**April 13, 2021 Meeting - Seattle Community Technology Advisory Board**

Topics covered included: Spotlight on Leah Shin; Economics of Rural Broadband; Digital Equity and Inclusion; Committee Updates

**This meeting was held:** April 13, 2021; 6:00-8:00 p.m., via Webex

**Attending:  (All via Webex)**

**Board Members:** Rene Peters, Camille Malonzo, Nicole Espy, Leah Shin, David Kirishenko, Lassana Magassa

**Public:** Dorene Cornwell, Tara Zaremba, Jackson Brown, Eryk Waligora, Harte Daniels, Tyler Woebkenberg, Mark Cockerill, Joydeep Hazra, Coleman Entringer, I. Horton, Karia Wong

**Staff:** Cara Vallier, David Keyes, Alice Lawson, Vicky Yuki, Tara Zaremba, Vinh Tang, Cass Magnuski

**24 In Attendance**

**Rene Peters:**   Welcome, everybody. Thanks for spending some of your beautiful Seattle evening with us. These are precious and rare, and this is the first really solid week of the year. As usual, we will quickly acknowledge that we're on the traditional land of the First People of Seattle, the Duwamish people. I just want to give respect to them past and present, in honor and gratitude for the land itself, and the Duwamish Tribe. So again, welcome to April. Hope everybody has been well since last month. For me, it's actually felt like I had a pretty long last month break, but hopefully, everyone is doing well. And, as usual, I'll start the meeting with just a couple of interesting docs that I have picked up over the last month. Many of you have heard of the PBS documentary called Coded Bias, in which each of these computer scientists from the MIT Media Lab. I'm not biased, but a computer scientist named Joy Buolamwini explores some of the intersections and difficulties of the clash between AI and public life, as that real and Artificial Intelligence divide shrinks increasingly. The documentary features different scientists and mathematicians, including Cathy O'Neil, who is the author of Weapons of Math Destruction, which is also on my reading list, and a lot of you may have heard of -- this is a very popular book about big data -- but a lot of really good perspectives and viewpoints expressed in the documentary. And it does a good job of chronicling a little bit of the policy just as it works its way up and through Congress. Those of you who are in DEI and Privacy and Cybersecurity would really enjoy it. I will post the link in the chat so that you guys can watch it at some point. <https://www.npr.org/sections/codeswitch/2020/02/08/770174171/when-bias-is-coded-into-our-technology> That's my little nugget for the month. So, with that, we will dial right on into our April edition of virtual introductions.

**INTRODUCTIONS**

**Rene Peters:**   Now that we're done with introductions, we will go directly to the order of business, approvals of the agenda for this meeting and last meeting's minutes. Last meeting, we had presentations from Saad Bahir as a follow-up on some of the Seattle IT activities and specifically on OKRs, and then we also had a really great presentation from Providence about how they responded with technology in the year 2020 and beyond. So, I will open up the floor for a motion to approve that.

**Camille Malonzo:** This is Camille. So moved.

**Rene Peters:**   Do I have a second for Camille?

**Leah Shin:**  This is Leah. I second.

**Rene Peters:**   All right. All in favor of approving the minutes, please say 'aye.' Any 'nays' or abstentions? Okay. Excellent. That will pass. Next, we move to approve the agenda for this meeting. Do I have a motion to approve the agenda?

**Leah Shin:**  This is Leah. I move to accept the agenda.

**Rene Peters:**   Do I have a second for Leah?

**Camille Malonzo:** I second.

**Rene Peters:**   Excellent. All in favor, please say 'aye.' Any 'nays' or abstentions? That will pass. So, we're ready to move on to the core of the agenda. Before I move any further, I wanted to do a quick disclaimer that this meeting is being audio recorded just for the purpose of Cass Magnuski and the minutes. We won't have the audio recording fully posted to the web site, but we will have a text transcript that comprises the minutes. We also have our Digital Equity 101 session that will be recorded as a lasting asset. Just so everybody is aware. That will be posted to the site in video form. Excellent. We will go to the next item. And as I teased, we have Leah Shin, who will be doing the next board member spotlight, just as a way for some of the membership and the other board members to get to know each other better. I want to give Leah a stage to talk a little bit about her interests and her background, and give a chance for anyone who wants to ask any quick questions about her. So, I give the floor to Leah.

**BOARD MEMBER SPOTLIGHT: LEAH SHIN**

**Leah Shin:**   I do have a couple of slides. Is it possible for me to share?

**Rene Peters:**   I believe that would be possible. Vinh, do you have any problem with that?

**Vinh Tang:**  No. I think you should be able to share.

**Leah Shin:**   Actually, I created this for work a little while ago. I'm going to talk a little about myself. I'm Leah. Nice to meet you all. Like I mentioned, pronouns are she/her/hers. I'm Korean-American, so you see 'hello' written in Korean there as a quick into. My statement of who I am is I really love business design for good, and I'll talk a little more about my journey here. here's a photo of my grandparents. They were the ones who originally immigrated from South Korea to Portland. I'll talk a little about that journey, but a lot about my philosophy about how I approach life, and how they think about that, as well.

'Becoming' is one of my favorite words. I think that has really shown how much I have really come to grow as a person, integrating their journey to come to America. Here's a little bit about where I was born. I was born in Portland, Oregon. Here's my family. I'm not the one crying. That's my sister. We came to the Seattle area in 2002, and I have lived here pretty much all of my life. I consider myself a Washingtonian and Seattleite.

Folks have asked why join CTAB. I think that has been rooted in my upbringing. I have soared in student government in high school and college. I sat on the City of Oak Creek Community Teen Advisory Board for five or six years, or so, ever since I was in middle school. I'm really rooted to community social impact work, organizing my first community organization, called Literacy for Love, where we collected books for English language learning students. There are a couple of photos there of some of my team members, who were able to collect about 6,000 books.

Here, I'm going to talk a little bit more about where I went to school. I went to the University of Washington Bothell campus. Here is where I was really able to explore some of my passion projects. This is where my love for technology came about. A broad and bespoken (unintelligible)...are some of the multi-media design projects I have done, focused on community needs. The very first one is rooted in how do we support local businesses, how do we raise awareness for Asian-American heritage; what are better food options that are affordable for students on campus. And lastly, how to set up a vending machine where we sell (unintelligible) products. There are issues in our local community and on campus. How do we go about working together to solve solutions for that in really creative ways, and also a lot about how I consider my life moving forward.

As I continue that journey, I wanted to discover how I can take that line of building with people on campus but outside of campus. So, my very first job where I was paid was actually in student government. I did that on campus. I was at Bothell for about four years, and I was actually able to enter the corporate tech bubble here in Seattle at T-Mobile, where I interned for about three or four years with different types of technology roles, kind of rotating there and earning for college. When I graduated, I was able to also intern in Washington, DC to take my love for civic technology in a different type of direction. And lastly, I joined Microsoft's bubble, and this is where I am today exploring product research, new product development, testing, and story telling, and I'm in a full time rotation program at Microsoft. So, it's been quite a journey of really taking the passions I have.

To summarize my interests and passions that are important to me are community, peace, how to think about diversity and inclusion, and the ways we think about technology, and how do we bring more people into CTAB to inspire them to share their opinions, their thoughts, their feedback with us so we can continue growing with Seattle. Because Seattle has changed so much since I was a kid. So, with that, I'm just really looking forward to the next couple of years together. I stumbled upon CTAB just this past year, and it's been an awesome experience so far meeting all of you. I keep telling my co-workers at Microsoft and some of my school members, alumni, they should get on board because it has just been so rewarding for me to do this outside of work. I'm very open to conversation on collaboration. Feel free to email me or find me on LinkedIn, but that's me and my show. So, thank you.

**Rene Peters:**   That's awesome. Thank you for that presentation. I think it definitely shows the depth of not only expertise, but just passion that exists with some of the board members. I'm happy to be serving with you. Were there any quick questions for Leah from anybody in the field? If not, we can just give our virtual applause. But as she says, she is very open to following up, so feel free to reach out to her with any questions that you have. But, thank you again, Leah, so much for that presentation. That was really great.

Next on the agenda is a really fantastic presentation. I'm really excited about it, focusing on the economics of rural broadband. To sort of kick us off, David, how is your video doing? Is it working? I suppose not. I was going to have David do a quick intro to Mark Cockerill. As you heard, Mark has a lot of expertise in the local area, and specifically, in the Key Peninsula, really focused on broadband and just its reach and access.

**David Kirichenko:**   Sorry. I dialed in with my phone and it wasn't working for some reason. But I'm back on the computer. I wanted to give Mark a proper introduction. I connected with Mark a while ago, when I was writing articles and doing research on rural broadband because they are one of the counties that have been hit hardest by the Covid crisis in terms of education and getting the rural communities connected. And with everything being remote for the past year, it has been really difficult getting students to actually get education in some parts of Pierce County. They've been emailing homework packets to students and students aren't even doing some of their work. Our world is becoming more and more interconnected with the internet, so Mark has been doing some tremendous work out in the Key Peninsula. It's a remote part of Pierce County. There really hasn't been much going on, and so Mark decided, as director of the Key Peninsula Community Council, to start researching and looking towards what we can do to immediately make an impact in our rural communities and bring broadband to them. This is part of a wonderful coalition of different partners, and he has been doing some fantastic research himself by putting together some surveys and studies, and getting resources behind that. He has been making some amazing progress. So, I'll let Mark take it over.

**ECONOMICS OF RURAL BROADBAND**

**Mark Cockerill:**  Okay, thanks, David. I appreciate that. Thank you for suggesting that I do the presentation, and thank you, Rene and Vinh Tang, for making it happen. And thank you all for being here.

Before I get into the survey, I'll talk about the Key Peninsula, the KP, which some of you might not be familiar with. Just in terms of locations, we're northwest of Tacoma. So you cross the Narrows Bridge, you go into Gig Harbor, and you take a hard left, and we're the next peninsula. It's pretty rural. Lots of trees. We're unincorporated. We don't have a local government or police force. I'll talk some more about how that impacts our ability to do funding. But we love the area, and we are willing to put up with the price of our ruralness. So, that's the KP.

I'm going to be honest with you. My training profession is in project management, so when they asked me to lead this project, the first thing I had to do was find out what broadband is. I've been learning a lot as I move along. During the middle of all of this Covid stuff, we went back and forth on whether we could do the survey. We decided to do it, so we did it in the month of October with Survey Monkey. And the survey is divided into four sections. The first was questions on the internet. The second was questions on phone service. The third was demographic questions. And fourth was contact information questions. And the fourth was really important because we not only wanted to know what was happening overall in the KP, but I wanted to know about it geographically, or by sections within the KP. As it turns out, we have four distinct zip codes in the KP. Basically, the northern part; the northern-western part; central; and then the southern part. We got over 500 responses, of which almost 90 percent, or 458, gave us the zip code information. That's the number that we started working with in the survey, the 458. As you can see right down here at the bottom, section 4B, we got some pretty good representation. We got 43 percent of the north; 35 in the middle; 11 for the western part, and the southern part.

So, let's take a look at this another way. All of those little blue dots represent addresses that are all over the map. I'm pretty pleased with it, myself, because as you can see, it's all over the KP. By the way, to the right, that land mass, that's the Gig Harbor area. To the left is Mason County. So, we got all over the KP, which is really good. We got into the center, and off in the fringes. That part was good. Let's go to slide two.

One of the first questions we asked was who is your provider. And starting with 5A, that row, you can see that CL stands for Century Link. Sixty percent of the people within the KP use Century Link. Thirteen for Wave and 19 for Comcast. And then, 10 percent is for other. They just use other types for access to get the internet. Now if you go down to 5B, the northern section, you will see that there is no Wave. It comes in as zero. But Comcast is at 42 percent, so it's a big time player up in the north. If you stay on comcast, you'll see that it drops down to 12 in the western/midsection, then down to one, and then it totally disappears. Whereas, if you shift to the left and you see Wave, zero up in the north, 14, then 23, and 28. Now the good news for all of this is we have three providers, and they're all large corporations and solid. Century Link just happens to be tied to DSL, which is, as you know, the slowest internet, except for dial-up, I think. But but Wave and Comcast are coaxial cable. And the thing that's good, and I like this, is we have areas that are both Century Link, Comcast, and Wave together, competing together. And I like that because once we start dealing with the providers, we're not stuck with just one or two. We have the potential for all three. That's going to be good for us as we move along. So, if you go to Map 2, I think it is? Maybe you can blow it up into the top part of the map.

The purple is Century Link. We'll see more of that again. But, up in the northeast corner, there's your Comcast, those grey boxes. And we slowly drift southward, then it kind of just disappears. So, there's a big complex going on up there, and it's going to be important when we get to the next slide. So, if you just shift up a little bit, you'll see the yellow coming in now, and that's Wave. You can see all the yellow and then the purple. That just backs up what I was talking about. From this point you can also see where everybody is located. Because when you're down here in the southern part, we've got lots of trees, but the thing that also makes the southern part different is there's more density in the northern/northeast part of the KP, and then as you get to the mid-part, people start moving away. But, down in the southern part, this is where people really stretch out. There's a trunk. It's called the KP Highway. That's where all of the providers and whatnot have their main trunk line coming down. And then the feeder lines come out of that. So, when you see these purple things off on the fringes on the east and the west, we're going through two or three miles before you get to a house. And then the house itself could be several hundred feet from the street. This is the rural of rural broadband. I'll talk a little bit more about it. If you live in Gig Harbor, Gig Harbor is a provider's dream. You have density, people packed together, so it's easier to build their broadband network. And then if you have more people, you get more revenue. Out here on the KP, what you're faced with is you have people all spread out, so it's really expensive to get to their homes, and there's not many people. So, three's not much incentive for a provider to want to do this. You can't blame them. Business is business. I'll get back into that. We pay for our ruralness, our trees and whatnot. Let's go to slide three.

Now this is why we have the project. This is what -- everybody kind of knew it, but now we've found it -- and it's statistically there. If we go down to 6B, the stuff in the red, 55 percent of respondents said they have less than 11 mbps download. Thirty-seven percent of all respondents said they have less than six. Thirteen percent of all the respondents said they have less than one. you don't have to be a genius to know that if you've got less than one, you can't do anything. Six is slightly better. Ten: Everything depends now on how many people in that household are taking a whack at that. On one of the slides later on, we'll talk about that. But this is the issue that we have. If you go down to 6C, this is the northern part. Move over to the very end, and you will see that people have 21 percent or greater, and 21 percent is the highest percentage of all of the other areas. And this is the area where there's Comcast and Century Link. And we know it's not coming from Century Link. One of the things we kind of want to find out is, if you move further south and you're picking up Wave, you have people who have 12 percent and 21 percent. I find myself asking why is it only half of what it would be what it is for Wave up at the top. That's going to be something we are going to want to look into. Let's go to Map 3. This is really busy. Let's bring up the northeast corner. Thanks.

Green and light green are the good colors. They represent 11 to 20 mbps, and then 21-plus. Up in that quadrant you see a lot of light greens and greens. Now, the bad colors, if you will, are the red, which is less than one, the orange which is one to five, and then the yellow is six to ten. You see that up here in this area. You have greens going throughout, but not as many greens and light greens as we would like to see, and you have a lot more of the reds, the yellows, and the oranges.

This was troubling to me, but I couldn't get past it. When I did this question, I was using Survey Monkey. I asked Survey Monkey if they could, as part of the survey, put a little clip on it and record your download speeds automatically recorded for each response, but they didn't have anything like that.  I was really kind of surprised. And I couldn't think of a way to ask people to do that before they started to take the survey, and then write it down. I was afraid that I'd lose continuity and make it too complicated, and then I'd lose that person. So 25 percent didn't know. So, we're really looking at 75 percent of over 450 responses. But it's still pretty good. Let's go to slide four.

This is the service. Rene, it's what I was telling you about when I was doing this, I had an epiphany. Now, I'll get into my epiphany. I didn't pay much attention to this response and analysis. This question was how do you rate your service. And this was meant that when your service stops for whatever reason, and you call to get it corrected, this was the question that they're answering. Almost two-thirds of the entire KP said that they were either dissatisfied or very dissatisfied. It kind of varies by the zip codes there. And then I got to think, the worst condition is you don't have any or you have very poor internet. If you've got that or very good internet, but it's not working. Now, out here in the KP, like I said, we've got lots of trees, and we have a lot of lines -- broadband lines, electrical lines, above the ground. So, when you have a storm, big wind, heavy rains, lots of snow, trees come down, poles come down and you lose electricity, you lose connectivity. And I don't know this, but I know business, okay, because I spent all of my life in it. When businesses profit, they follow the money. So, they're going to build first to the downed lines in Gig Harbor, because they also have the same issue, but there's more money there. There's also more incentive to get them fixed first. It's not that they don't like the Key Peninsula. They're just following the money trail. It's actually the same thing, if I may, for electricity, which is done by Peninsula Light. When we lose power, especially when it's Gig Harbor, Penn Light brings up a grid, shows a map, and what they do is they fix the areas that have the most density. That's what drives them. So, we have the least density. So, they're not picking on us. It's just the way that it works. Of course, I don't know what you can do about it, but it adds to the frustration of the ruralness, for people in the rural area not only dealing with trying to get connectivity, and get good connectivity, but then being able to service it when you lose it. Can we go to Map4?

So, the green is where people are satisfied or very satisfied. Remember now, 64 percent were dissatisfied. So, you can see a lot more of the red, which are the unhappy people, as opposed to the green. But you see a lot of the green up here in the north, then you can start scrolling down, where you see a lot more of the red and a lot less than the green. But, down here in the southern part, everybody knows that the infrastructure is the worst. There is not as much green as we'd like, but there are still areas there. So, that's another ruralness issue, that I'll be honest with you, I've never even come across in my readings and research on this stuff. Everybody talks about speed and whatnot, but nobody really talks about maintaining service. I don't have much to draw from, but I know my territory, I know the KP, and I know what causes it. Now, we're just going to go to slide five.

What does the internet cost? Here there are no particular issues. It's basically at KP level, you've got 55 percent for less than $100, and 18 percent are less than $50. The cost isn't so much an issue around here. What we found is that Comcast has the highest cost. I think that's because they sell in different packages, different rates of speed, and also you have bundling, which would add to the cost. Bundling meaning they give you internet, you phone, your TV. And the cheapest is Century Link. And out here in a community like that, because we're not as wealthy as the Gig Harbor area. Cost is always a factor. So, it works in Century Link's favor that they're the least expensive, but unfortunately the least reliable. There's the cost breakdown. Let's go to six.

Now we get into the demographic questions. This one relates back to the speed question. This question said how many internet users do you have in the house. Not how many people in the house, but how many people actually use the internet. You can see from 9A that we have over 50 percent have four-plus people in the house. So, when you start talking about those low speeds, less than 11 mbps, that goes down to 2.5 mbps, if you just do the simple math. it depends on what they're doing. But, I had a couple of questions where I offered to people to make comments. And in those sections, all the time, people said that they had to ration the broadband. Now, you're talking about Covid-19, where the parents had to stay at home, and the kids had to stay at home.  This is a touch story. i was talking to a woman the other day. She has to work at home. She's got two lines coming into her house, but each line is only two mbps. So, every day, she has to make the decision. If she gives the broadband to her kids for school, or does she have to keep it for work. Every day she has to ask that question. Does she keep the job, make the money to pay for everything, or give it to her kids to use for school? It's a heck of a decision to have to make. That kind of motivates me and keeps me going. Let's go on to slide seven.

Then I asked how many people use the internet for school. You can see that 73 percent use it for school. Of course, this is during Covid. The thing that I like to remind people is that, even if Covid goes away, and even if everybody is back in school, these kids still do homework at home. As you can see, we still have people who still have that low download number. So, the issue doesn't go away because you have in school training. Last slide.

How much do people use the internet for business purposes? As you can see, it's almost two-thirds. Once again, with Covid. Now, this is an open-ended question. It could be that they have to work from home. It could be that they're paying bills. And a lot of people do their own business at home, too, especially in the KP. So, once again, add another vital use. You have tele-medicine. You have tele-business, tele-school, tele-social. Out here in the KP, we don't have public transportation. A lot of times, we have organizations to help people move around. But with Covid-19, their only social interaction comes from the internet and the streaming bit. There are organizations that do lessons, that come and talk to one another and whatnot. So, that's driving people into more isolation. And that part doesn't go away, because these people can't freely move. I think that's it for the slides. I will take a pause and see if there are any questions.

**Rene Peters:**   We have one question from Harte, and it centers around what is the percentage of people at or below the poverty level in KP, and were they represented in your questioning. And if they were too poor, for example, to afford internet, how were they included in the survey, if they were?

**Mark Cockerill:**  Good question. Not well. We didn't for salary or income or anything like that, so I have no idea. We know the situation exists. I'm working with a couple of groups out here where they focus on students in need. It could be by language, by color, by income. It makes no difference. But, they need the most help. We talked about whether there is a way we could get them into the survey. It would have had to have been done by paper, and then incorporated. But, it just was too clunky. It's too hard for them to do. So, there are people out there who aren't represented in that area. If we know there are people out there who don't have internet because they can't afford it. We know there are people out there who don't have internet because their language skills are such that they can't work with it. We don't have a good number on that. And I wish I could tell you more, but that's as much as I could tell you.

**Rene Peters:**   We have a question from Joydeep Hazra, if you want to ask it.

**Joydeep Hazra:**   Do these areas have any kind of cellular coverage, or is it spotty? Just a general question about cellular coverage in the KP. Is there wireless coverage from T-Mobile, AT&T, Verizon, or others?

**Mark Cockerill:** Yes. We have pretty good coverage cellular-wise. I think that's what your question was. And a lot of people live on their cellphones. A lot of them like the landlines. But cellphones are kind of the norm here. As a matter of fact, it's rare that somebody takes a call at home on their landline. They'll take it on their cell. We have also, as part of our problems, there are several facilities on the KP that offer wifi. The school district, the fire department, they set up wifi so that you can go into their parking lots and park, and pick up on their wifi. And some of the parents, they go there with their kids in the car so that they can do their homework. We have cellular, and we have good wifi, but we don't have wifi in a safe environment where a kid can spread out and do his homework. I hope that answered your question.

**Joydeep Hazra:**   Yes, that leads to my second question because now, if you know about the T-Mobile broadband, I'm a customer of that since last September. And this is also my bread and butter. I'm a telecom engineer. They give a package of $60 unlimited. Have you explored that option?

**Mark Cockerill:** No, we haven't done that, and it's not because we don't want to. We're just really into the nuts and bolts of the wired line approach and the wireless approach, the wifi approach. The one thing I can tell you, though, is that although we have good cellular connection, it's very spotty. Verizon out here is the best, probably because they have more towers, I guess. I don't know. I can't tell you. But everybody out here leans towards Verizon. But there are places when you're out in the KP where it just goes dead. So, I'm going to write that down. This is T-Mobile, right?

**Joydeep Hazra:**   Yes. If you want to talk to me later on, I'm available. I can tell you as a customer. I can tell you as a vendor. I can tell you as a provider. This is my bread and butter.

**Harte Daniels:**  You keep talking about hot spots, correct? Are you talking about cellphones? It's very difficult for students to be able to do their homework off the cellphone. There has been multiple research on that. What Seattle uses is (unintelligible) for hotspots. David Keyes is here. Vicky Yuki is here. You can talk to them about what the City of Settle does in these situations. And the third thing is that cellular is double to four times as much as fixed wireless.

**Mark Cockerill:** If I could jump in just for a second, I know it's a school district which covers the Gig Harbor and Key Peninsula area. One of the guys that's on our broadband committee, he's the director of digital learning for the Peninsula School District. Part of his job, part of his life is they go out and they buy hotspot cellphones, I guess, because I don't have one. They mostly focus on Verizon, but they'll use any carrier if it works. And then, parents can come and ask the school district, and they will loan out the hotpot phones or cell phones, or whatever they are. Just the hotspot. So, for teachers who can work at home, and for students who can do work at home, it's just another way that our community tries to figure out how to deal with this. In the school district, they get funding from the federal government and they just build up the supply as people request it. Then, sometimes it works and sometimes it doesn't. It just depends upon where they are.

**Harte Daniels:**  There's a lot of funding from the FCC for rural areas. One of the conditions that the FCC gave to T-Mobile for their merger with Sprint was to be able to handle or create this type of --- we call it Lifeline for Broadband. And, I have not been able to find anything on the T-Mobile site except for them saying that they were expecting to take over Sprint's work on this, like Mobile Citizen, and they're seeming to have some problems with it. I've not seen much out of T-Mobile on the support for your lower income students and other people, which is supposed to be, as I said, the fulfillment of the requirement from the merger with Sprint. But you are correct. The rest of the group that you're talking about are probably looking at the FCC grants that are heavily weighted towards rural areas at this point in time and started with the Obama administration's USDA grants back in 2010. But, I'm going to let other people talk. Thank you.

**Rene Peters:**   Thanks, Harte. And David Kirichenko, you have one question in the chat, which I think would be a good one to round off on. Do you want to ask that one? Or I can ask it. It's basically asking Mark, would you mind sharing any of the goals for your project by the end of 2021, and what your priorities are?

**Mark Cockerill:** Sure. My goal for the end of this year is to have initiated and completed our first project with one of the providers. I should say that our approach to this could be block by block, house by house. It's going to take a long time. For the first project, I'm hoping it would be six to 12 houses on a particular street, or something like that, where maybe we bring in Wave, where they're on Century Link now. By the end of this year, I'd like to have that task completed, so that we move into the next five years, if you will, jus repeating the process, finding the providers, finding work sites, getting the money, signing the contracts, making sure the work gets done. So, I am hoping that by the end of five years that we have at least brought Key Peninsula up minimally to 25 through. Now, I know tht sounds pretty horrible, but for people out here, 25 looks real good. But, if we're able to successfully get Wave and Comcast more into the community, we will see more than those speeds. So, that's the game plan. End of this year, the first project complete. And then we just keep doing it for the next five years until we've got everybody up.

**Rene Peters:**   Camille Malonzo asked this question: Are there any type of programs that KP is advocating for or pursuing this year?

**Mark Cockerill:** I'm not sure what that means. Sorry.

**Rene Peters:**   As far as more of a legislative edge, as opposed to working with private companies.

**Mark Cockerill:** Ah. Okay. This is a good question, because we're wrestling with it from right now. And right now, the way it's looking is we're going to go more for the private sector than the public. And the reason is, number one, we don't have a legal status for a lot of the funding, especially at the federal level, because we're not a town or a city or anything like that. Two, some of the definitions and data mapping, if they do a data mapping of your area and just one person has 25 through, then they consider everyone to have 25 through. Or, if you have one provider, they consider that they don't have to worry about you. So, we bump into those. Then, the thing is, because of our plan, because we're going to be doing one job after the next, that doesn't lend itself to the way that the grants work at the federal level. You get one, and if you get it, you can't come back for a number of years. So, that's why we're going to the private sector, initially, anyway.

**Rene Peters:**   Yes, that makes sense. Thank you, Mark, so much. I think this was an  amazing talk, and you really just built out the story of a place that's very nearby Seattle, but has a completely different set up as far as what  the economy of broadband looks like. You also underlined some real human stories under all of that data, and some of the real decisions that people are forced to make, depending on the strength of their service and the availability of that service. Thank you so much for sharing that. You can already see from this discussion, there is this willingness to continue to share the insights between some of the work that's going on within Seattle, and some of the work you're engaging in in the KP. So, I hope that you won't be a stranger to the board. I know you have David Kirichenko as well, but feel free to continue to reach out and I'm that one or two folks who are on this call will be reaching out to you, as well. Thank you just so much for your time. And I also wanted to thank David Kirichenko for making the connection and bringing Mark to us. As you can tell, David is quite active. And he actually has a lot of very interesting perspectives in literature that he might want to share in the future. So, David and Mark, just thank you very much for putting this together. Mark, any parting words? I know you're going to be sticking around.

**Mark Cockerill:** Yes. I want to thank you very much for your kind words, and for inviting me to come back. It's good to talk with other people, especially in other areas. I constantly get new ideas. So, thank you very much for being so gracious.

**Rene Peters:**   Excellent. Well, we will transition. We're a little bit behind schedule, and it seems that by design, our meetings are always running a little bit behind schedule, so it's fine. We'll transition to our Digital Equity and Inclusion 101 session. I wanted to just queue up David Keyes. One of the goals that Camille Malonzo and I have as chair and vice chair at the beginning of the year is just for this board and its membership and the public to have a really clear understanding of not only what the board does, but how it fits into the greater machinery of Seattle and Seattle IT, and just to have a better understanding of some of those moving parts. So, David Keyes, who is our illustrious digital equity  manager of the City of Seattle, and a deep, constant support to CTAB, who has generously offered to walk us through exactly such a presentation, which he is calling Digital Equity 101. So, with that, I will hand it to him. And I'm assuming, Vinh Tang, that the recording is being handled on your end?

**Vinh Tang:**  Yes.

**Rene Peters:**   Okay. We're ready to go, then. So, take it, David.

**DIGITAL EQUITY AND INCLUSION 101**

**David Keyes:**   I'm going to share some slides.

**Vinh Tang:**  Whatever you prefer, David. Just let me know what you need.

**David Keyes:**   Okay. I'll go ahead and give it a shot at running it here.

There are a lot of ways that I could go in doing a digital Inclusion 101. What I thought I might do not so much the detail on who is in the digital gap, if you will, but to do sort of a broad picture for folks so that we're kind of level-setting with everybody about what we think about as we're looking at digital inclusion. and then, how that plays into CTAB's role and into the City, and then also to spend a few minutes on where that frames right now with federal policy and state efforts, as well. So we just have that picture.

First of all, one of the things we think about as a connected City, digital equity and inclusion is one aspect of it. But it includes what we're dealing with, an intelligent City or smart city technology, what we're dealing with  broadband deployment and adoption. I'll come back to that. Thinking about the connected City in terms of pathways for a diverse and skilled workforce. And then there's other arrows that go out from these to the kinds of things that people need for their daily lives, for jobs or education, or social services, or food. All of these connect back out to that as we look at the connected City.

What we've seen over time as a number of terms, and I just want to mention these as we're talking about other things. You may hear different terms used in different places. There has been public access to technology for a long time in some form or another, from public TV, radio and media, to then computers and wifi  public access. So, there's different definitions of that. And then, what's coming up a lot has been the Lifeline telephone, and Lifeline was expanded to be broadband. And then you'll hear about broadband deployment and broadband adoption. So, it was great to hear some of that work going on in the Key Peninsula. And as we look at it here, and as the State looks at it, then we look at where is broadband and where isn't it. And, once it's there, are people able to use that. That's often referred to as broadband deployment and broadband adoption. Then, we've seen what was originally the digital divide to become the closer term of digital inclusion. And then it connected to race and social equity with the term, digital equity. And the the providers have happened in a range of places, from what was called community tech centers or tele-centers around the world, maker spaces. And there's a lot of work going on in community based organizations and schools to deliver services and access. And then, more recently, the term, 'digital navigator' is being used for people who facilitate people using that, particular during Covid time. And that's a term that is coming into play a lot. And then, as we think of smart cities and gig cities, and the 5G communities now, those are also places that intersect with digital inclusion.

So, as we  look at digital equity, there is a definition that has grown. And that definition -- we took some of what we developed in Seattle and worked with folks on the National Digital Inclusion Alliance to develop a national definition of digital inclusion and digital  equity. So, it's activities that ensure all of the communities, including the most disadvantaged have access and use of information and community technologies. But then, equity requires intentional investments to reduce those historical and structural barriers to use.

That's where we think about what we need to do to actually create equity, not just equality, and not just any opportunity. So, what many people may hear about is the three legs of a table. We really use a four-legged table when we're describing the elements of digital equity. I think, as Mark was talking about, is that internet affordable and sufficient. As we think about devices, then is it the right device for all uses. Can somebody do their homework? Can they apply for jobs? That mean both having a fixed, or laptop, or that ability to connect wirelessly wherever you go, as well. And then, digital skills and support. And that needs to be both in a cultural context and is as needed. So, is it in the language that I need? Is it provided at the level of skills that I have? And I'll talk more about the pathways. And then applications and services. And there's a range of things in that, from are the programs that low-income people need easily findable? Are the languages easily findable? Is it designed in a way so people with impairments can actually access and utilize that service? So, that's the four legs as we work on digital equity.

We know that digital opportunities are currently not equitable or equal for all. And so, those main factors that we see are income, education in particular, age, disability, race and ethnicity, and then that rural issue of is broadband even there. Can they participate there?

Just a couple of tidbits from our Technology Access and Adoption Survey: It is much more than just that access. There's a big issue of people having limited digital skills to do what they need. We do find differences in the internet use between different populations. So, Seattle made a really early commitment to support digital equity, and in part, that was even as the City was starting to get ready to put information online. We developed this public access network, a commitment to say that if we're going to put out information, we need to make sure that people have access to actually use that information and to contribute information to that. So, that led to the development of internet and public facilities, kiosks and wifi, some computer labs, volunteers from Boeing starting that up, us supporting community access and training, including the Technology Matching Fund grants, and cable broadband for nonprofits that were originally demonstration projects in a couple of community centers to show what cable broadband could do. And that grew into a broader program, where we have over 250 sites connected right now. And the Tech Matching Fund grants was a project that started in CTAB, including our Technology Access and Adoption Survey, which we started in 2000, and which was really an idea for defining some metrics and indicators of a technology-healthy community.  That has continued to this day. Some of the other things that our programs do is low-income internet, and consumer help. Alice Lawson and her group works with us in conjunction as a broadband and digital equity program, doing a lot of community education, do some device distribution, and then fostering these best practices networks. How do we take what people have learned and share that with each other? And then, doing State and national advocacy.

As many of you know, this past year the City Council passed the Internet for All resolution, and we developed strategies that we're working on to help meet those goals. And that really builds on both the years of work that we had done, and the expertise that the City and partners have, a digital equity plan that was released and done with a lot of participation in 2016, and then seeing what was happening in the community and with Covid, to ramp up and work on this next iteration of the Internet for All Seattle. Let's close these gaps.

CTAB, over the year, and for folks who don't know, I actually started out as a citizen volunteer coming to CTAB meetings to see what was going on. I ended up on the board, and then ended up working for the City over 20 years ago, starting up our Community Technology program. So, CTAB has had a lot of important roles. And I think this is one of the questions for you guys going forward, in terms of how you want to participate and use the power and the influence that you have. That has included coming up with project ideas and designs, providing technical advice, public input and forums, holding hearings, doing outreach and education, doing research and advocacy. CTAB has done that at the local, State, and national level in providing positions about the low income internet programs, what the City should negotiate for, and public benefits, filed comments with the FCC in the past, or advised us on that. And then, as you know, doing funding advice and review like the Tech Matching Fund grants, or providing assistance. So, as we look at digital inclusion, these are opportunities for CTAB and members and committees to have an influence. And in some cases, you guys can also have a voice of the community that we, as staff people, don't have.

And so, as we're looking at making change in digital inclusion, we developed this theory of change, of structure for how we're designing for change, so that our strategies are addressed to both organizational issues and structural issues. We partner and work a lot with community-based organizations. And so our ability to affect change and collaborate to help individuals is often only as good as those community-based organizations who are on the frontlines. They have the capacity to help. There are a lot of structural issues we work on, too: communication systems; what are those broadband options; what are the low-income programs, and so on. What helps the individual that helps us get to this internet or digital equity for all?

Just a known about challenges then, as we look at both what individual challenges and some of the structural challenges are, for the individual, it's obviously is getting my computer my immediate need? Or is finding the resources and buying the computer the first step? So, the challenge of meeting those immediate needs, it's hard to find the right resources. There are concerns about cost and debt risks. I may already be in debt so I'm not eligible for this program. Or, if I sign up for this contract, what happens. Issues of trust. Privacy and safety and security, confusing systems. And that's really true in purchasing. If people have to bundle services, or have promotional things, can you afford it; how do you know you're getting the right-sized internet for what you need. And we heard earlier about when there are five people in the household or two people, it makes a difference. And there are just multiple systems and life factors. If I need to feed my kids and take care of schooling, how much do I need to know about my computer, or what to get. And then there are some structural issues, continuity in funding, continuity in services. So, we're piecemealing programs together. they're not necessarily provided over time. Limited provider contracts are available, particularly in multiple dwelling units and apartments may be a challenge in terms of what options you have. The challenge of us doing effective jobs of system mapping and hand off. How do I go from that immediate help to getting into that technology training program? So, we're looking at short term and long term solutions. Doing these collaborations take resources also.

But the City can't do it alone. Really, it's not the City's digital equity work, but it's our community digital equity work together. So, it really is elements of all of the sectors working together to find these solutions, and get input so that we can design the solutions properly. As we look at digital skills, what we've also seen is there are different pathways. So how do I get on that first rung so that I can get a computer I can use for Zoom, or Cisco Webex today, or Teams today? We've done some work looking at different frameworks for curriculum and competencies. How do we help people get to that place where they have the skills to be more self-sufficient to learn more? This is sort of a matrix, then, as we look at those digital skills pathways that have both life skills applying to get services, to youth education, getting into college, parent engagements when they help their kid, and different work skill pathways. So, those employment foundations, applied tech skills for tech careers. So, it's critical then, as we look at digital inclusion, where we have opportunities to affect that, to help develop our homegrown talent, to help families be self-sufficient and have the same opportunities. A lot of our work in digital equity is also looking at how do we measure need and how do we look at the impact? We do that through a combination of data, and we just heard a little bit of one survey that was done. For population data, we have used our Technology Access and Adoption research since 2000. We also look at the Census and American Community Survey. And then we use program data. What do we learn from our Tech Matching Fund grantees? What do we learn from service delivery data? How many people are connecting to wifi? And then, we also listen to story telling, and have to keep an ear out to those community ambassadors who are on the frontlines, so the nuance of what is a challenge for me signing up for the low income internet programs, or doing culturally-focused interviews. For instance, we've done multiple focus groups in different languages with people with disabilities or focused on African American communities in the past. So, we have a rich set of data. It's an ongoing challenge. And there's a set of things that we just recognize as we try to grapple with this data. Imperfect data really is the norm. The point is we have to be aware of what bias we have, what's missing, and admit it as we do it. How good can our data be? Let's keep working to get the best data we can. And then some things change. Like, it's not just having internet, but it's having what bandwidth you have and how many users are in the household trying to use that bandwidth at the same time, which we've certainly seen during Covid. Collecting data costs money, and so if we're working with our community partners, then if we're expecting them to do evaluation or collect metrics, they need dollars to do that, too. But their community capacity is limited. So, part of our challenge and our goal is how do we help ensure that organizations and those we work with in the community that we're partnering with them, and understanding that 20 funders may be asking them for information. The point is, for us to work on and be able to collect data and use it in a way where we get meaningful data at meaningful times. So, when our decisions can be made, how do we do that? And looking at both what is the critical info, but also understanding that one metric, like how many people have broadband, may not explain the situation of adoption, for instance. Those are some of the data challenges we have.

I'm going to switch gears for just a couple of minutes here, and just talk about what the frame of the State is now, and federal, just to give you that context before I wrap up. Washington State has recognized digital inclusion in State broadband legislation, and recently in the Governor's poverty reduction strategy, which is a great thing. There had actually been a digital inclusion fund, The Community Technology Opportunity Fund about 10 years ago that a group of us helped to write and pass, but we're seeing a resurgence. We've seen cycles of that as the tension has certainly been honed during Covid time, and because of some of the Race and Social Justice work going on. The priority in Washington State has been broadband for unserved areas. There have been coalitions of folks, State agencies, legislators, that have been meeting since Covid, including this Internet Action Crisis Team, and a coalition called Connect Washington has evolved from that that is doing some great work. In the pending budget, we're seeing a lot more investment starting to come. Some of this is federal funds. So, this is just sort of a snapshot. It may change in the next couple of weeks as the legislature refines its budget. There is $7.5 million for digital navigator program, so to pay to have community organizations and people who will assist people getting online and finding those initial programs with their initial questions is $6.2 million, plus $1.3, I think it is, specifically for Medicare folks. And then there's some other work going on. There's a statewide broadband office. And I think what is also exciting is we're starting to see more interagency collaboration, which mirrors some of what's happened at the federal level. So, the Key Peninsula may be part of these broadband action teams, BATs they're calling them. There's some money for tribal work in t he digital equity forum. And then this expansion of wifi hotspots that was mentioned. Most of those are for areas that have little internet.

Last year, the Office of Public Instruction funded $8.8 million to help offset some of the cost of internet for low income students. They're increasing that. There's funding for devices, as well. And then there's $9 million going for child care connectivity. So, those small organizations can help get broadband through the Department of Children, Youth, and Families.

The other thing that we see is there are some specific budgets, for instance the Office of  Immigrant and Refugee Assistance, and the Department of Social and Human Services (DSHS) is funding some technology for the folks they are assisting. So, that's a little bit of what's happening at the State. Let me take just a couple of minutes here, and I'll give you a general picture of the federal help coming right now.

The Cares Act had some money that was specifically for broadband. Most of it was around broadband expansion and build-out. I mentioned here emergency rental assistance, which the City Council just passed legislation this past week allowing some of the emergency rental assistance to be used for internet costs. And then there's some State and local government assistance.

The American Rescue Plan:  We're still waiting to see if some of that is coming in, and how that's going to be used. There is a comment period that we're working on right now for this emergency connectivity fund. And then there's some proposed legislation at work. The big one is the infrastructure plan that's, I think, in the digital inclusion frame. It includes broadband build-out. But it also has a strong section on our broadband adoption. So, we'll see how that plays out. Some of that is based on the Accessible and Affordable internet for All Act, and based on a digital equity act that Sen. Murray took a big lead in writing a couple of years ago. So, that's starting to have legs, I think. That supports deployment and adoption and competitive digital equity grants, which states, localities, nonprofits could potentially be available. And then, what was recently introduced was also this broadband justice act, which helps residents in subsidized housing. That will help rewire and gives an allowance for broadband as a utility. So these things are kind of in play. There are efforts to try and get this emergency broadband benefit continued as an ongoing support for low income folks. This emergency broadband benefit is right on t he horizon. The FCC is rolling this out later this month or early May. So, there's eligibility for families where we, the State, everybody is trying to look at how do we help people to sign up for this program. It's a little bit confusing. There's a federal verifier for eligibility that's rolling out. And also people can go through their provider directly. But that will pay up to $50 a month for individuals. Some of the internet providers are participating and offering a laptop benefit. It's up to the internet providers whether they participate or not. These are the guidelines for eligibility. You will see a lot more information coming on that. So it expands from free and reduced to those who have been impacted by Covid and have lost income, and those who are on current low income internet programs. Just to note: There are a number of internet providers in Washington State participating. We know that Comcast, T-Mobile, Verizon, some of the folks who have been doing Lifeline, Human IT is one that's been doing work just recently in Washington State. Right now, though, neither Wave nor Century Link are participating in the FCC program.  So, that's just rolling out. This is a little bit more about how it works. I'm not going to cover that now, but can answer questions on that if you want. And I'll leave it at that, and give you a chance to ask questions.

**Rene Peters:**   Any questions for David? I have a quick one. You mentioned the State budget. What is the schedule of the approval at the State level?

**David Keyes:**   Quick note:  Alice Lawson has said that Century Link has said that they will participate in the emergency broadband benefits. That's great news. I don't remember exactly. They're in caucus right now. Most of what they're doing right now, and other may know more, those that work with the legislature more -- they are just aligning with the Senate and House bills right now so that the projects match up. So, it's within the next couple of weeks. The budget actually takes effect, I think, in June or July.

**Rene Peters:**   Any other questions for David?

**Harte Daniels:**  David, has the City or your department for strategy begun looking at the difference between equality and equity and how we're actually moving into that framework, or how long will it take to develop that. And, besides looking at other municipalities and other entities that are intersectional in this type of work?

**David Keyes:**   Our work on equity, and particularly racial equity, is ongoing and critical. And I think that is something where we have used that lens for a while, and will continue to improve it. As we're working on Internet for All, we're doing a number of things in applying -- what are the specific race and equity impacts of these strategies. We've been working across the City with a number of City efforts on the economic recovery, on the Internet for All to do a root cause analysis. What are some of the structural issues that are actually causing this, and how will these solutions impact. i think it's an ongoing piece of work to collaborate with communities of color, so that we have that breadth of input. I think that's also an opportunity for CTAB to help us strengthen that mechanism. The City is doing a lot of work around that. For instance, there's a group called the Black Brilliance Research Project that has been proposing funding through a participatory budget process. We've been working with them on some of these digital inclusion strategies. So, it's an ongoing piece of work, working together. And then, in terms of our doing what others are doing both around the country and what others are doing around race and other kinds of equity work. What's exciting is that the State just hired its first equity coordinator. I don't remember the title of that exactly, but some of that came out of the State work. We're also working with King County. One of the things that I didn't mention yet is king County did its first broadband study and released that about a year ago. And they modeled some of that on our Tech Access and Adoption Study, but also looking at where connectivity issues were in rural King County. They then also allocated some funds from the Cares Act money to an equity fund for community and for community technology projects. So, those are underway and getting done. And then, they are just working on a new broadband plan, which will include digital inclusion. I don't know the exact timing of when that will be out, probably the middle of the year. But I think that's exciting that King County is embracing that. They also have a strong equity framework in their work.

**Harte Daniels:**  Yes. I appreciate your presentation, and I appreciate that question about equity and how it is carried forward. I would just like for DEI to be exposed to those questions instead of being presented with the final product, and then asking people to comment on it when they don't have all of that depth of what you just were able to illustrate to us. It's excellent that the knowledge that you have. I think that Camille Malonzo had a similar question, if you could look at the chat.

**David Keyes:**   Yes. So, her question is about how are community-based organizations participating, and how do folks meet up together. The way that that happens now, one of the ways that happens is through what CTAB does to reach out to community organizations and include them. And the, we help form with others a digital equity learning network or digital inclusion network called DELN, Digital Equity Learning Network of Seattle/King County. That group was meeting quarterly, and now it's meeting more every other month. Vicky Yuki actually helps coordinate that group. That's a key place where those community organizations come together, a place for us to meet up and do that. There is also regional or State-wide, this Connect Washington Coalition. Some of it has been driven by the Equity in Education Coalition. I'll have to look up the URL for that. <https://connect-wa.org/>  That's another place of our going out to those groups. So, I think there's a need to continue to strengthen that opportunity to get together. There are probably a couple of other folks that are involved with that. That's a portion of how that network is happening. And, frankly, I think that some of the ongoing coalition work is a little bit stronger in some other cities. So, I think we ought to keep doing that. We also, through our matching fund grantees, through going to the other meetings, we also go out to talk to people. But I would love to keep our folks working on that. Vicky Yuki just posted something about the Digital Equity Learning Network.

**Harte Daniels:**  The second part of Camille Malonzo's questions -- I don't know if Camille can unmute and ask it herself -- is how representative those coalitions or that network actually is. Is there any way of assessing that? That's a very good point. Camille, can you elaborate? Can you unmute?

**Camille Malonzo:**  Yes. I think that one of the points that David made in the presentation about data was the acknowledgement of biases in data, and how there are a lot of demands on that data. I see the really important but critical role that community organizations play in supporting that data collection, and just making sure that everyone is on the same page. I was wondering there are any doubts about the network of CDLs that we work with offer enough data to support the program needs now. Is there any work there? It kind of seems that there might be just generally always an opportunity to report back. But I was wondering if you can address that?

**David Keyes:**   Yes, I think there are two aspects of that. I think is the communication coalition building is both bringing people to the table together, and then also going out to other peoples' tables. It's also both bringing people together around the measurements, data collection, as well as bringing folks together to work on two other aspects, which is the capacity building. The exchange of best practices is the exchange of resources, and the advocacy and resource development. So, there is a strong group of folks. The reason that Digital Navigator is getting passed at the State level is because there was a broad range of folks representing a variety of people of color and the tribes and community groups which have advocated with the Governor's Office and legislators, and having a couple of critical legislators who also advocate. The piece about both the methodologies and the data that's being collected is fairly representative, both in the development and design of that, and in the collection of it, and in the use of that data once it has been collected. That's a place where there is an opportunity right now as we go into this coming year. We're just in the early stages of starting to look at doing the next round of our Technology Access and Adoption Survey, and to look at what is the methodology, what are the questions to be asked, what is the focus, what focus groups do we do, or how do we do that. So, I think there's an opportunity there to really work on the front end design of inclusion. I would love to see a committee from CTAB to work with us on it. I've talked to a couple of other groups about that and what our process will be. There is also a City Racial Equity and Data Analytics group of City staff who do data, and are working on how we improve that for the City overall. Part of that is surfacing the detail of the bias in the collection, and of the input and the process. That's getting to the depth of not just parsing by broad ethnicity categories or really thinking about how data collection is done, or what questions are asked, or how they're asked. So, there's a lot more depth there that's really important. And part of that -- we've also seen this with the census; we're asking diverse people to fill out the census. Well, why? What is the census used for? Part of that discussion was also that the diverse community needs to be more engaged in using data and surfacing data, and revising data, because then it's more meaningful. It's a feedback cycle. It's a participatory cycle. So the census isn't something that's way off and you're just asked to fill out a survey, but it has more meaning in how you apply it as daily business, or how it influences the wifi down the road, or that low income internet program.

**Rene Peters:**   Awesome. Thank you so much, David. It was a very informative presentation. I'm glad that we recorded it. It will be a great lasting asset for folks to get a good grounding on just where we sit as a board, and some of the things that Seattle is currently focused on, and the State and federal stuff. Really detailed. Thank you so much. So, with 15 minutes until eight, I'll go ahead and move us on to committee updates. We will have the DEI Committee give their update first. And then, we'll do Smart Cities and Privacy and Cybersecurity. We have a quick vote in Privacy and Cybersecurity. DEI?

**COMMITTEE UPDATES**

**Harte Daniels:**   March's meeting was a working meeting to try to answer the IFA polling. We will gather that information. We also are starting a survey, asking people some of these questions that David was discussing, where this committee was to go and how they want to approach things. As to the tele-medicine and senior project, we have still received no response from the Seattle Housing Authority or the County Aging and Disability Services. So, we have begun reaching out to other organizations and asking them about their collaboration with community groups. Part of that is, just as David said, collected data that the county and others are presenting are on ethnicity, and those aren't the only organizations that are out there that are affected. The only question is to ask Coleman -- I forgot to before the meeting -- whether he had received much from his survey on where this committee wants to approach the word, 'equity.'  We had the Pacific Northwest Organization Developers (PDON) that deals a lot with equity and that structure. As David said, there's a lot to do, so we're open to more volunteers, and looking to those volunteers to tell us what they consider equity and where those communities are at. Coleman, do you have anything to add?

**Coleman Entringer:**  No, I don't have anything to add right now. We do have a few responses from our small email distribution list that we have for the Digital Equity Committee itself. But I will go ahead and send another round to the wider CTAB mailing list, as well, so we can get broader feedback.

**Rene Peters:**   And the committee's next meeting is on what date?

**Coleman Entringer:**  It's the fourth Tuesday of each month.

**Rene Peters:**   Fourth Tuesdays. Okay. Excellent. We'll go ahead and move on to Smart Cities. I think I saw Tyler on the call.

**SMART CITIES COMMITTEE**

**Tyler Woebkenberg:**  Quick update on Smart Cities:  There actually is an update for this month. We've been working with one or two resources offline in order to collect Smart Cities content, research, etc. to be used for researchers, policy makers, folks in other states. So, we have actually been rolling that out over the past few weeks, maybe the last two months or so. We're going to be doing a little bit more to intentional end users. We will find it useful to just get some feedback overall. In lieu of formal meetings, we've been meeting somewhat *ad hoc* and also more virtually. I will share that out as we get closer (unintelligible).

**Rene Peters:**   It was a little hard to hear you. I think the part that was hard to hear was you giving the contact, smartCTAB@gmail.com, right?

**Tyler Woebkenberg:**  Sorry about that. Thank you. My headphones cut out.

**Rene Peters:**   No worries. And last but not least, Privacy and Cybersecurity. Nicole?

**PRIVACY AND CYBERSECURITY**

**Nicole Espy:**   We finalized our memo regarding the Internet for All effort. Just as a backup for the larger group, we reviewed the report from a privacy and cybersecurity perspective, and one of the things we noticed was the lack of discussion about privacy or cybersecurity at all in the document.  We had some general concerns that we included, plus some general suggestions. It wasn't necessarily a comprehensive review of the report, but we want to at least get a perspective of ours out there. We also included some really great comments from members of the subcommittee, as well. That document is here, and we would appreciate your approvals or comments in order to share this with the larger audience, so we can get more perspective, and privacy protections in that report.

**Rene Peters:**   Thanks so much for compiling this. Really great work from the Privacy and Cybersecurity group. I sent this out early yesterday just to the board members so you can have a look over it. Hopefully, you can sense from what's on the screen of some of the suggested additions and directions that the committee is going towards. I would like to open up the floor for a motion to approve this document for outward distribution so that they can continue to get more feedback and get this message out. Do I have a motion?

**Lassana Magassa:**  I move to approve it.

**Rene Peters:**   Awesome. Do I have a second for Lassana?

**Leah Shin:**  I second.

**Rene Peters:**   All in favor, please say 'aye.' Are there any 'nays' or abstentions? Okay, great. Motion passes, and this is approved for distribution. Once again, thank you to Privacy and Cybersecurity for the work, and to Nicole and Camille for compiling this. So that leaves us with public comment. If there are any updates or notifications or even questions from the public, this is your time to bring them to the board and the rest of the attendees here. The floor is open.

**PUBLIC COMMENT**

**Harte Daniels:**  This is something presented to the State Legislature to ask hardware manufacturers to make things easier for the e-recyclers in Seattle, to actually repair laptops. If they were to do this, if they were to make this easier on the e-recyclers, there would be more laptops to generate to low income students. So, they're asking for that support. I don't have the House Bill in front of me right now. Maybe David knows it, but it's something that you can look up. Thank you.

**David Keyes:**  I just want to clarify what bill that was.

**Rene Peters:**   If we could look that up and try to get a link....

**Harte Daniels:**  I'll try to do a quick search right now.

**Rene Peters:**   Okay. I have a quick plug on behalf of Jonathan Porat. He reached out to Data Analytics client student internships that are available on his team in Seattle IT. They'll be working on projects to review objectives and key results (OKRs) for those of us who were here last month, to come up with policy recommendations to improve progress and to analyze services, especially around identifying areas of improvement. This will be open to any undergraduate or grad student who may be interested. His ask is, if anyone is comfortable, or knows anybody that they would recommend, to distribute the following link.  <https://www.governmentjobs.com/careers/seattle/jobs/3032908/data-analytics-and-client-engagement-intern?pagetype=transferJobs>  And that will have the Data Analytics and client engagement internship job details. The deadline to apply is a week from now, so if anyone knows someone who may be interested, there is still time to get in. It is a fully paid position, and Jonathan is great. I imagine working with him would be a lot of fun, but also a chance to do some great impact for the City.

Did we get anywhere with the link to that bill?

**Harte Daniels:**  I'm just finding that it says Right to Repair Bill.

**David Keyes:**  That bill did not make it through.

**Harte Daniels:**  I'm sorry. It's House Bill 1212 on January 20. I'm sorry to hear that. Maybe at some point we can ask to have it brought up again.

**David Keyes:**  Rep. Gregerson was a big advocate of that. I think there was a lot of industry work against it. Talking to her to try to bring that back might work. <https://app.leg.wa.gov/billsummary?BillNumber=1212&Year=2021&Initiative=false>

**Rene Peters:**   Okay, thanks for that update. Are there any comments from the public or board members or anyone?

**Dorene Cornwell:**  I forgot whether I talked about this last month. But one unintended consequence of work on privacy security was banning the use of facial recognition software. Most of your probably know that there are hundreds of thousands of videos from the Capitol riot. And there were six police officers who were there, but anybody who is trying to investigate their participation form City government can't use facial recognition software to do that. I don't think that was a desirable consequence of that effort.

**Rene Peters:**   That's a really interesting point that you make. It's one of those things in the balance where the purpose is good faith for the general public, and just the fact that a lot of that technology comes down heavier on folks that are further and further away from the ideally recognized prototype of the White male. But we're also in the situation where folks do need to be held accountable that did have negative externalities. It's one of those interesting things that can happen. But, thanks for the comment. If you have any articles or literature, feel free to shoot it at me. I find that particular case really interesting.

**Dorene Cornwell:**  I've just gotten it from the SPD Twitter feed, I think. I haven't worked very hard at looking beyond that. I'll see if I can find links.

**Rene Peters:**   Wasn't it SPD that had the single highest number of deputies that were present at the Capitol that day?

**Dorene Cornwell:**  It's like I support peoples' right to participate in legal protests. And I also think that if you decide to go protest, you take the chance that your face is going to show up wherever it shows up. Frankly, I wish they would just identify themselves because I can think of different investigative angles, but being willing to identify themselves might increase public confidence. That's my opinion. That's me speaking only for myself.

**Rene Peters:**   That's what this segment is for. I appreciate the note. And I see that David Keyes was able to drop the link to the legislation in the chat. Check that out, and we'll see what the necessary follow-ups are on trying to get that back online. If no one else has any more comments, we are right on time. Once again, thank you. There was a lot of good discussion today. I appreciate Mark Cockerill coming in and talking. A really enlightening perspective on something outside of Seattle but still very close by. Thanks again to David Keyes for a really great presentation which a lot of people will be reviewing in the future. And thank you for letting us record that. Everybody have a good rest of your April. We will see you again in May.

**ADJOURNMENT**