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New Homes Rater Focus Groups Research Report

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Table of Contents

1.	RESEARCH BACKGROUND, OBJECTIVES, AND ACTIVITIES	1
2.	FINDINGS AND IMPLICATIONS	2
	RATERS IN THEIR OWN WORDS	2
	KEY CHALLENGES	7
	IMPLICATIONS AND FUTURE RESEARCH	10
	APPENDIX	13

1. Research Background, Objectives, and Activities

The Northwest Energy Efficiency Alliance (NEEA) contracted ILLUME Advising (hence forth referred to as “ILLUME” or “we”) to gather information regarding the practices of the residential homes’ rater community in the Northwest, including insights into the decisions raters make regarding certifications, business models, and how they are positioning themselves in the market. We conducted focus groups and observations during the Home Efficiency Forum (HEF).

NEEA’s Next Step Homes program – branded as BetterBuiltNW (BBNW) to raters and builders – works to increase the adoption of advanced energy-efficient building practices in the Northwest and accelerate code adoption for single-family homes. Raters are an integral part of the Next Step Homes program as they serve as the central market actor and engage builders to participate in the program.

To understand raters’ practices and gather feedback on both BBNW and HEF, we conducted two focus groups in Portland during the HEF in October 2019. In this report, we provide a summary of findings and analysis from the focus groups and field observations during the event. Our focus groups and observations focused on three main research areas:



We spoke with 13 raters from across the Northwest, including Idaho, Oregon, and Washington. We recruited raters who were attending the HEF. These raters work in a range of business structures, from part-time sole-raters to raters working within a larger consultancy with anywhere from three to two-hundred jobs per year.

We also attended HEF and observed questions and topics discussed during the forum. We found that the themes discussed during the forum overlapped significantly with the topics we discussed during the focus groups. The findings from this research are primarily intended to inform decisions on future research opportunities with raters and builders, and secondarily, inform decisions on the Next Step Homes programmatic outreach and the content and direction of future HEF.

2. FINDINGS AND IMPLICATIONS

We structured our findings based upon emerging themes from the two focus groups with raters, as well as our observations during the forum. During HEF, raters' conversations and questions tended to focus on technical aspects of building, such as how a certain new technology works, or how other raters solved an issue in the field during construction. Our observations during the forum and the EarthAdvantage home tour (the day before) echo much of what we learned from the focus groups, with raters sharing stories and experiences from the field and discussing strategies to engage builders.

The findings we discuss below apply to the raters in our groups and those we observed during the forum; however, as noted, further research involving other actors is needed to completely answer key questions about the efficient homes market in the Northwest, as well as to verify these findings.

RATERS IN THEIR OWN WORDS

The raters we spoke to seemed acutely conscious that their profession was 'niche' and not broadly known—even within the building industry. When asked how they would describe their work to others, they acknowledge this was a difficult task and gave answers varying from “I wouldn't” to “green building or sustainability” to “house doctor.”

“I explain it's like establishing miles per gallons for houses, in terms of energy use. People seem to understand that.”

The variation in answers and general difficulty characterizing their role was broadly characteristic of raters' profession. Specifically, they shared that there is not necessarily a clear career path for raters and that the work varies by project and by day (which is discussed further in the following sections).

When asked what they liked most about their work, they discussed making a positive difference in the environment and helping improve people's homes and quality of life while also problem-solving within a complex setting. Aspects they liked less tended to focus on grappling with their perceived legitimacy with builders and inspectors – these business challenges are discussed further below.

RATERS' RELATIONSHIP WITH BUILDERS

Raters depend on builders for their work, and a major part of their job is developing these relationships. The raters we spoke to were very clear that they are dependent upon relationships with builders, who are the foundational element for most of the work raters conduct.

Establishing a relationship. Establishing long-lasting partnerships with builders is a necessity for raters, and they work hard to earn builders' trust – something they say can take years. Raters reported that this is a continual process for them—while they may not always be actively seeking new builder prospects, they tend to be aware of and pursuing opportunities to initiate, build, and maintain relationships with builders. They reported reaching out to builders in various ways, including cold calling, meeting on-site, reviewing permit-related documentation to identify who is building what and where, and coordinating introductions via referrals. Raters also engage builders by providing a pathway to incentives and using the incentives to get builders interested in building above code. Once raters have established a firm relationship with builders, they work continually to educate them on the benefits of high-efficiency building.

“As far as new construction builders, I mean, they’re all interested in the bottom line, right? Those utility incentives are the things that kind of get them to move where I actually want them to go.”

Value proposition to builders. Given the complexities of different jurisdictions, codes, and program requirements, raters note that builders have a hard time traversing the paperwork and timelines needed to apply successfully for incentives that are available to them. Accordingly, the value raters provide builders extends beyond helping them access incentives to helping builders navigate variations in jurisdictions' building codes, and program requirements and timelines for programs they work within. In this sense, raters see themselves as partners with builders.

“Yeah, it’s a partnership. We don’t undermine the builder ever, ever. We support them; we’re not trying to chastise them for doing something wrong like to catch them. Some people think we’re like inspectors and we’re going to catch them and make them do this, make them do that. They’re not going to have that client very long.”

Raters reported that creating tools such as visual timelines and flowcharts to help their builders understand information needs and timelines for certifications were highly effective. Some raters also noted they reach out and work with utilities advocating for changes to program requirements to make it easier for builders to participate in these programs.

“I’ve created a flow chart, which is proved hugely helpful because once [builders] see that... They’ve got a little map. They see what’s in the map.”

A few raters also spoke about the importance of having builders walk through homes while they are doing their field checks because then builders can better understand the rater's process and the value of the rater's services. Some raters also thought this can make builders more likely to engage with them when talking about their other building projects.

Although **design charrettes** were not a common tool used by most raters, one did note participating in a charrette for one of their builders who was starting their first LEED project. Overall, most raters felt getting a whole building team on-site at the same time and for an extended period would be a challenge in and of itself, given the busyness of builders.

“I did [a charrette] back about six years ago on my multifamily builder. The second project I did with them, they started out doing just the Energy Star and then the second project was 51 town-homes, and they decided they want to do LEED platinum. They'd never done LEED before. So, they really dived into the deep end, and we had like a six-hour design charrette with people from the community, all the subs and the architect and builder people.”

Certifications and participation in programs. Raters in the group reported having a variety of certifications and program affiliations. However, raters observed that because most builders and homeowners are not aware of what certifications mean, certifications do not necessarily help build their business or credibility among builders. They believe this is, in part, because there are so many certifications that it is difficult for most to emerge as a principle, recognizable program more broadly (e.g., outside the world of raters). A few raters thought having a flagship certification that was widely recognized in the NW region would help establish their credibility among builders and homeowners.

Business structure and mix of work. As noted, we spoke to participants from a range of business structures. Raters who are starting their business or maintaining a small rating business also conduct other services. Some split their time as insulation vendors, HVAC or insulation installers, or code verifiers. These raters tended to conduct a smaller number of projects per year – about forty annually and often work with a smaller number of builders (two to three).

Conversely, dedicated raters can grow their business to include multiple staff, each conducting 100 to 200 projects annually, working with more builders. Raters generally work with four to six builders, and most of these builders are larger builders with multiple homes.

“I've been in the industry for almost 15 years in various different roles. Currently, I am a home energy rater, and obviously, there is no one really doing this work in Central Washington, so when I moved up there, I was the only one. I was working remotely at the time, and I kind of realized, ‘Oh, there is potentially this opportunity.’ I still think there's a lot of opportunity to do it. I really just got the business going really only two years ago, so growing pains, but I figured it out.”

RATERS' PROJECTS AND DAY-TO-DAY SCHEDULES

Raters' projects tend to follow a similar path, but day-to-day schedules vary. When asked to describe a typical 'project lifecycle,' most provided a similar picture, starting with project initiation to final submittal of documents for the incentive (Figure 1).

Figure 1: Typical Project Path for a Rater

1. Start new project documents (job start forms)
2. Get plans from builder
3. Conduct basic modeling
4. Communicate with the builder about project status and site visit scheduling
5. Conduct initial site visit — frame, insulation and duct checks
6. Notify builders of any corrections needed
7. Follow-up with builders and inspect, if needed, prior to drywall installation
8. Conduct final site visit, perform blower door test, infrared scanning, insulation checks
9. Adjust data files and submit for incentives

One rater noted that this path is the “textbook” path, but that reality is often different. He noted that, at times, job start forms are not processed until the first inspection, initial inspection data is not inputted into the system until after the final inspection, rather than in real-time, and that sometimes raters cannot make it back to the site to verify that the recommended corrections were made. Other raters also noted they, at times, could not verify corrections were made because they were unable to inspect the site before the builder installed the drywall.

When asked about their opinions and interactions with Axis, most raters did not find issues using it and felt that while there was a learning curve and occasional software bugs, they felt it had improved substantively over time and found it to be a useful tool for their projects.

Unlike the project lifecycle, most raters observed that “a typical day,” did not really exist. Despite this, each rater provided varied responses to their “day-in-the-life” activity which included portions of various jobs (as laid out in the project path), developing relationships with clients and business development, performing modeling (all the raters we spoke to did their own and did not outsource), entering data into Axis, administrative tasks, and often a great deal of driving.

Figures 2 and 3 give responses about a “typical day” as a rater and highlight how variable their activities can be day-to-day.

Figure 2: Example of a Rater’s Variable Schedule

-THERE IS NO TYPICAL DAY. MANY PERSONAL ISSUES AT HOME WHICH TAKE PRIORITY SO THERE ARE DAYS I DO NOTHING RELATED TO RATINGS. OTHER DAYS I AM GONE ALL DAY. I DO NOT KEEP OFFICE HOURS. SOMETIMES NOT DOING ANYTHING UNTIL EVENINGS, SUCH AS PLAN REVIEWS AND ADMIN STUFF. WITH ONLY 4 MAIN CLIENTS I HAVE BEEN INTERACTING WITH THE SAME PEOPLE ON JOB SITES FOR SEVERAL YEARS AT LEAST (MOSTLY). FLEXIBILITY TO DO WHAT NEEDS TO BE DONE BOTH PERSONALLY FOR WORK

Figure 3: Example of a Rater’s Variable Schedule

My business is multi-faceted so every day is different.
I often text builders to see where their projects are at which they respond to better than email.
I review plansets + do energy modeling in REM/Rate.
I work with a contractor sales rep at my local lumber store to gain builder leads + do site visits.
I do rough + final inspections including blower door tests.



KEY CHALLENGES

In this section, we discuss the main challenges that raters face in the energy efficient building industry, most of which involve growing their business, establishing their legitimacy, and ensuring homes are actually efficient. The main challenges that raters experience, include:

- **Limited awareness and knowledge of raters and their role among other market actors** – builders, appraisers, realtors, and home buyers – especially when it comes to the value and services provided by raters.
- **Keeping up to date with changes to code**, as well as code variations between jurisdictions.
- **Spotty enforcement of codes by jurisdiction**, which impacts their perceived value, legitimacy, and authority in the industry.

LIMITED AWARENESS AND KNOWLEDGE OF RATERS AMONG OTHER MARKET ACTORS

Our observations during the forum and discussions during the two focus groups suggest that the lack of awareness of incentives for builders and home buyers was another major challenge. Accordingly, a key aspect of business development for raters involves educating and engaging builders about building efficiency. That said, raters noted that builders' need for continuing education and training from other sources, like BBNW. Although raters did not have a clear consensus on how organizations, like BBNW, provide these trainings or their format, some raters did discuss successful builder engagement through open-house tours hosted at different construction stages.

“I would say they’re unsure what a rater is. ‘Who is that guy, and why is he creating that weird frame order for the house? What do they do? Why are they doing it?’ We go and talk to them about what we do, but if the general public isn’t well informed it’s harder [to get work].”

Many raters also thought that basic awareness about the available incentives and services provided by raters needs to be improved among other market actors – including appraisers, realtors, and home buyers. Raters, both during the forum and in the groups, noted that engaging these other market actors could also facilitate their ability to engage builders.

Specifically, raters thought that they could better engage builders if the value of efficient homes was more clearly reflected in home prices and conveyed to home buyers. This would involve educating realtors and home appraisers about the benefits of energy-efficient homes, including better indoor air quality and comfort. A few raters during the forum’s question and answer session also suggested that increasing general awareness of efficient buildings among potential home-buyers could also spur builders to build more efficient homes.

As such, many raters in the groups suggested efficiency organizations and BBNW could provide co-

marketing material and general awareness marketing campaigns. One rater discussed the benefits they saw with Energy Star co-branding and thought that leveraging the name of local organizations could help provide legitimacy.

“Marketing for me... You have to create your own marketing materials, and I am like not the best graphic designer... That’s the biggest thing because they’re already doing education. It’s not necessarily [for] builders, but it’s just about the community of buyers, and realtors, and appraisers.”

When we asked raters how NEEA, participating utilities, BBNW, and HEF can help support them, we observed that raters tend to think of these organizations and conferences as one entity. In future research with raters, builders, and owners, we recommend investigating how each market actor interfaces with BBNW, HEF, utilities, and NEEA to better understand how Next Step Homes can support raters.

KEEPING UP TO DATE WITH CHANGES TO CODE

While tracking code variations and changes is a key service that raters provide to builders, it can still be challenging for raters to stay current – one of the reasons some raters attended HEF. Code changes were a particular concern for several raters who worked in both Washington and Oregon because it meant tracking changes in two states, in addition to the local jurisdictions. Raters mentioned concern about code changes and the intricacies across jurisdictions in both the focus groups and during the HEF rater question and answer session.

Raters felt that state and local codes are a point of anxiety for builders, especially since builders are confused by code changes and have difficulty keeping track of the changes; sometimes because building code officials do not seem always to provide information on code changes.

“Builders are still struggling to hit the current energy code, that max energy code, just coming along, and I guess blindsiding them.”

In addition to learning about changes to code and standards from organizations, like BBNW, **raters want a better understanding of the implications of code changes and strategies they can offer their builders to meet code (e.g., new technology/products, building strategies, etc.).** This is particularly important for raters working in areas, like Seattle, with more stringent codes since the “low-hanging fruit” for improving building efficiencies are going away with code updates.

SPOTTY ENFORCEMENT OF CODES BY JURISDICTION

Raters, from both groups and the HEF sessions, noted their frustration with inconsistent enforcement of energy codes across jurisdictions because it impacts their value, legitimacy, and authority in the industry. Most raters thought that the energy code enforcement was spotty because inspectors “don’t care” about the energy-related components of the code; rather, inspectors primarily focus on what they consider the “most vital” aspects, like structural soundness. This may suggest that buildings are inconsistently built to code, and code is inconsistently enforced during inspections.

“After all of the rest that we do as raters, trying to help builders build a better home, more comfortable, better air quality, that an inspector can go in behind us and basically toss out the energy code, not care about [it] at all.”

A possible by-product of inconsistent code enforcement is that builders do not always implement the changes raters prescribe to meet code. Although this depends on the builder-rater relationship, it was commonly voiced as a point of frustration among raters in the group. This seems reflective of raters operating within the industry as “middle-people” with little authority, which can make them seem like an “opulent” service.

Raters also see spotty code enforcement as detrimental to the builders who are “doing it right” – meaning they meet the code – because in reality, most homes are not built to code. One group spent considerable time discussing that some builders will find workarounds to “meet code.” For example, one rater recalled that some builders were reticent to move from a 10-inch floor joist to a 12-inch floor joist to accommodate higher insulation. Builders who wanted to stay with 10-inch joists would say they used an R38 batt insulation but were not necessarily hitting an effective R38 insulation level. But the rater was skeptical that this actually happened since getting a true R38 batt into a 10-inch joist is substantially harder than a 12-inch R38 batt. In these cases, the rater noted that the only way to verify that the builder did install the correct insulation would be to “go down there and spend 20 minutes crawling around...trying to look for something.”

When builders side-step the system, it can impact builders participating in energy efficiency programs because the difference in efficiency is based on performance above code rather than performance compared to actual build efficiency. Raters noted that this difference between the actual performance of homes versus theoretical code may prove to be a large challenge in the future – for energy efficiency programs and program builders – as code becomes more strict and harder to substantially improve upon. This is already a concern for some raters working in areas with more stringent code.

Our incentives tend to be based on a code-built house, and they’ll know that a code-built house is not necessarily reality. I think that they really should be comparing it to what’s really being built, not what the code says.

Given raters' perceived impacts of inconsistent code enforcement, most raters expressed frustration towards building inspectors since they are the authority in the industry but do not always uphold the energy code. Some raters thought that inspectors did not value the role of raters, with one recalling that sometimes inspectors will undercut raters by approving a home before a rater verified it met the energy code.

“I’ve heard code inspectors say things like, ‘we believe that these homes are being built too tight as it is.’ And they don’t believe in energy efficiency, so literally that entire chapter of code is thrown out.”

To address some of these issues, raters suggested BBNW work with state regulators to provide regulation around inspections and the use of third-party inspectors, to help increase rater legitimacy.

IMPLICATIONS & FUTURE RESEARCH

IMPLICATIONS AND OPPORTUNITIES FOR BBNW AND HEF

Raters said that the HEF was a useful resource, which they primarily attended to network and learn about best practices for the field. When asked about the future role of HEF and BBNW, raters had a range of ideas from helping people early in their career with more basic training to advising experienced professionals of changes and innovations. To this end, raters said they would like more training opportunities on the following:

- New practices, codes and standards in the NW area (including upcoming changes),
- Strategies for raters to prepare builders for the code changes, and
- The fundamentals for building in an energy efficient way.

Given the concerns raters expressed around codes and standards in the Northwest region, there is clearly a role for BBNW and other organizations to serve as proactive guides for both raters and builders for any potential changes to future codes and standards.

“I’d like to see more of procedural training and things like this...And carbon is in the energy code now. So, we have got to understand that...we’re going to [need]...[forums like this] to ask about this...and I mean the goal is no gas, right?”

Ultimately, raters wanted help in **“making people want a labeled home.”** In other words, raters need help creating the demand for homes that have been certified/rated by building scientists through the various means discussed above aimed at increasing the visibility, recognition, and legitimacy in the industry.

These strategies included:

- Working with state regulators to provide regulation around inspections and the use of third-party inspectors, to help increase rater legitimacy,
- Providing raters with access to co-branded marketing materials, and
- Conducting a general awareness marketing campaign about the value of energy-efficient homes and the services raters provide.

FUTURE RESEARCH

The focus groups and HEF observations provided consistent evidence of how raters seek out builders, build their business, and conduct modeling and inspections for builders. From the rater's perspective, they play a key role in pushing efficient building practices, though not nearly as pervasively as they think is possible given the lack of awareness among builders.

Despite the variation day-to-day, raters provided consistent descriptions of their work and how they seek out builders to create this work. However, given that we have not spoken to builders, and given the number of challenges they described relating to code and inspections, we cannot with assurance assess their importance or confirm that they are the main market actor pushing the efficient building market forward.

While the data we collected corroborated the idea that raters are a vital market actor for NEEA and its stakeholders to engage with, they are unlikely to be the only one. Raters themselves note the need to increase builder awareness of these programs, as well as the need to create a framework where inspectors require code verification, to increase the number of new efficient homes. As such, we recommend NEEA corroborates these findings with other market actors who do and do not build energy-efficient homes. Among those who do focus on energy efficiency, we recommend incorporating builders who do and do not work with raters as part of their process. Specifically, we recommend mapping out the full residential and multifamily new construction market by:

- Conducting a literature review of residential new construction homes research, both from prior energy efficiency program evaluations and from market research literature.
- Interviewing a small number of builders, including small owner-builders, medium builders, and large builders with multiple teams of contractors.
- Surveying a larger number of builders to quantify the new construction market.
- Surveying a small number of architects and other building designers to understand how, if at all, these actors interface with builders and raters.
- Interviewing specialty subcontractors for critical energy-using components, such as HVAC and insulation.
- Riding along with raters to observe how they interact with builders and BBNW.

Gathering perspectives from a range of market actors would help understand the path and drivers of those already participating in energy efficient building, as well as identify and support those whom energy efficiency organizations hope to reach in the future.



Appendix A. Focus Group Guide

Introduction (2 Minutes)

Thank you all for being here today. My company, ILLUME Advising, is an independent research company working with NEEA (Northwest Energy Efficiency Alliance) to understand how various home builders and raters work together in the context of energy efficient design and building.

We really value your open and honest feedback, and I want to stress that this is an open discussion and there are no right or wrong answers. Also, everyone has their own unique perceptions and experiences, so one ground rule is that while it's fine to disagree, please be respectful of each other's opinions.

Before we begin, we will be recording these conversations for note-taking purposes. Everything you say will be kept confidential and we will report our findings in aggregate only. We won't attach your name or any other identifying information to any of our results or findings. Is everyone ok with us recording this conversation?

Help yourselves to snacks and drinks and please put your mobile phones on silent for the session.

Introduction and Background (10 minutes)

1. If you would, please start off by telling me **your name** and a bit about **yourself** and **about your business**.
 - a. What is the **make-up of your business** (e.g. one person or part of a larger company)? If part of a larger company, what is your role?
 - b. **How long** have you been in this business?
 - c. How did you **get started** in this field?
2. Next it would be great to get a **little more detail on your business**.
 - a) What **types of homes** do you work on (tract, custom, what fuel types, prevalence of one over another etc.)? *[Probe: the split among fuel types.]*
 - b) **How many** homes do you typically rate annually?
 - c) In what **geographical areas** do you usually work? *[Probe: which parts of the 4 states, is it more west or east of I-5 corridor, how far have they travelled to work?]*
 - o *If any work in more than one state:* What are the main **differences state to state**?
 - d) Who typically buys the homes you work on? *[Probe for age, income, preferences, etc.]*

Role and Day in the life (20 minutes)

3. How would you **describe your job and what you do, to someone who has never heard of raters** in a sentence or two? Take a minute to write this down, then I'll ask you to share.
 - a. Jot down the two to three things **you like most** about being a rater? **Least**?
4. *Hand out worksheet.* Can you describe **what a typical day looks like** for you going about your role as a rater?
 - a. Is this **full or part-time work**? If part-time, what other jobs do you have and what proportion of this work do you do relative to rating.
 - b. Is this typical of other raters you know?

Group Activity: Next I'd like to get an understanding of **the lifecycle of a project**.

5. *Moderator draws a line across the whiteboard and hands out worksheet.* On the left side is the start of a building project, on the right is its completion. On your sheet of paper, please write down the key stages or steps in the project starting from the beginning of a building project in which you are involved through to its completion, circling the steps that you're involved in and noting with whom you interact. Then we'll put them up here on the board.
 - a. *Gain an understanding of what tasks raters undertake*
 - b. *Who they regularly interact with throughout projects? [Probe for buyers, realtors, inspectors, etc.]*

Business Structure (25 minutes)

6. How does your **business** work?
 - a. Do you **do the modeling yourself** or **do you subcontract that work to verifiers**, etc.?
 - b. How do you generate new **business**? How do you find and pursue leads?
 - c. What **certification programs** do you work with and how?
 - d. Who or what sort of companies do you **compete** against? *Listen for other raters, alternative certifications, lack of interest in some geographies.*
 - e. How do you **differentiate yourself**?
 - f. What do you view as the particular **strengths** of your business?
7. What **challenges** do you face in your business?
 - a. What do you feel are the primary **gaps** in your business? *[Probe for operations.]*
 - b. Do you feel being a rater is a **sustainable business** on its own? Can it be?
 - c. How do you see **your business model changing** in the next three to five years? What do you think the future is for this field of work?
 - d. What might **improve the business environment** for you and raters in general?
 - e. Are there organizations or entities that could assist in this?
8. What are your **relationships with home builders**?
 - a. **How many** do you work with? Do you feel this is a **sufficient/manageable** amount? If not, what would be?
 - b. What **kind of homes** do you collaborate on?
 - c. How do you **meet** them?
 - d. How does the **relationship start** and then grow?
 - e. *Moderator to get a feel for how **trust** works in the relationship.*
 - f. There can be a tendency in the industry to think of energy efficiency, durability, and IAQ as the most important aspects of better buildings, but how does this definition align with a consumer or builder's definition?
9. How do you/your company **adjust to changes in development standards** (e.g. government standards, buildings codes, energy codes, etc.)?
 - a. How do these **changes affect your business**? Are these net-positive or negative, or does it depend on the change?
 - b. How do you **find out about these changes**? *[Probe for affiliation with professional associations, local government development department.]*

HEF 2019 and the BetterBuiltNW Program (10 minutes)

The next set of questions will relate to this conference and your experience with the BetterBuiltNW and other programs you participate in.

10. How did you **find out about the Home Efficiency Forum** and what motivated you to register?
 - a. Is this your **first time attending** or have you been before?
 - b. What do you **gain from attending**? *[If they attend regularly, probe on value of attending conference more than once?]*
 - c. How could it be improved? *[Listen for increasing demand among builders.]*
11. What **other trainings** do you attend or seek out? *[Probe: Which ones have been most useful to you and how/why?]*
 - a. Are there any that you wish **builders participated in**, in particular? What information do you wish you could put in front of them?
 - b. Are there **certifications** you seek out? *[Discuss certifications they have and might pursue in the future.]*
12. How did you **first hear about BetterBuiltNW**?
 - a. How would you **describe it** to someone who had never heard of it?
 - b. What are your **general perceptions** of BetterBuiltNW (positive/negative)?
13. Why did you or your company **decide to participate** in BBNW?
14. How would you **describe your overall experience with BetterBuiltNW**?
 - a. What do you see as the **primary benefit** of using this resource? Why do you say that??
 - b. What is one thing BetterBuiltNW could **do or provide to help you and your business** the most?
15. How, if at all, do you think **being affiliated** with BetterBuiltNW impacts your company's business?

Closing (5 minutes)

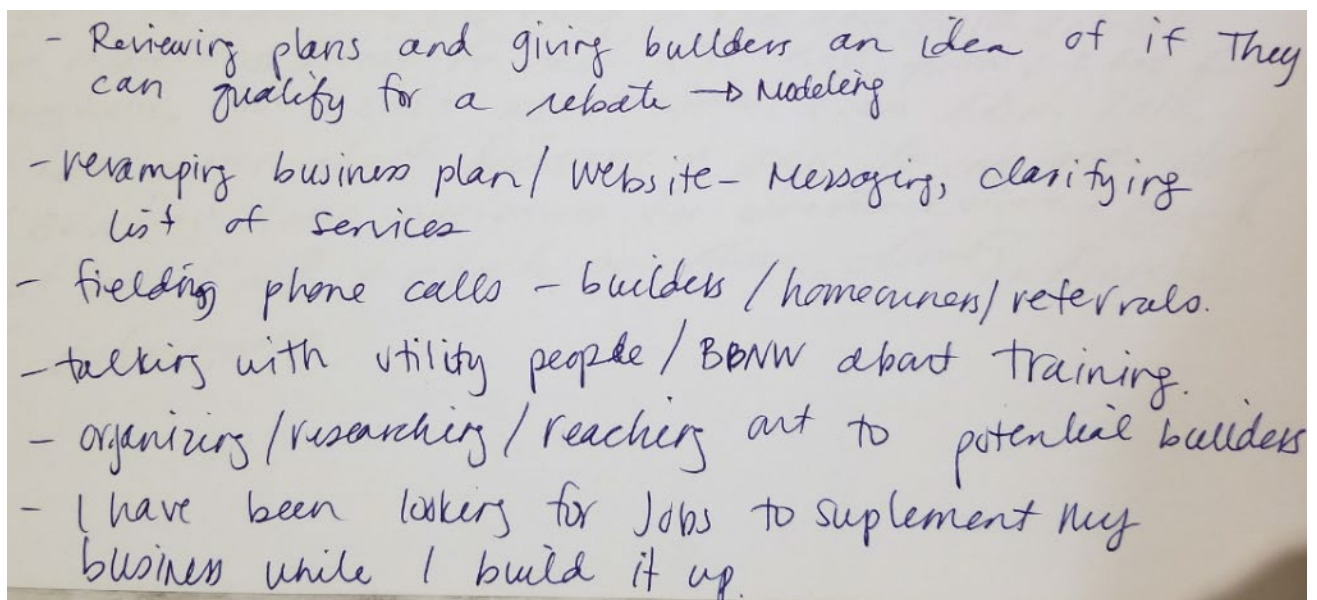
Thank you for taking the time to share all of your opinions and experiences with me.

16. If you would be willing to speak about these topics further with Utility program managers/staff members, please leave your business card with me as you leave!

Appendix B. Examples of Rater Responses to Focus Group Activities

Day In the Life – Rater from Central Washington

- Reviewing plans and giving builders an idea of if they can qualify for a rebate -> modeling
- Revamping business plan/website – messaging, clarifying list of services
- Fielding phone calls – builders/homeowners/referrals
- Talking with utility people/BBNW about training
- Organizing/researching/reaching out to potential builders
- I have been looking for jobs to supplement my business while I build it up.



A photograph of a handwritten list of activities, likely a transcription of a focus group response. The text is written in dark ink on a light-colored, slightly textured paper. The list consists of seven bullet points, each starting with a hyphen. The handwriting is cursive and somewhat informal, with some words written in all caps (e.g., 'Modeling', 'BBNW'). The list matches the typed text in the block above it.

- Reviewing plans and giving builders an idea of if They can qualify for a rebate -> Modeling
- Revamping business plan/ Website- Messaging, clarifying list of services
- fielding phone calls - builders / homeowners/ referrals.
- talking with utility people / BBNW about Training.
- organizing / researching / reaching out to potential builders
- I have been looking for Jobs to supplement my business while I build it up.

Day in the Life – Rater from Portland Metro

MORNINGS	AFTERNOONS
Check emails	Verification testing & inspections, reports
Go out to scheduled appointments with customers to walk job sites and get measurements for insulation quotes	Data entry & processing
Do verification inspections and testing, reports	Come back to home office and work on quote, energy modeling
Make phone calls to set up appointments	Uploading REM files
	Call back customers to schedule appointments

<u>Mornings</u> check emails print/process any needed paperwork Go out to scheduled appointments with customers to walk job sites and get measurements for insulation quotes Do verification inspections and testing, reports make phone calls to set up appointments	<u>Afternoons</u> Do verification testing + inspections, reports Data Entry + processing Come back to home office and work on quotes, energy modeling uploading Rem Files call back customers to schedule appointments
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Job Life Cycle—Rater from Portland Metro

- Identifying which builders are where using jurisdictional data and other online tools
- Calling on builders to schedule meetings
- After presenting on service offerings @ meetings, asking for plans to run REM
- Using REM models to identify whether or not a builder's home qualifies for utility incentives & if not, running modeling scenarios to determine what needs to be installed to meet certain thresholds
- Consulting on code & upcoming code changes
- Consulting on various building science related issues that impact builders projects
- Conducting pressure diagnostic testing for code compliance & certify home per code

Identifying which builders are building where using jurisdictional data and other online tools
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Consulting on code & upcoming code changes
Consulting on various building science related issues that impact builders projects
Conducting pressure diagnostic testing for code compliance & certify home per code

Job Life Cycle – Rater from Portland Metro

TEXTBOOK VERSION	REALITY
Get PO or work order from customer	Sometimes new starts and POs don't get processed until the time of frame inspections
Book order with AR	Sometimes the REM files not created until the end after home is finished
Enter new stats into project mgmt software	Sometimes data not entered into project mgr software until after the fact rather than in real time
Create plan review take offs and REM file based on plans -> send to EFL	Sometimes can't make it back to job site to verify if corrections were made. Have to take builders word for it if it's something covered by dry wall
Conduct frame & insulation inspections and test ducts at rough – data entered in real time	
Notify builders of any corrections needed & follow up to make sure they get corrected before drywall	
Conduct final blower door inspection	
Adjust REM files and upload to Axis	

<u>Textbook version</u>	<u>Reality</u>
Get PO or work order from customer	Sometimes new starts
Book order with AR	and POs don't get processed
not Enter new starts into Project mgmt software	until the time of Frame inspection
Create plan review takeoffs and REM file	Sometimes REM files not created
based on plans -> send to EFL	until the end after home is finished
Conduct Frame + insulation inspections and	Sometimes data not entered into
test ducts at rough - data entered in real time	project mgr software until after
Conduct Final + blower door inspection	the fact rather than in real time
Adjust REM files and upload to Axis	
Notify builders of any corrections	Sometimes can't make it back to
needed + follow up to make sure	job site to verify if corrections
they get corrected before drywall.	were made. Have to take builders
	word for it if it's something
	covered by dry wall.