



Statewide Broadband Update

Legislative Education Study Committee
Santa Fe

December 5, 2022

Dianne Lindstrom, Deputy Director
Office of Broadband Access
and Expansion



Acronyms

- BB: Broadband
- CNMC: Connect New Mexico Council
- DE: Digital Equity
- FCC: Federal Communications Commission
- GIO: Geospatial Information Officer
- HB: House Bill
- LM: Last Mile
- MM: Middle Mile
- NTIA: National Telecommunications and Information Administration; part of US Department of Commerce
- OBAE: Office of Broadband Access and Expansion
- ROW: Rights of Way
- SEN: Statewide Education Network
- SB: Senate Bill
- WF: Workforce

VISION STATEMENT

Achieve bold, affordable, collaborative broadband solutions for New Mexicans that honor the state's rich heritage and elevate the quality of life for all.



MISSION STATEMENT



Passionate leadership to drive bold, equitable & inclusive broadband solutions.



VALUES

Bold

Honest

Curious

Innovative



Respectful

Collaborative

Rigorous.



GOALS

Sustainable connectivity that is scalable, reliable, secure, affordable - for all New Mexicans

Fully leverage federal funding that New Mexico is eligible for (Capital cost and ongoing / operations)

Future proof - as much as possible - the broadband landscape for New Mexico

Use Statewide Education Network (SEN) as foundation

PSFA – Statewide Education Network (SEN) Update

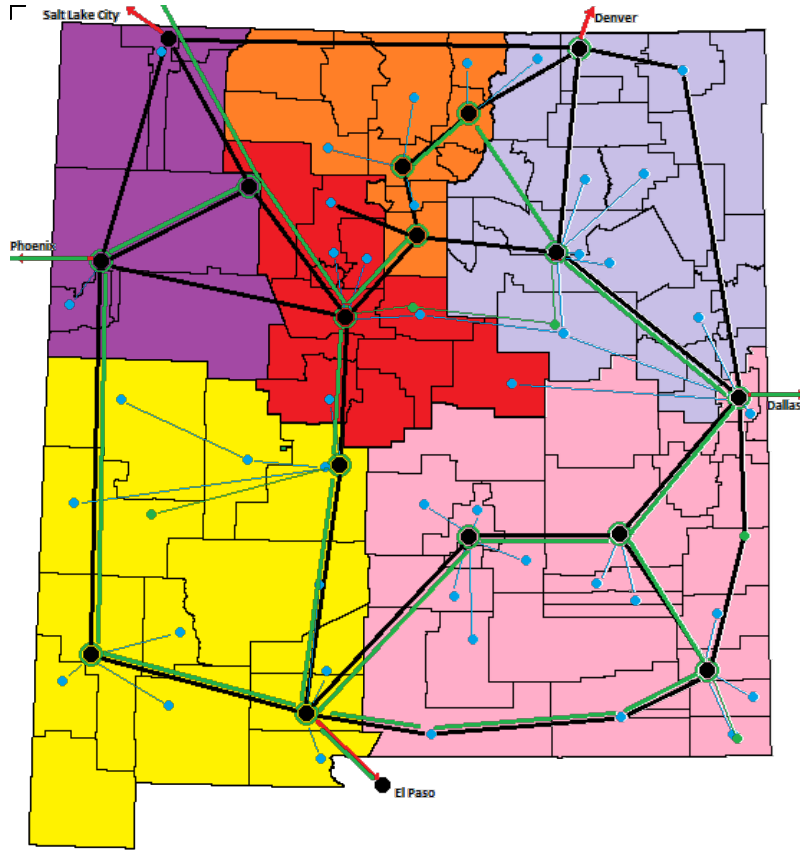
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Ovidiu Viorica, Broadband and Technology Program Manager



Partnering with New Mexico's communities to provide quality, sustainable
broadband for our students and educators.



SEN is Foundation for State Middle Mile

Nodes

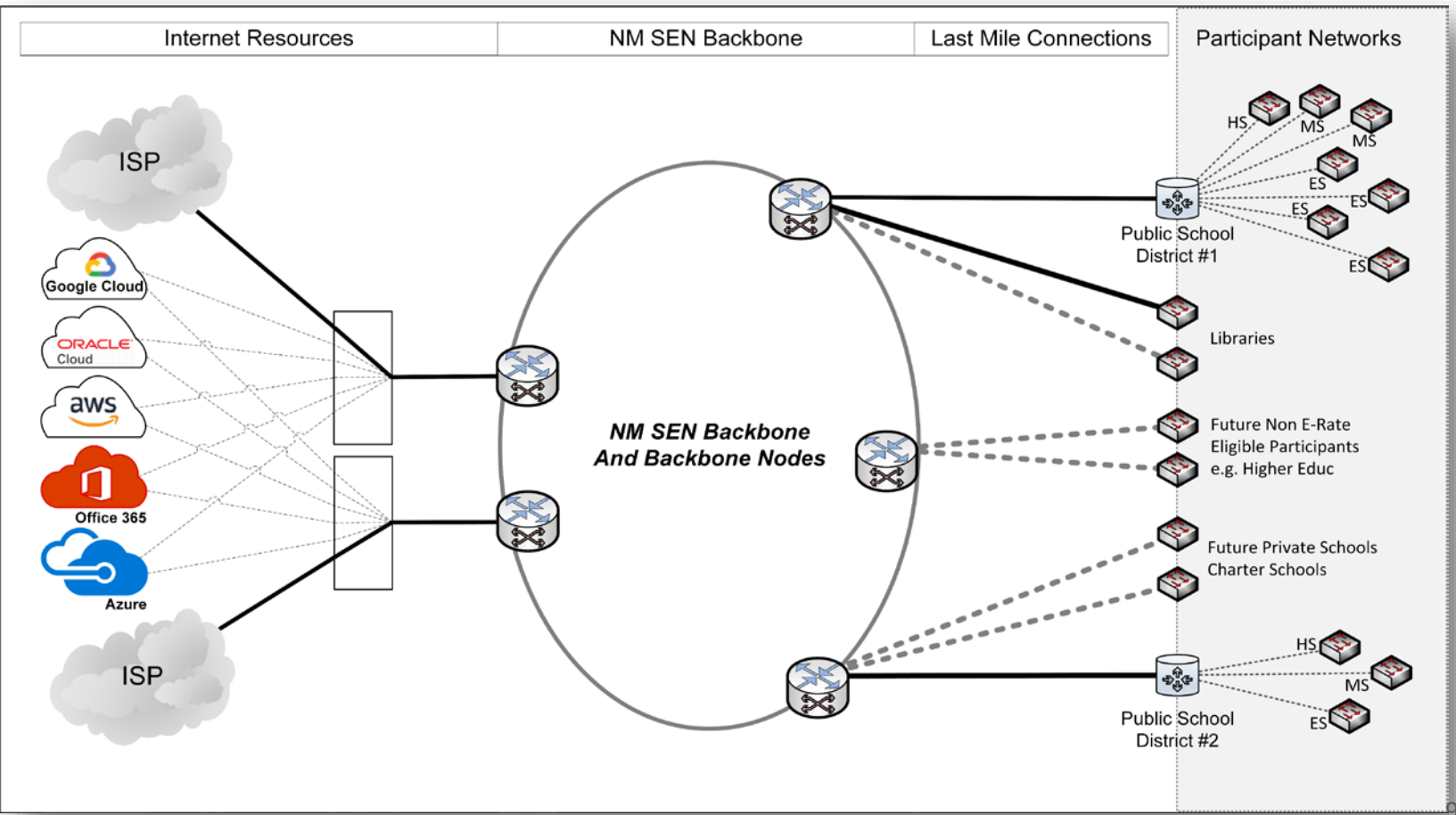
Upgrading electrical and cooling systems for Higher Ed facilities housing SEN Nodes

Major Routes/**Internet**

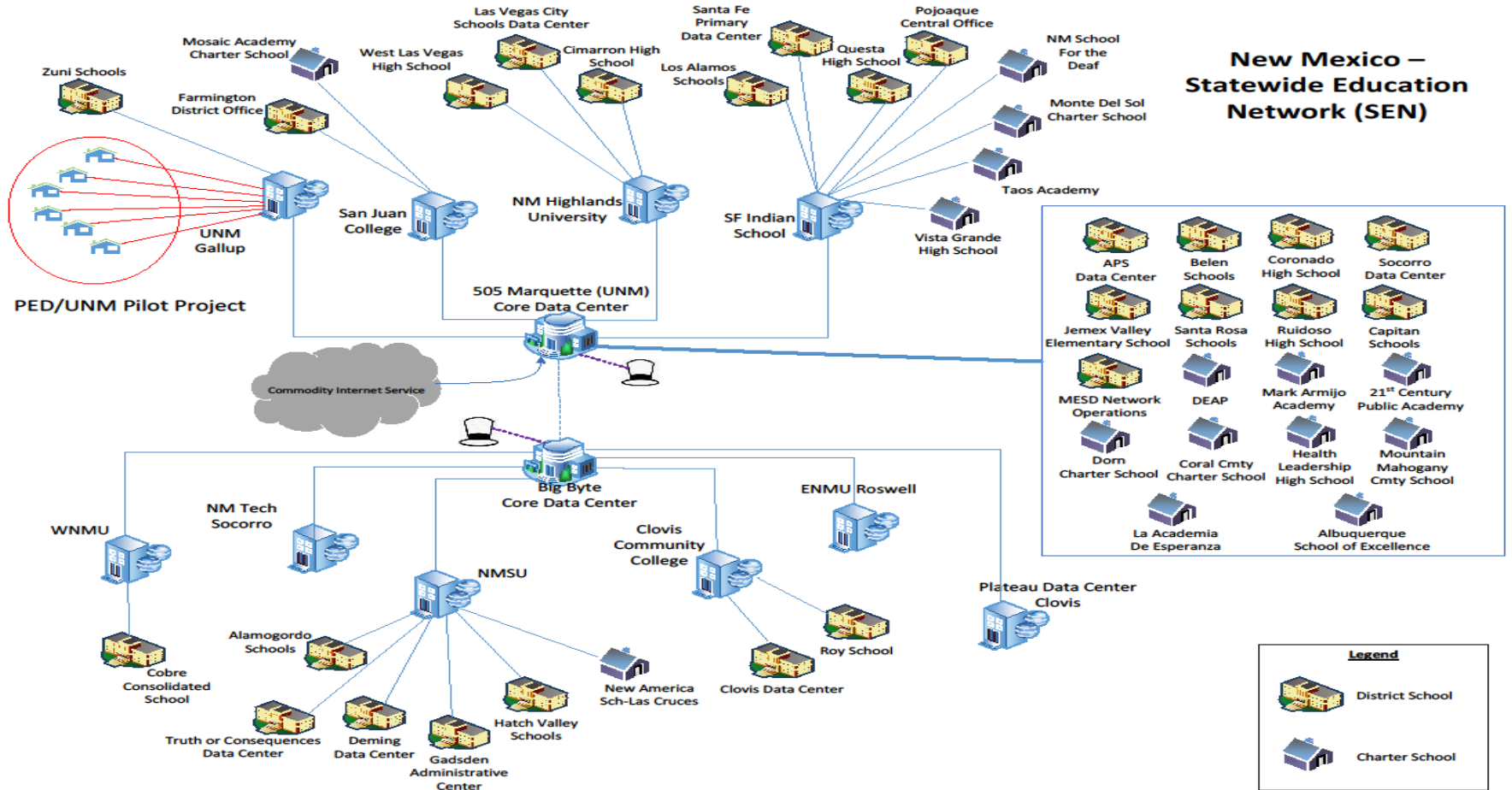
Adding key “Middle Mile” corridors, closing of rings for resiliency (a “box” around the SEN)

“Meet Me” and aggregation points become launching points for “Last Mile”

SEN High-Level Architecture



New Mexico – Statewide Education Network (SEN)



SEN Financial plan

SB144 (Statewide Education Network) - Implementation
 Preliminary financial plan
 (All projected amounts in \$Millions)

	A	B	C	D	E	F	G	H
	Year					Total State five years	Potential E-rate	Total
	FY23	FY24	FY25	FY26	FY27			
Number of member districts (charters also participate)	25	30	20	7	7			89
1 Statewide Education Network Initial setup and administration (100% State)*	\$ 1.0	\$ 0.5	\$ 0.5	\$ 0.5	\$ 0.5	\$ 3.0	\$ -	\$ 3.0
2 Backbone fiber construction (State share of E-rate match)**	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3 IA and Data Transport Cost including pre-K (State share of E-rate match)***	\$ 1.0	\$ 1.3	\$ 1.5	\$ 1.7	\$ 1.8	\$ 7.3	\$ 36.5	\$ 43.8
4 Aggregation hub development & operations**** (100% State)	\$ 0.5	\$ 0.6	\$ 0.7	\$ 0.7	\$ 0.7	\$ 3.2	\$ -	\$ 3.2
5 Equipment / equipment replacement fund	\$ 1.5	\$ 0.5	\$ 0.5	\$ 0.5	\$ 0.5	\$ 3.5	\$ -	\$ 3.5
6 Network Management and Operations (Network Operations Center - NOC)	\$ 1.5	\$ 2.0	\$ 2.0	\$ 2.0	\$ 2.0	\$ 9.5	\$ 19.0	\$ 28.5
7 Cybersecurity (DDoS mitigation, Security Operations Center/Monitoring, tools)	\$ 1.0	\$ 1.5	\$ 2.0	\$ 2.0	\$ 2.0	\$ 8.5	\$ -	\$ 8.5
8 BDCP regular projects (Cat1 & Cat2 upgrades - State share for E-rate match)	\$ 2.0	\$ 2.0	\$ 2.0	\$ 2.0	\$ 2.0	\$ 10.0	\$ 66.7	\$ 76.7
9 Contingency	\$ 1.5	\$ 1.6	\$ 0.8	\$ 0.6	\$ 0.5	\$ 5.0	\$ -	\$ 5.0
10	\$ 10.0	\$ 10.0	\$ 10.0	\$ 10.0	\$ 10.0	\$ 50.0	\$ 122.2	\$ 172.2

* Includes: Organizational setup and contract engineering, procurement support etc...

** Fiber construction to connect Node/Aggregation sites without other options - Future nodes

*** Provide the E-rate match for IA and Data transport as incentive for participants

**** Aggregation hubs remodel to ensure power, cooling, security - Already funded (GEER2/OBAE)

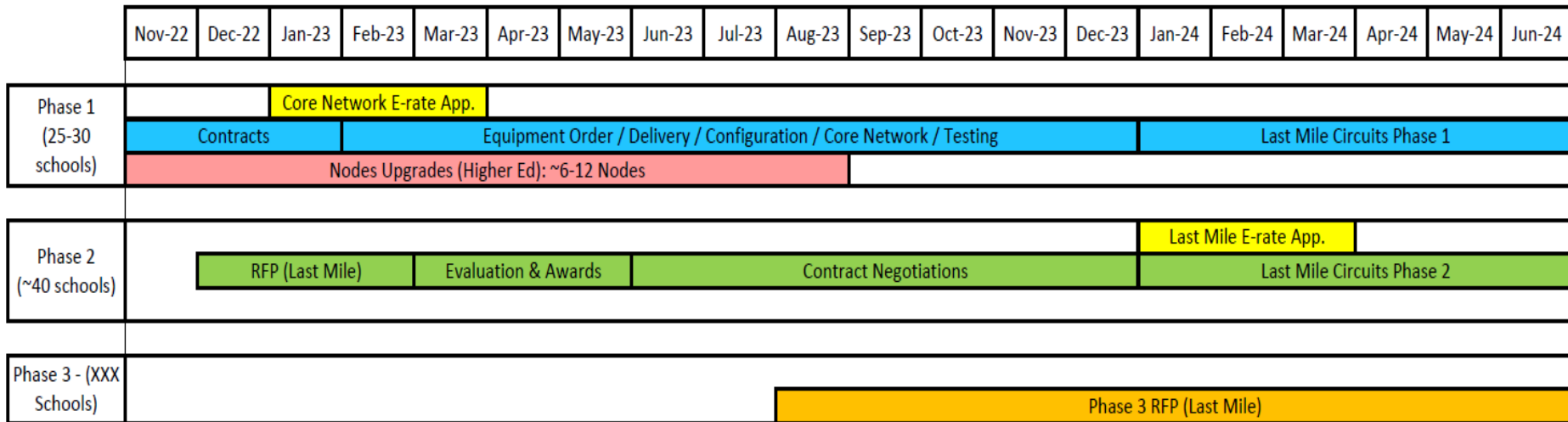


Sequence

- Phase 1:
 - Nodes in Albuquerque, Las Cruces, Gallup, Farmington, Santa Fe, Las Vegas
 - Backbone circuits between nodes
 - Commodity Internet in two locations
 - Switch over Last Mile circuits
- Phase 2:
 - RFP for additional Last Mile circuits (expiring contracts 2023-2024)
 - Negotiations & Contracting
 - Add schools to the SEN
- Phase 3
 - Repeat of Phase 2

Timeline

SEN High Level Timeline / Sequence



Accomplishments since September 1, 2022

Capture Federal Funds and Awards

- ✓ Digital Equity Report submitted
- ✓ Middle Mile grant application submitted
- ✓ FCC Mapping Demonstration
- ✓ NTIA Coordination
- ✓ FCC Mapping Challenge Coordination
- ✓ State GIO is working to challenge the FCC broadband mapping;
\$650M at stake



Accomplishments since September 1, 2022

THE REASON WE'RE ALL HERE – GRANTS AWARDED

Awardee	Communities to be Served
Comcast Corporation	<ul style="list-style-type: none">• <u>Phase One</u>: Anthony, Berino, Chamberino, La Mesa, Vado• <u>Phase Two</u>: Chaparral, La Union, Santa Teresa, Sunland Park
Central New Mexico Electric Cooperative	<ul style="list-style-type: none">• Estancia, Mountainair
Ethos Broadband	<ul style="list-style-type: none">• Truth or Consequences, Williamsburg
Socorro Electric Corporative	<ul style="list-style-type: none">• Village of Magdalena

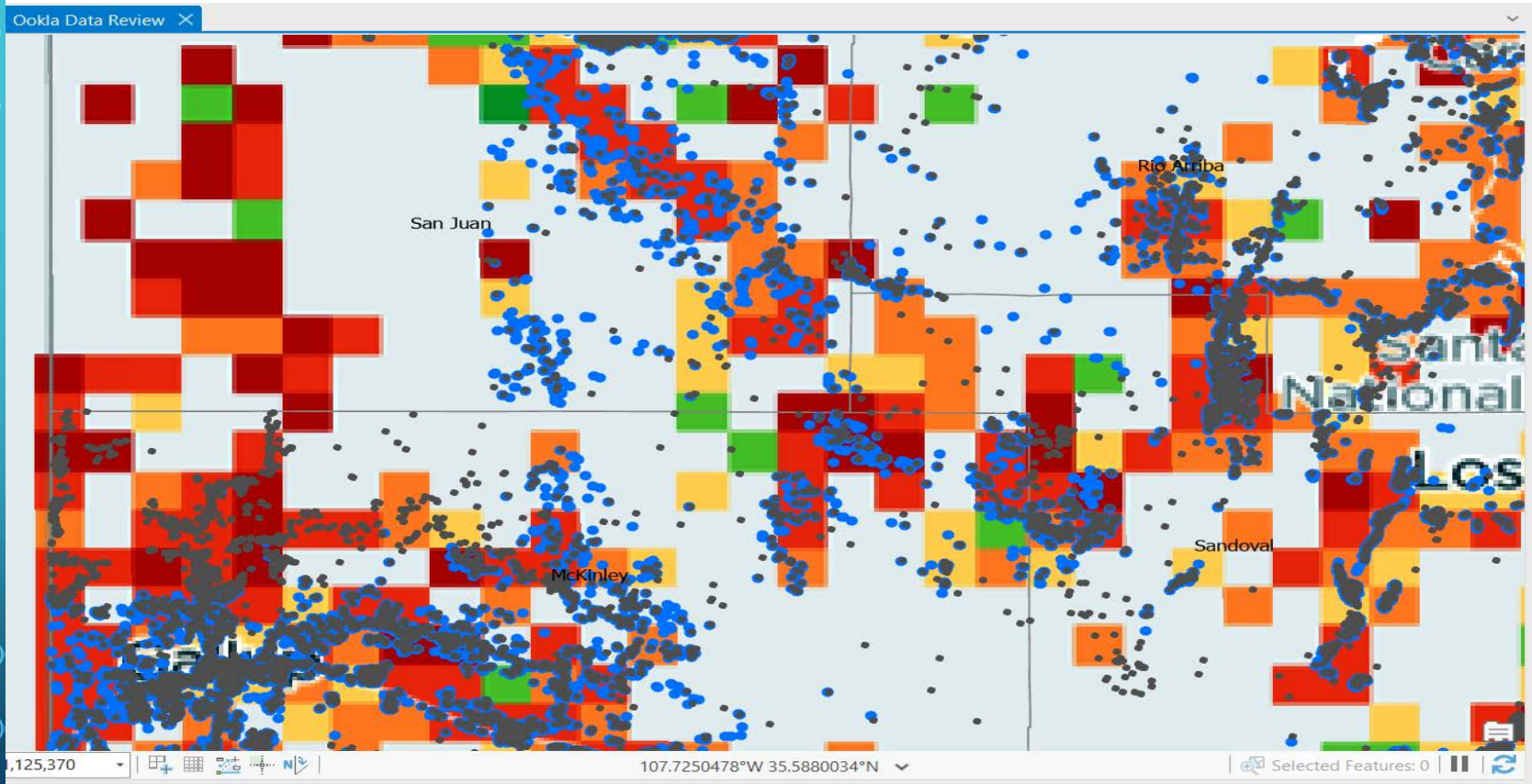
LEGISLATIVE INITIATIVES FOR 2023 SESSION

Challenges to broadband expansion in New Mexico

- ❑ Governance of State-Owned Broadband Assets
- ❑ Permits, Rights of Way, and Pole Attachments
- ❑ Cybersecurity
- ❑ Clarifying existing laws

<https://api.realfile.rtsclients.com/PublicFiles/16569e3bf98c467e95901b46fd511499/743c6949-8171-4386-9f3d-45a4296893cc/obae-annual-report-2022.pdf>

FCC Mapping Challenge





MAPPING CHALLENGE: CALL TO ACTION

- Talk with your constituents
 - Leadership of counties, tribes, municipalities
 - Community leaders
 - Family, friends, neighbors
- Look at FCC Map: broadbandmap.fcc.gov/home
- Individual Challenge
- Bulk Challenge
 - List of individuals and businesses – see handout for information needed
- Contact Office of Broadband – broadband@doit.nm.gov



Questions?

Dianne Lindstrom

Deputy Director, Office of Broadband

505-795-1484

Dianne.Lindstrom@doit.nm.gov

Ovidiu Viorica

Broadband and Technology Program Manager, PSFA

505-270-1355

oviorica@nmpsfa.org