

Energy Trust of Oregon Trade Ally Finder Market Research

Final Report

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Prepared by

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Executive Summary

Background, Research Objectives, and Approach

Research Into Action evaluated Energy Trust of Oregon’s Find a Contractor (FAC) online tool, which aims “to quickly and easily connect customers with contractors who are likely to help them with their project.” Energy Trust of Oregon (Energy Trust) contracted Research Into Action to determine whether the tool is meeting this objective, to characterize the tool’s primary users, and to identify opportunities for improvement.

We used a web intercept survey platform to implement a pop-up survey on pages featuring the FAC tool. In all, 86 people completed the survey: 79 residential homeowners, one commercial building representative, and six contractors. We conducted follow-up interviews with 14 residential survey respondents and one trade ally contractor to gather in-depth feedback on the website and to better understand the process homeowners use to hire a contractor.

Key Findings

The primary users of the FAC tool were single-family homeowners (88%) who are 45 years or older (70%), college educated (65%), white (93%), and predominantly located in the Portland/Salem metro area (91%, based on IP address). Survey respondents were most commonly seeking services related to HVAC or water heating projects. Follow-up interviewees said they had prior experience hiring contractors and were pursuing planned projects. They were primarily in the initial stages of those projects and had yet to hire a contractor for their needs.

In large part, users found the tool easy to use, but had some difficulty locating certain functions – namely the “Search by Name” option and the “Create a List” PDF function – that they would otherwise have found helpful.

Interview respondents had a positive association with Energy Trust as an organization and trusted that the site recommended quality contractors. They were, however, highly uncertain about what qualified a contractor to be a trade ally or how Energy Trust had vetted the contractors listed on the site. They also said ratings were an important factor when deciding which contractors to contact, but they did not find the three-star rating system intuitive.

In addition to ratings, interviewees said that referrals, reputation, and bid price were important considerations when hiring contractors. They were not, however, overly concerned about contractor proximity; some respondents found that some nearby contractors would not serve their home and others found they could hire contractors from far away. Rather, they were most interested in finding contractors who provided services in their area – a subtle but important consideration when considering how to connect them with the right contractors.

Conclusions and Recommendations

Conclusion 1: Most FAC tool users are seeking services for their single-family homes and have prior experience hiring contractors. Their racial makeup mirrors that of the larger population of Oregon homeowners; however, they tend to be younger and more educated and disproportionately located in the Portland/Salem metro areas.

Recommendation: If Energy Trust seeks to better serve customers in outlying regions, consider more targeted promotion or marketing of the tool to web users in these regions. It will also be important to ensure these users can easily locate and connect with trade allies who serve their areas, which we discuss in further in Conclusion 3.5.

Conclusion 2: Overall, Energy Trust's FAC tool is achieving its original objective to connect customers quickly and easily with contractors who are likely to help them with their project; however, some older users may experience challenges.

Recommendation: If Energy Trust is interested in driving older audiences to the site, it may be helpful to examine specific design elements to make the site easier to read and navigate for this audience. If Energy Trust seeks to increase overall likelihood that users will contact a trade ally, the organization might consider pursuing further research on user behaviors and decision-making processes or conducting experiments to test how certain design or content strategies facilitate action.

Conclusion 3: There are opportunities to improve tool functionality and enhance user experience.

Conclusion 3.1: The search field drop-down menus can be simplified, while still meeting user needs.

Recommendation: Revisit the drop-down menu options to combine, consolidate, and/or eliminate options. Eliminate irrelevant service categories that appear under specific project/building type queries (e.g., Solar Commercial still appears when users choose Existing Single Family as the building/project type).

Conclusion 3.2: The ability to search for a specific contractor by company name was the most useful advanced search feature; however, users may not see the hyperlink for the advanced search.

Recommendation: Instead of requiring a click on the advanced search to display this field, consider displaying the Search by Name field as a default field when someone visits the page.

Conclusion 3.3: The "Create a List" feature is useful, but users may not fully understand its function, which could prevent them from using it.

Recommendation: Revise the heading or add a pop-up definition to explain the function more clearly.

Recommendation: Consider allowing users to select more than three contractors for the PDF.

Conclusion 3.4: Ratings are a key factor that interviewees consider when researching and selecting a contractor; however, the three-star rating system is not intuitive.

Recommendation: Consider transitioning to a five-star rating system.

Recommendation: Consider explaining the star ratings on the main FAC page or make the hyperlink to the explanation of the stars more prominent.

Conclusion 3.5: Although some users liked the distance field, it is chiefly important to connect users with a contractor that serves their area and the distance field is not a reliable indicator of that.

Recommendation: Work with trade allies to capture the areas they serve. Search results should only include trade allies that serve the ZIP codes or city chosen in the search.

Conclusion 4: While the site is achieving its original objective, there is an opportunity to pursue a secondary objective related to educating users.

Recommendation: Enhance the presentation of information and provide more detail on what qualifies a contractor to be on the website. If Energy Trust performs any quality checking on the contractors, consider adding that to the webpage to boost user confidence.

1. Introduction

1.1. Background and Purpose

Energy Trust launched the first iteration of the Find a Contractor (FAC) tool in 2004 to connect customers with trade allies. In 2017, the organization contracted Research Into Action to conduct market research to achieve the following objectives:

- › Determine whether the tool is meeting its original objective to connect customers quickly and easily with contractors who are likely to help them with their project;
- › Identify any additional or new objectives or uses for the tool; and
- › Learn who is actually using the tool

As the project evolved, Research Into Action also sought to identify opportunities to enhance or optimize the tool's functionality by more closely examining the relative value of specific features, including: the drop-down menus, the advanced search option, the "Create a List" feature, the rating system, and distance/location information.

1.2. Research Approach and Methodology

Research Into Action began this research with a *Qualtrics Site Intercept* pop-up survey to collect demographic information and feedback from FAC tool users. The survey was active for approximately two weeks. At the end of this survey, we asked respondents if they would be interested in participating in a follow-up, in-depth interview (IDI); 41 respondents volunteered. Based on discussions with Energy Trust, we designed our IDI to gain insights from a diverse group of survey respondents by region (rural vs. urban), contracting services sought (planned projects versus emergency replacements), age, and rated usefulness of the site.

Research Into Action interviewed 15 of the 86 survey respondents: 14 residential users and one trade ally. We conducted the interviews between May 22 and June 2, 2017, and they lasted between 20 and 30 minutes. During the interviews, the interviewer shared their computer screen with 12 interviewees so they could view elements of the webpage while they responded to questions; the other two interviewees viewed the FAC page independently on their computers. This strategy minimized recall bias, thereby improving the quality of the interview data.

We asked residential interviewees to provide in-depth feedback about their experience using the website and their process for hiring a contractor. We asked the trade ally to comment on how well the profile represents his company and the value of the site to his company. Research Into Action used *SPSS* to analyze the quantitative data and *NVivo* to analyze the qualitative data.

2. Pop-Up Survey Findings

2.1. Identifying the Primary Users of the Tool

Pop-up survey responses suggest that residential single-family home owners are the primary users of the FAC tool (Table 2-1). Although commercial building representatives (1%) and contractors (7%) represented a minority of survey respondents, it is unclear if these percentages accurately reflect the makeup of FAC users; there may be some non-response bias present in that commercial and contractor users may be less likely to take a pop-up survey. Nonetheless, the survey results provide insight into who is primarily using the FAC tool.

Table 2-1: Basic Characteristics of FAC Users

User Types	Count	Percent
Residential home owner	79	92%
<i>Single family home owner</i>	76	88%
<i>Multifamily unit owner</i>	3	3%
Commercial building representative	1	1%
<i>Boarding stable owner / manager</i>	1	1%
Contractor	6	7%
<i>Registered trade ally</i>	5	6%
<i>Not registered, but interested</i>	1	1%
Total	86	100%

2.1.1. Location

Figure 2-1 maps the IP address locations of the 86 residential and commercial users that took the pop up survey. Most (91%) had IP addresses from the greater Portland/Salem metro area.

Customers used the FAC tool to find a variety of contracting services, with heating or air conditioning (36%) and water heating (31%) being the most common project types (Table 2-2). Nineteen percent of residential customers indicated they were looking for more than one type of contracting service.

During the survey, residential respondents could choose from a condensed list of eight project types for which they were seeking services (note: “lighting project” was only shown to commercial respondents). Table 2-2 displays the number and percentage of respondents who selected each option.

Each residential survey option in Table 2-2 was selected by at least two residential survey respondents, and only three respondents (4% of the sample) sought services that did not fall within these categories. This is noteworthy because, while the actual FAC tool provides more than 20 options in the “I need help with” and “Specialization” drop-down menus for users who select “Existing Single Family” as their “Project/Building Type”, the eight project types in the survey were sufficient for 96% of survey respondents.

Table 2-2: Project Type Seeking Services For*

Type of Project	Count (n=80)	Percent (n=80)
Heating or air conditioning project	29	36%
Water heating project	25	31%
Insulation or air sealing project	17	21%
Energy audit	13	16%
Windows project	11	14%
Solar project	10	13%
Planned remodel or addition	2	3%
Commercial lighting project	1	1%
Other	3	4%

* Multiple responses allowed

Survey results revealed customers typically used the FAC tool during the initial stages of their project (Table 2-3). Most customers indicated they were using the FAC tool to research a possible project (35%) or that they had an idea of what they would like to do, but they had yet to contact a contractor (41%). All three of those who said they had already selected a contractor to do the work were using the FAC tool to see if their contractor was listed as an Energy Trust-approved trade ally.

Table 2-3: Customer Project Stage at Time of Survey

Project stage	Count	Percent
I'm researching a possible project	28	35%
I have an idea of what I'd like to do, now I need to find a contractor	33	41%
I've already contacted one or more contractors, but I haven't hired one yet	13	16%
I've selected a contractor to do the work, but the work hasn't started yet	3	4%
None of the above	3	4%
Total	80	100%

2.1.4. Contractor User Characteristics

Survey results suggested that contractors represent a minority of FAC tool users, as indicated by their small contribution to survey responses (7% of responders). Five of the six contractors who completed the survey were registered Energy Trust trade allies, and the one contractor who was not a trade ally indicated they were interested in joining the network. Surveyed contractors mostly specialized in lighting or electrical work (5 of 6) for both existing and new (5 of 6) commercial buildings (6 of 6).¹ Most (4 of 5) registered trade ally respondents said they were visiting the FAC page to both look at their profile and to see where their profile appears in search results.

2.2. User Experience

Survey results revealed that most users had a positive experience with the FAC tool. The majority of residential (76%) and the sole commercial customer respondent said they found everything they needed in the FAC tool. Senior users (65 years or older) were more likely to say they could not find everything (40% of seniors) compared to users under the age of 65 (19% of all other age groups). Residential users who could not find everything commonly indicated they could not find any contractors near their home or a specific company for which they were looking (four mentions each, see Table 2-4).

Three respondents indicated they were unable to find “contractors” on the tool: one said they could not find “names of contractors,” one said they could not find registered trade allies (a subsequent response suggested they were not sure whether the contractors shown were registered trade allies or not), and one simply said they could not find “contractors [sic]”; it is unclear if this was due to lack of contractors in their area or some other reason, such as general confusion. Three said they could not find information on the specific technologies or services they were searching for, such as cost information for the technology they wanted installed. Appendix A includes all verbatim responses to this question.

¹ See Appendix A for further information on contractor firmographics.

Table 2-4: Content Residential Customers Could Not Find on FAC page

What they could not find on FAC page	Count (n=19)
Contractor near me	4
Specific contracting company	4
“Contractors”	3
Non-TA info: information on the specific technologies or services themselves	3
Non-TA info: incentive information	2
Other	3

Most residential and commercial users rated the FAC webpage as either “very” (58%) or “somewhat useful” (35%); the sole commercial respondent rated it as “somewhat useful” (Table 2-5). Trade allies gave mixed reviews on the value of the FAC tool as a means for connecting with customers: two said it was “very valuable,” one said, “somewhat valuable,” and two were “not sure.”

Table 2-5: Rated Usefulness of Energy Trust Find a Contractor Webpage

	Count	Percent
Very useful	47	59%
Somewhat useful	27	34%
Not at all useful	6	8%
Total	80	100%

Ultimately, the FAC tool appears to be meeting its intended objective; nearly three-fourths (71%) of residential and commercial respondents said the site increased their likelihood of contacting a contractor (Table 2-6). Additional analysis revealed a correlation between age and likelihood of contacting a contractor; the older the survey respondent, the less likely they were to say the site increased their likelihood of contacting a contractor. For example, only 50% of seniors (65 years or older) said they are now more likely to contact a contractor, compared to 78% of respondents under 65.

Table 2-6: Has using this site increased your likelihood of contacting a contractor?

	Count	Percent
Yes	57	71%
No	7	9%
Don't know	16	20%
Total	80	100%

Only 16% of customers offered suggestions for improving the FAC site, most of which pertained to the search results (Table 2-7). Some customers suggested adding content or features already present on page (e.g., search by name field), pointing to their confusion or inability to locate features.

Table 2-7: Customer Suggestions for Improving the Energy Trust Find a Contractor Webpage

Broad Suggestion	Specific Suggestion	Count Offering Suggestion Area
Results-related	<ul style="list-style-type: none"> • No contractors in area (2 mentions) • List where business is located • Be able to sort based on rating • List whether contractor is a trade ally • List why these are the chosen contractors and have reviews available • Site is not current with available contractors 	7
Search-related	<ul style="list-style-type: none"> • Simplify search options (2 mentions) • Add a search box to search for a specific contractor's name • Increase search options 	4
Feedback not related to FAC page		2

Four of six contractors offered suggestions for improving the FAC tool, with another indicating “the tool works well, as is.” Table 2-8 reports verbatim contractor suggestions for improvement.²

Table 2-8: Contractor Suggestions for Improving the Energy Trust Find a Contractor Webpage

Verbatim Response
It would be most helpful to have the NXT Level designation logo on the pop up for [company name]. Also, company logos next to the company name and a photo of the individual company contact on the pop up.
Change the name to "Find a Trade Ally". "Contractor" implies that Electrical Distributors who provide turnkey services would not be found there.
This list does not show Top Performers/NXT Level Ally's.
Allow more fields under the search categories.
I think the tool works well, as is.

² Two of the verbatim responses refer to the “NXT Level” designation, which applies to lighting contractors who have completed the Northwest Lighting Network’s NXT Level Lighting Training. The Northwest Lighting Network has its own set of trade allies and is sponsored by NEEA. Thus, these comments potentially indicate some confusion regarding the difference and/or connection between various networks. Conversely, this might be treated as an accreditation, which allies can include in their listing.

3. Follow-Up Interview Findings

The following sections discuss how residential interviewees used the options on the page to search for a contractor, how they interpret the contractor results information, steps they have taken to contact a contractor, how they make their final decision, and suggestions for improvement. We incorporated the trade ally's responses throughout.

3.1. How interviewees search for a contractor on the webpage

Interviewees most commonly needed a contractor for HVAC services, windows, or hot water heaters (Table 3-1). All interviewees had planned projects and were not pursuing emergency replacements. Three of the four respondents with HVAC projects said their current system was not working, yet they were not in a rush to get it replaced, and two of them sought to install a ductless system. Both respondents who were looking to upgrade their water heaters intended to switch to a gas-powered unit.

Table 3-1: Need for a Contractor

Project Type	Number of interviewees
HVAC	4
Windows	2
Water heater	2
Multiple end-uses*	2
Solar	1
Insulation	1
Roof	1
Assessment	1
Total	14

* One mentioned planning a project involving solar and insulation and the other was reportedly planning multiple energy-saving projects and an audit.

3.1.1. Drop-down Menus

- › **Interviewees found the menu options useful, mostly-understandable, and with an appropriate number of options.**

Most respondents found the options in the drop-down menus useful (12 of 14), as they covered a lot of topics, and they were able to find what they needed. Further, HVAC respondents understood the term “heating and cooling,” and those looking for help with hot water heaters found that option under the alphabetical drop-down list. Conversely, one interviewee said there were too many options under the

Project/Building Type menu and that he was looking for a “single-family residential” option. One respondent, who was planning multiple energy-saving projects, said that the service options were too specific, and he would not have searched with those options in mind.

Most respondents found the terms in the menus understandable for their purpose on the site. Four respondents simply looked for the term that met their needs and ignored the other options. Five said that some of the terms looked like technical jargon.³ Two of those five said that having the technical terms in the menu was okay with them because other website users who need a contractor related to that topic should know what it means and, in that case, it is good to have that option in the menu.

Finally, interviewees stated that either there were the right number of options in the menu (8 of 14) or were too many options (6 of 14). One respondent, who reported there was the right number of options, commented that Energy Trust “probably has to cover every situation,” so she understood why there were numerous options. Another said that when she was looking through the options, one of them caught her eye, so she clicked on it to see what it was about. One interviewee said there were “too many options for my personal convenience,” and wondered if some services were more relevant for commercial businesses. It is possible that this respondent did not specify “existing single family” in the Project/Building Type menu, as that selection narrows the services options.

3.1.2. Advanced Search

- › **The advanced search hyperlink/button provides a useful option to search by company name, though it is easily missed.**

Two interviewees used the advanced search feature, and six said that they noticed it but did not use it. Three respondents commented that the hyperlink for the advanced search was tiny and not noticeable right away. The ability to search for a specific contractor by company name was the most useful feature of the advanced search, as mentioned by four respondents. Two said that they wished they had noticed it because they were looking for a specific contractor and would have used the “Company Name” box to search for a specific contractor. One respondent who was looking for a contractor he already knew said he used that field and found it helpful. The other respondent who used the advanced search said the additional search options were not necessary for her to find a contractor for her HVAC project.

3.1.3. Create a List Feature

- › **The “Create a List” feature is useful, but respondents did not fully understand its function, which prevented them from using it.**

Most (11 of 14) respondents did not use the Create a List feature. Of those 11, five said they noticed the feature on the site. Two did not use the feature because they were just browsing for information and did not think they would need a summary list, while another two said they got all the information they needed from the results after using the drop-down menus.

³ Specific terms that interviewees identified as looking like jargon included HVLS fan, EPS rating, and “evaluate my home.”

A total of ten respondents said that the PDF feature was useful (including two who used it and eight who did not).⁴ When looking at the PDF, three respondents said they liked the summarized information, two liked its format, and two appreciated that they could easily print it. One respondent who did not see this option said that it would have been helpful to print out the PDF so she could take it to her husband to discuss who to hire rather than re-creating the search online or writing everything down. Others liked having the contractor's services offered, address, and phone number together in one place.

One respondent who did not use the feature and who said the PDF would have been helpful for her, suggested that the feature "could have a better explanation of what its purpose is." Two people said that they would like to be able to select more than three contractors to include in the PDF.

3.2. Interviewee interpretation of search results

This section discusses how interviewees feel about Energy Trust in general; their confidence that the results contained quality contractors; their opinions on contractor ratings, distance, and location information; the opinion on the tools' usefulness; and their likelihood of contacting a contractor after using the FAC tool.

3.2.1. Energy Trust as a trusted resource

- › **Energy Trust affiliation is important because interviewees interpret that to mean the contractor will perform quality work that qualifies for incentives.**

Respondents overwhelmingly associate affiliation with Energy Trust with quality contractors (13 of 14). They have faith that Energy Trust is recommending contractors who have a good reputation for performing quality work. More than half also mentioned the importance of working with an Energy Trust-affiliated contractor to ensure that their project qualifies for incentives or tax credits (8 of 14). For example, when asked why it is important to them to work with an Energy Trust-affiliated trade ally, select interviewees said the following:

It's extremely important. When I've used other contractors, I've been less than satisfied. They went about 90% of the way, and the last 10% left unfinished or lower quality. Energy Trust contractors are 100% quality.

It was important, as a starting point, to have someone I trusted who had their name on the website. I also wanted the incentives. That's a big part of it. He'd know how to do it right to get the incentives.

I feel if Energy Trust is putting the company's name out there, they must have done some vetting and if the company wants to have their name associated with Energy Trust, they'll want to do a good job.

Interviewees had mixed opinions regarding the number of contractors shown in the results; six said that there were too many contractors included in the results, six said there was a good number, and one said there were too few because she was unable to find someone in her area. The last respondent was

⁴ Interviewees who reported not using the Create a List feature were shown a live example during the interview of the process to create the PDF.

looking for a roofing contractor in Gervais, Oregon. Of those who said there were too many results, one said “trying to sift through all the choices was daunting,” while another said, “I felt overwhelmed.” Both of those respondents were in the Portland metro area.

3.2.2. Quality of Contractors

- › **Interviewees overwhelming trust that Energy Trust recommends quality contractors, but have high uncertainty as to how that is determined.**

Interviews revealed that, aside from the fact that they were listed in Energy Trust’s tool, there was very little information on the webpage that gave respondents confidence that the results contained quality contractors. A minority of interviewees noted the star ratings and certification information inspired some confidence. Four people mentioned that the services column with the contractors’ services helped them to know whether the contractor would meet their needs, but not whether the contractor provided quality service.

Seven people said that the Energy Trust affiliation was the only thing that inspired confidence that the contractors were reputable. The representative quotes below highlight the customers’ simultaneous confidence in Energy Trust of Oregon and uncertainty about the contractor vetting processes:

To be honest, I don’t see anything that gives me confidence they’re quality contractors. By association with Energy Trust, I would assume that Energy Trust does some type of vetting of these people, but I don’t know how much.

It’s intimidating not knowing if Energy Trust verifies the quality of these people. Are they shady or legitimate? I don’t know. I’m trusting Energy Trust that they’ve already done this, but it’s not clear to me.

I’m not positive these are all Energy Trust Trade Allies, but I assume they are. That carries weight with me even though I don’t know what that means, really, or what qualifies people to be on that site.

The interviewed lighting trade ally suggested including an asterisk or some other way of demarcating contractors who are top contributors. He was pleased that his profile contained his website and email, but was surprised that his name was not included. Overall, he said that his profile accurately represents his company and the services he provides, but was considering augmenting his profile by adding to the information included under services and specialties.

When discussing the contractor results during the interview, the trade ally noticed that Diamond Hardware appeared in the results above him. He said that they were more like a hardware store, rather than a contractor who assesses the project and presents a plan to the customer that demonstrates their cost, the incentive, their payback, and energy savings. He felt it was unfair that a hardware store appeared in the results before him, a top tier trade ally.

3.2.3. Ratings of Contractors

- › **Interviewees like the star ratings, but do not understand what they mean and assume the best would be five stars.**

Half of interviewees (7 of 14) rely on ratings as an indicator of quality when assessing contractors. Two of those seven mentioned they liked the star ratings that show up when the existing single-family project/building type is selected. However, four interviewees expressed confusion over the three-star rating system.

I was a little bit confused at first with the stars. Most of them had three stars. I'm like, where are all the five stars or four-and-a-half stars? Then I realized that's as high as it goes.

The ratings are not very informative. A lot of them are threes. There's not much diversity in the ratings. I don't trust the rating system. I'd be way more comfortable if they had five stars. Ratings are what matter and these ratings are not adequate.

I don't know how they collect ratings. I pay attention to them even if I don't know what they mean.

Three of these people who commented on the ratings said that they preferred to be able to sort the contractor results by rating. Many respondents (8) were satisfied with the default sorting of contractors being by distance, figuring that was as good of a way to sort the results as any. Two people suggested having the functionality to sort by services.

3.2.4. Distance and Location of Contractors

- › **Interviewees either like the current distance marker or would rather know what areas the contractor serves.**

Most (12 of 14) interviewees reported that the results contained contractors in their area, with six noting that the results also contained contractors outside of their area. The two interviewees who could not find contractors in their area were located in small communities along the I-5 corridor: Gervais and Riddle.

The distance marker may be particularly problematic for users in the Portland metro region. Four of the six interviewees who had contractors outside their region included in the results lived in the Portland metro region. Two interviewees who lived in Portland described instances where they found a contractor on the list, but when they called them to get estimates, found out that the contractor does not serve the Portland area. They described their situations as follows:

I called a company that said it was a mile from my house and they said they were in Washington. I think they said they have a satellite office near me, but it's a tiny office and didn't serve my area for the work I needed.

One problem when I was looking for builders, is that it pulled people from Washington. When I called a builder, they said they weren't doing work in Portland. So, I got all hot

and bothered that I found a good contractor and when I went to get the bid, they said they didn't do work in my area.

Interviewees had mixed sentiments regarding the distance marker on the website. Six respondents said that distance is not relevant for them and that what matters is if the contractor serves their area. As one interviewee said, "Assuming they service my area, I don't care where they're located." Exemplifying the unsuitability of the distance marker is the fact that one interviewee, located in Beaverton, reportedly hired a company that the FAC page said was 123 miles away from her home.

Five interviewees, though, said that the current distance marker is informative and helpful for them to know how close the contractor is to their area. Three contacts said that having the contractor's address on the main results page would be most useful for them to judge whether the contractor will serve their area rather than having to click on each name to bring up the address.

The trade ally preferred that the website *not* list the regions he is willing to serve because he said he is willing to travel "from San Diego to Alaska" to do work. He said that 90% of his work is in Klamath Falls, and he appreciated appearing high on the list when he searches for Klamath Falls. He noted that FAC users might not go down in the search results past the first page, and he said he would be less happy if he was on the second page of results.

3.2.5. Usefulness of Website

- › **The site is useful and increases the likelihood of contacting a contractor because it provides pertinent and consolidated information on contractors from multiple trades that are interested in energy efficiency and able to help with rebates.**

In the initial survey, 13 of 14 interviewees said the site was either somewhat (5) or very (8) useful to them. When we asked interviewees to explain why they gave that rating in the survey, six said it was a good informational resource and six found it useful because the site could connect them with a quality contractor. Additionally, they liked being able to see the services listed (1 of 13) and find contractors who could help ensure the project qualified for incentives or assist with incentive paperwork (3 of 13). Quotes from those who found the site "very useful" include:

It's useful in the fact that all the contractors and trades are right here instead of me going through the phone book and figure it out.

It gave me a jumping off point for who I should be looking at. I'm new to energy efficiency and the solar market and I didn't know where to start. It's nice to have an organization that's giving me broad information and can connect me with someone who can be a potentially reliable provider.

Two people who said the site was somewhat useful wanted more information included in the search results. One wished to have the contractor's website listed on the main page of results instead of having to click the name to retrieve it. The other said, "It'd be nice to know if they had any complaints against them so I don't have to go and do separate research on their credibility." Finally, another person whose survey answer indicated the site was "somewhat useful" said the "ratings were not informative," which limited the tool's usefulness. One interviewee said the site was "not at all useful" in their survey

response; in the interview she reported she gave this answer because she could not find a HVAC contractor that serves her rural area (Riddle, Oregon).

Most of the interviewees (10 of 14) said the website increased the likelihood they would contact a contractor (Table 3-2); four said this was because it was much clearer than simply searching the internet for a contractor. Two said that when “Googling,” you get “a lot” or “scattered” information, while the FAC page provided choices and consolidated, relevant information. Specific comments included:

I think just having the list of contractors in my area rather than having to go on a random Google search and try to determine what are the proper contractors for my specific job type and in my area. So, this list sped up that process and gave me a nice list to call right away.

Just ease of information. When you're Google searching for people, a lot of information comes up and this is drilled down info and saves me from looking through a ton of information.

Others were confident that the contractor from this page would be interested in energy efficiency work or be able to help with rebate paperwork.⁵

Table 3-2: Reasons the Website Made Interviewees More Likely to Contact a Contractor

Reason	Number of interviewees
Centralized information	4
Contractor can help with rebates	2
EE-focused contractors	2
Found the information they needed	1
Total	9

Four respondents were unsure in the survey whether they were more likely to contact a contractor after using the webpage. One of these four stated that they could not find a contractor in their area, another did not currently have the money for a contractor to come out to her home, and a third was looking for information on comparative pricing (which the site does not provide). The fourth reported that she has always trusted Energy Trust contractors due to positive past experience and her most recent use of the site did not increase her already-high likelihood of contacting a contractor she found on the FAC site.

The interviewed trade ally said he has had customers tell him they found his name on the Energy Trust trade ally list, though he surmised that the list was provided by a lighting specialist and was not the FAC tool. He added, “I would say I don’t get a lot of people that say they found my name on the Energy Trust

⁵ One interviewee who indicated in the survey that they were more likely to contact a contractor did not answer this question appropriately. In response to the question: “What about your experience made you more likely to contact a contractor?” the interviewee answered, “I would use a place that has good ratings and references.” The interviewer re-stated the question, to which the respondent replied, “I would possibly contact two or three similar contractors and get estimates from each.”

website.” He said that having information about how many people found his name on the FAC website would be very helpful to him. Finally, the contractor did not report any value of the website to him beyond connecting him with customers looking for a contractor.

One interviewee spontaneously mentioned that she had been an apartment manager. Given that no other property managers responded to the survey, we took the opportunity to ask her relevant commercial questions. She hypothesized that multifamily property managers were generally unaware of Energy Trust and the services it provides. As such, she recommended that Energy Trust reach out to rental housing associations to let owners and managers know about the FAC tool and other services, such as the direct install of low cost measures.⁶ She reported that her apartment building had a list of approved contractors they would contact for projects and that they tended to hire the same contractors repeatedly because they had existing accounts with them.

3.3. Steps taken to hire a contractor

This section discusses the steps interviewees followed to hire a contractor, where they are in their process of hiring a contractor, as well as the factors they consider when deciding which contractor to hire.

3.3.1. Steps Interviewees Followed to Hire a Contractor

- › **Most respondents contacted more than one contractor and visited the contractor’s website; half used other online reference tools when researching contractors.**

Nine interviewees contacted a contractor following their use of the site and all nine of them called the contractors on the phone. Two also emailed contractors, one of whom indicated they emailed the contractor directly from the Energy Trust Find a Contractor page. Eight of those nine interviewees said they visited the website of at least one contractor before contacting them; five of the nine visited the website of every contractor they contacted. One said that they try to go to the webpage before contacting a contractor to make sure they perform the type of work he needs.

About half of those who contacted a contractor (5 of 9) ran into some issues. Three said that some of the contractors they contacted did not return their call in a timely manner and two Portland-area residents said that a contractor they contacted served Washington and not Portland.

Additionally, about half of those who contacted a contractor (5 of 9) contacted more than two, with one respondent reporting that he contacted ten or twelve contractors in order to find someone who was available when he needed (Table 3-3).

⁶ This outreach approach was also echoed in findings obtained in prior research conducted for Energy Trust of Oregon. Multifamily market experts suggested outreach through the Oregon Rental Housing Association for market rate properties. These findings can be found in report section 5.3.2 in the Multifamily Process Evaluation: Final Report, submitted to Energy Trust of Oregon on March 1, 2017 by Research Into Action.

Table 3-3: Number of Contractors Contacted

Number of contractors contacted	Number of interviewees
One	2
Two	2
Three to five	2
Six or more	3
Total	9

Six of the nine said that all the contractors they contacted came from the Energy Trust FAC page, while the other three indicated that about two-thirds or three-fourths of the contractors they contacted came from the Energy Trust site.

About half of the respondents performed Google searches to find contractors and others visited sites including Angie’s List and Yelp (Table 3-4) Three interviewees said that they went to the other sites before visiting the Energy Trust Find a Contractor webpage and three specified that they went to the other sites after the Find a Contractor page, but then ended up back at the Find a Contractor page because it was more useful than the other sites. Half of the interviewees, though, did not report visiting other websites in their research to find a contractor.

Table 3-4: Other Websites Visited by Interviewees (n = 14)*

Website	Number of interviewees
No other website	7
Google	6
Angie's List	2
Yelp	1
Next Door	1
NW Natural	1

* Multiple responses allowed

Of the 14 interviewees, two were hiring a contractor for their first time. One said that the process is a little stressful and worries whether she is getting charged a fair price. The other interviewee said that it was easier than he was expecting, but that he had done research on “questions to ask and things to look out for.”

Just under half of the group who had experience hiring a contractor said that this time was no different from prior times (5 of 12). Two said that this time was easier because they were going through the Energy Trust page. One of those two said she spent “less time and energy shopping around” because of her use of the Find a Contractor page. Another stated that the FAC tool was valuable to her because her

family had just moved to a new area and did not know contractors there, whereas in the past, she always hired contractors through word of mouth. One interviewee mentioned that this time hiring a contractor has been challenging because contractors are busy during the spring season in which she was trying to do her project.

3.3.2. Where Interviewees Were in Their Process of Hiring

Eight interviewees had progressed in their process of hiring a contractor in the three weeks between the time of the survey and the interview, while six had not advanced. One person reported that their project was completed at the time of the interview and another six had hired a contractor for their project. All seven of these interviewees who had hired a contractor at the time of the interview reported that they found the contractor they hired on the FAC website.

3.3.3. Factors for Final Decision

- › **Respondents take multiple factors into account when hiring a contractor; particularly reputation, bid amount, as well as quality and timeliness of communication.**

Respondents relied heavily on reputation, reviews, and referrals from others when deciding on which contractor they will hire (Table 3-5). The bid amount also factored into the decision for about one-third of interviewees. Communication was also valued by interviewees, both in terms of the quality of communication and timely response to inquiries. A minority of interviewees also mentioned that it's important to them that the contractor is affiliated with Energy Trust and can help ensure the project earns rebates.

Table 3-5: Factors Considered by Interviewees when Deciding Whether to Hire a Contractor (n = 14)*

Factor	Number of interviewees
Reputation	6
Bid amount	5
Quality of communication	5
Referrals from others	4
Availability to do work	3
Responsive to inquiries	3
Energy Trust affiliation	3
Ability to do rebates	1

* Multiple responses allowed

The following quotes demonstrate the mix of factors that interviewees considered when deciding which contractor to hire:

We've gone through the comments on his website. We picked someone and researched them more fully. He's been very responsive to our phone calls and emails and any questions. That's very important to me. Communication is a huge one.

Most important that they do a good job. I'll look up the contractor license to make sure there's no complaints. I'll use family and friends and referrals who say they did a good job. I value communication, even though it's not critical for the job.

First and foremost is any recommendations I get from friends or Energy Trust and then price.

3.4. Interest in Additional Resources

- › **Interviewees were interested in advice from Energy Trust, but were commonly interested in information already provided on the FAC page.**

Many of the interviewees (9 of 14) were interested in additional advice from Energy Trust on hiring a contractor. Three interviewees suggested that Energy Trust could provide a list of initial questions to ask a contractor or have a list of frequently asked questions. Two said they were open to more information in general. Another suggested Energy Trust provide a list of resources available, such as the Contractor Board, which this respondent thought would be particularly useful for new homeowners. Finally, another interviewee suggested that there could be information on the benefits of selecting a contractor through Energy Trust. The FAC page presents some of the advice and resources that respondents suggested, implying that the information is not easily noticeable or frequently accessed.

4. Conclusions and Recommendations

Conclusion 1: Most FAC tool users are seeking services for their single-family homes and have prior experience hiring contractors. Their racial makeup mirrors that of the larger population of Oregon homeowners; however, they tend to be younger and more educated and disproportionately located in the Portland/Salem metro areas. The majority (88%) of survey respondents were single-family home owners, and 12 of 14 follow-up interviewees had prior experience hiring contractors. Users most commonly sought HVAC services; all follow-up interviewees were seeking non-emergency contracting services. Survey respondents tended to be 45 years or older (70%), college educated (65%), and white (93%). Comparison with census data on Oregon owner-occupied homes suggests that FAC users are representative in terms of race, but are disproportionately young and educated. Most notably, based on their IP addresses, the majority (91%) were in the Portland/Salem metro area. This last finding is particularly relevant to Energy Trust’s ongoing goal of connecting with and better serving customers outside the Northern and Willamette Valley regions.

Recommendation: If Energy Trust seeks to better serve customers in outlying regions, consider more targeted promotion or marketing of the tool to web users in these regions. It will also be important to ensure these users can easily locate and connect with trade allies who serve their areas, which we discuss in further in Conclusion 3.5.

Conclusion 2: Overall, Energy Trust’s FAC tool is achieving its original objective to connect customers quickly and easily with contractors who are likely to help them with their project; however, some older users may experience challenges. The site may struggle to serve older users (i.e., older than 64), who were more likely to say they could not find everything they were looking for on the page, were less likely to report that using the site increased their likelihood of contacting a contractor, and more likely to report ease-of-use difficulties.

Recommendation: If Energy Trust is interested in driving older audiences to the site, it may be helpful to examine specific design elements to make the site easier to read and navigate for this audience. If Energy Trust seeks to increase overall likelihood that users will contact a trade ally, the organization might consider pursuing further research on user behaviors and decision-making processes or conducting experiments to test how certain design or content strategies facilitate action.

Conclusion 3: There are opportunities to improve tool functionality and enhance user experience. Based on survey and interview results, we identified five features that could be enhanced to optimize ease of use and search results. These include: drop-down menus, the advanced search option, the “Create a List” feature, the rating system, and distance/location information.

Conclusion 3.1: The search field drop-down menus can be simplified, while still meeting user needs.

Recommendation: Revisit the drop-down menu options to combine, consolidate, and/or eliminate options. Eliminate irrelevant service categories that appear under specific project/building type queries (e.g., Solar Commercial still appears when users choose Existing Single Family as the building/project type).

Conclusion 3.2: The ability to search for a specific contractor by company name was the most useful advanced search feature; however, users may not see the hyperlink for the advanced search.

Recommendation: Instead of requiring a click on the advanced search to display this field, consider displaying the Search by Name field as a default field when someone visits the page.

Conclusion 3.3: The “Create a List” feature is useful, but users may not fully understand its function, which could prevent them from using it.

Recommendation: Revise the heading or add a pop-up definition to explain the function more clearly.

Recommendation: Consider allowing users to select more than three contractors for the PDF.

Conclusion 3.4: Ratings are a key factor that interviewees consider when researching and selecting a contractor; however, the three-star rating system is not intuitive.

Recommendation: Consider transitioning to a five-star rating system.

Recommendation: Consider explaining the star ratings on the main FAC page or make the hyperlink to the explanation of the stars more prominent.

Conclusion 3.5: Although some users liked the distance field, it is chiefly important to connect users with a contractor that serves their area and the distance field is not a reliable indicator of that.

Recommendation: Work with trade allies to capture the areas they serve. Search results should only include trade allies that serve the ZIP codes or city chosen in the search.

Conclusion 4: While the site is achieving its original objective, there is an opportunity to pursue a secondary objective related to educating users. Based on the in-depth interviews, users have a positive association with Energy Trust as an organization and see it as a trusted resource. They did, however, express a lack of understanding of the definition of “trade ally” and the associated requirements. They also had difficulty locating supplemental information such as the explanation of the star rating system and contractor selection tips.

Recommendation: Enhance the presentation of information and provide more detail on what qualifies a contractor to be on the website. If Energy Trust performs any quality checking on the contractors, consider adding that to the webpage to boost user confidence.

Appendix A. Detailed Pop-Up Survey Results

A.1. Sample Characteristics

Basic Characteristics of Survey Respondents

User Types	Count	Percent
Residential home owner	79	91%
<i>Single family home owner</i>	76	87%
<i>Multifamily unit owner</i>	3	3%
Commercial building representative	2	2%
<i>Multifamily property owner / manager</i>	1	1%
<i>Boarding stable owner / manager</i>	1	1%
Contractor	6	7%
<i>Registered trade ally</i>	5	6%
<i>Not registered, but interested</i>	1	1%
Total	87	100%

A.2. Generic Residential/Commercial Customer Questions

Q1. Have you visited Energy Trust of Oregon's "Find a Contractor" webpage before today?

Response Option	Count	Percent
Yes	20	25%
No	56	69%
Not sure	5	6%
Total	81	100%

Q2. How did you find out about Energy Trust's "Find a Contractor" webpage?

Response Option	Count	Percent
From another page on the Energy Trust website	37	46%
Internet search	17	21%
Utility	13	16%

Response Option	Count	Percent
Word of mouth	5	6%
Radio	3	4%
Other*	6	7%
Total	81	100%

* Twenty-two respondents chose other. Thirteen of those indicated their utility and three mentioned 'radio.' The other six offered various unique responses, and are represented in the Other category in the table.

Q3. Are you looking for a new contractor or for information on a contractor you already know?

Response Option	Count	Percent
A new contractor	54	67%
A contractor I know	7	9%
Both of the above	20	25%
Total	81	100%

Q4/Q5. What type of work are you looking to have done? Select all that apply.

Response Option	Residential Count (n=79)	Commercial Count (n=2)	Total Percent (n=81)
Heating or air conditioning project	29		36%
Water heating project	25		31%
Insulation or air sealing project	17		21%
Energy audit	13		16%
Windows project	12	1	16%
Solar project	10		12%
Planned remodel or addition	2		2%
Lighting project		1	1%
Other*	3		4%

* Four residential respondents chose other. One of those specified "ductless heating" and their response was recoded to the *Heating or air conditioning project* category. The other three offered various unique responses, and are represented in the Other category in the table.

Q6. Which of the following best describes the stage you are currently at?

Response Option	Count	Percent
I'm researching a possible project	29	36%
I have an idea of what I'd like to do, now I need to find a contractor	33	41%
I've already contacted one or more contractors, but I haven't hired one yet	13	16%
I've selected a contractor to do the work, but the work hasn't started yet	3	4%
The contracting work has already started	0	0%
I've finished my project	0	0%
None of the above	3	4%
Total	81	100%

Q7. Has using this site increased your likelihood of contacting a contractor?

Response Option	Residential Count (n=79)	Commercial Count (n=2)	Total Percent (n=81)
Yes	56	2	72%
No	7	0	9%
Don't know	16	0	20%
Total	79	2	100%

Q8. Is there anything you were looking for on this site that you did not find?

Response Option	Residential Count (n=79)	Commercial Count (n=2)	Total Percent (n=81)
Yes	60	2	26%
No	19	0	74%
Total	79	2	100%

Q9. (please specify what you could not find)

Verbatim Response
Want to just search contractor name to see if he is on the list. Cumbersome to scroll through
I would like to be able to search by name, as I was looking for someone specific.
Haven't found the Company I hired
A specific Contractor/Designer

Verbatim Response

I'm looking for info on the new ductless heat pump, my heat pump has quit, heating now with original electric furnace, have no AC furnace

Decommission information

Approximate cost of water heaters

Names of contractors

Contractors

A list of qualified contractors who are trade allies

I was trying to find a Plumbing Contractor. The closest to our area was over 100 miles away.

I looked for a contractor to perform an energy audit near Beaverton - I got one contractor, in Bend. Not helpful.

Could not find list of contractors in my area

A contractor near me

Your incentive page is unclear and links to incentives for WA.

Whether Avista- referred contractor is qualified to offer rebates

We live up in the hills near Rainier, OR. We heat with Propane and our Electric is through a PUD. We do not qualify for Mfg Home assessment through Energy Trust, so who CAN we turn to?

More specific information about the services they provide. Also, some information was out of date (broken links).

I was looking to how I could get my house to be a or in a Oregon Trust feature house plan or build.

Q10. How useful is Energy Trust's "Find a Contractor" page to you?

Response Option	Residential Count (n=79)	Commercial Count (n=2)	Total Percent (n=81)
Very useful	47	0	58%
Somewhat useful	26	2	35%
Not at all useful	6	0	7%
Total	79	2	100%

Q11. If you have any other suggestions on how we could improve the Energy Trust "Find a Contractor" webpage, please type them in the box below.

Verbatim Response

Where's the list to see if our contractor is a trade ally

The survey popped up before I was finished a little premature :-)

Simplify/condense/clarify the services listed under the "I need help with..." drop down

Verbatim Response

- Search box that takes you to a specific contractor if you already have a bane

- Please increase the search options.

- Not at this time

- None

- None

- More contractors in small towns, rural areas. No one comes to Hood River or Scappoose

- Making it easier to figure out which is the best contractor for the job. It's hard to tell here.

- List the area that the business is located. I would like to find a contractor in my local area.

- It didn't give me contractors close to our home

- I would say to brake down the parts of a house, like you just are looking for heating to say, click on just a heating tap and it will give all heating stuff.

- I just need to find out who does these ductless heat pumps, thought Pacific Power would know what they are and info about them. Thank you.

- I don't know if the problem is that this site is not current with available eligible contractors.

- Clear info on why these are chosen contractors, and reviews of those contractors easily accessible

- Can't think of one. Great work!

- Be able to sort based on ratings.

A.3. Residential Demographics

Q12. What range below captures your age?

Response Option	Count	Percent (excl. refusals)	Total Percent
24 years old or younger	1	1%	1%
25 to 34 years old	7	9%	9%
35 to 44 years old	15	20%	19%
45 to 54 years old	17	22%	22%
55 to 64 years old	16	21%	20%
65 years or older	20	26%	25%
Decline to answer	3	-	4%
Total	79	100%	100%

Q13. What is the highest level of education you have completed so far?

Response Option	Count	Percent (excl. refusals)	Total Percent
High school graduate or equivalent	7	9%	9%
Trade or technical school	6	8%	8%
Some college	13	17%	16%
College degree	21	28%	27%
Some graduate school	2	3%	3%
Graduate or professional degree	26	35%	33%
Decline to answer	4	-	5%
Total	79	100%	100%

Q14. What is your race and/or ethnicity? Select all that apply.

Response Option	Count	Percent (excl. refusals)	Total Percent
White or Caucasian	64	93%	81%
Asian or Pacific Islander	2	3%	3%
Hispanic or Latino	2	3%	3%
Black or African American	1	1%	1%
Decline to answer	10	-	13%
Total	79	100%	100%

A.4. Commercial Firmographics

Q15. What is your role at your organization?

Response Option	Count
President or owner	1
Vice president, CFO, CIO, or something similar	0
Facilities or operations manager	0
Landlord or property manager	0
Other	0
Total	1

Q16. Which of the following best describes the property type you are seeking contracting services for?

Response Option	Count
Automotive repair	0
Government, public, or education building	0
Grocery or convenience store	0
Healthcare facility	0
Industrial or agricultural	0
Multifamily/apartment building	0
Office	0
Public gathering space	0
Restaurant/food service	0
Retail store	0
Warehouse	0
Other*	1
Total	2

* The respondent specified the property type is a "boarding stable."

Q17. Approximately how many employees does your organization have in Oregon?

Response Option	Count
Less than 10	1
10 to 25	0
26 to 50	0
51 to 100	0
101 to 250	0
251 to 500	0
More than 500	0
Don't know	0
Total	2

A.5. Contractor Questions

Q18. Are you currently an approved Energy Trust trade ally?

Response Option	Count
Yes	5
No	1
Not sure	0
Total	6

Q19. [If 0 = 1] Are you visiting the site to look at your profile and/or to see where your profile appears in the results?

Response Option	Count
Looking at the information on my profile	0
Looking at where my profile appears in the results	0
Both of the above	4
Neither of the above	1
Total	5

Q20. [If 0 = 2 or 3] Are you interested in learning how you can become an Energy Trust-approved trade ally?

Response Option	Count
Yes	1
No	0
Not sure	0
Total	1

Q21. What types of contracting services do you provide? Select all that apply.

Response Option	Count (n=6)
Architecture/design	1
Construction	0
General contracting services	0
HVAC	0
Insulation	0

Response Option	Count (n=6)
Lighting or electrical	5
Roofing or siding	0
Solar panel installation	3
Water heating or plumbing	0
Windows	0
Other	2

Q22. Do you specialize in existing buildings or new construction?

Response Option	Count
Existing buildings	1
New construction	0
Both	5
Total	6

Q23. Which of the following building types do you typically work in? Select all that apply.

Response Option	Count (n=6)
Single family	2
Multifamily	3
Commercial	6
Governmental / institutional	5
Industrial	5

Q24. [If 0 = 1] How valuable to you is this website as a way for customers to connect with you?

Response Option	Count
Very valuable	2
Somewhat valuable	1
Not sure	2
Total	5

Q25. What suggestions do you have for improving Energy Trust's "Find a Contractor" tool?

Verbatim Response

It would be most helpful to have the NXT Level designation logo on the pop up for [company name]. Also, company logos next to the company name and a photo of the individual company contact on the pop up.

Change the name to "Find a Trade Ally". "Contractor" implies that Electrical Distributors who provide turnkey services would not be found there.

This list does not show Top Performers/NXT Level Ally's.

Allow more fields under the search categories.

I think the tool works well, as is.

Appendix B. Detailed Interview Results

Interviewee age groups

Age group	Number of interviewees
24 years old or younger	1
25 to 34 years old	1
35 to 44 years old	1
45 to 54 years old	3
55 to 64 years old	2
65 years or older	6
Total	14

Education level of interviewees

EDUCATION GROUP	Number of interviewees
High school graduate or equivalent	2
Some college	3
College degree	4
Graduate or professional degree	5
Total	14

Opinion of terms in drop-down menus

Opinion of terms	Number of interviewees
Most terms are understandable	5
Some terms look like jargon	5
Didn't look at all of the terms	4
Total	14

Opinion on the number of contractor results

Opinion	Number of interviewees
Too many	6
A good number	6
Too few	1
Don't know	1
Total	14

Suggested way to sort contractor results

Way to sort	Number of interviewees
Distance	8
Rating	3
Services	2
No suggestion	1
Total	14

Project Stages of Interviewees

Project Stage	Number of Interviewees at time of Survey	Number of Interviewees at time of Interview
1. I'm researching a possible project;	5	3
2. I have an idea of what I'd like to do, now I need to find a contractor;	8	1
3. I've already contacted one or more contractors, but I haven't hired one yet;	1	2
4. I've selected a contractor to do the work, but the work hasn't started yet;	0	6
5. The contracting work has already started;	0	0
6. I've finished my project;	0	1

Appendix C. Pop-Up Survey Instrument

C.1. Pop-Up Introduction

Timer format [pop up appears after two minutes on page]: Thanks for using our Find A Contractor tool. How is it working for you? Take a two-minute survey and qualify to win \$250!

Pre/Post Format:

Upon entry: Thanks for using our Find a Contractor tool. When you're done on this page, we'd like to ask you about your experience. Take a two-minute survey and qualify to win \$250!

- Button saying "Yes, I'll provide feedback"
- Button saying "No thanks"

Upon exiting the page: Wait, we still want your feedback! Take a two-minute survey and qualify to win \$250!

C.2. Screening [ASK ALL]

- S1. Which of the following best describes the building that you are seeking contracting services for?
1. A single-family detached home
 2. An apartment, condo, townhome, or duplex/triplex/fourplex
 3. A commercial building (includes businesses and nonprofit organizations)
 4. None of the above: I am a contractor
- S2. [If S1 = 1] Is the home located in Oregon?
1. Yes → Skip to S3
 2. No → Terminate survey
- S3. [If S1 = 1] Do you own this home?
1. Yes → Skip to Q1
 2. No → Terminate survey
- S4. [If S1 = 2] Are you seeking contracting services for a unit you live in, or a building you manage?
1. A unit I live in → Skip to S5
 2. A building I manage → Skip to S5
- S5. [If S1 = 2 or 3] Is this property located in Oregon?
1. Yes
 2. No → Terminate survey

- S6. [If S4 = 1] Do you own the unit you live in?
1. Yes → Skip to Q2
 2. No → Terminate survey
- S7. [If (S1 = 2 AND S4 = 2) OR S1 = 3] Are you at least partially responsible for decisions regarding improvements to the property?
1. Yes → 0
 2. No → Terminate survey
- S8. [If S1 = 4] Do you provide services in Oregon?
1. Yes → 0
 2. No → Terminate survey

Termination screen text: Thank you for your time, but we've determined you do not meet the criteria for the survey.

C.3. Generic Residential/Commercial Customer Questions

- Q2. Have you visited Energy Trust of Oregon's "Find a Contractor" webpage before today?
1. Yes
 2. No
 3. Not sure
- Q3. How did you find out about Energy Trust's "Find a Contractor" webpage?
1. Internet search
 2. Word of mouth (such as friends or family)
 3. From another page on the Energy Trust website
 4. Other (please specify: _____)
- Q4. Are you looking for a new contractor or for information on a contractor you already know?
1. A new contractor
 2. A contractor I know
 3. Both of the above
 4. Other (please specify: _____)
- Q5. [If S1 = 1 or S4 = 1] What type of work are you looking to have done? Select all that apply.
1. Energy audit
 2. Heating or air conditioning project
 3. Insulation or air sealing project
 4. Planned remodel or addition
 5. Solar project
 6. Water heating project
 7. Windows project
 8. Other (please specify: _____)

Q6. [If S1 = 3 or S4 = 2] What type of work are you looking to have done? Select all that apply.

1. Appliance installation project
2. Compressed air project
3. Energy audit
4. Foodservice equipment project
5. Heating or air conditioning project
6. Insulation or air sealing project
7. Lighting project
8. Planned remodel or addition
9. Refrigeration project
10. Solar project
11. Water faucet/showerhead upgrade project
12. Water heating project
13. Windows project
14. Other (please specify: _____)

Q7. Which of the following best describes the stage you are currently at?

1. I'm researching a possible project
2. I have an idea of what I'd like to do, now I need to find a contractor
3. I've already contacted one or more contractors, but I haven't hired one yet
4. I've selected a contractor to do the work, but the work hasn't started yet
5. The contracting work has already started
6. I've finished my project
7. None of the above

Q8. Has using this site increased your likelihood of contacting a contractor?

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

Q9. Is there anything you were looking for on this site that you did not find?

1. No
2. Yes (please specify what you could not find) _____

Q10. How useful is Energy Trust's "Find a Contractor" page to you?

1. Very useful
2. Somewhat useful
3. Not at all useful

Q11. If you have any other suggestions on how we could improve the Energy Trust "Find a Contractor" webpage, please type them in the box below.

1. _____

C.4. Residential Demographics [ASK IF S1=1 OR S4=1]

Now we'd like to get some demographic information to learn more about our customers.

Q12. What range below captures your age?

1. 24 years old or younger
2. 25 to 34 years old
3. 35 to 44 years old
4. 45 to 54 years old
5. 55 to 64 years old
6. 65 years or older
7. Decline to answer

Q13. What is the highest level of education you have completed so far?

1. Some high school
2. High school graduate or equivalent
3. Trade or technical school
4. Some college
5. College degree
6. Some graduate school
7. Graduate or professional degree
8. Decline to answer

Q14. What is your race and/or ethnicity? Select all that apply.

1. Asian or Pacific Islander
2. Black or African American
3. Hispanic or Latino
4. Middle Eastern or North African
5. Native American
6. White or Caucasian
7. Decline to answer [*Programming note: exclusive answer*]

C.5. Commercial Firmographics [ASK IF S1=3 or S4=2]

Now we'd like to get some additional information to learn more about you and your organization.

Q15. What is your role at your organization?

1. President or owner
2. Vice president, CFO, CIO, or something similar
3. Facilities or operations manager
4. Landlord or property manager
5. Other (please specify: _____)

Q16. [ASK IF S1=3] Which of the following best describes the property type you are seeking contracting services for?

1. Automotive repair

2. Government, public, or education building
3. Grocery or convenience store
4. Healthcare facility
5. Industrial or agricultural
6. Multifamily/apartment building
7. Office
8. Public gathering space
9. Restaurant/food service
10. Retail store
11. Warehouse
12. Other (please specify: _____)

Q17. Approximately how many employees does your organization have in Oregon?

1. Less than 10
2. 10 to 25
3. 26 to 50
4. 51 to 100
5. 101 to 250
6. 251 to 500
7. More than 500
8. Don't know

C.6. Contractor Questions [ASK IF S1=4]

Q18. Are you currently an approved Energy Trust trade ally?

1. Yes
2. No
3. Not sure

Q19. [If 0 = 1] Are you visiting the site to look at your profile and/or to see where your profile appears in the results?

1. Looking at the information on my profile
2. Looking at where my profile appears in the results
3. Both of the above
4. Neither of the above

Q20. [If 0 = 2 or 3] Are you interested in learning how you can become an Energy Trust-approved trade ally?

1. Yes
2. No
3. Not sure

Q21. What types of contracting services do you provide? Select all that apply.

1. Architecture/design
2. Construction

3. General contracting services
4. HVAC
5. Insulation
6. Lighting or electrical
7. Roofing or siding
8. Solar panel installation
9. Water heating or plumbing
10. Windows
11. Other (please specify: _____)

Q22. Do you specialize in existing buildings or new construction?

1. Existing buildings
2. New construction
3. Both

Q23. Which of the following building types do you typically work in? Select all that apply.

1. Single family
2. Multifamily
3. Commercial
4. Government / institutional
5. Industrial

Q24. [If 0 = 1] How valuable to you is this website as a way for customers to connect with you?

1. Very valuable
2. Somewhat valuable
3. Not at all valuable
4. Not sure

Q25. What suggestions do you have for improving Energy Trust's "Find a Contractor" tool?

1. _____

C.7. Closing Section [ASK ALL]

Q26. Thanks for your feedback! Are you willing to be considered for a follow up 30-minute telephone interview to tell us more about your experience using the Find a Contractor webpage? Selected interview participants will receive a guaranteed \$50 incentive for participating.

1. Yes
2. No

Q27. Please provide your email to be entered into the drawing for a \$250 Visa gift card. *Your email will not be used for any other purposes.* [DISPLAY IF Q26=YES] Those selected for the follow up interview will be contacted via this email. If you are selected for an interview, you will be contacted within the next two weeks.

1. _____

Appendix D. Interview Guide

D.1. Introduction

Thank you for agreeing to speak with me today. I'm interested in learning more about your experience using Energy Trust of Oregon's Find a Contractor webpage and how you go about selecting a contractor. I'll also ask about some specifics on the page and any suggestions you have for improvement. Are you near a computer?

[If yes] Can you click on the screen-sharing link in the email? Do you see my screen? [Continue until respondent sees screen. Give up if it will not work after a few minutes]

[If no] Are you able to easily access a computer right now? When I ask you about some details on the webpage, it might be helpful if you could see the website to jog your memory.

I'll be taking notes as we talk, but I'd like to record this conversation to ensure the accuracy of my notes. Is that okay with you?

Any questions for me before we get started?

D.2. Tool Features

[Read] My first questions are about the Find a Contractor webpage.

- Q1. I'd like a little information about the building you were looking for contractors for. What city is the property located in?
- Q2. [If commercial] How many units are in the building? Is it just one building?
- Q3. In the survey, you mentioned you were looking up information on [**a new contractor/a contractor you already know**]. Please tell me more about what you were hoping to find on the site.
 1. [If unclear] Did you want a contractor for an urgent need, like an emergency replacement for something that broke, or was this more for an upcoming, planned project?
- Q4. Let's take a look at the screen share. I'm pointing to the drop-down menus that ask what you need help with. Please tell me what you recall about your experience with that part of the page.
 1. How useful or applicable were the options to you?
 2. Were the terms understandable or did they look like jargon to you?
 3. How about the number of options in the drop-down menus, were there too many, too few, or the right amount?
- Q5. Also on the page, here, is an advanced search. Did you notice the option for the advanced search?
 1. Did you use the advanced search?

2. [If yes] Was it helpful for you to have additional search options?? (If needed: Did it help you narrow the results? How useful were the options?)
- Q6. Do you have any comments on how the contractor search results were displayed?
 1. In terms of the number of contractors shown, were there too many, too few, or a good number?
 2. Were contractors in your area included in the results?
 3. What sort of information on location would be most useful to you? (Probes: What areas the contractor serves, the location of the contractor business)
 4. For you, what would be the most useful way to sort the displayed contractor results?
- Q7. What information, if any, gives you confidence that the webpage results contained quality contractors who would meet your needs? (Probe: Any challenges to knowing what equipment types a contractor specializes in?)
- Q8. Did you use the “Create a List” feature to generate a PDF with details on up to three contractors?
- Q9. [If Q8 = yes] How useful was that feature to you?
- Q10. [If Q8 = no] Did you notice this feature?
 1. [If yes] Why did you decide to not use this feature?
 2. [If no] I’d like to quickly show you how this feature works. Let me know if you think this would have been useful if you had noticed it and used it.
- Q11. **[If could not find something they were looking for]** You mentioned in the online survey that you could not find _____. Can you tell me more about what you were hoping to learn?
- Q12. You said in the survey that the Find a Contractor page was **[usefulness]**. Can you tell me more about why it was **[usefulness]**?
- Q13. In the survey, you mentioned that you were **[more/less likely]** to contact a contractor after using the Find a Contractor tool. What about your experience made you **[more/less likely]** to contact a contractor?
- Q14. What changes to this Find a Contractor webpage would make it more useful or valuable to you?

D.3. Contacting a contractor

[Read] The next set of questions are about looking for and hiring a contractor.

- Q15. Have you contacted a contractor after using the Find a Contractor webpage?
 1. Yes
 2. No → Skip to Q22
- Q16. [If Q15 = yes] How did you contact them, was that by phone, email, or a contact form on the contractor’s website?
 1. Did you visit the contractor’s webpage first?

2. [If email] Did you email them directly from the Energy Trust of Oregon site?
- Q17. [If Q15 = yes] Did you run into any difficulties as you tried to contact a contractor?
1. [If yes] What were those difficulties?
- Q18. [If Q15 = yes] About how many contractors have you contacted for this project? *[Use numeric response to trigger skip pattern. Also use open-ended to capture response if other than "one".]*
1. One
2. More than one:
- Q19. [If Q18 = 1] Was the contractor you contacted one you found on Energy Trust's website?
1. Yes
2. No
- Q20. [If Q19 = No] How did you find the contractor that you contacted? → Skip to Q22
- Q21. [If Q18 = 2] Of the contractors you contacted, how many did you find on Energy Trust's website?
1. [If some contractors not from FAC] How did you find the contractor(s) that was(were) not on Energy Trust's website?
- Q22. Had you looked at any other websites to try to find a contractor?
1. [If yes] What were those sites? I am thinking you might have visited contractor websites, manufacturer websites, professional association sites, aggregated sites like Angie's List.
2. [If yes] When did you visit those other site(s) – was it before or after visiting Energy Trust's Find a Contractor page?
- Q23. In the survey, you mentioned you were in [**contractor stage**]. Where are you now in the process of hiring a contractor? You might mention one of the following, or tell me something else:
1. I'm researching a possible project;
2. I have an idea of what I'd like to do, now I need to find a contractor;
3. I've already contacted one or more contractors, but I haven't hired one yet;
4. I've selected a contractor to do the work, but the work hasn't started yet;
5. The contracting work has already started;
6. I've finished my project;
7. Other (describe).
- Q24. Is this your first time trying to hire a contractor?
1. [If yes] How has the process been going for you?
2. [If no] How has this time hiring a contractor differed from previous times, if at all?
3. [If no and unclear] How experienced would you say you are hiring contractors. For example, is this something you've done a lot or something you'd say you're still new at?
- Q25. [If commercial] Our research suggests that few multifamily property owners or managers like yourself are using the Energy Trust Find a Contractor tool – instead it is mostly used by homeowners seeking contractors for their homes. If they are not using the Energy Trust

webpage, do you know how other multifamily property owners or managers are finding contractors for upgrade projects?

1. [If not covered in Q24] How did you find contractors in the past?
2. Why did you decide to use the Energy Trust website instead of [insert Q25.1 answer]?
3. Do you think it is a helpful tool for multifamily property owners or managers like yourself?
4. [If no] How can Energy Trust improve the Find a Contractor Tool to better suit multifamily property owners and managers?

Q26. What do you consider when deciding whether to hire a contractor?

1. What factors are most important to you? (Probes: price, quality, timeliness/availability, reputation, energy efficiency knowledge)
2. Are there any requirements imposed by [**if commercial = your organization, if condo = an HOA**] that you must consider when hiring a contractor? These may be certifications or insurance requirements.

Q27. How important to you is it to work with an Energy Trust-affiliated contractor? Why do you say that?

Q28. Would you be interested in resources or advice on hiring contractors from Energy Trust of Oregon?

1. [If yes] What type of resources or advice would be most valuable to you?

Q29. Those are all the questions I have for you. Do you have any other suggestions for improving the Find a Contractor webpage?

D.4. Closing

Thank you very much for your time. In order to send the \$50 Visa Gift Card to you, we need a physical address to send it to. Where would you like me to send it?

Thank you very much for your time. You will get an email that will include the \$50 gift card. You will have an option of a digital or physical card. Digital can only be used on phone (not google wallet) or computer purchases, and the physical card can be used anywhere, but it's mailed and will take longer. The cards have a 6month expiration date.