

**EXH. CLW-7
DOCKETS UE-240004/UG-240005
2024 PSE GENERAL RATE CASE
WITNESS: CAROL L. WALLACE**

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

PUGET SOUND ENERGY,

Respondent.

**Docket UE-240004
Docket UG-240005**

**SIXTH EXHIBIT (NONCONFIDENTIAL) TO THE
PREFILED DIRECT TESTIMONY OF**

CAROL L. WALLACE

ON BEHALF OF PUGET SOUND ENERGY

FEBRUARY 15, 2024



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PSE Low-Income Household Needs Assessment

Phase 2 Report

December 2021

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Executive Summary

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The Puget Sound Energy (PSE) Low-Income Household Needs Assessment focused on historical delivery of two PSE low-income assistance programs:

Weatherization Assistance (LIW)¹

PSE's weatherization assistance program seeks to reduce customers' energy burden by providing holistic energy efficiency and education services to reduce energy use and associated costs. This program provides services to customers who meet income-eligibility criteria of 200% of the federal poverty level (FPL) or 60% of the state median income (SMI), whichever is greater based on household size.^{2,3}

Home Energy Lifeline Program (HELP)

PSE's bill assistance program, HELP, provides electricity and gas bill payment assistance for customers meeting income eligibility. At the start of this study, eligibility was up to 150% FPL. However, as of October 2021, HELP's eligibility window expanded to up to 200% FPL or 80% Area Median Income (AMI), whichever is greater.

During Phase 1 of the Low-Income Household Needs Assessment,⁴ Cadmus incorporated various secondary datasets to develop geographic information system (GIS) layers, which yielded numerous maps of income-eligible customers residing in PSE's service territory. Cadmus used these layers to identify historically underserved areas and to summarize key features for potential future delivery of services.

After completing Phase 1, PSE tasked Cadmus with supplementing the

secondary data findings with primary research in a second phase of the study. The purpose of the Phase 2 research is to provide context to the Low-Income Household Needs Assessment and help PSE better understand why gaps in historical delivery exist, as identified during Phase 1.

This report summarizes the key findings, conclusions, and recommendations from the Phase 2 research.

¹ Cadmus abbreviated PSE's Weatherization Assistance Program as LIW so as not to confuse it with the federal Weatherization Assistance Program (WAP) and to remain consistent with the abbreviation used in the Phase 1 report.

² The SMI criteria range from 237% of FPL for a single-person household to 218% of FPL for a six-person household. For households with seven or more inhabitants, PSE uses the 200% FPL threshold.

³ In January 2022, the LIW program will be expanding its eligibility window to up to 200% FPL or 80% Area Median Income (AMI), whichever is greater.

⁴ Cadmus. October 2020. *PSE Low-Income Household Needs Assessment Final Report*.

Looking Back: Phase 1 Key Findings

To characterize underserved populations and highlight areas with the highest need for PSE's assistance programs, Cadmus mapped distributions of eligible, yet unserved customers according to several factors that contribute to need of service. Cadmus identified these factors based on several prioritization criteria already in use for delivering weatherization programs in Washington State and identified other factors in discussion with PSE and based on stakeholder feedback.⁵ High-need criteria used for Phase 1 included a combination of the following:

- Households with children under 18 years of age
- Residents over 65 years of age
- Residents with a disability
- High energy burden
- Race/ethnicity (i.e., non-white residents)
- Language (i.e., households with limited English proficiency)

Cadmus ranked geographic areas based on the distribution of eligible customers by each high-need factor then developed a composite score by summing all factors in each area to consider how

to prioritize the areas of highest need. Phase 1 presented two scenarios for the composite need scoring and underserved U.S. Census block groups with the highest need:

- Scenario 1: Scoring included four high-need criteria (homes with children, residents over age 65, disability, and energy burden).
- Scenario 2: Scoring included all need criteria (including race/ethnicity and limited English proficiency).

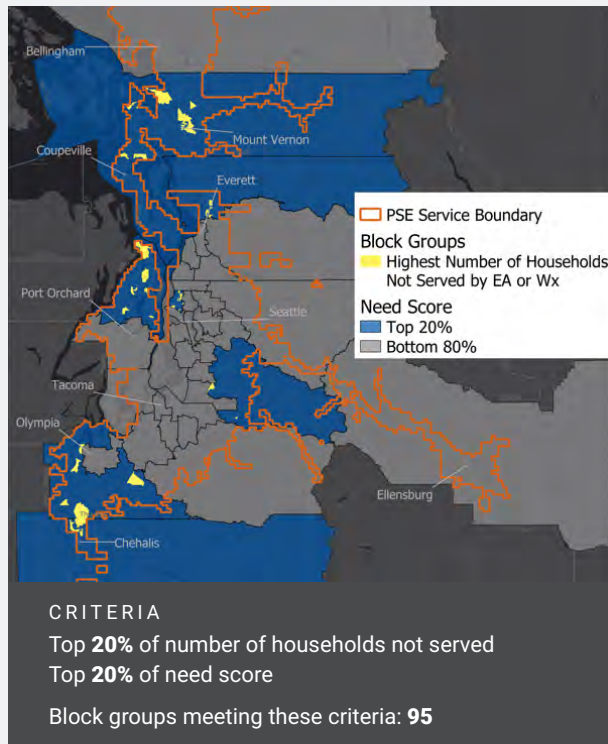
To identify underserved areas with the highest need, Cadmus developed a series of maps. Figure 1 (Scenario 1) and Figure 2 (Scenario 2) present the top 20% of the eligible, unserved census block groups (i.e., total concentration of households) in the Public Use Microdata Areas (PUMAs) with the highest composite need score. Ninety-five census block groups met the criteria for Scenario 1 and 140 block groups for Scenario 2.

The differences in these composite need scoring scenarios highlight the greater concentrations of eligible customers who identify as non-white and/or who have limited English proficiency in urban areas around King County (Scenario 2, as shown in Figure 2). In the absence of those two factors, the need scoring in Scenario 1 highlights a more diverse distribution of high need areas outside of the Seattle area, including Skagit and Thurston counties (Figure 1).

⁵ Washington Department of Commerce. 2019. *Weatherization Manual*. Section: Policy 1.2.1 Prioritizing Eligible Weatherization Clients. <http://www.commerce.wa.gov/wp-content/uploads/2019/07/Wx-Manual-2019-Jul-1-2019.docx>



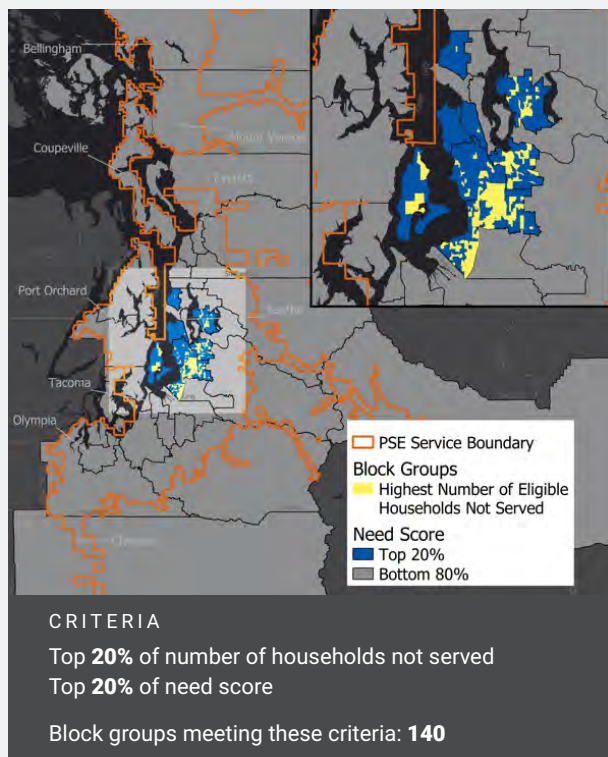
Figure 1. Underserved Block Groups with Highest Need (Scenario 1)



Top 10 Census Block Groups by Households Not Served

Block Group	County	Households Not Served	Need Score
530330004011	King	690	30
530330004013	King	539	30
530579524023	Skagit	524	30
530579523011	Skagit	501	30
530670120002	Thurston	465	32
530299709002	Island	457	30
530419704001	Lewis	430	30
530670124121	Thurston	428	32
530579518001	Skagit	415	30
530579523021	Skagit	407	30

Figure 2. Underserved Block Groups with Highest Need (Scenario 2)



Top 10 Census Block Groups by Households Not Served

Block Group	County	Households Not Served	Need Score
530330292062	King	540	39
530330260021	King	529	39
530330284031	King	520	39
530330300062	King	489	39
530330253023	King	439	39
530330297003	King	439	39
530330253013	King	437	39
530330254002	King	401	39
530330292041	King	369	39
530330295035	King	367	39

Phase 2 Approach

Cadmus applied the findings from Phase 1 of the Low-Income Household Needs Assessment to the Phase 2 research. We sought to address the following research objectives through primary data collection:

- Assess barriers to program participation
- Understand drivers for customer enrollment in PSE assistance programs
- Identify opportunities to close gaps in service

Cadmus focused the Phase 2 research on the counties identified with the highest need in Phase 1 (Skagit, Thurston, and King) and, where possible, sought out respondents from the top high-need

census block groups within those counties to further localize the research findings. Phase 2 consisted of the following research activities:

- Telephone interviews with organizations serving the low-income community (eight with implementation agencies contracted with PSE and eight with community organizations not directly implementing PSE assistance programs) in areas identified in Phase 1 as having underserved households with the highest need for program services
- Online survey with eligible nonparticipant customers in Skagit, Thurston, and King counties⁶

⁶ Cadmus defined nonparticipants as eligible customers who have not received weatherization services (some nonparticipants may have received bill assistance in the past. Cadmus included a battery of questions that addressed specific barriers for bill assistance participants to convert to weatherization participants).



Conclusions and Recommendations

This section presents Cadmus’ conclusions and recommendations. The detailed findings chapters of this report provide further explanation of these findings and additional context for our conclusions.

Survey Respondent Profiles

Cadmus used the demographic data collected during the survey to develop qualitative profiles for the survey respondents from each county of interest (Skagit, Thurston, and King), as shown in Table 1. These findings are not statistically correlated, but they are a summary of the primary demographics

represented in each county. Cadmus tested statistical significance of many of the survey findings based on demographic subsegments, so these profiles may help PSE better understand the tested subsegments and how they connected with the other characteristics of survey respondents in each geographic strata.

The largest concentration of Black, Indigenous, People of Color (BIPOC) responding to the survey live in King County, which aligns with Phase 1 findings. As described above, Scenario 2 prioritized high-need households based on race/ethnicity and limited English proficiency.

Table 1. Survey Respondent Profiles

King County	Skagit County	Thurston County
Multifamily residents (72%)	Multifamily/single-family split (40%/48%) ¹	Single-family residents (45%)
Renters (82%)	Renters (67%)	Renter/owner split (57%/43%)
BIPOC (64%)	White (71%)	White (78%)
HELP participants, LIW nonparticipants (86%)	True nonparticipants (68%) ²	True nonparticipants (85%) ²

¹ The remaining 12% were manufactured homes.

² True nonparticipants represent customers in the survey sample who were identified by PSE as having not received weatherization or bill assistance (HELP) in the past. Some customers in the survey sample were identified as HELP participants, these customers were primarily represented in King County.



Research Objective: Assess Barriers to Program Participation

Conclusion 1. Eligible, PSE nonparticipants are generally more aware of federal energy assistance programs like Low Income Home Energy Assistance Program (LIHEAP) than PSE assistance programs. Resource constraints may limit implementation agencies in effectively promoting and supporting PSE assistance programs.

During interviews, many stakeholders⁷ (nine of 14 interviewees) reported that despite marketing efforts, some customers are still not aware of PSE energy assistance programs. Survey data confirmed overall awareness of energy assistance programs is moderately low, with 36% of survey respondents (n=582) unaware of the prompted programs (Low-Income Home Energy Assistance Program [LIHEAP], Crisis Affected Customer Assistance Program [CACAP], HELP, and LIW). There was especially low awareness of PSE assistance programs; even HELP participants had low awareness of LIW and CACAP.

Of those aware of any of the prompted assistance programs, 48% of survey respondents (n=582) were aware of the federal LIHEAP, but only about one-quarter of respondents (or less) were aware of any one PSE program. Those who were aware of assistance programs generally learned about them from the PSE website or a local social service agency. The PSE website was a more common

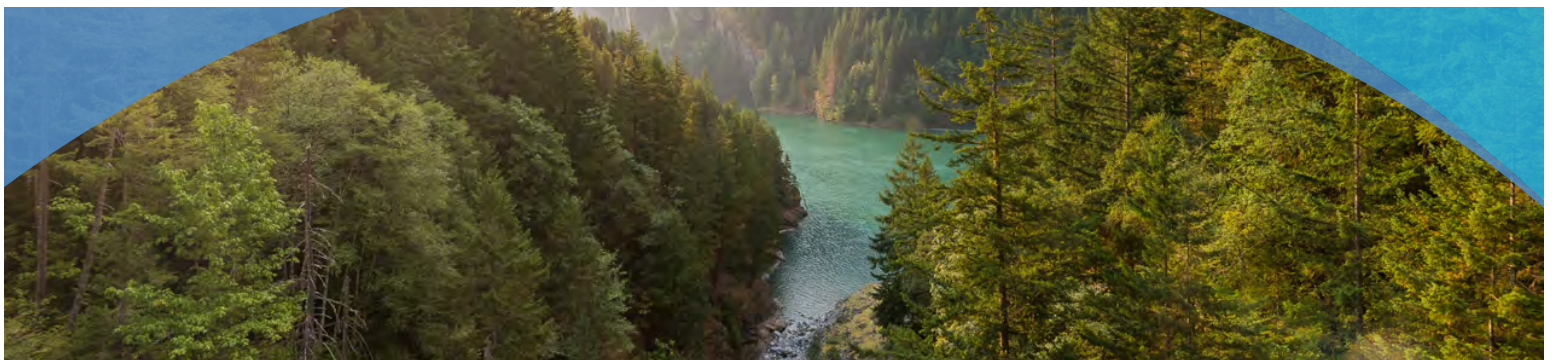
source of awareness for PSE programs, while local social service agencies were a more common source of awareness for LIHEAP.

During interviews, stakeholders said implementation agencies are resource-constrained and may not have enough staff or funding to adequately support the communities they serve (including for outreach). Stakeholders also indicated they struggled to assist customers with their PSE application process. According to seven of eight implementation agencies, it can be difficult to engage and enroll customers in PSE programs because they are often not able to fully access a customer's account to retrieve all information needed for the application, even if the customer provides permission.⁸ Stakeholders reported that it is beneficial that eligibility for the PSE programs is in line with LIHEAP as it can help streamline the application process. However, 11 stakeholders also said that relaxing PSE's program/documentation requirements to reduce the overall number of documents required from a single participant will ultimately allow more people to get assistance and enroll.

Survey respondents were more interested in participating in LIHEAP (57%, n=691) than LIW (30%). Interest in participating in HELP was more aligned with LIHEAP at 53%. When asked how they want to receive information about available programs in the future, the PSE website and local social service agencies were commonly mentioned; however, 72% of survey respondents (n=677) indicated they want to find out about available assistance through information with their bill.

⁷ Stakeholders were mainly organizations serving low-income communities. Please see *Study Objectives and Approach: Stakeholder Interviews* for more details on who was interviewed as part of this study.

⁸ According to PSE staff, the implementation agencies should already have access to customers' PSE account information.



RECOMMENDATIONS

Work with local social service agencies to support the promotion of PSE programs at the same time as federal programs such as LIHEAP. Because income eligibility for PSE programs is generally aligned with LIHEAP eligibility, local social service agencies can be a one-stop-shop for program applications and income verification. Customers should understand that multiple, similar offerings are available to reduce their energy costs, both federally sponsored and utility-sponsored.

Consider ways to improve communication channels for implementation agencies while maintaining security of personally identifiable information. Work with the implementation agencies to identify customer account information required for the application that they are currently unable to access. Consider allowing a customer to grant permission to an implementation agency to access more account information, if needed.

Compare the application requirements for LIHEAP to PSE programs to identify and reduce duplication of required customer information or documentation. If any elements of the application process are unnecessary for PSE but required for LIHEAP, consider if PSE assistance programs could be an offering that is easier to enroll in for customers whose applications are delayed or rejected for LIHEAP. To identify opportunities to streamline the application process directly and leverage other public program resources (such as household income data), consult with implementation agencies.

Conclusion 2. Perceived lack of need and stigma aversion/mistrust keeps eligible customers from applying for PSE program services.

Despite that all survey respondents were income-eligible for PSE programs (at or below 200% of FPL), most of those aware of PSE energy assistance programs reported they did not apply for these programs because they did not need to. Perceived need may be a larger barrier among older, white income-eligible customers. Generally, younger individuals aged 18 to 55 were more likely to indicate they struggle to pay their energy bills than those aged 56 and older. Similarly, BIPOC respondents were more likely to indicate they struggle to pay their energy bills than were white respondents.

Overall, 64% of survey respondents (n=688) said they struggle to pay their energy bills each month and 75% said they are comfortable accepting help to reduce their energy bills. However, these factors are not aligned with taking program action. During interviews, stakeholders said aversion to asking for

help may be a barrier to participation, explaining that customers may not want to ask for help from an assistance program because they may not perceive themselves as someone who needs help or because they are not comfortable asking. Customers may be uncomfortable asking for help for several reasons. There may be concern over stigma against those who need assistance, or mistrust in the organization providing the assistance. For example, not all customers may see their utility as an entity that wants to provide assistance to lower energy bills without some kind of "catch." BIPOC individuals are less likely than white respondents to say they are comfortable receiving assistance to lower their energy bills. BIPOC individuals likely experience additional barriers to feeling comfortable accepting help, such as aversion to playing into a stereotype perpetuated by institutional, systemic racism.

Stakeholders suggested that PSE emphasize that the programs are equal opportunity. Customers' pride may prevent them from wanting to participate in a program that makes them feel "lesser" for needing assistance; on the other hand, some eligible customers may believe other customers are in

greater need than they are. Focusing on messaging that programs are open to *all* customers in need could encourage those who may be averse to accepting help.

Customers who do not identify a need to participate in PSE programs based on energy cost burden alone may be motivated by messaging that emphasizes freeing up household budget for other

life costs. When asked what life costs they would have more flexibility or ease paying for if they received assistance through HELP, 53% of survey respondents (n=513) said the assistance would free up budget for other household bills, such as rent/mortgage, water, car insurance, or outstanding debt. Interviewed stakeholders agreed that such messaging could be effective.

RECOMMENDATION

Explore messaging that calls eligible customers to action for reasons other than saving on energy costs. Options may include messages that indicate program participation will offer more flexibility to pay for other household costs (such as rent/mortgage) or the fact that everyone contributes to the PSE assistance programs and everyone who is eligible deserves to benefit (i.e., emphasize that program services are covered as part of their base utility rate). Bill inserts and email campaigns may be an effective way to test new messaging strategies.



Research Objective: Understand Drivers for Customer Enrollment in PSE Assistance Programs

Conclusion 3. Eligible customers want to participate in assistance programs that are free to them and have an easy application process. However, customer intimidation of starting the application process may get in the way of greater customer enrollment.

The survey found that no-cost participation is the most important attribute of any program for income-qualified customers. Customers also want to participate in assistance programs that have an easy application process with quick approval. Even customers with limited English proficiency prefer these program elements over being able to interact with program staff in their preferred language.

PSE assistance programs do not carry participation fees. Additionally, of the survey respondents who had previously participated in a PSE assistance program (HELP, LIW, or CACAP), the majority said it was easy to enroll. The problem may be that more than half of survey respondents (53%, n=690) indicated they do not know how to start the process of enrolling in an energy assistance program. Though 42% (n=492) have interacted with a local social service agency or other nonprofit in their county, only 27% knew of a trusted organization they might turn to if they needed help in the future. Respondents who live in Thurston County were the least likely to know where they could get assistance.

Additionally, among participants who have not applied before, there is an assumption that the

application process is overwhelming. Fifty-one percent of survey respondents (n=582) said it would be a challenge to participate if an application process requires too much documentation. However, when Cadmus asked survey respondents specifically about each document required for the PSE and federal assistance programs, no one document proved too difficult to provide. The vast majority of respondents said providing proof of identity, residence, utility account, and income would be easy. During interviews, some agencies referred to hearing that customers had difficulty getting feedback from PSE about their application status or how they could apply. Eight of 14 agencies interviewed mentioned that customers have struggled with long application approval times and emphasized quick approval times are important to customers.

The application process for PSE assistance programs is primarily driven by the implementation agencies. For HELP, customers can start an application online but must finish and submit the application through an agency; for LIW, the entire application process is completed in conjunction with an agency. However, 51% of survey respondents (n=661) indicated they prefer to submit an application online. Online applications may mitigate some of the barriers around aversion to asking for help (due to stigma, shame, or pride), as well as facilitate an easier process from a logistical standpoint. HELP participants were more likely to prefer to submit an application through a local social service agency (completing the application either in person or over the phone) than were respondents who had never participated in a PSE program. This finding illustrates that the requirement that applications must be submitted through an agency is a barrier for people who have never engaged in a PSE program at all.



RECOMMENDATIONS

Since customers typically find out about PSE programs through the PSE program website and eligible customers are very interested in submitting applications online, the opportunity to establish interest in LIW online could be beneficial to program enrollment. Offer a form on PSE's website that could capture interested customer contact information and generate LIW leads for implementation agencies.

Starting a HELP application online is already available but the application must ultimately be completed with a representative from an implementation agency. Consider if there are more aspects of the HELP application process that could be facilitated online to align with customer preferences for online application submission.

Consider establishing PSE goals regarding approval timelines for all appropriate steps in the application process for HELP. Monitor and track how PSE's approval timelines perform against goals and evaluate the application process if it's not meeting stated goals or there are major delays in any one area of the process. Though the application and approval process for LIW is mainly driven by the Washington Department of Commerce, explore ways PSE can better support customers through the process.



Research Objective: Identify Opportunities to Close Gaps in Service

Conclusion 4. Due to high satisfaction levels, HELP participants could be good stewards for PSE assistance programs.

HELP participants reported having very positive experiences with the program. All HELP participants who responded to the survey said taking the time to enroll in HELP was worth the benefits they received, and they would be likely to enroll in HELP again if

they continue to be eligible. Nine of 14 interviewed stakeholders said when participants have positive program experiences and see impacts from their enrollment, they are likely to encourage their friends, families, and neighbors to get the same assistance.

HELP participants were more comfortable with professional contractors coming into their home to make energy upgrade than were nonparticipant survey respondents. However, according to PSE staff, very few HELP participants also participate in LIW. In the survey, HELP participant respondents who were not interested in LIW most commonly said they did not feel a need for the services LIW provided (60%, n=35).

RECOMMENDATIONS

Use HELP participation to trigger follow-up outreach specifically intended to enroll the customer in LIW. These customers will already be familiar with program participation and the application process and therefore some burdens to program entry will have already been overcome.

Gather testimonials from current HELP participants to use in promotional materials for PSE assistance programs. Testimonials should emphasize satisfaction with the application process and benefits of program participation.

Conclusion 5. The rental segment may require targeted outreach to understand eligibility and access to LIW.

Sixty-eight percent of all survey respondents (n=603) reported they rent their homes. Compared to survey respondents who own their homes, these renters were more likely to indicate they struggle to pay their energy bills each month and were more likely to feel comfortable accepting help to pay their energy bills. However, compared to homeowners, renters were less likely to feel comfortable with contractors coming into their home to make energy upgrades and more likely to report they do not have time to enroll in an assistance program.

For LIW specifically, renters may not know they are eligible for program services. Although awareness for LIW was low among all survey respondents (27%, n=582), of the 32 who were aware and chose not

to apply, 23 assumed they were ineligible because they were renters. Renters also experience an additional LIW application step requiring landlord approval for weatherization services. Cadmus asked renters how difficult it could be to seek approval from their landlords for weatherization services, and 64% (n=169) considered it easy to approach their landlord. However, according to interviewed stakeholders, customers may struggle to participate in LIW because property owners are unwilling to go through the program or pay any amount for improvements only for the tenant to receive the benefits. Of the renters who did not say it would be easy to approach their landlord for approval, the most common reason was the difficulty for a tenant to get in contact with their landlord (41%, n=51). Additionally, some respondents did not believe their landlord would approve of participating (27%, n=51) or reported a tense relationship with their landlord would prevent them from feeling comfortable about seeking approval (18%, n=51).

RECOMMENDATION

Facilitate program informational sessions targeting landlords in high-need census block groups (perhaps pilot these sessions in King County where there is the highest presence of renters). These sessions could explain the benefits of the LIW program from the property owner's perspective and address the split incentive by emphasizing how the program offers benefits to both tenants and landlords. Information sessions would be an effective method to directly address landlord questions/concerns, encourage enrollment of multiple residents in LIW (and HELP) at once, and mitigate the landlord approval burden from the application process.





Study Objectives and Approach

Phase 2 of PSE’s Low-Income Household Needs Assessment addressed the research objectives listed in Table 2.

Table 2. Phase 2 Research Objectives and Questions

Research Objectives	Research Questions
Assess barriers to program participation	<ul style="list-style-type: none"> • Why aren’t customers being served? • What are customers’ barriers to participation? • What are implementation agencies barriers to service?
Understand drivers for customer enrollment in PSE assistance programs	<ul style="list-style-type: none"> • What are customers’ motivations to participate? • How can messaging more effectively encourage enrollment?
Identify opportunities to close gaps in service	<ul style="list-style-type: none"> • How does PSE prioritize filling gaps in service? • What are the partnership opportunities to expand program reach? • How can the programs help streamline customer intake and income eligibility screening process?

Stakeholder Interviews

Cadmus conducted 16 interviews with organizations serving the low-income community in areas identified in Phase 1 as having underserved households with the highest need for program services (e.g., Skagit County, Thurston County, and King County), as shown in

Table 3. Stakeholder Interview Respondents

Organization	Representative Area	Type	Services Description
King County			
Emerald Cities¹	King County	Community Organization	Equitable housing advocate
Entre Hermanos	King County	Community Organization	General assistance targeting the Latinx community ²
Hopelink	King County	PSE HELP Implementation Agency	General assistance ²
Kent Youth and Family Services	King County	Community Organization	General assistance focused on families ²
King County Housing Authority	King County	PSE LIW Implementation Agency	Housing assistance
Multi-Service Center	King County	PSE HELP Implementation Agency	General assistance ²
Seattle Office of Housing	King County	PSE LIW Implementation Agency	Housing assistance
The Byrd Barr Place	King County	PSE HELP Implementation Agency	General assistance ²

. (In the table, the names of the organizations listed under each county are linked to the organization’s website.)

The purpose of the interviews was to identify local barriers in the communities where underserved households are located, including customer barriers to program enrollment and also the administrative barriers that make it more difficult to serve some customers.

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Organization	Representative Area	Type	Services Description
King County			
Emerald Cities ¹	King County	Community Organization	Equitable housing advocate
Entre Hermanos	King County	Community Organization	General assistance targeting the Latinx community ²
Hopelink	King County	PSE HELP Implementation Agency	General assistance ²
Kent Youth and Family Services	King County	Community Organization	General assistance focused on families ²
King County Housing Authority	King County	PSE LIW Implementation Agency	Housing assistance
Multi-Service Center	King County	PSE HELP Implementation Agency	General assistance ²
Seattle Office of Housing	King County	PSE LIW Implementation Agency	Housing assistance
The Byrd Barr Place	King County	PSE HELP Implementation Agency	General assistance ²

Organization	Representative Area	Type	Services Description
Skagit County			
Community Action of Skagit County	Skagit County	PSE HELP Implementation Agency	General assistance ²
Housing Authority of Skagit County	Skagit County	PSE LIW Implementation Agency	Housing assistance
Refugee and Immigrant Services Northwest	Skagit County	Community Organization	General assistance ² focused on immigrant populations
Thurston County			
Community Action Council of Lewis, Mason, and Thurston Counties	Thurston County	Implementation Agency	General assistance ²
Rochester Organization of Families	Thurston County	Community Organization	General assistance focused on families ²
Statewide			
Front and Centered ¹	Washington state	Community Organization	Equity advocate organization
Senior Services for South Sound	Washington state	Community Organization	General assistance ² and community services focused on seniors
The Energy Project	Washington state	Community Organization	Equity advocate organization focused on energy

¹ These organizations primarily work on behalf of other organizations rather than residential clients.

² General assistance organizations include health, hunger, education, housing and energy services.

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Customer Surveys

Cadmus conducted a web-based survey, via Qualtrics, to quantify the barriers to and opportunities for increasing market adoption among low-income households in PSE’s service territory. Targeting specific geographic areas based on Phase 1 findings, we surveyed income-eligible residential customers who had not been served by PSE’s weatherization and/or assistance programs to determine these barriers to adopting opportunities for energy affordability.⁹

Cadmus worked with PSE’s Customer Insights team to identify email addresses for customers in the census block groups from each need scoring scenario with the highest saturation of eligible/underserved customers, as identified in Phase 1. Table 4 lists Cadmus’ sampling strategy based on Phase 1 findings and how the survey achieved these goals. To achieve 90% confidence with 10% precision among most quantitative survey comparisons, we targeted at least 200 completed surveys per geographic strata (for a total of 600 targeted survey completes). We received 603 completed surveys, 200 in King and Skagit counties and 203 in Thurston County. Given the limited population among high-need census block groups in Skagit and Thurston counties, we supplemented the sample with eligible nonparticipants from the county as a whole. However, 50% of the email invitations sent for Skagit County and 87% of the email invitations sent for Thurston County were located in non-high need census blocks. We prioritized the sample from the high-need census block groups first and included the sample from the greater county area only to achieve the desired completes for these strata.

Table 4. Customer Survey Sampling Strategy and Achieved Completes

Geographic Strata (Underserved Census Block Groups)	Total Sample Population	Targeted Completes (Nonparticipants) ¹	Achieved Completes
Scenario 1 – Top Census Block Groups in Skagit County	3,219	200	200 ²
Scenario 1 – Top Census Block Groups in Thurston County	2,064	200	203 ³
Scenario 2 – Top Census Block Groups in King County	18,229	200	200

¹ Cadmus defined nonparticipants as eligible customers who have not received weatherization services (some nonparticipants may have received bill assistance in the past).

² 76 of these respondents were not located in high-need census blocks but were from within the county.

³ 122 of these respondents were not located in high-need census blocks but were from within the county.

Based on the areas selected and the findings from interviews with local stakeholders, Cadmus fielded the survey in English, Spanish, Chinese (Mandarin), Vietnamese, and Russian. Across all respondents, 31 responded to the survey in Spanish, eight in Russian, and two in Vietnamese. No respondents took the survey in Chinese (Mandarin).

Cadmus used findings from the stakeholder interview (conducted in Task 2) to inform development of the survey questionnaire. To ensure the survey addressed PSE’s needs, we mapped survey questions to corresponding research objectives. We recruited respondents to the online survey by sending either email or postcard invitations. To encourage a diverse and representative response to the online survey,

⁹ Cadmus defined nonparticipants as eligible customers who have not received weatherization services. (Some nonparticipants may have received bill assistance in the past. Cadmus included a battery of questions that addressed specific barriers for bill assistance participants to convert to weatherization participants.)

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Cadmus used postcard mailers to reach PSE program nonparticipants who have less digital engagement with PSE.¹⁰ The postcard distribution achieved a 6% response rate (70 responses of 1,178 postcards sent).

To encourage survey participation, each respondent was offered a \$10 Amazon.com electronic gift card for completing the survey. We included screening questions at the beginning of the survey to ensure we targeted appropriate income-eligible PSE program nonparticipants. Overall, the survey achieved a 9% response rate (1,468 responses out of 16,052 emails).

Statistical Testing

Cadmus explored the impact of different demographic or respondent attributes on survey responses. Table 5 shows the subsegments explored. We conducted pairwise z-tests with a Bonferroni correction (where applicable) to determine statistically significant differences between respondent groups.

Table 5. Respondent Subsegments Used for Analysis

Subsegment	Definition	Bins
County	Self-reported county of residence	<ul style="list-style-type: none"> • King • Skagit • Thurston
High Need Census Block	Flags if a respondent's sample record indicates they live in a high-need census block, as defined in Phase 1	<ul style="list-style-type: none"> • High-Need • Not High-Need
Housing Type ¹	Self-reported type of housing; survey response options were binned to account for lower sample sizes	<ul style="list-style-type: none"> • Single-Family • Multifamily • Manufactured Home
Age ²	Self-reported age; survey options were binned to account for lower sample sizes	<ul style="list-style-type: none"> • 18 to 36 years old • 36 to 45 years old • 46 to 55 years old • 56 to 70 years old • 70+ years old
Race/Ethnicity ³	Self-reported race or ethnicity; survey options were binned to account for lower sample sizes	<ul style="list-style-type: none"> • BIPOC • White
HELP Participation	Combination of self-reported and records flagged as HELP participants	<ul style="list-style-type: none"> • HELP Participant • Nonparticipant

¹ An additional survey option, "attached house (townhome, row house, or twin/duplex)" was binned with "a single-family detached house" into single-family.

² The survey option "18 to 25 years old" was binned with "26 to 35 years old."

³ The survey options "Black or African American," "American Indian or Alaska Native," "Asian," "Native Hawaiian or Other Pacific Islander," "Hispanic or Latinx," and "Two or more races" were binned into BIPOC.

¹⁰ PSE rates its customers' digital engagement based on interactions with various PSE digital channels (such as text alerts, online bill pay, online account usage). Customers who have limited digital engagement with PSE receive a rating of 0 to 1; the majority of PSE customers have ratings of 2 to 5; the maximum digital engagement level is 10. Cadmus mailed postcard invitations to customers in the survey sample with a digital engagement rating of 0 or 1, representing 6% of the Skagit County sample, 6% of the Thurston County sample, and 4% of the King County sample.

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MaxDiff Analysis

To help PSE reach underserved customers, Cadmus used MaxDiff to assess the most appealing program elements that drives customers to enroll in assistance programs. MaxDiff uses an experimental survey design (meaning it uses a random presentation of information to respondents), in which respondents answer a series of similar (yet different) questions about which program elements they find the most and the least appealing. This design predicts more accurate preferences than using traditional rating scales and has wide applications to inform education and outreach strategies.

After the survey fielding ended, we used hierarchal Bayesian regression analysis to calculate preference shares for each tested program element. The preference share represents the likelihood that the program element would truly be the most valuable program feature to a customer. Across all attributes, shares totaled 100%, with the most powerful program elements exhibiting the largest preference share.

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Findings: Stakeholder Interviews

This section describes the top findings from Cadmus’ interviews with stakeholders. Though we gathered the data qualitatively through in-depth interviews, when appropriate, we have characterized the responses based on the number of interviewees who expressed it.

We first conducted eight interviews with organizations that implement PSE’s bill and weatherization assistance programs. As part of these interviews, we asked respondents to recommend other community-based organizations that work on behalf of low-income residents (but not necessarily with PSE’s programs). Using these recommendations, and in conjunction with PSE, we interviewed six additional community organizations that work directly with low-income residents, two of which work on behalf of other community organizations rather than directly with residential clients.

Barriers to Program Participation

Interviewed stakeholders provided reasons that customers in high-need areas may not be served by PSE’s bill and weatherization assistance programs as well as the barriers that implementation agencies may experience when serving customers. Table 6 lists reasons by either customer barriers to participation or agency barriers to service.

Table 6. Reported Barriers to Participation

By Entity	Barriers
Customer barriers to participation	<ul style="list-style-type: none"> • Lack of awareness: Despite marketing efforts, some customers are still not aware of the programs (nine of 14 interviewees). • Language barrier: Though PSE provides resources in English, Spanish, Vietnamese, Korean, and Russian, some customers do not speak any of these languages. • Hard to reach: Some customers are difficult to reach with typical recruitment efforts, such as bill inserts or fliers. These customers include seniors who do not often leave their homes, houseless individuals, individuals who live in very rural areas, or particularly busy individuals like single parents. • Lack of time: Customers do not have time to complete the application or follow up repeatedly on enrollment status. • Administrative burden: Customers may not have all documents required to complete the application (11 of 14 interviewees), including proof of income or access to a notary. • Lack of trust: Customers may believe that enrolling in the program will negatively impact them because it goes against their public charge¹ or because they are skeptical of program benefits (misperception of hidden fees after participation). • Aversion to asking for help: Customers may not want to ask for help from an “assistance” program because they may not perceive themselves as someone who needs help. Alternatively, customers may be afraid to be stigmatized, feel shame for asking for help, or are averse to playing into stereotypes perpetuated by institutionalized, systemic racism. • Split incentive: For the high number of renters in this population, some may struggle to participate in PSE’s Weatherization Assistance program because the property owner may be unwilling to go through the program or pay any amount for improvements only for the tenant to receive the benefits.

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By Entity	Barriers
Agency barriers to service	<ul style="list-style-type: none"> • Lack of capacity: Implementation agencies may not have enough staff (including multilingual staff) to support the community they serve. This limits both the number of clients they can serve and their ability to complete outreach, particularly for rural organizations (11 of 16 interviewees). • Lack of funding: Generally, implementation agencies do not think they have enough funding to fully serve their clients (whether to hire more staff or to support comprehensive program services in general). • Difficulty enrolling clients: Implementation agencies struggle to assist customers with their application process because they are often not able to gain full access to a customer’s account, even if the customer provides permission.² Due to this, customers’ lack of time, or missing documentation, it can be difficult for agencies to engage and enroll customers before customers find the process too difficult and give up (seven of eight implementation agencies). • Regulatory barriers: Some restrictions on how funding can be used prevents agencies from being able to use the money they receive in the most effective ways (for example, if funding stipulates it can only cover certain cost-effective or energy-saving measures to be installed in a customer’s home). Additionally, some income-based eligibility requirements may be too strict, preventing agencies from being able to serve customers who still need the help, even if they are slightly over the formal eligibility level.

¹ A public charge is defined as an immigrant who has received one or more public benefits for more than 12 months in any 36-month period. Receiving a public charge is grounds for inadmissibility to the United States and can disqualify a citizenship applicant.

² According to PSE program staff, implementation agencies contracted with PSE already have access to a customer’s PSE account information.

Though in several places the implementation agencies’ feedback overlapped, there were some barriers expressed only by HELP implementation agencies or only by LIW implementation agencies. Therefore, Cadmus also explored these findings by program (Table 7).

Table 7. Agency Barriers by Program

By Entity	Barriers
HELP (two interviewees) & LIW (one interviewee)	There can be a disconnect in the application process for customers who try to engage with the program on PSE’s website before coming to a local social service agency for assistance. For example, a customer might have gone through the eligibility screening on PSE’s website and thought that was sufficient to schedule an appointment to get help with the application even though that is not the case.
HELP (two interviewees) & LIW (one interviewee)	PSE’s online scheduling tool may not be compatible with the agencies’, making the transfer of appointments an inconvenient process.
HELP (three interviewees) & LIW (one interviewee)	Agencies desire a more connected process between their organization’s database and PSE’s. Their hope is to make it easier to help clients who first engage through PSE by avoiding repeating work the client already completed when starting the process on their own.

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By Entity	Barriers
HELP (one interviewee)	An interviewee mentioned it would be easier to serve clients if the clients would remain eligible year-to-year (for example, those on a fixed income could remain enrolled in the program for more than one year). This could increase the number of “repeat” clients and also free up time for the agencies to serve more, new clients. This agency acknowledged the belief that PSE is already working on this kind of policy. ¹
HELP (two interviewees)	In general, agencies said it would be easier to serve clients if less documentation was required. Two interviewees said they would also have more time to serve more clients each year.
LIW (one interviewee)	Agencies desire additional, but limited, access to client account information. Because clients are generally busy people and may have limited English (or general literacy), it may be hard for them to find time to request the information or know exactly what pieces of information they need from PSE. This interviewee said if the agencies could prove it got permission from the client to access necessary information for the application, it would greatly improve its ability to help clients.
LIW (one interviewee)	Though there was not a lot of explanation, an interviewee indicated that there were too many logistical barriers to accept PSE program funding. Since it has multiple sources of funding, this agency declined PSE money for single-family homes and instead only accepted funding for multifamily homes, which was easier to receive.

¹ According to PSE program staff, PSE implemented a 2-year certification for those on a fixed income in 2018.

Drivers for Customer Enrollment in PSE Assistance Programs

Interviewed stakeholders identified the following key reasons customers participate in PSE’s bill and weatherization assistance programs:

- **Cost savings.** Customers’ main motivation comes from being able to save money on energy bills, allowing them to shift funds to other aspects of their lives (12 of 14 interviewees).
- **Comfort.** To a lesser extent, customers enroll in the Weatherization program, specifically, to make their homes more comfortable and livable.

Stakeholder respondents suggested the following ways marketing materials and messaging could be improved to encourage enrollment more effectively:

- **Promote in multiple languages.** Outreach materials and applications should be offered in several languages (PSE already provides information in Spanish, Vietnamese, Russian, and Korean. However, Chinese, Ukrainian, and Somali were often brought up among the other languages PSE customers speak).
- **Use clear and concise verbiage.** There are gaps in literacy levels among underserved populations (even in the customer’s preferred language), so marketing materials and messages should be simple to read. Icons and colorful images may help get the message across at a glance (nine of 14 interviewees).
- **Emphasize the programs are equal opportunity.** Customers may not feel comfortable participating in a program that makes them feel “lesser” for needing assistance. On the other hand, some eligible customers may feel that other customers are in greater need than they are.

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Focusing on messaging that programs are open to *all* customers in need could encourage those who may be averse to accepting help.

- **Use messages that address known barriers.** Make it clear program enrollment will not impact someone's immigration status, frame messaging to emphasize that program services are covered as part of their base rate, and appeal to value-added benefits such as having a warmer home in the winter or being able to spend saved money on other necessities.

Opportunities to Close Gaps in Service

During the interviews, respondents identified the following ways PSE can prioritize solutions to fill gaps in service:

- **Target outreach strategically.** Conduct targeted outreach to get the word out in places with low awareness or difficult-to-reach populations. Door-to-door or similar in-person techniques, such as community blitz marketing, may be more effective in these places.
- **Foster word-of-mouth promotion.** When participants have positive program experiences and see impacts from their enrollment, they are likely to encourage their friends, families, and neighbors to get the same assistance (nine of 14 interviewees).
- **Partner with trusted organizations.** Community organizations (including but not limited to program implementation agencies) have often already gained trust among their client communities. Community organizations can effectively navigate and implement the program on behalf of their clients with more support (12 of 14 interviewees).

Stakeholders identified the following opportunities for partnership to build trust and expand program reach:

- **Community action agencies (CAAs).** CAAs (including but not limited to current program implementation agencies) typically already have a client base and a positive reputation in their communities that can be leveraged with proper support.
- **Food banks and other assistance centers.** Many eligible customers use food banks and other donation centers. Put program materials or program representatives in these centers.
- **Common community places.** Put program materials or program representatives in grocery stores, churches, libraries, schools, and community centers.

Finally, stakeholders identified the following ways PSE can streamline customer intake to make the programs more accessible for underserved customers:

- **Provide better communication channels for implementation agencies.** Implementation agencies are willing to engage with PSE more closely to support enrollment. If agency representatives could access the customer account information required for the application, they could provide more support and relieve some burden for customers. They could also help decrease the percentage of application rejections or, if needed, facilitate problem solving for application rejections. According to interviews, better online tools would allow agencies to submit applications or schedule appointments more effectively.

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- **Improve response time.** Some agencies referred to hearing that customers had difficulty getting feedback from PSE about their application status or how they could apply. Other agencies said customers have struggled with long application approval times (eight of 14 interviewees).
- **Consider revising eligibility/documentation requirements.** In some ways and for some implementation agencies, the fact that eligibility for PSE's bill and weatherization assistance programs is in line with LIHEAP is beneficial because it can help streamline the application process. Many stakeholders also said that relaxing PSE's program/documentation requirements will ultimately allow more people to get assistance and enroll (11 of 14 interviewees).

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Findings: Customer Survey

This chapter presents detailed findings from the customer survey research. The survey targeted income-eligible nonparticipants in the areas of highest need for program services, as identified in Phase 1.¹¹ Throughout this section, the population, or *n*, of individual survey questions often exceeds 603 (the number of completed surveys) because participants may have dropped out during the survey, resulting in more responses than survey completes for most questions.

During the analysis, Cadmus tested for statistically significant differences in responses and attitudes across various demographics and subsegments such as county, high-need census block group, age, race/ethnicity, renter versus owner, housing type, and HELP participation within the income-qualified population. Though most responses were consistent across groups (meaning Cadmus did not find statistical differences), Cadmus highlights differences in the survey response data using statistical tests at the $p \leq 0.1$ and $p \leq 0.05$ levels, where applicable. For more information on the tests conducted, please see the *Study Objectives and Approach: Statistical Testing* section.

Program Awareness and Participation

Cadmus asked survey respondents a series of questions about their awareness and participation in certain assistance programs: the federal Low-Income Home Energy Assistance Program (LIHEAP), PSE's Home Energy Lifeline Program (HELP), PSE's Crisis Affected Customer Assistance Program (CACAP), and PSE's Weatherization Assistance Program (LIW).

Program Awareness

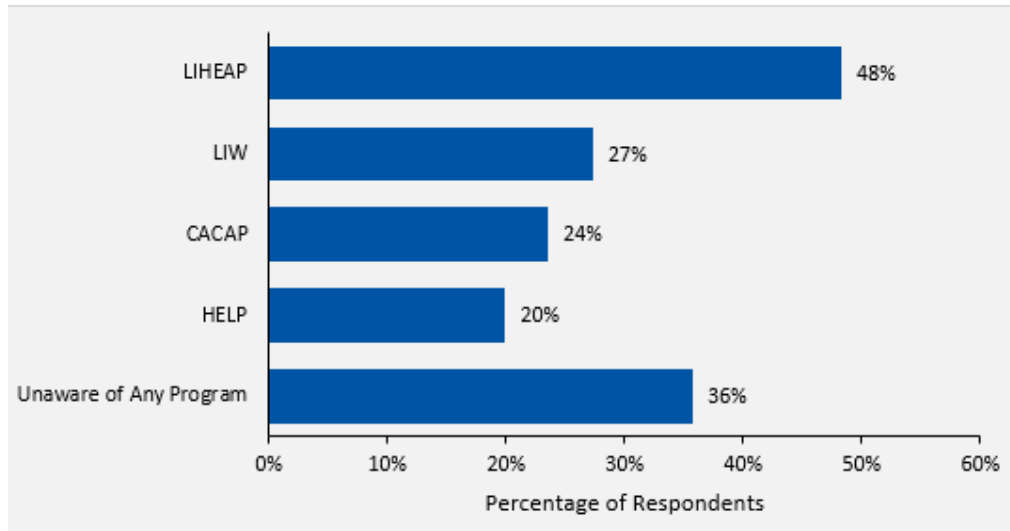
Overall, respondents had low awareness of the assistance programs, with 36% ($n=582$) unaware of any assistance programs. As shown in Figure 3 (based on a multiple response question), about half (48%, $n=582$) of respondents had heard of LIHEAP. However, only a quarter or less of respondents were aware of PSE assistance programs (HELP, CACAP, LIW).

HELP participants ($n=89$) were significantly more likely than nonparticipants to be aware of two of the programs ($n=113$)—HELP (100% of participants and 27% of nonparticipants) and LIHEAP (93% of participants and 81% of nonparticipants).

¹¹ Cadmus defined nonparticipants as eligible customers who have not received weatherization services (some nonparticipants may have received bill assistance in the past, so Cadmus included a battery of question that addressed specific barriers for bill assistance participants to convert to weatherization participants).

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Figure 3. Awareness of Assistance Programs

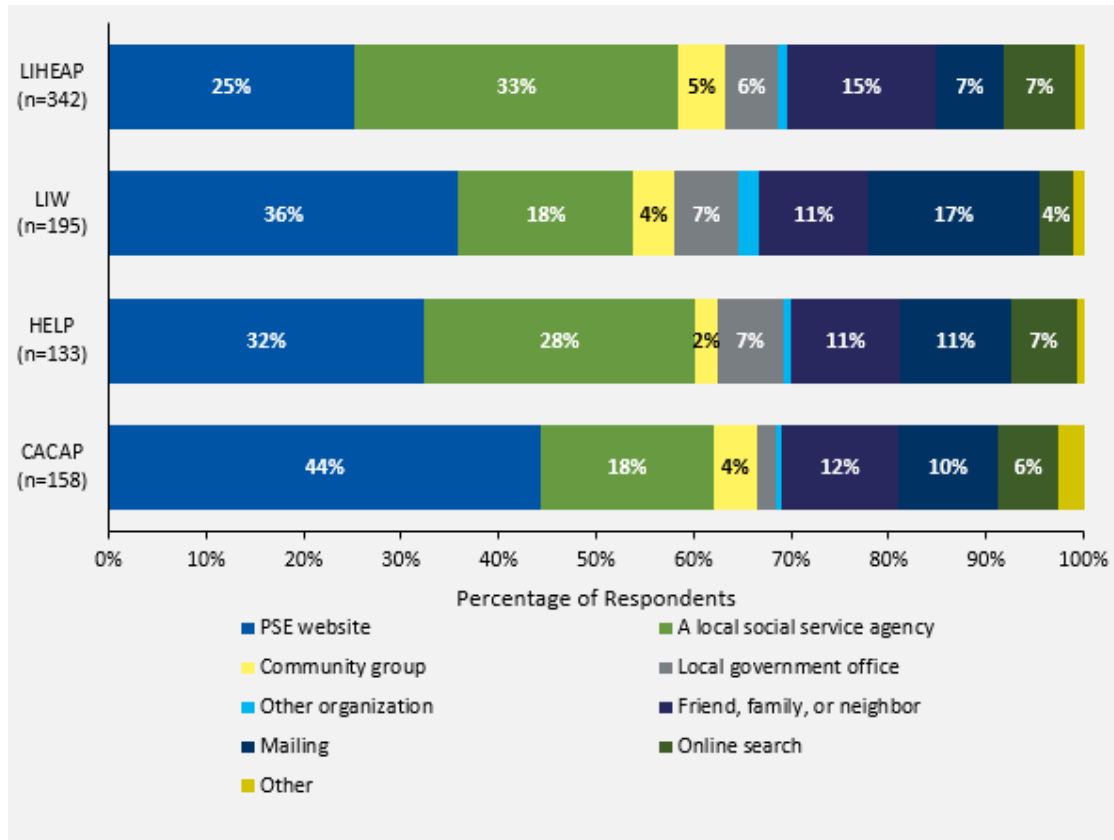


Source: Customer Survey Question B3. "PSE customers may be eligible for energy assistance programs. Before today, which of the following programs were you aware of?" n=582. Multiple responses allowed.

As shown in Figure 4, respondents most often heard about PSE assistance programs by visiting the utility website. Local social service agencies also increase awareness as they are the most common source of awareness for LIHEAP and the second most common source for PSE programs. Respondents who indicated they had already interacted with an organization to receive assistance were more likely to have heard about programs through local service agencies, while those who had not previously interacted with an organization were more likely to have found out through the PSE website. Hearing about the programs through word-of-mouth (friends, families, coworkers, neighbors, et cetera) and through mail were also ways survey respondents heard about the assistance programs.

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Figure 4. Avenues of Awareness



Source: Customer Survey Question B4. “How did you hear about these programs?” Multiple responses allowed.

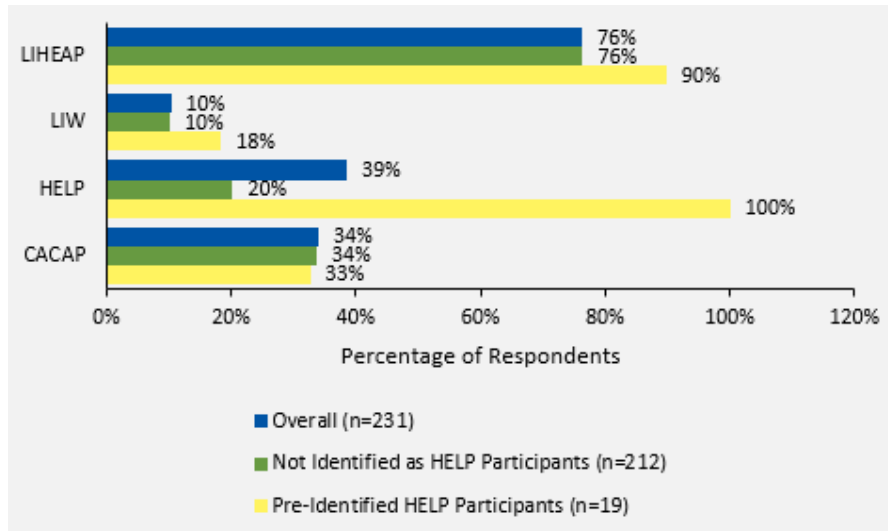
Program Participation

Cadmus designed the survey sample to target PSE program nonparticipants, but some HELP participants were included in the sample to understand barriers to converting to LIW participation. Survey respondents aware of at least one of the assistance programs or were known to have participated in HELP (75 respondents) were asked about previous participation. Thirty-three percent of survey respondents who, at the time of the survey, were enrolled in PSE’s HELP had participated in other energy assistance programs (n=55). Additionally, over half of those who were not enrolled in HELP—those assumed to be PSE nonparticipants—had participated in an energy assistance program in the past. When comparing differences in participation between respondent subsegments, BIPOC participants were more likely to have participated in an energy assistance program in the past than white respondents (70% and 58% respectively, n=88).

As shown in Figure 5, survey respondents most commonly participated in LIHEAP (76%, n=231) followed by HELP (39%) and CACAP (34%), and 10% in LIW. Qualitatively, it seems that HELP participants may be more likely than non-HELP participants to participate in LIHEAP and LIW.

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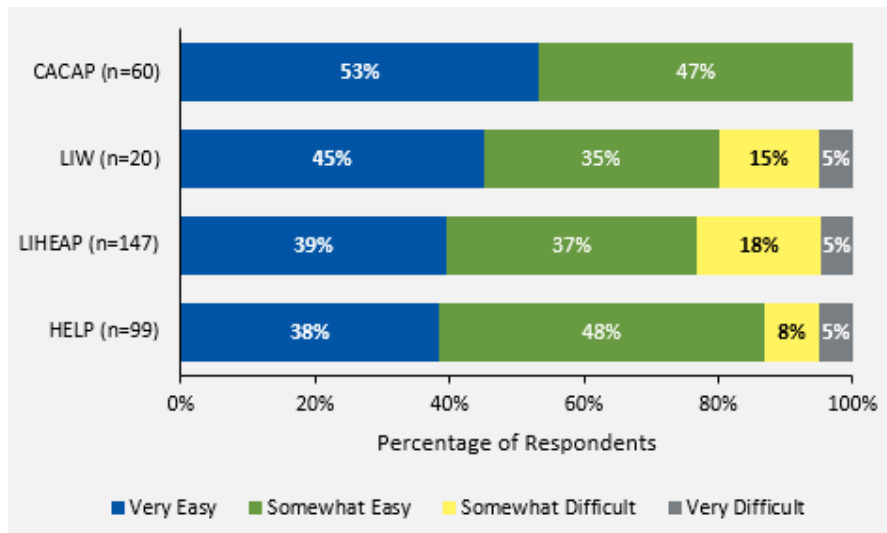
Figure 5. Historic Program Participation



Source: Customer Survey Question B7. "Which programs did you enroll in?" Multiple responses allowed.

Those who had participated in at least one of the programs rated the ease of enrollment. Overall, most survey respondents said it was easy to enroll in any of the programs (Figure 6). Every survey respondent who participated in CACAP said it was *very easy* or *somewhat easy* to participate.

Figure 6. Ease of Program Enrollment



Source: Customer Survey Question B8. "How easy or difficult was it for you to enroll in these programs?"

Those who found it difficult to participate in these programs provided further detail. Across LIHEAP, HELP, and LIW, most respondents said it was difficult to get hold of someone who could help them get started or fill out an application (18 of 27 LIHEAP respondents, seven of 12 HELP respondents, and three of seven LIW respondents). To a lesser extent, respondents noted other barriers such as believing there

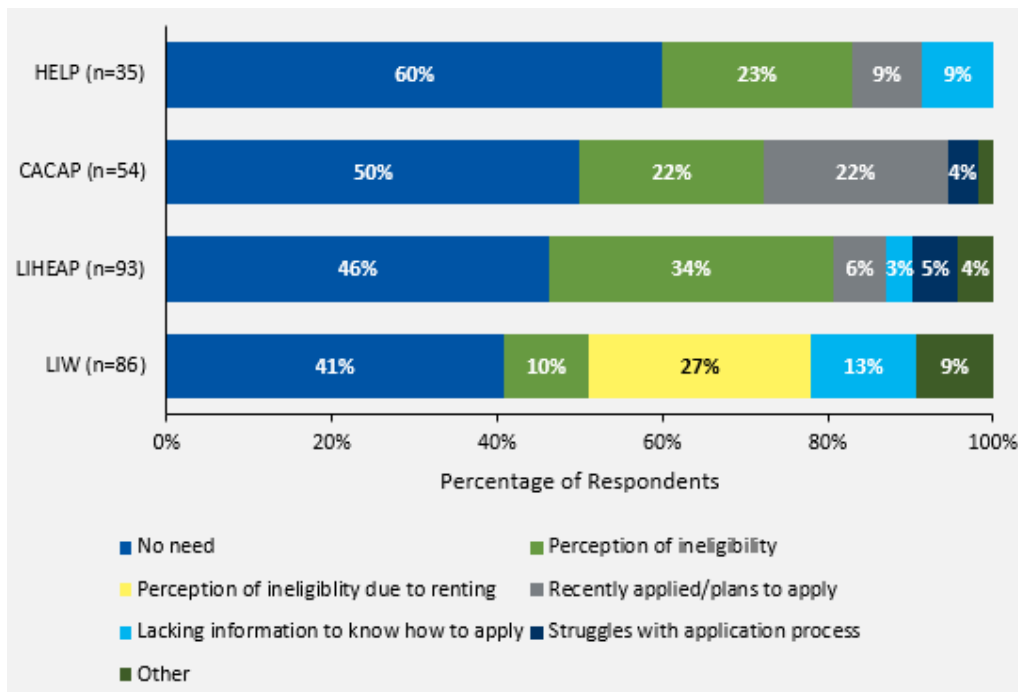
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to be too much documentation (seven of 27 LIHEAP respondents, three of 12 HELP respondents, and one of seven LIW respondents), language barrier (one of 27 LIHEAP respondents), wait times (two of seven LIW respondents), and lacking landlord approval (one of seven LIW respondents).

Some survey respondents who were aware of programs but had not enrolled also provided context as to why. Their reasons were consistent across most programs (Figure 7). The lack of need for the program was the driving reason for why respondents had not enrolled. This was also most common among HELP participants (60%, n=35). Some respondents said they thought other households needed more help than they did.

Across all programs, many respondents perceived they were not eligible for services. Most respondents who perceived themselves ineligible for LIW assumed so because they were renters (23 of 32). Some respondents indicated they had only recently found out about a given program and had either just submitted an application or were planning to apply soon. This was the most common reason for CACAP (22%, n=54). Other reasons included lack of information on how to apply and struggles with the application process (in this question, respondents said it was difficult to get in touch with someone who could get them what they needed to start the application process).

Figure 7. Reasons for Not Enrolling in an Assistance Program



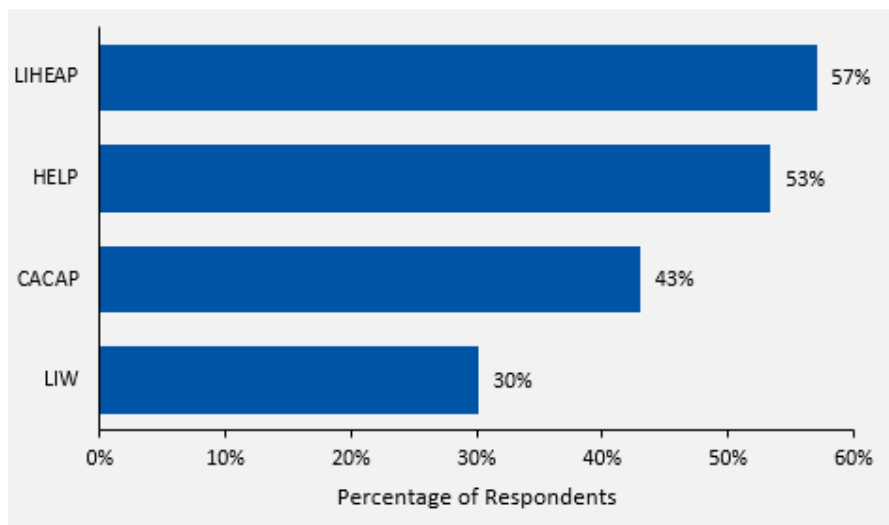
Source: Customer Survey Question B10. "Why haven't you enrolled in the [program]?"

All respondents to this survey—which was targeted toward non-PSE program participants or active HELP participants who were not enrolled in other programs—were asked what programs they would want to participate in in the future. As shown in Figure 8, respondents were mostly interested in participating in LIHEAP (57%, n=691) and HELP (53%), followed by CACAP (43%) and LIW (30%). Qualitatively, for LIW,

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only one HELP participant respondent stated not having a need for LIW. Respondents most commonly said they did not have enough information to apply (three of 11 respondents) or did not feel they were eligible because they were renters (four of 11).

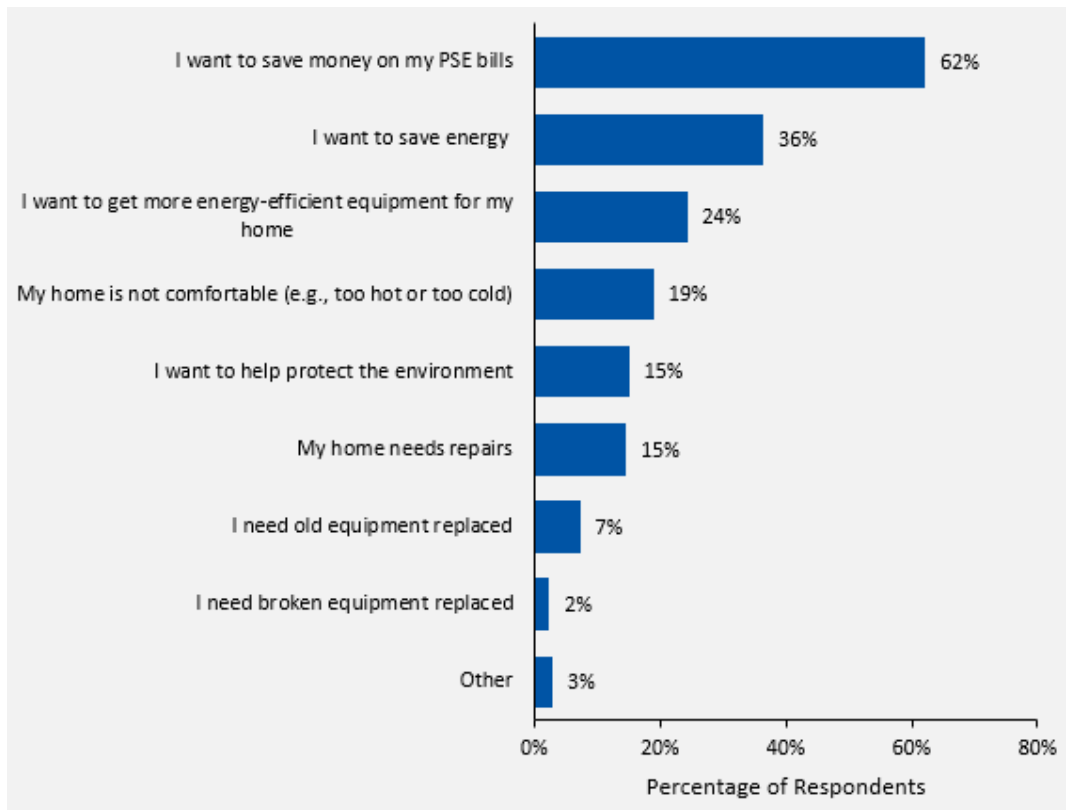
Figure 8. Interest in Participating in the Future



Source: Customer Survey Question B11. "Which energy assistance services may you be interested in receiving in the future? Select all that apply." n=691.

Respondents who were interested in the LIW program indicated why. The majority would be motivated by saving money (62%, n=206; Figure 9). Respondents were also interested in saving energy (36%), receiving more energy-efficient equipment (24%), and increasing the comfort of their home (19%).

Figure 9. Reasons for Enrolling in LIW

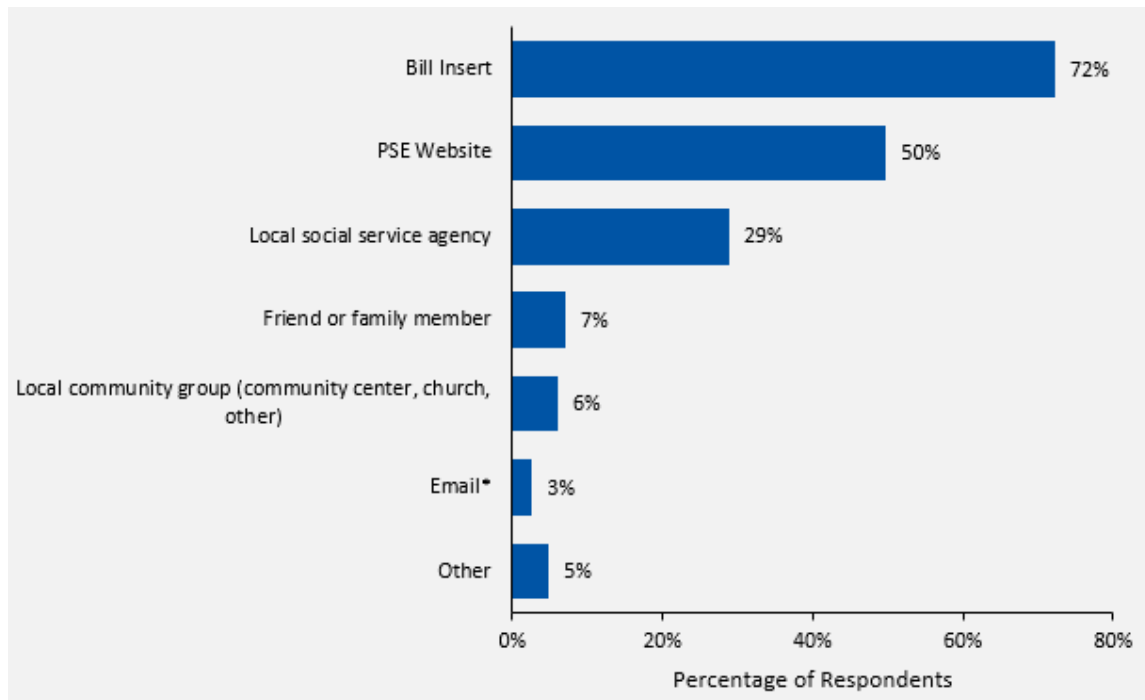


Source: Customer Survey Question B12. "What are the top reasons you would want to enroll in PSE's Weatherization Assistance Program?" n=206. Up to two responses allowed.

Respondents who indicated they were not interested in participating in *any* assistance programs also provided reasons, similar to reasons given by respondents who were not interested in participating in a specific program. These respondents said they did not need an assistance program (65%, n=91), were unsure if they would be eligible (24%) or were unsure how to engage with the programs (7%). Some respondents provided other reasons, such as not yet being comfortable with people in their homes due to COVID-19.

All respondents were asked how they would like to find out about available assistance in the future. Of 677 respondents, 72% wanted to receive information with their bill, 50% wanted to find information on the PSE website, and 29% wanted to find information from a local service agency, as shown in Figure 10.

Figure 10. Avenues to Receive Information



Source: Customer Survey Question B14. "In the future, how would you like to find out about energy assistance programs your household may be eligible for? Select all that apply." n=677. Multiple responses allowed.

Barriers

Survey respondents provided details on barriers to participating in energy assistance programs.

General Barriers

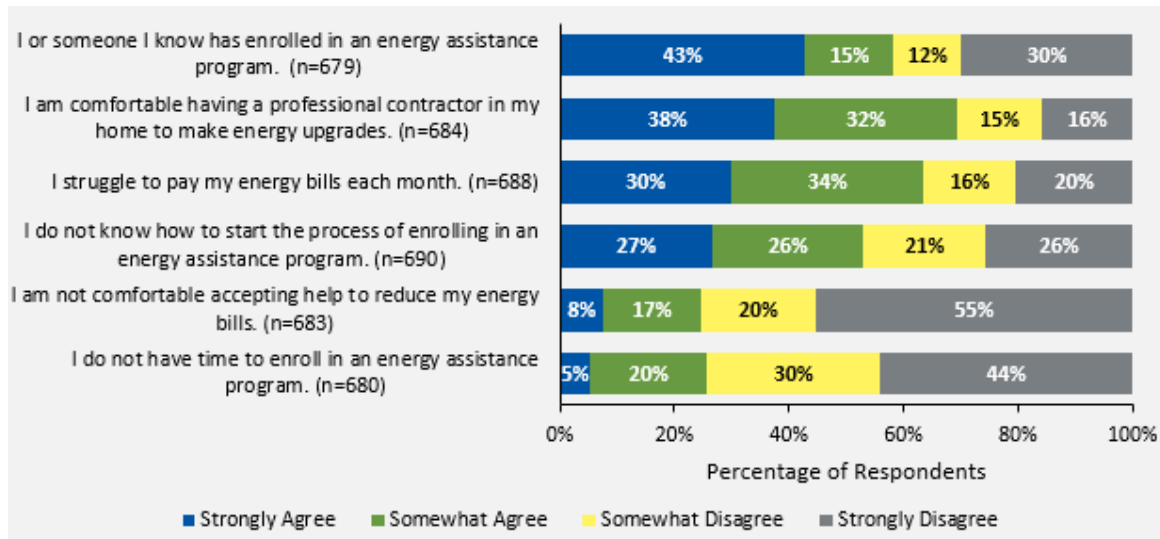
Before respondents were prompted with potential barriers to participation, they first answered an open-ended question about what would make it difficult for their household to participate in an energy assistance program. Most commonly, respondents said not having the support they needed to complete the application, which included not being able to submit their application in the preferred way, needing support but being unable to schedule an appointment to get help (in person or over the phone), not knowing where to start or to learn more about the programs, being unsure if they would qualify, being worried about hidden costs, and finding the documentation too difficult or too onerous to complete.

Survey respondents rated their agreement with a series of prompts on a 4-point scale: *strongly agree*, *somewhat agree*, *somewhat disagree*, and *strongly disagree*, as shown in Figure 11. Over half the respondents (58%, n=679) indicated they or someone else they knew had enrolled in an energy assistance program. Nearly two-thirds (64%, n=688) agreed they struggled to pay their bills each month. From looking at the data qualitatively, it seems respondents who disagreed that they struggle to pay their bills were typically those who said they did not feel a need to participate in an assistance program. Most respondents (70%, n=684) said they would be comfortable having a professional contractor enter their home to make energy upgrades.

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The majority of respondents were comfortable accepting help to reduce their energy bills (75%, n=683) and believed they had the time to enroll in an energy assistance program (74%, n=680); however, over half (53%, n=690) did not know how to start the process of enrolling in an energy assistance programs. Therefore, a leading factor in gaps in service may be the lack of knowledge on how to enroll.

Figure 11. Agreement Statements



Source: Customer Survey Questions C2 and C3. "For each of the next statements, please mark your level of agreement."

When examining possible barriers by respondent subsegments, several compelling differences were identified:

- County.** Survey respondents in King County were more likely to say they did not have the time to enroll in an energy assistance program (9%, n=220) than did Skagit County (4%, n=222) and Thurston County (3%, n=238) respondents.
- Owners and renters.** Renters were significantly more likely to *strongly agree* that they struggle to pay their energy bills each month (36%, n=459) than owners (18%, n=228) and more likely to have enrolled or know someone who has enrolled in an energy assistance program (50%, n=454) than owners (29%, n=224). However, owners were more likely to be comfortable with contractors coming into their home (44%, n=228) than renters (34%, n=455). Though renters were more likely to *strongly agree* that they did not have time to enroll in an energy assistance program (6%, n=449) than owners (3%, n=230), they were more comfortable receiving help to pay their energy bills (59%, n=451) than owners (48%, n=231). Owners were more likely to *strongly agree* that they did not know how to start the process for applying to an energy assistance program (31%, n=232) than renters (25%, n=457).
- Housing type.** Though multifamily residents were more likely to know someone who has enrolled in an energy assistance program (48%, n=289) than manufactured home residents (33%, n=102) and single-family home residents (42%, n=270), multifamily residents were less likely to be comfortable with people in their home (30%) than manufactured home residents (48%) and single-family home residents (42%). Survey respondents who live in manufactured

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homes were more likely to feel uncomfortable accepting help to pay for their energy bills (12%, n=105) than multifamily home residents (7%, n=288) and single-family home residents (6%, n=267).

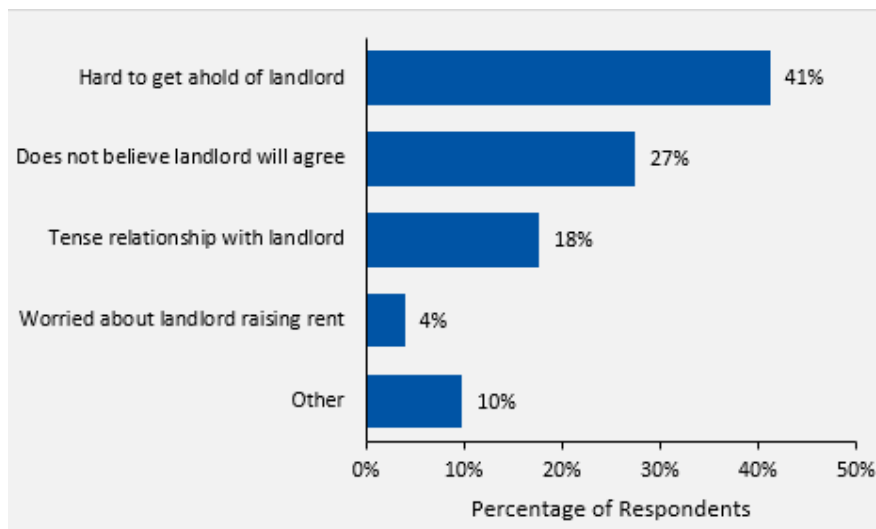
- **Age.** Generally, younger individuals (those 18 to 55) were more likely to *strongly agree* that they struggle to pay their energy bills than those aged 56 and older.
- **Race.** White survey respondents were more likely to indicate they *strongly disagree* with the statement that they struggle to pay their energy bills (20%, n=342) than BIPOC respondents (15%, n=211). BIPOC survey respondents were more likely than white respondents to *strongly agree* that they do not have time to enroll in an energy assistance program (7%, n=209, and 4%, n=342, respectively) and do not feel comfortable accepting help to pay their energy bills (9%, n=211, and 6%, n=344, respectively).
- **HELP participation.** Though HELP participants were more likely to *strongly agree* that they struggle with paying their bills (45%, n=104) than non-HELP participants (29%, n=216), they were less likely to agree that they do not know how to start the application process (28%, n=103) than non-HELP participants (60%, n=220). HELP participants were also less likely to *strongly disagree* with professional contractors coming into their home to make energy upgrades (10%, n=102) than non-HELP participants (18%, n=215). HELP participants were more likely to *strongly agree* that they were comfortable accepting help to pay their energy bills (77%, n=103) than non-HELP participants (55%, n=218), which makes sense given their program enrollment.

Cadmus also asked renters how difficult it would be to seek approval from their landlords for weatherization services. Most respondents (64%, n=169) would consider it easy to approach their landlord for approval.

Respondents who would find it difficult most commonly said it was simply difficult for a tenant to get in contact with their landlord (41%, n=51). 27% did not believe their landlord would approve of participating and 18% indicated their tense relationship with their landlord would prevent them from feeling comfortable approaching them for approval. Four percent (n=51) were worried that, if their landlord agreed, their rent would be raised (which is against LIW program rules). Respondents also mentioned being unsure if the unit had already recently undergone weatherization or thinking it was not needed for their home.

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Figure 12. Landlord Approval Barriers



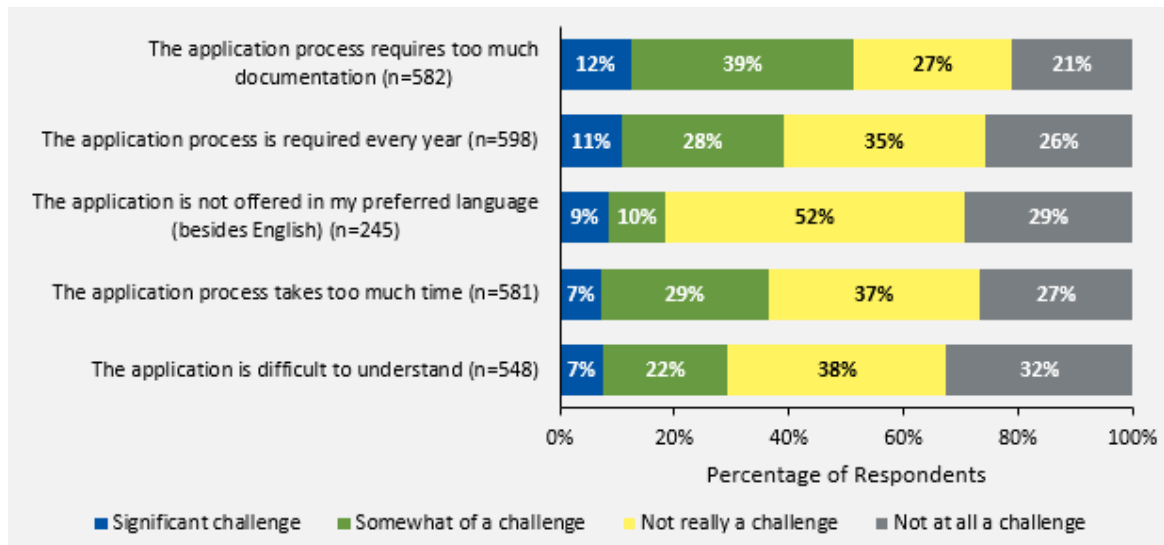
Source: Customer Survey Question C9. "Why is that?" n=51.

Application Barriers

Cadmus provided respondents a list of barriers that may prevent or hinder someone from being able to complete the application for an energy assistance program. Overall, as shown in Figure 13, none of the barriers were considered a *significant challenge* by most respondents. The only barrier considered to be a challenge, according to 51% of respondents (n=582), was the amount of documentation required. Most respondents did not consider the application process being required every year, not being offered in their preferred language (besides English), and the process taking too much time as challenges.

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Figure 13. Application Barrier Statements



Source: Customer Survey Question C4. “Here are some challenges that someone may face when deciding whether to enroll in an energy assistance program. Please mark how significant of a challenge these would be in your decision to enroll in an energy assistance program.”

When examining application process barriers by respondent subsegments, Cadmus identified several differences:

- **High-need census block group.**¹² Respondents from high-need census block groups (as identified in Phase 1) were more likely to indicate that an application requiring too much documentation (14%, n=379), not being available in their preferred non-English language (22%, n=173), and taking up too much time (33%, n=178) were *significant challenges* than were respondents from other areas of the county that were not identified as a high-need census block group (8%, n=179; 6%, n=64; and 25%, n=381, respectively).
- **County.** King County resident respondents were more likely to find the application too difficult was a *significant challenge* (12%, n=188) than respondents in Skagit (5%, n=173) and Thurston (5%, n=187) counties.
- **Housing type.** Manufactured home respondents were more likely to find parts of the application process to be *significant challenges* than multifamily home respondents in three of four prompts: too much time (10%, n=91, versus 5%, n=249, respectively), too much documentation (n=10%, n=91, versus 5%, n=249, respectively), and year-over-year manual re-enrollment (12%, n=91, versus 8%, n=261, respectively). However, manufactured home residents were more likely to consider the application not being in their preferred non-English language to be *not at all a*

¹² High-need census blocks were identified during Phase 1 of the study. These residents are considered the most underserved but likely in the highest need of the services that assistance programs provide. Please see the *Looking Back: Phase 1 Key Findings* section for more information on the definition of high-need census blocks.

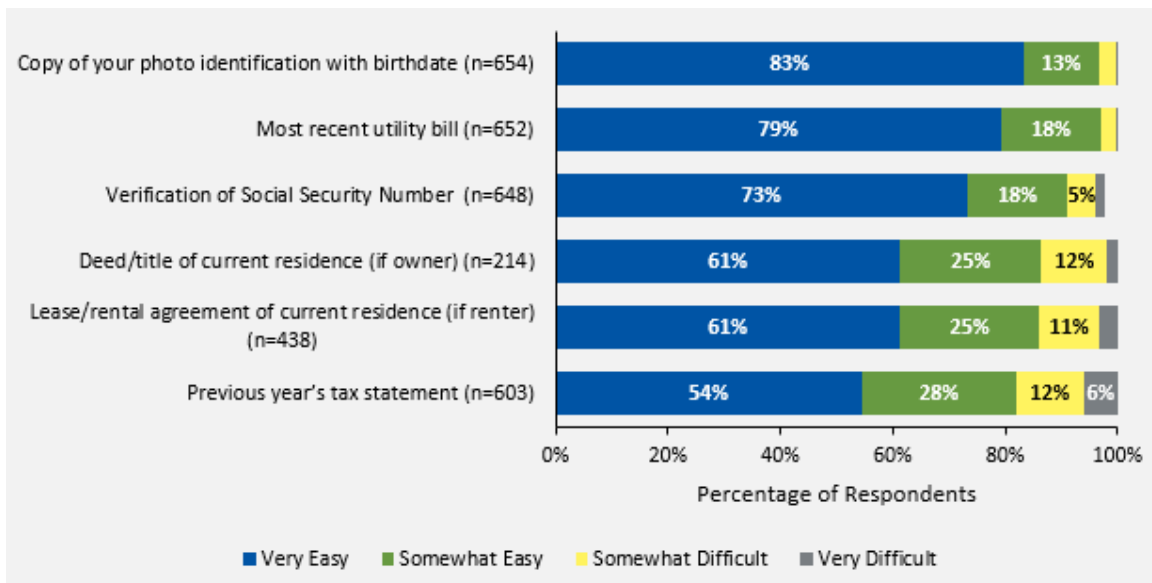
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challenge (67%, n=30) than both multifamily (52%, n=113) and single-family (48%, n=94) respondents.

- **Race.** BIPOC respondents were more likely to say that the application taking too much time (10%, n=177) and manual re-enrollment being needed year-over-year (14%, n=190) were *significant challenges* than white respondents (5%, n=304, and 8%, n=309 respectively). White respondents were more likely to say that the application being available in their preferred non-English language was *not at all a challenge* (67%, n=97) than BIPOC participants (44%, n=104).
- **HELP participants.** HELP participants were more likely to say that the application being difficult to understand was *not at all a challenge* (47%, n=93) than were nonparticipants (33%, n=169).

Cadmus provided respondents with a list of documents that may be required when applying for an energy assistance program, asking if it would be *very easy*, *somewhat easy*, *somewhat difficult*, or *very difficult* to provide a given document. As shown in Figure 14, when considering general documents that could be considered to prove identity, residence, and utility account, the vast majority of respondents said it would be *very easy* or *somewhat easy* to provide.

Figure 14. Ease of Providing Proof of Identity, Residence, and Utility Account



Source: Customer Survey Question C6. “To enroll in an energy assistance program, you may need to provide documentation to verify your household is eligible. Below is a list of documents that could potentially be a part of an application process. Please indicate how easy or difficult it would be for you to provide the following documentation to qualify for program benefits.”

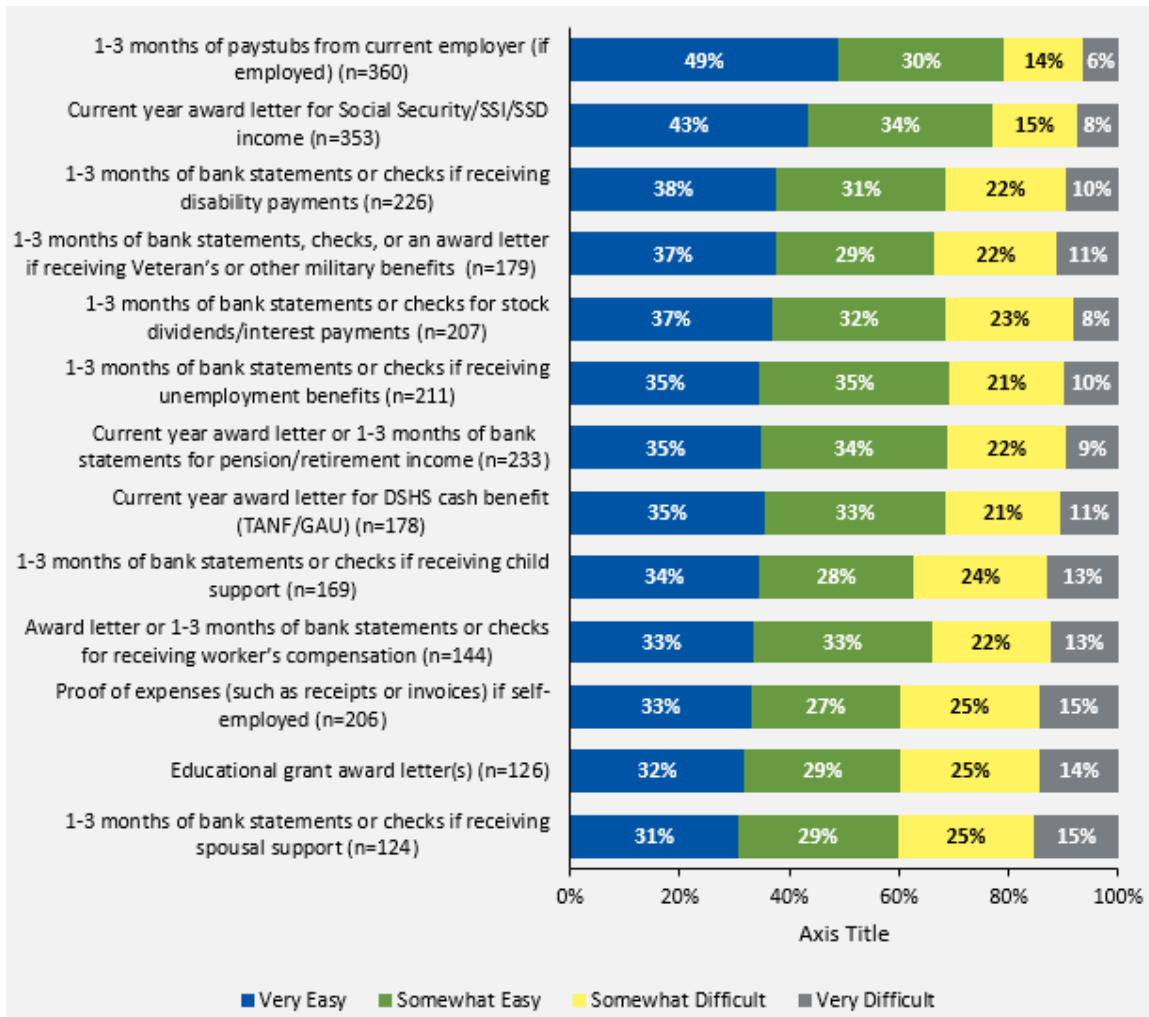
When examining application document barriers by respondent subsegments, white respondents were more likely to consider providing verification of social security number to be *very easy* than were BIPOC respondents (79%, n=349, versus 70%, n=204, respectively).

Respondents then said how easy it would be for them to provide different documents that could act as proof of income. This list was derived from the list of documents that would be accepted under PSE’s HELP, though not all documents are required for a given participant and not all are required for LIW. At

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least half of the respondents found it easy to provide each document, as shown in Figure 15. There were no statistically significant findings that applied to a particular customer subsegment.

Figure 15. Ease of Providing Proof of Income

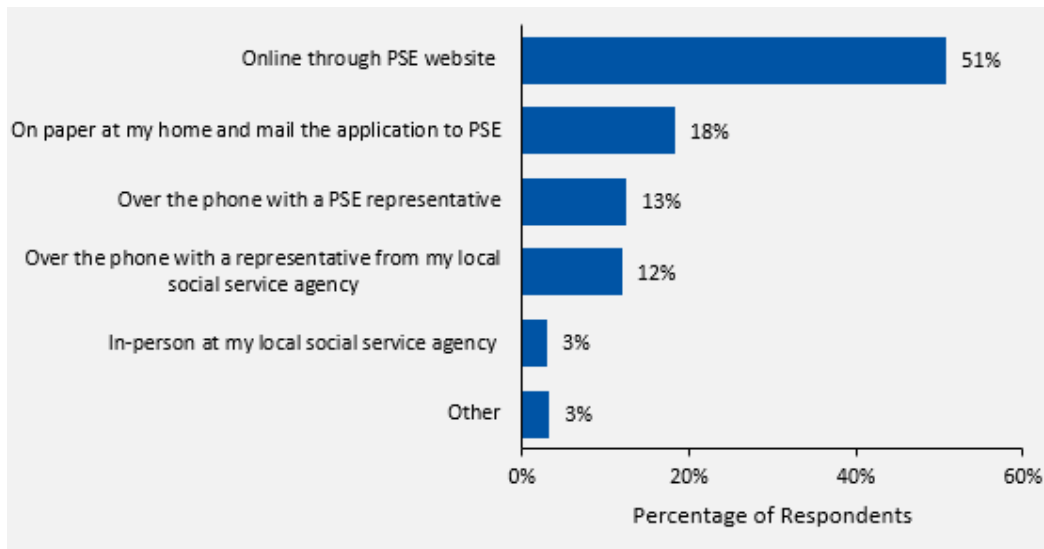


Source: Customer Survey Question C7. "Below is another list of documents that could potentially be a part of an application process to verify proof of income. These documents would be required for anyone over the age of 18 living in the household, if applicable. Please indicate how easy or difficult it would be for you to provide the following documentation to qualify for program benefits."

Currently, customers interested in participating in PSE may start the application process online, but they eventually must be connected with a partnering organization to complete and submit their HELP or LIW application. Respondents indicated the best way for them to complete the application (Figure 16). Of 661 respondents, 51% preferred to submit the application online through the PSE website, 18% to fill out a paper application and mail it to PSE, 13% to complete it over the phone with a PSE representative, and 12% to complete it over the phone with a representative from their local social service agency.

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Figure 16. Preferred Application Submission Avenues



Source: Customer Survey Question C5. "To enroll in an energy assistance program, you may be asked to fill out an application and provide documentation to verify your household is eligible. How would you prefer to fill out your application to enroll in a program?" n=661.

When examining application submission preferences by respondent subsegments, several differences were identified.

- **Owner and renters.** Owners and renters have different preferences for filling out the application. More owners wanted to complete the application by paper and mail it to PSE (26%, n=219) than renters (15%, n=442). On the other hand, renters were more likely to want to complete the application over the phone with a local social service agency (14%, n=442) than owners (8%, n=219).
- **Housing type.** Manufactured home respondents were the least likely to prefer options for online application (26%, n=99) than multifamily (55%, n=286) and single-family (53%, n=255) respondents and were the most likely to want to complete the application over the phone with PSE (20%, n=99) than multifamily (11%, n=286) and single-family (11%, n=255) respondents. Multifamily home respondents were the least likely to prefer mail (14%, n=286) over manufactured (24%, n=99) and single-family (21%, n=255) respondents. Multifamily home respondents were also the most likely to want to fill out the application over the phone with a local community agency representative (15%, n=286) than manufactured (11%, n=99) and single-family (8%, n=255) respondents.
- **HELP participation.** HELP participants were less likely to want to complete the application online (36%, n=102) than were nonparticipants (50%, n=214). Instead, they were more likely to want to use a local social service agency, preferring to complete the application either in person (6%) or over the phone (29%) than were nonparticipants (2% and 13%, respectively).

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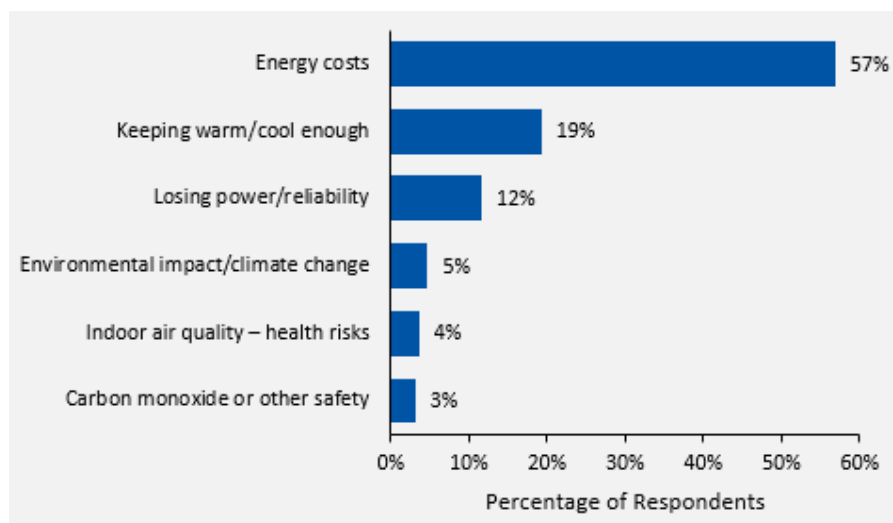
Motivations

Cadmus assessed what motivates customers to participate in energy assistance programs. In addition to questions about general and external motivations, we used Max Differential methodology to identify which aspects of an assistance program are most important to potential participants.¹³ We also asked known, current enrollees of HELP some questions about their experience with the program.

General Motivations for Participation

When it comes to concerns about using energy in their household, as shown in Figure 17, 57% (n=614) of respondents are most concerned about their energy costs. To a lesser extent, respondents are also concerned about keeping warm or cool enough (19%) and losing power (12%).

Figure 17. Greatest Energy Use Concerns



Source: Customer Survey Question D2. “What is your greatest concern when it comes to using energy in your household? Choose only one.” n=614

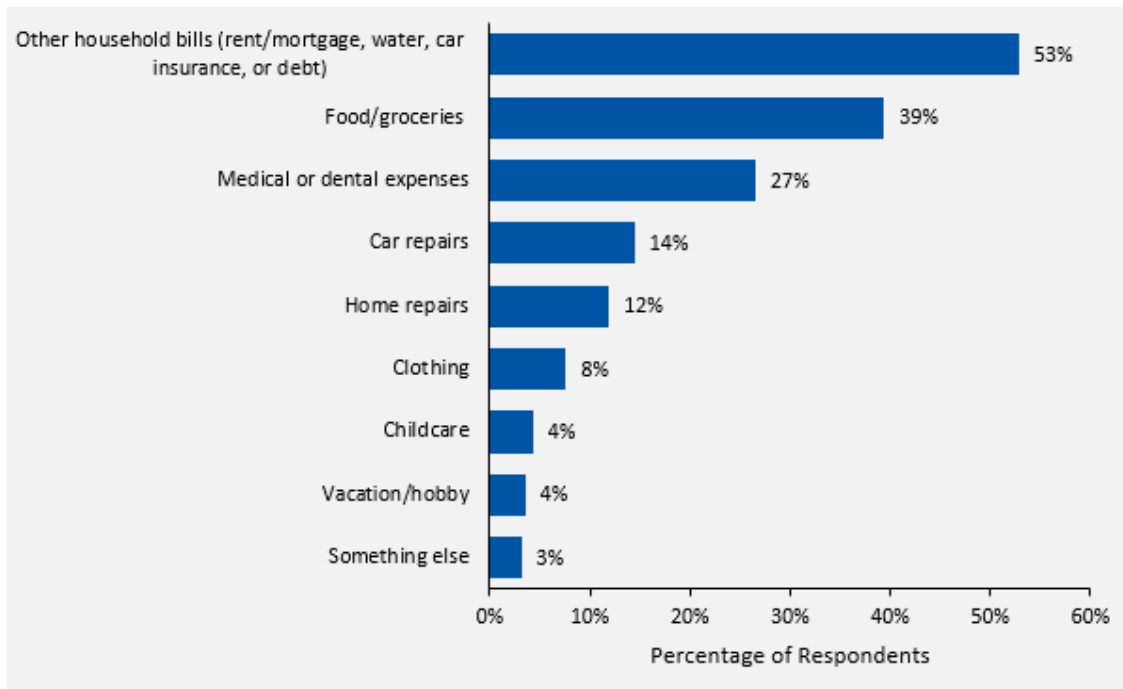
Current HELP participants who responded to the survey provided insights on how valuable it was for them to participate in HELP. Of 87 respondents, all indicated they believed that taking the time to enroll in HELP was worth the benefits they received. In addition, of 97 participants, all would be likely to enroll in HELP again if they continue to be eligible.

Cadmus also asked PSE nonparticipant respondents what they would potentially gain, or like to gain, from participating in HELP. First, respondents indicated what life costs they would have more flexibility in paying for if they received assistance through HELP (which is up to \$1,000). As shown in Figure 18, 53% (n=513) of respondents said they would spend the funds on other household costs (such as rent, water, car insurance, or outstanding debt). Respondents were also likely to spend the money on food/groceries (39%) and medical or dental expenses (27%).

¹³ Please see the *Study Objectives and Approach* section above for more details on Cadmus’ survey methodology.

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Figure 18. Priorities for Alleviated Energy Cost Burden

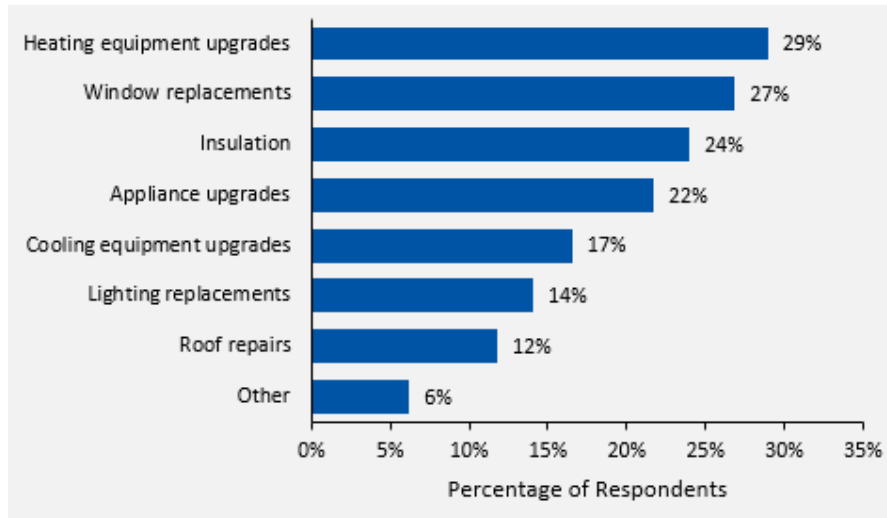


Source: Customer Survey Question D3. "PSE's Home Energy Lifeline Program (HELP) provides up to \$1,000 per year in bill-payment assistance. If your energy bills were discounted throughout the year, what other life costs would you have more flexibility in paying for? Please choose the top 2." n=513. Up to two responses allowed.

Next, respondents indicated what kind of home improvement they would be most interested in receiving through the LIW program. As shown in Figure 19, respondents were most interested in heating equipment upgrades (29%, n=484), window replacements (27%), insulation (24%), and appliance upgrades (22%). The LIW program provides all of these upgrades, with the exception of appliance upgrades and with the caveat that window replacements are installed only under strict circumstances. Twenty-one percent (n=611) of respondents were not interested in receiving any upgrades. Notably, 75% (n=124) of those who were not interested in receiving any upgrade lived in multifamily housing. Comparatively, of those who indicated they would want at least one kind of upgrade, only 37% (n=491) lived in multifamily housing. Those who indicated something else (*other*) did not often provide suggestions for additional measures, but they commonly mentioned that they believed they would not be able to accept help because they were renters or indicated they had already recently completed home upgrades.

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Figure 19. LIW Measures Desired



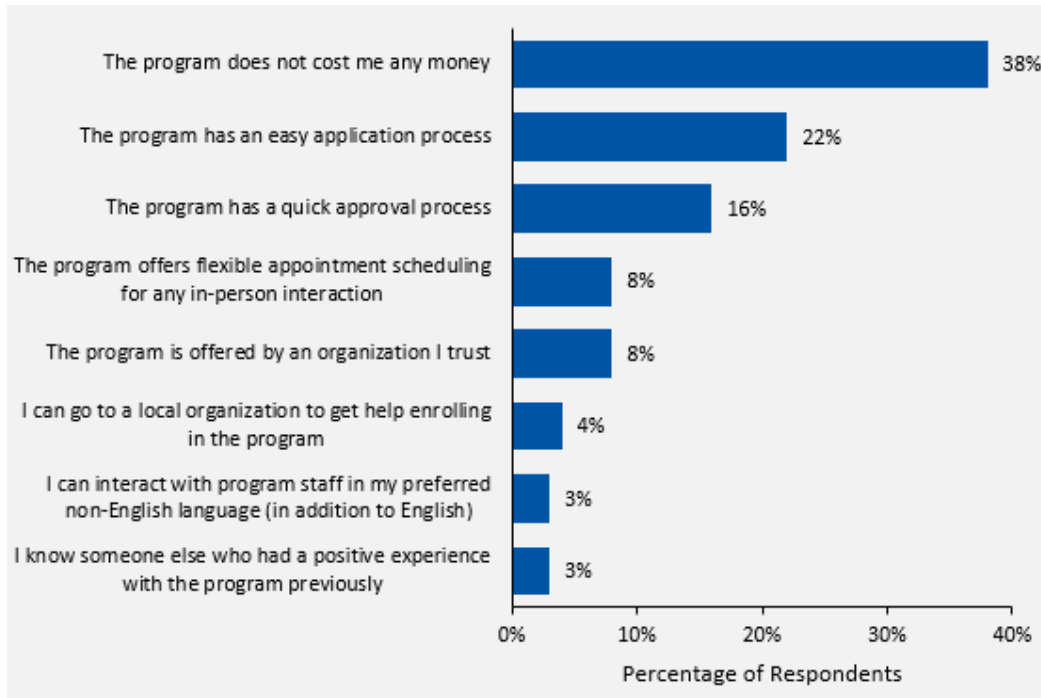
Source: Customer Survey Question D8. "PSE's Weatherization Assistance Program offers free home upgrades to help lower your energy bills. Which of the following home upgrades would make you most likely to enroll in the program?" n=484. Up to two responses allowed.

Importance of Program Attributes

Using MaxDiff methodology, Cadmus tested eight different attributes of an assistance program to learn which are the most important to customers when deciding whether or not to participate. Unsurprisingly, respondents said it was most important that the program does not cost the participant any money (38%, n=629). They also found it important that the application process is easy (22%) and has a quick approval process (16%).

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Figure 20. Importance of Program Attributes

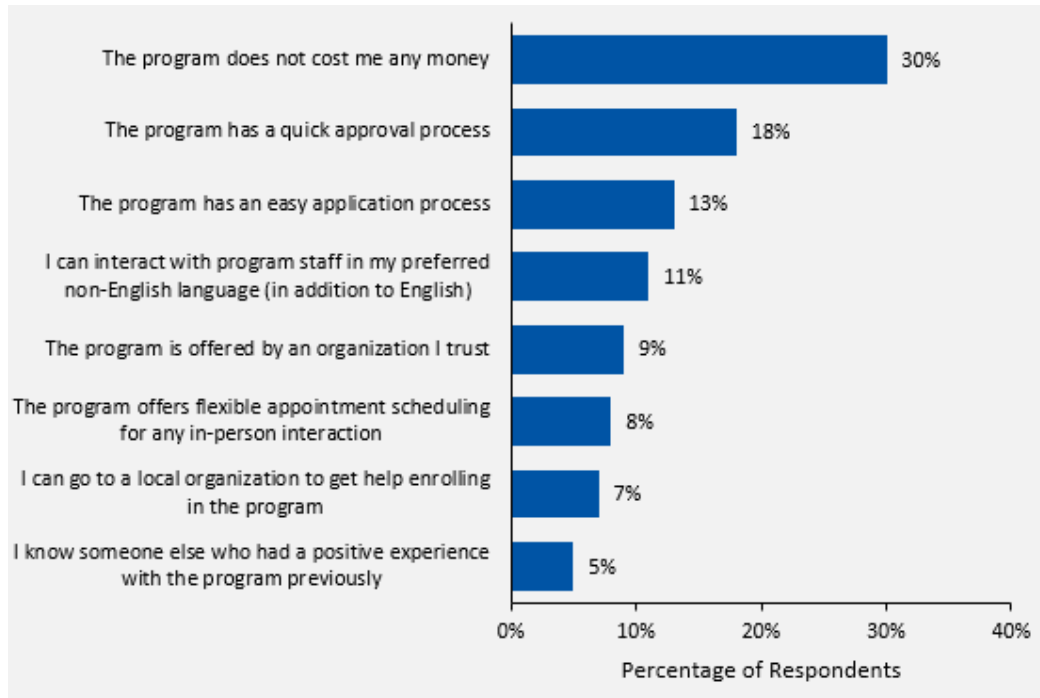


Source: Customer Survey Question D1. “Pretend you are considering enrolling in an energy assistance program. For the next 6 questions, you will be asked to evaluate the importance of different aspects of the program. Each of the 6 will include a slightly different group of four statements. Thinking of only the four statements listed below, which ONE is most important, and which ONE is least important to you?” Preference share data generated from MaxDiff modeling output.

Cadmus examined the preferences shared by different subsegments of the population, but there were very few statistical differences between groups. Cost, easy application process, quick approval process, and flexible appointment scheduling were the four most important aspects to customers across all subsegments, with one exception. Respondents who reported their primary language is not English, the fourth most important attribute was interacting with program staff in their preferred non-English language, followed by the program being offered by an organization they trust, then flexible appointment scheduling.

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Figure 21. Non-native English Speaker Preference Shares



Source: Customer Survey Question D1. “Pretend you are considering enrolling in an energy assistance program. For the next 6 questions, you will be asked to evaluate the importance of different aspects of the program. Each of the 6 will include a slightly different group of four statements. Thinking of only the four statements listed below, which ONE is most important, and which ONE is least important to you?” Preference share data generated from MaxDiff modeling output.

Trusted Organizations

Cadmus asked respondents a series of questions to understand what organizations customers already engage with and what organizations customer seek when looking for assistance.

Previous Experience with Organizations

Survey respondents answered a series of questions about trusted organizations—in particular, which organizations they could go to when seeking assistance for paying their energy bill. Forty-two percent (n=492) of respondents had interacted with a local social service agency (or other nonprofit) in their county, and only 27% said they knew of a trusted organization they might turn to in the future. Respondents who live in Thurston County were the least likely to know where they could get assistance. Of the participants who did know where they could get help or who had sought help in the past, 65% (n=127) said CAAs, like the ones interviewed as part of this research.¹⁴

¹⁴ Detailed findings can be found in *Findings: Stakeholder Interviews*.

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Though some respondents answered vaguely with “community action,” many named the specific organization they would seek out, which included these interviewees:

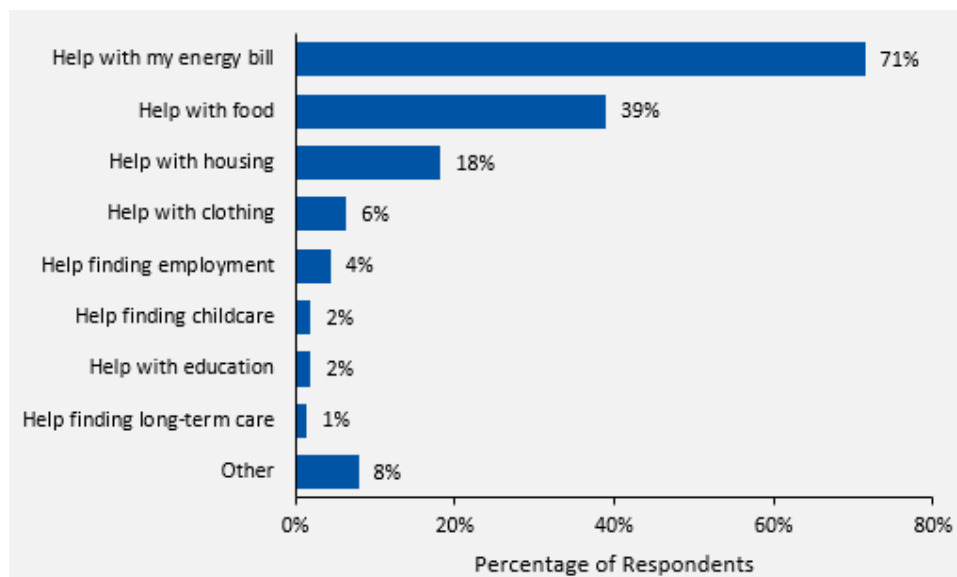
- Multi-Service Center (South King County)
- Community Action of Skagit County
- Community Action Council of Lewis, Mason, and Thurston Counties
- Hopelink (North and East King County)
- Housing Authority of Skagit County

Other than community action agencies, respondents also cited other organizations (20%, n=127), PSE (4%), and places of worship (4%) as places where they could seek assistance. Other organizations included the Salvation Army, Rochester Organization of Families (ROOF, an interviewee), Heart to Heart, Kitsap Community Resources, Seattle Chief Club, and Habitat for Humanity.

When asked if they had already sought out assistance from an organization, respondents usually named the same organizations as when identifying who they would go to. Respondents also mentioned the Washington Department of Social and Health Services, and several respondents said they would seek assistance from their local foodbank.

As shown in Figure 22, the customers who have sought assistance from social services agencies most commonly sought help with paying their energy bill (71%, n=203), and help with food and housing are not uncommon.

Figure 22. Assistance Sought from Trusted Organizations



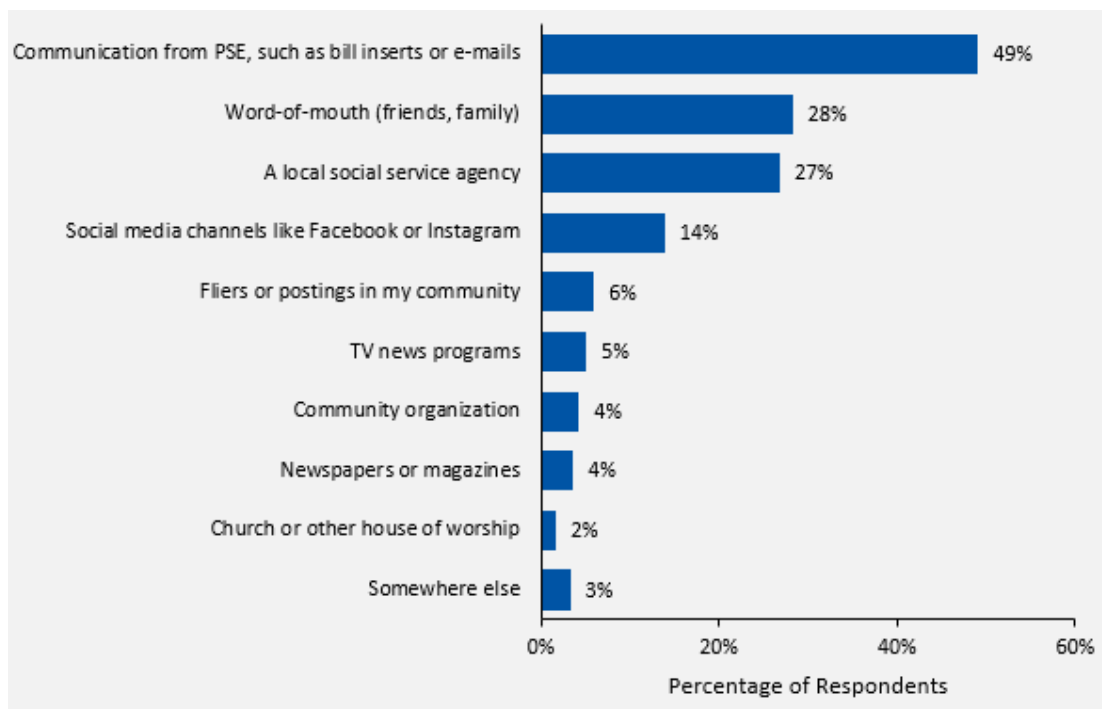
Source: Customer Survey Question E3. “What services did the social service agency assist you with?” n=203.
Multiple responses allowed.

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Sources for Assistance Information

Separately from identifying how they would *like* to hear about assistance programs they qualify for, respondents were also asked about where they *typically* hear about assistance programs they qualify for. As shown in Figure 23, survey respondents mostly hear about these programs through PSE, such as bill inserts or e-mails, (49%, n=605). Other common sources of information were word-of-mouth (28%) and from a local social service agency (27%).

Figure 23. Sources of Information about Assistance Programs

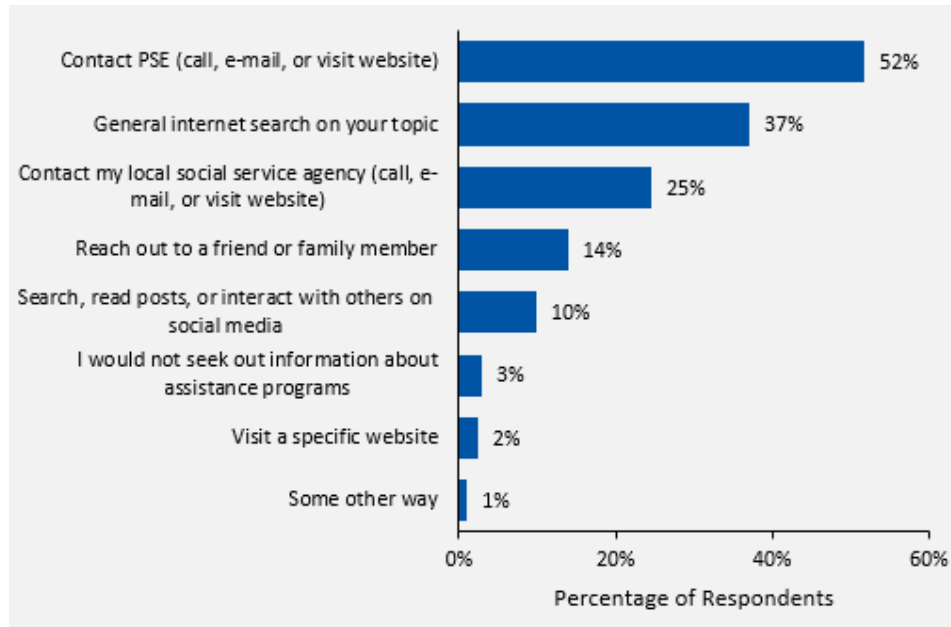


Source: Customer Survey Question E4. “Where do you typically hear about information related to assistance programs you may qualify for? Please select the top two ways you have learned about assistance programs in the past.” n=605.
Up to two responses allowed.

Cadmus then asked respondents what sources they were most likely to seek out when looking for information regarding assistance programs they may qualify for. As shown in Figure 24, respondents were most likely to reach out to PSE directly (52%, n=306), to conduct a general internet search (37%), or to contact their local social service agency (25%).

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Figure 24. Sought Out Sources of Information



Source: Customer Survey Question E5. “If there is something specific you are looking for about assistance programs you may qualify for, where are you most likely to seek out more information? Select the top two ways you are likely to search for information.” n=591. Up to two responses allowed.

Demographics

Using demographic data collected during the survey, Cadmus developed qualitative profiles for the survey respondents from each county of interest (Table 8). These findings are not statistically correlated, but they are a summary of the primary demographics represented in each county. Cadmus tested the statistical significance of many of the survey findings based on demographic subsegments, so these profiles may help PSE better understand how these subsegments can be layered to make up the characteristics of the survey respondents in each geographic strata.

Scenario 2, described above, prioritized high-need households based on race/ethnicity and limited English proficiency. King County had the largest concentration of Black, Indigenous, People of Color (BIPOC) survey respondents, which aligns with Phase 1 findings.

Table 8. Respondent Survey Profiles

King County	Skagit County	Thurston County
Multifamily residents (72%) Renters (82%) BIPOC (64%) HELP participants, LIW nonparticipants (86%)	Multifamily/single-family split (40%/48%) ¹ Renters (67%) White (71%) True nonparticipants (68%) ²	Single-family residents (45%) Renter/owner split (57%/43%) White (78%) True nonparticipants (85%) ²

¹ The remaining 12% were manufactured homes.

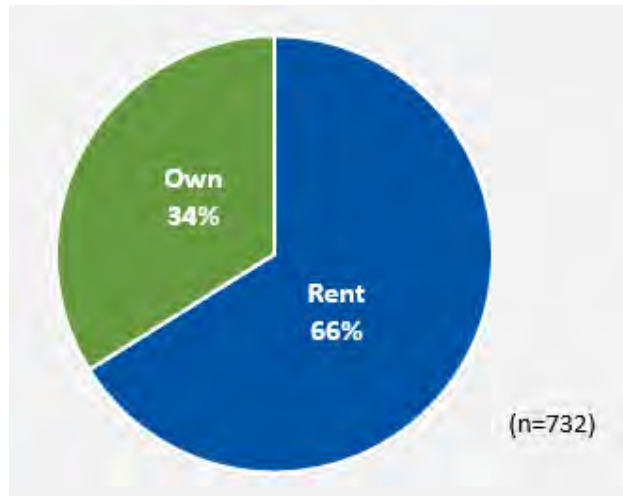
² True nonparticipants represent customers in the survey sample who were identified by PSE as having not received weatherization or bill assistance (HELP) in the past. Some customers in the survey sample were identified as HELP participants, these customers were primarily represented in King County.

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Housing Characteristics

Overall, of 732 respondents, 66% rent their home and 34% own their home (Figure 25).

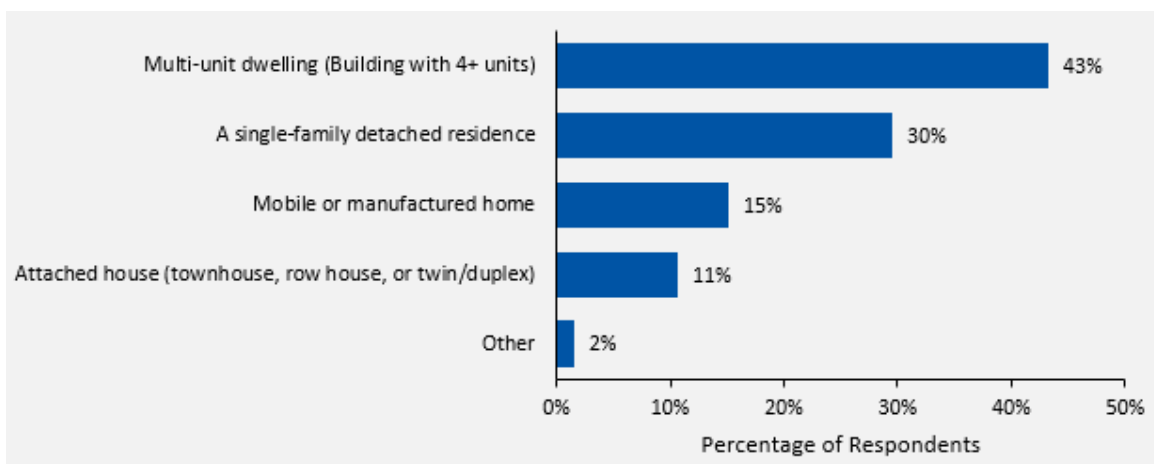
Figure 25. Homeownership versus Renting



Source: Survey Question B1. "Do you currently rent or own your home?" (n=732)

Of 715 respondents, 43% live in a multi-unit such as an apartment or condo, 30% live in a single-family detached residence, and 15% live in a mobile or manufactured home (Figure 26).

Figure 26. Housing Type

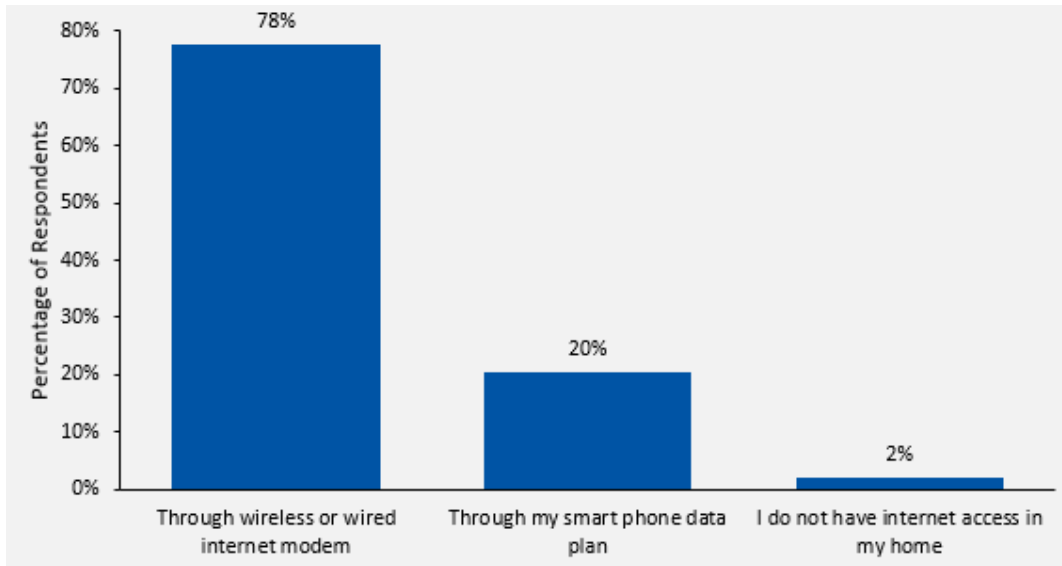


Source: Survey Question B2. "What type of residence do you live in?" (n=715)

As shown in Figure 27, of 603 respondents, 78% primarily access the internet through a wireless or wired internet modem, 20% access internet through a smart phone plan, and 2% do not have internet access in their homes.

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Figure 27. Internet Accessibility

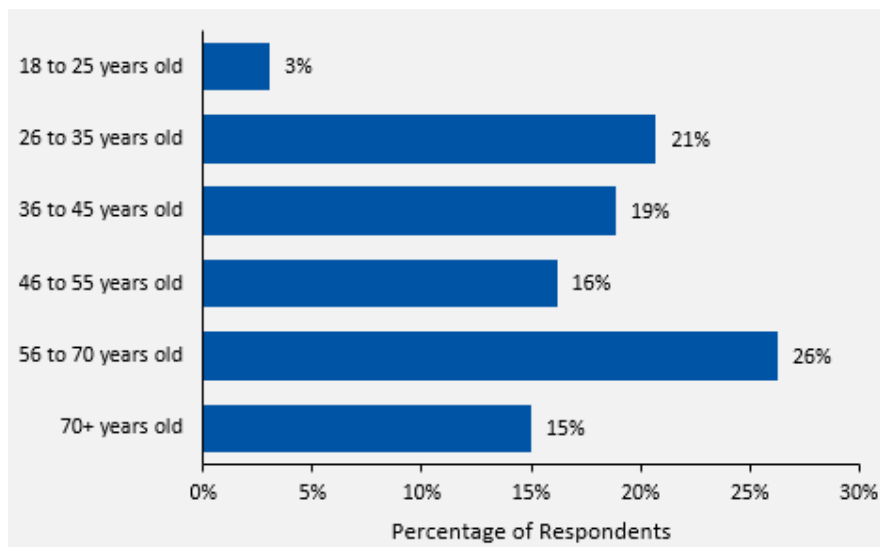


Source: Survey Question F5. "How do you primarily access internet in your home?" (n=603)

Customer Characteristics

Figure 28 shows that the most of respondents (26%; n= 594) are between the ages of 56 and 70 years old, 21% are between 26 and 35 years old, and 19% are between 36 and 45 years old.

Figure 28. Age Distribution of Respondents

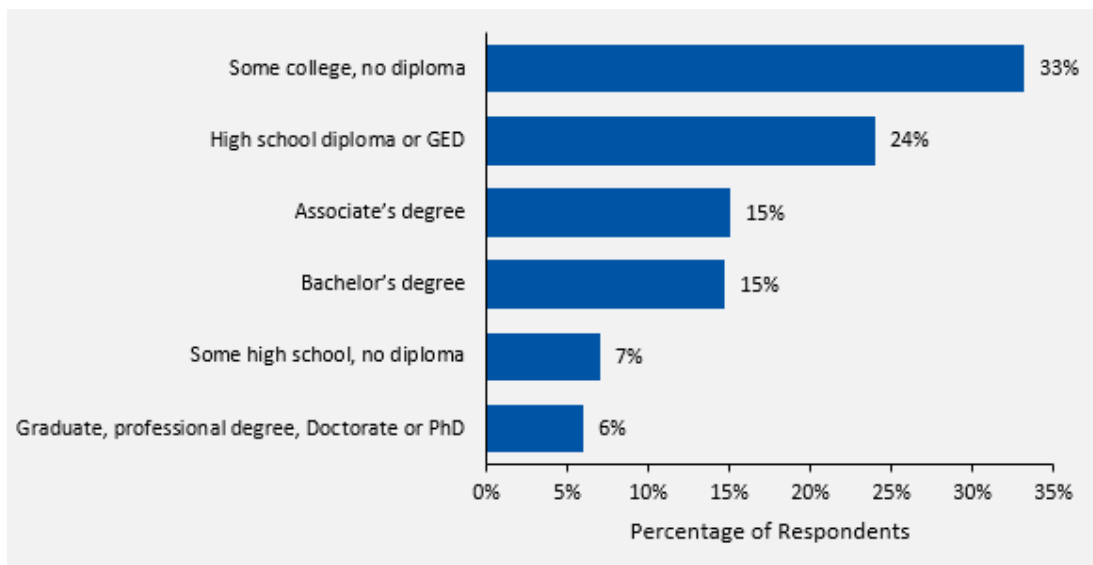


Source: Survey Question F2. "Which age range do you fall into?" (n=594)

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Level of education varied. Figure 29 shows that, of 584 respondents, 33% had completed some college but did not receive a diploma, followed by 24% who had completed high school, 15% who had an associate's degree, and 15% who had a bachelor's degree.

Figure 29. Education Levels of Respondents

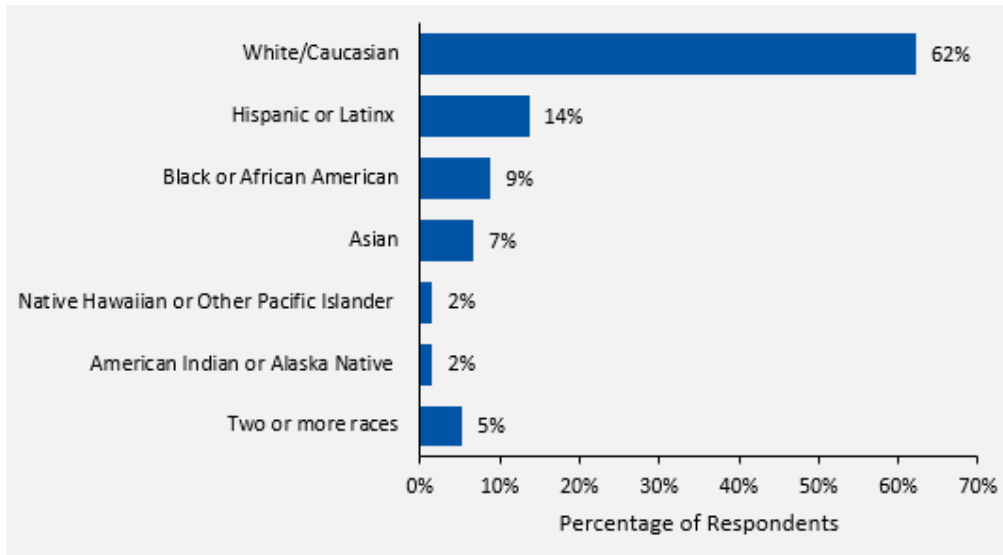


Source: Survey Question F3. "What is the highest level of education you've completed so far?" (n=584)

Figure 30 shows the racial makeup. Of 564 survey respondents, 64% identified as white or Caucasian, 14% identified as Hispanic or Latinx, and 9% identified as black or African American. Additionally, of 610 respondents, 94% reported English as their preferred language, 3% said Spanish, followed by Russian and Vietnamese with 1% each.

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Figure 30. Race Distribution of Respondents



Source: Survey Question F4. "What race or ethnicity would you consider yourself?" (n=564)

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Appendix A. Interview Instrument

Research Objectives	Research Questions	Corresponding Guide Questions
Assess barriers to program participation	<ul style="list-style-type: none"> Why aren't customers being served? What are customers' barriers to participation? What are implementation agencies' barriers to service? 	C1 - Error! Reference source not found.
Understand drivers for customer enrollment in PSE low-income programs	<ul style="list-style-type: none"> What are customers' motivations to participate? How can messaging more effectively encourage enrollment? 	B1 - B4
Identify opportunities to close gaps in service	<ul style="list-style-type: none"> How can PSE prioritize solutions to fill gaps in service identified in Phase I? What are the partnership opportunities to expand program reach? How can the programs help streamline customer intake and income eligibility screening process? 	C8 - D1

Note for reviewers: Cadmus intends to conduct up to 18 interviews for this study with many different stakeholder organizations. Cadmus will start by interviewing PSE's bill and weatherization assistance implementation agencies and The Energy Project. Based on the type of organizations interviewed, Cadmus may need to revise or skip some of the questions in this interview guide for relevancy. Any major changes to the interview guide will be discussed with PSE prior to engaging in an interview.

Introduction Email Language

Introduction Email Language

[SHEDULING EMAIL TEXT FOR CADMUS]

SUBJECT: PSE is looking for information to better serve low-income customers

Hello,

I am reaching out on behalf of Puget Sound Energy (PSE). PSE is looking to understand how it can better serve low-income individuals within its area. My firm, Cadmus, is a national research firm conducting this research on behalf of PSE. As part of this research, we are reaching out to organizations that often work with PSE's low-income populations. We will be asking about your organization's experiences working with low-income clients to understand barriers to participating in programs like PSE's bill and weatherization assistance programs. Are you available for a 45-minute interview between [DATE] and [DATE]? We can schedule for a time that works best for you. Any feedback you provide will only be reported in aggregate to PSE, meaning your individual responses will not be tied back to your organization.

If you have any questions about the validity of this research, please contact Sandy Sieg (Sandra.Sieg@pse.com) or Suzanne Sasville (suzanne.sasville@pse.com) at PSE.

Thank you in advance for participating in this research,

[Email Signature]

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A. Interviewee & Company Information

- A1. [For Wx and Bill Assistance agencies, acknowledge role with PSE programs] What service(s) does your organization provide to low-income members of the community you serve?
1. What services are low-income individuals typically looking for when they engage with your organization?
 2. [SKIP for Wx and Bill Assistance agencies and The Energy Project] How often do you refer customers to PSE bill and weatherization assistance programs? Why is that?
 3. [ONLY for Wx and Bill Assistance agencies] How does the process work when referring customers to the PSE bill and weatherization assistance programs? [Probe about effectiveness of internal coordination]
 4. [ONLY for Wx and Bill Assistance agencies and The Energy Project] How could the process of getting customers enrolled in the PSE bill and weatherization assistance programs be improved?
- A2. What is your role at [ORGANIZATION]? [PROBE to see if interviewee works directly with clients.]
- A3. What areas of your service territory have the highest need for low-income programs and services? [Probe on specific neighborhoods where needs are high]
1. Why are these particular areas in greatest need of support?
 2. Are there any particular groups of clients you think could use more targeted access to low-income programs and services? Why is that? [Probe on demographics]
- A4. How, if at all, does your company interact with PSE about low-income programs and services?
1. What does your organization expect from PSE when it comes to serving low-income clients? [Probe on needs/wants]

B. Enrollment Drivers

- B1. How do eligible clients typically hear about low-income programs and services available to them? [Probe about all low-income program and services, but also specifically about PSE's programs]
- B2. In your opinion what is the greatest value PSE's bill and weatherization assistance programs offer low-income members of the community you serve?
1. Why should eligible clients enroll in PSE low-income programs?
 2. Why do eligible clients enroll in PSE low-income programs? [Probe on primary driver for enrollment]
- B3. What messages can PSE use to better attract eligible customers' attention when trying to increase awareness of its assistance programs? [Probe on specific messages or value statements]
1. Are there any messages for PSE to avoid when reaching out to customers with information about available programs and services?

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- B4. In your opinion, what is the most effective way to reach low-income members of the community you serve with information about assistance programs? [PROBE FOR: bill inserts, email, social media, TV, etc.]

C. Barriers to Program Participation

- C1. PSE understands there are many low-income customers in [RELEVANT COUNTY or WASHINGTON for statewide organizations] who are eligible for bill and/or weatherization assistance but have not enrolled in the programs. In your opinion, what could be the reasons low-income customers do not participate in these programs?
1. How could PSE support efforts to overcome these barriers to participate? [Probe on greatest priorities for PSE focus]
- C2. PSE recently conducted a study to identify where eligible low-income and vulnerable populations live who have not yet enrolled in their assistance programs. Some of the highest need areas were [RELEVANT NEIGHBORHOOD(S) IN ORGANIZATION'S AREA]. Based on your knowledge of the area, why would these specific neighborhoods have a higher concentration of eligible customers who have not participated in assistance programs? [IF NEEDED: Vulnerable populations include seniors, children, individuals with disabilities, and those with a high energy burden.]
1. Are you aware of any specific barriers to participation for the customers who live in these neighborhoods?
 2. What kind of support efforts are needed to overcome barriers in these specific neighborhoods? [Probe on greatest priorities for PSE focus and what other organizations could provide support]
- C3. What barriers does your organization face in trying to serve a larger number of low-income clients each year? [Probe on staffing constraints, internal/organizational barriers, availability of contractors/partners to help with service.]
1. How could PSE support efforts to overcome these barriers? [Probe on greatest priorities for PSE focus]
 2. Are there any regulatory or other systemic barriers impeding your ability to serve a larger number of low-income clients each year? [Probe specifically about funding or program requirements from Department of Commerce or federal government]
- C4. Are there any requirements of PSE's bill and weatherization assistance programs that create barriers to enrolling customers? If so, what? [Probe about eligibility requirements, enrollment processes, waitlist, landlord approval, access to internet for online application submissions, etc.]
1. How could processes be changed to remove these barriers?

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- C5. **[IF LANGUAGE BARRIER NOT ALREADY MENTIONED]** Besides English, what languages do the clients you serve primarily speak?
1. How often is language a barrier to providing services to low-income clients? Do language barriers vary by neighborhood in **[RELEVANT COUNTY]**? What languages are primarily associated with different neighborhoods? **[Note to interviewer: no need for an exhaustive list, just top of mind reference if some neighborhoods have a heavy concentration of specific languages]**
 2. Does your organization employ staff who speak multiple languages? If so, how many? What languages do these staff speak?
 3. What further resources does your organization need to better serve low-income customers whose first language is not English?
- C6. Are there any low-income members of the community you serve who are particularly hard to reach with support services? If so, who? **[Probe about undocumented immigrants, single guardians who work outside the home, residents of particular neighborhoods, elderly, etc.]** Why is that?
- C7. Other than what we've already talked about, can you think of any reason why an eligible PSE customer may not want to participate in PSE's bill and/or weatherization assistance programs?
- C8. How can PSE encourage more low-income customers to enroll in its assistance programs?
1. Are there organizations that you think PSE could partner or coordinate with to help better serve the low-income populations in its service territory? **[Probe: food banks, unemployment offices, housing organizations, health providers]**

D. Closing

- D1. Thank you for participating in this interview. As part of this research effort, Cadmus will be talking to many organizations about these same topics. Are there other organizations you think we should reach out to, so we get a better understanding of barriers facing low-income members of your community? **[Probe: food banks, unemployment offices, housing organizations]**
1. Is there someone specific we should reach out to at that organization? **[Probe for potential direct contact]**
 2. Would you be willing to do a 'soft introduction' for us? We can send you language that you would be able to forward in an email, if that's helpful.
- D2. **[IF TECHNOLOGY BARRIER IS NOT ALREADY MENTIONED]** Do the low-income members of the community you serve typically have readily available access to internet? **[IF YES, probe if this could be a barrier to program participation as well]**

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1. Cadmus is planning to reach out to talk directly to low-income members of the community you serve through an online survey accessible from a mobile phone or computer. We plan to offer the survey in multiple languages to allow as many people as possible to participate. Are there any other considerations we should take when planning to reach out directly to customers?
- D3. Those are all of my questions for today! Is there anything else you'd like to mention?
1. If I have any follow up questions, can I reach back out to you?

Again, thank you so much for your time. We really appreciate it! Have a nice day!

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Appendix B. PSE LINA Phase 2: Customer Survey

Cadmus will program the survey into an online format using the Qualtrics platform. Table 1 presents the research objectives and the corresponding survey sections.

Table 1. Survey Objectives and Sections

Research Objectives	Research Questions	Corresponding Questions in Guide
Assess barriers to program participation	<ul style="list-style-type: none"> Why aren't customers being served? What are customers' barriers to participation? 	B3-B10, B13, C1-C9
Understand drivers for customer enrollment in PSE low-income programs	<ul style="list-style-type: none"> What are customers' motivations to participate? How can messaging more effectively encourage enrollment? 	B11-B12, D1-D8
Identify opportunities to close gaps in service	<ul style="list-style-type: none"> How does PSE prioritize filling gaps in service? What are the partnership opportunities to expand program reach? How can the programs help streamline customer intake and income eligibility screening process? 	B14, E1-E5

Survey and Sampling Design

- NOTE: Respondents will not answer all questions in this survey
- Survey recruitment will be through email and postcard distributions. Postcards will be sent out to customers who meet the criteria in Table 2 and have a Digital Engagement Score of 0 or 1. Email invitations will be sent to customers who meet the criteria in Table 2 and have a Digital Engagement Score of 2-10.

Table 2. Customer Survey Sampling Strategy

Geographic Strata (Underserved Census Block Groups)	Total Sample Population	Targeted Completes (Nonparticipants) ¹	Required Response Rate
Scenario 1 – Top Census Block Groups within Skagit County	3,219	200	6%
Scenario 1 – Top Census Block Groups within Thurston County	2,064	200	10%
Scenario 2 – Top Census Block Groups within King County	18,229	200	1%

¹ Cadmus will define nonparticipants as eligible customers who have not received weatherization services (some nonparticipants may have received bill assistance in the past).

Variables to be pulled into Survey

- FIRSTNAME
- LASTNAME
- EMAIL
- COUNTY
- PARTICIPATION [BILL ASSISTANCE OR NONE]
- DIGITAL ENGAGEMENT SCORE

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Agency Mapping to County

- If Skagit County, program [Community Action of Skagit County or Housing Authority of Skagit County]
- If Thurston County, program [Community Action Council of Lewis, Mason, and Thurston Counties]
- If King County, program [Multi-Service Center, Hopelink, The Byrd Barr Place, Seattle Office of Housing, or King County Housing Authority]

Email Invitation

To: [EMAIL]

Sender: PSE, PSEAsks@qemailserver.com

Subject: Tell us your thoughts on PSE programs and receive a \$10 gift card!

Dear [FIRSTNAME AND LASTNAME],

PSE values the opinions of its customers. We would like your input as we plan the future of our energy assistance programs. Because we value your time, when you complete the survey, **we will send you a \$10 Amazon.com gift card**. The survey will take only 10-15 minutes to complete. Your responses **will be kept private** and used for research purposes only. Also, space in this study is limited, so if you'd like to participate, be sure to take the survey soon.

Click HERE To take the survey

Or copy and paste the URL below into your internet browser: [SURVEY LINK]

Si prefieres hacer la encuesta en español, use el menú desplegable de la parte superior de esta pantalla para elegir el idioma deseado.

Если Вы хотите пройти этот опрос на русском языке, откройте раскрывающееся меню наверху этой страницы и выберите требуемый Вам язык.

如果您想用简体中文来完成调查，请使用此屏幕顶部的下拉菜单选择您的首选语言。

Nếu bạn muốn thực hiện khảo sát bằng tiếng Việt, vui lòng sử dụng menu thả xuống ở đầu màn hình này để chọn ngôn ngữ ưu tiên của bạn.

- Only one \$10 gift card allowed per participating household.
- If you have any difficulties taking this survey, please contact Kaitlyn Teppert at Cadmus, the national research firm conducting this survey on behalf of PSE. You can reach Kaitlyn Teppert at (303) 389-2530 or Kaitlyn.Teppert@cadmusgroup.com.
- If you would like to contact PSE directly to verify the legitimacy of this study, please contact the Energy Efficiency Services department at EESEvaluations@pse.com.

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Thank you in advance for sharing your opinions and your time.

Regards,
Puget Sound Energy



Email Reminder Language

To: [EMAIL]

Sender: PSE, PSEAsks@qemailserver.com

Subject: Don't forget to tell us your thoughts on PSE programs and receive a \$10 gift card!

Dear [FIRSTNAME AND LASTNAME],

PSE recently invited you to participate in a survey about the future of our energy assistance programs. We would still like to hear from you! Because we value your time, when you complete the survey, **we will send you a \$10 Amazon.com gift card**. Your input is very important to us and **will be kept private** and used for research purposes only. **Please take 10-15 minutes today to complete the survey**. Also, space in this study is limited, so if you'd like to participate, be sure to take the survey soon.

[Click HERE To take the survey](#)

Or copy and paste the URL below into your internet browser: **[SURVEY LINK]**

Si prefieres hacer la encuesta en español, use el menú desplegable de la parte superior de esta pantalla para elegir el idioma deseado.

Если Вы хотите пройти этот опрос на русском языке, откройте раскрывающееся меню наверху этой страницы и выберите требуемый Вам язык.

如果您想用简体中文来完成调查，请使用此屏幕顶部的下拉菜单选择您的首选语言。

Nếu bạn muốn thực hiện khảo sát bằng tiếng Việt, vui lòng sử dụng menu thả xuống ở đầu màn hình này để chọn ngôn ngữ ưu tiên của bạn.

- Only one \$10 gift card allowed per participating household.
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- If you would like to contact PSE directly to verify the legitimacy of this study, please contact the

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Energy Efficiency Services department at EESEvaluations@pse.com.

Thank you in advance for sharing your opinions and your time.

Regards,
Puget Sound Energy



Postcard Invitation Language

Side One:

<p>PSE LOGO CADMUS LOGO</p> <p>Puget Sound Energy has partnered with The Cadmus Group on this survey research. For any questions about this research or any difficulties taking the survey, please contact Kaitlyn Teppert at (303)-389-2530 or kaitlyn.teppert@cadmusgroup.com</p>	<p>MAILING ADDRESS</p>
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Side Two:

<p>Take this PSE survey and receive a \$10 Amazon.com gift card!</p>	<p>PSE wants your input as we plan for future energy assistance programs. When you complete the survey, we will send you a \$10 Amazon.com gift card. The survey will take only 10-15 minutes to complete. Space in this study is limited, so if you'd like to receive a gift card, be sure to take the survey soon.</p> <p>Take the survey at: [SHORT CUSTOM URL]</p> <p>Survey expires at the end of the day, [XXXX]. Only one gift card per household.</p> <p>If you prefer to take the survey in Spanish, Russian, Chinese, or Vietnamese, that option will be available at the survey link above.</p>
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A. Screener

Welcome! We'd like to ask you about the programs PSE offers its customers. This survey should take approximately 10 to 15 minutes to complete. We are looking for responses from individuals who are responsible for making decisions about energy use whose income falls within a specific range. Your input is very important to us and **will be kept private** and used for research purposes only. If you qualify and finish the survey, you will be eligible to receive a \$10 Amazon.com gift card. Please note that not all respondents will be eligible to complete the study.

Open drop-down menus by clicking on this icon  within the survey.

Click on the "Next" and "Back" buttons at the bottom of each page to navigate through the survey.

Si prefieres hacer la encuesta en español, use el menú desplegable de la parte superior de esta pantalla para elegir el idioma deseado.

Если Вы хотите пройти этот опрос на русском языке, откройте раскрывающееся меню наверху этой страницы и выберите требуемый Вам язык.

如果您想用简体中文来完成调查，请使用此屏幕顶部的下拉菜单选择您的首选语言。

Nếu bạn muốn thực hiện khảo sát bằng tiếng Việt, vui lòng sử dụng menu thả xuống ở đầu màn hình này để chọn ngôn ngữ ưu tiên của bạn.

A1. Are you responsible for decisions related to energy use for your home?

1. Yes

2. No **[THANK AND TERMINATE]**

A2. Are you responsible for paying your home's utility bill?

1. Yes

2. No **[THANK AND TERMINATE]**

A3. What county do you live in? **[SCREEN OUT ANY COUNTIES OTHER THAN THURSTON, SKAGIT, AND KING]**

1. **[DROPDOWN LIST OF WASHINGTON COUNTIES]**

2. Don't know

A4. In 2020, how many people lived in your household full-time?

[Dropdown list, 1 through 10, ending with "More than 10"] [TERMINATE IF A4 > 10]

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A5. In 2020, what was your monthly **net** income (after taxes and other authorized deductions)? This information may determine which questions you receive next. Please enter numbers only, **without** commas, decimals, or a dollar sign.

[USE TABLE BELOW TO DETERMINE INCOME ELIGIBILITY; THANK AND TERMINATE IF INCOME IS OVER THRESHOLD FOR NUMBER OF PERSONS IN HOUSEHOLD.]

[Open end numeric response]

Persons in Household	Maximum Monthly Net Income Limit
1	\$2,646
2	\$3,460
3	\$4,274
4	\$5,088
5	\$5,903
6	\$6,717
7	\$6,869
8	\$7,443
9	\$8,200
10	\$8,957

Termination Message: At this time, we are requesting responses to this survey from individuals who are responsible for making decisions about energy use whose income falls within a specific range. Thank you for your time. **[TERMINATE SURVEY]**

B. Program Awareness and Participation

- B1. Do you currently rent or own your home?
1. Own
 2. Rent
- B2. What type of residence do you live in?
1. A single-family detached residence
 2. Multi-unit dwelling, such as an apartment or condo building with 4 or more units
 3. Attached house (townhouse, row house, or twin/duplex)
 4. Mobile or manufactured home
 5. Other (please specify): **[SPECIFY]**
 6. Prefer not to say
- B3. PSE customers may be eligible for energy assistance programs. Before today, which of the following programs were you aware of? **[ALLOW MULTIPLE RESPONSE] [RANDOMIZE OPTIONS 1-4]**

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1. **Low-Income Home Energy Assistance Program (LIHEAP)** offered by the Federal Government and Washington State to provide financial assistance to eligible households to help pay their energy bills.
2. **Home Energy Lifeline Program (HELP)** offered by PSE to provide qualified households with up to \$1,000 per year in bill-payment assistance.
3. **COVID Bill Assistance Program (CACAP)** offered by PSE to support households impacted by the COVID-19 pandemic. The program provides qualified customers with up to \$2,500 in energy assistance support.
4. **Weatherization Assistance Program** offered by PSE to provide free energy-efficient upgrades to eligible homes, including insulation, roof repairs, duct sealing, and more.
5. I am not aware of these programs. **[EXCLUSIVE RESPONSE] [SKIP TO B11]**

B4. **[PULL IN RESPONSES IF B3=1-4]** How did you hear about these programs? **[ALLOW MULTIPLE RESPONSES] [RANDOMIZE 1-8]**

	LIHEAP	HELP	COVID Bill Assistance	Weatherization
PSE website				
A local social service agency (such as [POPULATE NAME OF AGENCY BASED ON COUNTY])				
Community group such as church or community center				
Local government office				
Other organization [SPECIFY]				
Friend, family member, or neighbor				
Mailing				
Online search				
Other [SPECIFY]				
Don't know				

B5. **[IF PARTICIPATION = ASSISTANCE]** According to our records, you are currently receiving bill assistance through the Home Energy Lifeline Program (HELP) offered by PSE. Have you enrolled in any other energy assistance programs in the past?

1. Yes
2. No
3. Don't know

B6. **[IF PARTICIPATION ≠ ASSISTANCE]** Have you enrolled in any of these energy assistance programs in the past?

1. Yes
2. No

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3. Don't know

- B7. **[IF B5 OR B6 = 1]** Which programs did you enroll in? **[ALLOW MULTIPLE RESPONSE]**
1. Low-Income Home Energy Assistance Program (LIHEAP)
 2. Home Energy Lifeline Program (HELP) **[DO NOT SHOW IF PARTICIPATION=ASSISTANCE]**
[IF SELECTED, SET PARTICIPATION = ASSISTANCE]
 3. COVID Bill Assistance Program (CACAP)
 4. Weatherization Assistance Program
 5. Don't know **[EXCLUSIVE RESPONSE]**

B8. **[IF PARTICIPATION=ASSISTANCE OR B7#5]** How easy or difficult was it for you to enroll in these programs?

	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult
[IF B7.1 IS SELECTED] Low-Income Home Energy Assistance Program (LIHEAP)				
[IF PARTICIPATION = ASSISTANCE] Home Energy Lifeline Program (HELP)				
[IF B7.3 IS SELECTED] COVID Bill Assistance Program (CACAP)				
[IF B7.4 IS SELECTED] Weatherization Assistance Program				

B9. **[REPEAT FOR EACH PROGRAM WHERE B8=SOMEWHAT OR VERY DIFFICULT]** What made it difficult to enroll in the **[PROGRAM]**? **[OPEN-END]**

B10. **[REPEAT FOR EACH PROGRAM INDICATED IN B3, IF B5 OR B6=2-3]** Why haven't you enrolled in the **[PROGRAM]**? **[OPEN-END]**

B11. Which energy assistance services may you be interested in receiving in the future? **[ALLOW MULTIPLE RESPONSES]**

1. **Low-Income Home Energy Assistance Program (LIHEAP)** offered by the Federal Government and Washington State to provide financial assistance to eligible households to help pay their energy bills.
2. **Home Energy Lifeline Program (HELP)** offered by PSE to provide qualified households with up to \$1,000 per year in bill-payment assistance.
3. **COVID Bill Assistance Program (CACAP)** offered by PSE to support households impacted by the COVID-19 pandemic. The program provides qualified customers with up to \$2,500 in energy assistance support.
4. **Weatherization Assistance Program** offered by PSE to provide free energy-efficient upgrades to eligible homes, including insulation, roof repairs, duct sealing, and more.
5. I am not interested in any of these programs. **[EXCLUSIVE RESPONSE]**

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B12. **[IF B11=4]** What are the top reasons you would want to enroll in PSE's Weatherization Assistance Program? **[RANDOMIZE 1-8; ALLOW UP TO TWO RESPONSES]**

1. I want to save money on my PSE bills
2. I want to save energy
3. I want to get more energy-efficient equipment for my home
4. I want to help protect the environment
5. I need old equipment replaced
6. I needed broken equipment replaced
7. My home needs repairs
8. My home is not comfortable e.g., too hot or too cold)
9. Other **[SPECIFY]**

B13. **[IF B11=5]** Why are you not interested in enrolling in any energy assistance programs? **[OPEN-END]**

B14. In the future, how would you like to find out about energy assistance programs your household may be eligible for? **[RANDOMIZE ORDER OF RESPONSES 1-7] [ALLOW MULTIPLE RESPONSES]**

1. PSE website
2. A local social service agency (such as **[POPULATE NAME OF AGENCY BASED ON COUNTY]**)
3. A non-profit assistance organization **[SPECIFY]**
4. A local community group, such as a community center, church, or other group
5. Information with my PSE bill
6. From a friend of family member
7. Someone came to my door to tell me about a program in-person
8. Other **[SPECIFY]**

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C. Barriers

C1. What, if anything, would make it difficult for your household to enroll in an energy assistance program? **[OPEN-END]**

C2. For each of the next statements, please mark your level of agreement. **[RANDOMIZE LIST]**

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
I struggle to pay my energy bills each month.				
I am comfortable having a professional contractor in my home to make energy upgrades.				
I or someone I know has enrolled in an energy assistance program.				

C3. For each of the next statements, please mark your level of agreement. **[RANDOMIZE LIST]**

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
I do not know how to start the process of enrolling in an energy assistance program.				
I do not have time to enroll in an energy assistance program.				
I am not comfortable accepting help to reduce my energy bills.				

C4. Here are some challenges that customers may face when deciding whether to enroll in an energy assistance program. Please mark how significant each of these challenges would be in your decision to enroll in an energy assistance program. **[RANDOMIZE LIST ORDER]**

	Very significant	Somewhat significant	Not really significant	Not at all significant	Does not apply to me
The application process takes too much time					
The application process requires too much documentation					
The application is difficult to understand					
The application is not offered in my preferred language (besides English)					
The application process is required every year					

C5. To enroll in an energy assistance program, you may be asked to fill out an application and provide documentation to verify your household is eligible. How would you prefer to fill out your application to enroll in a program?

1. Online through PSE website
2. On paper at my home and mail the application to PSE
3. Over the phone with a PSE representative

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4. Over the phone with a representative from my local social service agency (such as **[POPULATE NAME OF AGENCY BASED ON COUNTY]**)
5. In-person at my local social service agency
6. Other **[SPECIFY]**

C6. To enroll in an energy assistance program, you may need to provide documentation to verify your household is eligible. Below is a list of documents that could potentially be a part of an application process. Please indicate how easy or difficult it would be for you to provide the following documentation to qualify for program benefits. **[RANDOMIZE ORDER WITHIN PURPOSE CATEGORIES: PROOF OF IDENTITY, THEN PROOF OF RESIDENCE] [PAGE BREAK AFTER QUESTION]**

Purpose	Form of Documentation	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	Does Not Apply to Me
Proof of identity	Copy of your photo identification with birthdate					
Proof of identity	Verification of Social Security Number (SS Card, W-2 form, tax statement, etc.)					
Proof of Utility Account	Most recent utility bill					
Proof of residence	[IF B1=1] Deed/title of current residence (if owner)					
Proof of residence	[IF B1=2] Lease/rental agreement of current residence (if renter)					
Proof of residence	Previous year's tax statement					

C7. Below is another list of documents that could potentially be a part of an application process to verify proof of income. These documents would be required for **anyone over the age of 18** living in the household, if applicable. Please indicate how easy or difficult it would be for you to provide the following documentation to qualify for program benefits. **[RANDOMIZE ORDER]**

Purpose	Form of Documentation	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	Does Not Apply to Me or My Household
Proof of income	1-3 months of paystubs from current employer (if employed)					
Proof of income	Current year award letter for Social Security/SSI/SSD income					
Proof of income	Current year award letter or 1-3 months of bank statements for pension/retirement income					
Proof of	Current year award letter for					

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Purpose	Form of Documentation	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	Does Not Apply to Me or My Household
income	DSHS cash benefit (TANF/GAU)					
Proof of income	1-3 months of bank statements or checks for stock dividends/interest payments					
Proof of income	Award letter or 1-3 months of bank statements or checks for receiving worker's compensation					
Proof of income	1-3 months of bank statements or checks if receiving disability payments					
Proof of income	1-3 months of bank statements or checks if receiving unemployment benefits					
Proof of income	1-3 months of bank statements or checks if receiving spousal support					
Proof of income	1-3 months of bank statements or checks if receiving child support					
Proof of income	Educational grant award letter(s)					
Proof of income	1-3 months of bank statements, checks, or an award letter if receiving Veteran's or other military benefits					
Proof of income	Proof of expenses (such as receipts or invoices) if self-employed					

[PAGE BREAK] Thank you for completing those tables. Before we get to the next set of questions, please note that for PSE programs, only *some* of these documents may be required. Please continue to the next screen for the rest of the survey. **[PAGE BREAK]**

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C8. **[IF B1=2 AND B2≠2]** To enroll in PSE’s Weatherization Assistance Program, renters may need to provide a form that indicates their landlord approves of PSE making upgrades to their home. How easy or difficult would it be for you to ask for landlord approval for your home?

1. Very easy
2. Somewhat easy
3. Somewhat difficult
4. Very difficult

C9. **[IF C7=3 OR 4]** Why is that? **[OPEN-END]**

D. Motivations

Note: D1 will be programmed in Qualtrics to allow for a randomized presentation of 6 Best/Worst questions that display a combination of the following statements:

1. The program does not cost me any money
2. The program has an easy application process
3. The program has a quick approval process
4. The program offers flexible appointment scheduling for any in-person interaction
5. I can interact with program staff in my preferred non-English language (in addition to English)
6. The program is offered by an organization I trust
7. I can go to a local organization to get help enrolling in the program
8. I know someone else who had a positive experience with the program previously

D1. **[MAX DIFF]** Pretend you are considering enrolling in an energy assistance program. For the next 6 questions, you will be asked to evaluate the importance of different aspects of the program. Each of the 6 will include a slightly different group of four statements. Thinking of only the four statements listed below, which ONE is most important and which ONE is least important to you?

Most	Feature [RANDOMIZED LIST OF 4]	Least
<input type="checkbox"/>	The program does not cost me any money	<input type="checkbox"/>
<input type="checkbox"/>	The program has an easy application process	<input type="checkbox"/>
<input type="checkbox"/>	The program has a quick approval process	<input type="checkbox"/>
<input type="checkbox"/>	The program offers flexible appointment scheduling for any in-person interaction	<input type="checkbox"/>

D2. What is your greatest concern when it comes to using energy in your household? Choose only one. **[RANDOMIZE 1-7; SINGLE RESPONSE ONLY]**

1. Energy costs
2. Losing power/reliability

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3. Keeping warm/cool enough
 4. Carbon monoxide or other safety
 5. Indoor air quality – health risks
 6. Outdoor air quality – health risks
 7. Environmental impact/climate change
 8. Other **[SPECIFY]**
- D3. **[IF PARTICIPATION ≠ ASSISTANCE]** PSE’s Home Energy Lifeline Program (HELP) provides up to \$1,000 per year in bill-payment assistance. If your energy bills were discounted throughout the year, what other life costs would you have more flexibility in paying for? Please choose the top 2. **[RANDOMIZE; ALLOW ONLY TWO RESPONSES]**
1. Other household bills (rent/mortgage, water, car insurance, or debt)
 2. Food/groceries
 3. Clothing
 4. Home repairs
 5. Car repairs
 6. Childcare
 7. Vacation/hobby
 8. Medical or dental expenses
 9. Something else **[SPECIFY]**
- D4. **[IF PARTICIPATION = ASSISTANCE]** In your experience, was taking the time to enroll in PSE’s Home Energy Lifeline Program (HELP) worth the benefits you received by enrolling?
1. Yes
 2. No
 3. Don’t know
- D5. **[IF D4≠1]** Why was enrolling in HELP not worth the benefits you received? **[OPEN-END]**
- D6. **[IF PARTICIPATION = ASSISTANCE]** Assuming you are eligible again, how likely are you to re-enroll in HELP next year?
1. Very likely
 2. Somewhat likely
 3. Not too likely
 4. Not at all likely
- D7. **[IF D6=3 OR 4]** Why are you less likely to re-enroll in HELP? **[OPEN-END]**

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D8. PSE's Weatherization Assistance Program offers free home upgrades to help lower your energy bills. Which of the following home upgrades would make you most likely to enroll in the program?

[RANDOMIZE 1-6; ALLOW UP TO TWO RESPONSES]

1. Lighting replacements
2. Heating equipment upgrades
3. Cooling equipment upgrades
4. Insulation
5. Appliance upgrades
6. Roof repairs
7. Window replacements
8. Other **[SPECIFY]**
9. None of the above

E. Trusted Organizations

The next few questions are to help us understand our customers better. The answers will be used for research purposes only.

E1. **[IF PARTICIPATION ≠ ASSISTANCE]** If you ever have trouble paying your energy bill in the future, do you already know a trusted organization that you might turn to for assistance?

1. Yes **[SPECIFY NAME OF ORGANIZATION]**
2. No

E2. Have you ever interacted with a local social service agency or other non-profit assistance organization in your county?

1. Yes **[SPECIFY NAME OF ORGANIZATION]**
2. No
3. Don't know

E3. **[IF E2=1]** What services did the social service agency assist you with? **[RANDOMIZE 1-8; ALLOW MULTIPLE RESPONSES]**

1. Help with housing
2. Help with food
3. Help with clothing
4. Help with my energy bill
5. Help with education
6. Help finding employment
7. Help finding childcare
8. Help finding long-term care for myself or family member
9. Other **[SPECIFY]**

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E4. Where do you typically hear about information related to assistance programs you may qualify for? Please select the top two ways you have learned about assistance programs in the past.

[ALLOW ONLY TWO RESPONSES; RANDOMIZE LIST 1-9]

1. Word-of-mouth (friends, family)
2. Newspapers or magazines
3. TV news programs
4. Social media channels like Facebook or Instagram
5. Communication from PSE, such as bill inserts or e-mails
6. Church or other house of worship
7. A local social service agency (such as **[POPULATE NAME OF AGENCY BASED ON COUNTY]**)
8. Fliers or postings in my community
9. Community organization **[SPECIFY]**
10. Somewhere else **[SPECIFY]**
11. Don't know

E5. If there is something specific you are looking for about assistance programs you may qualify for, where are you most likely to seek out more information? Select the top two ways you are likely to search for information. **[ALLOW ONLY TWO RESPONSES; RANDOMIZE LIST 1-6]**

1. General internet search on your topic
2. Visit a specific website **[SPECIFY]**
3. Reach out to a friend or family member
4. Contact PSE (call, e-mail, or visit website)
5. Contact my local social service agency (call, e-mail, or visit website)
6. Search, read posts, or interact with others on social media
7. Some other way **[SPECIFY]**
8. I would not seek out information about assistance programs
9. Don't know

F. Demographics

Just a few more questions.

F1. What is your preferred language? **[RANDOMIZE ORDER OF RESPONSES 2-8]**

1. English
2. Spanish
3. Russian
4. Chinese
5. Somalian
6. Korean
7. Vietnamese
8. Ukrainian
9. Other **[SPECIFY]**

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F2. Which age range do you fall into?

1. 18 to 25 years old
2. 26 to 35 years old
3. 36 to 45 years old
4. 46 to 55 years old
5. 56 to 70 years old
6. 70+ years old
7. Prefer not to say

F3. What is the highest level of education you've completed so far?

1. Some high school, no diploma
2. High school diploma or GED
3. Some college, no diploma
4. Associate's degree
5. Bachelor's degree
6. Graduate, professional degree, Doctorate or PhD
7. Prefer not to say

F4. What race or ethnicity would you consider yourself?

1. White/Caucasian
2. Black or African American
3. American Indian or Alaska Native
4. Asian
5. Native Hawaiian or Other Pacific Islander
6. Hispanic or Latinx
7. Two or more races
8. Prefer not to say

F5. How do you primarily access internet in your home?

1. Through wireless or wired internet modem
2. Through my smart phone data plan (iPhone, Samsung Galaxy, or others)
3. I do not have internet access in my home

G. Closing

G1. Those are all the questions we have. Thank you for your time! To receive your \$10 Amazon gift card, please verify your name and e-mail address. Your information will only be used to e-mail you a gift card; PSE will not use it for marketing purposes, and they will not update any of your billing or e-mailing preferences with this information. Please note that if you do not complete your e-mail address, or only fill in some of the fields below, you will not receive your gift card.

1. First Name:
2. Last Name:
3. Email:

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End of Survey Message: This survey is now complete. You should receive your gift card within six-seven weeks. If you have not received it by then, please contact Kaitlyn Teppert at kaitlyn.teppert@cadmusgroup.com or 303-389-2530. To contact PSE directly, please call the customer service number of (888) 225-5773. Thank you for your time.