CY2018 Affordable Housing New Construction Program

CY2018 Process Evaluation Report

NAVIGANT

Submitted to:
ComEd
Nicor Gas
Peoples Gas
North Shore Gas

Submitted by:
Mallika Jayaraman
Cherlyn Seruto
Chelsea Lamar
Nicole DelSasso
Beth Davis
Bridget Williams

May 15, 2019

Table of Contents

01 Program Details

02 Process Evaluation Objectives

03 Developer Interview Results

04 Findings and Recommendations

01

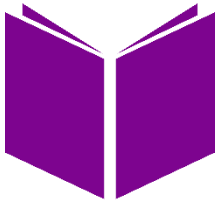
Program Details

What are the program goals?

To lower utility bills and to improve comfort for income-eligible customers by incentivizing single family and multifamily affordable housing owners and developers to construct energy-efficient buildings.

THE PROGRAM DOES THIS BY:

Providing technical assistance and incentive funding to affordable housing owners and developers for both new buildings and major renovations.



Educating affordable housing owners and developers in the development of affordable housing on cost-effective energy efficient building practices that can be included in building construction.

Setting program standards to achieve significant savings over the 2016 Illinois Conservation Code Baseline.

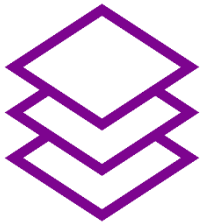
Source: ComEd 2018-2021 Energy Efficiency and Demand Response Plan

What is the purpose of the program?

The Affordable Housing New Construction Program provides incentives for energy-efficient construction and major renovation of affordable housing for both single family and multifamily properties.

THE PROGRAM IS JOINTLY OFFERED BY COMED, PEOPLES GAS (PGL), NORTH SHORE GAS (NSG), AND NICOR GAS (NG) AND INCLUDES:

Technical assistance



Three participation levels: major renovation, new multifamily, and new single family

Eligible projects are targeted at or below 80% of Average Medium Income (AMI) level

How has the program changed in CY2018?

This program is a continuation of the affordable housing new construction program previously administered by the Illinois Department of Commerce and Economic Opportunity (DCEO).

Prior to CY2018, the program was operated by the DCEO on an annual cycle from June to May, termed program years (PY). A bridge period transitioned from the old program year cycle to the new calendar year occurred from June 2017 – December 2017.

ComEd, Nicor Gas, Peoples Gas, and North Shore Gas began offering the program jointly during the PY9 Bridge period from June 2017 to December 2017 to the present. The program remained largely consistent with the DCEO offering in terms of program design and intent, but in CY2018, several programmatic changes were made to streamline program documentation and processes.

Energy efficient building practices emphasized in the program include high insulation levels, air sealing, controlled ventilation, and high efficiency HVAC systems.

How did the program perform relative to savings targets?

- Both ComEd and Nicor Gas exceeded their targets
- Peoples Gas did not reach its target, yet the program manager states these targets are flexible within the residential portfolio and is confident the entire residential portfolio will reach its target*.
- North Shore Gas did not have a stated AHNC target to reach, as there has been very low developer interest in developing any AHNC projects, due to the demographics and zoning of the territory. The program manager stressed they are enthusiastic to support an AHNC project in the future should the opportunity arise.

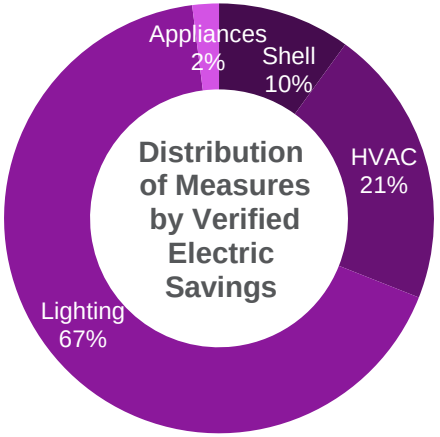
	2018 Gross Energy Saving Goal†	2018 Ex Ante Gross Energy Savings‡	Percent of Goal	Number of 2018 Projects
ComEd	1,879,000 kWh	2,054,612 kWh	188%	9
Nicor Gas	23,450 therms	26,033 therms	111%	3
Peoples Gas	61,000 therms	48,252 therms	79%	6

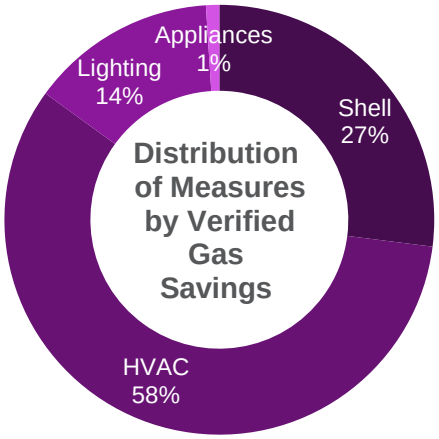
*Source: Program Manager Interview with Peoples Gas / North Shore Gas (August, 2018)

†Sources: ComEd 2018-2021 Energy Efficiency and Demand Response Plan, Program Manager Interview with Peoples Gas / North Shore Gas (August, 2018)

‡Source: Navigant 2018 Impact Reports

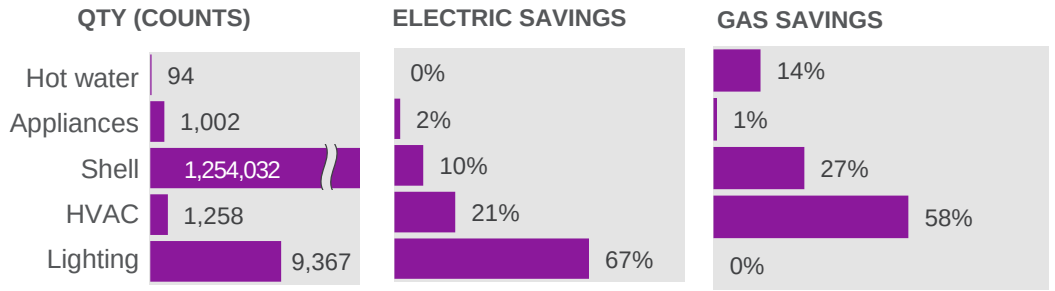
Program Participation in CY2018*



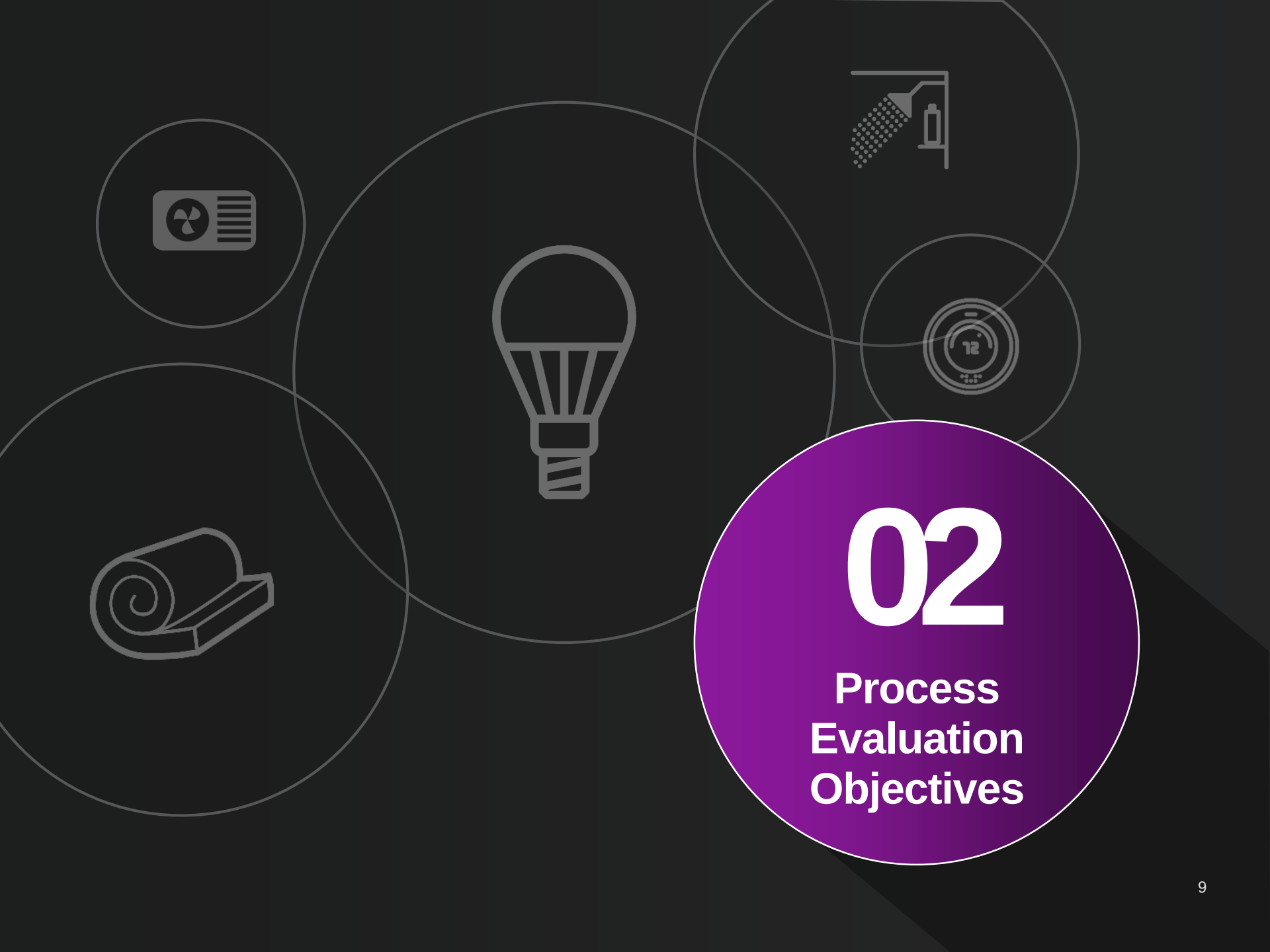


The nine AHNC Program CY2018 developers installed measures distributed among 689 income eligible residential units as shown in the following table. Measure categories are summarized into the following groups for the purpose of impact analysis and reporting: Shell (includes air sealing and insulation measures), HVAC (includes ventilation, heating, and air conditioning measures), and Lighting, Appliances, and Hot Water measure categories. As the program is designed to increase whole-building level savings, these individual measure type savings summaries should be considered for illustrative purposes only, as the program is designed so that the combined measures work together to influence the efficiency of the entire building as a whole. The majority of electric savings come from lighting–related measures, and the majority of gas savings come from HVAC measures.

Participation	Quantity	Units
Number of Units	689	Residential Units
Shell (Air Sealing and Insulation)	1,254,032	Includes a combination of measures (windows, thermal bridging, and infiltration) provided in units of square footage and cubic feet per minute (cfm)
HVAC	1,258	HVAC System
Lighting	9,367	Lamps
Appliances	1,002	Appliances
Hot Water	94	Water heaters



Source: Navigant Draft Joint Utility Affordable Housing New Construction Impact Evaluation Report, March 14, 2019.



02

Process Evaluation Objectives

Process Research Objectives

01

How did developers become involved with the program?

02

Why did developers participate?

03

What are participants' perspectives and overall satisfaction with the program?

How did CY2018 transitional changes impact the program?

04

How is the program affecting efficient construction techniques?

05

How can the program be improved? Are there changes or improvements which could be made to the educational component of the program?

Process Research Activities – how did Navigant gather data to achieve the objective?

Primary Research

Program Manager Interviews

- One at each utility

Slipstream Interview

Developer Interviews

- 10 responding developers

Secondary Research

Database Review

03

Developer Interview Results

What are the developer characteristics?

Out of 31 developers with projects started in PY9 or CY2018, ten developers responded to the interview request. Navigant assessed responses by activity level and by the program year(s) in which developers participated. Interviewed developers participated in the following program years:

- PY9 bridge* projects only: 6 responding developers
- CY2018 projects: 3 responding developers
- PY9 bridge period and in CY2018: 1 responding developer

The table below shows the characteristics of developers interviewed compared to the total population. Moderate and high activity level developers are over-represented in the sample as designed, as those with higher rates of participation were assumed to have greater potential for helpful insights into program operation. The developers interviewed also had slightly higher representation of projects in 2018 compared to the PY9 bridge period, however, the ratio of active projects to total projects† was within two percent of the population.

	ACTIVITY LEVEL			PROGRAM DESIGN YEAR		PROJECT COUNT	
	Low (1-2 projects)	Moderate (2-4 projects)	High (5+ projects)	PY9 bridge project	2018	# Total†	# Active Projects
TOTAL Developer Population	21	6	4	23	8	99	79
Developer Interview Respondents	4	4	3	7	4	67	52
Percent of Total Population in Each Category	**68%**	**19%**	**13%**	**74%**	**26%**	**80% Active**	
Percent of Sample Population in Each Category	**36%**	**36%**	**27%**	**64%**	**36%**	**78% Active**	

*PY9 Bridge period consisted of dates from June – December of 2017, accounting for the transition from the DCEO program year to the 2018 Calendar Year.

†Total Projects = Active Projects + Completed Projects

Source: CY2018 Affordable Housing New Construction Process Evaluation Developer Interviews, Jan 2-Feb 12 2019.

1. How did developers become involved with the program?

All 10 developers interviewed stated their organizations had long standing historic knowledge of the program.

Program managers also stated their perspective that there is a relatively small community of developers.

- The program was initially marketed via word of mouth, but Slipstream is shifting towards marketing the program to more diverse sources with the goal of generating more projects.

Source: CY2018 Affordable Housing New Construction Process Evaluation Developer Interviews , Jan 2-Feb 12 2019.

2. Why do developers participate?

3

Developers mentioned concern about the higher energy saving standard required by the utility version of the program compared to DCEO, and if the higher cost of implementing this standard would be justified by related energy savings achieved

4

Stated no concerns

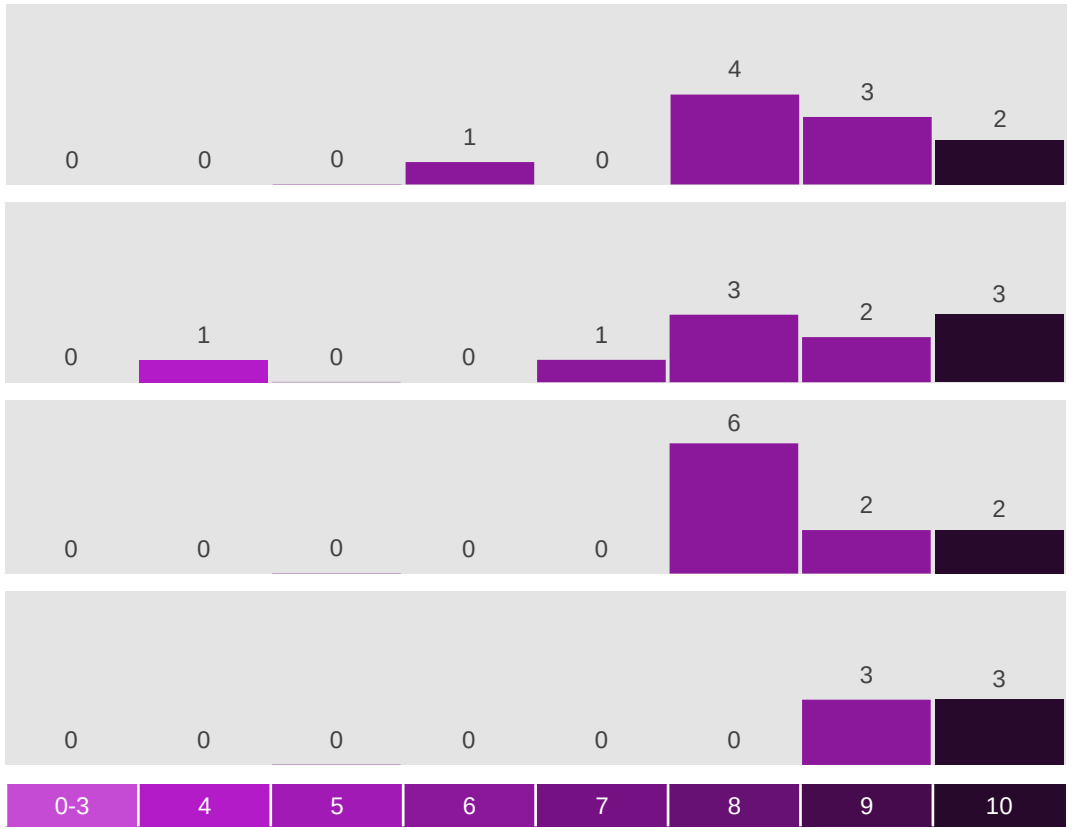
3

Developers were concerned that funding for the program offering would remain available

Source: CY2018 Affordable Housing New Construction Process Evaluation Developer Interviews , Jan 2-Feb 12 2019.

3. What are developers' perspectives and overall satisfaction with the program?

Program satisfaction averages above an 8 for all: communication with DCEO, the utilities, technical support, and the application process



Source: CY2018 Affordable Housing New Construction Process Evaluation Developer Interviews , Jan 2-Feb 12 2019.

3. What are developers perspectives and overall satisfaction with the program?

(continued)

What is developer satisfaction with program components?

Satisfaction is high at over 8 on average for both DCEO, the Utility, and the Application process, ranging from an average response of 8.3 to 8.6 on a scale of 0 to 10 where 0 indicates “extremely dissatisfied” and 10 indicates “extremely satisfied”.

Satisfaction is highest for the technical support provided by the program. Only six of the ten responding developers answered this question, as two developers with CY2018 projects only, and two with PY9 projects, stated they had no applicable experience with technical assistance from Slipstream.

How satisfied are developers with the Utilities versus DCEO, the former program operator?

Satisfaction regarding communication with the utility appears lower than satisfaction with DCEO communication, but this is due to one of three developers ranking the utility as a 4 compared to an 8 for DCEO. The other two developers rated satisfaction with DCEO similarly to utility satisfaction. The developer with lower satisfaction appears to have been highly influenced by the transition period, stating the rationale for the low rating is the shifting deadlines of the utility have made it impossible for them to work with their other funding sources.

Source: CY2018 Affordable Housing New Construction Process Evaluation Developer Interviews , Jan 2-Feb 12 2019.

3a. How did CY2018 transitional changes impact developer program experience?

While hurdles existed due to the transition from DCEO, most developers feel program updates were well communicated and program satisfaction remains high, particularly with Slipstream technical support.

Five of the seven responding developers with PY9 bridge projects mentioned difficulties with shifting requirements as a result of the transition period, though the high satisfaction with Slipstream technical support and developer open ended comments indicate these updates were well communicated, and developers are optimistic about the transparency of program requirements going forward.

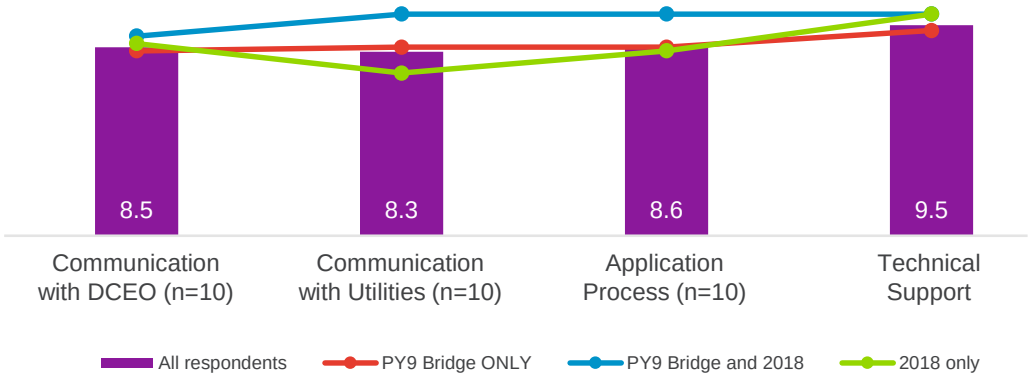
To assess whether or not the transition had an impact on satisfaction, Navigant analyzed satisfaction results by project cycle. The dots represent the average response by program year for developers that participated during the transition period during PY9 bridge period only (6 developers), during the PY9 bridge period and in 2018 (1 developer), and only in 2018 (3 developers).

Note satisfaction numbers are generally higher for the one developer that has a PY9 bridge project as well as a CY2018 project. **These results indicate developer satisfaction has not been negatively affected by the transition period.**

> "I'm caught in the middle of state requirements and utility requirements for a particular project, but it's likely to be better from the get go now."

> "The utility difference is that it is more than just a program, it is education. They are doing more energy efficiency seminars. DCEO didn't do this."

Satisfaction compared to bridge transition period experience



Source: CY2018 Affordable Housing New Construction Process Evaluation Developer Interviews , Jan 2-Feb 12 2019.

4. How is the program affecting efficient construction techniques?

Five developers stated their buildings would be less efficient without program funding and educational opportunities

> "Program has always absolutely incentivized energy efficiency. Having cash has certainly helped make it happen and it has been a very successful program. I don't know of any affordable housing that has not been built to some green or sustainable standard through a program like this."

Five developers stated their buildings would be same efficiency without program funding and educational opportunities, but that it would be more difficult to fund projects

> "It depends on the jurisdiction within the state. City of Chicago has a much higher set of requirements for building in the city, so not there, but it helps outside the City of Chicago and gives more flexibility."

Responses did not correlate to size of developer or stage in project cycle

Source: CY2018 Affordable Housing New Construction Process Evaluation Developer Interviews , Jan 2-Feb 12 2019. Developers were asked: "If the program did not exist, how would your affordable housing projects be different?"

5. How can the program be improved?

Financing / Cost Effectiveness

> "I'd like more data about whether or not the cost of the standard is justified by energy savings."

Throughout the interview developers had the opportunity to provide suggestions for improvement. Navigant asked them to explain their reasons for their satisfaction ratings with the application process, and the program technical support. Navigant also asked what program changes would make it easier to participate, and if they had any suggestions to improve their experience with the program. Navigant summarized these open-ended responses by developer into two key themes. The first theme is financing and cost effectiveness. While funding is noted as the main reason to participate*, most mentioned suggestions for improvement related to the themes of financing and cost effectiveness, with 11 mentions from 7 out of 10 developers suggesting improvement in the three categories shown.

Concern	Rationale	Count of Mentions
Timeline for receiving funding, and funding amount, is not clear	Developers receive the majority of their funding from Illinois Development Housing Authority (IDHA), and need commitment letters from other funding sources, such as utility funds, to receive points which help prioritize funding for their IDHA application. The AHNC Program incentive is not currently eligible for points under the IDHA system.	5
Tax consequences of AHNC incentive contract	Depending on the funding stream, project expenses may be taxed. The AHNC contract requires the account be assigned to an entity in the project financing partnership that may be susceptible to increased taxation.	3
Cost effectiveness of energy efficiency upgrades	Three developers mentioned they would like to see more data related to whether or not the additional effort pays off. On the other hand, one developer stated they go above and beyond standards and envision more doing so if they are positively incentivized.	4

Source: CY2018 Affordable Housing New Construction Process Evaluation Developer Interviews , Jan 2-Feb 12 2019.

*Slide 16

5. How can the program be improved?

(continued)

Information Storage and Collection

The second most commonly mentioned theme for program improvement relates to information storage and collection, with 6 mentions by 5 out of 10 developers suggesting improvement in the three categories shown. These 5 developers collectively rated their satisfaction with the application as an 8.6, demonstrating that while these developers are satisfied with the program, there is always room for improvement. Three mentioned the program documentation review cycle seems duplicative, and would appreciate a more streamlined process. One developer mentioned the requirements or criteria are not possible with other funding sources. The remaining 7 developers gave positive responses to the application and review process.

PROGRAM DOCUMENTATION REVIEW CYCLE

7 positive comments about current state

"Communication was adequate and very detailed. Grandfathering in from old standards to new involved clear communication and updates"

"I had communication issues with older grants and requirements, and like the new ComEd electronic application, [it is] much less cumbersome than previous [DCEO application]"

3 developers recommended program improvements

Review cycle seems duplicative, especially the substantiation checklist. (3 mentions)

Forms are not structured the same which increases the time in filling them out. Please work to increase commonality among forms. (1 mention)

There are requirements / criteria that are not possible with other funding sources. Request that ComEd aligns with other programs or makes sure that this program does not conflict with other standards or codes. (1 mention)

"The dimming of corridor lights is an issue at older properties because they would not accept a building where dimming is something they want to implement because of natural conflicts (light visibility or safety)"

Frequency of Reporting Requirements – annually or bi-annually preferred. (1 mention)

Source: CY2018 Affordable Housing New Construction Process Evaluation Developer Interviews , Jan 2-Feb 12 2019.

5. How can the program be improved?

(continued)

Are there any energy efficiency or indoor environmental measures you would like to see better addressed by the program standard? Which measures would you like to see refined, and why?

In addition to suggestions for program improvement, two developers suggested additions to measures when prompted:

Ventilation: “In my recent experience it has been ambiguous (even my architects have struggled with it.).”

Indoor Air Quality: “I’m not certain if the program is addressing it currently, if not I’d recommend [doing so].”

Source: CY2018 Affordable Housing New Construction Process Evaluation Developer Interviews , Jan 2-Feb 12 2019.

04

Findings and Recommendations

Findings and Recommendations

FINDING 1

Program satisfaction remains high, particularly with Slipstream communication.

FINDING 2

Five of the seven responding developers with PY9 bridge projects mentioned difficulties with shifting requirements as a result of the transition period, though the high satisfaction with Slipstream technical support and developer open ended comments indicate these updates were well communicated, and developers are optimistic about the transparency of program requirements going forward.

RECOMMENDATION 1

Navigant recommends Slipstream continue to provide proactive communication to developers throughout the application process. In CY2019, Slipstream hired an additional staff member to increase proactive communication with developers and to bring more developers into the program.

FINDING 3

One developer achieved a higher level of energy efficiency standard than the program required, and suggested additional funds be made available to incentivize achievement to successively higher levels of energy savings.

RECOMMENDATION 2

Utilities can also incentivize increased efficiency by designating additional funds if developers achieve a higher energy efficiency standard such as passive house. Navigant acknowledges that utilities stated this is under consideration for 2020.

FINDING 4

Developers would appreciate a more streamlined, less repetitive review process.

RECOMMENDATION 3

Review required documentation to reduce duplicative or unnecessarily repetitive requests. Navigant recommends a participant journey mapping analysis to help identify areas of improvement in the program participation process.

Findings and Recommendations

FINDING 5

Developers participate in this program for the incentive, however the transparency of the amount of the incentive and the timeline for which it will be received was noted as an area for program improvement. Since developers depend on certain funding sources to secure additional funding, increased transparency and reliability would greatly improve their program satisfaction.

RECOMMENDATION 4

Utilities and Slipstream should revisit the contract structure process to help developers streamline the application and payment process, and work with owners and developers to ensure contractual requirements reduce tax consequences of this funding source. Navigant recommends a participant journey mapping analysis to help identify areas of improvement in the program funding allocation process.

FINDING 6

There is a relatively small community of developers. The program was initially marketed via word of mouth, but Slipstream is shifting towards marketing the program to generate more projects.

RECOMMENDATION 5

Continue to deliver the program as designed but consider additional research to determine what market exists for market rate developers to get involved in AHNC programs. The evaluation team supports the program's plans to expand program marketing such as developing strategic partnerships with housing authorities.

FINDING 7

Most developers found the higher efficiency requirements of the bridge period challenging, and are concerned if the ROI of the additional energy efficiency requirements are worth it.

RECOMMENDATION 6

Navigant recommends utilities and Slipstream develop a plan to communicate cost benefit examples as a result of participation in the AHNC Program. A participant journey mapping analysis may also identify key areas in the program participation lifecycle to focus on increased education.