City of John Day
Community Connect Grant

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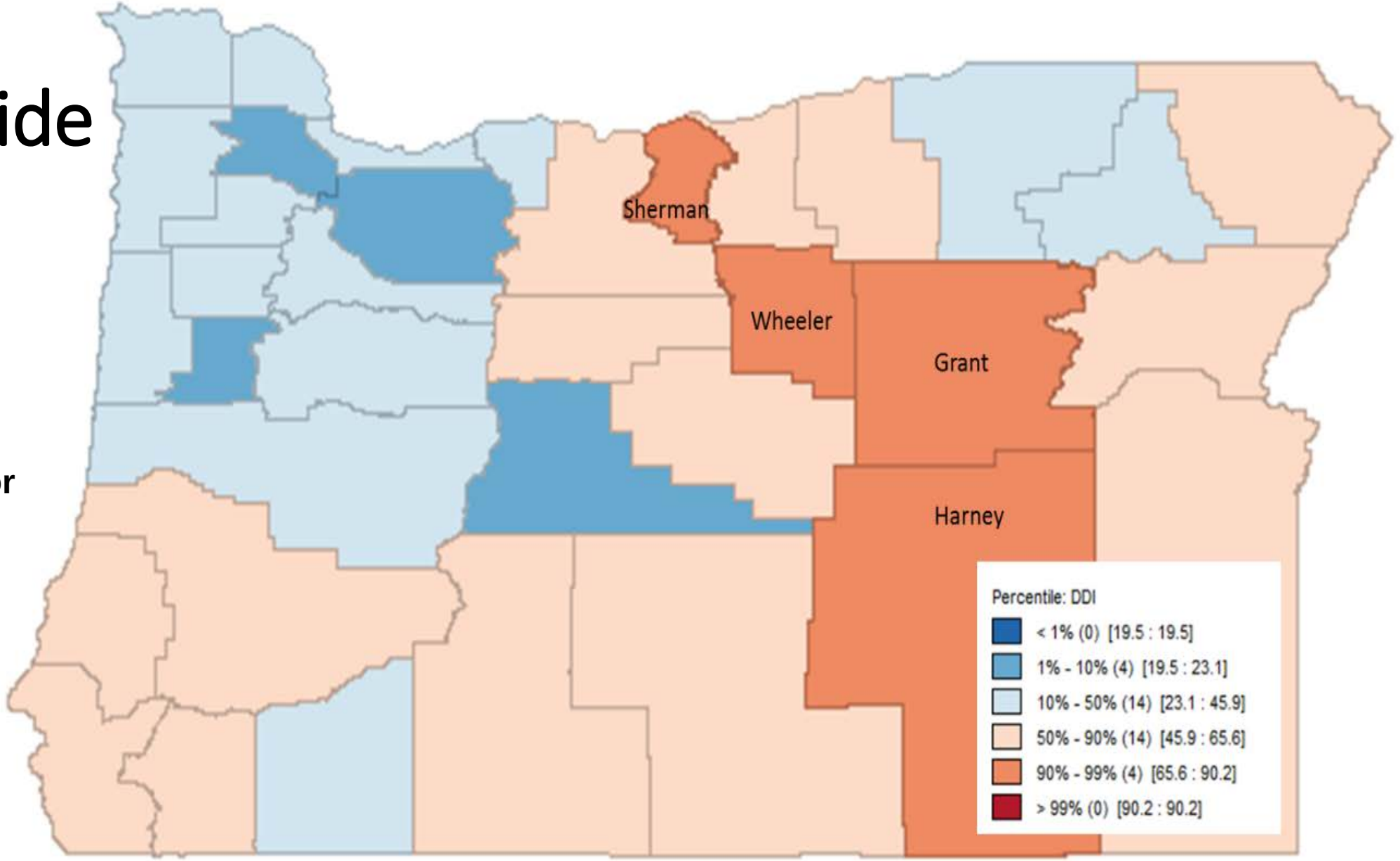
Oregon's Digital Divide

Grant County has the **second highest DDI rank in Oregon** (68.27) behind Wheeler County (90.17) which **ranked tenth in the nation for poorest internet connectivity**

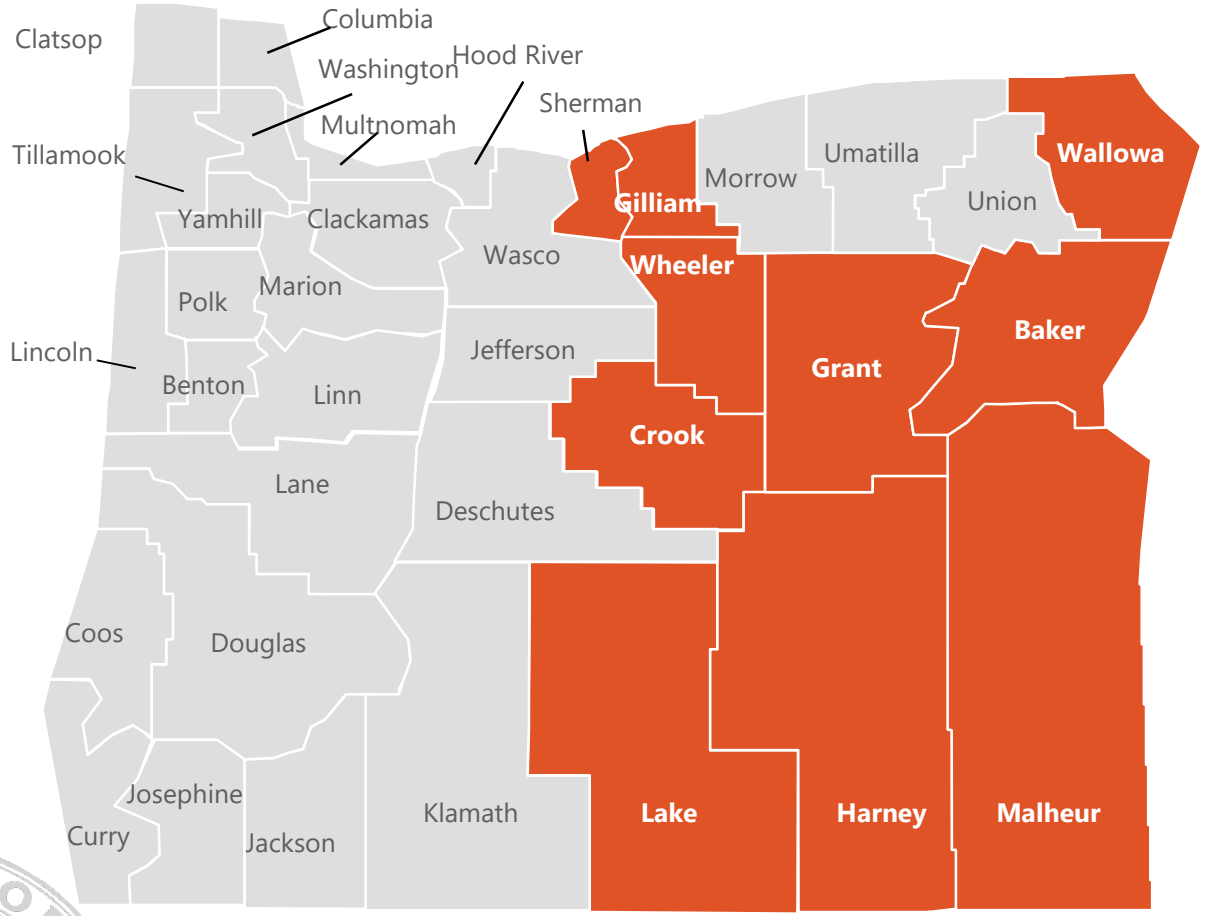
Grant, Wheeler, Harney and Sherman counties ranked in the **bottom tenth percentile** in Oregon on the DDI Index



Digital divide index (DDI) is a county-level index score (from 0 to 100) measuring the digital divide across both INFA and SE characteristics. The higher the DDI number, the larger the digital divide.

Digital Divide and K-12 Connectivity Gap

Oregon counties with the ***largest digital divide index (DDI)**** and the ***K-12 Connectivity gap***



County	*DDI	OMB Area Designation	Schools in Need**	# of State Offices	Population Rate (%)
Wheeler	90.17	Noncore	2	2	**-0.73**
Grant	68.27	Noncore	unreported	8	**-0.27**
Harney	65.72	Noncore	7	4	**-0.12**
Sherman	65.67	Noncore	unreported	3	**-0.46**
Malheur	65.08	Micropolitan	5	10	**-0.27**
Gilliam	63.52	Noncore	1	4	1.13
Wallowa	63.5	Noncore	1	6	1.13
Crook	63.31	Micropolitan	unreported	5	0.79
Lake	59.91	Noncore	unreported	7	0.1
Baker	54.99	Noncore	2	11	1.7

Schools in Need

- Minimum of ***100 kbps*** per user (Browsing & Online Testing)
- Media-Rich 1mbps per user (+Heavy Video Collaboration, Heavy Video Streaming, Online Educational Gaming, Remote Instruction)

Connectivity – 89% (***45th in nation***) 5% improvement

Fiber Needed – 94% (***42nd in nation***) 2% improvement

Affordability – 32% (***41st in nation***) 35% decline since 2016

** The DDI is a function of both a community's Infrastructure Adoption Characteristics (INFA) and Socioeconomic Characteristics (SE), including population, income, age, ethnicity and education. According to MSU's 2015-15 DDI index, there were ten counties in Oregon with a DDI that exceeded 50% and ranging from a low of 54.99% in Baker County to 90.1% in Wheeler County (Strategies for Broadband Infrastructure Deployment, Adoption and Utilization in Rural Cities and Counties, 2017)*

Education SUPERHIGHWAY

http://stateofthestates.educationsuperhighway.org/?postalCd=OR

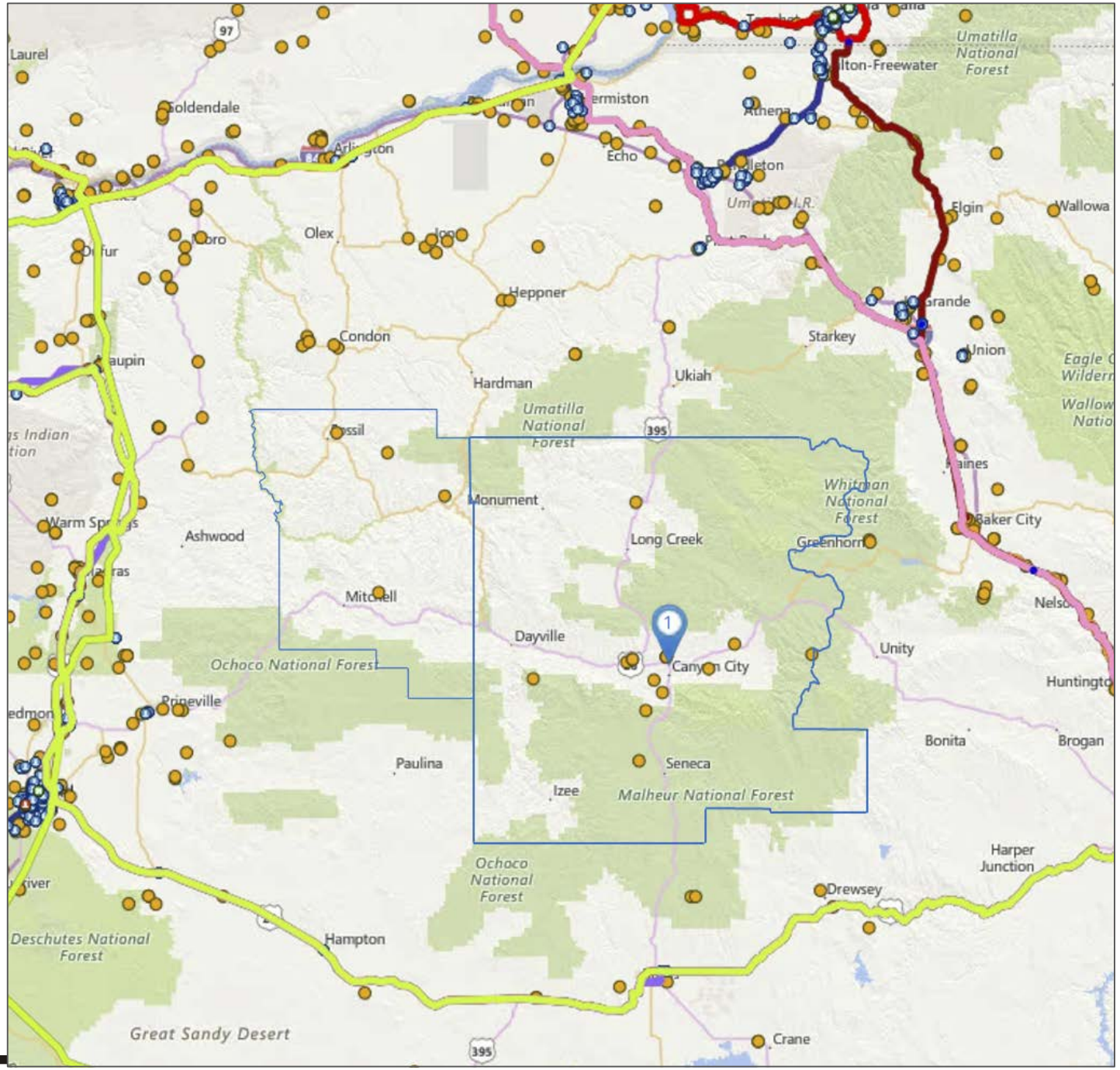
Closing the divide…

Grant and Wheeler only counties in eastern Oregon that **lack a long-haul broadband carrier** traversing county

Connecting to those networks through a **publicly-owned "digital highway"** ensures competitive broadband infrastructure for the future

Intent is to **create a market road** that can be used by any internet service provider or telecommunications firm

Open access networks are the future of broadband infrastructure



Community Connect Grant

- Designed to provide **financial assistance to provide service** at the Broadband Grant Speed (25 Mbps down / 3 Mbps up) **in rural, economically-challenged communities** where **broadband service does not currently exist**
- Grant funds may be used to:
  - (1) deploy service at the Broadband Grant Speed to critical community facilities, rural residents, and rural businesses
  - (2) construct, acquire, or expand a community center, and
  - (3) equip a community center that provides free access to service at the Broadband Grant Speed to community residents for at least two years.
- Grants are **highly competitive**

Community Connect Grant (continued)

- Minimum grant request amount is $100,000; Maximum grant request amount is $3,000,000
- Applicant is required to contribute 15 percent matching funds (in cash)
- John Day plans to apply for $2.9M for design and construction costs, and to put up $450K from the state appropriation for operations and maintenance
- Proposal will create broadband access of at least 25 Mbps down for all residents, businesses and critical community facilities in Seneca and along U.S. 395 South, beginning at the southern limit of Canyon City

Our Approach

- **Public Private Partnership (P3)** to Design, Build, Finance, Operate and Maintain (DBFOM) the network
  - Public agencies Design, Build and Finance the network (network owners)
  - Private agencies Operate and Maintain the network
- Network deployed in multiple phases
  - Phase 1 → John Day to Seneca (Community Connect Grant)
  - Phase 2 → Seneca to Burns (Federal and State Funding)
  - Phase 3 → Network expansions (east, west and south) to connect to existing private and public networks
- Will require agreements with multiple providers (public and private) to accomplish all three phases

Our Team (Community Connect Grant)

- ***Grant County Digital Network Coalition.*** Intergovernmental agency organized under Oregon Revised Statute 190. Grant County Digital is a mission-driven organization whose goal is to provide the fastest internet possible to as many residents as possible at the lowest price possible.
- ***Oregon Telephone Corporation.*** Provides service to the end user. President of OTC has ownership in and maintains services in over 20 communities and has built and operated fiber networks from Dayville, OR to Weiser, ID (over 250 miles).

Our Team (continued)

- ***Commstructure Consulting***. Technical consulting services company based in Oregon City, OR, specializing in communications outside plant (OSP) infrastructure design & project management
- ***Fiber Channels, Inc.*** Telecommunications firm specializing in fiber optic cable network design, engineering, permitting, construction management, maintenance, and operations
- ***CTC Technology & Energy.*** Established, woman-owned consulting firm that offers a unique combination of qualifications and capabilities in broadband financial analysis, business planning, engineering, and network strategic planning
- ***Cohen Law Group.*** Law firm specializing in representing public and private sector clients in cable, telecommunications and broadband matters

Phase 1 Network Design

- 30-mile fiber optic build, begins at a Point of Present (PoP) in John Day and extends through Seneca
- Includes fiber optic connection to Fall Mountain communications site
- Connects campsites along U.S. Highway 395 South (Starr, Swick Old Growth Interpretive Site)
- Connects all critical community facilities in Seneca (Post Office, City Hall, etc.)
- Provides multiport service terminal (MST) connections at property line for all residents and businesses in Seneca and along U.S. 395S → **Goal is to provide 100% access to the network to each potential user**

Funding (Phase 1)

- All funding is coming from the 2017 State Appropriation
- Obligated $70,000 for network design and administrative services (spent approximately $30K to date) for planning and grant application
- Community Connect Grant adds up to $3M for design and construction of Phase 1
- City of John Day committing at least $450K as matching funds for operations and maintenance (if needed)
- Balance of approximately. $1.3M will be used as collateral for Phase 2/3 grant applications

Goal is to lever up our state funding by using it as matching funds for grants

Challenges (in no particular order)

1) **Community Connect Grants** are highly competitive and take a long time to award (12-months of due diligence)
2) **Geography matters**: Rocky terrain, lots of elevation gain and drop, crossing national forest and BLM land in three locations, all add complexity to the build
3) **Small addressable market:** Public Private Partnerships require a willing private sector partner (or partners), but we have a small pie. The more times you slice it, the less appealing it is to providers. Finding the right balance that incentivizes competition without reducing it is not easy. Negotiating agreements is not easy, but it can be done.
4) **Communicating with the public:** People want to know how much its going to cost them (today and tomorrow). They want to know if they will have access to the network (and at what price). They think we're competing with the private sector. Answers to these questions depend in large part on items 1-3 above. Our goal is not to compete, but to partner with the private sector to execute our mission → delivering the fastest internet possible to as many people as possible at the lowest price possible

Opportunities (in no particular order)

- **We can close the digital divide and keep it closed.** Our residents can have access to the best internet service in the country, even though we are a rural-frontier community.
- There are **numerous benefits** to public safety agencies, schools, and healthcare (to name a few) from having access to a publicly-owned fiber optic network.
- We are **creating resiliency and redundancy in our communications infrastructure** that will benefit us for generations to come.
- We will begin **competing on a more level economic playing field** once this project is underway.
- We believe we can do this with **little to no impact** on our local taxpayers. If we are successful at leveraging the state's investment in our community, we can get federal funding to cover the majority of the capital cost.
- **We need it!** We can work with our private sector providers to resolve the patchwork quilt that has left some residents with access to 100 Mbps plus internet and advanced communications capabilities while others have little to no access.

Key Takeaway

- If the private sector could do this, they would have done it already
- But the government can’t do it alone either
- It will take a partnership…we have to work together to improve our economy. Closing the digital divide is a crucial step in this process.