2016-17 Jemez-Zia Pueblo E-rate Consortium

Jemez Day School (BIE) • San Diego Riverside (NM Charter) • Walatowa High School (NM Charter)
Jemez Tribal Library • T'siya Day School Elementary School (BIE) • Zia Tribal Library

Broadband in Schools & Libraries

Schools: Conduit of teaching, learning, and school operations

- Internet content- teaching & learning, i.e. Kahn Academy, digital textbooks
- Communication between students and teachers, i.e. Google Classroom
- Mobile Devices- require high-speed Internet, i.e. iPads, Chromebooks, etc
- NASIS Parent Portal to check assignments and grades (BIE)
- Mandatory Online Testing, i.e. PARCC, MAPS
- Dual Credit/Distance Learning
- Video-Conferencing for native language classes
- Virtual Global field trips
- Administration: On-line HR, Phone, Accounting, Safety & Email systems

Libraries: Critical community infrastructure for computer services

- K-12: After school homework & live tutoring: cloud apps, Kahn Academy
- Adults: On-line classes for college degrees, GED, basic literacy, certificates.
- On-line applications, scholarships, FAFSA
- Video-Conferencing for language and/or culture teaching/learning
- Website Portals for on-line banking, bill pay
- Required On-line testing for NM Drivers License, Food Handlers, NM Game & Fish
- Social services for senior, disabled and veterans e.g. benefits
- Filing federal and state taxes
- Job searches, resumes, unemployment
- Public Internet access for personal devices, including parking lot Wi-Fi
- Center for connectivity during emergencies

Current Speeds

My iPhone
LTE: 5 – 12 Mbps
DLS x2: 12 Mbps
T1 x6: 9 Mbps

Jemez Day School
Jemez Tribal Library
Zia Tribal Library
San Diego Riverside

**Many BIE Schools
Many Tribes/
Libraries**
T1 x 3: 4.5 Mbps

Walatowa High School

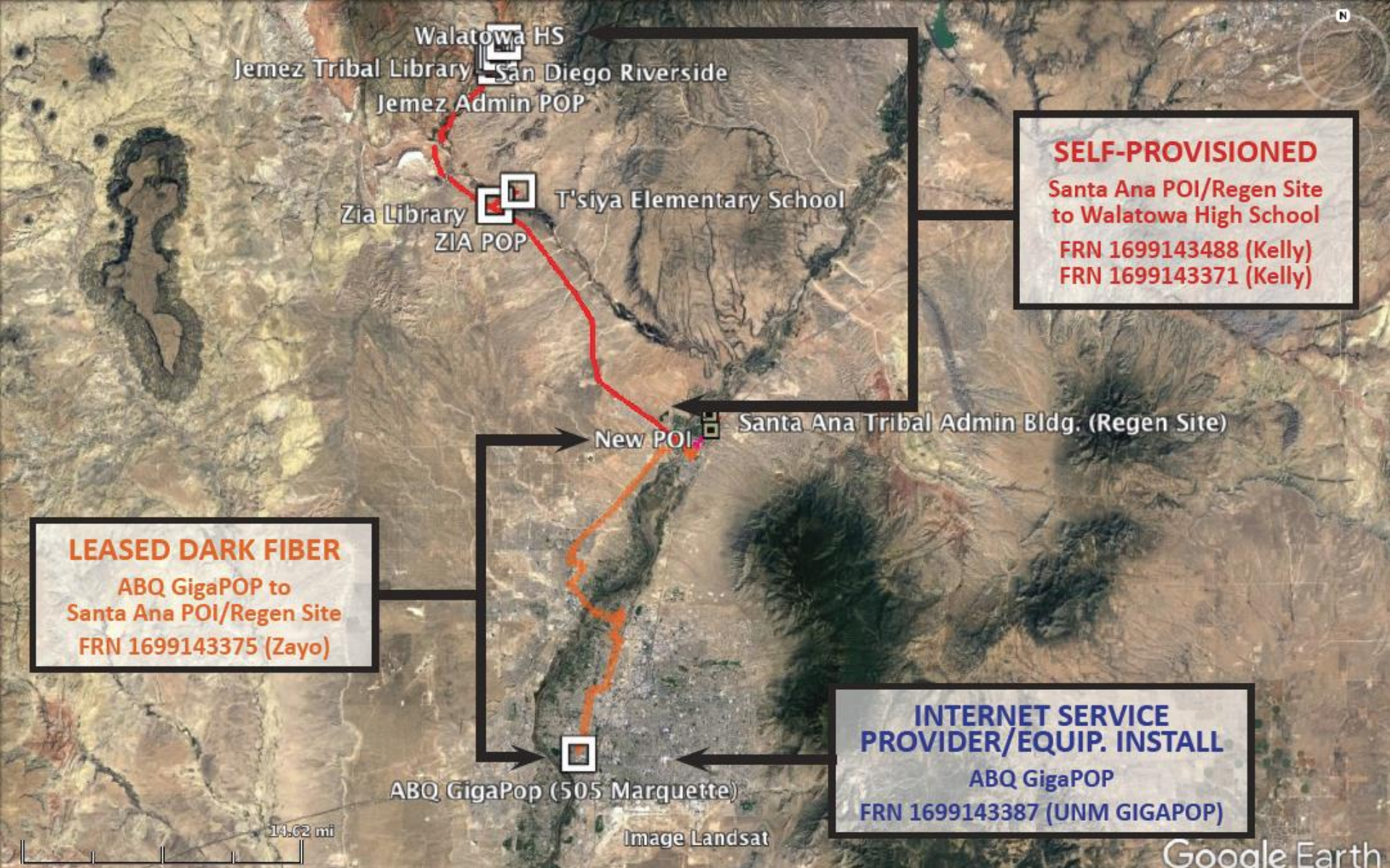**Many BIE Schools
Many Tribes/
Libraries**
T1: 1.5 Mbps

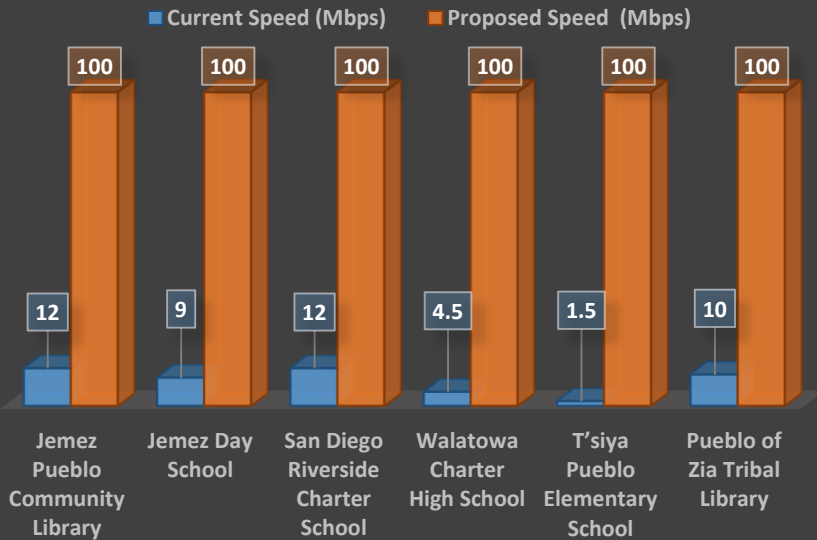*T'siya Elementary School*

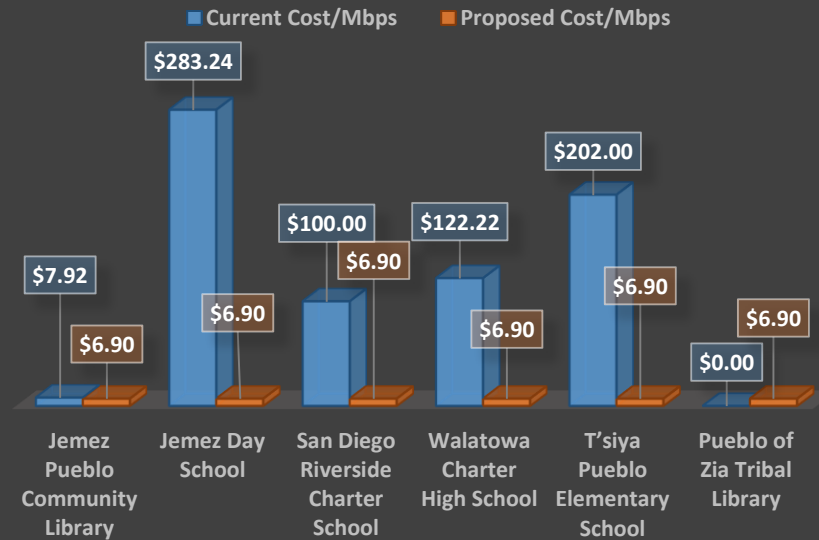**Target Speed: 100 Mbps**

Fiber Route

Before / After

BROADBAND SPEEDS

Current Speed (Mbps) · Proposed Speed (Mbps)

School/Library	Current	Proposed
Jemez Pueblo Community Library	12	100
Jemez Day School	9	100
San Diego Riverside Charter School	12	100
Walatowa Charter High School	4.5	100
T'siya Pueblo Elementary School	1.5	100
Pueblo of Zia Tribal Library	10	100

BROADBAND COSTS

Current Cost/Mbps · Proposed Cost/Mbps

School/Library	Current	Proposed
Jemez Pueblo Community Library	$7.92	$6.90
Jemez Day School	$283.24	$6.90
San Diego Riverside Charter School	$100.00	$6.90
Walatowa Charter High School	$122.22	$6.90
T'siya Pueblo Elementary School	$202.00	$6.90
Pueblo of Zia Tribal Library	$0.00	$6.90

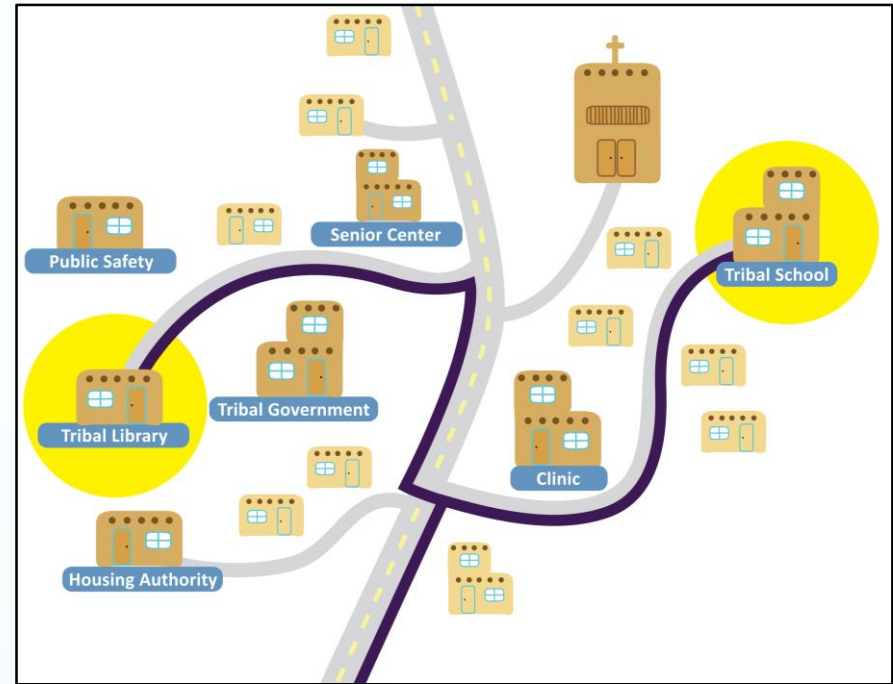| JEMEZ / ZIA CONSORTIUM MEMBERS	BEFORE					AFTER				
School/Library Name	Connection Type/Qty	Current Speed (Mbps)	Monthly Recurring Cost (MRC)	Current Cost/Mbps	Current Cost/Mbps w/E-Rate	Connection Type/Qty	Proposed Speed (Mbps)	Monthly Recurring Cost (MRC)	Proposed Cost/Mbps	Proposed Cost/Mbps w/E-Rate
Jemez Pueblo Community Library	1x DSL	12	$95	$7.92	N/A	Fiber	100	$690	$6.90	$0.69
Jemez Day School	6x T1s	9	$2,549	$283.24	$28.32	Fiber	100	$690	$6.90	$0.69
San Diego Riverside Charter School	2x DSL	12	$1,200	$100.00	$10.00	Fiber	100	$690	$6.90	$0.69
Walatowa Charter High School	3x T1s	4.5	$550	$122.22	$12.22	Fiber	100	$690	$6.90	$0.69
T'siya Pueblo Elementary School	1x T1	1.5	$303	$202.00	$20.20	Fiber	100	$690	$6.90	$0.69
Pueblo of Zia Tribal Library	Ethernet	10	$0	$0.00	N/A	Fiber	100	$690	$6.90	$0.69

Funding Opportunity

FCC E-Rate Program

- Schools and Libraries

- 90% Discounts off Internet Bills

- New: Discounts on Fiber Construction

- Limited Time: Additional 5% Discount if match is from tribal, state, federal source

- New: Extra Capacity allowed

Opportunity

- Bring Broadband Internet to the schools and libraries

- Fiber Optic Benefits: Can be easily increased to meet future needs, symmetrical uploads and downloads

Fiber Optic Backbone to the schools and libraries

Chairman Ajit Pai's Visit Monday August 20th, 2018

The Federal Communications Commission (FCC) regulates interstate and international communications by radio, television, wire, satellite, and cable in all 50 states, the District of Columbia and U.S. territories. An independent U.S. government agency overseen by Congress, the Commission is the federal agency responsible for implementing and enforcing America's communications law and regulations.

Ajit Pai
FCC Chairman

Michael O'Rielly
Commissioner

Brendan Carr
Commissioner

Jessica Rosenworcel
Commissioner

Jemez Library - Welcome

Riverside Charter School

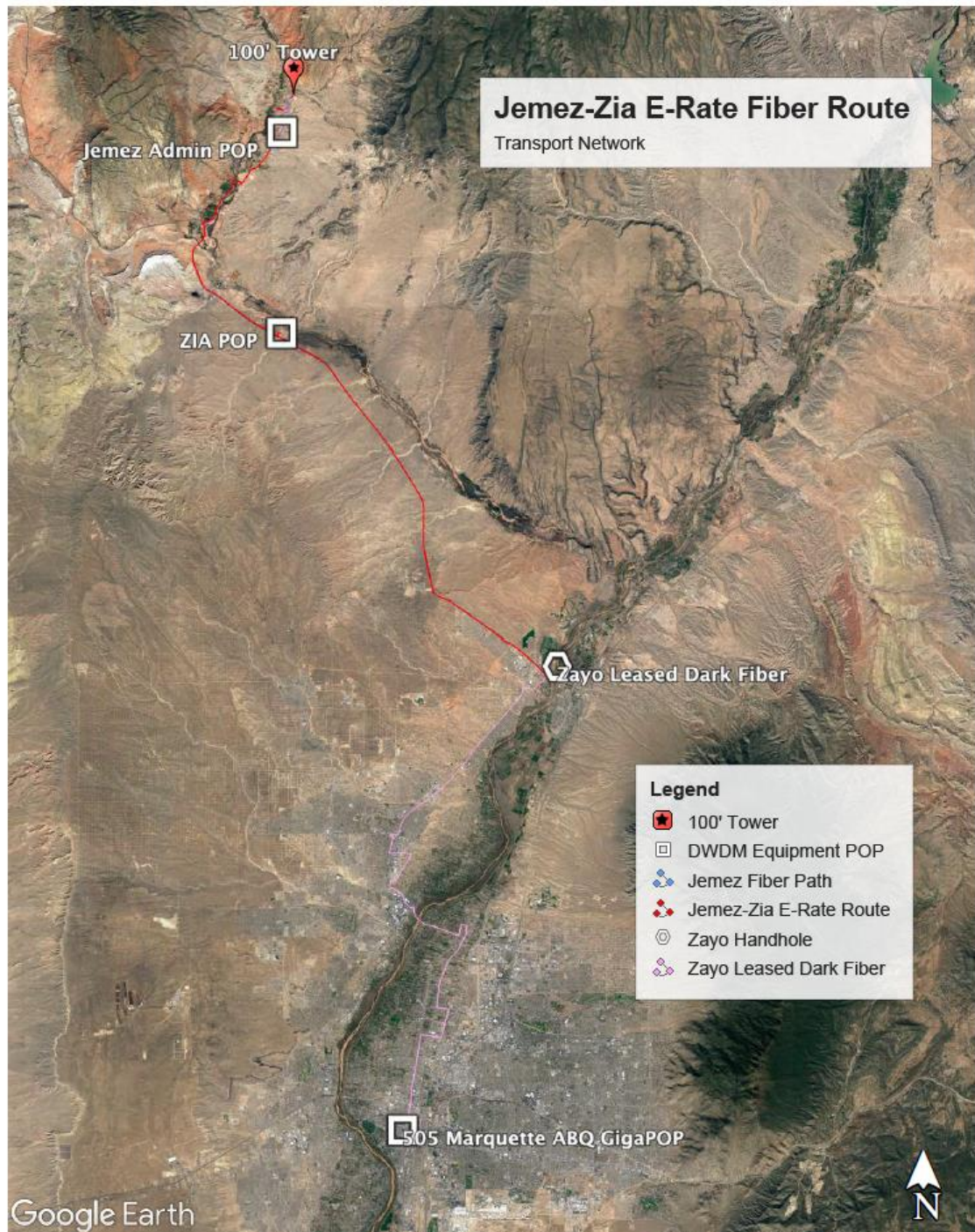# Walatowa High Charter School

Pueblo of Zia – Enrichment Library

**2020 Fiber Broadband
Jemez-Zia-Santa Ana Consortium
and Jemez Tribal Network**

Overview of Fiber Route

Albuquerque (UNM) to Jemez

Jemez Fiber/Zia-Santa Ana Consortium Broadband Project

Consortium Network:

(Santa Ana Pueblo, Zia Pueblo, & Jemez)

Cost: $1,257,837.26

Kelly Cable: Strands Spliced to support:

- Private Network for Interconnect Between Jemez/Zia to Sheriff's Posse Rd.
- Sovereign Fibers to Jemez
- Sovereign Fibers to Zia
- Sovereign Fibers to Santa Ana
- Fibers for Cell Towers – Future Use

Jemez Network:

Cost: $2,128,137.70

Kelly Cable: Strands Spliced for:

- Connection into Main Distribution Frame
  - Regenerate & Deploy Out

- Current and Future Use

Community Wireless Deployment & Network

- Deployment Team or Contractors
  - Completing Home Installs
- Network Operations Center (NOC)
  - Broadband Internet Service Support to users
- Home Installs:
  - Nano Station or Nano Beam
    - Wireless Access Point (WAP)
  - Air Cube
    - 2 ports for physical connection & wireless access