Science, Technology, and Telecommunications Committee

Using the Federal E-Rate Program as a Foundation to Expand Broadband Service: E-Rate School Program

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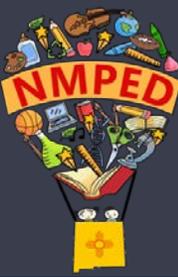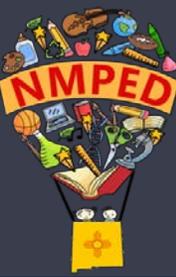*Investing for tomorrow, delivering today.*

Navajo Fiber Build – A model for collaboration

- E-Rate application for fiber in two states to create unified network for Diné Education

- 380 new miles of fiber with DoIT providing a state match of 5% for the $47 million E-Rate build

- Working on ensuring fiber connectivity for BIE controlled schools

- Collaboration across state lines and with multiple state agencies, including PED, DoIT, IAD, and Arizona Department of Education, and an external partner (SFIS)
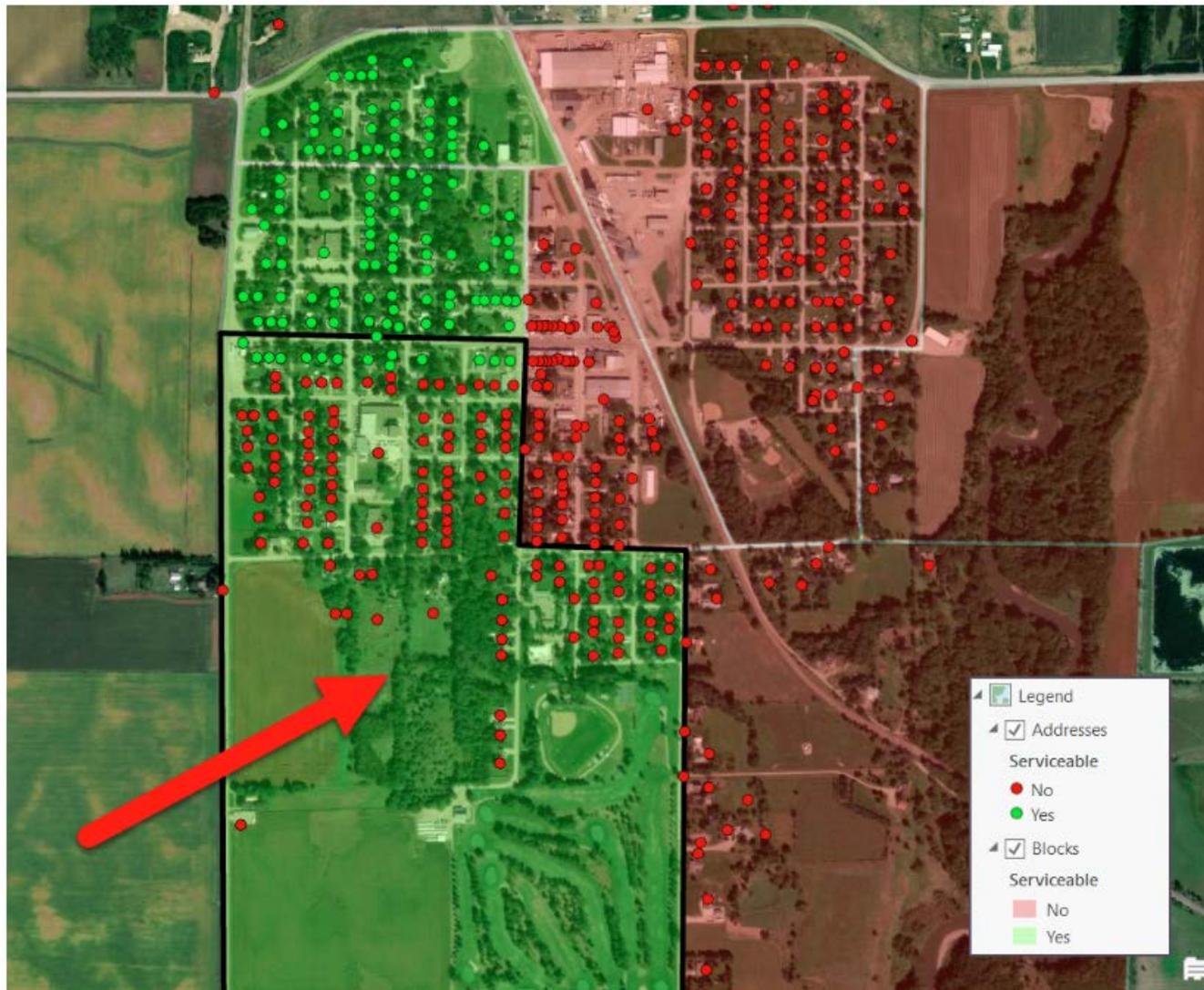
Lessons Learned from Tribal Collaboration

- Navajo Fiber Build and meeting immediate and long-term needs
  - Mobile hotspots, Chromebooks, and WiFi routers powered by cell service
  - Building fiber and connecting tribal schools, libraries, and chapter houses
  - Through collaboration DoIT will be able to address public safety and rural health care needs
  - Navajo Nation will be able to address economic development needs
  - Fiber to the premise in some areas

- Collaboration is key, whether with tribes and DoIT. The goal is to have a holistic approach to bringing universal broadband to the entire state.

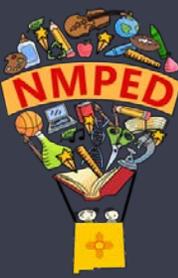- Special thanks to the Governor and legislature for making this possible

Understanding the Demand

- Mapping is key to understanding the demand for home Internet

- DoIT and the Earth Data Analysis Center at UNM have been critical in helping to understand where the resources are located or needed

- Engaging with service providers to address short-term solutions for access

- A number of our local exchange carriers have stepped up during the pandemic, including working with tribes to start the process of getting fiber to homes on tribal land
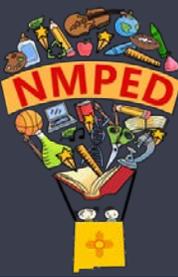
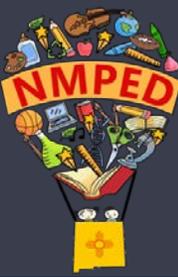FCC Form 477 data is problematic to understanding unserved addresses

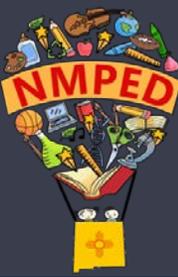Changing the way we see served and unserved addresses

Sacred Wind and the Navajo Nation

- Sacred Wind received funding from the Navajo Nation CARES Act fund to begin building permanent digital microwave infrastructure, with an estimated time of two years to complete the project

- With an investment of $1.6 million from the state, temporary towers can be deployed to serve nearly all customers in the Sacred Wind service area within three months

- When the permanent infrastructure is installed, ownership of the temporary towers would revert to the state for use in future emergencies
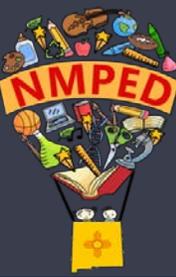
Long-Term Solutions for Broadband

- Short-term solutions, such as mobile hotspots and Chromebooks accomplished getting students connected; however, it is important to seek permanent solutions

- Long-Term Solutions can include: (1) Engaging with service providers by breaking down barriers to find solutions that meet the unique challenges of different communities; (2) Openly communicating and collaborating across state agencies and external partners; (3) Requiring a lead agency for the state who is responsible for ensuring all broadband projects are addressed in a holistic manner

- There has been an identified need to provide professional development (PD) to teachers on distance learning. As a result, PED is offering PD on distance learning in collaboration with CNM to over 18,000 educators.
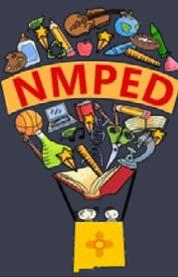
- Schools need additional support to engage in technology planning, which may be accomplished by utilizing Future Ready (creates change of culture in schools that enables positive change)

- The Council of Chief State School Officers (CCSSO) partnered with EducationSuperHighway, a national nonprofit, and the State Educational Technology Directors Association to develop guidelines for Digital Equity Data Collection

- This is a blueprint for state education leaders about how to conduct a high-quality, student-level data collection in assessing the state's digital divide.
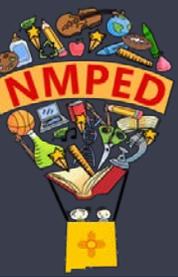
Continuing to Meet the Need for Connectivity

- Establishing a set of standards for the collection of student home access data will provide school districts, and in turn the state, the ability to identify whether:
  - a student has access to connectivity or a device at home; and
  - the connectivity is sufficient enough to allow the student to be engaged in online learning (such as streaming video)
- Data points include devices, device ownership, and if devices are shared in a household
  - This data can help PED, school districts, and charter schools identify and target students in of need support
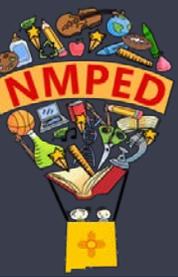
Summary and Action Steps

- Encourage planning and interagency collaboration for holistic solutions for all sectors
- Silos are counter-productive – there are three state agencies with E-Rate matching funds. We need one fund administered by DoIT
- Create one matching fund for schools, libraries, health clinics
- Encourage public private partnerships through legislation
- Allow New Mexico towns that are underserved to operate community broadband services through legislation
- Future proof the technology, fiber lasts 20 or more years
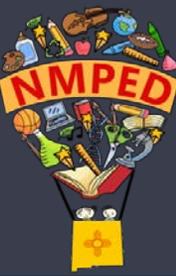
Designate a Lead Agency

- By [statute](#), DoIT is the lead agency for the State Information Technology Strategic Plan

- Specifically, under Paragraph 4 of Section 9-27-6 NMSA 1978, DoIT is required to develop a Statewide Broadband Network Plan, in conjunction with PED, HED, state universities, other education institutions, PSCOC, political subdivisions of the state, Tribes, Nations, Pueblos, PRC, and telecommunication network service providers

Keys to Long-Term Success

Collaborate and communicate → Address immediate needs → Plan and adjust as conditions change → All hands on deck for long term solutions

Questions?

Contact Information

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