Broadband Advisory Council - Infrastructure and Technology Working Group Meeting
Minutes of Meeting Held on Wednesday, September 4, 2019
10:00 a.m. to 11:30 a.m.

Attendance in Springfield, Chicago, and by Phone:

Lori Sorenson, Department of Innovation and Technology (DoIT, Chair; Travis March, Department of Commerce and Economic Opportunity (DCEO); Tom Chi, Springfield Police Department; Britney Carls, Governor's Office of Management and Budget; Deno Perdiou, AT&T; Rick Holzmacher, Illinois Rural Broadband Association; Sean Rapelyea, Illinois Governor's Office, Jessica Himes, Illinois Governor's Office; Joe Mambretti, Northwestern University; Paul Wright, Illinois Brotherhood of Electrical Workers (IBEW); Marc Thorson, Northern Illinois University, Sean Middleton, Illinois Electric Cooperative; Ray Montelongo, Montel Technologies; Bruce Montgomery, Montgomery & Company; Representative John Connor, Illinois 85th District; Ryan Gruenenfelder American Association of Retired Persons (AARP); Stephanie Cassioppi, US Cellular; Jim Zolnierek, Illinois Commerce Commission; Ben Winick, Illinois Department of Healthcare and Family Services; Dale Walters, DoIT; and Molly Dunn, Illinois Governor's Office.

Call to Order/Introduction of Working Group Members

Chair Sorenson called the meeting to order in Springfield and facilitated an introduction of all working group members present in person, by videoconference from Chicago and attending via WebEx.

Review of Working Group Deliverables and Timeframes

Chair Sorenson provided a brief overview of the Broadband initiative and indicated the working group is tasked with looking at issues and recommendations dealing with the underlying broadband technology and infrastructure in Illinois. The working group will convene through September and will provide recommendations to full Broadband Advisory Council on Oct 1. The information will help inform the report the full Broadband Advisory Council will submit to the Governor later this year.

Chair Sorenson cited issues with adoption of broadband throughout the state. Also, health care and other uses that state can use broadband funding to address. There will be $400M in broadband grant availability to be distributed over the next 6 years.

Chair Sorenson indicated the working group won't be establishing grant criteria but will provide guidance in what we should consider in establishing the program. This includes looking at other state models, sustainability, maximizing state investment by leveraging match funds from federal and private sources and aligning with the marketplace so investments can achieve the highest effectiveness and return.

Topic Discussions

Chair Sorenson opened comment from the group on topics related to the working group's mission, including - questions about infrastructure, barriers to access and adoption, best practices from other states, speed goals and what we want to achieve.

Barriers to Access and Adoption

Deno Perdiou identified challenges including access to capital, access to right of way, access to poles and facilities allowing for deployment of broadband services. The main access concern is accessing facilities at a reasonable cost in an appropriate timeframe. Property rights are very strong in Illinois and providers must get permission from every farmer or private owner to get access.

Chair Sorenson noted there is an Access working group focusing on those particular topics that is meeting separately.

Availability of Broadband

Chair Sorenson indicated there is data showing the lack of availability of broadband in some areas. Besides availability are there thoughts about other obstacles to adoption? What can we address?

Deno Perdiou: Marketing can be a key component to adoption. A 3rd or 4th carrier in a market won't get high adoption rates. Speed and overbuild are concerns for customers. In areas with no service that have interest in adoption, we need to look at each case individually. There may be a need to hire companies to promote service (often technicians). Some of the issue is a generational obstacle and some consumers prefer wireless service. There may also be other factors impacting adoption. It is not straight-forward but providers try to market to targeted groups of customers by area.

Sean Middleton: The take rate and density drives technology investment. Rural/remote areas are constricted to rely on limited options of technology. The per mile cost for rural subscribers is difficult unless there are incentives. The program should incentivize certain approaches for infrastructure - fiber, wireless.

Chair Sorenson: Fiber is the biggest upfront cost; would access to funds help overcome the high per customer cost to build fiber in less dense areas?

Sean Middleton: It could; fiber has a higher upfront cost but cheaper long term; wireless can be more expensive long term because of keeping up with modern technology

Rick Holzmacher: Generally, there must be request/demand for service to justify the investment. Having the state help with access to capital is the first hurdle to clear with fiber networks and broadband.

Speed Goals

Chair Sorenson: If we are serious about making a long-term investment, what kind of minimum speeds should we be looking at out of the gate?

Rick Holzmacher: Augmented copper solutions are an option and provide up to 90/40 speeds. But looking down the road, there may be a desire for at least 100 speeds for fiber. Most of the time, our providers are pushing fiber as far out as we can. Minimum 100 symmetrical (fiber) is what we would like to invest in.

Bruce Montgomery: Promotion of speeds and service has been fixated on download speeds, but that doesn't help with content creation. There should be more focus on symmetrical service speeds so people can upload content. Recognize that with diverse technology, we have to look at hubs and anchors that can serve as advocates for the issues surrounding adoption and use. If not for the Chicago Public Library, some did not have a means for exposure to these resources. There is a need to focus on what content is driving need and to look at users wanting to upload their content. We need to remember that customers are producers and consumers of content.

Adoption and Education Programs

Chair Sorenson: Some states have asked applicants about adoption and education programs and award points if the applicant partners with communities or have other plans for adoption or education programs within communities. Do we include this with the infrastructure grant opportunity or is it more effective on its own?

Bruce Montgomery: Community technology center grants did more to uplift use and broaden community technology. Illinois has a history of leading in this area. We should look not just to service providers but also communities. Funding could spark innovation.

Marc Thorson: I've been getting a push from colleagues for additional online classes and content, leading to better use of classroom time. Video usage and uploading content is becoming more and more important. Upload and download speeds are critical. Minimum upload speeds in rural areas are important for flipping the classroom as it is allowing for more education access and learning opportunities in rural areas.

Fort Wayne, IN Investment

Representative Connor: In Fort Wayne, IN, Verizon invested money to get fiber to homes. Any idea how that was set up? Can we follow that model for communities that don't have access to that?

Bruce Montgomery: The Fort Wayne Mayor was dealing with the loss of employers and was able to convince Verizon at the time to partner with Fort Wayne to gain access to fiber. They partnered with community housing development and infrastructure projects. The former Mayor of Fort Wayne is still involved in broadband access and renewable energies. Metro-networks or metro-fibers have been moved away from by providers.

Goal for $400M Infrastructure Program - Underserved

Chair Sorenson: Illinois has $400M to invest in the Connect Illinois broadband infrastructure program, what should be the overarching goal of the program? Other states set 4-year or 6-year goals, to achieve specific speeds. What should IL strive for?

Representative Connor: What are our current service levels to unserved communities?

Deno Perdiou: The Federal Communications Commission (FCC) reports on unserved rural and urban areas. The 2019 report is based on 2017 results, which results in a picture that is worse than reality due to constant improvement. Rural broadband is very popular right now. There will always be pockets in areas that are served and underserved, and I believe we will need to focus on the large geographic areas. Capital availability and access to poles will be obstacles. There must be a push for policy issues that make this work.

Access to Right of Way

Chair Sorenson: What's the largest obstacle?

Deno Perdiou: Access to right of way on private properties. If the State can address access issues that would be a good first step. How do you obtain access for the next generation of wireless in terms of light poles that IDOT owns? There needs to be a focus to eliminate those barriers. There is a need for work with farmers and the Farm Bureau for a compromise of what they are willing to accommodate on their properties in terms of either aerial or in ground service.

Mapping Underserved Areas

Chair Sorenson: Are we considering FCC's information accurate for our purposes regarding unserved and underserved areas?

Bruce Montgomery: We shouldn't rely on lagging data but should create our own qualitative and quantitative research on underserved areas. The $400M is more than we had before so we should be inclusive with our capacity to ask questions and do research. People are going to do economic development where the fiber will be.

Rick Holzmacher: I don't disagree, but we have the FCC data and we know what the federal support program requirements are and other states have their own mapping programs. Put all that together and there is a recipe for a good picture of what is going on in Illinois.

Chair Sorenson: What are the challenges other states have had in getting this data? Based on a recent pilot study by service providers, there are more unserved areas than reported in the current FCC data.

Travis March: When we talked to a few states, some define unserved as a certain speed level. If it is under that level, then it is classified as an unserved area.

Deno Perdiou: If the FCC is going to develop something more robust, you don't want to put in all the time and resources into your own resources. Look at the reporting that is a real time interactive mapping.

Paul Wright: It almost has to be a two-tiered approach. We must operate off the data available now in order to get started. Then address it on the second tier by looking at the data provided by the FCC.

Chair Sorenson: if we go off the FCC, if an area is defined as unserved that means we are not going to make a bad investment in those areas classified as unserved areas. Should we focus on unserved assuming that data is correct and make it the priority?

Jim Zolnierek, ICC: Should we also split that into other areas where it isn't an access issue, but just doesn't make financial sense to invest there?

Deno Perdiou: There are areas where the cost is over $1,000 per pole per year which is much higher than the FCC's recommendation. In terms of right of way and access to poles, that's where the policy needs to be focused.

Representative Connor: Any states that you would use as a model for right of way innovation and access?

Deno Perdiou: There are no comparable examples because every state's property rights are different. Constitutional issues and property right issues regarding farmers and the Farm Bureau vary. Providers don't want to be in court fighting over property rights all the time.

Bruce Montgomery: Urban Chicago has desperately unserved areas, we need to coordinate with both urban and rural areas.

Funding Schedule

Chair Sorenson: Let's talk about a funding schedule given there is a construction cycle based on Illinois weather. Is there an ideal funding cycle that enables us to maximize private investments and federal dollars?

Deno Perdiou: The biggest construction times are between spring and fall and the most efficient ways to use the money are also the times when the workers we need are in the highest demand. Getting things situated in the fall provides time to assess how the grants are awarded. Then we will be ready in the spring to use those resources efficiently.

Jim Zolnierek: When would the decision on state funding need to be made in order to leverage federal and private funding?

Chair Sorenson: Is the FCC on a schedule for their funding awards?

Deno Perdiou: No schedule. Would you allow carriers to match state funding with federal funding awards?

Chair Sorenson: Some other states have done so by working with providers that won federal money for a lower speed and investing state funds to increase the speed. Minnesota has been doing this for several years.

Karen Boswell, Frontier: That was important for us and we were able to spread our money to more areas and provide higher speeds.

Chair Sorenson: Karen is there a cycle to the federal funding? Or is that random when those areas go up for auction?

Karen Boswell: There is not a cycle, but more related to milestones you have to meet by the end of each year, such as service milestones.

Chair Sorenson: Is there a time that is preferred to get the requests in?

Paul Wright: Earlier in the primary funding year is preferred. Illinois has extreme temperatures which impact construction.

Jim Zolnierek: Per the FCC funding documents, deployment requirements are 40% by the first year with increases each couple of years. The build out requirement is over 6 years.

Chair Sorenson: How much time is an adequate for an award recipient to complete the project?

Jim Zolnierek: If the FCC is looking at 6-year deployment, you'd want to mirror that schedule.

Rick Holzmacher: A lot of the areas are more about pushing fiber out which isn't a time issue. The closer the fiber is, the faster the speed.

Chair Sorenson: The last thing the state would want to do is set a project timeline that is too short. What drives making that decision and consequences of short versus long deadlines?

Jessica Himes: New York's program was 3-years and Minnesota's was 4-years.

Jim Zolnierek: The grant requestor knows the area, so maybe asking them how long it will take them to get access to the area is appropriate. Then score based on the speed of setting up access.

Sean Middleton: I would caution going below a 3-year timeframe.

Karen Boswell: The idea of scoring on the applications is a good idea, and it should not go under 3-years.

Chair Sorenson: Travis, do you want to cover GATA?

Travis March: The State will have a total of $400M for capital grants related to the Connect Illinois program. $100M of that is bond funded. The other $300M comes from Rebuild Illinois funding. The first NOFO would have to be from the $100M in bond proceeds and would have to be for infrastructure due to bond funding limitations.

Travis March: The Grant Accountability and Transparency Act (GATA) is the required method on how the money would be distributed to grantees. GATA is the same requirements the federal government uses. There are pre-award requirements before anyone can be eligible to receive grants. GOMB runs the GATA program website where the information on this PowerPoint is available.

Travis March: Entities must be in good standing with the Illinois Secretary of State (SOS) and can't be on the Federal or Illinois Stop Payment lists. There is a fiscal and administrative risk assessment which helps inform the decision on advances. There's a Notice of Funding Opportunity (NOFO) which is the solicitation request for the grant funds that will be made available. We are projecting the first grant NOFO to be posted by January 1. The NOFO contains an overview of the opportunity and will be posted on the GATA Portal. Scoring methodology, goals, instructions, deadlines and required application elements would all be part of this overview. There's a budget template and conflict of interest forms, and the application is submitted electronically.

Travis March: When the applications are received, and the submission deadline is reached, a merit review process begins. The merit review is conducted by an agency committee that evaluates applications and scores.   If there was a challenge process, some of the submission information would be publicized to allow for that process to take place. For applicants that receive awards following scoring, a Notice of State Funding Award (NOSA) would be posted. Typically, up to 25% of funding can be advanced following the completion of a grant agreement. Before an agreement can be finalized, there is a 14-day protest period where the other grant applicants can protest based only on potential errors in scoring.

Travis March: The solicitation and award process will take time. As an example, if there is a 60-day posting period for the first NOFO, there would also be time for the challenge, merit review and protest periods that would take place before a grant can be executed. The timeline could vary depending on the number of submissions to be scored but could easily be a 5-month process. For a January NOFO, money would likely go out the door by June. Note that the broadband funding is a lump sum, which under GATA is considered a competitive award and therefore requires that we follow the NOFO process. Are there any questions on the process?

Representative Connor: Are the bond funds taxable?

Britney Carls: The taxable status of bond money depends on the purpose of expenditure but could be taxable. It will depend on the type of expense.

Next Meeting - Topics

Chair Sorenson: To set the stage for our next meeting, I would ask members to think about sharing more specific program goals and benchmarks. These are big picture goals and benchmarks, what should this look like at the end of the program or at the milestones? This is also open to the program speeds and what kind of programs we should fund. The challenge process we should dig into a bit more at a high level. Are there any other topics we want to explore at the next meeting?

Chair Sorenson: At our next meeting we should focus on goals and recommendations we will bring back to the Broadband Advisory Committee. The meeting on September 19th will be more of a review so we can meet the September 30th deadline.

Jim Zolnierek: Next meeting we can discuss more about federal funding.

Joe Mambretti: Illinois could use a vision document. Deno mentioned a lot of policy related topics that we will need so there should be a policy effort. There are also new fibers with hollow core which is particularly nice for quantum communications and Chicago is a center for this research. We also need a 5G policy and strategy. Data speeds are doubling almost every 12 months, so it is very critical to have these fiber capabilities.

Representative Connor: Anchor institutions in unserved or underserved areas should also be discussed.

Ryan Gruenenfelder: Has Illinois been in contact with the FCC on helping with resources on broadband mapping? Maybe a topic for next meeting.

Chair Sorenson: We have an opportunity to join the next wave of broadband mapping being let by the US Department of Commerce National Telecommunications and Information Administration provided we have funding. Where is the best place for Illinois to invest our money?

Deno Perdiou: Our counties need to have digitized maps to support the broadband mapping effort.

Public Comment

Chair Sorensen: Is there anyone from the public with a comment?

Next Meeting:

Our next meeting is September 13th, 11AM-12:30PM. I will send out a calendar invite. A third meeting is scheduled for September 19th from 9AM-11AM.

Adjournment

Chair Sorenson: Thank you for attending. Do we have a motion to adjourn?

Ryan Gruenenfelder: Motion to adjourn.

Jim Zolnierek: Second.

Motion carried.