Five-Year Action Plan

Broadband Equity, Access, and Deployment (BEAD) Program

Office of Broadband Access & Expansion

State of New Mexico

August 2023

Contents

Figures

Tables

On the cover: The Albuquerque International Balloon Fiesta

1. Executive summary

The Office of Broadband Access and Expansion (OBAE),[1] the Eligible Entity for the State of New Mexico, is pleased to present this Broadband Equity, Access, and Deployment (BEAD) Program Five-Year Action Plan. This Plan incorporates a comprehensive needs assessment (including the needs of covered populations and underrepresented communities) and establishes New Mexico's goal to deliver broadband, and the opportunities that broadband provides, to all residents of New Mexico.

The BEAD Program, established by the Infrastructure Investment and Jobs Act, provides $42.45 billion nationwide to fund the planning and deployment of broadband infrastructure and programs that promote broadband adoption, with the goal to "get all Americans online."[2] To support the expansion of broadband access, the program prioritizes unserved locations—i.e., those receiving service below 25/3 Mbps—and then underserved locations, which are defined as those receiving between 25/3 Mbps and 100/20 Mbps.

OBAE has written this Five-Year Action Plan to be responsive to the requirements established by the National Telecommunications and Information Administration (NTIA) under the Infrastructure Investment and Jobs Act. This document does not require detailed cost modeling data or a grant strategy; those elements of OBAE's planning currently are being developed in anticipation of the State's Initial Proposal document, which NTIA requires to be submitted by the end of 2023.

[1] OBAE is administratively attached to the New Mexico Department of Information Technology (NM DoIT) for budget and expenditure oversight.

[2] "BEAD Info Sheet," NTIA, https://www.internetforall.gov/sites/default/files/2022-05/BEAD%20Info%20Sheet%20-%20IFA%20Launch%20-%20Final.pdf.

1.1 Vision and goals

New Mexico is a land with a rich history of culture, art, and adventure. The State is home to 23 sovereign Pueblos, Nations, and Tribes, many of whom created a permanent residence over 1,000 years ago.[3] It one of the most rural states with approximately 17 people per square mile.[4] New Mexico is also the fifth largest state in the U.S., measuring 121,365 square miles with diverse geography from forests to deserts to altitudes.[5] This vast landscape has made it more difficult for the State to ensure all New Mexicans have access to broadband—yet New Mexico is dedicated to connecting the rich cultural history of its diverse people to its future through universal broadband.

The State of New Mexico recognized that broadband internet access plays a foundational role in economic activity, political and civic engagement, education, health care, and delivery of public services. Since then, the State has taken steps to improve broadband across New Mexico, including facilitating private sector investment, ensuring access for schools and public safety facilities, and building a foundation to comprehensively solve the State's rural broadband challenges over time.

1.1.1 Overview of OBAE

Governor Michelle Lujan Grisham appointed Kelly Schlegel as the Director of OBAE in July 2022. Over the past 12 months, Director Schlegel has worked diligently to develop the OBAE office, build a team, and coordinate efforts statewide to support accessible, reliable, affordable, and equitable internet for all New Mexicans. On a mission to provide "passionate leadership to drive bold, equitable, and inclusive broadband solutions," OBAE committed to the vision to "achieve enterprising, affordable broadband solutions for New Mexicans that honor the State's rich heritage and elevate quality of life for all." Seven values define OBAE's people, processes,

[3] "Explore New Mexico's Vibrant Native Communities and Cultures," New Mexico Tourism Department, https://www.newmexico.org/native-culture/.
[4] See https://edd.newmexico.gov/site-selection/census-data/.
[5] "New Mexico Climate & Geography," New Mexico Economic Development Department, https://edd.newmexico.gov/choose-new-mexico/climate-geography/.

planning, and programs, including: “courageous, honest, curious, innovative, respectful, collaborative, and analytically rigorous.”

Ramping up over the past 12 months, OBAE is building the team. In addition to the Director, Operations Manager, and an initial Project Manager, OBAE has also hired three more Project Managers, an Operations Manager, a Grants Manager, a Compliance Manager, General Counsel, a Geographic Information Officer, an Executive Assistant to the Director, and a new Public Information Officer.

OBAE is in the process of hiring a Tribal Liaison, a Digital Equity Manager, and will be posting additional positions, as well. OBAE also oversees a team of consultants and partner organizations that support broadband and digital equity efforts, including a Tribal Engagement consultant.

OBAE has also coordinated integration and management of a broadband team of five to oversee the Broadband Development Connectivity Program (BDCP) and development of the Statewide Education Network (SEN) that was initiated under the Public School Facilities Authority (PSFA).

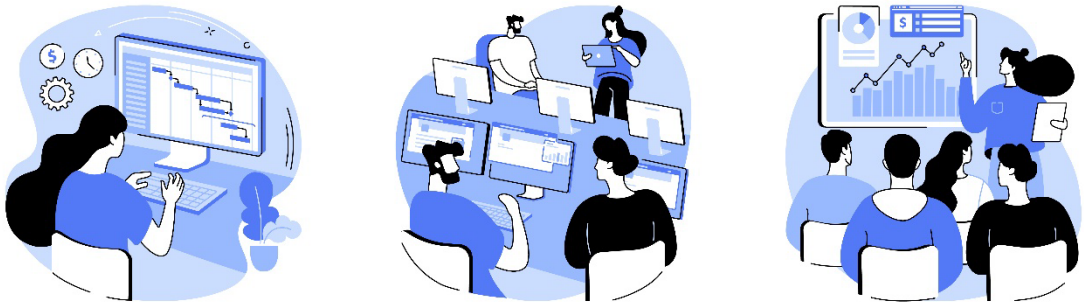
In January 2023, OBAE released a Three-Year Broadband Plan that provides an assessment of broadband availability and adoption across New Mexico and a comprehensive overview of the State’s broadband strategy.

1.1.2 Overview of vision and goals

OBAE's Three-Year Plan (2023) establishes a vision for the Office to "achieve bold, affordable broadband solutions for New Mexicans that honor the State's rich heritage and elevate quality of life for all."[6]

While the State's efforts have helped to narrow the digital divide within New Mexico, gaps remain—and the State recognizes that further progress requires both expanding broadband deployment and improving digital equity, which the Connect New Mexico Act (2021)[7] defines as "information technology needed for civic and cultural participation, employment, education, business and economic development, lifelong learning and access to essential services generally available to residents regardless of their racial grouping, socioeconomic status or cultural identity."

The goal of this Five-Year Action Plan is to deliver affordable, reliable, high-speed broadband—and the opportunities that broadband provides—to all residents of New Mexico.



As established by OBAE's Three-Year Plan, OBAE's primary goals for broadband in the State are universal availability of terrestrial-based, high-speed, scalable broadband networks and widespread adoption and meaningful use of the internet, with program stewardship by OBAE that ensures the utmost transparency and accountability for grantees and the government agencies issuing funds.

1.2 Current state of broadband and digital inclusion

New Mexico's work on expanding broadband access began years ago, with strong participation in federal programs including the American Recovery and Reinvestment Act (ARRA) of 2009, the U.S. Department of Agriculture's ReConnect program, the Universal Service Fund programs, and more.

[6] "State of New Mexico Three-Year Broadband Plan," OBAE, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf.

[7] "Connect New Mexico Act," https://nmlegis.gov/Sessions/21%20Regular/final/HB0010.pdf, Section 2.

Building on efforts to date, the State Legislature passed two pieces of legislation in 2021 to better coordinate broadband deployment efforts among different State entities:[8] The Broadband Access and Expansion Act (Senate Bill 93)[9] and The Connect New Mexico Act (House Bill 10).[10]

The Broadband Access and Expansion Act created OBAE. The Connect New Mexico Act established the Connect New Mexico Council as a co-coordinator of State broadband programs[11] and created the Connect New Mexico Fund to support a competitive broadband grant program. The Fund received appropriations totaling $100 million through Senate Bill 377 (2021).[12]

OBAE utilized American Rescue Plan Act (ARPA) funding to launch the Connect New Mexico Pilot Program in 2022 as a forerunner for the Connect New Mexico Broadband Grant Program. The pilot program provides infrastructure grants for broadband deployment to unserved and underserved communities across New Mexico. Awards from two waves of funding have been announced to date, representing a total investment of approximately $82.6 million (including matching funding) to serve 15,7810 locations, with a third wave of funding announced in March 2023. The application period for the third wave of funding closed on April 3, 2023. The State plans to announce the final set of awards in early Fall 2023.

While the State has made strides to increase broadband availability across New Mexico, gaps persist. According to analysis of the FCC's address fabric (May 2023) and other data sources, 84 percent of locations in the State are served at speeds of 100/20 Mbps or greater, including locations slated to receive 100/20 connectivity under enforceable commitments such as the FCC's Rural Digital Opportunity Fund (RDOF) awards or State grants. Approximately 8 percent of

[8] "Broadband," DoIT, https://www.doit.nm.gov/programs/broadband/.
[9] Broadband Access & Expansion Act, New Mexico Senate Bill 93, 2021, https://nmlegis.gov/Sessions/21%20Regular/final/SB0093.pdf.
[10] Connect New Mexico Act, New Mexico House Bill 10, 2021, https://nmlegis.gov/Sessions/21%20Regular/final/HB0010.pdf.
[11] The Council has established the following work groups: Tribal Working Group; Digital Equity & Inclusion; Connect New Mexico Grant Program; Mapping, Data & Evaluation; Regional Planning & Community Engagement; and Permits, Pole Attachments, Right-of Way; "Connect New Mexico Council, DoIT, https://www.doit.nm.gov/programs/broadband/connect-new-mexico-council/.
[12] New Mexico Senate Bill 377, 2021, https://nmlegis.gov/Sessions/21%20Regular/final/SB0377.pdf.

locations are unserved, and another 8 percent are underserved. The vast majority of the State's remaining unserved locations are in rural areas, making the cost of deploying broadband challenging.

Broadband adoption rates in the State lag neighboring States and the nation as a whole, per 2021 American Community Survey data, and vary widely across the State—with over 70 percent of households in some western counties reporting that they do not subscribe to wireline internet service.

The cost of available service is an obstacle for many households. Internet subscription rates in the State are heavily correlated with household income, and the State sees a greater disparity in subscription rates between low-income and higher-income households than the national average and neighboring states.

Since its inception, OBAE has been dedicated to listening to diverse voices from across the State to inform its planning work. To gather community input about the current state of digital equity in New Mexico and engage stakeholders in BEAD and Digital Equity Planning, OBAE facilitated or otherwise supported more than 150 community engagement events in 2022, including nine engagements with 23 Pueblos, Tribes, and Nations (or 100 percent of the Tribal Nations in New Mexico), [13] and more than 200 stakeholder engagement sessions in 2023. Comprehensive outreach efforts are ongoing as of the writing of this Plan.

1.3 Obstacles or barriers

OBAE has identified a range of potential obstacles or barriers that it will seek to mitigate. As discussed in Section 4, these include:

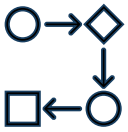
- **Funding availability** – While NTIA's BEAD allocation and the funds allocated by the State Legislature are significant, the total amount of funding available will not enable deployment of fiber broadband infrastructure to all unserved locations in the State (see Section 5.6). OBAE also will not have enough funding to address the needs of underserved locations or community anchor institutions (CAI) that lack 1 gigabit service.

- **Balancing technology limitations and costs** – Recognizing the high cost of fiber deployment in the State's extensive rural areas, fixed wireless technology may be well-suited to some portions of the State. Fixed

[13] "State of New Mexico Three-Year Broadband Plan," OBAE, January 1, 2023, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf.

wireless, however, comes with substantial limitations in performance and also has higher operational and equipment replacement costs as compared to fiber networks.

- **Addressing permitting requirements across State, federal, Tribal, and local jurisdictions** – New Mexico's land ownership patchwork, combined with its significant environmental resources and rich archaeological history, make permitting long fiber routes especially challenging. Permitting on federal lands in particular can cause significant delays.



- **Accessing the rights-of-way** – Rights-of-way in the State are controlled by a patchwork of sometimes overlapping State and federal agencies, Tribes and Pueblos, municipalities, and other authorities having jurisdiction, some of which lack sufficient resources and clear processes for quickly permitting right-of-way use approval. Accessing poles to add new aerial attachments—and the overall cost of make-ready in the rights-of-way—are also potential obstacles.

- **Accessing sufficient middle-mile fiber** – Many of the State's unserved and underserved communities lack access to robust middle-mile infrastructure, making it less cost-effective for service providers to extend or upgrade their last-mile networks.

- **Resolving conflict between the FCC's Broadband Map and New Mexico's map**[14] – Both in terms of availability and fabric, the State seeks guidance on which data sources the NTIA will accept. The State is working to ensure that feedback from the community is received and adjudicated accurately by the FCC.

- **Addressing potential noncompliance with the enforceable buildout commitments of "[a]n enforceable commitment for the deployment of qualifying broadband to a location"**[15] – The BEAD rules prohibit the State from allocating funds to areas that will be served by Rural Digital

[14] "New Mexico Broadband Mapping Program," University of New Mexico Earth Data Analysis Center (EDAC), https://edac.unm.edu/nmbb/. The NMBB Map, http://nmbbmapping.org/mapping/, is an interactive map built on ESRI's ArcGIS Server API for Flex. The map is credited to the New Mexico DoIT Offices of Broadband and Geospatial Technology.

[15] As defined in the BEAD NOFO, https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf, fn.52, p. 36.

Opportunity Fund (RDOF)-funded projects, but those projects have not yet been constructed.

1.4 Implementation plan

This Plan presents the State's estimated costs, timeline, and strategies for achieving universal service, along with strategies related to remedying inequities in digital inclusion (see Section 5).

1.4.1 Priorities

The State's primary objectives for broadband deployment are aligned with the principal focus of the BEAD Program:[16]

1. Serving 100 percent of unserved locations (i.e., below 25/3 Mbps)
2. Serving 100 percent of underserved locations (i.e., between 25/3 and 100/20)
3. Delivering gigabit connections to certain community anchor institutions that do not have that level of service

Further, as the digital divide encompasses not just access to internet services but also the adoption and meaningful use of those services, OBAE will prioritize digital equity initiatives that will be developed through ongoing community engagement and development of the Digital Equity Act Plan. These initiatives may include, by way of example and not limitation:

- Improve broadband speeds, increasing the median broadband speeds available to New Mexicans
- Increase the broadband adoption rate (percentage of households that subscribe to and use the internet)
- Enhance digital skills among New Mexico residents
- Improve telehealth access
- Improve distance learning access

[16] "NOFO: BEAD Program," NTIA, https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf, at p. 7.

- Foster digital equity through libraries, chapter houses, senior centers, community centers, and community anchor institutions by encouraging access to computers, the internet, and digital skills programs
- Increase consumer knowledge of internet privacy and security
- Encourage affordable broadband offerings by ISPs, including low-cost plans for lower-income households
- Ensure accessibility of public websites for people with disabilities

1.4.2 Estimated timeline and cost for universal service

The State does not have sufficient funding from BEAD alone to reach all unserved and underserved locations with fiber—a topic that is discussed in this Plan and will be discussed in greater detail in the Initial Proposal.

A preliminary analysis of the FCC data (May 2023) indicates that the total capital cost for extending high-speed, end-to-end fiber broadband to both unserved and underserved locations is approximately $2.81 billion to $4.12 billion over the period of performance. In this scenario, the buildout of primary fiber-to-the-premises infrastructure and customer activations extends through the performance period. The State recognizes that cost is dependent on a variety of factors and conditions, including but not limited to engineering, design and permitting, construction materials and labor costs, take-rates for participating ISPs and comparing economics of extending existing networks into new areas versus those of a completely new provider.

However, New Mexico was only allocated approximately $675.4 million.[17] Even if matching funds raise the total to $1 billion, New Mexico faces a significant shortfall that will challenge the State's creativity and partners. In the 2023 legislative session, OBAE sought $500 million from the State for the Connect New Mexico Fund and sought to replenish the Fund in FY 2025 based on the analysis of capital requirements conducted for the BEAD program.[18]

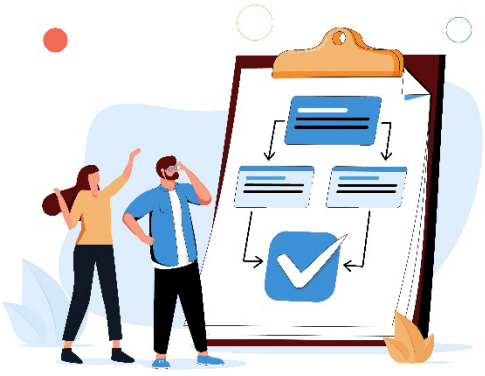
[17] "Biden-Harris Administration Announces State Allocations for $42.45 Billion High-Speed Internet Grant Program as Part of Investing in America Agenda," NTIA press release, June 26, 2023, https://ntia.gov/press-release/2023/biden-harris-administration-announces-state-allocations-4245-billion-high-speed.
[18] "New Mexico Broadband Plan Update," OBAE, January 1, 2023, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p.104.

Guided by the BEAD program requirements, the State will seek to achieve universal service during the period of performance for BEAD projects through a subrecipient selection process. Based on the cost estimate presented in this Plan, achieving universal service will require matching funds and other funding sources, and will involve the use of a mix of terrestrial-based technologies (e.g., fiber and fixed wireless) and non-terrestrial technologies for very remote locations. Specific buildout scenarios and options will be developed in the forthcoming Initial Proposal.

1.5 Confirmation that this BEAD Five-Year Action Plan meets minimum requirements

This Five-Year Action Plan meets minimum requirements as outlined in the NOFO and summarized in Section 7.1 of the NTIA's "Five-Year Action Plan: Guidance" document:

Requirement	Section in this Plan
1. Details of existing broadband program of office within the Eligible Entity	Section 3 Appendices
2. Funding the Eligible Entity has available	Section 3.1 Appendices
3. Existing efforts funded by the federal government	Section 3.1
4. Employees and contract support	Section 3.1
5. Obstacles or barriers	Section 4
6. Asset inventories	Section 3.3 Appendices
7. Description of external engagement process	Section 3 Section 5.1 Appendices
8. Broadband availability and adoption data	Section 3 Section 5
9. Broadband service needs and gaps	Section 3 Section 5
10. Comprehensive, high-level plan, including timeline and cost for universal service	Section 5
11. Digital equity and inclusion needs, goals, and implementation strategies	Section 3 Section 5
12. Alignment of the Plan with other efforts and priorities	Section 5
13. Technical assistance and capacity needed for successful implementation	Section 5.8



2. Overview of the Five-Year Action Plan

2.1 Vision

The State of New Mexico's vision, as set forth in the Office of Broadband Access and Expansion's (OBAE) Three-Year Broadband Plan (2023), is to "achieve bold, affordable broadband solutions for New Mexicans that honor the State's rich heritage and elevate quality of life for all." To carry out this vision, the Office has established a mission of "passionate leadership to drive bold, equitable, and inclusive broadband solutions."[19]

The criticality of broadband to the life of New Mexicans has never been more apparent. Even before the Covid-19 pandemic, broadband internet access had become foundational to economic activity, political and civic engagement, education, health care, and delivery of public services.[20]

The State of New Mexico recognized this urgency and has taken steps to improve broadband in all areas of the State; to support and facilitate private-sector investment in broadband; to ensure that schools and public safety facilities have access to robust broadband services; and to lay the groundwork for solving New Mexico's rural broadband challenges comprehensively over time.[21]

The Connect New Mexico Act,[22] passed in 2021, reflects the State's goal of universal broadband and digital equity. The Act defines "digital equity" as "information technology needed for civic and cultural participation, employment, education, business and economic development, lifelong learning and access to essential services generally available to residents regardless of their racial grouping, socioeconomic status or cultural identity." It defines "digital inclusion" as "access to and the ability to use information technologies."

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[19] "State of New Mexico Three-Year Broadband Plan," OBAE, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf.

[20] "State of New Mexico Broadband Strategic Plan and Rural Broadband Assessment," NM DoIT, June 2020, https://www.doit.nm.gov/wp-content/uploads/sites/4/2022/03/nmbbp_strategic20200616Rev2Final.pdf, p.8.

[21] *Id.*

[22] "Connect New Mexico Act," https://nmlegis.gov/Sessions/21%20Regular/final/HB0010.pdf, Section 2.

As described in more detail below, the goal of this Five-Year Action Plan is to deliver affordable, reliable, high-speed broadband—and the opportunities that broadband provides—to all residents of New Mexico.

This Five-Year Action Plan provides a roadmap regarding the State of New Mexico's strategy to reduce or eliminate the digital divide over the next five years, with a sequence of specific activities supported by funding from the BEAD program as well as other sources including New Mexico's own funding.

2.2 Goals and objectives

2.2.1 Goals

OBAE's Three-Year Broadband Plan (2023) set primary goals for broadband in the State, including the following.[23] (The first, second, and fourth goals are the focus of the BEAD Five-Year Action Plan; the third goal is complementary.)

1. **Universal availability of terrestrial-based, high-speed, scalable broadband networks**: New Mexican residents and businesses should have access to terrestrial-based high-speed broadband networks that reliably deliver at least 100/20 Mbps (download/upload) by 2029—the period when planned grant-funded broadband networks should be deployed. This speed constitutes the current federal definition of "served."

   All terrestrial networks funded by the State's grant programs should offer at least 100/100 Mbps unless the applicant can demonstrate extraordinary circumstances limiting this speed. In such cases, the networks must offer 100/20 Mbps and be scalable to at least 100/100 Mbps.

   To meet the 100/100 Mbps standard, New Mexico aims to prioritize fiber-based networks—given their distinct advantages of being sustainable and "future ready" with relatively lower operating and upgrade expenditures. For those highly remote communities where terrestrial networks cannot be deployed due to extraordinarily high costs or technical barriers, the State will consider initiatives to foster non-terrestrial solutions.

2. **Widespread adoption and meaningful use of the internet:** All New Mexicans should have the opportunity to adopt the internet. This can occur at home, an office, a community institution, or through a mobile device. All New Mexicans should be offered the support to overcome adoption challenges—which may include programs to enable affordability,

[23] "State of New Mexico Three-Year Broadband Plan," OBAE, January 1, 2023, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf.

obtain devices, receive digital literacy training, or have high-quality access at a nearby community institution.

Secondly, all New Mexican broadband adopters should meaningfully use the internet's myriad of valuable digital applications to advance their social and economic standing (e.g., health, education, workforce, civic and social services). The quality and innovation of online resources increase every year, thereby yielding valuable tools for both residents (e.g., e-learning, telehealth, workforce skills development) and businesses (e.g., online marketplaces, cloud-hosted applications performing real-time functionality).

3. **Advancement of next-generation statewide networks:** New Mexico's ambition of being the most connected State necessitates several other broadband deployment investments beyond the BEAD Five-Year Action Plan, including:
    a. A Statewide Education Network (SEN) that connects all interested public schools and public libraries together through scalable, reliable, affordable, and secure internet, and a complementary initiative, the Pueblo Education Network (PEN), which is focused on Tribal schools and libraries;
    b. Geographically comprehensive open-access middle-mile networks that offer reasonably priced, high-speed lit services and dark fiber to facilitate backhaul and support private links for government, large enterprises, data centers, educational institutions, and others requiring at least 1 Gbps connectivity;
    c. Universal mobile 5G coverage that spans across all rural communities and highly trafficked roadways; and
    d. Network architectures that offer resiliency, redundancy, and security.
4. **Program stewardship:** The result of universal broadband availability, widespread adoption, and meaningful usage, along with complementary statewide next-generation networks, will constitute a generational achievement involving significant public investment and time. The public expects accountability from both the government agencies issuing the funds and the awardees (grantees) receiving the funds.

    Thus, OBAE recognizes the immense value of program stewardship. OBAE leadership and staff are committed to the utmost transparency and accountability of its programs. Moreover, OBAE will actively monitor our awardees and hold them accountable for all programmatic and compliance requirements.

Collectively, the State's goals encompass an interconnected network system that provides widespread connectivity, resiliency and redundancy, safety and security, and customer choice through public-private collaboration (as described in greater detail in Section 3 and Section 5).

2.2.2 Objectives

In support of these goals, the State has set the following objectives:

Goal 1: Universal broadband availability

- *Objective 1:* Provide grant funding to enable broadband deployment.
- *Objective 2:* Ensure robust data for spatial data management and analytics to maintain current and accurate broadband maps.
- *Objective 3:* Remove deployment barriers related to permits, rights-of-way, and pole attachments (PROP).
- *Objective 4:* Implement a workforce development strategy to support a large, highly skilled broadband workforce across the State.
- *Objective 5:* Provide technical assistance programs to empower local communities to effectively participate in grant-funding programs.

Goal 2: Broadband adoption and meaningful usage

- *Objective 1*: Achieve 2023 programmatic requirements for the NTIA-administered Digital Equity Program.
- *Objective 2:* Support broadband affordability by maximizing participation in the FCC Affordable Connectivity Program.
- *Objective 3:* Foster digital equity and inclusion within Tribal communities.

Goal 3: Next-generation statewide networks

- *Objective 1:* Launch the SEN and support middle-mile expansion through public-private collaboration.
- *Objective 2:* Expand coverage of mobile broadband and public safety networks.
- *Objective 3:* Ensure statewide network resiliency and security.

Goal 4: Program stewardship

- *Objective 1:* Ensure transparency and accountability for OBAE regarding programs, initiatives, and results.
- *Objective 2:* Foster accountability for grantees regarding all programmatic and compliance requirements.

3. Current state of broadband and digital inclusion

This section describes the current state of broadband and digital inclusion in New Mexico, as documented through rigorous and comprehensive data collection and stakeholder outreach efforts. It begins with an overview of the State's past and current efforts to promote broadband deployment and digital equity; describes the resources and relationships available to the Office of Broadband Access and Expansion (OBAE, the Eligible Entity); presents detailed asset inventories related to broadband deployment, adoption, affordability, and access, and digital equity; and presents a needs and gaps assessment.

New Mexico faces challenges related to the lack of broadband availability across the State's extensive remote and rural areas.[24] To that end, in 2021, the State Legislature passed bills to better coordinate dispersed broadband deployment efforts among different State entities: The Broadband Access and Expansion Act [25] and The Connect New Mexico Act.[26]

The Broadband Access and Expansion Act created the Office of Broadband Access and Expansion (OBAE), which was initially administratively attached to the New Mexico Department of Information Technology for budget and expenditure oversight. This Act tasked OBAE with creating and implementing a statewide broadband plan.

The Connect New Mexico Act established the Connect New Mexico Council, which is composed of representatives from State entities and Tribal governments as well as qualified members of

[24] "New Mexico Broadband Plan Update," OBAE, January 1, 2023, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p.6.
[25] See 63-9J-1 to 63-9J-4 NMSA 1978, https://nmonesource.com/nmos/nmsl/en/item/18129/index.do#!fragment/undefined/BQCwhgziBcwMYgK4DsDWsBGB7LqC2YATqgJIAm0cAjAEwDMEVAlADTJYAuAphAIqJdCAT2gByUSwhciCfoJHjJ0wggDKWQhwBCIgEoBRADL6AagEEAcgGF9LDmAzQOWOEyZA, Broadband Access & Expansion Act, 2021, compiled at 2021 Laws, Chapter 123 §1. See also New Mexico Senate Bill 93, 2021, "https://nmlegis.gov/Sessions/21%20Regular/final/SB0093.pdf.
[26] See Sections 1 through 7 [63-9K-1 to 63-9K-7 NMSA 1978], Connect New Mexico Act 2021, Compiled at 2021 Laws, Chapter 120 § 1. See also, New Mexico House Bill 10, 2021, https://nmlegis.gov/Sessions/21%20Regular/final/HB0010.pdf.

the public, as a co-coordinator of State broadband programs with OBAE.[27] The Act also created the Connect New Mexico Fund to support a competitive broadband grant program—the requirements of which are to be established by the Council. This Fund received appropriations totaling $100 million through Senate Bill 377 (2021).[28]

As a forerunner to this grant program, OBAE launched the Connect New Mexico Pilot Program in 2022, supported by $117 million in funding from the American Rescue Plan Act (ARPA) Capital Projects Fund (CPF).[29] This program provides infrastructure grants for broadband deployment to unserved and underserved communities across New Mexico. To date, the Pilot Program has awarded approximately $91.4 million (including matching funding) to serve 15,900 locations,[30, 31] with applications for a third round of funding currently being reviewed as of the writing of this Plan.[32]

OBAE and the Council are working together to define broadband availability and enhance its adoption[33] through several statewide projects, cataloged in Table 1 below.

[27] The Council is composed of members representing the following organizations: Apache governments, Pueblo governments, the Navajo Nation, New Mexico Department of Cultural Affairs, New Mexico Department of Economic Development, New Mexico Department of Higher Education, New Mexico Department of Information Technology, New Mexico Department of Transportation, New Mexico Mortgage Finance Authority, and New Mexico Public Schools Facilities Authority. In addition, per Section 3(B) of the Connect New Mexico Act the Council has five members of the public "who have experience with broadband access and connectivity challenges for either private business or public institutions," one appointed by each of the following: Speaker of the New Mexico House of Representatives, Minority Floor Leader of the New Mexico House of Representatives, President Pro Tempore of the New Mexico Senate, Minority Floor Leader of the New Mexico Senate, and the Governor. The Council has established the following work groups: Tribal Working Group; Digital Equity & Inclusion; Connect New Mexico Grant Program; Mapping, Data & Evaluation; Regional Planning & Community Engagement; and Permits, Pole Attachments, Right-of Way; "Connect New Mexico Council, DoIT, https://connect.nm.gov/cnm-council.html.
[28] Senate Bill 377 (2021), https://nmlegis.gov/Sessions/21%20Regular/final/SB0377.pdf.
[29] "Treasury Announces Two Additional Capital Projects Fund Awards to Increase Access to Affordable, High-Speed Internet," Treasury press release, December 8, 2022, https://home.treasury.gov/news/press-releases/jy1152.
[30] "Governor announces broadband expansion funding for initial Connect New Mexico Pilot Program awardees," press release from the New Mexico Office of the Governor, November 10, 2022, https://www.governor.state.nm.us/2022/11/10/governor-announces-broadband-expansion-funding-for-initial-connect-new-mexico-pilot-program-awardees/.
[31] "Governor Lujan Grisham Announces $17 Million in Broadband Grant Awards to Bridge the Digital Divide in Unserved, Economically Distressed Communities," press release from the New Mexico Office of the Governor, March 28, 2023, https://connect.nm.gov/uploads/1/4/1/9/141989814/wave_2_pilot_program_announcement.docx.
[32] "Office of Broadband Access and Expansion Announces Third Wave of Connect New Mexico Pilot Program Funding," DoIT, March 3, 2023, https://www.doit.nm.gov/2023/03/03/office-of-broadband-access-and-expansion-announces-third-wave-of-connect-new-mexico-pilot-program-funding/; as of the writing of this Plan in August 2023, OBAE is reviewing Wave 3 applications (see, https://www.doit.nm.gov/programs/broadband/connect-new-mexico-pilot-program/.)
[33] "Broadband," NM DoIT, https://www.doit.nm.gov/programs/broadband/.

Since its inception, OBAE has been dedicated to listening to diverse voices from across New Mexico and incorporate their feedback into its planning work. In 2022, OBAE facilitated or otherwise supported more than 150 community engagement events, including working group meetings, community listening sessions, workshops, forums, and local and Tribal stakeholder sessions to build awareness, inspire action, and mobilize local, regional, and statewide support for broadband improvement and BEAD and Digital Equity planning. This outreach included nine engagements with 23 Pueblos, Tribes, and Nations (or 100 percent of the federally recognized Tribal nations in New Mexico) to foster digital equity and inclusion.[34] OBAE is working with NTIA and the Pueblos, Tribes, and Nations to coordinate additional engagement. OBAE also held regional meetings, a statewide broadband summit, and other events in spring 2023,[35] and outreach efforts are ongoing as of the writing of this Plan.

The State's investment in broadband deployment to date has also been complemented by additional federal funding: more than $186 million in grants to 15 Tribal entities for middle-mile and last-mile infrastructure and planning through the Tribal Broadband Connectivity Program. As of July 2023,[36] 10 New Mexico ISPs received approximately $251 million through the USDA ReConnect program,[37] and approximately $165 million[38] to 18 winning bidders in Phase I of the FCC Rural Digital Opportunity Fund (RDOF) auction. [39]

3.1 Existing programs

The table below identifies OBAE's current and recent activities and programs (including stakeholder engagement conducted for purposes of the BEAD Five-Year Plan); its previous statewide plans comprising goals for the availability of broadband; and its prior experience awarding broadband deployment grants. A list of stakeholder engagement efforts conducted in 2022 is included in Appendix A.

[34] "State of New Mexico Three-Year Broadband Plan," OBAE, January 1, 2023, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf.

[35] "Spring Sprint," Connect New Mexico, https://connect.nm.gov/spring-sprint.html.

[36] "Funding Awards," Connect New Mexico, https://connect.nm.gov/funding-awards.html. The total includes over $57 million for the Santa Fe Indian School and the Pueblo Indian Network (PEN). The Navajo Tribal Utility Authority also received a grant of more than $50 million for a project that is listed in Arizona by the NTIA but may deploy fiber in areas of New Mexico. It is not included in this Five-Year Action Plan or in this total.

[37] Total includes grants and loans in Rounds One through Four; Panhandle Telephone Cooperative, Inc. was also awarded approximately $43 million in Round Four for a project serving locations in one county in New Mexico and two counties in Oklahoma. "ReConnect Loan and Grant Program," USDA, https://www.usda.gov/reconnect.

[38] "FCC Rural Digital Opportunity Fund Phase I Auction State Results Summary," FCC, December 7, 2020, https://docs.fcc.gov/public/attachments/DA-20-1422A3.pdf.

[39] Resound Networks, the largest bidder in both subsidy amount ($55,183,614.20 over 10 years) and locations (over 18,000), received final clearance to proceed from the FCC in December 2022; see Three-Year Plan, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p. 50.

Table 1: Current activities that the New Mexico Office of Broadband Access and Expansion conducts

Activity name	Description	Intended outcome(s)
State of New Mexico Broadband Strategic Plan and Rural Broadband Assessment[40]	Released in June 2020, this plan analyzed quantitative data to identify the State's unserved locations, estimated the costs for infrastructure solutions, examined the role of broadband in the State's economy, and provided recommendations for a State broadband grant program.	Identified that between 13 and 20 percent of New Mexico locations did not have broadband available; established the foundation for the current New Mexico Digital Equity Strategy.
Three-Year Broadband Plan[41]	Per SB 93, OBAE released a statewide Three-Year Broadband Plan in 2023, and is required to provide an annual update to the Governor and Legislature on the plan.	Assesses broadband services across New Mexico, defines the key strategic goals to measure progress, summarizes recent progress, and defines specific initiatives and action items for 2023—many of which extend into 2024-2025.
New Mexico Broadband Map[42]	DoIT, in partnership with the University of New Mexico Earth Data Analysis Center, maintains an interactive online map of available broadband internet services by technology, based on data	Shows broadband coverage across the State, highlighting the gap areas in which broadband buildout will be needed to fully serve New Mexico's populations.

[40] "State of New Mexico Broadband Strategic Plan and Rural Broadband Assessment," DoIT, June 2020, https://www.doit.nm.gov/wp-content/uploads/sites/4/2022/03/nmbbp_strategic20200616Rev2Final.pdf.
[41] "New Mexico Broadband Plan Update," OBAE, January 1, 2023, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf.
[42] "New Mexico Broadband Map," https://nmbbmapping.org/mapping/.

Activity name	Description	Intended outcome(s)
	reported by ISPs and FCC data.[43]	
New Mexico Regional Broadband Meetings	Held in spring 2023; residents could meet State and local officials, learn about broadband initiatives and funding opportunities, share local stories, and participate in development of the statewide New Mexico Broadband and Digital Equity Plans.[44]	Engage community members in the development of the State's BEAD and Digital Equity (DE) Plans.[45]
Broadband Listening Sessions	OBAE hosted online Broadband Listening Sessions in May and June 2023 to gather feedback from the stakeholder groups identified in the BEAD NOFO.	Engage key stakeholders across the State in the development of the State's BEAD and DE Plans.
Internet for All New Mexico Broadband Summit	Statewide summit hosted in May 2023 by OBAE, NTIA, the Connect New Mexico Council, New Mexico Association of Counties, and New Mexico League of Municipalities.[46]	Engage community members in the development of the State's BEAD and DE Plans. There was a total of 372 participants, with 260 attending in person and 112 virtually. According to NTIA, this participation made it the highest-attended local coordination event in the nation.
Broadband Tribal	OBAE is conducting ongoing individual meetings with	Engage community members in the development of the

[43] 2022 Annual Report, OBAE, https://api.realfile.rtsclients.com/PublicFiles/16569e3bf98c467e95901b46fd511499/743c6949-8171-4386-9f3d-45a4296893cc/obae-annual-report-2022.pdf.
[44] "Regional Meetings," Connect New Mexico, https://connect.nm.gov/regional-meetings.html.
[45] "Spring Sprint," Connect New Mexico, https://connect.nm.gov/spring-sprint.html.
[46] "Statewide Summit," Connect New Mexico, https://connect.nm.gov/statewide-summit.html.

Activity name	Description	Intended outcome(s)
Engagements	Tribes, Nations, and Pueblos to gather feedback and understand broadband barriers.	State's BEAD and DE Plans.
Network Operators' Conference	A technical conference in May 2023 centered on broadband and networking and run by networking professionals to help other networking professionals.[47]	Engage community members in the development of the State's BEAD and DE Plans; 58 participants attended the conference.
Let's Get Going Broadband Bootcamps	This one-day broadband bootcamp helped local governments, elected officials, nonprofits, foundations, and digital equity advocates orient themselves and develop a better understanding of the broadband landscape in order to support collective development of effective solutions.[48]	Engage community members in the development of the State's BEAD and DE Plans. Two one-day bootcamps were facilitated at Doña Ana Community College and at Tesuque Pueblo, with 78 participants.
New Mexico Tribal Broadband Convening	This event, hosted in 2022, brought together Tribal leaders, IT staff, and representatives from a range of agencies, including OBAE, the New Mexico Department of Transportation, the New Mexico Indian Affairs Department, the Department of Information Technology, and the State Library, as well as NTIA and Federal	The group of 74 participants explored challenges and shared best practices in broadband infrastructure and access.

[47] "Network Operators Conference," Connect New Mexico, https://connect.nm.gov/network-operators-conference.html.
[48] "Let's Get Going Bootcamps," Connect New Mexico, https://connect.nm.gov/lets-get-going-bootcamps.html#.

Activity name	Description	Intended outcome(s)
	Communications Commission (FCC) representatives.[49]	
New Mexico Broadband Speed & Quality Testing[50]	DoIT hosts a speed test, which it encourages residents to conduct repeatedly during the week and at different times in the day to help DoIT analyze the difference between peak hour load and low use periods.[51]	Identify those areas within New Mexico having inadequate broadband service.
Map Challenge	OBAE hosts an online "Map Challenge" that encourages residents to submit a challenge to the FCC National Broadband Map or submit information for OBAE to file a challenge on their behalf.[52]	Ensure the accuracy of the FCC map to secure an appropriate allocation of funding for the State. Challenging inaccuracies within the maps is especially important in New Mexico, where initial reviews indicate that some areas reflect significantly overestimated coverage: New Mexico's overreport rate is estimated at 18.27 percent.[53]
County Broadband Benchmark Data[54]	Benchmark data for broadband access and speeds were collected for all 33 New Mexico counties and form the basis of online data	Help policymakers find areas in their respective regions where funding and programmatic investments are most needed.

[49] "2022 Annual Report," OBAE, https://api.realfile.rtsclients.com/PublicFiles/16569e3bf98c467e95901b46fd511499/743c6949-8171-4386-9f3d-45a4296893cc/obae-annual-report-2022.pdf.
[50] Available at https://nmbbmapping.org/survey/.
[51] "NM Broadband Speed & Quality Testing," DoIT, https://www.doit.nm.gov/programs/broadband/new-mexico-broadband-speed-quality-testing/.
[52] "Map Challenge," Connect New Mexico, https://connect.nm.gov/map-challenge.html.
[53] "What is the FCC Map Challenge?" Connect New Mexico, https://connect.nm.gov/what-is-the-fcc-map-challenge1.html.
[54] "Benchmark Data," Connect New Mexico, https://connect.nm.gov/benchmark-data.html.

Activity name	Description	Intended outcome(s)
	dashboards developed for each county.[55]	
Community Anchor Site Assessment (CASA)	As a second mapping initiative, NM DoIT is analyzing socio-economic factors that contribute to broadband adoption and compiling a robust dataset of anchor institutions.	This dataset is the first within New Mexico of these institutions requiring broadband services, including schools, medical facilities, libraries, fire departments, government buildings, and others. CASA will support adoption planning for infrastructure.[56]
Connect New Mexico Pilot Program	This program, administered by OBAE, utilizes $117 million in ARPA CPF funding to provide infrastructure grants for broadband deployment to unserved and underserved communities across New Mexico.[57]	Two waves of funding have been announced, representing a total investment of approximately $82.6 million (including matching funding) to serve 15,781 locations.[58][59] Applications for Wave 3 close in April 2023.[60] Serves as a forerunner to the Connect

[55] "2022 Annual Report," OBAE, https://api.realfile.rtsclients.com/PublicFiles/16569e3bf98c467e95901b46fd511499/743c6949-8171-4386-9f3d-45a4296893cc/obae-annual-report-2022.pdf.
[56] "New Mexico Broadband Mapping Program (NMBBP)," DoIT, https://www.doit.nm.gov/programs/broadband/mapping/.
[57] "Connect New Mexico Pilot Program," DoIT, https://www.doit.nm.gov/programs/broadband/connect-new-mexico-pilot-program/.
[58] "Governor announces broadband expansion funding for initial Connect New Mexico Pilot Program awardees," press release from the New Mexico Office of the Governor, November 10, 2022, https://www.governor.state.nm.us/2022/11/10/governor-announces-broadband-expansion-funding-for-initial-connect-new-mexico-pilot-program-awardees/.
[59] "Governor Lujan Grisham Announces $17 Million in Broadband Grant Awards to Bridge the Digital Divide in Unserved, Economically Distressed Communities," press release from the New Mexico Office of the Governor, March 28, 2023, https://connect.nm.gov/uploads/1/4/1/9/141989814/wave_2_pilot_program_announcement.docx.
[60] "Office of Broadband Access and Expansion Announces Third Wave of Connect New Mexico Pilot Program Funding," DoIT, March 3, 2023, https://www.doit.nm.gov/2023/03/03/office-of-broadband-access-and-expansion-announces-third-wave-of-connect-new-mexico-pilot-program-funding/; as of June 2023, OBAE is reviewing Wave 3 applications (see, https://www.doit.nm.gov/programs/broadband/connect-new-mexico-pilot-program/.)

Activity name	Description	Intended outcome(s)
		New Mexico Broadband Grant Program, which was established in 2021 under the Connect New Mexico Act, was allocated $70 million from the Connect New Mexico Fund, and was subject to administrative rulemaking[61] as required by law. Together the Connect New Mexico programs will deliver nearly $187 million in broadband expansion grants over the next few years.[62]
New Mexico Technical Assistance Program (NM TAP)[63]	TAP has engaged with Tribes, county governments, and rural providers to assist in developing broadband plans that can provide a roadmap to applying for BEAD funds. Additionally, TAP has worked with NTIA awardees to review their funding gaps and assist in finding cost savings. TAP also works with the Connect New Mexico Pilot program to assist with curing.	Produce the insights and data that the recipient organizations need to build their broadband planning and deployment capacity and lay the groundwork for solving New Mexico's rural broadband challenges comprehensively over time. As of the end of 2022, 11 counties and municipalities have sought and received assistance from the program;

[61] "Notice of Proposed Rulemaking 1.12.21," NM DoIT, December 22, 2022, https://www.doit.nm.gov/2022/12/22/notice-of-proposed-rulemaking-1-12-21/. These rules took effect April 11, 2023. See: "Order Approving Promulgation of Grant Program Rules," https://api.realfile.rtsclients.com/PublicFiles/16569e3bf98c467e95901b46fd511499/1a274af4-580c-4c60-8ac6-7f5a22e8770b/Order_Adopting_Rules.pdf.

[62] "Gov. Lujan Grisham launches statewide broadband grant pilot program," Press release from the Office of the Governor, August 10, 2022, https://www.governor.state.nm.us/2022/08/10/gov-lujan-grisham-launches-statewide-broadband-grant-pilot-program/.

[63] "New Mexico Technical Assistance Program," https://connect.nm.gov/nm-technical-assistance.html. DoIT was awarded a U.S. Economic Development Administration (US EDA) CARES Act Recovery Assistance grant to provide technical assistance to qualified government entities including Tribal governments, utility coops, companies, non-profits, and communities that are seeking to deploy or expand broadband infrastructure and/or services.

Activity name	Description	Intended outcome(s)
		four projects are complete and seven are ongoing.[64]
Broadband for Education – NM Homework Gap Team	In response to the COVID-19 pandemic, NM DoIT, the New Mexico Public Education Department (PED), NM Indian Affairs Department (IAD), Public Schools Facility Authority (PSFA), Department of Cultural Affairs (DCA) and State Library, Santa Fe Indian School (SFIS), the Navajo Nation, and community organizations partnered to provide home internet access and devices to students for remote learning.[65]	This initiative distributed 700 hotspots, 6,200 Chromebooks, and 102 Cradlepoints to Tribal communities, as well as working with ISPs to obtain quotes for quick-to-deploy broadband access solutions for 12,000 addresses/19,000 students in unserved areas.[66] The initiative also coordinated and installed public Wi-Fi hotspots at schools and libraries statewide—supplementing ISP-installed public hotspots.[67]
Cybersecurity Planning Committee	The Committee was established by Executive Order in September 2022[68] in response to the Notice of Funding Opportunity for the State and Local Cybersecurity Grant Program (SLCGP) from the U.S. Department of Homeland Security. Per the Order, DoIT is designated as	Develop an eligible cybersecurity plan for the purpose of applying to the SLCGP, which is intended to assist State, local, and territorial governments with managing and reducing systemic cyber risk and advise the Governor on legislative action to

[64] "State of New Mexico Three-Year Broadband Plan," OBAE, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p. 81.
[65] "New Mexico Homework Gap Team," CommUNITY Learning Network, https://www.communitylearningnetwork.org/nm-homework-gap-team.html.
[66] "Overview," Broadband for Education, http://www.broadband4education.nm.gov/overview.aspx.
[67] "New Mexico Homework Gap Team: HotSpot Mapping," CommUNITY Learning Network, https://www.communitylearningnetwork.org/nm-homework-gap-team.html.
[68] Executive Order 2022-141, issued by Governor Michelle Lujan Grisham on September 23, 2022, https://www.governor.state.nm.us/wp-content/uploads/2022/09/Executive-Order-2022-141.pdf.

Activity name	Description	Intended outcome(s)
	the State Administrative Agency to submit the State's SLCGP application, and the Acting Secretary of DoIT serves on the Committee.[69]	implement the plan. The Legislature created the State's Cybersecurity Office in 2023.[70]
New Mexico Community Broadband Survey Program	Gather community input on a wide range of broadband factors including access, performance, costs, and training needs. The first survey—conducted in partnership with Doña Ana Broadband (DAB), an informal community coalition—was conducted in the fall of 2021 and distributed in both English and Spanish.	The Doña Ana Broadband Survey Report was released in March 2022.[71] The survey collected 3,028 responses, including 1,553 responses from community members who indicated they do not have internet at home.
Local Broadband Planning Guide[72]	Released in January 2022, the Local Broadband Planning Guide provides a phased approach to support local communities in deploying broadband infrastructure that addresses communities' connectivity challenges.	Promote community improvement towards broadband availability and adoption.
New Mexico Broadband Program (NMBBP)	The State was awarded a $4.8 million grant by NTIA through the State Broadband	Supported the creation of the New Mexico Broadband

[69] "Cybersecurity Planning Committee," DoIT, https://www.doit.nm.gov/programs/cybersecurity/cybersecurity-planning-committee/.
[70] "Cybersecurity Act," Chapter 9 - Executive Department - NMOneSource.com. See also: SB 280, https://www.nmlegis.gov/Sessions/23%20Regular/final/SB0280.pdf.
[71] "Doña Ana Broadband Survey Report," prepared for NM DoIT by Bohannan Huston Inc. and CommUNITY Learning Network, https://www.doit.nm.gov/wp-content/uploads/sites/4/2022/07/Dona-Ana-Broadband-Survey-Report-2022_Final.pdf.
[72] "Local Broadband Planning Guide," OBAE, https://www.doit.nm.gov/wp-content/uploads/sites/4/2022/03/NMBBP_Local_Broadband_Guidance_Final.pdf.

Activity name	Description	Intended outcome(s)
	Initiative (SBI) to provide mapping, planning, capacity building, and technical assistance for broadband access and services. The grant was awarded for a period of five years and managed by DoIT.[73]	Map,[74] as well as the Regional Broadband Implementation Plan and Digital Literacy Regional Pilot Project (discussed in the following rows).
Regional Broadband Implementation Plan (RBIP)	Developed through the NMBBP, the goal of the RBIP was to bring regional stakeholders, providers, and the State together to facilitate the expansion and promotion of broadband use in unserved areas of New Mexico. Three pilot regions were chosen for the project.[75]	Development of a strategic business plan for each of the three pilot regions in 2015.[76]
Digital Literacy Regional Pilot Project (DLRPP)	The establishing grant for the NMBBP also included support for digital literacy training. As a companion project to RBIP, field work with New Mexico communities in the three pilot regions helped identify	Development of the New Mexico Broadband Digital Literacy Strategic Plan

[73] "The New Mexico Broadband Program Digital Literacy Strategic Plan," prepared for DoIT by Cirrus Consulting, December 8, 2014, https://www.doit.nm.gov/wp-content/uploads/sites/4/2022/03/nmbbp_digital_literacy_strategic_plan.pdf.
[74] "New Mexico Broadband Mapping Program," University of New Mexico Earth Data Analysis Center, https://edac.unm.edu/nmbb/.
[75] "The New Mexico Broadband Program Digital Literacy Strategic Plan," prepared for DoIT by Cirrus Consulting, December 8, 2014, https://www.doit.nm.gov/wp-content/uploads/sites/4/2022/03/nmbbp_digital_literacy_strategic_plan.pdf.
[76] See, Northeast Economic Development Organization (NEEDO) Strategic Plan, https://www.doit.nm.gov/wp-content/uploads/sites/4/2022/03/NMBBP_RBIP_NEEDO_Report.pdf; Southwest New Mexico Council of Governments (SWNMCOG) Strategic Plan, https://www.doit.nm.gov/wp-content/uploads/sites/4/2022/03/NMBBP_RBIP_SWCOG_Report.pdf; Northwest New Mexico Council of Governments (NWNMCOG) Strategic Plan, https://www.doit.nm.gov/wp-content/uploads/sites/4/2022/03/NMBBP_RIBIP_NWCOG_Report.pdf.

Activity name	Description	Intended outcome(s)
	resources and construct local solutions.[77]	
New Mexico Broadband Digital Literacy Strategic Plan	Released in 2014, the plan includes comparative analyses with other states, targets strategic sectors, reviews the New Mexico Broadband Regional Pilot Projects implemented throughout the State, and presents recommendations.[78]	The report found the need for digital skills training in New Mexico to be high and the current provision of training to be low, and recommended a program that can integrate training into appropriate existing institutions and support those institutions already providing training.
New Mexico Community Broadband Master Plan Guidebook[79]	Explores a range of proven technical, business, and partnership models and frankly assesses the benefits and risks of each model, so that communities can determine the best option for their unique circumstances.	A 2013 guidebook to help communities find the best approach to providing broadband to all their citizens.
New Mexico Regional Broadband Implementation Plan Framework	A September 2012 report secured by the NM Broadband Program to provide a working framework toward the collaborative planning, design, and implementation of broadband infrastructure	A series of Regional Broadband Implementation Plan (RBIP) pilot engagements within the state that included the southwest, northeast, and

[77] "The New Mexico Broadband Program Digital Literacy Strategic Plan," prepared for DoIT by Cirrus Consulting, December 8, 2014, https://www.doit.nm.gov/wp-content/uploads/sites/4/2022/03/nmbbp_digital_literacy_strategic_plan.pdf.
[78] "The New Mexico Broadband Program Digital Literacy Strategic Plan," prepared for DoIT by Cirrus Consulting, December 8, 2014, https://www.doit.nm.gov/wp-content/uploads/sites/4/2022/03/nmbbp_digital_literacy_strategic_plan.pdf.
[79] "The New Mexico Broadband Program Community Broadband Master Plan Guidebook," DoIT, March 2013, https://www.doit.nm.gov/wp-content/uploads/sites/4/2022/03/NM_Broadband_Guidebook_v1_1_final.pdf.

Activity name	Description	Intended outcome(s)
	within regional areas of New Mexico.[80]	northwest regions of the State.[81]
New Mexico Broadband Map[82]	The map, managed by the University of New Mexico's Earth Data Analysis Center (EDAC), incorporates a combination of provider-submitted data and similar data sets from the FCC. It is updated biannually to reflect access and speed data by geolocation across the State. Layers within these data sets reflect different types and localities of internet access in New Mexico, including census tract level information.	The map is an important tool for OBAE as it highlights the gap areas in which broadband buildout will be needed to fully serve New Mexico's populations.
Ongoing outreach and engagement efforts (2022 – 2023)	OBAE facilitated or otherwise supported more than 150 community engagement events in 2022 including working group meetings, community listening sessions, workshops, forums, and local and Tribal stakeholder sessions (see Appendix A).	The goal is to build awareness, inspire action, and mobilize local, regional, and statewide support for broadband improvement and BEAD and Digital Equity planning.

[80] "OBAE Documents Library," DoIT, https://www.doit.nm.gov/programs/broadband/obae-documents-library/ .
[81] See, for example: "Summary of Pilot Region Engagement with NW Council of Governments (NWCOG)," January 2015, https://www.doit.nm.gov/wp-content/uploads/sites/4/2022/03/NMBBP_RIBIP_NWCOG_Report.pdf. See also: https://www.doit.nm.gov/wp-content/uploads/sites/4/2022/03/NMBBP_RBIP_NEEDO_Report.pdf and https://www.doit.nm.gov/wp-content/uploads/sites/4/2022/03/NMBBP_RBIP_SWCOG_Report.pdf.
[82] "2022 Annual Report," OBAE, https://api.realfile.rtsclients.com/PublicFiles/16569e3bf98c467e95901b46fd511499/743c6949-8171-4386-9f3d-45a4296893cc/obae-annual-report-2022.pdf.

The tables below identify the current and planned full- and part-time employees and contractors who will assist in implementing and administering BEAD-funded activities and programs to achieve OBAE's goals and objectives.

Table 2: Current and planned full-time and part-time employees

Current/ planned	Full-time/ part-time	Position	Description of role
Current	FT	Broadband Director	The Broadband Director is the head of the Office of Broadband Access and Expansion.
Current	FT	Executive Assistant	The Executive Assistant is the first point of contact for the Director.
Current	FT	General Counsel	The General Counsel is the chief legal counsel for the Office of Broadband Access and Expansion.
Current	FT	IT Project Manager III	The TAP Manager is responsible for managing the Technical Assistance Program for governmental, Tribal, and ISP partners on broadband projects.
Current	FT	IT Project Manager III	The GIO Manager is responsible for managing the geospatial information for the State and is the project designer for broadband mapping.
Current	FT	A/O II – Planned IT PM IV	Originally the deputy director role, the office is in the process of changing this vacancy into the head of the Project Management Office and head of the Albuquerque office.

Current/ planned	Full-time/ part-time	Position	Description of role
Current	FT	A/O I – Planned Gen II	Originally the Operations Manager for the office, this role is changing into the Program and Operations Manager.
Current	FT	Program Coordinator II	The Compliance Manager is responsible for Federal and State reporting and compliance across all OBAE programs.
Current	FT	Program Coordinator I	The Grants Manager is responsible for managing grant programs and applicant data in the grants management software as well as applying for new federal, state, and private grants.
Current	FT	IT Project Manager III	Broadband PM 1 manages awarded projects in district 1.
Current	FT	IT Project Manager III	Broadband PM 2 manages awarded projects in district 2.
Current	FT	IT Project Manager III	Broadband PM 3 manages awarded projects in district 3.
Current	FT	IT Project Manager III	Broadband PM 4 manages awarded projects in district 4.
Current	FT	IT Project Manager III	Broadband PM 5 manages awarded projects in district 5.
Current	FT	IT Project Manager III	Broadband PM 6 manages awarded projects in district 6.
Current	FT	Program Coordinator I	The BEAD Program Coordinator is the programmatic designer and

Current/ planned	Full-time/ part-time	Position	Description of role
			contact for program applicants and stakeholders.
Current	FT	Program Coordinator I	The ARPA Program Coordinator is the programmatic designer and contact for program applicants and stakeholders.
Current	FT	Bus Ops Spec-A	The Broadband Admin Specialist tracks and monitors OBAE administrative paperwork including HR and Contracts.
Current	FT	Financial Coord-A	The Federal Funds Financial Coordinator is the designer of tracking Broadband funds across programs and SME on federal funding use and purposes and presents financial briefings to leaders.
Current	FT	Financial Coord-A	The State Funds Financial Coordinator tracks State Funds and is the subject matter expert on their use and purpose, and also drafts and tracks contracts for the Office of Broadband.
Planned	FT	Program Coordinator II	The Tribal Program Coordinator is the programmatic designer and contact for program applicants and stakeholders.
Planned	FT	Program Coordinator II	The Digital Equity Program Coordinator is the programmatic designer and

Current/ planned	Full-time/ part-time	Position	Description of role
			contact for program applicants and stakeholders.
Planned	FT	Bus Ops Spec-A	The Business Operations Specialist is the primary support for Rights of Applications and other TAP Processes.
Planned	FT	Bus Ops Spec-A	The Grants Specialist is the primary administrative and application support for the programs staff.
Planned	FT	HR Manager I	The HR Manager leads HR and develops HR policies and procedures and serves as the subject matter expert regarding State Personnel Board Rules.
Planned	FT	HR Labor Training – A	The HR Trainer develops desk guides, onboarding training, and other OBAE training.
Planned	FT	PR Coord – A	The PR Coordinator is the Public Information Officer for the Office of Broadband.
Planned	FT	IT Project Manager III	The Workforce PM is the project manager for workforce development.
Planned	FT	Customer Service Spec – A	The customer service representative is the first point of contact on outward facing projects such as the mapping challenge and questions from the public.

Current/ planned	Full-time/ part-time	Position	Description of role
Planned	FT	IT Project Manager III	The TAP PM supports TAP recipients with project management.
Planned	FT	Engineer Tech V	The TAP Engineer supports TAP recipients with Engineering design.
Planned	FT	Urban Regional Planner	The TAP Planner supports TAP recipients with land use issues.
Planned	FT	IT CIO Manager III	The CIO is the Chief Information Officer for the Office, providing database management and IT program management for the Office of Broadband.
Planned	FT	IT PM III	The GIS PM is the project manager supporting the GIO in planning and designing the mapping requirements and system needs of the Office.
Planned	FT	GIS Specialist I	The GIS Specialist delivers new database layers and works on broadband mapping.
Planned	FT	GIS Specialist I	The GIS Specialist delivers database layers and works on broadband mapping.
Planned	FT	Lawyer III	The Lawyer III assists with drafting of legislation, rights of way agreements, and contracts.
Planned	FT	Law Clerk	The Law Clerk is the primary support and researcher for the legal team.

Table 3: Current and planned contractor support

Current/ planned	Full-time/ part-time	Position	Description of role
Current	FT	Broadband Consultants	Contractor team developing the BEAD and DE plan for review by OBAE.
Current	FT	GIS Consultants	GIS mapping team support for FCC challenges and broadband mapping, plus PM support.
Current	FT	GIS Consultants	GIS team designing the system needs and requirements for future GIS mapping needs and system design.
Current	FT	Broadband Advisor	Helps set up programs and SME on strategic plan for Statewide Broadband Plan.
Current	FT	Leadership and Process Consultant	Map State processes for OBAE on contracting, file storage, and developing employee engagement for OBAE leadership.
Current	FT	Digital Equity and Community Engagement Consultant	SME on digital equity and community engagement.
Current	FT	Tribal Engagement Consultant	SME on Tribal engagement.
Current	FT	Project Manager	Assists with network design for TAP and Statewide Broadband Plan updates.
Current	FT	Public Information Officer	Manages public communication about OBAE's programs.
Current	PT	Middle-Mile Consultant	Supports Middle Mile Grant and planning.

Current/ planned	Full-time/ part-time	Position	Description of role
Current	PT	Engineering Contractor	Helped develop and design the Middle Mile grant application to NTIA.
Current	PT	Outside Counsel	Outside counsel supporting OBAE.
Current	FT	UNM – EDAC	Provides mapping support and State data storage for broadband mapping needs.
Planned	FT	Contractor	Map 5G tower assets across carriers in the State.

The table below identifies OBAE's currently available funding for broadband deployment and other broadband-related activities.

Table 4: Broadband funding

Source	Purpose	Total	Encumbered	Expended	Available
BEAD Planning funds (federal)	BEAD planning	$5,000,000	$2,948,386	$195,766	$1,885,848
Digital Equity Planning funds (federal)	Digital Equity planning	$740,534	$500,000	$0	$240,534

Source	Purpose	Total	Encumbered	Expended	Available
Connect New Mexico Pilot Program (ARPA CPF funds)	CNMP Pilot Program	$117,000,000	$37,173,659	$0	$79,826,341
ARPA administrative funds (federal)	Administrative funds for CNMP Program	$6,066,812	$2,104,313	$307,790	$3,654,709
Rural Broadband Fund (State funds)	For infrastructure and planning in rural New Mexico	$10,000,000	$2,360,092	$6,967,736	$672,172
Navajo ROW Match (State funds)	Money for State match for Navajo Nation project	$3,000,000	$2,166,099	$833,901	$0
Capital Outlay (State funds)	Severance Tax Bond for infrastructure, design, and planning	$7,048,000	$2,413,848	$47,745	$4,586,407
Northern NM STB	Severance Tax Bond for REDInet project in Rio Arriba County	$372,900	$372,900	$0	$372
State DE	State funding for digital equity	$1,000,000	$738,675	$261,325	$0

Source	Purpose	Total	Encumbered	Expended	Available
CNMF Broadband Infrastructure	Connect New Mexico Fund for infrastructure, design, and planning	$70,000,000	$172,520	$705,400	$69,122,080
CNMF Education	Connect New Mexico Fund for infrastructure for public schools[83]	$25,000,000	$0	$0	$25,000,000
CNMF Tribal, Local Government, and Co-ops	Connect New Mexico grant writing fund for Tribal and local governments, and telephone and electric co-ops	$5,000,000	$0	$0	$5,000,000

3.2 Partnerships

The table below identifies the New Mexico Department of Information Technology (DoIT) and OBAE's current and potential future partners in the development and implementation of this Plan. These partners include organizations already engaged in broadband deployment and digital inclusion efforts (e.g., local and Tribal governments, K-12 schools, higher education, ISPs) and other entities OBAE has identified as potential future collaborators.

[83] Subject to pending legislation as funding is appropriated from the State's public education reform fund.

Table 5: Partners

Partners	Description of current or planned role in broadband deployment and adoption
Connect New Mexico Council[84]	Ongoing collaborator with OBAE on broadband deployment projects
Connect New Mexico Council – Digital Equity & Inclusion Working Group	Ongoing collaborator with OBAE on broadband deployment and equity planning
Connect New Mexico Council – Mapping, Data & Evaluation Working Group	Ongoing collaborator with OBAE on broadband deployment and equity planning
Connect New Mexico Council – Regional Planning & Community Engagement Working Group	Ongoing collaborator with OBAE on broadband deployment and equity planning
Connect New Mexico Council – Tribal Working Group	Ongoing collaborator with OBAE on broadband deployment and equity planning
Connect New Mexico Council – PROP Working Group: Permits, Right of Way, Pole Attachments	Ongoing collaborator with OBAE on broadband deployment and equity planning
Connect New Mexico Council – Connect New Mexico Grant Program and Rule Making Working Group	Ongoing collaborator with OBAE on broadband deployment and equity planning
New Mexico Department of Transportation (NMDOT)	Ongoing collaborator with OBAE on broadband deployment and equity planning
New Mexico Department of Workforce Solutions (DWS)	Ongoing collaborator with OBAE on broadband deployment and equity planning
New Mexico Human Services Department (HSD)	Ongoing collaborator with OBAE on broadband deployment and equity planning

[84] Connect New Mexico Council, https://www.doit.nm.gov/programs/broadband/connect-new-mexico-council/.

Partners	Description of current or planned role in broadband deployment and adoption
New Mexico Public Education Department (PED)	Ongoing collaborator with OBAE on broadband deployment and equity planning
New Mexico Higher Education Department (HED)	Ongoing collaborator with OBAE on broadband deployment and equity planning
New Mexico Early Childhood Education and Care Department (ECECD)	Ongoing collaborator with OBAE on broadband deployment and equity planning
New Mexico Children, Youth, and Families Department (CYFD)	Ongoing collaborator with OBAE on broadband deployment and equity planning
New Mexico Department of Public Safety (DPS)	Ongoing collaborator with OBAE on broadband deployment and equity planning
New Mexico Department of Homeland Security and Emergency Management (DHSEM)	Ongoing collaborator with OBAE on broadband deployment and equity planning
New Mexico Department of Veteran Services	Ongoing collaborator with OBAE on broadband deployment and equity planning
Bureau of Land Management	Ongoing collaborator with OBAE on broadband deployment planning
New Mexico Courts	Ongoing collaborator with OBAE on broadband deployment and equity planning
County Clerks	Ongoing collaborator with OBAE on broadband deployment and equity planning
New Mexico Department of Health (DOH)	Ongoing collaborator with OBAE on broadband deployment and equity planning
New Mexico Alliance of Health Councils	Ongoing collaborator with OBAE on broadband deployment and equity planning
New Mexico Technology Council (NMTC)	Ongoing collaborator with OBAE on broadband deployment and equity planning

Partners	Description of current or planned role in broadband deployment and adoption
New Mexico Indian Affairs Department (IAD)	Ongoing collaborator with OBAE on broadband deployment and equity planning, including evaluating pilot applications for OBAE grants.
Navajo Nation Regional Partnership Council	Ongoing collaborator with OBAE on broadband deployment and equity planning
Councils of Governments (COG)	The seven COGs and/or Economic Development Districts in the State[85] are ongoing collaborators with OBAE on broadband deployment and equity planning
New Mexico Association of Counties	Nonprofit organization representing all 33 of the State's counties;[86] ongoing collaborator with OBAE on broadband deployment and equity planning
New Mexico Exchange Carrier Group (NMECG)[87]	Rural provider trade association that is a potential collaborator with OBAE
New Mexico Fiber Network[88]	Middle-mile network that is owned by local exchange carriers and is open to partnerships
Health Action New Mexico – Southern New Mexico Broadband Action Team	This nonprofit advocacy organization is working with residents of colonias, unincorporated communities in Southern New Mexico that often lack basic infrastructure, to raise awareness about broadband expansion efforts and encourage residents to participate in the State and county-level planning process.[89]
American Association of Retired Persons (AARP) New Mexico	Ongoing collaborator with OBAE on broadband deployment and equity planning
First Responder Network Authority (FirstNet)	An interoperable public safety wireless network operated by AT&T in large parts of the State

[85] "Regional Planning Districts/Council of Governments," New Mexico Department of Finance and Administration, https://www.nmdfa.state.nm.us/local-government/community-planning/regional-planning-districts-council-of-governments/.
[86] "About," NM Counties, https://www.nmcounties.org/about/.
[87] NMECG, http://nmecg.com/.
[88] "About Us," NM Fiber Network, https://www.nmfibernetwork.com/about.
[89] "Our Broadband Initiatives," Health Action New Mexico, https://www.healthactionnm.org/broadband.

Partners	Description of current or planned role in broadband deployment and adoption
AT&T	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Baca Valley Telephone Company[90]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Cibola Wireless[91]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Comcast[92]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Cricket Wireless[93]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Cyber Mesa[94]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Dell Telephone Cooperative[95]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Frontier Communications[96]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Fusion Connect[97]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Higher-Speed Internet[98]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Hughes Network Systems[99]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee

[90] Baca Valley Telephone and Sierra Communications, https://www.bacavalley.com/.
[91] Cibola Wireless, http://www.cibolawireless.net/.
[92] Xfinity, https://www.xfinity.com/.
[93] Cricket Wireless, https://www.cricketwireless.com/.
[94] "Contact Us," Cyber Mesa, https://www.cybermesa.com/Contact.htm.
[95] Dell Telephone Cooperative, https://delltelephone.com/.
[96] Frontier, https://frontier.com/.
[97] Fusion Connect, https://www.fusionconnect.com/.
[98] Higher-Speed Internet, https://higherspeed.net/.
[99] Hughes Network Systems, https://www.hughes.com/.

Partners	Description of current or planned role in broadband deployment and adoption
Jemez Pueblo Tribal Network[100]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
JNET	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
K'awaika Hanu Internet (Pueblo of Laguna Utility Authority)[101]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Kit Carson Internet – Kit Carson Electric Cooperative[102]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
La Cañada Wireless Association[103]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
La Jicarita Rural Telephone Cooperative[104]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Leaco[105]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Lobo Internet Services[106]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Lumen[107] (CenturyLink)[108]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee

[100] Theresa Davis, "Jemez Pueblo connects to high-speed internet," Albuquerque Journal, March 7, 2021, https://www.abqjournal.com/news/local/jemez-pueblo-connects-to-high-speed-internet/article_206de438-d6cb-5a44-ae58-d54295e6966d.html.
[101] "K'awaika Hanu Internet," Pueblo of Laguna Utility Authority, https://lagunaua.org/kawaika-hanu-internet.
[102] "Kit Carson Internet," Kit Carson Electric Cooperative, https://kitcarson.com/internet/.
[103] La Cañada Wireless Association, https://lcwireless.net/.
[104] La Jicarita Rural Telephone Cooperative, https://www.lajicarita.com/.
[105] Leaco, https://leaco.net/.
[106] Lobo Internet Services, https://www.lobo.net/.
[107] Lumen, https://www.lumen.com/en-us/home.html.
[108] CenturyLink, https://www.centurylink.com/.

Partners	Description of current or planned role in broadband deployment and adoption
Mescalero Apache Telecom, Inc. (MATI)[109]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Middle Rio Grande Pueblo Tribal Consortium[110]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Navajo Tribal Utility Authority[111]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
New Mexico Exchange Carrier Group (NMECG)[112]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Optimum (Suddenlink Communications)[113]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
NMSurf[114]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
NTUA Wireless[115]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
optiPulse[116]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Oso Internet Solutions[117]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee

[109] Mescalero Apache Telecom, Inc. (MATI), https://www.matinetworks.net/.
[110] "Tribal libraries, partners leverage federal E-rate to deliver high-speed connections to six pueblos, new ALA case study shows," ALA news release, September 16, 2020, https://www.ala.org/news/press-releases/2020/09/tribal-libraries-partners-leverage-federal-e-rate-deliver-high-speed.
[111] Navajo Tribal Utility Authority, https://www.ntua.com/.
[112] NMECG, http://nmecg.com/. The 10 carriers are: Bacca Valley Telephone Company (http://www.bacavalley.com/), Dell Telephone Company (https://delltelephone.com/), ENMR/Plateau (https://www.plateautel.com/), Leaco Rural Telephone Cooperative (https://leaco.net/), Penasco Valley Telephone Cooperative (https://www.pvt.com/), Tularosa Basin Telephone Company (https://www.tularosa.net/), Valley Telephone Group (https://www.vtc.net/), Western New Mexico Telephone (https://www.wnmc.com/), Windstream Telecommunications (https://www.windstream.com/), and Yucca Telecom (https://www.yuccatelecom.com/).
[113] Optimum, https://www.optimum.com/.
[114] NMSurf, https://www.nmsurf.com/.
[115] Choice (NUTA Wireless), https://www.choice-wireless.com/.
[116] optiPulse, https://www.opticalwireless.net/.
[117] Oso Internet Solutions, https://www.osointernetsolutions.com/.

Partners	Description of current or planned role in broadband deployment and adoption
Panhandle Telephone Cooperative, Inc.[118]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Plateau	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
PVT[119]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Red Bolt Internet[120]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
REDINet[121]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Resound[122]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Rio Cities[123]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Sacred Wind Communications[124]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Santo Domingo ISP[125]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Smith Bagley[126]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee

[118] PTCI, https://www.ptci.net/.
[119] PVT, https://connect.pvt.com/.
[120] Red Bolt Internet, https://redboltbroadband.com/.
[121] "About REDINet," REDINet, https://www.redinetnm.org/about-us.
[122] "About Us," Resound, https://resoundnetworks.com/about-us/.
[123] "Service Map," Rio Cities, https://riocities.net/service-map/.
[124] Sacred Wind Communications, https://sacredwindcommunications.com/.
[125] Santo Domingo ISP, https://santodomingoisp.com/.
[126] "Smith Bagley," Presentation to New Mexico Legislature, https://www.nmlegis.gov/handouts/IAC%20100322%20Item%209%20Smith%20Bagley%20Presentation.pdf.

Partners	Description of current or planned role in broadband deployment and adoption
Southwest Cyberport (SWCP)[127]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee.
Southwestern Wireless[128]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Sparklight[129]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Spectrum[130]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
TaosNet[131]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
TDS[132]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
T-Mobile	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
TrueNet Internet Services[133]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Tularosa Communications[134]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Valley TeleCom Group[135]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Verizon	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee

[127] SWCP, https://www.swcp.com/.
[128] Southwestern Wireless, http://www.southwesternwireless.com/.
[129] Sparklight, https://www.sparklight.com/.
[130] Spectrum, https://www.spectrum.com/.
[131] TaosNet, https://taosnet.com/.
[132] TDS, https://tdstelecom.com/.
[133] "Contact Information," TrueNet Internet Services, https://trunetconnect.com/contact/.
[134] Tularosa Communications, https://www.tularosa.net/.
[135] Valley TeleCom Group, https://www.vtc.net/.

Partners	Description of current or planned role in broadband deployment and adoption
Vexus Fiber[136]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Viasat[137]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Western New Mexico Communications (WNMC)[138]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Windstream	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Yucca Telecom[139]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Zayo[140]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
ZiaNet[141]	ISP that has engaged with the State on strategic discussions and may be a potential partner or future grantee
Navajo Tribal Utility Authority (NTUA)[142]	Tribal entity that is a potential collaborator with OBAE on numerous projects as well as a potential future grantee
Wireless Internet Service Providers Association (WISPA)[143]	ISP trade association whose members are potential collaborators with OBAE
Santa Fe Indian School (SFIS)[144]	Potential collaborator with OBAE on broadband deployment and equity planning
Taos Pueblo	Potential collaborator with OBAE on broadband deployment and digital equity projects

[136] "Service Areas," Vexus Fiber, https://www.vexusfiber.com/service-areas/.
[137] Viasat, https://www.viasat.com/.
[138] WNMC, https://www.wnmc.com/.
[139] Yucca Telecom, https://www.yuccatelecom.com/.
[140] Zayo, https://www.zayo.com/.
[141] "Welcome to the Internet," ZiaNet, https://w3.zianet.com/.
[142] NTUA, https://www.ntua.com/.
[143] WISPA, https://wispa.org/.
[144] Santa Fe Indian School, https://www.sfis.k12.nm.us/.

Partners	Description of current or planned role in broadband deployment and adoption
Picuris Pueblo	Potential collaborator with OBAE on broadband deployment and digital equity projects
Ohkay Owingeh	Potential collaborator with OBAE on broadband deployment and digital equity projects
Santa Clara Pueblo	Potential collaborator with OBAE on broadband deployment and digital equity projects
Jicarilla Apache Nation	Potential collaborator with OBAE on broadband deployment and digital equity projects
San Ildefonso Pueblo	Potential collaborator with OBAE on broadband deployment and digital equity projects
Nambe Pueblo	Potential collaborator with OBAE on broadband deployment and digital equity projects
Pojoaque Pueblo	Potential collaborator with OBAE on broadband deployment and digital equity projects
Tesuque Pueblo	Potential collaborator with OBAE on broadband deployment and digital equity projects
Cochiti Pueblo	Potential collaborator with OBAE on broadband deployment and digital equity projects
Santo Domingo Pueblo	Potential collaborator with OBAE on broadband deployment and digital equity projects
San Felipe Pueblo	Potential collaborator with OBAE on broadband deployment and digital equity projects
Santa Ana Pueblo	Potential collaborator with OBAE on broadband deployment and digital equity projects
Sandia Pueblo	Potential collaborator with OBAE on broadband deployment and digital equity projects
Zia Pueblo	Potential collaborator with OBAE on broadband deployment and digital equity projects

Partners	Description of current or planned role in broadband deployment and adoption
Jemez Pueblo	Potential collaborator with OBAE on broadband deployment and digital equity projects
Isleta Pueblo (Bernalillo) and Isleta Pueblo (Valencia)	Potential collaborator with OBAE on broadband deployment and digital equity projects
Acoma Pueblo	Potential collaborator with OBAE on broadband deployment and digital equity projects
Laguna Pueblo	Potential collaborator with OBAE on broadband deployment and digital equity projects
Zuni Pueblo	Potential collaborator with OBAE on broadband deployment and digital equity projects
Mescalero Apache Tribe	Potential collaborator with OBAE on broadband deployment and digital equity projects
Ft. Sill Apache Tribe	Potential collaborator with OBAE on broadband deployment and digital equity projects
Navajo Nation	Potential collaborator with OBAE on broadband deployment and digital equity projects

3.3 Asset inventory

This section catalogs and describes a sample of broadband deployment (infrastructure), broadband adoption, broadband affordability, broadband access, and digital equity activities across the State of New Mexico. These inventories comprise agencies that have hard assets, such as utility poles and land, and soft assets such as programs and activities that aim to close the digital divide. These sections are not exhaustive in their scope; rather, they focus on key assets OBAE believes can be readily leveraged to implement the Plan. Additional asset inventory data are included in Appendix A: Additional asset inventory data.

3.3.1 Broadband deployment

Analysis of the FCC's address fabric (May 2023) and other data sources found the following:[145]

[145] Location counts do not include community anchor institutions that may lack gigabit service or any low-income housing facilities (i.e., multi-dwelling unit buildings) the State may identify that are reported as served but where

- 70,609 of the State's 873,797 addresses (8 percent) are unserved
- 72,384 (8 percent) are underserved
- 730,804 (84 percent) are served, including addresses that that are slated to receive 100/20 Mbps connectivity under enforceable commitments such as RDOF funding or State grants

This analysis utilizes the FCC's V2 fabric and most recently updated service availability data (released May 30, 2023), with the addition of:

- More than 100,000 changes in service availability status, as successfully challenged (adjudication process complete and challenge conceded)
- Thousands of new Broadband Serviceable Locations which are projected to be conceded based on OBAE staff verification

Since these locations are not part of the fabric, they cannot be joined with service availability data. OBAE assigned speed data based on the average FCC service availability data of locations in the same area and classified locations accordingly as served, unserved, or underserved. OBAE excludes unlicensed fixed wireless and satellite in determining service availability.

The data were further refined by performing grant filtering of both federal and State programs, changing the service availability designation of any unserved or underserved locations that fell within those grant-served areas. Table 6 represents the changes from the base data to the adjusted data based on the grant filtering. In some instances, the locations funded via federal programs are understated due to overlap between federal and State programs. In the cases of overlap, the locations were attributed to State programs.

residents of individual units are unserved. The cost estimate and timeline for universal service presented in Section 5 do not take into account the cost to connect such locations.

Table 6: Calculation of unserved and underserved locations through grant filtering

Scenario	Underserved locations	Unserved locations
Base data	80,462	125,394
Locations funded via federal programs	10,874[146]	34,672
Locations funded via State grant programs	-2,796[147]	20,113
Adjusted data	72,384	70,609

The maps below illustrate the State's unserved, underserved, and served locations—including, in Figure 4, unserved locations as compared to median household income per census tract.

[146] 11,592 locations were reclassified as served due to funding commitments. 718 locations were reclassified from unserved to underserved. This resulted in a net reduction of 10,874 locations.
[147] 6,459 locations were reclassified as served due to funding commitments. 9,255 locations were reclassified from unserved to underserved. This resulted in a net addition of 2,796 underserved locations.

Figure 1: Unserved locations in New Mexico

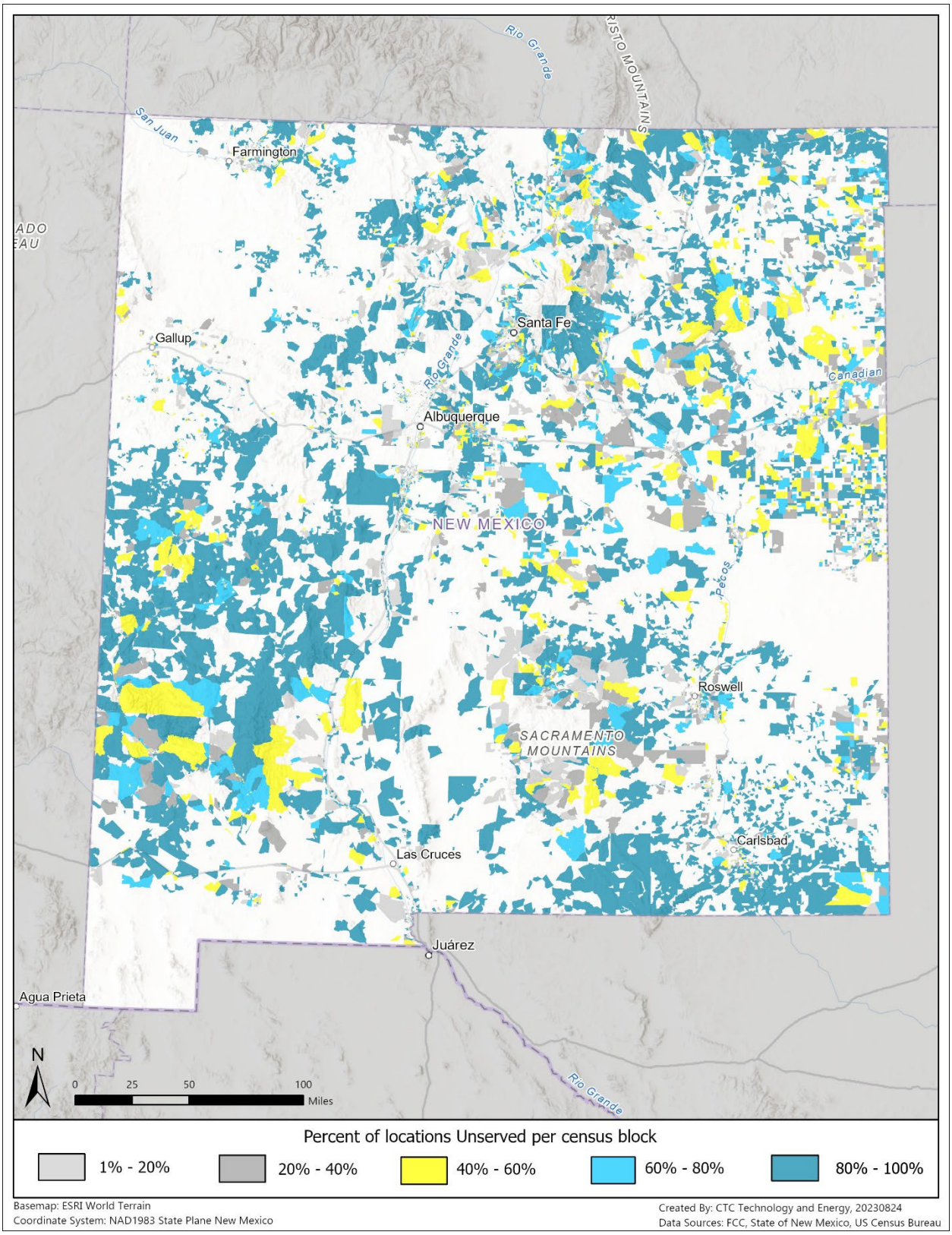


Figure 2: Underserved locations in New Mexico

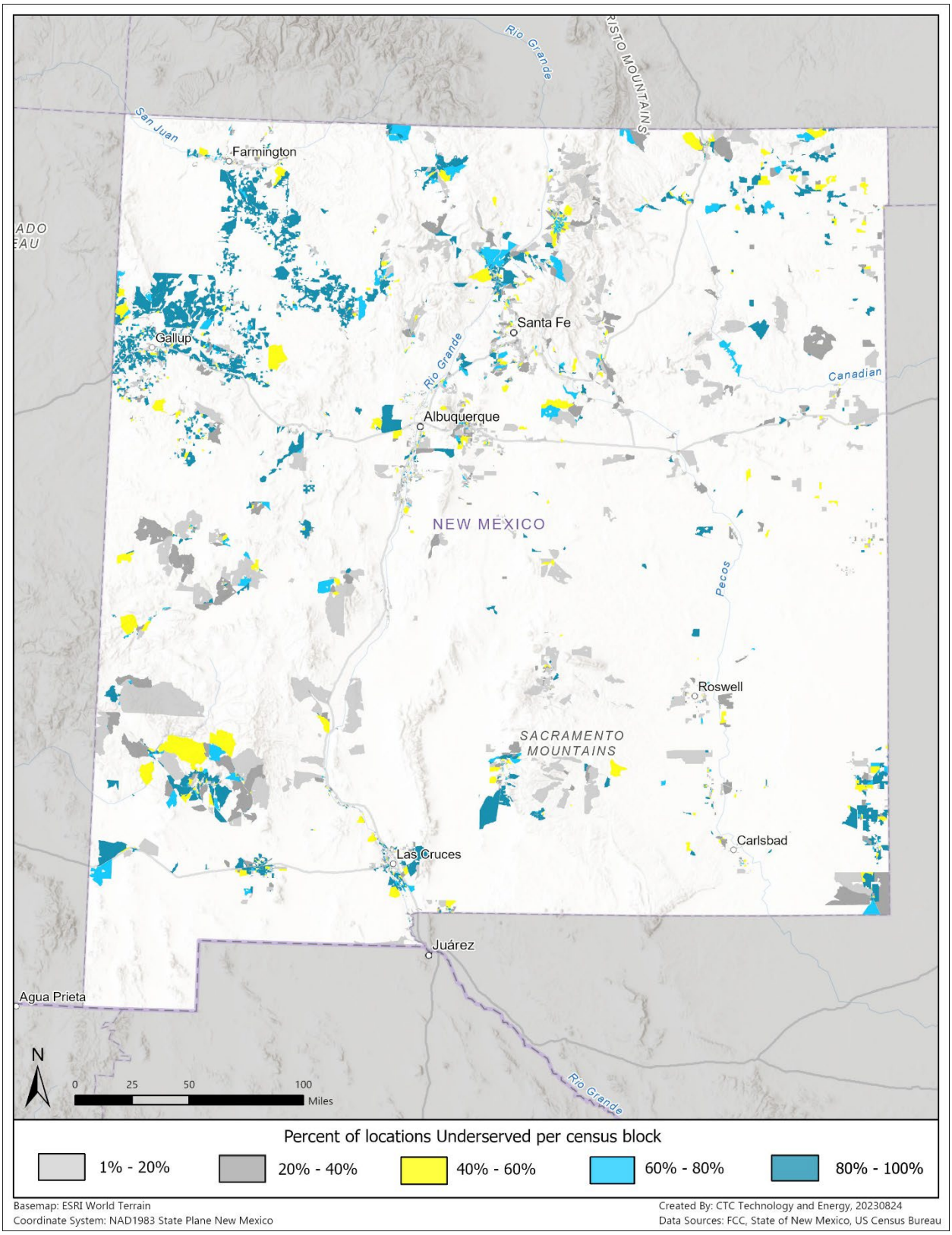


Figure 3: Served locations in New Mexico

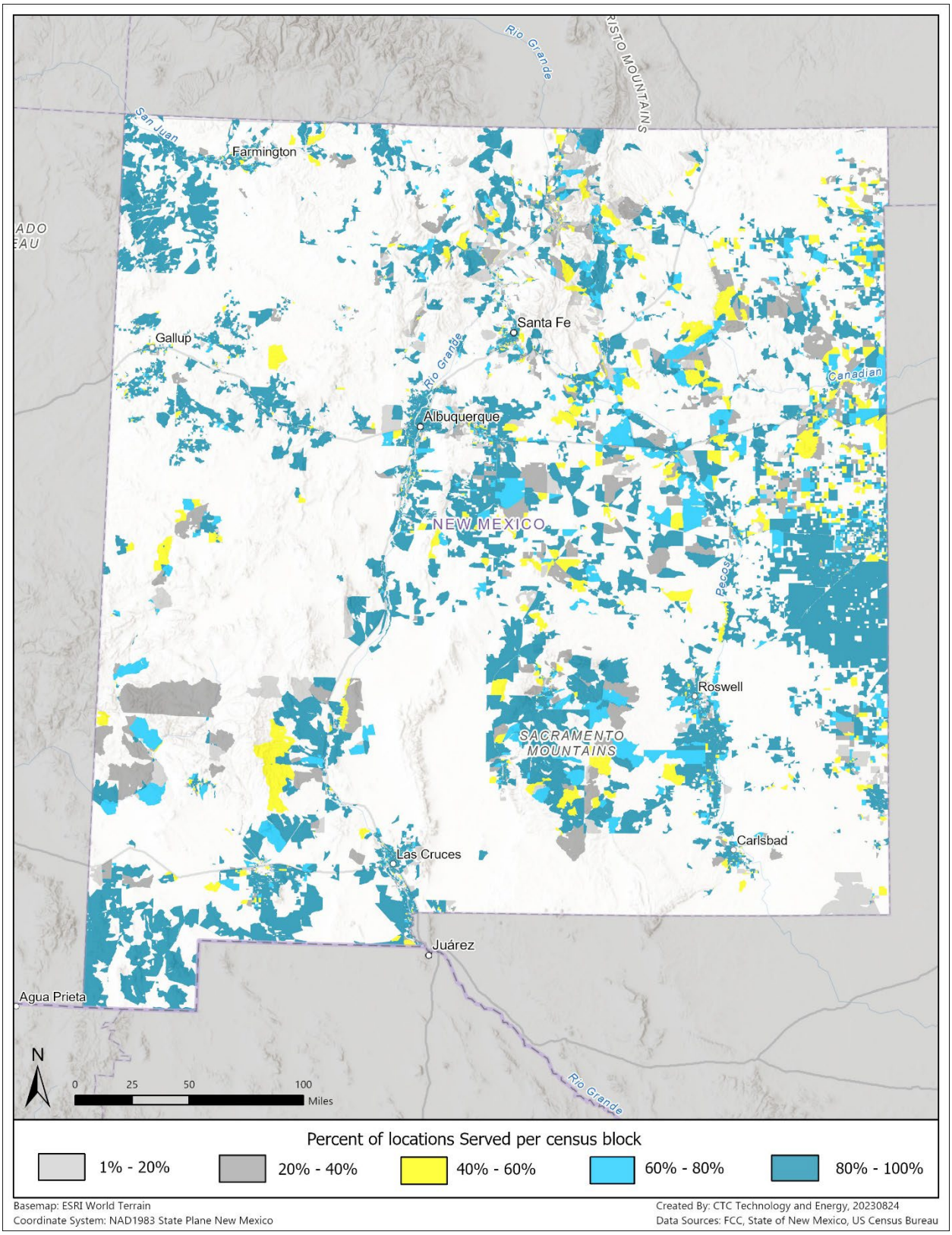


Figure 4: Median household income per census tract and unserved locations

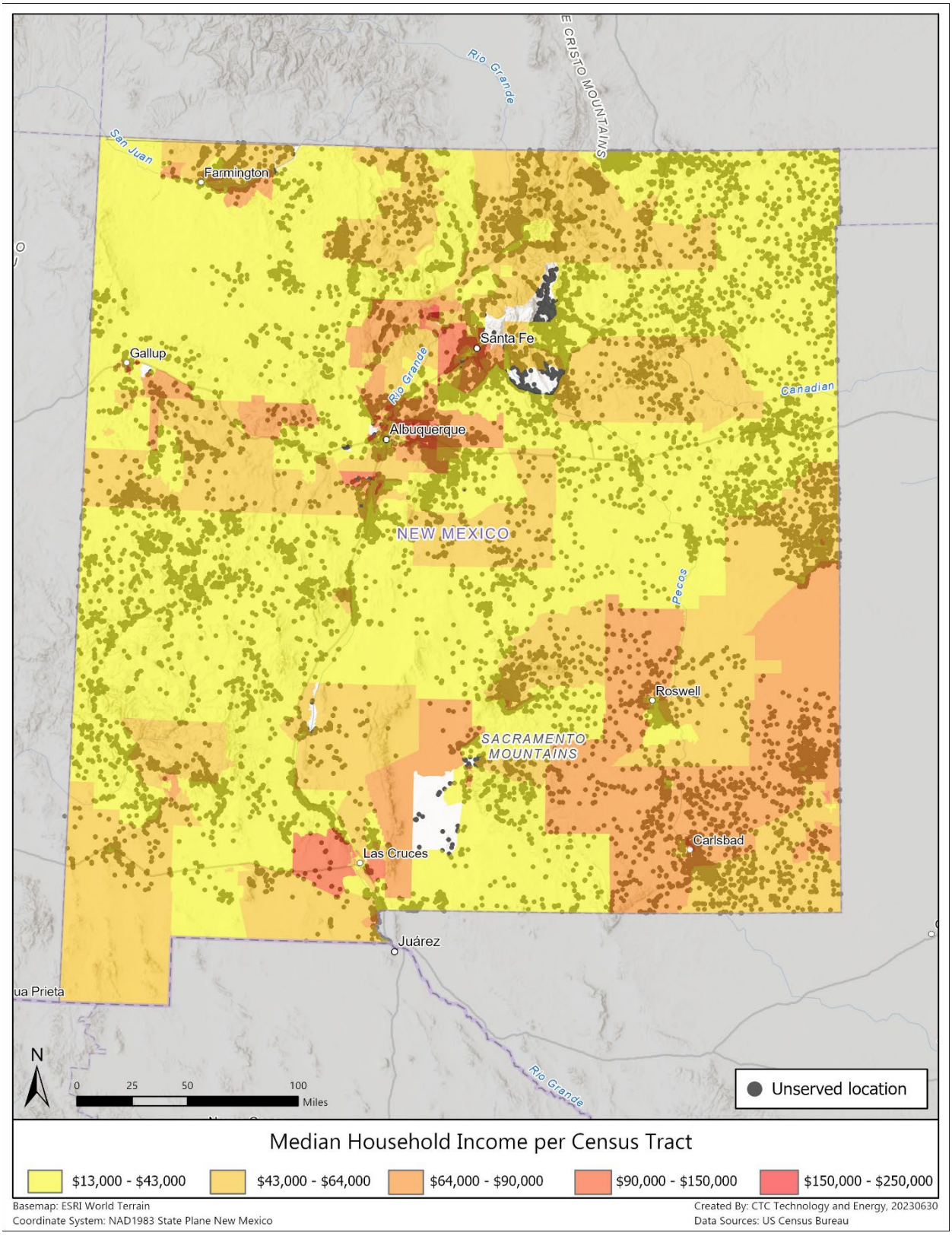
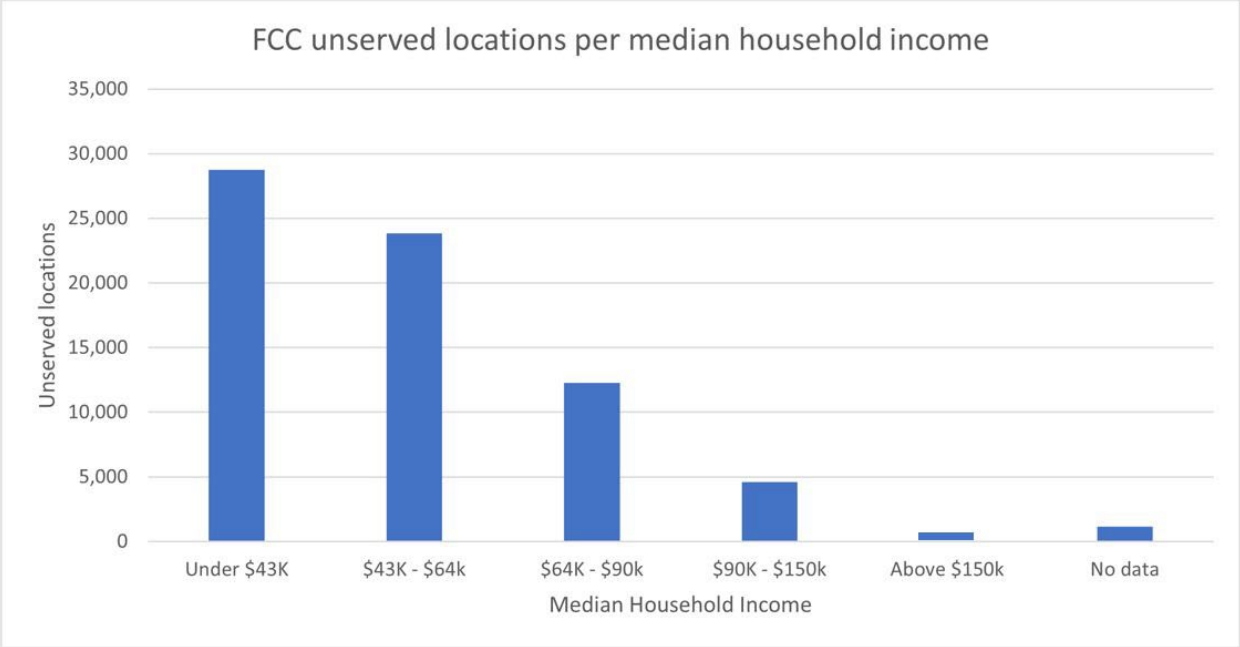


Figure 5: FCC unserved locations per median household income



The table below lists examples of the types of State-owned structures, land, rights-of-way, utility poles, conduit, fiber, and other assets that might be leveraged to implement the Five-Year Action Plan. A discussion of available workforce assets to deploy broadband is in Section 3.4.1.

Table 7: Broadband deployment assets

Asset name	Description
Statewide Education Network (SEN)[148]	The State's earlier Broadband for Education initiative connected nearly all K-12 public schools in the State to "fiber or equivalent technologies" using E-rate and State match funding. A similar effort for libraries is under way. The SEN is the next step. This network aims to connect all interested public schools and public libraries together through scalable, reliable, affordable, and secure internet connections by 2027. "Meet me" and aggregation points could also serve as launching points for last-mile deployment. The Public School Capital Outlay Council (PSCOC) has approved a Joint Powers Agreement between the New Mexico Public

[148] "Three Year Broadband Plan," OBAE, January 1, 2023, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p.89-90.

Asset name	Description
	School Facilities Authority (PSFA) and OBAE to streamline and expedite the SEN implementation. The SEN backbone is due to begin operating in spring of 2024, when it will start connecting schools and libraries.
Pueblo Education Network (PEN)	Santa Fe Indian School (SFIS) was awarded approximately $57.3 million under the NTIA Tribal Broadband Connectivity Program to construct 336 miles of new fiber optic infrastructure for 19 Pueblos, Navajo and Apache Tribes of New Mexico, Zuni Tribe, Pueblo of Acoma, Pueblo of Isleta, Pueblo of Jemez, Pueblo of Santo Domingo, and the Pueblo of Zia. The project will enable Tribal members, businesses, Tribal government entities, and anchor institutions to connect to affordable internet services; and connects the 700 students in grades 7 to 12.[149] The State is providing coordination and support to the PEN network. The PEN and the SEN will interconnect in Santa Fe, Albuquerque, and potentially other future locations, for the sharing of resources and resilience. No portion of the NTIA-funded PEN network is built yet.
State-owned fiber	Fiber strands may be available on portions of the State's fiber routes
State-owned land	Land owned by the New Mexico Department of Transportation or other State entities may be available for placement of huts or other broadband infrastructure
State-owned buildings	Buildings owned by the New Mexico Department of Transportation or other State entities may be available for placement of huts or other broadband infrastructure
State-owned towers	Towers owned by the New Mexico Department of Transportation or other State entities may be available for placement of antennas or other broadband infrastructure

[149] "State of New Mexico Three-Year Broadband Plan," OBAE, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p.25 and p. 47.

Asset name	Description
Rights-of-way	Rights-of-way controlled by the New Mexico Department of Transportation may be available for placement of fiber, huts, or other broadband infrastructure
REDInet	REDInet is an open access broadband network owned and operated by a consortium of local and Tribal governments in northern New Mexico. The network "offer[s] wholesale bandwidth to all qualified service providers within its network service area at affordable rates and, where practicable, below-market rates,"[150] and according to the organization's Chairman, partners with local governments to implement shovel-ready, community-owned projects.[151]
New Mexico Statewide Middle-Mile Network Request for Information (RFI)	The State released an RFI in 2022 to gather information about potential applications to the NTIA Enabling Middle-Mile Broadband Infrastructure Program and coordinate with service providers to support proposals and ensure they were consistent with the State's broadband goals.[152]
New Mexico Public Regulation Commission – Annual Broadband Program[153]	The Commission has awarded grants to nine ISPs totaling approximately $24 million[154] for deployment of broadband to unserved and then underserved areas.
Borderplex Connect – broadband expansion	Borderplex Connect, a nonprofit partnership between organizations in Doña Ana County in New Mexico and El Paso County in Texas, is working to map vertical and fiber assets in the region that could be used to support broadband deployment.[155]

[150] "Nondiscrimination and Interconnection," REDInet, https://www.redinetnm.org/nondiscrimination-and-interconnection.
[151] Isabella Alves, "Getting 'Redi' to connect," Albuquerque Journal, December 13, 2020, https://www.abqjournal.com/news/education/getting-redi-to-connect/article_d4586816-9725-5cda-a3cb-f28ff9b7325a.html.
[152] "Request for Information," NM Department of Information Technology, https://www.doit.nm.gov/programs/broadband/new-mexico-statewide-middle-mile-network-rfi/.
[153] "NMPRC Annual Broadband Program," https://www.nm-prc.org/utilities/telecommunications/nmprc-annual-broadband-program/.
[154] "Three Year Broadband Plan," OBAE, January 1, 2023, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p. 50-51.
[155] "Data Collection," Borderplex Connect, https://www.borderplexconnect.org/projects/data.

3.3.2 Broadband adoption

This section describes the current state of broadband adoption (i.e., the percentage of residents who have adopted broadband) and identifies broadband adoption assets.

As discussed further in Section 3.4.2, results from the 2021 NTIA Internet Use Survey indicate that an estimated 19.5 percent of New Mexico households report that they do not use the internet, which is in line with national averages.[156] However, 2021 ACS data show that internet subscription rates in the State lag the nation as a whole and neighboring states. There is also significant variability in internet adoption rates throughout the State—with over 70 percent of households in some western counties reporting they do not have a wireline internet subscription.

A school staff member who participated in an OBAE outreach effort noted that many of the students in their district rely on their phones for internet access, reporting that "the majority of the population we serve do not own computers." They noted that while students are assigned Chromebooks, they must return them at the end of the school year.

The table below lists programs that promote broadband adoption—such as through digital literacy and digital skills training, public computing labs, device and hotspot loans, K-12 schools with one-to-one computer programs, computer refurbishing efforts, and other broadband awareness and outreach efforts. These assets are available to all covered populations.

Table 8: Broadband adoption assets

Asset name	Description
NM Student Connect	Beginning in 2021, this initiative launched a multilingual Public Education Department (PED) Help Desk that helps students and teachers who lack high-speed broadband internet service or devices get access to the internet.[157] The program conducted outreached to over 16,000 student households to engage families on the federal Emergency Broadband Benefit,[158] and

[156] Digital Equity Act Population Viewer, based on 2021 NTIA/Census Current Population Survey – (Internet Use Survey), Digital Equity Act Population Viewer (census.gov). For national averages, see NTIA's Digital Data Explorer Tool for the Internet Use Survey, Digital Nation Data Explorer | National Telecommunications and Information Administration (ntia.gov).

[157] "2022 Annual Report," OBAE, https://api.realfile.rtsclients.com/PublicFiles/16569e3bf98c467e95901b46fd511499/743c6949-8171-4386-9f3d-45a4296893cc/obae-annual-report-2022.pdf.

[158] "Mapping Data to Solve Student Broadband Challenges," presentation to Science, Technology, and Telecommunications Committee, https://www.nmlegis.gov/handouts/STTC%20082421%20Item%205%20--%20PED%20--%20Broadband%20and%20Student%20Connectivity.pdf.

Asset name	Description
	assisted 110 school districts, Tribal-affiliated schools, and charter schools in applying for over $65 million in Emergency Connectivity Fund funding.[159]
Broadband For Education/NM Homework Gap Team	The program (discussed in Table 1) distributed 700 hotspots, 6,200 Chromebooks, and 102 Cradle Points to Tribal communities. The program also collected more than 51,000 quotes from ISPs for broadband solutions for up to 19,000 students (12,000 addresses) and created an online portal for school districts to shop quotes.[160] Districts could use funding from the CARES Act Governor's Emergency Education Relief (GEER) Fund to cover the cost of service for students without access at home.[161]
Teeniors	This nonprofit connects teens with older adults with the goal of empowering senior citizens to understand and use technology. Donations, grants, and local sponsorships allow Teeniors to provide coaching to seniors who cannot afford to pay.[162]
Adelante/DiverseIT	DiverseIT is a program coordinated by the nonprofit organization Adelante that provides training and employment opportunities to help people with disabilities, seniors, people of color, and women enter the technology field. The computers refurbished through this program are donated to individuals or organizations in need or made available at a low cost to the public. The organization also offers cost-effective computer repair services, IT support, and digital skills training.[163]
Santa Fe Public Library – Tech Connect	Libraries in the Santa Fe Public Library System have a free laptop and internet hotspot lending program for residents with library cards who are over 18, supported by CARES Act funding.[164]

[159] Claudia L. Silva, "New Mexico Student Connect Program to Focus on Low-Income Families," Government Technology, September 14, 2021, https://www.govtech.com/education/k-12/new-mexico-student-connect-program-to-focus-on-low-income-families.
[160] "Overview," New Mexico Broadband For Education, http://www.broadband4education.nm.gov/overview.aspx.
[161] "FAQs for GEER and Broadband For Students," NM PED, https://webnew.ped.state.nm.us/wp-content/uploads/2020/11/FAQs-for-GEER-and-Broadband-for-Students-FINAL.pdf.
[162] "About Us," Teeniors, https://www.teeniors.com/about.html.
[163] "DiverseIT," Adelante Development Center, https://goadelante.org/diverseit/.
[164] "Santa Fe Public Library – Tech Connect," Santa Fe Public Library, https://santafelibrary.org/tech-connect/.

Asset name	Description
El Valle de Anton Chico Library (San Miguel and Guadalupe County)	The El Valle de Anton Chico Library was awarded a $35,000 grant by the New Mexico Broadband Collective, a statewide group of funders, nonprofits, and Tribal and municipal entities, in 2022 for the purpose of "purchasing equipment and supplies that will allow the library to implement various programs including coding for girls, early literacy and bilingual programs, as well as basic computer applications to support the community."[165]
True Kids 1 (Taos County)	True Kids 1, "a youth media education nonprofit," was awarded a grant of $33,000 by the New Mexico Broadband Collective in 2022 to create a laptop lending program, as well as "train students in Taos County schools on different operating systems and reduced and free internet service available to community members." The students then go on to share their knowledge with senior citizens, families, and other community members. [166]
LULAC National Educational Service Centers, Inc. (LNESC) Albuquerque	LNESC, a national nonprofit that offers education and leadership programs for Hispanic and Latino students, provides technology-focused programs at its Albuquerque educational center, including a youth-focused introductory digital skills course called Digital Literacy, Intro to Network and Computers (D-LINC).[167]
Community Action Agency of Southern New Mexico (CAASNM)	CAASNM, a community action agency that serves low-income residents in Southern New Mexico, offers free computer literacy classes including "Basic Computer Skills" and" Introduction to the Internet."[168]
Goodwill Industries of New Mexico	As part of its employment and career development services, Goodwill provides free computer skills training, available online and in person at its Albuquerque services center. [169] It also provides full scholarships for two professional certification courses from Google: Data Analytics and IT support.[170]

[165] "New Mexico Broadband Equity Fund," New Mexico Foundation, https://www.newmexicofoundation.org/new-mexico-broadband-collective-fund/.
[166] "Programs," True Kids 1, https://truekids1.org/#program.
[167] "Albuquerque," LNESC, https://www.lnesc.org/centers/albuquerque/.
[168] "Free Computer Literacy Training," Community Action Agency of Southern New Mexico, https://www.caasnm.org/free-computer-literacy-training/.
[169] "Register for Free Online Learning," Goodwill New Mexico, https://www.goodwillnm.org/free-online-learning.html; "Jobs Skills Classes," Goodwill New Mexico, https://www.goodwillnm.org/job-skills-classes.html.
[170] "Google Certificate Program," Goodwill New Mexico, https://www.goodwillnm.org/google-certificate-program.html.

Asset name	Description
Encuentro	Encuentro, an Albuquerque-based nonprofit that supports the Latino immigrant community through education and career development opportunities, offers beginner and intermediate computer literacy courses[171] and plans to install a computer lab at its facility (opened in 2023).[172] In December 2022, Comcast partnered with Encuentro and Albuquerque nonprofit Working Classroom to donate 200 laptops to families and students and share information about Comcast Internet Essentials at an event hosted by Encuentro.[173]
Public library computer classes	Many public libraries in the State offer computer skills classes, such as Public Library of Albuquerque and Bernalillo County branches (several of which offer one-on-one tech support and training in English and Spanish);[174] Thomas Branigan Memorial Library in Las Cruces, N.M.;[175] Silver City Public Library in Silver City, N.M.;[176] Corrales Community Library in Corrales, N.M.;[177] and Española Public Library in Española, N.M.[178]
Public library computer access	Many of the State's public libraries have computers available for use within the library, including Santa Fe Public Libraries in Santa Fe, N.M.;[179] Ruidoso Public Library in Ruidoso, N.M.;[180] Clovis-Carver Public Library in Clovis, N.M.;[181] Roswell Public Library in Roswell, N.M.;[182] Taos Public Library in Taos, N.M.;[183] Socorro

[171] "Class Descriptions," Encuentro Nuevo Mexico, https://encuentronm.org/class-description-2/#COMP.
[172] "Building Our New Home," Encuentro New Mexico, https://encuentronm.org/ourhome/.
[173] "Comcast Hosts Copa Mundial Final Watch Party and Laptop Giveaway," Comcast news release, December 19, 2022, https://newmexico.comcast.com/2022/12/19/comcast-hosts-copa-mundial-final-watch-party-and-laptop-giveaway/.
[174] "Computer Classes and One-on-One Support," Albuquerque Public Library, https://abqlibrary.org/adultlearning/classes.
[175] "Computers," Las Cruces, N.M., https://www.lascruces.gov/1627/Computers.
[176] "Technology Training," Silver City Public Library, https://silvercitypubliclibrary.org/events-and-activities/technology-training/.
[177] "Tuesday Tech Classes," Village of Corrales, https://www.corraleslibrary.org/library/page/tuesday-tech-classes.
[178] "Española Public Library," City of Española, http://www.cityofespanola.org/165/Espaola-Public-Library.
[179] "Computers & Wi-Fi", Santa Fe Public Library, https://santafelibrary.org/computers-and-wifi/.
[180] "Internet and Computer Use Policy," Ruidoso Public Library, https://ruidosolibrary.org/internet-and-computer-use-policy.
[181] "Public Computers," Clovis-Carter Public Library, https://www.library.cityofclovis.org/index.php/resources/public-computers/.
[182] "Public Access Computers," Roswell, N.M., https://roswell-nm.gov/480/Public-Access-Computers.
[183] "Public Access Computers, Taos, N.M., https://www.taosgov.com/583/Public-Access-Computers.

Asset name	Description
	Public Library in Socorro, N.M.;[184] and Alamogordo Public Library in Alamogordo, N.M. (which also offers Chromebooks for checkout).[185]
New Mexico Black Leadership Council (NMBLC)	NMBLC provides information on a dedicated page of its website to help eligible households obtain discounted or subsidized internet services and devices by enrolling in Comcast Internet Essentials, the ACP, and/or Lifeline.[186]
Presbyterian Healthcare Services (PHS) – telehealth pilot project	With technical assistance from OBAE, PHS, a not-for-profit health care system in the State,[187] is conducting a 2023 pilot to deploy internet-connected "mobile medical exam kits" to clinics in underserved rural communities near the Navajo Nation, enabling telehealth appointments.[188] Clinics in the pilot include Cuba Health Center, Cuba School Based Health Center, Counselor Clinic, Torreon Health Clinic, and Ojo Encino Clinic.
Las Colonias Empowered by Broadband	This grassroots initiative promotes broadband access and adoption in the colonias.

3.3.3 Broadband affordability

The federal Affordable Connectivity Program (ACP) offers a monthly subsidy of up to $30 on the cost of internet service for eligible low-income households—or $75 for households on qualifying Tribal lands—as well as a one-time discount of up to $100 toward the purchase of a device. As of April 3, 2023, 159,063 New Mexican households are enrolled in the ACP,[189] representing 35 percent of the estimated 450,000 households that may be eligible for the program.[190] While New

[184] "Public Services," Socorro Public Library, http://www.adobelibrary.org/services.htm.
[185] "Library Technology," Alamogordo, N.M., https://ci.alamogordo.nm.us/834/Library-Technology.
[186] "Access to Internet," New Mexico Black Leadership Council, https://nmblc.org/internet/.
[187] "About Presbyterian," Presbyterian Healthcare Services, https://www.phs.org/about-us.
[188] Matthew Narvaiz, "Technology partnership takes newest virtual medicine rural," Albuquerque Journal, February 17, 2023, https://www.abqjournal.com/news/local/technology-partnership-takes-newest-virtual-medicine-rural/article_60eed00c-3e71-5bda-be08-ca3e950fdca8.html.
[189] "ACP Enrollment and Claims Tracker," USAC, https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/ (accessed April 10, 2023).
[190] Estimates are based on 2021 American Community Survey reported data on household income and participation in assistance programs such as the Supplemental Nutrition Assistance Program, Medicaid, Supplemental Security Income, and public assistance income. This estimation does not take into account qualification via Tribal assistance programs, and therefore may underestimate the size of eligible populations throughout the State; "State of New Mexico Three-Year Broadband Plan," OBAE, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p.9.

Mexico's ACP enrollment rate exceeds the national average (25.6 percent of eligible residents), substantial additional benefits could be realized by State residents if enrollment rates were to increase.

Many ISPs in the State participate in the ACP (the full list is included in Appendix B), and AT&T, Comcast, and Spectrum also offer low-cost plans for eligible low-income customers that provides service at essentially no cost when customers enroll in the subsidy (see Table 8).

> The majority of respondents in OBAE's 2023 Vulnerable Populations Broadband Barriers survey (approximately seven in 10) disagreed or strongly disagreed that the internet service available to the communities they serve is affordable.

In addition to larger ISPs, many smaller providers focused on serving local communities also participate in the program, such as TaosNet[191] and Tribally owned ISPs including K'awaika Hanu Internet (KHI), a subsidiary of the Pueblo of Laguna Utility Authority; [192] Santo Domingo Pueblo ISP;[193] and the Pueblo of Jemez, which operates the Jemez Pueblo Tribal Network. [194] Some member-owned cooperatives that provide internet service also participate, including Kit Carson Electric Cooperative [195] and Roosevelt County Rural Telephone Cooperative (dba Yucca Telecom)[196]—both of which offer fiber service.

In 2022, OBAE worked with ISPs to encourage the ISPs to participate in the ACP and to encourage their customers to enroll. The Public Education Department's Help Desk program, which previously conducted outreached to over 16,000 student households to engage families on the federal Emergency Broadband Benefit,[197] also transitioned to assisting residents with enrollment in the ACP in 2022.[198]

[191] TaosNet, https://taosnet.com/.
[192] "Who We Are," Laguna UA, https://lagunaua.org/who-we-are.
[193] Santo Domingo ISP, https://santodomingoisp.com/.
[194] Theresa Davis, "Jemez Pueblo connects to high-speed internet," Albuquerque Journal, March 7, 2021, https://www.abqjournal.com/news/local/jemez-pueblo-connects-to-high-speed-internet/article_206de438-d6cb-5a44-ae58-d54295e6966d.html.
[195] "Kit Carson Internet," Kit Carson Electric Cooperative, https://kitcarson.com/internet/.
[196] Yucca Telecom, https://www.yuccatelecom.com/.
[197] "Mapping Data to Solve Student Broadband Challenges," presentation to Science, Technology, and Telecommunications Committee, https://www.nmlegis.gov/handouts/STTC%20082421%20Item%205%20--%20PED%20--%20Broadband%20and%20Student%20Connectivity.pdf.
[198] "State of New Mexico Three-Year Broadband Plan," OBAE, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p.88.

As of the writing of this Plan in mid-2023, OBAE is actively engaged with legislators on drafting a bill that would create a State subsidy to complement the ACP.

The table below identifies a sampling of broadband affordability assets in the State, including ISPs' discounted service and device programs for low-income subscribers. These assets are available to most covered populations. A complete list of ISPs that participate in the ACP is included in Appendix B.

Table 9: Broadband affordability assets

Asset name	Description
City of Albuquerque – National Competitive Outreach Program (NCOP)	The City received a $400,000 award through the FCC's NCOP, which provides grants to trusted community institutions to perform ACP outreach.[199]
New Mexico Black Leadership Council – National Competitive Outreach Program (NCOP)	The Council received a $400,000 award through the FCC's NCOP, which provides grants to trusted community institutions to perform ACP outreach.[200]
El Paso Community Foundation – National Competitive Outreach Program (NCOP)	The Texas-based foundation, which is a member of the Borderplex Connect coalition, will use a portion of its $300,000 NCOP award to conduct ACP outreach in the Las Cruces area.[201, 202]
Pueblo of Jemez– Tribal Competitive Outreach Program (TCOP)	The Pueblo of Jemez received approximately $379,000 through the FCC's TCOP to conduct ACP outreach.[203]

[199] "Consumer And Governmental Affairs Bureau Announces ACP Outreach Grant Program Target Funding," FCC public notice, March 10, 2023, https://docs.fcc.gov/public/attachments/DA-23-194A1.pdf.
[200] "Consumer And Governmental Affairs Bureau Announces ACP Outreach Grant Program Target Funding," FCC public notice, March 10, 2023, https://docs.fcc.gov/public/attachments/DA-23-194A1.pdf.
[201] "Consumer And Governmental Affairs Bureau Announces ACP Outreach Grant Program Target Funding," FCC public notice, March 10, 2023, https://docs.fcc.gov/public/attachments/DA-23-194A1.pdf.
[202] Coker, Jonny, "Local organizations work to get rural communities access to internet services," KRWG, July 21, 2023, https://www.krwg.org/krwg-news/2023-07-21/local-organizations-work-to-get-rural-communities-access-to-internet-services.
[203] "Consumer And Governmental Affairs Bureau Announces ACP Outreach Grant Program Target Funding," FCC public notice, March 10, 2023, https://docs.fcc.gov/public/attachments/DA-23-194A1.pdf.

Asset name	Description
Pueblo of Zuni– Tribal Competitive Outreach Program (TCOP)	The Pueblo of Zuni received $325,000 through the FCC's TCOP to conduct ACP outreach.[204]
Outreach Program Services of America – Roswell	This California-based organization, which conducts outreach to help low-income individuals access government benefits and resources,[205] is conducting ACP outreach in Roswell.
Access from AT&T	Eligible low-income households can receive up to 100 Mbps symmetrical speeds[206] through the Access from AT&T plan for $30 per month, or at no cost with the ACP subsidy.[207] Qualifying DSL customers who have speeds of 10 Mbps or less available may be able to get this plan at a lower cost ($5-10 per month, with a data cap.)[208]
Comcast Internet Essentials	Comcast's Internet Essentials program allows qualified low-income customers to purchase up to 50 Mbps service for $9.95 per month, or up to 100 Mbps service for $29.95 per month; both plans are effectively free for customers enrolled in the ACP. Eligible customers can also purchase laptops/desktop computers at a subsidized price of $149.99.[209]
Spectrum Internet Assist	Spectrum Internet Assist offers qualifying low-income customers 30/4 Mbps service for $19.99 per month, or no cost with the ACP subsidy.[210]
Verizon Forward Program	The Verizon Forward Program provides an additional discount on Verizon Home Internet plans for customers enrolled in the ACP, offering Verizon's 300/300 Mbps Fios fiber plan at no cost and plans with higher speed tiers at a discounted rate. (The

[204] "Consumer And Governmental Affairs Bureau Announces ACP Outreach Grant Program Target Funding," FCC public notice, March 10, 2023, https://docs.fcc.gov/public/attachments/DA-23-194A1.pdf.
[205] "Outreach Programs," Outreach Program Services of America, https://outreachprograms.us/.
[206] "New 'Access from AT&T' Plan + New Federal Benefit = Free Internet," AT&T News Release, February 7, 2022, https://about.att.com/story/2022/new-access-plan-plus-new-federal-benefit.html.
[207] "Access from AT&T – Low-Cost Internet Service," AT&T, https://www.att.com/internet/access/.
[208] "New 'Access from AT&T' Plan + New Federal Benefit = Free Internet," AT&T News Release, February 7, 2022, https://about.att.com/story/2022/new-access-plan-plus-new-federal-benefit.html.
[209] "Internet Essentials," Xfinity, https://www.xfinity.com/learn/internet-service/internet-essentials.
[210] "Low Income Internet Service | Spectrum Internet Assist Program," Spectrum, https://www.spectrum.com/internet/spectrum-internet-assist.

Asset name	Description
	program also offers Verizon 5G Home Internet at no cost where available.)[211]

3.3.4 Broadband access

The following table identifies examples of public Wi-Fi networks, cellular connectivity (mobile broadband), and open-access middle-mile networks in the State. These assets are available to many or all covered populations.

Table 10: Broadband access assets

Asset name	Description
New Mexico Broadband Map Wi-Fi layer	The New Mexico Broadband Map displays the locations of Wi-Fi hotspots in the State, including Tribal locations available only to Tribal members.
ENMR NTIA 2022 Middle Mile Grant	ENMR Telephone Cooperative was awarded approximately $49.9 million through the NTIA Enabling Middle-Mile Broadband Infrastructure Program in June 2023 to enhance its network "by creating alternate paths and increasing resiliency and bandwidth with upgrades and new fiber routes"—including the construction of five new routes. ENMR states that its "objectives for the proposed project include assurance that last mile providers have access to affordable middle mile transport to the internet."[212]
Information Technology Disaster Resource Center (ITDRC)	Through Project Connect, the national nonprofit ITDRC installed Wi-Fi access points on community facilities to provide free internet access during the Covid-19 pandemic—with a focus on connecting students in rural and underserved communities. The group completed several installations across New Mexico, including The Tribal High School in Santa Fe, NM; Santa Fe Indian School; Tesuque Pueblo; Santa Clara Pueblo; and more.[213]

[211] "Free Internet with the Verizon Forward Program and ACP," Verizon, https://www.verizon.com/home/free-verizon-internet/.
[212] "Funding Recipients," NTIA, https://broadbandusa.ntia.gov/funding-programs/enabling-middle-mile-broadband-infrastructure-program/funding-recipients.
[213] "ITDRC Project Connect," Community Learning Network, https://www.communitylearningnetwork.org/itdrc-project-connect.html.

Asset name	Description
Yee Ha'ólníi Doo – Innovation Centers	With support from a $1 million grant from the Kellogg Foundation, in August 2021 Yee Ha'ólníi Doo—a Utah-based nonprofit focused on empowering Navajo and Hopi communities—launched an Innovation Hub on the Navajo Nation in Monument Valley, Utah and plans to open two more hubs in Sheep Springs, N.M. and Ramah, N.M. These community centers provide support and skill development for local entrepreneurs, as well as business tools including access to free Wi-Fi and computers. According to the organization, the inaugural center in Utah has received over 1,055 visits from 423 unique visitors, with 80 percent of visitors coming to use the Wi-Fi and devices in its Business Center.[214]
Santa Fe Public Libraries – free Wi-Fi	All three libraries in the Santa Fe Public Library system provide Wi-Fi access in their buildings and parking lots.[215]
City of Albuquerque – Wi-Fi in Neighborhoods program	The City of Albuquerque provides free Wi-Fi access at public City facilities as well as outdoor Wi-Fi hotspots.[216]
City of Aztec – free Wi-Fi	The City of Aztec offers free Wi-Fi at numerous locations.[217]
Pueblo Connect – Santa Clara Pueblo Wi-Fi	Using a portion of a $2 million Smart and Connected Communities grant from the National Science Foundation (2018),[218] the Pueblo Connect team provided Wi-Fi access in Santa Clara Pueblo using TV White Space (TVWS) technology in 2020.[219] The initiative intends to improve broadband access in rural and Native communities in northern New Mexico, as well as growing local capacity for online content creation in partnership with community organizations.[220]

[214] "Yee Ha'ólníi Doo Develops Innovation Hubs with $1M Kellogg Grant," Yee Ha'ólníi Doo news release, April 13, 2022, https://navajohopisolidarity.org/f/yee-ha%E2%80%99%C3%B3ln%C3%ADi-doo-develops-innovation-hubs-with-1m-kellogg-grant.
[215] "Computers & Wi-Fi," Santa Fe Public Library, https://santafelibrary.org/computers-and-wifi/.
[216] "Wi-Fi in Neighborhoods Free Internet Access," City of Albuquerque, https://www.cabq.gov/technology-innovation/wifi.
[217] "Information Technology," City of Aztec, http://www.aztecnm.gov/it.html.
[218] "Award Search – Award # 1831698," NSF, https://www.nsf.gov/awardsearch/showAward?AWD_ID=1831698&HistoricalAwards=false.
[219] "TV White Space Installation in Santa Clara Pueblo," Pueblo Connect news release, June 10, 2020, https://puebloconnect.cs.ucsb.edu/2020/06/10/tv-white-space-installation-in-santa-clara-pueblo/.
[220] "About," Pueblo Connect, https://puebloconnect.cs.ucsb.edu/about/.

Asset name	Description
Colores United	The New Mexico Broadband Collective awarded Colores United, a nonprofit in Luna County, a $75,000 grant to provide Wi-Fi access at public facilities in Columbus, N.M., including the city hall, town library, senior center, a café, and other locations.[221]
Comcast Lift Zones	Through its Lift Zone initiative, Comcast provides free Wi-Fi access by working with community organizations, nonprofits, and city partners to install hotspots. There are more than 45 Lift Zones across the State;[222] locations also have access to digital skills and educational content from Comcast.
Cellular coverage	According to the coverage maps on their websites, AT&T, Verizon, and T-Mobile each report that they provide cellular service in much of New Mexico.[223]
Pueblo of Cochiti	In 2020, the Pueblo received a $2.9 million grant from the State to deploy fiber to reach 260 homes, anchor institutions, and Tribal administration facilities.[224] The pueblo was also awarded $40,500 from the New Mexico Broadband Collective in 2022 for "the completion of fiber to homes of Cochiti Pueblo residents," as well as expanding its IT department.[225]
Pueblo of Picuris	The Pueblo was awarded approximately $3.7 million through the NTIA Tribal Broadband Connectivity Program in December 2022 to deploy 1 Gbps fiber service to 79 unserved households, 2 Tribal businesses, 3 anchor institutions, and 15 Tribal offices.[226] The pueblo also received a $$59,904 grant from the New Mexico Broadband Collective in 2022 "to develop, install and operate

[221] "New Mexico Broadband Equity Fund," New Mexico Foundation, https://www.newmexicofoundation.org/new-mexico-broadband-collective-fund/.
[222] "Lift Zones," Comcast New Mexico, https://newmexico.comcast.com/lift-zones/.
[223] Maps show self-reported approximate outdoor coverage for 4G LTE and 5G technologies (T-Mobile also includes 3G/2G coverage); see, https://www.att.com/maps/wireless-coverage.html, https://www.verizon.com/coverage-map/, https://www.t-mobile.com/coverage/coverage-map.
[224] "N.M. awards Cochiti Pueblo $2.9 million for broadband," NM DoIT news release, June 3, 2020, https://www.doit.nm.gov/2020/06/03/n-m-awards-cochiti-pueblo-2-9-million-for-broadband/.
[225] "New Mexico Broadband Equity Fund," New Mexico Foundation, https://www.newmexicofoundation.org/new-mexico-broadband-collective-fund/.
[226] "Biden-Harris Administration Announces More Than $25.7 Million in High-Speed Internet Grants to Tribal Lands in Minnesota and New Mexico," NTIA news release, December 14, 2022, https://www.internetforall.gov/news-media/biden-harris-administration-announces-more-257-million-high-speed-internet-grants-tribal.

Asset name	Description
	high-speed broadband service that would be 100 [percent] owned and operated by the tribe."
Mescalero Apache Telecom Inc. (MATI)	MATI, which is owned and operated by the Mescalero Apache Tribe, plans to deploy fiber to provide up to 1 Gbps symmetrical service to 835 unserved households, 336 businesses, and 29 community anchor institutions on the Mescalero Apache Reservation using an award of approximately $44 million from the Tribal Broadband Connectivity Program.[227]
Pueblo of Laguna Utility Authority	The Pueblo Utility Authority received a grant of $71,596 from the New Mexico Broadband Collective in 2022 to upgrade its network, which serves 500 Tribal members, and expand broadband access in the pueblo.[228]
Pueblo of Acoma	The Pueblo received a grant of approximately $14.3 million from the Tribal Broadband Connectivity Program to install fiber to 1,167 unserved households and anchor institutions to provide a minimum of 25/3 Mbps broadband service.[229]
Jicarilla Apache Nation Power Authority	The Power Authority received a grant of approximately $7 million from the Tribal Broadband Connectivity Program to connect 1,051 unserved Native American households, 25 anchor institutions, and 10 Tribal businesses in Dulce, N.M. with Fiber-to-the Home service delivering speeds up to 1 Gbps/1 Gbps.[230] The Power Authority was also awarded approximately $20,000 by the New Mexico Broadband Collective to upgrade the Tribal office's computer systems to support the project.[231]
Pueblo of Santa Clara	The Pueblo received approximately $9 million from the Tribal Broadband Connectivity Program to deploy fiber to connect 600 unserved households with Fiber-to-the-Home service offering up

[227] "Award Recipients," NTIA, https://broadbandusa.ntia.doc.gov/funding-programs/tribal-broadband-connectivity/award-recipients#M.
[228] "New Mexico Broadband Equity Fund," New Mexico Foundation, https://www.newmexicofoundation.org/new-mexico-broadband-collective-fund/.
[229] "Biden-Harris Administration Announces More Than $25.7 Million in High-Speed Internet Grants to Tribal Lands in Minnesota and New Mexico," Internet For All, https://www.internetforall.gov/news-media/biden-harris-administration-announces-more-257-million-high-speed-internet-grants-tribal.
[230] "Award Recipients," NTIA, https://broadbandusa.ntia.doc.gov/funding-programs/tribal-broadband-connectivity/award-recipients.
[231] "New Mexico Broadband Equity Fund," New Mexico Foundation, https://www.newmexicofoundation.org/new-mexico-broadband-collective-fund/.

Asset name	Description
	to 1 Gbps symmetrical speeds and wireless service offering up to 50/10 Mbps.[232]
San Ildefonso Services	San Ildefonso Services received approximately $5 million from the Tribal Broadband Connectivity Program to install fiber and fixed wireless service providing speeds between 25/3 Mbps and 1 Gbps symmetrical to 255 unserved households in the Pueblo of San Ildefonso. [233]
Pueblo of Zia	The Pueblo received a grant of approximately $4.7 million from the Tribal Broadband Connectivity Program to install fiber to 228 unserved households and 13 unserved anchor institutions delivering service with speeds up to 1 Gbps symmetrical.[234]
Pueblo of Isleta	The Pueblo received approximately $26 million from the Tribal Broadband Connectivity Program to install fiber to connect 1,526 unserved households, 54 anchor institutions, and 10 Tribal businesses using Fiber-to-the-Home and/or fixed wireless 25/3 Mbps service.[235]
Santo Domingo (Kewa) Pueblo	The Pueblo received a grant of approximately $12.7 million from the Tribal Broadband Connectivity Program to install fiber and connect wireless towers to serve Tribal members, businesses, and community anchor institutions. [236]
Pueblo of Ohkay Owingeh	The Pueblo received $500,000 through the Tribal Broadband Connectivity Program to deploy existing Ohkay Owingeh equipment in 250 unserved households to deliver no-cost

[232] "Biden-Harris Administration Announces More Than $40.3 Million in High-Speed Internet Grants for Tribal Lands," Internet For All, https://www.internetforall.gov/news-media/biden-harris-administration-announces-more-403-million-high-speed-internet-grants-tribal.
[233] "Award Recipients," NTIA, https://broadbandusa.ntia.doc.gov/funding-programs/tribal-broadband-connectivity/award-recipients.
[234] "Award Recipients," NTIA, https://broadbandusa.ntia.doc.gov/funding-programs/tribal-broadband-connectivity/award-recipients.
[235] "Award Recipients," NTIA, https://broadbandusa.ntia.doc.gov/funding-programs/tribal-broadband-connectivity/award-recipients.
[236] "Award Recipients," NTIA, https://broadbandusa.ntia.doc.gov/funding-programs/tribal-broadband-connectivity/award-recipients.

Asset name	Description
	wireless broadband service and provide a help desk and maintenance.[237]
Pueblo of Jemez – Jemez Pueblo Tribal Network	The Pueblo built and owns its own fiber network, which serves Tribal government facilities and 500 homes, utilizing $2 million in CARES Act funding allocated to the Tribe as well as $2.7 million awarded by the State ($1.4 million in CARES Act funding and $1.3 million in State capital outlay funds).[238] The project builds on a 2018 project by the Jemez-Zia Tribal Consortium, which received funding from the E-rate program to connect schools and libraries in both Pueblos via a fiber network.[239] The Pueblo also received an award of $500,000 through the Tribal Broadband Connectivity Program in 2023 to construct a wireless tower to serve outlying regions of the pueblo.[240]
Pueblo of Nambé	The Pueblo was awarded $500,000 through the Tribal Broadband Connectivity Program in 2023 to fund the first phase of a fiber network that is intended to serve all unserved households in the pueblo upon completion.[241]
2.5 GHz Rural Tribal Window program	Fifteen Tribal communities in New Mexico received spectrum awards through this program, in which the FCC issued licenses for rural Tribal communities to access unassigned spectrum over their lands that can be utilized for mobile coverage or fixed point-to-point applications. Licensees must demonstrate that coverage is available to 50 percent of residents in the license area within

[237] "Biden-Harris Administration Announces $8.39 Million in Internet for All Grants to Tribal Lands," NTIA Press Release, June 29, 2023, https://internetforall.gov/news-media/biden-harris-administration-announces-839-million-internet-all-grants-tribal-lands; "Award Recipients," NTIA, https://broadbandusa.ntia.doc.gov/funding-programs/tribal-broadband-connectivity/award-recipients.
[238] "Regional Projects," Digital Equity New Mexico, https://www.digitalequitynm.com/regional-projects.html.
[239] Ry Marcattilio, "New Report Shows How Two Tribal Networks in New Mexico Brought Faster Speeds and Lower Prices," Community Networks, October 6, 2020, https://communitynets.org/content/new-report-shows-how-two-tribal-networks-new-mexico-brought-faster-speeds-and-lower-prices.
[240] "Biden-Harris Administration Announces Nearly $4 Million in Internet for All Grants to Tribal Lands," NTIA news release, July 20, 2023, https://www.internetforall.gov/news-media/biden-harris-administration-announces-nearly-4-million-internet-all-grants-tribal-lands.
[241] "Biden-Harris Administration Announces Nearly $4 Million in Internet for All Grants to Tribal Lands," NTIA news release, July 20, 2023, https://www.internetforall.gov/news-media/biden-harris-administration-announces-nearly-4-million-internet-all-grants-tribal-lands.

Asset name	Description
	two years of the license being issued and achieve 80 percent coverage within five years.[242,243]

A representative from an organization that provides virtual training for the Navajo Nation noted at an OBAE outreach event that they received grant funding to distribute computers, but some participants continue to struggle with using the devices.

"Most of the population we work with are older (50+)… multiple people knew absolutely nothing about online safety… It was brand new information to them because they never had a computer so they didn't know what they needed to do to protect themselves online."

3.3.5 Digital equity

The following table identifies representative digital equity assets in the State of New Mexico, including workforce development training and employment services related to broadband adoption (additional workforce development assets from higher education institutions in the State are included in Appendix B); technical assistance programs aimed at supporting digital inclusion; and partnerships and coalitions that work toward digital equity. These assets are available to all covered populations.

Table 11: Digital equity assets

Asset Name	Description
Professional Readiness and Technical Experience for Careers (PROTEC)	PROTEC provides a range of training and certification intensives to help individuals improve business skills and find paid internships and entry-level employment opportunities through Santa Fe Community College (SFCC) Office of Continuing Education and Contract Training. This program was developed in partnership between Santa Fe Community College, Santa Fe County, the City of Santa Fe, and New Mexico Workforce Connection and offers a range of non-conventional training opportunities that build digital skills and "Professional Readiness and Technical Experience for Careers."[244]

[242] "2.5 GHz Rural Tribal Window," FCC, https://www.fcc.gov/25-ghz-rural-tribal-window.
[243] Coverage requirements reflect the percentage of the population to which service is available, and not the percentage of residents that adopt the service.
[244] "PROTEC Santa Fe," PROTEC, https://www.protecsantafe.com/.

Asset Name	Description
Santa Fe Community College (SFCC) – Certified Fiber Optic Technician training and Fiber to the Home Certification training	Santa Fe Community College (SFCC) has held seven Fiber Optic Technician Certification training intensives in 2022 and 2023 (six in Santa Fe County and one in Luna County), serving 117 students so far. Two additional sessions are planned for late summer and fall 2023. The training provides three certifications recognized by the Fiber Optic Association (FOA) and the U.S. Department of Labor: 1) Certified Fiber Optic Technician 2) Certified Fiber Optics Specialist in Testing and Maintenance, and 3) Certified Fiber Optics Specialist in Splicing. SFCC also offers students OSHA Safety, Customer Service, and Digital Business Skills through PROTEC. SFCC also held two Fiber to the Home Certification training sessions in Santa Fe County in 2022, with 33 students participating. One additional session is planned for 2023. Program training and certification are recognized by FOA and the U.S. Department of Labor.[245] Broadband training through SFCC has been made possible thanks to funding provided by Santa Fe County, as well as the Southwest Council of Governments for students in Luna County. In 2022, 24 Native students and more than 24 Hispanic students participated in SFCC fiber optic certification training programs. Credentials earned are valid for three years and recognized by the FOA and the U.S. Department of Labor.
Be Pro Be Proud New Mexico	The New Mexico Chamber of Commerce has partnered with Be Pro Be Proud, a technical workforce development organization active in several states, on an initiative in which a mobile tour bus will make stops across the State to showcase and provide information about various career opportunities[246]—including those related to broadband deployment. Nationally, fiber optic cable splicing is the organization's third most popular career module choice.
Light Brigade – Fiber Optics 1-2-3	Courses provide an understanding of fiber optic technology, how fiber works, various link components, as well as industry standards and best practices. Two trainings are scheduled for

[245] Information provided to OBAE by a representative of Santa Fe Community College.
[246] "Be Pro Be Proud – New Mexico," https://www.beprobeproudnm.org/.

Asset Name	Description
	2023 in Santa Fe:[247] a four-day class that includes two days of classroom knowledge and two days of hands-on skills training (fees start at approximately $2,000); and a two-day classroom-only course (fees start at approximately $1,000). Certifications are available.
New Mexico Broadband Collective	A diverse group of funders, Tribal, nonprofit, and government representatives across the State to support a Statewide approach to ensuring that broadband services are available to all New Mexicans. The Broadband Collective comprises various workgroups focused on providing funding and technical assistance to support community and regional efforts; ensuring there is equitable and effective use of technology Statewide; engaging in advocacy; and coordinating federal and State broadband resources and opportunities. [248] Through the Broadband Equity Fund, the Collective granted $455,000 to nine organizations and tribes in 2022.[249]
Pueblo of Jemez Digital Navigators Award	Pueblo of Jemez is a sub-grantee included in the National Digital Inclusion Alliance's (NDIA) Digital Navigators Award. Funding and support will go toward hiring community-based digital navigators alongside programmatic and technical support to further develop NDIA's digital navigator model for rural and Tribal communities.[250]
New Mexico Highlands University – "Building Sustainable Technology and Equity Connected Communities through Youth and Adult Workforce	The University received an award of $3 million through the Connecting Minority Communities pilot program to "use digital technology to deliver a culturally responsive curriculum to underserved populations in Northern New Mexico (NMM), and culturally sustaining pedagogy to teachers of students in underserved populations."[251]

[247] https://www.lightbrigade.com/in-person-fiber-optic-training?State=New+Mexico.
[248] "Funding Awards," Connect New Mexico, https://connect.nm.gov/funding-awards.html.
[249] "New Mexico Broadband Equity Fund," New Mexico Foundation, https://www.newmexicofoundation.org/new-mexico-broadband-collective-fund/.
[250] "State of New Mexico Three-Year Broadband Plan," OBAE, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p.54.
[251] "Biden-Harris Administration Announces $10.6 Million in Internet for All Grants to Five Minority-Serving Colleges and Universities," NTIA, October 5, 2022, https://broadbandusa.ntia.doc.gov/news/latest-news/biden-harris-administration-announces-106-million-internet-all-grants-five.

Asset Name	Description
Development: The Acequia and Land Grant Education" (ALGE) Project	
Eastern New Mexico University Roswell (ENMUR) – "Creating Connected Communities to Provide Opportunities (Project C-3PO)"	ENMUR received $1.9 million through the Connecting Minority Communities Pilot Program to increase broadband access and digital skills in its community of Chavez County,[252] including training minority business owners on software to grow their businesses and operating a technology support hotline.[253] Project C-3PO will also distribute mobile hotspots and encourage residents to sign up for the ACP; it is coordinating pop-up community outreach events in summer 2023.[254]
New Mexico State University – "Bringing Broadband to New Mexico State University and Surrounding Counties"	The University was awarded $1.7 million through the Connecting Minority Communities Pilot Program to increase broadband access on campus and in the surrounding community.[255]
Southwestern Indian Polytechnic Institute (SIPI) – "Parallel Network Upgrade"	SIPI received $1.6 million through the Connecting Minority Communities Pilot Program, which it will use to implement an upgraded campuswide network.[256]
Borderplex Connect – digital equity	Digital inclusion collaboratives from Doña Ana County in New Mexico and El Paso County in Texas merged to form a regional partnership. Projects in New Mexico include Opportunity Las Cruces, an initiative led by New Mexico State University to provide Las Cruces residents with digital skills training; Mamacitas Cibernéticas, a grassroots effort in which Sunland

[252] "Biden-Harris Administration Announces More Than $175 Million in Internet for All Grants to 61 Minority-Serving Colleges and Universities," NTIA, February 27, 2023, https://internetforall.gov/news-media/biden-harris-administration-announces-more-175-million-internet-all-grants-61-minority.
[253] Lisa Dunlap, "College receives federal grant for community internet access, training," Roswell Daily Record, February 10, 2023, https://www.rdrnews.com/news/local/college-receives-federal-grant-for-community-internet-access-training/article_487f7d5a-a8be-11ed-8430-b3334d8711f6.html.
[254] Communication from Project C-3PO to OBAE, July 18, 2023.
[255] "Biden-Harris Administration Announces More Than $175 Million in Internet for All Grants to 61 Minority-Serving Colleges and Universities," NTIA, February 27, 2023, https://internetforall.gov/news-media/biden-harris-administration-announces-more-175-million-internet-all-grants-61-minority.
[256] "Biden-Harris Administration Announces More Than $175 Million in Internet for All Grants to 61 Minority-Serving Colleges and Universities," NTIA, February 27, 2023, https://internetforall.gov/news-media/biden-harris-administration-announces-more-175-million-internet-all-grants-61-minority.

Asset Name	Description
	Park parents teach other parents digital skills; and ACP promotion.[257]
Telecommunications Equipment Distribution Program (TEDP)	TEDP, a program of the State of New Mexico Commission for Deaf & Hard of Hearing, provides telecommunications devices at no cost to qualifying residents with speech or hearing loss who need assistance with communication. iPads are included in the program, as long as the purpose is to access telecommunications, whether by email, video call, Alternative Augmentative Communication (AAC) Applications, etc.[258]
New Mexico State Library – Library Services and Technology Act Five Year Plan	The New Mexico State Library, a division of the New Mexico Department of Cultural Affairs serving 100 public and Tribal libraries throughout the State, states in its 2023-2027 Five-Year Plan that "support for broadband infrastructure and digital equity are now an important part of NMSL operations."[259]
Comcast and United Way New Mexico	As part of Project UP, Comcast's $1 billion nationwide digital equity initiative, the company supported the United Way of New Mexico in staffing its 2-1-1 call center with digital navigators who can provide information about the ACP.[260]
UNM-Taos Hub of Internet-based Vocation and Education (HIVE)	HIVE offers coworking space, individualized business coaching, and digital skills classes to help individuals grow their career or business through online opportunities. The program is a public-private partnership and a project of the Taos Community Foundation; it has received national recognition, including being selected for the Rural Innovation Initiative.[261]
CNM Ingenuity	The "enterprise arm" of Central New Mexico Community College provides accelerated training in key growth sectors, including technology, and wrap-around support for learners.[262]

[257] Borderplex Connect, https://www.borderplexconnect.org/.
[258] "Telecommunications Equipment Distribution Program," New Mexico Commission for Deaf & Hard of Hearing, https://www.cdhh.nm.gov/tedp/.
[259] Eli Guinnee, "New Mexico State Library Library Services and Technology Act Five Year Plan 2023-2027," New Mexico State Library, https://www.imls.gov/sites/default/files/state-profiles/plans/newmexico5yearplan.pdf.
[260] "United Way and Comcast band together to advance digital equity in New Mexico," New Mexico Inno, https://www.bizjournals.com/albuquerque/inno/stories/partner-content/2022/11/04/united-way-and-comcast-advance-digital-equity.html.
[261] Taos Hive, https://taoshive.com/.
[262] CNM Ingenuity, https://cnmingenuity.org/.

Asset Name	Description
Yee Ha'ólníi Doo – Ramah, N.M. and Sheep Springs, N.M. broadband strategic plan	This Utah-based organization, which focuses on empowering Navajo and Hopi communities, received a $75,000 grant from the New Mexico Broadband Collective in 2022 to lead a needs assessment, community planning process, and broadband strategic plan development to bridge the digital divide in the Navajo communities of Ramah, N.M. and Sheep Springs, N.M.[263] As discussed in Section 3.3.4, the organization also plans to open two Innovation Hubs in these communities with support from a Kellogg Foundation grant.
New Mexico Family and Community Engagement Solutions (NM FaCES)	A public-private collaboration that builds on the New Mexico Public Education Department's work to support home connectivity for students, this initiative takes a community-focused approach to promote digital equity. The program is designed to work alongside the State's broadband expansion effort and prepare residents to benefit from broadband by helping individuals "[connect] as learners and creators" and growing a diverse STEM/IT workforce to provide well-paid, stable employment for New Mexicans living in marginalized communities.[264]
Cultivating Coders	This nonprofit brings coding bootcamps to rural, Tribal, and inner-city communities with the goal of reaching communities underrepresented in the tech field. The organization reports that it has held seven trainings in New Mexico cities as well as one in the Navajo Nation,[265] and was awarded $45,000 through the New Mexico Foundation's workforce equity initiative in April 2023.[266]
New Mexico State Library[267]	New Mexico's libraries offer digital skills and help services that vary by location.

[263] "New Mexico Broadband Equity Fund," New Mexico Foundation, https://www.newmexicofoundation.org/new-mexico-broadband-collective-fund/.
[264] NM FaCES, https://storymaps.arcgis.com/stories/b1f017d11bf1417b89e5591aff0defd5.
[265] Cultivating Coders, https://cultivatecoders.com/.
[266] "New Mexico Worker/Workforce Equity Initiative," New Mexico Foundation, https://www.newmexicofoundation.org/nmwei/.
[267] New Mexico State Library, https://nmstatelibrary.org/.

Asset Name	Description
Cultivating Our Own to Lead (C.O.O.L.)	The Santa Fe Indian School, which is owned by the 19 Pueblos of New Mexico, launched a project to grow capabilities for Tribal members and staff to operate their own broadband networks by training a cohort of technical and administrative teams.

3.4 Needs and gaps assessment

This section describes the gaps between the current state of broadband and digital inclusion and the needs of residents and community anchor institutions in New Mexico, as documented through rigorous and comprehensive data collection and stakeholder outreach efforts.

3.4.1 Broadband deployment

New Mexico gathered data regarding its broadband needs and gaps in preparation for the State's broadband strategic plan and Three-Year Plan (described in more detail in Section 3.4.4) as well as this Plan. According to analysis of the FCC's address fabric (May 2023):

- 70,609 of the State's 873,797 addresses (8 percent) are unserved
- 72,384 (8 percent) are underserved
- 730,804 (84 percent) are served, including addresses that that are slated to receive 100/20 Mbps connectivity under enforceable commitments such as RDOF funding or State grants

The New Mexico Broadband Map shows a concentration of service in densely populated regions, along major transportation corridors, and in areas of strong business and industry demand. Fiber optic service, the most reliable service type for long-term, high-speed, connectivity, is most aligned with these high-demand areas.[268]

[268] "2022 Annual Report," OBAE, https://api.realfile.rtsclients.com/PublicFiles/16569e3bf98c467e95901b46fd511499/743c6949-8171-4386-9f3d-45a4296893cc/obae-annual-report-2022.pdf.

Tribal communities in the State also lack broadband access at disproportionate rates, according to a 2020 report by the New Mexico Indian Affairs Department, [269] which noted that the digital divide among Pueblos, Tribes, and Nations was likely to magnify the impacts of the Covid-19 pandemic by restricting access to remote learning, telehealth, and online economic opportunities. In a statewide survey conducted by the report's project team in 2019, 29 percent of Native American respondents said they did not have access to the internet access at home or work—compared to just 10 percent of non-Hispanic white respondents and 13 percent of Hispanic respondents.

Lack of reliable broadband access is a fundamental barrier to digital equity for some New Mexicans: Representatives of many organizations that participated in OBAE's outreach efforts described a lack of reliable, affordable, high-speed internet access among the communities they serve—particularly in rural areas, where several stakeholders noted a lack of broadband infrastructure.

During outreach conducted for the development of this plan, leadership from the Pueblo of Isleta—which received an award of approximately $26 million from the Tribal Broadband Connectivity Program to deploy fiber-to-the-home in the pueblo and intends to become its own ISP—noted that while there are several existing providers in the area, they do not serve all areas and the reliability of their service is lacking.

Lengthy permit approval timelines pose a challenge to Tribal communities:

Tribal community members highlighted permitting as a barrier to project deployments during OBAE's conversations with the Pueblo of Isleta. Stakeholders were interested in solutions to streamlining the permitting process.

In terms of the State's dedicated broadband office, OBAE is well prepared to facilitate implementation of broadband deployment and other elements of this Plan. In FY22, OBAE operated with a small team and remained small into FY23 with 6.5 full time employees.[270] Through the executive budget, OBAE requested to grow to 21 general fund positions: 14.5 new positions and 6.5 existing positions. In addition, OBAE will create five federally funded positions. This will increase the total staff count to 26.[271]

[269] Sanchez, Gabriel R.; Roybal, Carmela; and Joshi, Aakrit; "Covid-19: Internet Access and the Impact on Tribal Communities in New Mexico," New Mexico Indian Affairs Department, 2020, https://www.iad.state.nm.us/wp-content/uploads/2020/06/nabpi-iad-broadband-report-final.pdf.

[270] "State of New Mexico Three-Year Broadband Plan," OBAE, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p. 103.

[271] "State of New Mexico Three-Year Broadband Plan," OBAE.

Built into the executive budget is $1.7 million in additional funding over FY23. This request incorporates desired classifications, salaries at midpoint, benefits and additional costs for computers and office subscriptions. Also built into the cost is a request to fund salaries at 15 percent above midpoint. While this is outside the normal budgeting for State government, the request is important because OBAE is using generic classifications that do not consider the specialized nature of the work of the project managers and broadband specific positions. OBAE is competing for a limited number of highly skilled workers with knowledge of broadband, telecom, and electrical industries.

> ***"Sustainability is one of the biggest challenges…grants can help build the infrastructure but how do you manage the program going forward?"***
>
> - A concern from a participant in OBAE's stakeholder engagement session with the Santa Fe Indian School

3.4.2 Broadband adoption

The 2021 NTIA Internet Use Survey found that an estimated 19.5 percent of New Mexico residents report that they do not use the internet, which is in line with national averages in the survey.[272] However, analysis of 2021 American Community Survey (ACS) data suggests that internet subscription rates in the State lag the national average and neighboring states: 84 percent of all New Mexican households surveyed report subscribing to the internet, compared to 90 percent of U.S. households, 90 percent of Texas households, 91 percent of Arizona households, 93 percent of Colorado households, and 94 percent of Utah households.

> "In rural New Mexico, high-speed internet is satellite internet and extremely expensive, yet the socioeconomic status of our families prevents them from obtaining it."
>
> - Feedback from a school superintendent who participated in one of OBAE's 2023 digital equity stakeholder engagement sessions

There is wide variability in internet adoption rates within the State, both in terms of all internet subscriptions and wireline internet subscriptions. According to ACS data (5-year estimates, 2016-2021), there is a clear lack of adoption specifically along the western edge of the State. Rates of wireline non-adoption are particularly notable in McKinley and Catron counties, where 71 percent and 73 percent of households, respectively, do not have a wireline internet subscription.

[272] Digital Equity Act Population Viewer, based on 2021 NTIA/Census Current Population Survey – (Internet Use Survey), https://arcg.is/8vGLv (accessed December 21, 2022).

Outside of the western edge, there also is a high degree of non-adoption in Mora County (75 percent)—an area that was devastated by the Hermits Peak/Calf Canyon fire in 2022.[273] In contrast, Los Alamos County stands out in that a much smaller percentage of residents (16 percent) do not subscribe to wireline Internet service.

3.4.3 Broadband affordability

Affordability is a barrier to broadband adoption in New Mexico for some and an obstacle for many.

Across New Mexico, internet subscriptions are heavily correlated with household incomes according to 2021 ACS data (Table 11)—and subscription rates show a larger discrepancy between low-income and higher-income households than in neighboring states and the nation as a whole. Households in the State making $20,000 to $75,000 a year subscribe to internet services at a rate 18 percentage points higher than those who earn less than $20,000, while the national gap is 14 percentage points.

> "Affordability is a major barrier," said one respondent to the Vulnerable Populations Broadband Barriers Survey questionnaire. "Many vulnerable and marginalized groups live in poverty or have low incomes that make even basic broadband service unaffordable. They may lack disposable income for home internet or devices. Some cannot afford the upfront costs of equipment and installation fees."

Table 12: Internet subscription usage rates in New Mexico and neighboring states

	New Mexico	Texas	Arizona	Colorado	Utah	U.S.
Statewide	84%	90%	91%	93%	94%	90%
Less than $20,000	66%	74%	76%	78%	78%	74%
$20,000 – $75,000	84%	89%	90%	91%	92%	88%
More than $75,000	94%	97%	97%	97%	97%	97%

Demand among qualifying New Mexico households for the Affordable Connectivity Program is considerable, with the State consistently ranking among the top three in participation among households with school-aged children seeking monthly subscription assistance.[274] As of April 3, 2023, a total of 159,063 New Mexican households—or 35 percent of households estimated to be eligible for the ACP—were enrolled in the program, exceeding the national average (25.6

[273] "A way of life is all but extinguished by New Mexico's largest wildfire," NBC News, March 26, 2023, https://www.nbcnews.com/news/us-news/way-life-extinguished-new-mexicos-largest-wildfire-rcna75953.
[274] "2022 Annual Report," OBAE, https://api.realfile.rtsclients.com/PublicFiles/16569e3bf98c467e95901b46fd511499/743c6949-8171-4386-9f3d-45a4296893cc/obae-annual-report-2022.pdf.

percent).[275] However, as noted above (Section 3.3.3), substantial additional benefits could be realized by State residents if enrollment rates were to increase.

3.4.4 Broadband access

Analysis of the FCC's address fabric as of May 2023 found that 70,609 of the State's 873,797 addresses (8 percent) are unserved, 72,384 (8 percent) are underserved, and 730,804 (84 percent) are served. This analysis considers locations that are slated to receive 100/20 Mbps connectivity under enforceable commitments such as RDOF funding or State grants as served.

An organization that works with individuals with disabilities, some of whom live in rural and frontier communities, noted—in response to an OBAE outreach effort—that a lack of connectivity restricts access to important resources and opportunities:

"Access to affordable, reliable and secure high-speed broadband could improve consumer access to telemedicine and/or distance education," they said. "Our goal is to provide support to consumers to help them live independently within their chosen community. This has the potential to increase access to important community resources."

The majority of these unserved locations are in rural and low-income areas of the State, increasing the challenge of broadband deployment.

According to a prior analysis of FCC Form 477 data available for the State's 2020 broadband strategic plan, some areas of New Mexico that have access to broadband have fewer choices of internet providers than neighboring States. New Mexico lags behind Arizona, Colorado, Texas, and Utah in the percentage of its population served by three or more broadband providers. Fewer New Mexicans (85 percent) have access to this level of competition for 25/3 service, compared to 88 percent of Arizona residents and 97 percent of Utah residents. Further analysis of these data show that the disparity in New Mexico is mostly caused by fewer providers serving Tribal and rural areas. With respect to these areas, New Mexico trails Colorado and Texas in both categories but is ahead of Arizona.

To analyze changes in service availability, the State's Three-Year Plan (2023) compared the most recent broadband service datasets available (which incorporated FCC data from the end of 2021,

[275] Enrollment data from USAC enrollment and claims tracker, https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/; eligibility estimates are based on 2021 American Community Survey reported data on household income and participation in assistance programs such as the Supplemental Nutrition Assistance Program, Medicaid, Supplemental Security Income, and public assistance income. This estimation does not take into account qualification via Tribal assistance programs, and therefore may underestimate the size of eligible populations throughout the State; see "State of New Mexico Three-Year Broadband Plan," OBAE, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p.9.

predating the release of the address fabric)[276] to those available for the 2020 plan. This analysis indicated that while the total number of "net" unserved locations (i.e., lacking 25/3 service) in New Mexico did not change much from 2020 to 2022—increasing by roughly 2,000—new definitions of broadband and new fiber deployment significantly altered the broadband service map in those two years.

From 2020 to 2022, about 60,000 addresses were newly served by wireline (fiber, cable, or upgraded DSL) or "licensed" fixed wireless service providing reliable connections of 25/3 or more. At the same time, about 59,000 addresses that would have been considered served in 2020 were now considered unserved because they only had unlicensed fixed wireless service, which does not meet the definition of reliable broadband in the BEAD program.[277] Moreover, approximately 25 percent of all residential and business addresses in New Mexico lacked access to wireline networks offering at least 100/20 Mbps. (The State also added about 75,000 new addresses.)

Further analysis of the 2022 EDAC data identified that cable and DSL were the dominant technologies in the State, serving 70 percent and 55 percent of addresses, respectively. (The numbers do not add to 100 percent because some locations have more than one type of service.) Just 26 percent of addresses were served by fiber, and 7 percent were served by licensed fixed wireless.

> "Most of my patients use their cell phone as a computer and this can become a problem in that so much of today's health care coordination, including scheduling and messaging providers, is online. The cell signal is just not reliable and many systems will not work on a phone-based web browser."
>
> - Noted by a physician in the Santa Fe area who participated in one of OBAE's 2023 digital equity stakeholder sessions

3.4.5 Digital equity

The Covid-19 pandemic revealed broadband inequities across the State.[278] In an October 2021 report, the New Mexico Economic Development Department observed that "the lack of suitable internet access in less wealthy and more rural regions of New Mexico concentrates the State's innovation-related

[276] OBAE was provided the latest broadband service datasets from the Earth Data Analysis Center (EDAC) at the University of New Mexico. EDAC's information represented a combination of data provided by a limited number (14) of ISPs to OBAE in the Fall of 2022, and the last-available Form 477 data published by the FCC at the end of 2021.

[277] "State of New Mexico Three-Year Broadband Plan," OBAE, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p.8.

[278] "Statewide Strategic Plan: Empower & Collaborate: New Mexico's Economic Path Forward," New Mexico Economic Development Department, October 2021, https://eddstateplan.com/, p.45.

activities in a few core areas and restricts the ability of non-urbanites to participate in the State's innovation economy."[279]

Measures already being undertaken are discussed in Section 3.1, and existing digital equity assets are discussed in Section 3.3.5. This topic will be covered in greater detail in the State's forthcoming Digital Equity Plan. Initial findings from stakeholder outreach conducted for the development of this Plan and the State's Digital Equity Plan are documented in Appendix B.

> The New Mexico State Legislature defined Digital Equity in House Bill 10 as: "information technology needed for civic and cultural participation, employment, business and economic development, life-long learning and access to essential services generally available to residents regardless of their racial grouping, socioeconomic status or cultural identity."

Broadband adoption: Broadband adoption correlates with residential income, making it a digital equity issue. As noted above, only about 66 percent of New Mexican households making less than $20,000 annually have a wireline Internet subscription—compared to 94 percent of households earning more than $75,000 (see Table 11).

In an outreach session conducted for the development of this Plan, residents of southwest New Mexico reported that high poverty in the region prevents some households from subscribing to available service.[280] Attendees included individuals from Doña Ana, Catron, Grant, Hidalgo, Luna, Sierra, and Socorro Counties.

A survey deployed in Doña Ana County gathered community inputs and used NM DoIT's integrated Ookla Speed Test to gather live data on the speed of internet service at the location and time of the response. For residents without internet, printable surveys were made available at various locations. Speed test results from respondents with internet access showed only 8.5 percent of respondents were served (i.e., at or above 100/20 Mbps), while 37 percent were underserved (above 25/3 Mbps but below 100/20 Mbps) and 54 percent were unserved (below 25/3 Mbps). Of respondents with internet, the majority reported a household income of $50,000 or more while the majority of households without internet reported a household income below $21,000.[281]

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[279] "Statewide Strategic Plan: Empower & Collaborate: New Mexico's Economic Path Forward," New Mexico Economic Development Department, October 2021, https://eddstateplan.com/, p.101.
[280] Soular, Diana Alba, "5 takeaways from Southwest New Mexico internet gathering," Deming Headlight, May 23, 2023, https://www.demingheadlight.com/2023/05/23/5-takeaways-southwest-new-mexico-internet-gathering/.
[281] "Doña Ana Broadband Survey Report," New Mexico Department of Information Technology, https://connect.nm.gov/uploads/1/4/1/9/141989814/dona-ana-broadband-survey-report-2022_final.pdf.

Device needs: A lack of device ownership and usage compounds digital equity issues regarding internet access. Twenty-six of New Mexico's 33 counties are considered to have high or moderate levels of "digital distress"—that is, significant households that rely upon mobile broadband and/or do not own computing devices.[282]

A lack of device ownership and usage compounds digital equity issues regarding internet access. Twenty-six of New Mexico's 33 counties are considered to have high or moderate levels of "digital distress"—that is, significant households that rely upon mobile broadband and/or do not own computing devices.

According to the 2021 NTIA Internet Use Survey, New Mexico has the largest portion of residents in the nation (40.9 percent) who do not use a desktop computer, laptop, or tablet.[283] Given that smartphones are still not as capable as a desktop or laptop (particularly because of their small screens and lack of functionality), and cellular service contracts are often more expensive than home internet service, this represents a significant barrier for the State in terms of achieving adoption and meaningful use of the internet.[284]

"The public needs training and better access to laptops or desktop computers for best use of internet resources. Our organization is small and can't provide all services needed to the community."

- A library staff member who participated in an OBAE outreach effort

Analysis of 2021 ACS data suggests higher rates of device ownership: 93 percent of households report owning at least one computer device. However, only 76 percent own a desktop or laptop computer, also suggesting that access to sufficient devices may be an obstacle to internet use for many households.

Moreover, ownership of a sufficient computing device correlates significantly with household income. Only 53 percent of New Mexican households earning less than $20,000 per year own a desktop or laptop computer, compared to 91 percent of households earning more than $75,000. Low-income households are also more likely to rely on a smartphone as their sole device to access

[282] "2022 Annual Report," OBAE, https://api.realfile.rtsclients.com/PublicFiles/16569e3bf98c467e95901b46fd511499/743c6949-8171-4386-9f3d-45a4296893cc/obae-annual-report-2022.pdf; "digital distress" data from https://pcrd.purdue.edu/digital-distress-what-is-it/.

[283] "Digital Equity Act Population Viewer," NTIA, https://mtgisportal.geo.census.gov/arcgis/apps/MapSeries/index.html?appid=a0013a9dcbb9419e855f563d78e892ef.

[284] "State of New Mexico Three-Year Broadband Plan," OBAE, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p.9.

the internet. 23 percent of households earning less than $20,000 only own a smartphone, while just 4 percent of households earning more than $75,000 do.

To gain additional insight into local needs in the community of Sunland Park, New Mexico, Mamacitas Cibernéticas—a grassroots organization engaging parents to teach other parents digital skills—conducted a survey of 35 residents.[285] Over half of respondents indicated that they live in a low-income household, and all identified as either Mexican and born in Mexico (27) or born in the U.S. of Mexican descent (8). Just over 40 percent also reported that they are age 60 or above. According to the survey, access to computing devices may be an obstacle for respondents to make use of available internet service: 86 percent of respondents have service at home, but only 40 percent have a desktop or laptop computer. The majority (27) have regular access to a smartphone.

> "To close the digital divide, communities must be part of the assessment and planning process to guide services and educational activities that will be utilized." Mamacitas Cibernéticas

The cost of a device appears to be a significant factor, with 71 percent saying they could not afford a home desktop or laptop computer. Residents also reported some difficulty maintaining and troubleshooting devices; approximately 59 percent said they did not have someone who could help them with technology issues, and 86 percent could not afford to repair a computer or fix internet issues.

Digital skills: A survey by Mamacitas Cibernéticas suggests there may be gaps at the local level. When respondents were asked to select their biggest barriers to using the internet, "lack of skills" was the top response—and just over 71 percent said they could not afford the cost or did not have the time to learn additional computer and internet skills. 80 percent also indicated that they "have concerns about online security and safety that make [them] hesitant to use the internet." A lack of digital skills, combined with a lack of access to devices, may both contribute to lower rates of online engagement among respondents; while the majority (almost nine in 10) subscribe to internet service at home, approximately 46 percent said they do not access basic services on the internet.

A local solution to addressing the lack of digital skills has been provided by Teeniors, a small business with a nonprofit arm that offers digital skills coaching to adults. Teenagers and young adults tutor older individuals in using technology from smartphones to smart TVs.[286] The

[285] Data from the forthcoming "Findings and Recommendations Report" by Mamacitas Cibernéticas (publication expected in July 2023), shared with permission from the organization.
[286] "Teeniors: About Us," Teeniors, https://www.teeniors.com/about.html.

organization provides youth an opportunity to build their resume and simultaneously provides adults with digital skills training.

In focus groups Mamacitas Cibernéticas conducted with the respondents to its survey, residents voiced a desire to grow their online skills for various activities, from using Microsoft Office to setting up telehealth appointments—but described barriers such as stigma around their lack of knowledge, and that structured classes can lack flexibility in scheduling and be too fast-paced. During outreach conducted for this Plan, a representative of Mamacitas Cibernéticas also underscored that digital skills training for residents whose primary language is Spanish must be provided in their preferred language.[287]

The outreach effort also identified details on Project C-3PO, a computer literacy program developed by Eastern New Mexico University – Roswell to offer free digital skills services to community members in Roswell, Dexter, Lake Arthur, Hagerman, and Midway. Additional findings from digital equity outreach are detailed in Appendix B.

The Doña Ana County survey found that respondents without internet access reported less confidence in their digital skills compared to respondents with internet access. While many respondents cited other barriers like affordability and availability as primary reasons for not adopting broadband, many respondents highlighted their lower competency with digital skills as a barrier to using the internet if it were accessible.

Digital access for students: On May 18, 2021, First Judicial District Court Judge Matthew Wilson ordered that the State provide students and teachers in need access to digital devices, provide students access to high-speed internet, and provide school districts with sufficient funding for IT staff—finding that the technology to support remote learning was necessary for students to obtain an education as required by the State constitution.[288]

As a result of the Court's decision, OBAE believes that New Mexico has a head start on addressing students' and educators' broadband needs in New Mexico but needs and gaps remain.

[287] Soular, Diana Alba, "5 takeaways from Southwest New Mexico internet gathering," Deming Headlight, May 23, 2023, https://www.demingheadlight.com/2023/05/23/5-takeaways-southwest-new-mexico-internet-gathering/.
[288] The order granted an emergency motion filed by plaintiffs in the *Martinez and Yazzie v. State of New Mexico* consolidated lawsuit, in which the Court ruled in 2018 that the State had violated the provision in Article XII, Section 1 of the New Mexico Constitution to provide "sufficient" and "uniform" public education. Plaintiffs argued that failure to provide the essential technology for remote learning during the Covid-19 pandemic would continue to deny at-risk students access to a sufficient education; see, Matthew J. Wilson, District Judge, "Order Granting Yazzie Plaintiffs' Expedited Motion for Further Relief Concerning Defendants' Failure to Provide Essential Technology to At-Risk Public School Students," First Judicial District Court, Santa Fe County, May 18, 2021 in the case Yazzie/Martinez v. New Mexico, No. D-101-CV-2014-00793.

4. Obstacles or barriers

This section describes known or potential obstacles or barriers that might impede the successful implementation of New Mexico's BEAD Plan—as well as the plan of the New Mexico Office of Broadband Access and Expansion (OBAE, the Eligible Entity) to address these challenges.

This Five-Year Action Plan represents a comprehensive needs assessment that will guide the State's Initial Proposal. Through the process of developing this Plan, New Mexico has identified a range of potential obstacles or barriers it will seek to mitigate. In addition to the high-level discussions in the subsections below, the potential obstacles or barriers include the following:

- **Funding availability** – As housing density is a key driver of broadband network deployment costs, the State's extensive rural areas with widely spread-out addresses make connecting all unserved locations an extremely expensive proposition. During individual meetings conducted for this Plan, OBAE heard from a number of Tribal and rural ISPs that even if the capital cost of a project is covered, the population density can create shortfalls in operating expenses, as well. While NTIA's BEAD allocation and the funds allocated by the State Legislature are significant, the total amount of funding available will not enable deployment of fiber broadband infrastructure to all unserved locations in the State (see Section 5.6). OBAE also will not have enough BEAD funding to address the needs of underserved locations or community anchor institutions (CAI) that lack 1 gigabit service.
- **Balancing technology limitations and costs** – Recognizing the high cost of fiber deployment, fixed wireless technology may be well-suited to less dense areas of the State. Fixed wireless, however, comes with substantial limitations in performance and also has higher operational and equipment replacement costs as compared to fiber networks. Moreover, for the most widely spread-out homes and businesses in New Mexico (i.e., in areas where there are no existing towers for mounting fixed wireless antennas), address density is often so low that a fixed tower might only serve one or a few premises with broadband speeds—meaning that the cost of fixed wireless would then approach the usually higher cost of fiber.

- **Addressing permitting requirements across State, federal, Tribal, and local jurisdictions** – New Mexico's land ownership patchwork, combined with its significant environmental resources and rich archaeological history, make permitting long fiber routes especially challenging. Permitting on federal lands in particular can cause significant delays. New Mexico Senator Ben Ray Luján joined senators from multiple states in signing a December 1, 2022, letter to the Secretaries of the U.S. Department of the Interior, U.S. Department of Agriculture, and U.S. Department of Commerce "concerning the extensive delays internet service providers are experiencing when obtaining permit approvals," citing timelines of 16 to 48 months to permit broadband projects on Bureau of Land Management (BLM) or National Forest Service Land in New Mexico.[289]
- **Accessing the rights-of-way** – Rights-of-way in the State are controlled by a patchwork of sometimes overlapping State and federal agencies, Tribes and Pueblos, municipalities, and other authorities having jurisdiction, some of which lack sufficient resources and clear processes for quickly permitting right-of-way use approval—leading to time and cost inefficiencies when seeking access to deploy broadband infrastructure. Accessing poles to add new aerial attachments—and the overall cost of make-ready in the rights-of-way—are also potential obstacles.
- **Accessing sufficient middle-mile fiber** – Many of the State's unserved and underserved communities lack access to robust middle-mile infrastructure, making it less cost-effective for service providers to extend or upgrade their last-mile networks.
- **Resolving conflict between the FCC's Broadband Map and New Mexico's map[290]** – Both in terms of availability and fabric, the State seeks guidance on which data sources the NTIA will accept, given that the data provided to New Mexico by ISPs may be subject to nondisclosure agreements (NDA).
- **Addressing potential noncompliance with the enforceable buildout commitments of "[a]n enforceable commitment for the deployment of qualifying broadband to a location"[291]** – The BEAD rules prohibit the State from allocating funds to areas that will be served by RDOF-funded projects, but those projects have not yet been constructed.

[289] Senator John Barrasso et al., letter to Secretary Haaland, Secretary Vilsack, and Secretary Raimondo, December 1, 2022.
[290] "New Mexico Broadband Mapping Program," University of New Mexico Earth Data Analysis Center (EDAC), https://edac.unm.edu/nmbb/. The NMBB Map, http://nmbbmapping.org/mapping/, is an interactive map built on ESRI's ArcGIS Server API for Flex. The map is credited to the New Mexico DoIT Offices of Broadband and Geospatial Technology.
[291] As defined in the BEAD NOFO, https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf, fn.52, p. 36.

- **Complying with the Build America Buy America Act** – The State recognizes that compliance with those requirements (in the absence of certain waivers) may create considerations for project supply chain and risk management.[292] New Mexico's Three-Year Broadband Plan (2023) notes, "The mandate to buy American parts presents a conundrum because some broadband parts have been historically manufactured in foreign countries. The search for suitable and high-quality replacements and alternative manufacturers can be time consuming and at times futile."[293]

4.1 Legislative and regulatory barriers

New Mexico's Legislature and State government have been preparing for this Plan since before the rules were announced. New Mexico's Legislature in 2021 established the Office of Broadband Access and Expansion (OBAE) and Connect New Mexico Council to better coordinate broadband deployment efforts among different State entities.[294]

Permitting can be a barrier to broadband deployment[295] but New Mexico anticipated that concern and has been taking steps to mitigate any potential obstacles in that regard. The Connect New Mexico Council (CNMC) established the Permits, Rights-of-Way, and Pole Attachments (PROP) working group to focus on essential processes that will enable the effective deployment of broadband to all New Mexicans. The composition of the working group is diverse, including State and federal agencies, electric utilities that own poles, and internet service providers. Three major PROP initiatives include:[296]

- **Permits and rights-of-way streamlining:** This effort is intended to facilitate and expedite the complicated processes of securing the permits and rights-of-way agreements necessary from the many entities (local, State, and federal) having jurisdiction. The initiative is intended to put in place policy recommendations and processes that will better coordinate efforts between State and federal agencies, Tribes and Pueblos, municipalities, and other stakeholders.

[292] "Build America Buy America," Office of Acquisition Management, https://www.commerce.gov/oam/build-america-buy-america.
[293] "New Mexico Broadband Plan Update," OBAE, January 1, 2023, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p.107.
[294] "New Mexico Broadband Program," OBAE, https://www.doit.nm.gov/programs/broadband/.
[295] Representatives of several stakeholders, including ISPs and Tribes, expressed to OBAE during outreach and consultations that challenges with obtaining permits—including from railroads, the Bureau of Land Management, and the New Mexico Department of Transportation—can be a barrier to broadband infrastructure deployment.
[296] "New Mexico Broadband Plan Update," OBAE, January 1, 2023, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p.74.

- **Modernization of pole attachment policies and practices:** This effort is intended to facilitate and expedite the complicated processes of securing pole attachment agreements for "make-ready," or preparing utility poles for safely receiving new broadband infrastructure attachments.

- **NMDOT rights-of-way fee waiver program for in-kind fiber and/or conduit contribution:** Through this program, NMDOT would offer private broadband providers access to rights-of-way at a significantly reduced charge in exchange for either 1) allowing NMDOT and public agencies to install State-owned conduit and fiber at the same time as the private facilities are deployed (i.e., Dig Once); or 2) granting a fair and equitable reduction in billable broadband services provided to the State by the broadband entities or their partners. The State's exchange of access and use of the public right-of-way, for conduit and fiber or broadband service on a monthly or annual billable basis, would complement the FCC's infrastructure sharing statute 47 USCS §224.

NMDOT has been developing right-of-way management policies and rules to allow private broadband entities to be treated as utilities under 23 CFR Part 645 for several years, beginning with revising the Utility Accommodation Rule 17.4.2 NMAC to allow private businesses to have similar access to public rights-of-way that Public Regulation Commission (PRC) consumer rate regulated traditional utilities like water, electricity, and gas have enjoyed.

NMDOT also began implementing a publicly available four-year future Statewide Transportation Improvement Program (STIP) access portal in 2022 so that broadband companies can plan on future route deployments simultaneously with NMDOT highway improvement projects.

In the 2023 legislative session, Governor Michelle Lujan Grisham and OBAE pursued additional legislation to create smoother pathways for the development of broadband infrastructure, and the package of bills passed both houses and were signed into law by the Governor.[297]

According to Broadband Director Kelly Schlegel in a statement issued in April 2023, "in the several months since my appointment, it's become imminently clear that the key to making universal broadband a reality in New Mexico is breaking down some of the systemic barriers that exist in the form of complicated Rights of Way processes, cumbersome, multilayered grants procedures, and limitations on the State's ability to procure services for critical infrastructure projects."

[297] "Governor Signs Package of Broadband Bills which Break Down Systemic Barriers to Better Internet," news release from Connect New Mexico, April 6, 2023, https://api.realfile.rtsclients.com/PublicFiles/16569e3bf98c467e95901b46fd511499/127405bb-2ba3-4934-ad35-b7bc5b7a79ca/OBAE-legislative-agenda-signed-into-law.pdf.

The legislative package signed into law by Governor Lujan Grisham included the following bills intended to ameliorate these obstacles:

- House Bill 160 (Broadband Infrastructure): Gives the State Transportation Commission discretion to waive Rights of Way fees for installation of infrastructure for the public good, to provide broadband internet services to unserved or underserved locations as defined in the Connect New Mexico Act. The legislation removes obstacles for smaller ISPs to be able to commit to projects that may not be otherwise economically feasible.
- House Bill 232 (Disclosure of Certain Info): HB 232 aids OBAE in the broadband grant making process by establishing the confidentiality of certain grant application materials until the grant making process is complete, thereby ensuring a fair competitive process.
- House Bill 262 (Transfer Connect New Mexico Program): Authorizes OBAE to use Connect New Mexico Fund (CNMF) appropriations to grant awards to private entities for broadband infrastructure to provide service primarily for residential purposes. The bill transfers responsibility to OBAE to develop grant programs using CNMF appropriations and authorizes grant programs that promote any objective of the State broadband plan.
- Senate Bill 155 (Use of Telecomm Fund for Broadband): Amends the Rural Telecommunications Act of New Mexico to require the PRC to hold rates static for three years and increases the maximum size of the State Rural Universal Service Fund for broadband purposes to $30 million after December 31, 2026.
- Senate Bill 452 (Broadband Changes): Among other changes, amends the DoIT Act to allow the secretary and OBAE to utilize the department's established rates on a competitively neutral basis to provide internet service in order to connect underserved and unserved populations of New Mexico. Requires OBAE to follow an open process to identify unserved and underserved areas, while allowing for fair competition by private entities who would agree to provide service in unserved and underserved areas. With the exception of Tribes and Pueblos, the bill also requires all facilities-based providers to report semiannually to the broadband office each year on or before March 1 or September 1 depending on the data source in the same format as reported to the Federal Communications Commission.

To gain efficiencies in the permitting process at the federal level, the State may also consider enrolling or encouraging project sponsors to enroll eligible projects in the FAST-41 program[298]—which sets collaboratively established, publicly tracked timelines for environmental reviews and

[298] The program, established by Title 41 of the Fixing America's Surface Transportation (FAST) Act—i.e., FAST-41—in 2015, is administered by the Federal Permitting Improvement Steering Council; "FAST-41 Fact Sheet," FPISC, https://www.permits.performance.gov/sites/permits.dot.gov/files/2022-09/FPISC_090922.pdf.

authorizations by federal agencies. Broadband infrastructure projects that are subject to the National Environmental Policy Act (NEPA) and expected to require an investment of over $200 million (waived for projects with Tribal sponsorship), among other criteria, are eligible. The Santa Fe Indian School has enrolled the Pueblo Education Network (PEN) project in the program,[299] and the State may consider leveraging FAST-41 for additional projects as appropriate.

4.2 Labor shortages

The pool of skilled workers for broadband deployment is smaller than experts predict is necessary for the broadband projects that BEAD will fund nationwide. This analysis compounds the State's general labor shortage; the U.S. Chamber of Commerce reports that New Mexico has only "68 available workers for every 100 open jobs."[300] In outreach conducted for this Plan, several small ISPs noted that they have difficulty finding and retaining a skilled workforce.

As described elsewhere in this Plan, the State plans to use new and existing relationships to promote workforce development efforts and also to use its grant program to encourage service providers to hire and train employees as part of their BEAD projects. Workforce development efforts supported by Digital Equity Act funding will further enhance BEAD projects by providing a larger, more diverse pool of talent.

OBAE has submitted a request for State funding to accomplish its goals of workforce development, with the understanding that it will be necessary to manage the stakeholder relationships to ensure a cohesive and integrated strategy of training workers across the State. This includes programs in rural communities where ISPs and electric co-ops will need to recruit skilled labor to perform network installations, construction, and maintenance.[301]

OBAE has identified potential assets for workforce development among higher education institutions and private entities providing training and certifications related to fiber deployment, including through partnerships with local or State government entities (see Appendix B and Section 3.3.5). In addition to direct support such as partnerships and/or funding to expand access to these programs, OBAE also anticipates playing an important role in promoting available training and driving interest in employment opportunities in the broadband deployment sector.

[299] "Santa Fe Indian School Broadband," Federal Infrastructure Permitting Dashboard, https://www.permits.performance.gov/permitting-project/fast-41-covered-projects/santa-fe-indian-school-broadband.
[300] "The Worker Shortage Across America," U.S. Chamber of Commerce, interactive map accessed March 21, 2023, https://www.uschamber.com/workforce/the-states-suffering-most-from-the-labor-shortage?state=nm.
[301] "New Mexico Broadband Plan Update," OBAE, January 1, 2023, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p. 109.

4.2.1 National labor shortage analysis

The GAO's December 2022 analysis of the telecommunications workforce states that, "thousands of additional skilled workers will be needed to deploy broadband and 5G" as a result of eight federal broadband funding programs, including the $41.6 billion investment from BEAD.[302] The GAO focused on eight "key broadband deployment occupations" for its analysis of growth and wages including line technicians and repair, fiber splicers, network engineers, field technicians, general construction laborers, heavy equipment operators, on-site home repair personnel, and central office personnel.

In January 2023, the FCC's Telecommunications Workforce Interagency Group analyzed similar industry labor categories and finds a "profound skills gap" in the telecommunications industry workforce that is created, in part, by the "vast new investment" in advanced communication infrastructure of the IIJA BEAD $42.6 billion investment.[303]

In 2020, prior to the IIJA allocation, an FCC Broadband Deployment Advisory Committee (BDAC) report suggested that "considerable doubt has arisen among broadband infrastructure industry stakeholders as to whether they can meet build-out projects due to current workforce challenges."[304] The report found that there were 29,000 broadband-related technicians in the U.S. and that there would be a demand to hire 20,000 more technicians over the next 10 years.[305]

In comparison, a 2021 Brookings Institution analysis of an earlier version of the IIJA discusses the impact of a proposed $80 billion Congressional allocation of funding toward high-speed broadband. While the actual IIJA investment in broadband infrastructure is almost half as much as that, the Brookings analysis introduces a model that assume every $1 million in broadband investment results in the creation of 2.5 direct job opportunities.[306] By applying this Brookings analysis, planning for the IIJA's $42 billion of broadband investment will result in the creation of an additional 105,000 broadband-related jobs over the next five years.

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[302] "Telecommunications Workforce: Additional Workers Will Be Needed to Deploy Broadband, but Concerns Exist About Availability," GAO, December 15, 2022, https://www.gao.gov/assets/gao-23-105626.pdf.
[303] FCC Telecom Interagency Working Group Report on Workforce (January 2023), https://docs.fcc.gov/public/attachments/DOC-390665A1.pdf, p.4.
[304] BDAC, Broadband Infrastructure Deployment Job Skills and Training Opportunities Working Group Report,https://www.fcc.gov/sites/default/files/bdac-job-skills-training-opportunities-approved-rec-10292020.pdf, p.6.
[305] BDAC, Broadband Infrastructure Deployment Job Skills and Training Opportunities Working Group Report, https://www.fcc.gov/sites/default/files/bdac-job-skills-training-opportunities-approved-rec-10292020.pdf, p.7.
[306] Brookings, Marcela Escobari, Dhruv Gandhi, and Sebastian Strauss, "How federal infrastructure investment can put America to work," March 17, 2021, https://www.brookings.edu/research/how-federal-infrastructure-investment-can-put-america-to-work/ (p.12) citing to a Univ of Mass, Amherst Political Economy Research Institute 2020 study of the impact of a $6 trillion 10-year economic stimulus package that includes broadband projects. https://peri.umass.edu/publication/item/1297-job-creation-estimates-through-proposed-economic-stimulus-measures.

4.2.2 Other workforce growth and diversity challenges

In addition to a labor shortage for broadband deployment, the State must also address the following key workforce challenges—many of which were identified by the 2020 FCC BDAC report. Subsequent reports, including the January 2023 FCC Working Group Report, as well as the GAO 2022 analysis, reinforce many of the FCC's 2020 findings as they update the analysis to factor in IIJA BEAD project demands.

Lack of upward mobility: Broadband workers are more likely to be employed than the general workforce but lack upward mobility.[307] The U.S. Department of Labor states that the "increasing share of people ages 65 and older contributes to a projected labor force growth rate that is slower than much of recent history, as well as a continued declined in the labor force participation rate…"[308] The broadband industry is not immune as statistics show that broadband workers are getting older and close to retirement while there are fewer younger workers to take their place.[309] Even for positions that require significant on-the-job training like field technicians and line workers, there is significant turnover making it difficult for employers to maintain workforce levels and justify investing in further training.[310]

Impact of Covid and aging workforce: The FCC BDAC 2020 report noted that the impact of COVID and the "Great Resignation" must be considered when analyzing the market for low- and medium-wage workers, including the increased retirement of older workers and workers being squeezed out due to childcare or elder care obligations.[311]

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[307] Compared to the general workforce, broadband workers are more male, older, have less formal education; they are also better paid, more likely to work full-time, more likely to be covered by a union, and face lower barriers to entry. Compared to the current unemployed and underemployed population, they are also more likely to be white. On the flip side, broadband occupations offer limited pathways to higher-paying jobs and are expected to grow less over the next decade than most other occupations." Marcela Escobari, Dhruv Gandhi, and Sebastian Strauss, "How federal infrastructure investment can put America to work," The Brookings Institute, March 17, 2021, https://www.brookings.edu/research/how-federal-infrastructure-investment-can-put-america-to-work/.

[308] "Employment Projections and Occupational Outlook Handbook News Release," U.S. Bureau of Labor Statistics, September 8, 2022, https://www.bls.gov/news.release/ecopro.htm.

[309] "Broadband Infrastructure Deployment Job Skills and Training Opportunities Working Group Report," FCC Broadband Deployment Advisory Committee (BDAC), October 29-30, 2020, https://www.fcc.gov/sites/default/files/bdac-job-skills-training-opportunities-approved-rec-10292020.pdf, p.11.

[310] "Broadband Infrastructure Deployment Job Skills and Training Opportunities Working Group Report," FCC Broadband Deployment Advisory Committee (BDAC), October 29-30, 2020, https://www.fcc.gov/sites/default/files/bdac-job-skills-training-opportunities-approved-rec-10292020.pdf, p.11.

[311] https://www.fcc.gov/sites/default/files/bdac-job-skills-training-opportunities-approved-rec-10292020.pdf (page 6); See also "Creating and Expanding a Diverse Broadband Workforce with Good Jobs and Career Pathways: Broadband Equity, Access, and Deployment (BEAD) Program Playbook for Eligible Entities," America Achieves, Rural Innovation Strategies, Inc. (RISI), First Edition, June 22, 2022, https://americaachieves.org/wp-content/uploads/2022/06/America-Achieves-Broadband-Workforce-Report-June-2022.pdf (page 8-9); See also Brookings, Marcela Escobari, Dhruv Gandhi, and Sebastian Strauss, "How federal infrastructure investment can put America to work," March 17, 2021, https://www.brookings.edu/research/how-federal-infrastructure-investment-can-put-america-to-work/, p. 1.

Lack of awareness about broadband jobs: The FCC BDAC also found that there is a lack of awareness among job seekers of the opportunities for strong employment in the broadband infrastructure industry caused in part by a lack of training and certification programs offered by either educational institutions or industry stakeholders.[312]

The FCC provided a countervailing argument to the impact of COVID and lack of awareness by noting that the importance of broadband and the increased reliance on broadband services during COVID, as well as the treatment of broadband workers as essential during that time, gives the industry an opportunity to expand awareness about the broadband labor market and demand.

This is an area of opportunity for the State and its partners to ameliorate the potential broadband deployment workforce shortage.

Lack of standardized training: A lack of standardized training and coordination of employment opportunities in the industry fails to create clear career pathways and broader skill sets among broadband workers that can be more generally applicable which, in turn, inhibits a flow of broadband workers to meet immediate demands for specific types of workers, as well as inhibiting career advancement and changes.

Moreover, both the FCC and a more recent paper by America Achieves found a growing credentialing environment with multiple organizations developing individual credentialling and training programs. These certifications include multiple certification agency programs within several employment classifications including cable splicing, tower technician, outside plant engineer, and several others.[313]

Recruitment challenges in rural areas: The GAO analysis further noted that recruiting necessary workers into rural areas may be more complicated due to the lower population density and remoteness of those communities, as well as statistics that suggest only 10 percent to 15 percent of telecommunications workers travel beyond 200 miles from their homes to work on remote projects.[314]

Difficulty in hiring and retaining broadband workers: The FCC also found that these positions are difficult to hire and retain due to the uncertainty and project-based nature of the work, the requirement to be on-call and ready to report to work on a new job without much notice, and requirements to travel to a different city for long-term stays during a job, as well as delays in

[312] FCC, https://www.fcc.gov/sites/default/files/bdac-job-skills-training-opportunities-approved-rec-10292020.pdf.
[313] https://americaachieves.org/wp-content/uploads/2022/06/America-Achieves-Broadband-Workforce-Report-June-2022.pdf, p. 48.
[314] https://www.gao.gov/assets/gao-23-105626.pdf, p. 14.

employment and requirements to stop work due to external factors like weather and material supply shortages.[315]

Lack of diversity in the broadband workforce: The National Governors Association notes that 83 percent of telecommunications line installers are white and only 6 percent are women, making it even more difficult to recruit workers if they do not see themselves in the positions.[316]

Increased competition from other broadband infrastructure projects: America Achieves and the GAO note there will be increased competition for workers from other broadband infrastructure projects just getting under way with funding from the ARPA grant programs and USDA and RDOF programs, as well as additional competition for trades such as construction, electricians, and other labor categories that support large infrastructure projects as a result of the IIJA's other investments in transportation, water, and other infrastructure.[317]

The growth of fixed wireless and 5G installation could be viewed as competition for some of these labor categories, or as an opportunity and synergy to bring new workers into the telecommunications industry more generally. Experts note a boom in demand for high-wage, high-skilled workers for these jobs, many of which have crossover and adjacent skills to support wireline fiber broadband projects.[318]

No broadband-specific job codes: Gathering necessary statistics is made difficult by the fact that the U.S. Department of Labor has no broadband-specific job codes.[319] Experts suggest there are 15 different Department of Labor job codes that could be included in the analysis of the broadband workforce market—ranging from general categories such as construction laborers and managers, miscellaneous assemblers, and sales representatives to more specific roles including telecommunications equipment installers and telecommunications line installers.[320]

4.3 Supply chain issues and materials availability

The extensive funding allocated to broadband infrastructure deployment by Congress—and the current and planned investments by state and local governments and ISPs nationwide[321]—has

[315] FCC, https://www.fcc.gov/sites/default/files/bdac-job-skills-training-opportunities-approved-rec-10292020.pdf.
[316] https://www.nga.org/news/commentary/governors-broadband-investments-are-creating-jobs/.
[317] https://americaachieves.org/wp-content/uploads/2022/06/America-Achieves-Broadband-Workforce-Report-June-2022.pdf, pp. 8-9; See also, GAO Report on Telecommunications Workforce, p.14. https://www.gao.gov/assets/gao-23-105626.pdf.
[318] https://americaachieves.org/wp-content/uploads/2022/06/America-Achieves-Broadband-Workforce-Report-June-2022.pdf, p.26.
[319] https://americaachieves.org/wp-content/uploads/2022/06/America-Achieves-Broadband-Workforce-Report-June-2022.pdf, p.24.
[320] https://americaachieves.org/wp-content/uploads/2022/06/America-Achieves-Broadband-Workforce-Report-June-2022.pdf, p.24.
[321] Diana Goovaerts, "Editor's Corner: Is the fiber hangover real?" Fierce Telecom, March 15, 2023, https://www.fiercetelecom.com/broadband/editors-corner-fiber-hangover-real.

caused a spike in demand for labor and materials. This increased demand compounds an already disrupted market as Covid-19 caused factory closures and other issues in the supply chain.

Supply chain challenges reached unprecedented levels during the COVID-19 pandemic and have not disappeared. "Given that there are multiple new risk factors on the horizon, it is hard to envision trust in the system being restored to pre-COVID-19 levels any time soon," according to S&P Global Intelligence,[322] citing both geopolitical risks such as Ukraine and Taiwan and transportation risks including labor unrest and unanticipated cargo surges.

According to recent research, delays on orders of new fiber are decreasing, but are still challenging.[323] The allocation of BEAD funding may exacerbate the situation.

During 2023, inflation remains a potential barrier. "Even though inflation started to cool toward the end of 2022, it is still unclear how long it will take to return to its long-run average—that is, if currently high inflation will persist," the Federal Reserve Bank of St. Louis said in a blog post.[324]

For example, the fiber optic cable producer price index from the Federal Reserve Bank of St. Louis rose over 20 percent between January 2020 and April 2023, as shown below.[325]

[322] Peter Tirschwell, S&P Global Market Intelligence, "Risk Will Define Supply Chains for Years To Come," January 13, 2023, https://www.spglobal.com/en/research-insights/featured/special-editorial/look-forward/risk-will-define-supply-chains-for-years-to-come.

[323] "Fiber Broadband Association Reports Dramatic Improvements to Supply Chain," Fiber Broadband Association, May 2, 2023, https://fiberbroadband.org/2023/05/02/fiber-broadband-association-reports-dramatic-improvements-to-supply-chain/, reporting significantly improved lead times in several broadband categories, with delays down to approximately five weeks, depending on the category – hand holes were still registering delays of 8 to 14 weeks as of March 2023.

[324] Michael McCracken and Trần Khánh Ngân, "Will High Inflation Persist?" Federal Reserve Bank of St. Louis, *On the Economy Blog*, January 10, 2023, https://www.stlouisfed.org/on-the-economy/2023/jan/will-high-inflation-persist.

[325] "Producer Price Index by Industry: Fiber Optic Cable Manufacturing: Fiber Optic Cable, Made from Purchased Fiber Optic Strand (PCU3359213359210)" for the period January 2020 to April 2023, Federal Reserve Bank of St. Louis, .The latest available data is at https://fred.stlouisfed.org/graph/fredgraph.png?g=14Kos. Because the URL links to the latest available data, the data accessible via the link may be more recent the data in the graph above. The series data is available at https://fred.stlouisfed.org/series/PCU3359213359210.

Table 13: Fiber optic cable producer price index, January 2020 to April 2023

OBAE will continue to monitor this issue and will incorporate the latest data into its grant program design. OBAE also will continue to gather information regarding best practices, for example from the Fiber Broadband Association, and will continue to engage with ISPs and other partners to identify mitigation strategies.[326]

4.4 Industry participation

ISPs will be critical partners for connecting unserved and underserved communities and maintaining access, and OBAE has been and continues to be engaged with the industry statewide to seek their participation.

OBAE regularly engages with ISPs of all sizes (see Section 3, Table 5), and has conducted extensive outreach to inform BEAD and Digital Equity planning. OBAE has reached out to ISPs in New Mexico across all industry segments, including incumbent providers, competitive providers, and electric and telecommunications cooperatives. For example, OBAE held one-on-one meetings with Sacred Wind, Plateau, Kit Carson, Windstream, and Tularosa in July 2023. This outreach confirms that ISPs in the State intend to be collaborative partners in future broadband deployment efforts.

However, the engagements with service providers revealed potential barriers in workforce development efforts and other challenges to broadband deployment.

For example, Sacred Wind highlighted a lack of experience in the communities as a barrier to workforce development and that competing with larger companies' wages is a challenge. They are building a Tribal workforce to help serve Tribal communities and are working on securing funding for training programs to aid the workforce development. Plateau singled out the

[326] Fiber Broadband Association Reports Dramatic Improvements to Supply Chain," Fiber Broadband Association, May 2, 2023, https://fiberbroadband.org/2023/05/02/fiber-broadband-association-reports-dramatic-improvements-to-supply-chain/.

concerns with right-of-way processes as a roadblock to deployment. The lengthy process for right-of-way access coupled with supply chain issues are posing significant challenges for the ISP. Similarly, Kit Carson is struggling to hire an experienced workforce and singled out the lengthy right-of-way permitting process as a barrier to deployment.

ISPs have also played a key and ongoing role in helping the State identify service availability and gaps. Every six months, ISPs provide their data on customer coverage and technology type to the New Mexico Broadband Program (NMBBP) to build the New Mexico Broadband Map. According to the NMBBP, providers "realize the importance of sharing this information both for individual business opportunities and supporting integrated infrastructure planning."[327]

4.5 Topography

New Mexico encompasses a large geographic area of diverse interior-continental environments, including mountain ranges, forests, grasslands, and deserts. Temperatures vary widely across the State.[328] An important feature of New Mexico's summer climate is the North American Monsoon, which can start in late June and extend into September.[329] July and August are the wettest months across much of the State. In some regions of the State, monsoon rainfall accounts for half of the annual precipitation and plays an important role in supporting the agricultural economy.[330] The monsoon rains are highly beneficial but occasionally can be destructive.[331]

New Mexico's diverse topography means there likely will be high-cost areas in a variety of environments. The State's outreach and planning efforts are designed to identify those areas.

For example, dry and rocky areas in New Mexico—both lowland desert and highland mountain areas—challenge any design that calls for buried cable. In sandy areas, in contrast, erosion is a threat to buried cables; dry arroyos are subject to flash floods, so cables installed there have to be deeply buried.

Areas at high altitudes have especially long winters with a correspondingly short season for broadband deployment and construction. And some parts of New Mexico are comparable to Alaska with regard to the remoteness of the land and the difficulty of housing construction workers.

[327] "Broadband Internet Service Providers," NM DoIT, https://www.doit.nm.gov/programs/broadband/participating-internet-service-providers/.
[328] "New Mexico State Climate Summary," NOAA, https://statesummaries.ncics.org/downloads/NewMexico-StateClimateSummary2022.pdf.
[329] "New Mexico State Climate Summary," NOAA.
[330] "New Mexico State Climate Summary," NOAA.
[331] "New Mexico State Climate Summary," NOAA.

Combined with the State's topography, its extensive rural areas, which include widely spread-out homes and isolated communities such as colonias[332] make broadband deployment especially challenging. Connecting remote communities may require extensive construction in difficult terrain.

4.6 Affordability

Affordability is a barrier to broadband adoption in New Mexico for some and an obstacle for many.

Data from the American Community Survey indicate broadband adoption in the State correlates significantly with income, and there is a larger discrepancy in subscription rates between low-income and higher-income households in New Mexico than in neighboring states and the nation as a whole. Households in the State earning $20,000 to $75,000 a year subscribe to internet services at a rate 18 percentage points higher than those who earn less than $20,000, while the national gap is 14 percentage points.

A notable portion of low-income households that subscribe to service utilize the federal ACP subsidy to cover part of the cost. ACP participation among households in the State outranks the national average, especially among households with school-aged children. The State consistently ranks in the top three in terms of enrollment by families with students, and 35 percent of all New Mexican households that are eligible for the subsidy were receiving it as of April 2023—compared to 25.6 percent of eligible households nationally. While relatively strong participation rates mean that many residents are receiving valuable support to obtain home internet service, those participation rates also indicate a high demand for assistance.

As discussed in Section 3.3.3, OBAE has worked with the State's ISPs to encourage them to enroll in the program and promote it to their customers, and the Public Education Department conducted outreach to households with students. As of the writing of this Plan, OBAE is also engaged with legislators on drafting a bill that would create a State subsidy to complement the ACP.

Multiple entities in the State have also received grants through the FCC's ACP Outreach Grant Program to raise awareness about the ACP within their communities and promote enrollment. The Pueblo of Jemez and the Pueblo of Zuni were awarded funding through the Tribal Competitive Outreach Program (TCOP), while the City of Albuquerque, New Mexico Black Leadership Council, and El Paso Community Foundation (a member of the Borderplex Connect

[332] Defined by the U.S. Department of Housing and Urban Development as "rural communities within the U.S.-Mexico border region that lack adequate water, sewer, or decent housing, or a combination of all three." See, "Colonias History," HUD Exchange, https://www.hudexchange.info/programs/cdbg-colonias/colonias-history/.

coalition, which works in the Las Cruces area) received funding through the National Competitive Outreach Program (NCOP). (See section 3.3.3.)

4.7 Digital literacy

2021 Census data indicate that New Mexicans engage in a range of common online activities at similar rates as neighboring states and the nation. However, like the nation as a whole, less than one-third of New Mexicans report using the internet to take a class or participate in job training, telecommute, or search for a job—potentially suggesting opportunities for economic growth if these uses could be expanded.[333]

As digital literacy is a young field, more data collection is needed to understand how digital literacy relates to demographic traits such as income, age, race and ethnicity, and education. The State is conducting a statistically valid survey of New Mexico households to support the development of the State's Digital Equity Plan that will examine the state of digital literacy in New Mexico in more detail.

The survey, which is in progress as of the writing of this Plan, will include a representative sampling of residents and collect data on challenges to meaningful use of broadband by New Mexico populations in categories defined by the NTIA as being from historically disconnected communities, including people with disabilities, racial or ethnic minority groups, and residents of rural areas. This survey will provide a better measurement of the State's digital literacy status and form the basis for how to close gaps revealed.

A local-level survey of 35 residents of Sunland Park, New Mexico by the organization Mamacitas Cibernéticas (discussed in Section 3.4.5) suggests that a lack of digital skills may prevent some New Mexicans from using the internet when service is available. While almost nine in 10 respondents have internet service at home, approximately 46 percent said they do not access basic services on the internet—and when respondents were asked about their barriers to using the internet, a lack of skills was the most commonly selected response. Over 71 percent said they could not afford the cost or did not have the time to learn additional computer and internet skills.

[333] U.S. Census Bureau. November 2021, Current Population Survey, Computer and Internet Use Supplement.

5. Implementation plan

This section describes the State's comprehensive potential partner outreach and engagement process; its priorities, planned activities, and strategies in terms of implementing the BEAD Five-Year Action Plan; and the estimated cost and timeline for achieving universal service in New Mexico.

5.1 Stakeholder engagement process

This section describes the comprehensive, multi-faceted engagement process conducted by the New Mexico Office of Broadband Access & Expansion (OBAE) in preparation of this Plan. The stakeholder engagement effort, comprising statewide meetings and surveys with a complete range of stakeholders, demonstrated collaboration with local and regional entities (governmental and non-governmental), including Pueblos, Tribes, and Nations. It reflects OBAE's effort to facilitate an inclusive and effective engagement model. The stakeholder engagement process also included the covered populations[334] that have been identified as core stakeholder groups.

> Robust and extensive community engagement, especially with stakeholders who are unserved and underserved, is a critical effort to truly achieve bold NM broadband solutions,

To achieve OBAE's vision of delivering equitable and inclusive broadband solutions, OBAE has established strong collaborative relationships with private and public organizations, as well as

[334] Per NOFO Section I.C.g, referencing IIJA Section 60302(10), the covered populations are:
1. Individuals who live in covered households;
2. Aging individuals;
3. Incarcerated individuals, other than individuals who are incarcerated in a Federal correctional facility;
4. Veterans;
5. Individuals with disabilities;
6. Individuals with a language barrier, including individuals who—
    a. Are English learners; and
    b. Have low levels of literacy;
7. Individuals who are members of a racial or ethnic minority group; and
8. Individuals who primarily reside in a rural area.

local and State agencies. Through the Connect New Mexico Council and various Working Groups, OBAE regularly coordinates with a diverse group of stakeholders. In addition, OBAE provides continuous stakeholder outreach through its New Mexico Tribal Broadband Newsletter and New Mexico Broadband Connection Newsletter.

As of the writing of this Plan, OBAE is in the midst of extensive and lengthy consultation with its Tribal partners—who have shared priorities, insights, and experiences to help inform OBAE's work and the State of New Mexico's knowledge of digital needs among the Nations, Pueblos, and Tribes.

OBAE utilized these established relationships to design and implement an inclusive engagement process to offer stakeholders and the public multiple opportunities to provide feedback and participate in the planning process.

Engagements included email outreach to stakeholders, statewide meetings, public meetings, stakeholder meetings, stakeholder surveys, and a resident phone survey (which is completed with analysis underway for the State's forthcoming Digital Equity Plan). OBAE made strategic efforts to reach out to and engage with defined covered populations who historically may have not had as much representation in the public planning process.

Tribal consultation, involvement, and support is critical to the success of statewide broadband initiatives, and it is an ongoing priority for OBAE to engage Tribal leaders and representatives through its outreach.

OBAE conducted more than 150 stakeholder engagement sessions in 2022[335]—including nine engagements with 23 Pueblos, Tribes, and Nations (or 100 percent of the federally recognized Tribal nations in New Mexico)—followed by more than 200 stakeholder engagement sessions in 2023. OBAE continues to facilitate a schedule of ongoing engagement efforts that will inform this Plan and future BEAD and Digital Equity activities.

5.1.1 Full geographic coverage

OBAE purposefully designed its public and stakeholder engagements to cover the full geographic range of New Mexico.

[335] "New Mexico Broadband Plan Update," OBAE, January 1, 2023, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf. p.115-122.

5.1.1.1 Regional broadband meetings

OBAE hosted six Regional Broadband Meetings in accordance with the six New Mexico Economic Development Department (EDD) "Community, Business, and Rural Development" (CBRD) regions. Each Regional Broadband Meeting included State and local officials, multiple mechanisms of participation, and opportunities to learn about broadband initiatives and funding opportunities. The Broadband Regional Meeting provided information on BEAD and Digital Equity planning (including timelines and process details), data mapping, funding opportunities along with community roundtables, and open hours with OBAE staff.

In one of OBAE's regional outreach sessions, residents of southwest New Mexico reported that high poverty in the region prevents some households from subscribing to available service. Attendees included individuals from Doña Ana, Catron, Grant, Hidalgo, Luna, Sierra, and Socorro counties.

Regional Broadband Meetings were held at the following times and locations:

- Southeast Region 6 (Counties of Otero, Lea, Lincoln, DeBaca, Chaves, Eddy, Roosevelt, and Curry): April 17, 2023, at Otero County Fairgrounds
- Central Region 3 (Counties of Valencia, Bernalillo, Torrance): April 18, 2023, at the University of New Mexico-Valencia Campus
- Northeast Region 4 (Counties of Colfax, Union, Mora, Harding, San Miguel, Quay, Guadalupe): May 11, 2023, at Luna Community College, Springer Campus
- Southwest Region 5 (Counties of Doña Ana, Catron, Socorro, Sierra, Grant, Luna, Hidalgo): May 12, 2023, at Doña Ana County Government Center
- Northwest Region 1 (Counties of Sandoval, San Juan, McKinley, Cibola): May 15, 2023, at Farmington Municipal Schools
- North Central Region 2 (Counties of Rio Arriba, Los Alamos, Santa Fe, Taos): May 16, 2023, at Hernandez Community Center

"We're partnering with the Santa Fe Community College and looking to partner with prisons for community kitchens to serve those returning from incarceration. The challenge is tapping all of these workforce resources."

- An update on workforce development efforts during a listening session with workforce development stakeholders

5.1.1.2 Broadband listening sessions

OBAE also hosted online Broadband Listening Sessions for the stakeholder groups identified in the BEAD NOFO. These Broadband Listening Sessions included customized overviews of broadband history and

technologies ("Broadband 101"), funding and programmatic overviews, considerations for each stakeholder group, and ways to get involved in the next steps of the planning process. By hosting the events online, OBAE enabled participants around the State to attend and provide critical feedback.

Broadband Listening Sessions were held on the following dates in 2023:

- Local and Regional Governments: May 8, May 10
- Community Anchor Institutions: May 19
- Health Centers, Health Alliance: May 19
- Digital Equity/Covered Populations: May 22, May 26
- Workforce Development: May 30, May 31
- Internet Service Providers: June 5, June 8
- Tribal Government and Agencies: June 9
- Business and Economic Development: June 12, June 14
- Human Services Department: June 22

Attendees in the Regional Broadband Meetings and Broadband Listening Sessions were asked to answer brief survey questions through an online poll about their experience accessing broadband and the digital equity needs of their organization, constituents, and the State to guide broadband infrastructure expansion and digital equity planning. The surveys were also available publicly online.

"We hear about funding sources, but it hits a wall when people who don't know enough need to fill out forms to access funding."

- Input from an attendee at OBAE's listening session for Community Anchor Institutions, highlighting a barrier in accessing currently available funding

5.1.1.3 Statewide events

To ensure the entirety of the State had the opportunity to engage with the planning efforts, OBAE also hosted two statewide events. The New Mexico Broadband Day at the Roundhouse ("Day"), held on February 15, 2023, included the Connect New Mexico Council Meeting, topic working groups, opportunities to speak with public and elected officials, and information tables hosted by public, private, State, and local entities.

Additionally, OBAE hosted the Internet for All New Mexico Broadband Summit and Tribal Roundtable ("Summit") on May 24th, 2023. The Summit accommodated both in-person and virtual attendance. The statewide Summit aimed to allow the public to learn about broadband

initiatives and funding opportunities, share their experiences, and participate in the development of this Plan. Slide decks from the multiple presentations were posted publicly online.

5.1.1.4 Connect New Mexico Council meetings

In addition to the Regional Broadband Meetings and statewide events, OBAE hosts ongoing Connect New Mexico Council meetings. These meetings are hosted online to maximize engagement throughout the State by removing geographic attendance barriers. OBAE also hosts focused Council working groups in the following areas: the Connect New Mexico Grant Program; Digital Equity and Inclusion; Mapping, Data, and Evaluation; Regional Planning and Community Engagement; Tribal Working Group; and Permits, Pole Attachments, and Right-of-Way.

5.1.1.5 ISP engagement

OBAE is actively conducting one-on-one engagements with ISPs as well. These virtual sessions help develop a dialogue between OBAE and the providers for OBAE to better understand deployment plans, barriers to deployment, affordability programs, and gauge interest in potential partnerships. Additional information on ISP engagement is detailed in Section 3 (Appendix A).

5.1.2 Meaningful engagement and outreach to diverse stakeholder groups

5.1.2.1 Overview

OBAE utilized in-person regional engagements, stakeholder listening sessions, a phone survey, social media notifications, and flyers to reach out to a wide range of diverse stakeholders. Stakeholder groups included all covered populations as defined in the Digital Equity NOFO and all underrepresented populations and stakeholder groups identified in the BEAD NOFO.

While outreach is still ongoing, summaries of the engagement are listed below.

Several strategies were implemented in each stage of planning to ensure meaningful outreach and engagement of a diverse stakeholder group.

- OBAE facilitates the coordination of broadband meetings and community events throughout the State through its Calendar. The Calendar includes a diverse range of events and interests, including New Mexico Technology Council Peer Groups such as the New Mexico Technology Council Digital Inclusion Peer Group, which offers valuable networking, educational, workforce, and business development opportunities and a platform to tackle topics such as how to expand access to technology and education, how to best serve differently abled individuals with technology, and more.
    - OBAE will begin hosting Lunch and Learn Webinars in fall 2023. Attendees will be able to learn about best practices, State projects, and topics related to broadband and digital equity.

- OBAE hosts the Connect New Mexico Council which meets on the third Wednesday of every month. In addition to engaging community leaders and stakeholders by providing a platform to discuss broadband access and digital equity, the Connect New Mexico Council includes working groups that specifically focus on digital equity and inclusion, including a Tribal Working Group.
- OBAE considered participants' broadband knowledge and familiarity during each engagement. To best enable stakeholders to provide informed insights into the planning process, OBAE provided customized overviews of broadband history, technology, and use ("Broadband 101"). OBAE also reviewed the major broadband initiatives and funding opportunities available for stakeholders and their constituents for both infrastructure and digital equity.
- OBAE developed and distributed printed and digital promotional materials, including flyers, in English and Spanish to ensure that New Mexico residents that speak either language can participate in the planning process.
- OBAE distributed online surveys and obtained data to better understand:
    - The obstacles to broadband access faced by vulnerable populations
    - The programs that exist to provide community members with the skills and tools to participate in broadband-related opportunities
    - The appetite for developing broadband-related programs to benefit community members
    - The opportunities provided by community anchor institutions to improve their constituents' digital knowledge and familiarity
    - Infrastructure-related assets that exist in the State
    - Workforce development, training opportunities, recruiting, and hiring in broadband-related fields
    - Development and collaborative community strategies already in place by ISPs
- When engaging the public through the residential phone survey, OBAE utilized sampling strategies to enable the State to collect meaningful data on defined covered populations. OBAE collected fewer responses from lower-income, younger, and racial and ethnic minorities and so analysis will be performed to correct for any potential bias based on household income, age, and race or ethnicity.
- OBAE hosted two statewide engagements (New Mexico Broadband Day at the Roundhouse and the Internet for All New Mexico Broadband Summit and Tribal

Roundtable), offering the public a unique opportunity to provide direct feedback to State officials.

- OBAE has engaged a Tribal Liaison consultant who is supporting stakeholder engagement events and the Connect New Mexico Council Tribal Working Group, as well as additional outreach by OBAE such as Pueblo mapping work sessions, ongoing direct Tribal community visits and leadership meetings, and development of a comprehensive Tribal contact database and regular Tribal Broadband newsletter.[336]
- OBAE is in active dialogue with ISPs through one-on-one engagements to better understand deployment plans, barriers to deployment, affordability programs, and interest in potential partnership.

OBAE also attends, advertises, and supports various broadband-related efforts throughout the State. When engaging stakeholders or the public, OBAE took particular care to facilitate inclusive and diverse conversation and collaboration through the events it hosts and the content it broadcasts.

5.1.2.2 Tribal consultation and engagement

OBAE is also actively participating in one-on-one Tribal consultation meetings to better understand broadband barriers and needs in Tribal communities. The meetings aim to gather community input regarding digital equity programs, workforce development, and unique issues the community may face. Outputs from the meetings have helped reveal priorities from the Tribal community and alert OBAE to potential avenues for future programming.

The tribal communities are struggling with workforce development and want assistance with developing hiring practices.

- A representative the Pueblo of Sandia highlights a need in the community to prepare for broadband deployment during an OBAE outreach session

Tribal consultation, engagement, support and investment is a priority and essential to the overall success of the statewide broadband initiatives. OBAE has invested in a Tribal Engagement consultant who is supporting the CNMC Tribal Working Group, Tribal meetings, Tribal Convenings, Pueblo mapping work sessions, and direct Tribal community visits and leadership meetings, as well as development of a comprehensive Tribal contact database and a regular Tribal Broadband newsletter.

[336] "Tribal Broadband," OBAE, https://connect.nm.gov/tribal-broadband.html.

The first Tribal Convening was held on September 12, 2022, with 72 participants. The next Tribal Convening is tentatively scheduled for September 22, 2023. The Tribal Working Group meets every two weeks and is chaired by Godfrey Enjady (Mescalero).

OBAE has regular ongoing, weekly contact with Tribal leaders, Tribal IT/broadband staff and Tribal consultants in areas of technical assistance, project management, grant writing, training and general educational sharing. OBAE participates in weekly meetings with Navajo Nation representatives and with the NM Indian Affairs Department. OBAE regularly presents at the monthly Broadband Initiative on Navajo Nation meetings and Connect New Mexico Tribal Working Group meetings (TWG).

In addition, OBAE hosted a data webinar, a digital equity webinar, and two hands-on mapping workshops for Tribal members. OBAE is also participating in meetings to better understand and support development of the Pueblo Education Network, (PEN) a native-led initiative to link Pueblos and Tribal schools and build an educational middle mile, 15 electronic Tribal newsletters have been published since November 2022 reaching more than 300 subscribers with each distribution.

"[Residents] may have to drive miles to get cell service to attend a training via their cell phone or drive to borrow the public Wi-Fi at a business." For individuals without reliable access to transportation and individuals with disabilities or limited mobility, this can prevent a further barrier to accessing services online.

- A representative of an organization that works with individuals on the Navajo Nation who participated in an OBAE outreach session

Additionally, OBAE has presented at the New Mexico Indian Affairs Department's State Tribal Leaders Summit, the All Pueblo Council of Governors, Ten Southern Pueblos Council, and the Eight Northern Indian Pueblos Council. OBAE has also presented at the National Tribal Telecommunications Association Conference. OBAE also collaborated with NTIA to host a Tribal Roundtable at the May 24, 2023, statewide meeting.

Twenty-two Tribes in New Mexico applied to NTIA for Tribal Digital Equity Planning grants; funding has yet to be announced. New Mexico is required to address the needs and challenges of Tribal communities in the State Digital Equity Plan. OBAE is in the process of scheduling official government to government Tribal consultation. Leading up to scheduling Tribal consultation a letter was sent to all Tribal leaders in New Mexico requesting consultation.

There is extensive ongoing learning with Tribes that needs further development and distilling; this initial engagement marks the beginning of substantial work that must be done to ensure digital equity with the Tribal nations of New Mexico.

5.1.3 Multiple awareness and participation mechanisms

OBAE conducted multiple in-person and virtual meetings that ranged from multi-organizational to focused working groups on a regional and statewide scale.

OBAE maintains a robust contact list of every person who was invited or attended any of the Listening Sessions and Regional Broadband Meetings and provided contact information. OBAE also maintains an email list for individuals interested in broadband meetings and community events occurring throughout the State who wish to receive updates and invites.

Invites to the Regional Broadband Meetings, Stakeholder Listening Sessions, and statewide meetings were sent through OBAE's comprehensive contact list. In addition to email invites, OBAE conducts outreach through social media, printed and digital flyers in both English and Spanish, press releases, and through coordination with partner agencies.

Stakeholders were also able to provide feedback on OBAE's website through publicly available stakeholder surveys. Links to the survey were also provided during Regional Broadband Meetings and Stakeholder Listening Sessions. Public engagement was also conducted through a phone survey of adult New Mexico residents utilizing phone records obtained through a commercially available list of phone numbers.

5.1.3.1 Residential phone survey

OBAE also engaged the public through a residential phone survey. The survey gathered approximately 2,400 responses from adult New Mexico residents; the phone records were sourced through a commercially available dataset and respondents were surveyed about broadband availability, devices, digital skills, and their broadband needs. Data obtained from this survey will be weighted based on household income, age, and race or ethnicity to correct for potential bias since lower-income and younger residents, as well as racial and ethnic minorities, were less likely to respond. Analysis in this manner helps produce results that more closely reflect the opinion of the State's adult population. The results of the phone survey will be presented in the State's forthcoming Digital Equity Plan.

5.1.3.2 Online engagement

OBAE further facilitated statewide community involvement through its website. OBAE's website serves as a repository for all broadband-related events occurring throughout the State, enabling visitors to access information about State and local involvement and to advertise their own meetings or events. Site visitors are also able to sign up to attend or receive updates from the Connect New Mexico Council Working Groups. Site visitors can fill out any of the surveys that

OBAE designed to capture data from government agencies, community organizations, community stakeholders, and employers about their broadband needs and experiences accessing broadband. Additional resources on affordability, grant funding, mapping, and broadband educational tools are also available on the site.

5.1.4 Clear procedures to ensure transparency

OBAE took proactive steps to ensure compliance with all applicable laws and best practices to establish and maintain clear procedures to ensure transparency.

All in-person and virtual meetings were advertised publicly on OBAE's online Calendar. OBAE's Events Calendar is consistently updated with new and reoccurring events. The website also contains accessible broadband resources and ways that the public and stakeholders can get involved in digital equity and connectivity efforts. The OBAE website also hosted the publicly available stakeholder surveys. The surveys allowed respondents to choose which questions to answer, allowing individuals to control the level of personal information shared.

Participants in virtual meetings were able to attend anonymously. Closed caption transcripts of meetings were available in real time to enable engagement from some participants with differing abilities. The slide decks used during meetings were posted to the OBAE website to facilitate feedback and transparency.

Although contact information was not required to attend any of the meetings, the intent to collect contact information to include participants in future stakeholder outreach was clearly communicated during meetings. Contact information was collected from surveys, meeting chats, and Q&A sessions.

5.1.5 Outreach and engagement of unserved and underserved communities

OBAE proactively reached out to and engaged with representatives and organizations that serve underrepresented and underserved communities and defined covered populations.

OBAE continuously updates its contact list by integrating contacts obtained through stakeholder outreach to ensure outreach is comprehensive and inclusive.

OBAE also established procedures to increase the accessibility of meetings, materials, and information. The stakeholder listening sessions were accompanied by live closed captioning to enable engagement from some participants with differing abilities. The slide decks were also available publicly on OBAE's website. Flyers advertising meetings were published in both English and Spanish.

OBAE hosted all in-person events at public locations that were familiar community spaces or community anchor institutions that serve as resource hubs for underrepresented and underserved communities. OBAE aims to meet community organizations and their constituents

"where they are" by hosting meetings at locations already used as community resources. The joint work completed by the community anchor institutions and OBAE demonstrates the strong relationship that OBAE has fostered with community organizations and institutions as part of the planning engagement process.

To better understand the barriers and obstacles to broadband access faced by covered populations, OBAE designed a survey to collect meaningful insights into how it can best serve these populations.

5.2 Priorities

OBAE will work to ensure that every resident of New Mexico has access to a reliable, affordable terrestrial-based high-speed broadband network connection that delivers at least 100/20 Mbps.

OBAE's priorities for this Plan will depend on additional, related efforts that include:

1. A statewide education network (SEN) and a Pueblo education network (PEN) that offer scalable, reliable, affordable and secure internet to all;
2. Statewide middle-mile networks offering high-capacity backhaul to last-mile networks;
3. High-speed mobile broadband networks (e.g., 5G) that have quality coverage across all rural communities and well-trafficked roadways; and
4. Network architecture that is "fail proof" due to being both resilient and redundant.

Further, because the digital divide encompasses not just access to internet services (and the infrastructure and technologies that provide them) but also the adoption and meaningful use of those services, OBAE will prioritize several preconditions necessary for individuals to make meaningful use of the internet, including:

- Access to affordable service
- Ownership of a sufficient and appropriate device (such as a laptop or large-screen tablet)
- Working knowledge of how to use the internet (digital literacy)
- Basic understanding of online privacy and security issues

To that end, to, this Plan prioritizes collaboration with New Mexico organizations that can support education and outreach. These entities will be examined in even greater detail in the forthcoming State Digital Equity Plan.

Throughout all of this work, the State's key priorities for broadband deployment (i.e., its primary objectives) are aligned with the principal focus of the BEAD Program:[337]

1. Serving 100 percent of unserved locations (i.e., below 25/3 Mbps)
2. Serving 100 percent of underserved locations (i.e., between 25/3 and 100/20)
3. Delivering gigabit connections to certain community anchor institutions that do not have that level of service

Digital equity initiatives, developed through ongoing community engagement and development of the Digital Equity Act Plan, will support the goal of universal broadband adoption and may include—by way of example—efforts to:

- Improve broadband speeds, increasing the median broadband speeds available to New Mexicans
- Increase the broadband adoption rate (percentage of households that subscribe to and use the internet)
- Enhance digital skills among New Mexico residents
- Improve telehealth access
- Improve distance learning access
- Foster digital equity through libraries, chapter houses, senior centers, community centers, and community anchor institutions by encouraging access to computers, the internet, and digital skills programs
- Increase consumer knowledge of internet privacy and security
- Encourage affordable broadband offerings by ISPs, including low-cost plans for lower-income households
- Ensure accessibility of public websites for people with disabilities

In summary, OBAE has established the following priorities to support the BEAD vision for broadband deployment and digital equity:

[337] "NOFO: BEAD Program," NTIA, https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf, p. 7.

Table 14: Priorities for broadband deployment and digital inclusion

Priority	Description
Engage community stakeholders to increase broadband adoption among covered populations	OBAE conducted more than 150 stakeholder engagement sessions in 2022[338, 339], more than 200 stakeholder engagement sessions in 2023, and is continuing to facilitate a schedule of comprehensive, ongoing engagement efforts as described in Section 5.1.
Improve digital equity	The measurable objectives of New Mexico's Digital Equity Plan, currently under development, will be designed to ensure that New Mexicans have not just access to broadband, but also are able to adopt and make meaningful use of broadband.[340]
Maintain OBAE transparency and accountability	OBAE recognizes the immense value of program stewardship in all its programs. OBAE leadership and staff are committed to the utmost transparency and accountability of its programs. Moreover, OBAE will actively monitor awardees and hold them accountable for all programmatic and compliance requirements.[341]
Develop resources to enhance cybersecurity	Cybersecurity remains a priority at every level from residential broadband users to large public and private entities, given the increasing sophistication of bad actors to infiltrate broadband networks.[342]

[338] "New Mexico Broadband Plan Update," OBAE, January 1, 2023, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p.115-122.
[339] "New Mexico Broadband Plan Update," OBAE, January 1, 2023, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf. p.115-122.
[340] See, "New Mexico Broadband Plan Update," OBAE, January 1, 2023, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p.26.
[341] "New Mexico Broadband Plan Update," OBAE, January 1, 2023, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p.8.
[342] "New Mexico Broadband Plan Update," OBAE, January 1, 2023, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p.10.

Priority	Description
Build on OBAE's success	OBAE has moved mountains with a skeleton staff, and as this Plan progresses, OBAE anticipates increasing staff and thereby acquiring the capability to do even more.

5.2 Planned activities

OBAE's plan for ensuring reliable, affordable broadband service to all residents may include the following activities, among others that are developed as the State collects more data and stakeholder input:

- **Provisioning grant funding to broadband service providers to achieve universal service availability of high-speed Internet:** Utilize BEAD funding to award competitive grants to potential ISP partners to construct end-to-end fiber to unserved and underserved address locations as identified by the FCC data fabric and certified by the State's challenge process. This activity will be complemented by the State's previously awarded broadband deployment grants (e.g., using ARPA funding).
- **Conducting continued outreach to the public, partners, potential partners, and other key entities:** OBAE has conducted a comprehensive needs assessment process in preparation of this Plan—and intends to continue engaging with stakeholders (including Tribes, Nations, and Pueblos) to ensure their ongoing input in efforts to achieve the State's broadband goals.
- **Providing technical assistance to projects across the State:** OBAE is increasing its capacity and ability to support local broadband deployment and education initiatives, which can operate as a force multiplier for federal, State, and private funding. OBAE is currently providing technical assistance to 71 projects worth $715 million.
- **Identifying and leveraging additional sources of broadband funding:** OBAE will explore options, including subrecipient capital matches, to ensure that the networks that are built have a sustainable business plan and provide reliable, future-proof, and affordable broadband access to end users across the State.
- **Supporting efforts to improve digital equity:** OBAE will support efforts by partners to improve digital literacy, foster affordable services, expand access to devices, provide technical support, increase participation in price subsidy programs, and achieve other measures of digital equity.

5.3 Key execution strategies

OBAE is focused on four key strategies over the next five years to seek to reach universal service.

The first strategy focuses on the use of a competitive subgrant process to drive construction and deployment of fiber infrastructure (as described in Section 5.3 above). In concert with the physical buildout must also be the successful utilization of partnerships to increase broadband adoption among residents, with a special emphasis on identified covered populations. The third key strategy focuses on the provision of technical assistance to local and regional entities. The fourth strategy focuses on collaboration with Tribes, Nations, and Pueblos.

> In the engagement conducted by OBAE, members of the public throughout New Mexico noted the criticality of the BEAD funds to their communities' digital future.

5.3.1 Use partnerships to increase broadband adoption

The State is a leader when it comes to creating strong partnerships with community stakeholders to address broadband affordability issues. This includes working with stakeholders to conduct outreach, education, and enrollment initiatives into the Affordable Connectivity Program (ACP).

Notably, the Statewide Education Network (SEN) aims to connect all interested schools and public libraries by 2027. The Pueblo Education Network (PEN) focuses on connecting Tribes and Pueblos, and preserving native language, culture, and local education.[343]

5.3.2 Eliminate affordability and other barriers to adoption

The State's goal is to remove affordability as a barrier to participation in the digital economy or digital experience. The strategies to achieve this goal include:

1. Maximizing, to the greatest degree possible, eligible residents' participation in the ACP by working with counties and other entities to support outreach and enrollment programs
2. Making affordability an important scoring criterion of all State broadband grant programs
3. Working collaboratively with ISPs to encourage them to create plans in the event the ACP is not extended
4. Giving additional points in grant program scoring to entities that make commitment to offer adequate and reasonable low-income products statewide, not only on newly funded infrastructure

[343] "New Mexico Broadband Plan Update," OBAE, January 1, 2023, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p.25.

5. Ensuring that all relevant entities are participating in State Digital Equity Plan program

This agenda will be expanded further and analyzed with appropriate data in the State's BEAD Initial Plan and the Digital Equity Plan.

5.3.3 Provide technical assistance to local and regional entities

To address the significant shortfall in broadband funding, OBAE plans to continue to work with local and regional entities to provide technical assistance to increase broadband deployment and digital equity in a State whose topography and demography makes it one of the most challenging in the U.S.

Local initiatives will also be supported by other funding including, for example, the Connect New Mexico Pilot Program[344] that will be operated by the Department of Information Technology (DoIT) in fiscal years 2022 through 2025 and funded by the American Rescue Plan Act's Coronavirus Capital Projects Fund.[345]

5.3.4 Work in collaboration with Pueblos, Tribes, and Nations

The State is committed to respecting the sovereignty of the 23 Pueblos, Tribes, and Nations located within New Mexico. OBAE will work collaboratively with Tribal governments on an approach to achieving universal, affordable broadband service that seeks to meet their needs and achieve the State's goals.

Recognizing the importance of Tribal involvement and support for statewide broadband efforts, OBAE has engaged a Tribal Liaison and made it a priority to engage Tribal leadership and representatives in BEAD and Digital Equity planning through its outreach, as described further in Section 5.1.

5.4 Estimated timeline for universal service

This section presents the State's data-driven model and estimated timeline for the availability of reliable, universal broadband service in New Mexico. It reflects the current state and gap assessment documented in Section 3; the potential barriers and obstacles identified in Section 4; and the issues identified through the State's comprehensive stakeholder engagement and outreach efforts. The model excludes areas funded by other federal broadband grants and awards.

In general, six to 18 months will be required for planning, design, and permitting of broadband infrastructure projects upon final award. After these steps are complete, construction can begin.

[344] "Connect New Mexico Pilot Program," DoIT, https://www.doit.nm.gov/programs/broadband/connect-new-mexico-pilot-program/.
[345] "Capital Projects Fund," U.S. Department of the Treasury, https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments/capital-projects-fund.

Construction may proceed more quickly where fiber is a short "line extension" from an ISP's existing service area to a few adjacent addresses, and where the existing ISP already has an attachment on a nearby utility pole or can use existing underground conduit. Construction will take longer where larger-scale deployment is needed, where geography is challenging, or where New Mexico's unique topography, geology and history require extra care and may require a longer permitting time.

The State will seek to achieve universal service during the period of performance for BEAD projects through a subrecipient selection process guided by the BEAD program requirements. Based on the cost estimate presented below, achieving universal service will require matching funds and other funding sources, and will involve the use of a mix of terrestrial-based technologies (e.g., fiber and fixed wireless) and non-terrestrial technologies for very remote locations. The State will evaluate specific buildout scenarios in the forthcoming Initial Proposal. OBAE recognizes that this estimated timeline may be affected by the lack of sufficient funding or other considerations.

5.5 Estimated cost for universal service

This section presents the State's estimated costs for providing access to reliable broadband service to unserved and underserved locations in New Mexico. (See Section 3.3.1 for a discussion of how unserved and underserved location counts were determined.) These estimates are based on an analytical model that incorporates local labor and material unit costs; the location of existing infrastructure that can be used as a starting point; and surveys of a statistically valid sample of unserved and underserved areas. The estimates do not incorporate the State's open-access middle-mile strategy (see Section 2.2.1), because that investment is beyond the scope of the BEAD program.

The State does not have sufficient funding from BEAD alone to reach all unserved and underserved locations with fiber. The State estimates the total deployment cost to be approximately $2.26 billion to $2.94 billion (Table 15) to reach the estimated 70,609 unserved addresses with an estimated 20,087 miles of fiber. This estimate assumes a timeframe of 48 to 60 months for the buildout of primary fiber-to-the-premises infrastructure passing each unserved home, with deployment activities related to customer activations, including service drop construction and installation of customer premises equipment (CPE), continuing through the period of performance.

Table 15: Estimated deployment costs to reach all unserved addresses

Cost component	Estimated low-end cost	Estimated high-end cost
Physical fiber plant construction – FTTP distribution network	$2,065,900,000	$2,685,670,000
Core and distribution network electronics	$29,300,000	$38,090,000
Subscriber drop construction	$144,200,000	$187,460,000
Customer premises equipment	$22,400,000	$29,120,000
Total	**$2.26 billion**	**$2.94 billion**

A more comprehensive plan to address the State's broadband access needs, reaching all unserved and underserved addresses, would cost an estimated $2.81 billion to $4.12 billion (Table 16). This estimate includes a total of 24,735 miles of new fiber construction using a mix of 40 percent aerial and 60 percent underground construction (i.e., 14,875 miles of underground fiber) to reach all of the estimated 70,609 unserved locations and 72,384 underserved locations. The network design would pass underserved locations while reaching locations that are unserved, requiring comparatively less fiber deployment and resulting in a lower incremental cost to serve the underserved locations. In this scenario, the buildout of primary fiber-to-the-premises infrastructure and customer activations extends through the performance period.

Table 16: Estimated deployment costs to reach all unserved and underserved addresses

Cost component	Estimated low-end cost	Estimated high-end cost
Physical fiber plant construction – FTTP distribution network	$2,845,100,000	$3,698,630,000
Core and distribution network electronics	$60,400,000	$78,520,000
Subscriber drop construction	$215,600,000	$280,280,000
Customer premises equipment	$46,100,000	$59,930,000
Total	**$2.81 billion**	**$4.12 billion**

In summary, the State estimates that it cannot achieve universal service with BEAD Program funding alone. These data show that the cost to deploy fiber to New Mexico is significantly higher than NTIA's total BEAD allocation of $675,372,311.86, including a high-cost allocation within that amount of $141,141,809.74.[346] The State will continue to explore potential strategies to close

[346] "Biden-Harris Administration Announces State Allocations for $42.45 Billion High-Speed Internet Grant Program as Part of Investing in America Agenda," Internet for All, News Release, June 26, 2023, https://internetforall.gov/news-media/biden-harris-administration-announces-state-allocations-4245-billion-high-speed-internet.

the gap between the estimated cost for universal service and its BEAD allocation, such as using a mix of technologies (potentially including wireless and satellite), maximizing matching funds, leveraging existing assets, and requesting additional funding from the State Legislature.

The preliminary cost estimates presented here are directly responsive to NTIA's requirement that this Plan note the cost of universal service using the federal government's preferred infrastructure choice of fiber-to-the-premises. Considerable additional modeling is underway (using new data provided by NTIA in mid-August 2023) in preparation for the State's Initial Proposal; that document, which will be submitted to NTIA at the end of 2023, will include modeling and understanding of cost on a regional and localized basis, as well as modeling of different mixes of technology—including potentially lower-cost technologies such as fixed wireless and satellite. The Initial Proposal will thus evaluate scenarios under which the BEAD funds can be used to connect as many unserved New Mexicans as possible. All of that detail is required for the Initial Proposal and for development of OBAE's BEAD grant strategy. OBAE will continue to use the latest available data to update its unserved and unserved locations through each step of the BEAD planning.

5.6 Alignment

The vision, goals, and proposed supporting actions within New Mexico's Five-Year Action Plan are fully aligned with the State's priorities of expanding broadband deployment and adoption. OBAE is aware of numerous other plans, all of which have the goal of broadband deployment and therefore potentially align with this Plan.

5.6.1 State agency partners

Key statewide partners and potential partners include the Economic Development Department (EDD), which issued a strategic plan in 2022.[347] The Economic Development Department's 406-page plan envisions six core strategies, all of which align with this Plan:

1. Collaborative New Mexico: Modernize New Mexico's economic development ecosystem
2. Dynamic New Mexico: Strengthen New Mexico's communities
3. Skilled New Mexico: Reimagine education and training
4. Inclusive New Mexico: Promote equity through economic justice
5. Innovative New Mexico: Enable high quality home-grown innovation
6. Resilient New Mexico: Diversify New Mexico's economy

[347] "Statewide Strategic Plan: Empower & Collaborate: New Mexico's Economic Path Forward," New Mexico Economic Development Department, October 2021, https://eddstateplan.com/.

Noting that "broadband access is often a necessary enabler of workforce development and economic mobility," the plan states that "expanding broadband access for the [S]tate's less urban communities will better enable individuals throughout New Mexico to support the [S]tate's innovation ecosystem."[348]

The New Mexico Department of Information Technology (NM DoIT), to which OBAE is administratively attached, has several strategic plans.[349] Notably, the IT Strategic Plan for fiscal years 2021-2023 calls for "systemized, sustainable change—a transformation of the [S]tate's technology" in order to realize Governor Lujan's vision to "broaden our understanding of what New Mexico can be."[350] The NM DoIT Plan sets six strategic imperatives that closely parallel objectives in this Plan including enhanced State broadband (imperative one) and improved cybersecurity (imperative two).[351]

5.6.2 Local and regional partners

As outreach and engagement continues, OBAE expects to locate additional partners and to provide technical assistance to them as they create broadband plans and engage in broadband deployment efforts.

OBAE is actively collecting and synthesizing county-level broadband planning documents to integrate input, insights, and data gathered at the local level. As of the writing of this report, county plans OBAE has collected include:

- The Cibola County Board of Commissioners on November 17, 2022, adopted a resolution to create a broadband plan based on the recommendations from a Broadband Feasibility Report dated July 5, 2022. The Feasibility Report recommended several commonsense steps, including supporting broadband grants and collecting an inventory of relevant entities.
- Bernalillo County commissioned a broadband feasibility study, the results of which are presented in a June 2023 report, to evaluate existing coverage and develop a design and cost estimate for an infrastructure solution to improve high-speed connectivity for

[348] "Statewide Strategic Plan: Empower & Collaborate: New Mexico's Economic Path Forward," New Mexico Economic Development Department, pp. 130, 101.
[349] "Information Technology Strategic Planning," NM DoIT, https://www.doit.nm.gov/about-the-department/it-strategic-planning/.
[350] "IT Strategic Plan FY21-FY23," NM DoIT, July 2020, https://api.realfile.rtsclients.com/PublicFiles/16569e3bf98c467e95901b46fd511499/546c2bba-8341-4b6a-922e-a95f4263e88f/DoIT%20Enterprise%203Yr%20Strategic%20Plan%20Final%20JULY%202020.pdf, p.3.
[351] "IT Strategic Plan FY21-FY23," NM DoIT, July 2020, https://api.realfile.rtsclients.com/PublicFiles/16569e3bf98c467e95901b46fd511499/546c2bba-8341-4b6a-922e-a95f4263e88f/DoIT%20Enterprise%203Yr%20Strategic%20Plan%20Final%20JULY%202020.pdf, p.6.

residents and businesses. The report recommends ongoing coordination with OBAE to support the implementation of the proposed project.[352]

- The Southwest Colorado Council of Governments (SWCCOG) in 2020 created a broadband plan covering Southwest Colorado as well as Farmington and San Juan County in Northern New Mexico but has not recently devoted resources to expanding broadband in New Mexico.
- Luna County commissioned a broadband feasibility study to evaluate technology solutions and potential funding opportunities to deliver service to unserved rural residents in the County. The results are summarized in a Broadband Gap and Feasibility Report (August 2023).[353]

OBAE is in the process of compiling community-driven assessments, surveys, and reports from a range of communities and local organizations, including Los Alamos, Albuquerque, Los Lunas, Highlands University, Luna County, Dona Ana County, Sunland Park, and Borderplex Connect.

The organization Yee Ha'ólníi Doo has also received funding to create broadband strategic plans for Ramah, N.M. and Sheep Springs, N.M. (see Section 3.3.5).

In addition, 22 Tribes in New Mexico applied to NTIA for Digital Equity Planning Grants, and as of the writing of this Plan OBAE is in the process of scheduling official government-to-government Tribal consultation.

5.7 Technical assistance

Although New Mexico does not anticipate requiring technical assistance, we are in regular contact with our Federal Program Officer to ensure that there is an existing channel of communication in case needs arise.

OBAE will closely collaborate with our FPO and Tribal Liaison to seek and utilize any required technical assistance as it develops the Initial Proposals and launches its funding program.

As noted in Section 4, OBAE may request assistance with navigating federal rules and regulations, such as permitting rules regarding the environment and historic preservation in cases where efficiencies could be gained that could benefit project timelines.

OBAE also looks forward to collaborating with NTIA to provide joint technical support to New Mexican stakeholders aiming to participate in the BEAD-funded grant program.

[352] "Bernalillo County, NM, Broadband Plan," 2023, provided to OBAE by the County; plan not publicly available.
[353] The County provided OBAE with a copy of the report and indicated that it would be presented to the Greater Luna County Economic Opportunity Council at a meeting in August.

6. Conclusion

This Five-Year Action Plan establishes New Mexico's broadband goals and priorities—and presents a comprehensive needs assessment that will inform the State's Initial Proposal (which will be delivered to NTIA late in 2023). As OBAE Director Kelly Schlegel has said, "We look forward to working together to achieve the Governor's vision of making New Mexico the most connected State."[354]

New Mexico has already made significant progress in addressing broadband connectivity needs, gaps, barriers, and obstacles; this Plan addresses the State's approach to meeting the significant challenges that remain.

New Mexico has been proactive in its planning process, publishing a Three-Year Broadband Plan in January 2023 and preparing for the State Legislature a "Report on Broadband Knowledge and Digital Equity Analysis and Plan" (August 2023) and an Annual Report on broadband data (in process as of the writing of this Plan). New Mexico has also conducted extensive stakeholder outreach—and will continue to engage with stakeholders to gather insight and develop partnerships.

In addition to the digital equity benefits this Plan will deliver, New Mexico expects significant economic development benefits from broadband infrastructure deployment. As the Strategic Plan of the New Mexico Economic Development Department noted, "Broadband connectivity remains one of the most formidable threats to the long-term economic sustainability of New Mexico's rural and tribal communities."[355]

New Mexico also expects to realize additional benefits from broadband deployment. Although not funded by this Plan, the middle-mile networks created in support of funded projects will ease the deployment of mobile broadband networks. New Mexico expects a significant improvement

[354] "New Mexico Broadband Plan Update," OBAE, January 1, 2023, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf, p.6.
[355] "Statewide Strategic Plan: Empower & Collaborate: New Mexico's Economic Path Forward," New Mexico Economic Development Department, October 2021, https://eddstateplan.com/, p.244.

in public safety once every major road in New Mexico has cellular coverage. Broadband networks will improve the provision of education, health care, and other essential services and ease the task of first responders.

New Mexico aims to become the most connected State because that is what New Mexico's residents need and deserve. Achieving this goal will deliver all of the benefits described here and will also likely deliver benefits not even anticipated at this time, as new technologies make new things possible.

Appendix A: Stakeholder engagement

Demonstrating the State's established commitment to stakeholder outreach and engagement, the following table identifies working group meetings, community listening sessions, workshops, forums, and local and Tribal stakeholder sessions OBAE facilitated in 2022 to build awareness, inspire action, and mobilize local, regional, and statewide support for broadband improvement and BEAD and Digital Equity planning. These efforts, which also are documented in New Mexico's Three-Year Broadband Plan published in January 2023,[356] have informed the stakeholder engagement and outreach conducted in 2023 in preparation of this BEAD Five-Year Action Plan. The outreach process conducted for this Plan is documented in Section 5.

Table 17: Stakeholder engagement

Event date/ time period	Program name	Engagement description	Local and Tribal governments involved
1/5/2022	Broadband Collective Legislators Broadband Meeting	NM Broadband Collective	Statewide
1/12/2022	NM Broadband Collective Regional Projects Working Group Meeting	NM Broadband Collective	Statewide
1/14/2022	Connect New Mexico Council	CNMC	Statewide
1/26/2022	NM Broadband Collective Regional Projects Working Group Meeting	NM Broadband Collective	Statewide
1/27/2022	NM Broadband Collective Steering Committee	NM Broadband Collective	Statewide
2/4/2022	Broadband Spotlight: Lessons Learned in Chattanooga	Statewide	Statewide
2/9/2022	NM Broadband Collective Regional Projects Working Group Meeting	NM Broadband Collective	Statewide
2/18/2022	Connect New Mexico Council	CNMC	Statewide
2/23/2022	NM Broadband Collective Regional Projects Working Group Meeting	NM Broadband Collective	Statewide
2/24/2022	NM Broadband Collective Steering Committee	NM Broadband Collective	Statewide
3/16/2022	Connect New Mexico Council	CNMC	Statewide

[356] "State of New Mexico Three-Year Broadband Plan," OBAE, 2023, https://www.doit.nm.gov/wp-content/uploads/sites/4/2023/01/State-of-New-Mexico-Three-Year-Broadband-Plan-1-1-23-Version-1.0-File-011723.pdf.

Event date/ time period	Program name	Engagement description	Local and Tribal governments involved
3/23/2022	NM Broadband Collective Regional Projects Working Group Meeting	NM Broadband Collective	Statewide
3/24/2022	NM Meeting with FCC Commissioner Carr hosted by Ben Ray Lujan's Office	Statewide	Statewide
3/30/2022	CNMC Regional Projects & Engagement Working Group	CNMC Working Group	Statewide
3/31/2022	NM Broadband Collective Steering Committee	NM Broadband Collective	Statewide
4/6/2022	NM Broadband Collective Regional Projects Working Group Meeting	NM Broadband Collective	Statewide
4/12/2022	Broadband Listening Session Reserve/Catron County	Local	Local Agencies, Associations, Organizations
4/13/2022	CNMC Regional Projects & Engagement Working Group	CNMC Working Group	Statewide
4/20/2022	NM Broadband Collective Regional Projects Working Group Meeting	NM Broadband Collective	Statewide
4/20/2022	Connect New Mexico Council	CNMC	Statewide
4/27/2022	Listening Session with Hatch School Board	Local	Regional Agencies, Associations, Organizations
4/27/2022	CNMC Regional Projects & Engagement Working Group	CNMC Working Group	Statewide
4/28/2022	NM Broadband Collective Steering Committee	NM Broadband Collective	Statewide
5/4/2022	NM Broadband Collective Regional Projects Working Group Meeting	NM Broadband Collective	Statewide
5/11/2022	CNMC Regional Projects & Engagement Working Group	CNMC Working Group	Statewide
5/12/2022	Listening Session in Albuquerque	Local	Regional Agencies, Associations, Organizations
5/17/2022	Deming Town Hall	Local	Regional Agencies, Associations, Organizations
5/18/2022	NM Broadband Collective Regional Projects Working Group Meeting	NM Broadband Collective	Statewide
5/18/2022	Connect New Mexico Council	CNMC	Statewide
5/20/2022	NM Broadband Collective Grant Review meetings for Equity Fund and	NM Broadband Collective	Statewide

Event date/ time period	Program name	Engagement description	Local and Tribal governments involved
	Technical Assistance Program (TAP) fund		
5/24/2022	County Listening Session for Luna County and Columbus	Local	Regional Agencies, Associations, Organizations
5/25/2022	Listening Session in Village of Cuba	Local	Regional Agencies, Associations, Organizations
5/25/2022	CNMC Regional Projects & Engagement Working Group	CNMC Working Group	Statewide
5/25/2022	Listening Session in Deming	Local	Regional Agencies, Associations, Organizations
5/26/2022	CNMC Digital Equity Working Group	CNMC Working Group	Statewide
5/26/2022	NM Broadband Collective Steering Committee	NM Broadband Collective	Statewide
5/31/2022	NM Broadband Collective Grant Review meetings for Equity Fund and TAP fund	NM Broadband Collective	Statewide
6/1/2022	NM Broadband Collective Regional Projects Working Group Meeting	NM Broadband Collective	Statewide
6/2/2022	CNMC Digital Equity Working Group	CNMC Working Group	Statewide
6/3/2022	NM Broadband Collective Grant Review meetings for Equity Fund and TAP fund	NM Broadband Collective	Statewide
6/7/2022	County Listening Session in Lordsburg	Local	Regional Agencies, Associations, Organizations
6/8/2022	CNMC Regional Projects & Engagement Working Group	CNMC Working Group	Statewide
6/8/2022	NM Broadband Collective Grant Review meetings for Equity Fund and TAP fund	NM Broadband Collective	Statewide
6/9/2022	County Listening Session in Silver City	Local	Regional Agencies, Associations, Organizations
6/9/2022	CNMC Digital Equity Working Group	CNMC Working Group	Statewide
6/14/2022	NM. Broadband Collective Grant Review meetings for Equity Fund and TAP fund	NM Broadband Collective	Statewide
6/15/2022	NM Broadband Collective Regional Projects Working Group Meeting	NM Broadband Collective	Statewide
6/15/2022	Connect New Mexico Council	CNMC	Statewide

Event date/ time period	Program name	Engagement description	Local and Tribal governments involved
6/16/2022	Annual Conference for Association of Counties	Statewide	Regional Agencies, Associations, Organizations
6/22/2022	CNMC Regional Projects & Engagement Working Group	CNMC Working Group	Statewide
6/22/2022	City Managers Meeting in Ruidoso	Statewide	Regional Agencies, Associations, Organizations
6/23/2022	CNMC Digital Equity Working Group	CNMC Working Group	Statewide
6/28/2022	Southwest Region Broadband Support Session	Regional	Regional Agencies, Associations, Organizations
6/29/2022	NM Broadband Collective Regional Projects Working Group Meeting	NM Broadband Collective	Statewide
6/30/2022	NM Broadband Collective Steering Committee	NM Broadband Collective	Statewide
7/6/2022	CNMC Regional Projects & Engagement Working Group	CNMC Working Group	Statewide
7/7/2022	CNMC Digital Equity Working Group	CNMC Working Group	Statewide
7/20/2022	CNMC Regional Projects & Engagement Working Group	CNMC Working Group	Statewide
7/20/2022	Connect New Mexico Council	CNMC	Statewide
7/21/2022	CNMC Digital Equity Working Group	CNMC Working Group	Statewide
7/21/2022	Tribal Government to Government Meeting	Statewide	Tribes
7/27/2022	NM Broadband Collective Regional Projects Working Group Meeting	NM Broadband Collective	Statewide
7/27/2022	North Central NM Economic Development Broadband Meeting in Santa Fe	Regional	Regional Agencies, Associations, Organizations
7/28/2022	NM Broadband Collective Steering Committee	NM Broadband Collective	Statewide
7/29/2022	Doña Ana Broadband Reconnect Meeting in Las Cruces	Local	Regional Agencies, Associations, Organizations
8/3/2022	CNMC Regional Projects & Engagement Working Group	CNMC Working Group	Statewide
8/4/2022	CNMC Digital Equity Working Group	CNMC Working Group	Statewide
8/8/2022	Statewide Science and Technology Subcommittee Meeting in Socorro		Statewide
8/10/2022	NM Broadband Collective Regional Projects Working Group Meeting	NM Broadband Collective	Statewide

Event date/ time period	Program name	Engagement description	Local and Tribal governments involved
8/11/2022	NTIA Tribal Broadband Connectivity Award Announcement at Isleta Casino	Statewide	Regional Agencies, Associations, Organizations
8/17/2022	CNMC Regional Projects & Engagement Working Group	CNMC Working Group	Statewide
8/17/2022	NM Pilot Grant Webinar: Notice of Funding Opportunity (NOFO) Overview	Statewide	Regional Agencies, Associations, Organizations
8/17/2022	Connect New Mexico Council	CNMC	Statewide
8/18/2022	CNMC Digital Equity Working Group	CNMC Working Group	Statewide
8/19/2022	NM Pilot Grant Webinar: Application Overview	Statewide	Regional Agencies, Associations, Organizations
8/22/2022	NM Pilot Grant Webinar: Scoring Guide Overview	Statewide	Regional Agencies, Associations, Organizations
8/23/2022	NM Pilot Grant Webinar: Interactive Broadband Map Overview	Statewide	Regional Agencies, Associations, Organizations
8/23/2022	CNMC PROP Working Group (Poles, Right of Way, Permits)	CNMC Working Group	Statewide
8/24/2022	NM Broadband Collective Regional Projects Working Group Meeting	NM Broadband Collective	Statewide
8/25/2022	NM Broadband Collective Steering Committee	NM Broadband Collective	Statewide
8/31/2022	CNMC Regional Projects & Engagement Working Group	CNMC Working Group	Statewide
9/1/2022	CNMC Digital Equity Working Group	CNMC Working Group	Statewide
9/6/2022	CNMC PROP Working Group (Poles, Right of Way, Permits)	CNMC Working Group	Statewide
9/7/2022	NM Broadband Collective Regional Projects Working Group Meeting	NM Broadband Collective	Statewide
9/12/2022	NM Tribal Broadband Convening	Statewide	Tribes, FCC, NTIA, DOT
9/13/2022	National Tribal Broadband Summit – virtual	National	Tribes
9/13/2022	Listening Session in Hobbs	Regional	Regional Agencies, Associations, Organizations
9/14/2022	CNMC Regional Projects & Engagement Working Group	CNMC Working Group	Statewide
9/15/2022	CNMC Digital Equity Working Group	CNMC Working Group	Statewide
9/15/2022	Application Intake Portal Overview	Statewide	Statewide

Event date/ time period	Program name	Engagement description	Local and Tribal governments involved
9/19/2022	Regional Broadband Meeting for Southern NM	Regional	Regional Agencies, Associations, Organizations
9/20/2022	National Tribal Broadband Summit Part 2	National	Tribes
9/20/2022	CNMC PROP Working Group (Poles, Right of Way, Permits)	CNMC Working Group	Statewide
9/21/2022	NM Broadband Collective Regional Projects Working Group Meeting	NM Broadband Collective	Statewide
9/21/2022	Connect New Mexico Council	CNMC	Statewide
9/21/2022	Experience IT Conference – "Internet for All" Session	Statewide	Statewide
9/23/2022	New Mexico Data Mapping Meeting	Statewide	Statewide
9/26/2022	NM Governor's Statewide Conference on Economic Development in Albuquerque	Statewide	Statewide
9/27/2022	National Tribal Broadband Summit	National	Tribes
9/28/2022	CNMC Regional Projects & Engagement Working Group	CNMC Working Group	Statewide
9/28/2022	State CIO Forum	Statewide	Statewide
9/29/2022	Exploring Partnerships	Local	Statewide
9/29/2022	Mamacitas Cibernéticas Planning Meeting	Regional	Regional Agencies, Associations, Organizations
9/29/2022	CNMC Digital Equity Working Group	CNMC Working Group	Statewide
9/29/2022	NM Broadband Collective Steering Committee	NM Broadband Collective	Statewide
9/30/2022	New Mexico Broadband Summit	NM Broadband Collective	Statewide
9/30/2022	Summit Watch Party (Broadband Collective Event)	Local	Regional Agencies, Associations, Organizations
9/30/2022	Summit Watch Party (Broadband Collective Event)	Local	Regional Agencies, Associations, Organizations
10/3/2022	Planning free fixed wireless deployment	Local	Regional Agencies, Associations, Organizations
10/4/2022	Small group from Grant, Luna, Doña Ana	Regional	Regional Agencies, Associations, Organizations
10/4/2022	CNMC PROP Working Group (Poles, Right of Way, Permits)	CNMC Working Group	Statewide

Event date/ time period	Program name	Engagement description	Local and Tribal governments involved
10/5/2022	5th Meeting of the Indian Affairs Committee	Statewide	Tribes
10/5/2022	NM. Broadband Collective Grant Review meetings for Equity Fund and TA fund	NM Broadband Collective	Statewide
10/6/2022	Broadband Expansion Plans for Luna County	County	Regional Agencies, Associations, Organizations
10/7/2022	Project Thor – How a Region Built a System	Regional	Regional Agencies, Associations, Organizations
10/8/2022	Digital Inclusion Week Internet Resource Fair at International District Library in Albuquerque	Local	Regional Agencies, Associations, Organizations
10/11/2022	Intelligent Transportation Conference (ITS) in Albuquerque	Statewide	Statewide
10/12/2022	CNMC Regional Projects & Engagement Working Group	CNMC Working Group	Statewide
10/13/2022	CNMC Digital Equity Working Group	CNMC Working Group	Statewide
10/18/2022	Town Hall on Broadband in Anthony	Regional	Regional Agencies, Associations, Organizations
10/18/2022	CNMC PROP Working Group (Poles, Right of Way, Permits)	CNMC Working Group	Statewide
10/19/2022	Community Broadband Forum in Los Alamos	Local	Regional Agencies, Associations, Organizations
10/19/2022	Connect New Mexico Council	CNMC	Statewide
10/19/2022	Tribal Education Committee Meeting	Tribal	Tribes
10/20/2022	County Farm Bureau Annual Meeting	Local	Regional Agencies, Associations, Organizations
10/20/2022	UNM Gallup Community Workshops – GEER II and HED	Local	Regional Agencies, Associations, Organizations
10/21/2022	CNMC: Tribal Broadband Convening 2: Digital Equity & Inclusion	Statewide	Tribes, NTIA
10/26/2022	CNMC Regional Projects & Engagement Working Group	CNMC Working Group	Statewide
10/27/2022	CNMC Digital Equity Working Group	CNMC Working Group	Statewide
11/1/2022	CNMC PROP Working Group (Poles, Right of Way, Permits)	CNMC Working Group	Statewide
11/2/2022	SWNM DOH meeting	Regional	DOH county reps Doña Ana and Luna

Event date/ time period	Program name	Engagement description	Local and Tribal governments involved
11/7/2022	NM Broadband Collective Regional Projects Working Group Meeting	NM Broadband Collective	Statewide
11/9/2022	CNMC Regional Projects & Engagement Working Group	CNMC Working Group	Statewide
11/10/2022	CNMC Digital Equity Working Group	CNMC Working Group	Statewide
11/10/2022	Zuni – Red Bolt Broadband Event	Tribal	Tribes
11/11/2022	CNMC Tribal Working Group Meeting	CNMC Working Group	Tribes
11/15/2022	NM Tribal Workgroup: Data and Map Challenge Meeting	Statewide	Tribes
11/15/2022	CNMC PROP Working Group (Poles, Right of Way, Permits)	CNMC Working Group	Statewide
11/16/2022	Connect New Mexico Council	CNMC	Statewide
11/18/2022	Southern Broadband Action Team (BAT) monthly meeting	Regional	Regional Agencies, Associations, Organizations
11/24/2022	CNMC Digital Equity Working Group	CNMC Working Group	Statewide
11/28/2022	NM Broadband Collective Grant Review meetings for Equity Fund and TA fund	NM Broadband Collective	Statewide
11/29/2022	CNMC Mapping, Data & Evaluation	CNMC Working Group	Statewide
11/29/2022	CNMC PROP Working Group (Poles, Right of Way, Permits)	CNMC Working Group	Statewide
12/1/2022	NM Broadband Collective Grant Review meetings for Equity Fund and TA fund	NM Broadband Collective	Statewide
12/1/2022	Library Meeting with FCC Commissioner Rosenthal	Statewide	Libraries
12/1/2022	Fed reserve/Regional ACP meeting	Regional	Borderplex/Luna/ Doña Ana/Hidalgo
12/1/2022	CNMC: NM Tribal Workgroup #2: Data and Map Challenge Meeting	Statewide and National	Tribes
12/3/2022	Eastern Navajo Agency Council	Regional	Eastern Navajo Chapters
12/7/2022	"Broadband for New Mexico" Series with Senator Lujan	Statewide	Statewide
12/7/2022	CNMC Regional Projects & Engagement Working Group	CNMC Working Group	Statewide
12/7/2022	Next Century Cities “Build Broadband Together”	Regional	Statewide, City of Albuquerque, Next Century Cities
12/8/2022	CNMC Digital Equity Working Group	CNMC Working Group	Statewide
12/8/2022	Regional Community Collaboration of nonprofit service agencies	Regional	30 Public Service Agencies

Event date/ time period	Program name	Engagement description	Local and Tribal governments involved
12/8/2022	Regional ACP funding and outreach meeting	Regional	Doña Ana, Borderplex, Hidalgo & Luna counties
12/13/2022	CNMC Mapping, Data & Evaluation	CNMC Working Group	Statewide
12/13/2022	CNMC PROP Working Group (Poles, Right of Way, Permits)	CNMC Working Group	Statewide
12/16/2022	Southern Broadband Action Team (BAT) monthly meeting	Regional	Regional Agencies, Associations, Organizations
12/20/2022	Pueblo Map Challenge Working Meeting	Tribal	Pueblos
12/21/2022	CNMC Regional Projects & Engagement Working Group	CNMC Working Group	Statewide
12/22/2022	CNMC Digital Equity Working Group	CNMC Working Group	Statewide
10/12-14/2022	SHLB AnchorNETS Conference in Crystal. City, Virginia	National	CNMC
10/24-28/ 2022	Indigenous Connectivity Summit 2022 (ICS 2022)	National	Tribes
10/26-28/ 2022	NMLA Library Strong Conference in Albuquerque	Statewide	Libraries
11/30-12/1/2022	NDIA and Federal Reserve Bank – Training in Denver	National	OBAE. and CTC, NDIA, Federal Reserve Bank
Every other Thursday	CNMC Digital Equity & Inclusion	CNMC Working Group	Statewide
Every other Tuesday effective 11/29/2022	CNMC Mapping, Data & Evaluation	CNMC Working Group	Statewide
Every other Tuesday effective 8/23/2022 until 12/31/2022	CNMC PROP Working Group (Poles, Right of Way, Permits)	CNMC Working Group	Statewide
Every other Wednesdays effective 3/30/2022 until 12/28/2022	CNMC Regional Planning & Community Engagement	CNMC Working Group	Statewide
Mondays 4pm	CNMC Grants Management & Rulemaking Working Group	CNMC Working Group	Statewide
1/3/2023	OBAE and Connect New Mexico Council Update	CNMC	Statewide

Event date/ time period	Program name	Engagement description	Local and Tribal governments involved
1/4/2023	Connect NM – Tribal Working Group	Tribal	Tribes
1/4/2023	Connect New Mexico Regional Planning and Community Engagement Working Group Meeting	Statewide	Statewide
1/5/2023	Smaller Feast Day Gathering in Pojoaque	Regional	Tribes
1/6/2023	Smaller Feast Day Gathering in Pojoaque	Local	Tribes
1/6/2023	NTIA Check in with Heidi Byrd	Statewide	Tribes
1/6/2023	OBAE Invitation: Final push mapping challenge – Question and Answer Session	Statewide	Counties
1/9/2023	PSCOC Presentation	Statewide	Educators
1/10/2023	Pueblo Mapping Data	Statewide	Pueblos
1/10/2023	Press Conference with NTIA senior advisor Barbara Cottam	Statewide	Counties, Tribes, ISPs
1/10/2023	Laguna Pueblo	Statewide	Laguna Pueblo
1/11/2023	Virtual Tribal Leaders Presentation	Statewide	Tribes
1/11/2023	NTIA Meeting re Pueblo of Laguna Application	Local	Tribes
1/12/2023	NTIA Digital Equity Leaders Network Telehealth/Health Equity Series	Statewide	Tribes
1/17/2023	OBAE and Connect New Mexico Council Update	Statewide	Statewide
1/17/2023	PSFA Special Subcommittee Meeting	Statewide	Educators
1/18/2023	Meeting with UNM re Network Management Options	Statewide	Educators
1/18/2023	Tribal Working Group Meeting	Statewide	Tribes
1/18/2023	Meeting with Ginger Lane & WCA regarding fiber installation workforce	Statewide	Counties
1/18/2023	Connect New Mexico Council Presentation	Statewide	Tribes
1/19/2023	NTIA local coordination event planning	Local	Tribes
1/19/2023	Association of Counties Conference	Statewide	Counties
1/20/2023	NTIA Check in with Heidi Byrd	Statewide	Tribes
1/20/2023	Southern Broadband Action Team (BAT) Meeting	Southern Counties and Colonias	Counties
1/23/2023	Presentation to NM Exchange Carrier Group Annual Membership Meeting	Statewide	Counties
1/23/2023	Dinner with NMECG	Statewide	Counties

Event date/ time period	Program name	Engagement description	Local and Tribal governments involved
1/24/2023	NM Chamber Business Day Event	Statewide	Counties
1/24/2023	OBAE and Connect New Mexico Council Update	Statewide	Statewide
1/25/2023	Presentation for 100 Women Albuquerque	Local	Counties
1/26/2023	Presentation for Transportation Committee – Rep. Hochman Vigil	Statewide	Counties
1/27/2023	Presentation to NCNMEDD Annual Board Meeting	Statewide	Counties
1/27/2023	Meeting with Mayor Stephen Aldridge	Local	Lea County
1/27/2023	House Appropriations and Finance Committee (HAFC) Presentation	Statewide	Counties
1/31/2023	Presentation of 3-Year Plan to NM House and Senate Members	Statewide	Counties
1/31/2023	PSFA Special Subcommittee Meeting	Statewide	Educators
2/1/2023	Connect New Mexico Regional Planning and Community Engagement Working Group Meeting	Statewide	Statewide
2/2/2023	New Mexico Idea Presentation	Statewide	Counties
2/2/2023	IAD Reception	Statewide	Tribes
2/3/2023	Indian Day at NM State Legislature	Statewide	Tribes
2/3/2023	Visit to Santa Fe Indian School (SFIS)	Statewide	Tribes
2/3/2023	NTIA Check in with Heidi Byrd	Statewide	Tribes
2/4/2023	HAFC Special Appropriations and IT Funding	Statewide	Counties
2/6/2023	NM Broadband – BLM Collaboration	Statewide	Counties
2/7/2023	Presentation to Senator Heinrich's Office	Statewide	Counties
2/8/2023	Luna County engagement	Local	Luna County
2/8/2023	Meeting with Lia Stefanovich on the State's Administration of Federal Broadband Funding	Statewide	Counties
2/8/2023	Meeting with Kimball Sekaquaptewa, Chief Technology Director at Santa Fe Indian School	Statewide	Tribes
2/8/2023	Albuquerque Journal Interview	Statewide	Counties
2/10/2023	NTIA Check in with Heidi Byrd	Statewide	Tribes
2/14/2023	National Hispanic Cultural Center Foundation Luncheon	Statewide	Tribes

Event date/ time period	Program name	Engagement description	Local and Tribal governments involved
2/14/2023	National Hispanic Cultural Center Foundation Reception	Statewide	Tribes
2/15/2023	Broadband at NM State Legislature (had a tribal specific booth)	Statewide	Tribes
2/15/2023	Broadband Day Press Conference with the Governor	Statewide	Tribes
2/15/2023	Presentation for Broadband Day at the Legislature	Statewide	Tribes
2/15/2023	Connect New Mexico Council Meeting	Statewide	Counties
2/15/2023	Broadband Day Reception	Statewide	Counties
2/16/2023	New Mexico: Socorro Schools Broadband Project – Access to utility poles	Statewide	Educators
2/16/2023	Rio Arriba Health Council Meeting	Local	Rio Arriba County
2/16/2023	Broadband Industry Meet-up – Vexus & PROTEC Fiber Technician students (Santa Fe)	Local	Rio Arriba County
2/17/2023	Southern Broadband Action Team (BAT) Meeting	Regional	Southern Counties and Colonias
2/20/2023	Meeting with Chairman Small	Statewide	Counties
2/21/2023	Meeting with Rep. Ray Lara	Local	Doña Ana County
2/21/2023	Lunch w/ECHO	Statewide	Counties
2/21/2023	Jemez Pueblo Tour with FWA	Local	Sandoval County, Tribes
2/22/2023	Navajo Nation Broadband Office/States meeting	Statewide	Tribes
2/23/2023	Joint Digital Equity and State Broadband Leaders Network Meeting: Bridging the Digital Divide in Rural America	Statewide	Counties
2/23/2023	Office of Broadband Access and Expansion/ConnectNM Coordination Meeting	Statewide	Counties
2/24/2023	San Ildefonso Pueblo/SIS	Local	Santa Fe County
2/24/2023	NTIA Check in with Heidi Byrd	Statewide	Counties
3/1/2023	Connect New Mexico Regional Planning and Community Engagement Working Group Meeting	Statewide	Statewide
3/1/2023	NM Tribal Broadband Working Group	Statewide	Tribes
3/1/2023	New Mexico Tech Council Digital Inclusion Peer Group	Statewide	Statewide

Event date/ time period	Program name	Engagement description	Local and Tribal governments involved
3/1/2023	Office Hours for Connect NM Pilot Program	Statewide	Statewide
3/2/2023	Broadband Navajo	Statewide	Navajo Nation
3/2/2023	Meeting to Discuss USDA RD Broadband Funding	Statewide	Counties
3/3/2023	NTIA Check in with Heidi Byrd	Statewide	Tribes
3/7/2023	OBAE and Connect New Mexico Council Update	Statewide	Counties
3/8/2023	Laguna Meeting	Statewide	Laguna Pueblo
3/8/2023	Laguna Pueblo FTTH Project	Local	Cibola and Bernalillo counties
3/9/2023	15th Annual Women in Tech Event	Statewide	Statewide
3/10/2023	Follow-up Meeting with FWA re Jemez Pueblo	Local	Sandoval County, Tribes
3/10/2023	NTIA Check-in with Heidi Byrd	Statewide	Tribes
3/11/2023	Presentation at SxSW Conference in Austin	Statewide	Counties
3/13/2023	SxSW Follow-up Interview	Statewide	Counties
3/14/2023	NGA Broadband Advisors Monthly Network Call	Statewide	Counties
3/14/2023	OBAE and Connect New Mexico Council Update	Statewide	Counties
3/15/2023	Connect New Mexico Regional Planning and Community Engagement Working Group Meeting	Statewide	Statewide
3/15/2023	Redi-Net	Regional	Rio Arriba, Los Alamos, and Santa Fe counties
3/15/2023	NMTC Broadband Peer Group – Middle-Mile & Legislative Updates	Statewide	Counties
3/16/2023	Follow-up/recap meeting with FWA re Jemez Pueblo	Local	Sandoval County, Tribes
3/17/2023	City of Jal	Local	Lea County
3/17/2023	Picuris Pueblo: Broadband and Natural Gas Project(s) – follow-up	Local	Taos County, Tribes
3/20/2023	New Mexico Broadband & BNSF	Statewide	Counties
3/21/2023	Meeting with Kevin Shendo, Director, Pueblo of Jemez Department of Education	Local	Sandoval and Tribes
3/22/2023	NTTA Panel to discuss BEAD funding	Statewide	Tribes
3/23/2023	All Pueblo Council of Governors	Statewide	Pueblo

Event date/ time period	Program name	Engagement description	Local and Tribal governments involved
3/23/2023	Tribal Broadband Leaders Network Summit	Statewide	Tribes
3/23/2023	OBAE presents at the All Pueblo Council of Governors	Statewide	Tribes
3/24/2023	OBAE presents at the All Pueblo Council of Governors	Statewide	Tribes
3/28/2023	CTC Kickoff	Statewide	Statewide
3/29/2023	Tularosa Communications Celebratory Event	Local	Otero County
3/29/2023	Connect New Mexico Council Meeting	Statewide	Statewide
3/30/2023	Columbus Award Celebration and Tour	Local	Luna County
3/31/2023	Silver City Travel Celebratory Event	Local	Grant County
4/3/2023	USDA Reconnect Grant Award Event – Kelly Cable	Statewide	Counties
4/4/2023	NM Pilot Grant Award Event – Sacred Wind	Local	Counties
4/5/2023	New Mexico Tech Council Digital Inclusion Peer Group		
4/5/2023	PSCOC Subcommittee	Statewide	Counties
4/6/2023	NTIA Tribal Broadband Leaders Network – Community Engagement & Digital Equity Virtual		
4/7/2023	UT, AZ, NM & Navajo Nation Broadband Office/NNTRC monthly meeting	Statewide	Tribes
4/11/2023	Meeting with Gov. Paisano with the Pueblo of Sandia	Local	Tribes
4/11/2023	NGA Broadband Advisors Monthly Network Call	Statewide	Counties
4/12/2023	Connect New Mexico Regional Planning and Community Engagement Working Group Meeting	Statewide	Counties
4/13/2023	NTIA Broadband Leaders Network Monthly Meeting – Virtual		
4/14/2023	Radio Interview with Otero Count Commissioner Amy Barela	Local and Statewide	Counties
4/14/2023	NTIA check in with Heidi Byrd	Statewide	Tribes
4/17/2023	Region 6 Southeast Regional Meeting in Alamogordo (in Otero County)	Regional	Otero, Lea, Lincoln, De Baca, Chaves, Eddy, Roosevelt, and Curry counties
4/17/2023	PSCOC Full Committee Meeting	Statewide	Counties

Event date/ time period	Program name	Engagement description	Local and Tribal governments involved
4/18/2023	Sandia FTTH and SCADA project Presentation	Local	Pueblo of Sandia
4/18/2023	Region 3 Central Regional Meeting in Los Lunas (in Valencia County)	Regional	Valencia, Bernalillo, Torrance Counties
4/18/2023	Focus Group 1 – Grants	Statewide	
4/18/2023	Focus Group 8 – SEN	Statewide	
4/19/2023	Focus Group 7 – Middle Mile	Statewide	
4/19/2023	Meeting with NM Indian Affairs Secretary James Mountain	Pueblos and Tribal	Tribes
4/19/2023	Valencia County IT Department Meeting	Local	Valencia County
4/19/2023	Broadband Initiative on Navajo Nation	Pueblos and Tribal	Navajo Nation
4/19/2023	Meeting with Governor Mountain from Pueblo de San Ildefonso	Pueblos and Tribal	Pueblo de San Ildefonso
4/19/2023	Connect New Mexico Council Meeting	CNMC	Statewide
4/20/2023	Focus Group 9 – Workforce	Statewide	
4/20/2023	UNM Tech Days at UNM Student Union	Local	Bernalillo
4/21/2023	Sandia Pueblo Follow-Up Meeting	Pueblos and Tribes	Pueblo of Sandia
4/21/2023	ADACEN Meeting	ISPs	Bernalillo
4/21/2023	Southern Broadband Action Team Meeting	Regional	Southern Counties and Colonias
4/21/2023	Focus Group 2 – Tribal	Statewide	
4/24/2023	Meeting with Debra Griego from Pueblo of San Ildefonso	Pueblos and Tribes	Pueblo of San Ildefonso, Santa Fe County
4/24/2023 – 4/26/2023	NGA Broadband Leaders Workshop in Las Vegas	In-person workshop	State
4/25/2023	NM Indian Affairs Virtual Tribal Call	Statewide	Tribes
4/28/2023	NTIA Virtual Tribal Listening Session	Statewide	Tribes
5/2/2023	NMDOT Opportunity Fair	Statewide	All Counties, ISPs, and Tribes
5/2/2023	Navajo Nation Meeting	Pueblos and Tribes	Navajo Nation
5/2/2023	Focus Group 3 – Digital Equity	Statewide	
5/2/2023	Focus Group 4 – Community Engagement	Statewide	
5/3/2023	GEER II Broadband Pilot Project Executive Brief Meeting	Statewide	

Event date/ time period	Program name	Engagement description	Local and Tribal governments involved
5/4/2023	ABQNOG Albuquerque Network Operators Conference	Statewide	Counties and ISPs
5/5/2023	DFA Broadband and Local Government Meeting	Statewide	Counties
5/8/2023	State Broadband Leaders Meeting	Statewide	Counties
5/8/2023	Meeting with Mitch Hibbard, PVT	Local	ISPs
5/8/2023	Meeting with Ron Allen, Carlsbad Municipal Schools Director of Technology	Local	
5/9/2023	Meeting with Tesuque Pueblo	Pueblos and Tribes	Tesuque Pueblo
5/10/2023	Clearfield Demo Trailer at Picuris Pueblo	Pueblos and Tribes	Picuris Pueblo
5/10/2023	Local and Regional Government Virtual Facilitated Session	Statewide	Counties, Cities
5/10/2023	Focus Group 10 – Stewardship	Statewide	
5/11/2023	Region 4 Northeast Regional Meeting in Springer (Colfax County)	Regional	Colfax, Union, Mora, Harding, San Miguel, Quay, Guadalupe Counties
5/12/2023	Region 5 Southwest Regional Meeting in Las Cruces (Doña Ana County)	Regional	Doña Ana, Catron, Socorro, Sierra, Grant, Luna, Hidalgo Counties
5/15/2023	Region 1 Northwest Regional Meeting in Farmington (San Juna County)	Regional	Sandoval, San Juan, McKinley, and Cibola Counties
5/16/2023	Region 2 North Central Regional Meeting in Hernandez (Rio Arriba County)	Region	Rio Arriba, Los Alamos, Santa Fe, and Taos Counties
5/16/2023	IAD Tribal Leaders Meeting	Statewide	Tribes
5/17/2023	Connect New Mexico Council Meeting	CNMC	Statewide
5/19/2023	Health Center CAIs Virtual Facilitated Session	Statewide	Regional Agencies, Associations, Organizations
5/20/2023	Community Anchor Institutions Virtual Facilitated Session	Statewide	Regional Agencies, Associations, Organizations
5/22/2023	Digital Equity and Covered Populations Virtual Facilitated Session	Statewide	Regional Agencies, Associations, Organizations
5/22/2023	Meeting with Gallup Business Improvement District Board President	Local	McKinley County

Event date/ time period	Program name	Engagement description	Local and Tribal governments involved
5/23/2023	IAD Tribal Leader Meeting	Statewide	Tribes
5/24/2023	New Mexico Statewide Convening and Tribal Roundtable	Statewide	Tribes, Statewide Associations, ISPs, Counties
5/25/2023	Tour and Meeting at Santa Fe Indian School	Statewide	Tribes
5/25/2023	Tour with New Mexico School for the Deaf	Statewide	Counties
5/26/2023	Digital Equity and Covered Populations Virtual Facilitated Session	State	Regional Agencies, Associations, Organizations
5/30/2023	IAD Tribal Leaders Meeting	Statewide	Tribes, ISPs
5/30/2023	Workforce Development Virtual Facilitated Session	Statewide	Regional Agencies, Associations, Organizations
5/31/2023	Workforce Development Virtual Facilitated Session	Statewide	Regional Agencies, Associations, Organizations
5/31/2023	Meeting with HSD Secretary	Statewide	Counties
6/2/2023	Meeting with DOT Secretary Serna	Statewide	Counties
6/5/2023	Internet Service Providers Virtual Facilitated Session	Statewide	ISPs
6/5/2023	Rulemaking and Grants Working Group Meeting	Statewide	Counties
6/8/2023	Internet Service Providers Virtual Facilitated Session	Statewide	ISPs
6/9/2023	NMDOT Right of Way and Broadband Standing Meeting	Statewide	Counties
6/9/2023	Tribal Stakeholders Virtual Facilitated Sessions	Statewide	Tribes
6/12/2023	Business and Economic Development Virtual Facilitated Session	Statewide	Regional Agencies, Associations, Organizations
6/12/2023	Rulemaking and Grants Working Group Meeting	Statewide	Counties
6/12/2023	Meeting with Santa Fe County Commissioner J. Greene	Local	Santa Fe County
6/13/2023	NGA Broadband Advisors Monthly Network Call	Statewide	Counties
6/13/2023	IAD Tribal Leader Call	Statewide	Tribes
6/13/2023	Meeting with Sonia Bolanos for ACP	Statewide	Counties
6/14/2023	Business and Economic Development Virtual Facilitated Session	Statewide	Regional Agencies, Associations, Organizations

Event date/ time period	Program name	Engagement description	Local and Tribal governments involved
6/14/2023	Broadband Initiative on Navajo Nation Presentation	Pueblos and Tribes	Tribes
6/15/2023	NMC Annual Conference in Farmington Presentation	Statewide	Counties
6/26/2023	White House BEAD Announcement	Statewide	
6/27/2023	Virtual discussion on 5 Year Action Plan with WISPs, WISPA, and Internet Backbone	Statewide	Statewide
6/27/2023	Virtual discussion on 5 Year Action Plan with NTUA, NTUAW, and SFIS	Statewide	Statewide
6/28/2023	Let's Get going Broadband Bootcamp	Region	Doña Ana, Otero, Luna, and Chaves counties
6/29/2023	Let's Get Going Broadband Bootcamp	Regional	Bernalillo, Rio Arriba, Los Alamos, Santa Fe, and Sandoval counties
7/5/2023	State Tribal Leaders Summit	Statewide	Tribes
7/6/2023	Santo Domingo Tribal Event	Local	Pueblo of Santo Domingo
7/6/2023	BEAD Allocation at Santa Fe Indian School with Governor Michelle Lujan Grisham, Mitch Landrieu, April Delaney, Senator Lujan, Representative Leger-Fernandez and Director Kelly Schlegel	Regional	
7/7/2023	Bipartisan Infrastructure Law Roundtable with Local New Mexico Leaders	Statewide	Counties
7/10/2023	Tour of NM Surf	Regional	
7/11/2023	Southern Pueblos Council Meeting	Regional	Tribes
7/12/2023	Isleta Pueblo Tribal Consultation	Local	Isleta Pueblo
7/13/2023	Meeting with Preston Sanchez	Statewide	Schools and Tribes
7/17/2023	ISP 1:1 Oso Internet	Local	ISP
7/17/2023	ISP 1:1 Tularosa Communications	Local	ISP
7/17/2023	ISP 1:1 PVT	Local	ISP
7/17/2023	ISP 1:1 Laguna Pueblo	Local	ISP
7/20/2023	Meeting with Joy Thompson	Statewide	
7/20/2023	Meeting with Santa Fe Community College President Beccy Rawley	Local	Santa Fe County

Event date/ time period	Program name	Engagement description	Local and Tribal governments involved
7/20/2023	ISP 1:1 Leaco	Local	ISP
7/21/2023	ISP 1:1 Kit Carson	Local	ISP
7/21/2023	ISP 1:1 Plateau	Local	ISP
7/21/2023	ISP 1:1 Sacred Wind	Local	ISP
7/24/2023	Transportation Infrastructure Revenue Subcommittee Presentation	Statewide	
7/24/2032	NRECA, NTCA Panel	Statewide	Counties
7/25/2023	ISP 1:1 Lumen	Local	ISP
7/25/2023	Jemez Pueblo Tribal Consultation	Local	Jemez Pueblo
7/26/2023	ISP 1:1 Cellular One	Local	ISP
7/26/2023	ISP 1:1 Resound	Local	ISP
7/26/2023	Navajo Nation Tribal Consultation	Local	Navajo Nation
7/27/2023	Santo Domingo Tribal Consultation	Local	Santo Domingo
8/7/2023	San Felipe Pueblo Tribal Consultation	Local	San Felipe Pueblo
8/9/2023	Laguna Pueblo Tribal Consultation	Local	Lagun Pueblo
8/21/2023	Cochiti Pueblo Tribal Consultation	Local	Cochiti Pueblo

Appendix B: Additional asset inventory data

Asset inventory data by type

During OBAE's outreach and engagement in preparation of this Plan, various entities stated they have broadband adoption and broadband affordability assets. Those statements are reflected in the following tables as a supplement to the asset inventories described in Section 3.3.

Additional asset inventory – partners

The following table shows entities that participated in OBAE's outreach and engagement sessions and that offered to become partners of OBAE.

Partner	Description of current or planned role in broadband deployment and adoption
Alamogordo Public Library	Member of a broadband coalition with New Mexico State Library; potential partner for digital equity efforts
Albert W. Thompson Memorial Library	Potential partner for digital equity efforts
Belen Public Library	Potential partner for digital equity efforts
Carlsbad Public Library	Potential partner for digital equity efforts
Central New Mexico Electric Cooperative	Recipient of broadband funding from the State
City of Clovis	Potential partner for digital equity efforts
City of Deming	Recipient of broadband funding from the State
Comcast	Recipient of broadband funding from the State
David F. Cargo El Valle de Anton Chico Library	Potential partner for digital equity efforts
Destination Strategies	Member of the Broadband Coalition for Luna County
Eastern New Mexico University – Roswell	Potential partner for digital equity efforts
ENMR Telephone Cooperative	Recipient of broadband funding from the State
Espanola Public Library	Potential partner for digital equity efforts
Ethos Broadband	Recipient of broadband funding from the State
Jemez Springs Public Library	Member of a broadband coalition; potential partner for digital equity efforts
Pueblo de Cochiti	Potential partner for digital equity efforts
Silver City Public Library	Potential partner for digital equity efforts
Socorro Electric Cooperative	Recipient of broadband funding from the State
SWC Telesolutions	Recipient of broadband funding from the State
Tularosa Communications	Recipient of broadband funding from the State

Partner	Description of current or planned role in broadband deployment and adoption
Vallecitos Community Center and Library	Potential partner for digital equity efforts
Valley TeleCom Group	Recipient of broadband funding from the State
Western New Mexico Telephone Company	Recipient of broadband funding from the State

Additional asset inventory – broadband adoption assets

The following table details entities that participated in OBAE's outreach and engagement sessions and that stated that they have broadband adoption assets such as programs that provide devices to those who lack them or that provide digital literacy or digital skills training.

Entity name	Description
David F. Cargo El Valle de Anton Chico Library Digital Literacy Skills	This county-wide program provides digital literacy training and aims to close the digital divide.
Silver City Public Library Basic Computer Class Series	This county-wide program teaches community members about computer device usage, specifically Windows computers. Skills range from file and folder structure, web searching, and email use.
Belen Public Library Computer Learning Lab	The program teaches basic computer skills and provides professional development opportunities such as resume writing, business planning, and marketing skills.
Jemez Springs Public Library	The library has loaned laptops and e-readers in response to the pandemic.
Alamogordo Public Library	The Technology Accessibility Program loans hotspots and Chromebooks and provides one-on-one computer assistance twice weekly.
Los Lunas Public Library	The library provides basic computer skills courses and helps community members with professional development, such as resume building.
Vallecitos Community Center and Library	The program provides internet literacy training to community members.
Albert W. Thompson Memorial Library	The Adult Technology for Beginners program provides technical support for computing devices and teaches basic computer skills.
Espanola Public Library	The library offers basic computer skills courses on data privacy and general computing device use.

Additional asset inventory – broadband affordability assets

The following table details entities that participated in OBAE's outreach and engagement sessions and that stated that they have broadband affordability assets such as discounted or subsidized broadband tiers or ACP outreach programs.

Asset name	Description
City of Albuquerque ACP Outreach Program	This city-wide program promotes awareness of the federal ACP program to city residents.

The following table lists ISPs in the State (including mobile service providers) that participate in the ACP, per data from the Universal Service Administrative Company (USAC).[357] The table also indicates providers that offer a plan that provides service at effectively no cost with the application of the ACP subsidy ("no cost with ACP"), and whether the provider offers eligible customers the option to purchase a device at a discount.[358]

Table 18: ISPs participating in ACP (including no-cost plans and device discounts)

Provider name	Service type	No cost with ACP	Device discount
Access Wireless	Mobile Internet		
AFNET, LLC	Mobile Internet		Yes
Airtalk Wireless	Mobile Internet		Yes
ALLDATA COMMUNICATIONS CORP.	Mobile Internet		Yes
Assurance Wireless	Mobile Internet	Yes	
AT&T Mobility LLC	Mobile Internet	Yes	
Boomerang Wireless, LLC	Mobile Internet		Yes
Boost Mobile	Mobile Internet		Yes
Cellular One of Northeast AZ	Mobile Internet		Yes
CenturyLink or Quantum Fiber	Home Internet		

[357] Based on data provided to USAC by service providers, available at https://cnm.universalservice.org/.
[358] Per USAC, customers must pay more than $10 but not more than $50 and must purchase the device through the provider; "Companies Near Me," USAC, https://cnm.universalservice.org/.

Provider name	Service type	No cost with ACP	Device discount
Chaparral CableVision	Home Internet		
Cintex Wireless, LLC	Mobile Internet	Yes	Yes
Clear Wireless, LLC	Home Internet		Yes
Clear Wireless, LLC	Mobile Internet		Yes
Comcast Xfinity	Home Internet	Yes	
Comcast Xfinity	Mobile Internet	Yes	
Comlink Total Solutions Corp.	Mobile Internet		
Commnet Four Corners, LLC	Home Internet	Yes	Yes
Commnet Four Corners, LLC	Mobile Internet	Yes	Yes
Cricket Wireless	Mobile Internet	Yes	
Culture Wireless	Home Internet		Yes
Culture Wireless	Mobile Internet		Yes
Culture Wireless Group, LLC	Mobile Internet		Yes
Dailytel Inc.	Mobile Internet		
Delcom, Inc.	Home Internet		
Dell Telephone Cooperative. Inc.	Home Internet		
Digital Aid, LLC	Mobile Internet		Yes
EARTHLINK, LLC	Home Internet		
Easy Wireless	Mobile Internet	Yes	
ECOMOBILE, INC.	Home Internet		Yes
ECOMOBILE, INC.	Mobile Internet		Yes
ENMR Telephone Cooperative	Home Internet		

Provider name	Service type	No cost with ACP	Device discount
Excess Telecom, Inc.	Mobile Internet	Yes	Yes
Fidelity Cablevision, LLC	Home Internet		
Figgers Communication Inc.	Home Internet		Yes
Freemo	Mobile Internet		Yes
Frontier Communications Corporation	Home Internet		
Global Connection Inc. of America	Mobile Internet	Yes	Yes
Hello Mobile Telecom LLC	Mobile Internet	Yes	
Hoop Wireless, LLC	Mobile Internet	Yes	Yes
Hughes Network Systems, LLC	Home Internet		
human-I-T	Mobile Internet		Yes
IDT Domestic Telecom, Inc.	Mobile Internet		Yes
IJ Wireless	Home Internet		Yes
IJ Wireless	Mobile Internet		Yes
Infiniti Mobile	Mobile Internet	Yes	Yes
Insight Mobile, Inc.	Mobile Internet		Yes
Integrated Path Communications, LLC	Home Internet		Yes
InterConnection	Mobile Internet		Yes
JackRabbit Wireless	Home Internet		
K20 Wireless	Mobile Internet	Yes	Yes
K'awaika Hanu Internet	Home Internet		
Kit Carson Electric Cooperative, Inc.	Home Internet		
La Canada Wireless Association	Home Internet		

Provider name	Service type	No cost with ACP	Device discount
La Jicarita Rural Telephone Cooperative	Home Internet		
Leaco Rural Telephone Company	Home Internet		
Life Wireless	Mobile Internet		
Lingo	Home Internet		
Lokket Inc.	Home Internet		
Maxsip Telecom Corporation	Home Internet		
Mescalero Apache Telecom, Inc.	Home Internet	Yes	
Metro by T-Mobile	Mobile Internet		
National Wireless	Mobile Internet		Yes
NewPhone Wireless, LLC	Mobile Internet	Yes	Yes
Nexus Telecom	Home Internet		Yes
Nexus Telecom	Mobile Internet		Yes
NMSurf, Inc.	Home Internet		Yes
North American Local, LLC	Mobile Internet	Yes	
NTUA Wireless, LLC	Home Internet	Yes	Yes
NTUA Wireless, LLC	Mobile Internet	Yes	Yes
Optimum	Home Internet		
Oso Internet Solutions, LLC	Home Internet	Yes	
PCs for People	Mobile Internet	Yes	Yes
Penasco Valley Telephone Cooperative, lnc.	Home Internet		
Plateau	Home Internet		
Pueblo of Jemez	Home Internet		

Provider name	Service type	No cost with ACP	Device discount
Q Link Wireless LLC	Mobile Internet	Yes	Yes
Red Bolt Broadband	Home Internet		
Red Pocket & FreedomPop	Mobile Internet		Yes
Resound Networks, LLC	Home Internet		
Roosevelt County Rural Telephone Cooperative, Inc.	Home Internet		
Rural4G	Mobile Internet	Yes	Yes
Sacred Winds Communications, Inc.	Home Internet		
SafetyNet Wireless	Mobile Internet	Yes	Yes
Sage Telecom Communications, LLC	Mobile Internet	Yes	Yes
Sano Health LLC	Mobile Internet	Yes	Yes
Santo Domingo ISP	Home Internet		
Sarver Wireless	Mobile Internet	Yes	Yes
Selectel Wireless	Mobile Internet	Yes	Yes
Sierra Communications, Inc.	Home Internet		
Snapfon	Mobile Internet	Yes	Yes
Sparklight	Home Internet		
Spectrum (Charter Communications Operating, LLC)	Home Internet	Yes	
Spot On Networks, LLC	Home Internet		
Straight Shot Wireless	Home Internet		
Straight Talk, Total Wireless, Simple Mobile, Walmart Family Mobile, TracFone, Net10, Page Plus & Go Smart	Mobile Internet		Yes
SW DinehNet LLC	Home Internet		
SWA Connect, LLC	Home Internet		Yes

Provider name	Service type	No cost with ACP	Device discount
Tablet Mobile	Mobile Internet		Yes
TaosNet, LLC	Home Internet		
TCI	Home Internet		
TDS	Home Internet		
Tone Communication Services LLC	Mobile Internet		
Torch Wireless	Mobile Internet		Yes
TransWorld Network, Corp.	Home Internet		
Tularosa Basin Telephone Company	Home Internet		
Twigby	Mobile Internet		
Unity Wireless Inc.	Mobile Internet	Yes	Yes
Valley Telephone Cooperative, Inc.	Home Internet		
Verizon Wireless	Home Internet		
Verizon Wireless	Mobile Internet		
Via Wireless, LLC	Mobile Internet		Yes
Viasat	Home Internet		
Visionary Communications, Inc.	Home Internet		
Whoop Connect Inc.	Mobile Internet		Yes
Windstream Communications, LLC	Home Internet		
WNM Communications Corporation	Home Internet		
Wrazzle, Inc.	Mobile Internet		Yes
Xchange Telecom LLC	Mobile Internet		Yes
Yucca Telecommunications Systems	Home Internet		

Provider name	Service type	No cost with ACP	Device discount
Ztar Mobile, Inc.	Mobile Internet		Yes

Additional asset inventory – broadband deployment assets

The following table lists higher education institutions in the State that offer telecommunications-related degrees, certifications, or courses and could be potential resources for workforce development efforts to support broadband deployment.

Table 19: Higher education institutions that offer telecommunications-related programs

School	School type	Location in NM	Telecom-related programs	Degrees (Bachelors)	Online or in person
The University of New Mexico	Public, 4-year	Albuquerque	*Online Course (72 hours in total) on Computer Networking Suite, focusing on introductory, intermediate, and wireless networking.	Mechanical engineering (1.8%); Computer engineering (0.6%); American Indian/Native American studies (0.3%)	Both
Central Mexico Community College	Public, 2-year	Albuquerque	* The Electrical Trade Program (15-week course; Electric Line Worker Pre-Apprentice Program (15 weeks); Electrical Trades, Certificate of Completion	Skilled Trades, Manufacturing and Transportation; Information Technology	Both
Doña Ana Community College	Public, 2-year	Las Cruces	* Tower Technician: Building Construction Technology (Associate of Applied Science Degree, 60 credits); * Building Construction Technology –	Architect and Construction Technologies	Both

School	School type	Location in NM	Telecom-related programs	Degrees (Bachelors)	Online or in person
			Certificate of Completion (43-44 credits); Basic Residential Wiring – Certificate of Completion (17 credits)		
New Mexico State University	Public, 4-year	Las Cruces	* Fiber Optic Certification Training (10-day, hands-on intensive program); Offers fiber optic courses, with future trainings happening in June and October; Civil Engineering Technology (4 year); * Electrical Lineworker Certificate Program (training in pole climbing)	Mechanical engineering (4.1%); Information technology (2.8%); Engineering technology (1.9%); Range science and management (0.4%); Geography (0.3%); Engineering physics/applied physics (0.2%), Surveying technology/ surveying (<0.1%)	Both, but offer 100% online pro-grams via their global campus
Santa Fe Community College	Public, 2-year	Santa Fe	SFCC Fiber Optic Technician Certification training; Fiber to the Home Certification training	Building science and construction technologies program, Fiber Optic Technician certification training	In person
New Mexico Tech	Public, 4-year	Socorro	* Transdisciplinary Cybersecurity graduate programs at NMT	Civil Engineering, Electrical Engineering	
Eastern New Mexico University	Public, 4-year	Portales	* Computer and Network Certification (21 credits); Computer & Network Security Apprenticeship (35	Computer and information sciences (1%); Engineering technology (Bachelor's and	Both

School	School type	Location in NM	Telecom-related programs	Degrees (Bachelors)	Online or in person
			credits)	Associate, 0.8%); Business administration, management and operations (0.8%)	
New Mexico Institute of Mining and Technology	Public, 4-year	Socorro	N/A	Mechanical engineering (20.8%); Electrical and electronics engineering (12.8%); Computer science (10.2%); Civil engineering (4%); Engineering/ industrial management (1.8%); Information technology (1.3%); Professional, technical, business, and scientific writing (0.9%)	Both
New Mexico Highlands University	Public, 4-year	Las Vegas	N/A	Business administration and management (12.3%); Computer and information sciences (1.5%); Natural resources management and policy (0.5%); Information science/studies (0.5%)	Both
Institute of American Indian Arts (IAIA)	Public, 4-year	Santa Fe	N/A	American Indian/Native American studies (6.7%)	Both
Western	Public,	Silver City	* Electrical,	Business	

School	School type	Location in NM	Telecom-related programs	Degrees (Bachelors)	Online or in person
New Mexico University	4-year		electronic and communications engineering technology/ technician (8.1%)	administration and management (2.9% Bachelors, 4.2% Associate); Electrical, electronic and communications engineering technology/ technician (Associate, 3.4%)	
Northern New Mexico College	Public, 2-year	Española	* Business/office automation/ technology/data entry (3.3%)	Business administration and management (8%); Electrical and electronic engineering technologies/ technicians (2.8%); Computer engineering technology/ technician (1.9%)	Both
CNM Main Campus Student Services Center (SSC)	Public, 2-year	Albuquerque	* Network and system administration/ administrator (0.5%); Computer and information systems security/information assurance (0.3%); * Geographic information science and cartography (0.1%);	Building construction technology (<0.1)	Both
Navajo Technical University	Public, 2-year	Crownpoint	* Information technology (7.1%)	Administrative assistant and secretarial science (9.8%); Legal assistant/paralegal	Both

School	School type	Location in NM	Telecom-related programs	Degrees (Bachelors)	Online or in person
				(1.8%); Building construction technology (1.8%); Information Technology (0.9%)	
Clovis Community College	Public, 2-year	Clovis	* Computer and information sciences (1.6%); * Mechanical engineering/ mechanical technology/ technician (0.6%); * Management information systems (0.1%)	Office management and supervision (1%); Operations management and supervision (0.6%)	Both
University Of the Southwest	Private, 4-year	Hobbs	N/A	Business, management, marketing, and related support services (2.4%)	Both

Needs and gaps identified through stakeholder engagement

The following table details entities that participated in OBAE's outreach and engagement sessions and that stated that they have needs and gaps in the various categories detailed in this Plan.

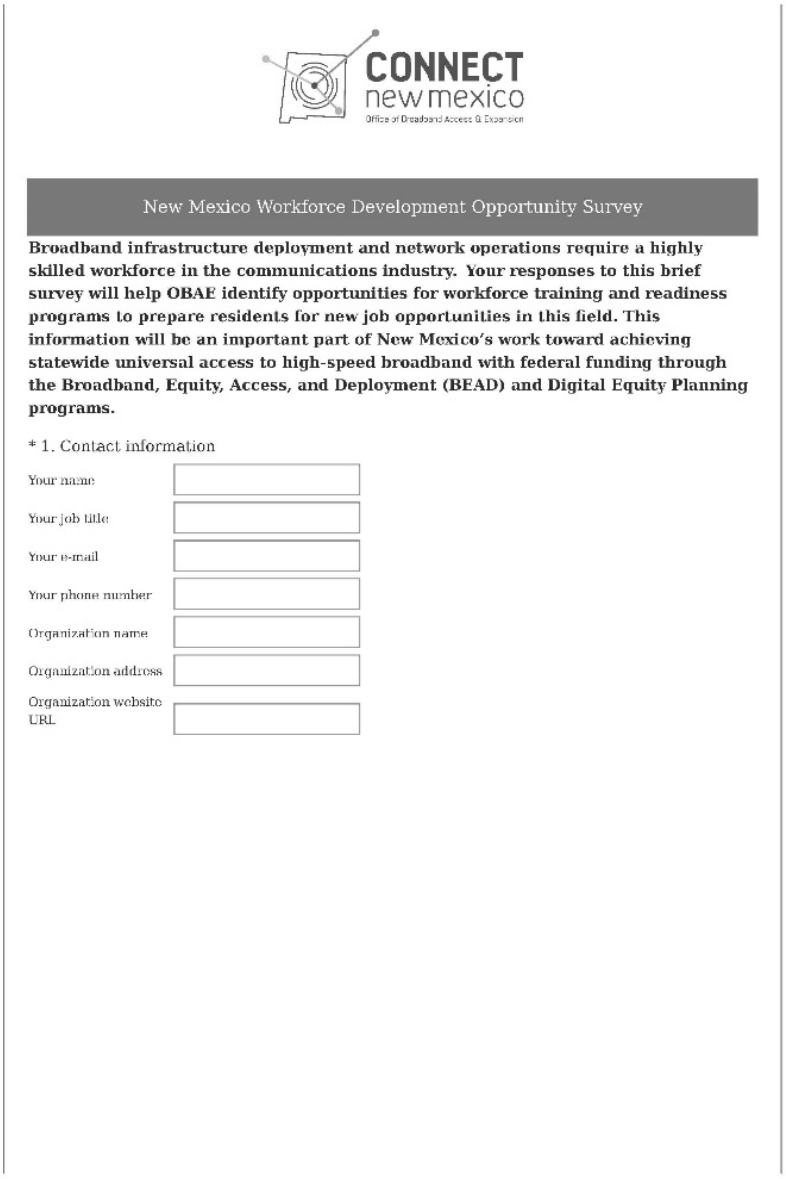
Issue	Need or gap identified
Broadband deployment – workforce development	The City of Santa Fe Office of Economic Development has identified a desire to partner with Santa Fe Community College to develop and provide vocational training for workforce development. It has identified a gap in continued education opportunities for professionals.
Broadband deployment – workforce development	Santa Fe Community College identified the needs for wraparound services to supplement workforce development. Reliable childcare, transportation, and funding to cover fees associated with training are critical to preparing a skilled workforce.
Broadband deployment –	Animas Public Schools offers welding certification in its curriculum but identified a lack of job opportunities in rural areas of the State.

Issue	Need or gap identified
workforce development	Lack of jobs makes it difficult to develop a workforce if employees leave.
Broadband affordability	Many stakeholders, such as the Mycelia Foundation and Luna County's Economic Opportunity Council, identified major affordability barriers to broadband adoption. Low-income households lack the funds to afford home internet and computing devices, while other cannot afford the upfront costs of equipment and installation.
Broadband access	Stakeholders such as Belen Consolidated Schools and the New Mexico Behavioral Health Institute have identified the lack of broadband infrastructure in rural areas as a barrier to access. They shared thoughts that internet service providers do not view rural areas as profitable enough to expand into, so rural residents struggle to get service. Stakeholders also noted that satellite is often the only service available in certain areas; they claim satellite is expensive and provides unreliable service.
Digital skills and literacy	Stakeholders identified a need for digital skills and literacy courses. They recognize that communities need to learn how to meaningfully use the internet and computing devices once broadband is accessible.
Workforce development	The ISP Sacred Wind highlighted difficulties in developing workforce capabilities in rural areas. Representatives discussed the lack of experience in communities contributing to hiring difficulties, as well as a struggle to compete with larger companies' higher wages. Plateau and Kit Carson, other service providers, identified similar issues with hiring skilled laborers and equipment operators.
Broadband deployment	Kit Carson pointed out last-mile deployment costs as a major barrier. Planning the deployment proves to be a large expense for the cooperative.
Broadband deployment – rights-of-way	Multiple service providers stressed the difficulty of accessing the rights-of-way and the lengthy permitting processes. Plateau, Windstream, and Sacred Wind all highlighted the permitting process as a barrier to timely deployment.

Appendix C: Survey instruments

OBAE gathered input from stakeholders through six online survey instruments, as a supplement to the existing and ongoing stakeholder engagement process. Surveys were provided via a link during the stakeholder sessions, posted to the State's website,[359] and delivered through email to all stakeholders in the relevant group.

Survey instrument 1: Workforce development opportunity survey



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New Mexico Workforce Development Opportunity Survey

Broadband infrastructure deployment and network operations require a highly skilled workforce in the communications industry. Your responses to this brief survey will help OBAE identify opportunities for workforce training and readiness programs to prepare residents for new job opportunities in this field. This information will be an important part of New Mexico's work toward achieving statewide universal access to high-speed broadband with federal funding through the Broadband, Equity, Access, and Deployment (BEAD) and Digital Equity Planning programs.

* 1. Contact information

Your name
Your job title
Your e-mail
Your phone number
Organization name
Organization address
Organization website URL

[359] "Tell Us," Connect New Mexico, https://connect.nm.gov/tell-us.html.

* 2. Type of organization (one selection only)

- ◯ Internet service provider (ISP)
- ◯ Labor union
- ◯ Trade association
- ◯ Industry certification or standards body
- ◯ Government agency (state, county, local, tribal, or regional consortia)
- ◯ Economic development association or agency
- ◯ Regional or local workforce development board or agency
- ◯ K-12 education (private, charter, public)
- ◯ Higher education organization (all levels, public or private)
- ◯ Trade, technical or vocational school (public, nonprofit, or for-profit)
- ◯ Community based or nonprofit organization
- ◯ Other (please specify)

New Mexico Workforce Development Opportunity Survey

3. Do you offer workforce development programs for job placement and training in the communications industry in New Mexico?

- ◯ Yes
- ◯ No

4. Do you offer training in any of the following industries that have transferable skills that can be applied to communications network deployment? (Select all that apply)

- ☐ Utilities such as electricity
- ☐ HVAC
- ☐ Computer science
- ☐ Cybersecurity
- ☐ General electrician
- ☐ General construction
- ☐ Other (please specify)

5. If you answered no to Question 3, are you interested in developing programs specifically targeted at employment opportunities in the communications industry?

- ☐ Yes
- ☐ No

Please describe your interest in developing these programs

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New Mexico Workforce Development Opportunity Survey

6. What type of workforce development programs do you offer? (Select all that apply)

- [ ] On-the-job training placement
- [ ] Standards certification and safety programs
- [ ] Training programs through a public or private K12 school
- [ ] Training programs through a school of higher education
- [ ] Trade or vocational certificate programs
- [ ] Job placement and recruiting services
- [ ] Formal apprenticeship opportunities

7. Which of the following communications designations are included in your programs? (Select all that apply)

- [ ] Construction laborers and heavy equipment operators
- [ ] Tower, line, equipment, maintenance, and testing specialists
- [ ] Supervisors / project managers
- [ ] Network design roles
- [ ] Locaters

8. Does your program specifically reach out to any of the following populations for participation in your programs? (Select all that apply)

- [ ] Veterans or current military personnel
- [ ] People with disabilities
- [ ] Seniors
- [ ] Incarcerated or formerly incarcerated
- [ ] Those in low income households or without reliable housing
- [ ] Those with a language barrier including English learners
- [ ] Those with a low level of literacy
- [ ] Specific racial or ethnic minority group(s)
- [ ] Those living in rural communities

9. How would you characterize your current capacity for developing and offering training programs to meet current workforce demands in the communications industry? (Select one)

- ◯ Underutilized
- ◯ Adequately utilized
- ◯ At capacity

10. How would you characterize your plans for developing and offering additional programs to meet future workforce demands in the communications industry? (Select one)

- ☐ We have plans to add capacity
- ☐ We have no plans to add capacity
- ☐ We are reducing our training capacity
- ☐ We are interested in adding capacity, but do not have resources to do so

Please describe your plans for additional or expanded programs or explain what additional resources you would need to add capacity.

11. What are the sources of funding for your training programs? (Select all that apply)

- ☐ Federal agencies and programs
- ☐ State agencies and programs
- ☐ County or local funding and programs
- ☐ Private foundations
- ☐ Fundraising and community grants
- ☐ Partnerships with employers
- ☐ Partnerships with unions or trade associations
- ☐ Fee-based services
- ☐ Other (please specify)

12. Do you serve "rural" communities?

- ☐ Yes
- ☐ No

What types of incentives are effective to recruit both skilled and manual labor to your rural community?

13. Please describe barriers to developing a diverse, skilled workforce in your community that can fill employment opportunities in the communications industry. Additionally, please provide examples or ideas of incentives or programs that can mitigate those barriers to create a diverse pool of highly skilled workers.

New Mexico Workforce Development Opportunity Survey

For ISPs only

14. Do you provide any in-house skills training, workforce development, or apprenticeship programs for your employees to support a highly skilled workforce?

- ◯ Yes
- ◯ No

15. If you answered yes above, please identify the types of programs. (Select all that apply)

- ☐ Mentorship
- ☐ Certification programs
- ☐ Apprenticeship
- ☐ Internship
- ☐ Sponsorships/scholarships for third-party training and classes
- ☐ Other (please specify)

16. In addition to any programs you directly provide, what other sources or programs do you use in New Mexico to train and support workforce readiness among your employees? (Select all that apply)

- ☐ Standards certification and safety programs
- ☐ Training programs through a public or private K-12 school
- ☐ Training programs through a school of higher education
- ☐ Trade or vocational certificate programs
- ☐ Formal apprenticeship programs

17. What sources or programs do you use to recruit and hire employees, including technicians, linemen, construction laborers and managers, and similar positions? (Select all that apply)

- [ ] Internet-based employment posting sites
- [ ] Workforce development and community job placement centers
- [ ] Communications industry specific training classes
- [ ] Third-party hiring and recruitment firms
- [ ] Advertisements in relevant trade association publications and websites
- [ ] Incentivizing employee referrals

18. Do you have programs or incentives to support diversity among your employees when considering methods to attract, retain, and promote a skilled workforce?

19. Please describe your vision for workforce readiness programs, recruitment practices, and wrap around services to support broadband expansion in New Mexico over the next five years.

Survey instrument 2: Covered population broadband barriers survey

New Mexico Vulnerable Populations Broadband Barriers Survey

Organizations that serve or represent vulnerable populations play a critical role in identifying how their unique needs can best be addressed. Your responses to this brief survey will assist the New Mexico Office of Broadband Access and Expansion (OBAE) in identifying programming opportunities and offering meaningful broadband-related employment, education, health care and civic opportunities for these populations. This information will support New Mexico's work toward achieving statewide universal access to high-speed broadband with federal funding through the Broadband, Equity, Access, and Deployment (BEAD) and Digital Equity Planning programs.

* 1. Contact information

Your name	
Your job title	
Your e-mail	
Your phone number	
Organization name	
Organization address	
Organization website URL	
Organization's number of employees	

2. Does your organization provide programs and services that are primarily targeted to any of the following communities? (Select all that apply)

- [ ] Individuals with disabilities
- [ ] Veterans or current military personnel
- [ ] Aging individuals
- [ ] Incarcerated individuals
- [ ] Individuals with low levels of literacy
- [ ] Individuals with a language barrier
- [ ] Individuals who primarily reside in a rural area
- [ ] Individuals who are members of a racial or ethnic minority group
- [ ] No particular focus on a population or community
- [ ] Other (please specify)

New Mexico Vulnerable Populations Broadband Barriers Survey

Internet Service

3. Please indicate your agreement or disagreement with the following statements describing individuals from the population(s) you serve or represent. On a scale of 1 - 5, where 1 is "strongly agree" and 5 is "strongly disagree" as representing on the spectrum.

	1 - Strongly Agree	2	3	4	5 - Strongly Disagree
Their households have access to some type of home internet service	◯	◯	◯	◯	◯
The available internet service is high-speed, sufficient for their needs, and reliable	◯	◯	◯	◯	◯
The available internet service is affordable.	◯	◯	◯	◯	◯
Their households can choose from among more than one provider for high-speed, reliable, and affordable broadband service	◯	◯	◯	◯	◯

4. Are there unique barriers to reliable, affordable, and high-speed internet service for the population(s) you serve?

- ☐ Yes
- ☐ No

Please describe these barriers to accessing reliable, affordable, and high-speed internet service:

New Mexico Vulnerable Populations Broadband Barriers Survey

Access to Computers

5. Please indicate your agreement or disagreement with the following statements describing individuals from the population(s) you serve or represent. On a scale of 1 - 5, where 1 is "strongly agree" and 5 is "strongly disagree" as representing on the spectrum.

	1 - Strongly Agree	2	3	4	5 - Strongly Disagree
There are computers in the household of the populations we serve or represent.	◯	◯	◯	◯	◯
The households can troubleshoot computer issues.	◯	◯	◯	◯	◯
The households can afford computer repairs or service.	◯	◯	◯	◯	◯
The households have enough devices to serve their needs.	◯	◯	◯	◯	◯
There are public computers that are convenient to use and close by to these households.	◯	◯	◯	◯	◯

6. Are there unique barriers to accessing home computers for the population(s) you serve?

- ☐ Yes
- ☐ No

Please describe these barriers to accessing computers and similar devices:

New Mexico Vulnerable Populations Broadband Barriers Survey

Digital Literacy and Digital Skills

7. Please indicate your agreement or disagreement with the following statements describing individuals from the population(s) you serve or represent. On a scale of 1 - 5, where 1 is "strongly agree" and 5 is "strongly disagree" as representing on the spectrum.

	1 - Strongly Agree	2	3	4	5 - Strongly Disagree
Individuals can find, understand, evaluate, create, and communicate digital information.	○	○	○	○	○
Individuals can use technologies appropriately and effectively to retrieve information, interpret results, and judge the quality of that information.	○	○	○	○	○
Individuals can use the internet to support education, employment, health, and personal needs.	○	○	○	○	○
Individuals have access to convenient and comprehensive digital literacy training.	○	○	○	○	○

8. Are there unique barriers to digital skills for the population(s) your serve?

- [ ] Yes
- [ ] No

Please describe these barriers to acquiring necessary digital skills:

New Mexico Vulnerable Populations Broadband Barriers Survey

Inclusive and Accessible Content

9. Please indicate your agreement or disagreement with the following statements describing individuals from the population(s) you serve or represent. On a scale of 1 - 5, where 1 is "strongly agree" and 5 is "strongly disagree" as representing on the spectrum.

	1 - Strongly Agree	2	3	4	5 - Strongly Disagree
Individuals have access to meaningful website content that is written in plain language and is appropriate for the targeted user or audience.	○	○	○	○	○
Individuals have access to meaningful website content that is accurately translated into necessary languages.	○	○	○	○	○
Individuals have access to meaningful website content that can be read by a screen reader.	○	○	○	○	○
Individuals have access to meaningful website content with closed captioning.	○	○	○	○	○
Individuals have access to adequate and appropriate assistive technologies to support access to the internet and use of website content by people with disabilities.	○	○	○	○	○

10. Are there unique barriers to inclusive and accessible content for the population(s) your serve?

- [ ] Yes
- [ ] No

Please describe these barriers to inclusive and accessible content:

New Mexico Vulnerable Populations Broadband Barriers Survey

Data Privacy and Cyber Security

11. Please indicate your agreement or disagreement with the following statements describing individuals from the population(s) you serve or represent. On a scale of 1 - 5, where 1 is "strongly agree" and 5 is "strongly disagree" as representing on the spectrum.

	1 - Strongly Agree	2	3	4	5 - Strongly Disagree
Individuals know how to protect their information online.	◯	◯	◯	◯	◯
Individuals can recognize a phishing scam or other types of scams and illegal activity.	◯	◯	◯	◯	◯
Individuals use anti-virus and anti-malware software on their computers.	◯	◯	◯	◯	◯

12. Are there unique barriers to data privacy and cyber security for the population(s) your serve?

- ☐ Yes
- ☐ No

Please describe those barriers to acquiring literacy in data privacy and cyber security:

New Mexico Vulnerable Populations Broadband Barriers Survey

Initiatives to Address Barriers

Thinking about the unique barriers you discussed:

13. What types of programs and initiatives would you recommend to address these barriers?

14. Does your organization currently offer any of these types of programs or initiatives?

- [ ] Yes
- [ ] No

If yes, please describe if you are interested in expanding your programs and, if so, what types of resources would you need to expand:

15. Would your organization be interested in adding new programs to its current portfolio?

- [ ] Yes
- [ ] No

If yes, what types of resources do you believe would be necessary to add new programs to your current portfolio?

New Mexico Vulnerable Populations Broadband Barriers Survey

Programmatic Impact of Broadband Access

16. Please describe how access to affordable, reliable, and secure high-speed broadband by the communities that you serve may impact the programmatic outcomes of your organization.

17. Do you have metrics to measure progress on your programmatic outcomes?

- [ ] Yes
- [ ] No

If yes, please describe:

Please provide examples or a discussion of metrics that you believe would be useful to track broadband related inputs and outcomes that are relevant to your mission, programs, and services.

18. Economic and workforce development outcomes - input and outcome metrics

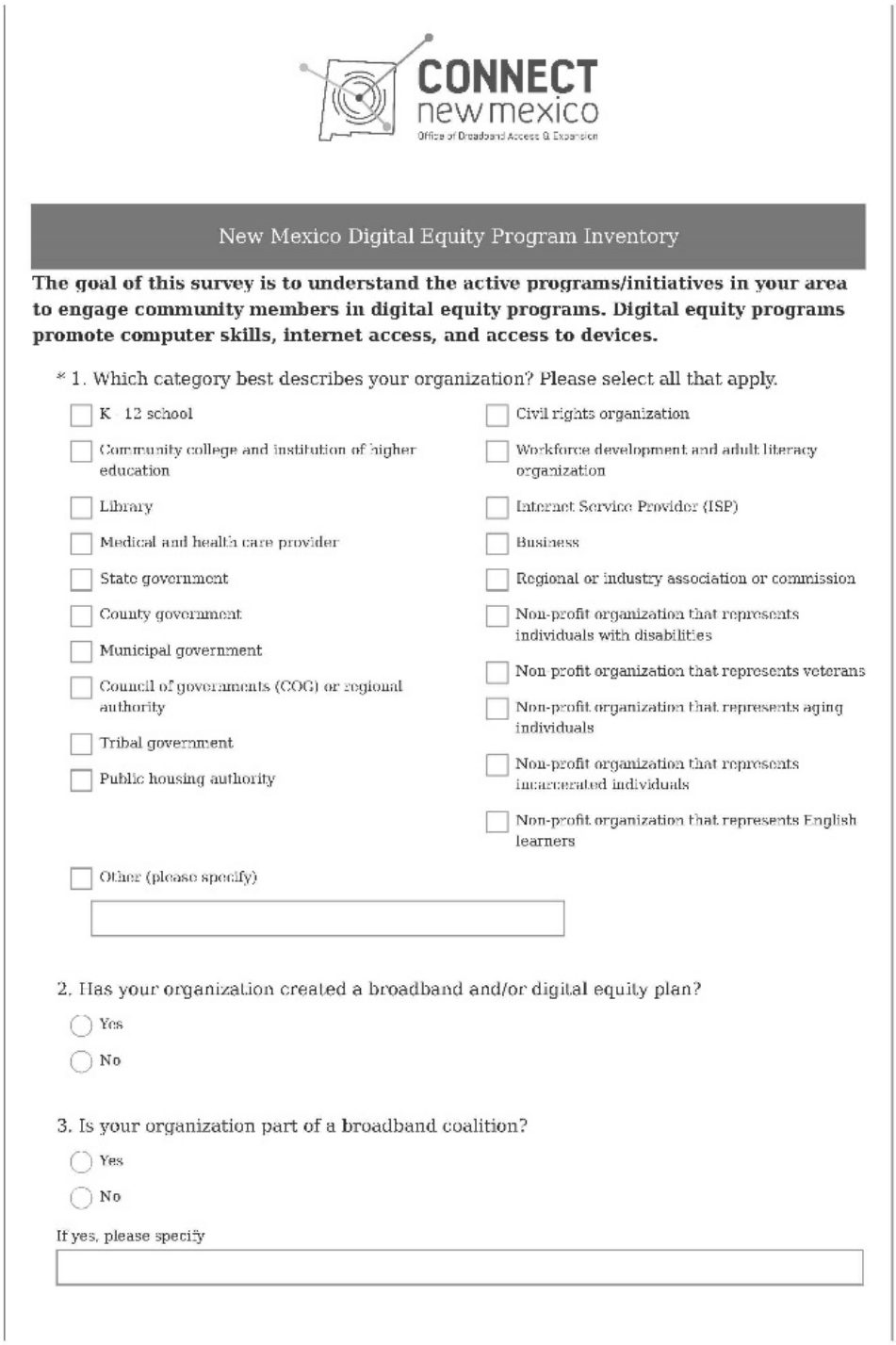
19. Educational outcomes - input and outcome metrics

20. Health outcomes - input and outcome metrics

21. Civic and social engagement outcomes - input and outcome metrics

22. Delivery of other essential services outcomes - input and outcome metrics

Survey instrument 3: Digital equity program inventory



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New Mexico Digital Equity Program Inventory

The goal of this survey is to understand the active programs/initiatives in your area to engage community members in digital equity programs. Digital equity programs promote computer skills, internet access, and access to devices.

* 1. Which category best describes your organization? Please select all that apply.

- ☐ K - 12 school
- ☐ Community college and institution of higher education
- ☐ Library
- ☐ Medical and health care provider
- ☐ State government
- ☐ County government
- ☐ Municipal government
- ☐ Council of governments (COG) or regional authority
- ☐ Tribal government
- ☐ Public housing authority
- ☐ Civil rights organization
- ☐ Workforce development and adult literacy organization
- ☐ Internet Service Provider (ISP)
- ☐ Business
- ☐ Regional or industry association or commission
- ☐ Non-profit organization that represents individuals with disabilities
- ☐ Non profit organization that represents veterans
- ☐ Non-profit organization that represents aging individuals
- ☐ Non-profit organization that represents incarcerated individuals
- ☐ Non-profit organization that represents English learners
- ☐ Other (please specify)

2. Has your organization created a broadband and/or digital equity plan?

- ◯ Yes
- ◯ No

3. Is your organization part of a broadband coalition?

- ◯ Yes
- ◯ No

If yes, please specify

4. Please provide point of contact information for your organization

Name	
Organization name	
Address	
Address 2	
City/Town	
State/Province	
ZIP/Postal Code	
Email Address	
Phone Number	

New Mexico Digital Equity Program Inventory

Program Details

Digital equity programs aim to ensure that communities have the skills, technology, and capacity to fully engage in the digital economy. Programs may target priority populations which include low-income, seniors, veterans, people with disabilities, incarcerated, English learners, ethnic minorities, and people in rural areas. Examples of digital equity programs include those that promote computer skills, internet access, and computing device access.

5. Does your organization offer digital equity programs?

- ◯ Yes
- ◯ No

New Mexico Digital Equity Program Inventory

Program Details

6. What is the name of the program? (Please note there will be opportunities to provide information on additional programs below. Answers should only pertain to a single program)

Program name

7. What aspects of digital equity does the program address? Please select at least one.

- [ ] Availability and affordability of internet
- [ ] Digital literacy
- [ ] Data privacy and cybersecurity
- [ ] Desktop computers, laptops, or tablet and technical support
- [ ] Online accessibility and inclusivity

8. Does the program focus on certain populations? Check all that apply.

- [ ] Individuals with disabilities
- [ ] Veterans
- [ ] Aging individuals (60 and above)
- [ ] Incarcerated individuals
- [ ] Individuals with a language barrier, including individuals who are English learners; and have low levels of literacy
- [ ] Individuals who primarily reside in a rural area
- [ ] Individuals who are members of a minority group based on race or ethnicity
- [ ] Individuals who live in a covered household (household income is lower than 150% of the poverty level)
- [ ] No particular focus on a population
- [ ] Other (please specify)

9. What is the project budget?

- ◯ $1 to $24,999
- ◯ $25,000 to $49,999
- ◯ $50,000 to $99,999
- ◯ $100,000 to $249,999
- ◯ $250,000 to $499,999
- ◯ Over $500,000

10. If known how much does the program cost to the participant?

Cost in dollars

11. Please give us a sense of the geographic populations you serve.

- ◯ State-wide
- ◯ County-wide
- ◯ City-wide
- ◯ Neighborhood-wide
- ◯ Other (please specify)

12. How long has the program been active, in months?

Program length in **months**

13. How many people were served by the program in the 2022 calendar year?

- ◯ Under 25 people
- ◯ 26 to 50 people
- ◯ 51 to 100 people
- ◯ More than 100 people

14. How many users do you expect to serve over the life of the program?

- ◯ 1 to 50
- ◯ 51 to 100 people
- ◯ 101 to 250 people
- ◯ 251 to 500 people
- ◯ More than 500 people

15. If you had additional resources, would you want to expand the project to serve more communities and people?

- ◯ Yes
- ◯ No

16. Does your organization have another digital equity program?

- ◯ Yes
- ◯ No

New Mexico Digital Equity Program Inventory

Program Details

17. What is the name of the program? (Please note there will be opportunities to provide information on additional programs below. Answers should only pertain to a single program)

Program name

18. What aspects of digital equity does the program address? Please select at least one.

- [ ] Availability and affordability of internet
- [ ] Digital literacy
- [ ] Data privacy and cybersecurity
- [ ] Desktop computers, laptops, or tablet and technical support
- [ ] Online accessibility and inclusivity

19. Does the program focus on certain populations? Check all that apply.

- [ ] Individuals with disabilities
- [ ] Veterans
- [ ] Aging individuals (60 and above)
- [ ] Incarcerated individuals
- [ ] Individuals with a language barrier, including individuals who are English learners; and have low levels of literacy
- [ ] Individuals who primarily reside in a rural area
- [ ] Individuals who are members of a minority group based on race or ethnicity
- [ ] Individuals who live in a covered household (household income is lower than 150% of the poverty level)
- [ ] No particular focus on a population
- [ ] Other (please specify)

20. What is the project budget?

- ◯ $1 to $24,999
- ◯ $25,000 to $49,999
- ◯ $50,000 to $99,999
- ◯ $100,000 to $249,999
- ◯ $250,000 to $499,999
- ◯ Over $500,000
- ◯ N/A

21. If known, how much does the program cost to the participant?

Cost in dollars

22. Please give us a sense of the geographic populations you serve.

- ◯ State-wide
- ◯ County-wide
- ◯ City-wide
- ◯ Neighborhood-wide
- ◯ Other (please specify)

23. How long has the program been active, in months?

Program length in **months**

24. How many people were served by the program in the 2022 calendar year?

- ◯ Under 25 people
- ◯ 26 to 50 people
- ◯ 51 to 100 people
- ◯ More than 100 people

25. How many users do you expect to serve over the life of the program?

- ◯ 1 to 50
- ◯ 51 to 100 people
- ◯ 101 to 250 people
- ◯ 251 to 500 people
- ◯ More than 500 people

26. If you had additional resources, would you want to expand the project to serve more communities and people?

- ◯ Yes
- ◯ No

27. Does your organization have another digital equity program?

- ◯ Yes
- ◯ No

New Mexico Digital Equity Program Inventory

Program Details

28. What is the name of the program? (Please note there will be opportunities to provide information on additional programs below. Answers should only pertain to a single program)

Program name

29. What aspects of digital equity does the program address? Please select at least one.

- [ ] Availability and affordability of internet
- [ ] Digital literacy
- [ ] Data privacy and cybersecurity
- [ ] Desktop computers, laptops, or tablet and technical support
- [ ] Online accessibility and inclusivity

30. Does the program focus on certain populations? Check all that apply.

- [ ] Individuals with disabilities
- [ ] Veterans
- [ ] Aging individuals (60 and above)
- [ ] Incarcerated individuals
- [ ] Individuals with a language barrier, including individuals who are English learners; and have low levels of literacy
- [ ] Individuals who primarily reside in a rural area
- [ ] Individuals who are members of a minority group based on race or ethnicity
- [ ] Individuals who live in a covered household (household income is lower than 150% of the poverty level)
- [ ] No particular focus on a population
- [ ] Other (please specify)

31. What is the project budget?

- ◯ $1 to $24,999
- ◯ $25,000 to $49,999
- ◯ $50,000 to $99,999
- ◯ $100,000 to $249,999
- ◯ $250,000 to $499,999
- ◯ Over $500,000
- ◯ N/A

32. If known, how much does the program cost to the participant?

Cost in dollars

33. Please give us a sense of the geographic populations you serve.

- ◯ State-wide
- ◯ County-wide
- ◯ City-wide
- ◯ Neighborhood-wide
- ◯ Other (please specify)

34. How long has the program been active, in months?

Program length in **months**

35. How many people were served by the program in the 2022 calendar year?

- ◯ Under 25 people
- ◯ 26 to 50 people
- ◯ 51 to 100 people
- ◯ More than 100 people

36. How many users do you expect to serve over the life of the program?

- ◯ 1 to 50
- ◯ 51 to 100 people
- ◯ 101 to 250 people
- ◯ 251 to 500 people
- ◯ More than 500 people

37. If you had additional resources, would you want to expand the project to serve more communities and people?

- ◯ Yes
- ◯ No

New Mexico Digital Equity Program Inventory

Planned Programs

38. Is your organization in the process of developing a digital equity program?

- ◯ Yes
- ◯ No

39. What kind of digital equity program(s) is your organization developing? Please select the categories that best fits the program type.

- ☐ Digital skills and literacy
- ☐ Data privacy and cybersecurity
- ☐ Devices (Laptops, computers, tablets)
- ☐ Technical support
- ☐ Digital navigators
- ☐ Broadband access
- ☐ Creating accessible and inclusive internet content

Other (please specify)

New Mexico Digital Equity Program Inventory

40. Does your organization want to develop a digital equity program?

- ◯ Yes
- ◯ No

41. If yes, what kind of digital equity program(s) is your organization interested in developing? Please select the categories that best fits the program type.

- ☐ Digital skills and literacy
- ☐ Data privacy and cybersecurity
- ☐ Devices (Laptops, computers, tablets)
- ☐ Technical support
- ☐ Digital navigators
- ☐ Broadband access
- ☐ Creating accessible and inclusive internet content

New Mexico Digital Equity Program Inventory

Metrics

42. Please describe how access to affordable, reliable, and secure high-speed broadband by the communities that you serve may impact programmatic outcomes of your organization?

43. Do you have metrics to measure progress on your programmatic outcomes?

- [ ] Yes
- [ ] No

If yes, please describe or provide a URL link with documentation.

Please provide examples or a discussion of metrics that you believe would be useful to track broadband related inputs and outcomes that are relevant to your mission, programs, and services.

44. Economic and workforce development outcomes - input and outcome metrics

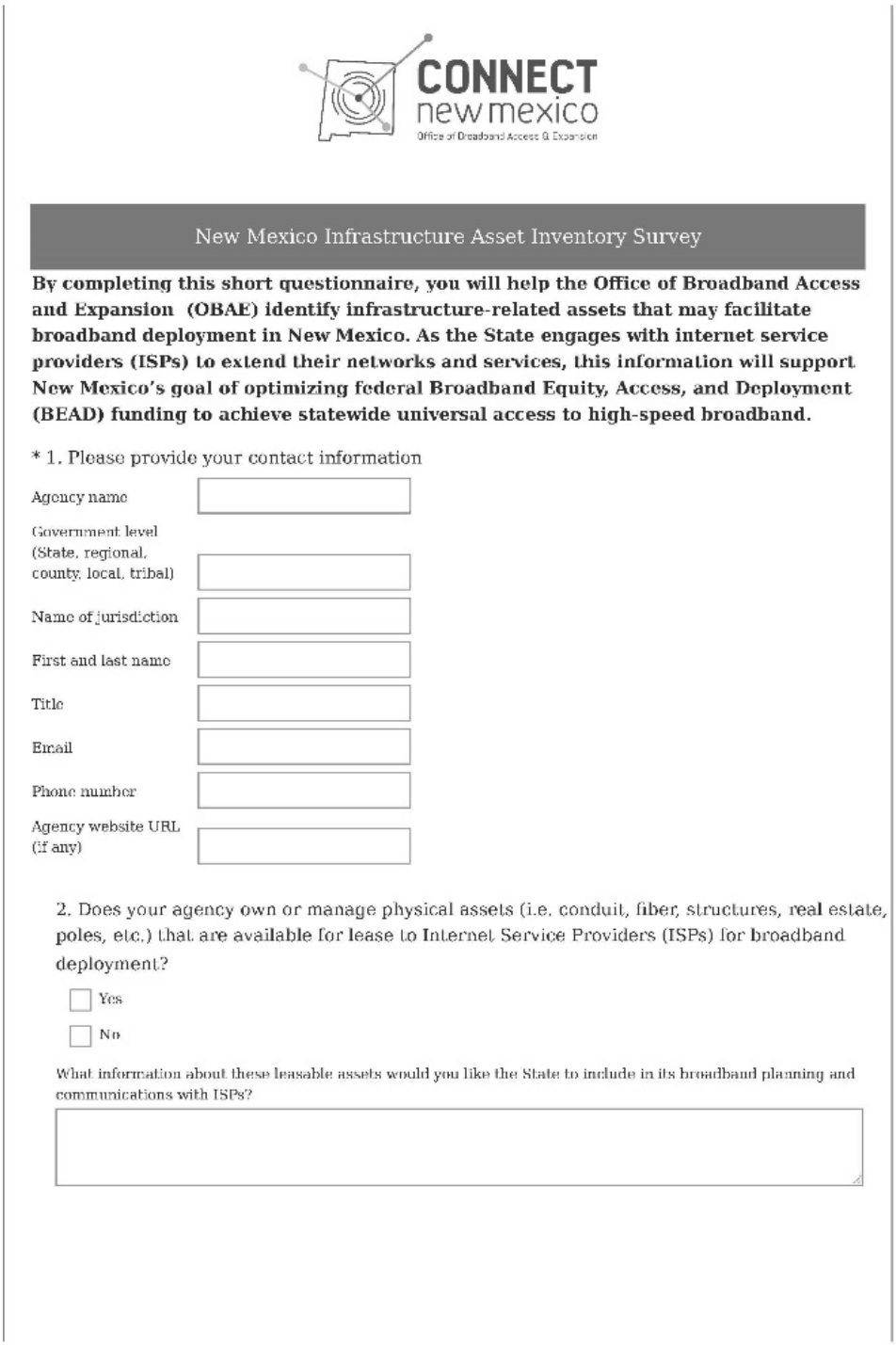
45. Educational outcomes - input and outcome metrics

46. Health outcomes - input and outcome metrics

47. Civic and social engagement outcomes - input and outcome metrics

48. Delivery of other essential services outcomes - input and outcome metrics

Survey instrument 4: Infrastructure asset inventory survey



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New Mexico Infrastructure Asset Inventory Survey

By completing this short questionnaire, you will help the Office of Broadband Access and Expansion (OBAE) identify infrastructure-related assets that may facilitate broadband deployment in New Mexico. As the State engages with internet service providers (ISPs) to extend their networks and services, this information will support New Mexico's goal of optimizing federal Broadband Equity, Access, and Deployment (BEAD) funding to achieve statewide universal access to high-speed broadband.

* 1. Please provide your contact information

Agency name

Government level (State, regional, county, local, tribal)

Name of jurisdiction

First and last name

Title

Email

Phone number

Agency website URL (if any)

2. Does your agency own or manage physical assets (i.e. conduit, fiber, structures, real estate, poles, etc.) that are available for lease to Internet Service Providers (ISPs) for broadband deployment?

- [ ] Yes
- [ ] No

What information about these leasable assets would you like the State to include in its broadband planning and communications with ISPs?

3. Will your agency oversee capital construction projects between now and 2027 that include opportunities for the placement of communications facilities by your agency, other state or local agencies, regional or local consortia, or ISPs?

- [ ] Yes
- [ ] No

What information about these projects (i.e. scope, location, schedule) would you like included in State broadband planning and in communications with ISPs?

4. Has your agency analyzed workforce readiness (i.e., the availability of skilled labor) in New Mexico as it may impact State broadband policies and deployment goals?

- [ ] Yes
- [ ] No

Please provide a URL link to relevant documents, presentations, or analyses or email broadband@doit.nm.gov

5. Does your agency have a role in workforce development that would support wired or wireless broadband deployment (including training and recruitment for equipment technicians, cable installation and repair, and construction jobs)?

- [ ] Yes
- [ ] No

Please describe programs or initiatives that your agency operates or supports or relevant programs operated by other agencies.

6. Does your agency track and monitor broadband or other communication outages that have significant impact on your community (or, if you represent a statewide organization, impact communities within your jurisdiction)?

- [ ] Yes
- [ ] No

If yes, please describe your agency's role in monitoring or tracking communications reliability in your community and discuss the impact of significant outages.

7. Is your agency involved in planning efforts or development of regulations related to reliable and resilient emergency-level broadband or other communications services, especially services for critical facilities in New Mexico (e.g., hospitals, schools, evacuation sites, utilities, data centers, public safety locations)?

- [ ] Yes
- [ ] No

Please provide a URL link to any publicly available materials relating to these issues and briefly describe the relevant issues related to critical facilities, including planning for climate and weather-related hazards. You may also email these materials to broadband@doit.nm.gov

8. Has your agency developed any policies, regulations, or guidance regarding emergency communications, network redundancy, climate resilience, disaster preparedness, or disaster recovery planning applicable to the broadband and communications industry in New Mexico?

- [ ] Yes
- [ ] No

Please provide a URL link to any publicly available documents and briefly describe policies and other materials that you believe would be helpful to [state]'s broadband planning efforts. You may also email these materials to broadband@doit.nm.gov

9. Has your agency developed policies or strategic planning documents that will facilitate broadband access efforts in New Mexico (e.g. publicly available information that directly addresses digital equity, infrastructure deployment, economic development, network resilience, partnerships, business planning, or other related efforts)?

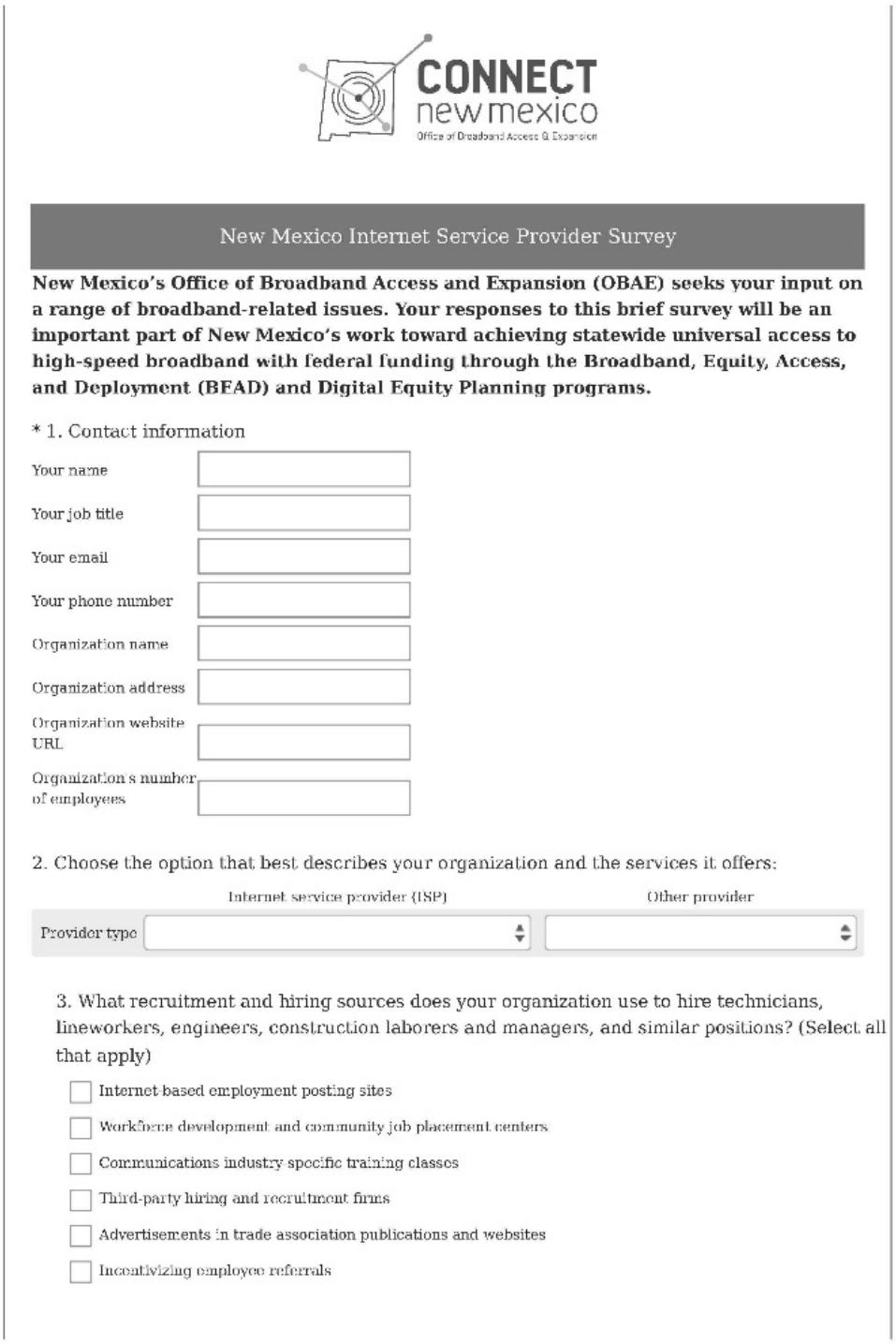
- [ ] Yes
- [ ] No

Please briefly summarize the material and provide a URL link or email information to broadband@doit.nm.gov

10. If applicable, please share information regarding broadband-related planning efforts of other New Mexico state and local agencies or contact information for agencies involved in broadband-related planning efforts that you believe would be helpful to OBAE's broadband planning efforts.

11. Please describe how your agency can collaborate with the OBAE and participate in its efforts to achieve statewide universal access to high-speed broadband.

Survey instrument 5: Internet service provider survey



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New Mexico Internet Service Provider Survey

New Mexico's Office of Broadband Access and Expansion (OBAE) seeks your input on a range of broadband-related issues. Your responses to this brief survey will be an important part of New Mexico's work toward achieving statewide universal access to high-speed broadband with federal funding through the Broadband, Equity, Access, and Deployment (BEAD) and Digital Equity Planning programs.

* 1. Contact information

Your name
Your job title
Your email
Your phone number
Organization name
Organization address
Organization website URL
Organization s number of employees

2. Choose the option that best describes your organization and the services it offers:

	Internet service provider (ISP)	Other provider
Provider type		

3. What recruitment and hiring sources does your organization use to hire technicians, lineworkers, engineers, construction laborers and managers, and similar positions? (Select all that apply)

- Internet based employment posting sites
- Workforce development and community job placement centers
- Communications industry specific training classes
- Third-party hiring and recruitment firms
- Advertisements in trade association publications and websites
- Incentivizing employee referrals

4. Does your organization offer, sponsor, or participate in any workforce development or apprenticeship programs?

- ◯ Yes
- ◯ No

5. If you answered yes to Q.4, please specify the type of programs. (Select all that apply)

- ☐ Mentorship
- ☐ Certification programs
- ☐ Apprenticeship
- ☐ Internship
- ☐ Sponsorships/scholarships for third-party training and classes
- ☐ Other (please specify)

6. How would you propose to work with New Mexico on workforce development issues related to broadband deployment, including programs to support diversity among your organization's employees?

7. Does your organization participate in the Affordable Connectivity Program (ACP)?

- ◯ Yes
- ◯ No

New Mexico Internet Service Provider Survey

8. What is the monthly post-subsidy price of your lowest-price ACP-eligible tier for participating subscribers?

- ◯ $0
- ◯ $1 - $10
- ◯ $11 - $20
- ◯ $21 - $30
- ◯ More than $30

9. What is the speed of your lowest-price ACP-eligible tier?

- ◯ 25/3 Mbps
- ◯ Up to 50/5 Mbps
- ◯ Up to 100/20 Mbps
- ◯ Greater than 100/20 Mbps but less than 100/100 Mbps
- ◯ 100/100 Mbps or more

10. How do you advertise or promote your participation in the ACP?

11. Does your organization offer other programs for low-income customers?

- ☐ Yes
- ☐ No

Please provide service speeds, monthly pricing, and a description of your low-income or discounted offerings.

12. Does your organization have programs to support consumer broadband skills or use of the internet?

- [ ] Yes
- [ ] No

If yes, please describe and provide URL links to relevant materials.

13. Does your organization have programs to support internet adoption?

- [ ] Yes
- [ ] No

If yes, please describe and provide URL links to relevant materials.

14. Please describe how your organization can collaborate with local communities on efforts to close the digital divide and, if applicable, please provide specific examples where you have done this successfully.

15. What strategies has your organization used to deploy broadband in the areas of New Mexico that are most expensive to serve?

16. Please discuss your continuity and disaster recovery plans in the event of a natural disaster or human error, such as a fiber cut, and whether any of your plans target specific geographic areas.

Survey instrument 6: Community anchor institution broadband access survey

New Mexico Community Anchor Institution Broadband Access Survey

Community anchor institutions play a critical role in facilitating greater use of broadband by underserved and vulnerable populations. Your responses to this brief survey will help the Office of Broadband Access and Expansion (OBAE) identify programs to advance residents' opportunities to use broadband to work, learn, receive health care, and participate in civic events. This information will be an important part of New Mexico's work toward achieving statewide universal access to high-speed broadband with federal funding through the Broadband, Equity, Access, and Deployment (BEAD) and Digital Equity Planning programs.

* 1. Contact information

Your name	
Your job title	
Your e-mail	
Your phone number	
Organization name	
Organization address	
Organization website URL	
Organization's number of employees	
Please indicate if your organization serves statewide, regionally, or locally	

* 2. Choose the option that best describes your organization. Select the one that best applies.

- ◯ K-12 school
- ◯ Higher education entity
- ◯ Library
- ◯ Health clinic, health center, hospital, or other medical provider
- ◯ Public safety entity
- ◯ Public housing organization (including HUD-assisted housing and tribal housing organizations)
- ◯ Neighborhood organization and community center
- ◯ Faith-based organization
- ◯ Community support organization that facilitates use of broadband service by low-income or other underserved populations
- ◯ Other (please specify)

3. Which of the following programs or services do you offer to facilitate the use of broadband services by your constituents or clients? Select all that apply.

- ☐ Support for applicants to broadband subsidy programs such as the Affordable Connectivity Program (ACP)
- ☐ Loans or donations of devices (computers, tablets) to access the internet
- ☐ Hotspots and free or subsidized internet access
- ☐ Cybersecurity training
- ☐ Other digital literacy training
- ☐ Training, equipment, subsidized services, or other resources to facilitate access to telehealth and telemedicine services
- ☐ Training teachers of broadband skills and digital literacy
- ☐ Developing and distributing accessible online content or devices designed for us by persons with disabilities
- ☐ Developing and distributing accessible online content directed at populations with specific needs, such as seniors, low-income residents, those with low-literacy, and those whose first language is not English
- ☐ Broadband internet access services at community centers or other gathering spaces used by clients and constituents
- ☐ Funding of programs that provide any of the above programs, including broadband infrastructure, devices, and subsidies to support affordability
- ☐ Program development and planning of broadband-related services
- ☐ Advocacy for digital inclusion, affordability, and the broadband-related needs of vulnerable populations
- ☐ Emergency and disaster relief services such as evacuation centers, charging stations, replacement equipment, and information on grants, loans, and services to those impacted by disasters
- ☐ My organization does **not** offer programs that facilitate the use of broadband services
- ☐ Other (please specify)

New Mexico Community Anchor Institution Broadband Access Survey

4. Is your organization located on tribal land, affiliated with a tribal or Native entity, or primarily serving tribal or Native populations?

- ◯ Yes
- ◯ No

If yes, which one?

5. Does your organization conduct outreach or tailor its broadband-related services to the needs of any of the following communities or groups? Select all that apply.

- ☐ Veterans or current military personnel
- ☐ People with disabilities
- ☐ Seniors
- ☐ Incarcerated or formerly incarcerated residents
- ☐ Those in low-income households or without reliable housing
- ☐ Other (please specify)
- ☐ Those with a language barrier including English learners
- ☐ Those with a low level of literacy
- ☐ Specific racial or ethnic minority group(s)
- ☐ Those living in rural communities
- ☐ Not applicable

6. Based on your organization's observations and experience, please describe the barriers and obstacles (e.g. affordability, lack of digital literacy, language barriers) that prevent members of the communities your organization serves, including tribal and Native populations, from accessing or using broadband internet services.

7. Do all of your organization's locations, offices, or community centers have access to broadband internet speeds of at least 1 Gigabit per second (Gbps) symmetrical (both upload and download)?

- [ ] Yes
- [ ] No
- [ ] I don't know

If **no**, please provide the addresses of the locations where your organization does not have access to broadband internet services of at least 1 Gbps symmetrical.

8. If your organization does not have access to, or does not purchase, service with symmetrical speeds of at least 1 Gbps, please describe why. Select all that apply.

- [ ] Service is unavailable
- [ ] Service is unreliable
- [ ] Service is expensive
- [ ] Customer service is inadequate
- [ ] Our operations do not require Gigabit-level services
- [ ] I do not know if 1 Gbps service is available at my location
- [ ] Other (please specify)

9. Does your current internet service meet the needs of your organization to deliver broadband-related programs to your clients and constituents?

- [ ] Yes
- [ ] No, service is unavailable
- [ ] No, service is unreliable
- [ ] No, service is expensive
- [ ] No, customer service is inadequate
- [ ] No, service is too complicated to set up and/or maintain
- [ ] Redundant connectivity necessary for our operations is too expensive/unavailable
- [ ] Other (please specify)

10. How essential is symmetrical Gigabit connectivity at your facilities to your ability to deliver your broadband-related services?

1 - Not important	2	3	4	5 - Critically important
○	○	○	○	○

11. Does your organization provide access to broadband internet services to clients, constituents, or visitors at each of your locations?

- [ ] Yes
- [ ] No

If **yes,** does your broadband internet service provide sufficient capacity to accommodate peak demand for such services at all of your locations? If **no**, is a lack of access to adequate internet services at your location preventing you from serving users?

12. Does your organization communicate with critical facilities such as hospitals, schools, data centers, and public safety agencies during natural disasters and emergencies?

- [ ] Yes
- [ ] No

If yes, describe your need to stay connected during disasters.

13. Has your organization been consulted on disaster planning and emergency communications?

- [ ] Yes
- [ ] No

If yes, please briefly describe any broadband and emergency communications plans.

14. Does your organization operate or sponsor any technical or broadband workforce development or training programs?

- [ ] We do not sponsor programs
- [ ] Mentorships
- [ ] Certification programs
- [ ] Registered apprenticeships
- [ ] Unregistered apprenticeships
- [ ] Pre-apprenticeships
- [ ] Internships
- [ ] Digital literacy training for specific employment opportunities
- [ ] Job placement and recruitment services
- [ ] Sponsorships/scholarships for third-party training and classes
- [ ] Other (please specify)

15. With additional resources, would your organization offer expanded broadband-related services or programs?

- [ ] Yes
- [ ] No

If yes, please describe those expanded broadband-related services and the additional resources your organization would need to offer (e.g., funding, skilled workforce, access to broadband internet services with faster speeds or more capacity).

16. How can OBAE assist you? What resources would be helpful to local organizations and community efforts to improve broadband?

Appendix D: Stakeholder engagement schedule of sessions

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Office of Broadband Access & Expansion

We need your feedback for better internet

Stakeholder engagement opportunity for community anchor institutions

The state of New Mexico Office of Broadband Access and Expansion (OBAE) is committed to engaging with the private, public and non-profit sectors to ensure meaningful feedback as we fulfill our mission for achieving universal broadband throughout the state. With unprecedented investments in broadband flowing from the federal level to the states, these engagements will drive action and inform funding requests that reflect our unique needs in New Mexico.

Feedback from New Mexico's anchor institutions is of particular importance as we identify and assess broadband funding needs and requirements. With this in mind, we hope you will join us for an upcoming listening session designed to gather input as well as inform key stakeholders about the work of OBAE in our efforts to prepare for these historic funding opportunities. Please save the date and mark your calendar for our upcoming "anchor institutions" online listening session and webinar:

Friday, May 19
12:00 – 1:00 pm
Community anchor institutions
https://us06web.zoom.us/meeting/register/tZMvce6oqzouH9PBvre_dzTOqb4rGvCbq9_0

Participants should register utilizing the zoom link to receive specific log-in information. Once registered, you will receive confirmation and details for attending the zoom meeting.

Finally, please save the date May 24 for a statewide "Internet for All" summit hosted by OBAE in coordination with the National Telecommunications and Information Administration. The event at Buffalo Thunder in Santa Fe will include state and local officials and is a chance to learn about the latest in funding opportunities and broadband initiatives. To stay up to date about the event and register to attend, you can find more information on our website.

Can't make the meetings? Please consider filling out any of the surveys that may be relevant to you as an individual or as part of an organization. You can find the survey information posted **here**.

If you have questions about any of these opportunities, please contact us via email at **Broadband@doit.nm.gov**.

Virtual Broadband Listening Sessions for stakeholders were held on the following dates:

- Local and Regional Governments: May 8, May 10
- Community Anchor Institutions: May 19
- Health Centers, Health Alliance: May 19
- Digital Equity/Covered Populations: May 22, May 26
- Workforce Development: May 30, May 31
- Internet Service Providers: June 5, June 8
- Tribal Government and Agencies: June 9
- Business and Economic Development: June 12, June 14
- Human Services Department: June 22

Appendix E: Stakeholder engagement schedule of public meetings

Regional Broadband Meetings were held at the following times and locations:

- Southeast Region 6 (Counties of Otero, Lea, Lincoln, DeBaca, Chaves, Eddy, Roosevelt, and Curry): April 17, 2023, at Otero County Fairgrounds
- Central Region 3 (Counties of Valencia, Bernalillo, Torrance): April 18, 2023, at the University of New Mexico-Valencia Campus
- Northeast Region 4 (Counties of Colfax, Union, Mora, Harding, San Miguel, Quay, Guadalupe): May 11, 2023, at Luna Community College, Springer Campus
- Southwest Region 5 (Counties of Doña Ana, Catron, Socorro, Sierra, Grant, Luna, Hidalgo): May 12, 2023, at Doña Ana County Government Center
- Northwest Region 1 (Counties of Sandoval, San Juan, McKinley, Cibola): May 15, 2023, at Farmington Municipal Schools
- North Central Region 2 (Counties of Rio Arriba, Los Alamos, Santa Fe, Taos): May 16, 2023, at Hernandez Community Center

Copies of the Regional Broadband Meetings flyer in English and Spanish are attached below.

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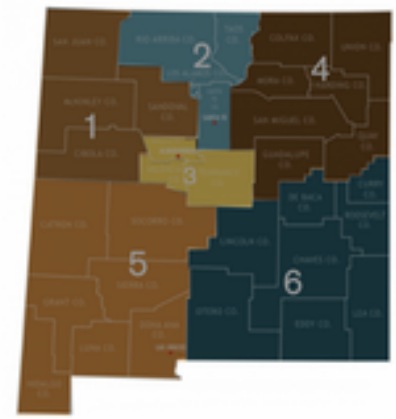
Office of Broadband Access & Expansion

Regional Broadband Meetings

Spring Sprint 2023

Attend a meeting in your region:
April 17 - Region 6 in Alamogordo
April 18 - Region 3 in Los Lunas
May 11 - Region 4 in Springer
May 12 - Region 5 in Las Cruces
May 15 - Region 1 in Farmington
May 16 - Region 2 in Hernandez



9:00am-1:00pm
Meet state and local officials, learn about broadband initiatives and funding opportunities, and participate in development of the statewide New Mexico Broadband and Digital Equity Plans.

- ☑ Broadband IStrategic Planning
- ☑ Digital Equity Planning
- ☑ Funding and Partnerships

Free to attend but pre-registration is required:

REGISTER ONLINE AT
HTTPS://CONNECT.NM.GOV/REGIONAL-MEETINGS

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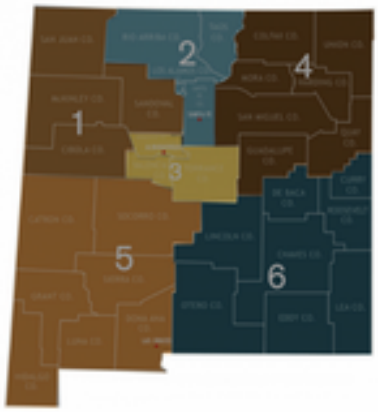
Conferencia Regional de Banda Ancha

carrera de primavera 2023

Asista a la reunión en su región
April 17 - Región 6 in Alamogordo
April 18 - Región 3 in Los Lunas
May 11 - Región 4 in Springer
May 12 - Región 5 in Las Cruces
May 15 - Región 1 in Farmington
May 16 - Región 2 in Hernandez



9:00am-1:00pm
Conozca a los funcionarios estatales y locales, conozca las iniciativas de banda ancha y las oportunidades de financiamiento, y participe en el desarrollo de los Planes de Equidad Digital y Banda Ancha de Nuevo México en todo el estado.

- ☑ Infraestructura de banda ancha
- ☑ Equidad digital
- ☑ Financiamiento y Asociaciones

La asistencia es gratuita pero se requiere inscripción previa:

Regístrese en línea en
https://connect.nm.gov/regional-meetings