

# Evaluation of Mentorship Matters

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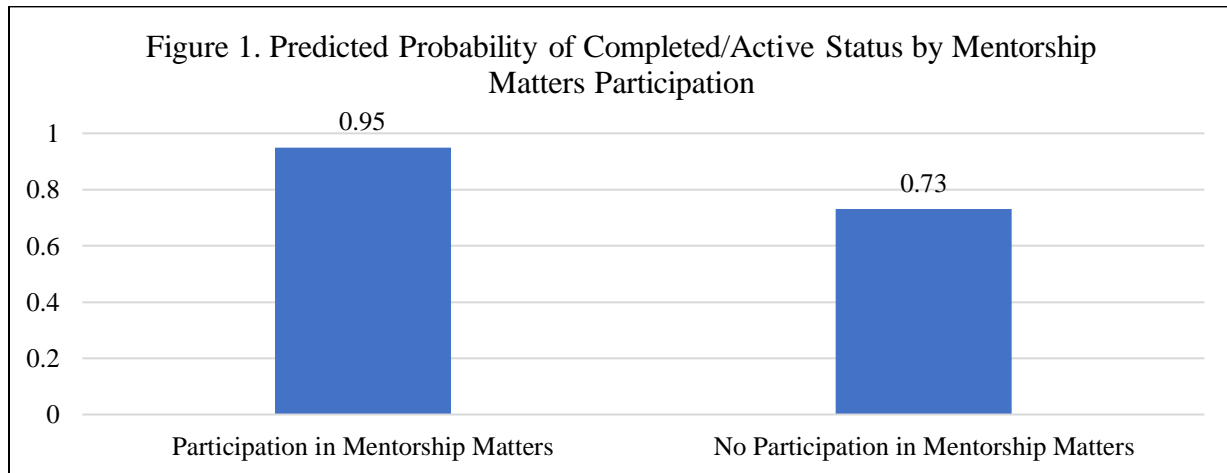
# Evaluation of Mentorship Matters

Maura Kelly and Lindsey Wilkinson, Department of Sociology, Portland State University  
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## Executive Summary

***Finding 1: Mentorship Matters training increase the likelihood that an apprentice will be retained in their apprenticeship***

The analysis of ARTS data predicts that, controlling for OTJ hours, 95% of apprentices who participated in Mentorship Matters program remained active (or completed) through the end of the evaluation period; 73% of apprentices who did not participate in the program remained active (or completed) during this period. See Appendix for regression model.



***Finding 2: Participants had largely favorable views of the Mentorship Matters training***

- Participants reported overall positive experiences at the training
- Some participants recalled specific skills from the training and reported using them on the job; other participants had non-specific memories of the training content
- Some participants viewed the conversation between apprentices, journey people, and foremen as particularly helpful

***Finding 3: Participants indicated the need to continue to improve communication and mentorship to promote retention***

- Participants reported both positive and negative experiences with communication and mentorship
- Participants articulated heightened tensions related to women and younger workers in the trades
- Poor communication and mentorship are critical issues that negatively impact retention

## ***Recommendations***

The overall recommendation suggested by these findings is that Sound Transit should continue efforts to support communication and mentorship to improve job site culture and to support the retention of apprentices. Some specific recommendations to achieve this goal include:

1. Information and skills related to communication and mentorship should be provided on an ongoing basis (e.g. trainings, job box talks).
2. Apprentices need additional information and skills related to managing problematic communication and mentorship.
3. Efforts to address communication and mentoring should address existing tensions around gender and age.
4. Putting apprentices and their mentors in dialog with each other can help each side understand the other.
5. Additional attention is needed to resolve instances of problematic communication and mentorship (e.g. training, supervisory practices, enforcement of existing anti-harassment and anti-discrimination policies).

## Introduction

The Mentorship Matters training aims to provide tradespeople with skills to improve communication and mentorship on construction job sites. 12 Mentorship Matters trainings on seven Sound Transit job sites were held between December 2018 and July 2019. A total of 99 workers (49 apprentices and 50 journey people and foremen) went to these trainings. Each training included a morning session for apprentices; a lunch period in which apprentices, journey people, and foremen met together; and an afternoon session for journey people and foremen.

Sound Transit contracted Portland State Researchers to evaluate the effectiveness of the Mentorship Matters training. The goal of the research was to answer the following questions:

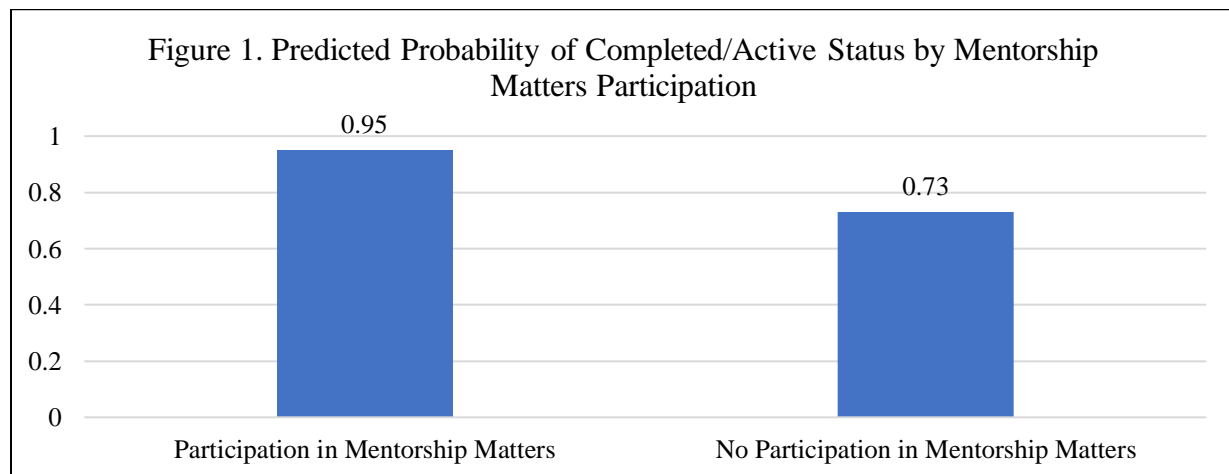
1. Does participating in the Mentorship Matters training increase the likelihood that an apprentice will be retained in their apprenticeship?
2. What are participants' perceptions of the Mentorship Matters training?
3. How else can mentorship and communication on construction job sites be improved to address the retention of apprentices?

Portland State researchers observed one training, conducted interviews with 12 apprentices and 12 journey people and foremen who completed the training, and conducted statistical analyses using the ARTS database (See Appendix A for more detail on the research design).

## Impact of Mentorship Matters on Apprentice Retention

*Mentorship Matters training increase the likelihood that an apprentice will be retained in their apprenticeship*

As shown in Figure 1, the analysis of ARTS data predicts that, controlling for OTJ hours, 95% of apprentices who participated in MM remained active (or completed) through the end of the evaluation period, compared to 73% of apprentices who did not participate in the program. See Appendix B for the regression model.



Of the 46<sup>1</sup> apprentices who completed the Mentorship Matters training, only three apprentices were terminated by December 31, 2019.

## Participants' Perceptions of Mentorship Matters

### *Participants had largely favorable views of the Mentorship Matters training*

Overall, participants evaluated the training positively. They viewed the training as addressing a significant problem in the construction industry and the skills provided were seen as relevant to their work.

Some participants had little to no memory of the content of the training. For example, David (journey person) said: *"I mean, it's always good to take time to reflect, I think. [For a lot of things, it] is not what you say, but how you say it. In that kind of thing, I think was helpful. But, yeah, I mean, I got something out of it directly. I couldn't tell you what it is off the top of my head."*

Other participants recalled specific skills discussed in the training, including: how to teach a skill, not yelling, ask questions, taking notes, repeating instructions back, and asking to try a skill. Below are some examples:

*How to let the person watch, then let the person do it, the reinforcing part... I was showing off next day because we have our daily safety meetings. It's my job to share the information that I learned with everybody else in our company. I was able to walk through the little booklet that they gave us. I'm a ham, I'm a character, so I made it a point to do it like how the guy was saying it. But it actually works. (Larry, journey person)*

*I guess he did a good job just to inform us of how to treat apprentices. I guess the key is using positive reinforcement instead of yelling at apprentices. I guess that was a specific spot of the class and I remembered that I could probably take it into my [work]. I mean don't normally yell at people anyway. But I've seen a lot of another journeyman yell. If you do something wrong, they just yell at you instead of telling you why you did it wrong or what are you doing wrong. Whatever. That's probably one of the part of the classes I took to use in my own training of apprentices I would say. (Omar, journey person)*

*I ask questions all the time a lot, to the point where I might even annoy you because I'm literally asking every two seconds. But I would say like, "Hey, I don't know what you're talking about." Like, "I don't understand. I need you to reexplain." I would also say I've went as far as carrying a notebook with me and a notepad to take notes as far as when they are talking to me, I'm writing stuff down so I can look at it later. Or if it comes up again, which it has, I'm like, "Oh shoot. I remember I wrote that down. Okay, hold on, hold on, okay, there it is. That's what that is." So being able to look back, and it also helps me to be able to retain it too when I write it down. As I'm writing it down, repeating it back to them. So I would say those two things are very big that I constantly have always done as far as*

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<sup>1</sup> 46 of the 49 apprentices who completed the Mentorship Matters training were included in this analysis. Two apprentices were excluded from the analysis along with all other apprentices with zero OTJ hours in ARTS. One apprentice was not found in ARTS because they are a registered apprentice in Oregon rather than Washington.

*when it comes to working with the journeyman, just being able to communicate and ask questions. And I would also say too, as far as letting them know like, "Hey, let me get in there. Can I try?" Or, "Can I do it?" Because like I said, for me, I'm very, very hands-on. I can't just stand and watch you and then think I'm going to be able to do it after you, like no. Yeah. So I would say those are two big ones that I have taken away from that [training], and I kind of was doing before so, but more so after that, I was like, "Okay, well definitely continue doing that." (Jennifer, apprentice)*

One particularly positive aspect of the training mentioned by several participants was the time apprentices and mentors spent together over the lunch hour. For example:

*I enjoyed that day. It makes you think. It gets you focusing in on things maybe from a different perspective. Then the other part of it that I did appreciate was when they brought in journeymen into the room with us, so we were able to hear their side of it. So it's just hearing a different perspective and what they expect or what they see. That was, I think, very valuable, that interchange, that interaction. (Emily, apprentice)*

### ***Suggestions on improving the training***

As noted above, several participants noted that they found the time apprentices and journey people met together to be particularly helpful and suggested the training might be adapted to teach both groups together. For example:

*The training I did, they did, the apprentices all did it, and then the journeyman all it. I don't think it works as well when you separate, when you're not working together. I think, I find, you talk as journeyman how you can be better, but if you don't hear it from the people that want you to be better and are trying to make you better, I don't think it helps both ways. It's communication when you're separating your training. (David, apprentice)*

Others suggested that training might be targeted towards workers who are not currently strong mentors. As one participant said:

*[The training should be provided to] the bosses, foreman, and superintendents. I think it'd be good training for them to go through because a lot of the people in those positions, they're from a past generation where they learned and thrived on "the hoot and holler" [yell at apprentices] and "let's get stuff done" [mentalities]. (Tyler, journey person)*

Another suggestion for improving the program was to increase attention on how to deal with problematic communication. As Mary noted:

*Honestly, I remember a general impression of the [Mentorship Matters] class, but I don't know if I can say what was the most helpful. I think, I don't know, it was just kind of like more of this construction culture of, "You got to speak up for yourself and do better for yourself and communicate better." And it's like, "Yes, yes, those are important things for me to do." But I want everybody to do this. This isn't just on a new generation of apprentices to try and do that. When I'm trying to communicate, and my foreman or my*



*journeyman won't really reciprocate. Then it's like, "Well, what good does it do if I learn all these amazing communication skills?" (Mary, apprentice)*

While the apprentices' Mentorship Matters training materials include a section on how to communicate with difficult mentors, this section was skipped on the day the evaluator observed the training.

Most participants did not have specific feedback about the content of the training or areas for improvement, although some provided the general suggestion that training on communication should be ongoing or provided to more workers. Some apprentices noted that the material covered in the training was also covered in their apprenticeship courses; for example, Hunter (apprentice) noted *"They touch on [the topics from the training] a lot in the apprenticeship program or every time I go to school."* Journey people were less likely to receive training about communication from other sources. As James (Journey person) said *"I remember being in the class and the guy was talking to me about it and I just, I hope that they do more of it. I remember saying that to him, that hopefully they more of this type of thing and I think it's good for not only our industry, but I think it's going to help Sound Transit."*

### ***Participants' perceptions of the impact of training on retention***

When asked about how the Mentorship Matters training might impact the retention of apprentices, most workers affirmed that they thought training about mentorship and communication would be helpful, although this was generally in the abstract.

*I think to retain employees, it's important that people are comfortable when they come into a new job and that people mentor them and teach them. And it's kind of the same with my industry. People don't really spend a lot of time to mentor [apprentices] before it's like, "Hey, you sink or swim" ... I think it has to be comfortable for people, it can't be a hostile work environment, you know?... It can be pretty bad, obviously. It can be the difference in when you wake up in the morning being like, "Yeah, I've got to go work today," or "Man, I really don't want to go to work today," you know? So I don't know if this program [Mentorship Matters] that Sound Transit is doing is the answer. I don't know that. I don't think that you know that or anyone knows that, but I think that it's better than doing nothing. And I had a positive experience with it. (James, journey person)*

## **Improving Communication and Mentorship to Address Retention**

### ***Conceptualizing "good apprentices" and "good mentors"***

At the opening of each interview, participants were asked what makes someone a good apprentice and what makes someone a good mentor. There was largely consensus across apprentices, journeys people, and foremen. Table 1 provides a summary of all the response types provided by participants to questions about what makes someone a good apprentice and a good mentor.

Below are some representative examples of participants' views of a good apprentice:

*A good apprentice [is someone] who follows instructions. That's a very big one. Because it's all about learning, so definitely listening. Someone who listens, who takes instructions, can take constructive criticism, because you really have to have a thick skin to being in this industry. So definitely someone [who is] a very hard worker. That's usually what I hear other foremen and journeymen say, they like someone who listens, who, like I said, can take feedback, who is on time, ready to go, ready to work. (Jennifer, apprentice)*

*[A good apprentice is someone who is] willing to work and not be offended by being told what to do. We're not really bossy or I'm telling you what to do, but somebody's always going to tell you. Especially if you don't know because there's a lot of things you can get hurt doing. Someone's going to have to tell you how to do it and do it correctly... Willing to work. Good work ethic... Showing up every day and keeping their head in the game. (Larry, journey person)*

Table 1. What makes a good apprentice and a good mentor

<b>Good Apprentice</b>	<b>Good Mentor</b>
<ul style="list-style-type: none"> <li>• Good work ethic, works hard, puts in effort</li> <li>• Shows up, on time</li> <li>• Listens and takes direction</li> <li>• Asks questions</li> <li>• Doesn't get offended, has "thick skin"</li> <li>• Physical strength to do the job</li> </ul>	<ul style="list-style-type: none"> <li>• Willing to teach, explain, and show</li> <li>• Listens</li> <li>• Answers questions</li> <li>• Patience</li> <li>• Encouraging</li> <li>• Gives the big picture (how tasks relate to overall project)</li> <li>• Cares about success of apprentices</li> <li>• Empathy (knows/remembers what apprentices are going through)</li> <li>• Gives learning opportunities to apprentices</li> <li>• Has knowledge and skills</li> </ul>

Below are some representative examples of participants' views of what makes someone a good mentor:

*I believe [a good mentor is] someone that cares, first off. That they embrace the apprenticeship and they understand that we are being put out in the field to learn, essentially. I mean, even though we go to classes every so often, someone that's willing to make sure that you're having opportunities, that you're not just stuck behind a broom or that you need to do different things and that they care that you're learning. So, to me that's a good mentor. I guess the construction industry is extremely busy and I guess it's nice to have people that will take a little bit of the extra time or extra minutes that it takes to ensure that you are learning correctly. (Emily, apprentice)*

*Maybe someone that listens and cares about others. Wanting to see that person grow and become better at what they're doing... I try to be patient. You know, I make sure I'm very clear on what I want, and I'll show the apprentice or whoever I'm working with how to do*

*it correctly and safely. If they got any questions, I'll take the time to listen and help them out. (David, journey person)*

### ***Positive experiences of mentorship***

Both apprentices and mentors provided many positive experiences with mentorship, as in the examples below.

*I worked for a different company when I went through the [Mentorship Matters training] with Sound Transit, and then now I'm with a second company that I work for now. So it's also a Sound Transit project. I would say that most places, I have had a positive experience, like with the foreman or my immediate supervisor, whether their superintendent or whatever. I feel like I've been fortunate that they do want me to learn and they just don't let the guys kind of push me aside, because, yeah, they can jump in and do it. Then the company that I'm currently with, I was informed verbally more than one time by my direct superintendent that he believes for the apprenticeship program to thrive and be successful, that it's a responsibility that they have to make sure that we are learning as much as we can as we go through it. So yeah, I mean, I appreciate that. I feel like I'm lucky in that respect. (Emily, apprentice)*

*The guy I had when I started this mentorship program, was fantastic... I really enjoyed working with him. He was really eager to learn, really into the whole program, everything. He was just really into it. (Ryan, journey person)*

### ***Challenges with mentorship***

Both apprentices and mentors reported challenges with communication and mentoring relationships. Apprentices noted instances where their mentors were not embodying the characteristics of a good mentor, as in the following examples:

*There's one in particular that likes to withhold information. I think he just like to do it his own way, and then doesn't fully explain how he wants it done. And of course, I end up in trouble or not doing it right. (Alex, apprentice)*

*I guess communication is a big problem. I guess thinking about maybe me and a mentor might communicate in general differently than we normally would with each other. So they're great barriers, and you might think one way and I think a different way, but we have to get past that. ... I mean just essentially like a mentor explaining something a certain way and, "Okay. I don't understand it that particular way that you explain it." And then just like looking at me like, "Are you stupid? I don't know how else to say this to you. I have this one way of thinking about it. If you don't understand that really specific way, then I guess screw you or something." (Mary, apprentice)*

The narratives indicated ongoing issues related to supporting women apprentices, as in the examples below:

*I really feel that a lot of them, they treat women differently... "Oh, you need a man to do that?" I mean, I don't even know how many times I've gotten that. "You need a man to you that for you?" Instead of saying, "Well, here's your task, this is what you're going to do," they'll say the task and tell you what you're going to have to do. Then they say something like, "Do you think you're going to be able to handle that?" You know what I mean? Just the little comments. I blow all that stuff off, it means nothing to me. I do my job and I know I do it well. But somebody who's not as strong-minded as me would not be able to do that. (Sarah, apprentice)*

*I'm very, very like, I want to know, I want to learn, I want to get in there, and I'm not going to learn if you guys aren't going to allow me to do that. So kind of basically having to take charge and kind of push myself in there, throw myself in the mix to show like, "Hey, I'm here. I'm just as good, if not better than my male counterparts." Kind of like I have to work ten times harder because I'm a woman, in some cases. (Jennifer, apprentice)*

Mentors also reported challenges with mentoring apprentices. Mentors reported experiences where their apprentices did not embody the characteristics of a good apprentice. For example:

*[Some apprentices have] like an attitude problem, you know? They take their hard hat off, you know, [I'm] telling them you have to wear it while you work and then they're like, give me attitude like, "No, I don't." The other day it was, "You know you have to wear your respirator while you're chipping." And they're like, "No I don't." You know it just becomes like a shouting match, trying to challenge me when the rules are the rules. (David, journey person)*

*[A challenge working with apprentice has been] hardheadedness. They're just not cut out for it. You can just tell. Some of them just, they're not long for this [work]. Oh, well, okay then that's their choice. I tried. I'm done. (Larry, journey person)*

Tensions around generational differences were prominent in mentors' narratives, as in the following examples:

*I think the new generation coming in, I have a couple apprentices that are real young, like one is like 19 and then another one is really young too. And I think for the most part they're good kids, but they are kind of whiny, you know, they whine about a lot. They're like, "Aw man, everything sucks." They say, "Everything sucks, this is the worst." It doesn't matter what it is. I mean it could be the best job in the world and they'd whine about it. Yeah, I think they're just a little self-centered and just a little whiny sometimes. But, you know what, the generation above me probably complained about me when I was younger too. (James, journey person)*

*[Younger workers] have a different work ethic, but I don't find them harder to work with... They just, I think it's not what they thought it was going to be. I think they believe they're entitled to something better. (David, journey person)*

### ***How communication impacts retention***

Several participants discussed how poor communication and mentorship (including harassment, discrimination, and a lack of access to learning the skills of the trade) can make working in the trades less desirable. Below is a representative example:

*And I think at the end of the day, it feels so much better. I feel good walking away from my job when I know that I felt appreciated as opposed to like, "Oh, I guess I learned how to do this thing today, but I was being yelled at all the time to do it." Like I don't feel good about coming home from that. But I look forward to going to work when I know that someone's going to give me the respect. (Mary, apprentice)*

Several narratives highlighted how negative workplace culture in general, and problematic communication and mentorship in particular, can lead to apprentices changing to a different trade or leaving the trades altogether. John (apprentice) reported that he had many bad experiences with mentors in his trade, which resulted in his decision to change to a different trade:

*It's basically been all pretty negative with how we've been taught. It's basically pretty bad. But the couple of good ones mentors I had, they were absolutely willing to teach me. They were laid back, they did step for step. They didn't rush you like, you know when they were in their apprenticeship, they got yelled at, they got screamed at and got treated like absolute dog crap. And they're like, well that's not what I'm about. I want to make sure that you become a good journeyman, that you want to stay in the trade. You know that like I'm going to give you the best of my knowledge that I learned and I'm going to try to even out in the bad that I got taught and teach you the good... [Other people] had a very, very, very negative attitude. Again, like 99.9% of [workers in my trade], they just, they have that I'm bigger badder than any other trade. I'm going to basically treat every apprentice like absolute dog crap and be okay with it. It's, it's to the point where I've actually, I'm actually going to be switching trades for how bad it's gotten... I'd love to get that mentorship to where someone's going to teach me and made me be a better person at my job than just screaming and yelling and making me feel worthless. (John, apprentice)*

Justin (former apprentice) had left the trades for several reasons, including poor communication. As he reported:

*I left the trade because I didn't feel that I was a good fit for the occupation, and it was also a very physically demanding. I was working with guys who had more experience with me, and I had a hard time keeping up with them without getting overuse injuries on my body. Also, it's really stressful trying to communicate with a lot of my coworkers who, well for one, some of them just weren't good at communicating about things that we were doing on the job site and a lot and other times there was a language barrier. (Justin, former apprentice)*

## **Recommendations**

The overall recommendation suggested by these findings is that Sound Transit should continue efforts to support communication and mentorship to improve job site culture and to support the retention of apprentices. Some specific recommendations to achieve this goal include:

1. Information and skills related to communication and mentorship should be provided on an ongoing basis (e.g. trainings, job box talks).
2. Apprentices need additional information and skills related to managing problematic communication and mentorship.
3. Efforts to address communication and mentoring should address existing tensions around gender, race/ethnicity, and age.
4. Putting apprentices and their mentors in dialog with each other can help each side understand the other.
5. Additional attention is needed to resolve instances of problematic communication and mentorship (e.g. training, supervisory practices, enforcement of existing anti-harassment and anti-discrimination policies).

## **Appendix A: Data Collection and Analysis**

### *Quantitative Data Collection and Analysis*

Records of registered apprentices in Washington were downloaded from the ARTS database (<https://secure.lni.wa.gov/arts-public/#/>). Filters were used to exclude apprentices who started prior to the most advanced apprentice who had completed the Mentorship Matters training (start date of 5-23-2013), apprentices not in the same trades as the apprentices who completed the training, and apprentices with more than zero OTJ hours.

Demographics of the apprentices who completed the Mentorship Matters training and demographics of all other apprentices are shown in Appendix B, Tables B.1 and B.2).

To assess whether the training has an impact on retention, researchers conducted a multivariable logistic regression using participation in the training to predict active/completed status (compared to terminated) through December 31, 2019, controlling for OTJ hours (see Appendix B, Table B.3) This model was used to determine predicted probabilities of retention for apprentices who had had had not completed the training (see Figure 1).

### *Qualitative Data Collection and Analysis*

24 interviews with Mentorship Matters participants were conducted over the phone between September 2019 and January 2020 by Dr. Maura Kelly.

Names and contact information for all workers who had participated in the Mentorship Matters program on Sound Transit job sites were provided by Sound Transit. Attempts to contact potential research participants included email, text, and phone.

Interview guides included general questions about mentoring, teaching, and communication on construction job sites as well as questions about the Mentorship Matters training. Interviews were an average of 15 minutes (ranging from 6 to 32 minutes).

Demographics of interview participants are shown in in Table A.1. The research design included stratified sampling by role (equal numbers of apprentices and journey people/foremen). The sample also included variation by craft, gender, race, and age.

Interviews were audiotaped and fully transcribed. Transcripts were analyzed using the qualitative data coding software Dedoose. Analysis focused on identifying how communication impacts workers, specifically in relationship to retention of apprentices; what factors improved and negatively impacted communication on construction job sites; how the Mentorship Matters training may have improved job site communication.

Table A.1. Demographics of Interview Participants

	N	%
<b>Gender</b>		
Man	16	67
Woman	8	33
<b>Race/ethnicity</b>		
White	16	67
Black	3	13
Latinx	3	13
Two or more races	2	8
<b>Craft</b>		
Carpenter	9	38
Cement mason	2	8
Electrician	2	8
Ironworker	2	8
Laborer	8	33
Operator	1	4
<b>Role</b>		
Apprentice	12	50
Journey person	10	42
Foreman	2	8
<b>Age</b>	Average 38 (range 21-64)	

Note: Role refers to role at time of interview (one participant was a journey person at the time of the training but a foreman at the time of the interview).

#### *Additional Data*

The evaluation of the Mentorship Matters program was also informed by Portland State researcher's observations at one Mentorship Matters training in January 2019 as well as a review of the Mentorship Matters curricular materials provided at the training.



## Appendix B: Additional Tables

Table B.1 Demographics of apprentices who participated in Mentorship Matters and apprentices who did not participate

	<u>MM %</u>	<u>Non-MM %</u>
<b>Gender</b>		
Man	65.22	92.22
<b>Race</b>		
White	63.04	71.93
Black or African American	15.22	6.43
Asian	4.35	1.95
Hispanic	15.22	12.87
American Indian or Alaska Native	2.17	3.54
Native Hawaiian or Pacific Islander		2.64
Not Elsewhere Classified		0.47
Not Specified		0.18
<b>Craft</b>		
Plumber	2.17	6.19
Sheet Metal Worker	2.17	6.97
Ironworker	6.52	8.84
Laborer	32.61	19.02
Carpenter	19.57	20.44
Piledriver Bridge Dock & Wharf Builder	4.35	0.99
Cement Mason	10.87	5.65
Construction Equipment Operator	4.35	4.3
Sprinkler Fitter	4.35	4.13
Inside Wireman	10.87	16.91
Lathing Acoustical Drywall Systems Installer	2.17	6.56
<b>Retention</b>		
Active (or completed) through December 2019	93.48	68.39
<b>Disadvantaged Zip Code</b>		
Yes	32.61	21.27
<b>King county resident</b>		
Yes	45.65	26.24
<b>N</b>	46	<b>13569</b>

Source: ARTS Database

Table B.2 Demographics of apprentices who participated in Mentorship Matters and apprentices who did not participate (continued)

	<u>MM</u>			<u>Non-MM</u>		
	Mean	Min	Max	Mean	Min	Max
Term in hours	7239.13	6000	10000	7731.21	6000	10000
Total OJT hours	3673.46	40	18591	4428.53	1	24648
Total RSI hours	266.68	0	850	288.25	0	2035
<b>N</b>	<b>46</b>			<b>13569</b>		

Source: ARTS Database

Table B.3. Coefficients from Multivariable Logistic Regression Predicting Active/Completed Status

Total OJT Hours	0.000*** (0.000)
Mentorship Matters Participant	2.049*** (0.601)
Constant	-0.086*** (0.029)
N	13,615

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: ARTS Database

As shown in Table B.3, the odds ratio for mentorship matters is 7.76 (coef is 2.049,  $\exp(2.049)=7.76$ ). Those who participated in mentorship matters are more likely than those who did not participate to be active or to have completed rather than to have cancelled. The odds of being completed/active versus cancelled are 7.76 times higher for mentorship matters participants than for non-participants. Additional analyses (not shown) indicate that the results do not change when we add controls for trade, race, and gender (in addition to OTJ hours).

## **Appendix C: Recruitment Script and Interview Guides**

### ***Recruitment script***

Hello, my name is Maura and I'm a researcher at Portland State. I'm calling because I'm doing an evaluation of Sound Transit's Mentorship Matters program and I would like to invite you to participate in a 15-30 minute phone interview. You will receive a \$50 gift card for your time. Your participation is voluntary, confidential, and won't affect your employment. Would you like to participate now or can we schedule another time to talk?

[If yes] Great. I have some additional information to share with you before we begin. This will take just one minute for me to read through.

We are conducting an evaluation of the Sound Transit Mentorship Matters program, which is intended to improve mentoring relationships on Sound Transit job sites. This project is funded by Sound Transit and conducted by Portland State University researchers, that's me.

You will be asked to complete this telephone interview, which will take about 15-30 minutes. Your participation is voluntary and you are not required to provide [me] with the information requested. You don't have to answer any questions you don't want to answer and you can stop at any time. By continuing with the interview, you give your consent to participate in the study. If you choose to participate, you will receive a \$50 gift card.

Benefits of the study include contributing to research that will potentially improve the experiences of workers in the construction trades. Risks to participating in the study are minimal, for example, thinking about negative past or future experiences at work.

Portland State researchers will keep your answers to this interview confidential to the fullest extent possible. Only the researchers conducting the project will have access to your answers. Any identifying information will not be shared with Sound Transit or your employer or included in reports from this study.

If you have concerns or problems about your participation in this study or your rights as a research subject, I can provide you with phone numbers to call (Portland State Office of Research Integrity: 503-725-2227, Kelly: 503-725-8302)

Would you like an Amazon or a Fred Meyer gift card? [confirm email or mail address]

Do you have any questions for me before we begin?

Great, I'm going to turn on the audio recorder now.

### ***Interview guide: Apprentices***

First, I would like to ask you a few questions about yourself.

1. Are you currently working on a Sound Transit site?
2. What is your craft?
3. And you are *currently* an apprentice, right?
4. When did you start your apprenticeship?
  - a. How did you get into the trades?
  - b. Did you work in the trades prior to your apprenticeship?
  - c. If pre-apprenticeship, which one?
5. What is your age?
6. What is your race or ethnicity?

Great. Now I'm going to ask you some questions about your experiences with journeymen and foremen, which we can call teaching, coaching, or mentorship.

7. What makes someone a good apprentice?
8. In your opinion, what makes someone a good mentor, someone you could learn from on a job site?
9. What are some of your *positive experiences* with being mentored by other workers on the job? Probe for examples
10. What *challenges* have you had in mentoring relationships? Probe for examples
11. How easy or difficult have you found being mentored by someone who is a different age, race, or gender than you? Probe for examples
12. What can journeymen and foremen could do to be better mentors to apprentices?

Great. Now I'm going to ask you some specific questions about the mentorship matters training you attended.

13. I have here that you did the training in [month], does that sound right?
14. Did you volunteer to attend or were you asked to attend?
15. What was your *overall impression* of the mentorship matters training?
16. What were the most helpful parts or most important lessons?
17. Was there anything about the training that you didn't like or wasn't helpful?
18. What would you have liked to learn but didn't?
19. What skills from the training have you used on the job?
20. Do you think the training will help you be successful in your apprenticeship?
21. Would you be interested in more training on mentorship if it were offered to you?
22. Do you have any other thoughts about mentorship or the training?

***Interview guide: Journey people and foremen***

First, I would like to ask you a few questions about yourself.

1. Are you currently working on a Sound Transit site?
2. What is your craft?
3. How long have you worked in the trades?
4. Are you currently a journeyworker, or foreman, or...?
5. What is your age?
6. What is your race or ethnicity?

Now I'm going to ask you some questions about your experiences with apprentices, which we can call teaching, coaching, or mentorship.

7. In your opinion, what makes someone a good apprentice, someone who you could teach, coach, or mentor?
8. In your opinion, what makes a [their role: journeyman/foreman] a good mentor to apprentices?
9. What are *your* strengths as a mentor to apprentices? Probe for examples
10. What challenges have you had in mentoring apprentices? Probe for examples
11. How easy or difficult have you found mentoring someone who is a different age, race, or gender than you? Probe for examples
12. On your current jobsite, what can journeymen/foremen could do to be better mentors to apprentices?

Now I'm going to ask you some specific questions about the mentorship matters training you attended.

13. I have here that you did the training in [month], does that sound right?
14. Did you volunteer to attend or were you asked to attend?
15. What was your *overall impression* of the mentorship matters training?
16. What were the most helpful parts or most important lessons?
17. Was there anything about the training that you didn't like or wasn't helpful?
18. What would you have liked to learn but didn't?
19. What skills from the training have you used on the job?
20. Do you know if any of the apprentices you work with also went through the training?
  - a. If yes, do you think it helped them? Probe for examples
21. Do think the mentorship matters program can help apprentices be successfully in apprenticeship and journey out?
22. Would you be interested in more training on mentorship if it were offered to you?
23. Do you have any other thoughts about mentorship or the training?