Preparing Students for Uncontrolled Crossings - Part 2: Teaching and Assessing

Jolene Troisi and Dona Sauerburger

[JOLENE] - Hello, everyone, and welcome to the webinar “Preparing Students for Uncontrolled Crossings, Part Two, Teaching and Assessing.” I'm Jolene Troisi.

[DONA] - And I'm Dona Sauerburger.

[JOLENE] - This is Part Two of three webinars, and if you have not watched Part One, “Background and Basics,“ we highly recommend going back and starting with that one so you will have a thorough understanding of the reasoning behind the methods presented in this, Part Two. Then join us again for Part Three, “Maximizing Your Skills for Listening and Looking.” Let's get started.

Now that we understand what Situations of Uncertainty and Confidence are, and how to recognize that we can be confident that it's clear to cross when quiet, now we have to actually look at what we need to teach our students so they can make that distinction effectively.

Of course, we've been talking about students using their hearing. The same applies to them using their vision. Students using their hearing will listen to vehicles approaching from either side, students using their vision will analyze in one direction at a time, and then analyze it from the other direction, and then they have to learn to look from one direction to the other. That's covered in Part Three.

And of course then, students who have functional vision and hearing will need to learn which is more effective to use in any given situation - vision or hearing. In some situations, they can hear vehicles much earlier than they can see them. And in other situations, it's the opposite. And that becomes a decision that they have to learn and we have to train them how to make those decisions.

Regardless, all students need to learn the big picture. They need to learn how to understand their crossing time intuitively - not with counting or timing. they need to learn how to sample warning times They need to learn how to compare that warning time to their crossing time. And then they need to learn to analyze that information. Can you be confident that all vehicles are detected with enough warning? if it's a situation of confidence. then you can cross when clear; if it's a situation of uncertainty, they have to learn how to determine the risk. And if the risk is acceptable. they can cross when it seems clear or make the decision to use alternatives. So. Now we begin. We're actually going there. Dona.

[DONA]: All right. The first thing we're going to do is get the crossing time. We've got a picture here of young man. He's at a crossing where I had a high school student assessing the crossing. And we're going to talk about that in a minute. But first of all, I want to talk about getting the crossing time because I was in a kind of a pickle here. It's a 4-lane relatively quiet street, but it was in front of his school and so there is some traffic and it's not going all that slow. And we can see over to the right, there's a very gentle hill - it's maybe a half a block to the right. which is the far lane And I was unable to tell if it was clear or not. I was in a situation of uncertainty and I wanted to get his timing, how long it takes him to cross. And I did not want him to cross when I didn't know if it was clear or not. So I was not going to have him - I was not going to get the timing of that crossing there. So what I did was mark out by pacing it how many paces it

was. And then I went into a parking lot of the school. and marked it out there. So I had him actually get the crossing time from the parking lot

And when I do that, I try to make it so that they're walking towards a curb because a lot of people will slow down when they start when they know that they're getting near the curb because they don't want to trip on it. So we need to include that slowing down in the timing of the crossing. And we start the timing of that crossing when they are committed to the crossing.

So, for example, if you've got a guide dog user who decides it's time to cross. you know if they've determined it's clear And they tell the dog to go forward. When should I start the timer? when they step out or when it gives the forward command.

Or let me add this, add another one. We've got somebody who's going to see if it's clear by using a monocular. So they look to the right, they look to the left. And they determined that it's clear because we've taught them how to do that reliably And then they've decided it's clear Should I start the timer then or after they've put the monocular away and actually started the crossing. Cindi?

[[CINDI]] You would want to start the timing um to include anything that they need to do to be able to start that timing. So if that's giving the dog the forward cue I would probably put the monocular on a lanyard and say, just let it drop around your neck, right? Like, let's not waste four seconds putting it away in our purse but I mean, right? Like whatever needs to happen um Like I've made the decision to cross And now I have to do this thing.

[DONA] Yeah, I totally agree, Cindi. preparation for the crossing that has to be done after you've decided to cross should be included in the crossing time. Others may do it differently, but that's the way I do it. I include it in the crossing time.

So now we're going to get the crossing time. So you start it when as soon as they realize that, you know, that it's time to cross or as soon as you tell them it's time to cross. And then stop the timer when they step out of danger, either stepping up onto the curb on the other side or if it's agreed on by both of you or everybody that that stepping onto the shoulder of the road. is where they're safe, then you stop the timer when they reach safety, whatever that is.

[CINDI]: I've worked with people and i don't know if I don't know the exact reason. I don't know if it's stepping up on the curb, but where the first half of their crossing time is maybe a second shorter than the second half or something like that. Are you just arbitrarily setting the middle at half of that time?

[DONA] I'm so glad you brought that up. No, I actually, I say it took you three seconds to reach the middle seven seconds to reach the other side. And like I said, a lot of people slow down as they reach that curb. They don't want to trip over it. And so I want them to know it how intuitively how long it takes to get past that first lane so they can get out of the way of the traffic in that lane. how long it takes to get the second lane so yeah So it's not just a halfway, it's what was your crossing time for the middle.

[CINDI]: All right. Thank you.

[DONA] Yeah, thank you. So let's say that we get we have a student cross twice. And once it takes eight seconds. to cross and the next time it takes 10 seconds to cross. What do you think their crossing time should be? Should we average those two together? or take the longest time or take the shortest time, what do you think? Jen, what do you think?

[JEN]: I would use 10.

[DONA] Yeah, I agree, Jen. Yes. You take the longest time You can't say you needed 10 seconds once but you don't really need that, do you? Because you do. You did once. So you take the longest time.

And so I was with this student And… We were in the parking lot and I timed his crossing and both crossings were exactly 10 seconds. So his crossing time is 10 seconds and i'm Just.. something in the back of my head just . . .I had kind of a brainstorm because I had been doing this about 20 years by that time. And almost everybody way misjudges. when they try to compare the crossing time with the warning time, they way misjudge.

In fact, I started with this student at the crossing that I showed you earlier, And… there was a car coming just i said oh we just see a vehicle coming. If you had started to cross just before you heard it or saw it. Would you have made it on the other side? He said, oh, yeah, sure. And I'm thinking, in what universe!?

But I didn't say anything. I said, all right, let's find out if you're right. We need to go get your crossing time. So we went and got his crossing time. And while we were there, I'm thinking, Let me just try something, So "Charlie or Sam or whatever I'm just curious. I want you to imagine crossing the street Tell me when you start and tell me when you reach the other side." And he said, I'm starting And then five seconds later, he said, I'm there. And I'm thinking, that explains Everything. No wonder he thought he had made it to the other side. He didn't have a good gut-level understanding of his crossing time. And by the way, research shows that crossing does not, that experience of crossing does not give you that intuitive understanding of crossing time. He had just crossed twice, and I told him it was 10 seconds and still he didn't have this what we now call "intuitive understanding of crossing time." He thought he could get there in half the time.

So on the spot, I came up with a little process, which we're going to present to you, have you go through, where he developed an intuitive understanding of his crossing time. And then we went back to that crossing, the same one where he thought he could fly. And again, I said, "all right … oh! here comes another vehicle." And I hadn't told him if he was right or wrong the first time, but I said, "what do you think? If you had started just before you heard or saw that, would you have made it to the other side before he arrived?" And he said, "no way!" The only thing that was different between that first time and the second time, other than the fact that he had crossed it is, that he had developed this intuitive understanding of crossing time.

And since I've been doing this - having them develop this before I take them to the next step - I haven't had any problems again with people misjudging it. Every once in a while, if they start having problems applying it, I'll say, "let's step back and review that."

Actually, this just happened like two weeks ago. It had been so long since I'd done this that I kind of forgot about that little trick and she was doing a task that's similar to what we're going to work with today. This is taught in Part Three, where you teach them to teach them to be able to judge when the approaching vehicles that they see. They're using their vision. They can see vehicles approaching. And they need to judge, do they still have time to cross before those vehicles arrive and arrive

she had, I had started with developing her intuitive understanding of her crossing time; She got that. And then she needed to judge the vehicles coming from the left - She did great. She said "There's still time. I still have time. Whoops, it's too late," And I started the timer and she nailed it.

Then we turned to the right, and for some reason, she just wasn't getting it. She was saying “it's still good. It's still good. It's too late,” and I started the timer and it was too late LONG before she said it was too late. And I kind of thought, “oh, what am I going to do now? So maybe I need to give her feedback. I need to develop… Oh, Dona, come on. You need to review her intuitive understanding of crossing time!” So we did that. I said, “let's review the intuitive understanding of your crossing time.” And it took about two or three minutes, she got really good, and the next time she made that judgment, it was perfect. she looked at them and she said, “it's too late now! It's too late already. There's not enough time now!” And she was right.

So it's something that you can use routinely. What you want your students to develop is what I call the “woah!” feeling. And I call it that because a number of years ago, I was working with Gene Bourquin and Rob Wall Emerson, we were trying to see if the vehicles would yield if you're using various strategies. And so what I had to do is be able to tell Gene when the vehicles that were approaching from the right were exactly… I forget if it was four or five, let's say four seconds away, because it took him four seconds to get into their lane and we wanted the drivers to think that if he didn't stop and they didn't stop, they were going to hit him. So it had to be that he left the curb and arrived just when they got there. Anyway, long story. So… I took a few minutes, practiced so that I could make that judgment very accurately. And the way I did it was to kind of mentally project Gene walking across, and mentally project the vehicle, regardless of how fast it was. mentally project its … movement such that I could tell when it was going to collide with Gene out there in their lane.

So the first half hour I was mentally just like really working it. I was very good. I was very accurate. There were only like two or three trials where I misjudged and they arrived sooner or later than expected. And so we had to throw those trials out. But after half an hour. I didn't have to think at all. I would watch those vehicles and at a certain point, I would get this gut “WOAH!” feeling in my belly. It was actually physical. And that's when I would say, “okay, Gene, it's time to go. This is the time.”

So we want our students to develop that same “whoa!” feeling. So they just intuitively, they don't have to count, they don't have to calculate, they don't even need to project movements and whatever, it's just like in their gut that “Yeah, this warning time is longer than my crossing time ,”or “less than my crossing time” and they just do it in the gut. So that's what this is all about. And so Jolene, I think they're ready for you to show us how it's done.

[JOLENE]: All right. So first, we're going to practice actually doing this. We're going to … Dona and I are going to model. For this practice, the instructor needs a stopwatch. It's lovely now that we all have phones generally that we can carry around with us but i we have learned in some of our sessions that not everybody can carry a phone around. So if you have a regular stopwatch, that's fine as well. the instructor has the stopwatch and the student is the one developing the intuitive understanding without counting so First, Dona and I will demonstrate and then you guys get a chance to practice. Dona, how are you today?

[DONA] “I'm great, thank you. Lovely to be here with you.

[JOLENE] So today we're going to work on developing your intuitive understanding of crossing. We already have your crossing time. We know that it takes you seven seconds to cross this street. And so now we're going to practice Imagining yourself crossing the street and knowing what your crossing time is, okay?

[DONA]: Yeah.

[JOLENE] So would you like a demo first or do you want to just try it?

[DONA]: Why don't you give me a demo? I'd like to see how it goes.

[JOLENE] I'm putting myself in your shoes. I am becoming Dona. And I am standing here at the corner or at the street where we're going to cross. And I'm picturing myself as you crossing the street. So I'm going to start out by telling you when I start crossing … when I'm halfway. … And when I'm all the way across. Okay, and I'm going to do it exactly in your time. You ready? Yeah. I'm crossing. halfway. across. Great. All right. feel good about that?

[DONA] Yeah, I got this. Yeah, yeah, yeah, yeah, yeah. Okay. I'm starting, one thousand one, one thousand two, one thousand three . . .

[JOLENE] Oh, Dona, I don't mean to interrupt, but remember, you're not counting this. You have to get… this is in your gut, this is not in timing. This is a feeling that you have. You're picturing yourself crossing the street. You're not counting the number of seconds. Let's try it again.

[DONA] Right, right, right, right. So… I'm starting .. I'm halfway. I'm there.

[JOLENE] Woo! When did you develop wings? You flew across that street.

[DONA] Come on.

[JOLENE] You can't cross that fast. That was a little bit fast, honey.

[DONA] What was it? I needed seven.

[JOLENE] Five seconds.

[DONA] Five seconds? Oh, geez. Okay.

[JOLENE] All right, let's try it again.

[DONA] All right, let me try it again. Let me try it.

[JOLENE] Or do you want to just try it?

[DONA] Let me give it a shot. Okay. I'm starting. Halfway. There.

[JOLENE] That was still a little fast. It was a little better than the first time, but it's still it was five and a half seconds.

[DONA] Okay. Could you do a demo for me again?

[JOLENE] Absolutely. All right. Put yourself in the picture. Ready? Crossing. Halfway …

[DONA] Ooh.

[JOLENE] Across.

[DONA] Oh, wow. That is much longer than I had pictured. Okay All right. Let me give it a shot. I'm starting. …Halfway. …There.

[JOLENE] Now you went too long.

[DONA] Oh, I went too long. Okay.

[JOLENE] NIne and a half seconds to cross the street.

[DONA] Oh, that was nine and a half? Okay. And I need seven, right?

[JOLENE] Right, right. Yep. Do you want another demo, or do you want to try it again?

[DONA] I think I'm ready to try it again. Let me do it and see if I can do it. Starting… Walk walk … halfway…. There.

[JOLENE] Excellent! You did it! That was perfect. Seven and a half seconds. which .. a half a second is acceptable. Anything within a half second of your time is good. So excellent job. Very, very good. Now we need to try to do that at least twice to really get it in your gut. So you want to try it again

[DONA] Sure, sure. Okay. I'm starting. … Halfway…. And I'm there.

[JOLENE] Perfect. Perfect.

[DONA] Oh, I got it twice in a row.

[JOLENE] Got it twice in a row. So we're done for now but when we're practicing this again, if your judgment starts to get a little off again, we are going to have to circle back and practice this again, okay? All right.

So now… it's the rest of your turn. And what we're going to do, does anybody, we can do it, I can do another demo for you or you can use the time that we just did with Dona. And what we're going to do now Just for the purposes of teaching yourself, of practicing yourself, since we're not right there next to you. If you'd like to use your own phone and your own stopwatch. Try not to look at the “stop/start” or the seconds, but just push the buttons for yourself. And see if you can get accurate with an imagined 7-second crossing .And if anybody's having trouble with it, you can raise a hand, we'll model. We can partner if you'd like. Or you can just do it for yourself.

[DONA]: Does anybody want to model before they start? You're going to go for it? Okay. Okay.

[JOLENE] I'm seeing some great facial expressions.

[DONA] Some of you might be ready for a demo, right? Yeah, yeah. Jolene, let's do another demo. You want to just put it up

[JOLENE] OK, Everybody, now imagine yourselves. Now you're me. Okay. You’re starting crossing…. Halfway … across.

[DONA] Was that longer than what you guys expected? or shorter? or about what you expected? “Wow,” says Jenna. Not a… Yeah, so you were way underestimating how much time it takes.

[VICTORIA] I… I found myself, I mean, I was like three seconds and then I went four seconds and I went four and a half. I mean, it was terrible! I'm going to have to practice the skill first. I'm sorry. It's going to take more than just this video.

[DONA] I would like to stick with it here. We've done this workshop where we just kind of talk about it and then we go on to the next step. And if you don't have a … you're not going to be able to do the next step Unless you have this. And Victoria if you keep underestimating it and then you get the model. We can model it again. And when you hear like “oh I'm already over and she's just got to the middle,” then you adjust your estimate

[JOLENE] because … we're going to keep using this Yes. What we do right so Cindi, do you have a question?

[CINDI]: I was just going to say, I know for me this was a difficult thing to do. And sometimes if I have a student that's really having trouble, I'll start with them with just the first like starting and middle And then build in the whole thing.

[DONA] Oh, Cindi, I'm glad you brought up ideas to help deal with this because some people struggle a little bit with it. I love your idea of just pulling it back and just doing half of a street at a time or one lane at a time. I have worked with somebody, he was trying to get his intuitive understanding for a four-lane street. He really struggled. He was not getting it. And then when we broke it down lane by lane. not that they need to know when they're in at the end of the first and the second and third lane, but in his case, just to help him picture this. I had him imagine it lane by lane. And that really helped him.

So I love your idea of bringing it down, making it more manageable. Let's share other ideas. Do you have any other ideas of how to make this easier?

[CINDI] For myself, I found … And with some students, I encourage like standing up and kind of like walking in place

[DONA] Oh, that's such a great idea. I'm glad you brought that up because actually, I usually have them do this at the street that they're considering crossing so that they can it's not that hard to imagine themselves there, but they are there. And I love your idea of kind of stepping out. I've seen some people doing that. Then I know they're not counting, they're actually walking in their head. I try to avoid having them imagine crossing when there's a lot of traffic coming because it's hard to imagine yourself crossing while you're dodging the traffic. So if possible, I have them start their imagination when it's clear.

And one other thought it's hard for people to just abstractly think, is “this time” longer than “this time”? And, you know, kind of very abstractly compare those two. So what I find helps a lot is for them to imagine crossing so that they … i'll say ‘if you had left just before you hear this vehicle (or you see this vehicle) … imagine you had started just before you saw it or heard it, then picture yourself crossing, and where would you be when it arrived?” And that takes it out of this abstract comparison of two times. and puts it more into a more concrete kind of imaginary time. Thank you. I'm so glad you brought up some ideas for helping.

[JOLENE] I also want to make a note that we are not looking for them to overestimate We want them to be accurate because if they overestimate then they're potentially ruling out some crossings that really could, that do have the potential to be crossed. So you don't want them, you don't want their crossing time like you know if it's actually seven seconds and they consistently get nine you really want them to keep practicing until they get that seven. Because they don't want to overestimate.

[DONA] Oh, yes. You know. some people instructors want to add a few seconds to the student's crossing time to add sort of a buffer. And the students do need a buffer, absolutely. In Part Three, we're going to talk about how to determine how much buffer they need, because some people need just one or two seconds of buffer, some people are not comfortable without four or five seconds of buffer. But that's a conscious decision they're going to make. And so they make it based on a really good accurate understanding of their crossing time. And then they add a buffer consciously. So don't add time to their crossing time because you want them to be safe, you're going to talk about adding buffer time later meanwhile, make sure they have a good accurate understanding of their own crossing time, like Jolene said.

[JOLENE] Would you like a model again? All right. We're starting. Halfway, sorry. across.

[DONA] Did that jive with what you guys are thinking? Pretty much. Okay. So try it on your own. See if you can Repeat that. How'd you do, Jen?

[JEN] Eight.

[DONA] Not bad. Not bad. Not close enough. You're getting there. You're getting there. Yeah.

[VICTORIA] Six and a half.

[DONA] Jenna, you look like you're, huh, Victoria?

[VICTORIA] I got six and a half.

[DONA] That's close enough. That's within a half second. I find that with a lot of training, people can get within a half a second. That's my goal that you know … So Jenna, how'd you do?

[JENNA] Well, I started out at like five seconds and I was consistently hitting five seconds and this And then I got to where I was hitting nine seconds and I thought, no, no, okay. So then I got seven and a half.

[DONA]: And you did!? Did you do it twice in a row? Ooh, let's see if .. you did! Awesome!

[JOLENE]: Are we going to keep doing more or are we moving on?

[DONA]: How many are ready? How many have done it twice in a row? Yeah. Oh, Victoria. All right. Cindi, did you have your hand up too? You did it? Yeah, Shelly? Jenna, you're still working on it? And Jen, how are you? So we're, yeah, sharing. Do you got it? Nah, you're going to be, you've been you've been pulling out. How about you, Michael?

[MICHAEL]: Seven and eight was the - I'm actually pretty good at the exercise. I've done this before. When I first started out, I got frustrated because All of a sudden, my phone is giving me pop-ups in the middle of my stopwatch Trying to buy an Apple watch. So I finally switched to using my wristwatch And I found out I'm pretty accurate.

[DONA]: All right. Michael. All right, Jolene, I think we're ready to move on. These guys are rocking.

[JOLENE] Fantastic. Before we move on, though, I see Cindi has her hand raised. Was there something you wanted to add, Cindi?

[CINDI]: What we've been doing here - using the stopwatch to practice and work on it ourselves - is actually something that I do with the vast majority of the clients that I work with also. I find that there's a few who really seem to develop this intuitive crossing time quickly and it just sticks and they're accurate when I go back the next week and the week after that and the week after that. I know personally, that's not my experience. It takes me a good bit of practice to develop it. And if I just… don't do anything with it for a week, it's gone. I'm pretty much starting over. And that with the majority of the clients I work with, it just doesn't develop that really deep long lasting. understanding.

And I think it's like all of the other skills we teach to really develop that, there has to be practice between lessons. And that's really where that improvement happens. It's really where that skill development happens. And I think this is the exact same. And that our clients can work on this the same way we have, which could be using a smartphone. And the built-in stopwatch, there's some apps that are accessible. I haven't found any stand-alone devices that do tenths of a second, so that can be a little bit frustrating, but hopefully, you know, if there's a stop, if they have a smartphone or something like that, they can use the built-in app or find various ones. And I think that really getting that practice, it helps them to really be able to have some more ownership of it and that they can improve themselves. it gives them the ability to check themselves and make sure they're still accurate even once we're done, you know, maybe they haven't practiced this for a while, they've gotten rusty. They can say, you know, hey, am I still accurate? And if not, they have the skills to improve it. The other thing too is for some people If they've got friends, if they've got family with them, they can also choose to recruit them and have that person be the one who's doing the timing. And so I think that, again, this is something that has to be worked on. It has to be practiced to develop this really deep understanding if people are going to be using this out in the community it's got to be worked on and be solid.

[JOLENE] Yes, thank you, Cindi. I really appreciate that. That's a great insight and a great addition. Absolutely.

Being able to compare their crossing time to the warning time is the critical skill. that should be on IEPs it's absolutely necessary to be able to make these determinations. So we're going to practice. We've got a video. And We're going to pretend to be the students. So remember, we're going to first have the students wait until it is quiet, if they're using their hearing. if they're using their vision, they're going to wait until it's clear in the direction that they're looking. They will report to you when they think they hear or see a vehicle. You are going to start your timer. when they say they think they heard or saw something that might be a vehicle. If there was no vehicle, thank them for reporting it. Do not suggest that they wait to be sure before reporting it. We want them to report it the instant they think they hear or see something coming.

Once the vehicle passes. report if they think they would have had enough time to cross. In other words, was the warning time shorter, longer, or about the same as their crossing. After they report, discuss their accuracy. Don't tell them their timing right away. after they make their decision first. then you make that discussion.

So, I will also make a note that if the student reports hearing a vehicle approach. when there's a masking sound, a temporary masking sound. go ahead and ask whether the warning time was longer or shorter. You still do the timing. But then talk about can we use that piece of data? Is that going to give us the information that we need? And then remind them that we can't use that. Because we have to know if the vehicles give enough warning when quiet. And if we hear the vehicle when something was noisy

when they heard it. they can't get an accurate data point from that. And then you repeat that until they're consistently accurate. in their comparisons.

So now we're going to practice this as if we're the students. We have a video here that you will hear a “ding” and see a blue screen when you “hear” the vehicle sound. And then you will hear another ding and a blue screen when it passes.

[DONA] And so if you could imagine, then, starting your crossing when you first heard the first ding, starting your crossing (using your intuitive understanding) and then were you on the other side before the second ding came (because the second ding is when it arrived), or were you still in the middle of your crossing when it arrived? or in other words, where were you when the second ding came? Were you already finished your crossing and having a cup of coffee, or just barely got there?

[JOLENE] Okay, everybody. We're standing by the street. crossing that we're in thinking about. And we're listening for vehicles. As the instructor, I'm the only instructor here in this case. I'm timing this. You all are thinking of your intuitive crossing And we're going to wait for it to be quiet. And listen, and then you'll report.

What do you think? Is the warning time longer, shorter. or about the same as your crossing time.

[SHERRI] I think I would have crossed.

[JOLENE] We're just looking at looking at the analysis first. Okay. Not quite thinking crossing yet.

[DONA] And talk about what is the purpose of this exercise? We've had to develop an intuitive understanding of crossing time. Okay, whatever. why are we now what are we doing what Are we…

[SHERRI]: I would say… Developing the skill to hear how long it is the warning time can be.

[DONA] And comparing that to your crossing time, right?

[SHERRI]: Yes.

[DONA] Beautiful. So the question about would you cross is a great one. And that's going to come later. But right now, it was longer than or about the same as or shorter than That's all we're looking for. Make sense?

[SHERRI]: I’d say longer than. longer than

[DONA] how many think longer than? Hands up. How many think,” well, about the same”? How many think it was shorter than the crossing?

All right, Jolene, take it away.

[JOLENE] So this one actually was longer than… This was 13 seconds. That's twice as long.

[DONA] Can we play that one again? Should we play that one again? And now that they know it was so long. And see if, okay. Here we go.

[JOLENE] did that feel more like what it actually, now that you … Now that you know the secrets?

[MICHAEL] yeah

[VICTORIA] I'm not calibrated, guys. I'm all over the place. I'm assuming. Hyperactive. Yeah, I got to do some practicing. You're right.

[MICHAEL] I think I was walking slower.

[JOLENE] you thought you were walking slower? I see haha!.

[JOLENE] So what is your perception on that one? Do you think that was longer than crossing time? About the same? shorter? That one was exactly the crossing time. That one was seven seconds. You got it?

[PARTICIPANTS] Yes.

[DONA] A lot of you got it. Almost all of you got that. All right! Excellent!

[MICHAEL] I usually get this. I'm conservative today.

[DONA] Here we go. Okay. Ready? Oh, let me share it first. That would be helpful.

[JOLENE] A lot of shaking “no”? Too short?

PARTICIPANTS Too short. Way too short.

[JOLENE] Okay. Yes, that one was only four seconds. Good job.

All right. Now, the third step, the third step is Make a conclusion. Look at the data that you have. the warning times that we've gotten and make those decisions literally exactly what we just did. So if all three of those data points that we just found from one direction were at a place where we were standing. what would you say? Were all the samples above crossing time?

PARTICIPANTS No.

[JOLENE] There was one that was four seconds, right? What about this situation.

PARTICIPANTS situation of Uncertainty,

[JOLENE] yes, exactly, right? And then… The next step is just to repeat. You keep doing this at lots of different crossing scenarios until you feel confident that your student is capable of making these determinations as well.

[DONA] Just to remind you that the students are going to report when they THINK they hear a vehicle because we want them to improve and use their ability to notice anything that might be a vehicle, anything that looks like it might be a vehicle, anything that sounds like it might be a vehicle. And don't ask them to wait until they're sure. ask them to report as soon as they think they hear something - there's another webinar we do on teaching the use of hearing. and vision. And with practice, you can notice things that maybe you didn't notice before. So you want them to really report when they first notice something that might be a vehicle. Don't ask them to wait until they're sure.

And that means that if they do report a vehicle and it's not coming. that you're going to thank them, tell them that's exactly what you want them to do. Don't say, oh, well, let's see if we can do better because then they are going to So

the second thing is that as Jolene has kept saying. that for an analyzing, we're only going to be using the vehicles that are heard when quiet or seen when clear. Not when there's a truck going down off in the nearest lane and it's blocking their view of the car in the farthest lane coming. And oh, I guess you didn't have enough warning. No, you'd only take the samples that were seen or heard when clear or quiet.

And then if they report hearing a vehicle when it wasn't quiet. go ahead and have them compare. Was that enough warning or, you know, was that longer than or about the same as or shorter than your crossing time? Because it's good practice you know this as Jolene said, this is one of the important skills is being able to compare the warning time they're getting with the crossing time. And this is a great opportunity to teach them about the effect of masking sounds. By noticing how much shorter, how much later they heard that, how much less warning time they get when they're heard during a masking sound and then just don't include it with your data point. All right, Jolene, take it away.

[JOLENE] So now… It's your turn. These scenarios that we're using now are real scenarios. Three of you get to be our lucky official participants. And each of you will have a different scenario. And we will then use that scenario to discuss the next step for each of those three, we'll do or we'll look at risk analysis from there.

All right. So. For the first scenario, remember. You are going to be picturing yourself at this situation at this crossing And we're going to be assessing the scenario So here's our first one.

[DONA] This one actually is a scenario that is taken in South Africa. We have Moira Higgerty to thank for this. And here we go. So you're paying attention? You ready? All right, here we go.

NARRATION Here is a woman with a white cane waiting to cross a two-lane dirt road in South Africa, listening for traffic. And here comes the traffic. First, a beautiful brown cow. Followed by a more cautious white and black speckled cow.

[JOLENE] We couldn't resist. I'm sorry. hahah g

[SHERRI] Awesome.

[JOLENE] We just did a three-part series for South Africa and they sent us some videos to use for their settings. So we… I didn't have a whole lot of advice for that one, frankly.

[SHERRI] I would not have crossed.

[JOLENE] Now we've worked on the intuitive crossing time and we've gone through all the steps of what to do at When you come to a crossing that you want to make. And so now we're going to practice with some actual videos. And for the next section of this webinar, we're going to have three different scenarios all at the same crossing.

So this is all the same location there are going to be some differences in the scenarios, but we're going to use the intuitive understanding of our crossing time and we're going to now practice comparing that to the warning time. And so because this is a prepared thing that we have done, we're going to start with vehicles from one side And then we're going to look at vehicles on the other side.

Our first student is Jen McEachen. who many of you might know without realizing it. She's been working behind the scenes managing the International Open O&M listserv ever since it was established in 2011.

Jen, on behalf of the folks who rely on that listserv, thank you. It's so great to finally meet you in person. Would you please tell us a little about yourself?

[JEN] So my name is Jen McEachen. I reside in northern British Columbia here in Canada. I am a university student working towards my bachelor's degree in emergency security management. So that's where my risk management expertise comes from. And I'm also a consultant in the emergency management field so As a deafblind individual and a guide dog handler. it benefits me in helping individuals, especially emergency management professionals, understand risk assessments and management emergency preparedness and mitigation. And I am also a Canadian Red Cross employee as the diversity, inclusion, and belonging coordinator Through my volunteer work with the Red Cross. It's where my passion for emergency management started. Thank you.

[JOLENE] All right. So, we have done the intuitive understanding of your crossing time Which in this case for this crossing we know is seven seconds. And now we are going to practice using some videos. So I'm going to share my screen so we can bring this video up.

All right, so Jen, we're standing at this potential crossing and we're going to decide if it's a situation of uncertainty So what we're looking for is if the … we're going to compare the warning time to your crossing time And we're going to imagine that because it's a video and it's not in real life, we're going to imagine that when Dona says, “I hear a vehicle from the left” that that's when YOU hear the vehicle as well.

And then we're going to hear and see the vehicle cross in front of us. And then we're going to compare that to warning time And we're going to see if the warning time is shorter than your crossing time, about the same as your crossing time, or longer than your crossing time. Sound good?

[JEN] Yes.

[JOLENE] Okay, I'll start the video.

[VIDEO] “It just got quiet. I hear a call from the left.”

[JOLENE] Okay, so this car is coming from the left, which means you only have to make it halfway across the street before you're out of their way, right? Before they would potentially hit you. So that puts our crossing time in half at about three and a half seconds. So comparing this to that, what do you think?

[JEN] I would say that the crossing is longer than the …

[JOLENE] The warning time is longer than your crossing time. Is that what you're saying?

[JEN] Yes. Yeah, I was just trying to remember haha!

[JOLENE] That's all right. That's okay. And yes, this one was eight seconds of warning time. So in comparison to Yeah, in comparison to about three to four seconds that's a good bit longer than your crossing time, exactly.

[JEN] Correct. Correct.

[JOLENE] All right. We'll try another video for more data.

[VIDEO] “It just got quiet. I hear a car from the left.”

[JOLENE] How about that one?

[JEN] I would say that one's longer than the first one.

[JOLENE] you know what? It was 10 seconds. Excellent. Look at you: The master!

[JEN] I've been practicing!

[JOLENE] Right! Okay. Yeah. So coming from the left, now we have two samples of data, one was 8 seconds and one was 10 seconds. So now… Just to give an example of walking through the flow chart … We're asking the question, were you able to gather enough data of vehicles heard from that direction when it was quiet? Yes, because we were able to get two vehicles.

The next question is, was the warning time of any vehicle shorter than the crossing time from that direction?

[JEN] No.

[JOLENE] No. Right. Your crossing time for that half of the street is 4 seconds, and the warning time was 8 seconds and 10 seconds so all the warning times were more than the crossing time.

The next question is: was the difference between the crossing time and the shortest warning time of the approaching vehicle long enough that you would agree that it would be extremely unlikely that there could be a warning time less than crossing time from the left?

[JEN] I agree

JOLNE Yes. And that makes it a Situation of Confidence for vehicles coming from the left.

So now we'll move on to assessing from the right. Now here is and of course these are prepared videos, so we put the two from the left first and now we're going to have ones from the right. In a real life situation, you would get at least two data points from one side and the other side. whatever order those come in. But we're doing it in a controlled way now.

[JEN] yes

[JOLENE] All right, here's our next video.

VIDEO: “It just got quiet. I hear a car from the right.”

[JOLENE] What do you think about that one?

[JEN] It's shorter than my crossing time.

[JOLENE] Yes, it was five seconds! You are just rocking it now!

[JEN] – thank you!

[JOLENE] So again, in our flow chart we had one data point, which that's enough if we know it's shorter than our crossing time. Then you ask that question we just said, was the warning time of any vehicle shorter than the crossing time? Yes, it was. So it becomes a Situation of Uncertainty – this time with vehicles to the right.

So now we know that we are in a Situation of Uncertainty at this situation right now with the road the way that it is and all of that from the right. And could you tell what made it a little bit difficult to hear the car coming from the right?

[JEN] I noticed the birds chirping in the background. But other than that, there was not any other ambient noise that I noticed that might restrict the ability to read the traffic.

[JOLENE] Okay. Well, I think if you were at this crossing in real life, I think you would have noticed that there was a parked car to your right.

[JEN] Oh, okay!

[JOLENE] So you might not have seen it in the video . . ..

All right, so now we know, Jen, we've decided that we have a Situation of Confidence with vehicles coming from the left, but a Situation of Uncertainty with vehicles coming from the right. Which means that now that makes it a Situation of Uncertainty overall, and so now we get to assess the risk to make a decision using educated data and we can make an educated decision about the level of risk and if we find that level of risk acceptable or not. And I'm going to hand it over to Dona to walk through that.

[DONA] Wonderful. All right. Jen, we're ready for our next adventure and thank you for doing this.

We're going to be looking at … you've watched some samples of vehicles approaching just one at a time. and determined that from the left, good to go, you know there's you don't need to worry about when it's quiet that there might be a car that could reach you. But from the right, it would be. So we're going to look at a longer period of time for that crossing. All right, Jolene, why don't you present the scenario? And Jen can make her judgment.

VIDEO: "I hear a car from the left. I hear a car from the right. I hear a car from the left."

[DONA] Did we not hear any from the right?

[JOLENE and JEN] There was one from the right. We did. There was one.

[DONA] Oh, I wasn't paying attention.

So we'll start by thinking about how likely is there any vehicle approaching that could reach you when you cross. And that's going to depend on two things. how much traffic there is at that particular time, and then how much warning you're going to get of their approach.

I think you said that on your road at home, there's only about one vehicle an hour. Was that right?

[JEN] Well, it's actually the family farm. I live right downtown where there's a bit more traffic during the day.

[DONA] Oh! Okay. But on the farm, it's one vehicle an hour.

[JEN] On the average.

[DONA] Okay. So in that case, most of the time when you start to cross, there's not going to be anything coming. And that would be true even if you had no warning, you know, if there was noise so loud that you had no warning, it would be extremely unlikely that as you start to cross that a vehicle is coming that

is close enough to reach you during the 10 or seven seconds that you need to finish your crossing. I think we said in this case it was seven seconds

So we're going to talk later about how likely you're going to be seriously injured or killed if that happens. But right now we're just talking about how likely is there a vehicle approaching. that could reach you. I mean, that's the whole point of this is to be confident that there's nothing coming, and we know that we can't be confident so How likely is it that, when it's quiet, there is a car coming that could reach you.

So… What I'd like to do is … let's talk about this in concrete terms. You know, on my little chart here i have “low traffic volume,” “moderate volume,” and “high volume,” and people ask “what's the point of that?” So I thought I'd describe it in more concrete terms.

If, in this case we have one vehicle every minute or so because that segment that you watched was a minute and there was one car from the right. And it takes you seven seconds to cross, so that means If that's average, every minute there are about seven seconds during which, when you step out, there's a car coming that could reach you. The other 53 seconds, when you step out there's nothing coming because there's only one vehicle every minute or so. Does that make sense?

[JEN] I think so.

[DONA] Okay. Okay, so… we're going to add later, because it's a combination of how much traffic there is, and also how well, how much warning you're getting of them, so we're going to add that in a minute. But right now, we're going to just talk about if you had no warning at all - it was extremely noisy or whatever -- how likely is it that when you step out that vehicle is coming that you know there's a vehicle within seven seconds of you. Would you say it's extremely unlikely or unlikely or moderately likely or extremely likely?

[JEN] Can you rephrase that?

[DONA] Yes, yes. I'm going to say that you know - put your risk management hat on. You know that out of every 60 seconds, for seven of those seconds there's a car coming that's close enough to reach you -- within seven seconds of you. And 53 of those seconds there's nothing coming. So what are the most likely

[JEN] I see where you're coming from now. because you're … there's seven seconds you're thinking of, but the 53 is the chance that you're able to cross safely.

[DONA] Yeah,

[JEN] I get it now where you're coming from.

[DONA] Yeah. So would you say the chances that when you step out you're within that seven seconds . . . you know, there is a car within seven seconds of you - Is that extremely likely? just likely? or unlikely? or extremely unlikely?

[JEN] Unlikely.

[DONA] Unlikely … It's unlikely. I agree. It's unlikely that as you step out, that car that comes every minute happens to be within seven seconds of you. All right.

[JEN] I had to think about that for a minute, you know.

[DONA] I'm glad. I'm glad we had this chance to work this out - putting it in your world, in your terms, right? Risk management.

So then we're going to go to the next step. Which is… How likely is it that, in the unlikely event that a vehicle is coming, it's going to hit you.

So we're going to look at different things. First of all, is there more than one lane coming because I think I talked earlier about Dick and Lorraine, who were crossing three lanes and they got to the middle lane. The driver in that lane slowed down for them. The driver right behind him moved around to the right and hit them. And killed them all. So that's what can happen when there's more than one lane approaching. And I'll tell you right now, there is only one lane so that's not a problem in this particular situation.

[JEN] do you mean one lane in both directions?

[DONA] From each direction, yes. If there's only one lane coming from Yeah, yeah, yeah. All right.

So the speed of the drivers um what would you consider? Were they going fast like on a highway? Were they going middle, like in a, you know, residential area? Or were they going slow, like when they're caught in traffic and they're just crawling along? What would you say of the speed of the drivers, moderate or high speed or low speed?

[JEN] moderate.

[DONA] I would agree. Yeah, they weren't going like on a highway, right? But they were going faster than somebody like, you know, browsing through the neighborhood or whatever. They were clipping along. good - moderately high speed.

Drivers, do you think they might expect pedestrians there? We're in the middle of the block. And we heard some people talking, but no one was crossing. Do you think drivers are expecting pedestrians there?

[JEN] No.

[DONA] No, I don't think so either. Yeah. What about visibility? We noticed that our ability to hear them was… cut off and they kind of appeared suddenly. And so even if we couldn't see it, we would know that You know what, there might be something blocking the sound here So what about the visibility? Do you think the drivers could see you?

[JEN] Low

[DONA] Yes, extremely low. That's right. I don't think they could see you until you come out from behind that vehicle, which is right when you're entering their lane, they won't see you until you actually are about to enter their lane. So very bad visibility.

The lighting is good, but that doesn't do any good.

Road conditions. Did they seem good or were they slipping and sliding and slushing around?

[JEN] From my observation, it sounds like a clear day. The road seems dry.

[DONA] The roads seem to be dry, be in good road conditions.

One thing I forgot to mention here was… Okay, would you be waiting, what research shows, although I don't think this would apply here because can't see you until you're in their lane. But research has shown that if you are willing to wait with a foot in the street, that they were more likely to stop you than if you're standing back on the curb. And so I'm going to skip that question with this one because it kind of… not applying because…

[JEN] I wouldn't do that, no. Because with the blocker I don't think that would be a smart idea.

[DONA] Well, you could wait with your whole body in the street because that car is going to block it from hitting you. But the problem is that that strategy of waiting with a foot in the street is not going to work there because They can't see waiting with a foot in the street.

[JEN] Yeah.

[DONA] So we're going to skip that one. And then you would not be using a cane, right? You'd be using a guide dog.

[JEN] Correct. Right.

[DONA] And you'd be probably crossing by yourself. So I'm going to go through this list and I want to emphasize we don't see how many are in the column indicating that they're more likely to hit you and how many are in the columns saying they're less likely to hit you. Well, let's just kind of put this whole picture together. So I'm going to review the whole picture for you.

On the column saying that they're more likely to yield for you is that there's only one lane coming from that direction, and the road conditions are good. On the column saying they're more likely to hit you are that they're going moderately fast, they are not expecting you, they can't see you until you step out in front of them, and you're walking alone, and you're using a guide dog and not a cane.

So let's put all this together. Jen, and this is a subjective, you're just assessment how likely is it that if there is a car coming when you stepped out, how likely is it going to hit you? Highly likely that it's going to hit you, moderately likely or unlikely it's going to hit you.

[JEN] That's hard question. I would say moderately to high. So… If you have a lot of contributing factors involved in risks that I would not cross there because of those risks.

[DONA] Ooooh, okay, that's something I'm going to ask you after we've looked at the whole picture And I'm not asking you, would you cross? I'm asking you very specifically: In the event that there's a car coming when you start to cross, how likely is that driver going to hit you? Is it highly likely? Because he can't see you, he's not expecting you.

[JEN] Highly likely.

[DONA] Highly likely. Okay. I hope I wasn't leading you with that … So the answer to that is it's highly likely he's going to hit you.

Okay. Now we're going to look at the last one, which is if there's a car coming And then the highly likely event that if that happens, he's going to hit you - highly likely - we're going to look at what would be the likelihood of being seriously injured or killed? And I'm going to guess that they're going about 26 to 30

miles per hour, which is 41 to 48 kilometers per hour. And at that rate, there's a 6% chance of being killed, there's a 35-36% chance of being incapacitated And you put those together, there's a 42% chance of being seriously injured or killed.

We have analyzed this and we figured out that it's unlikely a vehicle is going to be approaching as you start to cross, but if that happens., it's highly likely it's going to hit you. If that happens, there's a 41% chance of you being seriously injured or killed.

So Jen. Now's the question that you answered before. Is that risk acceptable to you?

[JEN] No.

[DONA] So we have a crossing with a risk that's not acceptable. What does somebody in risk management do next?

[JEN] In risk management, you always have to have a backup plan.

[DONA] haha -- Looking for alternatives. Wonderful. Oh, Jen, thank you. All right, let's start working on that.

[JEN] There are always going to be alternatives in… I always think of the backup plan for everything.

[DONA] Wonderful. That's perfect.

[JEN] Yes.

[DONA] Some of these will require planning - years of planning - some of these can be done on the spot. Can you think of any that you might - I love it how you put it, a backup plan. And in some cases, if you know that you're going to be in a situation, this is a forward-thinking plan. So given that, what kind of alternatives could you think of?

[JEN] I would call a taxi.

[DONA] Call a taxi! Don't have to cross! Get a ride! Exactly - avoid that crossing altogether. Wonderful! What other alternatives might you have?

[JEN] figure out alternative routes if you're able to, because in my case, there's always three different ways to get there.

[DONA] Oh, what kind of things would you be looking for in your alternative routes?

[JEN] Either a lighted intersection . . .

[DONA] Signalized . . .

[JEN] 4-way intersection.

[DONA] you said signalized, what was the other one?

[JEN] the four-way intersection.

[DONA] With stop signs, in other words. A place where the traffic on the street you want to cross has to stop. Okay. At a stop sign. Wonderful. So finding an alternative crossing that has a signal or a stop sign or is a place where you're more visible - where they're more likely to stop, or you can hear them better.

[JEN] OK

[DONA] What other alternatives can you think of?

[JEN] The three that I provided. The fourth one would be to connect with bus routes that you can find that you're able to utilize that is on the same street that you are on to avoid crossing onto the other side to catch the bus wherever you go.

[DONA] Beautiful. I'm going to put that under the category of avoiding the crossing. I think Michael had said at one point that . . . Suppose you need to cross the street to catch the bus to go the direction you need to go. And the bus, first of all, comes on your side and then goes to the end of the line, turns around and comes back. And if you catch it on your side, you can avoid that crossing and when it comes to pick you up on the other side, well, you're already on the bus. You avoided that crossing.

So one of the alternatives is to figure out some way- getting a taxi, like you said, getting a bus, figuring out a route where you don't have to cross that street at all. Excellent. Any other alternatives you can think of?

[JEN] that is all that I could think of.

[DONA] Okay. Another alternative is to get some help. And, you know, you can be creative in getting help We did hear pedestrians walking by, so you might be able to snag somebody to get across to help. But we have found that you can also get drivers to pull over, get out of their car and come and help you to cross if you're holding up a sign that, you know, an 8”x10” sign saying, please help me cross. or if you're near a store or whatever, you can go into the store and can somebody help me please cross? Or if there's a bus stop, you can ask some of the bus passengers. And I think that that's it.

There's one that takes years of planning. I said some of them take years of planning. And one would be to ask a traffic engineer to revise the crossing. They're not likely to install a stop sign. But there's a lot they can do to slow down the traffic. I'm going to show here a few pictures of solutions that have been done.

The first one is a two-lane street. that they basically widened and put a circle in the middle So that the drivers have to go around the circle, which will slow them down.

The next picture shows a five-lane street. that my client had to cross. And he might… It's going to be impossible to get enough warning time to cross five lanes and he might have been willing to take that risk, but he had to cross with his little son, his little boy, and he was not willing to put his son at that risk so he had to go about a block out of the way to where there was a traffic signal, although that signal quite treacherous so he had very limited choices. But anyway I came back several years later and found that they had taken this one crossing - this 5-lane crossing - and made it into 2 one-lane crossings by first of all, blocking off the outer lanes and put in what's called a “bulbout” where the pedestrian can walk right out to the second lane and then start the crossing. And after crossing the second lane, the third lane, which is the middle lane is filled in with a big refuge island. And then after you cross that island, then you get to one more lane that you have to cross and finally you reach the bulbout that comes out

from the other side of the street. These islands and bulbouts do not extend for the length of the street, they're just about …maybe two- or three-car-lengths so that the drivers have to channelize into these one lanes. So you can make a five-lane crossing into two one-lane crossings. So traffic engineering can make a big difference for these crossings.

[VIDEO] There is one alternative to consider that was too complicated to explain during our risk analysis with Jen. It can be useful only when (one) you can be confident that whenever its quiet or clear, you have time to cross at least half the street, (secondly), you can determine when you have reached the middle of the street, and (three) you are able to turn around quickly and return to the curb easily.

The strategy is to start crossing when it's quiet, and turn around if you hear a noise before reaching the middle. It doesn't matter what the noise is or where you heard it from because when it is no longer quiet, you can't be confident that you can get more than half way across and since you still have more than half the street to cross, you turn around, confident that you do have time to get back to the curb.

Note that this strategy enables you to avoid being in the street whenever vehicles reach the crosswalk because you do not want to rely on drivers yielding to you. Here's a demonstration of how it's done:

I'm standing at the corner of a two-lane street that is about 30 feet wide. It just got quiet and I start to cross but just before I reach the middle, I hear the sound of a car from the right and I turn around and come back. I would have come back even if the car was coming from the left since it could mask the sound of a car coming from the right.

Again, it just got quiet and I start to cross. When I'm still in the middle of the first lane, I hear an airplane and a car from the left and I turn around and come back to wait again. It just got quiet and I start to cross. When I reach the middle, it is still quiet and I give a thumbs-up and complete the crossing.

[DONA] And I think Jen, we're done. Do you have any questions before Jolene goes to the next student, or suggestions?

[JEN] Not that . . . I just have one question. I was thinking about this during a walk the other day and how would you figure out the warning time for areas where it has a lot of semi-trucks that pass by alongside cars. Because those have a different sound to them.

[DONA] The truck has a different sound to it?

[JEN] Well, semi trucks are louder and can be louder than the cars and trucks.

[DONA] That I can answer from research. that Rob Wall Emerson and I did that no that how loud that is has nothing to do with how much warning time it's giving. And the speed has almost nothing to do with it.

[JEN] How curious

[DONA] Yeah, I know. Isn't that weird? Yeah. But let's open it up to how would you determine that you're getting enough warning from those vehicles or any of the vehicles. How would anybody do that? Anybody want to …

[MICHAEL] i think you would have to do more trials because there is certainly the chance that ambient sound in the area that you're not aware of could be changing the warning time that you're getting from

other vehicles. Now again, it might not. But I think that the only real solution that I can think of is to just keep doing the statistics on that crossing. And, you know, I don't think two trials on that kind of thing would be enough. I think that perhaps you might have to .. if it's a place you're wanting to cross regularly. get out there and do 10 trials, 12, 20, to make sure that you know what the habits are of that area.

[DONA] Michael . . .

[MICHAEL] does put me off base?

[DONA] No, I think you nailed it. There's only one caveat there, which is that you can't assume that if you do a really good assessment at one point, that you can then assume it applies the next time. So no, that's not going to work. Each time you're going to have to do this.

But I love what you said about getting more samples. And Jen, if your first two samples are those loud trucks, you might think, “okay, that might be skewed. I would need to get more samples and make sure that the ones that are not the loud trucks are heard with enough warning.” does that kind of fit, Jen?

[JEN] Yeah, because you might get a totally different warning time with those big trucks. So I would use the normal type of traffic because this odd number of semis that pass through. But it will be different.

[DONA] Yeah. And it might be totally opposite of what you're thinking - it might be that the trucks are the problem.

So when you have two really different kinds of characteristics of the vehicles that you're observing, you might want to make sure you have two of each kind - two of the trucks, two of the other. I'm so glad you raised that, Jen. Anybody else have any suggestions with that?

[MICHAEL] let me let me throw in one other complicating factor here: An 18-wheeler has a much longer stopping time …

[JEN] Oh, yeah.

[MICHAEL] you're going to have a vehicle that will be slowing down but probably not able to come to a complete stop in the same amount of area. Now, how does that factor into your analysis?

[DONA] It wouldn't factor into the confidence that you have that it's clear, but Michael, we ought to add that to our Risk analysis, because if you having a lot of … if you're popping out in front of vehicles that have no warning of you, and there are all these 18-wheelers, yeah, they might factor in how likely are they going to hit you! You would add that factor that they need more time.

By the way, in our research, when we had Gene walking across the street, we had quite a few big 18-wheelers. They ALL stopped for him. All of them. I was surprised.

[JOLENE] I would imagine too if talking about adjusting the risk assessment the likelihood that you will be seriously injured or killed if you are hit by a semi is significantly higher than if you're hit by a typical vehicle. So that would certainly change those percentages a little bit, I imagine.

But the other thing that I thought of, though, is that still, regardless of the type of vehicles, remember, all of these warning times are from when it's quiet. So it doesn't matter what type of vehicle it is or you know you know what the level of quiet is at that area. And you're always taking your data from when it's

quiet, no matter what kind of vehicle you're listening for. So if the ambient noise is too loud, that's the first question of the flow chart, were you able to gather enough data of vehicles heard when quiet. if it's never quiet, the answer is no, you can't gather enough data, period. It's a situation of uncertainty. Does that make sense?

[JEN] It does.

[DONA] Good point. Because Michael, you were saying that the ambient sound might change. And yes, that's called masking sound. And if it's a steady sound that suddenly increases, like someone starts his uh you know and you know the motor to vacuum the house, whatever it is and it's a steady sound, then you have a new situation - the assessments that you did before that started are thrown out and now you have a new situation to assess. Wow, great discussion. Jolene, I think we're ready for the next thing.

[JOLENE]: Our next student is Michael Byington. Michael, would you tell us about yourself?

[MICHAEL] Jolene, I am a certified orientation and mobility specialist. I went to that profession rather late in life. I taught some O&M before, but I went back and got the credential when I was in my 50s, my first career was I had a master's in drama therapy and I worked in several jobs where i got to do drama therapy is at least part of the job. So I've always been in the human services.

[JOLENE] All right, Michael. So here we are. We have your intuitive understanding of your crossing time Again, it is seven seconds for this crossing. We have another scenario. This is the same crossing In Dona's neighborhood. But this is a different day. with different conditions. And so now we're going to analyze this situation again.

[MICHAEL] Dona, when this is over, I think I'm going to probably know more about living in your neighborhood than I do about living in mine.

[JOLENE] All right, I guess we're coming to your house next, Michael.

[MICHAEL] Okay!

[JOLENE] so… And again, remember, this is, you know, it's a contrived scenario. So because we have videos already, we're going to do from one direction first, and then we're going to do the other direction. But of course, if you were in real life, you wouldn't necessarily know whether they were coming from right or the left. But for the sake of brevity, we're going to do one and then the other.

[MICHAEL] Left, left, right, right.

[JOLENE] So here is our first video. And again, we're assuming that when Dona says “I hear a car from the left,” that that's also when you hear the vehicle from the left. And then we will see and hear it cross in front of us in the video and then compare that warning time to our crossing time.

So here we go.

[VIDEO] “It just got quiet. I hear a car from the left.”

[JOLENE] Okay. So what do you think? intuitively was that warning time shorter than your crossing time? about the same? or longer?

[MICHAEL] I'm going to say that I think it was close to about the same and I think it was about six seconds.

[JOLENE] Okay, that's interesting so Let me just ask, were you counting seconds?

[MICHAEL] Do I want to admit it if I was?

[JOLENE] Well, luckily I can't reach through the screen and smack your hand. So you're getting lucky there. But no, remember, we don't want to be counting we want to have that into that gut feeling that like, whoa, no, no, no, no, that's way too short. Or it's about the same as me imagining myself crossing the street. Or that, yes, it was way longer. And remember also that was a vehicle from the left. So we only have to get halfway across the street before we're out of their way and not worried about them anymore.

[MICHAEL] You're right. And that changed my answer, I think.

[JOLENE] Okay, then what's your answer now?

[MICHAEL] Well, my answer would be that considering that factor I suspect I would still be in the street, but out of the way of the car by the time the car got there. That would be at least from the left a situation of Certainty.

[JOLENE] We only have one data point so far, so we're not quite there yet.

[MICHAEL] We're going to do that now.

[JOLENE] Right, correct. I have the stopwatch and that was eight seconds from when we heard the vehicle to when it crossed in front of us. So yes, it was almost, it was double of what your crossing time for half of the street is. So yes, I agree that is that is not close to crossing time. Let's get another data point.

[MICHAEL] Great.

[JOLENE] Here we go.

[VIDEO] “It just got quiet. I hear a car from the left.”

[JOLENE] How do you feel about that one? Same questions.

[MICHAEL] That's closer. But I think doing the math and dividing my crossing time and so on I think it's about the same, but that I'd make it.

[JOLENE] Yeah, I agree. That one, again, with the timer, that one actually was 10 seconds. So it was even a little bit longer. So, but it is it is not very close to your crossing time

So now we have two data points. So we're going to go ahead for the purposes of thinking about it just from that direction. we're going to now look at the flow chart, and we're going to ask ourselves some questions just for coming from the left. So the first question, of course, is were you able to gather enough data … when quiet?

[MICHAEL] Well, I have my two data points, so I guess that's yes.

[JOLENE] Yes, the answer to that is yes. So then the next question is was the warning time of any of the vehicles shorter than your crossing time from that direction.

[MICHAEL] And the answer to that is no.

[JOLENE] No, correct. Absolutely. Now the next question from our flow chart is: was the difference between the warning times and crossing time long enough that you think it would be extremely unlikely that there could be a warning time less than crossing time?

[MICHAEL] I'm a little conservative on those issues, but I think the answer statistically would be a yes.

[JOLENE] I agree. And that makes it a Situation of Confidence for vehicles coming from the left.

So now we will move back to our videos and we're going to look at some scenarios from the right.

[MICHAEL] All right.

[VIDEO] “It just got quiet. I hear a car from the right.”

[JOLENE] What do you think about that one now?

[MICHAEL] I think I just made it, I think it was a situation where it was longer than my crossing time.

[JOLENE] Okay, and now we're your full crossing time. So we're at the seven seconds.

[MICHAEL] Right.

[JOLENE] That was - using my stopwatch, I got 15 seconds from when we heard the vehicle to when it crossed in front of us. So that is definitely longer than your crossing time. Is it significantly longer or is it kind of close to your crossing time?

[MICHAEL] Well, it's significant, it's not close. It's significantly longer. Now, I'm not sure that I realized how much longer it was, but I felt it was longer.

[JOLENE] Yes, absolutely. I agree. So since you misjudged that a little bit by thinking that it was closer than it was, why don't we practice your intuitive understanding of crossing time again. How do you feel about that?

[MICHAEL] I'll do what you say.

[JOLENE] Okay. So my first question to you then is, would you like a model of this first? Would you like me to tell you when you are - you know - start crossing halfway and all the way across, or do you want to just try it yourself

[MICHAEL] I want to try it myself. I have an understanding of the mechanics. My gut just is running a little bit slow what it needs to.

Here we go. I'm stepping off the curb…. I'm halfway across…. I'm on the other curb.

[JOLENE] Okay, so you're “halfway” was perfect. but the rest of the street was two and a half seconds too long.

[MICHAEL] I got a little winded on it.

[JOLENE] You had to stop and take a breather?! Now, of course, it does take a little bit, you know, usually the first part of the crossings faster and then the second part because you have to step up on the curb takes a little bit longer, but still, it's not usually two and a half seconds longer.

[MICHAEL] All right. So you want to try that again?

[JOLENE] Yes, let's try it again. Would you like a model again or do you want to just try it one more time first?

[MICHAEL] I'll try it this way. Okay. Okay. I'm stepping off the curb…. I'm halfway. …I'm there.

[JOLENE] Well, you're nothing if not consistent. That was exactly the same as the last time. This explains a little bit because this helps me understand why you felt like it was very close to your crossing time because you're overestimating your crossing time for sure. And consistently too. so let's do this one. Would you like a model this time or do you want to keep trying it?

[MICHAEL] Well, I'm getting the hint that you might prefer that we have a model.

[JOLENE] I won't insist but

[MICHAEL] I'll volunteer for you to give me a model.

[JOLENE] Okay. So here we go. You are stepping off the curb. …Halfway… Across.

[MICHAEL] Yep. And again. I listened to your model very carefully. And when you made it up on the across, I still had about three or four steps to take. I'm still doing that, but I'll try to do it less.

[JOLENE] Okay. Well, because remember, when we figure out your crossing time we get that crossing time from actually timing you crossing that street.

[MICHAEL] I understand that.

[JOLENE] Right. It's not an arbitrary… but we figure out, we timed you first. So it's just that your mental picture of it maybe is a little different than your actual execution.

[MICHAEL] All right. All right.

[JOLENE] So now let's try it with you doing it again.

[MICHAEL] All right. I'm stepping off the curb…. I'm halfway. …I made it.

[JOLENE] Okay, that was it. That was good. That was good. All right, let's try to get it one more time, see if we can get it consistent this way.

[MICHAEL] All right. Stepping off the curb. …I'm halfway. …whew - I made it!

[JOLENE] Well, you grew wings that time because you went a lot faster.

[MICHAEL] All right, you want me to try it again?

[JOLENE] Yes, let's try it again.

[MICHAEL] All right. I'm stepping off the curb…. I'm halfway. …I made it!

[JOLENE] Excellent. Excellent. One more time so we can try to get two in a row.

[MICHAEL] Yep. All right. All right. I'm stepping off of the curb…. Halfway…. I made it.

[JOLENE] Excellent. Yes, that was perfect - it was half a second longer than seven seconds. But remember, we accept a half a second window. So that was much more accurate compared to your actual crossing time.

All right. So with that in mind, now let's go back and I'd like to look at that last data point that we just had that you thought wasn't that much longer and let's listen to it again with your new refreshed understanding of your crossing time.

[MICHAEL] All right.

[JOLENE] And I'd like you to imagine yourself crossing as we're listening to the video, and see where you would be when the vehicle crosses in front of us.

[MICHAEL] Sure. I enjoy walking around Dona's neighborhood. This will be fine.

[JOLENE] All right. It's a lovely little neighborhood. Here we go. VIDEO: "It just got quiet. I hear a car from the right." What do you feel? Where would you have been when the car crossed in front of us?

[MICHAEL] Well, I wouldn't have been out having coffee with the neighbors, but I would have accomplished getting up the curb and I'm standing on the safe area - Yeah, I made it with… Well, this is scary because the next thing I was going to say was that I thought I had about four seconds to spare, but I don't think you want to hear that.

[JOLENE] No, we're not counting. We're not counting. You're lucky I can't slap your hand. But yes, you did have a good bit of time. If you had stepped out right before you actually heard the vehicle, there was still a significant amount of time that you would have made it up onto the side or the other sidewalk before that vehicle crossed behind you, thank goodness not into you.

All right. So, we will keep collecting data. Here's the next video.

[VIDEO] Loud noise from a helicopter . . ."I hear a car from the right."

[JOLENE] So what do you think about that?

[MICHAEL] Well, I think it was too short of a time for me to cross.

[JOLENE] Yes, exactly. Absolutely. It was too short of a warning time. That was only four seconds. So, but I have another question about that - can you use that data point?

[MICHAEL] I don't think so because she didn't say that she heard all quiet and I still heard a lot of ambient noise in the area.

[JOLENE] Yes, exactly. We cannot use this data point because it is so important that we always collect data when it's quiet. That helicopter really, really cut into our warning time and we only got four seconds in a place where, at the last one, we had 15 seconds of warning. So yes, that makes a huge difference.

[MICHAEL] Okay,

[JOLENE] so let's try for another one.

[VIDEO] “It just got quiet. I hear a car from the right”

[JOLENE] What do you think about that one?

[MICHAEL] I think I just barely made it! I was stepping up onto the curb as that car went by my hind end.

[JOLENE] Exactly. I love the visualization! Yes, exactly. That was very close to your crossing time. That was … with my stopwatch, I got that was nine seconds,

So now we've got our data points. Let's go back and look at - walk through the flow chart.

[MICHAEL] Okay

[JOLENE] So first question, of course: Were you able to gather enough data of vehicles heard when quiet?

[MICHAEL] Well, two is supposed to be enough, so that would be a yes.

[JOLENE] Yes, so that takes us to the next question. Was the warning time of any vehicle shorter than your crossing time?

[MICHAEL] Only the one that we didn't count. So I guess that makes the answer no.

[JOLENE] Correct.

Now the next question on our flow chart is: was the difference between warning times and crossing time long enough that you think it would be extremely unlikely that there would be a vehicle with a warning time less than crossing time?

[MICHAEL] And the answer to that is no.

[JOLENE] I agree! That 9 seconds is pretty close to your crossing time, so we cannot be confident that it would be extremely unlikely that there could be an approaching vehicle with a warning time less than crossing time.

[MICHAEL] well exactly. And my tendency as to what I would actually do if not in a student situation here would be to take at least two or three more data points to see if I could get a better handle on that.

[JOLENE] Yes, absolutely. If you are willing to take the time to get more samples, by all means, you are more than welcome to. This is your crossing. But I have students that would absolutely be like, ‘I can barely even stand here for two. I'm ready to go!’

All right, so because we don’t believe that it would be extremely unlikely that there could be a vehicle with a warning time that’s less than crossing time, this becomes a Situation of Uncertainty, which means that we’re going to assess the risk. And I will pass it off to Dona for that.

[DONA] Fantastic. Gosh, Michael, I love what you said about …We figured out because that one was so close, you said you were just stepping up and there he was. And how accurately you judged that because it’s exactly if you had started just before you heard it you would have stepped up and two or three seconds later, he would have been gone right by you. And that's awfully close.

And so one thing you can do is make the assumption that we are making, which is you can't be confident that there's not going to be a car, a vehicle that could arrive before you finish your crossing, you just can't be confident. And so you're thinking one thing you might do is to make yourself more confident by taking more samples? Is that what you're thinking?

[MICHAEL] Well, that's what I said, yes.

[DONA] Oh, haha- that's what you said, maybe that's not what you would do.

[MICHAEL] No, I think it is what I do.

[DONA] Oh, that is what you do. Okay. So assuming we're not going to take the time to do that, we're just going to assume that no, we can't be confident that it's clear to cross whenever it's quiet. So we're going to figure out how likely is it - you know i can't be confident, I can't be sure that there's not going to be a vehicle coming that would reach me, but you're going to look, Michael, and this might make it so that you don't have to go through that process of collecting more data.

[MICHAEL] OK

[DONA] just think of how likely is it, given what we collected. that the vehicle will be coming? okay? So you're going to look at how much traffic volume is there? And we know that you're getting almost enough warning time. We think of the two that you observed, you had more than enough warning time, just barely But we're thinking it's possible that there would be one that might be a little bit less, but the warning times pretty good. So, you're going to look at how much traffic is there so we can figure out how likely is it that there is a car coming. And then we're going to look at if there is a car coming that you didn't realize when you started crossing, how likely is it going to hit you?

And again, you're going to look at the speed. There is no more than one lane so we're gone talk about that. You're going to look at how much drivers might be expecting pedestrians, how well can they see you, what are the road conditions, would you be crossing with a group, are you willing to wait with a foot in the street, would you be using a cane, and then if you are hit, how likely to be injured or killed, and for that we're going to look at speed. So in the scenario that Jolene's going to show you, take a look at those things - traffic volume, speed, road conditions, etc.

[MICHAEL] I remember the matrix. Okay!

[DONA] All right!

[VIDEO] "I hear a car from the left (2 cars from the left). I hear a car from the left. I hear a car from the right."

[DONA] All right. And I forgot to mention, but you already know that we're only concerned about the traffic from the right -their speed, their visibility, their traffic volume, etc.

All right. So we're, you know, I love the fact that when you're faced with a situation where you can't really be confident that it's clear to cross whenever it's quiet your inclination was to take more samples. And so we might think about . . .rather than taking samples, look at how likely is it that there's going to be one of those vehicles coming that are less than your crossing time.

And so we're going to start with how much traffic volume was there that from the right?

[MICHAEL] There were three or four from the right - I mean from the left and then one from the right.

[DONA] Yes.

[MICHAEL] And, you know, just based on that very short sample, the conclusion would be that the traffic volume is moderate from the left, but perhaps low from the right.

[DONA] Yeah, so it's low traffic volume. And the warning time that we had was, well, the two that we heard, you had enough warning - if you had started before you heard them, you would have made it to the other side. But we know that because of the statistics, there is a possibility that there might be some that would be less than crossing time - not that likely because we had one that we heard way more than, you know, almost twice as much as time as we needed, but there is a possibility, so, given that warning time, and the fact that there's very little traffic - how likely is it that …

I'm going to put my hands up and say that my left hand is the crossing time, my right hand is where you are worried about vehicles getting closer than seven seconds. And so I'll put my thumb very close to that because you heard them with enough warning - those two - but we think that it's possible that there might be some that slip in under that. So that's where my thumb is. It's very close to my right hand.

And so what are the chances that with that low volume, there is a car approaching that's close enough to reach you but not close enough for you to hear. It's a very small area. What are the chances that when you step out, there's a car in that area close enough to reach you, but not close enough to be heard?

[MICHAEL] It's a pretty low risk.

[DONA] Pretty low risk. Would you say it's unlikely then that when it's quiet, there's a car coming that could reach you?

[MICHAEL] Yes, I would say that.

[DONA] Yes. And I think the interesting thing is … I'm glad you brought that up before that you would want to take more samples. But does this help you kind of not have to stand there and take more samples, but to kind of put together an idea of how likely is it that there's going to be a car coming?

[MICHAEL] It does. And it also relieves me to find that I'm a little bit more conservative than perhaps I need to be, because that actually lowers my risk more.

[DONA] It does. It does. It's unlikely that when it's quiet, under those conditions, that there's going to be a car that reaches you. And you don't have to take more samples to find that out. You just look at what observations you've made and you decide, no, that's not likely.

So in the unlikely event that a car does come that could reach you, there's only one lane, so we're going to put that in the column that they're less likely to hit you because they're not going to be coming around in the second lane. The speed of the drivers, would you consider that to be - they were driving slow, moderate, fast?

[MICHAEL] uh…moderate-to-fast. They were not slow.

[DONA] Yeah, they were not slow. And you're thinking maybe a little bit toward the fast side of moderate, huh?

[MICHAEL] Exactly.

[DONA] Okay, I agree. The expectation of drivers -- do you think anybody's expecting anybody to cross there?

[MICHAEL] Well, it's mid-block. It's a residential area. There are some parked cars along the street, although there are not any immediately where the crossing is being made. I think it's a pretty low expectation of seeing a pedestrian.

[DONA] Yeah, I think it's that's right there. Not expecting you. But you raise the next one, which is visibility.

[MICHAEL] The visibility was probably pretty good there.

[DONA] Yes.

[MICHAEL] I find the video scenario is a little bit hard to gauge things that I might not be seeing that could be there but

[DONA] Yes, yes. And we saw in my neighborhood that I could hear them long before I saw them, so assuming that they can see you as soon as you hear them is not a good one. You might, if you didn't have enough vision, you might want to ask somebody how far they can . . How straight is this? But yes, they have a pretty good view of you from quite a distance. And it was during the day, so it was well lit. So the visibility would be good, you'd say?

[MICHAEL] I would, yes.

[DONA] Yeah. And the road conditions, what do you think? Good, bad, fair?

[MICHAEL] It appeared to be dry and no factors there. So I would say good, yes.

[DONA] good road conditions, you would be walking alone, I assume, not with a group, so we're going to put that in the column that it's more likely to hit you.

[MICHAEL] Nobody else there? So yes, that's correct.

[DONA] Would you be willing to … And I will tell you that this is wide enough for that there are cars parked occasionally, not nearby. So there could be a car that would come careening up to the curb, but would you be willing to put your foot into the street, one foot into the street while you're waiting?

[MICHAEL] Probably.

[DONA] Okay, yeah. I would too because when they pass by...

[MICHAEL] The lecture on that study was an interesting thing to me, I realized that the thing that would make me possibly less likely to do that, even though I've heard Gene talk about the study that you have mentioned, is that as a low-vision person, I don't think I would see that. And so I don't think about doing it. It's not something that is in my consciousness of what information vision can give now. Intellectually…

[DONA] wait, wait - are you talking about your decision to put a foot in the street? or what the drivers are thinking?

[MICHAEL] No, I know about the driver's thinking. I used to be a bioptic driver, so…I know quite a bit about that but…. Gene's method with the foot in the street . . .

[DONA] No, no, no, no. This is totally different. No, sorry, sorry, sorry. That's very different. And I'll take this whole part out because, well, I'll explain we're not talking about - as you decide to go, you put a foot into the street and then pause a minute - I don't think that's actually that effective for this crossing. That's at a signalized crossing that you would put a foot out there and make sure that you like everything and then go.

But in this one, once you start to cross, you should probably, you

[MICHAEL] just do it.

[DONA] Yeah, keep going, don't pause because that's just going to confuse the driver. However, what I'm talking about here is just putting one foot in while you're waiting so that when the driver first sees you, you've got a foot in the street.

[MICHAEL] I would be comfortable with that.

[DONA] Okay. And research shows that that … they had the subject (which was one of them) standing at the curb so when they first were seen, they had one foot in the street, and then they would see what the driver would do. And the drivers . . . when they were waiting at the curb, they were less likely to stop. But if you had one foot in the street. they were more likely to stop. So that's why we put this in there.

[MICHAEL] Okay.

[DONA] And would you be using a cane?

[MICHAEL] Well, if you're asking personally, No, at my level of vision, I probably, if I'm traveling outside would have my very obvious bioptic on. I don't use those.

[DONA] Would you put a cane in your hand to get across that street?

[MICHAEL] if it were necessary, I would, yes, I have no aversion to use it – again, I just don't find it necessary.

[DONA] Right, but I will tell you that it more than doubles your chances that the driver is going to stop for you.

[MICHAEL] I teach that all the time, I am aware of that. Yes

[DONA] Okay. So you wouldn't be using the cane to keep from tripping and falling, you'd be using the cane to be visible to the drivers to increase . ..

[MICHAEL] Absolutely.

[DONA] All right. So you would use a cane just for that crossing just to make yourself more likely to not get hit.

All right, so we're going to summarize that - the things on the column that say that they're more likely to stop for you is that there's only one lane coming, they can see from a good distance and the road

conditions are good, and you'd be waiting when they see you, you've got a foot in the street, and you'll be using a cane.

So the things that say they're more likely to hit you is that they're going moderately fast, they're not expecting you and you're all by yourself.

So I'd like you to put that all together - and this is not as objective as, you know, this is what you perceive this to be as the chances of them hitting you, given that they have a good line of sight, the road conditions are good, you have a cane and you're waiting with a foot in the street, but they're not expecting you, and you're all by yourself.

What are the chances that if you step out and, in the unlikely event there is a car coming. that it's just going to keep coming and hit you? Is it unlikely, moderately likely, extremely likely?

[MICHAEL] That's unlikely.

[DONA] Unlikely. I agree. They have a good line of sight, you've got a cane in your hand. Now, if they do, just in the unlikely event that there's a car coming, and in the unlikely event that if that happens, they just keep going and hit you, at that speed you have about a 42% chance of being seriously injured or killed.

So, Michael, is the risk of crossing when it's unlikely there's a car that's going to be coming and if that happens, it's unlikely it's going to hit you but if it does, there's a 42% chance of being seriously injured or killed - Would you consider the risk of that to be acceptable?

[MICHAEL] In some cases, I would. Now, the factor that I would probably consider, and this isn't in part of your charts there, but I would look at how far out of my way I'd have to walk to get to a better risk-factor crossing.

[DONA] I love it, Michael, yes!

[MICHAEL] If that was going to be an inordinate inconvenience, I probably would cross there.

[DONA] I love it. We should add that to the chart. "How…How badly do you want to cross here in this scenario?"

[MICHAEL] Exactly!

[DONA]I love it. That is crucial and I think that really hits to how not only does what's acceptable risk to us vary from person to person, it varies from situation to situation among ourselves, doesn't it? you'd be more willing to take that risk If the alternatives were limited and you really wanted what was on the other side of that street. But the risk could not be acceptable if it just wasn't worth that risk. I love it. That's a crucial thing. And I think you're so wise to add that to when you're considering with your student.

So, since the risk is acceptable, we're not going to look at alternatives because you would just go ahead and cross. Are there any questions or anything you want to add to that?

[MICHAEL] Not really. I've taken up a lot of your time and Sherri's been so patiently waiting. We need to let her get to her . . .

[DONA] Michael, thank you. That was invaluable.

[MICHAEL] All right. Well, this is excellent. There's good smells coming from my kitchen.. . .

[JOLENE] Our final student is Sherri Martinez. Sherri, would you tell us a little about yourself?

[SHERRI] Hi, it's Sherri Martinez. I've been a special educator in Hawaii for 30 years. 25 of those years as a teacher of visually impaired students and a certified orientation and mobility specialist.

[JOLENE] Okay, so Sherri. Now it's your turn as our student. Again, we're coming back to this same crossing. We really need to cross the street right here in Dona's neighborhood! But we've got another scenario now. It's yet another day. So we're back and we're going to see if this is a situation of uncertainty or a situation of confidence now in potentially new conditions. Same crossing, different day, maybe different time of the day. I'm not sure but, here we are.

So we already have your intuitive understanding of your crossing time. We know that it's seven seconds. And we very recently practiced it, so we will only go over it again if you're struggling a little bit.

Okay, picture yourself In Dona's neighborhood. Here we go…

VIDEO: ”It just got quiet. I hear a car from the left.” What do you think? Was it close to your crossing time, shorter than your crossing time, or longer?

[SHERRI] It was longer.

[JOLENE] Yeah, it was longer. Did it feel really close or was it like a good bit longer?

[SHERRI] felt like it was a good bit longer.

[JOLENE] Yeah, because remember, we're going just halfway across the street now. So we've only got to do that three to four seconds, yes, absolutely. Me with my stopwatch, I got that was 12 seconds. So you definitely had time to get halfway across the street before that vehicle would have come to you. Let's gather some more data. .. VIDEO: “It just got quiet. I hear a car from the left.”

[JOLENE] Thank you for noticing that slightest hint of a vehicle and for reporting it, that's exactly what we want. You're doing excellent with your perception skills. And are you ready to try again? I'm resetting my watch.

[SHERRI] Yes.

[VIDEO] “It just got quiet. I hear a car from the left.”

[JOLENE] What do you think about that one?

[SHERRI] I feel like I had enough time to cross, but it was a little closer to my crossing.

[JOLENE] Yeah, absolutely. It was closer, but definitely, again, since you're only going halfway, there was still plenty of time. That was 10 seconds. So that was a good amount of time. So have we gathered enough data?

[SHERRI] Yes.

[JOLENE] Yes, we have. So now we're going to go to our flow chart and look at our situation

So we already said that, yes, you were able to gather enough data of vehicles heard when quiet. So the next thing we're going to look at - was the warning time of any of those vehicles shorter than your crossing time.

[SHERRI] No.

[JOLENE] No. So the next question is: was the difference between warning times and crossing time long enough that you think it would be extremely unlikely that there could be a vehicle with a warning time less than crossing time?

[SHERRI] Yes.

[JOLENE] I agree. So from the left, this becomes a . . . ?

[SHERRI] Situation of Confidence!

[JOLENE] Situation of confidence - Excellent. Now we need to judge it from the right. Here we go.

[VIDEO] "I hear another car from the right."

[JOLENE] How do you feel about that one?

[SHERRI] I feel like I had enough time to cross.

[JOLENE] Yeah, where were you, do you think? Were you already on the sidewalk or just stepping up onto the curb?

[SHERRI] I think that was up on the curb.

[JOLENE] That was 13 seconds.

[SHERRI] Okay.

[JOLENE] Yes. A good amount of time to get across. Again, now we're crossing all the way, so you need your full seven seconds, but 13 is still a good amount of time, absolutely. All right, one more.

[VIDEO] "It just got quiet. I hear a car from the right."

[JOLENE] How do you feel?

[SHERRI] I felt like I had enough time to cross.

[JOLENE] Yes, definitely. That was a good long time. That was 14, maybe even a little bit more for that one. Yes, we have plenty of time.

So do we have enough data?

[SHERRI] Yes.

[JOLENE] Excellent. So now we'll look at our flow chart. Of course, the first question, were you able to gather enough data? We already said yes you were. Was the warning time of any vehicle shorter than your crossing time?

[SHERRI] No.

[JOLENE] No. And with the shortest warning time of 13 seconds being almost twice as long as the 7 seconds you need for crossing, do you think it would be extremely unlikely that there could be a vehicle with a warning time less than the crossing time?

[SHERRI] Yes.

[JOLENE] No. So we have a …

[SHERRI] Situation of Confidence!

[JOLENE] from the left and from the right.

[SHERRI] Correct!

[JOLENE] So in this scenario - could you tell what was different? I wonder what made it so that this same crossing, now we can suddenly - we have the warning times are so much longer. Could you tell what was different in the video?

[SHERRI] The road was wet.

[JOLENE] The road was wet. So we get all that tire noise so much farther away. Absolutely. We've got a lot of warning time so . . . obviously the fact that the road is wet doesn't automatically make us determine that it's a situation of confidence, right? But it does give us a clue that we potentially could hear things a lot farther away. So, absolutely.

So in this case, being that it's a situation of confidence, we don't have to do the risk assessment because we can be confident that if there were a vehicle that we heard as soon as we stepped out into the street, we would have plenty of time to get across the street and out of its way before the vehicle crossed behind us. Absolutely. Excellent.

Thank you so much, Sherri.

[SHERRI] Thank you.

[JOLENE] Thank you, “pretend students” and all of our participants, for your dedicated participation, and for being willing to practice this method with us. We are so grateful for you, for making this webinar what it is. This is the end of Part Two, “Teaching and Assessing.” Next, come back for Part Three to find out how to teach students to maximize their skills for listening and looking. Thank you.