

BROADBAND UPDATE & RIGHT OF WAY (ROW)

Transportation Infrastructure Revenue Subcommittee
August 31, 2022
Kelly Schlegel, Broadband Director
Office of Broadband Access and Expansion

Acronyms

- NTIA- National Telecommunications and Information Administration
- BEAD – Broadband Access Equity and Deployment
- ARPA – American Rescue Plan Act of 2021
- NOFO – Notice of Funding Opportunity
- TCP- Tribal Broadband Connect Program
- CNMC - Connect New Mexico Council
- USDA- US Dept of Agriculture
- FTTH/FTTP – Fiber to the Home/Fiber to the Premise
- SEN - Statewide Education Network
- PEN – Pueblo Education Network
- ISP – Internet Service Providers
- ACP - Affordable Connect Program
- ROW - Right of Way
- BIA- Bureau of Indian Affairs

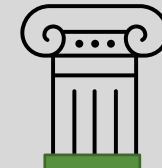
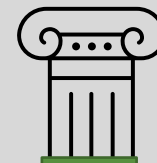
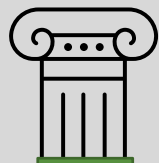
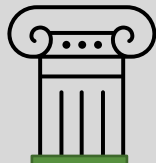
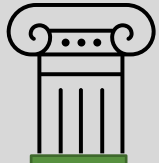
Bottom Line Up Front (BLUF)

- Kelly Schlegel appointed Director of Office of Broadband Access and Expansion (OBAE) by the Governor on 07/11 & on site 07/14,
- Building the strategy, team, and staff
- Meeting near-term urgent + important federal milestones to leverage funding programs:
 - Middle Mile - Sept 30
 - BEAD (Last mile) – submitted August 15
 - Digital Equity – submitted July 12
 - Funding/Supplies/Construction Timeline is years vs months
- Middle Mile (MM) Path Forward - Rural areas are dependent on a robust MM framework and key corridors but leap-frog solutions also being sought
- Notice of Funding Opportunity (NOFO) and grant awards for ARPA Capital Projects Fund is in process
- Addressing ROW and permits to lessen impact



OBAAE APPROACH AND PLAN

The Five OBAE Pillars



Foster Collaboration and Partnerships:

(e.g., SEN, PEN, Connect NM Council, Tribes and Pueblos, P3s, ISPs, Telcos, Coops, Counties, Border states, Nonprofits, Coalitions, Consortiums, Collectives, etc.)

Support a Robust Fiber State-wide Middle Mile

Plan the Foundation for Broadband (BB) Connectivity within 5-Year Period

Create and Adopt Innovative Approaches

(e.g., Spectrum, best practices, lessons learned, best in class tools)

Nurture Alternative Technologies

(e.g., MM Wireless, Satellite, Photoelectronics, Mesh Networks, etc.)

Robust middle mile provides a framework for last mile in rural areas, but alternative technologies help leap-frog timeline.

OBAE Framework

Primary Goals

- **Universal internet** access to all homes, businesses & community anchors
- **Universal mobile wireless** access
- *Free & secure **gigabit broadband** to all schools & libraries*
- Happy connected people

Guiding Approach

- **Engage & empower** communities & providers
- **Align public investment** with demonstrated need
- **Promote innovation &** technology diversity

Tools & Tactics

- **Last Mile** Access: Target resources through mapping & iterative pilot program
- **Middle Mile** Infrastructure: Align Local, State & Federal Investment
- **Digital Equity** Programming: Ensure that all barriers to true internet access and digital economy participation are eliminated

Rural Areas are integral to happy connected people. State needs to help drive servicing rural areas that are not commercially viable.



FEDERAL FUNDING AND TIMELINES

100% Connectivity: >\$1B Funding Enables BB Buildout

NTIA Digital Equity Funds

- ✓ Submitted plan July 12. Releases \$740K Planning Funds
- ✓ Engaged SME contractors for community + tribal outreach and Digital Equity (DE) Planning
- Outreach and detailed planning September 2022 - September 2023
- Submit detailed plan October 01 2023. Releases DE implementation funds
- Implement DE Plan October 2023 - 2025

\$30M+*

NTIA BEAD Funds

- ✓ Submitted GOV Letter of Intent (LOI) July 18.
- ✓ Submitted plan August 15. Releases \$5M planning funds
- Submit detailed plan May 2023. Releases broadband infrastructure funds
- Award grants when funding released
- Implement Last Mile 2024+

\$700M+*

NTIA MM Funds

- Architecting State-Coordinated Statewide MM Plan. ISP or ISP coalitions may submit independently.
- On track for September 30 submittal. Releases middle mile infrastructure funds.
- Award Grants when funding released
- Implement Middle Mile 2023+

\$50M - 100M*

*estimates

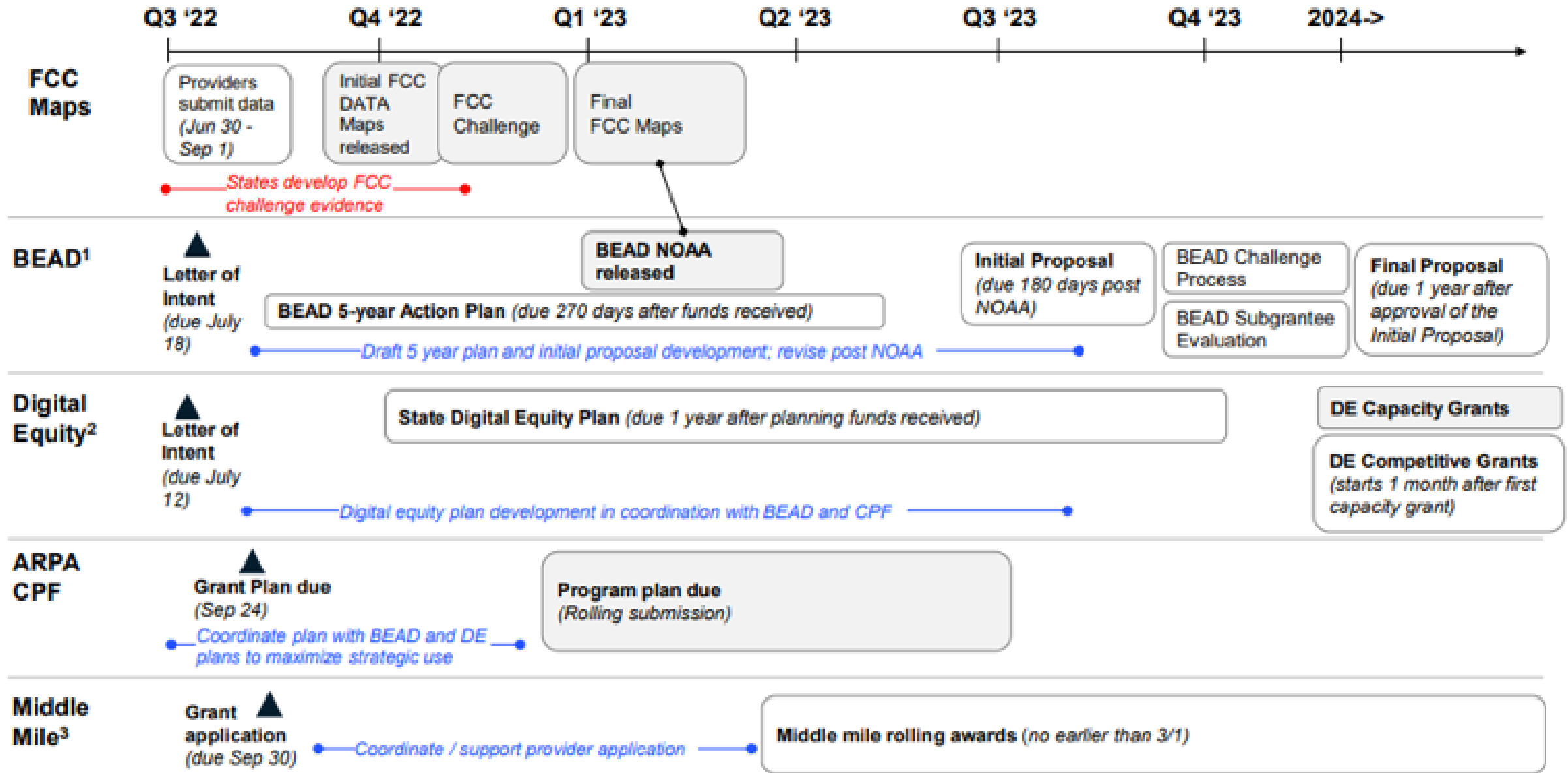
100% Connectivity: >\$1B Funding Enables BB Buildout

(continued)

Connect NM Council	<ul style="list-style-type: none">✓ Council members appointed, Interim Chair Selected and Established Seven Working Groups✓ Allocated \$70M by Legislature for MM and Last Mile deployment<ul style="list-style-type: none">• Rulemaking in process• Award Grants 2023+	\$70M
ARPA	<ul style="list-style-type: none">✓ Developed Pilot Grant Program, application and scoring criteria✓ On track for <u>Week of August 8</u> Notice of Funding Opportunity (NOFO)<ul style="list-style-type: none">• Award Round 1 of grants starting Fall 2022• Implement Middle Mile/Last Mile 2022+	\$123M
Tribal Connect Fund	<ul style="list-style-type: none">✓ Announcement of Round 1 <u>August 11</u> \$146M – 5 applications won<ul style="list-style-type: none">• Round 2 - TBD• Implementation 2022+	\$200M*
USDA Funds	<ul style="list-style-type: none">✓ Six NM Awardees announced for loans and grants<ul style="list-style-type: none">• Implementation 2022+	\$57M

* estimate

FEDERAL FUNDING TIMELINES

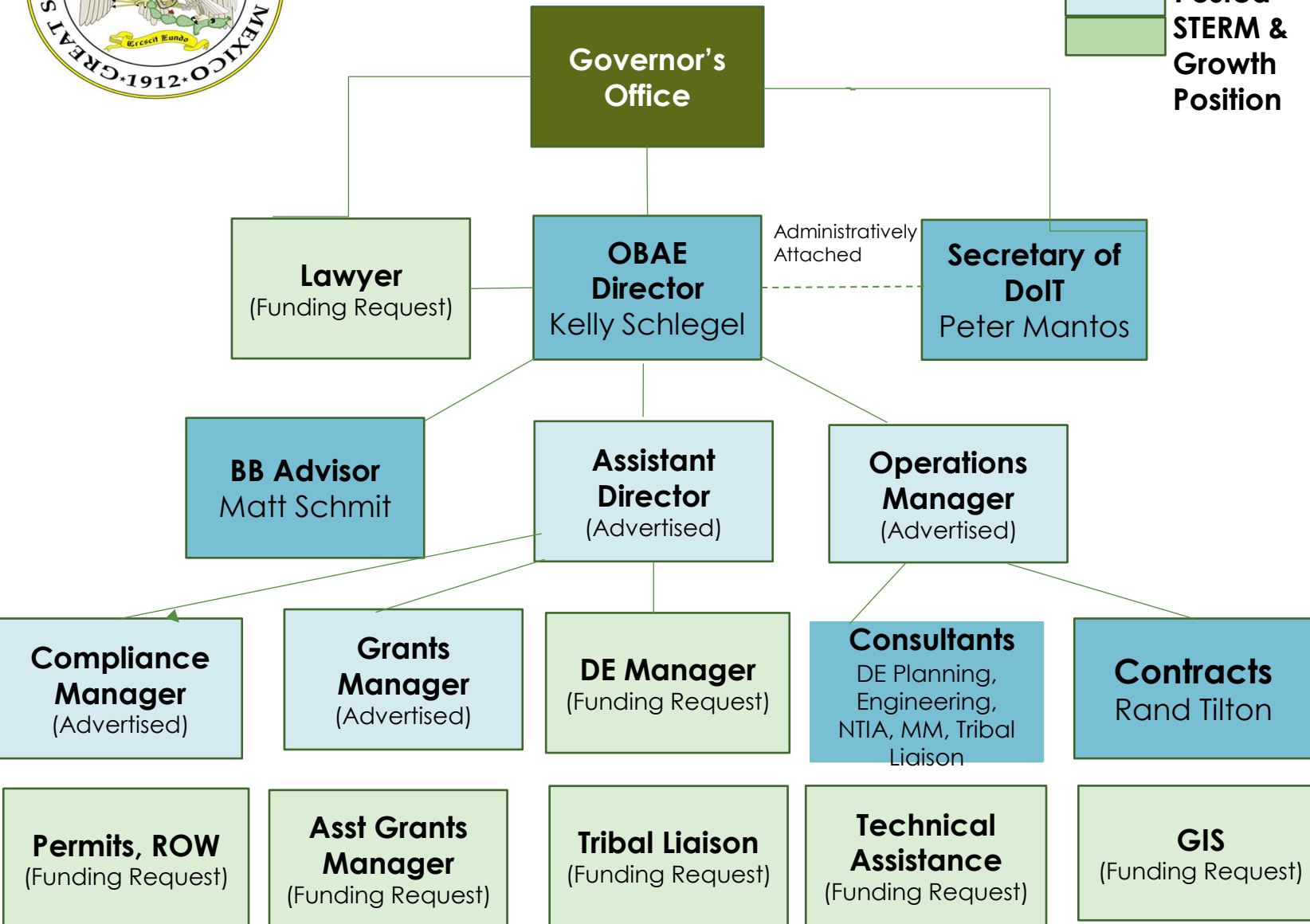




BUILDING OBAE CAPACITY



OBAE Organizational Chart



OBAE Staff-Up Ensures Broadband Execution Success

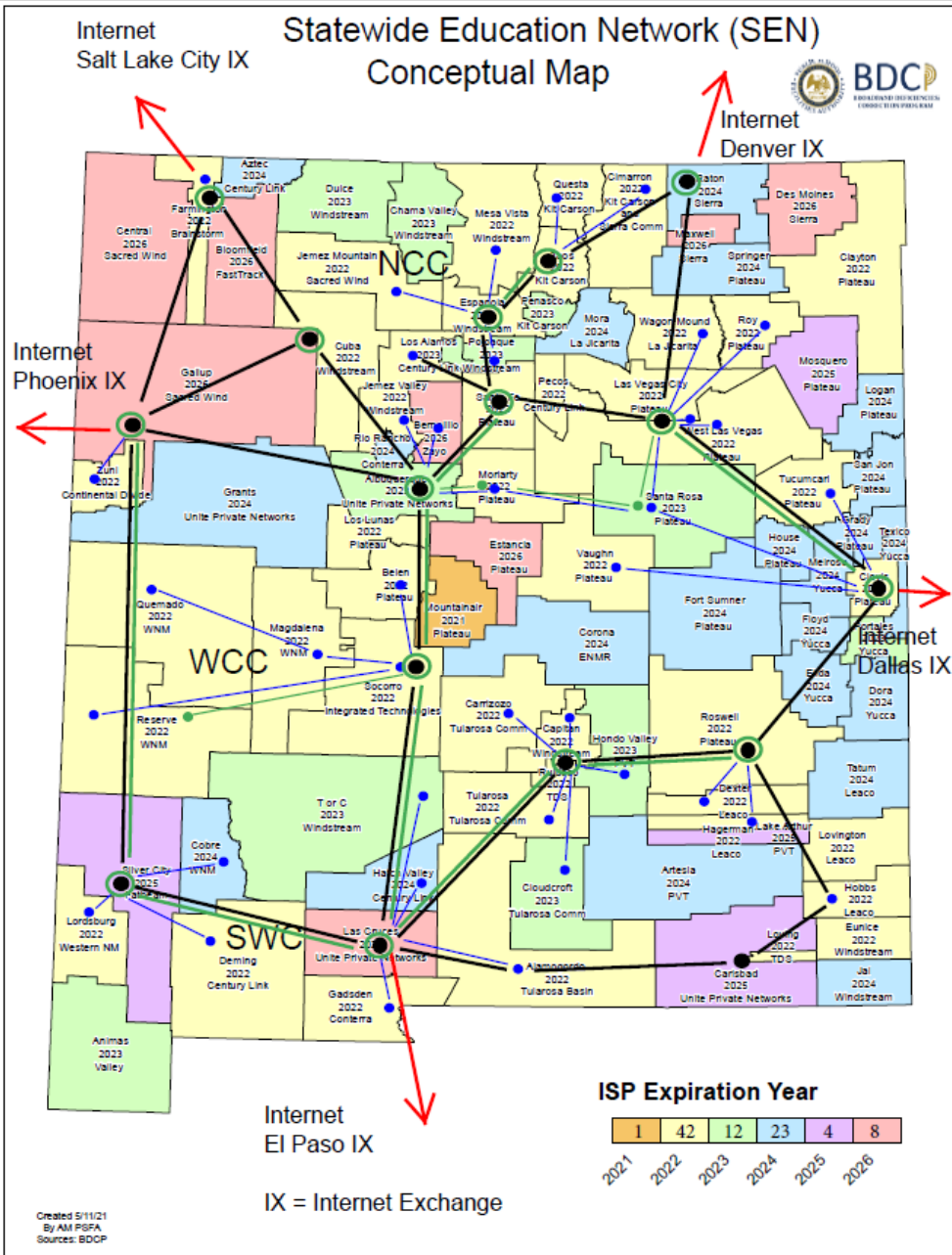
- Review, score and award grants for MM and Last Mile
- Technical assistance on grants
- Form key collaborations
- Community and tribal engagement
- DE Planning and Implementation
- Technical assistance on deployment
- Collaborate on School Education Network Deployment
- Coordinate Statewide Middle Mile Initiative
- Collaborate with Connect New Mexico Council



MIDDLE MILE PATH FORWARD

Middle Mile Vision

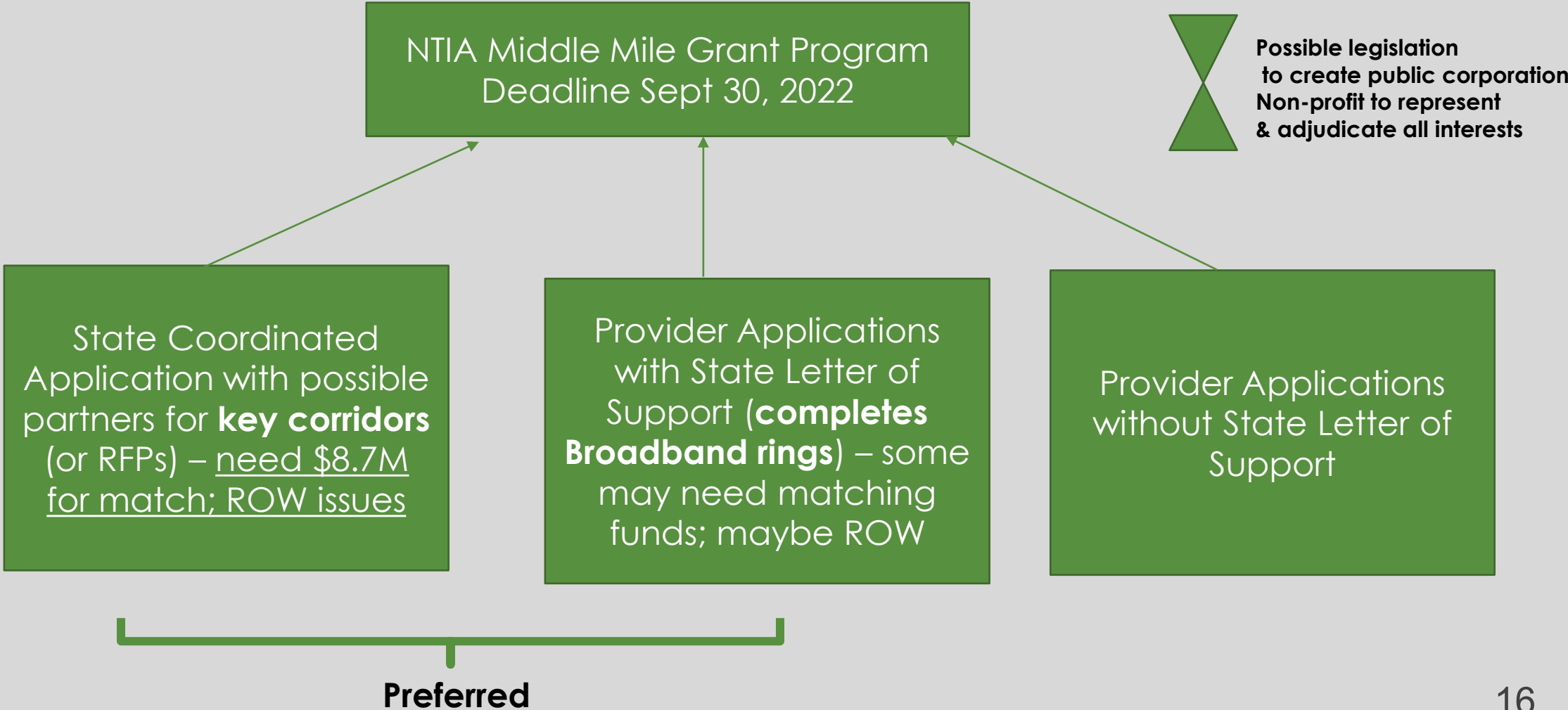
- A state coordinated robust middle-mile network involves the deployment of an open access network in partnership with providers that provides a framework across New Mexico for constructing the last mile:
 - Helps catalyze New Mexico ISPs to deploy last-mile networks that can achieve affordable service and 100 percent connectivity across New Mexico;
 - Enables market adoption for unserved/underserved residents, businesses, and institutions;
 - Affordability involves federal Affordability Connect Program (ACP), reasonable access fees and possible initial state subsidy



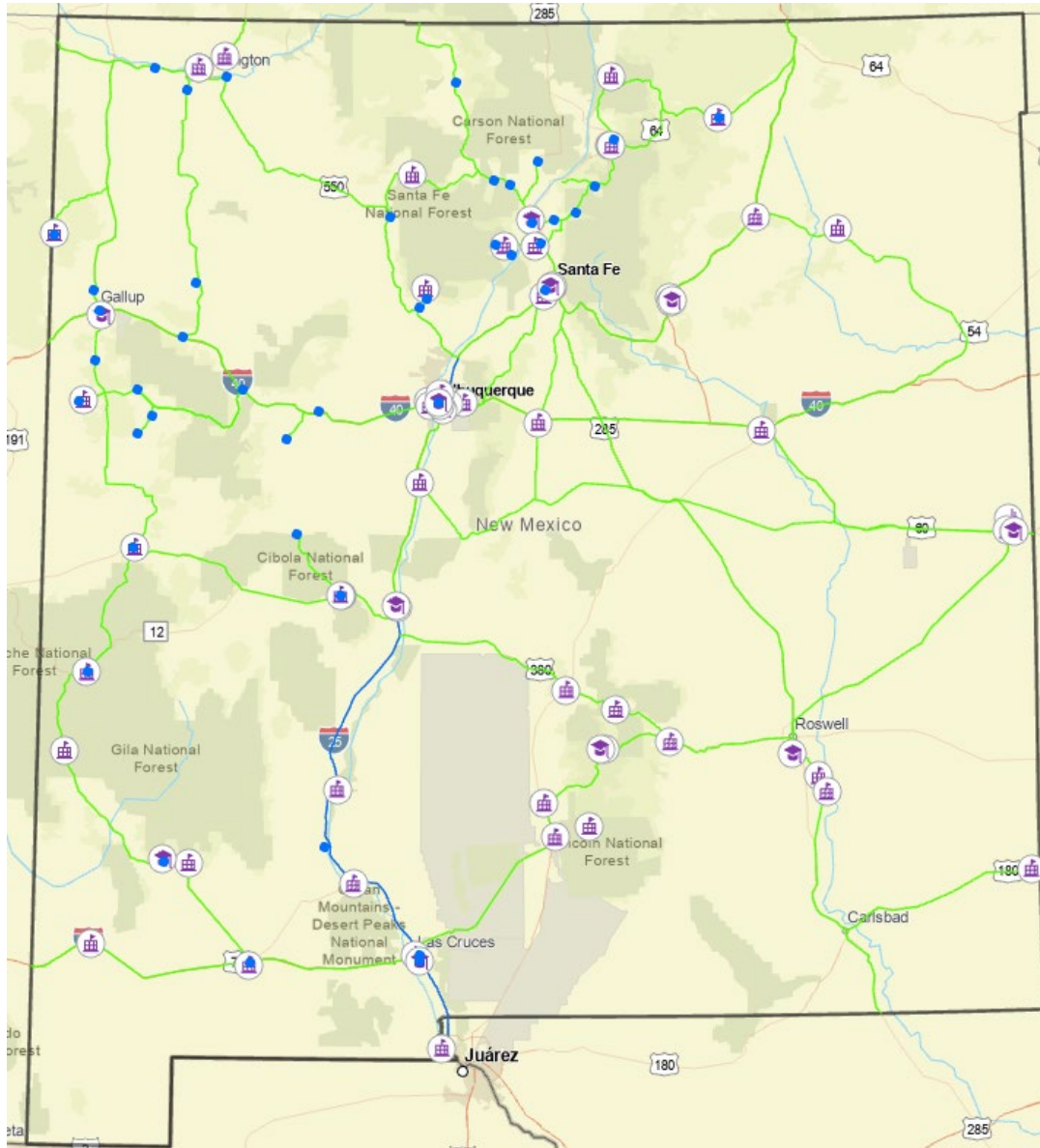
SEN is foundation for the State Middle Mile

- Major routes
- Nodes
- “Meet me” and aggregation points
- Upgrading facilities electrical systems

Scenarios for MM NTIA Applications





The Vision: New Mexico's Robust Middle Mile Network





Planning for Future Phases:


- Phases 2-4 in research stage and will be developed within the next two months.
- Engaging private sector on proposed new routes under review.
- Analyze critical corridors and extremely high-cost regions for expansion

 SEN Hub Site

 SEN School Site

 Data Center

 Priority MM Route

 Other Possible MM Route

Remove Obstacles on ROW and Permits

- Partnership with DOT – lower/ remove permits & fees for trade of fiber access
- ROW on Tribal/Pueblo Lands may be obtained thru fees, trade or circumnavigation
 - Tribals Convening on Sept 12
 - Exclusive ROW can drive selection of sole source provider
 - NTIA and BIA Sign Agreement to streamline Environmental Permitting for High-Speed Internet Projects on Tribal Lands
- ROW/Permits on Federal Land (BLM, National Forest etc.) is longest timeline
 - CNMC Working group led by Ovidiu Viorica
 - Prescriptive approval process and timelines can be longer than a year
 - OBAE Director initiated engagement with points of contact (POC)
- ROW/Permits with State Land Office
 - Prescriptive approval process and timelines can be long
 - OBAE Director initiated engagement with POC
- NMDOT to brief on ROW details

OBAE Next Steps

- **CY-3Q22**

- Build staff and office capacity,
- Award first pilot program grants (ARPA Capital Projects Fund),
- RFI for additional stakeholder feedback ahead of NTIA MM submission,
- Submit NTIA MM application - September 30,
- Tribal Summit Sept 12 and “Digital Inclusion Week” event – October 3-7,
- Complete rulemaking for Connect NM Broadband Grant Program,
- Complete written Statewide Broadband Strategic Plan, and
- Researching ROW and Permits.

- **CY-4Q22**

- Phase 1 of 4 detailed Digital Equity planning,
- Plan community and tribal surveys,
- Phase 1 of detailed BEAD Planning,
- Onboard new OBAE staff,
- Support SEN buildout,
- Progress Rural Early Wins, and
- Strategy for ROW and Permits.

Rural Site Visits: Iyanbito and Wingate





APPENDIX

Notice of Funding Opportunity

- Announcement of Notice of Funding Opportunity (NOFO) and press released week of August 8 for ARPA Capital Projects Fund (\$123M)
 - Fund “ready” Middle Mile and Last Mile projects
 - Application, Handbook and Method of Submittal, 4 Webinars
 - Three Types of Projects:
 - Fiber to the Premise (FFTP),
 - Fixed Wireless(FW) (where FFTP is not feasible)
 - Alternative Technologies (where Fixed Wireless is not feasible)
 - Technical Assistance will be available
 - Grant reviewers being identified and trained
 - Three waves: Now till Sept 23; Dec 9 and Feb 27
- *Subject to Appropriation

All 3 technologies help rural areas

Broadband Funding Award Highlights

USDA Reconnect Program - Rural Development (July 2022)

- Continental Divide Electric Cooperative Inc.(Cibola and McKinley Counties) \$3,681,000
- Eastern New Mexico Rural Telephone Cooperative (Chaves, Colfax, DeBaca, Guadalupe, Harding, Lincoln, San Miguel, Torrance, and Union Counties) \$14,749,747
- Peñasco Valley Telecom (Chaves Eddy, Lincoln, and Otero Counties) \$28,927,570
- Tularosa Basin Telephone Company Inc. (Lincoln and Otero Counties) \$5,825,102
- Valley Telephone Cooperative (Hidalgo and Luna County) \$44,924,000

Broadband Equity Fund Grants - NM Broadband Collective (June 2022)

- Colores United (Luna County) \$75,000
- Picuris Pueblo (Taos County) \$59,904
- True Kids 1 (Taos County) \$33,000
- Pueblo of Cochiti (Sandoval) \$40,500
- Pueblo of Laguna Utility Authority (Cibola County) \$71,596
- Yee Ha'oolniidoo (San Juan and McKinley Counties) \$75,000

Tribal Broadband Connectivity Program - NTIA & Department of Commerce (Fall 2021)

- Taos Pueblo Planning, Feasibility, and Sustainability Studies (Taos County) \$477,817

BEAD Planning: Overview of **PROPOSED** Methodology

Workstream 1 Strategy & Planning

Workstream 2 Outreach & Engagement

Workstream 3 Data Collection & Analysis

Workstream 4 Develop & Execute Funding Program

5-Year
Action
Plan:
summer
2023

- Develop vision, mission, & values
- Develop goals & metrics
- Design or document broadband office operating model

- Identify stakeholders
- Develop & execute outreach
- Establish broadband office operating model

- Create Cost Optimization
- Develop planned Funding Utilization Model
- Conduct impact analysis
- Conduct Asset Inventory
- Document current grant & deployment programs
- Identify funding
- Review mapping data

- Develop grant strategy based on Funding Utilization Model
- Develop workforce strategy
- Publish 5-Year Action Plan

Initial
Proposal:
late
2023

- Prioritize projects, technologies, geographies, & subrecipient eligibility
- Draft Integrated Master Schedule

- Continue outreach & engagement

- Review FCC maps
- Challenge FCC maps
- Update Cost Optimization Model
- Update Funding Utilization Model

- Refine grant strategy based on Funding Utilization Model
- Publish Initial Proposal
- Solicit public comment
- Submit Initial Proposal

Final
Proposal:
2024

- Finalize projects, technologies, geographies, & subrecipients
- Finalize Integrated Master Schedule

- Continue outreach & engagement

- Incorporate public comment
- Run challenge process

- Execute grant program cycles
- Submit Final Proposal

New Mexico Broadband Grant Program Map

Published August 5, 2022.

Speed/Technology Grant Eligibility

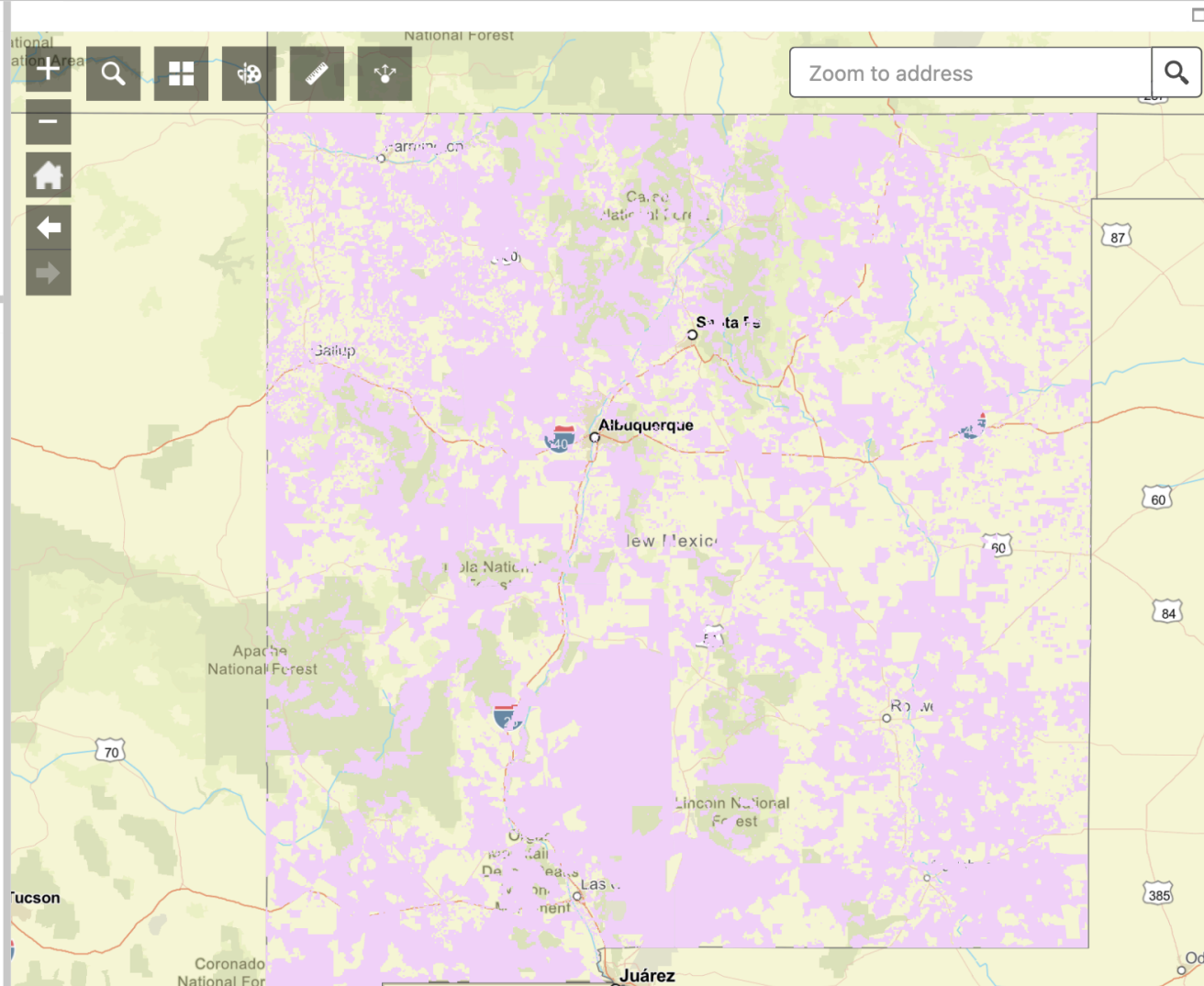
Layers

- Area Lacking 100 Mbps Download / 20 Mbps Upload (Wireline)
- Area Lacking 100 MBPS Download / 20 Mbps Upload (Wireline) No Prior Awards

General State Projects Federal

Layers

- Connect America Fund (CAF) I Awarded Area (2017)
- Connect America Fund (CAF) II Awarded Area (2018)
- Rural Digital Opportunity Fund (RDOF) Awarded Area (2020)
- USDA ReConnect Loan and Grant Program FY20 - 100% Loan
- USDA ReConnect Loan and Grant Program FY20 - 100% Grant
- USDA ReConnect Loan and Grant Program FY2022 - 50/50% Loan/Grant Under Review
- USDA ReConnect Loan and Grant Program FY2022 - 100% Grant Under Review
- USDA ReConnect Loan and Grant Program FY2022 - 100% Loan Under Review
- USDA ReConnect Loan and Grant Program FY2022 - 100% Grant Tribal/SV Community Under Review
- FCC 2.5 GHz Rural Tribal Applications



Rural areas are dependent on a robust Middle Mile framework and its funding/construction timeline, but leap frog activities are also being sought

Speed Test About Funding



New Mexico Broadband Program
Office of Broadband Access and Expansion
Department of Information Technology



Legend Print

Area Lacking 100 MBPS Download / 20 Mbps Upload (Wireline) No Prior Awards



County Boundary



Tribal Land



NTIA FUNDING TIMELINES

Timeline approximate unless exact date specified



Digital Equity Program

Administrative Entity: State of New Mexico

Planning Funds: \$740,534.91

Planning Window: Through Fall 2023

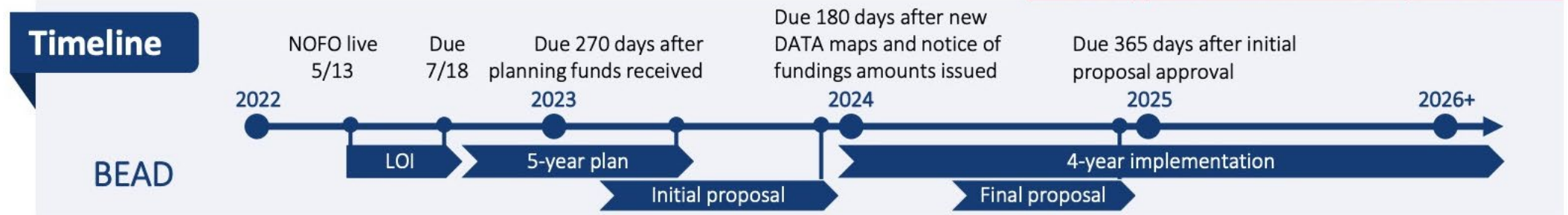
BEAD Program

Administrative Entity: State of New Mexico

Planning Funds: \$5,000,000

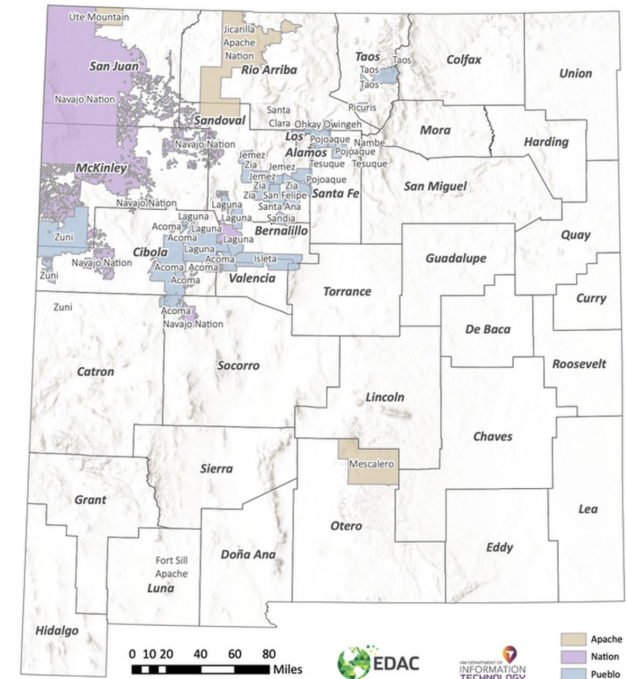
Planning Window: Through Summer 2023*

Timeline approximate unless exact date specified



Benchmark Data by County

The Office of Broadband Access and Expansion (OBAAE) has commissioned the development of County "Benchmark Data" from nationally recognized "authoritative" sources. These data are to be presented publicly using an online interactive infographic application. These data can be downloaded and used by communities in preparation of funding proposals or to present to stakeholders the need for improved broadband.



Map produced by: Earth Data Analysis Center; Data Sources: US Census, RGIS; Base map: "World Topographic Map" and "World Hillshade", by Esri, NASA, NGA, USGS, New Mexico State University, Texas Parks & Wildlife, HERE, Garmin, SafeGraph, METI/NASA, Bureau of Land Management, EPA, NPS, USDA

OBAE Duties

100% Connectivity

- NTIA Fund Applications (Middle Mile (MM), BEAD, TCP, Digital Equity)
- ARPA Fund Applications; USDA Fund Applications
- Coordination with neighboring states
- Grant making to providers or municipalities
- Technical Assistance on Planning, Applications & Deployment
- State coordinated MM Statewide Education Network Buildout Support

Digital Equity

- Broadband Adoption
- Digital Inclusion
- Devices
- Training and Help Desk
- Affordability

Community/Tribal Outreach

- County outreach; Tribal/Pueblo outreach
- Surveys
- Speed tests
- Information flow; BB Summits
- Technical assistance
- Needs and Requirements; Coordination with Indian Affairs Department

GIS Mapping

- Identifying served and unserved areas
- Knowledge of network locations
- ISP, Telco, Coop coordination
- FCC map coordination

Doña Ana Broadband

- Information
- Surveys
- Outreach
- Press
- Materials
- Data
- Dashboard
- Reports



Local Coalition Highlights

Engaged a wide range of organizations and agencies; Met consistently over a period of time; Identified champions; Established systems for communicating and sharing information; Leveraged skills and assets of stakeholders; Provided clear opportunities for stakeholders to participate; and Deployed a community survey and speed test

Website: <https://www.DonaAnaBroadband.com>

Broadband Survey Pilot

- Two Versions: I HAVE Internet I Do NOT Have Internet
- In English and Spanish
- Online and Offline via: Web QR Code Download, Print, and Mail Tablet Version (offline)

The image displays two versions of the survey: English and Spanish. The English version is titled "Doña Ana County Home and Business Internet Access" and "Doña Ana County Connectivity Survey". It includes a "Section 1 - General Information" with a "1.01 Location Pin" section featuring a map. Below this are various questions about internet service availability, usage, and barriers. The Spanish version is titled "Doña Ana County Internet Access" and "Doña Ana County Conectividad Survey". It follows a similar structure with questions about internet service and usage. Both versions include a mailing label at the bottom with fields for name, address, city, state, and zip code.

Report

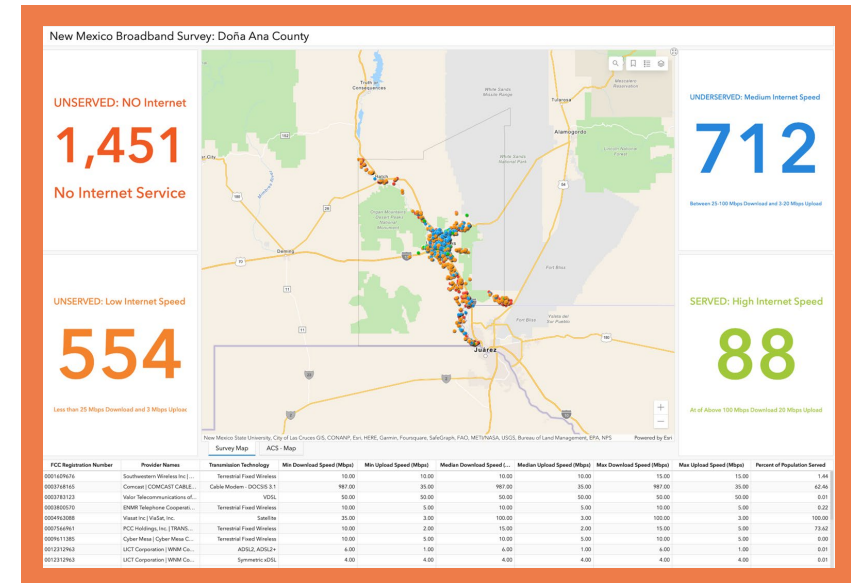
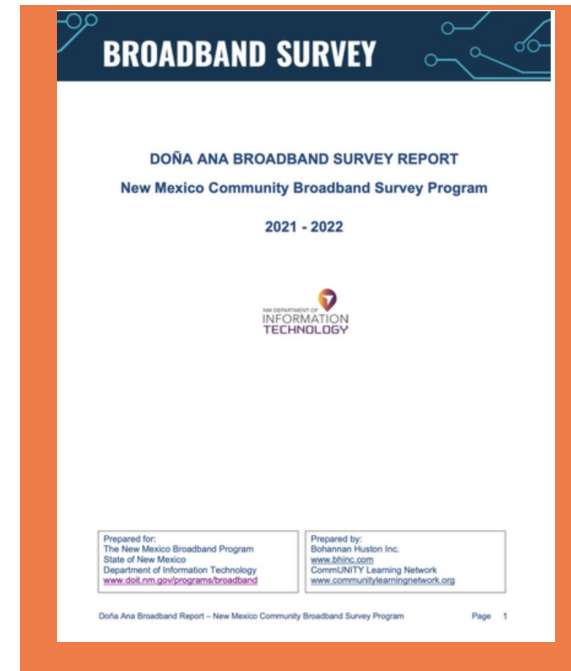
www.donaanabroadband.com/survey-report

Data

www.donaanabroadband.com/data-december-2021

Dashboard

<https://www.arcgis.com/apps/dashboards>



Leapfrog possibilities for Rural Areas

- Certain Regions and Counties amenable to Fixed Wireless
 - Deployment is months instead of years
 - Fiber must be within range (5-10 miles)
 - Cost is 1/3 the price
- Certain regions and Counties need alternative technologies
 - Example is Sceye High Altitude Platform Stations (tower in the sky)
 - Significantly less towers and fiber required
 - Working with Economic Development Dept (EDD) for funding
 - Encouraging application for ARPA Notice of Funding Opportunity
- Investigating rural medical clinics quick connectivity to save rural citizens to drive to specialist appts
- Rural areas benefit from Statewide education network as meet me points for eventual FFTH
- Digital Equity and Community Engagement is through the County
- ROW and Permit work is major piece of rural network connectivity
- Serving the unserved and underserved where not commercially viable is major mission of state