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## NWX-DOC-NTIA-OTIA (US)

Moderator: Katherine Bates February 19, 2020 2:00 PM eastern

Katherine Bates: So I'm going to start, since everybody can hear us, and we've had a few bumps along the way. But I wanted to welcome everybody to the BroadbandUSA webinar. I'm Katherine Bates with the NTIA's BroadbandUSA. Today's webinar focuses on the role of states in expanding broadband access.

> This session will provide an overview of how states across the country are increasing resources devoted to broadband deployment, supporting digital inclusion initiatives and focusing their attention towards broadband policy coordination across different state agencies.

> Our presenters today are, and if you would say here so I know that you're here. Kathryn de Wit, Manager of the Broadband Research Initiative at the Pew Charitable Trusts.

Kathryn de Wit: I'm here.

Katherine Bates: Thank you. Deana Perry, the Executive Director of the Georgia Rural Broadband Program.

Deana Perry: I'm here.

Katherine Bates: And Crystal Ivey, the Broadband Director at the Tennessee Department of Economic and Community Development.

Crystal Ivey: Here.

Katherine Bates: Okay, everybody's here. Technology is a wonderful thing when it works. Before we begin, I'd like to review the logistics for today's webinar. First, we'll open up the webinar for questions after the completion of the presentations. As you hear from each presenter, please use the question box on the right-hand side of the screen to submit your questions or comments, so type them in.

Second, the presentation along with a transcript and audio recording of today's session, will be available on the BroadbandUSA website within seven days of today under the Events/Past Events tab. And finally, please visit our BroadbandUSA website for information about our technical assistance program and other useful tools that can assist you with planning, funding and implementing your broadband project.

Next slide, yeah thank you. Before we begin with our speakers, I'd like to talk a little bit more because I like to talk. As a manager of State and Local Partnerships for BroadbandUSA, I'm fortunate to work with the Broadband Leaders Network, affectionately known as the SBLN. NTIA coordinates the SBLN, a community of practitioners who work on state broadband initiatives. Participants share best practices and discuss emerging telecommunication policy issues. There are current 51 states and territories in the SBLN.

We have experienced tremendous growth and interest in broadband at the

state level in the past three years. In 2016 for example, there were just 15 states who had a state-level, broadband point person. And as I mentioned, 51 states and territories, so we include some territories in there, are participating.

The SBLN consists of broadband directors, managers and staff from all over the state. Governor's office, Economic Development, Commerce Department, CIO's office, university extension, lots of different places. Next slide.

What we do at NTIA is we compile all the information on the state broadband programs, and so I want to encourage you if you have any questions about specific state programs to go to the BroadbandUSA website and you'll see, for example, Pennsylvania has the state broadband contact who coordinates it, what programs they have, what funding may have because more and more states have federal, I'm sorry more and more states have state funding available for broadband and then most states now have a state broadband plan that you can look at online.

So this is a wealth of information, it can help you navigate around and I encourage everybody to use it. So now I will turn this over to Kathryn de Wit with the Pew Charitable Trusts. Kathryn manages Pew's Broadband Research Initiative, which examines efforts to connect millions of Americans to high speed reliable Internet.

In addition to assessing how states are approaching this challenge, de Wit's work often includes addressing research gaps and bringing together stakeholders for data-driven discussions about how to close the connectivity gap.

Before joining Pew, de Wit was an associate at Booz Allen Hamilton, where she focused on telecommunications issues. Before her work at Booz Allen Hamilton, she was a senior fellow at the Heinz Endowment. De Wit holds a bachelor's degree in communications and sociology from Penn State University, and a master's in public administration from the University of Pittsburgh. Kathryn, I'm going to hand it over to you.

Kathryn de Wit: Thank you, and thank you so much to NTIA and BroadbandUSA for hosting this discussion today. Of course, we're very excited to talk about these broadband efforts. So, Chris, if you could flip to the next slide, start with Scope of Research, that would be great. For those of you who don't know me, as Katherine mentioned, I lead the Broadband Research Initiative at the Pew Charitable Trusts.

The bulk of my team's work over the last two years has been examining how states are addressing gaps in broadband deployment. A lot of the conversation when it comes to looking at broadband and gaps in access is focused at federal and local responses.

What we found over the last few years is that states are actually doing quite a bit, and we will be publishing a report on those findings at the end of the month. But I'm here to share some of those findings with you today.

So about 18 months ago, my team started on a 50-state policy and program analysis of how states were enacting - obviously policy, sorry, it's been a long day already. But how states were enacting policy to address gaps in broadband access.

We published that in our State Broadband Policy Explorer, which you can find on our website. That's at Pewtrusts.org. So if you have any interest in how the state of Maryland defines the speed of broadband or any funding or financing mechanisms that the state of Kansas has in place, you can go there and find that answer.

But we use that 50-state analysis in order to identify what, again, how states were enacting programs to address the gap. What we did was ultimately identify nine states to do in-depth case study research. And those nine states are highlighted on the map. And my team spent about three months out in the field, interviewing key stakeholders. So that includes state leaders, researchers, providers and other community leaders, be it business owners or the person who's the local broadband champion in the community.

They also attended meetings and events such as the Minnesota Rural Broadband Coalition Day on the Hill, and the West Virginia Broadband Enhancement Council meetings, which provided them an opportunity to observe program activities and have additional informal conversations with stakeholders. Next slide, please.

So from that research, we identify what we're calling five promising practices. And these are activities that were identified by states as being effective to making meaningful progress in closing the digital divide.

Those five practices are engaging stakeholders, establishing a policy framework, supporting planning and capacity building, providing funding for deployment and operational support, and evaluating program impact and using those evaluations to inform next steps.

Next slide please. So the first practice, stakeholder outreach and engagement. Simply put, stakeholder engagement informs all other practices. It is - those relationships really, and the information you gain from those relationships and the processes associated with stakeholder engagement are really the bread and butter of all of your efforts moving forward. And we're seeing that stakeholder outreach and engagement occurring at two levels.

So the first is at the state level. And the second is at the local level. When we're talking about state level stakeholder engagement, we're talking about that inter-agency collaboration. So how our state governments breaking down silos and facilitating coordination between all the different entities that either currently touch broadband or where broadband may be important to their overall efforts.

For example, North Carolina has a forum for their inter-agency collaboration, which assesses progress on the state's broadband plan, which we'll talk about in a few minutes. It prioritizes state efforts for broadband and coordinates responses to federal funding opportunities.

The second type of engagement is local stakeholder engagement. And really what that is, is bringing folks together who are impacted by access to broadband. So those are local citizens. They're government leaders, they're business owners. folks who work in hospitals, education entities. They all come together to talk about what the broadband challenges are in their communities and then share recommendations for state leaders to act against. One of those examples is Virginia's Commonwealth Connect Coalition, which is led by the state's Chief Broadband Advisor. Next slide, please.

The second practice is establishing a policy framework. I can't say this enough, but state policy matters, and it matters because it lays out a path for people within the state to respond to. States use policy to define directions and priorities. They use it to address barriers to broadband deployment, such as clarifying who can or cannot provide broadband. And then they connect broadband to other priorities such as economic development. And for example, Minnesota has a - Minnesota established a goal for borderto-border broadband access. After they established that goal, they then established the Office of Broadband Development and then a fund in order to support efforts that are managed by that office. Both the office and the fund were established to help the state move towards achieving the goal that they outlined first in policy. Next slide, please.

Supporting planning and capacity building is the third practice. And, again we're seeing that really at the state and local levels. So at the state level, we're seeing more states adopt statewide plans. These statewide plans both assess what the challenges are to increasing - to broadband deployment and then lay out the responses for how they want to close that gap.

If you look at a state like North Carolina, they're Connecting North Carolina plan was adopted in 2016, and was the result of more than 3,500 interviews across the state of local government leaders and other stakeholders.

And the plan identified recommendations for how the state can encourage both broadband deployment and adoption and also leverage broadband and other policy areas. One of those areas for North Carolina is the homework gap. So closing the gap between students who have access to broadband at home and those who don't.

Local and regional planning was an interesting area that we identified through the research. And essentially what that is, is building the expertise with your local leaders in order to assess the challenges that they face and identify paths to solving those challenges.

So for example, Colorado Department of Local Affairs supports regional

broadband planning efforts. DOLA, the Department of Local Affairs, also funds middle-mile infrastructure projects. Those middle-mile infrastructure projects have to be consistent with the regional plans that DOLA also supports.

So what we're seeing is states supplementing their own expertise and capacity, or their own capacity, excuse me, at the state level by helping communities and regional leaders build these broadband plans themselves. Next slide please.

Providing funding for broadband deployment and operational support is our fourth practice. And really what that is, is this is providing money for state-led efforts. It's putting money behind the policy and planning that we just discussed above.

Specifically, state grant programs are funding last-mile deployment. But they're also funding middle-mile deployment and digital inclusion programs. Those grant programs are funded by appropriations from the General Fund or a repurpose Universal Service support.

Two noteworthy things about statewide grant programs. The first is that grant recipients are reimbursed for their costs rather than being provided the money upfront. And the second thing is that there must be some indication and proof of how communities or providers are engaged in that grant application and planning process.

So for example, if a provider receives - will be the one receiving the grant, they have to indicate how the community that they will serve was engaged in both scoping and identifying the solution to the problem. And vice versa, if the community will be the ultimate recipient. Next slide please. The final practice is evaluating program impact and using that evaluation to identify next steps. It's pretty straightforward. It's about measuring and assessing the progress that programs have made and then using that to help them get closer to their goals. California is one state that does that.

And they measure both the level of broadband adoption, the previous - the number of previously unserved households that now have subscribed to broadband, and additional metrics in order to assess the progress towards their ultimate goal of having 98% access to broadband in each one of their roughly - each one of their regions across the state. Next slide please.

So bringing it all together, there are a couple of things that I want to flag before we move into some other findings. The first is that these practices are not necessarily sequential, so you don't need to start with stakeholder outreach and engagement before moving into establishing a policy framework. They do however build on and complement one another. So when I started the presentation, I talked about the importance of stakeholder outreach and engagement. All of these pieces do connect to one another and they each - each practice complements the other.

That said, not all, not all states have all of these practices in place and are making meaningful progress by using several of the practices rather than all five. Next slide please.

Before we wrap, I just want to cover two more things. So the first are some things that we're calling the near universal truths of broadband programs. And these were true. I just mentioned that not all states have every - each promising practice. but every state that we interviewed did have these three universal truths. So, the first, each state talks about the importance of executive and legislative leadership, having champions either in the governor's office or within your state capital in order to carve a path and enact the policy and legislation that you need in order to achieve these goals.

The second is the importance of the people who are administering these state broadband programs. It's important that they're visible. It's important that there is a person who is responsible for administering that program, whether it's showing up at community meetings or, you know, being available to answer questions related to grant applications.

The third piece is the role that state broadband directors and program leaders play as trusted partners and resources. They're viewed by all stakeholders as being neutral advocates. So they are neutral advocates for the statewide broadband program, not necessarily for specific entities. So what this means is that because communities don't see them as an advocate for providers and providers don't see them as an advocate for communities, these state broadband leaders can act as facilitators and coordinators to help build the relationships that are really essential to the success of these programs. Next slide please.

And then the last thing that we'll flag for you are the common characteristics of state broadband efforts. The first is that this is a multifaceted challenge with no one solution. No one policy or program is going to solve this. It will take a combination of efforts and of those practices that I outlined earlier in order to make meaningful progress in closing the digital divide.

The second is that it takes time and resources. These are infrastructure projects. They take a long time, and they do take resources both in terms of

funding and people in order to get that done.

The final piece is about respecting the process. Everybody who works on this issue has the same goal. It's increasing access to broadband. But what we found through the course of our research is the actual process of getting to that goal is incredibly valuable. And so, just respect the process.

So I'll wrap by saying, the next slide please. That I think what was most noteworthy about the research is that the conversation is not just why does broadband matter anymore. It's this is how broadband fits into our community plans and this is how we get it done. So thankfully, you have some wonderful representations on this call today of the states who are getting it done. But I'm happy to take any questions you have about the research when we wrap. Thank you.

Katherine Bates: Thank you, Kathryn. I want to reiterate the importance of the work that the Pew Charitable Trusts is doing on state broadband. As I mentioned before, the growth has been explosive over the last three years, and I think your work is really helping states look at it holistically and come up with some ideas that work for their area. So thank you.

> Our next speaker is Deana Perry. Deana Perry is the Executive Director of the new Rural Broadband Program, and I can't say the word rural, but Rural Broadband Program, which resides at Georgia's Department of Community Affairs.

The program was created by the Georgia legislature and signed into law by the Governor in the spring of 2018. The mission of the program is to provide planning, deployment, and incentives for broadband services and other emerging communication technologies throughout the state. Deana came to DCA from the Northwest Georgia Regional Commission, where she spent more than three years working with communities to develop broadband strategies. She worked with County Commissioners in a 15-county region, which is a lot of work, to create a rural broadband advisory committee. Please welcome Deana.

Deana Perry: Thank you Katherine and BroadbandUSA for the opportunity to participate in today's webinar. As Katherine mentioned, as both Katherines mentioned in fact, the strength in our program and in most programs is within the legislation. Next slide please.

> In 2018, the state of Georgia enacted a comprehensive legislation creating Georgia Broadband Deployment initiative. Senate Bill 402 fits the basic framework for our initiative. As you can see, we have had a long history and we certainly had champions in both our House and our Senate in moving this effort forward. In 2016, the joint High-Speed House Broadband Communications Access for all Georgians study committee was created. This was led by the Senate.

The Senate had held public hearings throughout the year in different parts of Georgia to understand and to explore broadband names. In 2017 the Household Development Council was created. The recommendations that came from this committee also included prioritizing broadband services in these unserved, rural areas. This committee, again, went throughout the state holding public hearings and hearing what rural areas within the state had to say and one of the priorities was infrastructure around broadband services.

So just this past year, in 2019, legislation was passed to provide the electric co-ops with broadband services. And then even as recent as 2019, our

governor, who took office in 2019, included broadband services as fundamental component of his plan to strengthen rural Georgia. Next slide please.

So the framework that was set forth in Senate Bill 402, which included 13 projects that was identified in this legislation. I have mentioned a few of these projects here. One of the projects was management and governance, a broadband plan, developing a broadband grant program, developing statewide mapping, creating community readiness programs that would include a broadband-ready community designation, a broadband-ready site designation, doing a state assets analysis, and then in addition to that, it did provide for definitions for broadband services in broadband-eligible areas in addition to some other - defining some other terms.

Next slide please. So if the legislation was one of our strengths, I would say the second strength is the structure. The governance structure of the GBVI includes oversight of the Department of Community Affairs and Georgia Technology Authority. It is designed to engage stakeholders and leverage their expertise while balancing a variety of interests. This offers the stakeholders a voice in methods, processes and regulations that are intended to improve broadband services in rural Georgia.

Other agencies included are the State Properties Commission, Georgia Department of Economic Development, Georgia Department of Transportation and the University of Georgia. So we also have an advisory committee. They too bring a lot of strengths to our program.

The advisory committee includes AT&T, ACCG, which is an association of counties, county governments. Georgia Cable Association, which is a membership of our cable associate, cable companies throughout Georgia, the

Georgia Municipal Association, which is a membership of city government, Comcast, GEDA, which is the Economic Development Authorities, Georgia Telecom Association, which represents the independent telcos, Georgia EMC representing all the various EMCs throughout the state, and then Windstream.

So that represents both the private sector and then also represents private providers and also represents local governments. So this is a team where we collaborate and we coordinate. They have been instrumental in providing feedback and input throughout our processes as we have developed and implemented the 13 projects that were supporting legislation. Next slide please.

So one of our larger projects that was set in legislation was our statewide mapping effort. So this lies within the definition of what the State has defined as an unserved area. So the State defines an unserved area as a census block, which 20% or more of the locations that do not have access to a minimum of 25/3 service is unserved. So that differs greatly by the FCC methodology, which is one location per census block means it's served. If one location is served, they're all served.

So we had to take a look at it and use a location level methodology. So in doing so, we had to take a look at statewide and gather information on the locations throughout the state. Initially, in order to test our theories and test what we were doing, we created a mapping pilot of three counties. Next slide please.

The objective of the pilot was to test the methodology of precisely mapping every home and business where broadband services were not available. Location level approach would require the development of a master address file and the collection of third locations from providers. So our initial approach in developing the master address file was to collect the data from our local governments and then to provide that data back to service providers to verify that they could serve those locations with 10 business days.

As you can see from the slide, there was a vast difference between Georgia's map and FCC. Again, the methodology differences between FCC and Georgia drives that difference. Our map shows that the FCC maps is understated. So as I said, the pilot results demonstrated the number of homes and businesses are vastly understated by the FCC maps. The results also confirmed that not only did the map approach concept work, but could be implemented statewide.

However, we did conclude that we would change the way in which we acquired the data to expedite the process, to make legislative deadlines. So rather than collecting and developing the master address file in house, we went to a commercial purchase approach and then we also changed the approach in which we collected the information from the providers rather than them providing us their serve locations. We had them verify through the master address file what addresses they could serve, and they provided that back to us.

Next slide please. So this is an illustration of the detail and the precision and how - and the data that we're collecting, beyond just looking at a census block and knowing that that census block is unserved based on a 20% or greater. This also demonstrates the level of detail, in which we are identifying each location within a census block, and understanding whether that particular location actually has service or has access to a 25/3 service.

That information - so what we'll publish will be at the census block level. This

information at the detailed level would be for internal uses, and it would be for advising and providing technical support to local governments or to those looking to, build out in areas of unserved locations.

Next slide please. So the strategy for the program is to enable and incent provider investment by driving public/private partnerships. So what we did is develop - we are in the process of developing three tools that will support that strategy. What we want to do is be able to offer technical assistance to our local government.

So in the state of Georgia, our Constitution will not allow us to grant directly to service providers. We have eligible applicants or local governments and development authorities. So we have developed tools that would assist them in identifying where the unserved locations are, understanding the investment requirements and identifying who the partners might be, whether it be a community looking to partner, whether it's a provider who has identified an area and wanting to partner up with the community.

We also have found that these tools will also be important investment decision-making tools, whether or not it's state funding or whatever the funding source may be. We have found that some local governments have are using (unintelligible), are using - perhaps looking into using local bonds, and other funding sources. So how can we assist and direct. We've also found that with the information that we have derived from our mapping, that just having this information alone can incent private investment.

We are also providing assistance and tapping into and unlocking federal dollars as well. So these two have been - have become the pillar of our program to support our strategy. And we are using these to direct and target investment. The cost model was developed through a vendor that we engaged. It is a statewide cost model, cost analysis where we have a cost average per location per census block for the state. So we can take the information we collect in the mapping effort, understanding where those locations are, understanding the cost of the investment and then also understanding where the providers are and who can access and utilize these tools.

So overall, this is - this is where we are. As Katherine mentioned, our legislation was implemented in 2018. The broadband office was created and is housed in the Department of Community Affairs, but we partner with GTA to implement the overall project with our team and our other partners. And I will be happy to entertain questions at the end of the presentations.

Katherine Bates: Thank you, Deana. The work that Georgia has accomplished in such a short amount of time is really impressive. Just coordinating both the project team and the advisory committee with all the different viewpoints and making the progress that you have is pretty amazing. So you should pat yourself on the back today.

Deana Perry: Thank you, Katherine.

Katherine Bates: So, our final speaker is Crystal Ivey. Crystal serves as a Broadband Director for the Tennessee Department of Economic and Community Development. She is responsible for managing the Broadband Accessibility Grant Program totaling \$45 million in grant funds available and designed to help providers offset the cost of expanding broadband and increasing adoption in unserved communities in Tennessee.

Crystal has her Bachelors of Science in business administration - in public

administration and economics from the University of Tennessee, Knoxville, my alma mater, and is pursuing her MBA from Tennessee Tech university. Please welcome Crystal.

Crystal Ivey: Hi everyone. Thanks to Katherine and NTIA and BroadbandUSA for the opportunity to talk to you guys today, and thanks to Kathryn and her team at the Pew Charitable Trusts for their work that they're doing around broadband and state efforts as well. In Tennessee, we have a lot of similarities with our program - in Georgia's program. So you're going to hear some things that were similar to what Deana mentioned.

> Really, our efforts were accelerated in 2017 with the passage of the Tennessee Broadband Accessibility Act. It included a lot of different components, really trying to get at addressing the broadband gaps in Tennessee. But the three main areas were investment, deregulation and education. For investment, it did create or authorize a state grant fund or grant program that is awarded to directly to broadband providers. That's something that was a little bit different than Georgia's program.

The deregulation component permitted electric cooperative, electric membership cooperatives or EMCs to provide retail broadband to their electric members. Prior to the legislation, they were not permitted to do that. And the last component was an education or digital literacy, digital inclusion component. It was important that this was included to really address the financial impact that - not just the infrastructure being in place has on the community, but that the community is using the infrastructure and maximizing its full benefit. And next slide please.

So for the Broadband Accessibility Grant Program, again the applicants are the broadband providers themselves. So the applicant has to be legally authorized in the state of Tennessee to provide retail broadband. But other than that, we are provider-type neutral, so they can be a for-profit or a nonprofit or municipal provider.

As long as they're legally authorized to provide broadband, they can apply. The proposed service areas for our grant are areas that lack a fixed terrestrial 25/3 connection. By fixed terrestrial, we just mean that we do not consider mobile or satellite coverage in determining eligible areas.

In Tennessee we do not do our own statewide mapping. We first start out with the FCC Form 477 data. But we know that there are some limitations to that data. So we have a very significant process to challenge the FCC's data in the grant applications, which I'm going to talk about here in a second.

And then the technology for the program is neutral as well in terms of - as long as it's providing the minimum 25/3 speed, we will accept an application for any type of technology. However, we do score pretty heavily on speed and scalability of that technology to ensure that these are solutions. These are long term solutions for our communities. Next slide please.

So I wanted to show a map of Tennessee just to kind of give you an idea of what we've been able to do in the first couple of years. The legislation originally called for three years of funding at \$10 million a year. We had a lot of demand for that funding. And so the legislature increased it to \$15 million in round two. So we've been able to award about \$25 million so far in the first two years and serve approximately 1300 contracted passing, which is - those are just homes and businesses that have been passed with the infrastructure.

So I think one thing I wanted to recommend on this call is that for our grant program, it's been really good that we've had an online dashboard, an online visual for legislators, community members and other stakeholders to be able to regularly check in on how the grants are going, what progress is being made and which grants we've awarded. Next slide please.

So I wanted to also provide a few pictures. Kathryn mentioned some accountability measures that the states are including in their grant program, including that they're reimbursable grants. Our grants are reimbursable in Tennessee as well, so the providers have to spend some money up front and then they request reimbursement from us and we reimburse those at the match rate for the grants, which is 50% in Tennessee. But an additional accountability measure that we've implemented is we actually monitor the projects in person.

I physically go out with the broadband providers. We drive around, we see the dirt moving, we see fiber or infrastructure being hung on the pole and we make sure that things are going smoothly. It's just good for us to lay eyes on the project, to help answer any questions that the grantee has.

Of course, we have many regular checkpoints along the way and we require a quarterly report from them and some other information, but at one time over the two-year grant period, we physically go out to the grant area.

And as Kathryn mentioned, these are construction projects. They take a lot of time and so it's also good to have some of these pictures to show our legislators and other funders that are asking how the projects are going along. It's good to show them these pictures as well. Next slide please.

So we're currently in our third round of funding. We have \$20 million available. Again, the legislature appropriated more money than we were expecting because we had such demand for the funding in round three for the \$20 million, we had \$62 million in grant requests.

So this grant is highly - the communities and the providers both are highly interested in this funding. The evaluation criteria, we post all of the information to our website so that providers know exactly what they're going to be scored on.

We thought it was really important to be transparent in that. Of course, we score on eligibility and whether or not the area is lacking a fixed terrestrial 25/3 connection. The process for that is pretty detailed. We allow providers to challenge the FCC data by providing supplemental evidence within their applications. Whether that be surveys or infrastructure maps or website address lookups. Basically, something that is trying to demonstrate that despite what the FCC data is reflecting, that area is not actually served.

We also look at the sustainability and implementation readiness of the applicant. We ask for a detailed budget, proof of financing, business model and other information to ensure that we're awarding these grants to applicants that can maintain the project itself, but that can also sustain the network for many years.

As I mentioned earlier, we score on speed and scalability, but we also score on affordability, and affordability is an issue that's very important to the adoption and usage piece.

So we ask providers what they'll be charging in the grant area and then as Kathryn mentioned earlier, we also score on community's support and economic impact. It's important for us that the providers have worked with the communities on designing the project and helping find the best solution that fits that community. For the scoring, we have many members that in our Department of Economic and Community Development that score the grant applications. We like to have their perspective on the grants and then we also have an external broadband consultant that we use for any technical questions that we may have on the application. Next slide please.

I mentioned electric cooperatives. They were permitted to provide retail broadband to their electric members within our legislation in 2017, and they're a really important part of the solution in Tennessee. I know some States do not have electric membership cooperatives.

In Tennessee there are 23 and they cover about 70% of the state. Thirteen of those have publicly announced that they will be providing broadband to their members and they're often in our most rural areas. So they are often in areas where there are no other providers existing in that area.

So they are an important part of the solution and they're active participants in our grant program. Seven of the 22 grants that we've awarded in the first two years have gone to electric cooperatives. Next slide please.

The third component of the legislation, the digital literacy component, again it's important that our communities are using this infrastructure and maximizing it, so that they can feel the full economic benefit of broadband being available to them. So, we also have a grant program partnership with the state library and archives where we award small grants to local libraries across the state for digital literacy instruction, for some equipment, hot spots as well.

Those are very popular. The libraries lend those out to customers to use at their home. And we awarded several of these grants across the state. It's really an important partnership with our state library and archives and I'm happy to provide more information on that as well. Next slide please.

The last thing I wanted to mention, the legislation of the Broadband Ready Communities Program. Deana mentioned that Georgia has something similar, and this is something that is another way for our communities to get involved. If they pass an ordinance or a resolution or whatever their process is locally to support broadband deployment in their community, they're required to - the legislation itself lays out exactly what has to be in the ordinance, but basically it's trying to remove local administrative barriers to deployment.

Things like naming a single point of contact with the County for all broadband-related questions. Not charging unreasonable permitting fees, responding to permitting fee, or permitting requests within a certain timeframe. I think it's 30 days.

Again, basically trying to remove any barriers on the local level to broadband deployment within a community. If a community in Tennessee passes this ordinance and it meets our criteria, we will designate them as a broadbandready community. It's also a way for communities to signal to broadband providers. that they are ready and willing to help however they can to bring broadband to their community. Next slide please.

So I think that's the end. I went kind of quickly, but I'm happy to answer any questions about Tennessee's program.

Katherine Bates: I was on mute. Sorry about that. Thank you, Crystal. Tennessee has really been leading the way on state broadband programs. In the last three years, I've seen the growth, in Tennessee in particular, and the number of applications.So we've gotten a few questions. So I did want to ask one and it can go to both

Deana and Crystal. And then Kathryn, if you want to chime in too, because you know everything about everybody in this all over the country.

You said that Tennessee got \$20 million or \$10 million, \$20 million, how is that allocated and is it just the General Revenue Funds or is there a different funding source? And Deana then if you can answer how Georgia is funding or plans to fund their grant program.

- Crystal Ivey: So Tennessee's grant is out of the General Fund and it's also non-recurring. So we have to go to the legislature every year and request additional funding. So, like right now our legislature is in session, and we are working on another round or another year of grant requests from the legislature. So it is out of the General Fund. And so we're competing with all of the other things that come out of the General Fund.
- Deana Perry: And this is Deana. So, currently our grant program is not funded. We are in a legislative session, so yet to be determined. But initially, what has been funded is the development of the program, and our mapping effort.
- Katherine Bates: Okay. And Kathryn, do you have an can you chime in on how you see it across the country? How people fund their grant program?
- Kathryn de Wit: Yeah, it's primarily through the appropriations from the General Fund, as
  Crystal outlined. We are seeing more states repurposing their Universal
  Service Funds that are traditionally used for telephone. So high cost
  deployment. And yeah, that's really it.

Though I will say, when you're talking specifically about deployment and infrastructure funds, we are seeing more states look towards alternative sources of funding and pulling in other federal revenue streams in particular to support capacity planning, and capacity building and planning efforts in particular.

Katherine Bates: Thanks a lot. And then I have - there's a question about everybody's favorite subject, data and mapping. And Deana, I'm going to ask you, can you talk about how - just talk generally about how the process is and who is in - who are you coordinating with to create those two maps? Because it was a pretty stark difference between the FCC data and the Georgia data. So can you go in a little more detail?

Deana Perry: Right. And as I mentioned, you know, it has a lot to do with the methodology and the data, the time in which the data was collected, but most importantly the methodology since we are at location level.

> So as I mentioned, the legislation stated and directed the DCA and the Georgia Technology Authority to work together. So we initially in 2018 designated Georgia Technology Authority the mapping project. And they have contracted with the University of Georgia for them to complete and - complete our mapping statewide.

So in 2019 budget, they did appropriate from general funds money and funding to support the mapping efforts. So \$10 million was appropriated for that project. And that's primarily working with University of Georgia.

The University of Georgia has a long history in their GIS tools and supporting the state with other mapping efforts. But they have also worked with Georgia Technology Authority in the past. Georgia Technology Authority also worked with NTIA and the state broadband initiative back in - is it 2013 Katherine? Was it 2013? Katherine Bates: Yes. I think 2014 is when it ended, I believe.

- Deana Perry: Okay.
- Katherine Bates: So Crystal, do you want to address your data and mapping, not issues but collection efforts in Tennessee? And maybe talk a little bit about your challenge process?
- Crystal Ivey: Absolutely. So in Tennessee, we like I mentioned, we do not do our own statewide mapping. So for our grant program, our starting point is the FCC Form 477 data. As many people are familiar, there are some limitations with just the way that that data is collected.

So we allow providers to essentially challenge the data in their application. They can submit supplemental evidence within their application to challenge an area. So essentially a provider can apply for any area in the state of Tennessee that they want to apply for as long as they can essentially prove with their evidence that that area lacks a 25/3 connection.

After we look at the applications, we have something called a public comment period where we post basic information about the applications on our website, which includes a basic PDF map of the grant area. And we allow other providers to comment on those applications to share anything with us that may not be apparent in the data. If they are under construction in an area, if they built out an area since the data was collected, any kind of information that would help us in making a decision.

So that's kind of step two is that public comment period and providers really like that part of the process. They like the opportunity to see which grants are being applied for and to let us know anything that's important about those areas. And then lastly, we work with a broadband consultant. I think I mentioned them earlier on the scoring.

We worked with a consultant who at the end of the day, if after we've done the application and the public comment period, we're still not 100% sure whether an area is served or not, and it has scored well enough to be considered in the running for funding, we will send a broadband consultant out into the grant area to do a drive tour of the area, to interview the incumbent that is reporting in the area, to talk to the applicant, to run some speed tests, to visit various community anchor institutions in the area and really try to make a determination as to whether or not service is available and that the area should be eligible.

So it's important to us that we're not overbuilding. We have limited funds and so we want to use these funds for areas that don't have broadband, but we also don't want to unfairly eliminate areas from contention just because they happen to be displayed incorrectly on the FCC data. So we've incorporated this process as a way to make sure we're getting to the right areas.

Katherine Bates: Okay. Thank you. I also want to point out that Tennessee is a partner in the National Broadband Availability Mapping Program that NTIA is currently undertaking. Any information on that program can be found on the BroadbandUSA website under resources. And we call it NBAM, so, because we like acronyms. But if you have any questions about that, you can - particular data and mapping questions, you can click on the email there and get those answered.

Kathryn de Wit, I want to ask you a question that's kind of a morphing of a couple of questions we have in here is, for communities who are looking to increase broadband access either through digital inclusion or efforts or

through infrastructure builds, how do they best work with the states and what would you advise from your research as kind of a best practice for how communities can work with their states?

- Kathryn de Wit: That's a great question, and I think the first step is figuring out whether or not your state has a statewide program. And you can go to our website, Pewtrusts.org, to look at how states support broadband. There's a whole list of statewide programs there. What I would however encourage you to do is actually reach out to our friends at BroadbandUSA, the kindly people who hosted this webinar. And not only will they have additional information on statewide programs, but they may have some insight as to who the appropriate person in the state would be to speak with.
- Katherine Bates: Okay. Thank you. And yes, please reach out if you have any questions, and as you're starting your research you can actually email me directly at kbates@ntia.gov with any questions about state level things. We have a lot of questions that we haven't gotten to.

But I do want, I will go through them and I will try to get back in touch with you on these today, but since we started a little late because of some technological difficulties, I wanted to get a few questions in and then, close up the webinar with a reminder that we do these monthly, and please join us on March 18 for our next webinar titled the American Broadband Initiative - 1 Year Update.

So it was a year this month that the American Broadband Initiative, which is an effort by the federal government to increase broadband access, was published. And so we're going to give a one-year update on that.

And thank you again for our speakers today and all the attendees for joining.

As a reminder the presentations transcript and audio recording will be available on the BroadbandUSA website within seven days. And finally, BroadbandUSA is also available for technical assistance to help expand broadband connectivity and promote digital inclusion and broadband adoption.

For more information, you can email us at BroadbandUSA@ntia.gov or visit our website or email me. We have toolkits and publications on there as you get started and we're there for you. So thank you all again and have a wonderful afternoon.

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