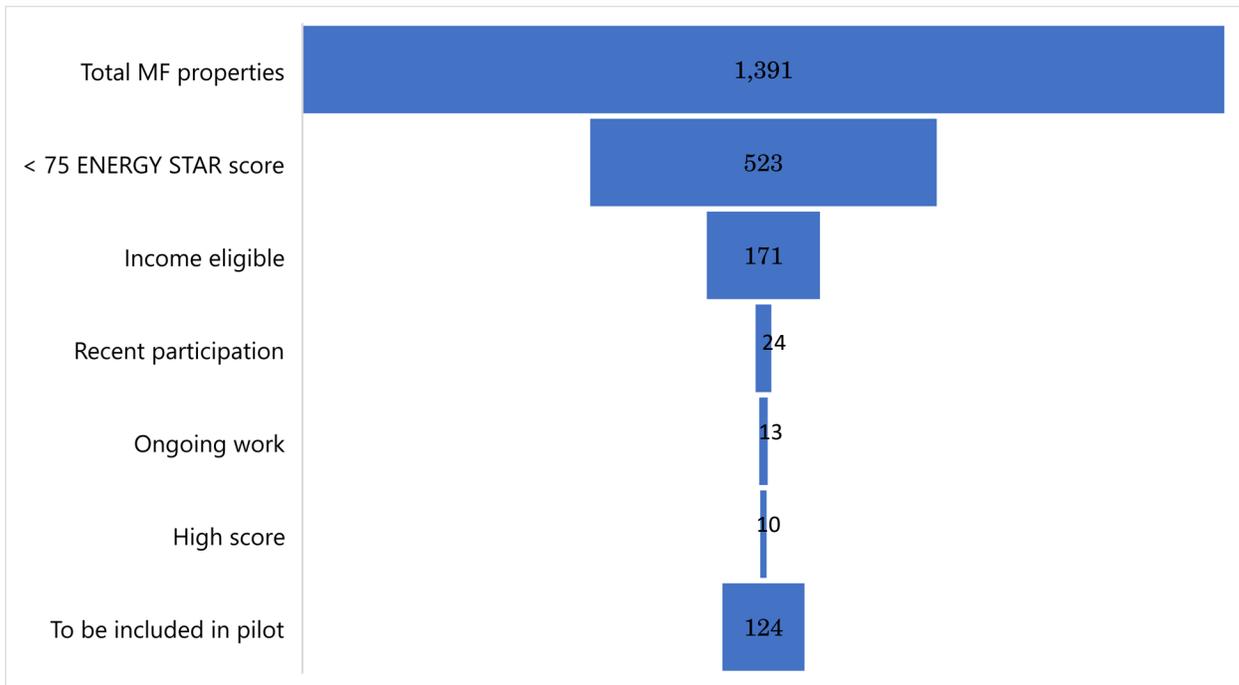


Figure 1. Pilot properties filtering process

Additionally, the City's benchmarking contacts database contained a notable amount of outdated primary and secondary contacts (i.e. phone lines no longer in service, email domains no longer valid, etc.). This led to an outreach scenario where approximately 20% of properties in the treatment group were not reachable (appropriate contact not found). When not accounting for these properties, in addition to properties that were unresponsive to outreach, the results may be interpreted as roughly 23% of reachable properties were successfully engaged to submit an application (nine out of 40, as opposed to nine out of 69). Thus beyond being a direct barrier to outreach efforts, the quality of the contact list also poses challenges to evaluating the results of this pilot.

Building on the key outcomes and lessons learned of this pilot, effective next steps include additional testing in different market segments (i.e. market rate multifamily, commercial, etc.) and to a larger population of underperforming buildings. Testing additional market segments would serve to study the overall effectiveness of the broader approach (outreach to benchmarking properties). The market rate multifamily market segment may be best suited, since there is both a larger population of underperforming buildings (approximately 290 total properties with ENERGY STAR scores at or below 64) and the City's benchmarking contacts database likely contains a higher rate of appropriate contacts relative to commercial properties. It is assumed that a large majority of the City's benchmarking contacts for commercial properties are benchmarking service providers as opposed to property managers, since the benchmarking reporting process becomes more complex for large commercial properties with various tenants, occupancy use types, and layers of management. Since individual emails or phone calls, which gave recipients a one-on-one experience, was found to be the most effective outreach strategy in this pilot, testing a more aggressive and personal outreach experience may yield best results. This strategy required a higher level of effort –however, it led to a substantially higher engagement rate for the treatment versus control group properties. Similarly, utilizing a more hands-on and hand-holding approach led to engaged properties moving more quickly through service stages toward completing projects. Including a larger population of underperforming buildings addresses one of the key limitations of this pilot, the small outreach list. A larger population would also avoid situations in which a majority of properties have above-average energy performance.

An additional untapped market segment is income eligible buildings between 25,000 and 50,000 square feet. These buildings are not required to benchmark per the City's ordinance but make up a larger number of buildings, since approximately 3,500 total multifamily properties fall in this property size cohort (relative to 1,391 total multifamily benchmarking properties). Additionally, the ENERGY STAR scores for these buildings would be expected to be generally lower than our test group due to potential lack of energy use data and building performance. An approximate 60% of total benchmarking multifamily properties with ENERGY STAR scores above 75 indicate a high awareness of energy performance and proactive action. A pilot, which offers voluntary benchmarking

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services tied to receiving an energy assessment for income eligible buildings (i.e. 100 total) could be tested. Other municipalities, such as the city of Evanston, have already begun to implement or are considering an energy benchmarking ordinance, thus could be an opportunity considered in the future as municipalities potentially adopt across ComEd's service territory. Exploring the use of alternative resources such as CoStar's products for commercial and multifamily databases, which include real-time data for contacts associated with properties, may increase the success potential of testing across commercial and market rate multifamily market segments.