

MONO COUNTY BROADBAND AND TELECOM STATUS

Mono County Board of Supervisors
November 2020



AGENDA



- **Background**

- **Broadband**

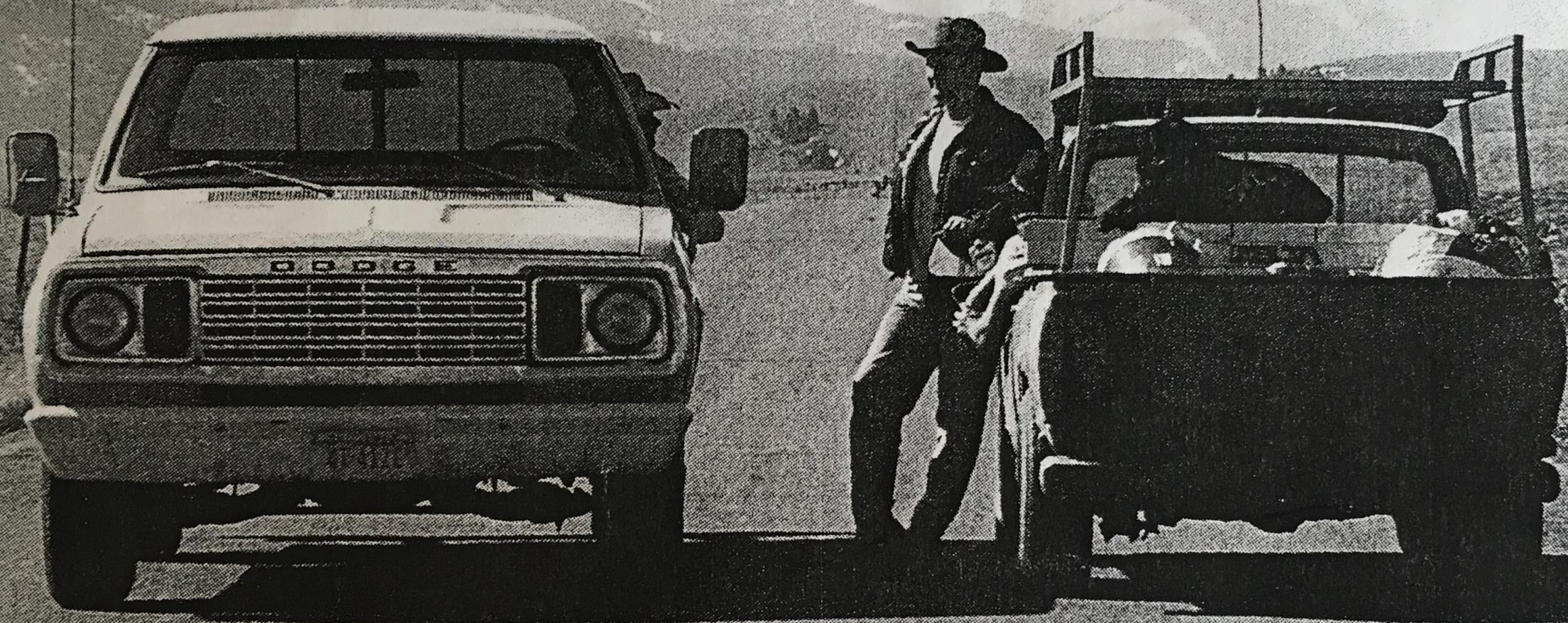
- Providers
- Status, Future Outlook

- **Telephone**

- Providers
- Status, Future Outlook

- **Q & A**

- **Next Steps**



Along the Information Superhighway



DIGITAL 395 – THE NETWORK



- **Sophisticated 100y network**
 - \$110m | 620mi. long fiber network – Reno <> Barstow
 - Petabytes of capacity – 25% utilization
 - New electronics (\$1.2m) – product/capacity growth

- **“Our Network” supports a Connected Eastern Sierra**
 - Serves G.E.M. facilities & service providers

- **Public Safety Grade network**
 - Hardened against wildfires, earthquake, etc.
 - CalTech earthquake / early warning

DIGITAL 395 - CALIFORNIA BROADBAND COOP

- **Structurally Solid**

- 501©12 telephone cooperative
- Nine-member Board since 2012

- **Financially stable**

- Positive Going Concern audits; cash reserves

- **Future focused**

- Strategic initiatives – 3mo. objectives
- Other opportunities?





9

switch

8

switch

TSC

1000

2013

\$37.01
per mbit

2016



\$1.83
per mbit

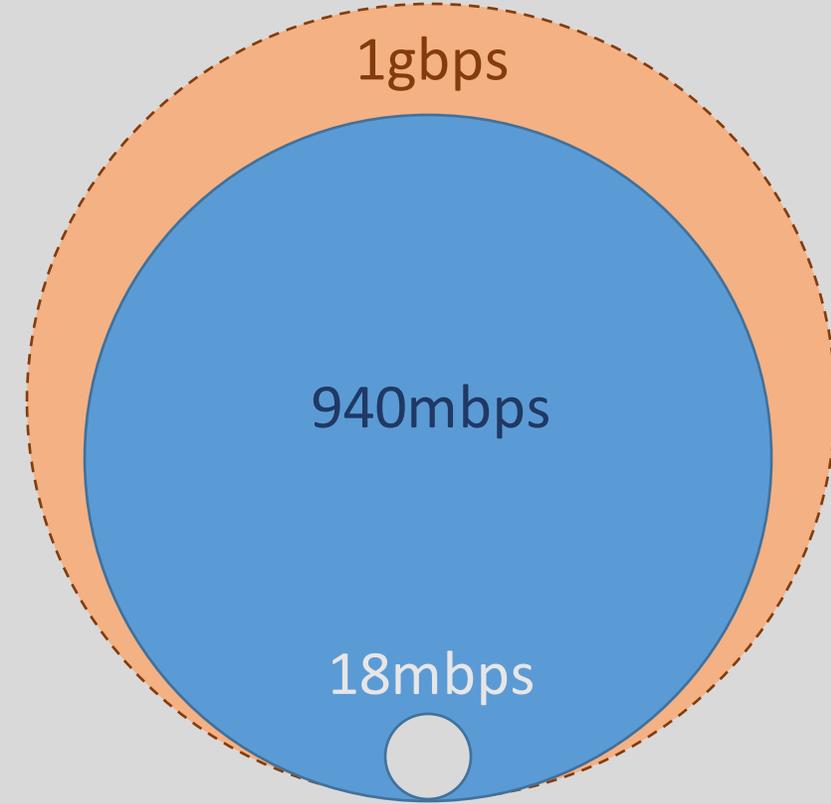
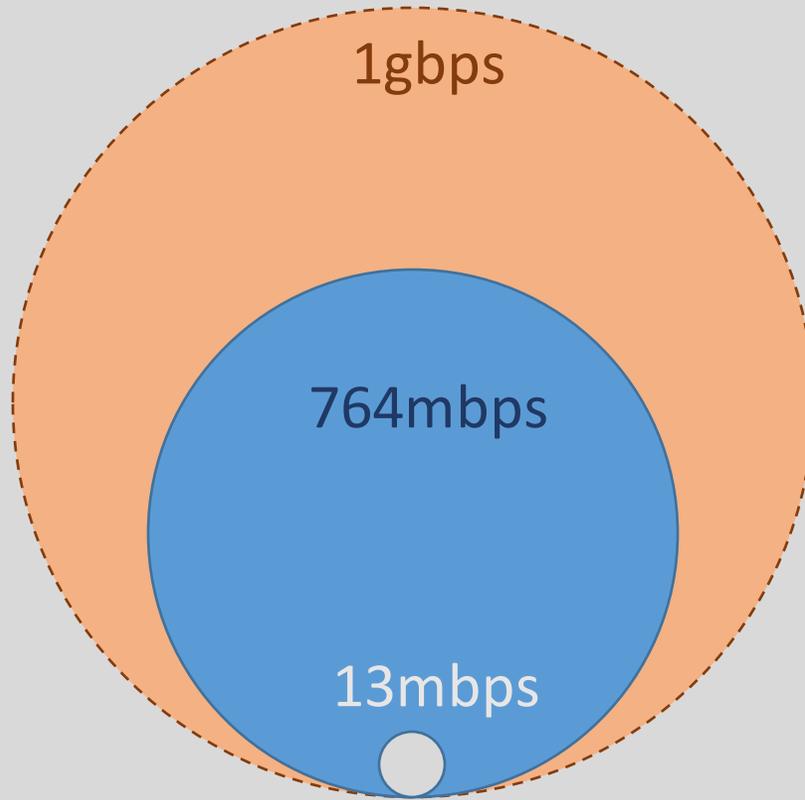
vs.



\$4 per mbit
national avg.

2018

\$.62
per mbit



○ National Average

● Mono County Average

○ Overall Capacity



1

Digital 395 provides broadband service in the form of 'backhaul' to providers

2

Providers utilize their 'Last Mile' network to connect customers at home & work

3

Customers purchase service from local providers



Fox Industries



BROADBAND ACCESS TOOL

SERVICE WIZARD **PROVIDERS** SERVICE AREAS FIND SERVICE PARTNERS

Provider Detail

- AT&T
- Fox Industries
- Frontier Communications
- Hartstrom.com Wireless
- Inyo Networks
- Lone Pine Communications
- Mono Broadband
- Race Communications**
- Schat.net
- Suddenlink Communications
- Verizon Wireless
- Wild Blue Satellite

Race Communications

Race Communications is a medium sized broadband company delivering high quality internet, TV, and phone to various Mono County communities.

Service Category: Internet, Phone, TV

Service Type: Fiber

Website: <http://www.race.com/communities>

Technology: Race has a network built entirely on fiber optic cable and uses it to deliver 1Gbps speeds to subscribers.

Backhaul: Digital 395

Pros:

- Good company
- Solid network and product
- Good service
- Great pricing

Cons:

- Slower install times
- Not a huge local presence

Areas Served Use Wizard Choices

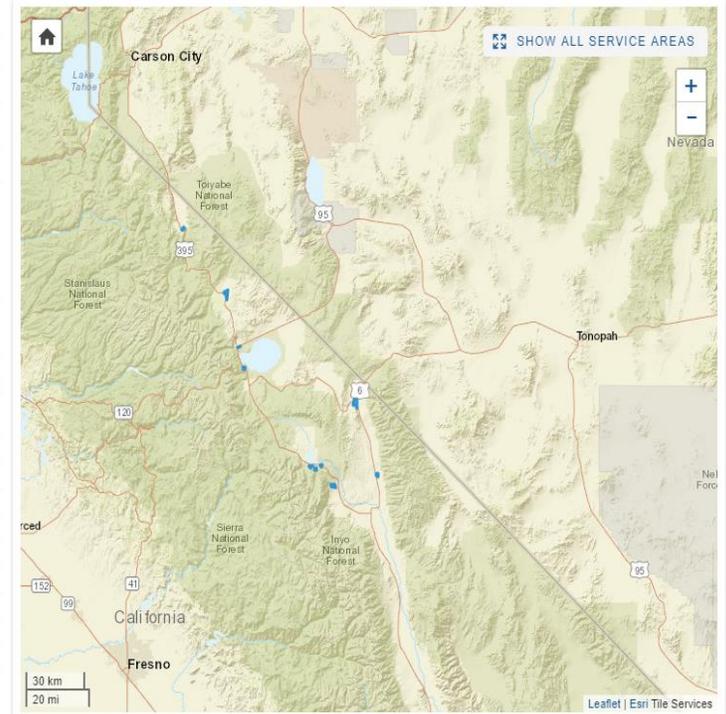
County	Community ↑	Speed
Mono	Aspen Springs	1 Gbps
Mono	Benton	1 Gbps
Mono	Bridgeport	1 Gbps
Mono	Chalfant Valley	1 Gbps
Mono	Crowley Lake	1 Gbps
Mono	Lee Vining	1 Gbps
Mono	Mono City	1 Gbps
Mono	Paradise Estates	1 Gbps
Mono	Tom's Place / Sunny Slopes	1 Gbps
Mono	Walker	1 Gbps

Discover your Broadband



Service Wizard

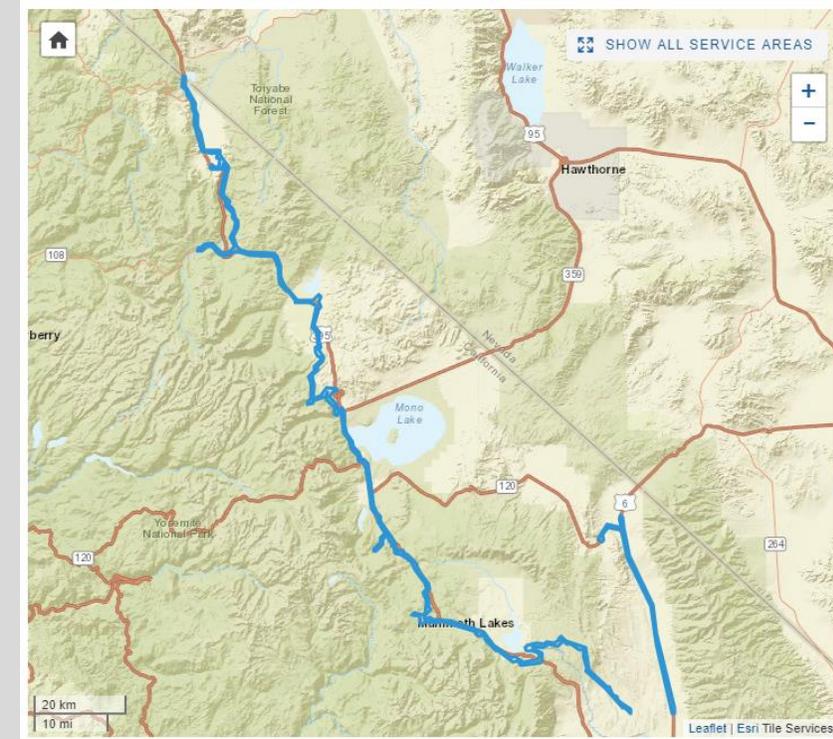
Use our wizard to estimate



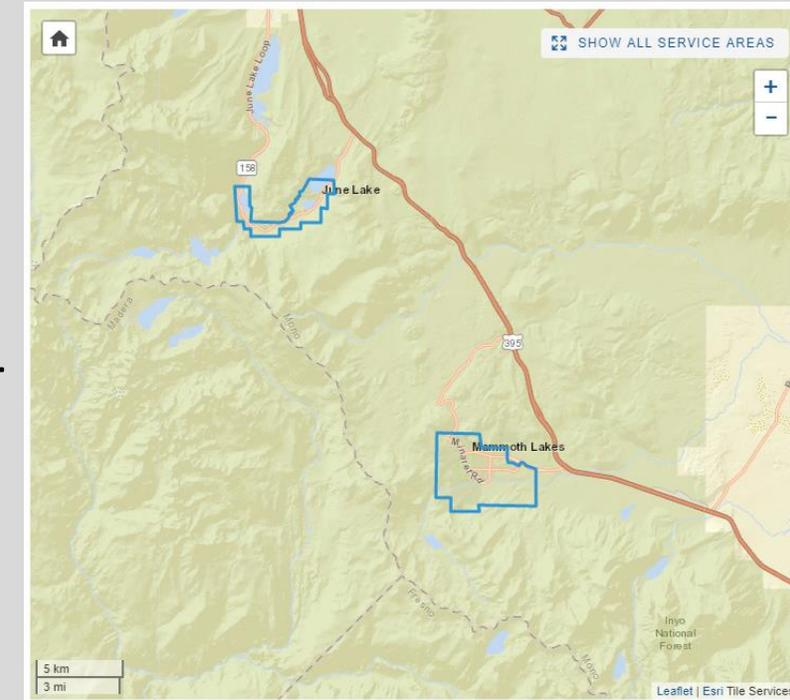
INYO NETWORKS



- **Commercial sales agent for Digital 395**
- **Network Performance**
 - FttP
 - Speeds up to 10Gbps – various products
- **Customer Service**
 - Solid and responsive
- **Future Outlook**
 - Continual development in products & locations



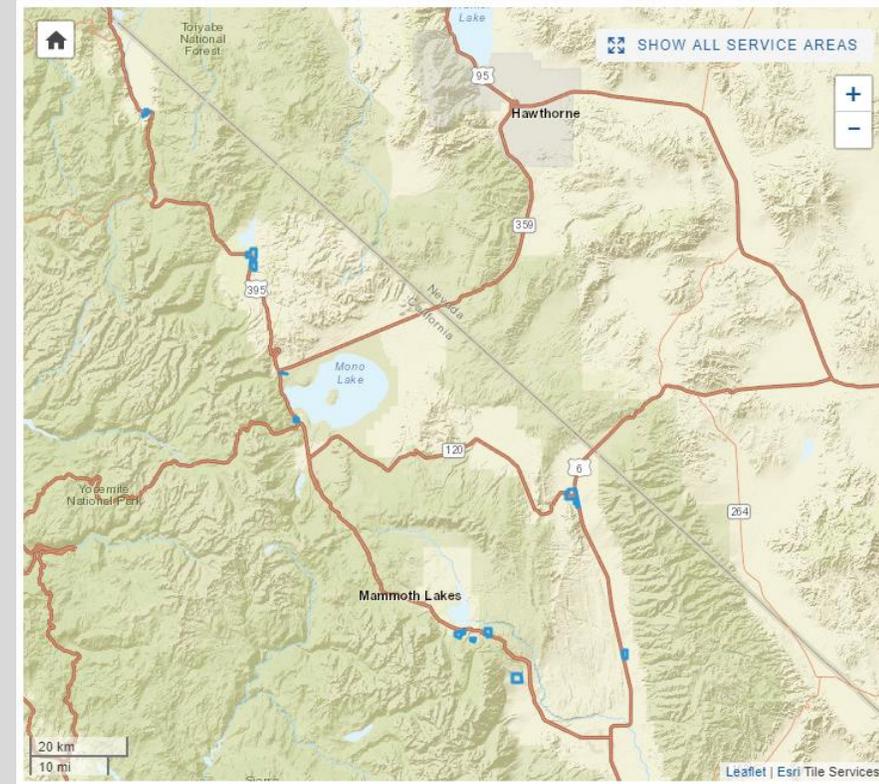
- **Primary carrier in Mammoth and June**
 - Gigabit service (plus TV & phone)
- **Network Performance**
 - + 44% downstream / + 38% upstream since March 1
 - Maintenance
 - Power – sustainability challenges
- **Customer Service**
 - Challenges: Call center; No-Shows; OSHA/Smoke
- **Future Outlook**
 - Engagement from senior management / improvement efforts



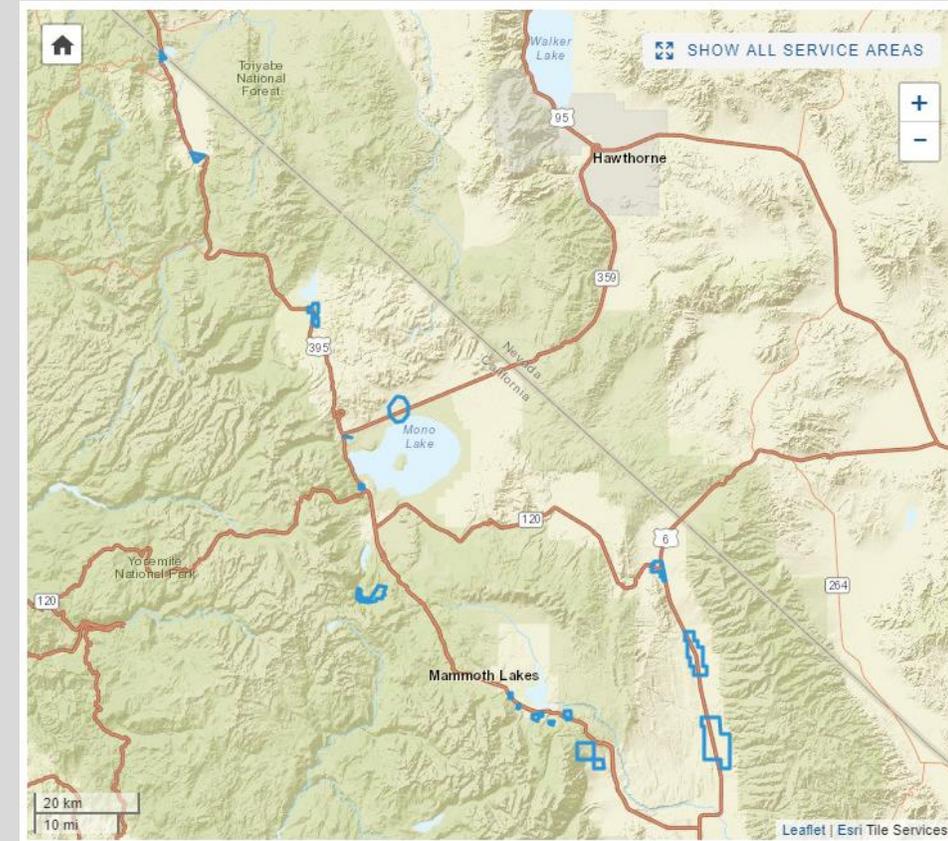
RACE COMMUNICATIONS



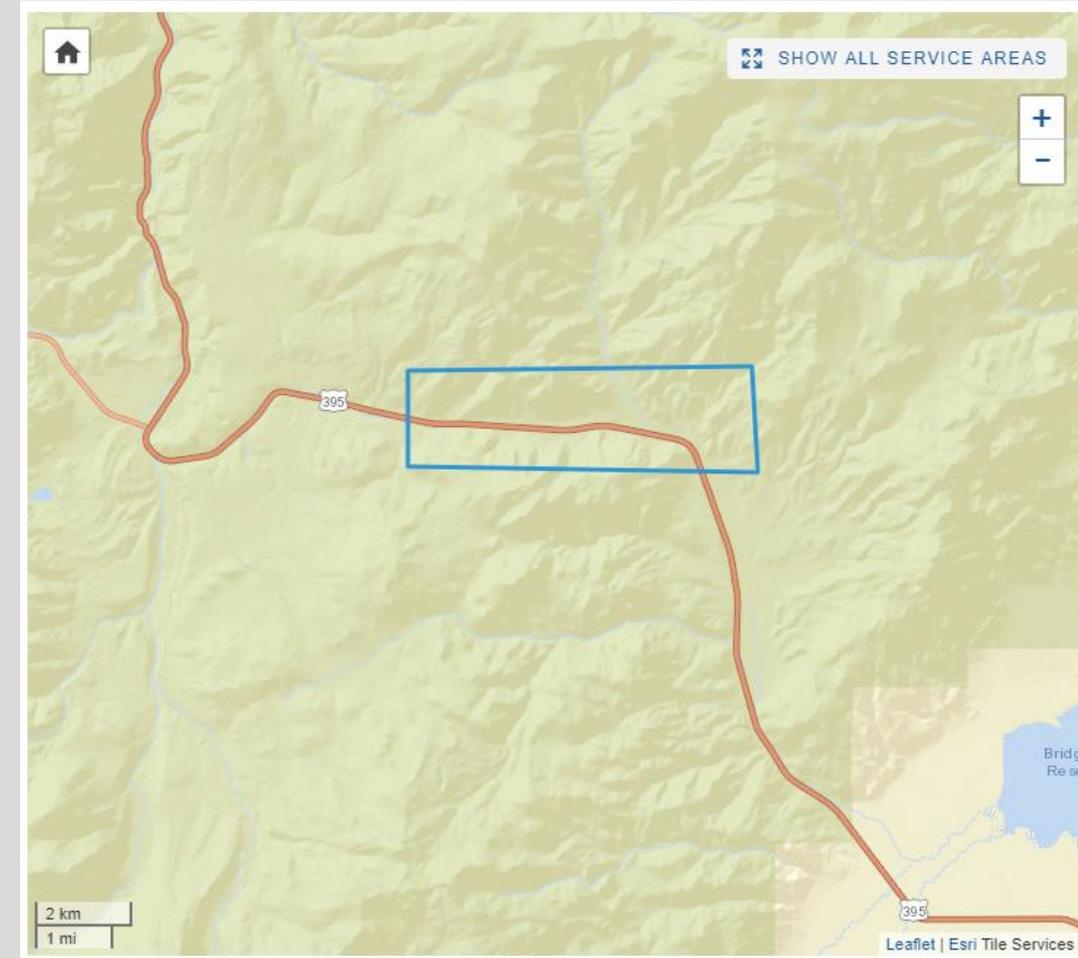
- **Primary carrier in unincorporated Mono**
 - Gigabit service (plus TV & phone)
- **Network Performance**
 - No significant issues – minor outages
 - Power resiliency
- **Customer Service**
 - Generally solid – minimal issues
 - Low quantity of local techs
- **Future Outlook**
 - Network expansion?



- **Secondary carrier in unincorporated Mono**
 - Speeds up to 100mbps
- **Network Performance**
 - Upgraded mountaintop sites to licensed 1.5Gbps links
 - 7d battery capacity
- **Customer Service**
 - Stable & responsive
- **Future Outlook**
 - 40Mbps product through tree cover



- **Primary carrier in Devil's Gate area**
 - Small geographic footprint
- **Network Performance**
 - Speeds up to 25mbps
 - Upgraded radios and battery plant
- **Customer Service**
 - Stable, responsive; one-man show
- **Future Outlook**
 - Continued support in area



FOX INDUSTRIES WIRELESS

- **Secondary carrier in Bridgeport / Primary in Twin Lakes**

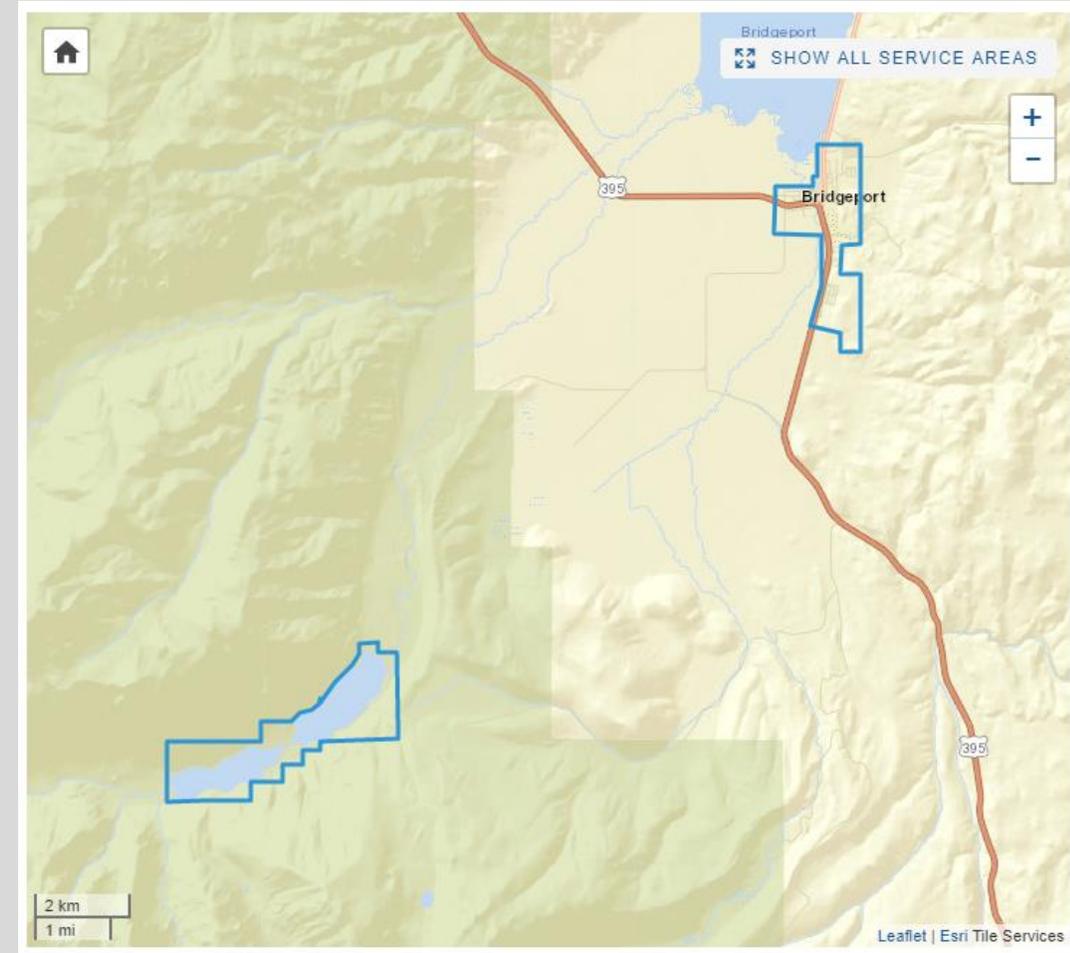
- **Network Performance**

- Speeds up to 25mbps

- **Customer Service**

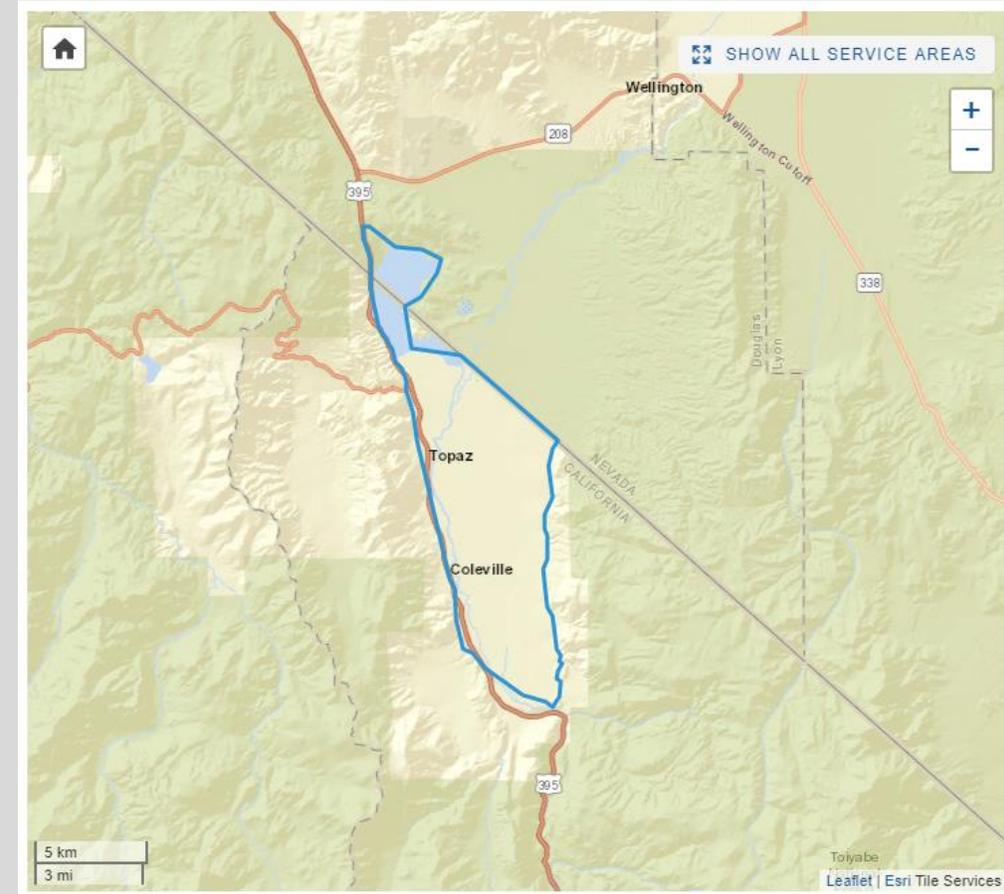
- Small team

- **Future Outlook**



MONO BROADBAND

- **Secondary carrier in Antelope Valley**
- **Network Performance**
 - Speeds up to 10mbps
- **Customer Service**
 - Small team
- **Future Outlook**



VERIZON WIRELESS

- **Dominant wireless carrier in county**
 - Cover majority of highway corridor & communities
- **Network Performance**
 - Combination of 3G, LTE, and 5G
 - Public Safety Priority & Pre-Emption
 - Use of Digital 395 at some sites
- **Future Outlook**
 - Continued gradual expansion and upgrades

AT&T WIRELESS

- **Secondary cell carrier in county**

- Decent community coverage / In-fill

- **Network Performance**

- Power resiliency
- Backhaul

- **Future Outlook**

- New site builds: Crowley, Chalfant, Antelope Valley, + +
- FirstNet collaboration

FRONTIER

- **Incumbent Local Exchange Carrier (ILEC)**
 - Primary “Plain Old Telephone Service” (POTS) carrier
 - Deliver Digital Subscriber Line (DSL) internet several communities
- **Customer Service**
 - Has not ever met the Out of Service Standard
- **Network Performance**
 - Outages – 911
 - Static & dropped calls
 - Minimal Digital 395 adoption
- **Future Outlook**
 - Two CAF II DSL projects in Bridgeport
 - Bankruptcy

FRONTIER - BANKRUPTCY

• Background

- Acquired CA, FL, TX from Verizon in 2016
- Acknowledged plant investment needs | CAF II monies
- Filed Chapter 11 on April 14, 2020 in NY Federal Court
 - Approval from some states – not CA, nor FCC (yet)

• Impact

- Entire holdings – WA, OR, ID, MT > Wave Division Capital
- Restructure to reduce remaining debt
- Splitting of fiber and copper??
- Mono County impacts – TBD?

QUESTIONS

