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THE STATE OF BROADBAND AT IIJA'S ONE YEAR ANNIVERSARY

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OPENING REMARKS:

DAVID DON Senior Vice President for Public Policy, Comcast

PANEL DISCUSSION:

ADIE TOMER (Moderator) Senior Fellow, Brookings Metro

VENEETH IYENGAR Executive Director, ConnectLA (Louisiana)

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Adie Tomer [00:23:26] Hi, everyone. Good afternoon. We'll get started here and now, so thanks everyone for coming. It is a really nasty day here in Washington weatherwise, so thanks, everyone, for braving the elements who's here in person and for everyone streaming online. Thanks for taking the time to be with us. It's actually unintentionally broadband day here at the Brookings Institution. Earlier, former FCC chairman Tom Wheeler had an event related to 5G. Today or this afternoon, we're switching gears a little bit, but we're hopeful that a lot of folks have had a chance to enjoy this content today. Before I forget, because I'm going to because it's not elsewhere in my remarks, I want to make sure for the folks online that, you know, you can actually send questions our way. And that's the beauty of this format. So you can either send it to the hashtag that is on the screen. So that's state of broadband or you can email events that's plural at Brookings dot edu and we will be monitoring them and hopefully get a chance to ask questions of the panel in just a few minutes. I want to kind of offer a little bit of context for why we're here today even talking about this.

It's not hyperbole to say that it has been a really dramatic two years for broadband policy in America. Many of us in this room, certainly people watching online, felt like we were kind of screaming from the rooftops about what was happening, that there was a new essential infrastructure in America, and public policy wasn't seeming to reflect that. No one with confidence, I can say that I would ask for the events of the past two years or, you know, starting, you know, early in 2020. But if there's one kind of weird— I don't even want to call it a silver lining, I don't know what you call something like this— but a positive development out of it is it didn't feel like we were screaming from the rooftops anymore. It felt like everyone now finally understood, of course, in the worst kind of ways. Right. Students, school aged kids. Right. Stuck at home in what we now really understand was a really tough learning environment for them and horrible for their mental health, a really tough environment for the parents of those kids and so many other workers who now need to commute from home, who lived in environments where they didn't have high speed broadband, they or they didn't have devices. Right. Or they didn't have the household income to be able to afford a connection.

It's been a really tough few years for them, but now we have the attention of policymakers. And the evidence here is amazing because we have through a series of multiple bills, but in particular the Infrastructure Investment and Jobs Act, preceding it, some really flexible funding in the American Rescue Plan Act or ARPA and even preceding it. Right. Earlier with the emergency broadband benefit. Right, you know, give— I just want to be clear on this, you can hear my colloquial tone— I am so tired of folks acting like Congress gets nothing done because it has been truly a landmark set of years. And what's amazing about it is not just all of us in this room or whatever room you might be in, but our kids, too, right. They're going to live a different future because of these investments, not just in broadband, but there was no sector that went from effectively, and using an old transportation metaphor, right, like 0 to 60 or even 0 to 100 faster than this sector did.

But that leads to a different set of questions. Now, all of a sudden, you know, what are we going to get out of this? How much is it going to deliver? And this is where it's the classic, right? Be careful what you wish for, because now there's a lot of pressure on a ton of different folks in this sector from the industry who helps make sure we're all physically connected to the governments they work alongside to communities and other community organizations and other national scale nonprofits, to researchers like Kathryn and I and our colleagues. We got to do a lot of work now to show that we can actually get to that kind of ubiquitous broadband and kind of ubiquitous set of connections that I think we all know are so important for America's competitiveness going forward and truly delivering an inclusive economy for everyone.

So with that, that's the kind of context we've got for today is how do we do that? Is the infrastructure bill, if you will, IIJA, you can call whatever you want. Is it going to deliver? And how much further are we going to need to go? Like I said, that touches a whole range of actors. So what we actually want to do to start the day was actually hear from industry. The people who, you know, especially for those streamers here in the room, right, we know them as the people you pay your bill to every month, but they do more than that. Right. They're the actual engine of making sure we're physically connected. That's the structure we've got. And it's really important that they are at the table as we talk about this discussion.

So I am really, really excited to start out with our colleague David Don, who's a senior VP for public policy at Comcast Corp. David's generally one of the company's lead strategists, both federally and at the state level, has 25 years of experience in this industry. I also want to note that David is a double Georgetown grad. So thoughts and prayers for your basketball program at this really tough time for you guys. Finally, it's really important to note that Comcast provides generous support here for Brookings, which helps make all the work we do at the institution, not just around broadband possible. I'd also like to reiterate Brookings's commitment to independence and underscore that the views expressed today, not just by David but by others, are solely those of the speakers, including David. So without further ado, David, the floor is yours.

David Don [00:29:12] Well, thank you, Adie. I don't know. First, you introduced me as the cable guy so I'm the face of your cable bill. Appreciate that and then you brought up Georgetown basketball. It's going to be a tough, tough presentation to give here today. But thank you for having me at Brookings. I want to jump in and just say— look, and I think Adie touched on this— Broadband is actually one, it is an American success story, even though we're talking about the infrastructure bills today and we're all familiar with what's going on in American infrastructure, what we have going on in our crumbling roads and bridges, what we've seen in Flint, Michigan, or in Jackson, Mississippi, that is the infrastructure challenge of this country. But broadband is actually a success story, and everyone in here knows it. Broadband is what got us through the pandemic as a dimension. And broadband is what's going to take us further as a nation.

At Comcast, when the pandemic began, we saw tremendous growth in usage, over 40% increase in traffic immediately. And we were able to meet that challenge without any impact on customer experiences on the Internet. And we saw this not just at Comcast but everywhere. Right. Not only were we able to meet the challenges of everyone working from home and schooling from home, but at the same time, we've seen speeds increase across the country. Ookla reports that broadband speeds were up 75% during the pandemic, and the BEAD reported that the Internet served us well and was handling all of the traffic that was on the Internet.

So the question is, why are we having this discussion and why is infrastructure being discussed or broadband being discussed in part of the broader context? And that's because broadband is critical. And what we learned during the pandemic is something Comcast and a lot of people are talking about and folks at Brookings, which is that everyone needs to have broadband connectivity. Right. So during the pandemic, we know we use broadband to work from home. We were schooling from home. We did telehealth, we saw e-commerce increased. And everyone here in this room and watching online felt that. But the numbers are actually astounding, right? When you look at working from home, 70% of Americans stopped going to the office and started working from home. When you look at telehealth, a 38 times increase in the use of telehealth. Broadband for commerce. Commerce went up online, commerce went up almost 50% in just the first year of COVID.

And, of course, education. How many of us had to have our kids study from home? Over 90% of Americans had to have students study from home and American children studied from home.

So the point of this story is what is critical is that we get everyone connected to broadband. And it turns out that broadband, so we need to know what the broadband challenge is, and it turns out Pew, I don't mean to take some of your data Kathryn coming up, but Pew's done some work on this and what we know is about 80%, just under 80% of Americans actually have broadband to the home and have the robust connections we're talking about. So really, when we talk about this infrastructure challenge in broadband, it's a 20% challenge. And how do we get that last 20% online? Because everyone needs to be online. That is the story of COVID. And when we talk about how do we get everyone online, what is the problem there? It's really at a high level two challenges and I think you'll be exploring that today Adie some more. One is those who don't have access to broadband, primarily a rural problem. We're all familiar with that and we're going to explore that a lot and the infrastructure bill talks a lot about the access challenge.

But there's also an adoption challenge. And the adoption challenge is actually much larger than the infrastructure challenge. If you look at the numbers, I think the Pew numbers say about 75 million Americans don't have broadband connections to their home. Of that, if you use some FCC data, admittedly some flawed FCC data form 477, roughly 10 million Americans just directionally don't have a broadband available to them. So the availability problem is about 10 million, which leaves about 65 million Americans who have it available to them, but they're not adopting for a variety of reasons. Those of you who know my company know we've been on this challenge for over a decade with our Internet Essentials program, and it is a difficult challenge getting that last 20%, that long tail or 15% or so who have access and don't take it is extremely challenging.

And that's where I'm hopeful we'll explore some today and really get the states focusing on. Because we know that construction project, that buildout is really attractive and we have to get everyone access and that's where a lot of attention is going and that is very expensive, something we've been doing in communications for decades in the Universal Service Program. But we cannot lose sight of this adoption challenge, which is, as I said, six times bigger. So what do we need to do here? We need to focus on outcome. Right. There's a lot of policy debates that are going on in between the lines. But fundamentally, what is our outcome and what is the primary goal here? And

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that primary goal has to be that before the end of the decade, we've got everyone connected to a robust broadband connection in the home. How do we do that?

I think we need to prioritize some of the factors like matching funds, make sure that you have companies that you're partnering with that are, have skin in the game and engage and have experience. We want to prioritize things like speed to deployment, make sure that we get these broadbands built over the next few years before these funds run out. And then we have good partnerships with experienced partners. Let's remember, you're going to hear numbers today in the 40, 50, \$60 billion. That seems like almost an unlimited amount of money. And two years ago even when some of these funds were allocated, it seemed like a ton of money. Now, throw in inflation. That 40 billion and beat is worth about 38 billion today. And by the time we're done five years from now, it's going to be 30 billion, maybe even a little bit less. So who you partner with, how you ask companies to bring or demand companies bring resources to the table is going to be critical to success. So, Adie, thank you for having me. I look forward to the discussion with everyone else and thank you very much for having me.

Adie Tomer [00:35:43] Thank you, David. Perfect. Yeah. There we go. Now I can hear my echo. David. Thank you. Ton of extra questions for us to think about. I'm really excited to have this panel here today. Number one, I already know everyone here, which is always a nice way to start a conversation like this, so it actually feels like a conversation. Second is we've got a range of folks on the stage who do different work that all complements one another to try to address these challenges that that David helped frame up for us. So I'm going to do very short introductions because they're all actual superstars, so you can find their bios online. That is something that you can do. So. But I want to jump right in so we have as much time as possible for our conversation and to hear from, from folks in the room and online, too.

So first, we're going to start on the far end away from me. So Kathryn De Wit directs the Pew Charitable Trusts Broadband Access Initiative. Pew is truly and has been for quite some time and just as much with Kathryn's leadership in putting out just some of the best independent, fact driven work on this stuff. It is the most important thing to read, and I think you already heard that from both David and me. Then to Kathryn's right, we have we have Veneeth lyengar is the first executive director for the state of Louisiana's broadband efforts, which you're going to hear all of us kind of reference as Connect L.A. today. Vineeth has worked in local government operations, public health and brings a

multidisciplinary approach to this issue that is really, really important. I think you're going to hear how that plays out both in Louisiana and his thoughts about the country overall. And then to his right and returning champion, at least for us, is Angela Siefer, who is the first executive director and founder of the National Digital Inclusion Alliance. Angela's been at this since 1997, she is one of the people that was on the proverbial roof shouting. And it's really a testament to how effective NDIA is, because you can see it quite literally in this bill, but also in communities across the country.

Everyone here actually delivers things, and we really like to hear from doers on our panel. So thank you for making the time to be here today with us. I want to start with this and maybe I'll throw it to Kathryn first so we can almost maybe go down the line, but is, what's kind of a state of the digital divide? You know, we both David and I talked about things have been changing, some positive, but not, not as far as we need to go. When either Pew's framing the work or just what you see out there, what's kind of the state of the digital divide?

Kathryn de Wit [00:38:03] Well, I'm not to trigger anybody in the room, but I feel like that's kind of the question du jour right now. But we started that number of 30 million Americans don't have access to a high speed, affordable connection or a high speed, reliable connection. Millions more don't have access to one that's affordable. But I think that the more important question beyond why don't we actually have an accurate count of who has access to broadband and who doesn't? The second question is okay, what, those folks who don't have access to broadband tell us what they look like, where do they live? And overwhelmingly, we know that if you are low income in America, you are less likely to have access to a broadband connection. You're not only less likely to have access to one, you're less likely to adopt. Actually, I was just confirming those, confirming those notes.

Adie Tomer [00:38:56] It's a broadband event, it's broadband a lot on stage.

Kathryn de Wit [00:38:58] So, you know, it's, you know, you wanna make sure you're quoting but pulling from research from my colleagues at the Pew Research Center, 43% of adults with annual household incomes under 30,000, that's three zero thousand do not have they do not adopt at home. And they cite almost half, about 45% cite cost as the primary barrier. So as we're thinking not just about building out these connections, we really do need to be thinking about long term solutions to affordability, because if those networks are not sustainable in the long run, I'm talking Opex. We need customers for that. Then, you know, there we can call into question about the value of the public investment. But fundamentally, low-income Americans do not have access to broadband. And that is a significant problem for a number of reasons.

Adie Tomer [00:39:47] Yeah. Thank you. Let's go to you next Veneeth and kind of ground it. Those numbers are both real and feel real, but they're also national. Right. How is this playing out in your particular state? And maybe even if you want to comment on what you hear from your other kind of state colleagues of what's going on in their state still.

Veneeth Iyengar [00:40:02] So and thanks Adie for, for hosting and for folks braving today's weather it is 60 degrees and sunny in Louisiana. I just wanted to say that.

Kathryn de Wit [00:40:10] Every time, man.

Veneeth Iyengar [00:40:11] Yes. But really the state of play in Louisiana is this. We have about a million and a half people. So the state has about four and a half million. But one out of every three lack Internet or at least high-speed affordable Internet, it's either because of the affordability, access, skills or a device issue, 47% of whom are African-American and Latino households. So it is a, it's a, it's a big problem that's, that's impacting both folks that live in rural areas and folks that live in urban areas.

Now, you know, in Louisiana for us, you know, scaling up the office and working with that same level of urgency that people need this on a daily basis before the before the pandemic and and now after is sort of our ethos and bread and butter for our office. I mean, we spend a ton of time out in the field trying to really understand what the challenges are based on different sectoral demographics. Right. So farmers are going to have a slightly different use case than public safety. There's going to have a slightly different use case than public safety. There's going to have a slightly different use case. Now in doing so, you know, the fortunate thing is we're getting a bunch of federal dollars, right? So through the FCC RDOF program, there's a bunch of dollars coming to Louisiana. We've already committed close to—.

Adie Tomer [00:41:20] Could you spell out RDOF just for people?

Veneeth Iyengar [00:41:22] Yeah. So it's the Rural Digital Opportunity Fund, right? So in Louisiana, well, just like in most states, there are three large buckets of money. Money coming from the Federal Communications Commission, that's money coming through Treasury in this case are ARPA dollars, CPF dollars, coronavirus project fund and then in infrastructure. So the fortunate thing and what I tell folks is it's not in Louisiana, yes, we have to spend the money in areas that need it the most. We need to make sure we correctly spend the money. You need to stretch out every single dollar. But I think equally important, from our perspective, it's not a question of if someone's going to get access, it's a question of when. And that's for us what we're really, really shooting the stars for it and try to do it as quickly as possible.

Adie Tomer [00:42:08] I love that you put that when in there because I think we'll come back to that at the end in particular. That's my last question, you guys. But Angela, let's go to you. And obviously, you all work nationally, but I'd love to also ground this conversation in even like substate level kind of a, you know, community, whether you call it city, county, whatever, even smaller neighborhood. But also on those adoption issues, I think Veneeth, you just touched on, David, you mentioned them too. How well what's going on in the digital divide to make sure, especially in what a lot of us called digital equity, you know, what's happening there? Where do we stand after the last few years?

Angela Siefer [00:42:40] Yeah. Thanks for having me, Adie. So when we first formed NDIA about seven, eight years ago, we did so because those who were working on these digital equity issues, they were teaching folks how to use the Internet, making sure they have access to the right device because mobile phone is always it, helping them get connected to an Internet plan that they could afford, that that work didn't, didn't really have it, it wasn't a field. It wasn't a defined field. It was occurring across the United States. So by defining digital equity as a field, what NDIA has done then is help those folks come together and define what it is, who they are and what they need.

And one of the first things we did is define digital equity and define digital inclusion. So digital equity is the goal. This is where we want to get. Individuals, communities have full access to information, communication, technology to do whatever it is they need to do. Digital inclusion, this is the how and this is what's already been mentioned already, right? Like this, that's the affordability because we know that that's a primary barrier, but it's also the skills and it's also the devices and the tech support. And they're really all connected because if you can't afford something, this is a this is a problem with some of the old data, people would say, I don't need that. Well, if you can't afford something, you don't need it. My daughter actually just brought this up with me recently because I used to say I don't need fresh flowers. And so now she said, she's 23 years old and she feels bad buying fresh flowers. I now buy fresh flowers. The difference is I can afford them now before I couldn't. So I used to say I didn't need them, but I really just couldn't afford them. So you're going to

say I didn't need them. Like it's the same thing, right? I don't need internet. Well, because you can't afford internet.

And it's connected to digital skills. If you don't know how to use it, you're also going to say you don't need it because you're not sure how to use it and you don't feel safe. So safety, privacy, they're all connected. And then the tech support, right? We throw that on. So all of those things, we have to consider them. So we need these holistic solutions, and we have all this money going to build. We can't wait and deal with the adoption piece later. We have to deal with it immediately because if we wait, we're going to be like, oh, well, gosh, people didn't adopt. Well, no, they didn't adopt in other places. Why do we think this one place where we were going to build out was going to be any different than the places where it was already happening? So we have to make sure we have these holistic solutions all at the same time, which is really hard because there's all this money going for build out and we want people to also figure out affordability and digital skills and devices. It's a huge lift for the states. I'm sorry Veneeth. It's a huge lift for the states.

Veneeth Iyengar [00:45:04] It it, it is a huge lift for the states. I mean, if you think about it, you know, 50 states plus a number of territories, we probably in aggregate, core broadband staff, there may be between 150, 200 people in the core, minus the consultants that are going to manage the success of 42 and a half billion in spend. That's it. So we, you know, we sort of equivocate ourselves as a, as a public startup, which means we have to operate with the sense of fluidity, and we have to be really flexible and we have to always focus on process improvement because you know what we were doing now may be slightly different from an iteration perspective than what we do next year.

But you're right. I mean, I've, I've mentioned it that frankly, if we make these investments and people don't see the value in how broadband can improve their lives, both professionally and personally, then frankly, it's a, it's a busted investment. And so from our perspective, you know, we're looking at how we can really help drive Louisiana's economy, help every single sector, both professionally, personally through these investments, which also means driving adoption, digital skills and doing the kinds of things that we need to do to tackle the digital divide.

Kathryn de Wit [00:46:22] And there's so many things that I want to pick up on in there. I think first on that piece around the sort of the value add, the why state legislators in particular, I think that's where in my own work, I don't know for the two of you, that's where I'm seeing the most enthusiasm and interest and, quite frankly, the, the biggest growth in coalition and advocacy is from

not from state legislators who have been working on tech or telecom or PSEs or PUCs for years, they're kind of like, okay, fine. It's the ones who want to talk about health care, they want to talk about education, they want to talk about workforce development, manufacturing. Those are the ones that are coming in and saying, okay, educate me. What do I need to know? What do I need to understand about this? Talk to me about Skilling. And so that's that is really exciting. And there's a lot of work to do there and a lot of, I think, cross-agency collaboration at the federal and state levels that should be happening.

But I think one thing I do want to press on with Angela, something that Angela pointed out earlier, talking about adoption and how Angela is absolutely right about how all of this needs to be holistic. We need to be thinking about these things together. For so long, when I first started working on this issue a little over a decade ago, infrastructure was over here and the fluffy stuff, adoption and skills over here, they never made sense. You're talking about a business, a network. So adoption, adoption at a minimum has to be part of that because it's a business plan. So the effective states were including those adoption planning, adoption requirements as part of their programs well before ARPA and BEAD were moving forward. That's a best practice and that's just a good practice. So it's not only something that is a reasonable expectation. We have evidence that it works.

Adie Tomer [00:48:14] Yeah, that that's great. I want to, a lot of acronyms are getting thrown around, which is very natural in DC. No, no, no. Because it's actually one of the few things I want to say you're making not even a—.

Kathryn de Wit [00:48:26] That's on my bingo card.

Adie Tomer [00:48:27] Point that's on data. You know, someone's from DC when they're just like, wait, is that even an acronym? Thank you. So we're talking a lot, especially for folks who, what so interesting about this moment is suddenly all the infrastructure sectors are being talked together. Now, in the end of the day, though, you know. Right. The governance, the regulation, the capital flows, often they are still sector specific. So it's really important for folks to know exactly what we're talking about here on the total. So I'll just throw some numbers out really quick just so everyone knows what we mean by why the infrastructure bill is so big.

So what you are going to hear us keep saying is BEAD, is the Broadband Equity Access and Deployment program. This is physical access. It is priced at 42.5 billion, David mentioned this, it will absolutely be eaten up away through construction costs, which is very real on the inflation side. We have 14.2 billion in the Affordable Connectivity Fund. And by the way, BEAD is run by an agency under commerce, call it, or department called NTIA, National Telecommunications Information Administration. Did I get it. Yeah. See, when you live in acronym world, you don't even know what they mean any more. Important here is the Affordable Connectivity Fund is, is under FCC, then you've got grants for the tribal connectivity program, 2.0 billion also under NTIA. Then you've got multiple programs under digital equity that themselves. I'm not going to say all these names here, right, are going to exceed 3 billion. You've got distance learning or telemedicine and broadband program, which has at least 1.9 billion in loans and grant pilots, the list actually goes on. There's plus 60 billion alone. You've got 10 billion that came from the, from ARPA, plus the additional flexibility in ARPA.

So there is a lot of programs on top of the money here. So I want to transition to basically okay, we just passed this one-year anniversary, makes for nice publications and, you know, newspapers. But it's also a time, I think, of national reflection, especially honestly at this time of year. So maybe Veneeth I'll start with you because you all have genuine as you know, the rest of us just got to comment on stuff. You got to run things right. So in the state of Louisiana you all have some positive news I'd love you to share here anyways I've actually seen these dollars hit but let's I really want to open it up after Veneeth speaks of hey, what's happening with, with the IIJA dollars as they kind of flow out to markets.

Veneeth lyengar [00:50:38] So, so a couple of things that, especially this past year. So we've been, we've been at this broadband effort formally over the last 18 months where we're fortunate that we had a number of legislators that come from rural parts that align with our governor, that's focused on rural revitalization to really make this a priority. So 95% of our success as an office is really a credit to the governor and to the legislature who have said we need to make this a priority and we need to work as quickly as possible. And so that's 95%. In fact, we've had three legislative bills, I think, without a single no vote that's helping to push the program along, but also due process iteration as we get ready for the infrastructure bill next year.

You know, this year we were fortunate in Louisiana to be the first state to be approved to receive our initial planning funds for both digital equity and for the BEAD program. So we're knee, knee deep in executing both. Our goal is, is sort of the converge both efforts, the five-year plan and the initial proposal that's required by NTIA and the digital equity efforts sometime by, by April of next year. And then we, we start that iterative conversation with, with NTIA to see what's next in terms of

approval process, etc. You know, our goal is, look, we're going to try to work in Louisiana as quickly and efficiently as possible, again, to try to disseminate some of these dollars from the infrastructure bill this time next year. I mean, that's our super ambitious timeline. And I think if we work towards that and we have the right partners, which we feel we do both locally, statewide, legislatively and nationally, then, then we'll get there. And so we've been making really good progress on, on really on the execution of our infrastructure bill dollars.

The other thing is we have committed, again, 170 out of our 176 million in American rescue plan dollars. We signed 67 grant agreements. Those projects are under way, including, including Comcast being one of them. And so, you know, we look forward to the progress and results that'll impact 65,000 plus locations. So in Louisiana next year, we thought last year was going to be a lot of work. We thought this year was going to be a lot of, actual next year is going to be even more. And it's namely a function of we've got a lot of our American rescue plan projects that are under construction underway, which is great, and those projects will move along really fast and quickly. And then we've got all of the BEAD work that needs to happen to get ready for, for infrastructure dollars.

Adie Tomer [00:53:12] Yeah. Great. What are other kind of IIJA success stories you all are hearing about?

Angela Siefer [00:53:16] So a lot of the work is that, the focus of the work is at that state level, right? Because they have to figure out what to do with all this money. And then the local folks are at the point of which they're saying, so how do we engage in this? What's, how do we participate in all of this? And the answer to that is to prepare for the engagement that Veneeth and colleagues have to do. Right. They're required to do that stakeholder engagement. But also, we encourage them, don't wait. Right? Create your coalitions now, create your local plans, because we were successful in getting into that notice of funding opportunity that Veneeth and friends, if there's local plans, they have to look at their local plans and consider them.

So for sure, the places that have already created plans and they have strong digital equity coalitions are ahead of the game. They're already ahead of the game. And in some respect, it's going to be hard to catch up with some of them. But, but we encourage communities like don't let that stop you. Create those coalitions, get folks talking to each other. A big piece of the digital equity planning process and then the implementation is going to be the question of who does the work. So who's going to teach people how to use the Internet, who's going to get computers into the homes? Who's

helping folks line up for the Affordable Connectivity Program and those who are already doing that work clearly front of the line, you know, or near it, but then also it's a question of who could be doing the work.

So this is organizations who are already trusted by the populations that need to be served, pulling them into this digital inclusion kind of programing and teaching them how to do that programing. Because a big barrier, a barrier to all of this is trust. Technology is intimidating. Technology hurts people. Right. We all know this. We've heard of there's scams right, they're rampant. So how do we make sure people don't get hurt by what it is that we are rolling out and that is education and is making sure that there is a trusted person to turn to when you're like, I got this email. Should I respond? But if you don't have somebody to turn to, how, then you're like, okay, I'm just going stay away from email. So we have to make sure that we basically change systems in the United States. We don't have this now. Most of us have somebody we turn to for various tech issues in our life. But if you don't have that person, then you're either you get hurt or you stay away.

Kathryn de Wit [00:55:40] So. The last year, to Veneeth and Angela's point, there's been a lot of staffing up, a lot of how are we going to do this? Starting to think through some of the logistics of the program. In 2020, just about half of states had existing broadband offices. Now all 50 do. And what we're seeing, to Veneeth's point, they are staffing up. Those are going, the size of those offices are going to look different across all states. That's for a range of factors, some of which are dependent on state legislation and usually state legislation. But so I think staffing and building up that capacity is really important.

My team at Pew has been working with more than 30 state broadband offices and territories to help them really get these offices up and moving, providing training, education on broadband policy, programs, our research to make sure that everybody's kind of operating from the same starting point. Because as Angela made the point earlier, this isn't an existing field of practice, really. It's kind of been humming along since the Recovery Act. And we are in some ways building this back up from scratch. But what from an implementation standpoint, we are, we have hit two important markers of several phases of implementation with BEAD, the notice of funding opportunity came out in June. June. Yes.

Adie Tomer [00:57:11] March.

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Kathryn de Wit [00:57:12] Yeah. Okay. No. In the summer. And that clarified a lot of the questions about the program implementation, some of the requirements. Now we are in the mapping and challenge phase which will help determine allocations for how much money each state will get before we start moving into a planning phase and then initial proposals, the final proposals and implementation.

Adie Tomer [00:57:36] But that's a great segue to the, the kind of getting some of the good out of the way. It's impossible even we talk about the good to intersperse a little bit of things that we're worried about. Let's go all the way into worrying zone.

Angela Siefer [00:57:49] We can spend a lot of time in that zone.

Adie Tomer [00:57:51] Oh, yeah. Let's live there for a little bit. Uncomfortable.

Angela Siefer [00:57:53] Scary.

Adie Tomer [00:57:54] Yeah. The let me, let me start at least on BEAD. I know we're going to naturally run out of time here, and I want to leave some time for questions. So you're doing great, I'm just saying, we're not going get to everything, but at least let's start with BEAD because we were living there. You already talked about staffing. So I mean, I'm just gonna toss all these out, hit on any you want, we won't touch all of them. Staffing constraints, but what's it going to take, it could be salary, funding people. Fiscal, specifically sustainability of actually continuing to potentially operate things that might have public ownership or some level of public private ownership after this money's gone because it's capital, right?

Kathryn de Wit [00:58:32] I have thoughts.

Adie Tomer [00:58:32] Yeah. So let's toss at least that out there. And then the third one, which is almost wraps it around and gets back to that time thing you talked about. And are are we going to reach everyone through this? Because I honestly think that's the big questions Americans, generalist Americans, if you will, are paying attention. Americans are asking themselves, hey, we spend a lot of money is everyone going to be connected. It's the same thing with like water pipes right now in the sense of are we actually remediating all the lead pipes or not? You know, those are the blunt questions most people think about. So, again, staffing, fiscal financing, if you will, sustainability and then and then are we going to get there? So let me just drop that bomb on all of you. Yeah.

Kathryn de Wit [00:59:05] I mean, I'm, but if one of you would like to take first pass, please feel free.

Veneeth Iyengar [00:59:10] Look, see, on, on staffing. We feel good with our team. We we have some nontraditional ways of sourcing talent. And from our perspective, it's really important to build up talent organically. So to build up talent organically and that's what we've done. So staffing will, where I think we feel good. Yeah. It may be dying. There you go. So so staffing we feel good in a nutshell.

On the sustenance of these networks, you know, we, you know, we do a pretty rigorous job in and really vetting the quality of the companies and the applicants that will receive our grant dollars. We feel good with, with the different providers that have availed of our grant program, you know, but legislatively we have an opportunity if projects fail to claw back the money and to clawback the asset, and that is in state law and that's in the legislature, and if that's the case, you know, God forbid that that actually happens, then we'll, we'll cross that bridge. But we feel good with the collection of partners that we have. They're going to execute.

And, in fact, what we've done over the last couple of weeks and what we'll continue to do next week is go with our partners and the companies that we've given grants to the communities to do kickoff meetings. And in every one of the conversations we've had thus far, the companies are going to execute far faster than what they indicated in our grant, which is music to our ears, one. And then the second is they're going to likely build in locations and invest in locations using their own dollars to go into subdivisions, locations and addresses that were not accounted for in our grant program. And that's what we want. Right. And so that's, that behavior we, we like to encourage.

Kathryn de Wit [01:00:54] A couple of things, a couple things here. First, I don't, we need to be setting higher goals in policy when it comes to building these networks, because part of the reason we are spending this much money on broadband now is because we have had such low policy goals for so long. We need to be setting the ceiling or the floor a little higher and we need to be building beyond that. And I think we also need to be having really hard conversations about accountability and and enforcement to Veneeth's point about clawbacks. If entities who have agreed to terms of grant agreements are not meeting the requirements of those agreements, why not? What needs to be fixed on either side in order to make sure that the people on the other end of those networks, because at the end of the day, we are talking about people, we are talking about American households, if they are not getting the connections that they are promised, we need to figure out why. That's really important.

It's also that we are not putting fiber in the ground and just and walking away and saying, okay, see you in 30 years. There are network operations maintenance. So when we talk about sustainability and fiscal sustainability in particular, this is a conversation we are already having with state officials, how are we going to be thinking about the health of these networks in the long run and not just the the physical networks themselves, but also affordability? Those lawmakers know that their constituents in many cases are not going to be able to afford those connections. We don't know how long ACP is going to be around. That's a problem. So those are two of the things that we're really pushing on, it's the accountability piece, because it's it's a tough these are tough numbers to swallow because these are tax dollars that we're having to spend again.

Angela Siefer [01:02:46] As estimates put it, the Affordable Connectivity Program is lasting another couple of years. That may be when some of the networks are getting built. And and we're just at that point getting to use that subsidy on individuals and households are getting to use that subsidy on these new networks that they finally have available to them. So we have to figure out a long-term sustainability plan for the Affordable Connectivity Program. Another big barrier is that the digital equity funds are amazing. Historic. 2.75 billion, right? Like at NDIA, we got an ice cream cake, we put 2.75. Like we're really excited.

Kathryn de Wit [01:03:24] It's a nice photo.

Angela Siefer [01:03:26] Yeah, it was really great. It was delicious. But digital equity, working, helping folks get connected to the Internet and continue to be able to use it is a forever job. And depending upon how one defines digital divide, if you define it broadly in terms of use, not just availability of, we will never solve the digital divide.

Kathryn de Wit [01:03:50] Yeah, yeah.

Veneeth lyengar [01:03:50] But you know what's interesting is models, business models have been disrupted because of the pandemic. You're, you're seeing more innovation. You're seeing more innovative delivery of health care models. I mean, you guys have written a report about grocery delivery, especially in areas that struggle with food insecurity. And so you've seen, you're seeing investments made by the private sector, by all sorts of different groups on new and innovative business models. And so from our perspective, we look at that and from a Louisiana perspective are thinking about how can we start to drive, you know, Louisiana's economy again. I mentioned earlier really forward, if we start to leverage broadband as a value, as an asset enabler and as a platform because you are going to have new innovative disruptive models are going to be created to help penetrate and address issues of food insecurity, health care, you know, the challenges that farmers are having, especially in rural areas. And that, that is going to be really interesting because they have to develop a new model to align themselves with new ways that from a business, a consumer and business to business, the different behaviors and how people are consuming things nowadays.

Kathryn de Wit [01:05:12] Can I add to this point, because I think somebody at a roundtable earlier this year made this observation— and I don't remember who it was, otherwise I would say it they said, you know, we have to stop treating technology, we have to stop treating digital equity, and I'm I am using access in here too as Angela does, but we have to stop treating it as an other. Because if we continue to treat it like another, as we have been as a nice to have as it like tack on thing that we can get out and we can get another coalition together, we're always going to be playing catch up. But the reality is exactly what Veneeth just described.

And if we want to stay competitive as an American economy, if we want to stay competitive with China, if we just want to stay competitive in general, we need to stop treating these things like an other. And we need to be thinking about technological integration, digital transformation in everything that we do from kindergarten all the way up through post-secondary ed and beyond. And that's I really think the only way that we are going to have sustainable impact that's going to affect more than just a small subset of Americans.

Angela Siefer [01:06:19] I would say, this, I would call this all of this investment is successful if we get to a place where we have systems level change to where all of the industries that are impacted by those, like if we have more health care that is integrating technology and they recognize that they need to make sure that the patients have access. Right. And thus they're paying for those patients to have access. Because what a lot of this comes down to is resources. Right. Who's going to cover the gap there? Who else benefits. Finance industry benefits, retail industry benefits. It's not just Internet service providers, right? Lots of folks benefit when lots of folks are online and that they all participate in the sustainability of this.

And so by systems level change, it is them, but it's also government and philanthropy and that it's wrapped into things and that we have a multitude of financial sort resources to keep this work moving forward. And it seems logical, right? All three of us are like, oh, this totally makes sense. So if we can figure out how to make that happen while we're expending this money, that's the sustainability of all this.

Adie Tomer [01:07:26] What's that going to take that we haven't already committed? And I'm going to let that be my last question. I'm going to go to you all in the audience first, for people online, we'll take it, I'm watching the clock unfortunately, I would love to stay here an extra half hour, but what more needs to be done? Let's maybe make that the last question and you can answer that however you want. Just be relatively tight because I know each of us can talk for 10 minutes about it.

Kathryn de Wit [01:07:45] I think it's already happening in some places. I think some of it is sharing, share, not only sharing where there are examples of that sort of systems change happening but elevating how you can replicate it. And not just here is the type of interagency collaboration that we saw in a state like North Carolina and the data sharing practice that we saw between the broadband office and the Department of Education. This is actually the policy that enabled it, because it only happened because the governor said that you had to.

Adie Tomer [01:08:19] Why don't you to quickly describe that policy.

Kathryn de Wit [01:08:21] And I don't remember what it was. It was around the coordination on the Broadband Advisory Council. So and this is a, it's several years old, but I think that the, we need to remember that public servants, in particular civil servants, they have so many things on their plate. So we have to really think about how if it's going to take a policy and executive order other people to make these things happen, just adding responsibilities to folks existing jobs and just assuming it's just going to happen naturally is likely not a sustainable solution.

Adie Tomer [01:08:51] So more funding to make sure they can do more.

Kathryn de Wit [01:08:53] It's talent attraction and it's more funding and policy.

Adie Tomer [01:08:57] Veneeth.

Veneeth lyengar [01:08:58] You know from our, from from our perspective it's all about I mean, our biggest worry is execution risk, right? Because of just the sheer size of the challenge. Plus we only have a couple of folks. But, you know, I think we're, we're, we'll get there because of the of the great partners that we have in Louisiana, but also nationally. But from our perspective, we just need to continue to overcommunicate what's happening, but also actively listen. Right. So the active listening part is really important.

I'll give you a really good example of some, today's Thursday. So this past Monday, we were in a in a parish an hour and a half south of Baton Rouge. And so in meeting with the parish president and meeting with the company that we've given a grant to, that, that company said, hey, parish president, we might need some help in permitting. And the parish president then said, hey, maybe we need to set up a local coordinating permitting council, right? Something that existed before the pandemic, but never really got off the ground because of the pandemic and now because of the need to expedite these projects, that's what he's going to do. Right. And so, you know, part of the part of our constant engagement, constant listening, constant over communicating, is going to start to result in where the local officials will start to really start to own the execution once it leaves our office to a certain degree and goes to the providers and goes to the committee. So, you know, that's going to always forever be part of our our our M.O. when it comes to Louisiana. And in terms of pushing stuff out.

Adie Tomer [01:10:31] I hear you talking about building public trust and no one in Washington would ever want a coordinating permitting council. That's not something anyone here is interested.

Kathryn de Wit [01:10:39] Can I, I'm really, very quickly. The five-year action plan is where we are going to see this come to fruition, and that's why they were designed that way. So when we're talking about agency coordination and top level down coordination and out to other sectors, bringing everybody to the table, the five-year action plan for states. So read those we'll analyze together. Okay. Sorry.

Angela Siefer [01:10:57] Yeah. So if I get, you know, a magic wand or a big request, it is that those who can help resource local folks to get together and be able to understand what these issues are, what's the difference between your mobile phone and your wireline phone, your wireline service coming? Like, what does wireline even mean, right? What's that home service that's coming in? And how does my, why does my Wi-Fi work? We don't need everybody to be technological experts but understanding the difference of those and how their broadband bill works, this is why the broadband labels that the FCC is working on now are so very important.

So NDIA get started, focus on the local, we're now supporting states also, but that local piece is a piece where a lot of attention has been on states legitimately. But we have to make sure that the local, local coalitions and local governments and everybody who's going to end up engaged because that stakeholder engagement understands what they're engaging in. And I think that's kind of a gap out there. And, you know, that's the request out there to philanthropy and industry to support that level of it, to help folks get together. Because we can't say, yes, we went digital equity coalitions and then we all look around and be like, well, are you going to do it. No, I'm too busy. Are you going to do it.

Veneeth lyengar [01:12:10] In just a-.

Adie Tomer [01:12:11] This last comment.

Veneeth lyengar [01:12:13] And I think we have to be particularly sensitive not to overstress and overload local officials because it's not just broadband that's going to be knocking on their doors and coming to their community. They're dealing with new water systems, new other, road projects, sewer projects. And it really becomes the downward pressure on their ability to execute not just one thing, but 50 million things. We just have to be hypersensitive about that.

Adie Tomer [01:12:46] Yeah, I think there's some common themes here across everything you are saying. And please get at least one question ready. I'm going to call in the room. There's a need to build public trust. We've got to expand capacity. That's both in personnel, that's in loot, too, we need money. And it's clearly got to be interconnected, which makes sense on infrastructure, but if we want to build competitiveness here, we need to understand how much broadband is part of the solution, but also needs to be thought of beyond just in an insular way. That was great. We're going to go to at least one in the room. Karen, we are not, okay. Okay.

Karen Slachetka [01:13:19] So I have two questions from the webcast audience.

Adie Tomer [01:13:22] Okay. Let's yeah, let's do this. We're going to, I'm gonna, here one second. Everyone who's in here, you get to stay. You can talk to these folks in about 5 minutes. We'll take the web questions and then you all stick around and you can grab these folks. Okay. So go ahead Karen. Let's load both up and.

Karen Slachetka [01:13:35] This is from Brittany Benkert, IT manager from the New Georgia Project. She has two very simple questions for you guys. First one, why isn't broadband treated as a public utility? Second one, what's the incentive for private companies to get to rural areas and tribal lands if the ROI doesn't meet that of major cities?

Adie Tomer [01:13:54] Okay, we've got 4 minutes, so let's see how quickly we can answer a couple of. Yeah, okay.

Veneeth Iyengar [01:13:58] So in the audience is a Georgia broadband director. So I will defer that question. Look, from our perspective, when it comes to utility or not, I have to deal in actualities and what the legislature tells us to do. There's more than enough for us to either solve the problem with the federal funds. And given the size of our team and there's only so much, I can only process in my mind, I can only deal with what's in front of me. And so, you know, if that's a question that our public service commission or our legislature wants to handle, I will defer to them.

Kathryn de Wit [01:14:32] We've got near universal access requirements that I think are being more stringently enforced or should be than we've seen before. And I think that's a important step forward in the conversation around broadband as a, as an essential service. The question of it being a utility, I think, is a different conversation to Veneeth's point about regulation and also about the 1996 Telecom Act that we definitely don't have time for. But this but movement towards universal access and availability, that that and enforcing that is the important, important movement.

Adie Tomer [01:15:06] Okay, let's do another one online or we can go in the room. We already had hands up. Okay, let's get to at least one in the room. And folks who are streaming, we're going to take a few minutes so you can stay too. Just tell us who you are and just end with a question mark if you don't mind.

Audience Member [01:15:18] Yeah, absolutely. My name is Ji Soo Song, I serve as a digital equity advisor at the US Department of Education, and I wrote my question down so I don't forget. But my question is around stakeholder engagement, because communities, as we all know, are experts of their own digital divide. Right. And the nuances of each divide. So at the Department of Education, we've been encouraging state broadband offices to work alongside LEAs, SEAs and schools who have led digital inclusion efforts over the past three years at the very least. So they have a lot of information about existing gaps and what are the products or strategies that can be strengthened using the new federal dollars. So to help, the Department of Education release some guidance on barriers faced by students that we like states to consider in their digital equity plan.

So for Kathryn and Angela, my question is, have you seen any model states that have done that sort of interagency collaboration between the education sector and the broadband sector as sort of a foundation to the digital equity plans? Do you know any model states? And then Veneeth, how is Louisiana working with the education sector to build out your own digital equity plan?

Adie Tomer [01:16:24] That's great. Thank you.

Angela Siefer [01:16:25] I can tell you the most exciting thing I think I've heard so far, Texas and pretty sure it was Texas, yes, and North and New York both are, their schools are being required to gather broadband adoption data. And then that data then is going to be part of the digital equity plans in those states. So not all states are doing that, and they just did it for other reasons, they didn't do it because they were going to be working on a digital equity plan, but they did it for other reasons. So the more that states can figure out how to gather that data from schools, then that is really, really important because it's going to probably be the most accurate data in the state around broadband adoption.

Veneeth Iyengar [01:17:08] We will shamelessly take those ideas from Texas and and in New York, New York. Let's look in a nutshell. You know, we have a great partnership with the Board of Elementary Secondary Education. In fact, they funded our office. They provided us the seed capital to get us going for every and in any meetings that we go to in any of the parishes, 64 parishes, we often, often insist on this, the local superintendent come.

You know, we're fortunate in Louisiana that for every elementary, middle and high school public in most, if not all the schools, nonpublic have fiber optics going to it every local library, including in the smallest of villages, have fiber optics going to it. So that's that's a big, big plus. And so you already have existing infrastructure. You have existing assets in every one of these locations. And so we just need to build off that. So we are hyper engaged in working with DOE, Louisiana Department of Education, both at the state level and at the parish level.

Adie Tomer [01:18:09] It's great. We have time for one more. We're going to one more.

Audience Member [01:18:15] Hi. Gordon Chapman, American Society for Civil Engineers. My question is regards to sufficiency of access. So this conversation has been based almost totally in wireline. And I'm curious how from perhaps from Louisiana's perspective or how you guys look at the statistics, is reliable 5G connection something you're going for? I, I, the capital intensiveness of getting a fiber optic connection to everybody's house or parish seems a lot more expensive than trying to get more wireless, reliable wireless connections.

Adie Tomer [01:18:57] It's a great question.

Veneeth lyengar [01:18:59] So let me take a shot at that. Okay. So, look, we, we don't have the, the geographic challenges that other states, frankly do. Right? We don't have mountains. And so I think our cost, you know, and again, that's one thing. The second thing that I think is really important

is we are technology neutral. Now, behaviorally, the companies are stepping up and investing in fiber infrastructure. It's not something we require, but it's something that companies are doing and they're doing that on the basis of the fact that they feel that the CapEx required plus what we would invest in can help support those return on investments over a period of time once we get adoption numbers up even more. Right. You pick up new customers.

But, you know, you talked about at the very beginning, ubiquitous Internet. Right. From our perspective, there is a, there's an acute settler tower, wireless shortage in Louisiana. Really impactful from a public safety perspective. Very impactful for farmers, small businesses. And so, you know, we're trying to understand that if the goal one day is, is ubiquitous Internet and high-speed Internet, the moment you leave your house to you, you drive along I-20, I-49, I-10, you know, what does that mean? What does that cost and how we would execute? So those are things we're actively looking at.

Angela Siefer [01:20:19] Can I add in the affordability aspect too is that with most mobile plans, there's a data cap. And so and those of us who can afford to have a mobile plan and a home plan, we do, because we like the reliability of it, we like having a backup because we rely upon it so much. And so as we think about the future of our country, we need to think about the future in terms of everybody having what they need to, to operate. And that data cap issue, unless we think data caps are going away, we've got to keep having both, both options.

Adie Tomer [01:21:10] [Microphone cuts out] Yeah, I'm going to wrap up. Cred to Blair Levin who's the real ubiquitous broadband person, one of the godparents here. And yeah, look, these are complementary goods. You know, any economists will tell you. So it's it's, it's a little bit of both. And the only word I'll add here is reliability is going to be really, really important. You know, it's one thing when, you know, someone gets frustrated when Internet goes down for 30 minutes, an hour, people actually lose their minds. And frankly, there's some health concerns when electricity goes down for 30 minutes, an hour or 2 hours, when suddenly becomes essential, that's what it starts to look like. Right. So reliability can be really, really important here.

And where there's advantages that basically having redundancies of actually some complimentary goods, we don't get that on electricity the same way. So, you know, it's kind of nice that we have both techs. Look, you know, for everyone online, especially who stuck with us, thank you. Thank you. Happy holidays to you and for everyone who's in the room, thanks for braving the elements and spending time with us. One last time, just please thank me, join me in thanking the panel for being here. Okay.