PSFA – State Education Network (SEN) Update

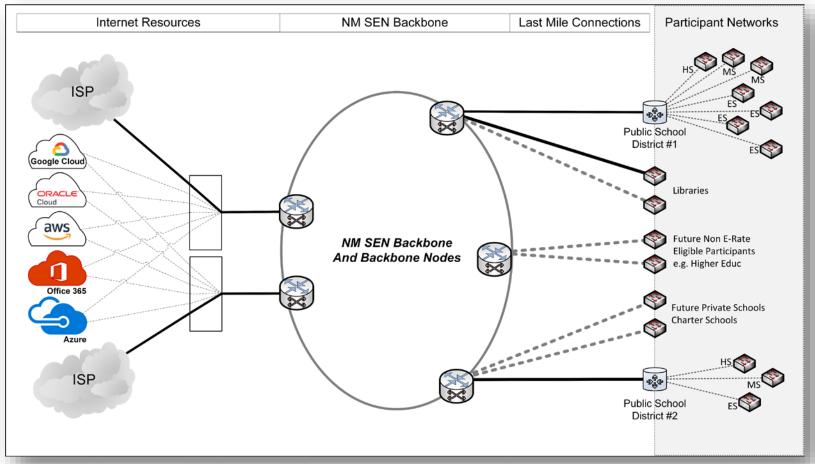## Science, Technology and Telecommunications Committee
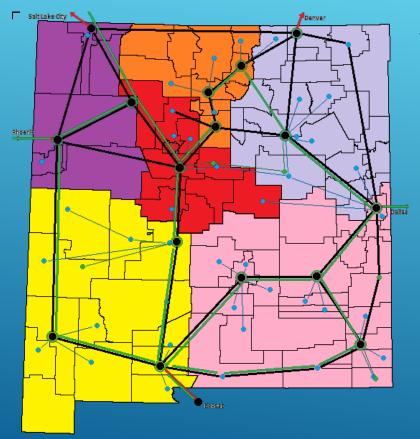
November 17, 2022

Ovidiu Viorica, Broadband and Technology Program Manager

Partnering with New Mexico's communities to provide quality, sustainable broadband for our students and educators.
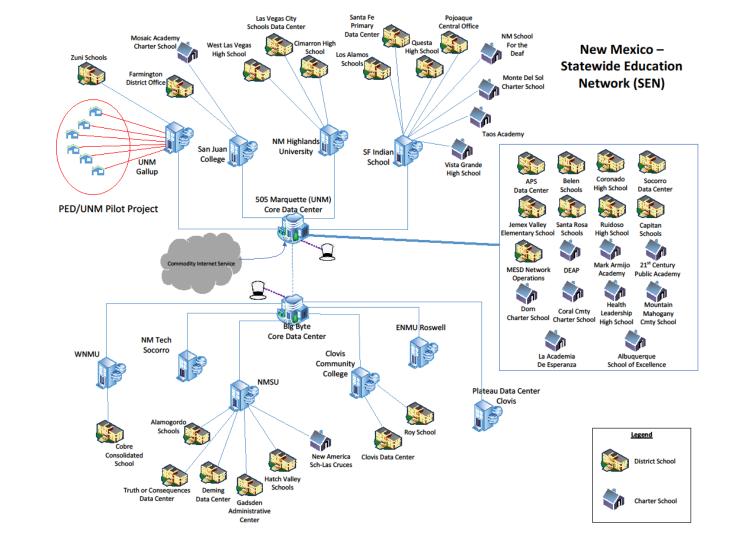
SEN High-Level Architecture

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"

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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								
	FY23	FY24	FY25	FY26	FY27	Total State five years	Potential E-rate	Total	
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	1
2 Backbone fiber construction (State share of E-rate match)**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	2
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	3
4 Aggregation hub development & operations**** (100% State)	$ 0.5	$ 0.6	$ 0.7	$ 0.7	$ 0.7	$ 3.2	$ -	$ 3.2	4
5 Equipment / equipment replacement fund	$ 1.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 3.5	$ -	$ 3.5	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	6
7 Cybersecurity (DDoS mitigation, Security Operations Center/Monitoring, tools)	$ 1.0	$ 1.5	$ 2.0	$ 2.0	$ 2.0	$ 8.5	$ -	$ 8.5	7
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	8
9 Contingency	$ 1.5	$ 1.6	$ 0.8	$ 0.6	$ 0.5	$ 5.0	$ -	$ 5.0	9
10	$ 10.0	$ 10.0	$ 10.0	$ 10.0	$ 10.0	$ 50.0	$ 122.2	$ 172.2	10

* 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)
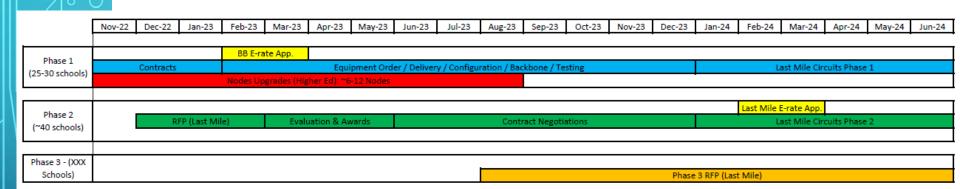
Sequence

- 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

Timeline

	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24

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Questions?

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