**Broadband Development on Navajo Nation Meeting Summary**

November 29, 2021

Chinle High School Auditorium


Introduction: Supervisor Lena Fowler

NN Council Member: Kee Allen Begay

- He gave appreciation for the meeting today. Talked about the lack of internet and cell coverage on the Navajo Nation. Discuss the broadband funding that was signed by United States president. Wants to look at alternative ideas to set up broadband on Navajo Nation. But like to have a draft to propose at Washington DC of the broadband setup.

Superintendent of Chinle School District: Quincy Natay

- Highlighted the need for broadband and education. Did a PowerPoint presentation that highlighted the importanct of broadband on the Navajo Nation. Indicated they had buses set up with mobile broadband to provide mobile classroom usage and to distribute meals to students. Presentation showed the extremes that kids were willing to attend school. Indicated bus routes included paved and dirt roads and that 57% of students I had no internet. Noted internet speeds were a concern as well as the cost for internet on the Navajo Nation for students. Wanted to know where the sense of urgency is for getting things done and if all we do are meetings when is the time to act.

District Manager: Patrick Sandoval

- Addressed the issues of broadband and the collaboration of elected officials concerning this issue. What are the challenges NN, other officials, carriers, etc. are facing? Listed a few problems that exist. What's implemented today may not be relevant 15 years later. We need to create a roadmap of what needs to be done to avoid bottlenecks and red tape. Address the lack of coordination and identity barriers that exist. Noted the high cost of internet on the Navajo Nation. Help us, help our government.

NN Executive Dir. Telecommunications: Chris Becenti

- Provided updates and noted concerns of broadband issues. Briefly discussed e-rates. E-rates can help certain locations get a discounted rate on internet service if they qualify (EX. Schools). They would also like to get wireless emergency alerts available to communities but there is a gap that has been closing since 2019. Rural addressing was the main priority that needs to be addressed first. This needs to be done with economic development. Having a rural address will be available to provide the number of people living in a location, 911 accessibility, and a valid address to use for shipping and credit applications. They need to know how many people are living in an area to determine if internet and cellular coverage set ups are needed. Chris also noted they need to update their system to change from analog to digital. Was doing a state and federal partnership. Notes the NM Sceye Project would deal with airship internet and cellular coverage. They would like to be prepared for when the next grants become available for broadband.

AZ Commerce Authority: Mr. Sebaka

- Indicated they have backhaul issues with right-a-ways and funding issues. They need to do a digital inclusion and how to use them. Need to make upgrades and options available to the public. Short term options include portable Wi-Fi, Starlink internet service, and they need to build up the middle mile connectivity. Long term options include the emergency broadband benefit program; accelerating the Broadband Act; talk to neighboring states and senators; CC has a plan but needs to know how to work together with others and get things going; using the pipes from Phoenix to bring internet up to northern AZ; and doing a digital inclusion.

NM BIA Regional Director: Gregory Mehojah

- Noted the challenges of broadband. They are working on right-a-ways and ARPA projects. Would like to work with Navajo Nation to provide more immediate action and to focus on projects. They need infrastructure funds.

NTUA Presentation: Mujtaba "Moosh" Ansari & Velena Tsosie

- Mr. Ansari: PowerPoint presentation to address current broadband situation with NUTAW. Proposed NTUA AZ projects funded with ARPA funds that includes new towers, fiber optic lines, new microwave links and upgrades to existing broadband infrastructure. For county projects they would like for people to reach out to them that would like to see a broadband project for their community.
- Ms. Tsosie: PowerPoint presentation concerns bringing First Net/AT&T coverage to the Navajo Nation and its benefits. This will increase cellular coverage and NTUAW will provide maintenance, support and monitoring for the sites.
- Other items noted include the use of federal programs to build partnerships and to expand. The CARES 2020 Act funding to build new towers and expand coverage. They have expansion requests that are pending fund approval and they have strategized for ways to look forward by extending their reach.

SBi Smith Bagley Inc. (Cellular One, Naked Media, Sunstate, Photon): Guy Turley

- PowerPoint presentation focusing on who they are and what they do. They focus on the underserved and unserved population in AZ, NM, UT and CO. They are also currently serving tribal lands with their service. They are looking at various telecommunications services and bringing them out by looking at the challenges. The pandemic response has spurred the need for broadband and notes that AZ was at the top for people signing up for service. Also notes the mifi devices were issued with Emergency Connectivity Fund but was not enough due to gaps of coverage and service. They are looking to increasing their infrastructure network and are looking at the holes in their coverage areas. They are looking at alternatives to keep their signal and provide individual and regional benefits. Their four-year plan includes to be a strategic partner with tribes, county and state; work on collaboration with other telecom providers; and to deliver necessary mobile and fixed broadband solutions. They launched their own fiber division in 2021.

Sacred Winds Communications:

- Word document presentation that shows an overview of their company. They served customers on and off the Navajo Nation with telecommunications services. They are focusing on bridging the digital divide and were the first to bring fiber to homes with 231 current users. They have also set up hotspots for customers and school children. They are looking to expand and provide redundancy. They currently have a new project, located in Ft. Wingate, NM, where they are doing testing. Noted the issues with obtaining right-a-ways. One right-a-way took nine years to obtain due to officials. Looking at infrastructure development they are hoping to improve in this area. They are looking at bringing a 911 call center to Navajo Nation, but their biggest concern is rural addressing, and they still need to run tests. Sustainability is an area they are looking to develop and figure out a way to maintain it. They are looking to partner with counties and schools to provide fiber to all McKinley schools. Lastly, they noted maintenance costs around $300K and their goal is the provide to the underserved and unserved public by helping provide infrastructure.

Quick Highlight: Chris Becenti

- Showed a map of the Emergency Broadband Benefit (EBB) area that was established with Emergency Connect funds. Navajo Nation had the most people to sign up for EBB.

Arcadian Fiber Project (Navajo Nation): Dan Davis, CEO & Co-founder

- PowerPoint presentation addressed the issues of getting broadband on Navajo Nation. It requires collaboration with multiple departments, agencies, etc. with a lot of work and time inputted. Great broadband requires direct connections between local fiber/towers and internet backbone fibers. It's about connections to servers located hundred of miles away in Salt Lake City and Phoenix. Existing fiber backbones routes were only designed to connect major markets. The original backbone was built fast and cheap in the 80's but not equally built across the US. The most difficult part now is getting land allotments to build across. Navajo Nation communities are too far from the backbone to connect, and costs are too high to build from an "empty" zone to the backbone. New Arcadian backbone fiber routes need to build data centers to make connections. This will help with reliability and provide for commercial needs. It's a long-term investment that will take 3 to 5 years to complete.
- The Navajo Arcadian Project will have three phases with 2,700 miles of backbone to build. This will help bring the backbone closer to the Navajo Nation. Currently, they are only dealing with gathering funds and not groundbreaking. This project will give Navajo Nation a 3% profit and require seven buildings to be built to have fiber extended to everyone. One key thing to note about Arcadian is that they sell fiber infrastructure to service providers who in turn provide the service to their customers. They don't provide direct service to the public.
- Phase one process from Phoenix to Salt Lake City will take 18 months to complete. Construction is scheduled to begin in January 2022 pending final customer commitments. Millions have already been invested. They are partnering with state and federal for funding. To accelerate the Arcadian project, more customers and more money is needed to get it done faster. Phase two from Tuba City to Denver will take an estimate two years to complete. From Tuba City to Farmington can be built faster with funding. Phase three is more about policies and discussions.

AT&T: Carrie Johnson, Director of Rural Tribal & External Affairs

- PowerPoint presentation on their safety communications and coverage expansions. Since AT&T was selected as the national provider for first responders with a 25-year contract, they are looking to expand existing infrastructure. They are also looking to extend their service for others including healthcare. FirstNet is American's public safety network, and they are working on expanding with different builds going on. Navajo Nation FirstNet requests include planned events and COVID-19 responses.

Frontier: Jordan Bramble

- Provided brief updates concerning alliances, projects, and initiatives.

END OF AGENDA PRESENTATIONS.