

Milestone #2: Interview Report

Annie Lu, Mia Oscarsson, Kelly Tong, Eileen Zhang

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University of Washington

Department of Human Centered Design & Engineering

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Introduction

The goal of this user research interviewing stage was to understand two different user spaces:

1. **Parks and Community Services staff**, such as park rangers: their experiences / issues they've seen with visitors, signage, trail safety, trail navigation
2. **Regular Park visitors**: their behaviors, needs, and accessibility concerns they face as they interpret signage and navigate the park.

These interviews gave us a more informed understanding of the current state of signage in Bellevue parks. Through our data analysis, we've developed recommendations both for the City of Bellevue and for our next phase where we'll design a signage system.

Interviews

Methods

Our team conducted 30-minute interviews on Zoom with 4 park visitors and 1 park staff; each meeting was facilitated by one team member while another team member took notes. Within the park visitors, we surveyed two user groups: Bellevue Trail Stewards, who are expert trail users, and average park users from diverse and non-English speaking backgrounds.

All participants were informed of the purpose of these interviews and their expected benefits and were asked to consent to anonymized audio recording for data analysis purposes only. Their names were not attached to any data. These audio recordings are stored securely on our OneDrive, which is password-protected and requires two-factor authentication from the University of Washington. All participants were compensated with a \$20 Tango gift card for their time; this was funded by our team's capstone funding from the Department of Human-Centered Design & Engineering.

We asked two different sets of questions: one set for park visitors, and one set for the park staff. The interview was semi-structured, where the interviewer had the discretion to adjust their questioning to fit the conversation and ask follow-up questions. See [Appendix A](#) for interview questions.

Participant Group Types

Expert users – V1 and V2

Our expert users come from the Bellevue Trail Stewards, a volunteer organization of citizens who regularly visit Bellevue trails and report issues in the park using the MyBellevue app. (The MyBellevue app enables users to submit issues with city infrastructure.) These users are highly familiar with the parks, having been visiting Bellevue trails for years if not decades.

Average users – V3 and V4

Our average users come from referrals through the researcher's connection with the City of Bellevue. They have visited multiple parks and trails within the City of Bellevue and represent more diverse needs than the expert-level Bellevue Trail Stewards. For example, their experiences of the parks with their families bring a unique perspective to how age plays a role in the need for accessibility at the parks.

Park Staff – R1

Park staff or rangers work at Bellevue parks and trails. They perform maintenance and rule enforcement activities to ensure that the park is a safe and welcoming place and act as a resource for park visitors' questions and concerns.

Findings

We first describe the behaviors of the expert users, the average users, and the park staff's experiences. We then discuss accessibility concerns, needs and desires, and overall recommendations developed from the interviews. See [Appendix B](#) for interview transcripts.

Expert User Behaviors – V1 and V2

V1 and V2 both reported that **they do not rely on signage and do not use the signs as they are familiar with the trails**. On that note, they have **no difficulty navigating the Bellevue Parks trails** because they are so familiar with the trails and have been there so many times.

“They have the little post signs around, I'm sure you have them or have seen them, that have the arrows... just arrows to the streets, basically, is how they are set up. So it'll say, you know, 0.7 miles to Lakemont Boulevard, for example... I didn't find them that helpful, because it doesn't tell you anything about where you're going other than the street name” (V2, 2:56).

Both V1 and V2 reported high engagement with the park. This includes **stewardship, caring about the trail conditions, and reporting repair needs** (i.e. a broken fence).

“Being a Bellevue Parks Trail Steward, I stop when I see anything like branches across the road or garbage, I'll stop and pick those up. If I see a large tree that needs to be removed with a chainsaw, I will submit an incident report [on the MyBellevue app]” (V1, 3:05).

Average User Behaviors – V3 and V4

V3 and V4 often **visited parks or trails with others such as family members like their children, mother, or friends with children**. While both participants reported not often noticing park signs, V4 described how they paid more attention to signage on their first visit to a new park compared to a park familiar to them (V4, 3:30).

Both participants **stressed the importance of having clear, readable navigational signs especially if they were bringing their young children or older family members**. The navigational signs provided them with an understanding of what to expect at the end of the pathway, how much distance it might take, and how much time walking the path would take. One participant called out Highpoint Trail Head specifically as a trail with great navigational signage, at this trail they felt comfortable enough to let their elderly mother walk ahead of them because she had the signage to rely on (V3, 10:51). Another participant wanted to see maps on navigational signs, not just arrows to provide direction (V4, 4:07)

“Things like where [the signs] tell you the distance is helpful, especially if you're with little kids. Because you don't want to take them on a path and find out it's way longer than you expected. And also with Grandma, if she wants to go on a walk, we need to know how far it is for her” (V3, 8:06).

Additionally, one participant described how **if there was not enough navigational signage they had to rely on their phone**. However, if their phone was not up to date with the most recent trail information or their battery was low then they would still become lost. They explained how they would much rather not have to use their phone and rely on the physical signage at the trails to navigate around.

“At the end of the bridge there were three other ways I could go to and there was absolutely no sign. And so, I didn't know where to go. And then when I looked on my phone – the thing is, my phone did not have all the pathways that would show me where that specific trail would lead me to and therefore, I didn't know where to go” (V4, 4:07).

Both participants brought up how the **bathroom locations were somewhat hidden and that having easy access to bathrooms was vital, especially with younger kids**. They both knew where the bathrooms were located because they were familiar with the parks they were describing – Crossroads Park and Bellevue Downtown Park – but they recognized that if one did not have prior knowledge, it would be hard to know where to look. Both expressed that having more signage around the locations of bathrooms or having a more visible location for bathrooms would be ideal.

“If you knew this Community Center, you would know to go to that place for the bathroom. But there's no sign that tells you that...That's the big part, especially with kids, the bathroom” (V3, 5:42).

Park Staff Experiences – R1

For the interview with park staff, we categorized our findings into relevant duties of the ranger. One of these tasks includes the **maintenance of the signs**. When it rains, dust/pollen sticks on the signs at the parks, making it difficult to see and read the signs (R1, 12:00). Part of the ranger's job is to **clean the signs** however, due to the frequency of rain, it makes this cleaning task nearly impossible to complete every time.

“As far as maintenance goes, our summer Park Rangers will clean a lot of the interpretive signs, just because every time it rains in the spring and all the pollen washes off the trees, it lands on the signs and then really quickly it makes them look kind of dingy and really challenging to read... So that's a challenge because keeping up with that is just simply not possible” (R1, 12:00).

Another main duty of the ranger is to **assist park visitors**. R1 describes these interactions (R1, 00:39) which include answering visitors' questions/concerns, **reminding people to leash their dogs which R1 emphasizes is the biggest issue**, talking to rule violators to uphold the City of Bellevue Park rules, communicating park updates, and program-related activities. R1 also comments on managing seasonal staff as the staff team changes depending on the time of year.

Accessibility Concerns

Expert users explained that they were so familiar with the parks that they didn't need maps for navigation, but one expert user did note that in their earliest experiences with the parks, they

learned park navigation by exploring, rather than from signs. We believe that **learning by exploring isn't an accessible method of learning navigation**.

“Sometimes you just have to explore to learn, you know, what street [the trail ends at]... I may not know that street until I actually get on it, and then I realize, oh, this is where I came out” (V1, 8:52).

This is supported by the average users' experiences: both average users described **difficulties navigating** to places in the park, such as the bathroom, and relying on phone GPS-supported maps, which one user noted was often inaccurate (see Average User Behaviors). Expert users also said that the **signs were difficult to read from afar**, and one expert user and one average user said it was difficult to read signs while driving in (V1, 18:41), (V3, 6:41).

Regarding trail difficulty, expert users said it would be **helpful to have signs marking either changes in elevation or the difficulty level of a trail**:

“One possible improvement would be some way to identify how strenuous the trail would be for somebody who might have some mobility limitations” (V1, 19:05).

“[Providing] approximate elevation gain... showing how many feet of elevation the trail would require if you took it to the end, might be a possible help to somebody [to] consider whether or not to go on a trail based on how steep it was” (V1, 20:28).

Regarding the Crossroads Park guidelines sign, expert users noted that the signs were **quite wordy and may contain too much information** for people to want to spend time reading it (V1, 13:42), (V2, 12:52). Interestingly, one of the average users attempted several times to make sense of what rules the symbols indicate (we believe those symbols only serve decorative purposes). This shows that **visitors may assume symbols represent rules**, so they shouldn't be used for decoration:

“The [symbol of] one person leaning over [the flower], I would assume kind of like, maybe, “Don't pick the flowers.” But you know, I would think if you guys would want to say, “Don't pick the flowers,” you know how sometimes there's a sign... like a round circle with a bar across... to say, “don't do that. And same thing with the [symbol of] ducks. It seems like the person's leaning over the ducks. But there's no restriction [indicating not to feed the ducks], at least not pictured visibly” (V4, 18:41).

More broadly, one average user noted that visitors might have difficulties noticing the signs because the **current teal color blends in with the background**:

“I get [that] you want [the sign colors to] aesthetically to fit in, but if it blends in too much then people can't find this thing” (V3, 6:14).

Finally, the ranger said that the signs get very easily covered by dirt, dust, and pollen after rain, and it isn't possible to constantly clean the signs after each rain (see Park Staff Experiences).

Needs/Desires

Both V1 and V2 expressed that they would like **features on signage that better indicated the difficulty of trails (elevation)**.

“But if you have elevation on the trail heads... how far they have to go and what kind of hike it is... even better would be you know, in a trail running app, they have like the hills [and] how far up it goes. That would be really useful because a lot of times down here on the spot... Bellevue [is] really not sort of in the flattest part” (V2, 17:58).

“One possible improvement would be some way to identify how strenuous the trail would be for somebody who might have some mobility limitations” (V1, 19:05).

V2 also indicated that **street names on signs** would better assist with navigation. Both V1 and V2 expressed that they prefer the signs to have **fewer words and simpler graphics/icons**. They also expressed that they’d prefer it if the signs had some **indication of directionality or wayfinding** and a way to find exactly where you are.

“At some of the major trailheads they could maybe install a simple map of the Greenbelt area that shows the trail so you could kind of get a visual impression when you first enter the trail, what your options are, where you'll be headed, and what direction you're heading” (V1, 09:24).

V2 expressed that they would like the signs to be **simpler and prioritize rules that are common issues, such as off-leash dogs**.

Both V3 and V4 expressed that they would like **indicators (such as in the form of signs) for where the bathroom is**, especially for V3 as they often go to the parks with small children.

“If you knew this Community Center, you would know you'd go to that place for the bathroom. But there's no sign that tells you that. So, that would be helpful because we assumed that's Community Center. You could probably go in, but it's not clear. That's the big part for, especially with kids and the bathroom” (V3, 05:42).

V3 and V4 also expressed that they would like **maps throughout the trails to indicate directionality**, and to aid in helping them get back to where they started. V4 also remarked that the **signs at the intersections were confusing** as it was hard to figure out how to get back.

“So, for example if you’re walking for a bit. Then I would want the sign to be not just one sign. Meaning not one map. But I would want several maps. As you walk a little bit more. Maybe like a mile or more” (V4, 21:11).

“Divisions that are happening because eventually it's going to get confusing and then you would want the map to give you clarity. [Imagining a sign] This is where you're at and then give you an idea how much more do you have to walk, you know, are you halfway there or have you walked maybe 1/4 and you still have 75% to go?” (V4, 21:11)

Throughout the interview, R1 emphasizes the **need for a database accompanied by a map to record information about all the signs**, including their content and location. The reason for this is so that for future changes, the signs would be quickly located and updated. Additionally, R1

suggests the **use of A-boards as temporary signs to catch park visitors' attention** versus the fixed signage (R1 19:03). A-boards are mobile and can be easily moved during the seasons as well as moved to different areas of the park. Some key insights R1 suggests for enhancing park signage is through **providing reasons or consequences for why the park sign rules are important** to encourage visitors to abide by the rules. Also, adding features such as **colors or borders** to make the sign more noticeable (R1 20:09).

Conclusion

Main Takeaways

Improved Signage Information

Consistent among expert users, average users, and park rangers, there were identifiable opportunities for improvement of park signage. The following list illustrates the most impactful ideas brought up by interviewees:

- For all parks, having clear signage directing users to nearby **bathrooms**
- For trails, signage that identifies **elevation or trail difficulty** to better match users' expectations when walking trail parks
- For wayfinding signs on trails, the **inclusion of maps** would be helpful for users to orient themselves within the park
- For wayfinding signs, having information on relevant **street names** would be helpful for users to orient themselves

The interviewees critiqued the park guidelines sign during the interview, which led to specific design recommendations related to the park guidelines sign. These common ideas that were brought up by multiple interviewees include:

- Identifying the **motivation** or reasoning for park guidelines, and ensuring users understand why the guidelines are valuable so there is a better chance of them being followed
- Using **type hierarchy** to visually communicate important information
- Improved **symbolology** that clearly relates to the rules outlined in writing on the signage
- Colors that **contrast** well for greater accessibility, ease of use, and consistency over time

MyBellevue App

Considering expert users' high engagement with the MyBellevue app, there is an opportunity to leverage this by **creating a category in sign reports encouraging people to "report signage that is inaccessible, hard to read, and/or incorrect"**. Currently, the app has categories to report sign problems. However, due to the intent of the MyBellevue app reporting system, users may assume reports are only for broken or vandalized signs. Leveraging the MyBellevue app reporting system to understand the effectiveness of park signs, might help the City of Bellevue **crowdsource data to improve signage accessibility**.

Database of Park Signs

Additionally, a **database of park signs** would vastly help understand the current state of the city's park signage. Collecting data on park signs at multiple parks in the City of Bellevue such as their location and age, could **help further the argument for sign improvements and keep track of when signage is updated**. This work could be executed through any geographic information system (GIS) surveying tool, such as ArcGIS Survey123.

Limitations

A limitation of our user research interviews was that we were only able to interview one park ranger. In addition, our expert interviewees were sourced from the same population sample, Bellevue Trail Stewards, and thus may not capture the experiences of non-Trail Steward experts. Finally, it is worth noting that because we have five participants, this limits the generalizability of our findings. These findings offer inspiration and advice for our team's next steps in designing signs and for the City of Bellevue, but it's important to keep in mind that these viewpoints may not be representative of all visitors.

Next Steps

Transitioning into Milestone 3, we will compile the insights from these interviews to begin prototyping the park signage. Before we begin designing, we will meet with the City of Bellevue graphics team to ask about the Bellevue brand and any restrictions on designing signage. Each team member will prototype the park rule guideline sign before we come together to move forward with a single final design.

Once we have designed the final version of the signage, we will evaluate the signs through A/B testing in the form of surveys. Each final signage design will be compared with the original Bellevue Parks signs to determine what features of the signs are most helpful for people. We believe that this survey's results will point us toward creating a design system for the final phase.

Appendix A: Interview Questions

Parks Visitors Questions

- Which Bellevue Park or parks do you go to most often?
 - ** if they say Crossroads or Mercer, pick that for the rest of the interview. If not, pick randomly. **
- Walk me through a typical visit that you have at the [park]?
 - How did you navigate that park?
 - **TRAIL stewards** As a trail steward, you are likely very familiar with the trails. Think about your earliest experience before you became familiar with the trails though: Did the signs play a role in your experience? (Whether they say yes/no: Tell me more)
 - Did the signs play a role in your experience?
 - What do you like about that park?
 - What do you dislike about that park?
- (if they go to different Bellevue parks) How do signs at [x Bellevue park] differ/are similar from [y Bellevue park]?
- What do you like about the signs around [park]?
- What do you dislike about the signs around [park]?
- This is the park guidelines sign, which shows park information and what activities aren't allowed at the park. What stands out to you about this sign?



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- Are there signs that have caught your attention?

****Reasoning: Find signs they paid attention to****

- What, if anything, would you change about the signs?
- Anything else you would like to share?

- ****If they give a sign suggestion**** how would you prefer this information to be conveyed to you?

Bellevue Parks staff questions

- What parks/trails do you work at?
- What's your day-to-day like with park visitors?
 - What are the most common questions or issues visitors have?
- In your experience, what types of park signage do visitors find most helpful?
- What are the biggest issues you have with park/trail navigation?
 - (If they say they, as a ranger, don't have issues, ask about issues visitors have)
- Are there any challenges you face in maintaining or updating park signage?
- Are there any specific areas within [your] park where signage seems to be lacking?
- How might you encourage more people to come to the parks?
- What are your thoughts on the current state of trail safety at Bellevue Parks?
- As an employee, are there any suggestions you have for improving the parks?

[V1 Interview Transcript](#)
[V2 Interview Transcript](#)
[V3 Interview Transcript](#)
[V4 Interview Transcript](#)
[R1 Interview Transcript](#)