NM DEPARTMENT OF INFORMATION TECHNOLOGY

BROADBAND ACTIVITIES

NM Broadband Program
Department of Information Technology
June 2020

The following is not a comprehensive list of Broadband Activities, yet does provide some understanding of the level of effort being provided directly to and/or statewide inclusive of Tribal Country. Of note, all of these activities have entailed a strong, passionate, collaborative structure among many agencies and individuals. The following list of activities are in no particular order except stratified by current, planned, and completed.

Current Activities

- NM Homework Gap Team (NM HGT): A group consisting of PED/IED, DCA/State Library, IAD, PSFA, SFIS, Navajo Nation, Community Learning Network (CLN), Regional Advocate, and DoIT was created to coordinate statewide activities in support of narrowing the Homework Gap. The initial step was to conduct a survey of public schools inclusive of tribal schools to ascertain their needs for devices. Due to the generosity of CLN the NM HGT has a website full of information.
    - NM HGT: https://www.communitylearningnetwork.org/homework-gap-team.html
- ITDRC Project Connect: As a result of CLN efforts New Mexico is graced with a team from the Information Technology Disaster Recover Center that is deploying Public WiFi Parking Lot Hotspots within the state. The ITDRC responds to disasters that normally involve hurricanes and wildfires, yet to have them in New Mexico is a fabulous honor. They deploy these hotspots at no cost and when they walk away, the facility owns the hardware. Additional information can be found at –
    - Hotspot Request: https://survey123.arcgis.com/share/3b61c508459e42b8928574f99f7afcfe
    - FAQ: https://docs.google.com/document/d/1ZjO5BM4ANyBlAQ-KKX2zXZ3W5VGCeSEpnlCZN1M95t8/edit#
    - ITDRC Info: https://www.itdrc.org/
- Devices: PED/IED allocated funds that resulted in the purchase of approximately 700 Residential Hotspots (Navajo - distributed), 102 CadlePoint (allocated to all tribes – in process with assistance from ITDRC) fixed and mobile (schools buses, vans, etc.) Hotspots, and 6200 Chromebooks (allocated to all tribes and schools with large tribal – in process).
- Device Analytics: To assist in the proper placement of these devices, the NMBBP conducted an overlay analysis of Mobile Wireless Services by Address Points for the entire state. The data informs by nearly one million addresses what type (2G, 3G, 4G, etc) of wireless service and from what Service Provider (T-Mobile, Verizon, AT&T, CellulareOne, etc) are available. These points were then subset by School District, pushed into a spreadsheet, and made available to the school in the placement of residential hotspots. In one case the points were subset by a county. These data are available to others.
- Hotspot Mapping: DoIT NMBBP reached out to internet service providers, schools, libraries, state agencies, local government, and other entities requesting the existence of Public WiFi "Parking Lot" Hotspots. The DoIT Broadband Program gathered this information and posted the locations with ancillary information onto their NMBBP Online Map. These sites each have a notation to "Practice Social Distancing" and "Please

Complete your Census Survey" Those located on Tribal Lands will state – "For Tribal Members Only".
    - NMBBP Map: https://nmbbmapping.org/mapping/
- Navajo Water Settlement: A water pipeline build funded by the U.S. Bureau of Reclamation from Farmington to Yah ta Hey that includes 96 strands in supporting a smart pipeline system with extra strands being apportioned to Navajo Tribal Utility Authority and City of Gallup (Aprx $1.1B)
- Pueblo Connect: The Pueblos of Santa Clara, Pojoaque, Tesuque, and Ohkay Owingeh have been selected to receive equipment and training towards the implementation of TVWS technology that will provide WiFi access into their communities. This $1.3M National Science Foundation (NSF) Grant currently has a pilot constructed in Santa Clara Pueblo.
- TVWS for Tribal Libraries: Another similar project targeting the tribal libraries of Acoma, Torreon, Mescalero, and Jicarilla that will provide TVWS converted to WiFi spectrum at "Kiosk" sites that can be accessed by the community. Currently Torreon is up and running. This is an approximately $300K grant funded by the Institute of Museums and Library Services (IMLS).
- BIE Schools: Meeting with BIE, and their GSA awarded telecom contractor, Verizon to include their subcontractor CellularOne, in providing affordable and reliable broadband to BIE Schools. They are under a different set of requirements that we (PED/SFIS/DoIt) are attempting to discover solutions. They are close to connecting Jemez Day School.
- Libraries: The State Library received $1M, hired an E-Rate coordinator, and is in the process of lighting up public libraries. In addition, In addition, they are applying for grants to support distant learning and support services for libraries.
- Covid Response: Engaging primarily Verizon in deploying MCT (Mobile Cellular on Trailer) WiFi Hotspots to Tribal Areas. Currently there are units in San Felipe and Jemez that are targeting Covid19 Response Teams inclusive of healthcare and other support services.
- WiFi Spectrum: The FCC has released to tribes the availability of WiFi Spectrum, that is normally licensed, as part of an "auction" that closes in August. The application process is rather simple and an important offering that all NM Tribes who qualify are urged to apply. The SFIS can provide detail, yet the DoIT NMBBP is offering their mapping services to assist those tribes with that part of the application process. The spectrum is a broadcast type, equipment inexpensive, and can be constructed very quickly. Zuni is up and running and other tribes are applying. Some are using consultant services to push together the application. Whether used now or later, an important asset to secure now.
- Support Data: The NMBBP Mapping project continues to collecting facility data, residential locations, mobile services, federal/state broadband grant awards (CAF/RDOF/PRC/ReConnect, etc), infrastructure, technology coverage by ISP to assist in proper placement of hotspots within communities. A note was sent out to all NM ISP (150+) noting these data are available and can be used to assist in their grant application requirements.
    - NMBBP Map: https://nmbbmapping.org/mapping/
- Legislation: Senate Bill 10 requesting $25M from the Covid Relief Fund to NM DoIT to provide matching grant funding to public entities.

Planned Activities

- Navajo Nation: The DoIT NMBBP is aggressively securing allocated funds of $3M to support in match the NM side of an approximately $55M E-Rate funded fiber project.

- Cochiti Pueblo: The DoIT NMBBP is in the process of allocating funds to the Pueblo of Cochiti to bring fiber to their residential communities (Aprx $2.875M).
- Sierra County: The DoIT NMBBP is allocating funds to Sierra County to enhance broadband access and capacity (Aprx $102K).
- Plateau/XTO: The DoIT NMBBP is allocating funds to Plateau/XTO to expand broadband in areas east of Carlsbad to sourthern Jal. (Aprx $1.1M)
- ENMR/Plateau: Plateau was granted a USDA Reconnect grant of $19.2M to expand broadband into patches within Central/East NM.
- PVT: Penasco Valley Telephone Cooperative was awarded $3.2M to expand broadband in SE NM.
- Acoma Pueblo: The Pueblo of Acoma was recently awarded nearly $1M from the USDA Reconnect Grant to connect their residential community.
- NCNMEDD: "Pass Through" legislated funds from NM DoIT to North Central NM Economic Development District for broadband expansion (Aprx $260K).
- Funding: The DoIT NMBBP in cooperation with Senator Udall's Office has scheduled webinars to educate local and state governments in the availability of federal funds. In addition, a similar hosting to ISPs regarding FCC RDOF/Auction 904 (Rural Development Opportunity Funds) applications.
    - RDOF ISP Application Process Webinar: 26 June 2020
    - Federal Broadband Offerings: 8 July 2020

<u>Completed Activities</u>

- NMBBP Study: DoIt has just completed the update of the New Mexico Broadband Strategic Plan that includes a Rural Area Assessment. To download a copy –
    - NMBBP Plan: https://www.doit.state.nm.us/broadband/reports/nmbbp_strategic_plan-20200616.pdf
- NMBBP BB4E: After nearly three years essentially all public schools inclusive of public schools on tribal lands have been connected with fiber using primarily E-Rate funding. Currently NM has received over $65M that has cost the State approximately $5M. A collaboration with PED, State Library, PSFA, and DoIT.
- MRGTC: The Middle Rio Grande Tribal "Broadband" Consortium connected with fiber the Pueblos of Santa Ana, San Felipe, Santo Domingo, and Cochiti by accessing Library E-Rate Funds and matching with State Library Go-Bonds. Collaborators included the Four Pueblos, Amerisk, State Library, PED, PSFA, and DoIT.
- Jemez-Zia Consortium: Similar model that connected the MRGTC Fiber with the Pueblos of Jemez and Zia using Library funds as match. Collaborators included the Two Pueblos, Amerisk, State Library, PED, PSFA, and DoIT.

<u>Considerations</u>

- Community Connectivity: Though in many areas there is fiber readily available yet the big lift is getting the capacity into the homes and businesses. However our Anti-Donation Clause limits direct behavior, yet there are a number of mechanisms that can be used and are being used that include alternative technologies and creative funding strategies.
- ROW: Right of Way permitting is a hug issue. Sometimes can take over a year and meantime funding is lost or contractors move on. The need to streamline this process is very important. During the ARRA Stimulus days, the DoIT NMBBP sped up the Right of Way process by providing all land stewards with the project design and scope, invited everyone into one room to provide an overview and etch out issues, define each requirement in that there be no surprises during the review process, and schedule or

estimate when permits will be awarded. This was never formalized, yet proceeded in a collaborative manner due to the “shovel ready” nature of these projects.

- Match Funds: Given the funding there are a number of avenues to provide additional capacity. The easiest is to leverage federal funds that provide a competitive space and a nod towards ISPs winning those awards to expand their business while riding public dollars, not a P3. There are a number of instruments we can use to move public funds: E-Rate, Healthcare Connect, USDA (Distance Learning/Telemedicine/ReConnect/etc.), EDA, IMLS, and so on. Small study awards to companies such as Electric Cooperatives to get into the business. Grant writing support to smaller companies who do not have the capital to proceed.
- Policy: Besides ROW and P3 legislation there is a ton of small stuff that the State can legislate to speed up the game. They include dig once, climb that pole once, cap on private ROW fees, cooperative requirements for existing pole use, alternative funds to toss in extra conduit during an E-Rate project, and so on. Be good to investigate these.
    - Policy Considerations: https://www.doit.state.nm.us/broadband/reports/BB4B_CTC_Report_Policy_Considerations-final20170117.pdf