

XCEL ENERGY

Colorado Single Family Weatherization Product Process Evaluation

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Introduction

Xcel Energy contracted with EMI Consulting to evaluate the 2018 Single Family Weatherization Product in Colorado. The product, in coordination with partner organizations, seeks to achieve energy savings and help income-qualified, single-family residential electric and natural gas customers lower their energy bills by supporting free weatherization services. The services involve a full home audit, installation of qualified energy efficiency measures—including health and safety measures—and education on energy saving practices.

As part of the evaluation, EMI Consulting assessed participating customers' satisfaction with the product, attitudes regarding the customer feedback process, and barriers faced and value provided by participating in the product. The evaluation team also assessed how similar products are implemented within the United States. This summary includes the key findings and recommendations from our evaluation.

Methods

Participating Customer surveys (n=70)

Peer program benchmarking interviews (n=6)

Fielding:

July 2019 – Sep 2019

Summary of Findings



Participating customers were **generally satisfied** with the product; they were **most dissatisfied** with the **education received** and **length of time between approval and installation**.



Word-of-mouth marketing is key to raising product awareness, and participating customers reported **strong preferences about email and phone communication**.



Customers' most common **motivations** for participating were **financial**.



Major barriers include the **time commitment required to participate** and **knowledge gaps about the product offering**.

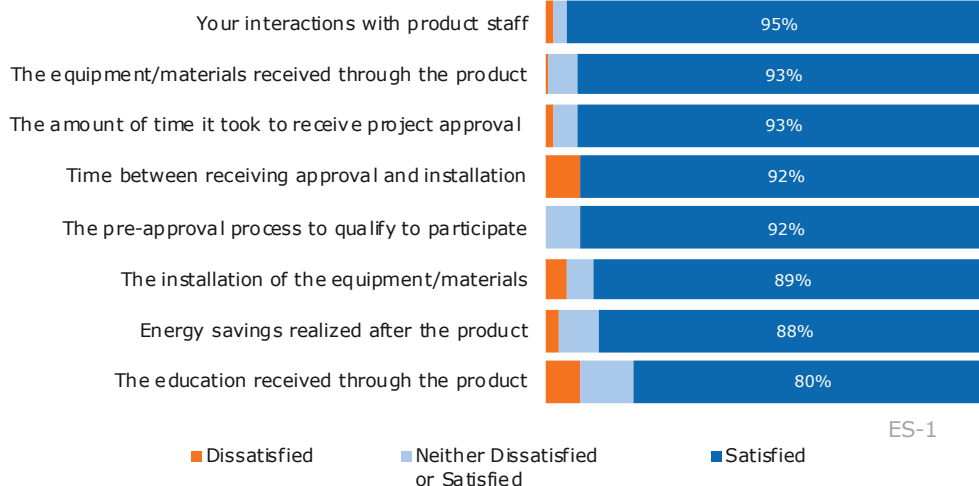
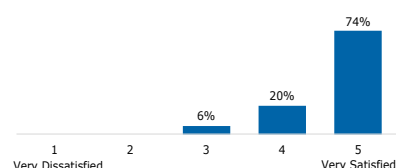


Most participating customers found the **implementation process was easy** with only a few challenges.

Satisfaction with the Product

Participating customers are satisfied.

Participating customer satisfaction with the overall product is very high with an average of 4.7 and no dissatisfied responses.



Awareness



Participating customers primarily learned about the product from a **member of their local community** or an **organization with which they were already connected**.



Email and phone were both the **topmost preferred** and **least preferred** contact methods. Respondents' preferences usually **did not align** with how they were contacted.

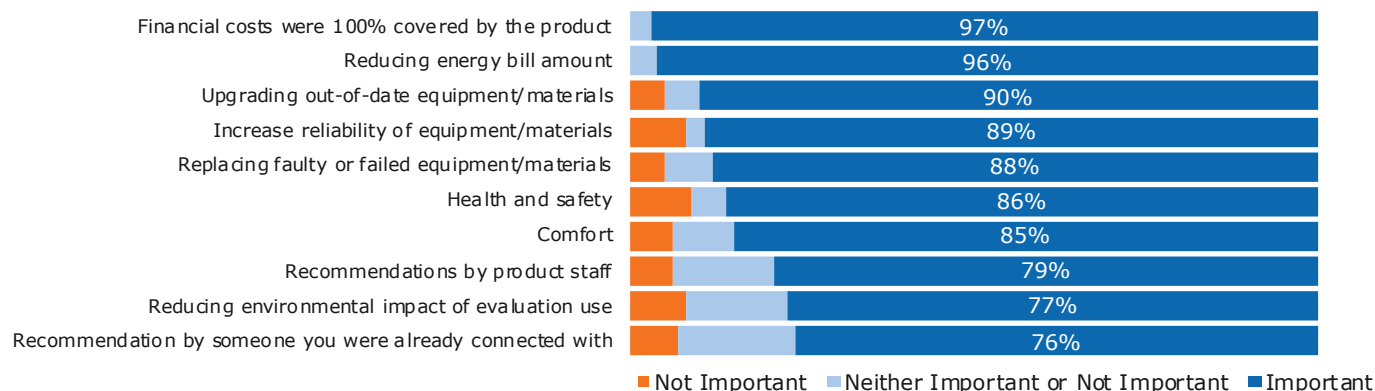


30% of participating customers believed **someone they directly spoke with** about the product at least **attempted to participate**. **More information** and **higher satisfaction with the product** would reportedly motivate others to participate in word-of-mouth marketing.

Motivations and Barriers



Participating customers had **positive initial perceptions** of the product and ranked **the free offer** and **reduction in utility bills** as **most important** to their decision to enroll.



2 MAJOR BARRIERS

Time commitment required



"I was told that it would take a long time (a waitlist)... It took a long time. We didn't know that we had been approved for over a year."

"My landlord was slow on signing the full participation for installation."

Knowledge gaps about the product



Respondents cited a desire to know:

"Details regarding all the weatherization upgrades that may be available to us."

"[If there would be any changes to my] lease agreement. How much more would my rent be after [the installations]?"

Implementation



The most frequently reported **challenges** were **contacting the right representative** and **understanding progress processes**



Half of the respondents reported **signing an energy pledge** or **receiving energy education**.



Participating customers suggested feedback surveys should be **offered soon after installation** and **easy to fill out and/or financially incentivized**.

Conclusions & Recommendations

Marketing and outreach are key to customer recruitment

Most customers first hear about the product through a trusted source.

Customers stated they would be motivated to promote the product if they had more information.

Customers reported high levels of satisfaction overall.

Most customers preferred the same level of communication but were most dissatisfied with their experience trying to contact a representative.

Customers stated they would like more information about the product processes, and more education about how to be more energy conscious and how to use their new equipment.

Customer feedback: A timely, easy-to-complete survey would make providing feedback easier on the customer.

Help customers market the product to their community. Provide product information to participating customers that can easily be shared with their network.

Explore including an addendum stating landlords will not raise rental prices because of weatherization upgrades from product. Similar language is currently included in the WAP application, however, the product should further research potential issues before adding.

Offer a referral bonus to participating customers and/or trade partners for high-potential neighborhoods. A referral bonus could increase the efficiency of processes since trade partners could focus their efforts and build off the trust gained within a community.

Set neighborhood goals with a reward to benefit the neighborhood. Allowing customers to help their neighborhood in addition to upgrading their home could create a sense of pride around product participation.

Use spatial (GIS) analysis to focus marketing strategy. Determine a focused marketing strategy to increase desired participation, including zones without a waitlist.

Product representatives should continue their high-quality interactions with participating customers. To maintain high satisfaction, product representatives should keep providing a great experience when communicating with participating customers.

Provide clear product contact information that is easy to locate. To improve the customer experience, provide easily accessible contact information, noting which representative to contact in each situation.

When gathering data on customers, note contact preferences for marketing and outreach efforts. Given the strong (and strongly differing) preferences for email and phone contact, allow customers to designate their preferred contact method.

Set clearer expectations on product processes. Verbal and written mediums should be used throughout the process to clarify when qualifying measures are decided and estimated savings will be available.

Expand energy pledge to more participating customers. Given the early success of the pledges in increasing energy-conscious behavior, broadening this new activity would increase energy savings.

Ensure that any materials given to agencies/other partners are accessible to diverse abilities as well as languages.

Create an educational slide show that trade partners can provide to participating customers in-person. An educational tool involving few resources to train individual trade partners.

Consistently offer a short feedback survey that takes minimal effort to give and fill out. One option would be to offer a short text survey once the installation is finished.

1. INTRODUCTION

Xcel Energy offers a comprehensive array of energy services and products to its customers, including demand side management (DSM). For the evaluations of its 2018 and 2019 products, Xcel Energy sought to understand the role each product plays in changing the marketplace, to analyze that influence on customer choices, and to use the findings to improve customer experience and ensure industry-leading product performance. To accomplish this, Xcel Energy contracted with EMI Consulting to evaluate five products offered in Colorado and Minnesota in 2019. This included the Single Family Weatherization Product in Colorado, discussed in this report.¹ This introduction includes an overview of the product and the evaluation approach, and describes the organization of this report.

1.1 PRODUCT OVERVIEW

Started in 2009 (and last evaluated in 2011), the Single Family Weatherization product is one of four products within the Low-Income Program. The product, in coordination with partner organizations, seeks to achieve energy savings and help income-qualified, single-family residential electric and natural gas customers lower their energy bills by supporting free weatherization services.

In 2018, the Colorado Single Family Weatherization product helped support a free service to income-qualified Xcel Energy customers that included a full home audit and installation of qualified energy efficiency measures. In calendar year 2018, the Single Family Weatherization Product claimed 999 kW, 1,209,911 kWh, and 448,755 Therms in energy savings from \$2.8 million in rebates provided in over 4,000 Colorado homes (Table 1-1).

Table 1-1. Xcel Energy CO Single Family Weatherization Energy 2018 Goals & Actuals

	2018 Goal	2018 Achievement
kW	102	103
kWh	1,241,188	1,310,212
Dth	48,620	48,238
Spend (Gas)	\$2,358,186	\$2,358,222
Spend (Electric)	\$1,222,574	\$1,266,682
Participation Gas	1625	1979
Participation Electric	2483	2313

¹ The products selected for evaluation in 2019 include: Heating Efficiency (CO), Motor & Drive (CO), Single Family Weatherization (CO), Energy Efficient New Homes (MN), and Residential Cooling (MN).

Xcel Energy partnered with Energy Outreach Colorado (EOC) to implement the product in 2018. In general, but not limited to, program partners were responsible for the following:

EOC:

- Managed health and safety solutions, verified applicants' income, managed a customer hotline, and processed rebate payments. Starting in 2018, they also began asking customers to sign an energy pledge to action and to sign up for commitment reminders. EOC also worked with Xcel Energy and program partners to determine budgeting and goals for the calendar year, managed and contracted with program partners, and conducted marketing and outreach.

WAP Agencies and Other Program Partners:

- Completed energy audits, installed direct install measures, and identified and installed efficiency opportunities using a prioritized list. They also addressed health and safety issues, completed quality assurance inspections, conducted marketing and outreach, and performed client intake.

Non-profit Partners:

- Scheduled energy education visits, completed client satisfaction check-ins, and provided materials to encourage referrals.

According to interviews with product staff, Xcel Energy made the following modifications to the Single Family Weatherization Product for the 2019 product year:

- Added the Health and Safety program. In January 2019, the Single Family Weatherization Product began offering a limited number of special rebates for health and safety issues for situations that present an immediate threat to occupant health and/or preclude installation of energy efficiency measures.
- Added an evaporative cooling measure.

1.2 EVALUATION OVERVIEW

The evaluation team designed a process evaluation of the Single Family Weatherization Product to provide information on six key research objectives.

Table 1-2. presents an overview of the research topics and data sources used in this evaluation. In addition to these data collection efforts, the evaluation team also conducted six interviews with seven product staff. These interviews served to identify research needs and also provide feedback on internal processes.

Table 1-2. Primary Research Objectives

Primary Research Objectives	Participating Customer Surveys (n=71)	Peer Benchmarking Interviews (n=6)*
Identify barriers to, and the value provided by, participating in the product.	X	
Identify new marketing and outreach methods	X	X
Identify opportunities to improve the customer feedback process.	X	
Identify whether there are opportunities to increase the efficiency of data collection.		X
Identify whether peer utilities also include their Single Family Weatherization Product in the DSM portfolio and strive to be cost-effective.		X
Identify whether peer utility programs have a market rate offering that is working for low-income customers and how they track it.		X

*The evaluation team completed six interviews regarding five peer programs.

1.3 REPORT ORGANIZATION

The following chapter presents the process evaluation approach and findings. Conclusions and recommendations are presented in Chapter 3. The evaluation plan, data collection instruments, and results by data collection effort can be accessed in this report's appendices.

2. PROCESS EVALUATION

The evaluation team conducted a process evaluation to determine how Xcel Energy can optimize the design and delivery of the Single Family Weatherization Product to its customers. Specific research objectives of the process evaluation are listed in Table 1-2 above.

To accomplish these objectives, the evaluation team elicited feedback from product staff, participating customers, and staff from peer utilities who are implementing similar programs. This chapter presents key findings from the process evaluation, the evaluation team's approach to conducting the process evaluation, and specific findings relating to each evaluation objective. These findings inform the conclusions and recommendations presented in the Conclusions and Recommendations chapter.

2.1 KEY FINDINGS

The evaluation team found that, overall, participating customers were very satisfied with the Single Family Weatherization Product. And staff reported product processes were running smoothly, although the structure created constraints. Product staff mentioned a key constraint was the product's reliance on multiple funding sources, which made process improvement difficult and the customer experience confusing at times.

Overall, participating customers noted that the product was easy to participate in and that they were happy with their experiences; however, knowledge gaps and the time commitment required were key barriers to participation. To increase participation, peer programs were focused on avoiding agency waitlists, which increased the time commitment required of participating customers, and tailoring marketing and outreach efforts. Participating customers desired more information, including (1) more information about the product processes, and (2) better education on how to be more energy conscious and how to use/maintain their new equipment/materials. To increase the level of and quality of the participating customer feedback as part of the product process, survey respondents desired a timely and easy to complete feedback survey.

Section 2.2 describes the overall approach used for the process evaluation research activities. It is followed, in Section 2.3, with the detailed results. Chapter 3 will present the evaluation team's recommendations based on these results.

2.2 APPROACH

To accomplish the evaluation objectives for the Single Family Weatherization Product, the evaluation team completed a suite of intersecting and complementary research activities in 2019. Information on the sampling approach used for the research can be accessed in Appendix A. The following discussion highlights the evaluation team's approach to conduct each of the following research activities:

- Staff interviews
- Participating customer surveys
- Peer benchmarking interviews

STAFF INTERVIEWS

The evaluation team conducted six in-depth interviews with seven key personnel involved with the Colorado Single Family Weatherization Product, including the Xcel Energy Product Manager, two Xcel Energy Product Management Team Leads, an Xcel Energy engineer, the Residential Program Manager at EOC, and the Chief Program Officer at EOC. The staff interviews covered the following topics:

- Assess the extent to which product design supports product objectives and customer service/satisfaction objectives
- Determine the degree to which product resources are sufficient to conduct product activities with fidelity to the implementation plan
- Collect staff feedback on implementation successes and challenges

Appendix B.1 presents the staff interview guide and Appendix C.1 detailed results used for these discussions.

PARTICIPATING CUSTOMER SURVEYS²

The evaluation team conducted telephone surveys with participating customers using customer records from Xcel Energy for the sample frames. The evaluation plan used for this project can be found in Appendix A. Sample sizes for the participating customer surveys were set at levels adequate to provide a 90% level of confidence with a minimum of +/- 10% relative precision.

For the purposes of this evaluation, a participating customer was defined as any customer that closed a Single Family Weatherization opportunity in 2018. The participating customer survey was designed to address the following process objectives:

- Identify barriers to, and the value provided by, participating in the product.

² The survey conducted as part of the evaluation is referred to as "participating customer survey" within this report to differentiate it from the "customer feedback survey" given as part of the product.

- Identify new marketing and outreach methods that target high need customers and realize more electric savings.
- Identify opportunities to improve the customer feedback process.

In addition to the above objectives, the participating customer survey also covered customer experience and satisfaction.

A summary of respondent demographics can be found in Table 2-1.

Table 2-1. Participating Customer Survey Respondents Demographics Summary

	% of Participating Customer Survey Respondents
Live in Denver	56%
Combo gas & electric customers	67%
Own their home	79%

Appendix B.2 contains the questionnaire used for the participating customer survey.

PEER BENCHMARKING INTERVIEWS

The evaluation team examined five peer utility programs to benchmark the Xcel Energy Single Family Weatherization Product against other comparable programs in the industry, assessing product design and delivery and key performance indicators (e.g., participation levels). The evaluation team conducted in-depth interviews with six staff members of these utility programs (including implementer staff) to:

- Identify whether there were opportunities to increase the efficiency of data collection, and
- Determine how similar programs were implemented within the United States, including whether (1) peer utilities also included their equivalent programs in their DSM portfolio and strived to be cost-effective and (2) whether peer utility programs had a market rate offering that worked for low-income customers and how they tracked it.

To provide important contextual information, additional descriptive program information was collected, where possible, including eligibility requirements, measures offered, implementation strategies and engagement practices, and participation levels. Appendix B.3 contains the interview guide used for the peer benchmarking interviews.

Table 2-2 summarizes the data on the process evaluation topics. The synthesis of findings places an emphasis on helping Xcel Energy interpret customer perspectives and identifying actionable opportunities for improving product operations and marketing. Recommendations follow in Chapter 3.

Table 2-2. Peer Utility Summary

Utility	Energy Type	Location	Income Requirement	DSM	Longevity
Xcel Energy	Electric	Colorado	80% AMI	Yes	9 years
	Gas	Colorado	80% AMI	Yes	9 years
Utility A	Combo	Midwest, Urban/Suburban	200% Federal Poverty	Yes	30+ years
Utility B	Gas	Midwest, Urban/Suburban/Rural	150% Federal Poverty	Yes	3 years*
Utility C	Electric	Eastern USA (Interview focused on the Carolinas)	200% Federal Poverty	Yes	10 years
Utility D	Gas	West Coast, Urban/Suburban	200% Federal Poverty	No	30+ years
Utility E	Electric	Southern Midwest, Suburban/Rural	Below \$50,000	Yes	> 10 years

* Dual fuel program started in 2015

2.3 PARTICIPATING CUSTOMER SATISFACTION

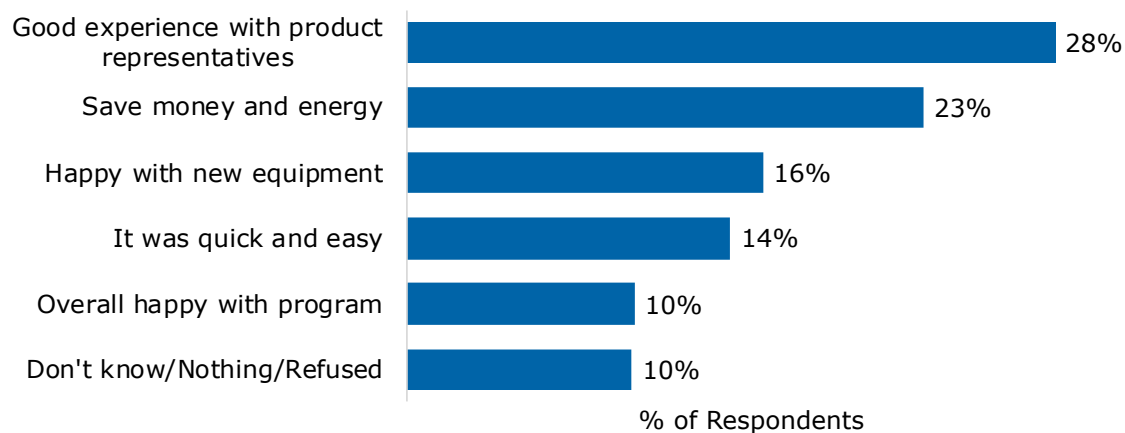
The participating customer survey covered participating customer satisfaction. Throughout the participating customer survey, participating customers gave positive ratings to the various product elements and provided only a few dissatisfied responses.

Two key measurements of satisfaction in the participating customer survey were how participating customers rated (1) Xcel Energy as a service provider, and (2) the product overall. Participating customers had high satisfaction with Xcel Energy as a service provider, with an average rating of 4.6 out of 5. Satisfaction with the Single Family Weatherization Product was also very high with an average of 4.7 out of 5 and no dissatisfied ratings (a rating of 1 or 2). We outline the ratings of specific product elements below. Although some customers expressed dissatisfaction with elements of the product, there were zero dissatisfied ratings for the overall product out of 71 completes, which should be seen as a great accomplishment.

When responding to an open ended question, participating customers most frequently cited their positive experiences with product representatives as the reason for their satisfaction with the product (Figure 2-1). These responses were consistent with the prompted responses on satisfaction of eight product elements (Figure 2-2), where respondents were satisfied with all eight product elements but most often linked their satisfaction to their interactions with product staff.

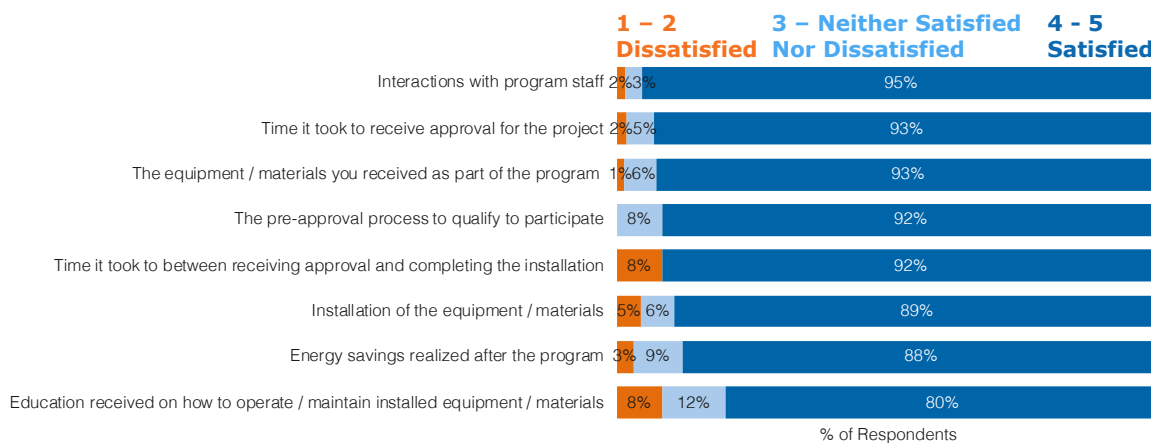
The second most common open-ended response regarding satisfaction was that respondents liked saving money and energy, a common theme throughout the participating customer survey, and which led to an overall positive interaction with the product. Saving money and energy was also the most common motivator for participating in the product, as discussed in the Participation Experience section.

Figure 2-1. Satisfaction with Product, Open End



As seen in Figure 2-2, when prompted, participating customers were satisfied with each product element (4 or 5 rating), with five of the eight elements receiving over 90% satisfied ratings.

Figure 2-2. Satisfaction with Product Elements, Prompted



While most respondents were satisfied with the product, 15 of them (21%) gave a 1 or a 2 rating for satisfaction at some point throughout the participating customer survey. Of the eight product elements, respondents were most dissatisfied (gave a 1 or 2 rating) with the education they received on how to operate or maintain installed equipment and materials (8%) and the time it took between receiving

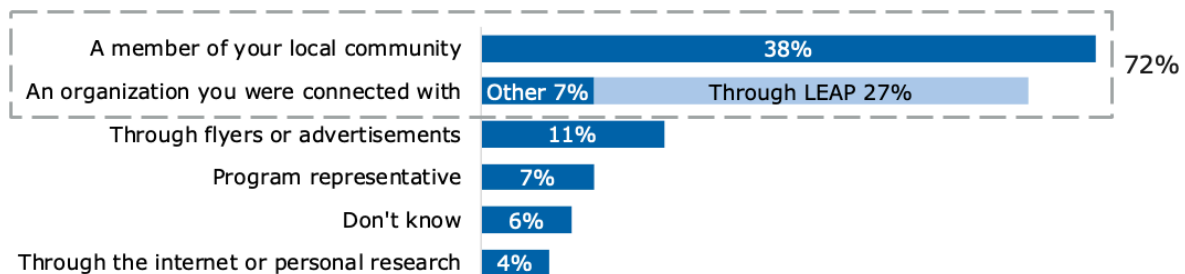
approval and completing the installation (8%). Some participating customers reported they did not receive any training and one said they could only use online materials given they are legally blind. Other common areas of dissatisfaction were issues with the quality of the installation and how that affected energy savings potential.

2.4 MARKETING & OUTREACH

The first process evaluation research objective was to identify new marketing and outreach methods. The evaluation team drew from participating customer surveys and peer benchmarking interviews to understand (1) how customers became aware of the product, (2) how customers would like to hear about products, and (3) how peer utilities conducted marketing and outreach for their weatherization programs.

Word-of-mouth played a key role in participating customer decision-making and in promoting participation in the product. About three quarters (72%) of participating customers first heard about the product through a trusted source. The Colorado Low-Income Energy Assistance Program (LEAP) staff played a significant role in marketing. Over a quarter (27%) of respondents reported that they learned about the Xcel Energy product through LEAP staff. An additional 7% said they learned about it through other organizations and 38% of respondents said a member of their local community informed them about the product.

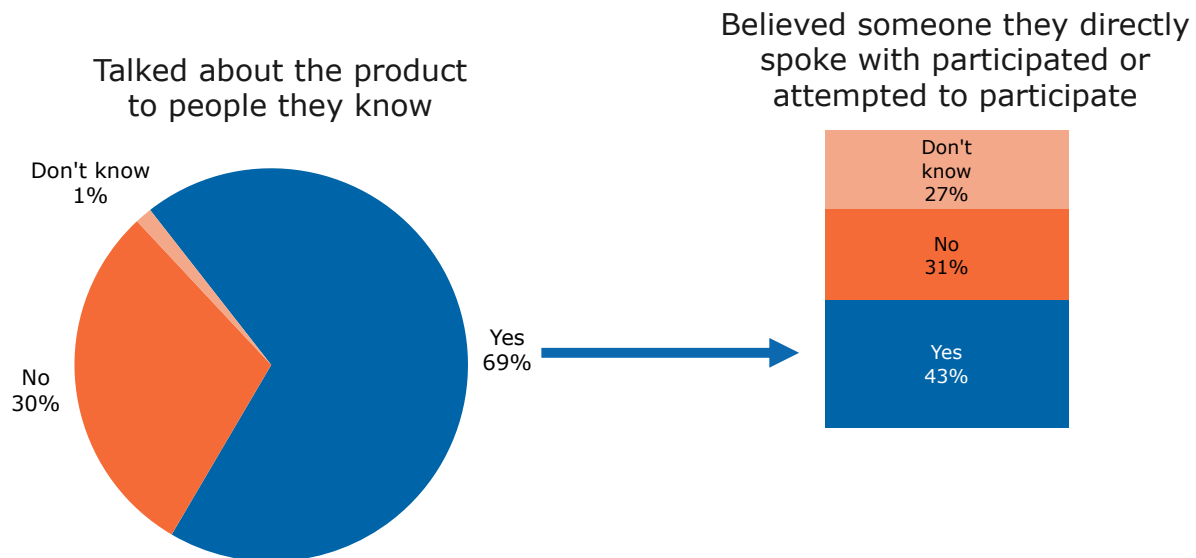
Figure 2-3. Where Respondents First Heard about the Product



In addition to participating customers first hearing about the product through a trusted source, Figure 2-4 shows 69% of respondents reported talking to people they knew about their experiences with the product, and 43% of those respondents said that they believed someone they directly spoke with participated or attempted to participate in the product. That is equal to 30% of total respondents contributing to successful word-of-mouth marketing.

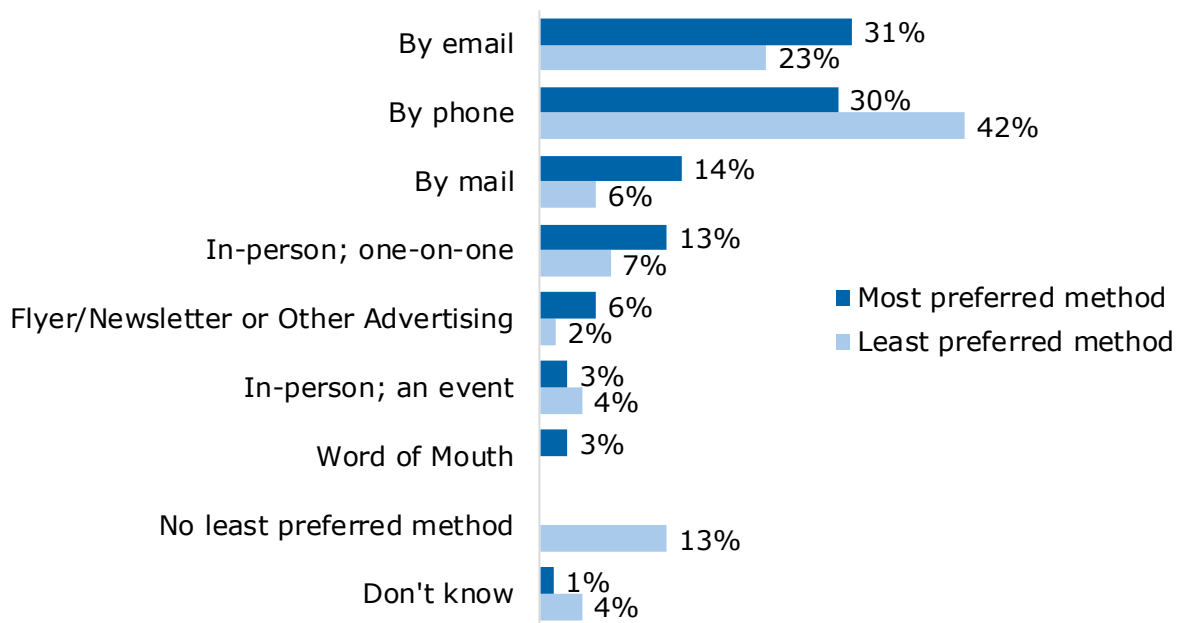
The same percentage of respondents (30%) did not report talking with their network. These respondents stated that they would be motivated to do so if they had (1) higher satisfaction with the product, including better quality installation and higher energy savings, and (2) more information on the product, such as materials to pass along to others that include any product differences between property type.

Figure 2-4. Survey Respondents Actively Participated in Word-of-Mouth Marketing



When asked about the way they preferred to be reached for marketing efforts, participating customers provided conflicted responses. Email and phone were both the most preferred (31% for email and 30% for phone) *and* least preferred (23% for email and 42% for phone) methods of contact, as shown in Figure 2-5. Half (n = 10) of the respondents who said phone was their most preferred method said email was their least preferred method. Similarly, just over half (n=13) of the respondents who said email was their most preferred method said phone was their least preferred method. This indicates a need to conduct both modes of communication, preferably having the ability to reach out using each customer's preference. The evaluation team found it noteworthy that, of the 11 respondents who answered how they were contacted by organizations marketing the product, only 2 were contacted by their most preferred method.

Figure 2-5. Marketing & Outreach Communication Preferences



Similar to Xcel Energy, the interviewed peer program staff also experienced positive results from word-of-mouth marketing. Peer utility staff found that recruiting participants by geography—for example, by county in more rural areas—had many beneficial results, such as being able to quickly act on word-of-mouth referrals and address concerns about the taboo of accepting assistance, limiting the driving distance for contractors, and easily targeting online advertisements to a geographic area.

Product representatives noted that, given the communities' distrust of free offers, a key challenge was getting through the door to complete an energy assessment. Peer programs also faced this common barrier and their methods to engage customers focused on how to gain trust in communities. To overcome this trust barrier, peer programs co-branded with local stores, partnered with other low-income agencies and/or local leaders, used referrals from internal billing assistance departments, and relied on traditional marketing methods (emails, mailers, and phone calls). To avoid another common barrier in certain areas—long waitlists—peer programs noted they were careful to not over-promote their programs.

Key marketing and outreach activities at peer utility programs are summarized below, with more detail included in Appendix C.3.

- Utility E noted that targeting by town/county helped build trust in the community. For instance, potential participants would see program vehicles parked in their town and then recognize the name when they received a marketing call. (Sending out postcards before starting marketing phone campaigns further improved the success of those calls since it brought legitimacy to the call.) Program staff would also meet

with local officials, such as city council members, and host breakfasts at local senior centers.

- Utility B worked with other state utilities and a philanthropic institution to bring communities together to achieve weatherization program participation goals. If they meet their participation goal as a neighborhood, then the partnering organizations weatherize a community building in the neighborhood.
- Utility D stated they wanted to start a program to help potential participants overcome the barrier of income verification. Many qualified customers cannot get to an office in the city during standard business hours, so Utility D wants to start a program that brings registration to suburban and rural areas. While this would help customers pass income verification to participate in the weatherization program, it would also allow them to qualify for many other low-income government programs.

Targeting by geography also helped program staff overcome another key barrier participating customers mentioned: the taboo surrounding accepting low-income assistance.

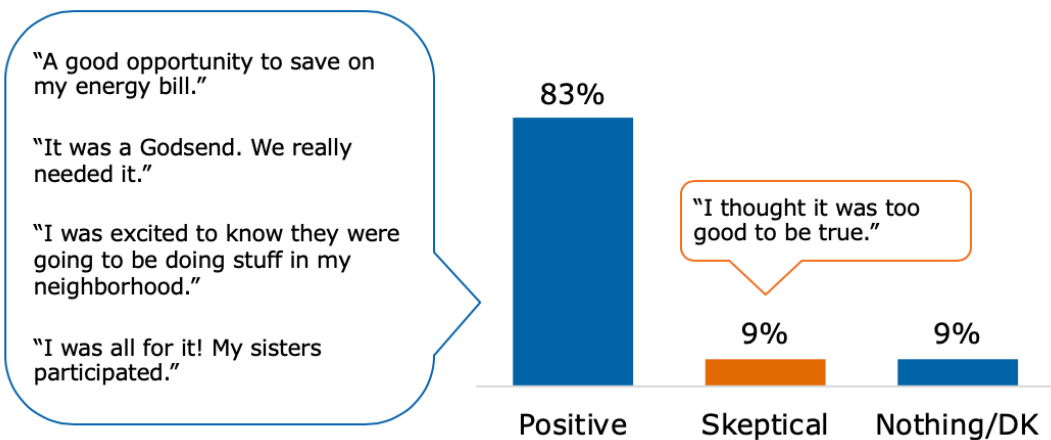
- Utility C and E successfully targeted neighborhoods that had a high-density of low-income households. Utility E found once they were able to get some community members to participate, they were much more likely to get more neighboring customers.

2.5 PARTICIPATION EXPERIENCE

The participating customer survey covered participating customers' experiences with the product from pre-application phase to follow-up communication after completing the project with the product.

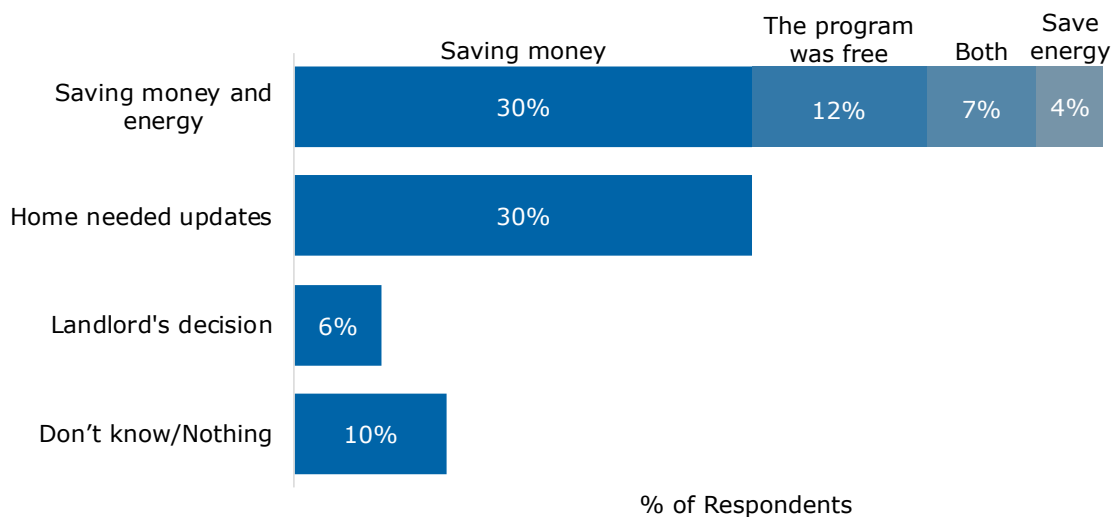
When asked for an open ended response about their perceptions of the product before they applied, 83% of respondents had positive initial perceptions of the product and 9% were skeptical (Figure 2-6).

Figure 2-6. Initial Perceptions of the Product



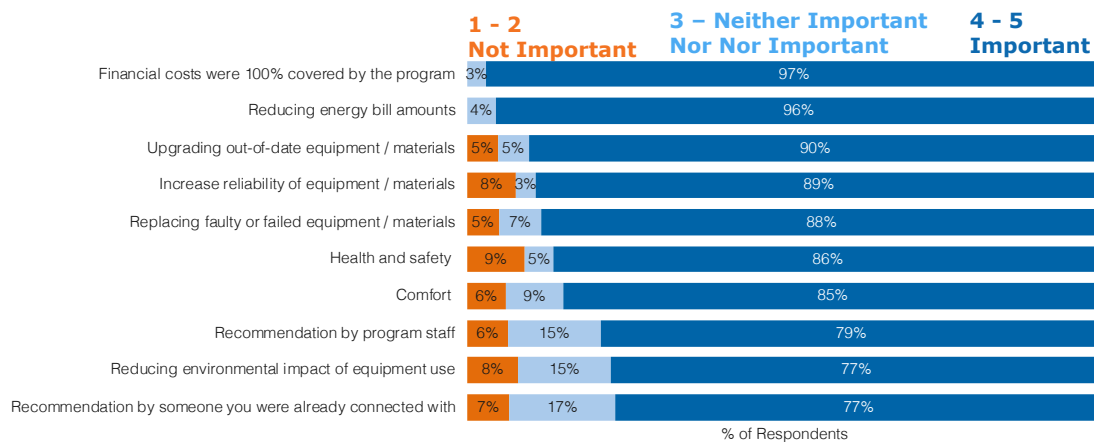
When asked to provide an open ended response, respondents reported saving money and energy was the most common motivator for participating; the need for home updates was the second most common. A small number (6% of respondents) participated in the product because their landlord decided to participate Figure 2-7.

Figure 2-7. Motivation for Participating, Open Ended



When prompted with specific product elements, respondents ranked financial reasons as most important to their decision to enroll in the product as shown in Figure 2-8. Respondents most frequently ranked health and safety as not important (1 or 2 rating), although the majority of respondents still found it important (86%). Recommendations by someone the participating customer was already connected with was the least ranked "important" factor. While word-of-mouth marketing is how participating customers first heard about the product, this lower ranking indicates other Product elements actually convinced them to participate.

Figure 2-8. Motivations for Participating in the Product, Prompted

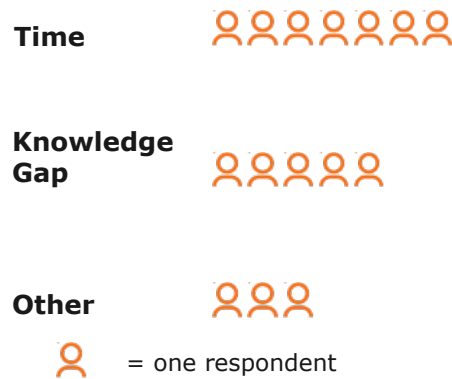


Elements regarding the equipment, updating out-of-date equipment (90% important), increasing reliability of equipment (89% important), replacing failed equipment (88% important), were condensed near the top of responses. Respondents who had multiple measures installed stated that inclusion of insulation and furnaces as product-eligible measures were particularly important when deciding whether or not to participate.

BARRIERS TO PARTICIPATION

Xcel Energy has an opportunity to increase participation in the Single Family Weatherization product where partner agencies have additional capacity by understanding the barriers faced by customers, as nearly a quarter of participating customer survey respondents (21%) stated they experienced barriers to participate in the product. As shown in Figure 2-9, the most common barriers were related to the time commitment required by participation and a lack of knowledge. The time requirement barriers included time spent on the waitlist, finding time to apply in person, and delays in receiving landlord approval. Knowledge gaps included lack of details from product representatives about the specific weatherization upgrades available to them and misunderstandings about the product processes, such as whether the participating customer would have to pay for the upgrades if their income increased and whether their rent would increase after the upgrades.

Figure 2-9. Barriers to Participate in the Product



Furthermore, 26% of respondents (n=27) reported that knowing estimated savings would have helped them make their decision to participate. Respondents also reported that knowing which measures were available to them and the process steps involved would have helped their decision-making process.

Three respondents provided unique responses about the barriers they faced. One lacked access to a computer; another mentioned having to overcome pride to accept assistance. The third respondent was concerned about the mess the installation process would create. Although there were only one of each of these responses, they shed light on three topics that are very important to the success of the product.

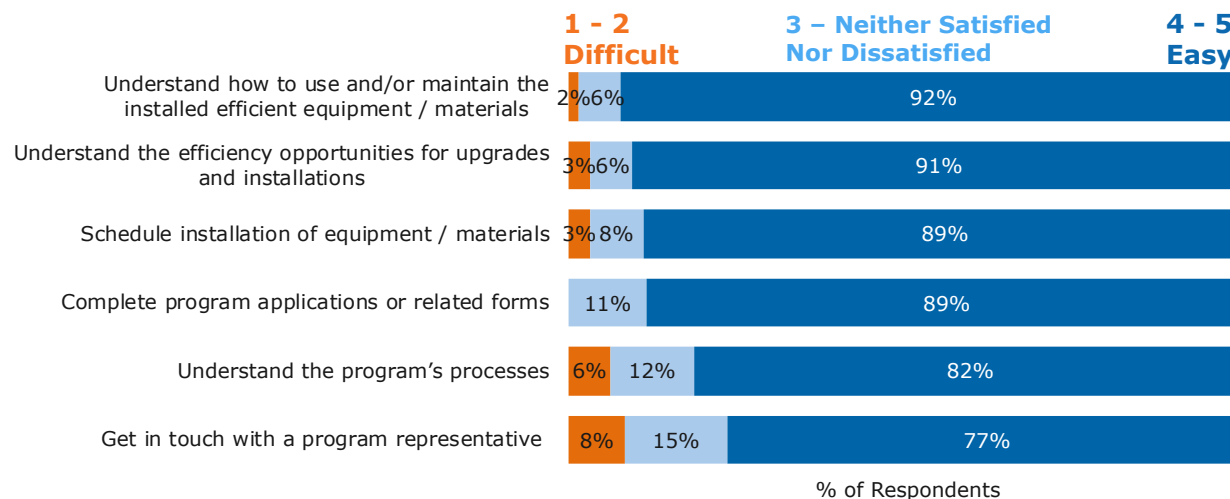
- Lack of resources: This product caters to low-income customers who may not own a computer or have access to reliable internet.
- Pride: Low-income persons may be reluctant to seek help given a desire to avoid the appearance of dependence and neediness.
- Afraid of the mess during installation: Even though the product offers a free service to participating customers, it's not without other costs, such as time required and disruption to standard routines.

IMPLEMENTATION EXPERIENCE

Participating customers noted that the energy assessment and installation was mostly an easy process. They found it easiest to understand how to use and/or maintain their installed efficient equipment/materials, with 92% of respondents rating a 4 or 5 on a scale where 1 meant "very difficult" and 5 meant "very easy." Participating customers also understood the efficiency opportunities for the upgrades and installations (91% with a 4 or 5 rating). Scheduling the installation and completing the application and forms were also easy for participants (both received an 89% "easy" rating), with zero "difficult" ratings for completing product applications. These results are shown below in Figure 2-10. These aspects of the product are very important to the customer's overall satisfaction and play into their

willingness to share their product experiences with their network, particularly in a positive way.

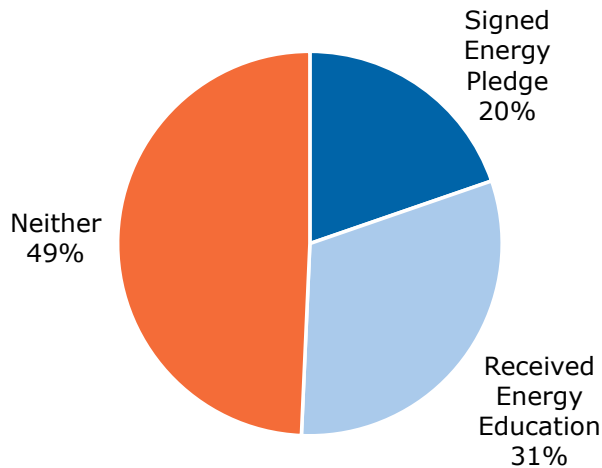
Figure 2-10. Rating the Ease or Difficulty of Tasks Associated with the Product



Reaching product representatives received the most “difficult” ratings (8%), with five respondents stating they had trouble contacting the right person and knowing whom to contact. It is important to balance this with the knowledge that, once participating customers were able to reach product representatives, they had positive experiences, rating their interactions with product staff the highest of the product elements (see Participating Customer Satisfaction section). Four respondents reported they wanted more information on the product processes and what to expect when participating. A couple of respondents had challenges with the installation and using/maintaining the equipment.

As part of the process, EOC offered participating customers energy efficiency education and, starting in 2018, also asked them to sign a pledge to commit to more energy conscious behaviors. Just over half of the participating customers reported they either signed an energy pledge or at least received energy education through the product (Figure 2-11).

Figure 2-11. Education of Survey Respondents by Their Trade Partner

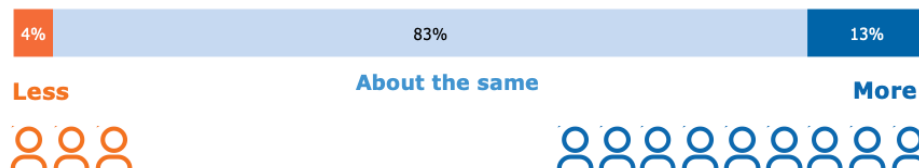


Of the 31% of respondents (n=22) that said they recalled receiving education, 45% (n=10) specifically reported that they received information on how to change their behavior to realize greater energy savings. Of the 51% of respondents (n=36) who either said that they recalled receiving education or signing an energy pledge, 94% reported they have been more energy-conscious (n=34). Of those 34 respondents, 79% mentioned turning off lights and/or appliances as examples of what they have been doing to try to save energy (n=27).

Of the 24 respondents who provided advice on how the product could make it easier for them to save energy, 75% wanted either more information, such as a crash course on energy saving strategies, or more services, such as more insulation to help with energy consumption.

As seen in Figure 2-12 below, over three quarters of respondents (83%) said that they liked the level of contact they received with product representative. Only 4% wanted less contact, and 13% wanted more contact.

Figure 2-12. Respondent Satisfaction with Level of Contact

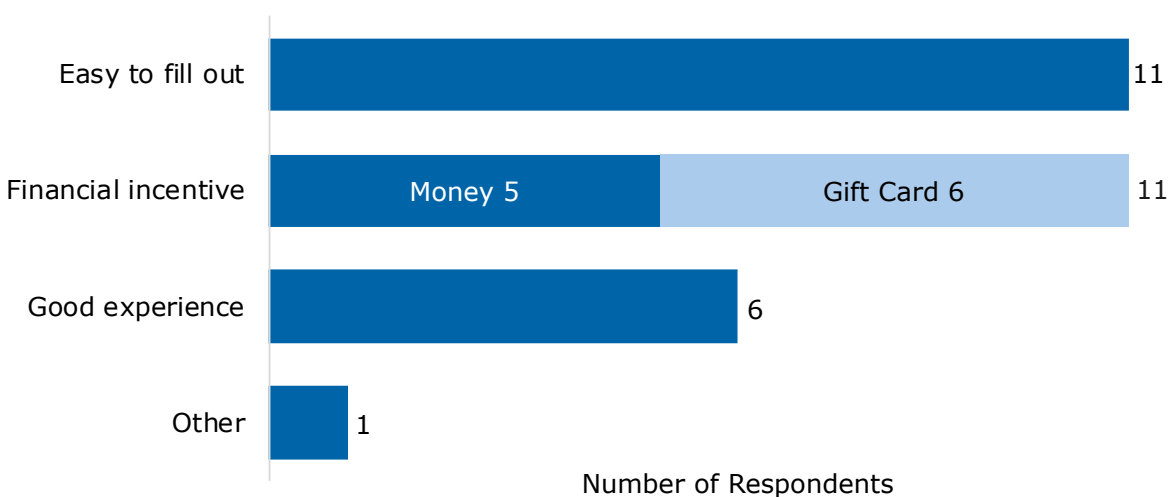


CUSTOMER FEEDBACK SURVEY

When a product representative completes a project with a participating customer, they conduct a customer feedback survey.³ Less than a quarter (23%) of participating customer survey respondents reported they completed a feedback survey from the product representative, while the rest did not remember whether they were offered or filled out a feedback survey.

Looking ahead to future opportunities to collect feedback, 29 participating customers provided conditions that *would* motivate them to fill out a feedback survey. The top answers were (1) if the feedback survey were easy to fill out and (2) if customers received a financial incentive, with a slight preference for gift cards, as shown in Figure 2-13. Overall, participating customers slightly preferred paper feedback surveys over online feedback surveys. 5 of the 6 respondents who stated a preference for when the survey should be sent, preferred receiving it directly after the installation or within a couple days afterward.

Figure 2-13. Incentives to Filling out a Customer Feedback Survey



³ The customer feedback survey is an activity that is part of the Single Family Weatherization Product processes and is different it from the evaluation's participating customer survey.

3. CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the evaluation team's key findings and associated recommendations regarding the Xcel Energy Single Family Weatherization Product in Colorado. All recommendations are based on key findings from our evaluation research and are designed to reflect the context of future product years, acknowledging expected changes in the market and planned product changes.

Overall, the evaluation team found that the Single Family Weatherization Product is operating smoothly, with high levels of satisfaction among participating customers. specific findings and recommendations follow.

Key Findings:

- **Key Finding 1: Marketing and outreach are key to customer recruitment—most customers first hear about the product through a trusted source.** There was evidence of this in staff interviews, peer benchmarking interviews, and in the participating customer survey. Peer programs relied on marketing and outreach to recruit customers to reach their participation goals and have found focused efforts within neighborhoods, such as setting neighborhood goals, increases participation. Product staff noted that a key challenge was getting through the door to complete an energy assessment, given communities had a lot of distrust of free offers. For example, a participating customer stated they feared their landlord would increase their rent after the product completed the home upgrades and almost didn't participate in the product. Participating customers also stated they would be more motivated to promote the product if they had higher satisfaction with the product or more information about the product that they could share.
 - **Recommendation 1a: Help customers market the product to their community.** Since overall satisfaction of this product is high, Xcel Energy should focus on providing more information to participating customers that can easily be shared with people in their network. For example, create a standard, but customizable, email template as an option for customers to send to their network. The template could include a description of product processes, clarify differences and misconceptions between owners and renters, and include typical energy savings realized by participants for their neighborhood and/or an abbreviated list of measures that similar customers received. A hardcopy version could be also be provided in case computer and/or internet barriers are applicable.
 - **Recommendation 1b: Explore including an addendum to product paperwork stating landlords will not raise rental prices because of weatherization installations.** To further increase trust and clarify misconceptions held by customers who are renters, the product should look into the possibility of adding an addendum stating landlords will not raise rental prices due to the product-related upgrades, similar to language that is currently included in the WAP

application. Before adding the addendum, the product should further research potential issues, such as creating further customer distrust if the product cannot properly enforce the addendum and deterring landlord participation. The product team should work with other agencies and organizations that have an interest in maintaining affordable housing to coordinate efforts as is possible.

- **Recommendation 1c: Offer a referral bonus to participating customers and/or trade partners for high-potential neighborhoods.** A referral bonus, such as a gift card, would encourage more participants and/or trade partners to promote the product in high-yield areas, increasing the efficiency of processes since trade partners could focus their efforts and build off the trust gained within the community.
 - **Recommendation 1d: Set neighborhood goals with a reward to benefit the neighborhood.** Promote participation within a neighborhood by creating a neighborhood participation goal. As used in similar programs, the product could work with community partners to offer a reward for meeting the goal, such as free weatherization of a community building. Allowing customers to help their neighborhood, in addition to upgrading their home, could create a sense of pride around product participation.
 - **Recommendation 1e: Use spatial (GIS) analysis to focus marketing strategy.** Perform spatial analysis to determine a focused marketing strategy to increase desired participation, including zones without a waitlist and more customers with electric as the primary space heating method.
- **Key Finding 2: Participating customers reported high levels of satisfaction with the Single Family Weatherization Product overall.** Respondents rated interactions with product representatives particularly high. Most participating customers preferred the same level of communication they received from product representatives, but were most dissatisfied with information about how to get in touch with a representative in the first place. The participating customer survey results showed respondents preferred email and phone communication to other methods, with fewer respondents stating email communication as their least preferred method.
 - **Recommendation 2a: Product representatives should continue their high-quality interactions with participating customers.** To maintain high satisfaction, product representatives should keep providing the same great experience when communicating with participating customers.
 - **Recommendation 2b: Provide clear product representative contact information that is easy to locate.** Since participating customers expressed dissatisfaction with how to get in touch with representatives, in particular knowing who to contact, providing contact information that noted who to contact in particular situations

would help improve the customer experience. Contact information should also be easily accessible to ensure participating customers can locate the information when needed. For example, Xcel Energy could provide refrigerator magnets with relevant contact information to partner agencies to distribute to participating customers.

- **Recommendation 2c: When gathering data on customers, note contact preferences for marketing and outreach efforts.** Given the strong (and strongly differing) preferences for email and phone contact, allow customers to designate their preferred contact method.
- **Key Finding 3: Participating customers stated they would like more information about the product and more education.** While participating customers were satisfied with the product, they would like (1) more information about the product processes, especially regarding which measures participating customers will receive and expected savings, and (2) more education about how to be more energy conscious and how to use their new equipment. Energy education was ranked last in satisfaction among product elements, and only half the respondents reported either signing an energy pledge or receiving energy education. A participating customer also noted that materials may have been provided, however, they have a disability that prevented them from using the resources.
 - **Recommendation 3a: Set clearer expectations on product processes.** From the first outreach activity and throughout the process, product representatives should outline the product processes with customers. Verbal and written mediums, preferably with visuals such as process maps, should be used to maximize clarity on when qualifying measures are determined for individual home types and estimated savings will be available, and should tie into energy-conscious behavior changes. For example, communication should note that achieving maximized savings will require energy-conscious actions by the participating customer.
 - **Recommendation 3b: Expand energy pledge to action activity to more participating customers.** Since this was the first year the energy pledges were offered, not all participating customers were offered an energy pledge to sign. Given the reported success of the energy pledges in increasing participating customers' energy-conscious behavior, broadening this new offer to more participating customers would help to increase behavior change and energy savings.
 - **Recommendation 3c: Ensure that any materials given to agencies or other partners are accessible to diverse abilities as well as languages.** The nature of this product means working with a diverse population. To ensure that everyone is able to take advantage of the product's offerings, ensure they are accessible to people of all ages and disabilities, such as sight and hearing impaired. Options include materials in large font sizes and materials with a spoken online version. While the product is currently offering materials in a few

languages, it should also look into whether expanding to more languages would be beneficial to customers.

- **Recommendation 3d: Create an educational slide show that trade partners can show participating customers in-person.** A slide show can be an easy tool to share knowledge, and there are few resources involved in training individual trade partners, who may quickly turnover. Trade partners can use tablets or smart phones for easy in-person delivery to participating customers during already scheduling home visits.
- **Key Finding 4: Customer feedback: A timely, easy to complete survey would make providing feedback easier on the customer.** Most customers did not remember the feedback survey. However, according to respondents, paper or online feedback surveys that are offered soon after installation, are easy to fill out, and/or financially incentivized would be most successful.
 - **Recommendation 4a: Consistently offer a short feedback survey that takes minimal effort to give and fill out.** One option would be to offer a short text survey that could be filled out by the customer once the installation is finished.

XCEL ENERGY

Colorado Single Family Weatherization Product Process Evaluation

APPENDICES

January 6, 2020



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APPENDIX A: EVALUATION PLAN

To support the process and impact evaluation of the 2018 Xcel Energy efficiency programs, the EMI Consulting evaluation team will be conducting a process evaluation of the Xcel Energy Colorado Single Family Weatherization Product. This memo provides an updated plan for the 2019 Xcel Energy Colorado Single Family Weatherization Product evaluation based on the original scope of work, staff feedback during the evaluation kick-off meetings, and staff interview findings. This evaluation plan includes the following sections:

- Product Overview
- Evaluation Overview
- Data Collection Activities and Sampling Plans

PRODUCT OVERVIEW

The Colorado Single Family Weatherization Product offers a free service to income qualified Xcel Energy customers that includes a full home audit and installation of qualified energy efficiency measures. Energy Outreach Colorado (EOC) implements the Single Family Weatherization Product, which improves energy efficiency while helping low-income customers lower their utility bills. In calendar year 2018, the Single Family Weatherization Product claimed 999 kW, 1,209,911 kWh, and 448,755 Therms in energy savings from \$2.8 million in rebates provided in over 4,000 Colorado homes (Table 1).

Table 1. Single Family Weatherization Projects, Close Dates January – December 2018

Project Description	Total Rebates	Customer kW		Customer kWh		Customer Therms	
		Savings ¹	% of total	Savings	% of total	Savings	% of total
A-Style LEDs	\$116,030	787.01	79.6%	715,355	59.1%	0	0.0%
Refrigerator Replacement	\$742,770	41.27	4.2%	232,263	19.2%	0	0.0%
Air Sealing & Weather-stripping T2	\$225,400	30.11	3.0%	34,898	2.9%	90,694	18.6%
Attic Insulation-LI SFW	\$703,560	63.47	6.4%	73,567	6.1%	94,933	19.4%
T-Stat Install & Programming LI-SFW	\$84,250	0	0.0%	0	0.0%	39,766	8.1%
Showerhead Primary	\$4,390	1.8	0.2%	15,645	1.3%	16,665	3.4%
High Efficiency Furnace	\$288,750	0	0.0%	0	0.0%	107,228	21.9%
Water Heater Blanket LI-SFW	\$34,800	0.03	0.0%	226	0.0%	3,691	0.8%
Aerators - Bathroom Primary	\$2,397	0.34	0.0%	2,894	0.2%	2,021	0.4%
Aerators - Kitchen	\$1,308	0.19	0.0%	1,612	0.1%	810	0.2%
Crawlspace Wall Insulation LI-SFW	\$67,900	17.39	1.8%	20,155	1.7%	45,822	9.4%
Other Projects	\$542,781	47.38	5%	113,296	9%	87,125	17.8%
Total	\$2,814,336	988.98	100%	1,209,911	100%	488,755	100%

a. These numbers are based on data provided to EMI Consulting in early 2019.

According to interviews with product staff, Xcel Energy staff made the following modifications to the Single Family Weatherization Product for the 2019 program year:

- Added the Health and Safety program.
 - As of January 2019, the Single Family Weatherization Product offers special rebates for health and safety issues for situations that present an immediate threat to occupant health.
- Added an evaporative cooling measure

EVALUATION OVERVIEW

The 2019 evaluation will consist of a process evaluation focusing on customer and market actor experiences with the 2018 product. Based on the evaluation team's original scope of work, we are not conducting an impact evaluation for the Colorado

¹ As discussed in the on-site evaluation planning meeting, a Product goal is to increase electric savings.

Single Family Weatherization Product. This section presents the objectives of the evaluation. It is followed by a more detailed description of the evaluation activities.

PROCESS EVALUATION

The evaluation team discussed process evaluation priorities during the kickoff meeting² and during the staff interviews that followed.³ During those conversations, several themes emerged, primarily around customer recruitment, focused participation and feedback processes, maintaining strong relationships with current partners and finding new partners, and clarifying goals.

- **Partnerships with agencies, community groups, and non-profits are key to success.** They assist in reaching potential participants and creating the necessary amount of trust to implement the product's services. Product staff have an overall positive opinion of this product and Xcel Energy's relationship with the implementer, EOC.
- **Multiple sources provide funding to implement the product, creating challenges in process improvement efforts.** EOC receives funding from the federal government, Xcel Energy, donations, and other partner funding to fully subsidize audits and installations of weatherization and energy efficient products in low-income, single family homes. Given the reliance on multiple market actors, it is difficult for Xcel Energy and EOC to make process improvements.
- **Increasing participation is a key challenge.** Challenges include: agency waitlists, privacy rules that restrict what customer information can be shared among partners creating a redundant task of finding qualified customers, federal guidelines, and geography. Additionally, there's opportunity to improve customer feedback processes.
- **Some product goals are not clear to all staff members.** These include how cost-effectiveness⁴ should be prioritized and how to use the new 2019 Health and Safety budget efficiently.

These topics are mapped to the following **objectives of the process evaluation**:

- Identify barriers to, and the value provided by, participating in the product.
- Identify new marketing and outreach methods that target high need customers and realize more electric savings.
- Identify whether there are opportunities to increase the efficiency of data collection.

² Held via telephone on February 25, 2019.

³ Staff interviews took place in March and April 2019.

⁴ The Xcel Energy Product Lead clarified the cost-effective goal to Key Product Staff during the on-site evaluation planning meeting as the following: The Product should strive to be cost-effective to benefit all Xcel Energy customers, but the Product is not mandated to be cost-effective.

- If similar peer programs can be identified, conduct benchmarking to determine how similar products are implemented within the United States.
 - Identify whether peer utilities also include their Single Family Weatherization product in the DSM portfolio and strive to be cost-effective
 - Identify whether peer utility programs have a market rate offering that is working for low-income customers and how they track it
- Identify opportunities to improve the customer feedback process.

DATA COLLECTION ACTIVITIES AND SAMPLING PLANS

To meet the above objectives, the evaluation team will conduct a variety of data collection activities. These are listed in Table 2 and explored in greater depth in this section. The evaluation team has already conducted interviews with Xcel Energy staff members to help understand specific needs for this evaluation (task reference A in Table 2). The evaluation team will also conduct surveys with participating customers (task reference B) to understand the customer experience, including barriers to participation and improving the customer feedback process. The evaluation team will benchmark the product against four to six peer utilities using data collected via in-depth phone interviews with key staff working with Single Family Weatherization programs at each peer utility (task reference C).

Table 2. Single Family Weatherization Research Summary

Task Ref.	Research Task	Sample Size	Enhanced Scope?	Research Objective(s)
A	Staff Interviews	8 (in 6 groups)		Inform evaluation plan
B	Participant Surveys (Phone)	70		Experience and satisfaction, motivations for participating, program awareness, barriers to participating, opportunities to improve product and feedback process
C	Peer Utility Benchmarking	4-6 utilities		Best practices, innovative approaches

A. STAFF INTERVIEWS

In March and April 2019, the evaluation team interviewed six groups of Xcel Energy staff to inform this evaluation plan, discuss program goals, and review program processes, challenges, and successes. Staff members interviewed included the person managing the product at the time of the interviews, a residential program manager, engineers, a program officer and program assistant at EOC, the Director of Energy Efficiency and a Utility Program Assistant at EOC, and a Residential

Program Manager at EOC. All staff members were selected for participation in the interview by the product manager.

These interviews were conducted by phone. Each was between 30-minutes and one hour in length. These interviews, combined with the kick-off meeting, allowed the evaluation team to create a focused evaluation plan and data collection activities.

B. PARTICIPANT SURVEYS

EMI Consulting will conduct surveys with customers who have successfully completed a project through the Single Family Weatherization Product in 2018. Customers selected for participant surveys will have been the primary contact for the application process. Survey topics will focus on customers' experience and satisfaction, motivations for participating, barriers to participating, and opportunities to improve the product. The focus will be on gas customers, if possible, given gas is a higher percentage of portfolio savings.

- Experience and satisfaction: Characterize the experiences customers have using the product. Identify customer satisfaction with the product.
- Motivations for participating: Identify customers' motivations for participating in the Single Family Weatherization Product specifically.
- Barriers to participating: Identify product or contextual elements that made successful participation challenging. Identify elements that prevent participating customers from participating to a greater degree.
- Opportunities to improve the product and feedback process: Using survey data related to customer experiences, the evaluation team will develop recommendations for refining processes in the Single Family Weatherization Product.

C. PEER UTILITY BENCHMARKING INTERVIEWS

The objective of the peer utility benchmarking task is to understand how peer utilities are approaching key issues related to implementing Single Family Weatherization programs. The Single Family Weatherization implementation staff identified the following utilities/organizations as priorities for this research effort:

- Black Hills
- Ameren MO
- NW Natural / ETO
- Dominion Energy / QuestStar
- Rocky Mountain Power
- Duke Energy
- KCP&L: Income-Eligible Weatherization
- Public Service Co. of Oklahoma: Home Weatherization program
- CenterPoint MN: Low-Income Weatherization
- Columbia Gas of Ohio: WarmChoice, Income-Eligible Weatherization

The evaluation team will work to recruit staff in key management roles related to Single Family Weatherization programs at peer utilities with a target sample size of four to six interviews. If necessary to deviate from this list of preferred peer utilities to achieve an adequate sample size, the evaluation team will select utilities with comparable Single Family Weatherization products to Xcel Energy's so that Xcel Energy has an "apples-to-apples" comparison. These interviews will generally focus on the same discussion topics being explored in the interviews with Xcel Energy customers and market actors, but will also emphasize the following research objectives specific to peer benchmarking interviews:

- Identify whether peer utilities also include their Single Family Weatherization product in their DSM portfolio and strive to be cost-effective.
- Identify whether peer utilities have Health and Safety measures as part of their program.
- Identify whether peer utility programs have a market rate offering that is working for low-income customers and how they track it.
- Identify successful methods of engaging partner agencies and non-profits, including funding sources.
- Identify successful marketing and outreach strategies used for Single Family Weatherization programs.
- Understand the application processes for participation.

The evaluation team will develop a peer utility interview guide that is customized to the desired benchmarking components, to be provided to Xcel Energy for approval prior to beginning any data collection. Finally, the evaluation team will summarize the results of the benchmarking analysis in a summary within the final evaluation report.

APPENDIX B: DATA COLLECTION DOCUMENTS

B.1 XCEL ENERGY STAFF INTERVIEW GUIDE

INTRODUCTION

This guide is to be used to interview staff associated with Xcel Energy's DSM programs as part of the EMI Consulting 2019 evaluation of the Xcel Energy DSM programs. The interviews will be semi-structured, with these questions serving as a basic guide for experienced EMI Consulting staff during one-on-one phone interviews.⁵ As a guide for semi-structured interviews, these questions will not necessarily be asked verbatim, but will serve as a roadmap during the conversation.

STAFF INTERVIEW RESEARCH QUESTIONS OR OBJECTIVES

- Assess the extent to which the program design supports program objectives and customer service/satisfaction objectives.
- Assess the degree to which program resources are sufficient to conduct program activities with fidelity to the implementation plan
- Collect staff feedback on implementation successes and challenges
- Identify themes and issues for possible revisions to the evaluation plan

INTERVIEW

SECTION A: INTRODUCTION

[If staff was not included in kick-off meetings:] First we would like to give you some background about who we are and why we want to talk with you today. EMI Consulting is an independent consulting firm that works with electric and gas utilities to review and improve program operations and delivery. EMI Consulting is sub-contracting with other leading national firms to perform this evaluation—including Evergreen Economics, Rick Ridge and Associates, and Apex Analytics. Xcel Energy contracted with us to perform an evaluation of their portfolio of energy efficiency programs and we're currently in the process of conducting interviews with product managers and key staff involved in designing and delivering the portfolio to improve our understanding of Xcel Energy's DSM programs and its' influence on customers. We also want to understand what will be useful for you as Xcel Energy

⁵ Some interviews may be conducted jointly. This would most likely occur if someone's role recently changed or if more than one person performs the role.

program staff because of our research. We want to incorporate your priorities into our study so that the results are as useful as possible.

[ALL] Thank you for taking the time to speak with me today. My objective for this meeting today is to gain a deeper understanding of this program, what Xcel hopes to achieve through implementing this program how it operates, and a bit about your experiences with the <PROGRAM NAME>. We are interested in asking you some questions about <PROGRAM NAME> so we can benefit from your knowledge and experience to improve our understanding of the program. I have a set of questions that should take approximately 45 - 60 minutes, depending upon your experiences and involvement with the program. All the information provided is anonymous, we will be weaving it together with information gleaned from other interviews.

Before I begin, is it alright if I record the conversation for note taking purposes?
[RECORD IF ALLOWED]

A1. [If needed] First, can you take a moment and explain your role and scope of responsibilities with respect to <PROGRAM NAME>? [IF ALREADY KNOWN, REWORD TO CONFIRM]

Probes:

- Approximately how long have you held this position?
- What previous positions did you hold?
- Whom do you report to in the overall org structure?
- Do you have any direct reports?

A2. [IF NOT KNOWN] What role do third party implementers play in program implementation?

SECTION B: PROGRAM GOALS

I'd like to be sure I understand the goals of this program, both overall and specific.

[TAILOR BASED ON WHAT IS ALREADY KNOWN]

B1. Can you take me through the key goals for <PROGRAM NAME>?

B1a. Can you describe any savings goals? Do you have specific goals for individual components of the program (e.g., upstream vs. downstream, by measure type)?

B1b. Any other, non-energy goals?

B1b1. Any more immediate goals? For example, participation goals, customer engagement goals, improving customer satisfaction?

Changing customer awareness of or attitudes about energy efficiency measures?

B1b2. Any longer-term goals? For example, reducing greenhouse gas emissions? Altering market behaviors?

B2. What are “indicators of success”?

B2a. What are interim indicators that the program is or is not meeting its objectives or goals?

B3. Have any of these goals changed in the last few years?

B3a. What was the rationale for changing them?

B3b. In your opinion, how have these changes affected the program’s operations or its outcomes?

B4. What influences do you think this program has had on the market?

SECTION C: PROGRAM ACTIVITIES

I would like to make sure I have a solid understanding of how this program operates. If there is any formal documentation that you can refer me to as we walk through these next questions, I’d appreciate getting copies.

[TAILOR BASED ON WHAT IS ALREADY KNOWN]

C1. What are the different components of the program?

C1a. What, if any, incentives and/or tools does the program use to achieve its goals?

C1b. What activities do program and implementer staff engage in to achieve program goals?

- Marketing?
- Financial assistance?
- Applications?
- Technical assistance?
- Education?
- Contractor/Trade Partner support?
- Drop ship/direct install?

C1c. What tools are used to reach out to customers and/or market partners?

C1d. What are the participation steps from a customer perspective?

- C2.** Are these program activities modeled on another program or set of programs?
- C3.** Have any of these incentives changed in the last few years? What was the rationale for changing them?
- C4.** Have any of these activities changed in the last few years?
 - C4a.** What was the rationale for changing them?
 - C4b.** In your opinion, how have these changes affected the program's operations or its outcomes?
 - C4c.** Have you measured how these changes impacted savings or participation?

SECTION D: RESOURCES

- D1.** What resources do you rely on to implement the program?
 - D1a.** Program, implementer, sales staff?
 - D1b.** Management and program direction?
 - D1c.** IT tools and data tracking tools?
 - D1d.** Other resources?
- D2.** Are these resources sufficient to implement the program as designed?
 - D2a.** [IF NO] How could the program design/implementation change to be more efficient? What additional resources would help you implement the program as designed?
- D3.** Have any of these program resources changed in the last few years?
 - D3a.** What was the rationale for changing them?
 - D3b.** In your opinion, how have these changes affected the program's operations or its outcomes?

SECTION E: PROGRAM TRACKING AND REPORTING

I understand that you are using Salesforce as your primary program tracking tool. I'd like to understand how program activities are tracked to understand what data might be available to us in our evaluation.

[TAILOR BASED ON WHAT IS ALREADY KNOWN]

- E1.** What kind of documentation is available for the program? Implementation plans? Program manuals? Process maps?
- E2.** What kinds of data are collected for <PROGRAM>?
- E3.** Are there any data that you would like to collect for <PROGRAM>, but haven't been able to?
- E4.** Are there any data/documentation not tracked in Salesforce that might be helpful for the evaluation?
- E5.** As part of our evaluation, we will likely want to speak to "near-participants," customers/distributors that were eligible to participate in the program, showed some interest in program participation, but didn't participate for whatever reason. Would these customers all be tracked in Salesforce?
- E6.** [For Engineering Staff] What kind of baseline does the program use to estimate energy savings? [PROBE FOR CODE VS. COMMON PRACTICE]

SECTION F: STRENGTHS AND CHALLENGES

Next, I'd like to get your feedback on how the program is running.

[TAILOR BASED ON WHAT IS ALREADY KNOWN]

- F1.** In your opinion, what are the strengths of <PROGRAM> as it is currently being run?
 - F1a.** What would you say is working well in terms of program design or implementation?
- F2.** What are the most significant challenges for this program at this point?
- F3.** What feedback, if any, do you receive from customers and/or market partners on the program? (PROBE FOR CUSTOMER ENGAGEMENT/CUSTOMER SATISFACTION)
- F4.** What do you believe are the biggest barriers to getting customers and/or market partners to participate in this program?
- F5.** Are there any specific opportunities for improvement in the design or implementation of the program? Please describe.
- F6.** What would you like to see changed in how the program is designed or run, if anything?

F6a. Do you think there are any roadblocks preventing these changes from happening?

SECTION G: CLOSING

- G1.** Based on the kickoff meeting, we are planning to prioritize <RESEARCH PRIORITIES>, does align with your understanding? Do you have anything you would like to add to these priorities, remove from this set of priorities, or change about these priorities?
- G2.** Do you have particular questions that you would like to see answered by the evaluation? Why are these questions important?
- G3.** Do you have any other comments, concerns or suggestions about the program that we didn't discuss that you would like to make sure I know about?

Thank you very much for taking the time in assisting us with this evaluation. If I come up with any additional questions that come from this interview, do you mind if I send you an email or give you a quick call? I will also follow up with you shortly to identify peer utilities and performance indicators to kick-off the benchmarking task.

B.2 PARTICIPATING CUSTOMER SURVEY GUIDE

INTRODUCTION

To support the process evaluation of the 2018 Xcel Energy energy efficiency programs, the EMI Consulting evaluation team will conduct telephone surveys with participants. For the purposes of this survey, the evaluation team defined a participating customer as any customer that closed a CO Single Family Weatherization project between January 2018 and December 2018. The research will be conducted to assess key process evaluation objectives, including customer experience and satisfaction, product awareness, motivations for participating, barriers to participating, and opportunities to improve the customer feedback process.

The remainder of the introduction provides the research questions which the participant survey is designed to address, a description of the sample population and the target number of completes, a description of the sample variables to support programming the survey, and fielding instructions for the survey house.

SAMPLE POPULATION AND TARGET COMPLETES

The following table provides the sample population based on data provided to the evaluation team in May 2019. The population was established from Salesforce opportunity data for each participating customer in the sample period (January 2018 to December 2018). The number of target completes is designed to achieve results at the 90% confidence level with +/- 10% precision. The sample population is broken out by Denver vs Other City. The maximum completes for electric-only customers is 7 for Denver and 7 for Other Cities. Given that gas only or combo customers make up the majority of program participants, we want to ensure we don't survey a disproportionate number of electric-only customers.

Table 3: Sample Population and Target Completes by Strata

City	Total Sample Population	Target Completes	Response Rate Required to Achieve Target Completes	Electric-Only Population	Maximum Electric-Only Completes
Denver	330	35	NA	107	7
Other City	375	35		49	7
Overall	705	70	9.9%	156	14

SURVEY

SECTION INTRO: INTRODUCTION AND SCREENING

Intro1. Hello, this is **<INTERVIEWER NAME>** calling from Ewald and Wasserman, a national research firm working with Xcel Energy. I'm hoping to speak to someone in your household who would be familiar with the **<PROGRAM>** installed in your home in 2018. Our records show that you received **<MEASURE_NAME_1 - 2>** as part of these upgrades. We're conducting a brief, 15 minute confidential survey on Xcel Energy's behalf and offering a \$25 gift card for your time. May I speak with **<CONTACT>?**

1. Yes, that would be me. (Skip to Intro2)
2. No, they are not available right now. (Skip to Intro4)
3. No, you have the wrong number.(Skip to TERM)
4. No, other reason (SPECIFY).(Skip to Intro2)
98. DK
99. REF **[TERMINATE]**

[ASK IF INTRO1=DK]

Intro1.a Just to confirm, you didn't have any equipment and/or material upgrades installed in your home free of charge in 2018 that were supposed to increase the energy efficiency and/or decrease your home's energy costs?

1. Yes, I remember having home weatherization upgrades
2. No, I don't remember having home weatherization upgrades

[TERMINATE]

98. DK **[TERMINATE]**

99. REF **[TERMINATE]**

[ASK IF INTRO1= 1 OR Intro1a= 1]

Intro2. Are you the person in your household who is most familiar with the upgrades installed through in the **<PROGRAM>** program, or at least as familiar as anyone else?

1. Yes.
2. No, they are not available right now.(Skip to Intro4)
3. No, that's someone else. (Skip to Intro4)
4. No, that person no longer lives here.
5. Not applicable – this household did not participate in any such program.

[TERMINATE]

98. DK **[TERMINATE]**

99. REF **[TERMINATE]**

[ASK IF INTRO2= 1]

Intro2a. Are you the person who made the decision to participate in the **<PROGRAM>** program, or was one of the main decision-makers?

1. Yes. (Skip to Intro6)
2. No, that was someone else in my household (Skip to Intro4)
3. No, that was my landlord (Skip to Intro6)

- 4. No, that person no longer lives here. (Skip to Intro6)
- 98. DK **[TERMINATE]**
- 99. REF **[TERMINATE]**

[ASK IF INTRO2=4]

- Intro3.** Is there someone else that is knowledgeable about your participation in the **<PROGRAM>** program?
- 1. Yes.
 - 2. No **[TERMINATE]**
 - 98. DK **[TERMINATE]**
 - 99. REF **[TERMINATE]**

[INTERVIEWER NOTE: In some cases, the person most familiar with the program may be a relative or friend at a different number.]

[ASK IF INTRO2=2-3 OR INTRO3=1]

- Intro4.** What is this person's name?
- 1. [RECORD CORRECT PERSON'S NAME AS **<CONTACT>**]
 - 98. DK **[TERMINATE]**
 - 99. REF **[TERMINATE]**

[ASK IF INTRO4=1]

- Intro5.** Would I reach that person by dialing the same number I used to connect with you: **<PHONE>**?
- 1. Yes
 - 2. No, use a different number (RECORD HERE AS **<PHONE>**) **[THANK AND TERMINATE; REDIAL NEW SAMPLE CASE]**
 - 98. DK **[TERMINATE]**
 - 99. REF **[TERMINATE]**

PROGRAMMER NOTE: Only those for whom Intro1=1 or Intro2=1 should get to this screen; the rest would end at Intro5 as they will need to be made into new sample cases and called back at a later time.

[ASK IF INTRO2=1]

- Intro6.** Great! Is now a good time or should we call you back?
- 1. No objection – fine to continue
 - 2. Objection **[RESOLVE AND RESCREEN AS NECESSARY]**
 - 99. REF **[TERMINATE]**

SECTION A: AWARENESS

- A1.** I'd like to start by asking how you first heard about the opportunity to receive **<PROGRAM>** through this program. (Select one)

- 1. A program representative

2. A member of your local community (SPECIFY)
3. An organization you were connected with (SPECIFY)
4. Through the internet or personal research (SPECIFY) (Skip to A2)
5. Through flyers or advertisements (SPECIFY) (Skip to A2)
6. Other (SPECIFY) (Skip to A2)
98. DK (Skip to A2)
99. REF (Skip to A2)

[ASK IF A1= 1 – 3]

A1a. How did the person/organization contact you?

1. In-person; one-on-one
2. In-person; an event
3. By phone
4. By email
5. Other (SPECIFY)
98. DK
99. REF

A2. What is your most preferred method for hearing about opportunities such as the **<PROGRAM>** program?

1. In-person; one-on-one
2. In-person; an event
3. By phone
4. By email
5. Other (SPECIFY)
98. DK
99. REF

A2a. What is your least preferred method for hearing about opportunities like this program?

1. In-person; one-on-one
2. In-person; an event
3. By phone
4. By email
5. Other (SPECIFY)
98. DK
99. REF

[ASK ALL]

A3. What initial perceptions did you have of the **<PROGRAM>** program when you first heard about it?

[VERBATIM]

[ASK IF Intro2a = 1]

A4. Was there any information that was particularly useful in helping you decide whether or not to participate?

1. Yes
2. No [Skip to A5]

98. DK [Skip To A5]

99. REF [skip to A5]

[ASK IF A4=1]

A4a. What additional information would have been useful to help you determine whether or not to participate in the **<PROGRAM>** program?

[ASK ALL]

A5. Did you talk to others (friends, neighbors, family, etc.) about your participation in the **<PROGRAM>** program?

1. Yes

2. No (skip to A5b)

98. Don't know (skip to A5b)

99. REF (skip to A5b)

[ASK IF A5=1]

A5a. To your knowledge, did anyone you talk to about the **<PROGRAM>** program participate or try to participate in the program after you spoke with them?

1. Yes

2. No

98. DK

99. REF

[ASK IF A5=2, 98, 99]

A5b. What would have motivated you to talk about the **<PROGRAM>** program with others in your community or social network?

[RECORD VERBATIM]

SECTION B: BARRIERS AND MOTIVATIONS TO PARTICIPATE

[ASK QUESTIONS IN SECTION B ONLY IF Intro2a = 1. OTHERWISE, SKIP TO SECTION C]

Now I'd like to gather some information about your decision to participate in the **<PROGRAM>** program.

[ASK ALL]

B1. Can you tell me what motivated you to participate in the **<PROGRAM>** program?

[Open ended]

[ASK ALL]

B2.

Next I'm going to read you a list of factors that may have impacted your decision to enroll in the %PROGRAM% program. Please rate the importance of the following in terms of your decision to enroll in the **<PROGRAM>** program, using a 1 to 5 scale where 1 is "Not at all important" and 5 is "Very important."
You can also tell me if something was not applicable to your experience or if you do n't know:

(1) Not at all important - (3) - (5) Very important 77=N/A, 98=DK 99=REF

(RANDOMIZE)

B2a. Reducing environmental impact of equipment use

B2b. Upgrading out-of-date equipment / materials

B2c. Replacing faulty or failed equipment / materials

B2d. Increase reliability of equipment / materials

B2e. Health and safety

B2f. Financial costs of equipment, materials, and installation were 100% covered by the program

B2g. Reducing energy bill amounts

B2h. Comfort

B2i. Recommendation by program staff

B2j. Recommendation by someone you know or organization you were already connected with

B2k. Was there any other factor that influenced your decision to enroll in the <PROGRAM> program?

1. Yes (SPECIFY)

2. No (skip to B3)

98. DK (skip to B3)

99. REF (skip to B3)

[ASK IF B2k=1]

B2k_2. How would you rate the importance of <B2k>? (1-5, 98, 99)

B3. [ASK IF ANY OF B2a-e IS RATED A 3 OR HIGHER AND IF <CONTACT> HAD MORE THAN ONE <MEASURE-NAME> INSTALLED]

Were any products installed particularly important in your decision to participate?

1. Yes (SPECIFY)

2. No

3. Other

98. DK

99. REF

[ASK ALL]

B4. Were there any factors holding you back from submitting an application to participate in the **<PROGRAM>** program? (**ASK OPEN ENDED, PROBE IF**

NECESSARY: understanding application process, wait time, feedback from previous participants, etc.)

[ASK ALL]

B5. Were there any other factors that discouraged or almost prevented you from participating in the **<PROGRAM>** program after submitting an application?

SECTION C: IMPLEMENTATION EXPERIENCE

[ASK ALL]

Next, I want to ask you a few questions about your experience with the program and how the program's processes worked for you.

C1. I am going to ask you to rate how easy or difficult the following tasks associated with the **<PROGRAM>** were to complete, using a scale from 1 to 5, where 1 is "very difficult" and 5 is "very easy". You may also tell me if something was not applicable to your experience. How would you rate how easy it was to... **(PAUSE AFTER EACH FOR RESPONSE. REPEAT SCALE IF NEEDED).**

1. [NUMERIC OPEN END, 1 – 5]
77. Not applicable
98. DK
99. REF

(RANDOMIZE)

C1a. Complete program applications or related forms **[ASK ONLY IF Intro2a = 1]**

C1b. Get in touch with a program representative

C1c. Schedule installation of equipment / materials

C1d. Understand the program's processes

C1e. Understand the efficiency opportunities for upgrades and installations

C1f. Understand how to use and/or maintain the installed efficient equipment / materials

[For any C1 < 3]

C2a – C2f. Why was it not easy to **<RESTORE QUESTION WORDING FROM C1A – C1F>**

[ASK ALL]

C3. Would you have liked more contact, less contact, or about the same amount of contact from program staff?

1. More
2. Less (Skip to C5)
3. About the same (Skip to C6)
77. Not Applicable (Skip to C6)
98. DK (Skip to C6)
99. REF (Skip to C6)

[ASK IF C3=1]

- C4.** What would you have liked program staff to contact you about more?
1. [OPEN END]
 98. DK
 99. REF

[ASK IF C3=2]

- C5.** What would you have liked program staff to contact you about less?
1. [OPEN END]
 98. DK
 99. REF

[ASK ALL]

- C6.** Did you sign an energy pledge to action during the program?
1. Yes (Skip to C8)
 2. No
 98. DK
 99. REF

[ASK IF C6=2, DK, REF]

- C7.** Did you receive any energy education or tips during program staff visits?
1. Yes **[SPECIFY]**
 2. No (Skip to C9)
 98. DK (Skip to C9)
 99. REF (Skip to C9)

[ASK IF C6=1 or C7=1]

- C8.** Do you feel that you've been able to be more energy-conscious?
1. Yes
 2. No (Skip to C9)
 98. DK (Skip to C9)
 99. REF (Skip to C9)

[ASK IF C8=1]

C8a. What are a few examples of what you've been doing to try to save energy?

[ASK ALL]

- C9.** What could the program do that would make it easier for you to save energy? [OPEN END]

SECTION D: SATISFACTION AND FEEDBACK

[ASK ALL]

D1. Thank you for your patience; I only have a few questions left. I'm going to ask you to rate your satisfaction with various aspects of the program. For each, please rate your satisfaction on a scale from 1 to 5, where 1 is "very dissatisfied"

and 5 is “very satisfied”, or let me know if it is not applicable to your project. How would you rate your satisfaction with: **[RANDOMIZE, PAUSE AFTER EACH FOR RATING, REPEAT SCALE IF NECESSARY]**

- 1. [NUMERIC OPEN END, 1 – 5]
- 77. Not applicable
- 98. DK
- 99. REF

(RANDOMIZE)

D1a. The equipment / materials you received as part of the program

D1b. The installation of the equipment / materials

D1c. The education you received on how to operate / maintain installed equipment / materials

D1d. The pre-approval process to qualify to participate? **[ASK ONLY IF Intro2a = 1]**

D1e. The amount of time it took to receive approval for the project? **[ASK ONLY IF Intro2a = 1]**

D1f. The amount of time it took to between receiving approval and completing the installation? **[ASK ONLY IF Intro2a = 1]**

D1g. Your interactions with program staff

D1h. Energy savings realized after the program

[For any D1 < 3]

D2a – D2h. Why weren’t you satisfied with **<RESTORE QUESTION WORDING FROM D1A – D1H>**

[ASK ALL]

D3. Thinking about your experience from start to finish, how would you rate your satisfaction with the **<PROGRAM>** program as a whole? (IF NEEDED: Please use the same scale from 1 to 5, where 1 is “very dissatisfied” and 5 is “very satisfied”)

- 1. [NUMERIC OPEN END, 1 – 5]
- 77. Not applicable
- 98. DK
- 99. REF

[If ans = 5, 77, 88 or 99 Skip to D4]

[ASK IF D3 < 3]

D3a. Why weren’t you satisfied with your experience with the **<PROGRAM>?**

- 1. [OPEN END]
- 98. DK
- 99. REF

[ASK IF D3 = a 3 or 4]

D3b. What else could program staff do to improve your satisfaction with the **<PROGRAM>?**

1. [OPEN END]

98. DK

99. REF

[ASK ALL]

D4. What did you like most about your experience with the **<PROGRAM>?**

1. [OPEN END]

77. Not applicable

98. DK

99. REF

[ASK ALL]

D5. Using the same scale from 1 to 5, where 1 is “very dissatisfied” and 5 is “very satisfied”, how would you rate Xcel Energy as an energy provider?

1. [NUMERIC OPEN END, 1 – 5]

77. Not applicable

98. DK

99. REF

[ASK ALL]

D6. Did you fill out a feedback survey after the installation?

1. Yes (Skip to D7)

2. No, I wasn’t offered a feedback survey (Skip to D6b)

3. No, I declined

4. I don’t remember (Skip to D6b)

98. DK (Skip to D7)

99. REF (Skip to D7)

[ASK IF D6 = 3]

D6a. Why did you decide to decline the option to provide feedback?

[ASK IF D6 = 2, 3, 4]

D6b. What would motivate you fill out similar feedback surveys in the future?

[ASK ALL]

D7. How do you prefer to provide feedback?

(Open-ended but probe if necessary: a paper survey? electronic survey? Speak directly to someone who then fills out the survey? Directly after installation? After a certain amount of time (specify)?)

CLOSING

CLOSE1. Is there anything we didn’t cover that you’d like to mention or discuss about your experiences as a participant in the **<PROGRAM>** program?

CLOSE2.These are all the questions I have. As a thank you for your input, we'd like to send you a \$25 Amazon gift card or donate the money to your local United Way in your name. Let me ask the information we need to email the gift card to the intended recipient—this could be you, personally, or anyone else of your choosing.

[COLLECT CONTACT INFORMATION]

[IF <CONTACT> ASKS]

We also have an option to donate the \$25 to United Way.

B.3 PEER UTILITY BENCHMARKING INTERVIEW GUIDE

INTRODUCTION

To support the process and impact evaluation of the 2018 Xcel Energy energy efficiency products, the EMI Consulting evaluation team will benchmark the Xcel Energy products against peer utilities. The objective of the benchmarking is to identify opportunities to improve the Xcel Energy products based on a comparison of peer utility programs' design, delivery, and processes. In addition, benchmarking allows the evaluation team to understand the performance of the product in context with the performance of other utilities. To conduct the benchmarking, the evaluation team will conduct secondary research on the peer utilities identified and perform in-depth interviews with program managers at the peer utilities.

This document presents the in-depth interview guide for the CO Single Family Weatherization Product peer utilities interviews. Target respondents are managers of Single Family Weatherization energy efficiency programs.

INTERVIEW

INTRODUCTION/RECRUITMENT

INTRO 1 Hello, this is **<INTERVIEWER NAME>**, calling from EMI Consulting on behalf of Xcel Energy. Is **<CONTACT NAME>** available?

INTRO 2 We are working with Xcel Energy on a benchmarking and best practices study for Single Family Weatherization energy efficiency programs. As part of this study, we are reaching out to leaders of Single Family Weatherization programs to learn about innovative programs and best practices in the field.

We would like to include **<UTILITY>** in this study, as your Single Family Weatherization program has been identified as a peer program. In your interview, we would talk about your Single Family Weatherization program's design and implementation, as well as its successes and challenges. We would be very happy to share an anonymized version of our report on peer Single Family Weatherization programs with you once we've completed our research.

[IF NEEDED:] We will not be requesting any customer or participant data.

INTRO 3 Can we include your utility in the study?

- a. Yes **[RECORD CONTACT INFORMATION; SETUP INTERVIEW TIME; EMAIL INTERVIEW TOPICS]**
- b. No **[DISCUSS CONCERNS; ANSWER QUESTIONS; ATTEMPT TO CONVERT TO “YES”]**

SECTION A: KPIs/PROGRAM DESIGN

A1. First, we’d like to talk through the basic design and organization of your program. **[ASK/CONFIRM BASED ON HOLES IN BACKGROUND RESEARCH ON PROGRAM]**

Can you describe your program at a high level?

- a. What are the program’s overall objectives?
- b. What are the program’s eligibility requirements?
 - i. *If not addressed, which type of customers qualify for your program? (gas, electric, and combo customers?)*
- c. Is your program run by utility staff or a third-party implementer? *(ex: Franklin Energy or Clear Result)* This does not include any partnerships with agencies, etc.
 - i. *IF third-party implementer, PROBE for how that works with the program design.*
 - ii. Does the implementation agreement have a pay-for-performance component? E.g. by kWh, etc. Does the structure have a flat administrative/overhead fee?
- d. Does the program partner with other agencies, non-profits, or community groups?
 - i. If so, which organizations?
 - ii. What does the program do to engage partner agencies and other groups?
- e. How many PROGRAM STAFF OR IMPLEMENTER STAFF members support the program? *(ex: Prog. Manager, Field Rep., others? %FTE on this program?)*

- f. Have there been any recent changes to the program?
- g. What will the program be like in the near future?

A2. Can you describe the implementation strategies used by staff or implementers? (*Audits? Direct install? QA? Health and Safety?*)

- a. What roles and responsibilities does the utility/implementers/other partners have in implementing the program? (*Who completes client intake? Verifies eligibility? Completes audits? QA? services to the customers?*)
- b. Does program staff or implementers provide training to participants? (*Format, content, and clarify who*)
- c. What is the typical length of a project? (*from initial contact through installation*)

A3. Next, I'd like to talk about your program's efficiency incentives.
[ASK/CONFIRM BASED ON HOLES IN BACKGROUND RESEARCH. CAN ASK QUESTIONS BELOW OR ASK RESPONDENT IF OK TO FOLLOW UP VIA EMAIL]

- a. What types of measures do you offer? (*health and safety?*)
[Ask to for a website link or other document if there is one available]
- b. What is the measure selection process for each individual household?
- c. *If Health and Safety measures are part of the program,* what are the criteria and processes to select and install measures?
- d. Is participation in the program 100% free for the customer?
 - i. If not, what does the customer pay and how does the program determine the appropriate rate?

SECTION B: GOALS AND COSTS

Next, I'd like to talk about the participation and energy savings achieved through the program in 2018. **[ASK/CONFIRM BASED ON HOLES IN BACKGROUND RESEARCH. CAN ASK QUESTIONS BELOW OR ASK RESPONDENT IF OK TO FOLLOW UP VIA EMAIL]**

- B1. How many projects were completed in 2018?
- a. How many applications were submitted in 2018?
- B2. What type of data do you collect?
- B3. What are the processes to collect data?
- a. Do you feel your data collection processes are efficient? Why or why not?
- B4. What were the program's energy savings goals in 2018?
- a. Are these goals based on gross or net savings?
- B5. How much net/gross energy savings did the program report in 2018?
- B6. We'd like to know more about the budget or total operating costs of your program to get a sense of the utility cost of energy savings. Ideally, this includes program incentives, salaries of program staff (including support staff who may not work on the project full-time), marketing, consulting, and other overhead.
- a. What is the program's total operating budget? (*gas vs. electric breakdown, if applicable*)
- b. Does the utility provide 100% of the program funding or is some of the cost covered by other organizations / partners?
- a. If another organization / partners provide funding, approximately what % is covered by the utility?
- B7. Is the Single Family Weatherization program part of the Demand-Side Management portfolio?
- B8. How does **[UTILITY]** apply cost-effectiveness to its Low Income programs?

(NOTE FOR INTERVIEWER: Xcel Energy thinks about cost-effectiveness as binary: a program must either be cost effective or one of the explicit exceptions, including low income programs. The objective is to determine if the utility being interviewed treats cost effectiveness in a different way.)

- a. [**Confirm based on answer to B8**] To confirm my understanding, that means the Single Family Weatherization program is (*is not*) mandated to be cost effective, correct?
- b. [*If program is mandated to be cost effective*] What is the criteria the program is mandated to meet?
- c. [*If program is not mandated to be cost effective*] Does the program still track cost effectiveness?
- d. [*If cost effectiveness is mandated or tracked*] Was the program cost-effective in 2018?
- e. Was the program always mandated (*ever mandated*) to be cost-effective?
 - i. (*If there was a change*) When was the change made and why?

SECTION C: PROGRAM PARTICIPATION

Next, I'd like to talk about program outreach and marketing.

[ASK/CONFIRM BASED ON HOLES IN BACKGROUND RESEARCH ON PROGRAM]

- C1. What steps does the program take to engage potential program participants?

Probe as needed: What marketing practices do you use to increase customer awareness of the program?

- a. What does the utility / implementer do vs. partner organizations?
- b. What has been the most effective?
- c. What has been the least effective?
- b. Do you target certain types of customers? (*high-need customers, customers that would help the program realize more electric savings*)

- C2. Does the program need to rely on marketing to meet participation goals?

- C3. Are there other barriers to increasing program participation besides awareness?

Probe as needed: For example, do partner organizations have waitlists? Is funding shortage a challenge?

- C4. *If not previously discussed*, please walk me through the participant application process for your program.

SECTION D: CLOSING

- D1. Great! Thank you so much for your time. Those are all the questions we have for you today. Before we finish, do you have any questions for me, or anything else you would like to add?

APPENDIX C: DATA COLLECTION RESULTS

C.1 STAFF INTERVIEW RESULTS

INTRODUCTION

To support the process and impact evaluation of the 2019 Xcel Energy CO Single Family Weatherization product, the EMI Consulting evaluation team conducted telephone interviews with key staff managing and implementing the Single Family Weatherization Product. The interview objectives were to collect staff feedback on product experiences and evaluation priorities. Members of the EMI Consulting evaluation team interviewed the following key staff managing and implementing the Single Family Weatherization Product at both Xcel Energy and Energy Outreach Colorado (EOC):

Xcel Energy

- 1 Product Manager
- 2 Residential/Low-Income Team Leads (1 current, 1 former), selected by Product Manager
- 1 Engineer, selected by Product Manager

EOC (Implementer)

- 1 CARE Program Manager, selected by Product Manager
- 1 Chief Program Officer and Residential Program Assistant, selected by Product Manager
- 1 Director of Energy Efficiency and Utility Programs Assistant, selected by Product Manager

This memo contains our summary of the key takeaways, a description of the product, an inventory of the product's strengths and challenges, and feedback on evaluation priorities.

KEY TAKEAWAYS

Below are key takeaways from staff experiences with the Single Family Weatherization Product. These key takeaways provide a summary of the product context and feedback received during both the kick-off meeting and the subsequent staff interviews.

- **Partnerships are key to success.** They assist in reaching potential participants and creating the necessary amount of trust to implement the services. There is an overall positive opinion of this product and Xcel Energy's relationship with the implementer, EOC.

- **Multiple sources provide funding to implement the product, creating challenges in process improvement efforts.** EOC receives funding from the federal government, Xcel Energy, donations, and other partner funding to subsidize audits and installations of weatherization and energy efficient products in low-income, Single Family homes. Given the reliance on multiple market actors, it is difficult for Xcel Energy and EOC to make process improvements.
- **Increasing participation is a key challenge.** Challenges include: agency waitlists, privacy rules restrict what customer information can be shared among partners creating a redundant task of finding qualified customers, federal guidelines, and geography.
- **Some product goals are not clear to all staff members.** These include how cost-effectiveness should be prioritized and how to use the new 2019 health and safety budget efficiently.

PRODUCT ACTIVITIES, GOALS, AND RESOURCES

The following presents the evaluation team's understanding of the product based on staff interview results and review of available product documentation.

ACTIVITIES

The Single Family Weatherization product is one of four products within the Low-Income Program and assists income-qualified, single-family residential electric and natural gas customers in lowering their energy bills by providing free weatherization services.

Roles

- Xcel Energy partners with EOC, Weatherization Assistance Program agencies and non-profits to implement the product. The partners determine budgeting and goals for each calendar year with Xcel Energy, conduct marketing and outreach, and perform client intake and income verification.
- EOC is also responsible for determining health and safety solutions, verifying accuracy of data, managing a customer hotline, and processing the rebate payment.
- WAP agencies and non-profit partners are responsible for: conducting energy education visits, completing energy audits, installing direct install measures identifying and installing efficiency opportunities using the priority list, addressing health and safety issues, quality assurance, and client satisfaction check-ins. Customers are also asked to sign an energy pledge to action and can sign up for commitments reminders.

Marketing, Outreach, and Client Intake

- The Single Family Weatherization Product is based off of a similar federal product. When instituting this product, the goal was to expand it beyond the

federal Department of Energy (DOE) WAP income requirement of around 60% area medium income (AMI) to accommodate Colorado's higher medium income. Customers must have a household income below 80% AMI to participate in the product.

- EOC directly markets to potential participants using mailers and phone calls as well as working with partner energy efficiency agencies and single-family agencies to reach potential participants. EOC uses the Low-Income Energy Assistance Program (LEAP) list to identify potential participants.
- The application is available on the CARE website and through partner agencies. EOC's CARE program has a one page application because an EBT-style card can be used as proof of income. Participants can mail or email the application, and all approved applications are sent to WAP.

Customer Visits

- During appointments, auditors educate potential participants and explain the process, the potential savings, and options on how to save energy. To reinforce the information provided, at the end of the appointment auditors give potential participants a work summary that documents the type of efficiency opportunities available.
- The product supplies and installs energy efficient appliances, such as refrigerators, and/or materials, such as pipe insulation.
- Customer feedback is collected via paper surveys, generally administrated by the contractor. They have found in the past that online surveys sent via email have a significantly lower response rate than the in-person paper surveys, but this adds an additional data entry task.

Measures and Rebates

- Rebate applications can be submitted via two methods:
 1. Some agencies submit their applications for rebates to Colorado Energy Office (CEO)
 2. Or, EOC completes and submits the application.
- The product measures are reviewed every two years, the most recent additions have been evaporative cooling units and smart thermostats. That process includes reviewing the cost efficiency of the products, adding products that are new to the market, and working with the implementation teams to make sure they agree with the list.

Table 1. Xcel Energy 2018 CO Single Family Weatherization Gas Measures.

Product Natural Gas Measures
Furnace efficiency upgrades
Wall insulation
Attic insulation
Crawl space insulation
Attic insulation for manufactured homes
Water heaters
Storm windows
1.5 GPM showerheads
GPM aerators
0.5 GPM aerators
Air Sealing
Programmable Thermostat Installation and Programming

Table 2. Xcel Energy 2018 CO Single Family Weatherization Electric Measures.

Product Electric Measures
Refrigerator replacements
Electrically Commutated Motors (ECMs)
Compact fluorescent light (CFL) bulbs (rebated per CFL installment)
LEDs (A-19 and BR-30 bulbs)
Cooling savings for building shell measures
Water heater blanket

GOALS

- The overall goal of the Product is to conduct cost efficient upgrades in low income homes to bring down the overall energy demand and use.
- The Product is meant to be equitable across Xcel Energy's service territory, not just focused in urban areas. It should reach all customers who request services in a timely fashion and cause minimal disruption to the customer.
- Individual measures are initially screened for possible inclusion in the product using cost effectiveness tests; however, overall cost effectiveness is only measured at the product level.

APPENDICES

- Additional goals for the product include creating long-lasting customer behavior change as well as connecting customers to other energy programs, leading to continued energy reduction.
- The Health and Safety program began in January 2019. The program added an but did not have concrete savings goals.
- Xcel Energy does not claim savings related to education performed by partner organizations, but would like to in the future.
- The large increase in the kW goal in 2019 (See Table 3 below) is due to the addition of Evaporative Coolers.

Table 3. Xcel Energy CO Single Family Weatherization Energy 2018/2019 Goals and 2018 Actuals.

	2018 Goal	2018 Achievement	2019 Goal
kW	102	103	226
kWh	1,241,188	1,310,212	1,778,000
Dth	48,620	48,238	47,617
Spend (Gas)	\$2,358,186	\$2,358,222	\$2,858,101
Spend (Electric)	\$1,222,574	\$1,266,682	\$1,439,268

Table 4. Xcel Energy CO Single Family Weatherization 2014-2018 Participation Goals and Actuals.

	2018		2017		2016		2015		2014	
	Goal	Actual	Goal	Actual	Goal	Actual	Goal	Actual	Goal	Actual
Participation Gas	1625	1979	1625	1838	2181	1887	2181	1100	2478	1865
Participation Electric	2483	2313	2478	3187	2552	2114	2552	1543	2478	2436

RESOURCES

- Partnerships – This product is heavily reliant on external market actors to be successful, including EOC, CEO, WAP, Mile High Youth Corps, Groundwork Denver, Pueblo, CREA Results, ERC, and other non-profits and community groups. These partnerships provide connections as well as financial funding.

- Financial Funding – Utility funds, EOC funds, and other partner organizations provide funding to offer this free product to customers.
- Salesforce - A highly useful tool that interviewees believe the product uses well, but could possibly take advantage of more of its potential.
- Google Suite - Product teams use it for applications and file storage
- Application Tracker - The implementation of this tracker is considered a successful process improvement since it helps the customer understand where they are in the process without having to call anyone.

PRODUCT STRENGTHS AND CHALLENGES

During interviews, staff identified the following strengths and challenges to implementing the Colorado Single Family Weatherization Product in 2018 and at the time of the interview. Strengths include factors that product staff identified as supporting the success of the product; challenges include factors that product staff identified as preventing the product from reaching its goals.

STRENGTHS

- Staff involved in administering the Colorado Single Family Weatherization Product hold it in high regards, and they are proud to be a part of a program that assists their community.
- It is easy for customers to participate in the product since the amount of administrative work is minimal for them and the benefit high given product services are 100% free. The main reason for participation is avoided replacement cost. Avoided cost of either discomfort, or the avoided cost of having to come up with disposable income to replace equipment or fix issues.
- It is also easy for Xcel Energy to administer, as the processing of incentive applications is completed through EOC.
- The partnership between EOC and Xcel Energy is strong, creating an easy work environment and collaborative partnership.
- The lack of strict cost-efficiency goals allows the product to put the customer and community needs first, and the implementation of the Health and Safety program will encourage this further.
- If easy to correct, Health and Safety issues are addressed immediately during the audit. Issues requiring more extensive work are discussed with EOC before correcting. (Program started in 2019.)
- EOC has created a marketing plan that uses flyers and small advertisements in local papers and community centers. The strongest performing advertisement has been referrals to neighbors and friends in communities. The product also receives referrals from other low-income services. To increase single family in-home engagement, EOC worked to develop other community partnerships to reach new clients and bring them into its services.
- One particular success was a neighborhood sweep (the Highway Project) that resulted in almost full participation. Interviewees mentioned that finding the homes is the hard part, but once the team does find a group of qualifying homes, they are usually successful.

CHALLENGES

- Utility weatherization products cannot dictate process improvements of the federal WAP program nor add complexity to agency processes. The product team has to (at times) convince partners to take free money by showing how it will help them meet their own impact goals.
- The number of participants are declining.
- Without a referral, many potential participants do not trust contractors to enter their home and provide a free service.
 - Reasons for customer distrust include: fear of deportation, fear they will need to miss work or school, and fear that the program is not actually free or there is a catch, especially if they've previously received disconnect notices from the utility.
- Partnering with community agencies is key to success since barriers to enter a new community are high and since the utility program does not cover all of the needed funding.
- Some agencies have participant waitlists in certain areas, such as Alamosa.
- Whether or not the product needs to be cost-effective is unclear and confusing to interviewees. The direction is to strive for cost-effectiveness, but don't focus too heavily on it.
- Some customers only want certain measures, such as a new refrigerator, instead of all the measures identified and will not take part in the program.
- Calculations for this product are different than other products, so engineers must maintain them separately.
- Federal guidelines can be prohibitive, such as only being able to assess a house once every 15 years.
- Colorado weather and geography are challenging. Often, lack of access to a home or area of a home is an issue.
- Privacy rules restrict what customer information Xcel Energy can release to EOC, creating a redundant task of finding qualified customers.
- It is unclear whether it is necessary to collect all of the data currently being collected.

FEEDBACK ON EVALUATION PRIORITIES

During interviews, staff identified research topics they would like the evaluation to address. The following compiles these topics along with additional topics that the evaluation team identified based on staff interview findings. The evaluation team will consider these research topics when prioritizing portfolio-wide evaluation needs and as able, incorporate them into the final evaluation plan for the 2018 CO Single Family Weatherization Product.

- Identify barriers to, and value provided by, participating in the product.
- Identify why applicants don't end up participating in the product.
- Identify new marketing and outreach methods.
- Identify whether there are opportunities to increase efficiency of data collection

- Conduct benchmarking task to determine how similar products are implemented within the United States.
 - Identify whether peer utilities also include their Single Family Weatherization product in the DSM portfolio.
 - Identify whether peer utility programs have a market rate offering that is working for low-income customers.
- Identify opportunities to improve customer feedback process.

C.2 PARTICIPATING CUSTOMER SURVEY RESULTS

This appendix presents results from the participating customer survey.

SECTION A: FIRMOGRAPHICS, AWARENESS

A1. I'd like to start by asking how you first heard about the opportunity to receive <PROGRAM> through this program.

	Frequency	Percent	Valid Percent
A member of your local community	27	38%	40%
Through LEAP	19	27%	28%
Through flyers or advertisements	8	11%	12%
Program representative	5	7%	7%
An organization you were connected with	5	7%	7%
Through the internet or personal research	3	4%	6%
Don't know	4	6%	NA
Refused	0	0%	NA
Total	71	100%	100%

[ASK IF A1= 1 – 3]

A1a. How did the person/organization contact you?

	Frequency	Percent	Valid Percent
In-person; one-on-one	4	6%	40%
Respondent contacted them	3	4%	30%
By phone	3	4%	30%
By email	0	0%	0%
Other	0	0%	0%
Don't know	1	1%	NA
Refused	0	0%	NA
System Missing	60	85%	NA
Total	71	100%	100%

A2. What is your most preferred method for hearing about opportunities such as the <PROGRAM> program?

	Frequency	Percent	Valid Percent
By email	22	31%	31%
By phone	21	30%	30%
Mail	10	14%	14%
In-person; one-on-one	9	13%	13%
Flyer/Newsletter or Other			
Advertising	4	6%	6%
Word of Mouth	2	3%	3%
In-person; an event	2	3%	3%
Don't know	1	1%	NA
Refused	0	0%	NA
Total	71	100%	100%

A2a. What is your least preferred method for hearing about opportunities like this program?

	Frequency	Percent	Valid Percent
By phone	30	42%	44%
By email	16	23%	24%
No least preferred method	9	13%	13%
In-person; one-on-one	5	7%	7%
By mail	4	6%	6%
In-person; an event	3	4%	4%
Flyer/Newsletter or Other			
Advertising	1	2%	2%
Don't know	3	4%	NA
Refused	0	0%	NA
Total	71	100%	100%

[ASK ALL]

A3. What initial perceptions did you have of the <PROGRAM> program when you first heard about it?

[VERBATIM]

"A good opportunity to save on my energy bill"

"A little nervous about people roaming through the house. They assured me that they would identify themselves and call to confirm appointment"

"Cool that they want to offer some upgrades but I knew very little."

"Curious about what would take place."

"DK"

"DK"

"DK"

"DK"

"Excited"

"Hopeful in the potential to upgrade some of the features of our home."

"Hoping it would be some help"

"I actually really liked it."

"I am always a skeptic so was wondering what I had to do in return."

"I did not know much about it"

"I filled out the card and sent it, but when they sent me the box with the stuff I couldn't believe it. You rarely get anything for free."

"I knew people who had done it in other states and I always heard it was a good deal so was ready to have it done. Utilities are already very high because of door insulation."

"I think just trying to see what it was that would save us money, and that we'd become more efficient."

"I thought I would try it"

"I thought it was a neat program - I didn't know how much they were going to do and end up fixing, and was pleased that they actually replaced some appliances"

"I thought it was a pretty good program since they come out and do testing."

"I thought it was an excellent idea"

"I thought it was going to be something simple, but it turned out to be more complex."

"I thought it was great"

"I thought it was great. The home we live in is older with terrible insulation. I wanted to take advantage of the program to save money."

"I thought it was really cool."

"I thought it was too good to be true."

"I thought it would be a good program. Now that I have grandkids living on the 2nd floor, I wanted to know how to lower energy costs."

"I thought it would help our building get more energy efficient. Help with heating and cooling. But what I am most concerned about is that we live in low income housing, and we have an air conditioning that sucks up all kinds of electricity."

"I thought that I was pretty green (efficient) already. I thought they wouldn't do too much."

"I thought that it sounded good. It would help low income households."

"I thought the perks were nice. I was very interested in learning about the program in seeing what we could do to improve our house and receive a lower bill every month."

"I thought they would help with the lights."

"I was all for it! My sisters participated."

"I was curious, and then I heard about someone who used it and thought it was great. And when calling the first time everyone was wonderful and helpful. It was excellent. Wonderful and dedicated people. Very professional. They did an excellent job lowering my energy bill."

"I was excited about it. It sounded good."

"I was excited to know they were going to be doing stuff in my neighborhood."

"I was excited."

"I was happy that they came and talked to me and were going to do some improvements so I could lower my bills."

"I was interested because they were offering weatherization installation."

"I was okay and went for it"

"I was pleased and interested."

"I was wondering if I was going to qualify and if it would be worth it"

"I'm not a homeowner. I didn't think too much about it, but when the installers came out to my premise they were very professional and likeable young people."

"It sounded good"

"It sounded too good to be true."

"It was a Godsend. We really needed it."

"It was going to correct a lot of issues in the old building bringing it up to today's standards."

"It was good."

"It was really helpful and I was really happy because they put in all kinds of things in the house (toilet, insulation)."

"Just more curious as to how it worked and whether it would benefit me."

"Just that I could save money."

"Liked the idea of the LED lights that save energy"

"My daughter told me about it."

"None"

"Not too much because I was remodeling the place anyway"

"Positive"

"Positive and inclusive"

"Sounded interesting and that we should look into it"

"Sounded interesting. Only heard about the fridge."

"Sounded like a great idea to help consumer save money and energy"

"Sounded like it was going to be pretty good."

"That it was a potential opportunity to save money in the future."

"That was a good program for low income people and they help us for free. Heard good things from neighborhood."

"They said on the flyer that a new refrigerator would be installed to save power. I thought it was great."

"Thought it was a good idea."

"Thought it was great"

"Thought it was great. Had it done before years and years ago."

"Thought maybe I wouldn't qualify since my income status was temporary."

"Very pleased to know that it existed"

"We thought it was a good idea."

"Well I was willing to give it a try--seemed like a good idea."

[ASK IF Intro2a = 1]

A4. Was there any information that was particularly useful in helping you decide whether or not to participate?

	Frequency	Percent	Valid Percent
Yes	27	38%	39%
No	36	51%	52%
Don't know	6	9%	9%
Refused	0	0%	NA
System Missing	2	3%	NA
Total	71	100%	100%

[ASK IF A4=1]

A4a. What additional information would have been useful to help you determine whether or not to participate in the <PROGRAM> program?

"Able to do for free--covered under a grant."

"Came in and re-did shower, put in LED lightbulbs"

"Comparison costs of before and after upgrades."

"Digital thermostat availability for upgrade"

6 "DK" responses

"I wanted to see if my house was losing energy"

"It would be helpful to know that more than one person would be showing up. I'm intimidated by people coming into my house and was surprised by the amount of people who showed up for the assessments."

"It would be nice if they let me know that my current refrigerator needed to be broken in order to upgrade to a new one."

"Just knowing that there would be money that I could save with it."

"Knowing that they were going to do what I needed"

"More data on how much would be wasted before and after installation"

"More specific information about efficiency protocols before coming to visit"

"None"

"Receiving a new refrigerator and the potential energy savings."

"REF"

"That the program was free."

"The online application made a big difference because it was easy."

"They showed number chart about how much money we would save"

"They told me it would save me water."

"Updates to improve home and a lot of helpful tips."

"When we installed the aerators it made a huge difference in the monthly bill and water usage."

"Would have liked notification of all upgrade possibilities that were available - we ended up missing out on some, it wasn't obvious what was possible"

[ASK ALL]

A5. Did you talk to others (friends, neighbors, family, etc.) about your participation in the <PROGRAM> program?

	Frequency	Percent	Valid Percent
Yes	49	69%	70%
No	21	30%	30%
Don't know	1	1%	NA
Refused	0	0%	NA
Total	71	100%	100%

[ASK IF A5=1]

A5a. To your knowledge, did anyone you talk to about the <PROGRAM> program participate or try to participate in the program after you spoke with them?

	Frequency	Percent	Valid Percent
Yes	21	30%	43%
No	15	21%	31%
Don't know	13	18%	27%
Refused	0	0%	NA
System Missing	22	31%	NA
Total	49	100%	100%

[ASK IF A5=2, 98, 99]

A5b. What would have motivated you to talk about the <PROGRAM> program with others in your community or social network? [VERBATIM]

"Being able to save energy."

10 "DK" responses

"I don't have that many friends right now."

"I'm not good at talking to other people."

"If I had more information that I could pass along, like a flyer or something."

"If I saw a huge savings in my bill"

"If I understood what those programs did for apartments, specially for low income people and of course if we had a more energy efficient air conditioner that would have been more helpful."

"It helps out and I would like to let others know about it"

"People came to the house, they approached her first"

"Potentially people complaining to me about their high energy bills."

"Probably the weatherization part"

"The benefits of it"

"With the storm windows, the guys who came out to perform the initial installation were supposed to install four windows when only one was installed. So, having the contractors actually do their job right the first time would motivate me."

SECTION B: BARRIERS AND MOTIVATIONS TO PARTICIPATE

[ASK QUESTIONS IN SECTION B ONLY IF Intro2a = 1. OTHERWISE, SKIP TO SECTION C]

Now I'd like to gather some information about your decision to participate in the <PROGRAM> program.

[ASK ALL]

B1. Can you tell me what motivated you to participate in the <PROGRAM> program?

[VERBATIM]

"Because I needed help as I'm not working right now."

"Because I wanted to see if my house was losing energy - because I'm a senior and my public services would be higher if I wasn't efficient."

"Because it was free and heating during the winter has become more expensive"

"Because it was free and I am on Social Security"

"Because this is an older house so it needed some upgrades--fixed windows, did a lot of stuff that needed to be fixed."

"Been so cold all the time."

"Blow door test was cool and I got interested. Also potential to get storm windows and weather stripping."

"Complementary products to help home owners save money"

"Cost effective, due to extreme weather in Colorado"

"DK"

"DK"

"DK"

"Everybody wants to save money. Also the environment. Do things to help the environment."

"Free upgrades to my house."

"Getting a new refrigerator and the potential energy savings."

"Getting our house ready for winter time."

"Got the card they mailed and read it and thought I'd give it a shot and see"

"Having no money. Needing to save."

"I am on Social Security and Disability and I did not have to put out any money...it was a blessing"

"I believed I was losing a lot of money in heating and cooling due to bad insulation."

"I did not have any money for heat in the winter"

"I didn't really have an option. Might have been something to do with power bill and low income housing."

"I had done it a few years ago"

"I just wanted to update appliances and to save money on the energy bill"

"I knew that my home needed some upgrading like my windows and I needed more insulations"

"I think it's upgrading which saves money on the monthly energy bill."

"I wanted to cut utility costs and be more efficient seasonally."

"I'm living on Social Security and I don't have much money to spend on modernizing the home, so I needed some help."

"It was done prior to me purchasing the property."

"It was the coalition's decision."

"Just seeing my monthly bill and trying to find ways to save money."

"Knowing that I needed it and wouldn't be able to do any of it by myself."

"Lowering heating bills"

"My daughter let me know"

"My doors actually have some draft and I wanted to get them fixed but didn't include that so initially just wanted that to be fixed."

"My finances. I was looking for ways to cut down on bills. That was my big motivator."

"My upstairs needed insulation. Their were cracks in the upper stairwell."

"My XE bills were getting too high. They said they could lower my bills with this program."

"Needed the repairs done"

"Nothing specific"

"Originally it was an offer from Xcel for free lightbulbs etc. I received them in the mail and was very happy with it. It was offered to renters as well which was great."

"Our electricity bill."

"Poor insulation, high energy bills"

"Recent adoption of 3 kids made it necessary to re-evaluate energy consumption."

"Saving energy, better insulation, weather stripping."

"Saving money"

"Saving money"

"Saving money."

"That it was being done free of charge and would save us energy."

"The building management arranged the whole thing."

"The fact that it was so old (over 100yrs), and the wind just came right through the windows."

"The information that I was given for what I could save."

"The option to be able to save and not waste so much energy. Had lots of air leaks and very high energy bills."

"The potential for future savings."

"The property management firm did it."

"The savings it offered."

"There was draft coming in because of poor insulation. I called Xcel to see what they could do."

"They kept bugging me to do it."

"They said it would stay warmer inside in the winter"

"This house gets really cold in the winter time and I wanted to save on the heat."

"Thought I could save a lot of money by having it done."

"To get everything in the house up to date and to help save money"

"To lower my energy bill"

"To save on money."

"Trying to save money"

"We had an inspector come through to let us know if we were eligible, and he informed us of some of the potential risks such as: living in an older home, drilling through the drywall, the release of asbestos. The inspection was very professional and inspired confidence."

"We needed to have our house checked and the tenants were complaining so we participated."
 "Well our utilities bill was getting way too expensive and had to do something. Years ago we had replaced all windows but I wanted to do something to bring the bills down."
 "Winterization, new furnace, and new windows."

[ASK ALL]

B2.

Next I'm going to read you a list of factors that may have impacted your decision to

enroll in the <PROGRAM> program. Please rate the importance of the following in terms of your decision to enroll in the <PROGRAM> program, using a 1 to 5 scale where 1 is "Not at all important" and 5 is "Very important."

You can also tell me if something was not applicable to your experience or if you don't know:

(RANDOMIZE)

B2a. Reducing environmental impact of equipment use

	1	2	3	4	5	Missing	Total
Frequency	0	5	9	9	39	9	71
Percent	0%	7%	13%	13%	55%	13%	100%
Valid Percent	0%	8%	15%	15%	63%	NA	100%

B2b. Upgrading out-of-date equipment / materials

	1	2	3	4	5	Missing	Total
Frequency	1	2	3	5	51	9	71
Percent	1%	3%	4%	7%	72%	13%	100%
Valid Percent	2%	3%	5%	8%	82%	NA	100%

B2c. Replacing faulty or failed equipment / materials

	1	2	3	4	5	Missing	Total
Frequency	2	1	4	10	43	11	71
Percent	3%	1%	6%	14%	61%	16%	100%
Valid Percent	3%	2%	7%	17%	72%	NA	100%

B2d. Increase reliability of equipment / materials

	1	2	3	4	5	Missing	Total
Frequency	2	3	2	13	45	6	71
Percent	3%	4%	3%	18%	63%	8%	100%
Valid Percent	3%	5%	3%	20%	69%	NA	100%

B2e. Health and safety

	1	2	3	4	5	Missing	Total
Frequency	5	1	3	6	51	5	71
Percent	7%	1%	4%	8%	72%	7%	100%
Valid Percent	8%	2%	5%	9%	77%	NA	100%

B2f. Financial costs of equipment, materials, and installation were 100% covered by the program

	1	2	3	4	5	Missing	Total
Frequency	0	0	2	6	58	5	71
Percent	0%	0%	3%	8%	82%	7%	100%
Valid Percent	0%	0%	3%	9%	88%	NA	100%

B2g. Reducing energy bill amounts

	1	2	3	4	5	Missing	Total
Frequency	0	0	3	7	57	4	71
Percent	0%	0%	4%	10%	80%	6%	100%
Valid Percent	0%	0%	4%	10%	85%	NA	100%

B2h. Comfort

	1	2	3	4	5	Missing	Total
Frequency	3	1	6	11	45	5	71
Percent	4%	1%	8%	15%	63%	7%	100%
Valid Percent	5%	2%	9%	17%	68%	NA	100%

B2i. Recommendation by program staff

	1	2	3	4	5	Missing	Total
Frequency	2	2	9	17	32	9	71
Percent	3%	3%	13%	24%	45%	13%	100%
Valid Percent	3%	3%	15%	27%	52%	NA	100%

B2j. Recommendation by someone you know or organization you were already connected with

	1	2	3	4	5	Missing	Total
Frequency	2	2	10	10	36	11	71
Percent	3%	3%	14%	14%	51%	15%	100%
Valid Percent	3%	3%	17%	17%	60%	NA	100%

B2k. Was there any other factor that influenced your decision to enroll in the
<PROGRAM> program?

"A program rep who assisted me was very helpful."

"Being free"

"Being free"

"Financial uncertainty being disabled."

"I knew that my house was not up-to-date and I was concerned for my health."

"Our heater. We would see a 65% efficiency to a 95% efficiency."

"Replacing LED lights"

"Seemed easy"

"They were able to install new toilets that save me money on my water bill."

[ASK IF B2k=1]

B2k_2. How would you rate the importance of <B2k>? (1-5, 98, 99)

	1	2	3	4	5	Missing	Total
Frequency	0	0	0	0	9	62	71
Percent	0%	0%	0%	0%	13%	88%	100%
Valid Percent	0%	0%	0%	0%	100%	NA	100%

B3. [ASK IF ANY OF B2a-e IS RATED A 3 OR HIGHER AND IF <CONTACT> HAD
MORE THAN ONE <MEASURE-NAME> INSTALLED]

Were any products installed particularly important in your decision to participate?

	Frequency	Percent	Valid Percent
Yes	26	37%	62%
No	13	18%	31%
Don't know	3	4%	7%
Refused	1	1%	NA
System Missing	28	39%	NA
Total	43	100%	100%

"A lot of the plastic lining installed around motor home"
 "Cleaned up the windows and provided new furnaces"
 "Fridge, fans, shower heads and lights"
 "Furnace was old and noisy"
 "Heater because it was outdated. Old heater smelled like gas."
 "Insulation"
 "Insulation"
 "Insulation"
 "LED lights"
 "LED lights"
 "Lightbulbs, Showerheads"
 "Lining and Attic Insulation"
 "New furnace"
 "Sink aerators"
 "The furnace."
 "The heater for the central air."
 "The high efficiency furnace"
 "The insulation and weather stripping."
 "The insulation in the attic and crawl space."
 "The insulation, the lightbulbs, and the duct cleaning"
 "The LED lights and the portable air conditioning units"
 "The LED lights to save on electricity and the aerator."
 "The storm windows and duct sealing."
 "The toilet and the lights."
 "Water aerators, showerheads"
 "Windows"

[ASK ALL]

B4. Were there any factors holding you back from submitting an application to participate in the <PROGRAM> program? (ASK OPEN ENDED, PROBE IF NECESSARY: understanding application process, wait time, feedback from previous participants, etc.)

6 "DK" responses

"I had to borrow a computer but I was okay with that"

"I was told that it would take a long time (a waitlist)."

"Income - I was out of work and wasn't sure if I would be asked to pay for the upgrades once I started working again."

"Just afraid of the mess"

"Lack of knowledge."

52 "No" responses

"No more just finding time to go and get it done"

"No. It took me a while to get approved but other than that it was good."

"Pride"

"The lease agreement. How much more would rent be after?"

"The only thing was that signing off with landlord"

"Time"

[ASK ALL]

B5. Were there any other factors that discouraged or almost prevented you from participating in the <PROGRAM> program after submitting an application?

"All the paperwork was daunting"

"Details regarding all the weatherization upgrades that may be available to us."

3 "DK" responses

"It took a long time. We didn't know that we had been approved for over a year."

"Just the fact that my landlord was slow on signing the full participation for installation."

59 "No" responses

2 "REF" responses

"The only discouragement I had was that even though the refrigerator qualified it was not replaced."

SECTION C: IMPLEMENTATION EXPERIENCE

[ASK ALL]

Next, I want to ask you a few questions about your experience with the program and how the program's processes worked for you.

C1. I am going to ask you to rate how easy or difficult the following tasks associated with the <PROGRAM> were to complete, using a scale from 1 to 5, where 1 is "very difficult" and 5 is "very easy". You may also tell me if something was not applicable to your experience. How would you rate how easy it was to...

(RANDOMIZE)

C1a. Complete program applications or related forms [ASK ONLY IF Intro2a = 1]

	1	2	3	4	5	Missing	Total
Frequency	0	0	7	10	44	10	71
Percent	0%	0%	10%	14%	62%	14%	100%
Valid Percent	0%	0%	11%	16%	72%	NA	100%

C1b. Get in touch with a program representative

	1	2	3	4	5	Missing	Total
Frequency	2	3	9	8	38	11	71
Percent	3%	4%	13%	11%	54%	16%	100%
Valid Percent	3%	5%	15%	13%	63%	NA	100%

C1c. Schedule installation of equipment / materials

	1	2	3	4	5	Missing	Total
Frequency	1	1	5	8	49	7	71
Percent	1%	1%	7%	11%	69%	10%	100%
Valid Percent	2%	2%	8%	13%	77%	NA	100%

C1d. Understand the program's processes

	1	2	3	4	5	Missing	Total
Frequency	2	2	8	7	46	6	71
Percent	3%	3%	11%	10%	65%	9%	100%
Valid Percent	3%	3%	12%	11%	71%	NA	100%

C1e. Understand the efficiency opportunities for upgrades and installations

	1	2	3	4	5	Missing	Total
Frequency	1	1	4	10	49	6	71
Percent	1%	1%	6%	14%	69%	8%	100%
Valid Percent	2%	2%	6%	15%	75%	NA	100%

C1f. Understand how to use and/or maintain the installed efficient equipment / materials

	1	2	3	4	5	Missing	Total
Frequency	1	0	4	11	50	5	71
Percent	1%	0%	6%	15%	70%	7%	100%
Valid Percent	2%	0%	6%	17%	76%	NA	100%

[For any C1 < 3]

C2a – C2f. Why was it not easy to <RESTORE QUESTION WORDING FROM C1A – C1F>

[ASK ALL]

C3. Would you have liked more contact, less contact, or about the same amount of contact from program staff?

	Frequency	Percent	Valid Percent
More	9	13%	13%
Less	3	4%	4%
About the same	57	80%	83%
Not Applicable	0	0%	NA
Don't know	2	3%	NA
Refused	0	0%	NA
Total	71	100%	100%

[ASK IF C3=1]

C4. What would you have liked program staff to contact you about more?

"Better idea of the possible upgrades available."

"Discussing the maintenance and use of equipment"

"DK"

"DK"

"Estimations on savings and warranties for the equipment"

"Everything including the process and efficiency. Because the landlord is in charge we don't know what would have made our A/C more efficient."

"Follow ups with our satisfaction regarding the installation of the new upgrades."

"Just about the program in general. The installation process, what the program was. All the landlord said was that we were getting new fridges."

"Our application status. We forgot all about it as it took over a year."

[ASK IF C3=2]

C5. What would you have liked program staff to contact you about less?

"All of it."

"DK"

"Too many people there. One person managing it (preferable female). Not being there when she was there when doing work."

[ASK ALL]

C6. Did you sign an energy pledge to action during the program?

	Frequency	Percent	Valid Percent
Yes	14	20%	20%
No	26	37%	37%
Don't know	31	44%	44%
Refused	0	0%	NA
Total	71	100%	100%

[ASK IF C6=2, DK, REF]

C7. Did you receive any energy education or tips during program staff visits?

	Frequency	Percent	Valid Percent
Yes	22	31%	39%
No	25	35%	44%
Don't know	10	14%	18%
Refused	0	0%	NA
System Missing	14	20%	NA
Total	71	100%	100%

"Advised us that a wood stove is better than a pellet and also info about filters."

"Basically educating on what installed"

"Basically how to seal the home properly during winter time."

"Books"

"Different tips for around the house."

"DK"

"DK"

"Don't remember. Something about radon."

"Flyers and hand outs."

"How to determine what to do when its hot or cold"

"How to keep doors from being drafty, and lighting recommendations."

"How to not adjust the thermostat drastically, and general reminders."

"How to turn down the heating system and the importance of filters."

"How to use digital thermostat"

"Information on which times of day in the winter are best for heating the home."

"Pamphlets, and flyers"

"That one of my indoor air conditioner wasn't an Energy Star appliance."

"They gave some information on the windows and how to use them"

"They handed out materials on how to improve energy bill"

"They told me what to do to conserve water, what would be the best products to upgrade, which would be the most efficient/save the most money"

"They updated me on everything they were installing and how to maintain it."

"Tips on how temperature be different in the house, how much water toilet used"

[ASK IF C6=1 or C7=1]

C8. Do you feel that you've been able to be more energy-conscious?

	Frequency	Percent	Valid Percent
Yes	34	48%	94%
No	2	3%	6%
Don't know	0	0%	NA
Refused	0	0%	NA
System Missing	35	50%	NA
Total	71	100%	100%

[ASK IF C8=1]

C8a. What are a few examples of what you've been doing to try to save energy?

"DK"

"I keep my doors shut and windows closed."

"I turn off everything when not in use"

"I turn off the power outlets instead of leaving them on and I kept updating the energy-saving bulbs."

"I use energy saving bulbs."

"Just with everything they've done it's like a whole new house. Watch temperature-- heater doesn't need to be as high and A/C doesn't need to be as cold."

"Keep lights off if not in room, take short showers."

"Keeping lights off."

"Keeping off the lights. Unplugging appliances that are not in use."

"Make sure the lights are off when not in use and I use less lights in the daytime. We also have water saver toilets and we limit our showers."

"Making sure to change the furnace filters, keeping the thermostat set at the right times, unplugging appliances when not in use."

"More conscious and aware of air leaks in my home"

"No lights during the day. Open the windows. Use the line to dry clothes. Keep doors closed when having a/c on."

"Not having everything turned on all day long, being more conscious about heating and cooling settings, running water only when needed"

"Open windows and doors in evening when it's cool and keep them close when it's hot. Watch our water consumption."

"Shorter showers, using less light."

"Shut things off, lower the thermostat, use less water. Use cold water for laundry, shorter showers."

"Shutting off all of my lights and unplugging chargers, TVs and other electronics. Not leaving things plugged-in."

"Telling the boys to turn off appliances and water sources when they are not in use."

"The kids unplug appliances when they are not in use and turn off TVs. Lower the thermostat and use more blankets."

"Thermostat is working properly...turning it down lower at certain times and setting it differently. Also, keeping a cleaner filter."

"Trying to get the kids to shut off appliances when not in use. Trying to lead by example. Turning off lights etc."

"Turning down the heat at certain times of the day."

"Turning lights off more often. Sticking with the LED lights."

"Turning lights off when leaving rooms and try to keep energy bill low."

"Turning off all of the lights when they are not being used. Unplugging appliances not in use. Getting all of the kids to watch the same TV in the same room."

"Turning on A/C less, opening windows. Keeping doors closed etc."

"Unplugging appliances and not always running the air-conditioner."

"Using high efficiency equipments, keeping lights off"

"Wash bigger loads in cold water, turn off A/C at night, turn off lights."

"We've been cutting down on air conditioning and water usage. Unhooking appliances and making sure lights are off."

"We've been more mindful of turning off lights when we leave and unplugging appliances when we are going out-of-town."

"Weather stripping, upgrading the lightbulbs, and getting rid of our inefficient air conditioner and upgraded our water cooler to an Energy Star appliance."

"Windows & I do not have to turn my heater up as high as I used to. I also installed weather strips."

[ASK ALL]

C9. What could the program do that would make it easier for you to save energy? [OPEN END]

"A crash course on energy saving strategies."

"Already doing a lot."

"Audit and weatherization of my windows"

"Better explanation of all options available to us"

"Check the insulation."

"Convince my landlord to install smart thermostats."

32 "DK" responses

"Do more work on my mobile home."

"Energy installments not all functional"

"Follow-up about replacing my old refrigerator."

"I need to contact them about windows. I need help with financing and figuring out how to get them. So possibly more contact."

"I thought they were going to do more insulation"

"I was not informed about the thermostat option which would have helped me."

"I would probably like to have another person come in and re-do the weatherization"

"If I had some more information on the insulation as to why it wouldn't need to be replaced or added to."

"If they were in charge of A/C units that would help. Electricity with the A/C goes up."

"Just provide more weatherization services"

"Keep me informed."

"Maybe be a little more lenient on replacing old refrigerators."

"Not much. Everything was so very helpful."

12 "Nothing" responses

"Provide more literature."

"Send a bill."

"Send literature for those who receive bills in the mail, or a notification on the app."

"Send out more communications with tips on how to save energy"

"Small check list, most valuable information to be done."

"They could change all of our windows. Our windows were not installed properly."

"What they did was pretty good."

"Would have liked more insulation installed to help with the energy consumption."

SECTION D: SATISFACTION AND FEEDBACK

[ASK ALL]

D1. Thank you for your patience; I only have a few questions left. I'm going to ask you to rate your satisfaction with various aspects of the program. For each, please rate your satisfaction on a scale from 1 to 5, where 1 is "very dissatisfied" and 5 is "very satisfied", or let me know if it is not applicable to your project. How would you rate your satisfaction with:

(RANDOMIZE)

D1a. The equipment / materials you received as part of the program

	1	2	3	4	5	Missing	Total
Frequency	1	0	4	6	57	3	71
Percent	1%	0%	6%	8%	80%	4%	100%
Valid Percent	1%	0%	6%	9%	84%	NA	100%

D1b. The installation of the equipment / materials

	1	2	3	4	5	Missing	Total
Frequency	1	2	4	9	50	5	71
Percent	1%	3%	6%	13%	70%	7%	100%
Valid Percent	2%	3%	6%	14%	76%	NA	100%

D1c. The education you received on how to operate / maintain installed equipment / materials

	1	2	3	4	5	Missing	Total
Frequency	4	1	7	10	38	11	71
Percent	6%	1%	10%	14%	54%	15%	100%
Valid Percent	7%	2%	12%	17%	63%	NA	100%

"Didn't end up working well in practice, not very functional the way it was set up."

"Didn't receive any training to maintain the equipment installed."

"I'm blind so I wouldn't have been able to read any of the material that was provided. Unless it was electronic."

"It wasn't very durable and I didn't know how to put it back on."

"Worst installers I could ever know."

D1d. The pre-approval process to qualify to participate? [ASK ONLY IF Intro2a = 1]

	1	2	3	4	5	Missing	Total
Frequency	0	0	5	9	46	11	71
Percent	0%	0%	7%	13%	65%	15%	100%
Valid Percent	0%	0%	8%	15%	77%	NA	100%

D1e. The amount of time it took to receive approval for the project? [ASK ONLY IF Intro2a = 1]

	1	2	3	4	5	Missing	Total
Frequency	1	0	3	12	42	13	71
Percent	1%	0%	4%	17%	59%	18%	100%
Valid Percent	2%	0%	5%	21%	72%	NA	100%

"It took too long to know if we had been approved or not."

D1f. The amount of time it took to between receiving approval and completing the installation? [ASK ONLY IF Intro2a = 1]

	1	2	3	4	5	Missing	Total
Frequency	2	3	0	12	43	11	71
Percent	3%	4%	0%	17%	61%	15%	100%
Valid Percent	3%	5%	0%	20%	72%	NA	100%

"Because they were supposed to install the new dishwasher, but there was a defect."

"DK"

"It took a year"

"They made a mess and it took longer to perform the installation."

"We didn't realize how long it would take for the approval."

D1g. Your interactions with program staff

	1	2	3	4	5	Missing	Total
Frequency	0	1	2	5	55	8	71
Percent	0%	1%	3%	7%	77%	11%	100%
Valid Percent	0%	2%	3%	8%	87%	NA	100%

"The quality of the interactions I did have were very positive, but I would have just preferred more interactions."

D1h. Energy savings realized after the program

	1	2	3	4	5	Missing	Total
Frequency	0	2	6	15	43	5	71
Percent	0%	3%	8%	21%	61%	7%	100%
Valid Percent	0%	3%	9%	23%	65%	NA	100%

"Weatherization not done well--weather stripping would tear and come off easy. Not durable."

"DK"

[For any D1 < 3]

D2a – D2h. Why weren't you satisfied with <RESTORE QUESTION WORDING FROM D1A – D1H>

Responses listed above with corresponding question.

[ASK ALL]

D3. Thinking about your experience from start to finish, how would you rate your satisfaction with the <PROGRAM> program as a whole? (IF NEEDED: Please use the same scale from 1 to 5, where 1 is "very dissatisfied" and 5 is "very satisfied")

	1	2	3	4	5	Missing	Total
Frequency	0	0	4	14	51	2	71
Percent	0%	0%	6%	20%	72%	3%	100%
Valid Percent	0%	0%	6%	20%	74%	NA	100%

[If ans = 5, 77, 88 or 99 Skip to D4]

[ASK IF D3 < 3]

D3a. Why weren't you satisfied with your experience with the <PROGRAM>?
No responses.

[ASK IF D3 = a 3 or 4]

D3b. What else could program staff do to improve your satisfaction with the <PROGRAM>?

"Because we still don't have energy efficient A/C."

"DK"

"DK"

"DK"

"Full list of options available."

"I just wish it didn't take so long for them to install solar panels (a more recent installation)."

"I think they did a wonderful job, really."

"I think they should listen to our problems and should have fixed the issue right away."

"Just the cognizance of guys potentially flirting onsite. Needs to be more professional people."

"More follow-ups in the form of calls."

"More one on one contact straight after setup."

"Need to offer more services and opportunities to have weatherization upgrades covered."

"Nothing at this time."

"Providing more information would have been great."

"Really disappointed I couldn't do the crawlspace. Lack of communication and overwhelmed with paperwork."

"Since got one out of the two, I keep contact with what they were going to install."

"They could have more durable material"

"When it comes to apartments, that they make sure the tenants know and understand what's going on. Direct contact to the tenants from the HWUP and literature sent."

[ASK ALL]

D4. What did you like most about your experience with the <PROGRAM>?

"After everything was done, I liked the difference."

"Didn't have to pay for anything."

"DK"

"DK"

"DK"

"DK"

"Efficiency and on schedule, everything done in a day."

"Everything is new and I think it is good for saving energy. Lowers the energy bill."

"Everything is running smoothly. The men who came out install were very nice."

"Everything was explained to us what was being done and what needed to be done."

"Everything, very happy with the program."

"Fun to try something new."

"Good quality equipment and good education."

"Having a newer and nicer appliance"

"Having the reassurance that I had more insulation in the attic and the lightbulbs."

"How easy it was."

"How prompt it was."

"I like that it was a fast installation and they didn't waste any time."

"I like the fact that it saves me on cost. I like that they were able to provide installation to a home that hadn't had it before. And I loved the customer service with the kids that came to install the equipment."

"I like the idea that I could save energy."

"I like the new bulbs and that the program staff helped identify and fill air leaks that could save me energy."

"I liked the people that did everything, from the beginning to the end. Even the people who came to do the installation. Everyone went above and beyond."

"Impressed with the professionalism and knowledge of the workers who did the insulation."

"It was a good program. It was easy to get in touch with people."

"It was new and everybody likes everything new."

"It was pretty quick when they came to do the project."

"It was quick and easy"

"It was quick and easy. Everything was user friendly and efficient."

"It was quick and the workers were very pleasant and very knowledgeable. All in all a great experience."

"It wasn't really a lot to contact. So it's cool."

"Just everything."

"Just knowing that there is new reliable equipment."

"Just knowing that there would be cost savings."

"Just saving energy"

"Just that they came in and gave great tips, allowed me to save money on gas bill, light bill etc. They did great work--windows insulation etc. Made the house better--cold stayed out."

"Just the customer service overall."

"Just the education."

"Just the fact that they lowered my monthly bills."

"Just the way they treated me, they treated me with respect and were helpful."

"Liked the person who installed and showed us how to use the upgrades. The person also followed up."

"New appliances, energy efficiency, friendly staff, and tips."

"New refrigerator."

"No other comments to add."

"Not applicable"

"Professionalism of staff"

"Realizing that those things that they sent like the LEDs do make a difference with energy savings."

"REF"

"Saved me money!"

"Some of the workers were good."

"That they explain things to you and give you lightbulbs that are brighter. Customizable to needs."

"The courteousness of the employees, the professionalism, and the clean up."

"The difference it made--saved on utility bills."

"The efficiency."

"The financial relief as well as the improved utilities of our home, particularly with more efficient heating in the winters."

"The improved efficiency of my property."

"The knowledge of what was going on. They kept me informed."

"The money I noticed saving."

"The opportunities."

"The people that came were pleasant, one even was an fellow church member. They were very professional and I was impressed with that."

"The people who came out were awesome."

"The personalized care--the time that they took to do it. They came in and they reviewed the house, did the energy audit, talked with me about it. Very upfront about everything."

"The staff members were very courteous and hard working. They did their job well."

"The staff on the phone were professional and helpful. Has good intentions."

"The winter bill was lower than years before."

"They did save me money."

"They were friendly and very explanatory about the equipment bringing into home."

"They were nice and they put things back if they moved them."

"They were punctual and fast. Helped reduce energy and water bill."

"They were very good and they knew what they were doing."

"They work good and helps reduce the bills."

"Very good."

[ASK ALL]

D5. Using the same scale from 1 to 5, where 1 is "very dissatisfied" and 5 is "very satisfied", how would you rate Xcel Energy as an energy provider?

	1	2	3	4	5	Missing	Total
Frequency	1	0	4	17	47	2	71
Percent	1%	0%	6%	24%	66%	3%	100%
Valid Percent	1%	0%	6%	25%	68%	NA	100%

[ASK ALL]

D6. Did you fill out a feedback survey after the installation?

	Frequency	Percent	Valid Percent
I don't remember	31	44%	52%
I did fill out a survey	16	23%	23%
I wasn't offered a feedback survey	16	23%	23%
I declined to fill out a survey	1	1%	1%
Don't know	5	7%	NA
Refused	2	3%	NA
Total	71	100%	100%

[ASK IF D6 = 3]

D6a. Why did you decide to decline the option to provide feedback?

"It got lost."

[ASK IF D6 = 2, 3, 4]

D6b. What would motivate you fill out similar feedback surveys in the future?

"\$25 Amazon gift card!"

"A gift card, reward, incentive."

"Amazon gift card."

13 "DK" responses

"Do a lot of that already."

"Gift cards"

"Gift certificate or incentive"

"I don't like filling out surveys"

"I have to have help because I am unable to see."

"I like that I am getting \$25. Just being offered."

"I really hate them. I get a lot of mobile calls and I usually decline."

"If I am satisfied."

"If it didn't get lost."

"If they are in an accessible format. Electronic or any other accessible format."

"If they are included with the bill I will fill them out."

"If they get everything done right the first time with no defects with the installation."

"If they sent a survey in the mail or called me directly."

"Incentivized programs."

"Just call and savings"

"Just for the project to actually be completed before offering a survey."

"Just good service."

"Just mail and ask questions"

"Just receiving them (especially if there is a reward.)"

"Just their help."

"More gifts"

"Nothing."

"Nothing. I am glad to help."

"Nothing. I am positive about my experience. Probably would have done it if offered."

"Once they send it to me I will fill it out."

"Payment"

"Professionalism of staff"

"Send email afterwards with the survey."

"Send it and I will fill it out."

"The Amazon gift card and rewards"

"They would need to be short."

"When mailing the survey try not to make it appear like other junk-mail."

[ASK ALL]

D7. How do you prefer to provide feedback?

(Open-ended but probe if necessary: a paper survey? electronic survey?

Speak directly to someone who then fills out the survey? Directly after installation? After a certain amount of time (specify)?)

"A paper survey"

"A phone call."

"By mail (a paper survey)."

"By phone or on paper."

"Directly after the installation when it's fresh on my mind."

"Directly after the installation."

"DK"

"DK"

"Electronic"

"Electronic"

"Electronic"

"Electronic - have it emailed. Wait a month or two."

"Electronic or call"

"Electronic or directly speaking to someone or paper survey"

"Electronic survey"

"Electronic survey"

"Electronic survey, a few days after installation."

"Electronic surveys."

"Email"

"Email"

"Email"

"Email"

"Email"

"Email"

"Email"

"Email or phone"

"Email."

"Face-to-face w/ them filling out the survey."

"For somebody to call us directly if they have time."

"In the mail"

"In written form"

"Mail"

"Mailed to my house. Directly after."

"Online"

"Online"

"Online"

"Online"

"Over the phone"

"Over the phone with a representative doing the survey."
"Over the phone."
"Paper"
"Paper"
"Paper"
"Paper or phone"
"Paper survey"
"Paper survey"
"Paper survey"
"Paper survey"
"Paper survey"
"Paper survey"
"Paper survey in the mail"
"Paper survey in the mail."
"Paper survey included in bill."
"Paper survey, after a couple days"
"Paper survey, paid postage."
"Paper survey."
"Paper survey."
"Paper survey. Directly after installation."
"Phone call where someone fills out for me."
"REF"
"Speak someone to fill out for me"
"Speaking directly"
"Speaking directly to someone who then fills out the survey"
"Speaking directly with someone."
"Speaking someone or paper survey"
"Speaking to someone directly"
"Speaking with someone directly over the phone."
"The way it's being done currently works out."
"Through the mail (paper survey)."
"Typically online"
"Usually through email."

Closing

CLOSE1. Is there anything we didn't cover that you'd like to mention or discuss about your experiences as a participant in the <PROGRAM> program?

CLOSE2. These are all the questions I have. As a thank you for your input, we'd like to send you a \$25 Amazon gift card or donate the money to your local United Way in your name. Let me ask the information we need to email the gift card to the intended recipient—this could be you, personally, or anyone else of your choosing.

[COLLECT CONTACT INFORMATION]

[IF <CONTACT> ASKS]

We also have an option to donate the \$25 to United Way.

C.3 PEER UTILITY BENCHMARKING INTERVIEW RESULTS

INTRODUCTION

EMI Consulting conducted secondary research and in-depth interviews with key staff of weatherization assistance energy efficiency programs at peer utilities. The objective of the benchmarking interviews was to identify opportunities to improve the Xcel Energy products based on a comparison of peer utility programs' design, delivery, and processes. In addition, benchmarking allows the evaluation team to understand the performance of the product in context with the performance of other utilities. The evaluation team's findings are informed by interviews with key informants (e.g., program managers) at five utilities (shown as Utilities A-E). These utilities were selected because they have comparable territories and/or programs to the Xcel Energy Colorado Single Family Weatherization Product. This enables the evaluation to provide an "apples-to-apples" comparison and to evaluate the set of circumstances (such as regulation and demographics) that impact program plans at peer utilities.

Interviews focused on topics similar to those researched in the participating customer surveys while also emphasizing the research objectives specific to the peer benchmarking interviews. Evaluation objectives addressed by the peer benchmarking research are:

- Identify new marketing and outreach methods.
- Identify whether there are opportunities to increase the efficiency of data collection.
- Identify whether peer utilities also include their Single Family Weatherization product in the DSM portfolio and strive to be cost-effective.
- Identify whether peer utility programs have a market rate offering that is working for low-income customers and how they track it.

The remainder of this memo provides a summary of key takeaways, background information relating to the structure of the low-income weatherization programs included in this analysis, and then findings related to the four objectives listed in the above bullets. The final section provides a summary of incentive levels from each peer utility.

KEY TAKEAWAYS

Weatherization programs are an option that customers can consider when they meet the income requirements and are looking for a way to reduce their utility bills. Peer utilities' promotion of these programs targeted high density, low-income areas and relied heavily on word-of-mouth marketing and personal referrals. Low-income weatherization programs were often accompanied by medium-income programs, as well as bill payment assistance programs.

Additional key takeaways from the interviews included:

- Peer programs relied on outreach to meet their participation goals, with internal utility staff or a contractor handling customer recruitment.
- The data collection processes varied by utility; Utility B received detailed program data and found success using a custom cloud-based system, while Utility C received only data on the house-type.
- Each program approached cost effectiveness slightly differently. None were mandated to be cost effective, and only one was cost effective.
- Programs tended to be accompanied by a medium-income program, which was not free to customers.
- All programs used a third-party contractor to conduct the work and were managed internally by a small group, generally one or two full time project staff who had help from others, such as marketing, engineers, or other staff.
- Health and safety resources varied by utility; Utility B spent a lot on covering health and safety upgrades, while Utility E spent very little.

BACKGROUND INFORMATION

This section provides background information on the structure of the peer weatherization programs.

Utilities interviewed were from across the nation and had territories ranging from rural to metropolitan. One utility spans many states, while the rest are confined to specific areas of a state. The programs are all well-established, with only Utility E starting within the last 10 years. Two of the utilities had a lower income requirement than 200% federal poverty level: Utility B was 150% federal poverty level and Utility E had a \$50,000 cap on household income.

Project length for weatherization programs tended to be relatively short for the utilities interviewed. Utility E noted a particularly quick turnaround of a few hours, while others ranged months because of delays in health and safety and more complex installs like water heaters.

The programs were generally staffed by only a handful of people, with a range of number of contractors. For instance, Utility E mainly worked with one contractor, while Utility B worked directly with four organizations. Those organizations worked with over 100 trade partners. Utility staff was made up of one or two project managers, with assistance from engineers, administration, and outreach and marketing staff.

Recent changes for all the programs leaned towards expansion rather than cutbacks.

- Utility C is looking at a pay for performance model as a possible change in the future. The Pay for Performance Pilot was designed to provide payments, based on kilowatt-hour (kWh) savings, to local non-profit organizations that provide weatherization and other energy saving upgrades to residential low-

income households. These payments are intended to assist the organizations in expanding the number of customers they serve through their programs.

- Utility E recently adjusted their income guidelines to be closer to the federal requirements to help with cooperation between agencies, and Utility B had a similar plan for the near future.

Four of the utilities partnered directly with an organization that worked with trade partners.

- The smallest program, run by Utility E, worked directly with one primary contractor that does the weatherization work throughout the whole state. The contractor had the call center and completed all the initial phone screening. They worked on a pay for performance model that is very strict. A 3rd party auditor inspected homes and, if the contractor did not score a 90% or higher, they do not get their biannual payout. If they happened to fail in the first half of the year, but they could make up the savings by the end of the year they could still collect their money.
- Utility B partnered with four organizations that worked with over 100 trade partners. They have been working with the same four contractors since the beginning of the program. They valued the education of their trade partners and held classes and certification courses. They also had a mobile education van that could reach more rural areas of the state to ensure more trade partners could get the education they need.

All of the utilities used contractors or trade partners to complete the program application.

- Utilities A, C, and D required customers to be 200% of federal poverty and to have their income verified by the government.
- Utility E had an income limit cap of \$50,000 per household. To participate in the program the participant had to sign a waiver saying that they are below the limit.

Table 1 below outlines key background information on each of the peer utilities interviewed as well as the Xcel Energy Single Family Weatherization product.

Table 4. Background Information by Utility

Utility	Energy Type	Location	Income Requirement	Third-Party Implementor	Longevity
Xcel Energy	Electric	Colorado	80% AMI	Yes	9 years
	Gas	Colorado	80% AMI	Yes	9 years
Utility A	Combo	Midwest, Urban/ Suburban	200% Federal Poverty	Yes	30+ years
Utility B	Gas	Midwest, Urban/ Suburban/Rural	150% Federal Poverty	Yes	3 years*
Utility C	Electric	Eastern USA (Interview focused on the Carolinas)	200% Federal Poverty	Yes	10 years
Utility D	Gas	West Coast, Urban/ Suburban	200% Federal Poverty	Yes	30+ years
Utility E	Electric	Southern Midwest, Suburban/Rural	Below \$50,000	Yes	> 10 years

* Dual fuel program started in 2015

MARKETING AND OUTREACH METHODS

Utilities recruited participants by geography—by county in more rural areas and by blocks in more urban areas. Geotargeting had many beneficial results, such as limiting the driving distance for contractors, quickly acting on word-of-mouth referrals, and easily targeting online advertisements to a geographic area.

Other methods of marketing and outreach included co-branding with local stores, partnering with other low-income agencies and/or local leaders, referrals from internal billing assistance departments, and traditional marketing methods, such as emails, mailers, and phone calls. Methods to engage customers focused on how to gain trust in communities, a common barrier. To avoid another common barrier in certain areas—long waitlists—utilities noted they were careful to not over-promote their programs.

While utilities mostly relied on trade partners to drive participation into their program, some programs also relied on support from internal staff and partner agencies. The contractors and trade partners worked directly with the program participants, while the utilities themselves did not regularly engage with participants other than to refer them to the program.

Key details of marketing and outreach activities per individual peer utility program are below:

- Utility E noted that targeting by town/county helped build trust in the community. For instance, potential participants would see program vehicles parked in their town and then recognize the name when they

received a marketing call. (Sending out postcards before starting marketing phone campaigns further improved the success of those calls since it brought legitimacy to the call.) Program staff would also meet with local officials, such as city council members, and host breakfasts at local senior centers.

- Utility B worked with other state utilities and a philanthropic institution to bring communities together to achieve weatherization program participation goals. If they meet their participation goal as a neighborhood, then the partnering organizations weatherize a community building in the neighborhood.
- Utility D stated they wanted to start a program to help potential participants overcome the barrier of income verification. Many qualified customers cannot get to an office in the city during standard business hours, so Utility D wants to start a program that brings registration to suburban and rural areas. While this would help customers pass income verification to participate in the weatherization program, it would also allow them to qualify for many other low-income government programs.

Targeting by geography also helped program staff overcome another key barrier participating customers mentioned: the taboo surrounding accepting low-income assistance.

- Utility C and E successfully targeted neighborhoods that had a high-density of low-income households. Utility E found once they were able to get some community members to participate, they were much more likely to get more neighboring customers.

EFFICIENCY OF DATA COLLECTION

Data collection varied amongst the peer utilities interviewed:

- Utility E received reports directly from the contactor, including all measurements and notes.
- Utility C received reports from their four agencies instead of the trade partners. The reports included whether the home is a low energy home (tier 1) or high energy home (tier 2 home).
- Utility B collected a large amount of data and was particularly proud of their cloud-based system that was designed for them by a private company. Their contractors can access the program from their tablets during the energy assessment, then the utility can follow along with the program's progress in a dashboard throughout the year. It is a powerful data analytics software that helped the utility engage with their customers beyond the weatherization product.

COST-EFFECTIVENESS AND MARKET RATE OFFERINGS

Utility D was the only utility interviewed that did not house the weatherization program in the utility's demand-side management portfolio and was the only one of the peer programs interviewed mandated to be cost-effective; however, Utility E

was cost-effective regardless. Utility E also offered the fewest measures and had the quickest timeline.

Utility B received funds from both the DSM Portfolio and rate-based funding. They spend the rate-based funding first. Table 2 below notes the key research findings regarding cost-effectiveness.

Table 5. Program Funding by Utility

	Utility A	Utility B	Utility C	Utility D	Utility E
Included in the DSM Portfolio?	Yes	Yes	Yes	No	Yes
Is the program mandated to be cost effective?	No	No	No	Yes	No
Is the program cost effective?	No	No	No	No	Yes

The programs all had a partner program for middle-income residents; these programs are not free to the customer and do not use Department of Energy money.

We spoke with Utility D's partner agency about how they run their market rate offering. They are a third party implementor who works with gas and electric utilities and non-profits in the area. They split the low income and medium income program in 2014 from the so that contractors would refer the residents who qualify for low income to the low income program before they did any work. Also, because the federal program prioritizes energy burden and gas prices are low, Utility D found that their customers were not being served.

Customers reach out to contractors about projects that they want to do, and contractors inform the customer of the program if they think they will qualify. The contractor buys the item from the midstream partner at a reduced rate, and then sells the items to the customer for a further reduced rate, after installation the contractor fills out the application. There is no income verification process, the customers just need to sign a form saying they are under the income limit.

The incentives are decided upon by finding the price that is going to motivate the customer to pick the efficient option. All measures go through updates on a cycle where they update a Measure Approval Document. That document has information about the timeline, incentives, justifications, program analysis, and engineering. Each measure must be cost effective and the program overall has to be cost efficient. The agency does not always know what the contractors are charging, but they hope that they cover the cost of the difference between the baseline and the energy efficient option.

They work with one non-profit agency that helps the residents who qualify get a loan for the work. Another non-profit agency covered the entire customer cost so that a certain number (about 40 in 2019) of customers could get a heat pump for free. The middle income program has portfolio level TRC, while the low income program has a savings to investment ratio project by project.

OTHER CONTEXTUAL THEMES

MEASURE AND INCENTIVES

Health and safety approaches varied amongst these utilities. Most programs offer a very limited amount of funding.

- Utility A's approach was interesting, they set loose guidelines so that they can give a larger amount of money to fewer houses, like in one case someone needed a steel door, and that was the only thing standing in between them and beginning weatherization, so they gave that customer the door.
- Utility B covers all of the money for health and safety. They train their trade partners to take care of the health and safety issues, or to recognize when they require a different contractor. They do not move forward with the weatherization until the issues are fixed.
- Utility C gives \$800 for health and safety, saying that 40% of their customers get delayed because of it.
- Utility E offers funding for a combination smoke/CO detector if the price is equivalent to a standard smoke detector.

All of the utilities interviewed offer attic insulation and air sealing. Four utilities offer furnace repair or replacement and three offer water heater repair or replacement. Utility C offers the most measures.

- Utility C uses a tier system, a tier 1 home uses less than 7 kWh per square foot and a tier 2 home uses more. For a tier 1 home Utility C provides up to \$600 of funding, and for a tier 2 home they provide up to \$4,000. In addition, for homes in need of HVAC replacement (heat pumps only), a total of \$6,000 can be spent for the replacement of the heating system. The Tier 2 measures are included in this measure with a \$6,000 max per home. In addition, they have a set maximum spend per home appliance at \$800.
- Utility A is changing its program so their most expensive measure, a heating system or water heater, is not included in the program anymore. Now, they offer it as a separate program so it does not cause delays and so the project can be done separately than the one-time-only weatherization:

“We decoupled things a little bit so that we would allow standalone heating system or water heater replacements without the primary weatherization job being completed. That was to address some needs in the community that the service providers were finding where maybe a home had already been weatherized in the past and didn't need more remediation, but they needed a heating system and

perhaps other funding sources were not available. So we allowed again a limited number of heating system or water heater replacement as a standalone.”

Table 6. Customer Payment and Health & Safety Summary

	Utility A	Utility B	Utility C	Utility D	Utility E
Customer Payment	Free	Free	Free	Free	Free
Health & Safety Budget	No explicit budget, (case-by-case basis)	Covered entirely	Up to \$800	Budget varies	Budget varies

MEASURES

Table 7. Natural Gas Measures by Utility^a

Product Natural Gas Measures	Utility A	Utility B	Utility C	Utility D	Utility E
Furnace replacement or repair					
Wall insulation					
Attic insulation					
Crawl space insulation					
Water heaters replacement or repair					
Storm windows					
GPM showerheads and aerators					
Air Sealing					
Programmable Thermostat Installation and Programming					

^a The measures listed are the gas measures offered by Xcel Energy CO SF Weatherization program in 2018. If a peer utility also offered the gas measure—as noted in materials provided by the peer program staff or the program website—it is highlighted orange.

Table 8. Electric Measures by Utility^a

Product Electric Measures	Utility A	Utility B	Utility C	Utility D	Utility E
Refrigerator replacements					
Electrically Commutated Motors (ECMs)					
Compact fluorescent light (CFL) bulbs					
LEDs					
Cooling savings for building shell measures					
Water heater blanket					

^a The measures listed are the electric measures offered by Xcel Energy CO SF Weatherization program in 2018. If a peer utility also offered the electric measure—as noted in materials provided by the peer program staff or the program website—it is highlighted orange.

Table 9. Other Measures by Utility^a

Other Measures	Utility A	Utility B	Utility C	Utility D	Utility E
Energy Education	X				X
Health & Safety	X	X	X	X	X
Cleaning or replacing of dryer vents					
Repair and replace HVAC equipment + a year's supply of HVAC filters					
Repair and replace washer and dryers					
Heat pump installation					
CO detector installation					

^a The measures listed are other measures offered by Xcel Energy CO SF Weatherization program in 2018. If a peer utility also offered the measure—as noted in materials provided by the peer program staff or the program website—it is highlighted orange. If the measure was only mentioned in the interview, it is marked with an “X”.

PERFORMANCE METRICS

Table 10. Goals and Actuals by Utility

Utility		Savings Goals	Savings	Budget	Household Goals	Households
Xcel Energy	Electric	1,241,188 kWh 102 kW	1,310,212 kWh 103 kW	\$1,266,682	2,483	1,979
	Gas	48,620 Dth	48,238 Dth	\$2,358,186	1,625	2,313
Utility A	Gas	18,431 Dth	20,537 Dth	\$2,429,000	N/A	887 total measures installed
Utility B	Electric	4,193,471 kWh 1,326 kW	5,048,629 kWh 1,630 kW	\$3,886,391	N/A	2,245
Utility C	Electric	Not available	Not available	\$2,200,000 (North Carolina Budget)	Not available	81 in Indiana (1,000 territory-wide)
Utility D	Combo	N/A	929,565 kWh 4,630 th	\$3,000,000	300	408
Utility E	Electric	4,193,471 kWh 1,326 kW	5,048,960 kWh 1,638 kW	\$3,900,000	N/A	2,245

Single-Family Weatherization Evaluation

2019 Program Evaluation: Recommendations and Responses

The Xcel Energy Single-Family Weatherization product in Colorado supports free weatherization services to help income-qualified, single-family residential electric and natural gas customers lower their energy bills. Services include full home energy audits, installation of energy efficient equipment, and customer education.

Xcel Energy (The Company) engaged a team of researchers led by EMI Consulting to conduct a process evaluation of the Low-Income Single-family Weatherization product. The evaluation team was asked to assess the following:

- Identify barriers to and the value provided by participating in the product
- Identify new marketing and outreach methods
- Identify opportunities to increase efficiency of data collection
- Identify whether peer utilities also include their Single-family Weatherization product in DSM portfolio
- Identify whether peer utility programs have a market rate offering that is working for low income customers and how they track it

Based on the results of this research, the evaluation team developed key findings and recommendations for Xcel Energy.

Recommendation	Response
1) Help customers market the product to their community. Since overall satisfaction of this product is high, Xcel Energy should focus on providing more information to participating customers that can easily be shared with people in their network. For example, create a standard, but customizable, email template as an option for customers to send to their network. The template could include a description of product processes, clarify differences and misconceptions between owners and renters, and include typical energy savings realized by participants for their neighborhood and/or an abbreviated list of measures that similar customers received. A hardcopy version could also be provided in case computer and/or internet barriers are applicable.	The Company agrees to work with implementer Energy Outreach Colorado to develop materials that help customers market the product to their community.
2) Explore including an addendum to product paperwork stating landlords will not raise rental prices because of weatherization installations. To further increase trust and clarify misconceptions held by customers who are renters, the product should look into the possibility of adding an addendum stating landlords will not raise rental prices due to the product-related upgrades, similar to language that is currently included in the WAP application. Before adding the addendum, the	The Company agrees to explore methods that will increase trust with renters that believe their rent will go up as a direct result of energy efficiency upgrades.

product should further research potential issues, such as creating further customer distrust if the product cannot properly enforce the addendum and deterring landlord participation. The product team should work with other agencies and organizations that have an interest in maintaining affordable housing to coordinate efforts as is possible.	
3) Offer a referral bonus to participating customers and/or trade partners for high-potential neighborhoods. A referral bonus, such as a gift card, would encourage more participants and/or trade partners to promote the product in high-yield areas, increasing the efficiency of processes since trade partners could focus their efforts and build off the trust gained within the community.	The Company agrees to explore offering a referral bonus to trade partners and/or customers in targeted neighborhoods.
4) Set neighborhood goals with a reward to benefit the neighborhood. Promote participation within a neighborhood by creating a neighborhood participation goal. As used in similar programs, the product could work with community partners to offer a reward for meeting the goal, such as free weatherization of a community building. Allowing customers to help their neighborhood, in addition to upgrading their home, could create a sense of pride around product participation.	The Company will investigate setting neighborhood goals in conjunction with community organizations and implementation partners in compliance with customer privacy rules.
5) Use spatial (GIS) analysis to focus marketing strategy. Perform spatial analysis to determine a focused marketing strategy to increase desired participation, including zones without a waitlist and more customers with electric as the primary space heating method.	The Company will examine and test using GIS data as an input to the targeting methods it employs to identify product participants.
6) Product representatives should continue their high-quality interactions with participating customers. To maintain high satisfaction, product representatives should keep providing the same great experience when communicating with participating customers.	The Company agrees to work with implementer Energy Outreach Colorado and community partners to reinforce positive customer interactions and product education.
7) Provide clear product representative contact information that is easy to locate. Since participating customers expressed dissatisfaction with how to get in touch with representatives, in particular knowing who to contact, providing contact information that noted who to contact in particular situations would help improve the customer experience. Contact information should also be easily accessible to ensure participating customers	The Company agrees to provide clear product contact information via suggested leave-behind literature or post-participation communications in paper or electronic form.

can locate the information when needed. For example, Xcel Energy could provide refrigerator magnets with relevant contact information to partner agencies to distribute to participating customers.	
8) When gathering data on customers, note contact preferences for marketing and outreach efforts. Given the strong (and strongly differing) preferences for email and phone contact, allow customers to designate their preferred contact method.	The Company agrees to collect, store and use customer contact preferences when possible for outreach efforts to drive future participation.
9) Set clearer expectations on product processes. From the first outreach activity and throughout the process, product representatives should outline the product processes with customers. Verbal and written mediums, preferably with visuals such as process maps, should be used to maximize clarity on when qualifying measures are determined for individual home types and estimated savings will be available, and should tie into energy-conscious behavior changes. For example, communication should note that achieving maximized savings will require energy-conscious actions by the participating customer.	The Company will work with Energy Outreach Colorado to improve materials given to customers.
10) Expand energy pledge to action activity to more participating customers. Since this was the first year the energy pledges were offered, not all participating customers were offered an energy pledge to sign. Given the reported success of the energy pledges in increasing participating customers' energy-conscious behavior, broadening this new offer to more participating customers would help to increase behavior change and energy savings.	The Company will work with Energy Outreach Colorado to expand the energy pledge to action activity if customer engagement continues to be high.
11) Ensure that any materials given to agencies or other partners are accessible to diverse abilities as well as languages. The nature of this product means working with a diverse population. To ensure that everyone is able to take advantage of the product's offerings, ensure they are accessible to people of all ages and disabilities, such as sight and hearing impaired. Options include materials in large font sizes and materials with a spoken online version. While the product is currently offering materials in a few languages, it should also look into whether expanding to more languages would be beneficial to customers.	The Company agrees to explore additional language and accessibility options for product materials.
12) Create an educational slide show that trade	The Company agrees to improve customer

<p>partners can show participating customers in-person. A slide show can be an easy tool to share knowledge, and there are few resources involved in training individual trade partners, who may quickly turnover. Trade partners can use tablets or smart phones for easy in-person delivery to participating customers during already scheduling home visits.</p>	<p>education by creating a slide show trade partners can use within customer homes.</p>
<p>13) Consistently offer a short feedback survey that takes minimal effort to give and fill out. One option would be to offer a short text survey that could be filled out by the customer once the installation is finished.</p>	<p>The Company agrees to work with Energy Outreach Colorado to improve the current feedback survey and explore different delivery methods.</p>