IIJA Broadband Grant Programs Public Virtual Listening Session #2 Moderator: Adam Geisler January 12, 2022

Carole Garner

0:14

Hello, and thank you for joining us today. Before we begin, we wanted to let you know that due to the format of our webinar, we regret that phone dial in audio is not available for the recorded portion of this webinar. It is approximately seven minutes of time at the beginning of the webinar that if you are on a dial in phone, you will not be able to hear.

0:37

Rest assured the presentation portion of the webinar will be available post event. If you'd like to listen to this webinar on your mobile device, you must download the GoToWebinar app for Android or Apple devices. Thank you very much. And we'll begin now.

Adam Geisler

1:13

All right, well, good morning, and/or good afternoon everyone. We are excited to have you here for our second session of our IIJA Broadband Programs Public Virtual Listening Series. My name is Adam Geisler, and I am the Division Chief of the Tribal Connect to Connectivity and Nation to Nation co-ordination at NTIA's Office of Internet Connectivity and Growth, and will serve as your moderator for today's session.

1:44

Before we get started, let's quickly review some housekeeping items. First, the presentation, along with a transcript and a recording of today's session will be available on the BroadbandUSA website within seven days, under the Events/Past Events tab. And when you go to the website, you'll see what that means.

2:05

And if at any time, you are having technical issues with our platform, please use the Q and A box to send a message to our event organizers or send an e-mail to broadbandforall@NTIA.gov. However, I am going to double down on the Q&A box on this one.

2:21

So today, we are excited to have so many of you join us representing a wide array of stakeholder groups to provide input on our Infrastructure, Investment and Jobs Act broadband programs. Our collaboration and your input will be key factors in the success of these programs, and we will open the mic to hear from as many participants as we can.

2:44

Again, your constructive feedback is critical to our next steps of designing and implementing these programs. Given our time constraints, however, it will not be possible to hear from everyone who would like to speak. And it looks like we have over 480 of you on the line today.

3:02

If we do not get to you, or if you would prefer to provide written comments, please feel free to provide your input on the discussion questions for today by submitting them in the Q&A box in the GoToWebinar module or by e-mailing them to the broadbandforall@NTIA.gov at anytime.

3:22

So, with that, I'm really honored to have with us today Ms. Lisa Hone, Senior Advisor for Broadband and Technology Policy at the National Economic Council, the White House. She'll provide some welcoming remarks and comments. Over to you, Lisa.

3:42

Thank you so much, Adam. I am so excited to be here for the second of five listening sessions being held by the National Telecommunications and Information Administration, the NTIA, about the broadband programs funded by the bipartisan infrastructure bill that will be implemented by NTIA.

4:03

I am here to underscore the Biden Harris Administration's commitment to high speed, reliable, affordable broadband, for all Americans. That's why we championed the broadband funding and the bipartisan Infrastructure bill and that's why we're so excited to see it being implemented. Make no mistake, NTIA has an enormous and an incredibly exciting and incredibly challenging job ahead of it and it needs partnerships from everybody participating in this listening session.

4:38

As most of you know, most of the broadband funding that NTIA will implement, not all of it, but most of it will go to states. And what that means is that the state broadband leaders also have an enormous, and exciting and challenging task ahead of them, and I know many of them are on the call today, and I know that they're probably saying "that is so true Lisa" as I'm saying this.

5:06

I have been fortunate enough to meet with the state broadband coordinator's from across the country, and I can tell you that they are some of the most knowledgeable, enthusiastic, experienced, excited people I've ever had the chance to work with.

5:21

And that's saying a lot. But they will need the full participation of counties, cities, non-profits, community members, other community organizations to really identify and determine how best to meet the broadband needs of all your communities. So, I want to thank you all for joining us today and in this broader endeavor.

5:44

And I want to encourage you all, on behalf of the White House to stay involved, stay committed, and help us meet our goal of affordable, reliable broadband for all Americans. Thank you so much and enjoy today's listening session.

Lisa Hone

Adam Geisler

6:02

Well, thank you Lisa, so much for, for finding the time to come on today and for those, I think, just really thoughtful opening comments about the importance of the mission that we're all moving towards under the IIJA.

6:15

Alright, so with that, next we're going to hear from Mr. Douglas Kinkoph, Associate Administrator of the Office of Internet Connectivity and Growth here at NTIA. And Doug will provide a quick welcome and a review of our request for comments.

6:30

Shortly after, Doug, we'll hear from Ms. Amanda Martin who will then provide a high-level overview of and NTIA IIJA, sorry for the Alphabet soup folks, broadband programs, and the policy questions that we're going to be asking you for feedback on today. So with that, over to you Doug.

Doug Kinkoph

6:57

Thank you, Adam. Good afternoon and thank you for joining us for the second, a series of listening sessions that NTIA is hosting to seek stakeholder feedback on the Infrastructure, Investment, and Jobs Act, broadband programs.

7:10

On Monday of this week, NTIA published a request for comment to help inform the development of the Infrastructure, Investment and Jobs Act broadband programs that NTIA is responsible for administering. Public feedback is critical, and you can help shape these programs from the ground up and bring important policy issues, and implementation considerations to the forefront of our process.

7:36

We pose quite a few questions to help prompt everyone's thinking, but you may choose to answer only some of the questions or all of them. You may offer additional feedback beyond what we specifically requested. Comments are due to regulations.gov by 5:00 PM Eastern Standard Time, on February 4, 2022.

7:58

They can be submitted at any time, and all comments will be posted publicly. To find the docketed regulations.gov, you can search for NTIA or use the full docket number, NTIA-2021-0002.

8:15

Today's listening sessions will highlight some of the questions set forth in the request for comments. We are truly interested in your input, and all responses will be carefully reviewed. Thank you in advance, and we appreciate your efforts in responding to the request for comments.

8:31

And now, I'll turn it over to Amanda Martin.

8:38

Amanda Martin

Good afternoon. My name is Amanda Martin, and I'm a Telecommunications Policy Analyst within the Office of Internet Connectivity and Growth. Before we jump into our questions, I want to provide a brief overview of the programs included in the bipartisan Infrastructure Law.

8:54

The bipartisan Infrastructure Law, formerly named the Infrastructure Investment and Jobs Act, invest \$65 billion in broadband funding. Of that, nearly \$48 billion will be administered by NTIA within the US. Department of Commerce of the funds that will come to NTIA. There are four programs.

9:15

The first is the Broadband Equity Access and Deployment Program. This is a formula-based program that will provide money to states and territories to close access gaps for unserved and underserved areas of the country.

9:32

The second program is the Digital Equity Act. This actually includes three sub programs. The first is a state planning grant, the second is a state capacity grant, and the third is a competitive grant directly from NTIA.

9:48

All of this is to promote digital equity, support digital inclusion activities, and build capacity related to the adoption of broadband. The third program adds an additional \$2 billion for the Tribal Broadband Connectivity Program.

10:04

And the last program provides a billion dollars in funding for the middle mile program. This is to extend middle mile capacity to reduce the cost of serving unserved and underserved areas and enhance network resiliency.

10:20

As we're working on producing the Notice of Funding Opportunity, or NOFOs, for these programs public input is critical. As Doug mentioned, the RFC is now out and we encourage you to submit responses.

10:33

Additionally, we want to use this listening Session to get feedback on four targeted areas. I will review the four questions for this listening session and then turn the conversation back to Adam Geisler to moderate the discussion.

10:47

Turning to the first question. Within the BEAD program, the law spells out five specific uses of funding. The first is unserved and underserved service projects. The second is connecting community anchor institutions. The third is data collection, broadband mapping and planning.

11:10

The fourth is installing Internet and Wi-Fi infrastructure or providing reduced cost broadband within multi-family residential buildings. The last is Broadband Adoption, which includes programs to provide affordable, internet capable

devices. Funds can also be used for any purpose that's determined necessary by the assistant secretary to facilitate the goals of the program.

11:37

So, our first question is this: Beyond the 5 specific uses mentioned in the law, what other uses of BEAD funds are necessary to facilitate the goals of the program and should be added to the eligible uses included in the NOFO?

11:52

Turning to our second. We want to look at affordability. The first Congressional finding within the law notes that affordable, reliable, high speed broadband is essential to full participation in modern life in the United States. At this listening session, we're also asking for input on how NTIA can promote affordability through the four IIJA broadband programs.

12:21

Now, for the third question. For this we want to look specifically at middle mile. In the middle mile section of the law, there are two purposes that are laid out for the middle mile program. The first is about reducing the cost of connecting, unserved and underserved areas. And the second is about increasing broadband connection resiliency through creating alternative network connection pass that can be designed to prevent single points of failure.

12:51

Given these two purposes, our third question is: How should NTIA target its middle mile investment to promote last mile affordability and resiliency?

13:03

And for our last question, we want to look at tribal communities. Local coordination is a critical component in both the BEAD Program and the digital equity programs. For example, in the section of the Digital Equity Act that's included on the slide below, you can see that tribal communities are specifically mentioned as a key stakeholder and an area for collaboration.

13:29

How should NTIA ensure that States/territories consult with Tribal entities within their boundaries to coordinate serving unserved and underserved areas, as well as digital equity in Tribal areas?

13:44

Now that we've gone over our four questions for this listening session, I want to kick it to Adam Geisler to moderate the discussion.

13:59

All right. Well, thank you Doug, and thank you Amanda, for both those opening comments and the deep dive into the questions that we're really here to try to answer or hear from you all today. So with that, we'll go ahead and get started into the portion that everyone, I think, is waiting for, on the listening portion of our session.

And again, we're here as a Listening Session to hear your thoughts around these four questions. Before we dive in too far, let's go over a few logistics, and then we'll get started.

14:32

This conversation will be structured around the four questions Amanda just reviewed. If you'd like the opportunity to provide verbal comments, please see the instructions on your screen.

14:44

If you are joining us from your computer or the GoToWebinar mobile app, please use the raise your hand feature on the GoToWebinar module to indicate you would like to speak. I do just want to note, for all of you that may have already raised your hands, we're actually going to lower everybody's hands and then we're going to ask you to go ahead and raise your hands again. Clean slate here.

15:08

If you are utilizing dial-in phone audio only and do not have access to the GoToWebinar module, please press *6 and that will put you into a queue and indicate you would like to speak to our event organizers.

15:23

With that, our event organizers will send you a private message when it is nearing your time to provide input. When I call your name, your mic will be unmuted, I imagine I'll ask if you can hear me or I can hear you, and you will have the opportunity to speak.

15:37

Please begin by providing your name and organization you represent. I can't stress that enough, but also please add the spelling of your name if that's OK, so we can get that captured appropriately.

15:50

Um, it's also important to note that we're going to limit the comments between 1 and 2 minutes and I have my handy dandy stop clock here. Everybody has it on their phones these days. So please keep comments brief to allow time for others to also weigh in during the 1 to 2 minute window. You may respond to one or more of the questions on the screen.

16:13

And also at anytime, you can also provide written comments in regard to the proposed questions. And I am going to have to run this pretty tight given the fact that we have well over 500, we have 508 folks on the line, I'm sure every one of you wants to provide feedback here, so I am going to go ahead and cut folks off with a two minute mark. I apologize in advance. Not trying to be rude, but we just want to get through everybody's comments.

16:36

So, as a reminder at any time, you can provide written comments in regard to the proposed questions, and you can do that by either submitting them via the Q & A box on the GoToWebinar module, or you can e-mail them directly to broadbandforall@NTIA.gov.

16:54

So please remember that this time is for you to provide input on the questions we are collecting input on you from today. We ask that you please do not use the raise your hand feature to ask questions about, excuse me. We ask that you please do not use the Raise your Hand feature to ask questions about the IIJA broadband programs. And that you just stick to the four questions that we're asking here today.

17:20

If you have any specific questions, please send. If you again IGA related broader broadband questions, please send those questions over to the broadbandforall@NTIA.gov, or you can submit them again into the Q&A box.

17:35

If we do not have a chance to get to you to provide verbal comments during this listening session, we still want to hear from you. Your thoughts are very important to us, and we are talking of students. We are taking all your input very seriously. This is a lot of money, and we want to make sure we get this right.

17:53

So please, submit your written comments again. You heard me say it three times out to the broadband for all at NTIA dot gov, if time runs out so we can collect them.

18:03

And with that, we're going to go ahead and begin. So as a reminder, we are going to ask for you to go ahead and raise your hands. If you are in the module or hit *6 if you are calling in, and that will put you into a queue and I will go ahead and call your name. So first up, we have, and I apologize, I'm horrible with names, but I'm going to give it a shot here, Lisa Gustinelli. Lisa, you are on, we'll go ahead and bring you off mute.

18:39

You kind of put me on the spot, can you just because as I joined at the end. I'm answering one of the questions, That's correct?

18:50

Right, so on the screen, we have four questions.

18:53

The first one is: Beyond the five specific uses mentioned in the law, what other uses of bead funds are necessary to facilitate the goals of the program? It should be added to the eligible uses included in the NOFOs first question.

19:08

The second one is: How can NTIA promote affordability through the four IIJA programs besides the low-cost plan requirement in the Bead program?

Lisa Gustinelli, Arizona State University Broadband Access and Equity Initiative

19:19

The third is how should NTIA target its middle mile investments to promote last mile affordability?

19:26

And the fourth is how should NTIA ensure that's states/territories consult with tribal entities within their boundaries to coordinate serving unserved and underserved areas as well as digital equity in tribal areas?

19:42

So those are the four questions that we're hoping to get your feedback on, and with that, I'll go ahead and start the clock.

19:48

OK, thank you so much.

19:50

My name is Lisa Gustinelli. I am the Innovator-in-Residence for the Arizona State University Broadband and Equity Initiative. I'm working on a grassroots project right now and so I believe it would refer to question number one, how are the funds going to be helping train the trainer programs? Such as if there's a digital navigator in a community that's underserved, will funds be allocated to train that digital navigator on the ground?

20:35

So, at least it sounds like, what I'm hearing you say, I just want to make sure we're capturing it correctly is, um, in terms of eligible uses, you really want to ensure that there's a digital equity digital navigator component in terms of the eligible uses for the BEAD Program funding beyond priority than identified.

20:52

OK, yes. Is there anything else you want to add for the other, the other, remaining questions?

21:00

No. Because I was the first response. But that was my most, I think that's the most important one. That we remember that, in order to use the funds, that we have to realize, you know, who's receiving the funds on the other end, and how they're going to be distributed to communities. Many who speak different languages, or have different types of populations?

21:28

Absolutely, Arizona is, right, with a lot of different dynamics that you're, that you're trying to address. Absolutely. All right. Lisa, thank you for the comments.

21:38

And with that, we're going to go ahead and move on to our next commenter, and John Byrd, you're going to be in the batter's box. I believe it's Sachin Gupta, I apologize, if I'm getting the names wrong, feel free to correct me. And again, Sachin, you're going to be coming off mute, if you could go ahead and give us your name, who you're representing, and also the spelling of your name, that'd be great.

Lisa Gustinelli

Adam Geisler

Lisa Gustinelli

Sachin Gupta, Centranet Fiber

22:05

Hi, my name is Sachin Gupta. I am with CentraNet Fiber. We are a subsidiary of rural electric co-operative in Oklahoma.

22:30

CentraNet Fiber.

22:36

Thank you. Sorry that the audio is coming through as clearly. Go ahead.

22:41

My comment is Question Number one and three, both kind of related. I'm going make it into a single comment. One of the eligible uses that you should add to the BEAD fund as promoting the deployment of middle mile that serves last mile connections. It is very difficult to reach the rural population here, in rural Oklahoma unless the middle mile is built to get to that last mile. Since you only have a very small amount of money, not a billion dollars available for middle mile will be very difficult for service providers to get to the extreme rural areas which are unserved and underserved without developing some middle mile course. So, one of the eligible uses that you should add, beside the five specific uses that you mention, is having the capability of adding on middle mile as long as last mile connections that build on top of that.

23:52

Uh, the question about NTIA targeting the middle mile investment. Here within Oklahoma electric co-operatives coordinate 93% of the landmass of Oklahoma. We serve all of the rural residents here within Oklahoma it would be the best use of the middle mile investments.

24.21

If priority is given to original co-operative electric co-operatives that are providing fiber to their members to allow them to interconnect amongst each other, allow them to make a bigger network per se, rather than having individual co-operatives having their own small fiber network. If priority, is given to that then co-operatives within a state can become bigger players and cover the entire state and be able to create alternate network rings.

25:04

OK well, thank you Mr. Gupta. I appreciate the feedback there from Oklahoma and, uh, the commentary provided, I think, aspect of what we're trying to do here is, is recognizing that every state has such unique dynamics, and I appreciate you providing some of those perspectives regarding the dynamics within Oklahoma.

25:27

So with that, we're going to go ahead and move on to Mr. John Byrd. And Carrie Goetz, you are in the Batter's box. So John Bird, we're going to go ahead and call on you. Again, name, spelling, the organization that you're with and we'll go ahead and bring you off mute.

25:48

John Byrd, Miller/Wenhold Capitol Strategies

Great. Adam, can you hear me?

25:50

I can, excellent. My name is John Byrd and I go by JB. I'm based in Fairfax City, Virginia, and a Senior Vice President Miller/ Wenhold Capital Strategies. I help represent The National Society of Professional Surveyors NSPS, Surface Utility Engineering Association, and the US Geospatial Executives Organization, USGO. My replies to help answers, question questions: 1, 3, and four. And what I'd like to focus on in the next minute is the US. Geological Survey's 3D elevation program, or 3DEP.

26:37

It's a nationwide Lidar program. It's collaborative with a lot of other federal agencies, and they have a specific elevation data program that can be leveraged by a wide variety of federal, state, and local units of government, as well as the private sector, and other interested stakeholders. And what makes this truly unique is all the data's already publicly available. And they have a once a year session that co-ordinates all sort's of siting and permitting opportunities.

27:10

For in this case, telecom deployment, it's called the Broad Agency Announcement, the BAA, and I would definitely want to make sure that NTIA coordinates behind the scenes with USGS staff on this program. And elevation data is crucial for two points.

27:32

Number one, it gives you a terrain model for the entire country. And then, at the back end, it allows again, for the siting and permitting to be way more efficient and to allow for, again, the actual infrastructure deployment decisions to be coordinated into more sophisticated, better way to leverage taxpayer money. So that's my brief statement. Thank you so much, Adam.

Adam Geisler

27:58

Absolutely, John. Appreciate the feedback and really highlighting you hit the nail on the head highlighting knowledge of topography when you're talking about running broadband infrastructure, is critical, especially as you evaluate costs Absolutely.

28:16

We will now go on to it. Looks like Carrie Goetz, I think I said that right. And in the batter's box is mister Timothy Hennessy. So, Carrie over to you.

Carrie Goetz, Strategitcom, LLC

28:34

I, myself by the way, my name is Carrie Goetz and that's G O E T Z Carrie, just like the movie. I'm so much nicer though. And I referenced with strategic com, and I have several customers that are looking to build out in edge data center areas are out in the middle of nowhere.

28:57

And one of the problems with doing that is that there's also no connectivity in those areas. But these edge data centers could very easily provide wireless,

broadband, EV charging, and multiple uses out of a small data center that would take care of an entire tribe, or an entire area.

29:16

So, to me, as far as 1, 3, and 4 goes, I think that some priority should be given to people that are not just running fiber, that are actually putting services on that fiber, that go for the community plan. And, you know, if that means working with a tribe or working with other entities, to make that happen.

29:34

And I'll give you, just to frame this, real quickly. Like one of the sites that we were looking at to build one of these data centers, just the monthly costs covering the construction, and the fiber was \$10,000 a month, which, for a 1 gig line, I mean, we're not talking much but the small data centers can be absolutely fitted with 5G antennas that can be fitted with Wi-Fi that can have parking lots next to you. And there's a lot of them. So, for me, I would think that some of the preference today, you should go, where, you know, it's going to be more than just the fiber. If there's additional services that can be provided on those fiber, that that should be a consideration, especially if it's like a joint concern with a tribe, or somebody else.

30:20

Alaska, Oklahoma, Texas, you name it all over the place.

Adam Geisler

Right? I want to make sure I heard that correctly.

30:26

So you're, so what you're really saying is, you know, beyond the infrastructure components, you are saying that we should be considering an aspect where communities have done community master planning or they've developed a sense and looking at a subset of awards based upon that, those planning activities where it furthers were identified.

Carrie Goetz

30:50

I think those planning activities certainly can highlight, you know, who a company is working with.

30:56

The point is, if somebody is going to put a data center at the end of that fiber that has multi-use, I think that's a very different case than if somebody runs fiber that's just going to be a singular use, right? Or, you know, just fiber to the home. So, if we're sitting at the end of the Fiber can also provide 5G and Wi-Fi and disaster recovery and desktop services and remote learning, and all that kind of stuff.

31:20

I think that, what's set at the end of that fibers should be part of the consideration for funding.

31:26

Thank you for that clarification. OK well, we will move on. Thank you, Ms. Goetz for that, for the feedback. And we're going to move now on to Mr. Timothy Hennessey, and in the batter's box Christine Hallquist. So, Christine, you're in the batter's box, Mr. Hennessy, you are up.

Timothy Hennessy, Spy Ego Media LLC

Hey, good morning, good afternoon, everyone.

31:49

My name is Timothy Hennessey. I go by TJ. I'm with Spy Ego Media LLC which is a consultant for several tribes across Texas, Oklahoma, California, and Montana so, I'm here today to talk about Question Number four. And as much as I hate to say this, it's a military jargon and it sounds awfully coersive, I think there's a forcing function that needs to be added to the state/ territory's consulting with tribal leaders and entities to ensure that their voices are well heard and represented.

32:21

In our experience, we've seen that the portrayal of the services in the internet that is afforded to the tribes is often different than that which actually exist.

32:34

And the people who know best are those tribes and their leaders. So I think it's of the most important essence to make sure that there's a forcing function so that these states are very thorough when it comes to consulting with those tribal entities. And Adam, I just wanted to say thank you and let everybody else know if you use that broadband for all (email address), they will get right back to you promptly, as Adam really responded to me, probably within three hours of an inquiry earlier in the week. So thank you.

33.02

Adam Geisler

Appreciate that, TJ, before you jump, and thank you for the feedback.

33:06

Um, when you talk about, like, adding an enforcement component, do you have some suggestions on what that would look like, because, right, number four, we're really talking about how do we ensure that there's consultation or communication in partnership between the tribes. And sometimes, you know, partnerships don't always mean heavy hands, Right? So, do you have some samples or suggestions on how that process would look? Or, I don't know if there's any vehicles that you've come across that make sense?

Timothy Hennessy

33:36

So, yeah, and, again, I'm sorry, for the really coercive technology, I have a military background. So, you know, some of those things are hard set in me. I would think that maybe having them open up multiple Zoom meetings, conferences, summits that they can record attendance for, would be an example of a way that they could ensure, you know, these were the people that were there, and you could establish a percentage of that community that was reached.

34:04

Appreciate that. All right, well TJ, we're going to move on to our next speaker. Christine Hallquist, you are going to be coming off of mute, and Mark, it looks like Pfaffinger. And Mark, you're in the batter's box, so you'll be after Christine.

Christine Hallquist, State of Vermont

34:25

Yeah. Thank you, Adam, at the NTIA for having this session I'm Christine Hallquist. I'm the Broadband Director for the State of Vermont.

34:41

My question ties, you know, we've done 40 ties to, my question ties to workforce development. We reached out to 40 construction firms throughout New England and New York and found out that there aren't any technician's available. So we're putting together a kind of a pay it forward training program for fiber optic technicians and, of course, we would like to see the funding allowed for this training to so we can do the works with facing two major issues, of course, material and labor.

35:11

And we're also purchasing materials, we just purchased 2000 miles of fiber to get ahead of the lead time. So I'm assuming that material pre purchasing, this can be allowed in this as well.

Adam Geisler

35:24

The important considerations, I mean, you hit the nail on the head, a lot of need, so that folks are busy, but also created a large demand and access. So any other comments you may have before we move on?

Christine Hallquist

35:40

Well, yeah, the other comment, again, I'm assuming that, uh, we're also working on putting together a statewide fund for setting, we're working with the agency transportation and electric utilities in the housing to make sure we put conduit in place as they're doing these construction projects. So, I'm assuming that's going to be allowed as well, because it's going to be significant savings, and make ready if we can coordinate with these other organizations when they're doing the work.

Adam Geisler

36:09

Yep. That, I appreciate you raising that the partnership with DOT especially for middle and last mile, I think, is real critical, especially in leveraging right of way, who wants to rip up roads more than once, right. So I'd really appreciate that comment. All right. Well, I really appreciate the feedback, and with that, we're going to move on, Mark Pfaffinger. Mark? You are up, and it looks like Kathy Olesen-Tracey, you are in the batter's box. So, Mark, over to you.

36:43

Again, name, spelling, and the organization.

36:53

Carole Garner

Hi, Adam, Carole here, let's give him a minute. I'm not sure if he is still up again. Tracy queued up right away, too. Oh sorry, Kathy.

37:13

Alright, So, Mark, we'll try to circle back to you after Kathy. Kathy, you are going to be coming off of Mute and Candelaria Mendoza, you are in the batter's box.

37:27

Sorry, Kathy, you're up. Mark? We're going to come back to you. We don't get you we're going, we're going to come back to Mr. Pfaffinger. So, Go ahead, Kathy.

Kathy Olesen-Tracey, ICCB

37:40

Hi, my name is Kathy Olesen-Tracey, I am the state director for Title 2 under WIOA in the State of Illinois. And what I would really hope as we continue to work through these processes, that there would be some consideration to bring in partnerships with adult education and the workforce system aligning some of these services with the federal law, WIOA. So, I think there's room in these conversations to ensure that the Adult Ed space and the workforce space is included under the Broadband Equity and the Digital Equity Act. I think those spaces would align very nicely with the work happening under WIOA.

Adam Geisler

38:27

Well, uh. While I have you, do you gather, do you have some examples how you've seen that in the past or you know what that vision would be?

Kathy Olesen-Tracey

Absolutely. So, under digital equity what I would say implementation of program planning that promote digital equity, almost every state that works within the WIOA system. We work towards ensuring that job seekers, employers, and adult literacy learners English language learners have access to technology-based education and infrastructure. And the last year my state has released over \$4 million and resources for programs to purchase laptops to give to students as a lending library is Wi-Fi hotspots so students can engage in instruction.

39:24

We have supported the infrastructure development at higher education institutions so that they can manage the absolute growth exponentially of students hitting our servers with online learning. So, we need the support to build these infrastructures for the programs, but specifically for our marginalized and vulnerable students who lack access. So, partnering within that WIOA system would allow all four of the WIOA titles, which would be Department of Unemployment, Department of Commerce, adult education, and vocational rehab to service these students and their clients. Often, who are marginalized and under-represented within the technology infrastructure.

40:10

As I'm listening to the public comments, a lot of the students that we all serve, a lot of the clients that we all serve are inter-related through here, so the WIOA system would allow us to serve those students and building that infrastructure. So I would request that you bring in the WIOA system as partners in the digital equity, specifically, and in the Broadband Equity and Access program.

40:36

We require, in most states, students participate in technology to address a fragmented technology skills many individuals have to be able to go into the workforce or to obtain a post-secondary credential.

40:53

Adam Geisler

Makes sense, OK. Well, I appreciate you elaborating on that a little bit more. I think the, we try to, we ask these broad questions is, right, we have four questions, and then we put a 2 minute timer on folks, and sometimes we just need to pull the thread a little bit more. So, I appreciate you giving us a little bit more detail there.

41:13

All right, well, thank you, Kathy. We're going to now move on to Mark. We're going to have you come off mute, we'll try one more time, Mark Pfaffinger.

Mark Pfaffinger, Larimer County

41:27

Oh, thank you. I couldn't unmute before. This is Mark Pfaffinger, Larimer County. I'm the Chief Information Officer for Laramir County, but I'm also overseeing our broadband program. What I think is important is that you consider prioritization for areas that can show a non-profit model. Utility service that maybe leverages- local, rural electric, or utility providers- as a way to ensure, or number two, that the ongoing affordability is tied to community benefits and design.

42:07

And I think those systems are proven that over time, they can deliver a low cost and non-profit driven architecture, which I think is important for the marginalized communities, and those with lack of connectivity, in order to ensure that they have fair equitable access to broadband.

Adam Geisler

42:27

Makes a whole lot of sense of what you're talking about, the affordability aspects, and the metrics that you described, I think, are very fair comments.

42:37

Is there anything else that you want to add on to the other three questions that we have here while you have the floor? Or maybe we put you on mute already, Mark. Sorry. All right. So, I will go ahead and keep moving on here.

43:00

So, next, coming off of mute, we will have, it looks like Sudeep Lahiri, apologize if I got that wrong. And, in the batter's box, we have Patrick Messac, you're up Patrick, in the batter's box, over to Sudeep.

Sudeep Lahiri, Counsel Academy LLC

43:21

Hello. My name is Sudeep Lahiri. I am a co-founder of a distance learning startup which targets a diverse set of students ranging all the way from school level students to even college undergrad level education yesterday.

44:07

So, as I said, I'm a co-founder of a startup company focusing on distance education, reaching out to diverse educations, particularly interested in providing our services to minority students and under privileged students.

44:31

When we reach out to them, we run across the difficulty that they need technology support across you know computers, laptops, tablets, plus broadband and connections, without which we cannot have a wider outreach that we intend to.

44:52

To that purpose, we are trying to reach out to NTIA and see if their funds and their programs can facilitate, our outreach to the needful students. To this purpose, when on this point, we are finding that, although great programs have been initiated from the NTIA, the whole Bidens program.

45:19

I think when it comes to digital equity act programs, and perhaps to some degree on the Middle Mile Broadband infrastructure program, for us to tap into those resources, we have to face a lot of paperwork. Sometimes we have to go through government who require us to only go through universities or other government agencies.

45:41

Or, sometimes, we do not have a direct link, a channel to directly apply.

45:47

For example, the middle mile broadband infrastructure program only limits to non-profit associations, or government organizations. So, we don't, we don't see a channel to apply for that line of program.

46:04

The other program for the Digital Equity Act which kind of is a little more relevant to what we want to achieve in that space, we are finding that it also needs to kind of go to political subdivisions agencies or local education agencies and that our application process becomes very difficult and challenging.

46:28

We also tried to solve the ideal.

46:31

Yeah, I'll give you, I'll give you a 15 more seconds Sudeep, and then we have to wrap it, so, go ahead.

Sure. We try similarly for the tribal broadband connectivity program, given that was also relevant for us, but I think the digital inclusion and distance learning was difficult because it has to go to government or tribal government agencies. So, if opening up the application process will basically help, that's the summary.

Gotcha. So what I'm hearing you say is, from an eligibility standpoint, one of the things that that you are seeing as a pain point, is it's not expansive enough on who's eligible to apply by just drawing the line at the non-profit. And you're

Adam Geisler

Sudeep Lahiri

talking about adding, essentially, the ability for for-profit entities to enter this space, to apply. So I think that's what I took from that. OK, all right, I heard that correctly.

47:25

All right Sudeep, thanks for the feedback. And with that, we're going to go ahead and move onto Patrick. And it looks like, I think it's Kalie Snyder, you are in the batter's box, so Patrick, you are up. We'll bring you off mute. And again, name, spelling, and who you're with.

47:53

Patrick Messac, #OaklandUndivided Thanks, Adam. My name is Patrick Messac, and I'm the Project Manager for Oakland Undivided which is a collective impact initiative seeking to bridge the digital divide for Oakland's 54,000 Public School students and 36,000 unconnected households. I'd like to speak briefly to number two.

48:15

The largest barrier we face in Oakland around affordability is the federal government's reliance on self-reported data from the ISPs that designate our 36,000 households primarily concentrated in three neighborhoods within our city, as underserved.

48:32

If I go up to a family, living in public housing and our under connected communities, and asked if they are underserved, when they have no internet connection, no internal wiring through their public housing building, I think that they would argue with that.

48:46

With the ISP notion that investment in infrastructure in their part of town, would be an overbuilt, this raises the real possibility that the Federal government could perpetuate the long-documented history of inequitable investment in predominately bypoc urban centers. Investing in areas of our country with the highest concentration of the unconnected will never be an overbuild. And I just strongly encourage the federal government to invest in real data sources that provide granular data on connectivity and allow urban centers gives us the possibility of kind of breaking up the duopoly.

49:25

I believe that makes it really difficult to enable affordable and accessible last mile connections to our most underserved, and I would argue, unserved residents.

Adam Geisler

49:35

Thanks. All right, before you jump off, Patrick, so I want to make sure I just we capture this correctly, because I think, you know, what you're getting at, is an important point, and I don't think it's something that we haven't heard in the past in other spaces with other stakeholders.

49:53

So, your, your number-one concern is the reporting aspect and the way in which, uh, connectivity is reported via the ISPs.

50:02

And then the second aspect of that, from what I heard you say, is that when it comes down to affordability and underserved, you're saying that if the building isn't, if there's no connectivity options or that the individuals in in the areas that you described, aren't affluent, or don't have the funds to pay for it, it's not underserved, it's unserved. Did I hear that correctly? is that we were trying to get across?

Patrick Messac

50:30

Yes. That's, that's definitely what I tried to get across, and, you know, we have a collective that involves the city, innovative public private partnerships. But, you know, as we look into so many of these grant opportunities, Oakland is essentially excluded because, you know, according to ISP self-reported data, were served. We have access to 25-3 old outdated coaxial cable that touches the Census track, and then the entire area is deemed served. So we just want to be able to tap into these resources for the tremendous concentration of, of need in our community, and we need the support of these federal dollars to make that happen.

Adam Geisler

51:06

Right. So, I think that your comment both ties to both one, in terms of eligibility, or I guess, eligible uses, and then to affordability. So, OK, appreciate the feedback and, with that, we will keep moving.

51:21

It looks like Kalie Snyder. You are up Ryan Collins you're in the batter's box. Go ahead.

Kalie Snyder, PA DCED

51:30

Hi. Thank you so much, Kalie Snyder. And I am with the Pennsylvania Department of Community and Economic Development. Two things today, the first is question one: beyond the 5 specific uses, I understand that the legislation allows for other programs that will fund the costs of devices. But still, I think maybe there should be some level of funding allowed for that if we're going to build out to areas that need it. A lot of those areas also don't have access to those devices, either whether that's through sub grant programs or whatever, but that's one of my suggestions.

52:13

As it relates to question number 3 and middle mile investments, I think if I recall correctly and reading the legislation, it read something to the effect of connecting middle mile infrastructure to last mile networks that provide, or plan to provide, broadband service to households and unserved areas.

52:32

I caution you on the plan to provide, and I'm sure other states have experienced similar scenarios where entities were funded with the intent to build out and such things didn't happen. So the concern there is the intent. Certainly, ensure

that there is a formal documentation showing the intent is there and if the intent is not fulfilled, that there is the ramifications. I just I worry about that wording and how that could be interpreted. Thank you.

53:08

Adam Geisler

Yeah, no, I appreciate the feedback. Your second comment absolutely noted. And your first, it sounds like, you know, from your lens, the program really doesn't solve the problem until people have, can also afford or have access to devices to connect.

53:26

Right. Well, good as a connection, if you still don't have that last piece, is kind of what I heard from that. So, yes. All right, So I heard it correctly good.

53:35

Well, I appreciate it, Ms. Snyder, and for showing up and sharing those comments, I think those are important for us to take into consideration. And, again, every state is going to have, or region, or locality, or tribal government is going to have these different nuances in what you're viewing as your as your pain points and problems. So it's important for us to take all these into consideration as we work towards, you know, addressing the digital divide issues that everybody's face.

54:01

So Ryan Colin's, you are up, and it looks like, uh, Hongwei Zang, I think I said that right. If I didn't, I apologize. You are in the batter's box, Zhang, Z, H A N G. And Ryan Collins's, you are up bringing you off mute.

Ryan Collins, Buckeye Hills Regional Council

54:29

There we go. OK, it just took a second to get off mute. Ryan Collins from Buckeye Hills Regional Council.

54:35

We are a Council of Governments in Southeastern Appalachian, Ohio. To address a lot of the questions, except for number four, just because, unfortunately, I don't have a lot of experience working with tribal entities, unless it's for like an environmental review in our area.

54:52

One, to re-iterate, was what was spoken about earlier. There's a huge shortage just on technician's right now, when it comes to putting in this infrastructure. So allowing for funding to be used for training programs, for technicians, speaking to different companies here in the state of Ohio.

55:10

And I will iterate the state of Ohio is working on putting together a universal curriculum for this so, other technical schools around the state can start implementing their own programs. But just talking to the different ISPs and different providers. And they're having to trade back and forth their workers, because there's just not enough people in the workforce that are able to do this work, or who are willing to do the work.

55:34

In order to promote affordability, especially here in rural areas, we find that affordability comes with options. So, promoting co-ops and community owned networks, and different models for delivering the service would allow for more affordability. There's co-ops in the area that give kickbacks to their customers after so many subscribers.

55:58

They get money off their bill every month, just those small little things that add up, that really help for that affordability piece. And with the Middle Mile investment's, promote last mile affordability. One big thing that came about the ARPA Final ruling came out last week, and their language was updated, too. The services could be anywhere where an identified need for additional broadband infrastructure investment is needed. That's a huge deal because there's middle mile in a lot of these areas. But, it's not affordable at all, or it's not providing an adequate service, but when other entities try to go into those areas to build, they then instantly get challenged and get told. No, You can't do that because of overbuilding quote unquote. As was said earlier, it's not overbuilding if it's going to actually provide adequate service and affordable service in the area.

56:55

And so, I think that's just a huge thing that needs to be reiterated, and to go back to that accurate reporting. Here in our rural areas, at least a census block in an urban area is an actual block here in our urban areas. It's an area that's surrounded by roads, and that could be miles upon miles upon miles, and if one house and that census block is served to that entire thing, lights up. So making sure that there's more accurate, granular data. So we can actually see what areas are served and what areas are not so that we can really target to what is needed, is what we need.

57:31

Fair enough.

57:32

But, you know, I think that also gets into the eligible uses that last piece. Um, number one is actually encapsulating and mapping and documenting that maybe on the, on the caulk side of things. So no, I did great, great feedback. Appreciate all three items there, Ryan and I appreciate you joining us today to share that. It's, I don't want to say it's good to hear common undertones but, uh, but it is, it is good for our team to hear where there's some commonality across the country on some of these issues. I think that's a big goal that we have with these listening Sessions So. Alright.

Ryan Collins, Buckeye Hills Regional Council

One more thing before we move on. Sorry.

Adam Geisler

I'll give you, I'll give you a 10 seconds.

Ryan Collins

Yeah, that's perfect, it's just to go back to the co-ops in the community, Our networks pieces. What ends up happening with a lot of these programs is because the larger entities are so used to applying to these programs, they end up getting that money just because they're more adept at the application. So just taking it, taking those co-ops and those smaller networks into consideration that can and often provide better service and better customer service to their local areas. I just can't stress that enough.

Adam Geisler

58:41

No, Fair. Fair Point. Fair point. Well, thank you, Ryan. I am now going to go ahead and it looks like Hongwei Zhang, you had your hand come down, but I am going to call on you to come off mute, just to see if you have anything. So I'll just give it a second here, and if not, then our next person we're going to go on to is Marland Jenkins and after that, Aryeh Fishman.

59:09

So, uh, Jenkins in the batter's box, Fishman after that. So, Mr., I think it's Mr. Zhang. Give it four seconds, three two...Can you hear me? There we go. All right. I'm glad that I was muted. Name, Spelling organization.

59.43

Hongwei Zhang, Iowa State University

Sure, first name which is Hongwei, last name, Z H A N G I'm a Professor of Computer Engineering at Iowa State University.

59.58

I'm currently leading a project, leading us, large scale wireless leading looking at next generation technologies for rural broadband, including how to support Horticulture and so on.

1.00.14

So, I guess my comment is related to the Question 1 and 3. So, you know, it's great to see this huge emergent. I hope, that it's going to help adjust some of the urgent, near-term need for as far as broadband services is concerned.

1:00:31

So, the feedback I want to share is that, unlike the electricity, right, how great technology, broadband technology, actually evolve very fast, within the potentially the deployment period of this effort, maybe 5 to 10 years, we may well see another generation of technologies being developed. So I think that has a few implications on how we execute, potentially. One of course, we want to make sure that whenever each project starts, we want to make sure the best state of the art technology adopted to serve the intended use cases, which is actually very diverse in the, in the rural regions, regions from communities to agriculture.

1:01:15

So, I think the other aspect is that we will not ideally be able to enable continuous measurement and learning about, you know, the impact of the individual project or practice, so that, know, that alone in front of the existing ongoing project can be actually help us develop, potentially, you know, future solutions and projects along the way.

1:01:41

I guess, third comment is I think there's actually synergy between the, the research community and some of the more near-term focus project initiatives.

1:01:51

I think if there's a way of uh, kind of encouraging those collaborations that I think that's going to help you know, the longer time broadband initiative in general, Thank you.

1:02:05

Yeah, no, no worries.

1:02:06

And before you jump off, No. Yeah, I think you raise a good point. Right. This is going to be a great investment. But, you know, especially from an education standpoint, you want to glean. You know, what the measurements are, when this is all said and done to be able to help improve and educate.

1:02:27

And so I just want to make sure that I heard you correctly and then also just offer a comment. Some of what I heard you describe was around, um, it made my brain to think a little bit about our reporting metrics and thinking about what are the things that we should be encapsulating in our reporting for this program.

1:02:46

And what I do want to share is, um, know, if you have suggestions on specific things that would be beneficial, or that you see, that you see we should be tracking from a reporting standpoint, that would maybe be of interest to you.

1:03:01

Especially, as we look at eligible uses, or, you know, any of these aspects that you see, feel free to send those over, Mr. Zhang, to the broadbandforall@NTIA.gov, again, broadbandforall@NTIA.gov, because I, you know, this is a unique opportunity.

1:03:17

If there are some things that we should be considering on the reporting side, that could be beneficial for everybody. You know, there's nothing wrong with sharing that with us now.

Hongwei Zhang, Iowa State University

So, yes, certainly, I then, if I may just share a note before I leave. So I've, sort of our work on the feedback.

1:03:34

I think one question I want to share with the, the community today, if I may, is, I think there are root causes on why we have this broadband issue. I think many of us understand that. I think the question for us is in the context of how broadband technology get developed and adopted, how do we make sure that in 10 years, 20 years later, we don't have to address the same gap we see today in the country?

1:04:03

Adam Geisler

Understood, I think that's it, that's a great one for, for food, for thought for everybody. You're right, we don't want to be coming back to the well again, the same issues, so fair point. All right, thank you, appreciate the feedback.

1:04:17

All right, Marland Jenkins, you, it looks like you lowered your hand. But I am going to see if you want to come off mute. And Aryeh Fishman, you are after Jenkins, so Marland, are you still on? We'll go five, four, three, two. In the nick of time. All right. Go ahead.

Marland Jenkins, TEKNOGRID

Saved by the bell, this is great. Marland is very happy to be a part of this call to join in with everyone. Happy New Year, by the way.

Spelling is Marland - MARLAND. Last name is Jenkins - JENKINS AKA everyone calls me MJ. Companies called TEKNOGRID.

1:05:31

We've been around for the last 12 years, so part of my, part of my inquiry, and thanks for the opportunity again, is that, as we talk about co-ops within communities and building out broadband to, to one, build broadband to connect low income or underserved communities.

1:05:51

And then two, to create jobs off the backbone of that broadband build out, I think, is the most creative idea ever from a broadband perspective, or technology perspective because ultimately, the people that utilize these services on a daily basis, and they pay for these services as consumers, why not allow them to deploy and make revenue and make money off of it and kind of increase the livelihoods, right, of the same consumer led products in cell phones, et cetera?

1:06:24

So back to the co-op scenario, you know, part of the roadblocks that we face is, you know, with like, so I'm based out of New York metro area. And so in order for us to get involved in certain programs, like the EBB program or other programs within the FCC, or NTIA, you know, you have to have a certain credentials, which is the CLEC right? In order to really expand, to get into the right of ways, to be able to touch, to bring fiber at the polls, et cetera?

1:06:55

Are you guys considering how to kind of move those roadblocks? Because in order to apply for a CLEC, in order to get to the right of ways, you got to really get the attorneys, legal fees and all this other stuff is the whole process. And with that red tape being involved, the only thing that you'll have the option to do is do fixed wireless, from the building, to building into hops to hops. But you'll never be able to really get into the right of way, because you can't get permits, et cetera. And so that's one of the hurdles that we're facing.

1:07:28

So, you'd ask the question, and if we are what we're considering around, CLEC, lack, or I'm just going to expand upon that upon that and say or, ILEC, um, do you have a suggestion for us on what you believe we should be considering? I think you kind of identified the barrier there, but do you have a suggestion on or methodology on approach, and I'll just give you another

1:07:55

Marland Jenkins, TEKNOGRID

Hopefully, I think, just taken off, just dusting off feel regulatory requirements, because the states and municipalities kind of put that role into the utilities hands, I think. And so, maybe just dusting off those requirements, taking a look at it and just seeing how to make it a little bit more, I expedient right because I'm in the process of spending about \$14,000 in order to do two states, \$7000 per state.

1:08:26

I'm going to do it because I think there's a need to do broadband. And also we have a training program over the last year that we're doing an apprenticeship So it ties in very well. But I would rather not have to go that route.

1:08:37

Adam Geisler

Ok, understood, appreciate you, humoring me there on that follow up. But I think I you raised an important aspect of this, you know, how do the CLEC/ ILEC and other designations play into our solution sets around, frankly, any of these four questions. And how does that accommodate the different regions and approaches that, that maybe have alternative thoughts to that. So appreciate you raising that.

1:09:09

Marland Jenkins, TEKNOGRID

I think one last thing is the carriers will have some type of probably a potential, you know, they'll raise a white flag, red flag, or something to that. Because that's how they've been creatively, you know, interweaving their networks over the years since the monopolization of XYZ, I don't want to call any names but, the bottom line, is the de monopolization happened in 1996 with, you know, one of the big bills. And so, we have to kind of like look at that notion of what happened in 1996 and do it a bit more so that way these community co-ops or broadband can actually work and move forward. Thank you.

1:09:47

All right. Marland, I appreciate the feedback, and, uh, definitely capturing this.

1:09:55

Marland Jenkins, TEKNOGRID

Adam Geisler

Thank you guys willing to put me on, and I can help out as well.

1:09:58 Thank you.

1:10:00

Adam Geisler

All right. We're gonna move on to Aryeh Fishman. And after that, in the batter's box, we have Candelaria Mendoza, so, Aryeh Fishman, I think I said that right?

1:10:12

Aryeh Fishman, Edison Electric Institute Yes. Thank you. My name is Aryeh Fishman and first name is spelled Aryeh Fishman. I represent Edison Electric Institute, so, that's a good segue from the coops, but actually note that, you know, power companies are also very interested in being part of the solution, in terms of broadband.

1:10:42

Got a couple of comments in terms of the questions. I think, one, I support what are the comments earlier, I think would be well worth giving some thought to targeting, you know, BEAD money to projects that do partner with middle mile. So I think that is important for you all to think about.

1:11:01

I've heard another theme, which I also think would be very helpful, is that to think about, again, targeting projects, which can leverage off of the existing R O W and infrastructure. You made the point yourself, in terms of make ready so to the extent that we're able to break down and make ready, time and effort, that can become a big savings and feedback to affordability.

1:11:24

Again, I would point out another thing which would be worth giving some thought to be, I think, probably emphasizing that you guys would look for states that, where the states or political subdivisions would allow for ROW to be used as well as cost recovery for middle mile. So in some cases, at least electric utilities are not able to make use of their existing right of way, is because they are not necessarily as the gentleman, or mentioned CLEC or ILEC. In other words, using electric corridors for broadband would make a lot of sense in terms of our ability to be solution partners.

1:12:02

And I think another thing to think about would be the ability and the capability of the partnerships to be able to do the ongoing operations and maintenance, as well as the resiliency. So important to get these networks up, but we're also seeing obviously, a lot of different weather events. And another big component of this is going to be the ability of the applicants to get those systems back up and running so that the customers are able to in fact, make use of those networks. So those are some things I would throw out for you to consider. And again, I thank you all for having this listening session. We look forward to being a part of the solution with y'all.

1:12:39

Awesome. Well, I appreciate the feedback Mr. Fishman and absolutely noted right there just as roads are generally, our friends in Alaska would probably disagree, make it to everybody's house. The Electrification Act, also in the past, has promoted access to a majority of the country as well. And so you bring up a good point about the partnership aspects that should be considered, so I appreciate you raising that and putting out that interest. All right. Yeah, appreciate you joining us. So, we're going to keep going. Candelaria Mendoza, you are up?

1:13:17

Jerry Mixin looks like you may have also lowered your hand, sorry for the wait but Jerry, we're going to put you in the batter's box if you want to come back on, feel free to put your hand back up. Will also call on you here after Candelaria Mendoza's up.

1:13:39

Candelaria Mendoza, City of San Antonio

CANDELARIA MENDOZA. I am the interim digital inclusion administrator at the City of San Antonio. Thanks again for having this call, and I just wanted to give a little bit of feedback for question one: I definitely want to second for support for funding for laying down of conduit construction projects are already happening and across our cities and states.

1:14:12

Also funding to help promote. So a lot of the projects that we've been doing in San Antonio, PR pieces sometimes get forgotten and it makes it very difficult. So I think and aligned with number two as well, just in how we can promote the affordability for different programs.

1:14:32

And a PR, are getting resources for PR is a big piece, especially when we're talking about are those underserved and underserved communities, it really requires additional time and effort especially doing face-to-face or providing things in different languages and so making sure that piece is covered. Also, I think we touched on it a little bit, but just and the aspects of transparency, collaboration, and sustainability, funding to help support shared performance measures. And would be amazing if we could all be kind of speaking the same language when we're tracking different aspects as well as getting support for that research and evaluation. Um, obviously this is kind of a once in a lifetime opportunity that we have this 3 to 5 plus year kind of project that most states across the country will be doing.

1:15:29

And so, the great opportunity for us to tag team with our academic institutions, to get together and have support for that research and evaluation of the projects that will be happening and taking place across the country. And obviously, dashboard development from that data set, being able to share that out across are different, either state broadband offices, local governments, to again, bring that transparency and see what's working so that you can bring sustainability to those efforts that were successful.

1:16:09

Adam Geisler

Great. So, um, as a reminder, if there are aspects that you guys are feeling would be important for us to consider in our performance measures or reporting, again, feel free to send those into the broadbandforall@NTIA.gov. I mean, you raise a great point about commonality in goals and items of measure. And of course, there's aspects of that in the law, but that that doesn't mean that there may not be additional things that we should be considering.

1:16:38

I do have one follow-up for you, Candelaria, and it was on your initial comment about being able to leverage these funds for existing projects in terms of laying conduit. I guess my question to you is as a follow up, is, the instances that you're talking about, are you talking about instances where there are roads, projects that are like, looking at color of money, so where are these instances of projects where they are being funded, through local funds or state funds or federal funds?

1:17:12

Candelaria Mendoza, City of San Antonio I think it could be a combination, and in this particular example, I was thinking about local funds. So usually what's covered in either the general funds or bond packages. Conduit can become a item that can be added usually if that does become an issue. When you're talking about construction, it usually does. Things like that that become wants usually get moved off, unless there's an opportunity to include that in and as a funding support and ensure that it becomes a requirement that doesn't get dropped off.

1:17:46

Ah, OK, I see what you mean. Well, I appreciate, you humoring me on the follow up, and for the point you raised, I think they're all great, and we definitely hear you on those. All right, well we'll keep cruising along.

1:18:02

Jerry, it looks like Mixin? Yeah, we're going to go ahead and bring you off mute, Jerry. Hopefully ,we haven't keep you wait too long, you have a comment. And then Andrew Coy, you are in the batter's box. So Jerry, questions one through for any feedback for us. 4, 3, 2, 1. Alright, we're going to keep going, Andrew Coy, we're going to go ahead and bring you off of mute. Jerry, if something happened, we didn't quite get your time, feel free to put your hand back up. We're happy to put you back on the list.

1:18:57

Andrew Coy, we are going to bring you off of mute and Rodney Couch. You are in the batter's box. Andrew, you are off mute.

Andrew Coy, Digital Harbor Foundation Thank you, Andrew Coy, Executive Director of Digital Harbor Foundation and Board member for the Baltimore Digital Equity Coalition. While I know there's a number of specific definitions for both unserved and underserved and that there's a history for both of those definitions as they appear, I think all of us would agree as Patrick Messac from Oakland highlighted, that the end goal is actual connectivity and that the calculation method is inadequate for addressing this as currently structured. My recommendation and encouragement here on both questions 1 and 2, given the prominent presence of equity in both of those titles, is that NTIA create a digital equity scorecard as a way to document the ratio of percent served, % connected, meaning that a community that is labeled as served, but has a low connectivity rate, with score lower, low for digital equity. Such an approach could focus attention and planning on addressing the digital divide from within the plans, as well as potentially put pressure to decrease the over reporting. To provide a case in point in my hometown of Baltimore, the broadband data maps show the Baltimore is nearly 100%

connective, while the reality on the ground according to the ACS by the Census Bureau, is that 40% or 96,000 households are not connected to at home internet.

1:20:10

I'd encourage NTIA to require such a digital equity scorecard to be discussed, not only in the State equity plans, but also how and where possible notice of funding opportunities require submissions to address low digital equity scores.

1:20:21

An additional point that I would offer, as it relates to question three, is that specific attention to be given to the so-called gap networks that are focused on providing connectivity to those specifically, not served by incumbents through which Middle Mile providers can receive a benefit for providing ongoing capacity to non-profit ISP providers. For example, in Baltimore, and my organization provides Internet to a fixed income, multi dwelling unit in East Baltimore, a local company, Light Cloud, has committed 10 gigabit backhaul connections of fiber to the premise which we then relay to the 271 residential units at no cost to those households, which are receiving upwards of 325 megabit per second symmetrical service. I see ways that this model could be replicated elsewhere to serve to connect and affordable, to even no cost way. Such benefits could include part of the scoring rubric on the requirements or percent of capacity being made available for such non-profit gap, network services.

1:21:13

A third concept I would offer is the collaboration with USDA's co-operative Extension to create a tech extension that can build on the existing human infrastructure and systems that exist in a distributed way, throughout every county in the country. Maryland has already allocated ARPA funding to create the first of this kind, but technical programs within USDA co-operative extension programs, such as the 4H programs, exist throughout the country in places such as in Nebraska and Utah have been leading the way in doing this work, this work. Final, fourth concept if I may, that I would offer is a collaboration within the AmeriCorps program that could address the need for digital navigators throughout the country. I could envision a program similar to other AmeriCorps programs that could support individuals to serve within their communities for a service period as digital navigators. Such a program could reach a level of scale, and shared resources that could provide much needed support within communities.

1:22:06

Adam Geisler

That was great. You went through quite a bit there. You know, one thing that I think a lot of what you said, quite a bit of interest. Well thought-out, appreciate your broaden that comment. You gave an example of a connection 325 symmetrical that there was no cost and if you, again, feel free to provide any of these comments in writing to us on samples or examples of things that you've tried before that we should be considering as we look at any of these questions here, as we look at the development of these programs in terms of eligible uses to be included.

1:22:47

So, if you have some concepts like that, we would love to hear or see, you know, any details that you're able to share with us around how those made sense, as part of your feedback, if you want to do written feedback to the broadbandforall@NTIA.gov, so really appreciate the feedback Andrew, and we're going to keep moving on. We have about six minutes left, so we're going to do the six-minute warning. I'll probably bleed over by two minutes at the top of the hour so my apologies if you have to jump, feel free.

1:23:16

Rodney Couch, you are up and Yolanda Lewis. Name, Spelling, Organization, and uh, Comments on Questions 1, 2, 3, or 4. Over to you.

Rodney Couch, K-PowerNet, LLC/KAMO Power 1:23:31

Hi my name's Rodney Couch. Can you hear me? All right. Good. RODNEY COUCH. I work for KAMO electric co-operative, we're in north-east Oklahoma and my discussion was basically number three, how to target the middle mile investment to promote last mile affordability. If we've got last mile providers, namely co-ops because we're part of that family, that part of the affordability as if they don't have to build middle mile, if, if a company like us is there, that could support that and we're co applicants, or maybe applicants in the same area, but NTIA, make sure that, uh, the due diligence was given to make sure that the applicants aren't basically overbuilding each other, or the they were asked if they work together. Are there any types of, or can we make sure that there's types of, uh, protections in there? That way, we're not spending money on something that doesn't need to be spent. And that's, that's what I've got there.

Adam Geisler

1:24:41

Rodney Couch, K-PowerNet, LLC/KAMO Power OK, do you have a, do you have a sample, or examples of ways in which we could like, suggestions for building those protections. Or if, if you were writing the NOFO, how would you articulate that?

I guess, what I would I would look at is see, if, you know, coverage maps is probably going to be the first thing that I would look at. But if they're an applicant and there's more than one applicant or service area, are we already looking at, or do they look at, or can we put a protection in there that looks at, does this middle mile really need to be built or funded through applicant A when applicant B already has existing middle mile. They're applying for additional middle mile that can support applicant A. We need to have something in place that says, hey, applicant A and applicant B, two need to get together.

Adam Geisler

Yeah, Yeah, OK, fair enough. Well, Mr. Couch, I appreciate the feedback on question three for the middle mile considerations, very common sense comment, makes a lot of sense and we appreciate you spending a moment to share with us your thoughts.

1:25:59

1:25:39

Now. Yeah, Absolutely, man, thanks for being on. Um, Yolanda Lewis, we have you up next, Yolanda. We're going to bring you off of mute, James Maleski, it looks like James Maleski, you may have lowered your hand, So you're up. James, you're next and then we're going to go ahead and wrap up with, with closing the event. So Yolanda?

1:26:24

Yolanda Lewis, E-racism, LLC

Thank you for the opportunity, Yolanda Lewis, I'm with E-racism LLC, and we are an organization that provides treaty compliance and enforcement training. And we'd like to know if you've incorporated the UN Convention for the elimination of all forms of racial discrimination into the overall project from the contracting applicant and the actual targeting, because we have desperate impact that this digital divide has been created by the planning. Being these in these areas that have been left behind are left behind, because it was pre planned. And so what we see in bridging the digital divide is a divide is going wider. We have done studies in Sacramento, the Capital of California, as well as in Silicon Valley in the Bay Area and we see that those that have been branded through the one drop rule and the three fifths rule that has been emancipated have been left behind because they are not being given proper status. So we'd like to know what we can do as far as bringing the treaty obligations into the entire NITA program in the allocation, and in the metrics and in the reporting in order to meet our treaty obligations.

1:27:36

Adam Geisler

Noted, I hear that, really appreciate you providing that feedback, so I think that that definitely dovetails into item four. But as you said, there's aspects of that sprinkled through all the other questions as well. So I really do want to thank you for raising that. That is, I think, the first time, I think we've heard that in any of our listening sessions, or even consultations to that, to the extent that you just described it. So thank you, Yolanda. We're now going to move on to James as our last individual to provide comments. James Maleski, and then after James will go ahead and do a couple of housekeeping items to close it out. So, James, over to you.

1:28:17

Name, spelling, organization, and comments to questions 1, 2, 3, or 4 or all. Hey, James, can you hear me? OK, just went back on mute. Let's try it one more time, James.

1:29:09

OK. Well, um, give it two more seconds. We'll go ahead and wrap here, James. OK, well, James, I apologize for the technical difficulties. Please feel free to send in your comments in writing to us as well. We have now reached one o'clock Pacific, four o'clock Eastern.

1:29:39

I'm coming live to you from my reservation here in Southern California, La Jolla Indian reservation, home of the Payomkowishum people, I do want to thank you for spending the last hour and a half with us in providing the feedback that you did.

1:29:54

We really appreciate you being here and sharing the detail as we really consider what's best to solve the digital divide issues.

1:30:03

In compliance, obviously, with our statute, but before we let you go, we want you to know that. There were several of you that we were also unable to get to. Obviously, we just saw that. And so, again, as a reminder, please send your feedback into broadbandforall@ntia.gov as soon as possible, and we'll be sure to collect those.

1:30:25

Also we'd love to see you on our upcoming IIJA Broadband Program public virtual listening sessions. You can see the dates for those on the screen. So we got January 26, 2022, February 9, 2022, and February 23rd of 2022. Um, the registration links and descriptions for those should be posted shortly on our BroadbandUSA website under the Events tab. If you guys haven't figured it out here today

1:30:56

The Events tab is the place to go for all of the most up to date event information for our organization here at NTIA. So, as we close out, I do again, want to thank you all for being here with us, providing that thoughtful comment, and I really do hope that we can see you in our future listening sessions.

1:31:15

Thank you again for being here and joining us. Have a great rest of your afternoon. No\$úun Lóoviq from me and my family, and have a great rest of your day. Thank you so much, this concludes our presentation.