Coordinator: Welcome and thank you for standing by. Today's call is being recorded. If you have any objections, you may disconnect at this time. All participants are in a listen only mode for the duration of today's call. Please press zero should you need assistance during your call. You may begin at any time. Thank you.

Laura Spining: Thank you, Pippa, and good afternoon. Welcome to Broadband USA monthly webinar series. For today, our March webinar is going to be about federal funding and I have two of my esteemed colleagues that will you through that material. Don Williams, who has extensive experience working with cities, and counties, and states through the years in developing their plans, assessing their rights of way agreements and any franchise agreements, and Sandeep Taxali who has deep history working with the telecom industry both as a consultant and at a number of companies as well.

So they're going to walk you through some of the federal funding opportunities available on broadband deployment and digital inclusion programs. I think the operator explained that the phone is in listen only mode. If you have questions then you should submit those in the question section of the webinar and we will address those questions at the end of the session.
today. And it looks like we've got about 127 people on the bridge so I think we're going to go ahead and get started. Don, can you kick us off? Actually, first, I was going to give you a little bit of information about NTIA. I do see a number of familiar names on the screen who are logging in, as well as some names that I don't recognize. So hopefully, we've got some folks that are very familiar with NTIA and maybe some new folks as well.

But NTIA is the executive agency that advises the President on telecom and IT policy issues. A number of the issues that have been debated in recent years include cyber security as well as privacy and looking at how those are impacting U.S. citizens as well as our economy. But today, we're going to focus on the work within our agency that is our Broadband USA program and is here to support communities in their work to expand broadband and to be sure that all of your citizens have the opportunities that come with having access to broadband.

So Don, you want to kick us off?

Don Williams: Sure. Thanks, Laura. Appreciate that. So at Broadband USA we really are serving as strategic advisors to a number of communities around the country to expand broadband access, as well as digital inclusion programs. Both are fundamentally important to economic development and cities going forward. Broadband USA has defined a technical assistance framework, which Sandeep and I are a part of, and we help with financing, planning, public/private partnerships, and implementation of local broadband programs working with communities around the country.

Next slide. On our Broadband USA technical assistance programs, we do a number of things both with implementation as well as planning. We do a direct assistance to communities and nonprofits, service providers. We also
do group technical assistance with small groups or regional groups, consortiums of cities and counties. We work with them on planning, implementing broadband access and inclusion initiatives. We also put on one-to-one technical assistance with communities around the country that is focusing on their particular needs as an individual community, helping them put together stakeholders as well as planning, as well as implementation and sustainability.

As an organization, Broadband USA also puts on events and workshops and we put out a number of guides and toolkits, including those on public/private partnerships, broadband planning, smart city toolkits, adoption of digital inclusion. And in the next couple of months, we've got a few more coming out, another one on partnerships, one on implementation, and one on sustainability of broadband systems.

Sandeep is going to start us off by talking about the FCC Broadband grant programs. Take it away, Sandeep.

Sandeep Taxali:  Great. So I first want to emphasize that today's presentation involves a high level overview of the federal funding sources. Our Broadband USA team can provide a deeper dive through our technical assistance program. Moreover, the websites of all of these agencies provide detailed funding guidelines and planning resources. Please review those if you decide to apply for such funding. So we're going to start with the federal communications commission, which actually offers a subsidy program, not a grant program. There's a technical difference and I had served at the FCC earlier in my career.

So with the FCC, the FCC provides the vast majority of federal funding for broadband infrastructure. Its funds are subsidies or money that does not have to be repaid so long as all programmatic rules and obligations are met. Its
three main programs for broadband service include the Connect America Fund, the Erate program for schools and libraries, and the Rural Healthcare Program. In addition, it has the Lifeline program, which provides financial assistance to lower income households to obtain voice and broadband services.

All of these programs are administered by the Universal Service Administrative Company, also known as USAC. USAC provides planning resources, reviews the applications, makes funding decisions, disburses the funds, and ensure proper compliance. Their team is tremendously valuable and you should contact them again if you seek FCC subsidy support. So we're going to start with the Connect America Fund. The Connect America Fund is commonly known as the Universal Service High Cost Program and this program provides funding to the actual service providers.

The Connect America Fund was launched in 2012 to advance higher speed broadband and mobile services across unserved communities. Its funding method involves either providing a fixed subsidy for every connected unit based on a forward-looking cost model or the FCC holds auctions to identify the most efficient and effective service providers and their technologies. The FCC has launched Phase 2 in 2014 and that's what we're going to be talking about, sort of Part B or Phase 2. This phase involves an invitation to price capped carriers to build broadband across their unserved areas for a specified forward-looking cost.

That part of the program involved approximately $1.7 billion. The price capped carriers did not accept funds for 20 states or portions of those 20 states, so that brings us to the present. Last month, in February, the FCC launched funding rules for the unserved portion of those states not addressed by the price capped carries and other locations with extremely high
deployment costs. This program allocations approximately $2 million over ten years.

Unserved needs areas lacking 10 megabits per second down and 1 megabits per second up. The FCC will allocate funds via a reverse auction. Bids will be evaluated based on the cost efficiency and then adjusted for performance factors, including speed, user capacity allowance, and latency. The FCC will soon seek comments on these mechanics of the option. After consideration of that record, the FCC will vote on final auction details and set specific deadlines and the timeline for the auction. So stay tuned.

Let's move onto the Mobility Fund. The Mobility Fund represents the wireless component of the Connect America Fund. The Mobility Fund was actually created in 2011 to advance mobile data and voice service across rural and (unintelligible) areas lacking 4G LTE coverage. This fund, part two, will now allocate $4.53 billion over ten years with approximately $340 million reserved for tribal areas. Eligible areas include those census blocks not fully covered by 4G LTE with a minimum download speed of 5 megabits per second. The FCC estimates approximately 575,000 square miles that remain unserved accounting for 3 million people that either lack 4G LTE or require universal service support to support advanced mobile wireless.

This auction will involve a market based, multi round reverse auction. Winners will be chosen based on the lowest subsidy required. Providers must offer mobile data speeds of at least 10 megabits per second down, one megabit per second up with latency less than 100 milliseconds. The order also imposes build-out requirements such that by year six of the program, 85% of the winner's area must be covered by LTE service. The FCC will soon release a list of eligible areas of carriers offering advanced mobile servicing challenge
areas, so the FCC hopes to complete the challenge process by early next year in January and launch the auction soon thereafter.

Quickly moving along, we'll talk about the Erate program. The FCC's Erate program provides subsidies to the nation's schools and libraries for their purchase of internet connectivity. In fact, it's the federal government's largest educational technology program. Erate had been established in 1996, just a few years after the launch of the commercial internet. At that time, only 14% of the nation K through 12 classrooms had internet connectivity. Today, almost all schools and libraries have internet connectivity.

Erate funding is capped at an annual level of $3.9 billion. Beneficiaries receive subsidy rates from between 20% to 90% of their eligible service cost. The subsidy level is determined by the number of school participants in the national school lunch program. Recent reforms now allow schools to construct their own networks. Schools must prove that their self-instruction approach is most cost effective and thus elicit bids for both lit services on a recurring basis as well as a new construction to determine which of the lowest cost of ownership.

Schools may also purchase dark fiber (unintelligible). This is a key point for those of you on the call. If your community is unserved and the schools also lack speeds obviously generally below 100 megabits per second, those schools may be a critical anchor revenue client and can either purchase an IRU or sign a long-term contract, both of which will help your business case. Just something to consider.

Recent reforms also streamline the application process in many ways. For example, schools do not have to go through a competitive bidding process for lower speed service tiers and can also engage in multiyear contracts without
having to go through a competitive procurement every year. Also, these reforms allow a consortia of schools to apply. Applications are due by May 11 of this year to fund services purchased between July 1 and June 30 of the following year.

Moving along to the FCC's Healthcare Connect Fund. The FCC's Healthcare Connect Fund provides support for broadband connectivity to healthcare providers. Annual funding is capped at $400 million. Beneficiaries receive discounts of up to 55% of eligible expenses. These expenses include funding for broadband services, installation charges, and equipment. Network construction and dark fiber IRUs are also an eligible expense, so long as a consortia of healthcare providers are the applicants. These consortia can also include non-rural partners so long as the majority of the members are rural based and applicants must procure their services through a transparent competitive process.

Similar to what I said earlier, funding from the Healthcare Connect Fund can partially fund the construction of a broader community network. For example, if you have a consortia of hospitals and clinics and they need a high speed network, either through a service recurring model or an IRU they may, again, purchase an IRU and seek funding from the FCC for that IRU purchase, which can then be transferred to a community seeking to build a broadband network for the homes and businesses in that area. Again, there's some specific rules on how network costs can be shared and allocated, and Don and I can help you understand those rules better, as well as members at USAC.

Again, the application window for the Healthcare Connect Fund runs through June 30 of this year. Now, let's turn to USDA's funding programs. Don?
Thanks, Sandeep. USDA has two amazingly good grant programs regarding broadband. One of them is a grant program, one of them is a loan program. We'll talk about the grant program first. Both of the programs are run by USDA and the Community Connect program, the grant program is administered by the Rural Utility Service Telecommunications Agency. Community Connect Grant Program provides financing for the deployment of broadband infrastructure in unserved, lower income, and rural areas. Eligible entities are state and local governments, federally recognized tribes, nonprofit organizations, as well as for profit corporations.

One of the keys for the Community Connect grants is the definition of a rural area. So just take a minute and talk a little bit about that. The rural areas for this program is confirmed by the latest Bureau of Census report and it includes areas that are not the following -- a city or town that has a population greater than 20,000 inhabitants; an urbanized area contiguous and adjacent to a city or town that has a population greater than 50,000 inhabitants. And there's a couple ways to go about seeing if your community meets these criteria.

One is to utilize the NTIA, now FCC national broadband map and the other thing is RUS has a listing of communities that are currently served by borrowers and grantees, and you can find that on USDA website. Next slide please. You can also find on the RUS website, providers and local service providers, and all of that information is going to be verified by an RUS regional representative.

For both of these programs, you get to draw your service area, for PFSA, and you can use that by using the RUS mapping tool, which is also online. Community Connect supports capital costs for construction, acquisition, or leasing of facilities, spectrum, land, buildings used to deploy the broadband
service. The broadband service is to include the following -- all residential and business customers located within the proposed funded service area. That's the PFSA. Also includes the cost of providing broadband service free of charge to critical community facilities for two years.

Let's talk a minute about what the critical community facilities are. So these are going to include public schools, fire stations, public libraries, as well as leasing of facilities, spectrum, land, and towers. The other thing it can do is it works for the improvement and construction or acquisition of a community center and provision of community access points. Now, one of the things to be aware of in this program is what is allowed as a cost. Operating expenses are not eligible as a cost with a couple of exceptions. One is the bandwidth expense is to provide free broadband service to the critical community anchor institutions, and the other is no cost for the community center that you're going to give two years of free service to.

Other requirements are less than 10% of the grant or up to $150,000 can be used for improvement, expansion, or acquisition of the community center itself if your community does not have such a community center. Next slide please. So the next one is USDA Farm Bill. This is a widely used grant program that's been working with rural America for a number of decades. It's quite an interesting program and it's important for broadband development in many areas of rural America. The Farm Bill provides funds for construction improvement, acquisition of facilities, and equipment that's required to provide broadband in eligible rural areas.

And once again, we need to focus on this program what's the definition of a rural area that will meet this loan program's criteria. They are as follows. A rural area is at least 15% of the households in the proposed funded service area are unserved. No part of the proposed funded service area has three or
more incumbent service providers, and the third one is no part of the proposed funded service area can overlap with the service area of a current RUS borrower, or the service area of a grantee that were funded by RUS. So we have to go through those particular parts of your program to make sure you're available.

One of the nice things about this program is the pre-application period for both periods of time. RUS staff can look at the draft application and they provide good feedback, and anybody working on this program thinking of putting in for a loan really should take advantage of the RUS staff because they're very helpful. So loan program. So one of the most important points of this, rather than a grant program, is the cost of the money. And the interest rate for this program, you can see that in the Department of Treasury. What you're going to look for at the Department of Treasury Website, Federal Reserve, is you're going to look for obligations of (unintelligible). And at this point, for 20 year, it's about a little under 3% and that's an excellent rate.

As a condition of the financing, you have to have 10% equity contribution to the requested loan amount at the time of the application. And you also have to have that 10% of the requested loan amount at the loan closing. Next slide. Now, we're going to have three other brief discussions, well four now that we've got the Appalachian Regional Commission added in, which is an important program. We're going to talk a little bit about HUDs development block program. Then Sandeep is going to talk about the economic development administration, economic adjusted assistance program, and Sandeep is also going to talk about the important National Science Foundation Program.

I'll start off with HUD. Next. Great, so HUD has these community development block grants, CDBGs, and they can be used to provide funds for
broadband connectivity, as well as a number of other services that are particularly important in disadvantaged communities throughout the country. The primary benefit and objective is to benefit low and moderate income persons in America. And the way this regulation and by statute works is 70% of all the funds have to be expended by each entitlement grantee that's an estate and insular area, such as a tribe, during a period of three years which is going to be established by the grantee. And benefits have to be going overwhelming to low and moderate income residents of that area.

Broadband infrastructure development may be eligible for such a program as a public facility or an improvement, even as a private utility or as a public service and that's going to depend on the nature and design of your particular project when you put in the application. In addition, HUD has also established broadband connectivity standards for housing construction, which is a relatively new and very useful idea. And this includes HUD funded new residential construction, and if you've got some housing that's going to undergo substantial renovation, you can also use that unit based support for providing broadband to those multiple dwelling units that are subject to the HUD programs.

Grants and loans to businesses to create jobs and retention, including businesses that are involved in broadband deployment or other technologies are also eligible for the CDBG block grants. Sandeep?

Sandeep Taxali: Great. Talk about the Economic Development Administration. So EDA is an agency that resides actually within the U.S. Department of Commerce, where NTIA has also resided. EDA recently amended its national strategic priorities to include broadband and that's good news, which means they're trying to focus more on broadband investments. First, EDA's grants are for
government and tribal entities, higher education institutions, and nonprofit. It does not provide to individuals and for profit (unintelligible).

Secondly, the area must be suffering from economic hardship. Two criteria include per capita income that is 80% or less than the national average and secondly, unemployment rates, which over a two year average is 1% greater than the national average.

So if your community reflects one or both of those factors of economic hardship, you may qualify for an EDA planning or infrastructure grant. There are -- EDA generally requires a 50% match. So it has two programs, which investment in broadband, the economic adjustment assistance program, and the public works program. The public works program helps distressed communities revitalize, expand, and upgrade their physical infrastructure. So that program could be actually used for broadband infrastructure.

The economic adjustment assistance program, also known as EAA, provides funding for both planning activities and infrastructure, again, in (unintelligible) experiencing economic hardship. So I'll cover the latter in just a few minutes. Well, let me just first of all quickly highlight some of the EDA projects just to give you some color on what they've done in the last few years around broadband. Again, they don't do too much in broadband but it is an emerging part of their strategic agenda.

In 2015, EDA awarded $1.25 million to an economic development district that represented several counties in Western Colorado. This funding was for a 20 year dark fiber IRU spanning 100 miles. This region faced economic distress due to the decline of the coal mining industry. The IRU would help achieve affordable broadband and attract businesses and entrepreneurs. Before that award, EDA had actually funded a planning setting for the same region and
that's where they (unintelligible) the planning grant, which then showcased the need for broadband, and then they actually funded the infrastructure.

In 2012, EDA made a $2.1 million grant to the City of San Leandro in California to deploy 7.5 miles of conduit, which would help support the development of industrial land. So again, another example of infrastructure funding. A more dated opportunity involves what happened in 2009, which is EDA invested $1.8 million in the (unintelligible) Science and Technology Park in Albuquerque, New Mexico to fund the deployment of fiber. This advanced broadband would help local businesses leverage advances in technology that have been generated by universities and federal laboratories.

I would urge you for both of these programs to contact an EDA field representative in your state if you wish to learn more about their funding programs. Don and I have worked with their field offices, and again, they offer a tremendous team to help you understand the scope of the program and the rules. They will also help you prepare an application because their applications are actually reviewed by a separate independent team. So again, they'll hand hold you through the whole planning process and the application development process. So again, both programs are relevant to broadband planning and infrastructure.

Now, let's move onto the National Science Foundation. So the National Science Foundation last year created a program called the Platforms for Advanced Wireless Research or Power. This program seeks to fund city scale testing platforms to advance research on wireless devices and networks, thereby fostering innovation across the wireless ecosystem and emerging services such as the Internet of Things. Over the next five years, MSS anticipates investing $50 million into this program, combined with a $50 million private sector match of both cash and in kind contributions from 25
companies and industry associations. So this whole program stands to be worth $100 million.

So if you're a city or county administrator and you want to, for example, set up a testing platform for 5G services across emerging spectrum bands, you should consider looking into this program. And again, NTIA closely works with the MSF staff in various endeavors including the recent national broadband research, which I helped co-lead. And so, again, if you have any specific questions about this program, let us know.

An ideal project for NSF would be one where members of the wireless research community, local communities, and industry get together to design, develop, and deploy, and operate a next generation wireless platform. Okay, moving along, we are getting into the Appalachian Regional Commission. Let me just get my notes on that. ARC is a regional economic development agency composed of the governors of the 13 Appalachian states and they have a federal co-chair. It awards broadband grants for various purposes. So past projects have included fiber runs to industrial parks, community Wi-Fi for commercial districts, wireless networks in unserved areas, tele help and business learning networks, and many feasibility studies.

Their grants are available to public sector entities and nonprofit entities within the Appalachian region. Grant applications must be recommended for approval by a state ARC Office. One of the most prominent funding opportunities recently involved combining over $20 million to fund Kentucky Wired, which is Kentucky's new state wide fiber middle mile network that touches every county of Kentucky. I believe that is the single largest broadband investment. (Mark Delalco), another good friend of ours, works at ARC and leads their broadband development program. And again, if you
have any questions about their program and need to get a hold of Mark, feel free to contact him directly or work through Don and myself.

So those are the major programs. Now, we're going to turn the conversation to some of the key success factors as well as some pitfalls that also may limit funding. So we want to basically educate you on basically how to plan for any of these funding programs. As I said earlier, all of these programs have their unique objectives, their unique eligibility criteria, and their unique programmatic and legal obligations.

So hopefully, one or more of these may be worth considering if you require subsidy support or low interest loans. Don and I help manage the single largest federal investment program for Middle Mile at (unintelligible) and so based on that experience, as well as having worked with these federal agencies, we would like to share a number of best practices to pursue and pitfalls to avoid as you plan your funding pursuit.

As far as key success factor is establish your goals and develop a detailed broadband strategy if you don't already have one. This strategy should include the existing service gaps in the community or communities that you're targeting, your proposed technology approach, your targeted communities, the measurable outcomes that you're seeking, your organizational qualifications and that of your partners. Absent this strategy, you're essentially walking in the dark but with a detailed strategy, you'll be able to determine whether your project is eligible for any of these federal programs.

For example, if you're a private entity seeking to deploy fiber to the residential and/or commercial market, you may want to consider partnering with a nonprofit to conduct a planning study to be funded by EDA, again, if that community is experiencing economic distress. You then may want to team up
with a consortia of hospitals in that area that may seek an IRU because that consortia could the anchor client revenue for FCC's funding from the rural healthcare program. So again, develop your strategy and then apply that strategy to the different federal funding programs to determine which one works.

Finally, quantify all key drivers for your business model to determine your funding needs. Develop your analysis around your addressable market, your targeted customer segments, the adoption rates, the revenue per user, the deployment of recurring costs, and all matches sources. This analysis, for example, will help you determine whether you need subsidy or grant support in the case that your financial project yields a negative present value, for example. Or if it doesn't, if it's just a matter of you need some short-term financing or even long-term financing but not necessarily subsidy support, you can maybe do with loans and then you can target your resources to USDA's loan program. Or you could combine both USDA -- some rules around the combination of federal funds, but there may be cases where you can take subsidy support and USDA loan financing.

So with that said, Don will move into some of the challenges that we've seen with entities that are looking for such federal funding.

Don Williams: Thanks, Sandeep. So as Sandeep said, we've looked at a lot of grant applications, some successful and some not. And one of the things for all of these programs, whether it's an FCC program, and EDU program, and RUS program, you have to make certain that you understand what the funding agency is looking for. And it's not like you have to just ignore what your local needs are, but you have to make certain that your local needs are said and put forward in such a manner that it makes it easy for the funding agency to look at it and say yes, this is just the kind of thing we're looking for. And the fact
that you're able to make that and put that into a local framework, because while broadband is global, broadband is eminently local. And everybody would like to see your locality in terms of purpose and scope addressed but it has to be in the sense that the application, making sure that it meets the specifications.

Similarly, it has to be aligned with the program's goals. Sometimes you'll read an application and you go, nice application. Unfortunately, it doesn't seem to be matching the program's goals and interests. So you have to make sure there's an alignment between what it is you're putting forward as a program, making sure that that matches with the program's interest. And again, as Sandeep has indicated, you want to make sure that you have program goals, metrics that that funding agency can look at and say, was this a success or no. And that's important for EDA. It's important for RUS. People in watching funding agencies are increasingly looking for measurable goals and results so that they can say, yes, this program was a success and should encourage more funding.

Those are really the key criteria. There's some other ones, which are pretty important when you're developing a budget. One of those is every program is going to have certain costs that are eligible and certain costs that are ineligible. And when your grant is being reviewed, or your loan is being reviewed, one of the things you want to make sure is that when you're putting together your budget, you paid attention to what costs are going to be allowed and what costs are not going to be allowed. And for the costs that are not going to be allowed, often those are operating costs. So you're going to have to come up with a strategy for working out the operational costs as well as showing your funding agency that your project is sustainable going forward when the funding grants run out.
Next slide please. Again, there's a number of common mistakes people make. We've kind of talked about some of those. One is the budget doesn't match the funding request. Sometimes people will put in a proposal and the proposal has a fairly big network component to it in terms of mileage or complexity, but yet there really doesn't seem to be a budget that supports that. So you want to make sure that your budget numbers on capital costs are matching the actual requirements you're going to have for construction of the network.

Secondly, you want to be sure that the community outcomes as a result of the funding are put forward in a positive, noticeable manner. So I find sometimes when you're writing up these grant proposals, your grant proposal is going to have amazingly wonderful impact on the community, but you want to make sure that while you know it, everybody else has to read about it. So make sure you're very clear going forward in your grant that these are the community outcomes and you have community support for it. And finally, and again having all looked at these grant proposals as they come in over time, you want to make sure your key staff shows leadership. In fact, in some of the grant application evaluations, making sure that your staff has management experience can be up to 10% of the scoring system. And those are important to make certain.

So want to make sure that your proposal has key staff and that they have good management experience either in a project management capacity for infrastructure in general, or more particularly, in broadband network deployment. Next slide please.

Sandeep Taxali: Thanks, Don. So wanted to just quickly close with just discussing some of the resources we have here at Broadband USA. First, a federal funding guide. We developed a federal funding guide a few years back while just two years data, it still provides a nice landscape of all the programs, criteria of these
different programs in the application process. Again, it provides just a nice landscape, a ten page guide. So it's a nice quick read and again, if you review that and have any questions please do contact us.

Furthermore, Broadband USA. So we've published a number of other primers to help communities with their broadband access and additional inclusion efforts. These publications can directly or indirectly impact your financing strategy, for example, the PPP guide, the public private partnership guide discusses various business models for public private collaboration, including ownership, network sharing, and operations, all of which influence the financing structure of the projects, which you may pursue. So that's a good read.

More recently, my colleagues released a partnership guide to power smart cities. It has a section on approaches to leverage financial contributions and in kind resources from both public and private partners. So then again that's very relevant. And finally, while our presentation was pretty high level, if you seek more of a deep dive from our team, please do contact us. The email and phone contact information for our team is listed above. As noted earlier, many of our technical assistance engagements involve identifying the federal and non-federal funding opportunities for communities, again, looking to advance broadband access and adoption.

So with that said, I think we're ready for questions.

Laura Spining: All right, so we have questions in the question box. The most asked question is about availability of the slides and those slides will be hosted on the Broadband USA website later this week. So those will be available to you. In addition, we had Don, a couple of questions about the USDA program. Can you address which of those offer Broadband infrastructure?
Don Williams: They both do. So that's really a nice quick answer. So you can use either the Community Connect or the Bank Farm Bill program for broadband infrastructure. And that's where most of the money is spent, the overwhelming majority of it. And again, they have wonderful staff at regional levels that you can work with and they'll come out and meet you face to face, and they're both very good programs.

Laura Spining: Thanks, Don. There's also a question about the CAF2 awards and the specific question is do the awardees have to make public basically their six year plan? Is that a requirement from USAC? Sandeep, do you know about those requirements?

Sandeep Taxali: I'll have to get back to you (unintelligible) question about the six year plan that you're talking about, if it's -- we talked about a six year period to build I think 85% of the network (unintelligible). I'll have to get back to you I guess (unintelligible) on the question that he's asking and what has to be made public. But they do require a great deal of filing with USAC about the progress of your plan, your specific plan, your technology plan, and your overall strategy as well as the project timeline and milestones achieved. But as far as what specific component of that has to be made public, I'll have to get back to you on that.

Laura Spining: All right, thanks Sandeep. I think we've got a couple of other questions to get a note from a colleague to be sure and mention -- Sandeep, talk to you a little bit about the Broadband USA funding guide that I believe was originally published in 2015 -- late 2015 and we are in the process of updating that publication as well.
Let's see, I'm looking through the other questions. Question about what other services does Broadband USA technical assistance provide.

Don Williams: Well, good question since that is really our job at this point. So wonderful question. So what we can do is we can work with communities and we view communities as local governments, any incorporated entity, nonprofits, citizen task forces, regional consortiums, councils, governments. We currently work pretty much with all of those groups in a variety of ways.

One of the things we work with you is helping you understand what assets your community currently has, and in that regard we can help you with asset inventories, both of the providers that are there, what your assets are as a community that could be used to defer or defray the cost of broadband deployment, whether it's wireless or fiber system. We can also help you with investments regarding the types of services that are currently available in your community. We can work with you on a gap analysis in terms of what services your community most likely needs. We can help you assemble a good group of stakeholders and help you develop good outreach techniques to the stakeholders in your communities.

We can also work with you on business plan. We can work with you on reviewing RFPs, whether those RFPs are for consulting groups or whether those RFPs are for construction. We can also help you look at different ways to work with your sustainability and your business plans going forward. We can talk to you about different kinds of demand studies and different kinds of methodologies that are involved in those. And there's probably a number of other things we can work with you on and we do enjoy it and look forward to it.
Laura Spining: So I just want to be sure that I address part of the question that was about additional -- going deeper on some of the options that were talked about today. That was something you could provide for an individual and if you want to make that request, you can use the Broadband USA email address that is posted on the webinar or just go to our website. There's a form you can fill out there. So the next question from Stevens County, Washington -- thank you for joining. I know we've had a number of discussions with folks out in Stevens County about some of the issues that you face there. Your question is about dark fiber for providers who have indicated that the location of their fiber routes is proprietary.

And I don't know, Don or Sandeep, if you want to answer that. My personal experience from the industry is that they're not willing to share it with you then there's not much that any federal agency, regulator, or policy maker can do necessarily to help you with that. So troubling that still today that's an issue but I'm sure that it remains to be an issue.

I think we have a couple of other questions. Let's see. Can you provide an example of a project that is utilized a public private partnership model utilizing the funding source you have highlighted? So Sandeep, I think you talked a little bit about that, but Don, you are responding as if you're familiar with some public private partnerships that have benefited from federal funds.

Don Williams: Sandeep and I both have some experience with the Appalachian Regional Commission Funding. They've got a couple of good projects going in the southwestern area of Virginia and we've talked to those folks and that's been quite good. There's a number of public private partnerships, some of them not particularly traditional. There's a wonderful project or there's a number of good projects in Minnesota. One of the ones I'm thinking of is RS Fiber and
that involved a partnership with a local bank through the community redevelopment act funding and as well as a co-opt structure and the city itself.

And they have constructed a very nice regional network that is providing great services. There are a number of communities that are working with public private partnerships at the moment. Viejo, California which we've spoken with working with the city as well as a private company, Enyo Communications. They're putting together an expansion of a fiber network. There are dozens of such projects currently going on around the country.

Sandeep Taxali: There are so many of them. We funded Middle Mile, Last Mile but mostly Middle Mile and then offer our Middle Mile investments, private actors as well state and local government entities have come in to finance last mile. So for example, Leverett, Massachusetts is one example that comes to mind where we helped fund a 1,000 plus mile network in Western Massachusetts and the town of Leverett, through a community champion and just a very eager community, worked with the state to secure funding for last mile investment as well as they raised a muni bond through private investors coupled by the state funding helped fund the last mile network along with a private ISP, which is going to operate the network.

So the network is owned by the city, but the private entity will help them develop and operate the network. I think (unintelligible) Virginia where, again, (BTOP) funded middle mile to the Mid-Atlantic Broadband Cooperative, MBC, and off of that, for example, in the last two years, Microsoft deployed -- using a licensed spectrum, a last mile strategy to connect -- to bring broadband connectivity to students who did not have last mile at home so through an unlicensed wireless product, they are now able to on a trial basis obtain high speed connectivity. The backbone was funded by BTOP and then from there, Microsoft along with some investments from
MBC, which is a nonprofit co-op came in to do the last mile strategy for (unintelligible).

Another interesting example that I came across last year was in California, where a private entity was working with USAC to bring broadband to homes and businesses but they wanted USAC or SEP funding subsidy support both from the Erate program and from the Healthcare Connect Fund. And so it worked with all the rules and the USAC folks were heavily involved in making sure that all of the deployment costs were transparent and they were only funding what was needed for the healthcare centers, as well as for the schools and libraries. But that funding, once it got funded, the middle mile network and some portions of the last mile network could then be leveraged to build broadband for the rest of the homes and businesses.

So again, they worked closely with USAC and USAC of course worked with the FCC to make sure all of the rules were met but again, a nice example of a public private play using multiple funds, because again these funding programs are, as you know, are siloed and there's a movement to start breaking some of those silos in creative ways that still meets all of the rules and regulations. So those are just three examples.

Laura Spining: All right. Thanks, Don and Sandeep for that. We have another question about how much broadband grant funds can be used or are used for radio or wireless networks.

Don Williams: Well, I think the key there would be to the extent that the wireless network is meeting the speed and reliability obligations of the grant, and servicing an area that is otherwise not feasible to service, that most of the programs would consider that as a part of your application. But again, you want to call up and
you want to work with your regional representatives and get the specifics on that, explain to them what your approach is.

For example, currently working with some communities out west and they have a very limited number of people per square mile. And these are going to be wireless projects and they're going to be applying for grants. That's for sure.

Laura Spining: Great. Thanks, Don. Let's see, we've got a question about grant fund for broadband feasibility studies and I think, Sandeep, you talked about EDA funding feasibility studies. Can you talk a little bit more about that program and/or other programs that fund feasibility studies?

Sandeep Taxali: So EDA is (unintelligible) program along with the Appalachian Regional Commission will also fund feasibility studies as well. But if you're not in an Appalachian state, if you're elsewhere and if your community is under economic distress, for example, unemployment numbers, then EDA could be a funding source for a feasibility analysis. They fund a number of feasibility plans and they've done some work around that with broadband. So EDA would be one source.

I'm trying to think of who else. I don't think the USDA.

Laura Spining: So EDA and ARC are the two primary funding sources for feasibility studies. Okay, let's see. Moving on. Don, I think this one's for you about USDA's definition of rural and specifically, are you ineligible if you are adjacent to a city of 50,000 or more?

Don Williams: So you're ineligible if it's an urbanized area contiguous and adjacent to a city or town that has a population of greater than 50,000 inhabitants.
Laura Spining: So that sounds like a very specific definition, but potentially worth calling the USDA. Okay, very good. Let's see. We currently -- so there's a specific question about what I think is potentially economically distressed area where the pricing for broadband services or at least for delivering fiber are quite high. And I'm trying to see, are these specific grant funds for this? I recommend that if you have a very specific community that has needs for broadband and/or feel like that the services currently available are not affordable, to reach out directly to either Don or Sandeep and explain a little bit more about the specific situation.

And Bert, thank you for your follow-up. Yes, it will continue to be difficult in some places to understand where dark fiber is actually available. Okay, and Sandeep, just a note from (unintelligible) about following up. So thank you guys for that and that as best I can tell is the last question that we've got today. I think you see on your screen a note about Broadband USA's webinar for next month, April 19 at 2:00. So the second Wednesday of the month at 2:00 Eastern Time. The topic for that webinar is broadband adoption and digital inclusion in rural communities. So if you represent a rural community, we hope that you'll join us this time next month and contribute to that conversation as well.

The other thing I wanted to mention was that Broadband USA is hosting a workshop in Mesa, Arizona on the morning of April 18 and more information on that workshop will be available on our website later this week or in the near term. Let's see, and that's I believe all I have to cover today.

Let me just do one more sweep of the questions before we close out. So on that April 19 date of the webinar is the same date as the Mesa, Arizona workshop. I misspoke on that, I apologize. Those are both April 19 and I
don't see anything else in the question box. So thank you so much. We had great attendance. I think it topped out at 160 and a number of folks who hung around for the better part of it, which indicates that the material that was covered was very helpful. So appreciate your time and look forward to continuing to work with you and your communities as you try to make progress and improve those services to your citizens and businesses. Thanks so much.