

Idaho Broadband Advisory Board's Call for Project and Planning Proposals

Open October 19th to December 1st, 2022

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December 1, 2022

Idaho Department of Commerce

Ramón S. Hobdey-Sánchez
PO Box 83720
Boise, ID 83720-0093

Dear Ramón,

First, I would like to start by thanking the Department of Commerce and the Broadband Advisory Board for the opportunity to respond to the RFI and for all the work that has been done to prepare Idaho to receive these funds.

My name is Kyle Bradshaw and I'm the General Manager of ATC Communications, a family-owned and operated company serving 4,000 subscribers across 4,000 square miles in communities including Albion, Malta, Almo, Declo, Malad, Arco, Mackay, among others. ATC was started in 1929 and we have spent the last ten years upgrading our infrastructure from plain old telephone lines to fiber optics and we now provide speeds up to 10,000 Mbps.

We have worked hard over the years and are proud to say that **we offer fiber to 70% of our customers but we also understand that the last 30% will be extremely expensive and will be very time demanding.** Additionally, we have identified several areas outside of our regulated serving area that lack sufficient access to broadband – including areas in Cassia and Custer County. We are looking forward to the opportunity to participate in the State programs to accelerate our fiber deployment and to help connect more Idahoans with speeds they deserve.

Our industry is very competitive and we believe **by providing specific details about our technology, deployment plans, speeds, costs, and prices our competitors could use this against us during the RFP process.** For example, if ATC submits a proposal today with a cost of \$7,000 per location, will competitors copy our proposal but do it for \$6,900 per location? Additionally, the grant requirements will be slightly different for each fund so it is extremely difficult to estimate costs and define a serving area. BEAD funding, for example, will require Davis Bacon wages and will result in much higher costs than a project submitted for CPF funding.

ATC has every intention of participating in the upcoming grant programs (CPF, BEAD, etc.). However, because the responses to the RFI are not kept confidential, we are unable to participate today and will instead wait until the official RFP's are announced in the coming months. Alternatively, if the decision is made to keep applications confidential then we will gladly prepare a proposal for your review.

I also have the pleasure of serving as the President of the Idaho Telecom Alliance (ITA) and represent 13 similarly situated companies across Idaho. ITA members serve nearly 40% of Idaho's land mass, 50,000 customers, and have deployed 7,000 miles of fiber in Idaho. **Many ITA members have voiced the same**

concerns described above and most, if not all, will be ready to submit projects when the RFP's are announced. We would like to take this opportunity to ask Commerce and the Board to fully vet proposals to ensure funding does not go to areas where adequate service already exists or will soon exist using federal funding (USF, RDOF, ReConnect, etc.). Also, funding should not be directed to entities lacking a history of providing proven technology or cannot demonstrate a plan to support and maintain the network once the one-time grant dollars have been spent.

Thank you for your time and consideration,

A handwritten signature in blue ink, appearing to read "K. Bradshaw".

Kyle Bradshaw
General Manager – ATC Communications
President – Idaho Telecom Alliance
kbradshaw@atccomm.com
208.673.2401

A. Applicant's contact information:

Name: Deanna Bramblet
Title/Position: Clerk/Auditor
Mailing address: 701 W College Avenue, Suite 101, St. Maries, ID 83861
Email address: dbramblet@benewahcounty.org
Phone number: 208-245-3212

B. Description of the extent to which the planning funds will be used to facilitate deployment of high-speed broadband networks to areas that are currently either unserved, underserved, or both.

Benewah County's entire planning area is comprised of unserved and underserved households. A recent study performed by Geo Partners, LLC determined that 100% of the households in the proposed service area are in a Socially Vulnerable Community (SVC) zone. A Socially Vulnerable Community is a community or area identified by the Center for Disease Control's Social Vulnerability Index with a score of 0.75 or higher based upon several census metrics, including income and household size.

In September of 2021, Timber Plus Economic Development Association was awarded \$10,000 in grant resources from Imagine Idaho Foundation to plan and design a broadband infrastructure plan for Benewah County to reach unserved and underserved residents. In 2022, Benewah County conducted a county wide speed testing campaign to determine unserved and underserved residents and to utilize that data to perform a pre-engineering study conducted by GEO Partners/Breaking Point Solutions. Benewah County and Timber Plus Economic Development have stakeholder engagement with local internet service providers including Chickadee Wireless, Intermax, Red Spectrum, and Ziplly Fiber.

This planning grant will fund the next stage of planning and design, utilizing the work that has been completed to date. We will take the speed testing data, pre-engineering study, list of existing ISPs, and cost analyses to complete the process of building a final plan, conducting an RFI/RFP for interested vendors and ISPs, and contracting final grant writing for upcoming grant funding opportunities. Specifically, the planning funds will:

- Facilitate the creation of a broadband plan to expand coverage to the most service locations at the highest reasonable speeds throughout the county to reduce or eliminate under- or unserved locations. Activities associated with creating the plan include:
 - Review existing provider coverage
 - Continue outreach for speed testing to confirm provider and local crowdsourced data
 - Support challenge of FFC bulk fabric data
 - Determine technology design choices
 - Evaluate cost and coverage of each choice
 - Design infrastructure plan and document user impact
 - Consider ownership and management options for the fiber assets
 - RFI/RFP letting to providers
 - Review and assessment of provider proposals
 - Select partner provider(s)
 - Provider contract negotiations

- Establish project plan milestones and timelines
- Grant writing to reflect above work plans
- Work with businesses in the county to determine workforce needs
- Outreach to determine educational and training needs
 - Assess locally available training to meet needs
 - Develop training and outreach programs to encourage adoption
- Set affordability targets
- Establish a regular communications channel with all stakeholders

C. Description or name of contractors or third-party vendors to be used to facilitate a planning study or strategic plan.

The county will be looking for a consulting firm with experience in program development, project and portfolio management, and strategic planning to assist in this project.

Funding Request.

\$25,000

1. Planning proposal costs (include budget overview with estimated costs).

Benewah County seeks \$20,000 to contract with an agency to complete planning activities and to contract with a grant writer to design grant application documents based on planning activities. The following costs are anticipated to fund the activities of the project proposal:

Item	Estimated Cost
Grant Writing	\$5,000
Project Management	\$20,000
TOTAL	\$25,000

2. Project term in which the planning grant would start and be completed.

The infrastructure project will begin immediately with grant writing for the project planning funds. The remaining activities will begin immediately upon grant award. The planning process is anticipated to take about 4 months. Subsequent business and educational outreach will be addressed via DEA funding when available.

ACTION	TIME REQUIRED
Confirm existing providers and their broadband coverage	2 weeks
Continue speed tests to confirm actual user experience, challenge FCC bulk fabric data	Parallel
Confirm service locations and anchor institutions	1 week
Determine technology design choices	2 weeks
Confirm cost, timeline, and service impact of each design	1 week
Make technology choice and design infrastructure	1 week
Consider asset ownership and management options	2 weeks

Set adoption targets	Parallel
Determine affordability guidelines	Parallel
Determine training and educational needs	Parallel
RFP letting to providers	1 week
Review provider proposals	3 weeks
Select provider (s)	2 weeks
Negotiate contract pending funding award	3 weeks
Set timelines and milestones	2 weeks
Write infrastructure funding grant	Parallel

3. Explanation and demonstration of the applicant’s financial ability to complete the planning process within the applicant’s proposed budget.

As a unit of government in the State of Idaho, Benewah County has been the recipient of many state and federal grants and has the financial and organizational capability to move the project from initiation to completion. The County has the staff and resources to ensure successful completion of the planning process within the proposed budget. Notably, Benewah County is the only county in the State to receive grant funds for remote telehealth services in 2020.

4. Description of any proposed match for the planning grant. Match includes financial and in-kind contributions toward the project. In-kind contributions should be converted into monetary values for calculation.

While Benewah County does not have the financial resources to provide a cash match for this project, partner agencies equally committed to improving broadband in Benewah County will contribute match as follows:

- The Executive Director for the Greater St. Joe Development Foundation will dedicate one-quarter of his time for development and implementation. This in-kind contribution equates to approximately \$14,000.
- The Panhandle Area Council, Economic Development Corporation for Region I Idaho, is donating their time for preparation of this planning proposal and the project proposal. It is estimated that this in-kind value is approximately \$4,500.
- Imagine Idaho Foundation will donate 4 hours per month in planning or a value of approximately \$9,600 of in-kind planning over a twelve-month period.

In addition, Imagine Idaho granted \$10,000 to cover Benewah County’s speed testing and pre-engineering study costs, as well as about \$19,000 in in-kind planning time in 2022.

The overall value of match contributions to Benewah County’s planning process totals \$56,500.

D. Description of whether (and if so, how) this planning grant would help address broadband infrastructure in Idaho in conjunction with the Idaho Broadband Advisory Board’s Strategic Plan or federal fund guidelines.

Benewah County’s planning project will engage new partners, connecting local government with service providers and the community. The data collection, community education, and business and industry engagement will strengthen broadband infrastructure in Idaho by increasing regional buy-in for the state and creating the documentation necessary to successfully apply for funding to bring a broadband project to completion.

E. Explain how the proposed planning grant would address priorities outlined in the Board’s Idaho Broadband Strategic Plan. This includes addressing distance learning, telehealth, public safety, economic development, and business opportunities, promotes dig once policies.

Broadband access in rural areas is linked to increased job and population growth, higher rates of new business formation, higher home values, and lower unemployment rates. Benewah County’s interest in expanding these opportunities for its residents aligns with the Board’s Idaho Broadband Strategic Plan by addressing the root cause of many of the barriers that rural Idahoans face – connection.

This broadband planning grant sets the foundation for Benewah County to provide distance learning opportunities, promote telehealth for vulnerable, disabled, veterans, and elderly citizens, improve public safety, bolster economic development, and facilitate the creation of additional business and economic opportunity in the area. Benewah County, like many rural communities, has a lower than average high school graduation rate and lower than average percentage of residents having earned a college degree. Access to broadband will encourage residents to seek continuing education opportunities, engage in distance learning, and connect with educational tools they would not otherwise have access to. Benewah County residents and businesses will have access to the resources necessary to start and grow a business; small business will more easily attract a quality workforce; and communities will explore innovative ways to handle growth. Broadband access is key to ensuring opportunity and progress amidst the changing landscape of business, education, and work. Additionally, promoting a dig once policy will be at the forefront of the project grant as Benewah County engages providers and the community to bring this valuable resource to the Panhandle in coordination with state transportation, infrastructure and improvement planners.

Broadband planning proposals may be submitted with the acknowledgment that the submission in no way guarantees funding in the future. Idaho Broadband Advisory Board planning funds will be awarded pursuant to future grant guidelines and application criteria and in correlation with the statewide broadband plan.

PROJECT PROPOSAL

A. Applicant's contact information:

Name: Deanna Bramblet
Title/Position: Clerk/Auditor
Mailing address: 701 W College Avenue, Suite 101, St. Maries, ID 83861
Email address: dbramblet@benewahcounty.org
Phone number: 208-245-3212

B. Broadband project proposal outline and scope should include the following:

1. Description of the extent to which the project will facilitate deployment of high-speed broadband networks to areas that are currently either unserved, underserved, or both. It is difficult to participate in our modern economy without access to reliable high-speed internet. Impacts of the Covid-19 pandemic emphasized the deficiencies of the broadband systems across the State of Idaho as Idaho communities saw adverse impacts to healthcare, education, industry, and public safety. Existing barriers to connectivity were exacerbated by the higher demands of those who had to work from home, students who had to learn from home, and healthcare providers assisting patients through online platforms. Timber Plus, the county's economic development corporation, commissioned a Rapid Design Study in October of 2022 on behalf of Benewah County to collect data and explore solutions to the lack of consistent access to broadband in the county.

The study removed all areas where broadband was previously funded by USDA, CAF, and RDOF. This reduced the study from approximately 3,820 households to about 1,464 households. These households were largely surrounding some of the minor population areas such as the city of St. Maries. For the remaining households, the study calculated that a 100% fiber-to-home solution would cost on the order of \$21 million, or about \$14,500 per household.

The following data was considered when identifying unserved or underserved communities in Benewah County:

- Approximately 55% of the households are in Opportunity Zones.
- The area is classified as rural, with an average density of 4.97 per square mile, well below the USDA threshold of 6 per square mile.
- 100% of the area is in an SVC zone (Severely Vulnerable Communities).
- Benewah County ranks 31st out of 44 counties for median household income, and it has the 17th highest poverty rate.
- Households without access to reliable broadband service at 100/20 Mbps or 25/3 Mbps.

This project will build out fiber that will deploy high speed internet at 100/100 mps speeds over a 294 square mile area to unserved and underserved homes in rural Benewah County.

2. Description of type(s) of technology to be used (i.e., fiber, fixed wireless, cable etc.).

This will be a 100% fiber to home project. The county has a partnership with Avista Utilities and will be able to use existing power poles where available. Other methods include boring underground, and use of trenching and aerial fiber.

3. Number of unserved or underserved locations and/or households that will be served by the project and at which speeds the locations will be connected (i.e., 25/3 Mbps, 100/20 Mbps, or 100/100 Mbps).

1,464 unserved and underserved households will be served by the project at 100/100 Mbps.

4. Project term for the proposal (anticipated time frame for project from start to finish in months).

It is estimated that the project will take 24 months (2 years) to complete, weather permitting.

5. Funding Request.

\$21,000,000

6. Anticipated total project costs and financing sources.

The total project cost is estimated at \$21,000,000 with a grant request to the Idaho Broadband Council for the Idaho Broadband Grant Funds.

7. Project Ownership (i.e., private, public, public/private partnership, other).

This will be a public/private partnership with Benewah County owning the fiber infrastructure and partnering with a third-party administrator.

8. Proposed project costs (include budget overview and estimated costs).

The proposed project costs total \$21,000,000 to complete the project in its entirety. A phased project is possible, using multiple funding sources as state and federal funds become available.

Item	Estimated Cost	Source
Fiber cost	\$16,016,000	Idaho Broadband Grant
Tower Cost with CPEs	3,000	Idaho Broadband Grant
Connection Costs	810,563	Idaho Broadband Grant
Capitalized Interest	282,000	Idaho Broadband Grant
Labor	2,888,437	Idaho Broadband Grant
TOTAL	\$21,000,000	

9. Explanation and demonstration of the applicant’s financial ability to complete the project within the applicant’s proposed budget.

Benewah County has been the recipient of many state and federal grants and has a record of successfully moving projects from the initiation stages to completion. The county has the staff and resources to ensure completion of the implementation process within the proposed budget. If the costs exceed the budget, then unserved areas will be given priority and will be completed first.

10. Description of any proposed match. Match includes financial and in-kind contributions toward the project. In-kind contributions should be converted into monetary values for calculation.

The total match for this project is \$25,000. Match for this project comes in the form of community support. Imagine Idaho contributed \$10,000 to complete the Rapid Design Study during the initial planning stages. Timber Plus has committed to matching with Executive Director salary totaling \$15,000 over the course of two years to drive the project and oversee completion.

11. Description of whether (and if so, how) this project works in conjunction with the Idaho Broadband Advisory Board’s Strategic Plan. This includes addressing distance learning, telehealth, public safety, economic development, business opportunities, and/or promotes dig once policies.

Using the guiding principles in the Idaho Broadband Strategic Plan, the Benewah County Rapid Design study confirmed that all five of the strategic objectives identified will be met with this project:

- a. Infrastructure and Technology – The project will incorporate middle mile and last mile infrastructure investments to connect residents, businesses, and community anchor institutions that are currently unserved and underserved. New partnerships will be formed with ISPs, state agencies, and experts. Further, any trenching proposed by this project will follow Idaho’s Dig Once principles and Right of Way policies to build out the broadband infrastructure responsibly.
- b. Economic Development – It is the mission of the County’s economic development corporation, Timber Plus, to encourage and support existing and future business activity in the area. This project will provide broadband infrastructure opportunities to previously unserved areas, increase potential economic diversification through enhanced connectivity, and identify remote work and learning, telehealth, and public safety opportunities. To support the various needs of rural infrastructure, the County partners with appropriate state, federal, and local agencies to avoid duplication of services.

- c. Educational Access – Due to the rural nature of the County, it is imperative that students and educators have access to affordable and reliable broadband service in homes, schools, and libraries. Investments in Broadband infrastructure will be prioritized in unserved or underserved areas where students, their families, and teachers live and work.
- d. Operations & Data – Benewah County is in communication and collaboration with Shoshone, Kootenai, and Latah counties as all three counties have areas in service that lack redundancy. This project will build out fiber infrastructure that will make it possible to merge dead ends with other counties in the future.
- e. Public Safety & Communications – Of utmost importance is the reliability of broadband service for access to emergency communications. This project will ensure connection to emergency services for all Benewah County residents. Additionally, EMS services will greatly improve to those areas that are currently unserved or underserved, as they will have access to GPS data that will identify locations for more efficient response times. Access to high-speed Broadband will offer a consistent means of communication when other forms of power are out of service.

Benewah County's broadband goals are directly in line with the Idaho Broadband Strategic Plan, removing barriers and improving opportunity for rural Idahoans in Idaho's Panhandle.

Broadband project proposals may be submitted with the acknowledgment that the submission in no way guarantees funding in the future. Idaho Broadband Advisory Board projects will be awarded pursuant to future grant guidelines and application criteria for Capital Project Funds, BEAD Funds, and/or State funding, and in correlation with the statewide broadband plan.



December 1, 2022

Idaho Department of Commerce
Attn: Ramón S. Hobdey-Sánchez,
P.O. Box 83720
Boise, ID 83720-0093

RE: Notice of Request for Broadband Project and Planning Proposals

Dear Ramón,

Blackfoot Communications ("Blackfoot") would like to thank the Idaho Broadband Advisory Board for the opportunity to respond to the Request for Broadband Project and Planning proposals.

Blackfoot is a rural local exchange carrier that has been building and operating fiber and copper-based networks in Eastern Idaho for decades. Since purchasing Blackfoot in 2013, Blackfoot's parent corporation (a Montana-based cooperative) has invested more than \$20 million in making capital improvements to the data and voice network in Eastern Idaho. Blackfoot intends to build Fiber-to-the-Premise ("FTTP")-based Internet service at speeds of up to 1 Gbps (or more) to all the communities it serves, including Ashton, Chester, Drummond, Egin, Elk Creek, Island Park, Island Park Village, Lamonte, Last Chance, Macks Inn, Marysville, Newdale, Parker, St. Anthony, Salem, Shotgun, Staley Springs, Teton, Valley View, Warm River, and Wilford.

Blackfoot's service territory is in a very remote part of Idaho, covering more than 1,900 square miles that has a population of less than 14,000 people. Blackfoot currently serves residential and business customers, including several anchor institutions (e.g. schools, hospitals, government offices) throughout its service territory. Today, Blackfoot provides fiber-based broadband services at speeds of up to 10 Gbps, copper-based DSL broadband services, voice and other telecom related services to approximately 3,000 customers in Fremont County as well as a small sliver of Madison County, Idaho.

In 2020, Blackfoot began a fiber-to-the-premise project for a portion of its Island Park service area, which covers more than 770 square miles. So far, Blackfoot has invested more than \$10.5 million of its own capital to build-out FTTP to nearly 900 locations in Island Park. In 2023 and 2024, Blackfoot plans to invest several million dollars more to build FTTP-based broadband to hundreds more locations Island Park.



Because of the extraordinary costs to build fiber in this remote, rugged and sparsely populated area, Blackfoot will seek grant funds to supplement its own investments in order to achieve its goal of providing FTTP Internet service to all communities it serves in Idaho. Any awarded grant funds will be focused on facilitating deployment of high-speed broadband at speeds of up to 1 Gbps or more to areas that are currently unserved, underserved, or a combination thereof within its service area.

Blackfoot plans to build FTTP-based broadband to more than 5,000 locations in its existing service territory. Based on its experience in building these types of networks, Blackfoot anticipates that it will take up to 7 years to complete buildout to all its remaining communities. Based on its experience with building these networks, including negotiating an unstable inflationary environment and supply issues, Blackfoot estimates the cost to be approximately \$50 million to build FTTP networks to all 5,000 remaining locations.

Since Blackfoot has invested tens of millions of its own funding already and because of the high costs and sparse population in its service territory, it would need to rely extensively on grant funding to complete those areas. Notwithstanding, both Blackfoot and its parent corporation are well capitalized and will be able to meet any grant funding matching requirements that may be imposed.

We look forward to working with you in developing a comprehensive broadband plan for Idaho and, more importantly, providing fiber-based broadband services to as many locations in the state as possible!

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Williams', with a stylized flourish at the end.

Jason Williams
Chief Executive Officer

Camas County Broadband Planning



CONTACT

Camas County

Travis Kramer, Camas County Commissioner
PO Box 430
Fairfield, ID 83327
Kramer.Camas@gmail.com/(208)764-2242

PROJECT DESCRIPTION

Camas County requests planning funds in the amount of **\$25,000** to finalize a broadband plan to expand coverage to the most service locations at the highest reasonable speed throughout the county, with the goal of addressing unserved and underserved locations.

Planning funds will allow Camas County to work toward expanded internet connectivity and increased connection speeds in Idaho's second least-populated county (pop. 1,139). Improved connectivity will address Camas County's and the Idaho Broadband Strategic Plan's shared goals: provide **economic and business opportunities** in the form of access to work-at-home jobs and commerce, connect Idahoans to **telehealth** and other healthcare resources, expand **educational access** for youth and adults, and improve **public safety** communications in rural areas.

Camas County is home to the county seat, Fairfield (pop. 400), as well as several unincorporated communities. All of the county's residents are identified as either unserved or underserved. Camas County worked with Geopartners and Breaking Point Solutions to conduct a speed testing survey to identify the county's connectivity deficits and create a model that addresses both the needs of the community and next steps in the planning process. The speed test found that 80% of households tested had performance under 25/3 and 100% had performance under 100/20. Next steps in the planning process include exploration of a broadband model that would bring connection to 85% of households with projected savings of \$138 to \$570 a year per household; a competitive RFP process that identifies potential ISP partners to assist with construction and operation; and a combination of education, community surveys, and public meetings to gather information and create community buy-in for this broadband project.

Planning Grant Request

Camas County will hire a firm or individual to support the county's best interest, with expertise in program development, and project and portfolio management. The firm will have expertise working to establish broadband in unserved and underserved locations in the US, and will have broadband industry network and regulatory experts that can manage or augment projects from idea to implementation. This firm or individual will support Camas County with strategic decisions and synchronization of people, processes, platforms, RFPs, vendor agreements and contracts, and the ability to advise on issues that arise along the way to support satisfactory project completion.

When Camas County undertook the initial planning for this project, only one ISP was interested in providing service in Camas County. In recent weeks, there has been growing interest, making this planning process crucial to selecting the best ISP partner to provide consistent affordability and reliability for Camas County residents. The county is prepared to incentivize potential contractors to come in under budget and to provide match to bring this project to completion in the most cost-effective way possible. A competitive RFP process is key to ensuring responsible use of available resources.

Planning activities will include:

- Review of existing provider coverage
- Outreach for additional speed testing to confirm crowdsourced data
- Evaluate cost and coverage of each choice
- Determine technology design choices
- Design infrastructure plan and document user impact
- Consider ownership and management options for fiber assets
- Design RFP process to identify providers
- Review of provider proposals and final provider selection
- Engage in provider contract negotiations
- Establish project plan milestones and timelines

Camas County will contract with a grant writer to provide proposal development services based on the outcome of its planning activities. This will allow Camas County to effectively communicate its broadband plans and apply for state and federal project funding.

FINANCIAL CAPABILITY

Camas County, in partnership with Imagine Idaho, its selected firm/contractor, and other community partners, will execute the planning process using planning funds requested through this proposal. Having successfully managed several large-scale projects and grant awards, the County is financially and organizationally capable of administering planning and project grant funds and leading the planning process. Planning grant line item costs are estimated based on the costs of planning for other planning projects of similar scope. Any costs that exceed the estimated amounts listed in this application will be covered by Camas County or its project partners.

BUDGET AND TIMELINE

This proposed planning project has a **budget of \$25,000** and an anticipated planning and completion period of about **12 months**, factoring in upcoming grant application deadlines.

Camas County and its partners are dedicated to this project and are prepared to invest in its success. While the county does not have cash resources to contribute, the following in-kind and cash **match contributions** have been made or committed to this project:

- Camas County's Commissioner Kramer will dedicate 17 hours a month for 12 months, at a value of \$30/hour totaling \$6,120 in 2023.
- Camas County's prosecuting attorney will provide legal services at three hours per month for 12 months at a rate of \$125/hour, totaling \$4,500.
- 4 hours of staff time per week for 12 months donated by Imagine Idaho totaling \$9,600 in 2023. Imagine Idaho granted \$10,000 in 2022 to cover speed testing and pre-engineering study costs.

The total match investment for Broadband in Camas County is \$30,220.

The chart below illustrates Camas County's 2023 **planning activities, budget, and timeline.**

Activity	Timeline	Budget	Funding Source
Project planning design and management conducted by selected contractor. <ul style="list-style-type: none">• See "Contractors" section for activity detail.	4 months (Feb 2023 - May 2023)	\$25,000	Requested planning funds
	TOTAL Project Request	\$25,000	15

Camas County

BROADBAND PROJECT PROPOSAL



CONTACT

Camas County

Travis Kramer, Camas County Commissioner
PO Box 430
Fairfield, ID 83327
Kramer.Camas@gmail.com/(208)764-2242

PROJECT DESCRIPTION

Camas County's Broadband Project has the following goals:

- Improve Broadband access to unserved and/or underserved locations, affecting hundreds of residents and several small businesses.
- Address distance learning, telehealth, public safety, and economic and business development through better access and community education.
- Create partnerships between government, citizens, businesses, and providers while contributing to Idaho's overall Broadband infrastructure.
- Provide opportunity while keeping costs affordable for Idahoans.

Camas County is home to the county seat, Fairfield (pop. 400), as well as several unincorporated communities. **All of the county's residents are identified as either unserved or underserved.** During the pre-engineering planning study and speed tests, conducted in partnership with Geopartners and Breaking Point Solutions, the county found that 80% of households had performance under 25/3 and 100% had performance under 100/20. Initial studies recommend a hybrid fiber and wireless model that will bring connection to an estimated 85% of residents, or just over 418 households, with projected savings of \$138 to \$570 a year per household.

The recommended **hybrid fiber and wireless model** will bring high-speed connection to the most residents for the least cost and the least potential for unforeseen barriers during the construction process. Estimates for a full fiber model to each home have run as high as \$21M.

The **projected connectivity for this project will be up to 500/500 Mbps for residents in Fairfield and a minimum of 100/20 Mbps** throughout the county. Camas county anticipates that this will be a **public-private partnership** where a private ISP entity will be awarded to build and own a majority of the resources, handling maintenance and operation for a system with competitive service providers to ensure affordability. Using preliminary estimates, Camas County is prepared to present a project that will result in a positive RTI for the selected provider.

A **competitive RFP process** as part of the planning phase will identify local providers positioned to meet Camas County residents' needs as far as speed, service, and affordability. Camas county is committed to a competitive process that builds on the community and stakeholder engagement activities that have already been done as part of the ongoing planning and implementation process.

With an aggressive digital equity outreach plan, we aim to subscribe 85% of connected households in the county. The county's outreach and education campaigns have resulted in strong community support and interest in the process of bringing broadband to Camas County. Continued education, community surveys, and public meetings will gather information and add additional community buy-in for this broadband project.

BUDGET AND TIMELINE

This proposed project has an **estimated budget of \$3,500,000** and an anticipated **timeline of 18 months from the date of funding** (ex. June 1, 2023 - Dec 31, 2024).

Camas County and its partners are dedicated to this project and are prepared to invest in its success. While the county does not have cash resources to contribute, the following cash and in-kind **match contributions** have been received over the course of the planning process or are committed for the implementation portion of this project:

- Camas County's Commissioner Kramer will dedicate 17 hours a month for 12 months, at a value of \$30/hour totaling \$6,120 in 2023.
- Camas County's prosecuting attorney will provide legal services at three hours per month for 12 months at a rate of \$125/hour, totaling \$4,500.
- 4 hours of staff time per week for 12 months will be donated by Imagine Idaho totaling \$9,600 in 2023. Imagine Idaho granted \$10,000 in 2022 to cover speed testing and pre-engineering study costs. Additionally, Imagine Idaho donated \$19,000 of in-kind planning time in 2022.

The current total match investment for broadband in Camas County is \$49,720.

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Anticipated total project costs, shown in the budget below, were estimated based on pre-engineering study recommendations for a hybrid fiber and wireless model. During its competitive RFP process, Camas County anticipates receiving multiple bids and will incentivize interested ISPs to come in at their best price, including match commitments, in order to minimize total costs.

Budget Line item	Total
Fixed Equipment : towers, generators, cabinet, switch, distribution, microwave links	\$1,650,000
Nodes	\$1,200,000
Fiber	\$650,000
Budget Total	\$3,500,000

FINANCIAL CAPABILITY

Camas County, in partnership with Imagine Idaho, selected contractors, and other community partners, will initiate the implementation portion of this project using project funds requested through this proposal. Having successfully managed several large-scale projects and grant awards, the County is financially and organizationally capable of administering project grant funds and leading the implementation process. Project grant line item costs are based on estimates received during the planning portion of this project.

SUMMARY

Camas County's Broadband project aligns with the Idaho Broadband Advisory Board's strategic plan as it seeks to create opportunity for rural Idahoans to expand their education, improve their financial well-being, build a business, access telehealth services, and connect with others. Camas County is the very definition of a rural Idaho county. With a household median income significantly below the state's average, just 32 employer establishments as of the 2020 census, and no in-person continuing education or higher education facilities, the connection and opportunity associated with consistent, high-speed broadband access is crucial to maintaining healthy and vibrant communities. Broadband access in rural areas is linked to increased job and population growth, higher rates of new business formation and home values, and lower unemployment rates. This project will significantly reduce connection barriers faced by rural Idahoans through expanding and improving broadband access in Camas County.

Idaho Broadband Advisory Board: Request for Proposals for Broadband Projects & Planning Grants

A. Applicant/contact information:

Dodd Snodgrass
Executive Director
Clearwater Economic Development Association (CEDA)
1626 6th Ave. North, Lewiston Id. 83501
dsnodgrass@clearwater-eda.org
208-746-0015

B. Description of the extent to which the planning funds will be used to facilitate deployment of high-speed broadband networks to areas that are currently either unserved, underserved, or both:

CEDA will utilize contracting services and facilitated planning for Idaho's Region 2, which includes Nez Perce, Latah, Idaho, Lewis, and Clearwater counties. Much of this 13,500 square mile area is unserved or underserved. CEDA will engage a consultant or team to facilitate the creation of a broadband plan for each county and to integrate individual county plans into a regional strategy document.

This plan will be aided and informed by regional Broadband Action Team (BAT) planning. The completed document will inform grant-writing for available broadband funding and infrastructure projects that reduce the under and unserved locations in our region.

Proposed scope of work for the county plans:

- Review existing provider coverage using public sources, engagement with regional ISPs, crowdsource speed test data and surveys.
- Determine technology design choices
- Evaluate cost and coverage of each choice
- Design infrastructure plan and document user impact
- Consider ownership and management options for the fiber assets
- RFI/RFP letting to providers
- Review and assessment of provider proposals
- Select partner provider(s)
- Provider contract negotiations
- Establish project plan milestones and timelines
- Set affordability targets

Proposed scope for integrated regional plan:

- Integrate individual county plans to identify opportunities for projects to be combined to meet economy of scale considerations and reduce cost/maximize benefits.
- Address region-level challenges and opportunities including ROW considerations, Dig Once policies, and partnership opportunities.

C. Description or name of contractors or third-party vendors to be used to facilitate a planning study or strategic plan:

CEDA will use government procurement requirements to select contractor(s) to provide planning services.

D. Funding Request: **\$135,000**

E. Planning proposal costs (include budget overview with estimated costs). Budget overview and estimates

Item	Estimated Cost	Cost for Region
Grant Writing (CEDA)	\$5,000/county avg	\$25,000
Contract Services	\$20,000/county	\$100,000
County Integration (contractor)	\$10,000	\$10,000
Total		\$135,000

F. Project term in which planning grant would start and be completed.

Planning will begin immediately upon receiving grant award with finalization of scope of work and RFP process for a qualified contractor to perform the work.

Individual county plans are anticipated to take between 4 and 6 months to complete. The regional plan, which can only be completed once individual plans are finalized, is estimated at 4 months.

Priority will be given in the timeline for the planning process to key dates identified by potential funding agencies, including projected BEAD award deadlines, with the goal of completing planning processes in time for eligible applicants to submit and complete infrastructure projects before the award completion dates. These dates will inform how the contract between CEDA and the responsive contractor is created and what tasks within the contract are given priority.

- G. Explanation and demonstration of the applicant’s financial ability to complete the planning process within the applicant’s proposed budget.

CEDA, a non-profit organization, has extensive experience receiving and administering funds for planning processes.

- H. Description of any proposed match for the planning grant. Match includes financial and in-kind contributions toward the project. In-kind contributions should be converted into monetary values for calculation.

The match for this request is going to come in the form of the volunteers who make up the Broadband Action Teams (BAT’s). These volunteers are the ones who are dedicating some of their time each week to getting others in their communities to take speed tests, challenge FCC maps, and take service/affordability surveys (as mentioned in Question B).

In-Kind Match calculation:

Broadband Action Teams:

Clearwater County: 10 individuals, 20 hours each, @ \$29.95/hr = \$5,990

Idaho County: 10 individuals, 20 hours each, @ \$29.95/hr = \$5,990

Lewis County: 10 individuals, 20 hours each, @ \$29.95/hr = \$5,990

Latah County: 10 individuals, 20 hours each, @ \$29.95/hr = \$5,990

Nez Perce County: 10 individuals, 20 hours each, @ \$29.95/hr = \$5,990

Total In-Kind = **\$29,950**

- I. Description of whether (and if so, how) this planning grant would help address broadband infrastructure in Idaho in conjunction with the Idaho Broadband Advisory Board’s Strategic Plan or federal fund guidelines. Explain how the proposed planning grant would address priorities outlined in the Board’s Idaho Broadband Strategic Plan. This includes addressing distance learning, telehealth, public safety, economic development, and business opportunities, promotes dig once policies.

This planning grant would help address broadband infrastructure by providing the data and community engagement needed to proceed with future-proof broadband builds that meet the needs of our residents. A direct, focused plan with professionals in the broadband field will help north central Idaho to close our digital divide and open doors for economic opportunity. It will position communities more strategically to apply for the CFP and BEAD funding.

North central Idaho is mountainous, geographically large, with a low population density, and larger distances between communities. This area of Idaho had significant challenges supporting distance learning, telehealth, public safety, and business opportunities.

The Idaho Broadband Strategic Plan outlines four key strategic priorities, all of which are addressed by this proposal:

1. Infrastructure and Technology:

This planning will engage partnerships between ISPs, local governments, state agencies, and experts and position rural un/underserved communities to apply for and leverage available funding. Dig Once and ROW policies will be evaluated in the proposed plan.

2. Economic Development:

Economic diversification through expanded internet access and capacity will be achieved through planning. Remote work, e-learning, and telehealth capability will be evaluated and prioritized. Digital inclusion and digital equity priorities will be included.

3. Educational Access

Through the engagement of school districts, libraries, and institutions of higher learning in Region 2, this plan will identify gaps in broadband infrastructure and allow the region to prioritize projects that invest funding in students, families, and teachers in unserved and underserved areas.

4. Operations and Data

The regional approach offered in this proposals maximizes funding efficiency through collaboration. The collaborative approach proposed here shares data between traditionally siloed sectors of the broadband discussion and encourages stakeholders, state agencies, and ISPs to work together towards common goals.

Broadband planning proposals may be submitted with the acknowledgment that the submission in no way guarantees funding in the future. Idaho Broadband Advisory Board planning funds will be awarded pursuant to future grant guidelines and application criteria and in correlation with the statewide broadband plan.

From: Strong, Stafford G <Stafford.Strong@charter.com>
Sent: Monday, November 28, 2022 4:10 PM
To: COM Broadband <broadband@commerce.idaho.gov>
Cc: Ramon Hobdey-Sanchez <ramon.hobdeysanchez@commerce.idaho.gov>
Subject: Charter Communications Response to Notice of Request for Broadband Project and Planning Proposals

Idaho Department of Commerce, Attn: Ramon S. Hobdey-Sanchez,

Please find Charter Communication's response to Idaho Department of Commerce Notice of Request for Broadband Project and Planning Proposals.

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Charter Communications is currently exploring partnerships on projects of various sizes and costs in a number of municipalities. Final estimations will be dependent on a number of factors once grant program rules and parameters are released. While it is our hope that we will be able to participate in the State's broadband infrastructure grant program, the specific requirements of the program are essential for us to know before fully determining our ability to participate in the program.

A properly structured state-funded broadband deployment program should incorporate several key components. These essential components should include, but not be limited to the following: Allocating limited government resources to unserved and underserved areas only, so that areas where residents already have access to broadband service and areas where federal funds (such as through RDOF) have been committed are not overbuilt and sufficient resources remain available to bring broadband to those who currently lack any access; Current broadband providers should have the opportunity to apply for the funds; Favoring one category of provider or business model over another is a counterproductive limitation on the deployment of broadband infrastructure; Current broadband providers should have the ability to challenge applications as they are in the best position to know whether an area is already served, so that state funds are directed at those most in need; And significantly, implementing agencies should not impose requirements that disincentivize private companies from participation – things like open access requirements, rate regulation, and tier offering requirements should be avoided. We look forward to working with your office as the rules continue to be developed, and ultimately will evaluate our participation in the program once the rules are made available and the grant window is open.

Sincerely,

Stafford Strong

Senior Manager, State Government Affairs – Washington and Idaho | C: (360) 936 – 0522
(preferred) | O: (360) 258 – 5109
222 NE Park Plaza Dr, #231 | Vancouver, WA 98684



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Response to Broadband Projects & Planning Grants



PRESENTED TO: IDAHO BROADBAND ADVISORY BOARD

Submitted By: The City of Ammon, Idaho

Idaho Broadband Advisory Board

Response to Broadband Projects & Planning Grants

City of Ammon Shovel Ready Construction Funding Request

Contact info:

Name: Dan Tracy

Title/Position: City of Ammon IT Director

Mailing address: 2135 South Ammon Road-Ammon, Idaho 83406

Email address: dtracy@cityofammon.us

Phone number: 208-612-4054

Ammon is applying as **Idaho local government**

The Project:

The city of Ammon is proposing a Phase 6 Shovel Ready Project, with a proven history of success. Phases 1-5 of fiber installation has run on time and on budget, with plans for this phase to proceed with the same accuracy and outcomes.

Key factors in accessibility to broadband are availability and affordability. While FCC maps may show availability in the Ammon area, they do not necessarily adequately address affordability or the daily financial challenges of many people, some of whom (both in Idaho and elsewhere) must choose between paying rent or purchasing medicine. The next build-out in Ammon is specifically addressing the needs of socioeconomically challenged residents in the neighborhoods of Hillsvie and Hillsdale. Oftentimes, the prices charged by local providers are 2X the prices of ISPs riding the City's fiber network. In order to meet these challenges, Ammon has developed a very detailed shovel-ready project called Local Improvement District 6. While we recognize that Ammon is not an isolated rural community or a community in remote mountainous areas, the project Ammon is proposing still clearly meets the criteria set forth by the Department of Commerce, Broadband Office, and the State of Idaho.

The city of Ammon and past successes:

Ammon, the city "Where Tomorrow Begins," is a suburb city located directly between the Ammon foothills on the east and the city of Idaho Falls on the west, in Bonneville County, Idaho. Ammon is the 15th largest city in Idaho and was one of Idaho's fastest-

growing cities from 2000 to 2010. The city experienced a 123.3% growth rate from 2000 to 2010 based on the 2010 US Census.

In 2010, the city of Ammon began construction of a municipally owned fiber optic system. Since that time, they have invested in several hundred miles of fiber optic infrastructure. This infrastructure was initially dedicated to the operational needs of the City, primarily SCADA (supervisory control and data acquisition) which is a control system architecture that consists of networked data communications, graphical user interfaces, and computers for high-level process supervisory management. Today, this infrastructure serves city operations, the local 911 dispatch center, first responders, nine different service providers, 110+ area businesses, and over 1600 residential properties.

The City has built out most of its infrastructure in two different ways. The most common method is utilizing Local Improvement Districts (LIDs). In the LID process, the City takes the total cost of the fiber project and splits it equally among all of the residents who opted in to receive the fiber. Historically, this cost has been between \$2900 and \$3450 per resident in the LID. The City works with various banks at the end of the project to have those amounts financed for the residents. The second method is an installation in new developments while they are under construction. In these "Fiber Ready Developments," the developer installs the vaults and conduit per the City's design, and afterward, the City pulls in the fiber, splices, and does all of the installations. This costs the developer \$1200 per home, but each newly constructed home receives fiber.

In the Ammon Fiber Model, it is important to note the separation between the service that is provided and the physical infrastructure. The City itself does not provide service to any of the residents or businesses where our fiber is located, the City only provides the physical infrastructure to connect everything together. The service is provided by various Internet Service Providers (ISPs), who set up their equipment in the City's server room or their colocation center. Ammon then uses another company, EntryPoint, to configure the network automation to connect those ISPs to the residents.

When Ammon connects a resident, they are provided with access to a simple website, which the City calls a portal page. This portal page controls a Virtual Broadband Gateway (VBG). This VBG is installed at the resident's home and has automation software, from EntryPoint, which allows the resident to open a portal page and view the various ISPs and the services they provide. The resident chooses their ISP and service, then the VBG device makes some network changes to connect them to their chosen ISP. The entire process is very quick, taking only a few minutes. This process also leaves the resident in control of which service they need, as well as how much they would like to spend per month.

On the Ammon network there are no contracts and there are no data limits. Residents have the option to change their ISP at any time. This creates a competitive environment for the ISP and drives down the price, benefiting the residents. The City does not control the price of the services provided, the payments for those services go directly from the resident to the ISP. In the city of Ammon, most residents pay about \$30.00 per month

for a 1-gigabit symmetrical connection, once their construction costs are paid off.

The Benefits of Ammon Fiber:

- The City and the residents own the physical fiber in the ground
- Ammon builds the infrastructure themselves - changes and modifications are not as costly as it is all managed in-house
- The automation in selecting a plan increases competition and drives down the cost
- After construction fees the resident owns their fiber, this makes their monthly cost much less expensive and increases their land value
- All of the City's fiber is in the ground and protected
- The automation involved allows only a couple of people to manage a large network

Ammon predicts that by the end of 2022, 65% of the City will have access to the City's fiber network.

Sustainability:

Ongoing costs include annual operations and maintenance ("O&M") expenses to support the fiber network and installations. Finally, the City takes into account additional potential staffing costs that may be required to manage the current and eventual fiber network.

To ensure proper performance of the fiber network, regular maintenance will need to occur to repair any problems with the fiber network. One benefit of a fiber network is the relatively low amount of maintenance needed to keep the system up and running. The system should work properly unless there is specific damage that occurs somewhere in the network, or, in the rare event of equipment failure. The main maintenance will stem from breaks that occur in the fiber due to damage to the infrastructure – i.e. conduit caused by illegal digging, or damage to the end equipment, such as a failed end device. The current maintenance responsibility belongs to the City, which already has all the needed tools, equipment, and training in performing fiber network maintenance.

Costs for fiber replacement are expected to be relatively low for the first twenty-plus years following construction. However, since all circumstances cannot be known initially, the City is already building a replacement fund. These funds would be utilized in the event of a catastrophic failure (i.e., windstorm, ice storm, flooding, etc.) where entire portions of infrastructure would be required to be replaced. This would also include equipment such as switches, routers, and end equipment which may have expired warranties after 3-5 years.

The City has approached fiber infrastructure as a continuous department rather than a one-time project. Just as roads are extended and widened periodically to support more

traffic, the fiber network will eventually need to be expanded to support more users and applications in the Ammon area. The City has created an organizational and policy framework for the construction and management of fiber and long-term connectivity objectives. This will facilitate dedicated focus to ensure the network serves all community needs. The City integrates fiber connectivity into all future planning activities through a coordinated approach that provides for adequate planning to accommodate needs. The City has designed its policies and procedures around common telecommunications industry standards sooner, rather than later. This includes City code based on service level agreements (“SLA”), acceptable use policies (“AUP”), and other common policies governing the use of network infrastructure.

Although Ammon has extensive miles of a fiber network and miles of deployed conduit, deep planning has been done for the City’s next phase of network deployment to ensure the long-term support of municipal & Smart City services including:

- Support Innovation and Technology
 - Enable connectivity across City facilities to support secure Departmental applications
 - Maximize redundancy and resiliency for City services
 - Design sufficient capacity to meet City’s long-term vision
- Support Water/Wastewater Utilities
 - Construct all possible locations for fiber connectivity
 - Augment SCADA functions to enhance data collection activities
- Support Parks & Recreation
 - Identify City park facilities that may benefit from fiber and/or wireless connectivity
 - Design future fiber connectivity to these locations
- Support Future Smart City Technologies
 - Design the network with sufficient strand capacity to support future applications such as ITS, etc.
- Applications
 - Create splice points at all key intersections
 - Plan fiber access points and termination for multiple applications such as WiFi6
 - Sufficiently size fiber vaults, handholes, and splice cases appropriately along major corridors
- Enable Smart Pole Connectivity
 - Build sufficient capacity into the backbone to support smart street light connectivity
 - Plan the network to support fiber backhaul from streetlights and utility poles
 - Plan for public safety applications

- Design a network for ITS to include autonomous vehicle applications

The Importance of Underground Infrastructure

The City of Ammon deploys all of its infrastructure underground, and there are a few key reasons for this. The overarching goal is that keeps the uptime of the fiber network as high as possible. Having infrastructure below the surface, with no pedestals above ground, means that infrastructure is not susceptible to being hit by vehicles or other equipment. It also means that infrastructure undergoes fewer temperature variations and is, therefore, less susceptible to expansion and contraction which may shorten the life of connection points. While it may be more expensive and intrusive upfront, a significant amount of costs can be saved in the long run in the form of downtime and employees to repair infrastructure.

i. Description of the extent to which the project will facilitate deployment of high-speed broadband networks to areas that are currently either unserved, underserved, or both.

The city of Ammon is in the planning process of its 6th fiber buildout. This buildout will cover approximately 1200 homes with a focus on the unserved and underserved within the City of Ammon (specifically the Hillview and Hillsdale communities). The City estimates that approximately 50% of the residents in this Phase 6 are in need of reliable and affordable access to high-speed internet, as this is the most socioeconomically challenged part of the City. The area is not technically rural, however, the broadband needs of these residents are significant. As the Covid Pandemic demonstrated, the need for dependable high-speed internet is vital for students, family members working from home, and telemedicine. With each emerging strain, as well as the most recent RSV outbreak, more parents are spending time at home with ill or immunocompromised children and elders. The need for reliable internet is growing year by year, and Ammon is determined to keep up with the needs of its residents.

This project will be carried out by the City itself, as using its own construction crew is the best way to control the timeline, budget, and priorities of the City.

A dedicated strand of fiber is run from each home that opts into the fiber project, back to a central node and the Network Operations Center (NOC) that the City also owns. From the NOC, nine different ISPs, five of which provide residential service, also connect to the network to provide service. The City only provides physical fiber infrastructure, not service. Once the fiber is installed, residents have access to a website where they choose the desired service. After the choice is made, the automation for the network connects the resident to the ISP they have chosen. This process allows a single fiber to

provide services from different ISPs automatically, leaving the resident in control of their needs and budgetary constraints.

Automation:

The scale and complexity involved in the deployment of a large physical fiber infrastructure that retains its ability for several different ISPs to operate in a logically separated manner is a unique one. The City of Ammon utilizes Entrypoint software on all of its end devices called Virtual Broadband Gateways or VBGs that are installed in the residents' homes. These VBGs were created and have undergone a long development cycle with the Ammon Fiber Model, and are continuing to improve as they are becoming the backbone of other cities utilizing the Ammon Fiber Model. Once a resident has been installed and an account set up for them, they have the ability to access a portal page. From this portal page, the resident can choose the level of service they desire, up to 1 gigabit. Residents have the ability to log on at any time and quickly change the ISP they are using, while also having the option of signing up for multiple services on the same device if they desire. There are no data caps or contracts and giving residents the ability to operate in such an open market incentivizes providers to provide services at a very cost-effective rate.

ii. Description of type(s) of technology to be used (i.e., fiber, fixed wireless, cable , etc.)

The city of Ammon Fiber Department only deploys fiber optic infrastructure with a dedicated fiber run to every home. This fiber optic infrastructure is always installed underground, as having the entire network underground significantly reduces the opportunity for a vehicle or other unexpected event to take down a section of the network.

Unlike shared internet, dedicated internet access means there's only one connection to a home or business. Locations with dedicated fiber connections "own" their bandwidth and never share it with anyone else. This guarantees 99.99% uptime and symmetrical download and upload speeds regardless of what it's used for. This type of internet connection is a much better option for those who need/want the following:

- Faster speeds for uploading, downloading, or transferring large files and data.
- High demand for streaming media such as video
- Having lots of employees using the same connection
- Secure and direct connection to Cloud servers and applications
- Demand for 24/7 data access and uptime
- Reliable and remote secure access to video surveillance

The Covid-19 pandemic has increased the nation's understanding of the crucial role high-speed internet access plays in everyday life. In a time of social distancing, people needed broadband to work from home, access health care services, apply for public assistance, order groceries or prescriptions, and connect with classrooms.

The pandemic shone a light on the drastic discrepancies in access to high-speed internet in the United States. In 2020, there were more than 14 million people without any internet access and, according to a Federal Communications Commission study. This may actually be an undercount, as the FCC data is based on census blocks and not households. The data may show that a broadband provider serves a particular census block, but not every household in that block may access that service.

The lack of access to high-speed internet led to a larger education gap, increased unemployment for those who could not work at home, and left many without access to urgent or ongoing medical care via telemedicine.

Taking the knowledge gathered during the pandemic, Ammon created and is implementing a plan that focuses on the most reliable and sustainable method of delivering high-speed internet to its residents.

iii. Number of unserved or underserved locations and/or households that will be served by the project and at which speeds the locations will be connected (i.e., 25/3 Mbps, 100/20 Mbps, or 100/100 Mbps).

This project will work to serve 1200 homes in the city of Ammon, with every home connected at 1 gigabit.

This is an affordable plan with the City's support for funding, however, it is voluntary and residents can opt-in at the time of planning.

Some residents choose to opt-out of the program. There are several reasons one may opt out of the program, and the city of Ammon strives to have options for those individuals. Some common reasons include renters who are not the owner of the home, those who do not fully understand how the costs are lower than what they are currently paying or how the program works, residents whose lives are in flux (i.e. selling their home or dealing with a death in the family), or seniors who believe they have no use for high-speed internet and are on a fixed income.

As an alternative to Ammon Fiber residents may select another ISP in their neighborhood, which is commonly provided through point-to-point wireless or a copper-based solution like Centurylink.

The other ISP options, however, run as much as \$110 per month to provide exactly the same or often less service and are less reliable. Not only are these options expensive,

but they do not lend to the long-term sustainability of a dedicated line. The city of Ammon works to demonstrate the value of dedicated fiber to its residents, with costs closer to \$30 a month (¼ of what many pay for a subpar internet connection) but the project is purely voluntary at this point.

iv. Project term for the proposal (anticipated time frame for the project from start to finish in months).

This project will start in the fall of 2023 and will be completed within 36 months. This estimate is based on previous phases of similar sizes, where the City was able to stay on schedule and within budget.

Past Projects/Phases Success:

The city of Ammon began building infrastructure for the public in 2016. For its first project, LID1, there were several lessons learned and key processes formed. Since that time, the City has become more efficient with each project at building infrastructure. With an average cost of around \$2000 per home to deploy fiber, the City has become very efficient at building out infrastructure for its residents. The current project, LID5, is not shown because it is still in progress, but is on track to follow suit with past projects.

Completed/In Progress Phases:

Closing Amount	Project	Homes Covered	Take Rate	Property Assessment	Cost Per Home	Project Start	Project End	Project Months
\$795,002	LID1	369	72.90%	\$2,955	\$2,154	8/1/2016	5/1/2018	21.26
\$671,887	LID2	388	53.09%	\$3,261	\$1,731	4/1/2018	12/1/2018	8.13
\$955,365	LID3	505	56.04%	\$3,375	\$1,891	2/1/2019	4/1/2020	14.16
\$1,289,781	LID4	634	58.83%	\$3,457	\$2,034	2/1/2020	7/1/2021	17.2
In Progress	LID5	1158						

v. Funding Request.

The city of Ammon would like to request the full cost of the project which is \$2.2 million, which would meet the broadband needs for Phase 6 installation.

If full funding is not available, the City could offer a 25-50% match for the funds, up to \$1.1 million. Ideally, the City would receive full funding from the state of Idaho, as Ammon would prefer to use these funds to extend this project into Phase 7 and continue providing broadband to areas in need.

vi. Anticipated total project costs and financing sources.

This project is estimated at \$2.2 million, which is based on budgetary needs from previously completed phases.

As indicated above, if full funding is not available, the City could offer a 25-50% match for the funds, up to \$1.1 million. Ideally, the City would receive full funding from the state of Idaho, as Ammon would prefer to use these funds to extend this project into Phase 7 and continue providing broadband to areas in need.

vii. Project Ownership (i.e., private, public, public/private partnership, other).

The project will be entirely managed, owned, and operated by the city of Ammon, which is a public entity.

viii. Proposed project costs (include a budget overview and estimated costs).

Salaries Provides salary for employees of the City, who will be working on Local Improvement District 6	\$ 711,147.75
Overtime Provides overtime payment for employees of the City, who will be working on Local Improvement District 6	\$ 5,871.76
Employee Benefits Provides benefits for employees of the City, who will be working on Local Improvement District 6	\$ 295,269.87
Personal Protective Equipment	\$ 3,110.29
Office Supplies	\$ 382.35
Heat	\$ 102.62
Fuel and Oil	\$ 57,477.17
Postage	\$ 218.92
Notices & Publications	\$ 8,135.00

Health & Safety	\$ 1,522.53
Meetings & Travel	\$ 92.82
Membership Dues	\$ 5,275.06
Books & Subscriptions	\$ 1,500.94
Training & Certification	\$ 220.02
Department Supplies	\$ 116,354.67
Vehicle Repair & Maintenance	\$ 25,792.63
Ground Repair & Maintenance	\$ 16,943.43
Building Repair & Maintenance	\$ 3,518.22
Equipment Repair & Maintenance	\$ 140,065.05
Contracts / Consulting	\$ 15,945.63
Professional Services	\$ 48,162.20
Legal Counsel	\$ 12,438.77
Equipment Rent / Lease	\$ 10,959.51
Capital Outlay - New	\$ 709,517.19
Interest Expense	\$ 5,201.25
Total	\$2,195,225.64

ix. Explanation and demonstration of the applicant’s financial ability to complete the project within the applicant’s proposed budget.

This project is the city of Ammon’s 6th fiber buildout. The City is currently in its 5th buildout and has successfully accomplished four others dating back to 2016. All of the City’s projects have been completed with an average per-home cost of around \$2000 or less per household.

The Ammon Fiber Department has used the Local Improvement District or LID structure to build out most of its infrastructure. The way this is typically done is that the City forms a LID which has very defined boundaries and a description of the improvements that are to be completed. This structure also allows the City to finance the entire cost of the project upfront. At the end of the project, the total cost is split among all of the homes that opted into the project, and an assessment for fiber optic improvements is made on each property. The homeowners then have the option to pay this full amount up front. If they choose not to pay upfront the City will take the remaining amount of the project that

was not paid for and get a loan from a bank for the remaining amount. The bank and the City work together to agree on the terms of the loan. This allows the City to get back the money that it used for the improvements and sets a payment plan for the residents who opted to pay for their assessment over a long period of time. This structure is cumbersome for the City at times but it serves the residents well.

The City of Ammon fully financed its first fiber buildout, LID1. After LID1 The City followed the structure outlined above

Data from previous builds:

	Closing Amount	Homes Opted In	Homes Covered	Homes Not Covered	Take Rate	Assessment
LID 1	\$795,002.60	269	369	100	72.90%	\$2,955.40
LID 2	\$671,887.54	206	388	182	53.09%	\$3,261.59
LID 3	\$955,365.55	283	505	222	56.04%	\$3,375.85
LID 4	\$1,289,781.7	373	634	261	58.83%	\$3,457.86
Totals	\$3,712,037.4	1131	1896	765		

x. Description of any proposed match. Match includes financial and in-kind contributions toward the project. In-kind contributions should be converted into monetary values for calculation.

The city of Ammon would like to request the full cost of the project which is \$2.2 million, which would meet the broadband needs for Phase 6 installation.

The city of Ammon is willing to match up to 50% (\$1.1 million), however, the City would prefer to use this money to complete a Phase 7 buildout in an effort to serve more of the unserved and underserved areas.

xi. Description of whether (and if so, how) this project works in conjunction with the Idaho Broadband Advisory Board’s Strategic Plan. This includes addressing distance learning, telehealth, public safety, economic development, business opportunities, and/or promoting dig once policies.

The Idaho Broadband Advisory Board (IBAB) has finalized a statewide strategic plan for structuring, prioritizing, and dispensing grants from the Idaho Broadband Fund. IBAB aims to serve 100% of Idaho businesses and homes with broadband speeds of at least 100 megabits per second minimum for download and 20 megabits per second for

upload speed by 2027. The city of Ammon has the same goal of serving 100% of its residents with broadband over 100Mbps.

The IBAB's guiding principles are the same as those driving the city of Ammon:

Access: Barriers to access for all Idahoans are removed ensuring that underserved and unserved locations receive broadband services.

Affordable: Committed to affordable broadband service for Idahoans.

Alignment: Stakeholders are committed to achieving the vision in this plan. Key decisions support the outlined long-term goals.

Competition: Support middle mile and last mile infrastructure investments that support and build off existing infrastructure and provider networks, increase competition, efficiency, and redundancy to communities.

Data-Driven: Plan is delivered with close attention to metrics. Data is continuously gathered and acted upon.

Responsive: Strategic agility is deployed in the execution of this plan and regular adaptation to the rapidly changing environment occurs.

According to the Federal Communications Commission (FCC), the State of Idaho is home to 67 terrestrial broadband providers, however, connectivity is uneven for the residents of Idaho. Determining the number of unserved households in Idaho varies widely depending on the source cited. The FCC estimates that nearly 18,000 households lack access to fixed terrestrial broadband service at 25/3Mbps. Conversely, BroadbandNow and the US Census estimate the number of unserved households is closer to 100,000. Connecting Idahoans who are underserved, or lack access to 100/20Mbps, to high-speed broadband, is an even larger task, estimated by the FCC to be 150,000 households.

The mission of the Idaho Broadband Advisory Board (IBAB) is to deliver a roadmap to close the digital divide in Idaho. They commit to providing equal access to economic development, public safety, telehealth, and education opportunities with investments in broadband infrastructure. The IBAB will prioritize funding for the most needed areas identified as households, businesses, and communities in unserved and underserved areas.

The city of Ammon is in agreement with the IBAB's plan in several ways:

- The City is working tirelessly to provide 100% of its residents access to affordable broadband
- The City also commits to providing equitable access to its residents through investments in broadband infrastructure
- The City is not only meeting but exceeding the IBAB's goal of 100/20Mbps with their personal goal of 1-gigabit symmetrical connections

Additionally, Ammon is in line with the IBAB's priorities with respect to economic development. By using residents of the City in every phase of Ammon Fiber projects, the deployment of fiber networks strengthens the economic ecosystem for businesses in Idaho and ensures access to broadband infrastructure that is reliable and affordable. With a focus on economic development, the city of Ammon can support its residents' needs:

- Provide broadband infrastructure opportunities to previously unserved areas.
- Increase the potential economic diversification through enhanced connectivity.
- Identify remote work and learning, telehealth, and public safety opportunities in Idaho.
- Work closely with local ISPs to help residents understand options available to them through the Affordable Connectivity Program/Lifeline subsidy.
- Partner with appropriate state agencies to avoid duplication of service and support the varying needs of rural community infrastructure in close proximity to Ammon.

In line with the IBAB's recommendations, Ammon has a plan in place for each of these four major building blocks:

- A technical plan
- Streamlined decision making
- Plans for broadband funding into Phase 7
- A clear reporting structure

The priorities and plans for Ammon's future are directly in line with the state of Idaho, and the City looks forward to continuing the growth and expansion of its tightly-knit community. With grant funding from the state of Idaho, these priorities and plans can become a reality for residents in Phase 6 and future phases.

PROJECT GRANT PROPOSAL

Greater Treasure Valley Network – Middle Mile and Planning

Applicant's contact information:

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Broadband project proposal outline and scope:

The City of Boise and Ada County Information Technology (IT) Departments have applied to the National Telecommunications and Information Administration (NTIA) Enabling Middle Mile Grant (MMG) Program for the build scope described below. Should the NTIA choose not to fund the project, the City of Boise and Ada County request funds from the State to support this project. The project team has significant matching funds available (as noted below) and sees this project as essential to the future of last-mile access to the surrounding rural areas. As of the writing of this proposal, the NTIA MMG program is reviewing the application. Additionally, the project team is seeking support from the State to aid in planning to develop next steps for future connectivity in rural areas surrounding the proposed build.

Description of the extent to which the project will facilitate deployment of high-speed broadband networks to areas that are currently either unserved, underserved, or both:

The City of Boise and Ada County Information Technology (IT) Departments are working together to create the Greater Treasure Valley Network (GTVN), a fully fiber optic, 131.1-mile open-access middle-mile network loop. The proposed project is intended to support the needs of the Boise and Ada County governments, enhance connection to underserved households, and increase competition in the local market, thereby lowering prices for existing services for more affordable options throughout the area.

This network will lease dark fiber at sub-market rates through long-term indefeasible rights of use (IRU) agreements with commercial and nonprofit service providers, eight of whom have expressed written

interest in participating in the project. The network will promote competition and enable a wider range of affordable last-mile service offerings throughout the City and County through its carrier-neutral, non-discriminatory operation. The network will be jointly owned by the City of Boise and Ada County through a Memorandum of Understanding (MOU) or Joint Powers Agreement (JPA) – that agreement will detail the particulars of ownership percentages, with the intent being a fifty-fifty split of the assets. If funded, construction and maintenance will be contracted per an RFP following the City’s procurement guidelines. Half the fiber will be reserved for government use and half will be managed by a third-party administrator responsible for leasing. The administrator will be selected via a formal procurement process.

An added benefit of this publicly owned and third-party managed network will be enhanced resilience and reliability of government services and community anchor services across the valley through route diversity. This network will be constructed primarily underground, protecting against adverse weather impacts, including those influenced by climate change. The network is expected to provide the foundation for a larger open-access middle-mile network serving a consortium of local governments across southwestern Idaho.

Although there is privately owned and operated middle-mile infrastructure in the Boise/Ada County area, it is not open-access and there are underserved populations throughout the proposed project service area that will benefit from this project. In addition, cost is a major factor driving down broadband adoption in the proposed project area; most premises that have not adopted service have only one broadband provider and services are prohibitively expensive for lower income brackets, as evidenced by the preliminary results of the residential survey currently being conducted on behalf of the City by CTC Technology & Energy. The proposed network will bring open-access middle-mile infrastructure near those areas, creating opportunities for new market entrants to deliver services at lower costs for residential and business customers.

Description of type(s) of technology to be used:

This network will build middle-mile fiber infrastructure with the intent of leasing dark fiber to last-mile providers for ease of deployment to enable last-mile deployment.

Number of unserved or underserved locations and/or households that will be served by the project and at which speeds the locations will be connected:

Of the 131.1-miles of fiber, 47.7 miles (36.4 percent of the GTVN) will pass through underserved census blocks. The network will pass through many underserved areas, particularly in the network’s southern loop its western side, and the spoke leading up to Emmet City. The project team is in process with a digital access study, which will take into account the new FCC Broadband address fabric to give a clear picture of unserved and underserved locations.

Low-income housing in Boise was identified using the City of Boise’s internal records. Both Emmet City and the City of Meridian have provided letters of support for this project. In its letter of support, Emmet City highlighted the large portion of its population on free and reduced lunch programs and with household incomes below the poverty line. Additionally, 10 schools in the Boise School District, serving

4,216 students, are participating in the USDA Community Eligibility Provision in 2021-2022, offering meal services to low-income students. The participating schools are Whitney Elementary School, Whittier Elementary School, Frank Church High School, Morley Nelson Elementary, Koelsch Elementary School, William Howard Taft Elementary School, Hillcrest Elementary School, Garfield Elementary School, Jefferson Elementary School, and Hawthorne Elementary School.

The proposed network will bring fiber into to numerous underserved areas, including low-income housing locations, and will serve as a communications pathway for connection opportunities to many community anchor facilities in the region—129 of which are located within 1,000 feet of the network path. The network will pass underserved areas, including 18 affordable housing complexes. This will facilitate the cost-effective provision of affordable last-mile services to these locations

The network will be able to provide speeds of 1 Gbps/1Gbps to all locations.

Project term for the proposal:

60 months (estimated March 2023 – February 2028). This timeline can be adjusted as requirements dictate.

Funding Request: \$20,849,593.36

This request represents the NTIA middle-mile grant request of \$20,349,593.36 submitted in September 2022. Should the NTIA choose not to fund this project, the project team is requesting replacement funds from the State to support this project.

Additionally, the project team is seeking \$500,000 in planning funds for a two-year period concurrent with the build schedule, which would allow development of next steps for future connectivity in rural areas surrounding the proposed GTVN build. Details of this proposal are included in the accompanying Planning Grant Proposal.

Anticipated total project costs and financing sources:

Total Project Costs:	\$42,029,782.37
Total Grant Request:	\$20,849,593.36
Total Matching Funds (Cash):	\$20,885,863.21
Total Matching Funds (In-Kind):	\$ 294,325.80
Total Matching Funds (Cash + In-Kind):	\$21,180,189.01

In September 2022, the GTVN team requested \$20,349,593.36 in grant funding from the National Telecommunications and Information Administration’s Middle Mile Grant Program (NTIA MMG) and has solicited \$21,180,239.91 in non-federal cash (\$20,885,863.21) and in-kind (\$294,325.80) as matching funds for this \$42 million project. No financing is required as this project is expected to generate a positive yearly net income as early as year four (\$13,784,391.90). The take-rate assumed for this project is quite high at 75%, due to the letters of interest and commitment received by the GTVN team from three local providers willing to provide cash match for the building of the network in exchange for discounted 20-

year IRUs. One partner is expected to acquire 24 strands, while the other two are expected to acquire 48 strands each, serving as the middle-mile basis for their networks. In year 4, those two organizations are expected to increase their IRUs for the entirety of the network by 12 strands each.

Additionally, the project team seeks \$500,000 in funding for planning support related to development of next steps for future connectivity in the surrounding rural areas. Planning funds would be used to convene rural jurisdictions along the outlying areas of the project interested in extending the reach of the GTV middle-mile network to facilitate last-mile connections as well as identifying future interconnection points and infrastructure to create a network of networks. Further details of this proposal are included in the accompanying Planning Grant Proposal.

Project Ownership (i.e., private, public, public/private partnership, other):

If funded, the City and County will execute a Memorandum of Understanding (MOU) or Joint Powers Agreement (JPC) to address ownership and governance of the proposed open-access middle-mile network. The intent is for the City and County to jointly own the infrastructure. They will then release an RFP for the construction of the network as well as for administration. Following deployment of the network it will be managed by a third-party administrator. The City's procurement process will be used to procure both the third-party administrator and the vendors responsible for construction of the network. The third-party administrator will be responsible for leasing the available open-access fiber and maintaining the reserved government use fiber. The City and County envision this network as the first step in an eventual Southwestern Idaho regional middle-mile network owned by a consortium of local governments.

Proposed project costs (include budget overview and estimated costs):

- Administrative and Legal Expenses – \$ 1,923,099.70
- Land, structures, rights-of-way, appraisals, etc. – \$ 389,325.80
- Architectural and engineering fees – \$1,384,416.00
- Environmental Review – \$ 125,000.00
- Construction – \$34,068,869.75
- Contingencies – \$3,639,071.12
- Planning Efforts – \$500,000.00 (see planning grant proposal for further detail)

Total Project Costs: \$42,029,782.37

Explanation and demonstration of the applicant's financial ability to complete the project within the applicant's proposed budget:

The GTVN middle-mile project has adopted fiscally sustainable business strategies to support the long-term financial health of its network. Boise/Ada County's income model is based on 20-year dark fiber IRU contracts, which are expected to generate more than enough revenue to support its ongoing operational costs and the matching investments made by private industry. The model assumes that the 20-year IRU for each strand mile will be \$1,500. Each customer will also be charged \$400 per fiber mile per year to cover ongoing maintenance which exceeds the costs necessary to maintain the network.

Overall, with the assistance of middle-mile grant funding, the network will produce a positive net income of an estimated \$25.8 million over an eight-year projected time period. This level of positive revenue under the modelled circumstances also reflects a resilience to any issues that may reduce the extent to which actual adoption does not match the model's predictions.

An eight-year project pro forma was required for submission to the NTIA and it calculated that this project generates a positive yearly net income as early as year four (\$13,784,391.90). The take-rate assumed for this project is quite high at 75%, due to the letters of interest and commitment received by the GTVN team from three local providers who will provide cash match for the building of the network in exchange for discounted 20-year IRUs. One partner is expected to acquire 24 strands, while the other two are expected to acquire 48 strands each, serving as the middle mile basis for their networks. In year 4, those two organizations are expected to increase their IRUs for the entirety of the network by 12 strands each. We note that none of these individual organizations are expected to own more than 21% of the entirety of the strands in any area to be installed by the proposed project. The model provides a discount to each of these organizations equal to their contributions in the project, treating those matching portions as pre-payment of these costs. Once each organization receives IRUs and an ongoing maintenance discount equal to their initial matching contributions, the organization then pays for its new IRUs and maintenance costs as normal.

Overall, with the above adoption assumptions, this project is sustainable throughout at least a 20-year period. Annual network maintenance and monitoring costs are estimated at \$333,144, lower than the total annual income from maintenance charges (\$390,902.62). We note that with so much of the income generated per year dependent upon one-time 20-year IRUs, the organization plans to put aside a portion of the income to cover operating costs in later years. The organization may increase per fiber mile maintenance costs to improve sustainability, and if any additional organizations acquire IRUs for only two or four strands, their annual maintenance contributions will more effectively offset operating costs in the second decade of the network's operations.

Description of any proposed match:

The match for this project totals \$21,180,189.01 and consists of in-kind contributions of previously constructed fiber infrastructure owned by the City of Boise, staff time over the course of the project for project management (\$294,325.80), and cash commitments from the City (\$1,625,814.70), County (\$147,285.00), the Ada County Highway District (\$95,000.00), and from providers such as Involta (\$3,500,000), Zayo (\$8,512,707), and Fatbeam (\$7,00,057), who indicate they will contribute to the project's construction costs in exchange for pro-rated assets along selected routes upon the project's completion.

Description of how this project works in conjunction with the Idaho Broadband Advisory Board's Strategic Plan:

Research suggests that the social returns on investment in broadband are significant.¹ Increasing access and usage of broadband infrastructure in rural areas (and the amenities, digital skills, online education, and job search opportunities that come with it) lead to higher property values, increased job and population growth, higher rates of new business formation, and lower unemployment rates, according to researchers at the Federal Reserve Bank of Richmond.² Broadband expansion can also improve health and life outcomes, offering access to remote healthcare providers, online social networks, and educational opportunities. Additionally, rural broadband has the potential to support State and local governments' cost savings on medical expenditures and generate additional tax revenues from increased incomes and the sale of broadband services.

The proposed open-access middle-mile Greater Treasure Valley Network (GTVN) will significantly expand network capacity throughout the urban, suburban, and rural mountain valley region in southwestern Idaho. By providing access to reliable and affordable broadband services, this project will facilitate all of the goals of the Idaho Broadband Advisory Board's Strategic Plan including economic growth, educational opportunities, business growth, increased access to telemedicine, and improved public safety and services.

The GTVN is intended to improve regional network redundancy and resiliency. This objective has been incorporated into its design, which consists of several loops of fiber infrastructure – if one hub goes down, diverse routing ensures it will have minimal impact. Stephen O'Meara, the CIO for Ada County, manages the busiest 911 network in the State and sees this infrastructure as the first step for statewide action to create an ESI next generation 911 network in Idaho. The network will also serve national security interests by delivering a public internet connection at the Air National Guard Military Base at Gowen Field to update their flight publications and enable cybersecurity operations that cannot be done on the Department of Defense network.

Operated on a non-discriminatory basis, the network will support interconnections with any providers seeking access to deliver last mile broadband services as it is intended to incentivize last mile providers to reach additional unserved and underserved parts of the city and county and to create resiliency and redundancy for governmental networks and other institutions in the area. The GTVN team has been working together for the past year to explore improving broadband services in both jurisdictions. This work included the commission of a study regarding access, which is being undertaken by CTC Technology & Energy. Preliminary analysis provided by the team at CTC enabled the commitment of the GTVN team to this project and has influenced the design of the network proposed in this grant application. CTC's analysis of their findings has not yet been finalized and published, but researchers have been in communication with the GTVN team as their analysis develops.

Developing a tech-savvy and connected workforce surrounding the Boise region will support the entire state. The City of Boise and Ada County collectively believe that an educational pipeline is needed to create a skilled, diverse workforce that can work not only on this project or in the City of Boise and Ada County, but anywhere in the state. The City and County are committed to furthering policies and

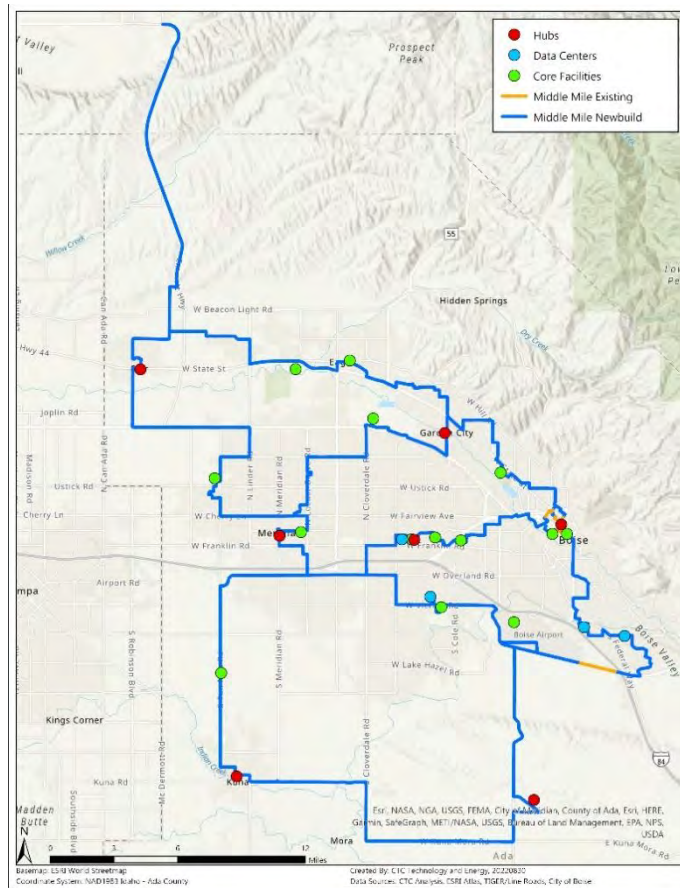
¹ [The benefits and costs of broadband expansion \(brookings.edu\)](https://www.brookings.edu/research/the-benefits-and-costs-of-broadband-expansion/)

² [Bringing Broadband to Rural America | Richmond Fed](https://www.frb.org/publications/default.aspx?articleid=1000)

supporting curriculum development that will sustain a workforce with ‘quality jobs’ (i.e., jobs that exceed the local prevailing wage and help the employee develop the skills and experiences necessary to advance along a career path). The City and County will facilitate programs that develop strong and diverse workforces that can build and maintain broadband networks in a safe and effective manner. They have worked to create these connections, seeking private entities that will use their open access network, while working to create the workforce for these entities.

Currently, the City and County are in the process of facilitating connections between organizations who may otherwise not have partnered toward fulfilling these goals. To that end, the City and County have met with representatives from the College of Western Idaho (CWI) and Boise State University (BSU) to inventory programs for careers in broadband that exist in the region. CWI has a relationship with Lewis-Clark State College, which has a robust curriculum that includes an apprenticeship program for Fiber Optics Technicians. CWI itself offers training in network and system administration, as well as Cisco networking and security technologies. BSU is developing their Information Technology (IT) program, which currently focuses on supply chain management for IT and cybersecurity. BSU is developing a networking-focused curriculum pathway, and it already has curriculum paths for CWI program graduates who want to further develop in management and leadership. The cybersecurity program at BSU is robust, and BSU is developing a Vocational Certification pathway in this field. Both universities have specific programs to create equity in the field by inviting and supporting members of marginalized groups to their programs. Specific groups identified for these outreach efforts include veterans, people displaced from their previous careers by automation, and people with disabilities. These programs are part of a larger planning process that will aid in the creation of equitable on-ramps for broadband related jobs

Figure 1: Map of Proposed Greater Treasure Valley Network



PLANNING GRANT PROPOSAL

City of Boise and Ada County Greater Treasure Valley Network Expansion Planning

Applicant's contact information:

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Broadband planning grant proposal outline and scope:

The City of Boise and Ada County seek broadband planning grant funds to support expansion of middle-mile fiber to outlying areas of a currently planned middle-mile project, the Greater Treasure Valley Network (GTVN). The GTVN team has applied to the National Telecommunications and Information Administration (NTIA) Enabling Middle Mile Grant (MMG) Program for funding support for the first phase of the GTVN. Should that grant be awarded, the project team seeks to enable the resulting infrastructure to be a key to unlocking last-mile efforts for surrounding rural areas. Good planning on this effort will enable faster deployment of last-mile and support the Idaho Broadband Advisory Board's strategic goals.

Description of the extent to which the planning funds will be used to facilitate deployment of high-speed broadband networks to areas that are currently either unserved, underserved, or both:

The applicants are working together to create the Greater Treasure Valley Network (GTVN), a fully fiber optic, 131.1-mile open-access middle-mile network loop. The first phase of the project is intended to support the needs of the Boise and Ada County governments, enhance connection to underserved households, and increase competition in the local market, thereby lowering prices for existing services for more affordable options throughout the area. The ultimate goal of the middle-mile project is to make last-mile deployment to unserved and underserved areas throughout the region more efficient and cost-effective for the outlying rural communities.

Planning funds would be used to convene rural jurisdictions along the outlying areas of the current middle-mile project interested in extending the reach of the GTV middle-mile network to facilitate last-mile

connections as well as identifying future interconnection points and infrastructure to create a network of networks. The project team proposes to include the following rural jurisdictions in the planning effort (County/City):

- Boise
 - Idaho City
 - Placerville
 - Centerville
 - Pioneerville
 - Horseshoe bend
- Elmore
 - Mountain Home
 - Fairfield
- Gem
 - Emmett
- Owhyee
 - Marsing
 - Homedale
 - Murphy
 - Grandview
- Canyon
 - Middleton
 - Notus
 - Parma
 - Greenleaf
 - Wilder
 - Melba
 - Nampa
 - Caldwell

The effort will be initially broad in order to fully understand the best possible future routes of the middle-mile infrastructure. Multiple parties have recommended the creation of a north/south middle-mile route from Grangeville to Boise. The ring would be planned to connect either via Highway 16 or Highway 55. Further, if incumbent ISPs are adding middle-mile to the west (Canyon County), the planning process could include recommendations for incumbent ISPs to utilize the infrastructure in process instead of going the long distance to their colocation centers.

Description or name of contractors or third-party vendors to be used to facilitate a planning study or strategic plan:

The intent is to leverage any existing contracts that the state finds acceptable, however, the project team would be able to issue an RFP if the state directs. Currently, the City and County are utilizing an independent consultant, CTC Technology & Energy, for broadband advisory services and would prefer to continue their engagement for this planning effort.

Funding Request:

\$500,000

Planning proposal costs (include budget overview with estimated costs):

- Personnel – \$150,000
- Travel – \$25,000
- Meeting Expenses – \$10,000
- Consultant Costs – \$315,000

Personnel expenses include hiring a part-time project manager/coordinator to support the overall planning effort administratively. Travel is estimated to include approximately \$5,000 per trip for City and County staff travel needs for up to five regional meetings. Meeting expenses include up to \$2,000 for facilities and refreshments for regional meetings. Consultant costs are estimated at \$250 per hour for approximately 1,260 hours of effort.

Project term in which the planning grant would start and be completed:

July 2023 – June 2025 (two years)

Explanation and demonstration of the applicant's financial ability to complete the planning process within the applicant's proposed budget:

The City of Boise and Ada County, their partners, and designated agents, including the selected consultant (the City and County currently contract with CTC Technology & Energy, an independent broadband strategy consultancy that provides grant-writing and broadband planning and engineering services), will utilize the requested funding to complete the broadband outreach, strategy and implementation plan within but not to exceed the requested budget and timeframe. This budget has been developed based on the levels of effort and resulting staffing costs from similar planning projects. As proven in the past with numerous other federal, State, and Local grant awards, the City of Boise is financially sound and qualified to administer the funds.

Description of any proposed match for the planning grant:

The project team does not propose a match for this proposal.

Description of whether (and if so, how) this planning grant would help address broadband infrastructure in Idaho in conjunction with the Idaho Broadband Advisory Board's Strategic Plan or federal fund guidelines:

To better determine how additional investment in infrastructure and interconnections will strive to serve 100% of Idaho's businesses and homes with access to high-speed broadband that provides minimum download speeds of at least 100 Mbps and minimum upload speeds of at least 20 Mbps, the planning grant will support a rigorous process by which the GTVN team plans outreach and meeting organization activities, including preparation of meeting materials and contacting target rural jurisdictions noted earlier in this proposal. The intent is to hold in-person meetings with those jurisdictions. While the total number of meetings is yet to be determined they will include at least one regional meeting in each identified county. The program team will create a summary report of each meeting that identifies key decisions and goals for the jurisdictions as it relates to acquiring last-mile services for their residents, businesses, and community anchor institutions. The meetings will enable evaluation of potential partnerships between incumbent providers such as Anthem, IRON, Zayo, and Fat Beam. Finally, the project team will prepare a draft action plan that will incorporate feedback from stakeholder meetings and key next steps. That plan will be shared with the meeting participants for comment.

We anticipate next steps to include developing a clear understanding of community needs and goals for services that will enable the GTVN team to begin planning for engineering and design needs as well as target approaches for funding opportunities to build next phases of the middle-mile infrastructure.

Explain how the proposed planning grant would address priorities outlined in the Board's Idaho Broadband Strategic Plan:

Research suggests that the social returns on investment in broadband are significant.¹ Increasing access and usage of broadband infrastructure in rural areas (and the amenities, digital skills, online education, and job search opportunities that come with it) lead to higher property values, increased job and population growth, higher rates of new business formation, and lower unemployment rates, according to researchers at the Federal Reserve Bank of Richmond.² Broadband expansion can also improve health and life outcomes, offering access to remote healthcare providers, online social networks, and educational opportunities. Additionally, rural broadband has the potential to support State and local governments' cost savings on medical expenditures and generate additional tax revenues from increased incomes and the sale of broadband services.

The proposed open-access middle-mile Greater Treasure Valley Network (GTVN) will significantly expand network capacity throughout the urban, suburban, and rural mountain valley region in southwestern Idaho. By providing access to reliable and affordable broadband services, this project will facilitate all of the goals of the Idaho Broadband Advisory Board's Strategic Plan including economic growth, educational opportunities, business growth, increased access to telemedicine, and improved public safety and services. The planning process will allow the City and its partners to develop a network expansion plan that will facilitate these outcomes throughout rural Idaho.

¹ [The benefits and costs of broadband expansion \(brookings.edu\)](https://www.brookings.edu/research/the-benefits-and-costs-of-broadband-expansion/)

² [Bringing Broadband to Rural America | Richmond Fed](https://www.frb.org/publications/default.aspx?articleid=1234)

The GTVN is intended to improve regional network redundancy and resiliency. Operated on a non-discriminatory basis, the network will support interconnections with any providers seeking access to deliver last-mile broadband services. The GTVN is intended to incentivize last-mile providers to reach additional unserved and underserved parts of the City and County and to create resiliency and redundancy for governmental networks and other institutions in the area.

Developing a tech-savvy and connected workforce surrounding the Boise region will support the entire State. The City of Boise and Ada County collectively believe that an educational pipeline is needed to create a skilled, diverse workforce that can work not only on this project or in the City of Boise and Ada County, but anywhere in the State. The City and County are committed to furthering policies and supporting curriculum development that will sustain a workforce with 'quality jobs' (i.e., jobs that exceed the local prevailing wage and help the employee develop the skills and experiences necessary to advance along a career path).

The City and County will facilitate programs that develop strong and diverse workforces. They have worked to create these connections, seeking private entities that will use their open-access network, while working to create the workforce for these entities that can build and maintain broadband networks in a safe and effective manner.

Recently, the City of Boise met with the Idaho Workforce Development Council to discuss creating an industry partnership training program for jobs associated with constructing, operating, and maintaining broadband networks. It is estimated that the need will outstrip the supply of trained workers in this field as billions of dollars flow from federal grant funding sources for broadband infrastructure projects. Planning now for a statewide vocational program will increase the number of Idaho residents who are trained and readily available to participate in these family-sustaining job opportunities

Currently, the City and County are facilitating connections between organizations that may otherwise not have partnered toward fulfilling these goals. To that end, the City and County have met with representatives from the College of Western Idaho (CWI) and Boise State University (BSU) to inventory programs for careers in broadband that exist in the region. CWI has a relationship with Lewis-Clark State College, which has a robust curriculum that includes an apprenticeship program for Fiber Optics Technicians. CWI itself offers training in network and system administration, as well as Cisco networking and security technologies. BSU is developing their Information Technology (IT) program, which currently focuses on supply chain management for IT and cybersecurity. BSU is developing a networking-focused curriculum pathway, and it already has curriculum paths for CWI program graduates who want to further develop in management and leadership. The cybersecurity program at BSU is robust, and BSU is developing a Vocational Certification pathway in this field. Both universities have specific programs to create equity in the field by inviting and supporting members of marginalized groups to their programs. Specific groups identified for these outreach efforts include veterans, people displaced from their previous careers by automation, and people with disabilities. These programs are part of a larger planning process that will aid in the creation of equitable on-ramps for broadband related jobs.

Idaho Broadband Advisory Board
Idaho Department of Commerce
700 W. State Street
Boise, ID 83702

November 30, 2022

Dear Idaho Broadband Advisory Board Members –

We write to you today in our official capacity as county and municipal leaders in the Ada County region to ask for your support on our broadband grant proposal in response to your request for broadband projects and planning proposals from your November 10, 2022 meeting.

Over the last year we have been gathering as a loose coalition in service of our residents to enhance digital access county-wide. Over the course of the pandemic, it laid bare the critical need to improve our region's broadband infrastructure, ensuring that residents across all income fields had access to affordable and reliable internet service. Whether for work, for school, or for leisure – it's clear that our world operates online and in order to ensure greater connectivity, there remains a need to invest in a more reliable system of broadband networks across Ada County and our neighboring regions.

To accomplish this joint goal, we seek your support to help build a Greater Treasure Valley Network. The first phase of this proposed project would lay a 140-mile connected conduit/fiber ring through each of our towns, connecting to the colocation centers at the center of our county, and up north to Gem County. This countywide municipal middle mile open access network will be designed to make it more economically viable for broadband providers to serve the county's un and underserved residents, as well as addressing the needs of both public and private partners. In later phases, we would expand to connect to other rural communities, like those in Canyon, Boise, and Elmore Counties, by adding mileage or connecting to other middle mile open access networks projects. We advocate the state requires middle mile be designed to connect to each other, to create the needed resilience we need for internet in Idaho.

Our broadband coalition submitted an Infrastructure Investment and Jobs Act Middle Mile grant application to fund the first phase of the Greater Treasure Valley Network. We estimate its cost at \$40 million total: \$20 million from private partners (Involta, Zayo, and FatBeam) and \$20 million from requested federal funding. In March we will find out whether the National Telecommunications and Information Administration (NTIA) approved our grant request. If we do not receive funding from NTIA, we plan to request \$20 million from the state to fund this initial phase. We also plan to ask for planning dollars to expand connections to outlying rural communities and other middle mile projects.

Throughout this planning process, we have also worked to build a strong private/public partnership among government entities and local broadband providers to build a future-proofed network. This helps ultimately serve residents and their affordability needs, while also

allowing for collaboration and competition among and with private entities. We plan to continue to do so in support of the Idaho Broadband Advisory Board's vision and long-term plans.

More information about the project specifics can be found in our full application materials. In the interim, we look forward to working closely with you as members of the Board to reach our mutual goal of all Idahoans having access to affordable and reliable broadband infrastructure.

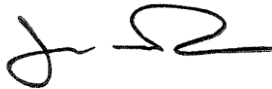
Respectfully,



Commissioner Rod Beck
Ada County Commission



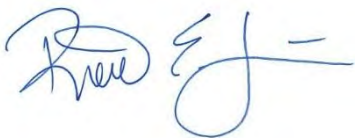
Mayor Trevor Chadwick
City of Star



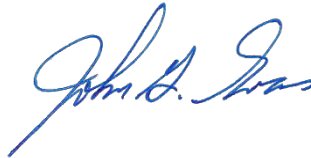
Mayor Jason Pierce
City of Eagle



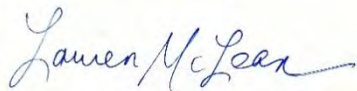
Mayor Joe Stear
City of Kuna



Mayor Robert Simison
City of Meridian



Mayor John Evans
City of Garden City



Mayor Lauren McLean
City of Boise

September 9, 2022

Alan Davidson

Assistant Secretary of Commerce for Communications and Information

Herbert C. Hoover Building (HCHB)

U.S. Department of Commerce, National Telecommunications and Information Administration

1401 Constitution Avenue, N.W., Washington, D.C.20230

Dear Mr. Davidson:

I write to you on behalf of Google Fiber regarding the City of Boise and Ada County's application for funding to build a middle-mile broadband network. Google Fiber designs, builds, and operates high-speed fiber-to-the-home networks ("FTTH") across the United States. Although we are not currently building or operating a fiber network in the Boise metro, we are in active conversations to expand to the state of Idaho, including to Boise and Ada County. Our decision to expand to Boise is subject to many considerations, including approval of our methods of construction and access to the public right-of-way. As an example, we would require approval of the shallow trenching techniques we have deployed successfully in the other metros where we currently operate.

The City of Boise and Ada County's proposed middle-mile project would be an additional factor that could encourage us and other providers to deploy fiber-enabled services in the City of Boise and Ada County.

Should we proceed to deploy in Ada County, to the extent the proposed middle-mile network coincides with our designed network, we would welcome the opportunity to collaborate on joint trenching to reduce the cost of construction for all parties. In addition, or in the alternative, to the extent the proposed middle-mile network is completed prior to our own deployment, we would welcome the opportunity to lease conduit or fiber.

Again, though our own decision to deploy our network in the Boise metro is still pending, we support the City of Boise and Ada County's proposal to seek funding for a middle-mile broadband network. While it is not the only consideration for us, we do believe it can provide a meaningful incentive to induce providers like Google Fiber to invest in the region.

Sincerely,



Mark Strama

General Manager, Expansion



GLOBAL HQ
1821 30th Street, Unit A
Boulder, CO 80301 USA | www.zayo.com
@ZayoGroup

September 22, 2022

Alan Davidson
Assistant Secretary of Commerce for Communications and Information
Herbert C. Hoover Building (HCHB)
U.S. Department of Commerce
National Telecommunications and Information Administration
1401 Constitution Avenue, N.W.
Washington, D.C.20230

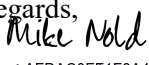
Dear Mr. Davidson:

As one of the nation's leading fiber infrastructure providers, Zayo Group looks forward to supporting the City of Boise and Ada County's application for funding to build and maintain a middle-mile broadband network. Zayo is eager to help and has deep working knowledge in the region.

The expected benefits include a very high-speed, underground, and diverse network. This will enable such things as affordable FTTH and FTTX connectivity to the underserved, disaster recovery, data center connectivity, smart-grid functionality, and highly reliable support.

Zayo's contributions could total up to \$9 million, if commercial and contractual terms are agreed to between Zayo, the City, and the County. Such contributions may include network design, construction, operations, and maintenance. For Zayo, we expect this would improve the efficiency and effectiveness of Zayo's in-region operations and create attractive financial longevity through ownership and/or rights-of-use of select fiber assets and related equipment.

I conclude by reiterating Zayo's support for the City of Boise and Ada County's application for middle-mile broadband network funding. Approval of the City's application and completion of the middle-mile broadband build will benefit local residential, governmental, and commercial interests, and by extension, the entire region.

DocuSigned by:
Best regards,

Michael F. Nold

Michael F. Nold
SVP, Corporate Strategy & Development
Zayo Group



BOISE STATE UNIVERSITY
OFFICE OF INFORMATION TECHNOLOGY

August 31, 2022

Alan Davidson
Assistant Secretary of Commerce for Communications and Information
Herbert C. Hoover Building (HCHB)
U.S. Department of Commerce
National Telecommunications and Information Administration
1401 Constitution Avenue, N.W.
Washington, D.C.20230

Dear Mr. Davidson:

As CIO at Boise State University, I fully support the City of Boise and Ada County's proposal for NTIA funding to build a robust middle mile infrastructure. When completed, the project will have a meaningful and sustainable impact throughout the region and State, which includes communities where many of our students and potential students live and work. Our ability to deliver educational courses and content to Idaho and the area will only be enhanced with building out the fiber infrastructure in Ada County and the City of Boise.

The City of Boise and Ada County's proposal will facilitate connectivity to end-users of the internet by aggregating traffic between networks over this vast region, benefiting individuals, businesses, hospitals, educational institutions, and other entities, directly and indirectly. The potential impacts on local communities are substantial: enhancing economic development, facilitating access to healthcare and education, lowering costs, and increasing job and training access are a few examples.

The City of Boise and Ada County have a well-documented record of leveraging resources and executing projects that enhance the economic viability of the Treasure Valley region. As a community stakeholder Boise State is a partner on many fiber optic and conduit systems throughout the area. The skills, expertise, and experience that the Applicant has used on those successful projects will also be deployed on the middle mile network that it proposes to build.

In sum, the middle mile network that the City of Boise and Ada County propose will be a real step toward the goal of filling the gaps in our nation's middle mile infrastructure and advancing our national goals of increasing connectivity, affordability, and equity.

I fully support the City of Boise and Ada County grant application.

Regards,

Max Davis-Johnson
CIO/AVP Information Technology

2-Sep-2022

Adam Reno
IT Infrastructure Svcs Sr Mgr
City of Boise Information Technology
150 North Capitol Blvd
Boise, ID 83702

To whom it may concern,

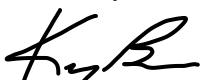
Thank you for the invitation to support Ada County and the City of Boise in pursuing a NTIA Middle Mile Grant to construct 130 miles of conduit and fiber. We are excited to explore a partnership that would serve both the interests of the community and Crown Castle through a competitive, open access network that serves unmet needs and improves resiliency. Crown Castle is supportive of the proposed fiber build as outlined by the City of Boise for their middle mile grant application. As we consider our entry into the Boise market, we may look to leverage competitive, open access fiber as part of our solution.

Crown Castle has a proven track record of deploying and operating high-speed network infrastructure over the past 25 years across the United States. With over 40,000 towers, approximately 115,000 small cells on air or under contract and more than 85,000 route miles of fiber, we are the nation's largest provider of shared communications infrastructure. Our shared infrastructure business model is inherently sustainable and aligns with the goals of the NTIA middle mile program. As our business needs in Boise firm up, we will continue to collaborate with the City of Boise and look forward to a long-term partnership.

We look forward to helping ensure the proposed network has long-term financial sustainability and best meets the needs of your residents, anchor institutions, and local businesses.

If you have any questions, please do not hesitate to reach out. We appreciate the opportunity to provide this level of support.

Sincerely,



Kelly Brewer
VP of Operational Strategy



Mayor Robert E. Simison

City Council Members:

Treg Bernt
Joe Borton
Luke Cavener

Brad Hoaglund
Jessica Perreault
Liz Strader

Alan Davidson
Assistant Secretary of Commerce for Communications and Information
Herbert C. Hoover Building (HCHB)
U.S. Department of Commerce
National Telecommunications and Information Administration
1401 Constitution Avenue, N.W.
Washington, D.C.20230

Dear Mr. Davidson:

As Chief Information Officer at the City of Meridian, I fully support the City of Boise and Ada County's proposal for NTIA funding to build a robust middle mile infrastructure. When completed, the project will have a meaningful and sustainable impact throughout the region, which includes communities where many of my constituents reside and work.

The City of Boise and Ada County's proposal will facilitate connectivity to end-users of the internet by aggregating traffic between networks over this vast region, benefiting individuals, businesses, hospitals, educational institutions, and other entities, directly and indirectly. The potential impacts on local communities are substantial: enhancing economic development, facilitating access to healthcare and education, lowering costs, and increasing job and training access are a few examples.

The City of Meridian appreciates having worked well with the City of Boise and Ada as various fiber optic and conduit systems, and cybersecurity projects have been deployed. I believe, the skills, expertise, and experience that the applicant has shown on those successful projects will also be deployed on the middle mile network that it proposes to build.

In sum, the middle mile network that the City of Boise and Ada County propose will be a real step toward the goal of filling the gaps in our nation's middle mile infrastructure and advancing our national goals of increasing connectivity, affordability, and equity.

I fully support the City of Boise and Ada County grant application.

Regards,
Dave Tiede
Chief Information Officer
City of Meridian



INFORMATION TECHNOLOGY
CITY OF EMMETT
501 E. MAIN ST.— EMMETT, ID 83617
PHONE (208) 398-2100
WWW.CITYOFEMMETT.ORG
“Driven by innovation”

August 12, 2020

Alan Davidson
Assistant Secretary of Commerce for Communications and Information
Herbert C. Hoover Building (HCHB)
U.S. Department of Commerce
National Telecommunications and Information Administration
1401 Constitution Avenue, N.W.
Washington, D.C.20230

Dear Mr. Davidson:

As Information Technology Director, I fully support the City of Boise and Ada County’s proposal for NTIA funding to build a robust middle-mile infrastructure. When completed, the project will have a meaningful and sustainable impact throughout the region, which includes communities where many of my constituents reside and work.

The City of Boise and Ada County’s proposal will facilitate connectivity to end-users of the internet by aggregating traffic between networks over this vast region, benefiting individuals, businesses, hospitals, educational institutions, and other entities, directly and indirectly. The potential impacts on local communities are substantial: enhancing economic development, facilitating access to healthcare and education, lowering costs, and increasing job and training access are a few examples.

The City of Boise and Ada County have a well-documented record of leveraging resources and executing projects that enhance the economic viability of the Treasure Valley region. They have deployed an array of products and services, such as water renewal systems, geothermal heat, fiber optic and conduit systems, cybersecurity projects, and other projects with a vast array of community stakeholders that have served the valley well. The skills, expertise, and experience that the Applicant has used on those successful projects will also be deployed on the middle mile network that it proposes to build.

The City of Emmett is a rural community just outside the Boise Valley. Several years ago, we began building a robust city-wide fiber optic network that is now starting to expand to homes and businesses. One big challenge that we are working to tackle is the lack of affordable middle-mile fiber optic connectivity that would allow us to connect to larger upstream providers and data centers located in the Boise Valley. This project would truly bridge that gap and provide affordable and high-quality access to upstream bandwidth to fulfill the city’s vision of providing the necessary broadband connections that will facilitate economic growth and education opportunities for our citizens. Emmett has a large portion of its population on free and reduced lunch programs and household income levels below the poverty line. This program will allow us to give those households the competitive advantage they need to compete in a technical society and workforce.

In sum, the middle mile network that the City of Boise and Ada County propose will be a real step toward the goal of filling the gaps in our nation’s middle mile infrastructure and advancing our national goals of increasing connectivity, affordability, and equity.

I fully support the City of Boise and Ada County grant application.

Regards,

A handwritten signature in blue ink that reads "Mike Knittel".

Mike Knittel, Information Technology Director



2065 w. Riverstone drive ste. 202
Coeur d'Alene, id 83814

o 509 344 1008
f 509 344 1009

Alan Davidson
Assistant Secretary of Commerce for Communications and Information
Herbert C. Hoover Building (HCHB)
U.S. Department of Commerce
National Telecommunications and Information Administration
1401 Constitution Avenue, N.W.
Washington, D.C.20230

Dear Mr. Davidson:

Fatbeam supports and is willing to participate in the City of Boise and Ada County's proposed middle-mile network project based on the benefits that could accrue to Fatbeam, our customers and the future citizens of the southern Idaho region. Fatbeam's support could consist of potential cash contribution, in kind support such as design and construction, maintenance and repair of the network, along with NOC, and overall network management capabilities. Based on the final route design, consumed routes and agreed upon contributions it is anticipated Fatbeam's combined contribution could total up to \$7.5MM.

These potential benefits include possible savings to Fatbeam, which the middle-mile network may enable. Examples of areas in which savings could be realized include data center connectivity, reduced construction cost, diverse network routes, and a greater ability to provide reliable, affordable broadband connectivity to our constituents.

The middle-mile fiber network could help Fatbeam increase its ability to meet existing needs as well as future needs. The middle-mile network's ability to support last-mile broadband service interests could benefit Fatbeam's current operations in the area; it also could support services Fatbeam may consider offering in the future.

I conclude by reiterating Fatbeam's support for the City of Boise and Ada County application for middle-mile broadband network funding. This middle mile network is a long-term benefit to all, local residential, governmental, and commercial parties involved, and by extension, the entire region.

Regards,

DocuSigned by:
Jason Koenders
1453816E39B84B5...

Jason Koenders
COO/CTO
Fatbeam LLC



Alan Davidson
Assistant Secretary of Commerce for Communications and Information
Herbert C. Hoover Building (HCHB)
U.S. Department of Commerce
National Telecommunications and Information Administration
1401 Constitution Avenue, N.W.
Washington, D.C.20230

Dear Mr. Davidson:

I am Ken Kremer, CTO of Involta, a local data center that provides colocation, cloud, consulting, security and managed services. We also provide Internet and transport services to and from the local data center using fiber in the area. We serve approximately 90 customers in the market. Involta fully supports the City of Boise and Ada County's application for funding to build a middle-mile broadband network.

Involta supports and is willing to participate in the City of Boise and Ada County's proposed middle-mile network project based on the benefits that could accrue to Involta and its customers from the network.

These potential benefits include possible savings to Involta, which the middle-mile network may enable. Examples of areas in which savings could be realized include connectivity to purpose-built data center, access to local regional Internet Exchange Point, bulk purchase of internet access, disaster recovery, offsite backups, access to security services, direct cloud connectivity, smart grid functions, edge computing, call center consolidation, and shared services such as technical support.

Involta would be willing to share the cost of the fiber build for up to \$3.5 million in exchange for pro-rated assets of fiber, conduit and innerduct along selected routes. Involta's data center would be an ideal place for a PoP location for fiber and equipment. Involta could potentially exchange colocation resources for one rack of space and power for \$1000 per month for 20 years, totaling \$240,000.

The middle-mile fiber network could help Involta increase its ability to meet existing needs as well as their future needs. The middle-mile network's ability to support last-mile broadband service interests could benefit Involta's current operations in the area; it also could support services Involta may consider offering in the future.

I conclude by reiterating Involta's support for the City of Boise and Ada County application for middle-mile broadband network funding. It will benefit Involta, as well as local residential, governmental, and commercial interests, and by extension, the entire region.

Regards,

A handwritten signature in black ink that reads "Ken Kremer".

Ken Kremer
Chief Technical Officer – Data Center Strategy

PO Box 1986 Cedar Rapids, IA 52406 | 855-364-3061

61



Alan Davidson
Assistant Secretary of Commerce for Communications and Information
Herbert C. Hoover Building (HCHB)
U.S. Department of Commerce
National Telecommunications and Information Administration
1401 Constitution Avenue, N.W.
Washington, D.C.20230

Dear Mr. Davidson:

I am the CFO and Co-Founder of Vero Fiber Networks and Vero Broadband (Vero), a fiber infrastructure owner and operator and internet service provider, operating in 22 States and headquartered in Boulder, Colorado. Vero is providing this letter to illustrate its full support of the City of Boise and Ada County's application for funding to build a middle-mile broadband network.

Vero is willing to participate in the City of Boise and Ada County's proposed middle-mile network project based on the benefits that could accrue to Vero and its potential customers. These benefits include, but are not limited to, new retail customer acquisition, datacenter and aggregation point connectivity, 5G and wireless backhaul services, school district site connectivity, and reduced regional backhaul transport expenses.

The middle-mile fiber network would serve as a launch pad for Vero to build fiber-to-the-home networks in unserved or underserved areas. Vero provides internet and telecommunications services to consumers and small businesses in its existing geographies, and has decades of experience in solving critical connectivity needs in markets often overlooked by national carriers and cable operators. Further, we possess deep experience in state and local grant and funding processes that could further finance potential buildouts. Finally, we retain a robust balance sheet, with zero debt, and are confident in our ability to secure funds to finance a successful network implementation.

We are excited by the opportunity to partner with the City of Boise and Ada County to leverage the middle-mile network as a means of dramatically enhancing connectivity options for thousands of homes and small businesses. Please let us know if we can provide any additional information that may be helpful in support of this application.

Regards,

A handwritten signature in blue ink that reads "Greg Friedman".

Greg Friedman
Chief Financial Officer
Vero Fiber Networks and Vero Broadband

THIS LETTER IS INTENDED TO COMMUNICATE VERO'S DESIRE TO SUPPORT THE APPLICATION AND PURSUE A COMMERCIAL RELATIONSHIP, SHOULD THE APPLICATION BE APPROVED FOR FINANCING. IT DOES NOT REPRESENT A FIRM COMMITMENT TO PARTICIPATE AND IS A NON-BINDING LETTER OF INTENT ONLY.



Brad Little, Governor
Tom Kealey, Director

August 31st, 2022

Sarah Bleau
Director of Middle Mile
Office of Internet Connectivity and Growth
National Telecommunications and Information Administration
1401 Constitution Avenue, NW
Washington, DC 20230

Re: NTIA Middle Mile Grant Letter of Support

Dear Ms. Bleau,

We are writing to express our support for the City of Boise and Ada County's application for the National Telecommunications and Information Administration's Middle Mile Grant Application.

The Idaho Broadband Advisory Board and the Idaho Office of Broadband support all Idaho-based applications for the NTIA Middle Mile Broadband Infrastructure Grant Program. Idaho is committed to the statewide expansion of high-speed connectivity for education, telehealth, remote work, and improved economic development opportunities for underserved and unserved communities.

As the Chair of the Idaho Broadband Advisory Board, improving rural Idaho's access to high-speed broadband is our highest priority. This project supports the Idaho Broadband Advisory Board's statewide broadband plan for ensuring all Idahoans and communities have access to affordable and reliable connectivity.

We look forward to the success of the application and integrating it into our overall broadband strategy to connect all Idahoans to high-speed broadband by 2027.

Sincerely,


Representative John Vander Woude
Chairman, Idaho Broadband Advisory Board


Tom Kealey
Director, Idaho Department of Commerce



MILITARY DIVISION, STATE OF IDAHO

4040 W. GUARD STREET
BOISE, IDAHO 83705-5004

BRAD LITTLE
GOVERNOR

MICHAEL J. GARSHAK
THE ADJUTANT GENERAL

23 September 2022

Alexandra Winkler
Chief Information Officer
Information Technology
Boise, ID

Dear Ms. Winkler,

I fully support the City of Boise and Ada County's proposal for NTIA funding to build a robust middle mile infrastructure. This project would greatly enhance the capabilities of the Idaho Military Division on Gowen Field allowing us to better accomplish our State and Federal missions.

Gowen Field facilitates a large variety of Army and Air Force training missions in support of our national defense. Part of this proposal would augment our current fiber infrastructure, enhancing the speed and access to key information used by both Army and Air flight Operations, Cyber Defense missions, emergency management, and our Garrison Training programs. This commercial internet capability would greatly enhance our ability train our Service Members and the support we provide to the community.

The City of Boise and Ada County middle mile infrastructure proposal would enhance the Idaho National Guard mission, advance our national goals of increasing connectivity, affordability, equity, and support our country's national security interests.

I fully support this City of Boise and Ada County grant application.

Michael J. Garshak
Major General, IDNG
The Adjutant General/Commander



Alan Davidson
Assistant Secretary of Commerce for Communications and Information
Herbert C. Hoover Building (HCHB)
U.S. Department of Commerce
National Telecommunications and Information Administration
1401 Constitution Avenue, N.W.
Washington, D.C. 20230

Dear Mr. Davidson:

My name is Josh Worrell and I am Sr. Manager of Business Development for [TDS Telecommunications LLC \(TDS®\)](#), the nation's 7th largest wireline communications company offering broadband, video and voice to over 1100 communities in 32 states. TDS fully supports the City of Boise and Ada County, Idaho application for funding to build a middle-mile broadband network.

TDS supports and is willing to participate in the City of Boise and Ada County's proposed middle-mile network project based on the benefits that it could accrue to TDS and its customers from the network.

These potential benefits include possible savings to TDS, which the middle-mile network may enable. Examples of areas in which savings could be realized include [data center connectivity, bulk purchase of internet access, disaster recovery, access to video programming, smart grid functions, call center consolidation, and shared services such as technical support].

The middle-mile fiber network could help TDS increase its ability to meet existing needs as well as future needs. The middle-mile network's ability to support last-mile broadband service interests could benefit TDS's current operations in the area; it also could support services TDS may consider offering in the future.

I conclude by reiterating TDS's support for the City of Boise and Ada County application for middle-mile broadband network funding. It will benefit TDS, as well as local residential, governmental, and commercial interests, and by extension, the entire region.

Sincerely,

/s/ *Joshua Worrell*

Joshua Worrell
Sr. Manager Business Development
(608) 664-9530
Josh.Worrell@tdstelecom.com



201 Spear Street
7th Floor
San Francisco, CA
94105

Rudolph M. Reyes, Jr.
West Region Vice President and Deputy General Counsel
Public Policy & Legal Affairs
Phone: 415-370-2557
rudy.reyes@verizon.com

September 9, 2022

Alan Davidson
Assistant Secretary of Commerce for Communications and Information
Herbert C. Hoover Building (HCHB)
U.S. Department of Commerce
National Telecommunications and Information Administration
1401 Constitution Avenue, N.W.
Washington, D.C.20230

Re: Letter of Support for City of Boise and Ada County's Middle Mile Network Grant Application

Dear Mr. Davidson:

Verizon is delighted to provide a letter of strong support for the City of Boise and Ada County's application for funding to build a middle-mile broadband network. Verizon recognizes the value and collaborative partnership of the City of Boise and Ada County and its commitment to digital equity and connectivity for its constituents.

Broadband networks are critical to our daily lives. They allow us to work remotely and learn virtually. We turn to the internet to find jobs, connect with loved ones, and learn new things. And with more Americans staying at home amid the COVID-19 pandemic, much of our lives are focused online. Broadband connectivity has become a vital tool for engaging with the world. But today, millions of Americans still lack access to broadband.

The public health crisis has underscored not only how important broadband connectivity is but also how lack of access can reinforce and widen educational and economic disparities. Low-income communities, rural populations, and working families who lack broadband risk falling further behind. As learning has shifted online, students without internet access at home may struggle to keep up. Adults in communities without internet access may not be able to search and apply for jobs; work remotely; start businesses; or access educational, social, and other resources needed to thrive in the digital economy.

Verizon is providing a letter of support on behalf of the City of Boise and Ada County's grant request because we believe in the potential benefits the middle-mile network may enable. Examples of the potential benefits realized include data center connectivity, disaster recovery, access to video programming, smart grid functions, and shared services such as technical support. The middle-mile fiber network will help to increase the City and County's ability to meet existing needs as well as future needs.

Alan Davidson
September 9, 2022
Page 2 of 2

Therefore, Verizon is proud to support the City of Boise and Ada County's application and believes it will significantly improve the quality of life for the community.
Thank you for your thoughtful consideration.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'RM Reyes, Jr.', written in a cursive style.

Rudolph M. Reyes, Jr.
West Region Vice President and Deputy General Counsel

TO: Idaho Broadband Advisory Board
RE: Request for Proposals for Broadband Projects & Planning Grants
FROM: City of Rexburg and Madison County, Todd Smith – Rexburg Chief Information Officer
CONTACT INFO: 35 N 1st E, Rexburg, Idaho, 83440
Todd.smith@rexburg.org
208-359-3020

With progress already underway (see the attached whitepaper and map), the Lightbridge Community Broadband network will greatly enhance access to broadband in Rexburg and Madison County. Rexburg's most competent broadband internet is provided to the high-density housing and city-center businesses, but single-family homes and business outside the city limits tend to have limited choices when it comes to Internet service.

The intention of Lightbridge is for every resident to receive FTTH (Fiber-to-the-Home) within Madison County and Rexburg. This fiber infrastructure will provide 100/100 Mbps, or any combination of speeds up to 100Gig service. We are seeking funding for the remainder of the construction to provide access to as many residents as funding can provide within the City of Rexburg and Madison County. This will allow residents to greater more ISP options.

Our joint partnership between a political subdivision (Madison County) and a local government (City of Rexburg) will ensure a stronger community network than one government entity can provide alone.

Construction of the middle mile has been underway since April 2022. The Lightbridge middle-mile network consists of 432 strands fiber optic cable placed in 1.25" conduit buried four feet underground. A second conduit containing seven micro ducts is being deployed in parallel to accommodate future expansion, growth, and needs.

The total cost of the project is about \$40 million - \$17 million for middle-mile infrastructure (conduit, handholes, fiber, and co-location facilities) and \$23 million for the last-mile infrastructure. It is anticipated that complete construction will take 10-12 years. The last-mile will be broken into phases – i.e. neighborhoods – being constructed in 6-12 month blocks. Funding could be requested for specific phases, rather than the entire project. In addition, there are costs associated with the third-party administrator (retail space, marketing and media, staffing, etc.) Until further funding is procured, construction is being funded from City and County general funds, urban renewal districts, Idaho Transportation Department, and contributions from community partners.

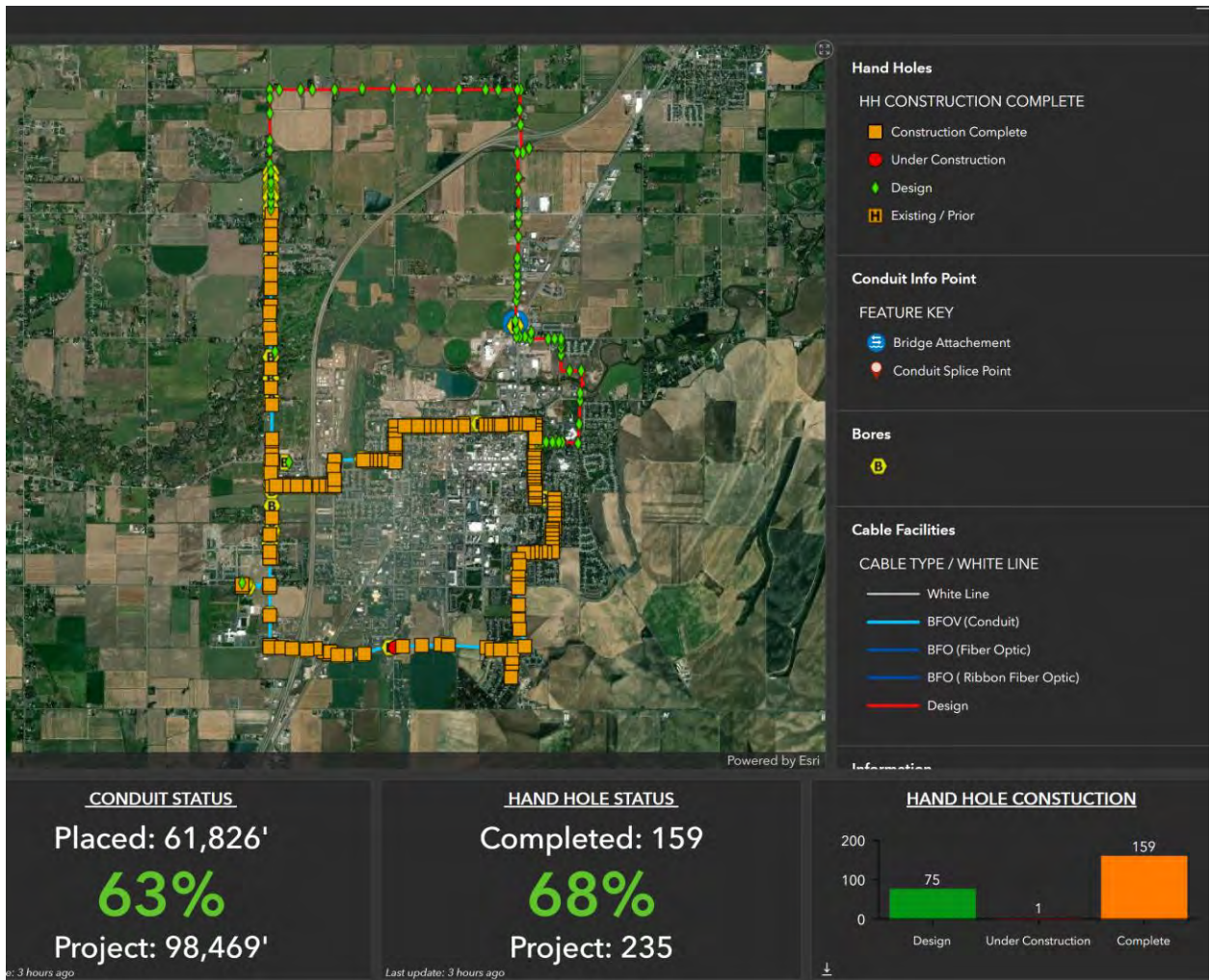
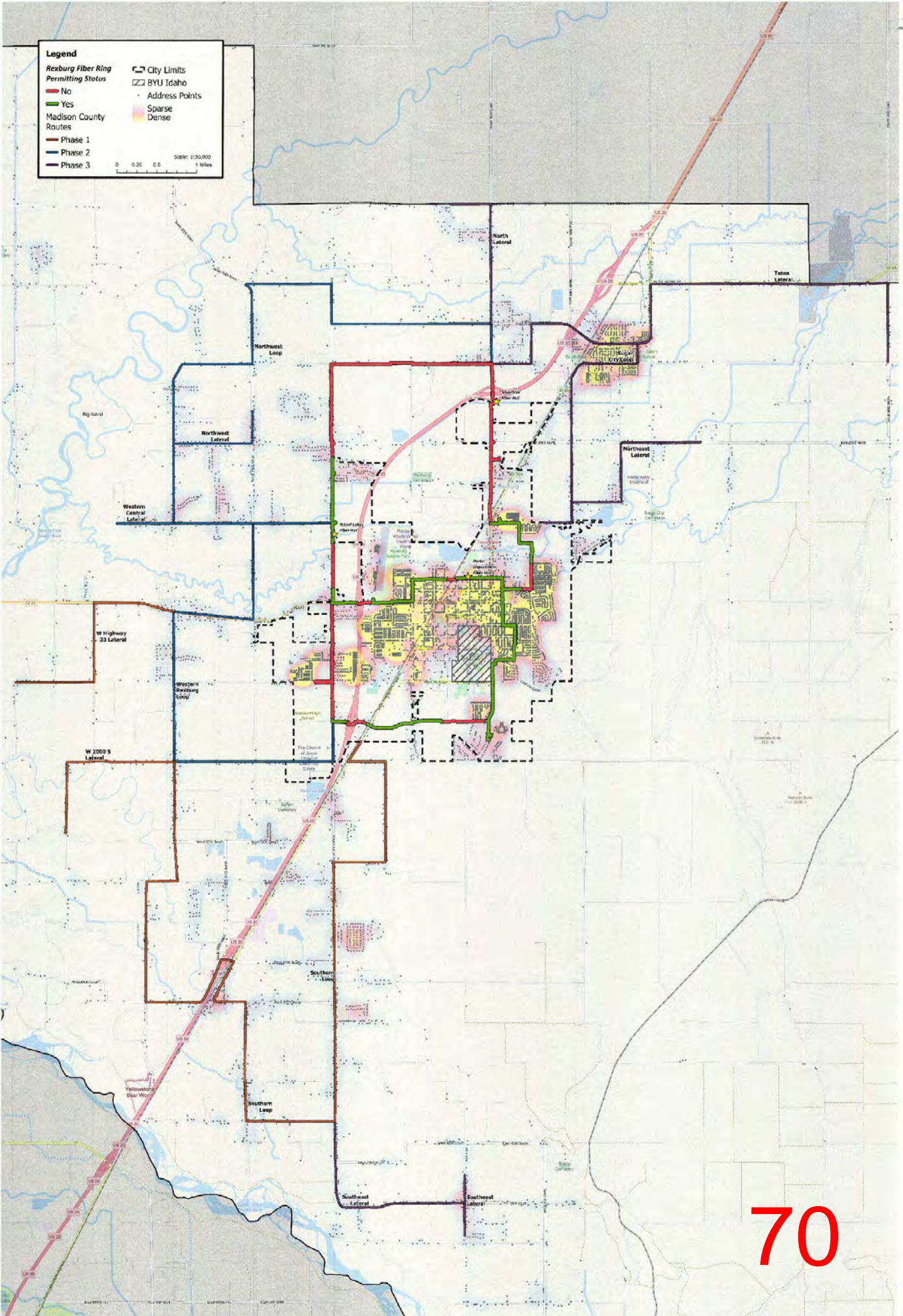


Figure 1. Progress of the middle-mile network in Rexburg, ID. as of December 1, 2022.



Legend

Rexburg Fiber Ring Permitting Status

- No
- Yes

Madison County Routes

- Phase 1
- Phase 2
- Phase 3

- City Limits
- BYU Idaho
- Address Points
- Dense
- Sparse

Scale: 1:100,000
0 0.25 0.5 1 Miles

Lightbridge: A County-City Joint Broadband Effort

The City of Rexburg, its community partners and residents, for decades now, have recognized the critical importance of top-quality Broadband connectivity in creating the kind of place that they want to live, work, and play and that their children and grandchildren will want to stay and invest in. This crucial and truly, ordinary and necessary infrastructure of today and the future opens significant and boundless opportunities in the key indicating factors of quality of life such as job creation, education, public services, healthcare, business recruitment and retention and more.

At the same time, State of Idaho has ranked near the bottom for broadband connectivity. Idaho currently ranks 38 out of 50 for access to gigabit internet connectivity.¹¹ Due to this lack of access, the State of Idaho and its municipalities are less competitive in business and talent recruitment and retention. Not only has the ordinary and necessary infrastructure of broadband in the State of Idaho failed to keep up with today's lifestyles, but also with surrounding states in terms of businesses and education standards. This infrastructure has proven critical for all of our residents as it pertains to today's lifestyles.

Current private Internet Service Providers (ISPs) provide the bare minimum in infrastructure to receive their federal funding. Small rural communities especially pay the price. Communities looking to be the type of place where their citizens stay and businesses and talent want to come have learned that they must invest in themselves to create this type of place.

As the City of Rexburg has listened, and continues to listen, to the voices of our residents and community partners, we have taken every effort to understand the issues, both current limitations and future possibilities, and to engage the private sector providers. In 2013, frustration arose and the City of Rexburg's partners, including BYU-Idaho, as well as businesses and residents, told the city they were not getting adequate and competitive broadband. So, the city, along with its community partners, embarked on a year-long fiber study that looked at many options including the city providing infrastructure, the city enacting broadband-related municipal ordinances that would expedite the private sector's efforts, and partnering with anchor institutions and/or Internet service providers.

During the City of Rexburg's study, some new providers began offering services in Rexburg, and some incumbents made some infrastructure investments. Due to the renewed interest by the private sector, the city and its partners determined to wait on pursuing its own infrastructure and instead encourage private sector development.

Over the next decade, providers invested to capture high-density housing and some businesses, but there has not been an adequate and competitive investment for all segments of the community. The COVID-19 pandemic brought to light the critical need for enhanced broadband for businesses, education, and work-from-home families. We now, even more fully, understand the far-reaching consequences that the lack of access to adequate (sufficient for today and tomorrow) and affordable broadband has on our community. With this understanding, the City of Rexburg continues to recognize

¹ <https://www.usnews.com/news/best-states/rankings/infrastructure/internet-access>



high-quality broadband as an ordinary and necessary infrastructure component for our city's families and businesses.

We now recognize that local governments are singularly positioned to find and create customized solutions for their unique community needs. We also know when communities are allowed to invest in themselves, they will become the great places where businesses and talent want to be. The State of Idaho is only as good as its local communities. It is the sum of these parts that makes Idaho great.

Current Initiative

With all of this in mind, in 2020 the city began pursuing an open-access community network that would have a dual purpose. First, it would allow the city to connect all its assets to be more efficient in providing services to its citizens. Second, it would provide the infrastructure to get fiber to the home for every resident while allowing a variety of ISPs to compete and provide consumers with more choices. To facilitate this open-access community network, a fiber optic middle-mile redundant backbone "ring" is being built. Silver Star Communications won a competitive bid to engineer and construct the backbone.

As the city embarked on this effort a unique joint-municipal partnership took shape. Madison County expressed its interest in partnering with the city to provide this same benefit to its residents living outside of city limits. Construction is now underway for Idaho's first joint County-City community broadband network. The "Lightbridge Community Broadband" network will begin providing services to both residential and business customers in Rexburg and Madison County in the first half of 2023.

Open Access

Many municipalities cannot create open-access networks for their community. They may be able to fund the operation once the network is in place, but they cannot front the cost of the infrastructure. Unlike other open-access infrastructure, like public roads, fiber broadband infrastructure needs to be built out much more thoroughly and quickly.

The funds received from the American Rescue Plan Act of 2021 which were intended to bolster city general fund accounts, were used as the seed money for the construction of a middle-mile redundant backbone ring. This allowed Rexburg and Madison County to invest in its community in ways the private sector has not.

The Lightbridge network will provide a true open-access network where providers can differentiate themselves on more than just price. Lightbridge will allow for consistent and reliable internet in an egalitarian manner while ensuring competition with any internet service provider to compete for residents' business.

To help facilitate an open-access network, Lightbridge Community Broadband will be managed by a private third-party administrator. Through a competitive bid process, WideOpen Networks was selected as the third-party administrator. They will manage the infrastructure but will not resell any of their own services. The third-party administrator will be overseen by a board consisting of the Mayor, a County Commissioner, a technical representative from both the County and the City and a member of a community anchor institution (currently the school superintendent).



Service Offerings

Sadly, the FCC has set broadband standards for internet speeds at download speeds of 25 Mbps *and* upload speeds of 3Mbps. Lightbridge's high-performance optical fiber network will support Gigabit, 10Gig, and 100Gig services *up and down*. Shared colocation facilities are part of the design, and rack space will be available for use by internet service providers who want to offer services on the network. Multiple redundant fiber rings are being constructed to enable highly reliable services to be offered to any customer on the network.

All residential and business services will be delivered by private-sector service providers. As a community broadband network, Lightbridge will not sell any telecommunications services (e.g., voice, video, Internet access). Instead, Lightbridge will act like airport infrastructure that allows various airlines to compete for customers.

Conclusion

The 2020 Census show us two things. First, the poverty rate in Rexburg is high – 33.9%². Although the FCC mapping indicates that 100/25 service is available throughout the county and city, a third of the residents have difficulty affording it.

Second, according to a New York Times article, Rexburg is the 4th fastest growing micropolitan statistical area in the nation³ and Madison County is the fastest growing county in Idaho. This puts a larger demand on public services such as telehealth, emergency services, educational institutions, remote workforce, libraries, and more which all depend on broadband infrastructure.

The growth seen in Rexburg and Madison County is typical of municipalities across the state of Idaho. Given this rate of growth, Idaho needs to invest in itself by allowing local municipalities to invest in themselves for more competent broadband in the state. Rexburg and Madison County have worked hard to create an open-access network that is both egalitarian and conservative while allowing internet service providers the opportunity to provide their many services to our community members. As we move on from the middle-mile ring to providing it to every neighborhood and business, we look to the state and federal government for support, authorization, and funding partnership opportunities to complete this project. The City of Rexburg and Madison County invites the State to fund this project and others like it across the state.

² <https://www.census.gov/quickfacts/fact/table/madisoncountyidaho,rexburgcityidaho/IPE120221#IPE120221>

³ <https://www.nytimes.com/live/2021/08/12/us/census-results-data>



Cox Response to Idaho Broadband Advisory Board

December 1, 2022

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Idaho Broadband Advisory Board
Broadband Equity Access and Deployment Program
RE: IBAB Project Proposal Scope
broadband@commerce.idaho.gov

December 1, 2022

Dear Idaho Broadband Advisory Board,

Cox Communications appreciates the opportunity to respond to this proposal as a broadband service provider. Our response demonstrates Cox's expertise and commitment to bridging the Digital Divide for un- and underserved households and businesses to achieve the shared goal of investing in and deploying a sustainable and scalable network that will deliver world-class broadband in the State of Idaho.

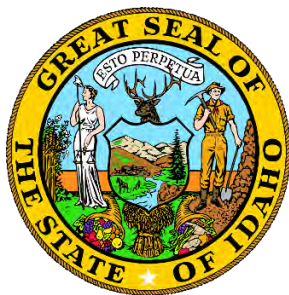
At Cox we deliver the networks, technology and support that enables a best-in-class broadband experience and powers remote learning, working from home, tele-health, remote medicine, and business services, as well as Smart Community initiatives. Cox has a proven track record of investing in digital equity in Idaho - leveraging a multi-pronged approach to access and adoption. Our goal is to reach those who are most in need while also delivering tools that support adoption and provide essential skills to get ahead. Throughout our response, you will see that we have both the local resources and nationwide capabilities to meet your needs today and into the future. No one is better positioned than Cox to deliver reliable, award-winning, and affordable internet today and for the community of tomorrow. We are committed to being a partner in the establishment and acceleration of broadband infrastructure in Idaho, and our team looks forward to working with the Idaho Broadband Advisory Board to meet the needs of Idahoans.

Thank you,

Guy Cherp



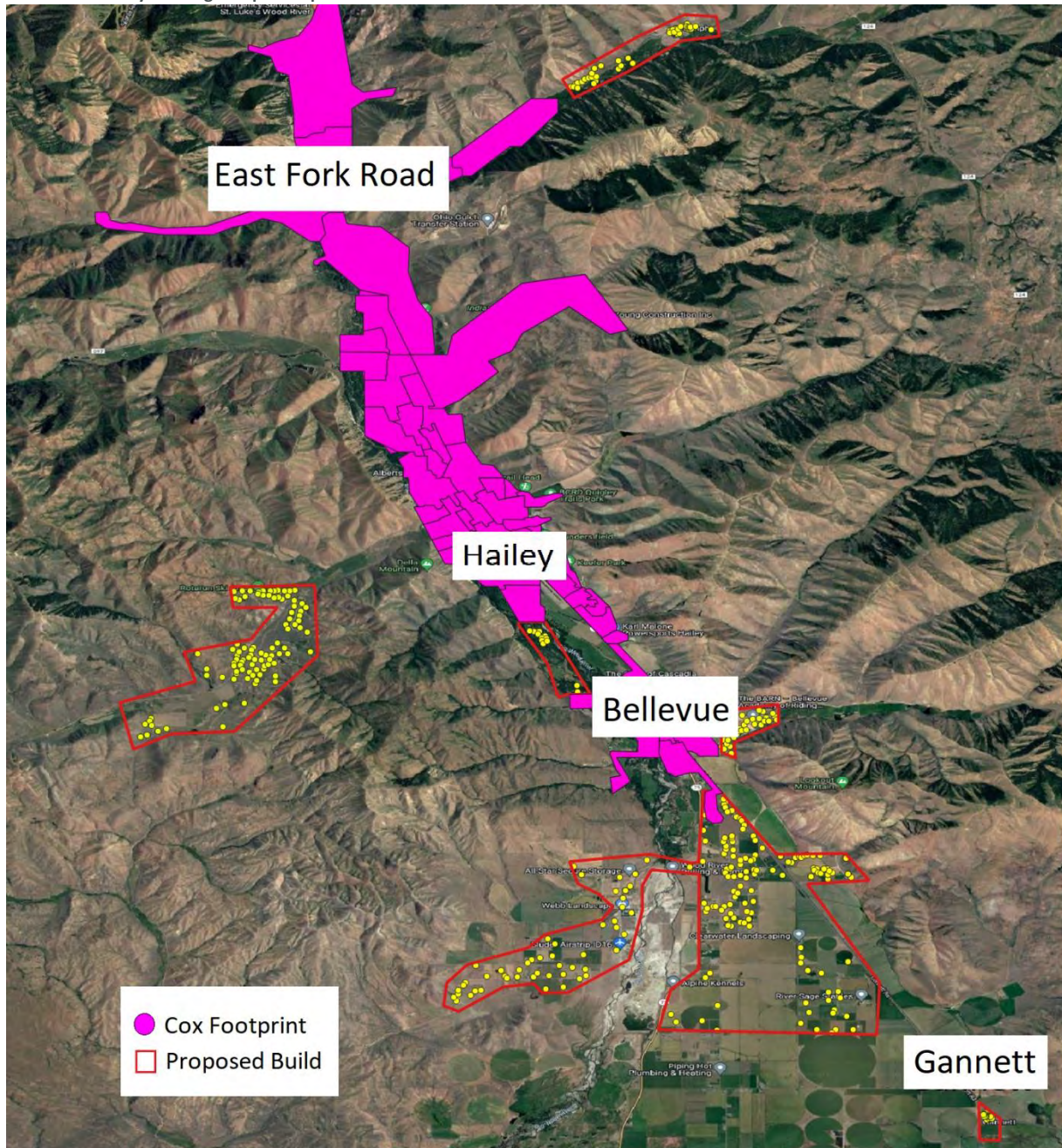
Market Vice President



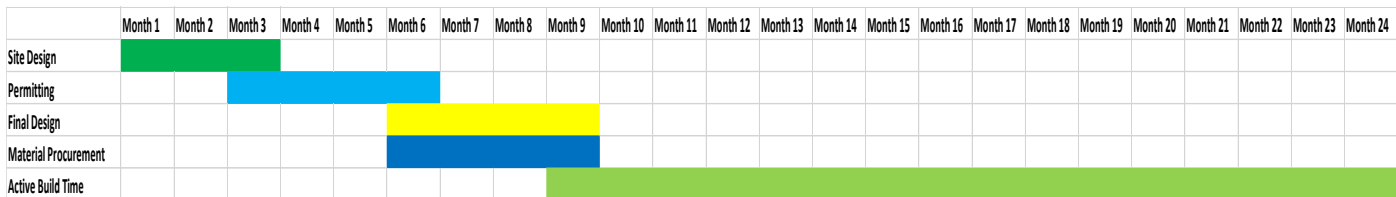
Project Overview

Our proposed project, if approved, would expand our network to deploy Fiber to the Home to up to 452 unserved households in Blaine, County. These households would have access to a variety of broadband speed tiers, from up to 100mbps to multi-Gig (with round trip latency under 100ms to the 95th percentile) to meet their individual needs. To further serve the needs of the unserved homes, Cox offers affordability and digital equity programs so all residents have the opportunity for connection.

Cox Blaine County Coverage Map & Proposed Build Area



The proposed timeline for this project is approximately 24 months from contract execution. We share project timelines, so all stakeholders are informed regarding the progress of our work. An example is included below:



Example Construction Timeline

Technology Overview

As bandwidth demands of the broadband Transport Networks continue to grow rapidly, Cox has pushed fiber deeper in the network. Cox is proposing to build a fiber-to-the-home (FTTH) network, which offers symmetrical Gigabit data speeds to each customer. FTTH networks leverage a point-to-multipoint protocol called PON (Passive Optical Network) for distribution via passive optical splitters. There are multiple types of PON; since 2014 Cox has been deploying GPON (Gigabit PON) exclusively for residential services, and in Q1 of 2021 we began to introduce XGSPON (10 Gigabit Symmetrical PON) enabling greater speeds and capacity.

Cox FTTH architecture is broken down into two major areas: the Transport Network and the Distribution Network. The Transport Network uses digital Ethernet optics for transport to the targeted area. The shorter-range Distribution network uses a series of passive optical splitters for PON distribution out to each potential customer passing. The demarcation between the Ethernet access and PON distribution domains is an OLT (Optical Line Terminal), which is located within the targeted service area. The OLT defines the type of PON being distributed and is the only active component located in the Outside Plant. Within the Distribution network is another key network element called an ODN (Optical Distribution Network). An ODN in physical form typically is a cabinet containing passive optical components (splitters and/or WDM's), but the ODN also represents a sub-group or boundary of customer passings fed by a common ODN cabinet for network management purposes. Finally, the CPE (Customer Premise Equipment) termination of the PON network is an ONT (Optical Network Terminal), which converts PON back to Ethernet for handoff to a customer premise equipment gateway & set-top boxes.

Our current 5th Generation FTTH Transport Network includes a pair of components called the OCML (Optical Communications Module Link extender) and MDM (Mux DeMux) which make up our standard DAA (Distributed Access Architecture) solution. The OCML will be used to transport up to 40 DWDM Wavelengths (20 channel pairs), redundantly up to 60km. The OCML is located in the headend and the MDM in the field, in the case of FTTH typically the MDM will be rack mounted inside the ODN cabinet. This same DAA solution is used by other architectures, but in this application the immediate use of the OCML/MDM is for backhaul of the OLT uplinks. Additionally, it should also be used as a means to distribute any type of digital Ethernet link into ODN/Node areas, including but not limited to R-Phy Nodes, COI (Cox Optical Internet) links, Carrier & Small Cell links.

The 5th Gen FTT Home The 5th Gen FTTH Distribution network introduces a change from the traditional splitter cascades to Optical Taps instead. The Optical Tap architecture mimics an HFC architecture and moves all of the

splitting from the ODN cabinet to the cross connects and therefore reduces the ODN cabinet variations. Moving forward any customer type (MDU, SFU, or Commercial) can be serviced from a 5th Gen ODN. We will continue to maintain the maximum 64 passing limit per OLT port as in prior generations but will be managed by design instead of a fixed split ratio. In the ODN cabinet, on the front end of each of those splitter cascades is a CEx (Co-Existence) Filter. The CEx filter is a WDM (Wave Division Multiplexer) which provides an injection point for various PON wavelengths to give us the option to overlay GPON, XGSPON and/or NG PON2 in the future.

The following is an overview of the primary network elements which make up the FTTH architecture solution.

The OCML contains an integrated DWDM filter, EDFA and Optical Switch, which enables up to 40 DWDM ITU Channels (20 ITU channel pairs) to be transported redundantly up to 60km. It's located at the edge of the headend facing the Outside Plant. The OCML will be paired with a passive 40 channel (20 ITU channel pairs) MDM filter. In the case of FTTH the MDM will be rack-mounted inside the ODN cabinet. Initially the OCML/MDM pair will be used to backhaul of the OLT uplinks.

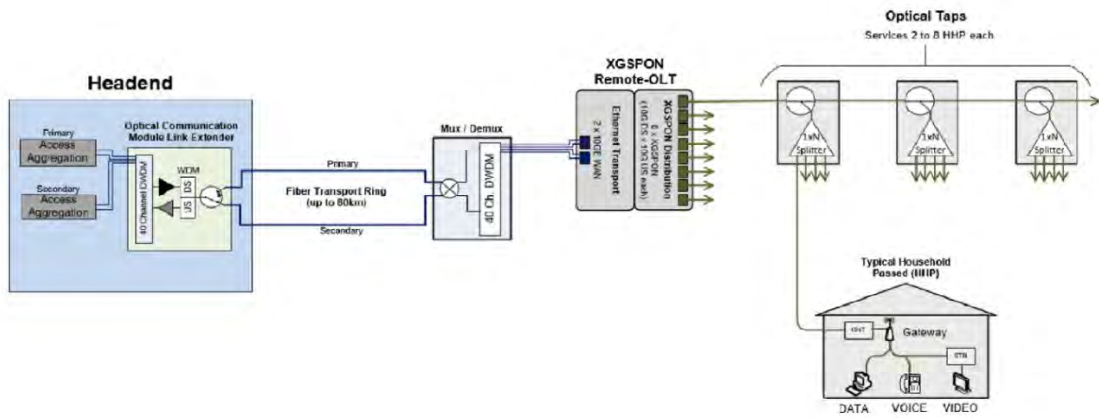
The OLT (Optical Line Termination) is the device serving the network side of the PON network. It distributes downstream traffic to multiple subscribers and aggregates subscriber traffic coming from the ODN (Optical Distribution Network). It performs a function similar to the CMTS (Cable Modem Termination System) in an HFC network. The OLT may be deployed in 3 fashions, the most typical is a passively cooled strand-mount Remote-OLT (OLM), but also may be rack-mounted within an existing MTC/STC facility or in an environmentally controlled cabinet. Beginning in Q1 of 2021 in limited markets Cox will start deploying XGSPON. Initial XGSPON deployments will match the existing set of video, data and telephony products via GPON, but XGSPON is capable of symmetrical 10Gbps services, data tiers above 1Gbps may be enabled in the future. Program plans will need to be referenced to determine timing of when a market will be XGSPON enabled, once it has, all OLT deployments will move to XGSPON exclusively. Prior to XGSPON market enablement, OLT deployments will continue with the legacy GPON platform.

The ODN (Optical Distribution Network) is passive, the ODN cabinet serves as a common point for housing Mux and Optical Splitter elements. ODN cabinet is a common point which all links in a targeted service area are routed through, which helps with network management and troubleshooting. ODN cabinet hardware and integration services are provided by PPC (fka SPC), they integrate a combination of optical components as specified by Cox Engineering.

The Optical Cross Connect (OCC) is a fiber enclosure with fusion splicing capabilities, but also provides a connectorized termination point for a fiber drop to a customer. It also serves as a physical demarcation of ownership between OSP (Outside Plant) Fiber Techs and Field Service UHT's (Universal Home Technicians). The OCC will also house the Optical Taps within the OSP side of the enclosure.

The Optical Network Termination (ONT) is an active device located in the customer premise, which terminates the subscriber end of the PON network. The ONT serves as the demarcation point between the optical and electrical domains with a copper Ethernet handoff to gateway CPE (currently the PW6). The ONT is platform specific and must align with the desired PON network and OLT type.

Cox FTTH Architecture



Cox Existing Network Design Diagram (currently using attached Gen 5 Architecture)

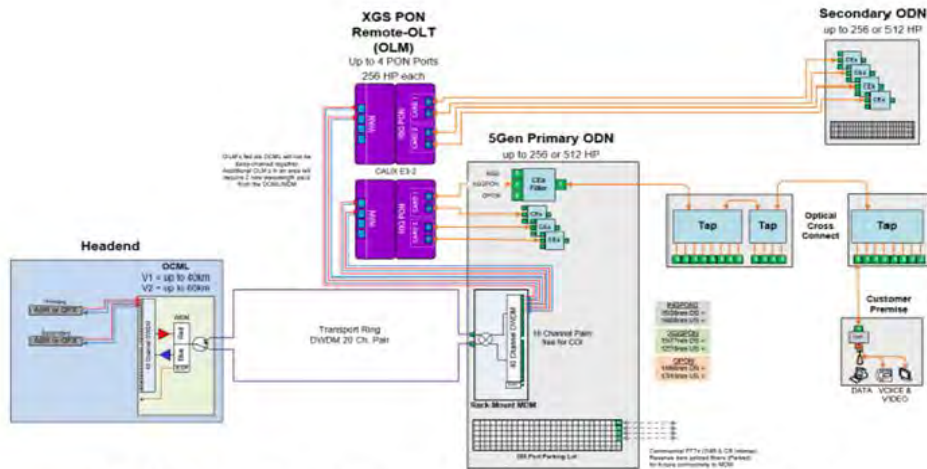


FIGURE 2.1.38 – 5GEN GREENFIELD / BROWNFIELD NETWORK ARCHITECTURE FOR SFU DEPLOYMENTS WITH XGSPON

Cox's Proposed Partnership

Public-Private Partnerships are especially useful in the broadband space, where state and local governments can tap into the expertise of private providers (Cox) in the buildout of broadband networks, the deployment of smart city services, and the enhancement of broadband adoption and digital literacy. Cox is a strong partner for state and local government, and our private investment will be a true force-multiplier for unserved households when combined with federally funded broadband investments. A partnership with Cox will be a transformational, impactful, and sustainable investment in the Blaine County community. Public-private partnerships (P3) can leverage the core competencies of each partner -- public partners bring funding to the table and the ability to streamline deployments, while private partners like Cox bring experience in building, running, securing, and upgrading networks, as well as providing ongoing service and support to customers.

Cox is thinking long term when it comes to serving the citizens of Idaho. Scalability is one of the key focuses for our network and Blaine County. By focusing on FTTH for these 452 households and our commitment to 10g across all customers, we believe Cox offers the best solutions to equip Idaho residents with reliable broadband now and for the future.

Building upon its longstanding efforts to bridge the digital divide, Cox has committed hundreds of millions of dollars to expand its footprint to reach underserved and rural communities. These efforts will allow Cox to provide reliable internet service and promote its growing digital equity portfolio across a fiber-based network to more than 100K homes and businesses in communities near its existing footprint nationwide.

Cox intends to reach more underserved communities by partnering with local cities and towns looking to leverage federal funding opportunities to address specific community objectives and help close the digital divide. Through these public-private partnership opportunities, Cox can help cities more effectively achieve their strategic connectivity objectives thereby preserving their resources for greater impact.

Cox's Commitment to the Community and Continued Investment

Cox currently serves 12,000 customers in the Wood River Valley and has invested \$12.5 million since 2014 to upgrade our network with millions more planned to realize our future 10Gig network.

Since 2020, Cox has contributed nearly \$200,000 to community organizations in the Wood River Valley. This included \$9,000 in student and school district support. Recently, Cox sponsored 30 students to attend the Sun Valley Economic Summit.

Partnering with the residents of the Indian Creek development, Cox built a FTTH network to serve over 150 homes with an additional 40 lots pending development. Most of the Indian Creek area was unserved and underserved by a wireline provider prior to the Cox FTTH build.

In 2020, Cox partnered with the City of Sun Valley on a CARES Act grant to extend a fiber connection to its Elkhorn Fire Station. This was a joint trench project with Idaho Power.

On a larger scale, through corporate contributions and the generosity of our employees, we provide more than \$70 million annually to philanthropic and community-based organizations. Our employees contribute approximately 80,000 volunteer hours annually. Commitment to giving back to our communities has always been a longstanding principal at Cox. Across the Cox family of businesses, we're empowering our people to build a better future for the next generation. Our social impact initiative, known as 34 by 34, is aimed at removing obstacles and expanding access to programs to help 34 million people live more prosperous lives by 2034. From bridging the

digital divide to addressing social equity and environmental sustainability challenges, we're committed to growing the good in the communities we serve, one action at a time.

Project Financials

Cox estimates that the cost of the project for all locations is \$13.3M. This consists of both terminal and fiber costs, which include supplier pricing for labor and materials. Building broadband networks in un-and-underserved areas are quite costly, but Cox is able to contribute a portion of the estimated cost and would seek the remainder from Idaho in federal grants. The total gross build costs for these projects will be \$13.3 million for 452 households with Cox requesting \$13.1 million in subsidy. Once the network is finished, Cox will be able to generate enough revenue from the newly served area to not only sustain its operations, but to invest when needed in the future to meet ongoing needs.

Cluster	# Homes Passed	Gross Build Cost	Subsidy
Combined Blaine County Clusters	452	\$13,344,887	\$13,174,488

Cox will leverage its expertise in building, operating and upgrading networks to ensure that any funding awarded is used efficiently and within the requirements of any grant program. Cox will also leverage its longstanding supply chain competitive procurement process and invoicing requirements to maximize grant dollars for major procurement purchases. Direct oversight of the project will be conducted by dedicated resources, both at the project management and field installation supervisory levels throughout the duration of deployment.

Please see attached Letter of Good Standing in reference to ability to provide capital. (p.13)

Why Partner with Cox?

Innovating for the Future

Innovation is not, by its very nature, simply a set of solutions. It is ever evolving, with benefits realized through advances in both technology and their applications. With a long history of supporting education, Cox understands its positive impacts on the quality of life in surrounding communities. In fact, Cox has both funded and contributed human capital to CableLabs, a cable industry think tank driven by their goal to “Wake up every day to invent the future”, a partnership that has yielded numerous examples of innovation, including virtual reality learning and actionable research on the human dynamics of distance learning. With a keen focus on education, CableLabs recognizes that rapidly evolving technology has the potential to fully transform the educational environment, including teaching and learning.

The Road to 10G

We’re dedicated to empowering others to build a better future and celebrate diverse products, people, suppliers, communities, and the characteristics that make each one unique. Cox Communications will make a multibillion-dollar annual infrastructure investment over the next several years to enable a 10-Gigabit, symmetrical, fiber-based network that will power the next generation of internet users. When you hear “10G”, that means we’ll be able to deliver 10 gigabits of data to the home on all existing and future networks, creating a seamless experience all the way to the consumer.

Affordability

Cox has been successful with our cornerstone initiative for families who cannot afford an Internet connection in the home. Our goal is to improve educational access and help shape the lives of children and families, who, through no fault of their own, do not have regular access to the internet to do homework, research their interests and prepare them for the jobs of the future.

To eliminate as many barriers of digital adoption as possible, Cox has established special pricing for qualified households for Internet Access and has just announced speed increases to 100Mbps download for our qualified tiers. This includes Connect Assist, Connect2Compete and our Straight up Internet plans (see chart below). Starting at just \$9.95 a month, we will provide 100mps download speed service that currently serves the needs of hundreds of thousands of qualified families across the country. With the assistance of PCs for People, we facilitate families getting an affordable computer they can use for family education with a \$20 desktop and \$50 laptop starter bundle. In addition, Cox supports the FCC Affordable Connectivity Program (ACP), which offers a \$30/month subsidy and can provide eligible customers free internet service.

Affordability & Digital Equity Programs

We're deeply committed to digital equity in our communities. Here are some of the ways we're working to connect people that need it most. To learn more, visit cox.com/digitalequity.

	Connect2Compete Internet Packages	ConnectAssist Internet Packages	ACP (Affordable Connectivity Program)
Description	Cox sponsored program providing low-cost internet to families with children K-12 receiving government assistance	Cox sponsored affordable internet for low-income individuals receiving government assistance – this program is similar to Connect2Compete but is targeted to households without children K-12	Government sponsored benefit program that helps ensure internet connectivity for qualifying households
Cost & Billing	<ul style="list-style-type: none"> \$9.95/month (including modem rental) No installation fees <p><i>Note: Schools or other organizations can pay Cox directly on behalf of group of students through the Special Payment Program</i></p>	<ul style="list-style-type: none"> \$30/month (with <u>wifi</u> modem rental) Free self installation <p><i>Note: Schools or other organizations can pay Cox directly on behalf of qualified individuals or families through the Special Payment Program</i></p>	<p>Customer receives discounts of up to \$30/month off their internet service</p> <p>Cox submits for reimbursement to USAC/FCC monthly</p>
Features	<ul style="list-style-type: none"> Access to over 3M+ Cox Hotspots nationwide Cox Security Suite – online safety software tools Access to the Cox Digital Academy, which provides educational resources 	<ul style="list-style-type: none"> Access to over 3M+ Cox Hotspots nationwide Cox Security Suite – online safety software tools Access to the Cox Digital Academy, which provides educational resources 	All standard internet plans qualify for the Affordable Connectivity Program, including Connect2Compete, ConnectAssist. Cox's prepaid product.
Qualifications	<ol style="list-style-type: none"> Must have a child in K-12 at home Must participate in one of the following government subsidy programs: National School Lunch, SNAP, TANF, Head Start, WIC, Low Income Home Energy Assistance Program (LIHEAP), Public Housing 	Must participate in one of the following government subsidy programs: SNAP, TANF, Head Start, WIC, Low Income Home Energy Assistance Program (LIHEAP), Public Housing, Pell Grant, Veterans Pension, Tribal Programs, Supplemental Security Income (SSI)	Participation in one of the following government subsidy programs: National School Lunch Program (NSLP), SNAP, TANF, Federal Public Housing, LIHEAP, WIC, Head Start, Pell Grant for current academic year, Tribal Programs, Medicaid, Supplemental Security Income (SSI), Veterans Pension & Survivors Benefits or proof income is 200% or less than federal poverty level guidelines
URL	cox.com/c2c	cox.com/connectassist	cox.com/ACP

Conclusion

Cox values strengthening our partnership with Idaho to address the Digital Divide and accelerate Digital Equity solutions. Through our partnership, we would utilize this grant to achieve the program's goal to provide fast and reliable broadband to unserved and underserved homes in Idaho.

Today, fast and reliable broadband is crucial for meeting the needs of today's increasing number of people schooling and working virtually and supporting the increasing number of connected devices in the home. Cox has decades of work connecting families and we look forward to our partnership to ensure many more Blaine County residents have access to our network. Our commitment to our customers and investment in infrastructure would empower Idaho residents now and into the future.

Delivering robust and reliable broadband service to the un-and-underserved communities in Idaho is Cox's commitment. Thank you for the partnership with Cox to help bridge the digital divide by delivering affordable, high-quality, and innovative information technologies.

Cox acknowledges that our submission in no way guarantees funding in the future, and that Idaho Broadband Advisory Board projects will be awarded pursuant to future grant guidelines and application criteria for Capital Project Funds, BEAD Funds, and/or State funding, and in correlation with the statewide broadband plan. We further acknowledge that any resulting agreement or contract will be subject to negotiation by the parties.

Delaware
The First State

Page 1

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY "COXCOM, LLC" IS DULY FORMED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN GOOD STANDING AND HAS A LEGAL EXISTENCE SO FAR AS THE RECORDS OF THIS OFFICE SHOW, AS OF THE TWENTY-EIGHTH DAY OF FEBRUARY, A. D. 2022.

AND I DO HEREBY FURTHER CERTIFY THAT THE SAID "COXCOM, LLC" WAS FORMED ON THE FIFTEENTH DAY OF JULY, A. D. 1996.

AND I DO HEREBY FURTHER CERTIFY THAT THE ANNUAL TAXES HAVE BEEN PAID TO DATE.



JWB
Jeffrey W. Bullock, Secretary of State

2641751 8300
SR# 20220726800
You may verify this certificate online at corp.delaware.gov/authver.shtml

Authentication: 20279221
Date: 02-28-22

Contact Information

Cambridge Telephone Company, Inc.

James Wescott

VP, Customer Service & Business Development

jwescott@ctctele.com

(208) 257-3314

Broadband Project Proposal and Scope

Description of project

The Cambridge and Council Rural Fiber Project would extend 60 fiber route miles to rural Idahoans who are currently unserved and underserved. There are a total of two Proposed Funded Service Areas (PFSAs) and are as follows: Cambridge and Council.

According to CTC's records, there are 75 Business and 636 Residential locations that are covered by this project. CTC has seen an increase in bandwidth consumption as well as full-time residents throughout the COVID-19 pandemic and expects increased telework, telehealth, and remote education services as part of the network demand.

CTC will deploy new Calix equipment to serve customers with truly high speed broadband services. XGS-Pon cards now part of CTC's deployed network and increased bandwidth capacity will be a priority for these subscribers. CTC commits to providing an option of 100/100 Mbps to every subscriber and will have the capability to provide 1000/1000 Mbps or more.

Description of Type(s) of Technology to be Used

CTC will deploy fiber and Calix equipment for the network.

Number of unserved, underserved locations that will be served by the project

<u>PFSAs</u>	<u># of Unserved Locations</u>	<u># of Underserved Locations</u>
Cambridge		208
Council	329	174
Permitting		
<u>Total</u>	329	382

Project Timeline

Subject to permitting timelines, CTC does anticipate that deployment of the services will take three years. However, CTC will make every effort to construct as feasible and within IBAB's guidelines. Due to the locations, there is a limited time window in which the weather is cooperative to allow for construction. The construction season is typically May through October. As long as facilities are installed, CTC can continue to cutover premises throughout the winter months and that is predominantly accessible in winter months.

Anticipated Total Project Costs and Financing Sources

The proposed costs of the project are broken out as follows:

<u>PFSAs</u>	<u>Proposed Cost</u>
Cambridge	\$ 934,842.00
Council	\$ 2,963,891.00
Permitting	\$ 50,000.00
<u>Total</u>	\$ 3,948,733.00

CTC is willing to provide matching amounts as required by the various Funding sources as they become available. Given the variation in programs, CTC will decide at the time of application on the percentage match above the minimum requirement.

Project Ownership

CTC will own and operate the Facilities. CTC will work with local government entities (i.e. Washington County, Adams County, City of Cambridge, and City of Council) to ensure their needs are accounted for and local governments have input into the project.

Explanation and Demonstration of Applicant's Financial Ability to Complete the Project

CTC has operated telecommunications services since 1905 starting in Washington County. CTC has operated Middle Mile fiber facilities and is well suited with a management team of individuals with one having 40+ years of experience and a combined experience of over 80 years of experience with its key management.

The financial stability is sound and there will be continued operations of CTC's network. Common ratios used for evaluation of funding are within financial institution guidelines for continued funding. Full detail can and will be provided through a secure application portal as required for final application.

Description of Alignment with IBAB's Strategic Plan

CTC will establish an open access, nondiscriminatory interconnection policy as it relates to its proposed project. Network facilities (Facilities) that are constructed with grant funding will be made available for third-party access, provided the third-party request is technically feasible and does not exceed current or anticipated capacity limitations and the Parties can negotiate a reasonable rate for the proposed interconnection. Additionally, CTC is committing to reasonable, good-faith negotiations with all public, private, and non-profit entities that present viable access requests. CTC will not discriminate between or maintain bias in favor of any requesting entity, but rather will evaluate the requests in the order they are submitted. CTC will allow interconnecting parties on a first-come-first-serve basis in any Facilities funded by NTIA, the State of Idaho or other such entities. Such interconnection will allow 24-hour access and will be based on reasonable and nondiscriminatory rates and terms.

CTC intends to establish an application process, wherein all third-party entities will be fairly evaluated. CTC's application process will be standardized and easily accessible. Applications will be evaluated by staff or department heads. A completely submitted application is not guaranteed approval unless it meets the technical capabilities of the network, as established by CTC. Applications will be reviewed within a reasonable period of time. The application process will be open-ended and offered until such a time when it becomes unfeasible to lease or access network Facilities. The application process will resume once the network has the capacity to accommodate additional third-party requests.



In order to allow the open and nondiscriminatory use of their funded Facilities while maintaining the network's integrity, CTC use generally accepted technical measures to provide third-party access and address network attacks, illegal content, and other harmful activities. CTC reserves the right to disconnect or limit access to Facilities that in CTC 's opinion are a threat to the security or lawful operation of its services or its services' software and/or hardware. Illegal or harmful content or use of the Facilities will be remedied using any technique available, including protocol-aware filtering and rate-limiting, to control and limit the offending source. However, CTC will not unjustly or unreasonably impair access to lawful third-party traffic based on content, application, service, user, or use of non-harmful devices. Any necessary technical measures to allocate capacity and provide acceptable service levels to all customers will be application- and device- neutral.

Entities approved through the application process will be required to enter into a lease/access agreement with CTC, subject to periodic review. CTC will allow a reasonable time period for negotiations, not to exceed 90 days. Market pricing baselines will be established based on the facilities that CTC has made available through Grant funding. CTC has established these procedures in order to ensure compliant network management practices, as well as creating an efficient method in granting third-party access to Grant funded network facilities.

Contact Information

Cambridge Telephone Company, Inc.

James Wescott

VP, Customer Service & Business Development

jwescott@ctctele.com

(208) 257-3314

Broadband Project Proposal and Scope

Description of project

The Washington, Adams, and Boise Counties Rural Fiber Project would extend 115 fiber route miles to rural Idahoans who are currently unserved. There are a total of seven Proposed Funded Service Areas (PFSAs) and are as follows: Archie Creek, Cambridge, Council, Cuprum, Clear Creek, Ditch Creek, and Lowman.

According to the latest census data, there is a population of 260 housing units, 241 residents, 98 households, and 7 businesses. Cambridge Telephone Company (CTC) proposes the deployment of 458 Calix ONTs as Lowman in particular is considered a recreational area with many summer homes, United States Forest Service locations, and emergency services. CTC has seen an increase in bandwidth consumption as well as full-time residents throughout the COVID-19 pandemic and expects increased telework, telehealth, and remote education services as part of the network demand.

CTC will deploy new Calix equipment to serve customers with truly high speed broadband services. XGS-Pon cards now part of CTC's deployed network and increased bandwidth capacity will be a priority for these subscribers. CTC commits to providing an option of 100/100 Mbps to every subscriber and will have the capability to provide 1000/1000 Mbps or more.

Description of Type(s) of Technology to be Used

CTC will deploy fiber and Calix equipment for the network.

Number of unserved, underserved locations that will be served by the project

<u>PFSAs</u>	<u># of Unserved Locations</u>
Archie Creek	32
Cambridge	37
Clear Creek	10
Council	98
Cuprum	40
Ditch Creek	7
Lowman	234
Total	458

Project Timeline

Subject to permitting timelines, CTC does anticipate that deployment of the services will take five years. However, CTC will make every effort to construct as feasible and within IBAB’s guidelines. Due to the locations, there is a limited time window in which the weather is cooperative to allow for construction. The construction season is typically May through October. As long as facilities are installed, CTC can continue to cutover premises throughout the winter months and that is predominantly accessible in winter months.

Anticipated Total Project Costs and Financing Sources

The proposed costs of the project are broken out as follows:

<u>PFSAs</u>	<u>Proposed Cost</u>
Archie Creek	\$ 447,571.00
Cambridge	\$ 918,449.00
Clear Creek	\$ 562,642.00
Council	\$ 2,064,156.00
Cuprum	\$ 1,689,273.00
Ditch Creek	\$ 516,812.00
Lowman	\$ 3,250,036.00
Permitting	\$ 150,000.00
Total	\$ 9,598,939.00

CTC is willing to provide matching amounts as required by the various Funding sources as they become available. Given the variation in programs, CTC will decide at the time of application on the percentage match above the minimum requirement.

Project Ownership

CTC will own and operate the Facilities. CTC will work with local government entities (i.e. Washington County, Adams County, City of Cambridge, and City of Council) to ensure their needs are accounted for and local governments have input into the project.

Explanation and Demonstration of Applicant’s Financial Ability to Complete the Project

CTC has operated telecommunications services since 1905 starting in Washington County. CTC has operated Middle Mile fiber facilities and is well suited with a management team of individuals with one having 40+ years of experience and a combined experience of over 80 years of experience with its key management.

The financial stability is sound and continued operations of CTC’s network. Common ratios used for evaluation of funding are within financial institution guidelines for continued funding. Full detail can and will be provided through a secure application portal as required for final application.

Description of Alignment with IBAB’s Strategic Plan

CTC, will establish an open access, nondiscriminatory interconnection policy as it relates to its proposed project. Network facilities (Facilities) that are constructed with grant funding will be made available for third-party access, provided the third-party request is technically feasible and does not exceed current or anticipated capacity limitations and the Parties can negotiate a reasonable rate for the proposed

interconnection. Additionally, CTC is committing to reasonable, good-faith negotiations with all public, private, and non-profit entities that present viable access requests. CTC will not discriminate between or maintain bias in favor of any requesting entity, but rather will evaluate the requests in the order they are submitted. CTC will allow interconnecting parties on a first-come-first-serve basis in any Facilities funded by NTIA, the State of Idaho or other such entities. Such interconnection will allow 24-hour access and will be based on reasonable and nondiscriminatory rates and terms.

CTC intends to establish an application process, wherein all third-party entities will be fairly evaluated. CTC's application process will be standardized and easily accessible. Applications will be evaluated by staff or department heads. A completely submitted application is not guaranteed approval unless it meets the technical capabilities of the network, as established by CTC. Applications will be reviewed within a reasonable period of time. The application process will be open-ended and offered until such a time when it becomes unfeasible to lease or access network Facilities. The application process will resume once the network has the capacity to accommodate additional third-party requests.

In order to allow the open and nondiscriminatory use of their funded Facilities while maintaining the network's integrity, CTC use generally accepted technical measures to provide third-party access and address network attacks, illegal content, and other harmful activities. CTC reserves the right to disconnect or limit access to Facilities that in CTC's opinion are a threat to the security or lawful operation of its services or its services' software and/or hardware. Illegal or harmful content or use of the Facilities will be remedied using any technique available, including protocol-aware filtering and rate-limiting, to control and limit the offending source. However, CTC will not unjustly or unreasonably impair access to lawful third-party traffic based on content, application, service, user, or use of non-harmful devices. Any necessary technical measures to allocate capacity and provide acceptable service levels to all customers will be application- and device- neutral.

Entities approved through the application process will be required to enter into a lease/access agreement with CTC, subject to periodic review. CTC will allow a reasonable time period for negotiations, not to exceed 90 days. Market pricing baselines will be established based on the facilities that CTC has made available through Grant funding. CTC has established these procedures in order to ensure compliant network management practices, as well as creating an efficient method in granting third-party access to Grant funded network facilities.



PO Box 124 • 1101 E. Main Ave. Custer, ID, 83226 • Telephone: (208) 879-2281 • Fax: (208) 879-5211

Dear Members of the Idaho Broadband Advisory Board and the Idaho Department of Commerce,

I want to thank you for the opportunity to submit a planning application for our future broadband expansion plans. As you know, we are a cooperative that is deeply committed to serving our communities and providing them with the best services possible at the lowest prices. The opportunity to secure additional funding to help us complete our fiber optic expansion is exciting. I was concerned to hear that any responses would be made public, so at this time we will not be submitting a planning proposal. Since a response to the RFI doesn't constitute an application for grant funds, I don't feel it is wise for us to share our future buildout plans in detail with our competition. When the formal application process is ready, we certainly plan on submitting an application. We hope the sensitive information contained in those applications will be used to fairly compare applications by the Board but will be treated confidentially.

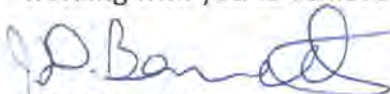
We have been serving our members with telecommunications services since 1955 and we have spent decades expanding and upgrading our networks to stay current with technology and customer demand. I appreciate the Board's willingness to engage with existing providers to identify what the needs are and how you can assist us. Since I will not be submitting a detailed network expansion plan I thought it would be helpful to you if I listed some of our priorities, challenges, and goals. I hope this information will aid you in your planning.

- Custer Telephone Cooperative is committed to deploying fiber to every member in our 4 exchanges. We also are expanding our fiber footprint in our CLEC area as well. In our opinion fiber optic connectivity has the highest capacity, best customer experience, and best longevity out of all the network architectures.
- Fiber buildouts are expensive. Due to the inflation caused by the massive amount of funds being released, some construction estimates have grown to over \$90,000 per mile of fiber placed. We have placed over 800 miles of cable in the ground to date which equates to roughly \$75,000,000 at today's construction costs. We serve over 1000 square miles of Custer and Lemhi Counties, but have a very small subscriber base to recoup that investment. In spite of that, over the last 15 years, we have upgraded over 65% of our ILEC subscribers to fiber optic service, with more being converted every year.
- Planning, engineering, and permitting sometimes takes years to prepare before construction can begin, therefore reasonable buildout expectations are a necessity.

This institution is an equal opportunity provider and employer.

- We have plans and engineering in place to continue our fiber optic expansion for many years to come, but since it is such a capital intensive endeavor, we are excited about the opportunity to get assistance from the State of Idaho to help us achieve our goal sooner.
- I am following the national conversation about USF reform, and I am hopeful that state and federal policy makers keep in mind that these networks require ongoing investment and maintenance. One-time funding for construction expenses will speed up deployment, however if the network isn't built and supported for long term viability, or managed by people skilled in this industry, these networks can fail. This would not be a good outcome for our taxpayers. We would encourage funding be directed toward entities that have a proven track record of successfully operating data networks and that the state consider the long-term assistance that may be necessary to support these rural networks over the decades to come.
- Stable jobs and families are the foundation of strong communities. We are committed to making sure our staff and their families remain strong, healthy, and productive members of the community. Great people make all the difference, and we've been serving our members for almost 70 years and we are excited about the next 70.
- We actively assist many charities, nonprofits, and schools in our communities to enable them to achieve their missions.
- There is a narrative that rural communities need their own public networks. It's been my observation that rural cities and counties often times do not have the resources, expertise, or staff to operate data networks in addition to all of their other responsibilities. Recently, one of our county commissioners told me that they appreciate that we take good care of the citizens of the county so the county can focus their valuable attention elsewhere. I told him that we're grateful to have that responsibility and we take it very seriously.
- We are passionate about providing the best services available. We operate on tight margins, but we are very effective at using our limited resources to their fullest potential. We take pride in our fiscal responsibility.
- As a cooperative any excess capital is retired back into the community to our members. This has been a great benefit to our communities through the years.
- Many of our subscribers are on fixed income. We always keep them in mind and we strive to provide them with the fastest services at the lowest prices possible. We also participate in the federal assistance programs to help our subscribers pay for their services.

Once again, I would like to thank you for the opportunity to provide input to assist you in planning this very important grant program. I am blessed to work with all the local service providers in our region. They are staffed with wonderful, smart, and dedicated people who are just as committed to serving their communities as we are. You are showing great leadership by seeking the input of organizations who have been involved in this industry for generations and know what it takes to be successful in a very challenging environment. Rural Idaho is not an easy place to build broadband networks, but in spite of all of the environmental, regulatory, and fiscal challenges we face, Custer Telephone Cooperative, and our peers, are well positioned with the skills, knowledge, and experience to connect all Idahoans to the broadband they deserve. We look forward to working with you to achieve this goal.



J.D. Bennetts
CEO/General Manager



North-Central Idaho- District II Interoperability Governance Board

Idaho Department of Commerce
Attn: Ramón S. Hobdey-Sánchez, J.D.
State Broadband Program Manager
Idaho Department of Commerce
700 W. State Street
Boise, Idaho 83702

November 30, 2022

Dear Idaho Department of Commerce:

re: DIGB2 Middle Mile Network Segment Plan

Project Summary.

North-central Idaho via the District II Interoperability Governance Board (DIGB2) has a unique opportunity to vastly improve broadband infrastructure for all five counties (Clearwater, Idaho, Latah, Lewis, and Nez Perce) by constructing a complimentary scalable, redundant and resilient segment from Orofino to Grangeville. This segment will interface with the IRON/IIG and Port of Lewiston infrastructure in Grangeville and Ziply Infrastructure in Orofino, Idaho. It will allow multiple private entities to provide last mile connections to residences and businesses in otherwise unserved and unreachable areas of North-Central Idaho. The project will require an RFP for final engineering and construction. The open-access network ownership is yet to be determined but the intent is to engage either the IRON/IIG group or the Port of Lewiston to own and maintain the network on behalf of the Counties of District II. The Idaho Broadband Advisory Board is developing a broadband investment application process to allow entities to apply for state funds in 2023. As per the IBAB's request, DIGB2 is submitting a concept proposal to Idaho's Broadband Advisory Board on December 1, 2022. DIGB2 has commitments from four of the five Counties that make up District II in the amount of \$2.5 million and will be asking the State of Idaho for \$8 million of the \$10.8 million projected cost.

Why is it needed?

The communities of District II and specifically the County seats in Clearwater, Idaho, and Lewis Counties currently have only one path for broadband connectivity and these counties have experienced multiple fiber cuts and outages over the last several years, including loss of service to Emergency Communications Systems (9-1-1). This segment will provide a redundant loop to reroute broadband communications in the event of a failure and enable service continuity to industry, education, healthcare, public safety, local government, and residences in one of the most unserved/underserved areas in Idaho.

What are the benefits?

This project will enhance other broadband infrastructure projects proposed by the Port of Lewiston and IRON/IIG in District II. The broadband network developed because of funding from the State of Idaho will be reserved for true open access, which will enable a choice of existing "last mile" service providers. The open access commitment is also intended to promote new entrants into the area. The open access fibers are not intended for incumbents and carriers attempting to just pass through the area. Current and

Clearwater, Idaho, Latah, Lewis, Nez Perce Counties; Nezperce Tribe; Cities of Lewiston and Moscow; District II Local, State, and Federal Planning Participants

future last mile service providers who want to offer services in District II will be able to purchase connections from the middle mile network path to extend their last mile connections to reliable and cost-effective internet exchange locations at standard rates and not simply on what the market will bear. This will minimize service monopolies that tend to keep prices high and bandwidth, speed, and services low. It will create a fair and level playing field for all (small, midsize, and large companies) broadband providers.

Who are the Partners?

DIGB2 is comprised of emergency communicators, emergency managers, tribal and elected officials and public safety responders working to improve Emergency Communications in North-Central Idaho on behalf of the District II Boards of County Commissioners. The DIGB includes voting members from each County, The City of Lewiston, the City of Moscow, and the Nez Perce Tribe.

District II Idaho Association of Counties (DII-IAC), an organization of elected officials, is a subset of the Idaho Association of Counties (IAC). The IAC, formed in 1976, is a nonprofit, nonpartisan member service organization dedicated to the improvement of county government. It was designed and incorporated by county elected officials to provide services, research, uniformity, and coordination among member counties, in order for the county elected officials to serve their constituents better.

In 2018, due to lack of action on the part of the current broadband incumbents, DIGB2 engaged Advanced Technical Partners, LLC to author a study to determine potential fiber paths for Emergency Communications in District II. The resulting study provided a basis for the Idaho Governor’s Broadband Plan and the current Idaho Broadband Advisory Board.

District 2 Interoperability Governance Board (DIGB2) has partnered with IRON, the Clearwater Economic Development Association, and the Port of Lewiston and the five counties in the development of this project. While the public safety aspect of this project drives the proposal, it provides a true opportunity to finally enhance broadband infrastructure and service for all five counties in District II.

Sincerely,
Jerry Zumalt
District II Interoperability Governance Board, Chair
(jjumalt@idahocounty.org)

For more information, contact Dave Taylor, 911 Coordinator, Nez Perce County, davet@npc911.org.

Attachments Included:
DIGB2: Infrastructure Report
Preliminary Engineering Report: DIGB2 Orofino-Nezperce Fiber Network
Preliminary Engineering Report: DIGB2 Nezperce to Grangeville

Voting members: Clearwater County: Don Gardner; Mitch Jared. Idaho County: Jerry Zumalt; Terry Cochran. Latah County: Tim Besst; Roger Lanier; Mike Neelon. Lewis County: Jason Davis; Bob West. Nez Perce County: Bill Reynolds; Brian Birdsell and Clark Filip. Nez Perce Tribe: Leotis McCormack; John Wheaton.



P.O. Box 586
Orofino, ID 83544
Phone: (208) 476-3615
Fax: (208) 476-8902



Commissioners
Rick Winkel, Chairman
Mike Ryan
Vince Frazier

Clearwater County Commissioners

Dear Idaho Broadband Advisory Board,

May 31, 2022

The Clearwater County Board of Commissioners is in support of the Idaho District II Interoperability Governance Board (DIGB2) broadband project and the Port of Lewiston's grant application for the securing of funds to install the middle mile broadband fiber infrastructure from Orofino Idaho, through Nez Perce Idaho, and concluding in Grangeville Idaho.

In this area of District II Idaho, our 911 centers have been negatively impacted by poor broadband accessibility and dead-end fiber runs. Many times, the fiber to Clearwater County has been cut resulting in the temporary loss of 911 services. This is just an unacceptable situation.

Critical communications require a looped redundant fiber system so that when damage occurs on one side, the network continues through a different path, thus ensuring no breakdown in emergency communications. The installation of this proposed path is a critical step in establishing this redundant broadband system within District II region of Idaho.

In addition to supporting emergency services this broadband connection will benefit Economic Development, Telehealth, Distance Education, and Residential Connectivity. With the ever-expanding Internet economy, District II Idaho requires a better broadband system to compete in the new markets.

The citizens of Clearwater County, along with the other four counties in District II will benefit from this project, therefore Clearwater County is in support of this grant proposal.

Rick Winkel, Chairman

A blue ink signature of Rick Winkel, written over a horizontal line.

Mike Ryan, Member

A blue ink signature of Mike Ryan, written over a horizontal line.

Vince Frazier, Member

A blue ink signature of Vince Frazier, written over a horizontal line.

SKIP BRANDT, FIRST DISTRICT
KOOSKIA, IDAHO

TED LINDSLEY, SECOND DISTRICT
GRANGEVILLE, IDAHO

DENIS B. DUMAN, THIRD DISTRICT
COTTONWOOD, IDAHO



Phone (208)983-2751 FAX (208)983-1428

320 West Main Street, Grangeville, ID 83530

BOARD OF IDAHO COUNTY COMMISSIONERS

April 12, 2022

Jerry Zumalt, Vice Chair
DIGB II

RE: ARPA Award for DIGB II Broadband Fiber Project

Dear Jerry;

Idaho County has authorized up to \$500,000 of Coronavirus State and Local Fiscal Recovery Funds (CSRFR) through the American Rescue Plan Act (ARPA) to DIGB II for the Broadband Fiber Project via Idaho County Resolution 2022-07 on April 12, 2022.

Please contact us if you have any questions,

Sincerely,

A blue ink signature of R. Skipper Brandt, written in a cursive style.

R. Skipper Brandt, Chairman

A blue ink signature of Ted Lindsley, written in a cursive style.

Ted Lindsley

Absent

Denis B. Duman

Idaho County Resolution 2022-07

**AN IDAHO COUNTY RESOLUTION AUTHORIZING THE AWARD OF CORONAVIRUS
STATE AND LOCAL FUNDS (CSFRF) RECEIVED THROUGH THE AMERICAN RESCUE PLAN ACT
TO THE DISTRICT 2 INTEROPERABLE GOVERNANCE BOARD ("DIGB II")**

WHEREAS, Idaho County received Coronavirus State and Local Fiscal Recovery Funds (CSFRF) through the American Rescue Plan Act (ARPA); and

WHEREAS, the Idaho County Board of Commissioners received a request from the District 2 Interoperable Governance Board ("DIGB II") for funds to assist in the DIGB II Broadband Fiber Project; and

WHEREAS, ARPA allows for the use of CSFRF funds to assist with investments in broadband infrastructure for communities who lack access to a reliable high-speed broadband connection, affordable broadband, and reliable services;

NOW THEREFORE BE IT RESOLVED that the Idaho County Board of Commissioners hereby authorizes up to \$500,000 in CSFRF funds to DIGB II to assist in the DIGB II Broadband Fiber Project.

PASSED and ADOPTED this 12th day of April, 2022, during the regular meeting of the Board of Idaho County Commissioners.

IDAHO COUNTY
BOARD OF COMMISSIONERS

ATTEST:



R. Skipper Brandt, Chairman


Kathy M. Ackerman, Clerk

Ted Lindsley, Commissioner

Absent

Denis B. Duman, Commissioner



Latah County
BOARD OF COUNTY COMMISSIONERS

P.O. Box 8068 ♦ 522 South Adams ♦ Moscow, Idaho 83843
(208) 883-7208 ♦ fax (208) 883-2280 ♦ e-mail boccc@latah.id.us
Kathie LaFortune ♦ Thomas C. Lamar ♦ David McGraw

Idaho Broadband Advisory Board
c/o Idaho Department of Commerce
P.O. Box 83720
Boise, ID 83720

Re: Orofino-Nezperce-Grangeville Fiber Backbone Project

Dear Idaho Broadband Advisory Board:

Latah County supports the Port of Lewiston's construction of a fiber segment that connects the county seats-- Orofino (Clearwater County), Nezperce (Lewis County), and Grangeville (Idaho County). This letter will be included with the Port of Lewiston's grant proposal that is being submitted as a non-CARES Act project. This project is recognized as critical infrastructure for telecommunication for public safety as well as education, healthcare, and industry. As a dark fiber, open access network it will provide internet service providers lease options to address customer needs; it will finally provide the redundancy our network lacks in north-central Idaho. To the extent that funds are available and can be used in compliance with federal, state and local laws, guidance and rules, Latah County intends to direct funding up to the amount of \$1 million to this project.

Latah County is an active partner in the District 2 Interoperability Governance Board (DIGB2). Our county sees this project supporting the conceptual planning completed by DIGB2 to address public safety communication. This planning is documented in the 2019 Infrastructure Report prepared by Advanced Technology Partners LLC. This north-central Idaho "open access" fiber network is an action item recommended in 2019 to Governor Little by the Idaho Broadband Task Force.

Respectfully submitted,


Kathie LaFortune
Chair


Thomas C. Lamar
Commissioner


David McGraw
Commissioner

Attest: 
Clerk/Deputy

Date: 6/1/21



Lewis County

COMMISSIONERS:

Greg Johnson, Chairman
Justin McLeod, Member
Mike Ponozzo, Member

510 Oak St., Rm #1
Nezperce, Idaho 83543-5065
Phone: (208) 937-2661
Fax: (208) 937-9234

May 14, 2018

Dave Taylor
Nezperce County
911 Coordinator

Dave,


On May 7, 2018 the Lewis County Board of County Commissioners voted to support their portion of the cost of funding a consultant for infrastructure discovery and to determine all associated costs for identifying fiber in our District 2 five County region.

As per your presentation, we have allotted \$4,200.00 towards this study. We realize the importance of fiber communication to improve our 911 system now and in the future. A main concern for all Counties should be to have a redundant system to properly serve the citizens of our five Counties.

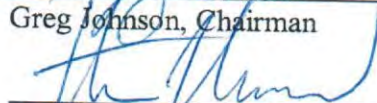
Thank you for working on this important project.

Sincerely,

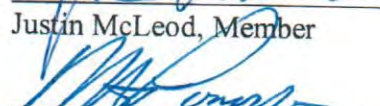
BOARD OF COUNTY COMMISSIONERS



Greg Johnson, Chairman



Justin McLeod, Member



Mike Ponozzo, Member

LEWIS COUNTY

RESOLUTION No. 2020 - 14

A RESOLUTION SUPPORTING THE DISTRICT 2 INTEROPERABLE GOVERNANCE BOARD ("DIGB II") REQUESTS TO DEVELOP THE OROFINO TO NEZPERCE FIBER LINE THAT IS PART OF THE REGIONAL BROADBAND PROJECT, AND FURTHER PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Lewis County recognizes that the development of regional broadband is a valuable and necessary asset for economic development, public safety, increasing public access to data, redundancy and resiliency; and

WHEREAS, it is the desire of the Lewis County Board of Commissioners to support the District 2 Interoperable Governance Board's ("DIGB II") efforts to work collaboratively with Clearwater County, Idaho County, Latah County, Lewis County, Nez Perce County, and Nez Perce Tribe to establish solutions for the development of regional broadband; and

WHEREAS, in response to the impacts of the coronavirus pandemic, DIGB II has identified projects to create a highly reliable and redundant broadband communications infrastructure to serve telehealth, emergency services, private business, and schools for remote learning.

NOW, THEREFORE, BE IT HEREBY RESOLVED THAT:

Section 1: The Lewis County Board of Commissioners hereby supports the application of a \$1,385,171 grant through the US Economic Development Administration (EDA) to fund the design and construction of a high priority publicly-owned middle mile broadband fiber pipeline between the cities of Orofino and Nezperce.


Section 2: Clearwater County agrees to serve as the local grant applicant on behalf of all Region II counties.

Section 3: The 20% grant match will be pro-rated across the five counties in region II based on a population share, and Lewis County will provide \$9,686 (3.5%) of the required match if awarded.


Section 4: This Resolution shall take effect and be in force from and after its passage and approval.

This Resolution is dully approved and adopted by the Board of Lewis County Commissioners on the 17TH day of August, 2020.


BOARD OF COUNTY COMMISSIONERS
Lewis County, Idaho



Greg Johnson, Chairman




Mike Ponzoso, Member



Justin McLeod, Member

ATTEST:



Alesia Winner, Clerk
Lewis County, Idaho



NEZ PERCE COUNTY

BOARD OF COUNTY COMMISSIONERS

1225 Idaho Street
P.O. Box 896
Lewiston, Idaho 83501-0896
(208) 799-3090
FAX (208) 799-3149

April 4, 2022

Jerry Zumwalt, Vice Chair
zumwalt@idahocounty.org

Re: ARPA Award for DIGB II Broadband Fiber Project

Dear Mr. Zumwalt:

Nez Perce County authorized up to \$1,000,000 of Coronavirus State and Local Fiscal Recovery Funds (CSFRF) through the American Rescue Plan Act (ARPA) to DIGB II for the Broadband Fiber Project via Resolution #2022-03-061 on April 4, 2022.


The County anticipates committing \$250,000 of these funds for DIGB II to expend for engineering costs associated with this project. The remaining \$750,000 of ARPA funds will be released to DIGB II upon the award of funds to complete the project.


If you have any questions, please give our office a call.

Sincerely,

BOARD OF COUNTY COMMISSIONERS


DOUGLAS A. ZENNER, Chairman


DON H. BECK, JR.


DOUGLAS W. HAVENS, Member

BoCC/sac

cc: Dave Taylor
Port of Lewiston

Don H. Beck
First District

Douglas W. Havens
Second District

Douglas A. Zenner
Third District

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RESOLUTION NO. 2022-04-061

A RESOLUTION AUTHORIZING THE AWARD OF CORONAVIRUS STATE AND LOCAL FISCAL RECOVERY FUNDS (CSFRF) RECEIVED THROUGH THE AMERICAN RESCUE PLAN ACT (ARPA) TO THE DISTRICT 2 INTEROPERABLE GOVERNANCE BOARD ("DIGB II") TO ASSIST IN THE DIGB II BROADBAND FIBER PROJECT, AND FURTHER PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Nez Perce County received Coronavirus State and Local Fiscal Recovery Funds (CSFRF) through the American Rescue Plan Act (ARPA); and

WHEREAS, Nez Perce County received a request from the District 2 Interoperable Governance Board ("DIGB II") for funds to assist in the DIGB II Broadband Fiber Project; and

WHEREAS, ARPA allows for the use of CSFRF funds to assist with investments in broadband infrastructure for communities who lack access to a reliable high-speed broadband connection, lack affordable broadband, and lack of reliable services.

NOW, THEREFORE, BE IT AND IT IS HEREBY RESOLVED THAT:


Section 1: The Nez Perce County Board of Commissioners hereby authorizes up to \$1,000,000 in CSFRF funds to DIGB II to assist in the DIGB II Broadband Fiber Project.


Section 2: This resolution shall take effect and be in force from and after its passage and approval.

This resolution is duly approved and adopted by the Nez Perce County Board of Commissioners on the 4th day of April, 2022.

BOARD OF COUNTY COMMISSIONERS
Nez Perce County, Idaho

BY:

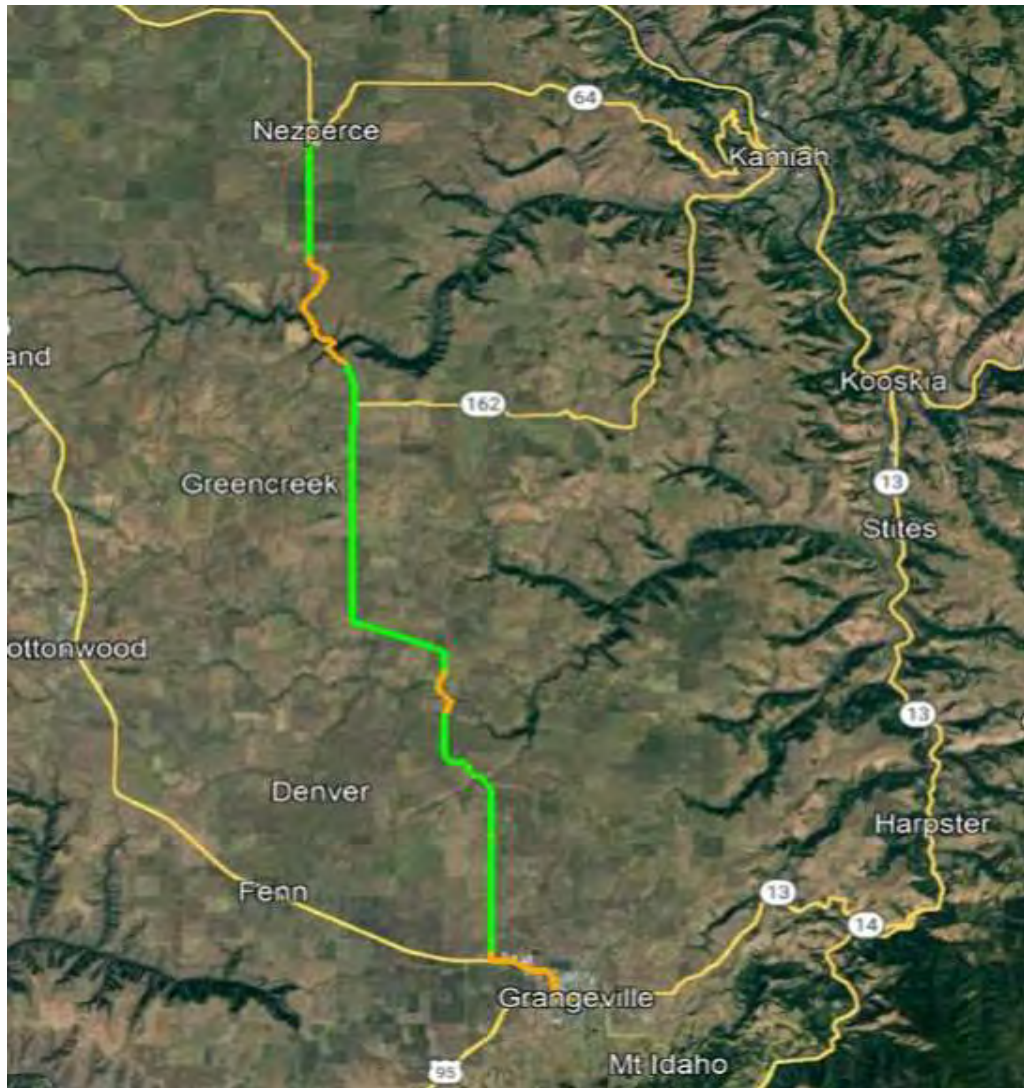

DOUGLAS A. ZENNER, Chairman
Nez Perce County Commissioner


DON H. BECK JR., Member
Nez Perce County Commissioner


DOUGLAS W. HAVENS, Member
Nez Perce County Commissioner

ATTEST:


PATTY O. WEEKS
Clerk, Nez Perce County, Idaho



PRELIMINARY ENGINEERING REPORT DIGB2 NEZPERCE TO GRANGEVILLE FIBER NETWORK

Prepared by:
Access Consulting, PC
2300 Regent Street Suite 207
Missoula, MT 59801

A. Preliminary Engineering Report

The Executive Summary of the Infrastructure Report of the Idaho District 2 Interoperable Governance Board, prepared by Advanced Technology Partners LLC, provides the following introduction and scope description of a proposed fiber optic network to link the Region 2 member agencies. It reads, in part:

“The District Two Interoperability Governance Board (DIGB2) comprised of Latah, Nez Perce, Clearwater, Lewis, Idaho Counties and the Nez Perce Tribe has a strategic interest in creating a highly reliable communications infrastructure to meet the growing needs of the counties and the communities they serve. Applications related to emergency services such as Next-Generation E911, inter-agency voice and data communications, location services and mapping require reliable communications infrastructure with scalable broadband connectivity. Moreover, sharing these applications with agencies or other counties outside of the DIGB2 region requires access to other reliable networks, securing data as needed. With these goals in mind, the DIGB2 members have a need to understand the current network capabilities within their region, the resource owners, and estimated costs for upgrading or adding new infrastructure which helps to fulfill their strategic goals.

As expected, the bulk of the existing communications infrastructure is owned by commercial telecommunications providers such as CenturyLink (now Lumen), “Zayo, XO, Frontier” (now Zply), and Inland Cellular. This is particularly true in the more rural DIGB2 areas. However, local governmental entities like the Port of Lewiston, Port of Clarkston, Port of Whitman as well as the cities of Lewiston and Moscow, have been constructing fiber optic infrastructures which provide additional resources over and above the commercial providers. Furthermore, non-standard communication entities such as Idaho County Light and Power (ICLP) and Clearwater Power have existing rights of way and infrastructure which could be procured to help reduce the costs of any future desired or required communication builds. Finally, there are private entities who would be willing to allow use of their rights of way to help create additional communications infrastructures.”

With that as background, the member agencies have begun to develop a phased plan for implementing broadband infrastructure where none currently exists, adequate capacity is lacking, or commercial network costs are unaffordable. This Preliminary Engineering Report examines the economic and technical feasibility of one leg of that larger network, the link from Grangeville (Idaho County) to Nezperce (Lewis County). Access Consulting, PC (hereinafter AC) was retained by the Port of Lewiston to provide a preliminary engineering report, including schematic design, construction cost estimates, project schedule, and recommended project delivery method, for a new fiber optic link between the Public Safety Answering Points in Grangeville and Nezperce, ID. AC has been actively engaged in the planning of broadband infrastructure in north central Idaho, western Montana and southeastern Washington for over fifteen years. This assessment draws upon that experience and firsthand knowledge of the distance and topographical challenges inherent in building telecommunications infrastructure in remote areas like Idaho and Lewis Counties.

A.1. Description of project components:

This proposed project will build a new fiber optic link between the public safety answering points (PSAPs or 911 centers) in Grangeville, ID (Idaho County Sheriff's Office) and Nezperce, ID (Lewis County Sheriff's Office). The purpose of this connection is to:

- Provide highly reliable communications infrastructure that enables interoperability between regional first responders,
- Enables applications like Next Generation E911, inter-agency voice and data communication, location services and mapping.

NETWORK FEASIBILITY REPORT

This connection is one piece of a larger network articulated in the Infrastructure Report authored by the District 2 Interoperable Governance Board (DIGB2), published on June 27, 2019. That report reviewed communications infrastructure availability in the five-county area and recommends a topology of nine links to provide a highly reliable broadband network to support government interoperability, especially public safety communications, throughout the region. The construction reviewed in this report provides one of those nine links.

This project includes the construction of a 48-strand armored single-mode fiber optic circuit between Nezperce, Idaho and Grangeville, Idaho. Single-mode fiber was selected because it offers virtually unlimited bandwidth and supports the greatest distance between end points. This network cable will be either direct-buried or bored and placed in conduit depending on existing ground conditions.

The first decision in designing such a network is the selection of the preferred route for the network. Access Consulting considered three potential routes, including:

1. A buried route following the shortest road path between the two end points. This route exits south from Nezperce on Highway 162 then continuing south on Old Highway 7 continuing south on US Highway 95 to Main Street in Grangeville.
2. A buried route north from Nezperce on Highway 62 to Craigmont then continuing south on US Highway 95 to Main Street in Grangeville.
3. A buried route following Highway 64 east to Kamiah then continuing south on US Highway 12 and then south on Highway 13 to Main Street in Grangeville.
4. An aerial and buried path following existing Clearwater Power and Avista utility poles south from Nezperce on Highway 162 then continuing south on Old Highway 7 continuing south on US Highway 95. The route leaves US Highway 95 north of Grangeville on County Road going east then head south on D Street to Cunningham Street. The route continues east on Cunningham Street and then heads south on A Street to the Idaho County Sheriff's Office.

Construction cost is a function of distance and construction type. Route option 1 above was selected for this feasibility assessment because it was the shortest route.

The network will include approximately 143,500 lineal feet of 48-strand, single-mode fiber optic cable. This cable can provide up to 48 physically separate networks (one per strand). That number can be expanded with wave division multiplexing and/or virtual network technology to meet all the foreseeable goals of the Owner. For the purposes of this assessment, we have assumed that the network will be divided into twenty-four 2-strand networks operating at 1 gigabit per second. This is near the actual low-end of the networks capacity but enables the network to meet immediate goals and provides a basis for operational cost assessment.

The endpoints of the networks will be at the PSAPs in Nezperce and Grangeville. The fiber will be terminated in a rack or wall mounted patch panel. A Layer 3 network switch or router with appropriate fiber optic modules will light the network and provide for connection to the local network.

A.2. Project Drawings

Drawings showing the proposed route described below are provided in the report Addendum.

A.3. Feasibility Analysis:

To assess the feasibility of this project, Access Consulting:

NETWORK FEASIBILITY REPORT

- selected the most promising potential route for the link,
- performed a visual inspection of the entire route,
- developed a schematic network design for that route,
- determined preferred construction methods for that route, and
- estimated construction routes for two construction plans.

The field survey of the preferred route between Nezperce, ID and Grangeville, ID via Highway 162 to Old Highway 7. The route between the two cities was a combination of trenching and directional boring depending on the type of geology present. Most of the exposed rock that hinders some areas on Highway 162 and Old Highway 7 is diorite, basalts, moraine, and glaciofluvial outwash. The rocks vary in hardness between grade 6 and grade 8 on the Mohs hardness scale. The rock is present from 3' to 15' from the edge of the road in places making trenching difficult or impossible. In these areas of exposed rock hemming the shoulder, boring would be better suited for the burial method.

The Aerial Option described below utilizes existing utility pole where possible to reduce the cost of construction. This method also reduces the physical reliability and security of the network but is included here to better inform decisions regarding this project.

In summary, this project must be considered very feasible. The construction methods proposed are all common practice in the telecommunications industry in this region. The narrow right of way in places on Highway 162 and Old Highway 7 poses some safety concerns for crews working along the shoulder, but this risk can be mitigated with an appropriate traffic management plan. The network media proposed, single-mode fiber optic cable, is commonly used in outdoor telecommunications installations and provides the best capacity and range of all network media available today. Single-mode fiber also provides the best ability to adapt to new developments in network electronics technology. The electronics required to light the network on Day One (routers or layer 3 switches) are current technology most likely already present in the two Counties' networks. Because they are already in those networks, supporting those devices should pose little to no challenge for existing staff.

A.4. The proposed method of construction.

This project will be procured through a traditional design/bid/build process as dictated by the Statutes of the State of Idaho. Design consultants, including the engineer of record, shall be selected by a qualifications-based selection process as required by Title 67, Chapter 23, Section 2320 of Idaho Statutes. The selected Design Consultants shall produce the bid documents, typically drawings and specifications, for the Owner that will be the basis of a competitive sealed bid for the construction. The Design Consultants shall also provide owner's representative and construction administration services during the build phase of this process.

The Palouse and Camas prairies of north central Idaho pose risks for fiber optic cables. Our proposed method of construction is a combination of buried and bored placement of the fiber optic cable. This method mitigates the risk of damage from wildfires, ice, wind, and accidents.

General contractor(s) shall be selected in a competitive, sealed bid process in accordance with Title 67, Chapter 2, Section 2805 of Idaho Statutes. This Section specifies the bidding process and requirements for public works construction projects exceeding \$200,000 total value.

A.5. The number of construction contracts anticipated.

The Design Consultant shall advise the Owner on the feasibility of executing this project with one or more general contracts, based on an assessment of available contractor capacity, delivery schedule, seasonal construction limitations, and other factors determined by the Owner. If multiple contracts are procured, they shall be defined and delimited by “meet me” points detailed by the Design Consultant.

A.6. Detailed Construction Cost Estimates:

Two construction designs were developed for construction cost estimating.

The first option is a fiber route that is underground to increase its resistance to natural disaster (weather, wildfire) and human interference (construction accidents, vandalism). The link is placed underground by trenching (93,735 feet) and boring (43,673 feet). Boring is recommended for penetrating the exposed rock through Lawyer Creek Canyon on Highway 162, in the towns of Nezperce and Grangeville, the area 2,500 feet south of the intersection of Old Highway 7 and Reservation Line Road. It is also recommended when the line intersects driveways and roads that cross the route. Boring these intersections saves the cost of restoring the existing road/driveway after trenching. These recommendations are not intended to dictate the Contractor’s chosen means and methods but are assumptions used for the cost estimate below.

Starting in Nezperce, ID, on the westside of the Lewis County District Court building/Lewis County Sheriff’s Office in the alleyway, bore north 265’ to 5th Ave. Follow 5th Ave on the southside of the street going west 744’ to the alleyway. On the east side of the alleyway, bore south for 765’ to the southside of 7th Ave. Begin boring east 145’ to Walnut St. Start boring south on Walnut Street along the westside of the road and continue along Highway 162 for 632’. At this point, begin trenching for 14,934’ while boring under county roads and driveway crossings. At this point, begin boring for the next 7,007’. At this point, bore under Highway 162 to the eastside 48’. Continue boring south for 4,890’ to Lawyer Creek. Bore under Highway 162 and Lawyer Creek to the westside of the highway 99’. Continue boring south for 3,990’. At this point, bore under Highway 162 for 56’ to the eastside. Continue boring south 260’ then bore under Highway 162 back to westside of the road 46’. Continue boring south for 2,870’. At this point, begin trenching 47,527’ on the westside of Highway 162 and Old Highway 7 boring under county roads and driveway crossings. At this point, begin boring for 1,978’. At this point, bore under Old Highway 7 to the eastside 47’. Bore south for 1,972’. At this point, bore under Old Highway 7 for 68’ to the westside of the road. Bore south for 2,364’. At this point, bore under Old Highway 7 to the eastside 46’. Begin trenching going south for 33,493’ boring under county roads and driveway crossings. At this point, bore going south to the northside of US-95 1,216’. Begin boring east for 10,365’. At this point, bore south 59’ under West Main Street. Begin boring east for 312’ to the westside of South C Street. Bore south for 230’ on the westside of South C Street. Bore east on the northside of West South Street 1,127’ to the eastside of South Idaho Street. Bore north for 86’ on eastside of South Idaho Street. Bore southeast for 84’ to the entrance facility of the Idaho County Courthouse/Idaho Country Sheriff’s Office.

NETWORK FEASIBILITY REPORT

Buried (Trench & Bore)		
Boring	Price/Ft	Total
43,673	\$50.00	\$2,183,650.00
Trenching	Price/Ft	
93,735	\$20.00	\$1,874,700.00
Fiber*	(48F) Price/Ft	
143,500	\$0.77	\$110,495.00
Conduit (3" HDPE)	Price/Ft	
43,673	\$2.37	\$103,505.01
Splices	Price/Splice	
1,728	\$50.00	\$86,400.00
Splice Cases	Price Each	
70	\$325.00	\$22,750.00
Grounding Rods/Clamps	Price Each	
70	\$17.25	\$1,207.50
70	\$5.00	\$350.00
Hand Holes**	Price Each (includes labor)	
116	\$4,174	\$484,184
Electronics		\$10,000.00
	Total	\$4,877,241.51

* Corning 48F Armored Direct Bury

**Quazite Underground Enclosure Assembly, PG, Fiber Optics Cover Logo, 49 5/8 in Overall Length

The second option (the Aerial Option) seeks to reduce the total cost of construction by using aerial construction wherever possible following nearly the same route as the completely buried option. There are several sections that do not have poles requiring boring or trenching depending on the soil types. As noted above, this increases the possibility of natural or manmade outages but reduces overall construction cost by roughly \$2.1 million. The predicted total cost of

NETWORK FEASIBILITY REPORT

construction for the aerial option is detailed below.

Aerial (some boring/buried req)		
-		
Boring	Price/Ft	Total
24,543	\$50.00	\$1,227,150.00
Trenching (direct buried)	Price/Ft	
8,117	\$20.00	\$162,340.00
Poles	Price/Year (Avista)	
318	\$20.00	\$6,360.00
Messenger Cable	Price/Ft (Includes Labor)	
107,340	\$12.50	\$1,341,750.00
Fiber* (Included Slack)	(48F) Price/Ft	
153,500	\$0.77	\$118,195.00
Conduit (3" HDPE)	Price/Ft	
24,543	\$2.37	\$58,166.91
Splices	Price/Splice	
1,080	\$50.00	\$54,000.00
Splice Cases	Price Each	
90	\$325.00	\$29,250.00
Grounding Rods/Clamps	Price Each	
40	\$17.25	\$690.00
40	\$5.00	\$200.00
Hand Holes**	Price Each	
40	\$2,863.00	\$114,520
Electronics		\$10,000.00
	Total	\$3,122,621.91

*Corning 48F Armored Direct Bury

**Quazite Underground Enclosure Assembly, PG, Fiber Optics Cover Logo, 49 5/8 in Overall Length

A.7. Real property acquisition: No real property acquisition is anticipated at this time.

A.8. Permits and Agreements Required

Permits will be required for all construction in road right of ways. The Design Consultant should initiate dialogues with the Idaho Transportation Department regional office and County

NETWORK FEASIBILITY REPORT

Road departments to determine the information required to apply for and receive required permits. Permits may also be required for the minimal construction work required to bring the fiber into the buildings at the network terminations.

A.9. Estimated project schedule.

This project can be designed and constructed in approximately 12 months, weather and material lead times permitting. Ideally the design and permitting processes would be completed in the fall with bidding early in the calendar year and construction during the favorable weather of spring and summer. We estimate the individual phases of the project will require the following

- i. Design Phase: 3 months after consultant selection
- ii. Permitting Phase: 2 months (may overlap bid phase)
- iii. Easement acquisition: None required
- iv. Bid Phase: 2 months including award and contract negotiation
- v. Construction Phase: 6 months

A.10. Overall project budget breakdown.

Project Budget			
Grangeville-Nezperce Fiber Network Budget			
	Buried	Aerial/Buried	
Admin (PoL)	\$25,000	\$25,000	
Land, structures, ROW			N/A
Engineering/Design	\$346,284	\$221,706	7.10%
Construction	\$4,877,242	\$3,122,622	
Project Inspection (CM)	\$121,931	\$78,066	2.5%
Project Contingencies	\$731,586	\$468,393	15%
Total	\$6,102,043	\$3,915,787	

PRELIMINARY ENGINEERING REPORT



12/18/2020
Revised 12/07/2021

DIGB2 OROFINO-NEZPERCE FIBER NETWORK

Prepared by:

Access Consulting, PC

2300 Regent St. Ste 2300

Missoula, MT 59801

A. Preliminary Engineering Report

The Executive Summary of the Infrastructure Report of the Idaho District 2 Interoperable Governance Board, prepared Advanced Technology Partners LLC, provides the following introduction and scope description of a proposed fiber optic network to link the Region 2 member agencies. It reads, in part:

“The District Two Interoperability Governance Board (DIGB2) comprised of Latah, Nez Perce, Clearwater, Lewis, Idaho Counties and the Nez Perce Tribe has a strategic interest in creating a highly reliable communications infrastructure to meet the growing needs of the counties and the communities they serve. Applications related to emergency services such as Next-Generation E911, inter-agency voice and data communications, location services and mapping require reliable communications infrastructure with scalable broadband connectivity. Moreover, sharing these applications with agencies or other counties outside of the DIGB2 region requires access to other reliable networks, securing data as needed. With these goals in mind, the DIGB2 members have a need to understand the current network capabilities within their region, the resource owners and estimated costs for upgrading or adding new infrastructure which helps to fulfill their strategic goals.

As expected, the bulk of the existing communications infrastructure is owned by commercial telecommunications providers such as CenturyLink, Zayo, XO, Frontier and Inland Cellular. This is particularly true in the more rural DIGB2 areas. However, local governmental entities like the Port of Lewiston, Port of Clarkston, Port of Whitman as well as the cities of Lewiston and Moscow, have been constructing fiber optic infrastructures which provide additional resources over and above the commercial providers. Furthermore, non-standard communication entities such as Idaho County Light and Power (ICLP) and Clearwater Power have existing rights of way and infrastructure which could be procured to help reduce the costs of any future desired or required communication builds. Finally, there are private entities who would be willing to allow use of their rights of way to help create additional communications infrastructures.”

With that as background, the member agencies have begun to develop a phased plan for implementing broadband infrastructure where none currently exists, adequate capacity is lacking, or commercial network costs are unaffordable. This Preliminary Engineering Report examines the economic and technical feasibility of one leg of that larger network, the link from Orofino (Clearwater County) to Nezperce (Lewis County). Access Consulting, PC (hereinafter AC) was retained by the Clearwater and Lewis Counties to provide a preliminary engineering report, including schematic design, construction cost estimates, project schedule, and recommended project delivery method, for a new fiber optic link between the Public Safety Answering Points in Orofino and Nezperce, ID. AC has been actively engaged in the planning of broadband infrastructure in north central Idaho, western Montana and southeastern Washington for over fifteen years. This assessment draws upon that experience and firsthand knowledge of the distance and topographical challenges inherent in building telecommunications infrastructure in remote areas like Clearwater and Lewis Counties.

A.1. Description of project components:

This project will build a new fiber optic link between the public safety answering points (PSAPs or 911 centers) in Orofino, ID (Clearwater County Sheriff’s Office) and Nezperce, ID (Lewis County Sheriff’s Office). The purpose of this connection is to:

- Provide highly reliable communications infrastructure that enables interoperability between regional first responders,
- Enables applications like Next Generation E911, inter-agency voice and data communications, location services and mapping.

This connection is one piece of a larger network articulated in the Infrastructure Report authored by the District 2 Interoperable Governance Board (DIGB2), published on June 27, 2019. That report reviewed communications infrastructure availability in the five-county area and recommends a

DIGB2 NETWORK FEASIBILITY REPORT

topology of nine links to provide a highly reliable broadband network to support government interoperability, especially public safety communications, throughout the region. The construction reviewed in this report provides one of those nine links.

This project includes the construction of a 48-strand single-mode fiber optic circuit between Orofino, Idaho and Nezperce, Idaho. Single-mode fiber was selected because it offers virtually unlimited bandwidth and supports the greatest distance between end points. This network will be either buried or installed on utility poles (aerial), depending on existing ground conditions.

The first decision in designing such a network is the selection of the preferred route for the network. Access Consulting considered three potential routes, including:

1. A combination aerial/buried route following the shortest road path between the two end points. This route exits south from Orofino across the bridge, follows Highway 12 east to Idaho 7, and then follows Idaho routes 7 and 62 south to Nezperce.
2. An aerial path following existing Clearwater Power utility poles east from Orofino, crosses the Clearwater on the existing CP aerial crossing, and joins the existing pole lines on Routes 7 and 62 south into Nezperce.
3. A combination aerial/buried route following US Highway 12 east to Kamiah and Idaho 64 west to Nezperce.

Construction cost is a function of distance and construction type. Route option 1 above was selected for this feasibility assessment because it was the shortest route and provided options for both buried and aerial construction.

The network will include approximately 140,000 lineal feet of 48-strand, single-mode fiber optic cable. This cable can provide up to 48 physically separate networks (one per strand). That number can be expanded with wave division multiplexing and/or virtual network technology to meet all of the foreseeable goals of the Owner. For the purposes of this assessment, we have assumed that the network will be divided into twenty-four 2-strand networks operating at 1 gigabit per second. This is near the actual low-end of the networks capacity but enables the network to meet immediate goals and provides a basis for operational cost assessment.

The endpoints of the networks will be at the PSAPs in Orofino and Nezperce. The fiber will be terminated in a rack or wall mounted patch panel. A Layer 3 network switch or router with appropriate fiber optic modules will light the network and provide for connection to the local network.

A.2. Compliance with ED-900

The project components described in this engineering report are consistent with the EDA investment project description that is provided in Section B.2 of Form ED-900

A.3. Project Drawings

Drawings showing the proposed routes for the two options described below are provided in the report Addendum.

A.4. Feasibility Analysis:

To assess the feasibility of this project, Access Consulting:

- selected the most promising of three potential routes for the link,
- performed a visual inspection of the entire route,
- developed a schematic network design for that route,

DIGB2 NETWORK FEASIBILITY REPORT

- determined preferred construction methods for that route, and
- estimated construction routes for two construction plans.

The field survey of the preferred route between Nezperce, ID and Orofino, ID via 62 to 7 (Russell Ridge Rd to Gilbert Grade Rd) to US 12 found favorable conditions for a hybrid of buried and aerial. The buried route would utilize aerial poles in Nezperce and Orofino to exit the towns. For the Buried Option described below the rest of the route between the two cities was a combination of trenching and directional boring depending on the type of geology present. Most of the exposed rock that hinders some areas on US 12 and Gilbert Grade Rd is Columnar Basalt. This rock is a grade 6 of 10 on the Mohs hardness scale. The rock is present from 1' to 8' from the edge of the road in places making trenching difficult or impossible. In these areas of exposed rock hemming the shoulder, boring would be better suited for the burial method. On Gilbert Grade Rd, there are approximately 12 sections of 250' or less of rock that would need to be bored.

The Aerial Option described below utilizes existing utility pole where possible to reduce the cost of construction. This method also reduces the physical reliability and security of the network but is included here to better inform decisions regarding this project.

In summary, this project must be considered very feasible. The construction methods proposed are all common practice in the telecommunications industry in this region. The narrow right of way on Gilbert Grade Road poses some safety concerns for crews working along the shoulder, but this risk can be mitigated with an appropriate traffic management plan. The network media proposed, single-mode fiber optic cable, is commonly used in outdoor telecommunications installations and provides the best capacity and range of all network media available today. Single-mode fiber also provides the best ability to adapt to new developments in network electronics technology. The electronics required to light the network on Day One (routers or layer 3 switches) are current technology most likely already present in the two Counties' networks. Because they are already in those networks, supporting those devices should pose little to no challenge for existing staff.

A.5. The proposed method of construction.

This project will be procured through a traditional design/bid/build process as dictated by the Statutes of the State of Idaho. Design consultants, including the engineer of record, shall be selected by a qualifications-based selection process as required by Title 67, Chapter 23, Section 2320 of Idaho Statutes. The selected Design Consultants shall produce the bid documents, typically drawings and specifications, for the Owner that will be the basis of a competitive sealed bid for the construction. The Design Consultants shall also provide owner's representative and construction administration services during the build phase of this process.

General contractor(s) shall be selected in a competitive, sealed bid process in accordance with Title 67, Chapter 2, Section 2805 of Idaho Statutes. This Section specifies the bidding process and requirements for public works construction projects exceeding \$200,000 total value.

A.6. The number of construction contracts anticipated.

The Design Consultant shall advise the Owner on the feasibility of executing this project with one or more general contracts, based on an assessment of available contractor capacity, delivery schedule, seasonal construction limitations, and other factors determined by the Owner. If multiple contracts are procured, they shall be defined and delimited by "meet me" points detailed by the Design Consultant.

A.7. Detailed Construction Cost Estimates:

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Two construction options were developed for construction cost estimating.

The first option (the Buried Option) places most of the fiber underground to increase its resistance to natural disaster (weather, wildfire) and human interference (construction accidents, vandalism). For this option, the only aerial segments are those within the towns of Orofino and Nezperce. These aerial segments run on existing utility poles. We chose aerial construction for these areas to minimize cost from removing and replacing pavement and other improvements. The remainder of the link is placed underground by trenching (124,927 feet) and boring (7,365 feet). Boring is recommended for penetrating the bedrock along Gilbert Grade Road and U.S. Highway 12. It is also recommended when the line intersects driveways and roads that cross the route. Boring these intersections saves the cost of restoring the existing road/driveway after trenching. These recommendations are not intended to dictate the Contractor's chosen means and methods but are assumptions used for the cost estimate below.

<u>Buried Option</u>		
Boring	Price/Ft	Total
7,365	\$50.00	\$368,250.00
Trenching	Price/Ft	
124,927	\$20.00	\$2,498,540.00
Aerial	Price/Ft	
4,455	\$12.00	\$53,460.00
Fiber*	(12F) Price/Ft	
136,747	\$0.60	\$82,048.20
Messenger Cable	Price/Ft	
4,455	\$0.50	\$2,227.50
Splices	Price/Splice	
912	\$50.00	\$45,600.00
Splice Cases	Price Each	
74	\$325.00	\$24,050.00
Hand Holes**	Price Each	
74	\$4,174	\$308,876
Conduit (3" HDPE)	Price/Ft	
7,365	\$2.37	\$17,455
Grounding Rods/Clamps	Price Each	
74	\$17.25	\$1,276.50
74	\$5.00	\$370.00

DIGB2 NETWORK FEASIBILITY REPORT

Electronics		\$10,000.00
Poles	Yearly Use Fee (2010)	
30	\$16.51	\$495.30
	Sub Total	\$3,412,648.55
Contingency		
15%		\$511,897.28
	Grand Total	\$3,924,545.83

*Corning 12F Armored Direct Bury

**Quazite Underground Enclosure
 Assembly, PG, Fiber Optics Cover
 Logo, 49 5/8 in Overall Length

The second option (the Aerial Option) seeks to reduce total cost of construction by using aerial construction wherever possible. In addition to the aerial segments in Orofino and Nezperce, this option uses existing utility poles when possible. As noted above, this increases the possibility of natural or manmade outages but reduces overall construction cost by roughly \$900,000. The predicted total cost of construction for the aerial option is detailed below.

<u>Aerial Option</u>		
Boring	Price/Ft	Total
5,940	\$50.00	\$297,000.00
Trenching	Price/Ft	
39,273	\$20.00	\$785,460.00
Aerial	Price/Ft	
96,367	\$12.00	\$1,156,404.00
Fiber*	(12F) Price/Ft	
151,580	\$0.77	\$116,716.60
Messenger Cable	Price/Ft	
96,367	\$0.50	\$48,183.50
Conduit (3" HDPE)	Price/Ft	

DIGB2 NETWORK FEASIBILITY REPORT

5,940	\$2.37	\$14,077.80
Splice Cases	Price Each	
105	\$325.00	\$34,125.00
Splices	Price/Splice	
1,284	\$50.00	\$64,200.00
Hand Hole**	Price Each	
32	\$4,174	\$133,568.00
Grounding Rods/Clamps	Price Each	
32	\$17.25	\$552.00
32	\$5.00	\$160.00
Electronics		\$10,000.00
Poles	Yearly Use Fee (2010)	
239	\$16.51	\$3,945.89
	Sub Total	\$2,664,392.79
Contingency		
15%		\$399,658.92
	Grand Total	\$3,064,051.71

*Corning 12F Armored Direct Bury

**Quazite Underground Enclosure
 Assembly, PG, Fiber Optics Cover
 Logo, 49 5/8 in Overall Length

A.8. Real property acquisition: No real property acquisition is anticipated at this time.

A.9. Permits and Agreements Required

Permits will be required for all construction in road right of ways. The Design Consultant should initiate dialogues with the Idaho Transportation Department regional office and County Road departments to determine the information required to apply for and receive required permits. Permits may also be required for the minimal construction work required to bring the

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fiber into the buildings at the network terminations.

Joint use agreements and permission to attach shall be required for all aerial segments that intend to use existing Avista, Clearwater Power, or Idaho County Power and Light poles. All three entities have established joint use agreements and design approval processes that the Design Consultant shall use to obtain the needed permission to attach. Easements to cross private lands will be required where the aerial route on existing utility poles crosses private land. There is typically an annual fee for these easements that must be included in operating cost analyses and any return-on-investment analysis if the aerial option is selected.

A.10. Estimated project schedule.

This project can be designed and constructed in approximately 12 months, weather and material lead times permitting. Ideally the design and permitting processes would be completed in the fall with bidding early in the calendar year and construction during the favorable weather of spring and summer. We estimate the individual phases of the project will require the following

- i. Design Phase: 3 months after consultant selection
- ii. Permitting Phase: 2 months (may overlap bid phase)
- iii. Easement acquisition: None required
- iv. Bid Phase: 2 months including award and contract negotiation
- v. Construction Phase: 6 months

A.11. Overall project budget breakdown.

Project Budget			
Orofino-Nezperce Fiber Network Budget			
	Buried Option	Aerial Option	
Admin (CEDA)	\$25,000	\$25,000	
Land, structures, ROW			N/A
Eng/Design	\$278,643	\$217,548	7.10%
Construction	\$3,924,546	\$3,064,052	
Proj, Inspection (CM)	\$98,114	\$76,601	2.50%
Const Contingencies	\$392,455	\$306,405	10%
Total	\$4,718,758	\$3,689,606	
80% EDA	\$3,775,006	\$2,951,685	
20% Counties	\$943,752	\$737,921	

Infrastructure Report

Idaho District 2 Interoperable Governance Board

Prepared For:

**Nez Perce County
on behalf of
Idaho District 2 Interoperable Governance Board**

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Executive Summary

The District Two Interoperability Governance Board (DIGB2), comprised of Latah, Nez Perce, Clearwater, Lewis, Idaho Counties and the Nez Perce Tribe has a strategic interest in creating a highly reliable communications infrastructure to meet the growing needs of the counties and the communities they serve. Applications related to emergency services such as Next-Generation E911, inter-agency voice and data communications, location services and mapping require reliable communications infrastructure with scalable broadband connectivity. Moreover, sharing these applications with agencies or other counties outside of the DIGB2 region requires access to other reliable networks, securing data as needed. With these goals in mind, the DIGB2 members have a need to understand the current network capabilities within their region, the resource owners and estimated costs for upgrading or adding new infrastructure which helps to fulfill their strategic goals.

As expected, the bulk of the existing communications infrastructure is owned by commercial telecommunications providers such as CenturyLink, Zayo, XO, Frontier and Inland Cellular. This is particularly true in the more rural DIGB2 areas. However, local governmental entities like the Port of Lewiston, Port of Clarkston, Port of Whitman as well as the cities of Lewiston and Moscow, have been constructing fiber optic infrastructures which provide additional resources over and above the commercial providers. Furthermore, non-standard communication entities such as Idaho County Light and Power (ICLP) and Clearwater Power have existing rights of way and infrastructure which could be procured to help reduce the costs of any future desired or required communication builds. Finally, there are private entities who would be willing to allow use of their rights of way to help create additional communications infrastructures.

The scope of this project is to help inform DIGB2 members on the current status of the communications infrastructure in the area and to provide some guidance on how that infrastructure could be leveraged to help meet strategic goals. To help achieve this goal, costs estimates have been provided. These estimates are to provide context in any resulting tactical discussions regarding how to proceed. The cost estimates are just that, estimates. It is beyond the scope of this project to obtain specific quotes from contractors or vendors regarding any builds or upgrades. However, the figures quoted are conservative estimates based on “worst case” conditions. It is unlikely that costs would exceed these estimates given the information provided.

Strategic Vision

The DIGB2 has a strategic vision for the five county area. Their vision is to create a highly reliable network infrastructure which connects the geographically important points of presence (POP) locations in the region. This network should also be scalable, secure and flexible. Any steps to create a network for DIGB2 should adhere to this vision and the underlying goals of DIGB2.

The network would first and foremost create connectivity between the DIGB2 locations. The primary value is for locations to be on the same private network. This allows for peer to peer communications between DIGB2 members and their agencies enabling the sharing of resources and facilitating unfettered direct data communications.

The integrity of the resulting network is important. Therefore, reliability, resiliency, and redundancy are key components of the strategic vision. After connectivity is established, the reliable transport of data throughout the network must be maintained. Highly available communications will ensure that applications continue to function, especially in times of need.

The scalability of the network must also be a focus. Technology continues to advance at a rapid pace. The funding to create networks must be expended in such a way as to ensure that the initial investments are capable of growing over the expected lifetime of the network. A cost shared regional network is more financially sustainable due to the inherent buy in and of each county.

The security of any network is also important. Data security capabilities of the DIGB2 network must be a priority. Not all data needs to be secured. Many applications provide security thereby absolving the network of the responsibility. However, the network should have the ability to secure data when and as needed.

The network should also be flexible in nature. The technologies and services being employed shouldn't be ridged or fixed. The network would be upgradeable to allow for the implementation of newer technologies without major hardware replacements. Interoperability and collaboration are the product of an adaptable network. This further ensures that initial investments will not be wasted before the expected lifetime of the hardware.

Potential DIGB2 Network

The DIGB2 region (shown below), is comprised of the Latah, Nez Perce, Clearwater, Lewis and Idaho Counties and the Nez Perce Tribe. Within each of these counties is highlighted a specific location designated as the central point of interconnection, or Point of Presence (POP), for the county and specifically for emergency services. The POPs chosen are the county sheriff's offices based on the services and applications that reside in these locations. Primarily these locations are the current Public Safety Answering Point (PSAP) for each county. Having a network which provides reliable communications to these POP locations is one of the strategic goals of DIGB2.

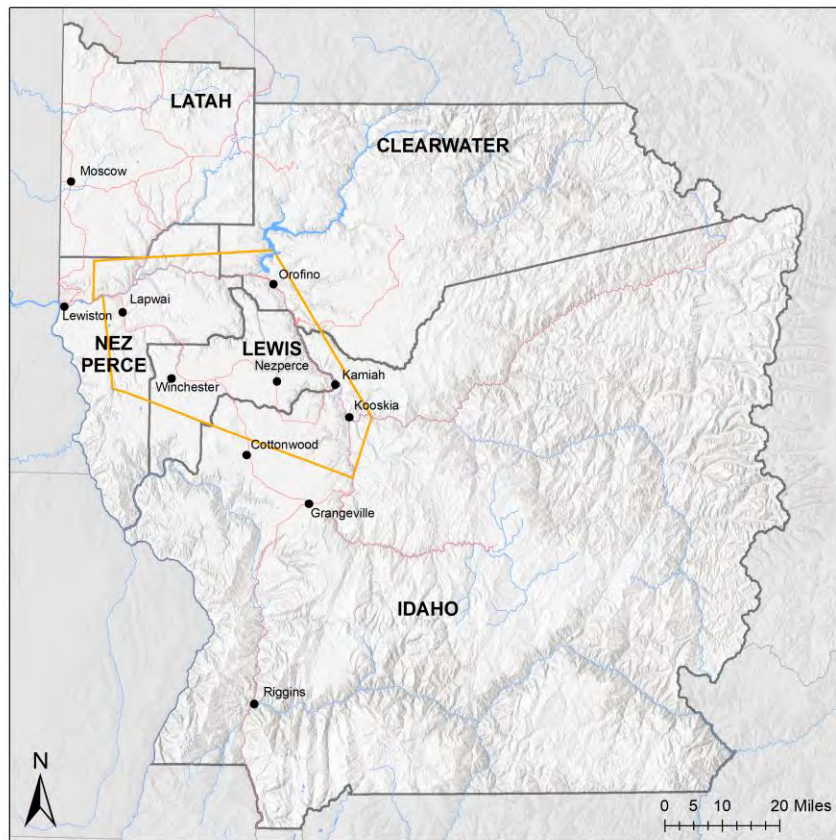


Figure 1 – District Interoperability Governance Board (Region 2)

The network that DIGB2 would create would have multiple physically redundant and diverse pathways and connections into each POP to increase reliability. A partial mesh network of dark fiber or leased Wide Area Network (WAN) services, sometimes referred to as “lit services”, would be created between the POPs to continue to increase network reliability. Figure 2 below, shows one possible variant of a redundant, reliable, physically diverse partial mesh network that DIGB2 could leverage to meet their strategic goals.

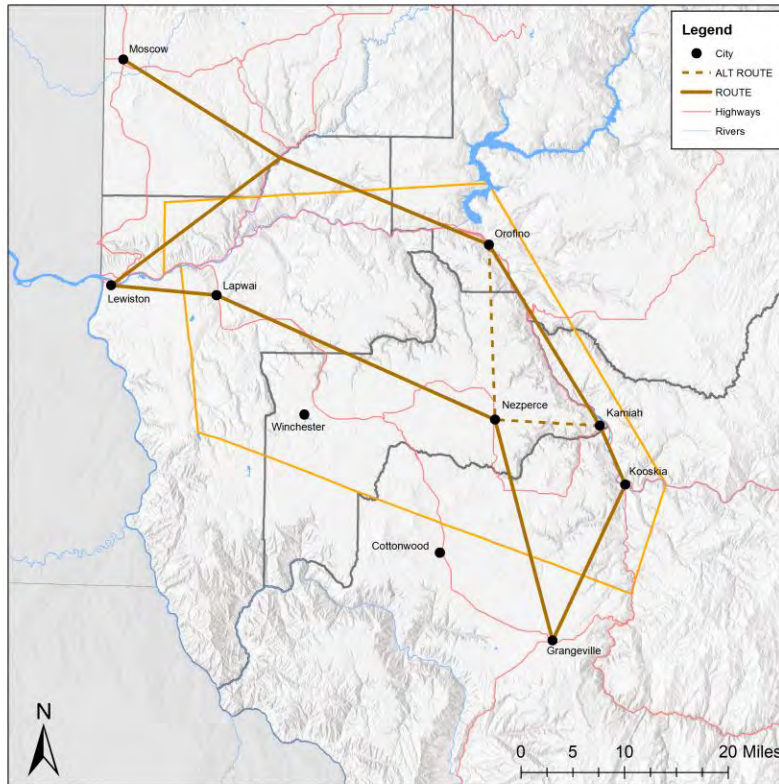


Figure 2 – Proposed DIGB2 Network Connections

The feasibility and costs of such a network are primarily dependent on the existing network infrastructure currently in place, and the costs of accessing that infrastructure. The costs can vary based on the type of infrastructure being created or leased, the availability of resources in the region and the partnerships that might be formed. All of these factors play a part in reducing the costs of a network procurement. In this specific instance shown above, there is existing network in place today built by the commercial carriers, other local resources and some potential partnerships that offer opportunities for lowering a network acquisition. These options will be further articulated in this document.

Current Network

The Incumbent Local Exchange Carriers (ILECs) in the region are Frontier Communications in Latah and Clearwater counties, and CenturyLink Communications in Nez Perce, Lewis and Idaho counties. While these two carriers cover their specific counties, unfortunately their networks do not have many known points of interconnections. This means that DIGB2 would have to create these points of interconnection as needed. Moreover, the ILECs have not invested to create ubiquitous fiber networks within their respective territories. They have also made strategic decisions to not implement broadband Ethernet services in large parts of their territories. This limits the scalability and products of the services that are for lease.

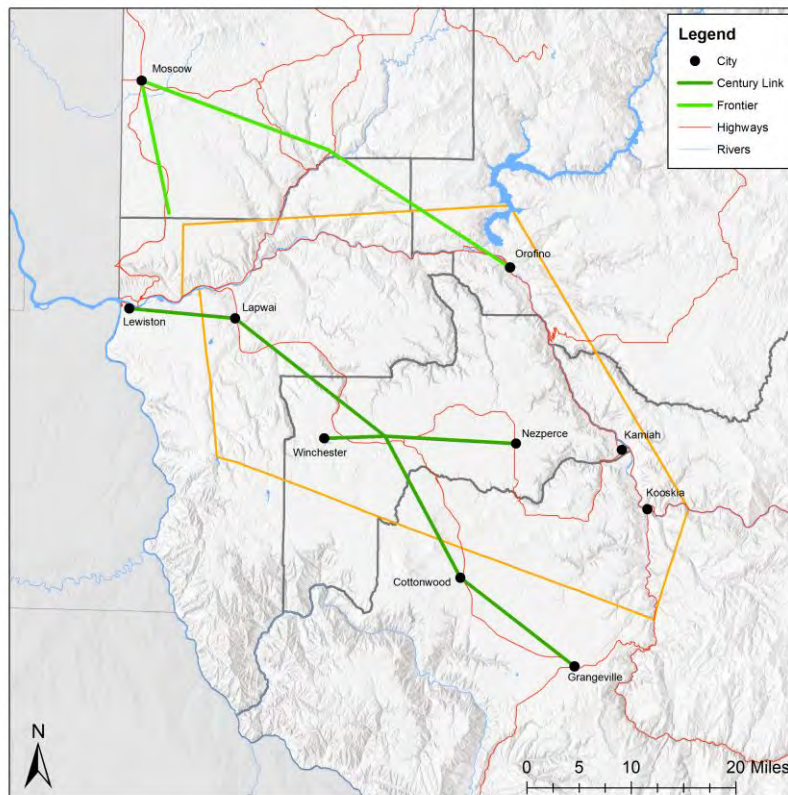


Figure 3 – ILEC Footprints

In Figure 3 above, Frontier has fiber assets from Moscow extending south to the county line on SR-95, as well as fiber assets to Orofino. CenturyLink has a more extensive fiber network which connects Lewiston, Lapwai, Nez Perce and Grangeville. The networks depicted is by no means an exhaustive map of the ILEC networks. They are intended to show the relevant portions of the networks which directly pertain to the DIGB2 strategic plan.

At this time neither Frontier, nor CenturyLink, have made any indication that they would be willing to lease available dark fiber (not activated) to DIGB2. In the case of CenturyLink, they specifically declined to lease fiber in this area to DIGB2, they are willing to lease network services over existing fiber resources. Frontier is also willing to lease network services.

One of the primary network providers in the DIGB2 region is the Port of Lewiston (PoL). Working with other Port Authorities in Washington, like the Port of Whitman (PoW) and Port of Clarkston (PoC), the PoL has created an extensive fiber network in Lewiston. The PoL network is also expanding each year based on community needs. This makes them a valuable partner in the DIGB2 strategic plan.

Of importance is the fiber run extending from the Memorial Bridge, past the Nez Perce County Sheriff's office, and back to Port Drive in Clarkston. This is important because the location on Port Drive is a major communications hub for the region providing diverse access for all the larger communication providers, like AT&T, Zayo, XO and CenturyLink. This makes the fiber assets owned by the PoL the key to getting connections in/out of the DIGB2 region. Moreover, the fiber assets owned by the PoL are publicly available.

There are other carriers in the region, like Inland Cellular, which have wireless network and some terrestrial network assets. While these assets are significant in their own right, they are not materially significant in the scope of the DIGB2 strategic plan. These carriers are likely more interested in any resulting infrastructure created in the region and therefore are natural potential partners, or funding sources for any builds that may be required.

Other Resource Owners

There are a number of non-telecommunications entities in the region who are of interest to the DIGB2. These entities have no telecommunications infrastructure today, but they do possess other assets which are of value. Primarily, they have Right of Way (ROW) access, buried conduit and/or poles for aerial fiber which could be used in construction of new telecommunications infrastructures. Clearwater Power, Idaho County Light and Power (ICLP) and Avista are all companies that fall within this classification. Additional resources that can potentially be leveraged include Idaho Transportation Department and local railway owners.

Clearwater Power is a member-owned rural electric cooperative founded in 1937. They serve 11 counties throughout Idaho, Washington and Oregon on a not-for-profit basis. With 2909 miles of lines, 42,100 poles and over 10K acres of ROW, they are a significant potential partner in the region. Clearwater Power has resources in all the DIGB2 counties, with a larger number being in Latah, Nez Perce, Clearwater and Lewis counties.

The area covered highly correlates to the areas of importance for the DIGB2 strategy. The paths available through Clearwater Power will create network connections between Moscow, Orofino and Lewiston. Unfortunately, there are no physically diverse paths between Moscow and Juliaetta. This represents a possibility that a fiber cut between these locations would isolate the Latah County POP from the rest of the DIGB2 POPs. An alternate connection path would need to be investigated to create the redundant, diverse, network required by DIGB2.

Idaho County Light and Power (ICLP) in Grangeville is another resource owner in the region. Founded in 1938, they are a consumer-owned cooperative providing electrical distribution services in the DIGB2 region, primarily in Lewis and Idaho County. Like other power utility providers, ICLP has miles of ROW and utility poles with which telecommunications infrastructures can be created.

The ICLP paths create network connections between Grangeville, Kooskia and Kamiah. While these paths do not directly connect POPs within the region, in the larger strategic plan they do create WAN diversity and redundancy which helps improve the overall network reliability.

What is not clear from the data gathered of the resources is that in the towns and less rural areas of the counties, both Clearwater Power and ICLP rely on Avista for pole access. This means that it would be convenient, cost effective, or at times necessary to use Avista's ROW to create new network connections. Fortunately, both utilities have good working relationships with Avista, and Avista has a well published process for usage of their ROW and poles. This suggests that there is not expected constraints around accessing town locations in the region.

Finally, there is yet one other resource owners in the region to be considered. Midwest Pacific Rail Net & Logistics of Kansas City, Missouri owns the Bountiful Grain and Craig Mountain Railroad (BGCM) and Watco Companies LLC in Pittsburg, Kansas owns the Great Northwest Railroad. These short line rail lines have ROW from Lewiston to Orofino, Kamiah and Grangeville.

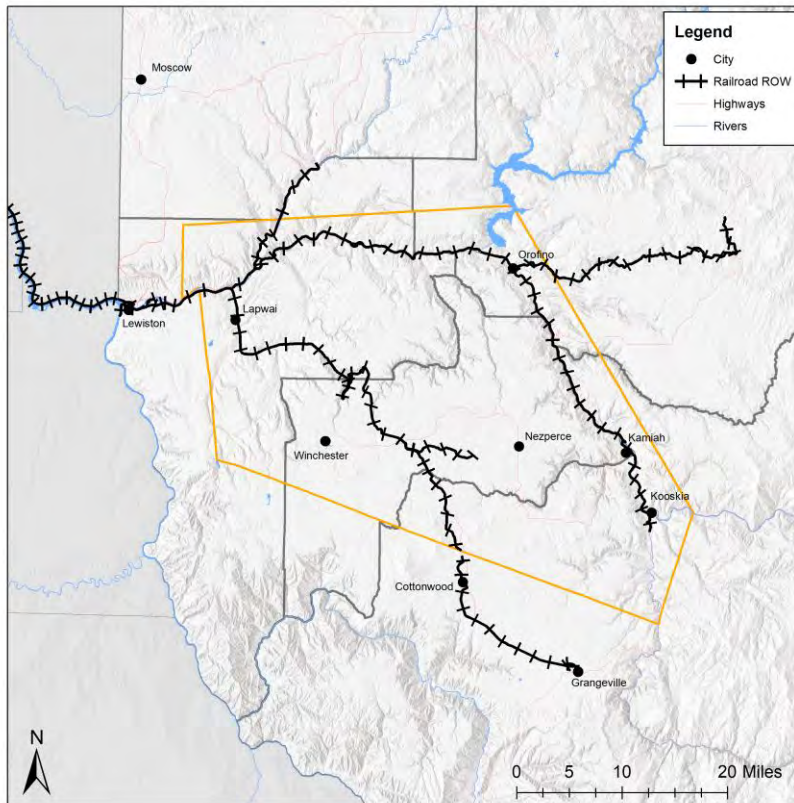


Figure 9 – Railroad ROW

These ROWs represent a significant value for the DIGB2 as they connect a larger area within the strategic plan and connect many of the POP sites. To build infrastructure in these ROW paths can vary greatly depending on the underlying soil bed. Furthermore, other considerations need to be taken into account for the ROW owners. Telecommunications is not one of their core business strengths and represents a different business model for them. Some rail owners may be reluctant to create this kind of infrastructure or business vertical, and so may need more incentives or support.

Proposed Network Segments

To understand what is needed, we now have to compare the existing infrastructure with the strategic vision of DIGB2 and determine what gaps exist and some potential solutions for closing those gaps. It is also assumed that these gaps will need to be addressed in a phased approach, as they are likely to be larger enough in scale to exhaust available funding if done all together.

Review of the existing infrastructure and considering the strategic networking vision of the DIGB2 a couple of key points are clear. First, there are significant resources in the region that could be leveraged to help meet the DIGB2 vision. Second, because many of these resources haven't been built out with telecommunications infrastructure simply leasing WAN services or fiber will not be enough to meet all of the strategic vision. Network builds will be required to implement the full strategic goal of DIGB2.

The existing CenturyLink and Frontier networks cover most of the area. However, these are currently owned and managed by the ILECs. This means that DIGB2 will only be able to lease WAN services on these routes, not obtain dark fibers. While this is fine for the initial phases of the project, the hope is to build fiber infrastructure where feasible. Moreover, the existing WAN services, on their own, do not satisfy the goal of improving reliability in the DIGB2 region. The current infrastructure is not sufficiently meshed to provide redundancy in the event of network failures. More infrastructure is needed to provide greater redundancy. This infrastructure is needed to be physically diverse from the existing infrastructure.

The following is a suggested list of network segments that could be built independently, but with the overall objective of satisfying the DIGB2 strategic goals.

- A) Lewiston to Lapwai
 - This link would connect the Nez Perce County POP with the town of Lapwai, thus creating an interconnection with the Nez Perce Tribe.
 - The connection could combine the PoL fiber with either a new build or a combination of new build and Nez Perce Tribe fibers.
- B) Lewiston to Orofino
 - This link connects Nez Perce County POP to the Clearwater County POP.
 - The connection could be a new build using either the railroad or Clearwater Power ROW.
- C) Lewiston to Moscow
 - This link connects the Latah and Nez Perce County POPs.
 - The connection could be a new build using the Clearwater Power ROW.
 - Today, this link is provided by IRON.
- D) Moscow to Orofino
 - This link connects the Latah and Clearwater County POPs.
 - The connection could be a new build using the Clearwater Power ROW.
- E) Orofino to Kamiah

- This link connects the Clearwater County POP with Kamiah. Kamiah is a potential interconnection point with ICLP.
 - The connection could be a new build using either the railroad or Clearwater Power ROW.
- F) Grangeville to Kamiah
- This link connects the Idaho County POP with Kamiah. Kamiah is a potential interconnection point with Clearwater Power and the railroad ROW.
 - The connection could be a new build using the ICLP and Clearwater Power ROW.
- G) Lapwai to Nez Perce
- This link would connect the Lewis County POP with the town of Lapwai.
 - The connection could be a new fiber build or a combination of new build and Nez Perce Tribe fibers.
- H) Nez Perce to Orofino
- This link connects the Clearwater County and Lewis County POPs.
 - The connection could be a new build using the Clearwater Power ROW.
- I) Lapwai to Grangeville
- This link connects Lapwai to the Idaho County POP.
 - The connection could be a new build using either the railroad or Clearwater Power and ICLP ROW.

These links would create the partially meshed, fully diverse and scalable network needed by DIGB2. These links are small enough in scope that they would be easier to fund individually. Moreover, they create functionality with the network that provides value to the overall network and DIGB2.

Benefits to DIGB2

There are a number of benefits for DIGB2 in having their own communication network. The primary goal of connectivity is clearly obtained. However, the connectivity also enables reliability, scalability, security, flexibility as well as cost control if implemented within DIGB2's strategic vision. These additional benefits differentiate DIGB2 creating and owning an infrastructure versus solely leasing available commercial services.

Connectivity:

The network creates connectivity between the POPs that matter most to the DIGB2 region. This base connectivity enables peer to peer communications as well as access to other networks. With this infrastructure, speeds of 1Gbps, 10Gbps and/or 100Gbps would be common based on current hardware costs for these interfaces.

Reliability:

Links would be added to the network in a manner which provides physical diversity and redundancy between POPs. The combination of these links increases the reliability of the network by eliminating single points of failure that might isolate POPs. With this reliability a network that has less than two (2) hours of non-schedule down time per year is easily obtained.

Scalability:

Network infrastructures based on fiber optics are inherently scalable due to the nature of the fiber optic cables and their capabilities. Once the investment has been made in the original hardware, bandwidth can be added to the network for less expense than typical lease costs, even more so in rural areas where commercial competition is low.

Security:

Private networks, like the network DIGB2 would envision, are also easier to protect. The infrastructure is privately held and maintained, while the access to the network can be strictly controlled. Moreover, the services provided and controlled by DIGB2 add additional security.

Flexibility:

DIGB2 would have the ability to decide which technologies and services would be supplied on the network. This means that as newer technologies are developed or made operationally feasible, DIGB2 could decide to deploy them versus having to accept only the services and products their local commercial providers choose to offer.

Cost Control:

The costs of constructing, owning and operating a network are not inconsequential. As stated above they add up quickly and represent a significant financial obligation. However, when looking at the Total Cost of Ownership (TCO) over 10-20 years of time, a case can be made that ownership is a more financially practical solution to leasing.

Interoperability:

The DIGB2 fiber network will provide the ability to combine emergency communications systems and resources enhancing agency interoperability as never before. Standardization of

CAD, Call Taking, and Radio as well as other resources made available via a broadband network will allow real time communication that will improve the ability of agencies to provide assistance to one another more efficiently and effectively.

Resiliency:

A mesh network such as proposed by DIGB2 will eliminate single points of failure that exist in the current ILEC based networks upon which all of the counties now count on. With a ringed, mesh, network a failure at any given point will not take down the network resources at any POP. The proposed network provides true geo-diversity and redundancy to the network providing better than industry standards five nines (99.999%) up time.

Redundancy:

By designing and providing diverse network entry points from separate directional paths into each county POP as well as dual equipment sets at each POP the DIGB2 network eliminates loss of network resources and emergency communications systems down time such as that experienced by Clearwater County in the last three years (six times).

Partnerships

Creating a new, or improved, network infrastructure in the DIGB2 region is a significant undertaking. The area is not densely populated. The terrain can be challenging with steep hills, rivers and the underlying soil conditions containing solid rock. Commercial carriers have not created pervasive network infrastructures in the region for these same reasons. Having a single entity fund a network expansion is not tenable. Therefore, partnerships should be looked at as a reasonable way to share costs.

The commercial carriers, like CenturyLink, Frontier and Inland Cellular are well funded companies with a vested interest in expanding services in the area. The challenge with many commercial carriers is that they have fixed Return on Investment (ROI) metrics that must be adhered to in capital expenditure (CAPEX) projects. If they can't make back enough revenue in a specific period of time on a project, they will choose to spend their funding on other projects. Moreover, the amount of funding required by the carrier can also be a limiting factor. For example, CenturyLink is a \$13B dollar company that spends hundreds of millions of dollars each year of CAPEX. DIGB2 would need a significant amount of funds to keep the attention of a company like CenturyLink in a partnership arrangement. They would likely prefer to keep DIGB2 in a typical customer relationship, as it better fits their business model. Smaller carriers are more attractive commercial partners.

Utilities are easier to work with and are normally less interested in any competitive dynamics as a partner. Many have longer ROI models, which are easier to work into CAPEX projects. Both Clearwater Power and ICLP have expressed a willingness to participate in the DIGB2 project. Clearwater Power has some Associated Usage Policy (AUP) issues as well as easement issues that would need to be reviewed and considered. ICLP is more liberal with their AUP and easement concerns and show an eagerness to understand the opportunities involved with bringing enhanced communications to the communities they serve.

The ownership of the railroad ROW has also expressed an interest in partnering to create more fiber infrastructure. They have done some preliminary costing on what funding would be needed to install conduit along their ROW. Working with the ownership, it is possible for DIGB2 to develop a partnership model that allows for access to any resulting fiber optic installations along their ROW. In general, the construction along the railroad ROW is more expensive, due to the nature of the soil composition and the fact that the cable would be buried versus aerial. However, the benefit is that there is no easement or other AUP constraints with the use of this ROW.

Another partnership opportunity is to work with other State agencies. One such agency is the Idaho Transportation Department (ITD). At present, they do not have a large number of fiber cables in the area, however, they have ROW that could be leveraged to help create networks. ITD is also incented to create more fiber networks for their own purposes as they prepare for the inevitability of self-driving vehicles and the network requirements that accompany them. ITD also has a standard process for partnering with others to create fiber infrastructure along their ROW. The obstacle with ITD is funding and scope. It is difficult to get them to allocate time on any initiatives outside of projects for which they have CAPEX funding. Their scope is also statewide, which means their resources can be easily preoccupied.

Educational entities, like local universities or colleges, are also potential partnership opportunities. They often have needs for high-speed data communications, whether on campus or regional to connect to remote campus locations. These institutions also have varying funding sources from which they can draw. They receive direct state funding for capital expenditures, but they also have the ability to get federal funding for research projects or infrastructure improvements. One resource the education sector has access to is the Idaho Regional Optical Network (IRON). They use IRON to create and manage a statewide network for education, research and collaboration. The education institutions could be approached about using IRON to help light and operate any resulting network the DIGB2 group creates. The IRON network is also redundantly connected to the region and with the commodity Internet. This would give the DIGB2 network reliable connectivity outside of the area.

Finally, not-for-profit organizations like economic development organizations can be leveraged for support and possible funding help. They typically do not have capital dollars, but they are adept at tracking state/federal funding sources and can be helpful in applying for these funds. Moreover, they have relationships with other potential partners in the region and can help facilitate agreements between parties.

Addendum A

Costs (Estimated)

The cost of creating a telecommunications infrastructure is complex, and as one would imagine, has many dependencies. Construction costs are just the beginning. The ongoing costs for operating and maintaining these kinds of networks need to be account for as well. Cost of goods and labor is relatively stable and easily calculated. The costs that vary the most are the leases for rights of way or whether the fiber route is aerial or buried. If buried, the composition of the soil will greatly vary the cost of the conduit installation. Plowing through soft soil can cost less than \$6 per foot, while rock can cost over \$100 per foot. In these cost estimations, the “worst case” assumptions are made with regard to installation costs. It is likely that actual costs will be 5%-12% less on average.

If one were to construct the fiber optic network shown in Figure 2, the maximum estimated costs would be roughly \$39,677,829.00. This assumes the railroad ROW is used whenever available and that aerial routes are used for all other builds. It also assumes that none of the existing infrastructure would be used. A more realistic approach is that aerial routes are preferred, due to costs and installation times. The result is a network cost of roughly \$18,224,892.00. The following list describes the links and individual costs associated with this aerial network.

- A) Lewiston to Lapwai - \$787,241.00
-
- B) Lewiston to Orofino - \$2,084,344.00
-
- C) Lewiston to Moscow - \$1,400,000.00
-
- D) Moscow to Orofino - \$1,930,000.00
-
- E) Orofino to Kamiah - \$1,929,298.00
-
- F) Grangeville to Kamiah - \$1,250,000.00
-
- G) Lapwai to Nez Perce - \$3,104,841.00
-
- H) Nez Perce to Orofino - \$1,218,064.00
-
- I) Lapwai to Grangeville - \$4,521,104.00

With the fiber optic network installed, DIGB2 would then need to procure the necessary hardware/software with which to “light” the fiber infrastructure. Again, the methods and costs associated with lighting a fiber optic network vary depending on scale required, services needed and bandwidth expectations. DIGB2 could opt for highly efficient and scalable equipment at an expense of \$1.5M to \$2M or for a more realistic less efficient, lower cost, but still scalable

equipment cost of approximately \$125K that meets the needs of the broadband network capability called for in the DIGB2 strategic vision.

Once the network is constructed and installed, there is a process for provisioning, monitoring, repairing, upgrading and expanding the network over time. This requires a set of skilled labor resources that have the necessary abilities and in sufficient numbers to support the network during the hours of operation. Furthermore, the labor force will need tools, transportation and other support to be effective. The estimated operating cost for the network as described above would be no more than \$310K per year assuming two skilled local network engineers, 7x24 network monitoring and a one (1) hour response time.

NOTE: The actual design and costs, both one time and ongoing, for a managed private Ethernet network are outside the scope of this document.

Glossary

AUP – Acceptable Use Policy

BGCM – Bountiful Grain and Craig Mountain Railroad

DIGB2 – District Interoperability Governance Board Region 2

DWDM – DenseWave Division Multiplexing

ICLP – Idaho County Light and Power

ILEC – Incumbent Local Exchange Carrier

IRON – Idaho Regional Optical Network

ITD – Idaho Transportation Department

POC – Port of Clarkston

POL – Port of Lewiston

POW – Port of Whitman

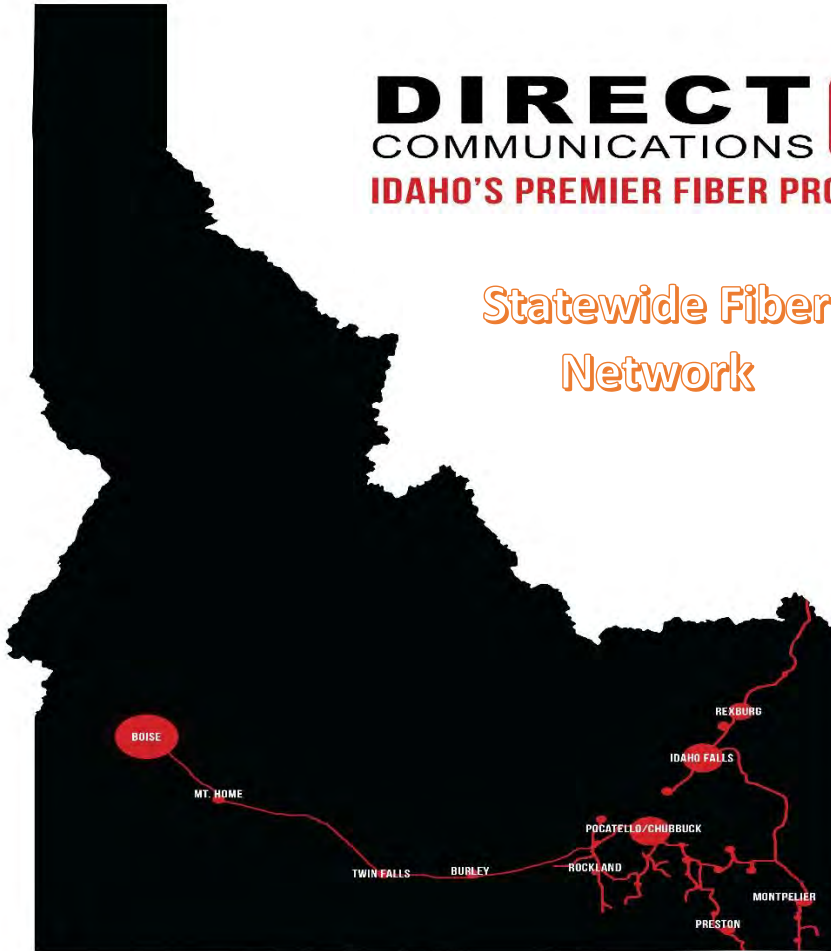
ROI – Return on Investment

ROW – Right of Way

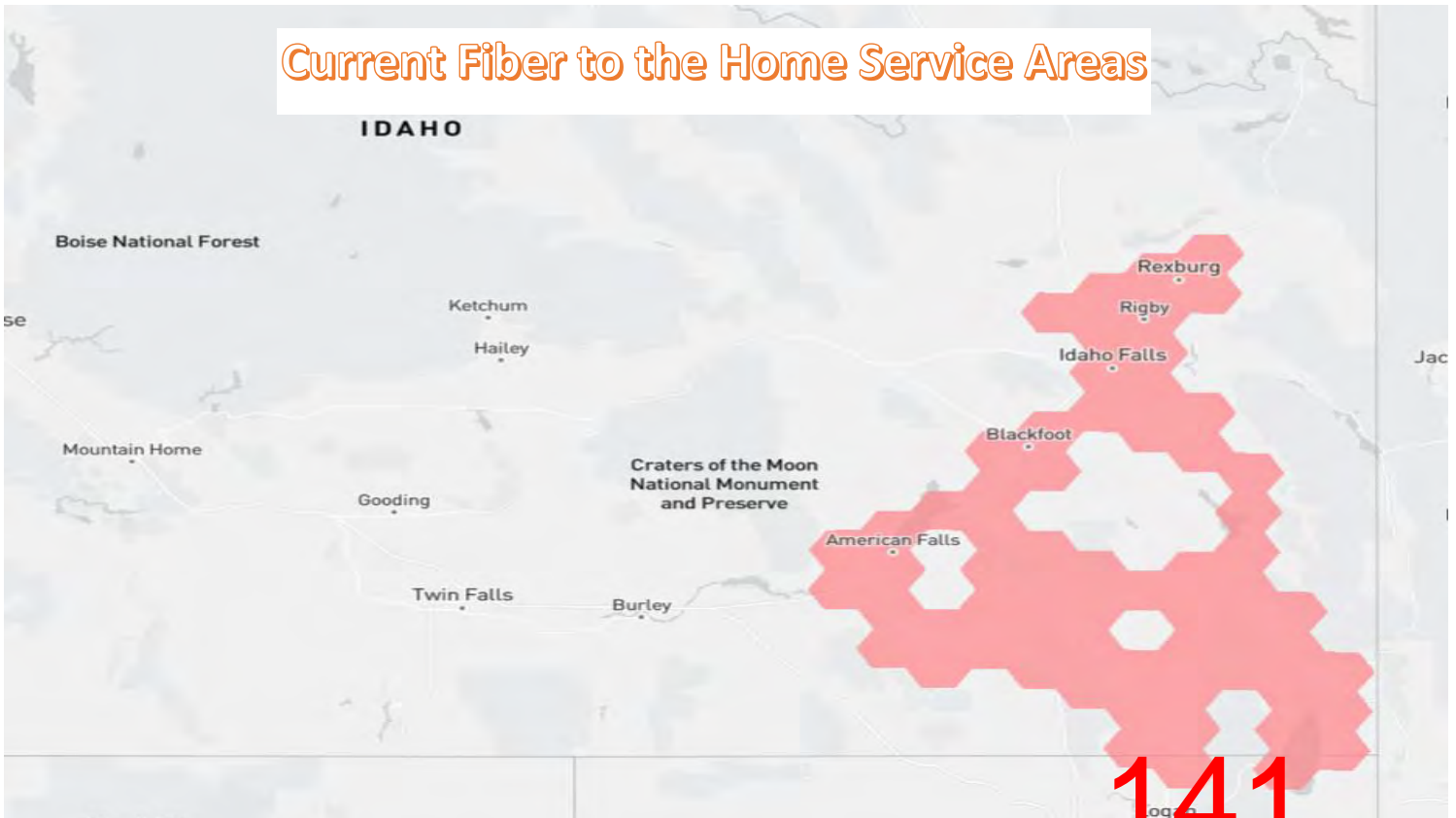
TCO – Total Cost of Ownership

DIRECT COMMUNICATIONS 
IDAHO'S PREMIER FIBER PROVIDER

Statewide Fiber
Network



Current Fiber to the Home Service Areas



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Idaho Broadband Committee:

Thank you for the opportunity to respond to your RFI seeking information about our broadband expansion plans.

Hopefully, you know how serious we are about expanding service to the unserved and underserved residents of Idaho. Since 2020 we have teamed up with local communities to apply for grants and funding to bring fiber to more than 1,000 residents in Arimo, Lewisville, Dingle, Ovid, Bern, Liberty, Clifton, Oxford, Dayton, East of Grace, and Thatcher.

In 2021 we worked with the City of American Falls to utilize their award of \$915,000 to build public wifi through their city parks. In 2021 We received funding through the 2nd round of the Idaho Broadband Grant to build more fiber to reach an additional 300 residents in Weston and Roberts.

No one type of project works for every community; however, we are committed to adapting and coming to the table to discuss projects and funding that works for all parties involved.

-Early on we developed a relationship with the City of Chubbuck to connect their facilities. We are now using that network to build out fiber to the home to the City of Chubbuck.

-We are within a few weeks of starting construction on the East side of Bear Lake, which is included in the funding we received through the USDA's ReConnect 2nd Grant. This project will connect 2,064 residences, 118 farms, 30 businesses, a post office, and a fire station.

-Currently, we are halfway done with a Private/Public Partnership with American Falls that utilized their ARPA funds and allowed us to match those funds to build out FTTH to 1,400 residences. We have also just signed a contract with the City of Iona that will utilize ARPA funds as well as a match from us that will build out FTTH to an additional 1,000 residences.

We understand the value of working with communities and counties and we are no strangers to this process. With a network that spans the east side of the State of Idaho, we are eager to expand to everything our network touches as well as everything adjacent.

Having said this, we do not feel comfortable disclosing what communities we are working with or where we would like to expand next. It has become evident to us that providers that have previously neglected their subscribers would like nothing more than to lock customers into long-term contracts as soon as they hear we might be building in their areas. We are committed to bringing the best service, and the very best price to our customers, and we don't want them to get snagged in a princely buyout.

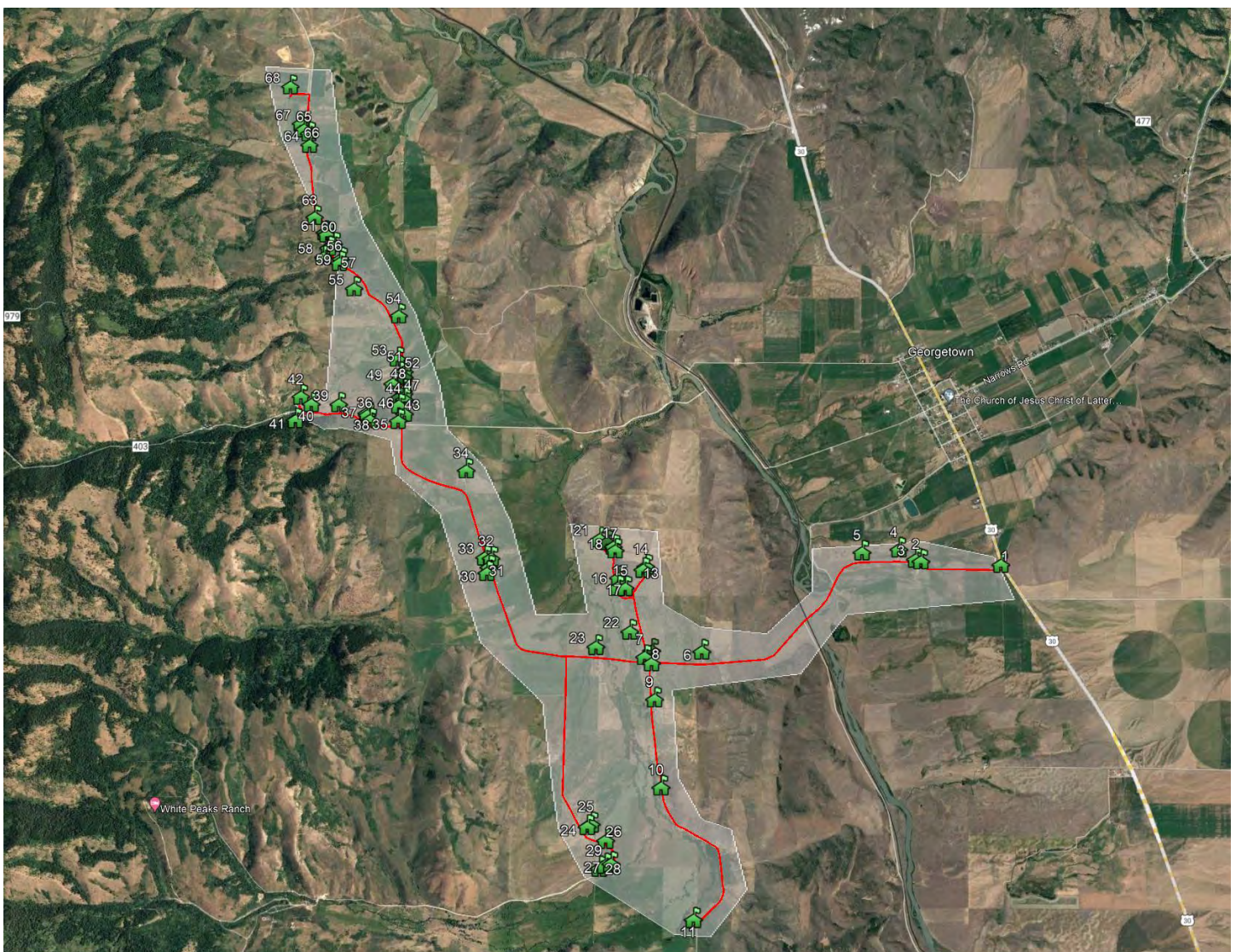
We are providing high level information on two projects that we are prepared to move forward on today. We are prepared to provide details and information about dozens of projects we would love to partner on if that information could remain private. In fact, we are prepared to show you exactly what it would take to bridge the digital divide in Eastern and Southern Idaho. Additionally, we would be willing to provide significantly more detail than the high-level data we are providing today.

Daniel J. Parrish
Community Development Officer
Direct Communications
danielp@directcom.com
(208)406-3503

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Project #1

- Service Status: Unserved, Zero broadband providers. Limited cellular service or wireless coverage
- Roof tops: 68 unserved residential locations
- Fiber Miles: 15.5 Miles of underground fiberoptic construction
- Cost Estimate: \$1,516,783.00
- Proposed service: 1gig symmetrical
- Low-cost proposal: ACP participation, 100 meg symmetrical speeds for as low as \$39.99
- Community support: County support and signed MOU



Project # 2

- Service Status: Unserved, Zero broadband providers. DSL service offered at speeds below Broadband speeds Limited cellular service no wireless coverage
- Residential Roof tops: 305 unserved residential locations
- Commercial Services: 10 unserved commercial locations
- Fiber Miles: 12 Miles of underground fiberoptic construction
- Cost Estimate: \$1,900,000
- Proposed service: 1gig symmetrical
- Low-cost proposal: ACP participation, 100 meg symmetrical speeds for as low as \$39.99
- Community support: County support and signed MOU, HOA support & signed MOU





Idaho Department of Commerce
Attn: Ramón S. Hobdey-Sánchez
P.O. Box 83720
Boise, ID 83720-0093

November 30, 2022

Farmers Mutual Telephone Company (FMTC) is a cooperative that was established in 1908 with the purpose of providing communication services to the Fruitland Idaho area. 114 years later, FMTC has stayed current by using state of the art technology and providing broadband services to all our member owners in our Payette and Canyon County service area. These services use fiber optic connections with affordably priced plans at up to Gigabit speeds.

FMTC is encouraged to see the Idaho Broadband Advisory Board (IBAB) has accepted the challenge to bring broadband services to the areas in Idaho that are unserved or underserved.

FMTC has invested over \$18 million dollars since 2016 to provide the most reliable and fastest connectivity to the rural areas that we serve. We understand the investment, the commitment, and we have the organization to support more broadband deployments in the future. As we look forward to the funding opportunity that is at hand we see a competitive arena for official applications that will be required in the near future. We are concerned that any proposal provided at this time, without being held in confidence, would give competitors an unfair advantage. Therefore, we have chosen not to provide a detailed explanation of our plans by not responding to this RFI.

FMTC looks forward to the opportunity to respond to the official RFP when one is issued. We are pleased that money is available to address filling the gaps in current service for the unserved and underserved areas of the state that are outside of our current service area. The CPF Fund and the BEAD Funds that the IBAB will be charged with to distribute are one time funding. It is our hope that organizations that have a history of providing proven technology in a professional and cost-effective manner are weighted positively and appropriately for the long-term commitment of providing the most technologically advanced services for the next 100 years.

Sincerely,

A handwritten signature in blue ink that reads "Ronald A. Rembelski".

Ronald A Rembelski
General Manager

High Speed Internet & Broadband Solutions | Residential VoIP and Business Voice Services
Networking & Computer Repair | ESI Business Phone Systems

208-452-2000 | fmtc.com | 319 SW 3rd St. | PO Box 1030 | Fruitland, ID 83619

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Proposal due date:
December 1, 2022

Prepared for:
Ramón S. Hobdey-Sánchez



FATBEAM RESPONSE

BROADBAND PROJECTS & GRANTS

Proposal for:
**IDAHO DEPARTMENT
OF COMMERCE**



fatbeam.com
2065 W. Riverstone Dr.
Suite 202
Coeur d'Alene, ID 83814
t 509.644.1008

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December 1st 2022

Dear Ramon Hobdey Sanchez,

Thank you for the opportunity to share our recommended projects with the State of Idaho. We have included three sperate projects in Clearwater, Elmore and Jerome Counties.

Connectivity is more important than ever to empower those you serve and to keep our communities connected. By helping build and manage a reliable, affordable fiber-optic network, we at Fatbeam believe you can expand what's possible for various communities across the State of Idaho while being thoughtful with the resources you are entrusted to manage. Our ultimate goal is to create fiber optic network projects that will serve the ever-increasing digital needs of our unserved & underserved communities. We feel confident that our proposed projects support and align with the State of Idaho's network infrastructure goals not just today, but also into the future.

Fatbeam has been successfully delivering unique fiber optic networks to various communities throughout the Western United States for more than a decade.

We look forward to answering any questions regarding our proposed projects for your recently released RFI for the State of Idaho Broadband Projects & Planning Grants.

Best regards,

A handwritten signature in black ink, appearing to read "Paul Merritt", written over a light blue circular stamp.

Paul Merritt
CEO
Fatbeam

2065 W. Riverstone Dr.
Suite 202
Coeur d'Alene, ID 83814
fatbeam.com

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CLEARWATER COUNTY

1. Description of the extent to which the project will facilitate deployment of high-speed broadband networks to areas that are currently either unserved, underserved, or both.
 - a. Project will provide fiber to the home for roughly 400 unserved and underserved homes in a remote part of Clearwater County. The project will utilize existing middle fiber.
2. Description of type(s) of technology to be used (i.e., fiber, fixed wireless, cable etc.)
 - a. Project is 100% fiber, with the potential to bring fiber to over 400 addresses
3. Number of unserved or underserved locations and/or households that will be served by the project and at which speeds the locations will be connected (i.e., 25/3 Mbps, 100/20 Mbps, or 100/100 Mbps).
 - a. The number of homes and businesses where services could be provided would be approximately 400 address which are all with-in 3000-4000 feet of the backbone/middle mile fiber. Since this is a fiber build, speeds are basically unlimited and can exceeded 10Gig / 10Gig if needed.
4. Project term for the proposal (anticipated time frame for project from start to finish in months).
 - a. The expected term for completion of the project (start date from permit(s) being issued) would be 12-16 months
5. Funding Request
 - a. \$4,750,000.00
6. Anticipated total project costs and financing sources.
7. Project Ownership (i.e., private, public, public/private partnership, other).
 - a. Project would be privately owned
8. Proposed project costs (include budget overview and estimated costs)
 - a. Line item detail will be provided in grant application



9. Explanation and demonstration of the applicant's financial ability to complete the project within the applicant's proposed budget.
 - a. Fatbeam is happy to provide this detail during our grant submissions; however, building fiber networks is our core business. Multiple project references and financials can be demonstrated.

10. Description of any proposed match. Match includes financial and in-kind contributions toward the project. In-kind contributions should be converted into monetary values for calculation.
 - a. Fatbeam is open to providing in-kind contributions towards this project. Monetary contributions will be considered and will meet application requirements as needed.

11. Description of whether (and if so, how) this project works in conjunction with the Idaho Broadband Advisory Board's Strategic Plan. This includes addressing distance learning, telehealth, public safety, economic development, business opportunities, and/or promotes dig once policies.
 - a. This project is directly in line with the Idaho Broadband Advisory Board's Strategic Plan by providing broadband to unserved households in remote Clearwater County. By providing adequate broadband users will be able to utilize distance learning and telehealth programs. Business class broadband will also assist in the economic development allowing new businesses the required infrastructure along with work at home options. Fatbeam will also work with the local public safety groups to ensure they have access to these facilities





JEROME COUNTY

1. Description of the extent to which the project will facilitate deployment of high-speed broadband networks to areas that are currently either unserved, underserved, or both.
 - a. Project will provide fiber to the home for roughly 325 unserved homes in a remote part of Jerome County
2. Description of type(s) of technology to be used (i.e., fiber, fixed wireless, cable etc.).
 - a. The project is fiber to the home with a fiber mounting box on each home.
3. Number of unserved or underserved locations and/or households that will be served by the project and at which speeds the locations will be connected (i.e., 25/3 Mbps, 100/20 Mbps, or 100/100 Mbps).
 - a. Project with sever roughly 325 homes with currently are considered unserved. The fiber to the home technology can provide speeds well above 1G/1G.
4. Project term for the proposal (anticipated time frame for project from start to finish in months).
 - a. The projected timeline from start (permit issue date) to finish would be 6 months.
5. Funding Request.
 - a. \$1,250.000.00
6. Anticipated total project costs and financing sources.
 - a. \$1,250.000.00
7. Project Ownership (i.e., private, public, public/private partnership, other).
 - a. Project would be privately owned
8. Proposed project costs (include budget overview and estimated costs).
 - a. Line item detail will be provided in grant application

9. Explanation and demonstration of the applicant's financial ability to complete the project within the applicant's proposed budget.
 - a. Fatbeam is happy to provide this detail during our grant submissions; however, building fiber networks is our core business. Multiple project references and financials can be demonstrated.

10. Description of any proposed match. Match includes financial and in-kind contributions toward the project. In-kind contributions should be converted into monetary values for calculation.
 - a. Fatbeam is open to providing in-kind contributions towards this project. Monetary contributions will be considered and will meet application requirements as needed.

11. Description of whether (and if so, how) this project works in conjunction with the Idaho Broadband Advisory Board's Strategic Plan. This includes addressing distance learning, telehealth, public safety, economic development, business opportunities, and/or promotes dig once policies.
 - a. This project is directly in line with the Idaho Broadband Advisory Board's Strategic Plan by providing broadband to unserved households in remote Jerome County. By providing adequate broadband users will be able to utilize distance learning and telehealth programs. Business class broadband will also assist in the economic development allowing new businesses the required infrastructure along with work at home options. Fatbeam will also work with the local public safety groups to ensure they have access to these facilities.



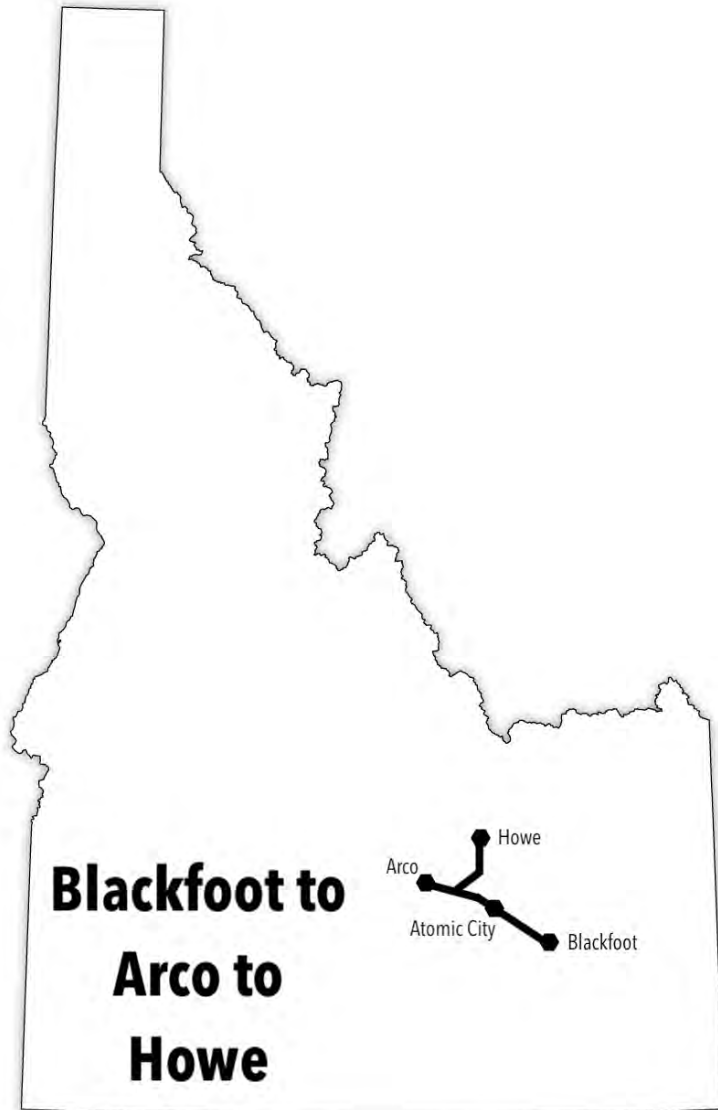


ELMORE COUNTY

1. Description of the extent to which the project will facilitate deployment of high-speed broadband networks to areas that are currently either unserved, underserved, or both.
 - a. Project will provide fiber to the home for roughly 175 unserved and underserved homes in a remote part of Elmore County. The project also includes approximately 17 miles of middle mile fiber build to reach this area, connecting it back to a metropolitan area.
2. Description of type(s) of technology to be used (i.e., fiber, fixed wireless, cable)
 - a. Project is 100% fiber, to include both middle mile build and fiber to the home, etc.
3. Number of unserved or underserved locations and/or households that will be served by the project and at which speeds the locations will be connected (i.e., 25/3 Mbps, 100/20 Mbps, or 100/100 Mbps).
 - a. The number of homes and businesses where services could be provided would be approximately 175. Since this is a fiber build, speeds are basically unlimited and can exceed 10Gig / 10Gig if needed.
4. Project term for the proposal (anticipated time frame for project from start to finish in months).
 - a. The expected term for completion of the project (start date from permit(s) being issued) would be 12 months to include both fiber to the home and the middle mile build.
5. Funding Request.
 - a. \$2,225,000.00
6. Anticipated total project costs and financing sources
7. Project Ownership (i.e., private, public, public/private partnership, other).
 - a. Project would be privately owned
8. Proposed project costs (include budget overview and estimated costs)
 - a. Line item detail will be provided in grant application



9. Explanation and demonstration of the applicant's financial ability to complete the project within the applicant's proposed budget.
 - a. Fatbeam is happy to provide this detail during our grant submissions; however, building fiber networks is our core business. Multiple project references and financials can be demonstrated.
10. Description of any proposed match. Match includes financial and in-kind contributions toward the project. In-kind contributions should be converted into monetary values for calculation.
 - a. Fatbeam is open to providing in-kind contributions towards this project. Monetary contributions will be considered and will meet application requirements as needed.
11. Description of whether (and if so, how) this project works in conjunction with the Idaho Broadband Advisory Board's Strategic Plan. This includes addressing distance learning, telehealth, public safety, economic development, business opportunities, and/or promotes dig once policies
 - a. This project is directly in line with the Idaho Broadband Advisory Board's Strategic Plan by providing broadband to unserved households in remote Elmore County. By providing adequate broadband users will be able to utilize distance learning and telehealth programs. Business class broadband will also assist in the economic development allowing new businesses the required infrastructure along with work at home options. Fatbeam will also work with the local public safety groups to ensure they have access to these facilities,



Blackfoot to Arco to Howe Middle Mile

Prepared for: Idaho Broadband Advisory Board

Prepared by: George Swanson, CHRO, FyberCom LLC

Address: 3780 N Yellowstone Hwy, Idaho Falls, ID 83401

Contact: 208.690.0866

November 30, 2022



Description of Project

This project relates to building middle-mile infrastructure connecting fiber infrastructure in Blackfoot to Arco to Howe. This project would include offering bandwidth to the Idaho National Laboratory, which has expressed interest in this project; further discussions will happen with them next week. This would also create a fiber ‘ring’ backup solution for Salmon in conjunction with another one of our proposals. IRON has also expressed support for this build to help with connecting Arco to its network. With this middle-mile fiber, the previously-mentioned areas would have a more stable, reliable internet connection as there will be infrastructure redundancy. This would benefit these areas as their internet becomes wholly unusable when the main trunk line goes down. This middle-mile project to these cities will give us the backbone to run fiber to each home in this area. We will be able to connect town/city resources and buildings, residential homes, and businesses to have a high-speed, low-latency fiber connection. A total of at least 821 homes would be passed by this middle-mile line, resulting in 590 unserved and 231 underserved citizens.

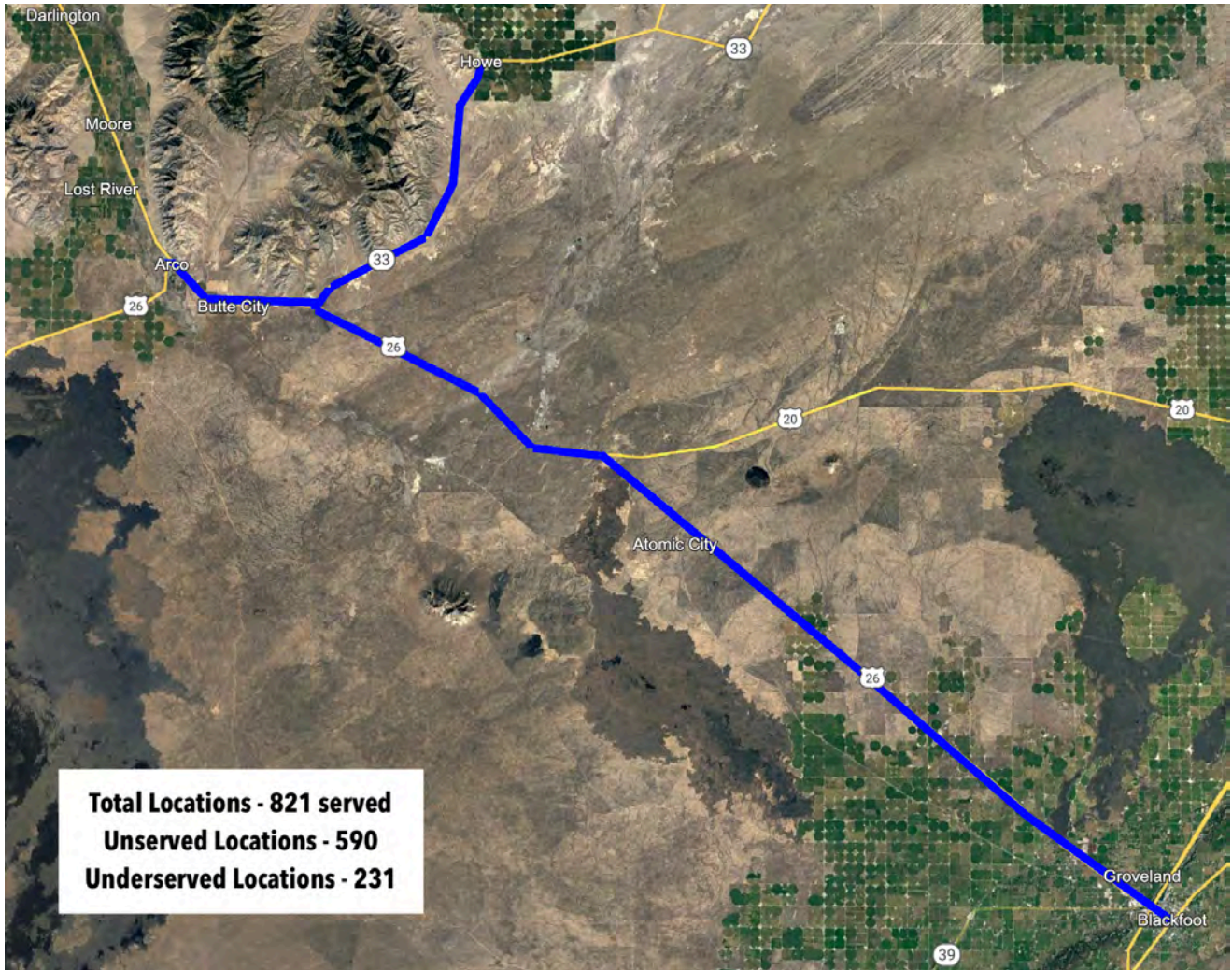
Description of Technology

Fiber will be the technology used. The influence of this choice is the scalability of fiber optics using GPON. 1000 Mbps symmetrical to each premise. FTTH architecture is based on GPON standards. Middle mile uses MEF Carrier Ethernet 2.0 with supported standards of IEEE 802.3, 802.3ac, 802.1q, 802.1p, QinQ 802.3ad, RFC 1349, RFC 2474, RFC 2460, Synchronous Ethernet, and 1588v2 TC. OSPF propagates routing information between pop routers and back to our core network. Fiber optics connect core routers, edge routers, and peering partners, where iBGP and eBGP protocols are used for prefix propagation. MPLS layer is used to diversify services across the common lit circuit.

Project Approach and Schedule

Schedule	Action Item
Month 1	Assess build strategy, Supply required bond, scope of work, fee schedule, etc
Month 2-3	Apply for all permits and 811 locates
Month 3-35	Begin fiber construction, trench, boring, drilling
Month 34-35	Program equipment and light fiber
Month 36	Final Inspection, Complete Grant Paperwork

Unserved and Underserved





Funding Request

FyberCom is willing to match up to 25-30 percent of the project costs for this project.

Anticipated Total Project Cost

\$5,868,500, before the match, FyberCom capital, and cash would be our financing source.

Project Ownership

FyberCom would privately own the fiber build with options to lease.

Proposed Project Costs

Line Item	Total Estimated Cost
Fiber Construction Bid	\$5,789,000
Permits	\$37,000
Design	\$40,000
Legal	\$2,500
Total	\$5,868,500

Ability to Perform and Complete Project

FyberCom LLC is an expert in planning and deploying advanced fiber optic and wireless networks. FyberCom was founded in 2013 in Idaho Falls. The CEO and Owner, Jared Stowell, recognized a need for an internet service provider focused on price, unlimited data, availability, and customer service. FyberCom's main office is at 3780 N Yellowstone Hwy, Idaho Falls, ID. FyberCom commits to finishing this middle-mile proposal 36 months after the award. FyberCom began its rapid growth throughout Eastern Idaho, gaining multiple achievements such as:

- INC 5000 and 500 - **No. 1333** (2020), **No. 818** (2019), **No. 402** (2018)
- Post Registers Readers Choice Award for 'Best Internet Provider'
- Multiple grants awarded and completed for the State of Idaho
- Largest ISP on Ammon Fiber Open Network
- Largest ISP on City of Mountain Home Open Access Network

- The newest ISP on the City of Idaho Falls Open Access Network, with the largest circuit connection to the city, allows us to offer the fastest speed and lowest prices on the Idaho Falls Fiber network.
- Achieved an average network take rate of 78%

<https://www.inc.com/profile/fybercom>

<https://postregister.secondstreetapp.com/Readers-Choice-Awards-2022/>



RELEVANT PROJECT EXPERIENCE

1. Anderson Manufacturing Complex- This new industrial park on North Yellowstone Highway in Idaho Falls needed a fiber-optic network allowing multiple connections through each unit. This industrial park network was wholly designed, installed, and maintained by FyberCom. She was currently servicing 25 of the lots.
2. City of Ririe- FyberCom was awarded a state broadband grant to hook up the city's well houses, library, city building, and any residents or businesses that wanted to take service. This project had to be completed in 5 months; in that five months, we completed the city network, 78 homes, and six businesses. After this project met the grant needs, FyberCom returned and serviced all remaining interested residences.
3. Idaho Falls Country Club- We had been approached by many of the residents of Idaho Falls Country Club seeking a fiber internet connection. In total, we ran fiber-to-the-premise for 145 residents out of 151 total homes.
4. City of Menan- The city and its residents required more bandwidth. Working closely with the Mayor and City Council, we devised a plan to run fiber to every home. With a take rate of over 90 percent, we made this our model for cities moving forward.
5. Iona, Red Rock Estates, Summit Park, Crow Creek- In these Idaho Falls neighborhoods, we had hundreds of requests to run fiber. The take rate on this project has been 74 percent.



- 6. State of Idaho- Over 100 miles of middle mile fiber in Bingham, Bonneville, Jefferson, and Madison Counties.

FYBERCOM CLIENT REFERENCES

EntryPoint Networks, Leader of 'Ammon Model'

Bruce Patterson

Director Solution Services

Email: bpatterson@entpnt.com

Phone: 208-360-1279

Address: 2565 E 17th St, Ammon ID

Idaho Falls Fiber

Jace Yancey

Operation Technology Manager

Email: jyancey@ifpower.org

Phone: 208-612-8121

Address: 140 S. Capital Ave, Idaho Falls ID

Lemhi County Economic Development Association

Tammy Stringham

Director of Operations

Email: director@lceda.net

Phone: 208-756-1567

Address: 200 Main St, Salmon ID

Carmen Charter School

Jim Smith

Superintendent

Email: countryspsych@yahoo.com

Phone: 208-303-7518

Address: 14 Ethels Way, Carmen ID

City of Ririe

Larry Lovell

Mayor of Ririe

Email: 26lovell26@gmail.com

Phone: 208-589-3324

Address: 464 Main St, Ririe ID



Anderson Manufacturing
Ryan Anderson
Owner
Phone: 208-221-8623
Address: 3125 N Yellowstone Hwy, Idaho Falls ID

City of Menan
Tad Haight
Mayor of Menan
Email: alliumguy@gmail.com
Phone: 208-705-6876
Address: 664 N 3530 E, Menan ID

Blackstone Estates
Brad Pickett
Developer
Phone: 208-681-2723
Address: N 4206 E, Rigby ID

QUALIFICATIONS OF PROJECT TEAM

- A. Project Lead: FyberCom - Jared Stowell
- B. Network Design: FyberCom - Vince Calkins and JD Burton
- C. Network Construction: FyberCom - Steve Smith
- D. Network Operations and Management: FyberCom - Eric Wright and Vince Calkins
- E. Community Outreach and Customer Acquisition: FyberCom - George Swanson

Jared Stowell - FyberCom, Chief Executive Officer

Jared is the Chief Executive Officer at FyberCom, LLC; during his tenure with FyberCom, Jared has been responsible for creating and managing hundreds of fiber and wireless networks. This includes everything from strategy to implementation, including legal, public processes, financials, construction, and technical aspects. As Chief Executive Officer, Mr. Stowell assists all of FyberCom's leadership with network planning, analysis, design, cost projections, construction oversight, focus on take rates, and the long-term success of FyberCom.

Vince Calkins - FyberCom, Chief Technology Officer

Vince is the Chief Technology Officer at FyberCom, LLC. Vince is recognized as the network engineer and architect that built FyberCom's network. With a BS in Business, Financing Vince has a strong understanding of creating technology strategies that are currently in tech and affordable for the end-user. With over ten years of networking experience, he plays a vital role in the success of our fiber projects. Vince's primary responsibilities include



overseeing all network design projects, including network planning, feasibility analysis, cost projections, construction oversight, and overall network operations.

JD Burton - FyberCom, Network Solutions Architect

JD is the Network Solutions Architect at FyberCom, LLC. JD is also our Lead Fiber Splicer. Having hands-on experience combined with his 1200-hour certificate from AutoCad and certification in SolidWorks, he has extensive knowledge of the architecture of fiber optic networks. At FyberCom, JD oversees all splicing projects, research, and development of new fiber networks, ordering and maintaining fiber inventory, client relationships and deployments, customer support, and imaging all-fiber network designs.

Steve Smith - FyberCom, Lead Fiber Foreman

Steve is the Lead Fiber Foreman at FyberCom, LLC. Steve has over 15 years of construction experience. This experience creates a deep knowledge of in-ground and aerial fiber construction. Steve focuses on developing the planned fiber area in the construction work performed. This includes heavy equipment knowledge and training, fiber optic blowing equipment, fiber pulling using air assist, drill operation, locating, and supervision of all-fiber employees.

Eric Wright - FyberCom, Network Engineer

As one of FyberCom's network engineers, Eric has been a vital part of FyberCom's network performance and maintenance. Eric has over a decade of networking experience working on various enterprise, wireless, and fiber networks. Eric's responsibilities primarily involve installing, configuring, and supporting firewalls to ensure network security. Eric is also dedicated to ensuring that our networks have maximum uptime, providing fast and reliable connections for our customers.

George Swanson - FyberCom, Chief Human Resource Officer

George is the Chief Human Resource Officer at FyberCom, LLC. George has over a decade of experience hiring and managing teams. He has a BS in Business Marketing and is SHRM Certified. George's key responsibilities are developing and executing human resource strategies supporting the company's overall business plan and strategic direction, specifically in succession planning, talent and development, change management, company performance and management, and compensation. He provides strategic leadership by articulating HR needs and plans to the executive team.



EVIDENCE OF LEGAL CAPACITY

FCC FRN- 0023650807

SAMS UID- E96GEKJ7MCJ3

DUNS # 08-054-2084

Tax EIN- 46-4818590

Idaho Sellers Permit # 005219904

Idaho Construction Permit # 036307 - C - 4

All registrations/filings/taxes are current. This is certified via the proposal signatory page.

Copies of any other documentation are available upon request.

Idaho's Strategic Broadband Plan

FyberCom LLC is a locally owned and operated ISP in Southeast Idaho. We have operated here since 2014, providing fixed wireless and fiber optic networks from Island Park to Burley and servicing Salmon, Carmen, and Mountain Home. The Board's vision of affordable and reliable broadband infrastructure is the same vision we share.

Please refer to our Project Description, which details how we work in conjunction with the board's plan.



FyberCom LLC - Proposal Signatory

FyberCom's Executives authorize the initial proposal submitted to the Idaho Broadband Advisory Board.

gs

11/30/22

George Swanson
Authorized Representative
Chief Human Resources Officer
3780 N Yellowstone Hwy
Idaho Falls, ID 83401
208-690-0866
gswanson@fybercom.net



Blackfoot to Pingree to Aberdeen to American Falls to Burley Middle Mile

Prepared for: Idaho Broadband Advisory Board
Prepared by: George Swanson, CHRO, FyberCom LLC
Address: 3780 N Yellowstone Hwy, Idaho Falls, ID 83401
Contact: 208.690.0866
November 30, 2022



Description of Project

This proposal provides another fiber circuit into the Burley area. Burley has very limited middle-mile connections, and the existing ones are either too full or just unavailable for use. Also, the current middle mile connections here do not come from the East side of the state; all are from the West. Most of the small cities passed on the way to Burley do have K-12 schools, such as Rockland, Declo, Aberdeen, American Falls, and Burley. These schools have limited access to distance learning and Telehealth options. A total of at least 575 homes would be passed by this middle-mile line, resulting in 173 unserved homes and 402 underserved homes.

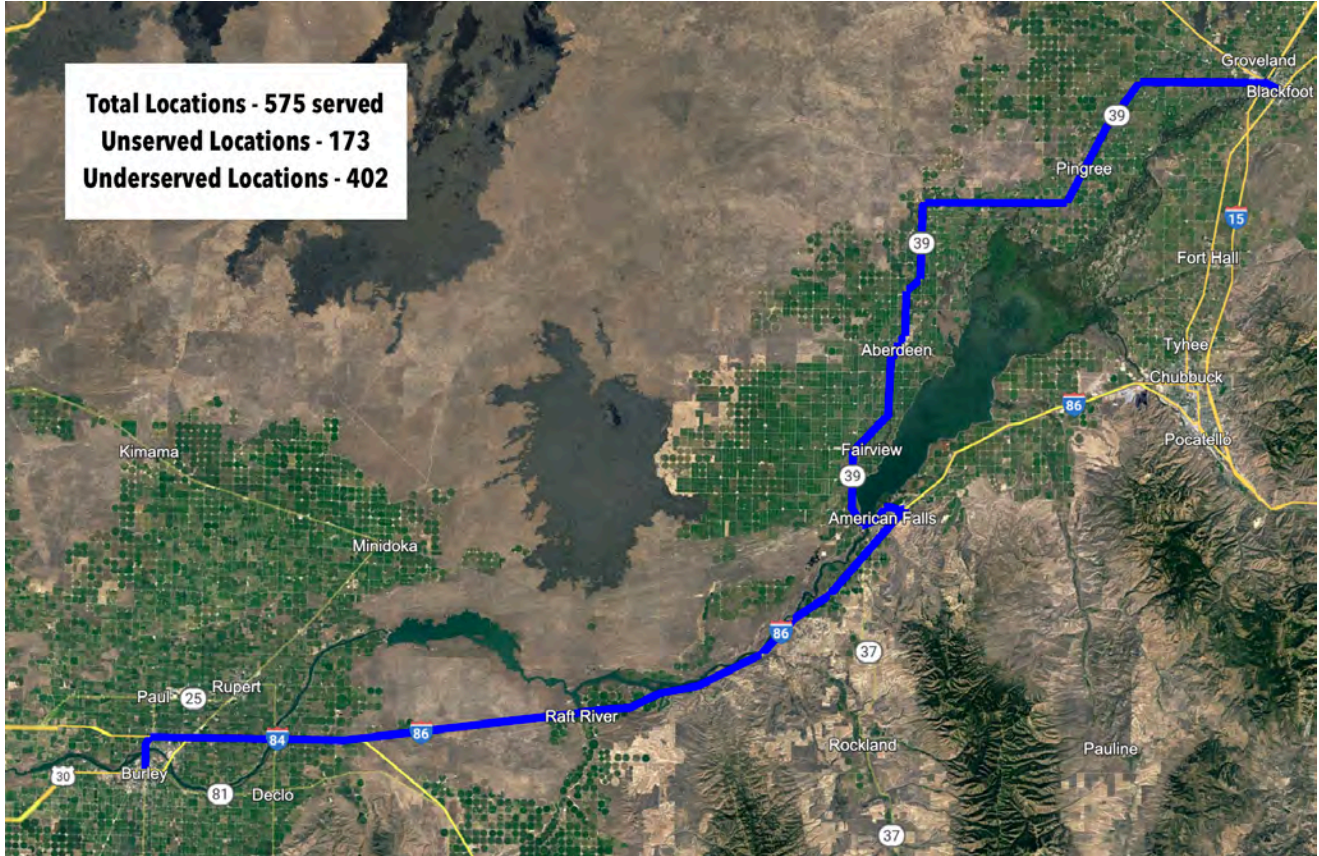
Description of Technology

Fiber will be the technology used. The influence of this choice is the scalability of fiber optics using GPON. 1000 Mbps symmetrical to each premise. FTTH architecture is based on GPON standards. Middle mile uses MEF Carrier Ethernet 2.0 with supported standards of IEEE 802.3, 802.3ac, 802.1q, 802.1p, QinQ 802.3ad, RFC 1349, RFC 2474, RFC 2460, Synchronous Ethernet, and 1588v2 TC. OSPF propagates routing information between pop routers and back to our core network. Fiber optics connect core routers, edge routers, and peering partners, where iBGP and eBGP protocols are used for prefix propagation. MPLS layer is used to diversify services across the common lit circuit.

Project Approach and Schedule

Schedule	Action Item
Month 1	Assess build strategy, Supply required bond, scope of work, fee schedule, etc
Month 2-3	Apply for all permits and 811 locates
Month 3-35	Begin fiber construction, trench, boring, drilling
Month 34-35	Program equipment and light fiber
Month 36	Final Inspection, Complete Grant Paperwork

Unserved and Underserved



Funding Request

FyberCom is willing to match up to 25-30 percent of the project costs for this project.



Anticipated Total Project Cost

\$7,678,000, before the match, FyberCom capital, and cash would be our financing source.

Project Ownership

FyberCom would privately own the fiber build with options to lease.

Proposed Project Costs

Line Item	Total Estimated Cost
Fiber Construction Bid	\$7,560,000
Permits	\$75,500
Design	\$40,000
Legal	\$2,500
Total	\$7,678,000

Ability to Perform and Complete Project

FyberCom LLC is an expert in planning and deploying advanced fiber optic and wireless networks. FyberCom was founded in 2013 in Idaho Falls. The CEO and Owner, Jared Stowell, recognized a need for an internet service provider focused on price, unlimited data, availability, and customer service. FyberCom's main office is at 3780 N Yellowstone Hwy, Idaho Falls, ID. FyberCom commits to finishing this middle-mile proposal 36 months after the award. FyberCom began its rapid growth throughout Eastern Idaho, gaining multiple achievements such as:

- INC 5000 and 500 - **No. 1333** (2020), **No. 818** (2019), **No. 402** (2018)
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- Multiple grants awarded and completed for the State of Idaho
- Largest ISP on Ammon Fiber Open Network
- Largest ISP on City of Mountain Home Open Access Network
- The newest ISP on the City of Idaho Falls Open Access Network, with the largest circuit connection to the city, allows us to offer the fastest speed and lowest prices on the Idaho Falls Fiber network.
- Achieved an average network take rate of 78%

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The area included in this proposal meets the criteria for Idaho's Broadband plan by helping supply internet to unserved locations that otherwise will not receive broadband due to their rural location and high cost of middle mile installation. With this middle mile, one of our primary goals will be to install local public WiFi locations and help promote distance learning and Telehealth.



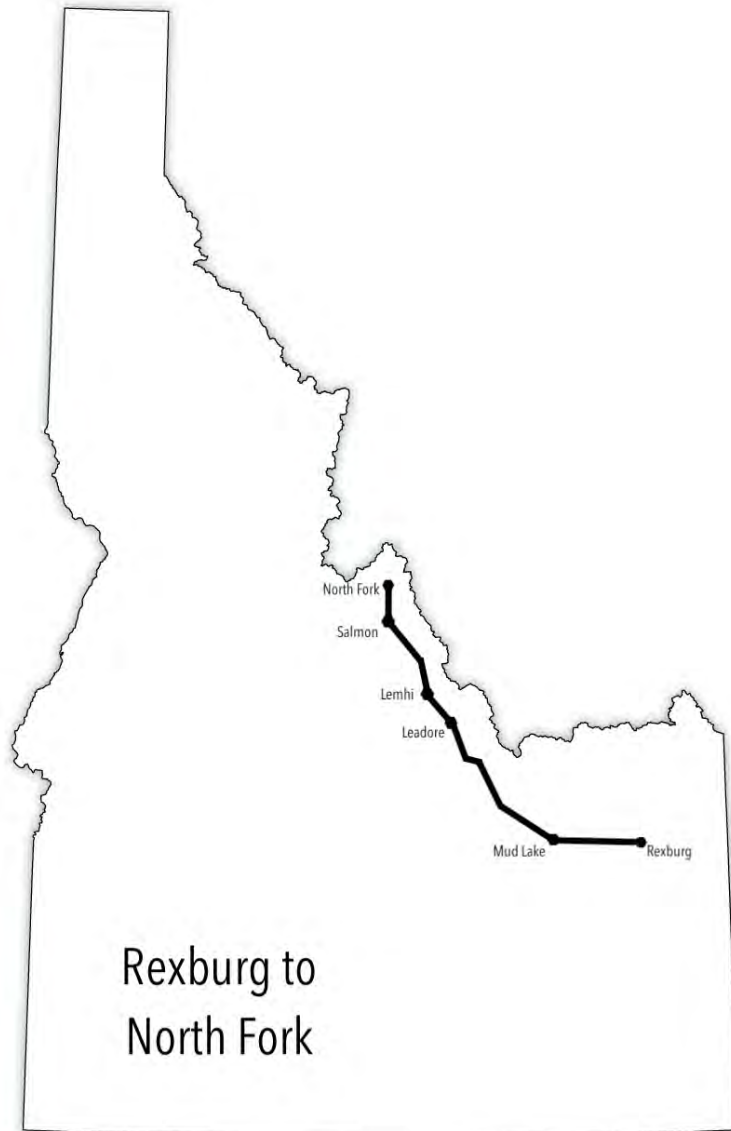
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gswanson@fybercom.net



Rexburg to Mud Lake to Leadore to Salmon to North Fork Middle Mile

Prepared for: Idaho Broadband Advisory Board
Prepared by: George Swanson, CHRO, FyberCom LLC
Address: 3780 N Yellowstone Hwy, Idaho Falls, ID 83401
Contact: 208.690.0866
November 30, 2022



Description of Project

This project relates to building middle-mile infrastructure connecting fiber infrastructure in Rexburg to Mud Lake to Leadore to Salmon to North Fork. Starting in Rexburg is a strategic location for this middle-mile project due to its large network of available transport. A few areas of emphasis for this build are North Fork, Lemhi, and Salmon. The North Fork area is a highly-unserved portion of the state. FyberCom, along with other companies, have not been unable to justify the economic cost involved in building out to these remote locations. The second area of emphasis is Lemhi, a growing unincorporated city that is primarily unserved, PD and finding them a connection is of enormous importance to us. The final area that benefits heavily from this is Salmon. Salmon is underserved due to the high cost and remote nature. There is extremely limited broadband infrastructure, most of which has caused the area to be unserved and underserved. When that line goes down, all connections are down. This middle mile would create a redundant line into Salmon. A total of at least 1,274 homes would be passed by this middle-mile line, resulting in 955 unserved homes and 319 underserved homes.

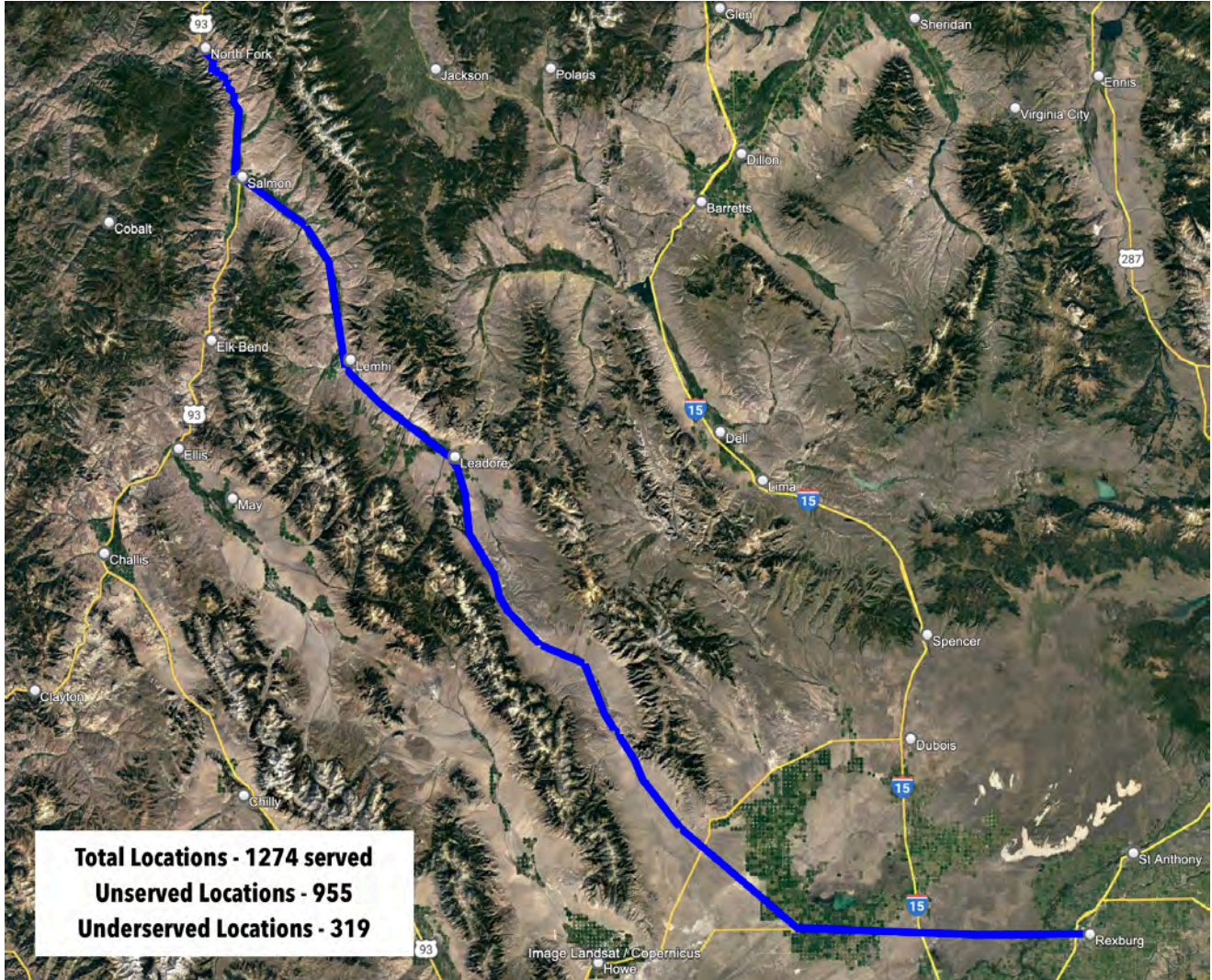
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Fiber will be the technology used. The influence of this choice is the scalability of fiber optics using GPON. 1000 Mbps symmetrical to each premise. FTTH architecture is based on GPON standards. Middle mile uses MEF Carrier Ethernet 2.0 with supported standards of IEEE 802.3, 802.3ac, 802.1q, 802.1p, QinQ 802.3ad, RFC 1349, RFC 2474, RFC 2460, Synchronous Ethernet, and 1588v2 TC. OSPF propagates routing information between pop routers and back to our core network. Fiber optics connect core routers, edge routers, and peering partners, where iBGP and eBGP protocols are used for prefix propagation. MPLS layer is used to diversify services across the common lit circuit.

Project Approach and Schedule

Schedule	Action Item
Month 1	Assess build strategy, Supply required bond, scope of work, fee schedule, etc
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Unserved and Underserved





Funding Request

FyberCom is willing to match up to 25-30 percent of the project costs for this project.

Anticipated Total Project Cost

\$12,597,500, before the match, FyberCom capital, and cash would be our financing source.

Project Ownership

FyberCom would privately own the fiber build with options to lease.

Proposed Project Costs

Line Item	Total Estimated Cost
Fiber Construction Bid	\$12,460,000
Permits	\$65,000
Design	\$70,000
Legal	\$2,500
Total	\$12,597,500

Ability to Perform and Complete Project

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With this middle-mile connection, there will be an immediate impact on Telehealth, Public Safety, and Business Opportunities for the residents of Leadore, Lemhi, Salmon, and North Fork. These remote areas have lots of unserved locations that, in some cases, do not even have access to cellular networks.



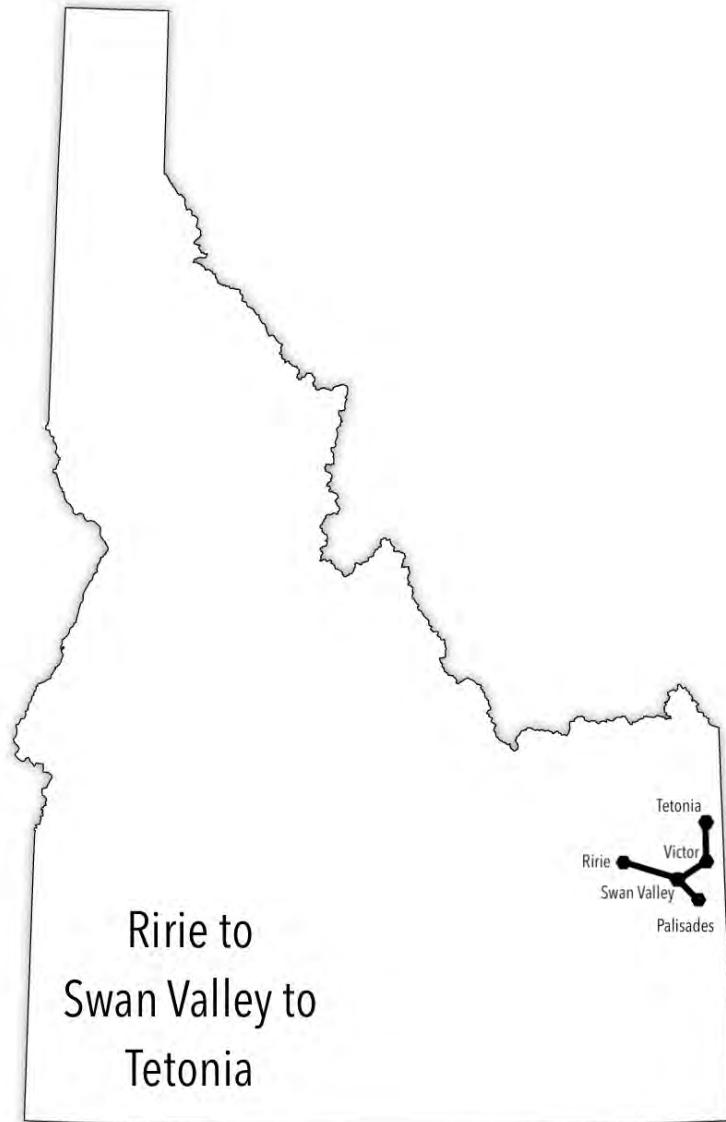
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Ririe to Swan Valley to Tetonia Middle Mile

Prepared for: Idaho Broadband Advisory Board
Prepared by: George Swanson, CHRO, FyberCom LLC
Address: 3780 N Yellowstone Hwy, Idaho Falls, ID 83401
Contact: 208.690.0866
November 30, 2022



Description of Project

This project relates to building middle-mile infrastructure connecting our current fiber infrastructure in Ririe to Swan Valley, Irwin, Palisades, Victor, Driggs, and Tetonia. This middle-mile project to these cities will give us the backbone to run fiber to each home in this area. We will be able to connect town/city resources and buildings, residential homes, and businesses to have a high-speed, low-latency fiber connection. A total of at least 597 homes would be passed by this middle-mile line, resulting in 405 unserved and 192 underserved citizens.

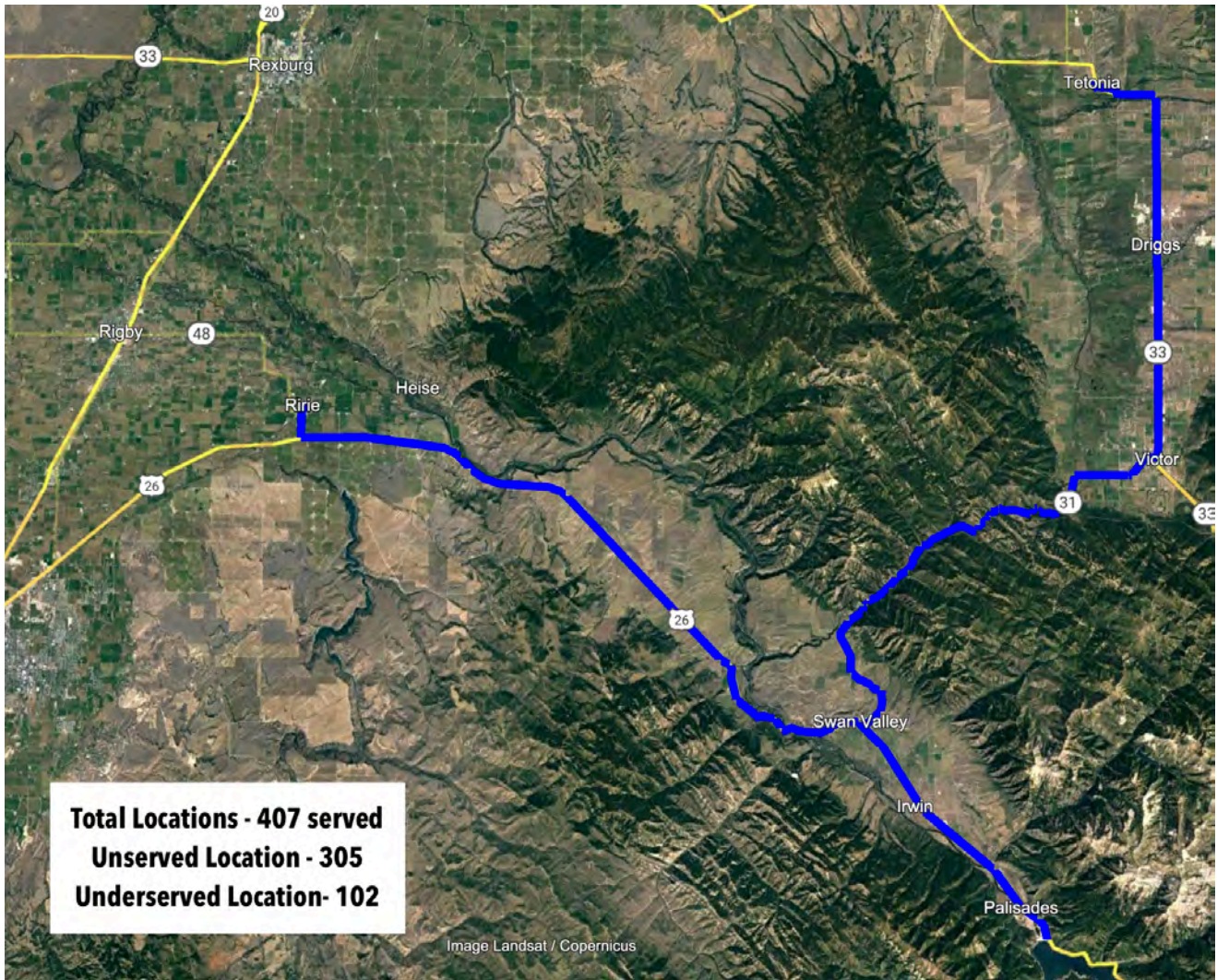
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Anticipated Total Project Cost

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Project Ownership

FyberCom would privately own the fiber build with options to lease.

Proposed Project Costs

Line Item	Total Estimated Cost
Fiber Construction Bid	\$4,998,000
Permits(State, County, City, Canal, and Railroad)	\$45,500
Design	\$40,000
Legal	\$2,500
Total	\$5,086,000

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Idaho's Strategic Broadband Plan

FyberCom LLC is a locally owned and operated ISP in Southeast Idaho. We have operated here since 2014, providing fixed wireless and fiber optic networks from Island Park to Burley and servicing Salmon, Carmen, and Mountain Home. The Board's vision of affordable and reliable broadband infrastructure is the same vision we share.

This specific plan will help Swan Valley, Palisades, Driggs, and Teton. The middle mile project will help FyberCom get the needed broadband infrastructure to help build out E911 Services, broadband services for West Piney school campground, Pine Basin Science Camp, cell service, search & rescue, remote fire departments, other boys/girls scout campgrounds, and all unserved and underserved households/businesses.



FyberCom LLC - Proposal Signatory

FyberCom's Executives authorize the initial proposal submitted to the Idaho Broadband Advisory Board.

gs

11/30/22

George Swanson
Authorized Representative
Chief Human Resources Officer
3780 N Yellowstone Hwy
Idaho Falls, ID 83401
208-690-0866
gswanson@FyberCom.net

// Gooding County

Broadband Infrastructure Project Proposal Brief

This document serves as a guide and project brief for developing self-sustaining, high-quality Broadband Internet in, **Gooding County, Idaho.**

The Overlook

In Gooding County and across rural America, lack of access to reliable, fast, and affordable broadband internet is the largest roadblock to education, healthcare, and industry development. However, Gooding County is taking a collaborative and proactive approach to addressing this deficit. This document serves as a *Planning Update and Guide to Developing Broadband Connectivity* across Gooding County, serving our communities now and for generations to come.

Roadblocks

Many Gooding County citizens struggle with adequate internet connectivity and overall access falls short on multiple metrics.

- ~37% of citizens in the county have access to 1 or fewer providers, who may or may not provide adequate and affordable service.
- ~ 38% of citizens do not have access to the old 25Mbps wired broadband minimum standards
- ~ 20% of people do not have access to any wired internet

Current data lacks context for those under the new standard for broadband of 100mbps/20Mbps. However, we can extrapolate that the metrics would be worse for the citizens of Gooding based on currently available data.

Preparing an Innovative Solution

Gooding County is posed to overcome its technology and connectivity deficits with an *innovative, collaborative effort to develop self-sustaining community-owned broadband infrastructure* that invites better service through RFP bids and allows citizens to access quality internet now and for years to come. County Leadership is working with municipal and community anchors to create a collaborative, unified plan for tackling the broadband access gaps in their communities. The collaborative Gooding Broadband Committee includes:

- Gooding County
- City of Bliss
- City of Gooding
- City of Hagerman
- City of Wendell
- Bliss School District
- Hagerman School District
- Wendell School District
- Gooding School District
- Gooding Public Library
- Wendell Library
- University of Idaho 4-H
- Glanbia
- Hartfield Manufacturing
- Hagerman Valley Inn

Several other community institutions, including the hospital, state park services, and local businesses, have also been contacted and invited to the committee.

The Road Forward: Next Steps

The unified Gooding County and Municipal Leadership have already made significant planning strides to create a Complete County wide broadband plan that is firmly rooted in elements of the IBAB Strategic plan and the RIVDA Broadband Elements of Success (page 3). County and Municipal leaders have:

- Begun scheduling Broadband and IT Assessments in collaboration with RIVDA
 - Gooding County, Bliss, City of Gooding, Hagerman, and Wendell all are participating in the assessments.
 - Completion anticipated in early 2023.
- Engaged RMWT to complete Preliminary Engineering
 - ACD studies expected in early 2023.

Upon completion of the Broadband Assessments a unified broadband plan will be compiled. This broadband plan in conjunction with the pending ACD engineering studies will provide a shovel-ready solution to building comprehensive community owned infrastructure in Gooding county.

Community First Technology

While we will not be sure of the exact plans, we look to the successes of our neighboring communities. We expect that our network will utilize a multi-technology approach to connectivity. Phase-1 includes the construction of *wireless fiber infrastructure to serve the most rural residents* in the county and lay the fiber foundation for the area, while Phase-2, detailed in the engineering studies, includes *fiber to the premises for all locations within the city limits of Bliss, City of Gooding, Hagerman, and Wendell with speeds up to 1GB/1GB*. This 2 Phase approach can be completed as one continuous/simultaneous project, decreasing overall construction time and leveraging resources as efficiently as possible.

Potential Planning Costs

At the beginning of our collaborative planning and preparations for creating our shovel-ready solutions, we anticipate the need for planning funds to offset the cost of community and economic development research to better prepare to meet the expectations of the Elements of Success (page 3), and further our ability to decrease the technology gap. Potential planning funding would also be utilized to bolster a comprehensive plan to improve digital access for all populations and better access to educational, work, and telehealth opportunities.

Elements of Success

- **Sustainability** – The aspects that encourage sustainability include grants (Federal and State), volunteer work, neighborhood champions and public engagement, broad use of the proposed infrastructure for ongoing maintenance.
- **Resource sharing** – Resource Sharing requires fewer resources and cost to maintain one set of servers vs. four. Collaborative cost reductions while maintaining independence and confidentiality through shared managed cloud-based resources.
- **Innovation** – Overcoming past paradigms of limited internet service, discipline for the collaborative process, creating plans for current and future needs.
- **Transformation** – Righting the past wrongs and looking towards the future on a solid foundation. This includes planning for the future with proactive concordant efforts by contractors to build access to services in new/future housing and developments. City planning with an eye to the future, including city easements to assets such as poles, towers, common ditches, new construction, etc., is essential to the overall success and sustainability of a well-integrated network.
- **Public Safety / Cybersecurity** – While seemingly less critical in the more rural areas, attacks on essential services provided by most counties and municipalities are becoming increasingly common. These attacks include water and other utilities as well as fire and police protection. As rural townships tend to have fewer resources to combat these attacks, they become more frequent targets ([NYTimes](#); [CBSNews](#)).
- **Educational Narrative** – This is an essential component to success. The digital divide and educational disconnect both in Idaho and the whole of rural America are well documented. The sustainment of population and economic health is critically impacted by the opportunities afforded to the youth of your communities. While the connectivity of our schools is vitally important, circumstances from the previous 18 months clearly show that individual student connectivity in the home is imperative for uninhibited, comprehensive education. Connectivity is essential to students at every level, from primary and secondary students to those continuing their education with trade certifications and university degrees.
- **Telehealth** – While telehealth programs do not lie directly within the cities' or county's purview, connectivity to available telehealth services does. Developing a high-speed network that meets the needs of telehealth providers brings more accessible primary care to citizens at a decreased cost. As the population in the United States ages, telehealth can also provide affordable, comprehensive care to more isolated and aged citizens.

// Gooding County

Broadband Infrastructure Planning Funding Request

This document serves as a request for funding for Broadband Planning in **Gooding County, Idaho.**

Planning Funds Request

Dear Idaho Broadband Advisory Board,

Gooding County is looking to spend approximately \$31,000 in costs to develop our broadband plan. That is broken down as follows:

Planning Item	Cost
ACD Studies (Preliminary Engineering)	\$6,000
Community Outreach	
• Businesss, School, and Institutional Outreach	\$25,000
• Citizen Surveys	
• Speed Testing Outreach	
TOTAL	\$31,000

Gooding County has signed a contract with RMWT to complete the preliminary engineering. That contract amount is \$16,000. We have received a grant from Imagine Idaho to pay the first \$10,000 of this fee, leaving a balance of \$6,000 to be paid. We will also be doing a great deal of community outreach at an estimated cost of \$25,000. We are involving businesses, schools, and our hospital in getting speed testing done as one of our first steps in completing our needs assessment. We are utilizing a multimethod approach to community engagement, including social media, mailing outreach, town hall meetings, and community anchor involvement.

We have already begun our planning phase and have scheduled a complete Broadband and IT Assessment in cooperation with RIVDA and ETS. This funding request will support the County and all of her cities. As previously mentioned, we are also under contract to complete our preliminary engineering. We expect to complete all our planning by the end of the first quarter of 2023 in order to take advantage of the new state and federal grant opportunities for 2023.

Our planning initiative has been developed first to facilitate economic building through shovel-ready engineering plans and to serve the most rural and underserved populations. Our planning initiatives, including community outreach, developing community champions, and involving critical anchor institutions, are devised to increase our understanding of community needs and allow for immediate utilization of our assets upon receiving funding for broadband expansion. The planning funds will be utilized to assess the community's specific needs surrounding access to distance learning,

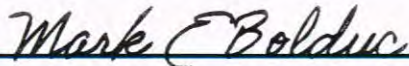
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telehealth, public safety, economic, and business opportunities. Complete and well-thought-out planning promotes the economical “dig once” policies endorsed by the Broadband Strategic Plan and keep overall build costs lower for our future project funding requests. Gooding County has the drive, ambition, and leadership initiative to complete our Broadband Planning and Initiatives. Full or partial funding of this request would bolster our timeline, efficiency, and breadth of reach. We are excited to continue working with our community to build a better Gooding and a better Idaho.

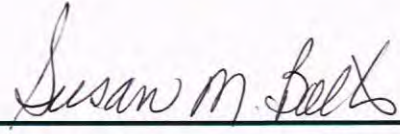
Thanks for your interest in our community.

Sincerely,

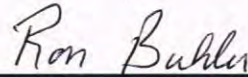
Gooding County Commissioners



Chairman: Mark Bolduc



Commissioner: Susan Bolton



Commissioner: Ronald Butler



IDAHO FALLS POWER

P | 208.612.8430
F | 208.612.8435



November 30, 2022

Broadband Notice of Request

Submitted via email: broadband@commerce.idaho.gov &
ramon.hobdeysanchez@commerce.idaho.gov

Idaho Broadband Advisory Board Request for Proposals for Broadband Projects & Planning Grants

The City of Idaho Falls dba, Idaho Falls Power (IFP) which owns and operates Idaho Falls Fiber (IFF) appreciates the opportunity to provide a project proposal in response to the Broadband Projects & Planning Grant.

Idaho Falls is the fourth largest city in Idaho. Over the last decade, the community has experienced tremendous growth with a population now over 66,000 according to the United States Census Bureau. In addition to serving our resident populace, the city is the regional commerce center for smaller communities and rural residents throughout Southeastern Idaho and Western Wyoming.

The city formed an electric utility in 1900 due to the demands from citizens at the time to provide services only available at the time in larger cities and states. Idaho Falls Power is one of the oldest electric utilities in the Western United States. IFP's electric rates are the lowest in Idaho and among the lowest in the U.S. with superior reliability and resiliency.

In 1998, IFP once again saw the need to bring forward-looking services to the community with the construction of the area's first fiber optic network that was available for use/lease to both private and public entities. The region's private internet service providers (ISP) were able to utilize this dark fiber to provide services to businesses and other regional entities. With the growing need for better and more affordable broadband access in residential areas, Idaho Falls Fiber leaned in again to meet the community's needs by starting construction on a citywide fiber-to-home, lit service and open access network in 2019.

In just three short years, IFF now operates the largest open access broadband network in the state. Over 15,000 residential homes/apartments have access to high speed, affordable fiber optic broadband. To date, IFF has over 5,000 customers connected to our network and taking service. We continue to experience higher than projected customer connection rates (take-rates). Residents can choose from six ISPs and have the option of either 250 Mbps or 1 Gbps upload and download speeds, with prices as low as \$59.89! Broadband access must be affordable, which is why IFF does not charge for equipment or installation with no contracts. IFF's mission is to provide service and not cater to shareholder profits. The network stands on its own financially and will not use one cent of local property taxes or other city general funds; operating as a standalone enterprise fund.

Idaho Falls Power and Fiber have continued to innovate and find avenues to leverage existing infrastructure to maximize service while keeping access affordable. IFF continues to apply for state and federal grant funding opportunities and is hopeful that at least some of the federal tax dollars being allocated to states for the expansion of affordable broadband can flow down to Idaho Falls citizens. IFF acknowledges there are areas in the state that are much further behind on the development of broadband access and are potentially more costly to build, but IFF is a community that should not be penalized just because they actually started to solve this community need starting back in 1998. Idaho Falls Fiber customer subscription rates speak for themselves on the community's need for access to a reliable and affordable fiber network.

Next year, IFF is starting the last year of the citywide buildout. The last year of the buildout is going to be the most challenging due to construction types and soil conditions. IFF purposely saved the hardest and most costly construction for the last year to hopefully leverage lessons learned from the previous three years. We are hopeful that the Broadband Committee will recognize the need and realize the impact that some funding support from the state would have on IFF's ability to continue offering service at a price that is affordable. There is no other community in the state that broadband dollars would go further and have an immediate positive financial impact than Idaho Falls. Idaho Falls has over 66,000 Idahoans that deserve at least some of the benefits from the millions of federal broadband funding dollars that have rolled down to states for allocation/distribution.

Year Four of Four-Year Fiber to Home Citywide Buildout

- I. Description of the extent to which the project will facilitate deployment of high-speed broadband networks to areas that are currently either unserved, underserved or both.

The last phase of this build will be like the past three years, where a dedicated fiber optic line is brought to each home in the final build areas of Idaho Falls. The current speed and service offerings are 250 Mbps and 1 Gbps, which are bi-direction speeds, meaning upload and download. This type of service for the price offered is not available in the areas that IFF is finishing the buildout. The IFF network would not be experiencing the take rates we have been if the community was not underserved and already had access to affordable broadband of this type. An important aspect of our network design and construction type, where there is a dedicated fiber line run to each home, is that it is not a gigabyte passive optical network (GPON), as IFF's network can readily and affordably be upgraded to higher speeds as needed. In ten years, 250 Mbps will not be adequate, and IFF will need to facilitate the deployment of the next generation of network speeds. With a dedicated, not daisy chain design, this network will facilitate the deployment of future broadband needs and not just the needs of today. Dedicated fiber lines to each home and business is a costly construction design but is also the gold standard for future proofing. Today's adequately served areas are tomorrow's underserved areas without proper network design and construction practices.

- II. Description of type(s) of technology to be used (i.e., fiber, fixed wireless, cable etc.)
This project will focus solely on building a Fiber-to-Home Network.
- III. Number of unserved or underserved locations and/or households that will be served by the project and at which speeds the locations will be connected (i.e., 25/3 Mbps, 100/20 Mbps, or 100/100 Mbps)
Over 8,000 residences and businesses will have access to connect with speeds of either 250/250 Mbps or 1,000/1,000 Mbps.
- IV. Project term for the proposal (anticipated time frame for project from start to finish in months).
8 months. This is a shovel-ready project with an anticipated completion date of December 2023.
- V. Funding Request.
\$3,500,000 or whatever financial support the committee is willing to offer to enable affordable access.
- VI. Anticipated total project costs and financing sources.
\$30,000,000 is the total cost of the fiber-to-home, lit network buildout that underwent construction in 2019. \$7,000,000 is the projected cost of the last phase of the four-year buildout to be funded with fiber network revenues and capital reserves of Idaho Falls Power through an enterprise fund to enterprise fund loan.
- VII. Project Ownership (i.e., private, public, public/private partnership, other)
Public Private Partnership.
The city will own and maintain the fiber optic infrastructure and local internet service providers will provide the internet service that is delivered to customers.
- VIII. Proposed project costs (include budget overview and estimated costs).
\$7,000,000
- IX. Explanation and demonstration of the applicant's financial ability to complete the project within the applicant's proposed budget.
Idaho Falls Fiber has completed every year of construction on or under budget and on time. This is year four of the buildout and proposals submitted in prior commerce funding opportunities, but never awarded any funding, were still finished on time and on budget. There is no risk in allocating funding and IFF not completing construction within the timeline and budget. Every dollar received by a public utility such as IFP, is utilized for public infrastructure.

- X. Description of any proposed match. Match includes financial and in-kind contributions toward the project. In-kind contributions should be converted into monetary values for calculation.

Idaho Falls Fiber is proposing that they would match 50% of funds awarded up to \$3,500,000. In the event that less dollars are awarded, IFF will make up the difference in financial and in-kind dollars to complete the last phase of the 4-year buildout. Every dollar of financial support will be spent dollar-for-dollar supporting affordable access to broadband in the Idaho Falls Community.

- XI. Description of whether (and if so, how) this project works in conjunction with the Idaho Broadband Advisory Board's Strategic Plan. This includes addressing distance learning, telehealth, public safety, economic development, business opportunities, and/or promotes dig once policies.

The Idaho Falls Fiber network meets each of the requirements of the Idaho Broadband Advisory Board's Strategic Plan. With high-speed internet, customers can pursue distance learning, teleworking and telehealth from the comforts of their homes. IFF provides fiber to traffic lights, hospitals, substations and power plants, police and fire stations, 911 center services, schools, etc. Economic developments and business opportunities have been created based on the fact that IFF has a fiber network. The nature of this open access network with its easements and rights-of-ways, will benefit future, multiple ISPs to provide service over the same cable.

Idaho Falls Power
Bear Prairie
General Manager
bprairie@ifpower.org
(208) 612-8430

From: Christina E Culver <christina@imagineidaho.org>
Sent: Wednesday, November 30, 2022 9:50 AM
To: Ramon Hobdey-Sanchez <ramon.hobdeysanchez@commerce.idaho.gov>
Cc: Jake Reynolds <Jake.Reynolds@commerce.idaho.gov>; Benn Brocksome <Benn@bennbrocksomeandassociates.com>; Peyton Nunes <Peyton@bennbrocksomeandassociates.com>; Tucker Craig <tucker.imagineidaho@gmail.com>
Subject: County Tracking of Broadband Projects/Planning

Dear Ramon – Please find attached our tracking document for Idaho’s 44 counties on their broadband projects and planning. This is based on ongoing contact and outreach with each county. We have a number of city inquiries – but we have included those in the county tracking.

I hope you will consider sharing this with the broadband board so they are confident a big wave of requests are on their way in preparation for the legislative session and funding approval.

In anticipation of your December 1 submissions for project and planning grants this will give you a good idea of what is likely coming – even if they do not make the RFI deadline. We are confident that many are going to apply for the actual CPF and Planning grant RFP, as well as BEAD if they qualify.

The green highlighted counties mean they are ready to submit for funding, or have an ISP handling their submission. The yellow highlighted counties mean they are in early stages of planning with intention to apply for funding in the future. And no color means they have no interest in planning, or after multiple attempts we received no information.

Where we could, we tried to update with dollar amounts requested. Most are still pending as they weren’t quite ready to share their requested amount. I have left this in excel format so you can make your own updates.

Please be in touch if you have any questions. Best regards, Christina

Christina Erland Culver | Board Member and Project Team Lead | Imagine Idaho Foundation | P.O. Box 3084 | Ketchum, ID 83340 | mobile – 208-470-6657 | christina@imagineidaho.org | www.imagineidaho.org



Imagine Idaho County Report

11.30.2022

County	status of broadband	Speed-Testing (Y/N)	Idaho 2021 CARES Act	Known Planning Grant Amounts	Project Ask Dollar Amount	Estimated Project Budgets	contact	phone	email
Ada	Ada County and the City of Boise have finished planning a middle mile loop to connect roughly 20,000 unconnected people that was presented to the IBAB on Nov. 10. The county is working to build a treasure valley broadband team that will work together on this project. They have asked for \$20 million from IJA with a lose commitment from Fatbeam and Zippy to match the other \$20 million.	Y				\$ 40,000,000	Alex Winkler (City of Boise)		awinkler@cityofboise.org
Adams	Adams County has been in early discussions of trying to do a plan. The County did not accept any ARPA dollars.	Testing in north Adams county (through valley county project), but not south					Joe Iveson	208-741-1273	joeiveson@yahoo.com
Bannock	Bannock County is ready to submit for the state RFIs. The county has been in contact with a regional ISP that they have worked with on previous projects. Bannock county is finalizing plans for submission and Imagine Idaho will have updates the week of 11/28.	Y (did speed testing last year)					Jeff Hough	208-236-7210	jeffh@bannockcounty.us
Bear Lake	Bear Lake is in the early phases phases of speed-testing and stakeholder building. Imagine Idaho is working with Bear Lake County on this effort. The county will apply for the planning grants. Imagine Idaho supported	Y		\$ 15,000			Paul Christensen		pchristensen@bearlakecounty.id.gov
Benewah	Imagine Idaho Grantee. Benewah County has completed speed-testing, formed a stakeholder group, and is applying for the RFIs. The model the County is pursuing is county owned with third party administration. Taking out RDOF areas, the project will reach 1,464 households. Facts about the area: Approximately 69% of the households are in Opportunity Zones. The area is classified as rural, with an average density of 4.97 per square mile, well below the USDA 6 per square mile threshold.	Y		\$ 25,000		\$ 21,000,000	Alex Barta	208-568-0853	timberplus3@gmail.com
Bingham	Unaware of plans as of 11/7	Unknown					Whitney Manwaring	208-782-3013	wmanwaring@co.bingham.id.us

Blaine	Blaine County is in early planning phases, having just started speed-testing. South Valley is the area that still does not have great coverage and where the low-socioeconomic households are largely populated. Blaine County School District beginning preliminary awareness of speed-testing in coordination with IIF. CARES Act covered Carey and part of Picabo and left the rest unserved. Imagine Idaho supported.	Y	\$1,508,626				Stephen McDougall Graham	(208) 788-5531	smgraham@co.blaine.id.us
Boise	The county applied for and received funding in 2022 to get broadband up to the Lowman area. Imagine Idaho is in communication with the county grant writer about a planning grant. The county grant writer is attempting to get approval from county commissioners to move forward with an application for a planning grant as there are small pockets that need coverage still.	N	\$676,056				Ryan Stirm	208-781-1635	rstirm@co.boise.id.us
Bonner	The county does not view broadband as an area it specifically should work on. It believes in letting private industry handle this. Imagine Idaho is aware of projects that could be potential applications from ISPs directly, such as wired or wireless networks. Local ISP has been upgrading cable plant in Hope, Idaho, completing running fiber to the hope peninsula. now going to east hope, going to build around the lake over to tressel creek. The next step will be to build back toward headway. Towers will be involved in their efforts ISP is looking into applying for BEAD and state grants. Have used their own capital up to now. They have had concerns about how other providers have accepted grants and have not done the work right. Fiber they are putting out is capable of 2 gigs right now. New wireless technology is coming in, up to 100 Mbps probably. Changing distance to 2-3 miles instead of 10 or 12 like now A competitor took CARES Act on the hope peninsula. Project was supposed to be completed Dec. 31, 2021 and the project is still not finished. Any applications that the Board may see will come from ISPs.	N	\$1,519,970				Dan McDonald	208-265-1438	dan.mcdonald@bonnercountyid.gov
Bonneville	No knowledge of plans as of now	Unknown					Rodger Christensen	208-529-1350 x1365	rchristensen@co.bonneville.id.us
Boundary	County not expecting to apply for grants due to past frustrations. There are pockets of the county that can use better service and attention from ISPs. IIF working with Boundary to find solutions	N					Dan Dinning	208-267-7723	commissioners@boundarycountyid.org
Butte	The cities of Arco and Moore are working on a plan currently. They are working on a RFI for planning grants with a regional ISP that will submit an RFI. Imagine Idaho supported.	Y					Monica Hampton	208-680-1938	mhampton@buttecountyid.us

Camas	Imagine Idaho Grantee. Camas County has completed the pre-engineering stages and will submit for the RFI's. The county is currently having discussions with ISPs to work with on the project. Camas County is an excellent candidate to receive both CPF and planning grants because of its poor connectivity, where over 80 percent of speed test results were less than 25/3 mbps and 100 percent were under 100/20 mbps. Project details: Hybrid- Fiber would go to Fairfield only and reach right around 481 homes. The estimated cost is about \$3.5 million dollars. Overlaying fixed wireless with the fiber will bring coverage to about 83 percent of households in the county.	Y		\$ 25,000		\$ 3,500,000	Travis Kramer	208-954-2562	kramer.camas@gmail.com
Canyon	hold until after election						Leslie Van Beek	208-454-7320	
Caribou	Caribou County completed work in the Grace and Thurston area (western and south western end are now covered) and now want to reach Bancroft and Chesterfield. Caribou County is a part of Fourcasi, which received approximately 30 percent of funding during the last round of state grants, according to Fourcasi Director Molly Beseris. While not a large county wide project, the IBAB should be aware of work that will come in the future	Unkown if ISP is					Mark Mathews	208-216-9334	n/a
Cassia	Cassia County has worked with ETS on the broadband planning and now has a design completed. The County will apply for the RFI's with ETS.	Y					David Burgess	208-312-8855	dburgess@cassiacounty.org
Clark	Mud Lake Telco working in the county. Imagine Idaho is working with Mud Lake on a possible regional project that would include Butte County (Arco and Moore), Fremont County, and potentially Jefferson County. Imagine Idaho supported.	Unkown if ISP is					Greg Shenton	landline: 208-374-5274. cell: 208-313-1355	gshenton@co.clark.id.us
Clearwater	Planning for last mile projects. Last mile projects depend on funding of middle mile projects. The middle mile project is the Port of Lewiston and IRON proposed project that ranges from Grangeville to New Meadows.	Y							
Custer	Imagine Idaho Foundation encouraged the county to submit for the planning grant RFI, specifically to cover Clayton and Challis. Custer Telco is the ISP that would most likely apply as the county has a long lasting relationship with the company. However, Custer Telco has concerns about applying until there is an official application process due to proprietary information concerns. Custer Telco is also the ISP that is working with Lemhi County.	Unkown if ISP is					Wayne Butts	208-833-2332	wayne_butts@hotmail.com

Elmore	Elmore County is putting together a plan that is near completion and is based off of Lincoln County's project. Imagine Idaho encouraged them to apply for the planning grant. The county worked with an ISP in past on middle mile that provides infrastructure to build off of.	Y	\$431,748				Crystal Rodgers	208-999-2206	crodgers@elmorecounty.org
Franklin	Franklin county is a part of the Fourcasi area that received funding during the last round. The majority of the county was covered during that process, but they are working with and ISP to fill in gaps.	Unkown if ISP is	\$1,495,187				Boyd Burbank	208-244-0639	boyd@fcidaho.us
Fremont	Imagine Idaho is in preliminary discussions with Fremont County about partnering with regional ISP Mud Lake Telco to build regional project. Fremont County will apply for the planning grant. The county could potentially apply with Mud Lake. The efforts of Fremont County will initially be to connect anchor institutions. There is a possibility to connect into St. Anthony's network, which they have designed with EntryPoint Solutions.	N		\$ 15,000			Blair Dance	208-270-7494	bdance@co.fremont.id.us
Gem	Gem County is in the beginning of putting a plan together. Imagine Idaho recommended that they apply for planning grant funds to improve connectivity in Letha, Ola, and the high valley area.	N		\$ 15,000			Bill Butticci	208-365-8975	commissioners@co.gem.id.us
Gooding	Gooding County has recently been accepted as an Imagine Idaho grantee and is in the early phases of speed-testing and stakeholder convening. Region IV Economic Development Association is completing this work on behalf of Gooding County. Imagine Idaho Foundation has recommended applying for \$15 thousand dollars through the broadband planning grant. Gooding County is hiring RMWT for a design study that ETS will use to apply for funding. The county commission is not sure what their grant request will be yet. They have commitments already from all of the cities in the county for its BAT.	Y		\$ 15,000		\$ 8,500,000	Michele McFarlane	208-539-6199	mbolduc@co.gooding.id.us
Idaho	Planning for last mile projects. Last mile projects depend on funding of middle mile projects. The middle mile project is the Port of Lewiston and IRON proposed project that ranges from Grangeville to New Meadows.	Y	\$496,509						
Jefferson	Mud Lake Telco has expressed interest in working further into Jefferson County, where it currently is in the NW part of the county.	Unkown	\$477,641 (Ririe), \$766,610 (Roberts)				Scott Hancock	208-521-6554	shancock@co.jefferson.id.us
Jerome	Jerome County has completed a design with ETS for a county owned model. ETS is going to apply for state grants with Jerome County.	Y			\$ 8,500,000	\$ 8,500,000	John Crozier	208-420-4552	
Kootenai	Not aware of plans as of November	N	\$608,631				Leslie Duncan	208-446-1606	lduncan@kcgov.us

Latah	Imagine Idaho Grantee. Latah County was partially funded by IIF to fund an engineering plan that is completed. Has built a coalition and will work on last mile planning for 2023	Y		\$ 15,000			covered		
Lemhi	Lemhi County is working with Custer telco currently on options. Custer Telco has a multy year project currently in progress that will connect around 300 homes in Lemhi County. Custer Telco is hesitant to apply for the RFI due to proprietary information concerns, but will for the official grant.	Unkown if ISP is					Rick Snyder and Tammy Stringham	rick: 208-768-2714	ricksnyder54@hotmail.com , director@lceda.net
Lincoln	Lincoln County is working with ETS on its broadband planning and applications that it will submit. The county has actively been pursuing grant funding for broadband, but was not accepted for past ReConnect rounds. It is currently working to connect schools, libraries, and other anchor institutions. It wants to build a county owned network.	Not yet	\$1,505,430				Rebecca Wood	208-320-1387	commishwood@gmail.com
Lewis	Planning for last mile projects. Last mile projects depend on funding of middle mile projects. The middle mile project is the Port of Lewiston and IRON proposed project that ranges from Grangeville to New Meadows.	Y	198,603	\$ -		\$ -			
Madison	Madison County was awarded \$2.1 million through ReConnect4 for a middle mile loop around Rexberg. Silver Star is the ISP that will do the work. The county still has needs in the outlier areas of the county, and Imagine Idaho is in discussions with them to work on further speed-testing. Imagine Idaho supported.	Y (rexburg only)			\$ 22,000,000	\$ 22,000,000	Paul Sorensen	208-359-6200	psorensen@co.madison.id.us
Minidoka	Minidoka County is an ETS Project. ETS recommended that the county apply for grant funding.	Y					Wayne Schenk	208-436-7180 x111	wschenk@minidokacounty.id.gov
Nez Perce	Planning for last mile projects. Last mile projects depend on funding of middle mile projects. The middle mile project is the Port of Lewiston and IRON proposed project that ranges from Grangeville to New Meadows.	Y							
Oneida	All of Oneida county as connected by ATC in the past two years. A part of the Fourcasi effort that received funding during the last round. IBAB may see applications from ISPs, but not from the county.	N					Bill Lewis	208-766-4116 x 100	
Owyhee	Imagine Idaho Grantee. Owyhee County is working with an ISP on the planning process. They have established stakeholders and are holding meetings to improve public knowledge. Areas of focus are Bruneau Grandview area and other populations along highway 78. The IBAB will receive an application from Owyhee County through their ISP partner.	Y		\$ 10,000			Angie Barkell/Mandi Boren		
Payette	Farmers Mutual Telco does all county work and has covered the county over the past several years.	Unkown					Raul Pena		

Power	Called and sent a follow Up email. Also called and emailed County Clerk Sharee Sprague. No additional info.	Unkown					Ron Funk	208-339-2129	rjffarms@gmail.com
Shoshone	Imagine Idaho Grantee. Shoshone County has completed speed-testing and its rapid design study. The county plans to apply for both the CPF and planning grants. The county has worked with stakeholders to inform communities of the county's needs. Shoshone County plans to build a hybrid model for its project. In particular there is significant fiber presence along portions of Highway 90 which could be utilized. From these routes, it would be relatively easy to extend to the communities immediately adjacent to Highway 90 and possible spurs to Enaville, Prichard, Eagle, Murray and Burke. Another possible extension could be along Highway 3 through Emerald Creek and Clarkia. Another possible extension could be along 746 from St. Joe through Calder and Herrick.	Y		\$ 25,000		\$ 21,000,000	Colleen Rosson		
Teton	Imagine Idaho grantee. ETS has completed a design study for Teton County and they have held meetings to discuss speed-testing phase of plan. Schools and cities have agreed to help with communications and stakeholder building. A more definitive budget will make itself clear in the coming month. Imagine Idaho is estimating around \$11 million to \$42 million depending upon model and fiber costs.	Y		\$ 20,000			Greg Adams	208-201-6898	gadams@co.teton.id.us
Twin Falls	Not aware of any projects happening at this time.	Unkown					Gary Anderson	208-736-6789	gary.anderson@co.twin-falls.id.us
Washington	Imagine Idaho is estimating that a project will cost in the vicinity of \$8,743,172 for all fiber. IBAB will receive an application for broadband planning grant funds of \$15,000. The county has begun to build a stakeholders network and has had the school districts help with communication. Imagine Idaho grantee.	Y		\$ 15,000			Robert Peterson		
CEDA Counties (Nez Perce, Lewis, Idaho, Clearwater, LataH)	Have had all meetings with schools and are speed-testing aggressively. The project is in conjunction with the Port of Lewistons and IRONS proposed middle mile project that will run from Grangeville to New Meadows. Imagine Idaho supported.	Y	198,603 (Lewis), \$496,509 (Idaho)				Krista Baker		kbaker@clearwater-eda.org
Valley	Imagine Idaho Grantee. The WCM Fibernetwork will be requesting a State grant for \$20 Million or somewhere close to that. Entrypoint has hired 2 firms to help with this request.. Valley is reaching out to CEDA to discuss any collaboration there that might work.	Y		\$ 15,000		\$ 20,000,000	Sherry Maupin	208-315-5107	smaupin@co.valley.id.us
				\$ 210,000		\$ 144,500,000			

December 1, 2022

Idaho Department of Commerce
Attn: Ramón S. Hobdey-Sánchez,
P.O. Box 83720
Boise, ID 83720-0093
broadband@commerce.idaho.gov

Proposal for Grant Project Idaho Department of Commerce/Idaho Broadband Advisory Board

Applicant: Inland Cellular LLC

Contact:

Mike Bly
SVP Business Operations
1112 36th Street N
Lewiston, ID 83501
mikeb@inlandcell.com
208-798-0245 x1222

Project Name: Waha Fiber to the Premises

Project Area: Central Nez Perce County, around the area known as Waha (near Waha Lake).
Waha is south of Lewiston.

Project Outline and Scope

- i. **Description of the extent to which the project will facilitate deployment of high-speed broadband networks to areas that are currently either unserved, underserved, or both.**

The people who live in the Waha area have very limited access to broadband services. There is one terrestrial service provider offering 25/4 Mbps service to some of the residents, meaning they are underserved, the rest of the area is unserved. Our project would provide service to 165 locations.

- ii. **Description of type(s) of technology to be used.**

The project will use fiber as both the middle mile and last mile. The fiber will connect to our existing network at a tower we have on Richardson in Lewiston. We have leased fiber there through the Port of Lewiston.

iii. Number of unserved or underserved locations to be served and the speeds that will be offered.

The project will serve 165 locations. It is unclear how many are underserved vs. unserved. It appears from the FCC National Broadband map it is about 50/50 underserved vs. unserved. We will offer a few different speed packages, including a service up to 1 Gbps/1 Gbps.

iv. Project term for the proposal (anticipated time frame for project from start to finish in months).

This project is anticipated to take 12-18 months from start to finish.

v. Funding Request.

The total cost of the project is estimated at \$1,655,645. We propose a match of \$47,400, for a funding request of \$1,608,245.

vi. Anticipated total project costs and financing sources.

The total cost of the project is estimated at \$1,655,645. This would be paid for by grant funds in the amount of \$1,608,245 and an Inland Cellular match of \$47,400

vii. Project Ownership (i.e., private, public, public/private partnership, other).

Ownership of the project is private (Inland Cellular LLC).

viii. Proposed project costs (include budget overview and estimated costs).

See attached Budget Summary and Budget Detail.

ix. Explanation and demonstration of the applicant's financial ability to complete the project within the applicant's proposed budget.

Inland Cellular has been in business since 1989, and we have a stable mobile service business in addition to other services, including fixed wireless and fiber internet service. We have over 110 employees, and we can use existing resources to provide for the labor requirements and fund the project cash flow. We would coordinate with a 3rd

party to install the fiber network and would arrange to pay them as we are reimbursed with by grant funds.

We have a financial audit conducted each year and can provide a copy upon request.

x. Description of any proposed match.

We propose our match to be our labor costs, which are estimated to be \$47,400. These labor costs include: engineering; customer premises install; network configuration; network/routing equipment installation; project management; and, site prep/power/backup power installation.

A breakdown of labor costs is included in the attached budget.

xi. Description of whether (and if so, how) this project works in conjunction with the Idaho Broadband Advisory Board's Strategic Plan.

This project would achieve two major objectives:

- Provide lightning-fast speeds for any and all broadband needs, whether that is telehealth, education, or for business use
- Provide permanent, upgradeable fiber connections that can be upgraded to even faster speeds in the future, should they be needed someday

Waha Fiber to the Premises

Budget Summary

ACTIVITY/EQUIPMENT	Grant	Match		Total
		\$	%	
Customer Premises Equipment	\$ 86,955	\$ -	0%	\$ 86,955
Engineering	\$ 57,000	\$ -	0%	\$ 57,000
Fiber Backhaul/Property Edge Install	\$ 1,260,000	\$ -	0%	\$ 1,260,000
Labor - Inland Cellular	\$ -	\$ 47,400	100%	\$ 47,400
Project Management	\$ 25,000	\$ -	0%	\$ 25,000
Site Equipment - RAN/Radio/RF/Power/Routing/Network	\$ 56,650	\$ -	0%	\$ 56,650
Contingency	\$ 122,640	\$ -	0%	\$ 122,640
TOTALS:	\$ 1,608,245	\$ 47,400	2.9%	\$ 1,655,645

Waha Fiber to the Premises

Budget Detail

<u>ACTIVITY/EQUIPMENT</u>	<u>QTY</u>	<u>UNIT COST</u>	<u>Ext. Cost \$</u>
Customer Premises Equipment			
Zhone, ONT kit, SFP, cables, etc.	165	\$ 500	\$ 82,500
Vehicle expense	165	\$ 27	\$ 4,455
TOTAL:			\$ 86,955
Engineering			
Network engineering (3rd party PE)	1	\$ 52,000	\$ 52,000
Other engineering (Avista, etc.)	1	\$ 5,000	\$ 5,000
TOTAL:			\$ 57,000
Fiber Backhaul/Property Edge Install			
Subcontractor estimate	1	\$ 1,250,000	\$ 1,250,000
Other	1	\$ 10,000	\$ 10,000
TOTAL:			\$ 1,260,000
Labor - Inland Cellular			
Customer premises install	165	\$ 120	\$ 19,800
Network engineering/configuration	140	\$ 80	\$ 11,200
Network/routing equipment installation	80	\$ 40	\$ 3,200
Project management	200	\$ 50	\$ 10,000
Site prep/power/backup power installation	80	\$ 40	\$ 3,200
TOTAL:			\$ 47,400
Project Management			
Land/right of way acquisition	1	\$ 25,000	\$ 25,000.00
TOTAL:			\$ 25,000
Site Equipment - RAN/Radio/RF/Power/Routing/Network			
Cables, etc. for inside hut	165	\$ 10	\$ 1,650
Climate control hut	1	\$ 25,000	\$ 25,000
Equipment rack	1	\$ 500	\$ 500
Other networking equipment	1	\$ 1,500	\$ 1,500
Power - battery backup	4	\$ 1,500	\$ 6,000
Power - install electricity at site, meter	1	\$ 10,000	\$ 10,000
Routers	3	\$ 4,000	\$ 12,000
TOTAL:			\$ 56,650
Contingency			
Contingency @ 8%	1	\$ 122,640	\$ 122,640.40
TOTAL:			\$ 122,640
GRAND TOTAL:			\$ 1,655,645

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December 1, 2022

Idaho Department of Commerce
Attn: Ramón S. Hobdey-Sánchez,
P.O. Box 83720
Boise, ID 83720-0093
broadband@commerce.idaho.gov

Proposal for Grant Project Idaho Department of Commerce/Idaho Broadband Advisory Board

Applicant: Inland Cellular LLC

Contact:

Mike Bly
SVP Business Operations
1112 36th Street N
Lewiston, ID 83501
mikeb@inlandcell.com
208-798-0245 x1222

Project Name: Stites Fixed Wireless

Project Area: Town of Stites

Project Outline and Scope

- i. **Description of the extent to which the project will facilitate deployment of high-speed broadband networks to areas that are currently either unserved, underserved, or both.**

We will deploy a fixed wireless network in Stites that will allow us to offer up to 960/960 Mbps speeds. The maximum current speeds available in Stites are below 100/20 Mbps, making this an underserved area.

- ii. **Description of type(s) of technology to be used.**

We will use a Cambium Terragraph fixed wireless network to provide service to the premises, while utilizing a microwave radio system (with 3 hops) for backhaul to an

existing Inland Cellular location in Grangeville where we have a fiber connection to get out to the world.

iii. Number of unserved or underserved locations to be served and the speeds that will be offered.

There are 60 underserved locations. We will offer speeds of up to 960/960 Mbps.

iv. Project term for the proposal (anticipated time frame for project from start to finish in months).

This project should take no more than 12 months from start to finish.

v. Funding Request.

The total cost of the project is estimated to be \$251,046. We propose to provide \$12,500 in labor as a match. The total funding request would be \$238,546.

vi. Anticipated total project costs and financing sources.

The total cost of the project is estimated to be \$251,046. This would be paid for by grant funds in the amount of \$238,546 and an Inland Cellular match of \$12,500.

vii. Project Ownership (i.e., private, public, public/private partnership, other).

Ownership of the project is private (Inland Cellular LLC).

viii. Proposed project costs (include budget overview and estimated costs).

See attached Budget Summary and Budget Detail.

ix. Explanation and demonstration of the applicant's financial ability to complete the project within the applicant's proposed budget.

Inland Cellular has been in business since 1989, and we have a stable mobile service business in addition to other services, including fixed wireless and fiber internet service. We have over 110 employees, and we can use existing resources to provide for the labor requirements and fund the project cash flow.

We have a financial audit conducted each year and can provide a copy upon request.

x. Description of any proposed match.

We propose our match to be some of our labor costs, up to \$12,500. These labor costs include: engineering; customer premises install; microwave radio installation; network configuration; network/routing equipment installation; project management; and, site prep/power/backup power installation.

A breakdown of labor costs is included in the attached budget.

- xi. Description of whether (and if so, how) this project works in conjunction with the Idaho Broadband Advisory Board's Strategic Plan. This includes addressing distance learning, telehealth, public safety, economic development, business opportunities, and/or promotes dig once policies.**

This project would achieve two major objectives:

- Provide lightning-fast speeds for any and all broadband needs, whether that is telehealth, education, or for business use
- Deliver those speeds in a cost-effective manner – a cost much lower than fiber

Stites Fixed Wireless

Budget Summary

ACTIVITY/EQUIPMENT	Grant	Match		Total
		\$	%	
Customer Premises Equipment	\$ 61,700	\$ -	0%	\$ 61,700
Labor - Inland Cellular	\$ 39,100	\$ 12,500	24%	\$ 51,600
Licenses/Permits	\$ 2,400	\$ -	0%	\$ 2,400
Microwave Backhaul Equipment	\$ 80,000	\$ -	0%	\$ 80,000
Site Equipment - RAN/Radio/RF/Power/Routing/Network	\$ 36,750	\$ -	0%	\$ 36,750
Contingency	\$ 18,596	\$ -	0%	\$ 18,596
TOTALS:	\$ 238,546	\$ 12,500	5.0%	\$ 251,046

Stites Fixed Wireless

Budget Detail

<u>ACTIVITY/EQUIPMENT</u>	<u>QTY</u>	<u>UNIT COST</u>	<u>Ext. Cost \$</u>
Customer Premises Equipment			
CPE, cable, router, etc.	34	\$ 500	\$ 17,000
Customer premises equip (Distribution nodes)	26	\$ 1,500	\$ 39,000
Vehicle expense	60	\$ 95	\$ 5,700
TOTAL:			\$ 61,700
Labor - Inland Cellular			
Customer premises install	60	\$ 200	\$ 12,000
Microwave radio installation (3 hops)	240	\$ 50	\$ 12,000
Network engineering/configuration	140	\$ 80	\$ 11,200
Network/routing equipment installation	80	\$ 40	\$ 3,200
Project management	200	\$ 50	\$ 10,000
Site prep/power/backup power installation	80	\$ 40	\$ 3,200
TOTAL:			\$ 51,600
Licenses/Permits			
License acquisition, microwave (3)	3	\$ 800	\$ 2,400
TOTAL:			\$ 2,400
Microwave Backhaul Equipment			
Microwave hop 1	1	\$ 30,000	\$ 30,000
Microwave hop 2	1	\$ 30,000	\$ 30,000
Upgrade microwave hop 3	1	\$ 20,000	\$ 20,000
TOTAL:			\$ 80,000
Site Equipment - RAN/Radio/RF/Power/Routing/Network			
Cables for radio	6	\$ 750	\$ 4,500
Cables, etc. for inside hut	1	\$ 250	\$ 250
Climate control hut	1	\$ 10,000	\$ 10,000
Equipment rack	1	\$ 500	\$ 500
Other networking equipment	1	\$ 1,500	\$ 1,500
Power - battery backup	4	\$ 1,500	\$ 6,000
Power - install electricity at site, meter	1	\$ 10,000	\$ 10,000
Routers	1	\$ 4,000	\$ 4,000
TOTAL:			\$ 36,750
Contingency			
Contingency @ 8%	1	\$ 18,596	\$ 18,596
TOTAL:			\$ 18,596
GRAND TOTAL:			\$ 251,046

From: Mike Kennedy <mkennedy@intermaxteam.com>
Sent: Wednesday, November 30, 2022 3:41 PM
To: COM Broadband <broadband@commerce.idaho.gov>
Cc: Caitlin Kling <ckling@intermaxteam.com>; Ramon Hobdey-Sanchez <ramon.hobdeysanchez@commerce.idaho.gov>
Subject: Intermax Response to the State of Idaho's Request for Broadband Project and Planning Proposals

Idaho Department of Commerce
Attn: Ramón S. Hobdey-Sánchez

Dear Idaho Broadband Advisory Board members and Program Manager Hobdey-Sánchez,

Attached is a list and description of 8 proposed projects that Intermax is submitting for the committee to review and factor into their thinking for the Capital Projects Fund round of broadband funding.

These projects span three counties in North Idaho, and all are in reasonable range of existing fiber infrastructure. This will help make the expansion into Underserved areas fiscally responsible for the committee and help the funding go further. All proposed projects meet the criteria of the Idaho Statewide Broadband Plan.

As referenced in the state's "Request for Broadband Project and Planning Proposals" of October 19th, we look forward to the next step wherein the committee will create the "future grant guidelines and application criteria" for these project proposals. When that step is completed and a formal, official window for projects opens we intend to participate and continue the work of expanding rural broadband to un- and under-served areas of the state.

Thank you for all the work you put in working to accomplish this goal together.

Sincerely,

Mike Kennedy
President and CEO
Intermax Networks



Mike Kennedy
President and CEO

o: 208-762-8065 d: 208-415-1772

w: intermaxnetworks.com

a: 7400 N Mineral Drive Suite 300, Coeur d'Alene, ID 83815



November 30, 2022

Sent Via Email To: broadband@commerce.idaho.gov

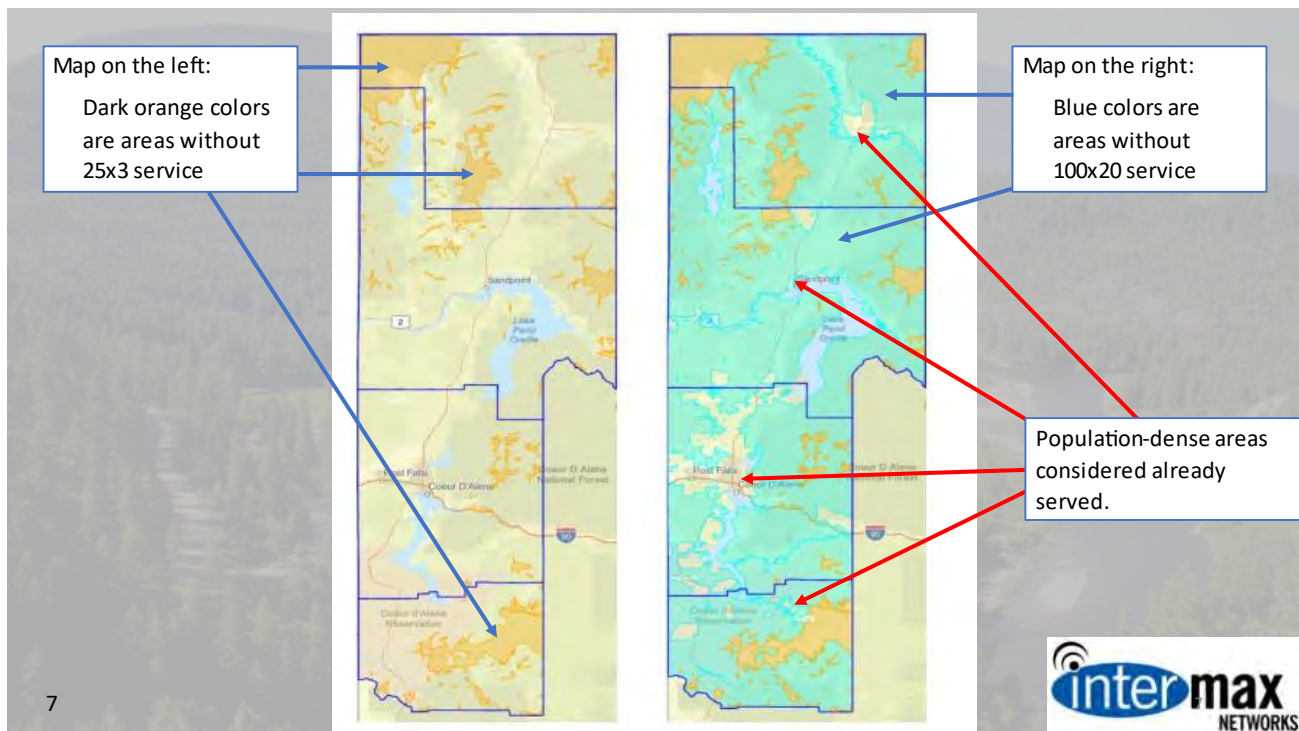
Idaho Department of Commerce
 Attn: Ramón S. Hobdey-Sánchez,
 P.O. Box 83720
 Boise, ID 83720-0093
 Fax: 208-334-2631

Re: Newmax, LLC dba Intermax Networks' Response to Idaho Broadband Advisory Board's Request for Proposals for Broadband Projects

Dear Mr. Hobdey-Sánchez, Chairman Vander Woude, and Broadband Advisory Board Members:

Newmax, LLC dba Intermax Networks ("Intermax") submits this response to the Idaho Broadband Advisory Board ("IBAB")'s Request for Proposals for Broadband Projects released on October 19, 2022. The following eight projects cover underserved locations within Intermax's service area in Kootenai, Bonner, and Boundary counties.

Below is a representation of the most recent data on service in these counties, with orange depicting areas that are unserved (lacking 25x3 Mbps), blue depicting areas that are underserved (lacking 100x20 Mbps), and the light-yellow areas depicting fully served urban areas.



Priorities:



We believe the best use of grant dollars is to prioritize as follows:

1. Use the State dollars and ARPA dollars for the low hanging fruit of higher density neighborhoods where the early money goes to serve the largest number of locations.
2. Use BEAD money for more remote areas where the cost per location is higher and use the Federal money for the most expensive projects. Some of those locations might be \$6,000 to \$15,000 per passing.

Benefits:

The Intermax 2023 proposed projects are all focused on the State of Idaho and ARPA Capital Projects Fund (“CPF”). Spending CPF dollars on projects for underserved locations (less than 100x20 Mbps speeds) provides the most benefit as it will:

- ensure locations that represent the core of workforce, small business, telecommunications, telehealth, and digital access needs can be met;
- leverage existing fiber assets that have been constructed privately or with other public funding;
- focus on projects that can be completed by December 31, 2026, as required by the Treasury regulations for the Capital Projects Fund; and
- reserve the money allocated from the BEAD program to address the more expensive unserved locations first (as required in that program).

All projects discussed below have been assessed for the Capital Projects Fund as areas where there are immediate needs and where construction could be completed by December 31, 2026.

I. Applicant’s Contact Information

- A. Mike Kennedy
- B. President & CEO
- C. 7400 N. Mineral Drive, Suite 300, Coeur d’Alene, ID 83815
- D. mkennedy@intermaxteam.com
- E. 208-415-1772

II. Broadband Project Proposal Outline and Scope

Our answers to the questions posed by the Idaho Broadband Advisory Board RFP are the same for each project.

Proposed Projects:

- A. *Description of the extent to which the project will facilitate deployment of high-speed broadband networks to areas that are currently either unserved, underserved, or both:*



The projects listed in this proposal will provide high-speed internet to 17,132 underserved locations in the three northern counties – the vast majority of which are households. In these proposed project areas, all locations are currently underserved.

B. Description of types of technology to be used:

Fiber will be constructed for all Projects all of which will provide speeds in excess of 100/100 Mbps as required. Gigabit speeds will be available in all project areas.

C. Number of unserved or underserved locations and/or households that will be served by the project and at which speeds the locations will be connected:

These projects will provide Gigabit speed internet to 17,132 underserved locations in the three northern counties. The number of underserved locations are as follows:

Name	Underserved Locations to be Connected
Project 1	4,363
Project 2	2,442
Project 3	1,016
Project 4	2,133
Project 5	487
Project 6	611
Project 7	2,469
Project 8	3,611
	17,132



D. *Project term for the proposal:*

Name	Underserved Locations to be Connected	Projected Construction Timeline in Months
Project 1	4,363	30
Project 2	2,442	24
Project 3	1,016	24
Project 4	2,133	24
Project 5	487	18
Project 6	611	18
Project 7	2,469	24
Project 8	3,611	30
	17,132	

E. *Funding request:*

The overall cost for these projects included will be \$79,908,917. Intermax will include a match of 25% which will be \$19,977,229. The details of each project are included in the chart above.

The public funding request to IBAB for all projects listed will be: \$59,931,688.



F. *Anticipated total project costs:*

These overall project costs include all expected costs including construction contingencies based on the terrain and expected potential difficulties of each project. The public funding request will be 75% of the total estimated cost after the Company’s 25% match, as shown here:

Name	Underserved Locations to be Connected	Total Project Cost	Est. Total Cost Per Location	Intermax Match - 25%	Public Funding Est. Cost Per Location	Funding Request to IBAB
Project 1	4,363	\$ 19,480,795	\$ 4,465	\$ 4,870,199	\$ 3,349	\$ 14,610,596
Project 2	2,442	\$ 10,903,530	\$ 4,465	\$ 2,725,883	\$ 3,349	\$ 8,177,648
Project 3	1,016	\$ 5,199,888	\$ 5,118	\$ 1,299,972	\$ 3,839	\$ 3,899,916
Project 4	2,133	\$ 9,872,057	\$ 4,628	\$ 2,468,014	\$ 3,471	\$ 7,404,043
Project 5	487	\$ 2,492,466	\$ 5,118	\$ 623,117	\$ 3,839	\$ 1,869,350
Project 6	611	\$ 2,827,861	\$ 4,628	\$ 706,965	\$ 3,471	\$ 2,120,896
Project 7	2,469	\$ 11,830,214	\$ 4,792	\$ 2,957,553	\$ 3,594	\$ 8,872,660
Project 8	3,611	\$ 17,302,107	\$ 4,792	\$ 4,325,527	\$ 3,594	\$ 12,976,580
	17,132	\$ 79,908,917		\$ 19,977,229		\$ 59,931,688

G. *Project ownership:* All Projects will be owned by Intermax.

H. *Proposed project costs:* The details of each project are included in the chart above.

I. *Explanation and demonstration of the applicant’s financial ability to complete the project within the applicant’s proposed budget:*

Intermax successfully completed 25 CARES Act projects between 2020 and 2021, all of which were completed on time and on public budget. During those years and before, Intermax has been completing internally funded fiber construction projects for business and residential projects with internally generated private funding.

In 2019, Intermax was a Connect America Fund Phase II Auction recipient and was awarded \$11 million to complete 25x3 Mbps fixed wireless deployment in Boundary, Bonner, Kootenai, Benewah, and Spokane Counties. Intermax is currently engaged in completing all deployment obligations and performance testing requirements.

Intermax is a locally owned and operated company that has been providing internet to counties in the North Idaho Panhandle since 2002.



J. *Description of any proposed match:*

Intermax will provide a 25% match of the total project cost on all proposed Projects. The Intermax match will amount to \$19,977,229 in total.

K. *Description of how project works in conjunction with the Idaho Broadband Advisory Board's Strategic Plan:*

All proposed projects are in the rural North Idaho Panhandle. They are mapped to be close to existing fiber backbone infrastructure. Each project will offer infrastructure and technology opportunities for Gigabit speed fiber internet to 17,132 underserved locations.

The specific benefits that tie directly to IBAB's Strategic Plan include:

- economic development
- remote work
- remote learning
- telehealth
- increased connectivity to rural and agricultural areas.

Importantly, this will also improve educational access where teachers, students, and their families reside and require digital access.

Finally, these projects will all offer support to other political subdivisions such as highway districts and sewer districts in the proposed project areas.

Creating Idaho’s North-South Middle Mile Network

A Fiber Connection between Grangeville and Star

“Shovel-ready” 198-mile, 288-strand fiber network filling Idaho’s middle mile gap between Grangeville and Star.

- Supporting Idaho’s 2027 Vision; directly serving 5 counties/9 communities currently bypassed
- Providing 21st century capacity and reliability through a 99% underground network
- Improving affordability through non-discriminatory multiple provider access for last mile service
- Positions Idaho for BEAD funding opportunities
- Connecting with the Port of Lewiston Moscow-Grangeville Network in Grangeville to create a 314-mile open access, middle mile backbone from Moscow to Boise that does not currently exist
- Providing a redundant access point in Grangeville for a fiber link between Orofino, Nezperce, and Grangeville that is essential for DIGB2’s public safety needs
- Private/public owners committed to maintain the network; scaled capacity for at least three decades

To attain Idaho’s 2027 vision of reliable, affordable, accessible high-speed internet, a strategic priority buildout of middle mile is required before Idaho addresses the last mile infrastructure needs that plague the state. A robust north-south fiber segment with multiple east-west fiber connections or loops ensures each Idaho community can be physically networked through backbone infrastructure.

Did you know that Idaho lacks an instate fiber connection between northern and southern Idaho with all broadband Idaho services traveling through Oregon and Washington? Yes, our state’s primary middle mile connectivity for education, healthcare, public safety, government, and commerce bypasses the rural communities of Central Idaho. Is there no greater example of Idaho’s digital divide?

The Project: With the State of Idaho’s financial support and commitment to ensure access to broadband for all citizens, Idaho Regional Optical Network (IRON) and Intermountain Infrastructure Group (IIG) are ready to take on Idaho’s most deficient and challenging middle mile network gap by constructing, owning, and managing a fiber segment linking Grangeville to Star. Complying with Idaho’s “Dig Once” policy, the infrastructure will be constructed through Idaho, Adams, Valley, Gem, and Ada counties providing middle mile access to Grangeville, White Bird, Riggins, New Meadows, McCall, Donnelly, Cascade, Emmett, and Star. The 198 mile, open-access network will consist of one conduit with 288-strand fiber cable. By being buried underground or bored into rock, it will be highly secure and reliable. This middle mile network of 288-strand fiber markedly increases Idaho’s broadband service capacity and reliability up and down the state for at least the next three decades. *For the project route, see Appendix A.*

IIG will provide services to commercial providers for commerce; IRON will continue its mission of serving education, healthcare, public safety, and governmental needs. 144 strands of the fiber will be owned and managed by IRON with IIG owning and managing the remaining 144 strands. IIG will maintain the entire fiber system.

The upcoming Port of Lewiston’s Moscow to Grangeville open-access, middle mile project that physically connects Latah, Nez Perce, Lewis, and Idaho counties is critical to this Grangeville to Star project and benefits the state through these collective efforts. Combined, the extended north-south network allows for high-speed instate transference with interstate connectivity. The two north-south segments will ensure middle mile capacity of open access infrastructure supporting Idaho’s telecommunication needs for at least the next 30 years and shall *finally* culminate two decades of studies and failed attempts.

The construction team anticipates that this \$80 million project will take 36 months to permit, construct, test, and bring the network online. If permitting can begin by September 2023, construction should commence by April 2024. With the State of Idaho support of \$20 million and \$60 million in private investment, Idaho gains a Grangeville-Star open access solution closing the middle mile gap between northern and southern Idaho.

The Planning:

- In 2003, this middle mile gap was identified as north-central Idaho’s single largest infrastructure deficiency at an economic summit hosted in Lewiston and has remained central to the region’s *Comprehensive Economic Development Strategy (CEDS)* for two decades. Regional economic development, internet service providers, and public safety partners have pushed for a solution.
- Between 2005 and 2010, a middle mile assessment was conducted, a feasibility study was developed, and a Request for Proposal was issued seeking a commercial provider solution.
- In 2009, the Idaho State Legislature passed House Concurrent Resolution No. 21 supporting the planning and construction of new fiber communication facilities between the cities of Riggins and Grangeville.
- In 2010, Frontier Communication was unsuccessful in securing federal stimulus funding for the middle mile gap.
- In 2011, the project was highlighted in the state’s LinkIdaho strategic plan.
- In 2015, the District 2 Interoperability Governance Board (DIGB2) representing Latah, Lewis, Idaho, Nez Perce, and Clearwater county governments began working on public safety middle mile telecommunication issues.
- In 2019, the project was highlighted in the recommendations made by Governor Little’s State Broadband Task Force.
- In 2022, Idaho County and DIGB2 completed a feasibility study for a buried, middle mile network. The study results were considered in the development of this project’s route and estimate of costs.

IRON, IIG, and regional partners prepared to apply for National Telecommunication Information Administration (NTIA) 2022 Middle Mile funding. After exhausting options, the partnership abandoned the application. Federal grant requirements were expensive and did not allow for the partnership to

create the appropriate ownership and management structure to ensure success. Public support from the State of Idaho without federal strings is now essential.

The Partners: In 2007, the non-profit Idaho Regional Optical Network (IRON) was formed to offer high-speed and low-cost broadband network access for higher education, research, healthcare, local government, and public safety. Principal members are Idaho universities/colleges, the Idaho Hospital Association, and the Idaho National Laboratory. Its private partner, Intermountain Infrastructure Group, LLC (IIG), owns and operates a backbone and local networks in California, Washington, Illinois, and Nevada. IIG has 350 network miles with 1,100 miles currently under construction.

The Port of Lewiston, Clearwater Economic Development Association, and DIGB2 have had direct input into this project's planning and design to ensure local community needs are addressed. Regular communication with Valley County partners is ongoing so that this project complements and augments the West Central Mountain Network's fiber project. This project could eventually connect to the proposed Great Treasure Valley open access network.

With a need that is great and support that is high, letters of support accompany this proposal. *For support letters received as of the proposal deadline, see Appendix B. As more support letters are received, they will be forwarded.*

The Need: AirBridge Broadband Owner David McKnight documents the needs and solutions in his support letter.

The primary challenges we face in delivering quality internet to our customers in rural Northern Idaho are two-fold: 1.) Cost: Each 10 GB fiber connection costs us around \$5,000. 2.) Reliability: There is only one fiber feed for Idaho and Lewis counties, and whenever there is a fiber cut, all providers go down. Not only do our residents suffer due to consequences of these unconscionably excessive fiber costs, but more importantly, our economic opportunities in our communities are severely hindered as businesses are unable to secure reliable bandwidth in a cost-effective manner. That is a big deal.

The project will have two benefits: 1.) Competition will have the net effect of driving down the cost of a fiber connection. 2.) Redundancy will attenuate the effect of fiber cuts on our single fiber connection into the area.

Nez Perce County 911 Coordinator/DIGB2 Representative Dave Taylor provides a public safety perspective.

The proposed middle mile fiber link will be a foundation to support Public Safety Emergency Communications and will provide a primary network path for Next Generation 9-1-1 (NG911) systems through a large part of rural Idaho. This path along with the current existing paths will provide the redundant loops necessary to ensure National Emergency Number Association (NENA) standard 99.999% up time that is needed to properly provide 9-1-1 services to the Citizens of Idaho. Currently if systems are interrupted, Emergency Communications Centers (ECC) cannot receive emergency calls and must transfer 9-1-1 calls to another county. When this occurs all wired and wireless services are affected, disabling the timeliness in which First Responders are able to receive a radio dispatch and respond to the call costing life-saving time when seconds count. Idaho County and Lewis County both experienced this crisis during the pandemic for a 24-hour period.

Idaho’s north-south middle mile network does not exist because we have been waiting for a commercial provider to develop it for 20 years. Unfortunately, the Return on Investment (ROI) is expected to be low and the risk is too great to attract a commercial provider. Because Central Idaho is sparsely populated with miles of narrow canyons, rock, and elevation changes, construction costs are high. Public financial support is needed and will result in public benefit. Thus, public funding should be dedicated to the most flexible and beneficial option for its constituents.

The Benefits:

- **Resiliency** -- This project will protect Central Idaho bandwidth resiliency by providing all providers duplicate access to exchange points. Simply, it allows for more than one telecommunication pathway: one in-state and one out-of-state. If a fiber cable is cut between Grangeville and Lewiston or between Riggins and New Meadows, there will be an architecture to help ensure no more days of lost service. Retail businesses can still run credit cards. Manufacturers can still transfer digital files and schedule deliveries. High schools can still offer digital learning. Online mental health appointments can still be provided. A surgeon can still request online support during a critical procedure.
- **Open Access** -- As open access infrastructure, the North-South Middle Mile Network will create what Idaho loves—a free market environment. The fibers along the entire network funded by this strategic partnership will allow a heretofore unavailable choice for existing “last mile” service providers and promote new entrants into communities. The open access fibers are not intended for incumbents and carriers attempting to just pass through the area. Current and future last mile service providers who want to offer services in Central Idaho will be able to purchase connections from the middle mile network path to extend their last mile networks to reliable and cost-effective internet exchange locations at standard rates, not what the market will bear. This will minimize service monopolies that tend to keep prices high and services low. It will create a fair playing field for all (small, midsize, and large companies) broadband providers.
- **BEAD** -- This middle mile network positions Central Idaho communities for National Telecommunications and Information Administration’s BEAD funding for last mile infrastructure. By Federal Communication Commission data standards, the project will directly benefit three under-served Central Idaho communities and 3,763 people. It will also directly benefit four communities (population of 23,972) currently with only one provider providing 100/20 Mbps. In total, the network will benefit at least 30 anchor institutions. In addition, the middle mile network will serve Idaho statewide by providing a north to south fiber network within Idaho for the first time!

With this kind of strategy where middle mile is the priority, Idaho can achieve our goal of 100% high speed internet availability to Idaho businesses and residents by 2027.

Project Readiness: This proposal is a presentation of the possible. This project is not just an idea. It is “shovel-ready”, except for permitting, with the concept thoroughly considered and engineered. It is ready to execute.

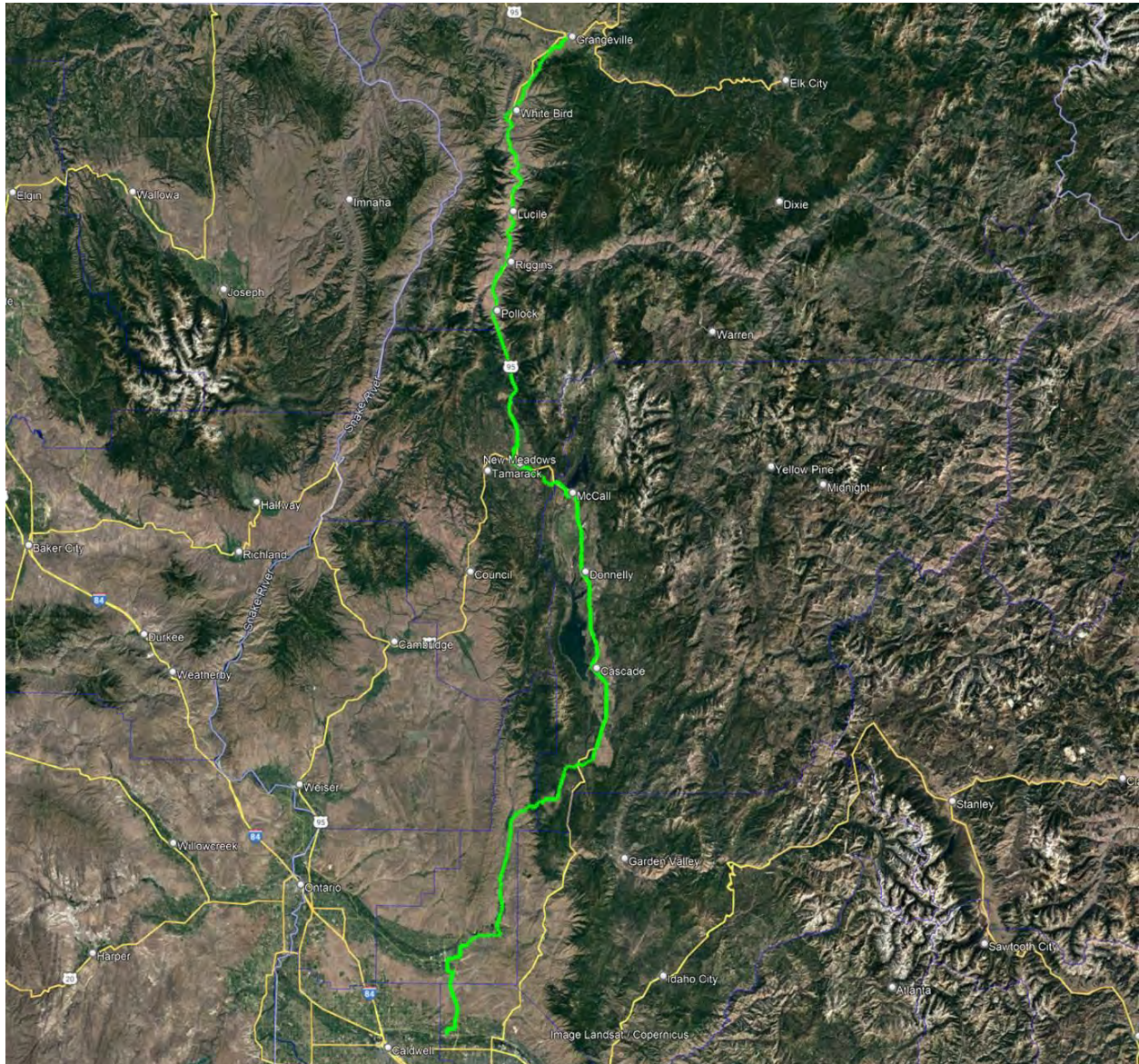
Meeting Idaho’s Broadband Future: The Idaho North-South Middle Mile Network connecting Grangeville to Star is built by a partnership of people who are committed to a statewide middle mile strategy. It offers a true public-private partnership to connect northern Idaho to southern Idaho with open access. Idaho’s \$20 million financial support will be a fraction of the actual costs to create this missing link in Idaho’s broadband strategy. The 198-mile network will provide Idaho with a competitive advantage for the BEAD last mile federal funding for rural Idaho. It will ensure accessible, affordable, and reliable broadband for Idaho businesses, schools, public institutions, hospitals, and residents. It will stimulate rural economic growth. With a full broadband network in place, every Idaho community can prosper. Rural Idaho communities will not just survive—they will thrive!

Idaho Regional Optical Network (IRON)	Intermountain Infrastructure Group (IIG)
Brent Stacey, President/CEO 950 W Bannock Street, Ste 1100 Boise, ID 83702-6140 Company Phone: 888-611-4766 Company Website: www.ironforidaho.net Brent.Stacey@ironforidaho.net Brent’s Phone: 208-520-4617	Jeff Yount, President/CEO 533 Airport Blvd, Suite 400 Burlingame, CA 94010-2013 Company Phone: 970-443-9943 Company Website: www.intermountainig.com jeff.yount@intermountainig.com Jeff’s Phone: 303-810-4006

Creating Idaho's North-South Middle Mile Network

A Fiber Connection between Grangeville and Star

Appendix A – Project Route



Creating Idaho's North-South Middle Mile Network

A Fiber Connection between Grangeville and Star

Appendix B – Support Letters

The following support letters have been received prior to the project proposal submission to the Idaho Broadband Advisory Board on December 1, 2022. We fully expect to receive more letters and will forward a revised Appendix B that will include the additional support letters by December 15, 2022.

- 1 Avista Utilities
- 2 Cascade Fire District
- 3 Cascade Medical Center
- 4 City of Lewiston
- 5 City of New Meadows
- 6 Idaho County Board of County Commissioners
- 7 Idaho State Board of Education
- 8 Ida-Lew Economic Development
- 9 Mountain View School District 244
- 10 Nez Perce County Board of County Commissioners
- 11 Paulsen, David and Doris (veteran, retired)
- 12 University of Idaho (IT)



803 Main Street
Lewiston, ID 83501

November 21, 2022

Idaho Broadband Advisory Board
c/o Ramon S. Hobdey-Sanchez, J.D.
State Broadband Program Manager
Idaho Department of Commerce
700 W. State Street
Boise, ID 83702

Re: Creating Idaho's North-South Middle Mile Network
Letter of Support

Dear Idaho Broadband Advisory Board:

This letter is to affirm support for the Idaho Regional Optical Network and Intermountain Infrastructure Group's public/private partnership for an open access middle mile broadband proposal from Grangeville to Star. It supports Idaho's 2027 broadband strategic goal of providing 100 percent of Idaho with accessible, reliable, and affordable high-speed internet. This middle mile network will prepare Central Idaho communities for last mile infrastructure and set Idaho up to successfully compete for BEAD funding. The network will link into the Port of Lewiston's open-access middle mile in Grangeville and help to finally provide infrastructure to connect north and south Idaho.

As an Avista Regional Business Manager for the Lewis-Clark Region where part of this project is located, I feel it is important for me to weigh in on behalf of my company.

After the past two years of Covid-related challenges, there is little doubt that broadband is now considered critical infrastructure in America. Access to, and use of, high-speed Internet is vital for today's communities – large and small.

Broadband has revolutionized business, government, education, health care, work and lifestyles. Without robust broadband access and fully technologically literate populations, many communities will be unable to take advantage of the extraordinary benefits that ultra-high-speed, next-generation Internet can provide. This includes many rural communities currently served by Avista. To help support the strengthening and revitalization of rural economies, Avista is taking a multi-pronged approach in the communities we serve. This includes maintaining and improving relationships with public entities to provide fair and non-discriminatory access to utility infrastructure for the buildout of broadband networks that focus on helping rural communities stay connected to the ever-changing, technology-dependent economy.

In today's information-driven global economy, broadband connectivity is not simply an amenity - it

has become essential. However, this connectivity is more than just connecting households, schools and universities, and healthcare centers to each other as well as the rest of the world through high-speed internet. It is also a tool that enables increased productivity for Idaho's farms, factories, forests, mining, and small businesses. Connectivity is fundamental for economic development, innovation, advancements in technology, workforce readiness, and an improved quality of life.

Avista believes the IRON Middle Mile Broadband proposal will serve as a catalyst in transforming much of Idaho.

Sincerely,

A handwritten signature in black ink that reads "Mike Tatko". The signature is written in a cursive, slightly slanted style.

Mike Tatko
Regional Business Manager, Lewis-Clark Region
Avista Utilities



Cascade Rural Fire Protection District
P. O. Box 825
109 East Pine Street
Cascade, Idaho 83611-0825
208.382.3200 – Phone
208.382.4222 – Fax

November 22, 2022

Idaho Broadband Advisory Board
c/o Ramón S. Hobdey-Sánchez, J.D.
State Broadband Program Manager
Idaho Department of Commerce
700 W. State Street
Boise, Idaho 83702

Re: Creating Idaho's North-South Middle Mile Network
Letter of Support

Dear Idaho Broadband Advisory Board:

This letter is to affirm support for the Idaho Regional Optical Network and Intermountain Infrastructure Group's public/private partnership for an open access middle mile broadband proposal from Grangeville to Star. It supports Idaho's 2027 broadband strategic goal of providing 100% of Idaho with accessible, reliable, and affordable high-speed internet. This middle mile network will prepare Central Idaho communities for last mile infrastructure and set Idaho up to successfully compete for BEAD funding. The network will link into the Port of Lewiston's open-access middle mile in Grangeville and help to finally provide infrastructure to connect north and south Idaho

I would like to take this opportunity to introduce myself. I'm Steven Hull and I'm the Fire Chief at Cascade Rural Fire Protection District. We are located in the West Central Mountains in Cascade, Idaho.

We support this project since we rely heavily on broadband. We receive our Computer Aided Dispatch (CAD) alerts through our Mobile Data Terminals (MDT's). The MDTs are mounted in our apparatus so when we are responding to emergencies, we can get updates from our dispatch center without having to ask for it. We can see it in real time as the dispatchers enter it. As a rural area, a lot of our response area has limited coverage. Increased fiber connection would greatly benefit Cascade Rural Fire Protection District during emergency response. With limited broadband coverage, we rely on our radios for communication, which are not reliable 100% of the time. Communication is always a concern for me and I'm always looking for ways to improve it. The North-South Middle Network would be an enormous benefit for our organization.

Sincerely,

Steven Hull
Fire Chief
Cascade Rural Fire Protection District

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November 28, 2022

Idaho Broadband Advisory Board
c/o Ramón S. Hobdey-Sánchez, J.D.
State Broadband Program Manager
Idaho Department of Commerce
700 W. State Street
Boise, Idaho 83702

Re: Creating Idaho's North-South Middle Mile Network, letter of support

Dear Idaho Broadband Advisory Board:

The purpose of this letter is to affirm support for the Idaho Regional Optical Network and Intermountain Infrastructure Group's public/private partnership for an open access middle mile broadband proposal from Grangeville to Star. It supports Idaho's 2027 broadband strategic goal of providing 100% of Idaho with accessible, reliable, and affordable high-speed internet. This middle mile network will prepare Central Idaho communities for last mile infrastructure and set Idaho up to successfully compete for BEAD funding. The network will link into the Port of Lewiston's open-access middle mile in Grangeville and help provide infrastructure to connect north and south Idaho.

As the only health care organization within 30 miles, Cascade Medical Center Hospital District (CMC) is a political subdivision of Valley County and is essentially the public health organization for the area. We are located about half way between Grangeville and Star. Our mission extends beyond caring for our patients to being the watchful stewards of the health and wellness of everyone who lives in or travels to or through our county. Although our hospital has good broadband service, many of our patients do not. And of those who do, it is often expensive and unreliable. The middle mile project will set up our region for success in providing the infrastructure necessary for providers to deliver stable and competitively priced options at the last mile to people's homes and businesses. In health care, this connectivity is vital for telehealth patient care visits and remote patient monitoring (vital sign monitoring from home for hypertension, COPD, heart failure, and diabetes).

Cascade Medical Center is dedicated to partnering with local organizations, state Broadband agencies, and others to see our local residents have access to stable, affordable broadband connectivity. It is vital for our community's commerce, economic options, and the health and well-being of local citizens. Please reach out to us if you have any questions.

Sincerely,

Tom Reinhardt

Tom Reinhardt, CEO
treinhardt@cmchd.org
208-382-4285 x1300
Cascade Medical Center
PO Box 1330
Cascade, ID 83611

242



November 29, 2022

Idaho Broadband Advisory Board
C/o Ramon S. Hobdey-Sanchez, J.D.
State Broadband Program Manager
Idaho Department of Commerce
700 W. State Street
Boise, Idaho 83702

RE: Creating Idaho's North-South Middle Mile Network – Letter of Support

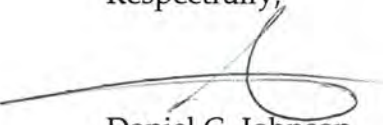
Dear Idaho Broadband Advisory Board:

This letter is to affirm support for the Idaho Regional Optical Network and Intermountain Infrastructure Group's public/private partnership for an open access middle mile broadband proposal from Grangeville to Star. It supports Idaho's 2027 broadband strategic goal of providing 100% of Idaho with accessible, reliable, and affordable high-speed internet. This middle mile network will prepare Central Idaho communities for last mile infrastructure and set Idaho up to successfully compete for BEAD funding. The network will link into the Port of Lewiston's open-access middle mile in Grangeville and help to finally provide infrastructure to connect North and South Idaho.

As a former Idaho legislator and Port of Lewiston Commissioner, I have worked on statewide economic development legislation and projects that have helped communities throughout Idaho. Lewiston and the Port of Lewiston are in a position to contribute to the viability of Central Idaho communities through the North-South Middle Mile project, and I am pleased to be a part of this effort.

I support this project for a few good reasons. First, I believe it is essential that Central Idaho communities have the telecommunication resources needed for industry, education, health care, public safety, and local government. Secondly, I believe it puts these communities on a more equal footing to pursue economic opportunities with other communities like the City of Lewiston and the State of Idaho. Lastly, I believe it provides an incentive for all broadband providers to be involved.

Respectfully,


Daniel G. Johnson
Mayor

November 22, 2022

Idaho Broadband Advisory Board
c/o Ramón S. Hobdey-Sánchez, J.D.
State Broadband Program Manager
Idaho Department of Commerce
700 W. State Street
Boise, Idaho 83702

Re: Creating Idaho's North-South Middle Mile Network
Letter of Support

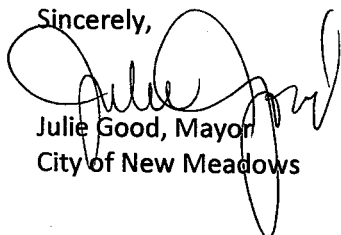
Dear Idaho Broadband Advisory Board:

This letter is to affirm support for the Idaho Regional Optical Network and Intermountain Infrastructure Group's public/private partnership for an open access middle mile broadband proposal from Grangeville to Star. It supports Idaho's 2027 broadband strategic goal of providing 100% of Idaho with accessible, reliable, and affordable high-speed internet. This middle mile network will prepare Central Idaho communities for last mile infrastructure and set Idaho up to successfully compete for BEAD funding. The network will link into the Port of Lewiston's open-access middle mile in Grangeville and help to finally provide infrastructure to connect north and south Idaho.

New Meadows is a small town in the west central mountains of Idaho, and we are grateful for the attention you give to the rural challenges we face. We are seeing an overwhelming demand for high quality, affordable, reliable internet in our area. The lack of service, and the instability of existing service, has an enormous impact on our community in so many ways including healthcare access, educational access and impacts on the local economy.

We support this effort because we need to be given the option to build infrastructure that accounts not just for our base population, but also the visitor/weekend/seasonal population. When a large group of Meadows Valley homeowners return to Boise after each weekend because they do not have adequate internet service to work from home throughout the week, it results in a huge impact on our community. Our current lack of a local grocery store is just one of the economic disadvantages the broadband crisis has sustained. Additionally, when an influx of visitors arrive over the weekend, broadband access plummets to accommodate those visiting, which leaves locals without critical access. Thank you for considering the needs and challenges our community faces when making long-term decisions for broadband access to our region.

Sincerely,



Julie Good, Mayor
City of New Meadows

November 28, 2022



Idaho Broadband Advisory Board
c/o Ramón S. Hobdey-Sánchez, J.D.
State Broadband Program Manager
Idaho Department of Commerce
700 W. State Street
Boise, Idaho 83702

Re: Creating Idaho's North-South Middle Mile Network
Letter of Support

Dear Idaho Broadband Advisory Board:

This letter is to affirm support from the Clearwater Economic Development Association (CEDA) for the Idaho Regional Optical Network and Intermountain Infrastructure Group's public/private partnership for an open access middle mile broadband proposal from Grangeville to Star. The project partners are seeking \$20 million in state commitment. This project supports Idaho's 2027 broadband strategic goal of providing 100% of Idaho with accessible, reliable, and affordable high-speed internet. This middle mile network will prepare Central Idaho communities for last mile infrastructure and set Idaho up to successfully compete for BEAD funding. The network will link into the Port of Lewiston's open-access middle mile in Grangeville and help to finally provide infrastructure to connect north and south Idaho

CEDA is a non-profit community and economic development organization that has served north central Idaho since 1968. Our membership and board is anchored by elected representatives from Nez Perce, Latah, Lewis, and Idaho counties, as well as education, the Nez Perce Tribe, partner organizations, and the private sector. CEDA has been a champion for establishing and improving broadband service for our region's communities and businesses for 20 years. It is addressed in our official regional planning document, the Comprehensive Economic Development Strategy, we have engaged with providers, and we have directly secured funding to improve incremental access in our region.

Our priority these past few years is to establish a redundant, open access fiber system for our region and to create a north-south connection. With the leadership of the Port of Lewiston, District 2 Interoperability Governance Board, and Idaho Regional Optical Network, this effort is converging to create a robust, truly open-access, dark-fiber network to benefit residents, governments, communities, and businesses across the state.

Sincerely,

A handwritten signature in blue ink that reads 'Dodd Snodgrass'.

Dodd Snodgrass
Executive Director



Phone (208)983-2751 FAX (208)983-1428

320 West Main Street, Grangeville, ID 83530

BOARD OF IDAHO COUNTY COMMISSIONERS

November 22, 2022

Idaho Broadband Advisory Board
c/o Ramon S. Hobdey-Sanchez, J. D.
State Broadband Program Manager
Idaho Department of Commerce
700 W State Street
Boise, ID 83702

RE: Creating Idaho's North-South Middle Mile Network
Letter of Support

Dear Idaho Broadband Advisory Board:

This letter is to affirm support for the Idaho Regional Optical Network and Intermountain Infrastructure Group's public/private partnership for an open access middle mile broadband proposal from Grangeville to Star. It supports Idaho's 2027 broadband strategic goal of providing 100% of Idaho with accessible, reliable, and affordable high-speed internet. This middle mile network will prepare Central Idaho communities for last mile infrastructure and set Idaho up to successfully compete for BEAD funding. The network will link into the Port of Lewiston's open-access middle mile in Grangeville and help to finally provide infrastructure to connect north and south Idaho.

The Idaho County Board of Commissioners have been working in conjunction with the Commissioners of the other four Counties that make up District 2 in North Idaho to make this vital link between Northern and Southern Idaho a reality. We feel that the proposal put forward by IRON is the best chance for this to become a reality.

This project is vital to providing redundancy to the entire northern portion of the State which it does not have currently. In addition, it will be capable of providing the bandwidth and speeds that are so essential in today's business, healthcare and governmental arenas that are currently lacking. On the County level, it will provide a redundant link between the 5 County PTACs that will allow any one County to assume dispatch, enhanced 911 or phone over IP for a County whose dispatch may go down during a disaster such as fire or flooding. It will also allow citizens to take advantage of telehealth or work-from-home opportunities.

Sincerely,

R. Skipper Brandt, Chairman

Ted Lindsley

Denis B. Duman

November 15th 2022

Idaho Broadband Advisory Board
c/o Ramón S. Hobdey-Sánchez, J.D.
State Broadband Program Manager
Idaho Department of Commerce
700 W. State Street
Boise, Idaho 83702



Re: Creating Idaho's North-South Middle Mile Network
Letter of Support

Dear Idaho Broadband Advisory Board:

This letter is to affirm support for the Idaho Regional Optical Network and Intermountain Infrastructure Group's public/private partnership for an open access middle mile broadband proposal from Grangeville to Star. It supports Idaho's 2027 broadband strategic goal of providing 100% of Idaho with accessible, reliable, and affordable high-speed internet. This middle mile network will prepare Central Idaho communities for last mile infrastructure and set Idaho up to successfully compete for BEAD funding. The network will link into the Port of Lewiston's open-access middle mile in Grangeville and help to finally provide infrastructure to connect north and south Idaho

I am the Director of the Idaho County / Lewis County Economic Development Council (Ida-Lew EDC). We are a Non-Profit LLC sponsored by Federal, State, County and City programs as well as our Local Business Communities. Our office is located in Grangeville, Idaho, the current southern terminus of the existing Middle Mile program.

As an Economic Development Council we represent, support and advocate for our local Central Idaho businesses and industries. Though we are 'Rural' in every sense of the word, we continue to be a vibrant and necessary part of our State Economy. The future health of our local economy, our agriculture, timber, tourism, manufacturing and retail sectors, all require access to reliable, affordable, high-speed, internet service.

If our Central Idaho Industries are to compete in the 21st Century, completion of the Middle Mile from Grangeville to Star is absolutely necessary.

Sincerely,

A handwritten signature in blue ink that reads "Tim McDonald -".

Tim McDonald
Director
Idaho County / Lewis County Economic Development Council
208-983-8302
tim@Ida-Lew.org



714 Jefferson Street
Grangeville, ID 83530
Telephone 208-983-0990
Facsimile 208-983-1245
www.sd244.org

Date: November 21, 2022

Idaho Broadband Advisory Board
c/o Ramón S. Hobdey-Sánchez, J.D.
State Broadband Program Manager
Idaho Department of Commerce
700 W. State Street
Boise, Idaho 83702

Re: Creating Idaho's North-South Middle Mile Network
Letter of Support

Dear Idaho Broadband Advisory Board:

This letter is to affirm support for the Idaho Regional Optical Network and Intermountain Infrastructure group's public/private partnership for an open access middle mile broadband proposal from Grangeville to Star. It supports Idaho's 2027 broadband strategic goal of providing 100% of Idaho with accessible, reliable, and affordable high-speed internet. This middle mile network will prepare Central Idaho communities for last mile infrastructure and set Idaho up to successfully compete for BEAD funding. The network will link into the Port of Lewiston's open-access middle mile in Grangeville and help to finally provide infrastructure to connect north and south Idaho

My Name is Steve Higgins and I represent the Mt. View School District as Superintendent of schools. Mt. View S.D encompasses the communities of Whitebird, Grangeville, Kooskia and Elk City, educating approx. 1200 students K-12. Broadband access and even more important, affordable, reliable access would be a tremendous upgrade in our current ability to provide educational and business use internet.

If the Middle Mile Project is approved it could expand the market for network providers enhancing speed, bandwidth and price competitiveness. In all, a benefit to the district and those we serve.

Sincerely,

Steven D. Higgins, Superintendent
Mt. View School District #244

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NEZ PERCE COUNTY

BOARD OF COUNTY COMMISSIONERS

1225 Idaho Street
P.O. Box 896
Lewiston, Idaho 83501-0896
(208) 799-3090
FAX (208) 799-3149

November 21, 2022

Idaho Broadband Advisory Board
c/o Ramón S. Hobdey-Sánchez, J.D.
State Broadband Program Manager
Idaho Department of Commerce
700 W. State Street
Boise, Idaho 83702

Re: Creating Idaho's North-South Middle Mile Network
Letter of Support

Dear Idaho Broadband Advisory Board:

This letter expresses Nez Perce County's support for the Idaho Regional Optical Network and Intermountain Infrastructure Group's public/private partnership for an open access middle mile broadband proposal from Grangeville to Star. In addition, it supports Idaho's 2027 broadband strategic goal of providing 100% of Idaho with accessible, reliable, and affordable high-speed internet. This middle mile network will prepare Central Idaho communities for last mile infrastructure and set Idaho up to successfully compete for BEAD funding. The network will link into the Port of Lewiston's open-access middle mile in Grangeville and help to finally provide infrastructure to connect north and south Idaho.

It is critical for Nez Perce County to have reliable and low-cost broadband services, which contribute to Economic Development, Emergency Communications, Education, and Public Health. The development of this middle mile network has been a need for many years and will fill the gap for future additions and connectivity.

Sincerely,

BOARD OF COUNTY COMMISSIONERS

DOUGLAS A. ZENNER, Chairman

DON H. BECK JR., Member

DOUGLAS W. HAVENS, Member

Dave and Doris Paulsen

November 26, 2022

1638 Timber Circle P.O. Box 638

McCall, Idaho 83638

Idaho Broadband Advisory Board

C/O Ramon Hobdey-Sanchez, J.D.

State Broadband Program Manager

Idaho Department of Commerce

Boise, Idaho 83702

Regarding: Letter of Support to:

Create Idaho's North-South Middle Mile Network

Dear Sir:

We are sending this letter to affirm support for the Idaho Regional Optical Network and Intermountain Infrastructure Group's public/private partnership for an open access middle mile broadband network from Grangeville, Idaho to Star, Idaho. This supports the state of Idaho's 2027 Broadband Strategic Goal of providing 100% of Idaho with reliable, affordable and accessible HIGH SPEED INTERNET. With all the changes in how people, communities, schools, hospitals, community services, small and far reaching businesses interact today, the entire state of Idaho needs this infrastructure to stay competitive as well as protect the people of this great state. With this Network in place, Central Idaho cities, towns and villages will be able to successfully compete for BEAD funding to bring high speed internet to their local communities linking the entire state from north to south and keep Idaho competitive in the everchanging healthcare, education and business world.

My husband, a disabled Veteran and I, personally depend on safe, fast, reliable services for our health care and banking needs in the small, growing community of McCall, Idaho in Valley County.

Thank you for your time.

Sincerely,

Dave and Doris Paulsen

250

November 15, 2022

Idaho Broadband Advisory Board
c/o Ramón S. Hobdey-Sánchez, J.D.
State Broadband Program Manager
Idaho Department of Commerce
700 W. State Street
Boise, Idaho 83702

Re: Creating Idaho's North-South Middle Mile Network Letter of Support

Dear Idaho Broadband Advisory Board:

This letter is to affirm support for the Idaho Regional Optical Network and Intermountain Infrastructure Group's public/private partnership for an open access middle mile broadband proposal from Grangeville to Star. It supports Idaho's 2027 broadband strategic goal of providing 100% of Idaho with accessible, reliable, and affordable high-speed internet. This middle mile network will prepare Central Idaho communities for last mile infrastructure and set Idaho up to successfully compete for BEAD funding. The network will link into the Port of Lewiston's open-access middle mile in Grangeville and help to finally provide infrastructure to connect north and south Idaho

The University of Idaho is Idaho's land-grant, research, extension and outreach university with 2,223 full time employees and locations in 42 of Idaho's 44 counties. We serve 11,507 students in Idaho and across the world through 165 undergraduate and graduate programs while conducting broad-ranging research with expenditures over \$106,000,000. Improved middle mile connectivity will result in improved internet access for all Idahoans, especially those in rural areas, and is critical to accomplishing our mission and setting all of Idaho up for success.

The proposed project will open endless opportunities for the university to better serve its mission. Open access, middle mile connectivity enables improved educational access to our students, allows our research data to be shared, and supports the ever-increasing need for our people to learn, work and live anywhere in the state. The value of this project, however, extends far beyond just the University of Idaho. Improving the availability and redundancy of open access connectivity between north and south Idaho will enable economic growth for all. It will make education, healthcare and government services more accessible in rural Idaho. Most importantly it will help Idahoans compete in a global society while having all the advantages of living and working in our beautiful state.

Thank you for your consideration of this critical request. If I can provide any additional information, please do not hesitate to contact me.

Sincerely,



Daniel R. Ewart
Vice President for Information Technology and Chief Information Officer
University of Idaho

Idaho Broadband Advisory Board
c/o Ramon Hobdey-Sanchez, J.D.
State Broadband Program Manager
Idaho Department of Commerce
Boise, Idaho 83702

Re: Letter of Support to:
Create Idaho's North-South Middle Mile Network

Hello

22 Nov 22

This letter is strong support for the Idaho Regional Optical Network and Intermountain Infrastructure Group's public/private partnership for an open access middle mile broadband network desire from Grangeville to Star, Idaho. This supports the state of Idaho's 2027 broadband great goal of having 100% of Idaho with Reliable, Accessible, and Affordable HIGH SPEED INTERNET. This network will allow Central Idaho towns, cities and villages to obtain last mile infrastructure and set Idaho up to successfully compete for BEAD funding. This network will connect into the Port of Lewiston's open access middle mile in Grangeville and help finally get much needed infrastructure to join North and South, Idaho together.

The McCall Store some 8-9 years ago listened, at Shore Lodge; to Verizon and Frontier explain how together they would have high speed optical fiber thru Central Idaho in a couple years. Now is a great time for this to happen. Central Idaho is in a major growth cycle that needs support to enhance the opportunities in the cyber world. Not to mention increase the speed of businesses, schools and government services to assure healthy life styles and services.

The McCall Store, which has spun off 4 other successful businesses, knows what it means to be in a vacuum. This project is needed. Not 8-10-12 years from now but, TODAY. We look forward to the success of this network and receiving BEAD funding.

Regards ~~Bey~~ Scotty Davenport Owners 1012 N 3rd St McCall

251A

Idaho Broadband Advisory Board
c/o Ramon Hobdey-Sanchez, J.D.
State Broadband Program Manager
Idaho Department of Commerce
Boise, Idaho 83702

Re: Letter of Support to:
Create Idaho's North-South Middle Mile Network

Howdy

20 Nov 22

This letter is strong support for the Idaho Regional Optical Network and Intermountain Infrastructure Group's public/private partnership for an open access middle mile broadband network desire from Grangeville to Star, Idaho. This supports the state of Idaho's 2027 broadband great goal of having 100% of Idaho with Reliable, Accessible, and Affordable HIGH SPEED INTERNET. This network will allow Central Idaho towns, cities and villages to obtain last mile infrastructure and set Idaho up to successfully compete for BEAD funding. This network will connect into the Port of Lewiston's open access middle mile in Grangeville and help finally get much needed infrastructure to join North and South, Idaho together.

Some 8-9 years ago we listened, at Shore Lodge, to Verizon and Frontier explain how together, they would have high speed optical fiber thru Central Idaho in a couple years. What fast talk! Nothing happened. NOW is a great time. Central Idaho is in a major growth cycle that needs this support to enhance its opportunities in the cyber world. Not to mention increase the speed of businesses, schools and government services to assure healthy life styles and services.

We have built 5 very successful businesses over the last 32yrs here in Valley County. We know the vacuum there is without high speed broadband. And the rancher, cleaning his borrow pit, cuts the line and shuts down the internet for days. This Project is Needed. Not 8-10-12 years from now but, TODAY. We look forward to the success of this network and receiving BEAD \$\$\$\$.

Thanks Bev & Scotty Davenport Box 1453 McCall Idaho 83638



251B



P.O. Box 1032 • CASCADE, IDAHO 83611 • [REDACTED]

Idaho Broadband Advisory Board
c/o Ramon Hobdey-Sanchez, J.D.
State Broadband Program Manager
Idaho Department of Commerce
Boise, Idaho 83702

Re: Letter of Support to:
Create Idaho's North-South Middle Mile Network

Howdy

23 Nov 22

This letter is strong support for the Idaho Regional Optical Network and Intermountain Infrastructure Group's public/private partnership for an open access middle mile broadband network running from Grangeville to Star, Idaho. This supports the State of Idaho's 2027 broadband goal of having 100% of Idaho with Reliable, Accessible, and Affordable HIGH SPEED INTERNET. This network will allow Central Idaho towns, cities and villages to obtain last mile infrastructure and set Idaho up to successfully compete for BEAD funding. This network will connect into the Port of Lewiston's open access middle mile in Grangeville and help finally get much needed infrastructure to join North and South, Idaho together.

We are a small business providing commercial and residential facilities. Our goal is to provide a reasonable location and financial opportunities for small businesses to succeed and support the local community. Residential opportunities are very very few because of the high real estate cost in the resort areas of our North-South corridor. Thus, we have set up work force housing at a reasonable value to enable Teachers, Gov't employees and First Responders to live in their communities.

This broadband service in an affordable framework continues our business goal of affordability to those in our service industries.

251C



P.O. Box 1032 • CASCADE, IDAHO 83611 • 

What are we talking about??????

The Regional Optical Network corridor, which is 46% of the North-South "goat trail".

Grangeville	White Bird	Slate Creek
Lucile	Fiddle Creek	Riggins
Pollock	Pinehurst	New Meadows
Meadows	Lardo	McCall
Lake Fork	Norwood	Donnelly
Roseberry	Yellow Pine	Big Creek
Tamarack Falls	Warm Lake	Cascade
Clear Creek	Smiths Ferry	Crouch
Garden Valley	Banks	Horseshoe Bend

These are the people who need help, sure some like the isolation, but ask the veteran who counts on the fiber to connect to the VA to get medicines or the student looking for info on a school paper. Ask the businesses that have a POS system to run credit cards, order merchandise, pay employees and pay taxes.

The network is badly needed to bring the 27+ lost communities into the present world. Schools, Community Services, Hospitals, First Responders, City/County Gov't and those that have found they can work from home, have a healthier life style and communicate quicker with this network.

The Idaho Broadband Advisory Board can get this accomplished for the advancement of the Great State of Idaho.

For those of us on the "goat trail" THANK YOU for your efforts.

Best Scotty Davenport Owner

251D

Submitted by the Jerome County Commissioners

Charles Howell | 208.644.2701 | chowell@co.jerome.id.us

A. Ben Crouch | 208.644.2702 | bcrouch@co.jerome.id.us

John Crozier | 208.644.2703 | jcrozier@co.jerome.id.us

// Jerome County

Broadband Infrastructure Project Proposal Brief

This document serves as a project brief for developing self-sustaining, high-quality Broadband Internet in, [Jerome County, Idaho](#).

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The Overlook

In Jerome County, and across rural America, lack of access to reliable, fast, and affordable broadband internet is the largest roadblock to education, healthcare, and industry development. However, Jerome County is at the precipice of a prodigious opportunity for positive broadband infrastructure development. This document serves as a *Traveler's Guide to Developing Broadband Connectivity* across Jerome County, serving our communities now and for generations to come.

Roadblocks

Many Jerome County citizens struggle with adequate internet connectivity and fall short when measured by multiple metrics. There are approximately 3,000 people without access to wired internet in Jerome County ([BroadbandNow.com](#)). Inadequate internet access places the citizens, townships, and the county at a disadvantage.

The county government, municipalities, and businesses are unable to implement current industry-standard technologies, much less implement new and innovative technology solutions. Even in areas where municipal buildings, a few anchor institutions, or schools have adequate service, they are unable to fully implement technological change due to a community-wide lack of access increasing the digital divide and decreasing economic and social opportunity. While all the cities in Jerome County suffer from some level of inadequate connectivity, they each have unique needs that must be addressed by a comprehensive broadband plan.

- **Jerome**
 - Jerome is the county seat and the largest and best-served area of Jerome County. However, with an average download speed of 61.89 Mbps, Jerome is at a considerable disadvantage in comparison to national averages, 39.1% slower than the average in Idaho and 83.3% slower than the national average([Broadbandnow.com](#)).
- **Hazelton**
 - Hazelton citizens functionally have no access to fiber internet. A lack of quality service and a lack of delivery on service promises inhibit technology growth for the whole of the community. The average download speed in Hazelton is 0.27 Mbps. This is 99.7% slower than the average in Idaho and 41907.4% slower than the national average ([Broadbandnow.com](#)).

- **Eden**

- In Eden a lack of affordability and inequitable access to services create disruption for growth in the educational, health, and employment sectors. Speeds are not adequate for citizens to really excel in the desired areas. Eden citizens functionally have no access to fiber internet. The average download speed in Eden is 10.6 Mbps. This is 89.6% slower than the average in Idaho and 970.0% slower than the national average. ([Broadbandnow.com](https://www.broadbandnow.com)).

Eden and Hazelton have been especially affected by the lack of fulfillment of obligations and promises by bad-faith actors. Having received broadband funding in the past, ISP partners have not provided services to the area as promised, hurting the communities.

Preparing an Innovative Solution

Jerome County is posed to overcome its technology and connectivity deficits with an **innovative, collaborative effort to develop self-sustaining community-owned broadband infrastructure** that invites better service through RFP bids and allows citizens to access quality internet now and for years to come. Over the past year, the Leadership of Jerome County has come together with the leadership of the City of Jerome, Eden, and Hazelton to form a strong collective, working together to create a unified broadband initiative.

The unified Jerome County and Municipal Leadership have:

- Completed a **Broadband and IT Report** in collaboration with RIVDA
- Developed community broadband plans in line with the IBAB Strategic Plan
- Participated in SWOT analyses to determine plan feasibility
- Engaged in Community Research
- Completed Preliminary Engineering – Received ACD Plans – November, 15
 - This plan will be shovel-ready pending the finalization of the timeline and budget expected in January 2023.

Community First Technology

Firmly rooted in elements of the IBAB Strategic plan and the RIVDA Broadband Elements of Success (page 4), our proposed network includes a multi-technology approach to connectivity completed in 2 Phases. Phase-1 includes the construction of *wireless fiber infrastructure to serve the most rural residents* in the county and lay the fiber foundation for the area, while Phase-2, detailed in the engineering studies, includes *fiber to the premises for all locations within the city limits of Jerome, Hazelton, and Eden with speeds up to 1GB/1GB*. This 2 Phase approach can be completed as one continuous/simultaneous project, decreasing overall construction time and leveraging resources as efficiently as possible.

Able to serve 100% of premises within the city limits of Jerome, Eden, and Hazelton and 95% of rural households outside of city limits, this plan will alleviate the broadband access gap suffered by the underserved citizens of Jerome County. As we have just received our ACD studies, we are hesitant to put forth estimates on budget and timeline as we are still working with our consultants to solidify both.

TENTATIVELY, we expect a project of this magnitude to be achieved in 24-48 months, depending on procurement and secondary factors. Our costs for the build will be determined shortly utilizing our consultant's expertise and our newly acquired ACD studies.

Potential Planning Costs

As we progress in solidifying our build and tower construction sites, we would like to partner with existing community infrastructure owners to leverage this infrastructure for "tower" sites decreasing costs and increasing reach in critical rural areas. Planning funds to arrange for these meetings and contracts may be requested.

Further, in continuing our progress toward broadband independence, we would like to expand our plan to improve digital access for all populations and better access to educational, work, and telehealth opportunities. Funding for community outreach and research to implement digital equity outreach may also be requested.

Elements of Success

- **Sustainability** – The aspects that encourage sustainability include grants (Federal and State), volunteer work, neighborhood champions and public engagement, broad use of the proposed infrastructure for ongoing maintenance.
- **Resource sharing** – Resource Sharing requires fewer resources and cost to maintain one set of servers vs. four. Collaborative cost reductions while maintaining independence and confidentiality through shared managed cloud-based resources.
- **Innovation** – Overcoming past paradigms of limited internet service, discipline for the collaborative process, creating plans for current and future needs.
- **Transformation** – Righting the past wrongs and looking towards the future on a solid foundation. This includes planning for the future with proactive concordant efforts by contractors to build access to services in new/future housing and developments. City planning with an eye to the future, including city easements to assets such as poles, towers, common ditches, new construction, etc., is essential to the overall success and sustainability of a well-integrated network.
- **Public Safety / Cybersecurity** – While seemingly less critical in the more rural areas, attacks on essential services provided by most counties and municipalities are becoming increasingly common. These attacks include water and other utilities as well as fire and police protection. As rural townships tend to have fewer resources to combat these attacks, they become more frequent targets ([NYTimes](#); [CBSNews](#)).
- **Educational Narrative** – This is an essential component to success. The digital divide and educational disconnect both in Idaho and the whole of rural America are well documented. The sustainment of population and economic health is critically impacted by the opportunities afforded to the youth of your communities. While the connectivity of our schools is vitally important, circumstances from the previous 18 months clearly show that individual student connectivity in the home is imperative for uninhibited, comprehensive education. Connectivity is essential to students at every level, from primary and secondary students to those continuing their education with trade certifications and university degrees.
- **Telehealth** – While telehealth programs do not lie directly within the cities' or county's purview, connectivity to available telehealth services does. Developing a high-speed network that meets the needs of telehealth providers brings more accessible primary care to citizens at a decreased cost. As the population in the United States ages, telehealth can also provide affordable, comprehensive care to more isolated and aged citizens.

11/30/2022

Dear Idaho Broadband Advisory Committee

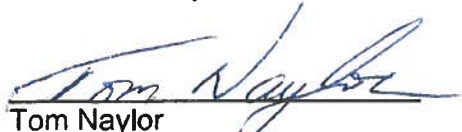
In 2021, Lincoln County presented a comprehensive grant application to the Idaho Department of Commerce for access to remaining CARES Act funds. Our application clearly identified the first phase of a two phased initiative. Subsequently we were awarded approximately \$1.5 million dollars and as stipulated completed, in record time, that first phase – a county owned wireless network providing significantly increased internet service to the outlying areas of our rural community with 100Mbps+ symmetrical speeds. Nevertheless phase two, while pending, is designed and completely project ready.

As with Phase 1 in our comprehensive broadband plan for Lincoln County, we come together as a community in this working agreement for the completion of Phase 2. The Idaho cities of Shoshone, Dietrich, and Richfield together with Lincoln County are committed to the completion of this plan and our commitment to provide the internet access our rural community deserves. Our main concerns being Telehealth, Education loss, safety, and economic development opportunities.

We are on the verge of accomplishing a major milestone for rural counties throughout the State of Idaho by providing a future proof solution, namely, fiber to the home and eliminating the digital divide which challenges and limits education, health, public safety, and business pursuits. Therefore we remain committed to this effort and respectfully submit this proposal for your careful consideration to our plan, and our needs. Thank you for your time and consideration!

Signed,


Rebecca Wood
Lincoln County Commissioner


Tom Naylor
Richfield Mayor


Dan Pierson
Shoshone Mayor


Taylor Perkins
Dietrich Mayor

// Lincoln County

Broadband Infrastructure Project Proposal Brief

This document serves as a project brief for *Phase-2* of the Lincoln County Comprehensive Broadband Plan. With a plan that is shovel ready, **Lincoln County, Idaho**, is prepared to continue the development of self-sustaining, high-quality Broadband Internet.

The Overlook

Pioneering an Innovative Solution

In Lincoln County, and across rural America, the lack of access to reliable, fast, and affordable broadband internet has been the largest roadblock to education, healthcare, and industry development. However, through strong cooperative leadership between County and Municipal officials, Lincoln County has made great strides toward overcoming its technology and connectivity deficits with an *innovative, collaborative effort to develop community-owned broadband infrastructure* that is self-sustaining, invites better service through RFP bids, and allows citizens to access quality internet now and for years to come.

The Road Forward – Broadband Infrastructure 2- Phase Plan:

The comprehensive broadband plan, briefed here and thoroughly detailed in our Lincoln County RIVDA Technology Report, consists of a unified effort by Lincoln County in cooperation with Dietrich, Richfield, and Shoshone to build fiber networks and wireless fiber towers serving the majority, ~ 95%, of households and businesses in Lincoln County.

Phase-1 has been completed and includes the construction of wireless infrastructure to serve the most rural residents in the county. *We are currently seeking funding for Phase-2*, which includes fiber to the home for all residents within the city limits of Dietrich, Richfield, and Shoshone with speeds up to 1GB/1GB.

Journey Progress – Phase-1 - Wireless Infrastructure Completion:

Lincoln County has made exceptional progress both in terms of speed and breadth, in connecting the citizens of Lincoln County to fast, reliable, and affordable broadband services. In partnership with RIVDA, Lincoln County, Richfield, Dietrich, and Shoshone government, *community leaders participated in extensive research, gathered technology reports, acquired professional and comprehensive ACD engineering plans, rallied community anchor institutions, and solicited community feedback to create comprehensive reports and compelling application materials for funding*. This hard work and determination proved fruitful. Lincoln County received \$1.5 million dollars in CARES act funds through its influential and competitive grant application to complete Phase-1 of its Broadband plan in 2021.

Perseverance, Cooperation, and Triumph

While a significant achievement, receiving funding was just the beginning. CARES-funded projects for 2021 had a must-complete deadline of December 31st, 2021, or the county would lose the funding. Utilizing the RFP process, Lincoln County partnered with a trusted private company, ETS Tecló, to complete their ambitious wireless tower project in record time. With only 95 days to complete the project, County and City leaders partnered with ETS rose to the significant challenge. Overcoming ubiquitous supply chain issues, equipment procurement, contractor shortages, coordinating challenges with permitting agencies and Idaho Power, and the added complication of an Idaho winter, ETS crews worked tirelessly at all hours, in cold, rainy, foggy, and snowy conditions to meet the December 31st deadline.

Efficiently utilizing existing infrastructure and erecting three new 120-260 ft. towers, Lincoln County and ETS were able to complete a robust wireless network that tested well above state-required standards (Lincoln County RIVDA Technology Report, Appendix D). This network is currently providing robust wireless fiber access for 187+ (November 28th, 2022) households and businesses in rural, unincorporated portions of Lincoln County and within municipal limits.

Concurrently, ETS has connected several major government buildings with wired fiber and community institutions with wireless, including Shoshone City Hall, the County Courthouse, Lincoln Recreation Center, Dietrich City Hall, Richfield City Hall, and the Richfield Youth Center. Wired government buildings are currently receiving speeds over 1GB/1GB, while the wireless system provides clients with symmetrical speeds up to 1GB/1GB and *no less* than 50Mbps/50Mbps. (See maps and images on page 4.) This work has created a solid foundation for Phase-2 of the Lincoln County Broadband Project.

The Destination: Phase – 2: Fiber-to-the-Home

Through strong leadership and well-chosen trusted partners, Lincoln County has made incredible strides in a short time. While the wireless infrastructure is a huge leap forward for the citizens of Lincoln, there are still limitations to overcome. 95+ households and businesses that have shown interest in accessing high-speed internet are currently inhibited by trees and other geographical obstructions. *Completing Phase-2 of the Lincoln County broadband plan, bringing Fiber-to-the-Home (FTTH), is imperative to continuing service excellence in Lincoln County.* Direct fiber connections within the city

limits of Shoshone, Richfield, and Dietrich will have a considerable impact on the reach and connectivity in Lincoln County. With greater speed options, reliability, and the decreased load on the wireless system, 100% of premises within city limits and ~ 95% of the county’s total businesses and homes can be served with reliable high-speed internet well above the new standards of 100/20mbps up to 1GB/1GB.

Looking towards the future, Lincoln County has continued its research and progress by *updating ACD studies, continuing to develop and grow community and business partners (i.e., Glanbia), and has a shovel-ready, updated plan to continue to grow our community-owned broadband infrastructure* with FTTH in Shoshone, Dietrich, and Richfield city limits. Bringing fiber-to-the-home (FTTH) will help future-proof Lincoln County’s infrastructure while providing better connectivity to residents now. Providing opportunities for growth, business expansion, and educational opportunities FTTH is the next leap forward for Lincoln.

The FTTH estimated costs are determined by updated ACD engineering studies, informed by previous build costs, research on current market trends, and procurement chains with regard to current events. These numbers are inclusive of fiber to the home terminus and hardware, along with labor, final engineering, project management, and materials. We are currently preparing to compete for federal and state monies to continue building a better tomorrow for Lincoln County.

LINCOLN COUNTY	COSTS
PHASE-2	
SHOSHONE	\$ 3,000,000.00
RICHFIELD	\$ 2,000,000.00
DIETRICH	\$ 1,500,000.00
SHARED	\$500,000.00
PHASE-2 TOTAL	\$7,000,000.00

New Horizons: Closing the Digital Divide

Affordable, quality broadband access has long been the largest and most prominent hurdle for the communities, citizens, and businesses in Lincoln County. As we approach the precipice of overcoming this hurdle, our focus is turning toward closing the technology gap in our communities and striving for digital equity and inclusion, especially for our vulnerable populations. Having attended the recent Broadband for All meeting, we look forward to collaborating with experts like Angela Siefer to expand our reach to tackle this next hurdle. Potential planning funding would be utilized to bolster a comprehensive plan to improve digital access for all populations and better access to educational, work, and telehealth opportunities.

Wireless Fiber Maps and Assets:

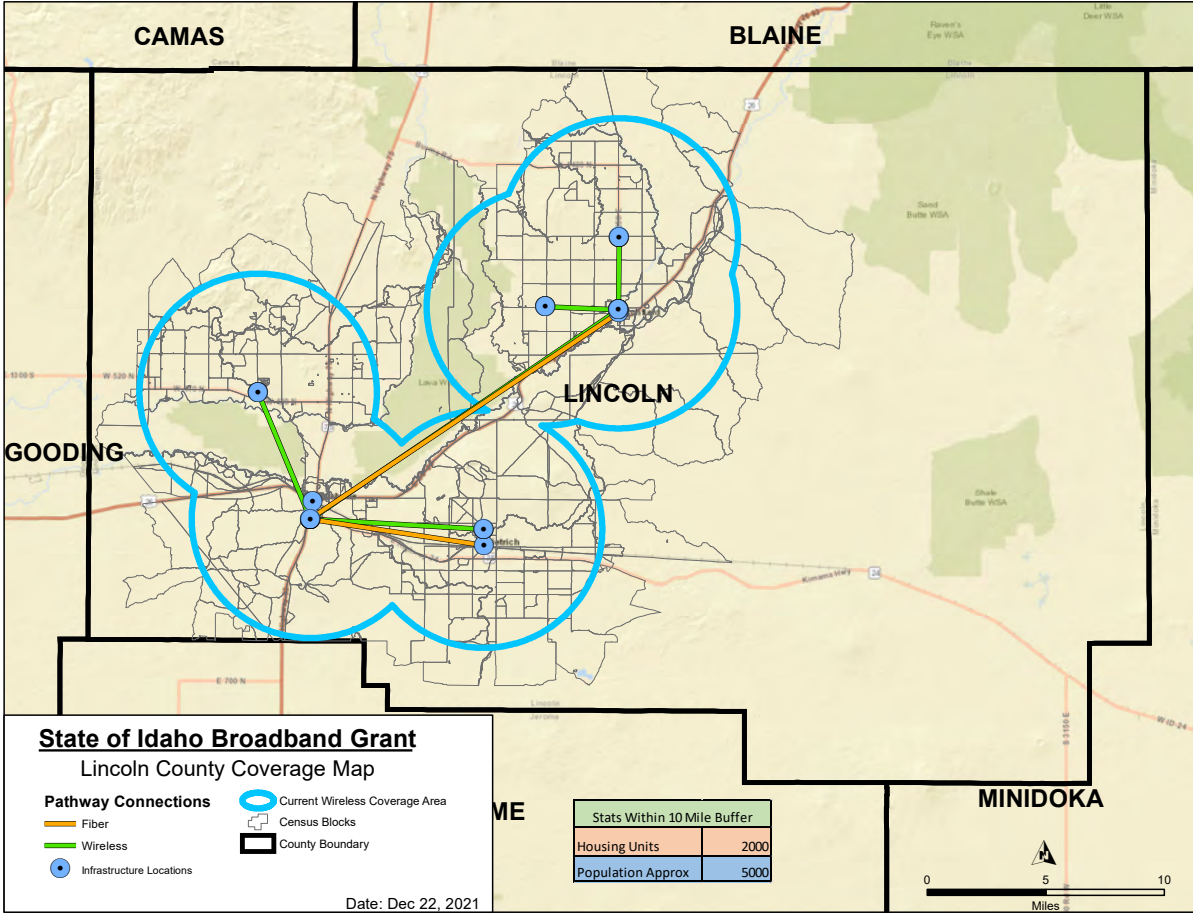


Image 1: Map of current coverage area for Lincoln County Wireless Fiber.



Image 2: The construction of new vertical assets in Lincoln County.

SFMC

Shoshone Family Medical Center

We treat you like family ♥



Keith E. Davis, MD

Board Certified Family Medicine
Docdavis4L@hotmail.com

December 1, 2022

To Whom It May Concern:

In Lincoln County, the ability to provide telehealth services for county residents is essential. It allows our medical teams to have connections and provide care for people who cannot physically get to medical offices. In a very rural county, such as ours, it provides an opportunity to care for patients we might not otherwise be able to serve.

The county-owned broadband system has been an important resource to provide medical service for Lincoln County residents, but the next phase will be key in delivering high quality services to the *entire* community.

I highly support and recommend you consider the Lincoln County Broadband Proposal Phase II.

Professionally yours,

A handwritten signature in black ink that reads "Keith E. Davis MD". The signature is written in a cursive, slightly slanted style.

Owner/CEO/Medical Director

VIA EMAIL

December 1, 2022

Idaho Department of Commerce
Attn: Ramón S. Hobdey-Sánchez,
P.O. Box 83720
Boise, Idaho 83702
broadband@commerce.idaho.gov

RE: Lumen/CenturyLink proposed projects – Pocatello North

Dear Mr. Hobdey-Sanchez:

Thank you for your time and effort as well as that of the Department of Commerce and Broadband Advisory Board on the continued work to develop and implement a broadband program for the state of Idaho. Lumen, under its subsidiaries of CenturyLink and Quantum Fiber, appreciates the opportunity to be able to file the proposed Fiber to the Premise/Home (FTTP) project for the Pocatello North area.

Given the short time frame from when the RFP was issued to the initial filing deadline of today, the company has done its best to provide as much information as possible for the project. However, the company has not been able to complete all of the internal financial analysis and review to determine the total amount/value of the company match for this project. As the information becomes available this information can be updated. The filing today shows the

company match to cover the capital costs of the fiber drop placements and customer location electronics/equipment necessary to provide fiber services. It is anticipated that the company match will increase significantly when it is updated when the internal financial analysis is completed, as well as when the in-kind match is calculated and included.

The company is evaluating additional projects and plans to continue to make additional filings in the future.

Again, thank you for the opportunity to participate in this RFP opportunity.

Please let me know if you have any questions.

Sincerely,

/s/ Tim Kunkleman

Tim Kunkleman

Applicant: Lumen/CenturyLink

- Qwest Communications d/b/a CenturyLink QC (Pocatello North)

Applicant Contact Information:

Tim Kunkleman

Regional Director Government Affairs

931 14th ST, Denver CO 80202

Timothy.Kunkleman@lumen.com

Office: 303-992-5810

Proposed project area:

Pocatello North: The company has identified underserved areas near where it is building RDOF. Attachment A provides a Power Point map of the proposed project area to provide FTTP to the underserved locations.¹ CenturyLink was also awarded RDOF within its Pocatello North exchange area very close to the project area and is in the process of completing the planning/engineering for the RDOF projects in this area. The company expects that construction of the RDOF projects will happen during 2023. Estimated 99 underserved customer locations/households within the project area

Description of the Fiber to the Premise (FTTP) technology for the proposed project areas:

The company will utilize 10 Gigabit Symmetric Passive Optical Network (XGS-PON) Fiber to the Premise/Home (FTTP) internet technology in the project areas. The company is also deploying this same technology within the RDOF areas it won in Idaho. Customers served with XGS-PON FTTP will be able to subscribe to multi-gig symmetrical high speed internet services.

The company will be marketing its FTTP fiber internet service through its Quantum Fiber brand.

The current pricing and terms and conditions for Quantum Fiber, is located at the following website: <https://fiber.q.com/fiber/s/welcome>

This site shows the following:

Speeds up to 200 Mbps Symmetrical is \$30 a month.

Speeds up to 940 Mbps Symmetrical is \$70 a month.

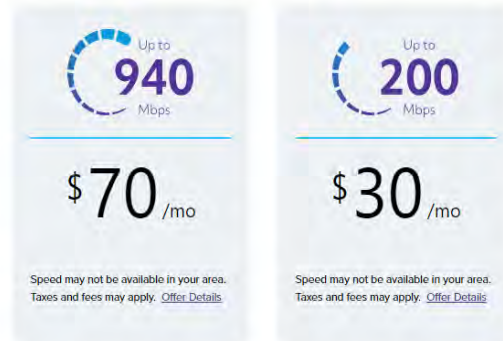
(Taxes and fees may also apply.)

¹ Upon request a KMZ file showing the project area in Pocatello North can be provided.

Today's internet at tomorrow's speed.

Internet for budgets that could use a break.
Get Quantum Fiber for your home or business at a price that's nice.

*Based on network uptime or availability.



Because the decision to adopt a newer technology was made so recently, Lumen's current retail fiber internet service offerings do not yet reflect XGS-PON FTTH multi-gig capabilities. Lumen is working through its product development process and will publicize the offerings once the process is completed. Recently the company announced a symmetrical 8-gig service now being offered in limited areas and to be expanded to other areas in the future.

<https://www.fiercetelecom.com/broadband/lumen-trots-out-8-gig-service-quantum-fiber-subs-3-cities>

Future enhancements to the capability of FTTP:

By deploying FTTP in the network, the company can scale easily by upgrading the electronics only. With deployment of XGS-PON in the project areas, with symmetrical speeds of up to 8 Gbps, this is already 80 times faster than the 100/100 Mbps minimum required by the BEAD program. It is fully expected that the technology for FTTP will continue to significantly improve available speeds. For example, the company is involved with industry discussions regarding 50 – 100 Gbps PON technology. Even though no firm timelines on adoption of these new speeds are available at this time, the company has demonstrated that its Quantum Fiber brand will continue to lead the pack in terms of innovation in the FTTP space.

Competitive pricing for Quantum Fiber services:

The company has standardized pricing for its Quantum Fiber brand, and grant and RDOF areas will get the same very competitive pricing that the company offers in Boise and other very competitive areas.² It is important that when evaluating the merits of a grant proposal, that the state also consider the price the applicant will charge customers for services. The company has noticed in

² In its November 10, 2022, comments to the Idaho Broadband Advisory Board, the company disclosed that it already has over 82,000 FTTP locations in Idaho that it has already build at its own expense, with an additional 45,000 planned for 2023. Company-wide, already about 3 million FTTP customer locations have already been built by the company. This demonstrates the company is fully capable and has the expertise to build FTTP within grant project areas.

other states with grant programs, that other providers may be willing to cover a higher percentage match, however, their prices for service are also significantly higher.³

Project term/timeline for construction completion:

Upon approval of a grant project and execution of a contract, the company will utilize all internal and external resources necessary to successfully complete each Fiber-to-the-premise (FTTP) project within an estimated 2-year time frame.⁴

Funding Request

Pocatello North Project:

- Estimated capital costs for fiber placement costs for FTTP. (Feeder, distribution, electronics) is \$436,000.⁵ Grant amount initially being requested.
- Estimated capital costs for fiber drop placement and customer location electronics is \$20,000, assuming a 50% take rate over 2 years. The company will cover this capital cost as a part of its match.
- Estimated value of in-kind match to be determined (TBD).
- Total estimated capital cost including the fiber drop costs is \$456,000.

Financing sources for the project:

The company is internally funding all grant area awarded projects through internal cash flow.

Company Financial Statements:

For financial statements, the following are the links to the 10-K for Lumen Technologies for 2019, 2020 and 2021.

<https://ir.lumen.com/financials/sec-filings/default.aspx>

In addition, following are links to the 10-K for Qwest Corporation:

³ A key factor in doing a financial analysis of a potential grant project, is the expected revenues. There is a relationship between the match percentage a provider may be willing cover, and the prices they will charge in a project area. In other states, the company has noticed that some providers may be willing to cover a higher percentage match, but at the same time, their prices are significantly higher than what the company provides through its Quantum Fiber brand.

⁴ The company believes it should be able to complete this project within 2 years from the contract execution date. However, there may be factors/issues outside of the company's control, such as supply chain/material delays, contract construction resource limitations, weather events, permitting delays or other issues that may necessitate a longer than 2-year time frame to complete project construction.

⁵ The fiber cable and electronics will be placed close enough to each customer location so that when a customer orders fiber internet service from the company, the fiber drop and customer location electronics will be placed to the customer location.

Qwest 2019:

<https://d18rn0p25nwr6d.cloudfront.net/CIK-0000068622/436d2e80-cdfa-4b27-a613-25ca743a22b0.pdf>

Qwest 2020:

<https://d18rn0p25nwr6d.cloudfront.net/CIK-0000068622/aa74272e-9229-4822-a7e1-796e48d91905.pdf>

Qwest 2021:

<https://d18rn0p25nwr6d.cloudfront.net/CIK-0000068622/98b6d0b1-a59b-4a4a-84b8-137b258cfdb4.pdf>

Project Ownership:

The company will own and control the network for the grant projects.

Open access will be provided to other providers consistent with the company's requirements as an Incumbent Local Exchange Carrier or through a Bona Fide Request.

Description of proposed match (including financial and in-kind contributions): Explanation and demonstration of the applicant's financial ability to complete the project within the applicant's proposed costs: (Include budget overview and estimated costs.):

Given the short time for responding to the RFP, the company has not been able to complete its internal financial analysis to determine the total match it is willing to cover for these projects. The initial proposal is for the company to at least cover the capital costs for the fiber drop placements and the customer location electronic costs as a portion company match. Additionally, the company has not at this time, fully evaluated/quantified the benefits of the fiber and electronics being placed for the nearby RDOF projects. The company will be calculating the in-kind contribution value and can update the information when it is available.

A budget overview with a more detailed breakdown of the estimated costs, can be provided once the financial analysis has been completed for the projects.

Lumen's internal network planners/engineers have developed the cost estimates utilizing internal cost estimate software, that is used by the company to develop cost estimates for the completion of hundreds of FTTP projects the company is doing every year throughout the company.

Project consistency with the Broadband Advisory Board’s Strategy Plan:

With the deployment of XGS-PON technology in the project areas, this will maximize the opportunity for distance learning, telehealth, public safety, economic development and business opportunities. Any anchor tenants along the fiber route will also benefit by having fiber nearby.⁶

Bringing significantly improved internet access to the residents in the project areas will improve the quality of life. Residents will have the ability to access information, conduct personal and professional business, connect with friends and family members, take advantage of educational opportunities through the internet, converse with people throughout the world, compare options for major purchases, watch movies and shows when it is convenient for them, and game with friends across town or in other parts of the world. These are just a few of the advantages most people take for granted when they live in an area where broadband services are available.

Enhance Economic Development: The proposed project will clearly enhance the economic development potential of the project area. Broadband connectivity is among the most important tools for economic development in the state and the broadband connectivity gap remains one of the most significant barriers to furthering economic development in rural Idaho. Broadband is a critical element in community well-being and in many places is a minimum condition for economic competitiveness.

Another key economic benefit of broadband is it affords households the ability to effectively and productively work from home or operate a home-based business. Home-based businesses also create an opportunity to evolve into business establishments outside the home environment and to become sources of additional future employment. While some households find a way to work from home or operate home-based businesses without broadband (largely due to broadband unavailability), the percentage of households working from home or operating a home-based business is significantly higher when broadband connections are available to and are used by the household. Additionally, broadband connectivity that enables effective work from home options creates new employment opportunities for households and opens up additional labor forces for employers regardless of location. As experienced during the Covid pandemic, being able to work at home is critical to many consumers and businesses. It is very difficult to effectively work at home without adequate high-speed internet.

Rural businesses may realize greater benefit from effective broadband connectivity than their urban counterparts because online sales can remove geographic barriers to reaching customers and supply chains. In a highly connected world, prospective customers are more apt to search for many products and services online. Any business that wants to be found by new customers, locally or globally, needs to be where those customers are looking, and those customers are looking on the Internet. Internet invisibility is a formidable barrier to the success of many rural businesses.

⁶ Usually providing fiber-based services such as ethernet, to anchor tenants, will require the placement of a fiber entrance cable, which would be handled on a separate project, when fiber-based services are ordered by an anchor tenant.

Benefiting Education: The availability of high-speed Internet service will enhance every level of education from kindergarten through college. With the advances in information and communications technology, education is no longer confined to the classroom. As experienced during the Covid pandemic, at home learning has become very critical. Broadband-enabled education tools will permit remote collaboration among students on projects, videoconferences with teachers, and real time video exploration of faraway areas. The educational advantage possible with improved broadband is indispensable to students.

Improving Health Care: This project will help create shared services that reduce operating costs and provide patients with a broader spectrum of enhanced services. Improved broadband will facilitate the delivery of long-distance clinical healthcare, remote patient monitoring, and professional health-related education. Telemedicine is particularly important for patients in rural locations because of the scarcity of primary care physicians and specialists.

The delivery of telemedicine services will include clinical services such as consultations, examinations, and real-time monitoring of patients. Telemedicine will also include a number of non-clinical services such as doctor/patient communications, continuing medical education for healthcare providers, and physician training. Beyond this there are time and cost saving elements related to telemedicine which deliver critical medical services to residents of remote areas who would otherwise be unable to receive a high level of medical care. Enhanced broadband has the potential to enable applications which will utilize streaming video, multimedia, wireless communications, and semi-robotic surgical and examination tools for the delivery of healthcare services.

Public Safety and Emergency Responders: Public Safety and Emergency Responders, will benefit from this project which will enable response teams to be connected to vital information that will improve coordinated, timely reaction to accidents and disasters, and offering first responders access to the information and tools they need to make decisions and seek support.

Digital Inclusion Plan and Low-Income Assistance Programs:

The company participates in the Affordable Connectivity Program (ACP) for qualified low-income customers.

Information about this program is located at the following websites:

CenturyLink:

<https://www.centurylink.com/home/help/account/consumer-assistance-programs.html>

Quantum Fiber:

<https://www.q.com/acp>

Link to YouTube video about ACP.

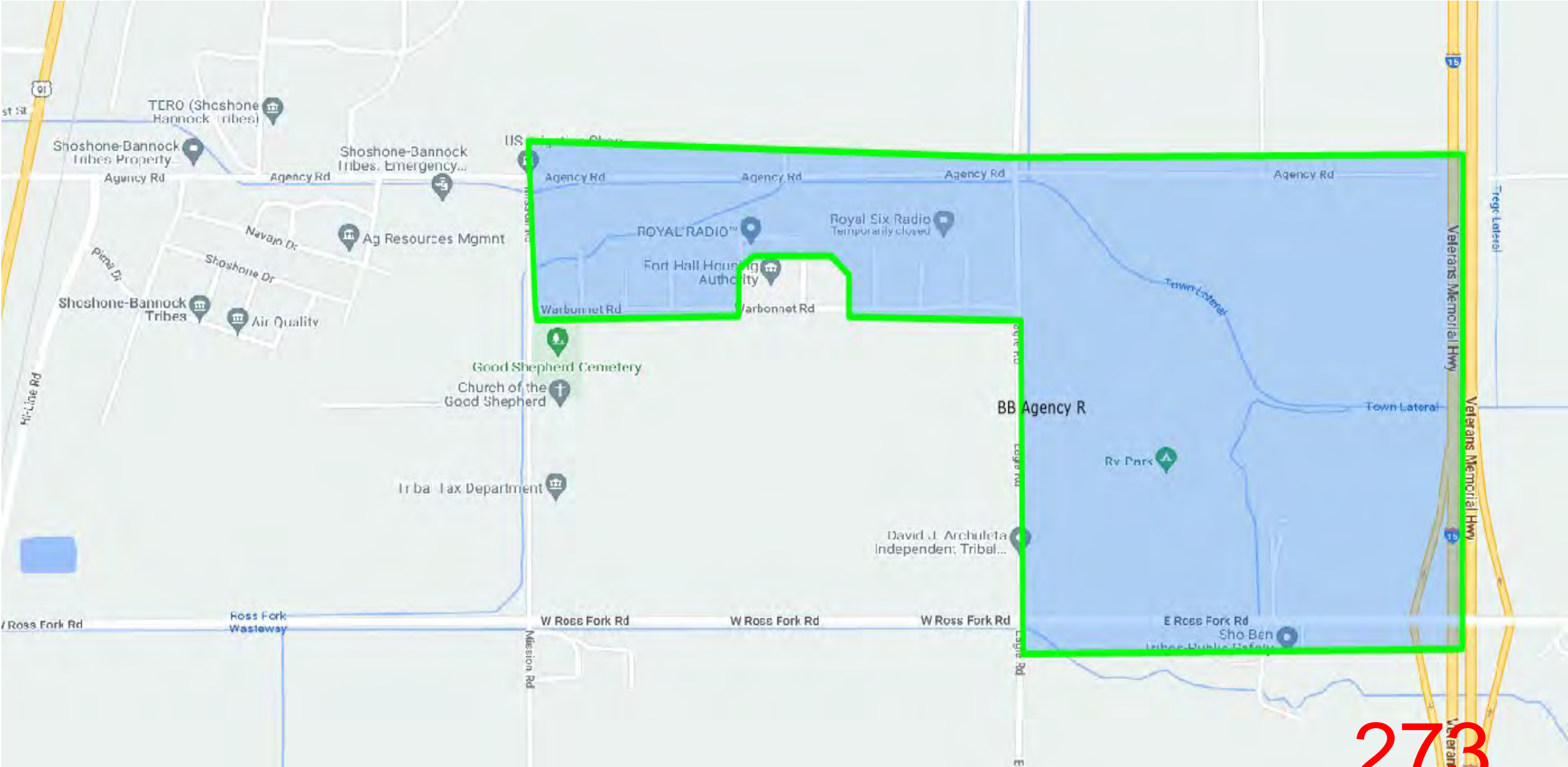
<https://www.youtube.com/watch?v=Ee0spi0Vetk>

The company also participates in the FCC Lifeline program. Information regarding this program is located at the following website:

<https://www.centurylink.com/home/help/account/consumer-assistance-programs.html>

Qualified low-income customers can subscribe to these programs and receive offsetting monthly credits for high-speed fiber internet service to cover a significant portion of the monthly charge. (ACP - \$30, Federal Lifeline - \$9.25)

Proposed BB Grant Project - Pocatello North Area



Proposed project – Pocatello North Area – RDOF Areas

CNS RDOF Auction Details (11/10/2022)
Cooperative Network Services

Request map files of this data. Get notified when we update this map.

- RDOF Auction 904 Winning Bids
- Fully Authorized through 11/10/2022
- Ready to Authorize through 11/10/2022
- RDOF Bids in Default Through 11/10/2022
- RDOF Auction 904 Winning Bids by T&L
- RDOF - Potentially Previously Served Blocks ("letters sent") 07/29/2021
- RDOF FCC AB Indiana and LTD Declined Waiver Blocks 07/29/2021
- FCC Study Area Boundaries

Fort Hall, Agency Rd, Ross Fork Rd, Hillside Rd, CenturyLink, Inc., Ross Fork Rd, Hillside Rd

RDOF Auction 904 Winners
Bidder Name: CenturyLink, Inc.

Selected features: 0

Esri Community Maps Contributors, BonnevilleGIS, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA

BUTTE COUNTY

BROADBAND PLANNING PROPOSAL

Mud Lake Telephone Cooperative Association
Valeri Steigerwald, General Manager
PO Box 235
Dubois, ID 83423
steigerwald.v@mudlake.us
208-374-5401

PROJECT DESCRIPTION

Mud Lake Telephone Cooperative Association (Mud Lake Co-op) requests planning funds in the amount of **\$30,000** to conduct a pre-engineering study, GIS mapping, a feasibility study, and other planning activities to bring high speed connection to unserved and underserved Butte County residents and businesses. **This project is expected to take 6 months to complete (ex. February 2023 - July-2023).**

MUD LAKE CO-OP

Mud Lake Telephone Cooperative Association is a not-for-profit community cooperative providing services in Clark, Jefferson, Butte and Fremont counties. Mud Lake Co-op began providing telephone services in 1952 to a number of telephone exchange areas mainly in the western side of Jefferson County and the entirety of Clark County. In the years since, Mud Lake has expanded their service areas and the types of services provided. Mud Lake Co-op provides ISP services to residential and business customers as well as schools, municipalities, and county governmental departments in their current service areas.

ADDRESSING UNSERVED AND UNDERSERVED AREAS

The entirety of Butte County is believed to be unserved or underserved, with details pending additional planning and data collection. With a population of just 2,741, Butte County exemplifies rural Idaho. The community has identified a need for better access to distance learning, telehealth, economic opportunity, and business development resources in the area. **Mud Lake anticipates improved connection speeds of no less than download 10 M; upload 1 M = \$34.90 per month; Up to download 100.0 M; upload 50.0 M = \$104.90 per month..**

Mud Lake Co-op does not currently provide middle mile, last mile or ISP services in Butte County, but does provide other cooperative-based services to Butte County residents. Based on interest from Butte County leadership, Mud Lake Co-op seeks to engage the community in the planning process to bring broadband to this rural, underserved area. The planning process in Butte County will include a pre-engineering study, mapping, a feasibility study, community education and outreach, and outreach to businesses and local government.

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CONTRACTORS

Mud Lake Co-op has existing relationships with the following contractors:

- Calix
- Syringa Networks
- VertiGIS
- Rocky Mountain Consulting Engineers

Mud Lake Co-op will engage these contractors to create a broadband plan that brings value to the residents of Butte County. The planning process will determine the most economically and logistically feasible service and ownership models, collect data, conduct surveys, and create community buy-in. Additionally, Mud Lake will contract with a grant writer to create funding proposals based on the results of the planning process in order to seek state or federal funding to complete this important project.

MATCH COMMITMENT

Mud Lake Co-op is dedicated to bringing the most cost-effective high-speed connectivity to Butte County. As a demonstration of this commitment, Mud Lake Co-op commits the following in-kind match:

- Mud Lake Co-op will provide labor for this project as match. The average hourly fully burdened comp of Engineering Technicians is \$85/hour with an anticipated total 200 hours of labor.
- Mud Lake Co-op will provide other services as necessary to bring this project to completion.

The total committed match for this project is \$17,000.

REQUESTED PLANNING BUDGET

Mud Lake Co-op requests planning funds in the amount of \$30,000 to conduct planning activities as a first step toward expanding service in Butte County and addressing unserved and underserved residents. Mud Lake Co-op will also contract with a grant writer to create proposals to fund this project based on the data collected during the planning process.

Budget Item	Cost	Funding Source
Planning Contractors <small>see contractor section for detail</small>	\$25000	Requested Planning Funds
Grant Proposal Contractor	\$5000	Requested Planning Funds
TOTAL Project Request	\$30,000	

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FINANCIAL CAPABILITY

Because our business model is a community cooperative, we are able to utilize member equity to implement projects that enhance our infrastructure for future service deployment. Examples of infrastructure projects funded through our cash reserves and that improve service delivery are: Data Center upgrades that include redundant servers in two physically separate locations; Technology upgrades for ONT's deployed at customer sites; Purchasing fiber and other essential supplies at least a year ahead of need so as to ensure timely deployment.

Mud Lake Co-op has a strong balance sheet and operating costs are covered by its operating revenue. Mud Lake Co-op has no debt obligations. A copy of Mud Lake Co-op's most recent audited financial statements is available upon request. Mud Lake Co-op is in an excellent position to plan and implement this project.

SUMMARY

As a not-for-profit co-op, Mud Lake Telephone Cooperative Association's goals are in line with the Idaho Broadband Advisory Board's strategic planning objectives - to provide connection to rural Idahoans. Broadband access in rural areas is linked to increased job and population growth, higher rates of new business formation and home values, and lower unemployment rates. This project will significantly reduce connection barriers faced by rural Idahoans through expanding and improving broadband access in unserved and underserved communities.

BUTTE COUNTY

BROADBAND PROJECT PROPOSAL

Mud Lake Telephone Cooperative Association
Valeri Steigerwald, General Manager
PO Box 235
Dubois, ID 83423
steigerwald.v@mudlake.us
208-374-5401

PROJECT DESCRIPTION

Mud Lake Telephone Cooperative Association (Mud Lake Co-op) requests project funds in the amount of **\$7,525,000** in project funds to bring high speed connection to unserved and underserved Butte County residents and businesses. **This project is expected to take 24 months to complete (ex. February 2023 - March 2025).**

MUD LAKE CO-OP

Mud Lake Telephone Cooperative Association is a not-for-profit community cooperative providing services in Clark, Jefferson, Butte and Fremont counties. Mud Lake Co-op began providing telephone services in 1952 to a number of telephone exchange areas mainly in the western side of Jefferson County and the entirety of Clark County. In the years since, Mud Lake has expanded their service areas and the types of services provided. Mud Lake Co-op provides ISP services to residential and business customers as well as schools, municipalities, and county governmental departments in their current service areas.

ADDRESSING UNSERVED AND UNDERSERVED AREAS

The entirety of Butte County is believed to be unserved or underserved, with details pending additional planning and data collection to identify the number of households that will be served and at what speeds. With a population of just 2,741, Butte County exemplifies rural Idaho. The community has identified a need for better access to distance learning, telehealth, economic opportunity, and business development resources in the area. **Mud Lake anticipates improved connectivity of No less than download 10 M; upload 1 M = \$34.90 per month; Up to download 100.0 M; upload 50.0 M = \$104.90 per month.**

Mud Lake Co-op does not currently provide middle mile, last mile or ISP services in Butte County, but does provide other cooperative-based services to Butte County residents. Based on interest from Butte County leadership, Mud Lake Co-op seeks to engage the community in the planning process to bring consistent, cost effective, redundant fiber connectivity to home service to this rural, underserved area.

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TECHNOLOGY & PROJECT OWNERSHIP

Mud Lake Co-op anticipates using a fiber to home model to bring high-speed broadband to Butte County. As Mud Lake Co-op continues planning and outreach activities, specific technology and data details will be documented.

Mud Lake Co-op will work with Butte County leaders during the continued planning process to determine an appropriate ownership model.

MATCH COMMITMENT

Mud Lake Co-op is dedicated to bringing the most cost-effective high-speed connectivity to Butte County. As a demonstration of this commitment, Mud Lake Co-op commits the following in-kind match:

- Mud Lake Co-op will provide labor for this project as match. The average hourly fully burdened comp of Engineering Technicians is \$85/hour with an anticipated total 200 hours of labor.
- Mud Lake will provide \$10,000 of operating capital to project expenses

The total committed match for this project is \$27,000.

REQUESTED PROJECT BUDGET

Mud Lake Co-op proposes an estimated project budget in the amount of **\$7,525,000** to expand service in Butte County. Project costs are estimated based on preliminary planning and data collection.

Project Budget Item	Cost	Funding Source
RF Plant	\$2,610,000	Requested Project Funds
Electronics	\$737,000	Requested Project Funds
Backhaul	\$981,000	Requested Project Funds
Fiber Plant	\$3,197,000	Requested Project Funds
TOTAL Project Request	\$7,525,000	

FINANCIAL CAPABILITY

Because our business model is a community cooperative, we are able to utilize member equity to implement projects that enhance our infrastructure for future service deployment. Examples of infrastructure projects funded through our cash reserves and that improve service delivery are: Data Center upgrades that include redundant servers in two physically separate locations; Technology upgrades for ONT's deployed at customer sites; Purchasing fiber and other essential supplies at least a year ahead of need so as to ensure timely deployment.

Mud Lake Co-op has a strong balance sheet and operating costs are covered by its operating revenue. Mud Lake Co-op has no debt obligations. A copy of Mud Lake Co-op's most recent audited financial statements is available upon request. Mud Lake Co-op is in an excellent position to plan and implement this project.

SUMMARY

As a not-for-profit co-op, Mud Lake Telephone Cooperative Association's goals are in line with the Idaho Broadband Advisory Board's strategic planning objectives - to provide connection to rural Idahoans. Broadband access in rural areas is linked to increased job and population growth, higher rates of new business formation and home values, and lower unemployment rates. This project will significantly reduce connection barriers faced by rural Idahoans through expanding and improving broadband access in unserved and underserved communities.

CLARK COUNTY WITH DUBOIS AND SPENCER BROADBAND PLANNING PROPOSAL

Mud Lake Telephone Cooperative Association
Valeri Steigerwald, General Manager
PO Box 235
Dubois, ID 83423
steigerwald.v@mudlake.us
208-374-5401

PROJECT DESCRIPTION

Mud Lake Telephone Cooperative Association (Mud Lake Co-op) requests planning funds in the amount of **\$25,000** to conduct a pre-engineering study, GIS mapping, a feasibility study, and other planning activities to bring high speed connection to unserved and underserved Clark County residents and businesses in addition to the cities of Dubois and Spencer. **This project is expected to take 6 months to complete (ex. February 2023 - July-2023).**

MUD LAKE CO-OP

Mud Lake Telephone Cooperative Association is a not-for-profit community cooperative providing services in Clark, Jefferson, Butte and Fremont counties. Mud Lake Co-op began providing telephone services in 1952 to a number of telephone exchange areas mainly in the western side of Jefferson County and the entirety of Clark County. In the years since, Mud Lake has expanded their service areas and the types of services provided. Mud Lake Co-op provides ISP services to residential and business customers as well as schools, municipalities, and county governmental departments in their current service areas.

ADDRESSING UNSERVED AND UNDERSERVED AREAS

The entirety of Clark County and the cities of Dubois and Spencer are believed to be unserved or underserved, with details pending additional planning and data collection. The communities have identified a need for better access to distance learning, telehealth, economic opportunity, and business development resources in the area. **Mud Lake anticipates improved connection speeds of no less than download 10 M; upload 1 M = \$34.90 per month; Up to download 100.0 M; upload 50.0 M = \$104.90 per month..**

Mud Lake Co-op currently provides middle mile and last mile in Clark County to a number of areas. They are also an ISP offering services in the Clark County area. The proposed project is new and based on engagement with the Clark County Commissioners, Mayors of Dubois and Spencer, business leaders and economic development leaders. The planning process will include a pre-engineering study, mapping, a feasibility study, community education, and outreach.

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CONTRACTORS

Mud Lake Co-op has existing relationships with the following contractors:

- Calix
- Syringa Networks
- VertiGIS
- Rocky Mountain Consulting Engineers

Mud Lake Co-op will engage these contractors to create a broadband plan that brings value to the residents of Clark County. The planning process will determine the most economically and logistically feasible service and ownership models, collect data, conduct surveys, and create community buy-in. Additionally, Mud Lake will contract with a grant writer to create funding proposals based on the results of the planning process in order to seek state or federal funding to complete this important project.

MATCH COMMITMENT

Mud Lake Co-op is dedicated to bringing the most cost-effective high-speed connectivity to Clark County, Dubois, and Spencer. As a demonstration of this commitment, Mud Lake Co-op commits the following in-kind match:

- Mud Lake Co-op will provide labor for this project as match. The average hourly fully burdened comp of Engineering Technicians is \$85/hour with an anticipated total 200 hours of labor.
- Mud Lake will provide \$10,000 of operating capital to project expenses.

The total committed match for this project is \$27,000.

REQUESTED PLANNING BUDGET

Mud Lake Co-op requests planning funds in the amount of \$25,000 to conduct planning activities as a first step toward expanding service in the Clark County area and addressing unserved and underserved residents. Mud Lake Co-op will also contract with a grant writer to create proposals to fund this project based on the data collected during the planning process.

Budget Item	Cost	Funding Source
Planning Contractors <small>see contractor section for detail</small>	\$20000	Requested Planning Funds
Grant Proposal Contractor	\$5000	Requested Planning Funds
TOTAL Project Request	\$25,000	

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FINANCIAL CAPABILITY

Because our business model is a community cooperative, we are able to utilize member equity to implement projects that enhance our infrastructure for future service deployment. Examples of infrastructure projects funded through our cash reserves and that improve service delivery are: Data Center upgrades that include redundant servers in two physically separate locations; Technology upgrades for ONT's deployed at customer sites; Purchasing fiber and other essential supplies at least a year ahead of need so as to ensure timely deployment.

Mud Lake Co-op has a strong balance sheet and operating costs are covered by its operating revenue. Mud Lake Co-op has no debt obligations. A copy of Mud Lake Co-op's most recent audited financial statements is available upon request. Mud Lake Co-op is in an excellent position to plan and implement this project.

SUMMARY

As a not-for-profit co-op, Mud Lake Telephone Cooperative Association's goals are in line with the Idaho Broadband Advisory Board's strategic planning objectives - to provide connection to rural Idahoans. Broadband access in rural areas is linked to increased job and population growth, higher rates of new business formation and home values, and lower unemployment rates. This project will significantly reduce connection barriers faced by rural Idahoans through expanding and improving broadband access in unserved and underserved communities.

CLARK COUNTY WITH DUBOIS AND SPENCER BROADBAND PROJECT PROPOSAL

Mud Lake Telephone Cooperative Association
Valeri Steigerwald, General Manager
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208-374-5401

PROJECT DESCRIPTION

Mud Lake Telephone Cooperative Association (Mud Lake Co-op) requests project funds in the amount of **\$4,231,500** in project funds to bring high speed connection to unserved and underserved Clark County and cities of Dubois and Spencer residents and businesses. **This project is expected to take 24 months to complete (ex. February 2023 - March 2025).**

MUD LAKE CO-OP

Mud Lake Telephone Cooperative Association is a not-for-profit community cooperative providing services in Clark, Jefferson, Butte and Fremont counties. Mud Lake Co-op began providing telephone services in 1952 to a number of telephone exchange areas mainly in the western side of Jefferson County and the entirety of Clark County. In the years since, Mud Lake has expanded their service areas and the types of services provided. Mud Lake Co-op provides ISP services to residential and business customers as well as schools, municipalities, and county governmental departments in their current service areas.

ADDRESSING UNSERVED AND UNDERSERVED AREAS

The entirety of Clark County, as well as the cities of Dubois and Spencer, are believed to be unserved or underserved, with details pending additional planning and data collection to identify the number of households that will be served and at what speeds. The communities have identified a need for better access to distance learning, telehealth, economic opportunity, and business development resources in the area. **Mud Lake anticipates improved connectivity of no less than download 10 M; upload 1 M = \$34.90 per month; Up to download 100.0 M; upload 50.0 M = \$104.90 per month.**

Mud Lake Co-op currently provides middle mile and last mile in Clark County to a number of areas. They also an ISP offering services to all residents, businesses, municipalities, schools, etc. in the Clark County area. The proposed projects are new projects within the County and are based on engagement with the Clark County Commissioners, Mayors of Dubois and Spencer, business leaders and economic development leaders.

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TECHNOLOGY & PROJECT OWNERSHIP

Mud Lake Co-op anticipates using a fiber to home model to bring high-speed broadband to the Clark County area. As Mud Lake Co-op continues planning and outreach activities, specific technology and data details will be documented.

Mud Lake Co-op anticipates a private model through the community cooperative (MLT Cooperative) while working closely with public leaders.

MATCH COMMITMENT

Mud Lake Co-op is dedicated to bringing the most cost-effective high-speed connectivity to the Clark County area. As a demonstration of this commitment, Mud Lake Co-op and partners commit the following in-kind match:

- Mud Lake Co-op will provide labor for this project as match. The average hourly fully burdened comp of Engineering Technicians is \$85/hour with an anticipated total 200 hours of labor. Mud Lake will provide \$10,000 of operating capital to project expenses.
- Each of the cities has committed to providing equipment during the construction process.

The total committed match for this project is \$27,000.

REQUESTED PROJECT BUDGET

Mud Lake Co-op proposes an estimated project budget in the amount of \$4,231,500 to expand service in the Clark County area. Project costs are estimated based on preliminary planning and data collection.

Project Budget Item	Cost	Funding Source
RF Plant	\$1,218,000	Requested Project Funds
Electronics	\$608,000	Requested Project Funds
Backhaul	\$551,500	Requested Project Funds
Fiber Plant	\$1,854,000	Requested Project Funds
TOTAL Project Request	\$4,231,500	

FINANCIAL CAPABILITY

Because Mud Lake Co-op's business model is a community cooperative, we are able to utilize member equity to implement projects that enhance our infrastructure for future service deployment. Examples of infrastructure projects funded through our cash reserves and that improve service delivery are: Data Center upgrades that include redundant servers in two physically separate locations; Technology upgrades for ONT's deployed at customer sites; Purchasing fiber and other essential supplies at least a year ahead of need so as to ensure timely deployment.

Mud Lake Co-op has a strong balance sheet and operating costs are covered by its operating revenue. Mud Lake Co-op has no debt obligations. A copy of Mud Lake Co-op's most recent audited financial statements is available upon request. Mud Lake Co-op is in an excellent position to plan and implement this project.

SUMMARY

As a not-for-profit co-op, Mud Lake Telephone Cooperative Association's goals are in line with the Idaho Broadband Advisory Board's strategic planning objectives - to provide connection to rural Idahoans. Broadband access in rural areas is linked to increased job and population growth, higher rates of new business formation and home values, and lower unemployment rates. This project will significantly reduce connection barriers faced by rural Idahoans through expanding and improving broadband access in unserved and underserved communities.

JEFFERSON COUNTY BROADBAND PLANNING PROPOSAL

Mud Lake Telephone Cooperative Association
Valeri Steigerwald, General Manager
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steigerwald.v@mudlake.us
208-374-5401

PROJECT DESCRIPTION

Mud Lake Telephone Cooperative Association (Mud Lake Co-op) requests planning funds in the amount of **\$25,000** to conduct a pre-engineering study, GIS mapping, a feasibility study, and other planning activities to bring high speed connection to unserved and underserved Jefferson County residents and businesses. **This project is expected to take 6 months to complete (ex. February 2023 - July-2023).**

MUD LAKE CO-OP

Mud Lake Telephone Cooperative Association is a not-for-profit community cooperative providing services in Clark, Jefferson, Butte and Fremont counties. Mud Lake Co-op began providing telephone services in 1952 to a number of telephone exchange areas mainly in the western side of Jefferson County and the entirety of Clark County. In the years since, Mud Lake has expanded their service areas and the types of services provided. Mud Lake Co-op provides ISP services to residential and business customers as well as schools, municipalities, and county governmental departments in their current service areas.

ADDRESSING UNSERVED AND UNDERSERVED AREAS

The entirety of Jefferson County is believed to be unserved or underserved, with details pending additional planning and data collection. The community has identified a need for better access to distance learning, telehealth, economic opportunity, and business development resources in the area. **Mud Lake anticipates improved connection speeds of no less than download 10 M; upload 1 M = \$34.90 per month; Up to download 100.0 M; upload 50.0 M = \$104.90 per month.**

Mud Lake Co-op currently provides middle mile and last mile in Jefferson County areas. They are also an ISP offering services to all residents, businesses, municipalities, schools, etc. in the west Jefferson area. The planning process in Jefferson County will include a pre-engineering study, mapping, a feasibility study, community education and outreach, and outreach to businesses and local government.

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CONTRACTORS

Mud Lake Co-op has existing relationships with the following contractors:

- Calix
- Syringa Networks
- VertiGIS
- Rocky Mountain Consulting Engineers

Mud Lake Co-op will engage these contractors to create a broadband plan that brings value to the residents of Jefferson County. The planning process will determine the most economically and logistically feasible service and ownership models, collect data, conduct surveys, and create community buy-in. Additionally, Mud Lake will contract with a grant writer to create funding proposals based on the results of the planning process in order to seek state or federal funding to complete this important project.

MATCH COMMITMENT

Mud Lake Co-op is dedicated to bringing the most cost-effective high-speed connectivity to Jefferson County. As a demonstration of this commitment, Mud Lake Co-op commits the following in-kind match:

- Mud Lake Co-op will provide labor for this project as match. The average hourly fully burdened comp of Engineering Technicians is \$85/hour with an anticipated total 200 hours of labor.
- Mud Lake Co-op will provide other services as necessary to bring this project to completion.

The total committed match for this project is \$17,000.

REQUESTED PLANNING BUDGET

Mud Lake Co-op requests planning funds in the amount of \$25,000 to conduct planning activities as a first step toward expanding service in Jefferson County and addressing unserved and underserved residents. Mud Lake Co-op will also contract with a grant writer to create proposals to fund this project based on the data collected during the planning process.

Budget Item	Cost	Funding Source
Planning Contractors <small>see contractor section for detail</small>	\$20000	Requested Planning Funds
Grant Proposal Contractor	\$5000	Requested Planning Funds
TOTAL Project Request	\$25,000	

FINANCIAL CAPABILITY

Because our business model is a community cooperative, we are able to utilize member equity to implement projects that enhance our infrastructure for future service deployment. Examples of infrastructure projects funded through our cash reserves and that improve service delivery are: Data Center upgrades that include redundant servers in two physically separate locations; Technology upgrades for ONT's deployed at customer sites; Purchasing fiber and other essential supplies at least a year ahead of need so as to ensure timely deployment.

Mud Lake Co-op has a strong balance sheet and operating costs are covered by its operating revenue. Mud Lake Co-op has no debt obligations. A copy of Mud Lake Co-op's most recent audited financial statements is available upon request. Mud Lake Co-op is in an excellent position to plan and implement this project.

SUMMARY

As a not-for-profit co-op, Mud Lake Telephone Cooperative Association's goals are in line with the Idaho Broadband Advisory Board's strategic planning objectives - to provide connection to rural Idahoans. Broadband access in rural areas is linked to increased job and population growth, higher rates of new business formation and home values, and lower unemployment rates. This project will significantly reduce connection barriers faced by rural Idahoans through expanding and improving broadband access in unserved and underserved communities.

JEFFERSON COUNTY BROADBAND PROJECT PROPOSAL

Mud Lake Telephone Cooperative Association
Valeri Steigerwald, General Manager
PO Box 235
Dubois, ID 83423
steigerwald.v@mudlake.us
208-374-5401

PROJECT DESCRIPTION

Mud Lake Telephone Cooperative Association (Mud Lake Co-op) requests project funds in the amount of **\$668,000** in project funds to bring high speed connection to unserved and underserved Jefferson County residents and businesses. **This project is expected to take 24 months to complete (ex. February 2023 - March 2025).**

MUD LAKE CO-OP

Mud Lake Telephone Cooperative Association is a not-for-profit community cooperative providing services in Clark, Jefferson, Butte and Fremont counties. Mud Lake Co-op began providing telephone services in 1952 to a number of telephone exchange areas mainly in the western side of Jefferson County and the entirety of Clark County. In the years since, Mud Lake has expanded their service areas and the types of services provided. Mud Lake Co-op provides ISP services to residential and business customers as well as schools, municipalities, and county governmental departments in their current service areas.

ADDRESSING UNSERVED AND UNDERSERVED AREAS

The entirety of Jefferson County is believed to be unserved or underserved, with details pending additional planning and data collection to identify the number of households that will be served and at what speeds. The community has identified a need for better access to distance learning, telehealth, economic opportunity, and business development resources in the area. **Mud Lake anticipates improved connectivity of No less than download 10 M; upload 1 M = \$34.90 per month; Up to download 100.0 M; upload 50.0 M = \$104.90 per month.**

Mud Lake Co-op currently provides middle mile and last mile in western Jefferson County. They are also an ISP offering services to all residents, businesses, municipalities, schools, etc. in the Jefferson areas. The proposed projects are new within the County based on engagement with Mayor of Mud Lake, business leaders, school leaders and residents. Mud Lake Co-op seeks to engage the community in the planning process to bring consistent, cost effective, **redundant** fiber connectivity to home service to this rural, underserved area.

290

TECHNOLOGY & PROJECT OWNERSHIP

Mud Lake Co-op anticipates using a fiber to home model to bring high-speed broadband to Jefferson County-western region with Mud Lake and Hamer. As Mud Lake Co-op continues planning and outreach activities, specific technology and data details will be documented.

Mud Lake Co-op anticipates a private model through the community cooperative (MLT Cooperative) while working closely with public leaders.

MATCH COMMITMENT

Mud Lake Co-op is dedicated to bringing the most cost-effective high-speed connectivity to Jefferson County. As a demonstration of this commitment, Mud Lake Co-op commits the following in-kind match:

- Mud Lake will provide \$10,000 of operating capital to project expenses.

The total committed project match for this project is \$10,000.

REQUESTED PROJECT BUDGET

Mud Lake Co-op proposes an estimated project budget in the amount of **\$668,000** to expand service in Jefferson County. Project costs are estimated based on preliminary planning and data collection.

Project Budget Item	Cost	Funding Source
RF Plant	\$43,500	Requested Project Funds
Electronics	\$146,600	Requested Project Funds
Backhaul	\$86,300	Requested Project Funds
Fiber Plant	\$391,600	Requested Project Funds
TOTAL Project Request	\$668,000	

FINANCIAL CAPABILITY

Because our business model is a community cooperative, we are able to utilize member equity to implement projects that enhance our infrastructure for future service deployment. Examples of infrastructure projects funded through our cash reserves and that improve service delivery are: Data Center upgrades that include redundant servers in two physically separate locations; Technology upgrades for ONT's deployed at customer sites; Purchasing fiber and other essential supplies at least a year ahead of need so as to ensure timely deployment.

Mud Lake Co-op has a strong balance sheet and operating costs are covered by its operating revenue. Mud Lake Co-op has no debt obligations. A copy of Mud Lake Co-op's most recent audited financial statements is available upon request. Mud Lake Co-op is in an excellent position to plan and implement this project.

SUMMARY

As a not-for-profit co-op, Mud Lake Telephone Cooperative Association's goals are in line with the Idaho Broadband Advisory Board's strategic planning objectives - to provide connection to rural Idahoans. Broadband access in rural areas is linked to increased job and population growth, higher rates of new business formation and home values, and lower unemployment rates. This project will significantly reduce connection barriers faced by rural Idahoans through expanding and improving broadband access in unserved and underserved communities.

Idaho Department of Commerce

November 28, 2022

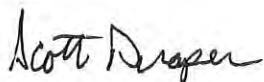
Attn: Ramón S. Hobdey-Sánchez
P.O. Box 83720
Boise, Id 83720-0093

PMT is excited with the recent news of being able to submit an RFI for funding relating to the deployment of broadband to rural residents in south central Idaho. PMT has been in business since 1916 and has provided telecommunication and emergency lifeline services in a concerted effort for more than 100 years. PMT is a locally owned Co-Op that provides for the needs of its members with state-of-the-art access to worldwide information. Providing fiber services allows for a future proof medium that will service Idaho residents for many years to come.

It is the intention of PMT to apply for opportunities to fund fiber build outs and increase the broadband deployment to areas currently served by copper facilities and meet the FCC requirements of broadband. PMT will continue to monitor the Idaho Department of Commerce website for the RFQ process to specify specific projects for funding. The integrity of the process is important to PMT as the broadband field becomes more competitive. It is with discretion that that current RFI's are contained within the Idaho Department of Commerce and not shared with broadband competitors of PMT. Because of concern, we are choosing to NOT provide details of our business plan, expansion, or current deployment of PMT fiber services within our area of service.

Once a statewide RFP is issued, PMT will follow the rules as set forth by the governing state agency and will continue through the process to secure funding. We are pleased that money will be made available to address current gaps in service and plan to participate to improve Idahoans access to broadband. It is with caution that we urge the Department of Commerce and the Broadband Advisory Board to not fund competitive broadband services in areas where adequate service already exists. It is also with caution that Idaho funds do not fund ventures by entities that lack a history of providing proven technology in a professional and cost-effective manner while delivering a future proof medium to be used for the foreseeable future.

Respectfully,



Scott Draper
Director of Engineering/Construction



1626 6th Avenue N. • Lewiston, ID 83501
(208) 743-5531
E-mail: portinfo@portoflewiston.com
Container Yard
(208) 743-3209

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Joseph Anderson

ADMINISTRATION
General Manager
Scott M. Corbitt
Operations Manager
Open
Traffic Manager
Kim Petrie

December 1, 2022

Re: Submission of Proposal for Broadband Projects & Planning Grants

Idaho Broadband Advisory Board,

The Port of Lewiston submits the following middle mile project to bring reliable, affordable, and accessible high-speed internet to unserved and underserved portions of North Central Idaho. Specifically, the Port's project will lay fiber optic cables from Moscow to Lewiston and then from Lewiston to Grangeville. This 95-mile fiber network will connect with the proposed 198-mile network from the Idaho Regional Optical Network (IRON) to create an open access, middle mile backbone from Moscow to Boise that does not currently exist.

Project Overview

The Port's project affects the counties of Latah, Lewis, Clearwater, Nez Perce, and Idaho. This region has a geographic area of 13,500 square miles of forest lands, high prairies, steep grades, and river valleys, with the lowest point of the region at 700 feet above sea level and the highest point above 8,500 feet. Approximately 51% of the region's 110,000 residents and 47,176 households live in two of its 29 communities. There are only 5.6 people per square mile.

The population levels, rough terrain, and miles between communities make it almost impossible for private industry to invest in middle mile broadband infrastructure. As stated in Governor Little's Broadband Taskforce Report (dates) North Central Idaho is considered the "black hole" for telecommunication in Idaho. This fact leaves the 29 communities and the thousands of other rural residents at extreme disadvantage compared to folks in better served parts of the State.

This project will provide 95 miles of community-to-community middle mile fiber backbone ready to be leased by Internet Service Providers (ISP's) to serve their customers. It provides an open-access connection from Moscow to Lewiston (a fiber connection that does not exist) and an open-access connection from Lewiston to Grangeville. The only fiber that exists in the Lewiston to Grangeville segment is exhausted, at or near capacity, old, and privately owned as part of a closed network that is not open to other ISP's. Together, these new segments represent the most critical infrastructure pieces of an envisioned network to address the region's telecommunication for private industry, healthcare, education, and public safety. It is

also a substantial component to connect fiber to southern Idaho, a need that has been a priority for decades.

Benefits to Healthcare

The affected region has five hospitals (four rural, critical access hospitals and one regional medical center) and 27 rural medical clinics associated with these hospitals located in nearly each of the 29 communities in the region. The pandemic clearly demonstrated the need to connect these health care providers with the medical centers in Spokane, Coeur d'Alene, and Boise. Telehealth is becoming the chosen form of care for these rural providers, especially for care associated with behavioral health and fields without many rural practitioners.

The region's telecommunication system is not reliable or dependable for virtual medical consults or transferring medical scans or other large sized data files. Providers in the region do their best to maintain connectivity, but even with their attempts at redundancy, they experience data outages regularly that prevent telehealth treatments and force medical staff to revert to outdated manual processes.

Benefits to Education

Distanced learning has become standard for many since the pandemic and the need for this service is no where greater than in North Central Idaho. 12,000 K-12 students reside in the service region for this project, which contains 14 different school districts. 12 of these districts serve rural communities ranging from 200 to 3,000 people. During the pandemic, these districts were largely prevented from offering distanced learning by their lack of adequate broadband. Most of the rural areas are served by microwave where usage reduces quality and speed as well as poor quality images or cut in service due to inclement weather condition, and where connectivity is dependent on line-of-sight microwave towers.

The region is home to two of Idaho's four-year colleges and universities with the University of Idaho and Lewis Clark State College. Both schools have moved to offer hybrid learning options and their connectivity needs have exceeded the available infrastructure. The schools combined represent over 16,000 students, 60 research and outreach offices in 42 counties, and an extreme need for the connectivity that this project will bring.

Benefits to Public Safety

The five county governments along with the Nez Perce Tribe are working under an intergovernmental agreement to address public safety interoperability communication needs. The public safety network must be able to exchange and make use of information through connected computer systems and software. The District 2 Interoperability Governance Board (DIGB2) is central to the planning of the needed middle mile network.

As the system currently exists, citizens calling 9-1-1 for emergency response do not always connect or are misrouted. Emergency calls are then relayed from one emergency communication center to another to deploy responders who need to receive real time information, transfer digitized pictures, and relay data. Going forward, the region is unable to participate in Next Generation 911 due to lack of broadband infrastructure. The Port's project provides the needed fiber infrastructure to create the needed connectivity, as well as provided critical redundancy for emergency communications networks.

Benefits to Economic Development and Business Growth

The world of business is shifting to a "new normal" with work from home, hybrid schedules, and remote work software. Our region is seeing an influx of both businesses and families from all over the West and among their first questions is "how is the broadband connectivity?". In North Central, we currently do not have a good story to tell them.

Although broadband deficiency existed prior to COVID-19, the pandemic illuminated the need. A cobbled together, fragmented middle mile (community to community) system of telecommunications that does not provide reliable, affordable, and redundant service stands in the region's way of business development, telehealth services, distance learning, and the ability to provide the public safety. Even with no regional interstate, it is widely believed that communication transportation is a bigger regional deficiency than the freight transportation system.

The lack of broadband during the COVID-19 pandemic impacted businesses including high tech and advanced manufacturers, engineering design firms, medical centers, school districts, and government. Loss of time and business, the inability to work from home, the inability to service patients, and the challenges of providing distance learning are repeatedly cited by these businesses. More concerning is the inability to grow business. No service, cut services, and poor telecommunication services are the region's inhibitors to growth. Most recently, Idaho County experienced a cut in a fiber line that resulted in hours of lost connectivity in the county seat.

Relationship to IBAB Strategic Plan

As explained in the above *Benefits* sections, this plan is fully in line with IBAB's Strategic Plan 2022-2027. The Port's plan satisfies each of the Strategic Objectives within Infrastructure & Technology, Economic Development, Educational Access, Operations & Data, and Public Safety & Communications. As explained in IBAB's 2019 report to Governor Little, North Central Idaho is the most unserved region for broadband in the State. The Port's plan will play a significant role in bringing the necessary infrastructure to this region to accomplish each of IBAB's Strategic Objectives.

Project Details

The Port of Lewiston will install 95 miles of fiber optic cable from Moscow to Lewiston to Grangeville. The installation will proceed in two phases, with the first phase proceeding from Moscow to Lewiston and the second one proceeding from Lewiston to Grangeville. The fiber optic line will be constructed within State, County, and Highway District rights of way throughout the selected route. The vast majority of the fiber optic line would be plowed directly into the roadway or shoulder of the road. Depending on conditions, portions of the fiber line will be attached to utility poles or if trenching is difficult, placed underground by drilling.

The Port's project will ultimately connect with the open access middle mile project proposed by IRON and Intermountain Infrastructure Group (IIG) to bring fiber optic connectivity from Grangeville to Star. Combined, the extended north-south network will allow for high-speed in state transference with interstate connectivity. The two north-south segments will ensure middle mile capacity of open access infrastructure supporting Idaho's commercial, governmental, non-profit, and residential telecommunications needs for the next 30 years and will finally culminate two decades of studies and failed attempts.

Cost and Funding

In the Fall of 2020, the estimated cost of the Port's project was \$5,617,933. The Port secured a U.S. Department of Commerce Economic Development Administration (EDA) grant on August 23, 2022, in the amount of \$4,494,346 to pay for design and construction of this network. As part of the grant, the Port of Lewiston will provide 20% matching funds of \$1,123,586, for a total estimated cost of \$5,617,933. EDA's management of the grant on this project has commenced.

Following two years of work doing environmental and cultural surveys along the proposed route, the Port conducted a cost update in August of 2022 that increased the estimated completion cost to \$11,878,246. The increase was due in large part on double digit inflationary increases to prices of materials and labor. The increased costs not covered under the EDA grant total \$6,260,313. The Port's request for funding from the State of Idaho would be for that amount, to complete the critical middle mile infrastructure backbone for benefit of the entire State.

The budget is a mix of engineering fees, labor expenses, and material costs. Contingency costs have been included within the draft budget.

Proposed Timeline

As stated above, the timeline for this project has already commenced following receipt of the EDA grant. The following timeline includes both dates for Round 1, the Moscow to Lewiston segment, and Round 2, the Lewiston to Grangeville segment.

10/17/22 – Release RFP for Design/Engineer
12/30/22 – Execute Design/Engineer Contract
1/1/23 – Begin Project Design
9/30/23 – Complete Project Design
10/1-31/23 – Advertise for Bids
11/1/23 – Open Bids
11/30/23 – Award Construction Contract
4/1/24 – Begin Construction (Round 1)
11/30/25 – Complete Construction (Round 1)
3/31/26 – Project Award Closeout
4/1/25 – Begin Construction (Round 2)]
11/30/26 – Complete Construction (Round 2)
5/31/27 –Project Closeout

Open-Access Network

This 95-mile open-access broadband network will allow for all the last mile service providers easy access to high-speed fiber at standard rates. The open-access network will allow for new entrants into the different communities along the route, creating a true free market opportunity for broadband. Costs will be reduced by minimizing the service monopolies. The reduced costs will benefit the schools, hospitals, and small towns along the route, providing to them the same opportunities that others in the State largely take for granted.

Conclusion

The Port of Lewiston respectfully requests the Idaho Broadband Advisory Board to assist in completing the north-south broadband network backbone for the State of Idaho. The Port requests IBAB's assistance in funding the difference between the overall cost estimate for its project and the previously awarded amount for the EDA grant. This total is just shy of \$7 million dollars. This network will go far in correcting the huge broadband deficiency in North Central Idaho, and open opportunities for the region's businesses, schools, hospitals, public institutions, and residents. The Port of Lewiston appreciates the opportunity to present this proposal to the Board.

Sincerely,



Scott Corbitt

General Manager
Port of Lewiston

scott@portoflewiston.com

1(208)743-5531

Idaho's Seaport

November 28, 2022

Idaho Department of Commerce
Idaho Broadband Advisory Board

RE: Request for Proposals for Broadband Projects/Planning Grant

To Whom It May Concern:

RTI understands the importance for the Advisory Board to receive relevant RFI to grant request proposals. RTI thanks the Board for the opportunity to discuss RTI's company background, build positioning and ability to bring *state-of-the-art* connectivity using fiber, wireless, etc...to the unserved and underserved in our exchange areas and also the need, due to marketplace competition and potential overbuild, for confidentiality of certain plan details.

Company History

Rural Telephone Company (Local Exchange Carrier) was established in 1979. Our crews completed most of the buried plant construction for the Company. The Company quickly expanded service into 3 other states. Over time and due to market demand for telecommunication buried plant construction, Rural Telephone Company is uniquely advantaged for proven broadband builds.

PRINCIPALS

James R. Martell, President
Michael J. Martell, Vice President
Mark R. Martell, Administration
Matthew J. Martell, Construction Manager
Chad Grigg, Engineer

EXPERIENCE

59 years telecommunications construction & management
39 years telecommunication construction & management
31 years telecommunications management - 28 yrs Broadband buildout
28 years construction management
30 years telecom engineering – 28 yrs in Broadband buildout

187+ years of telecommunication construction experience!

STATEMENT OF QUALIFICATIONS

Projects completed have ranged from ≤ 2 miles to 100 miles. We have successfully installed telecommunication buried plant in rural, rocky and mountainous terrain. Our inventory includes state-of-the-art equipment and a complete range of heavy machinery and transportation necessary to complete a large size project. We also have the diversity and attention to care and detail to handle small jobs as well. Our range of skills include: blowing and testing fiber, directional boring, plowing, trenching, manholes and we have assumed the responsibility for permitting and Right-of-Way issues as necessary.

Project Overview

RTI endeavors to upgrade to 100% (FTTH) Fiber-to-the-Home for all customers in each of the RTI ILEC Exchange areas in Idaho and non-LEC area in Elmore County and Camas County.

All grant funds awarded/received from Idaho Department of Commerce would be utilized toward attaining 100% (FTTH) Fiber to the Home for RTI exchange areas. RTI Network will be built with the future in mind, serving all unserved or underserved customers with quality broadband service to meet the needs of today and the foreseeable future.

Need for Confidentiality

Due to potential overbuild by competition where adequate service already exists, specific details of construction buildout proposal must remain confidential. Competition could net unfair advantage by utilizing certain proprietary plan build in areas which overlap. Any funds awarded to competition would be misspent grant dollars and defeat the efficiency and altruistic purpose of the Idaho Broadband Advisory Board grant(s).

Rural Telephone Company thanks the Idaho Commerce Broadband Advisory Board for this grant opportunity. Please be assured that our goals are the same and Rural Telephone has a proven track record for spending grant dollars for the absolute best value to the communities we serve.

Sincerely,



Mark R. Martell

GM/Administrative Manager

Planning Proposal– Shoshone County

A. Applicant:

Colleen Rosson
Shoshone County Grants Administrator
700 Bank St. Ste 120, Wallace ID 83873
crosson@co.shoshone.id.us
O - 208-556-0521

B. Description of the extent to which the planning funds will be used to facilitate deployment of high-speed broadband networks to areas that are currently either unserved, underserved, or both:

Shoshone County is seeking funding for a comprehensive broadband planning and implementation strategy.

To address the unserved and underserved locations in Shoshone County, we will engage a consultant to provide the following:

- Review existing provider coverage
- Continue speed testing to confirm provider and local crowdsourced data
- Support the challenge of FCC bulk fabric data if determined needed
- Determine technology choices and design options
- Evaluate cost and coverage of each option
- Design infrastructure plan and show user impact
- Assess ownership and management options of assets
- Provide contract negotiations
- Establish project plan milestones and timelines
- Grant writing as identified by above items
- Engage with local organizations and volunteers to facilitate outreach identifying education and training needs for residents and business.
- Create/ enhance outreach plan and timeline to educate users, close the digital divide, and foster inclusion.
- Identify “affordability” relevant to our residents and businesses and set targets

Shoshone County’s goal is to expand coverage to the most locations at the highest reasonable speeds throughout the county.

C. Description or name of contractors or third-party vendors to be used to facilitate a planning study or strategic plan:

The last two years we have searched for planning and design contractors who meet our specific needs and budget. After a recommendation from Imagine Idaho and reviewing their information we have selected Solarity for this project.

Solarity is a professional strategic planning, project management and process analysis company founded in 2003 in Kentucky. A division of HealthTech Solutions, Solarity has worked alongside federal partners, understand the funding process, and have experience with broadband planning at all levels.

Solarity brings relevant certifications and hands on approach to results. They work with communities to identify issues and goals to develop a tailored, measurable action plan for success.

Solarity provides professional trainers, certified, experienced project, and program managers, and business consultants to assist government agencies, educational institutions, and businesses with specific efforts to enable them to focus their resources on what they do best.

D. Funding request: **\$20,000**

E. Planning proposal costs (include budget overview with estimated costs):

Budget overview:

Shoshone County seeks \$20,000 to contract with an agency to complete planning activities and to contract with a grant writer to design grant application documents based on planning activities. Shoshone county will provide a \$2,500 match for this project in the form of staff hours.

Item	Estimated Cost
Grant Writing	\$2,500
Plan Design and Project Management	\$20,000
<i>Subtotal project cost</i>	<i>\$22,500</i>
County In-Kind match -Staff hours	-\$2,500
Total	\$20,000

F. Project term in which the planning grant would start and be completed:

Planning would begin immediately upon award of grant award and is anticipated to take approximately four months. January 2023 – April 2023.

Action	Timeframe	Participants
Confirm existing providers, coverage, and existing assets	3 weeks	GEO/Solarity/County

Continue speed tests to confirm actual user experience and challenge FCC bulk fabric if needed	Parallel	GEO/Solarity/County
Determine technology choices and design options	3 weeks	GEO/Solarity/County
Evaluate cost and coverage of each option	1 week	GEO/Solarity/County
Design infrastructure plan and show user impact	2 weeks	GEO/Solarity/County
Assess ownership and management options of assets	3 weeks	Solarity/County
Determine affordability targets	Parallel	Solarity/County
Determine education and training needs	Parallel	Solarity/County
RFP to providers	2 weeks	Solarity/County
Review provider proposals	2 weeks	Solarity/County
Set timelines and milestones	2 weeks	Solarity/County

G. Explanation and demonstration of the applicant’s financial ability to complete the planning process within the applicant’s proposed budget:

As a unit of the government of the State of Idaho, Shoshone County has been the recipient of many state and federal grants and has a record of successfully moving projects from the initiation stages to completion. The county has the staff and resources to ensure completion of the planning process within the proposed budget.

H. Description of any proposed match for the planning grant. Match includes financial and in-kind contributions toward the project. In-kind contributions should be converted into monetary values for calculation.

Shoshone County and its partners are invested in this project and are prepared to invest in its success.

A portion of Shoshone County's grant administrator's time will be dedicated to development and implementation of this project (\$35/hour).

The Director of the Silver Valley Economic Development Corporation and the Broadband Action Team will contribute staff hours to the preparation and implementation of the planning grant scope of work (average \$20/hour).

These contributions are expected to reach a total match contribution of \$2,500 for the planning portion of this project.

Additionally, a grant from Imagine Idaho in the amount of \$13,700 provides complementary funding to conduct Shoshone County's speed testing and rapid design study.

I. Description of whether (and if so, how) this planning grant would help address broadband infrastructure in Idaho in conjunction with the Idaho Broadband Advisory Board’s Strategic Plan or federal fund guidelines. Explain how the proposed planning grant would address priorities outlined in the Board’s Idaho Broadband Strategic Plan.

This includes addressing distance learning, telehealth, public safety, economic development, and business opportunities, promotes dig once policies:

This planning grant will address broadband infrastructure in Idaho by collecting data, building community engagement, and designing a strategy to close the digital divide in the most rural and underserved parts of our state. Shoshone County's planning efforts will result in high quality data and modeling, allowing the county to seek additional broadband infrastructure funding opportunities. Data will also be necessary as the County works to attract service providers and additional partners.

With a comprehensive strategy, we will leverage existing infrastructure to create hybrid last mile solutions to the geographically difficult communities, bringing not only 25/5 (scalable to 100/20) speeds but enhancing the capabilities of our public safety communications. The strategy developed through this planning grant will provide avenues to close the 23-mile conduit gap along I-90 completing a fiber loop, currently on hold by Syringa. This project is critical to fiber redundancy for not only our communities, but the state of Idaho and surrounding states. This middle mile project will mitigate the precarious redundancy position we are in with only one fiber provider.

Shoshone County is committed to open competition which fosters affordable pricing and brings fiber to more locations. The county looks forward to the opportunity to collaborate with other rural communities to share best practices and working solutions as counties across the state plan to expand broadband for their citizens.

In addition to potential cost savings, residents in unserved or underserved areas will have the opportunity participate in telemedicine, online learning, commerce, remote work, and will have the connections to support networks and mental health services that are currently unavailable due to nominal or non-existing connectivity.

These basic services are no longer a luxury in this connected world, but a necessity. Connectivity is critical to the health and economic sustainability of our residents, businesses, government, and community as a whole. Our geography dictates that we will never be a large population center, which closes our doors for ROI as seen by investors and internet service providers. With the proper tools, Shoshone County can compete, in a connected, global economy while maintaining our entrepreneurial and independent culture. A professional, quality plan will provide the data and strategy necessary for Shoshone County to move forward with our goal of bringing broadband to more Idahoans.

Project Proposal– Shoshone County

A. Applicant:

Colleen Rosson
Shoshone County Grants Administrator
700 Bank St. Ste 120, Wallace ID 83873
crosson@co.shoshone.id.us
O - 208-556-0521

B. Description of the extent to which the project will facilitate deployment of high-speed broadband networks to areas that are currently either unserved, underserved, or both:

Shoshone County is seeking funding for a hybrid infrastructure to bring reliable speeds of a minimum 25/5 Mbps (scalable to 100/20 Mbps). Our recent speed testing initiative found 98% were less than 100/20 Mbps and 80.7% were less than 25/3 Mbps. Of the tests ran 20% were satellite not terrestrial connections. This represents a significant opportunity. The proposed fiber/fixed wireless project will connect 4,552 households to fiber and 975 to fixed wireless.

C. Description of type(s) of technology to be used (i.e., fiber, fixed wireless, cable etc.):

The choice for Shoshone is to go with a hybrid solution. There is fiber presence along portions of Interstate 90 which will be utilized to add 116 miles of fiber and ten 80-foot towers. This design provides for 83% fiber coverage, 4% fixed wireless coverage 13% uncovered through this project.

The ultimate goal is 100% fiber, as a fiber construction is completed for a specific area, the fixed wireless hardware can be repurposed to cover additional areas to expand the revenue stream to expand the network.

D. Number of unserved or underserved locations and/or households that will be served by the project and at which speeds the locations will be connected (i.e., 25/3 Mbps, 100/20 Mbps, or 100/100 Mbps)

The proposed project will connect 5,527 households, 4,552 to fiber and 975 to fixed wireless. All will connect to a minimum 25/5 Mbps and provide for 100/20 Mbps or higher speeds as requested.

E. Project term for the proposal (anticipated time frame for project from start to finish in months):

The full project is anticipated to take 65 months. Beginning February 2023 through July 2028

F. Funding Request: \$21,000,000.00

G. Anticipated total project costs and financing sources:

Shoshone County seeks \$21,000,000 to install fiber and fixed wireless to the home. We anticipate funding from the State of Idaho, match from service providers, in-kind and cash match from the county.

H. Project Ownership (i.e., private, public, public/private partnership, other):

Public/private partnership.

I. Proposed project costs (include budget overview and estimated costs):

Area	Municipality	State	Installed capital costs	Cost/unit	Percent
Name.....	ID Shoshone	ID	Aerial fiber (\$/mile).....	92,500	89%
Total population.....		12,765	Trenched fiber (\$/mile).....	\$ 110,000.00	6%
Total households.....		5,527	bored fiber (\$/mile).....	\$ 140,000.00	5%
Total square miles.....		2,641	80 ft tower (\$/tower).....	15,000	100%
Green system design.....		B2	Fiber connection(\$/user).....	1,250	
Cost/household.....		\$3,752	NAP per each.....	3,000	
Cost/Covered household.....		\$4,335	FDH per each.....	60,000	
Coverage %.....		86.6%	fixed CPE.....	250	
Fully Burdened Cost.....		\$20,736,900	wireless CPE.....	250	4
			base backhaul	0	\$12,500.00
1.5% Administration costs		\$311,054			
Total proposed project cost		\$21,047,954			
In-kind staff match		- \$ 47,954			
Adjusted proposed project cost		\$21,000,000			

J. Explanation and demonstration of the applicant’s financial ability to complete the project within the applicant’s proposed budget:

As a unit of the government of the State of Idaho, Shoshone County has been the recipient of many state and federal grants and has a record of successfully moving projects from the initiation stages to completion. The county has the staff and resources to ensure completion of the planning process within the proposed budget.

K. Description of any proposed match. Match includes financial and in-kind contributions toward the project. In-kind contributions should be converted into monetary values for calculation:

A portion of Shoshone County's grant administrator's time will be dedicated to development and implementation of this project (\$35/hour).

The Director of the Silver Valley Economic Development Corporation and the Broadband Action Team will contribute staff hours to the preparation and implementation of the project grant scope of work (average \$20/hour).

These contributions are expected to reach a total match contribution of \$47,954 of this project.

- L. Description of whether (and if so, how) this project works in conjunction with the Idaho Broadband Advisory Board's Strategic Plan. This includes addressing distance learning, telehealth, public safety, economic development, business opportunities, and/or promotes dig once policies:

We will leverage existing infrastructure to create hybrid last mile solutions to the geographically difficult communities, bringing not only 25/5 (scalable to 100/20) speeds but enhancing the capabilities of our public safety communications.

This funding will provide avenues for an additional fiber provider to invest in our community, mitigating the precarious redundancy position we are in with only one fiber provider.

Shoshone County is committed to open competition which fosters affordable pricing and brings fiber to more locations. The county looks forward to the opportunity to collaborate with other rural communities to share best practices and working solutions as counties across the state expand broadband for their citizens.

In addition to potential cost savings, residents in unserved or underserved areas will have the opportunity participate in telemedicine, online learning, commerce, remote work, and will have the connections to support networks and mental health services that are currently unavailable due to nominal or non-existing connectivity.

These basic services are no longer a luxury in this connected world, but a necessity. Connectivity is critical to the health and economic sustainability of our residents, businesses, government, and community as a whole. Our geography dictates that we will never be a large population center, which closes our doors for ROI as seen by investors and internet service providers. With the proper tools, Shoshone County can compete, in a connected, global economy while maintaining our entrepreneurial and independent culture. A well thought out, future proof network will provide the infrastructure necessary for Shoshone County to move forward with our goal of bringing high speed broadband to more Idahoans.



November 30, 2022

VIA EMAIL: broadband@commerce.idaho.gov

Idaho Department of Commerce
Attn: Ramón S. Hobdey-Sánchez
P.O. Box 83720
Boise, ID 83720-0093

Re: Idaho Broadband Advisory Board Request for Broadband Project and Planning Proposals

To Whom It May Concern:

Silver Star Communications (a dba of both Columbine Telephone Company, Inc. and Millennium Networks, LLC, "Silver Star") submits the following in response to the Idaho Broadband Advisory Board ("IBAB") Request for Proposals issued October 19, 2022.

Silver Star is considering several possible projects for development and implementation under the BEAD program. The proposed projects cover areas in Bonneville County, Blaine County, Butte County, Camas County, Caribou County, Jefferson County and Madison County, Idaho. These projects will be designed to facilitate the deployment of high-speed broadband networks to areas currently unserved or underserved, through the construction of fiber optic facilities installed to the premise. Once the facilities are installed and services are activated, end user consumers will have access to up to 10 Gbps broadband service.

Silver Star anticipates that any awarded project will be completed well within the timeline required for ARPA/BEAD funding. Silver Star has participated in and completed several grant award projects, the majority of which have been completed earlier than the committed due date. Silver Star has extensive experience designing, operating and maintaining fiber infrastructure projects. Throughout the years, it has worked with various government entities to improve broadband access in the communities.

- a. In 2021 Silver Star was successful in its bid to the City of Rexburg to design and build an open access fiber network to connect municipal owned assets. The design also ensured for future scalability to support a city-wide fiber network for both residential and commercial customers
- b. Silver Star has worked extensively with the States of Idaho and Wyoming to connect area schools and district buildings with fiber infrastructure. In 2022, the Madison

County School District #321 awarded Silver Star a project to build high speed fiber infrastructure to two elementary schools.

- c. In 2020, Silver Star's Idaho Broadband grant project built out an extension of its network through the City of Driggs which comprised of new Central Office equipment and a next generation PON (passive optical network) service as the primary delivery method to allow up to 10Gig service levels. These services are carried over ribbon fiber placed in the ground to each premise. The end user experience is delivered with an industry leading gateway router that is WiFi6 capable, with built in network security and parental controls. This project covered an approximate four-square mile area of land, constructing 79,680 feet of fiber optic main cable and 114,300 feet of fiber optic to the premise connections.
- d. In October 2022, Silver Star was awarded a USDA-RD Reconnect 3 Grant award that will connect over 200 locations in eastern Madison County, Idaho and provide access to up to 10 Gbps speeds. This network extension will place approximately 21 total route miles of main cable and 19 total route miles of end user connections.

Given the scope and reach of the projects Silver Star has under consideration, it is difficult to place an exact figure on the cost; however, considering past projects and the current economic climate, Silver Star estimates an amount to construct of up to \$50,000,000. At least 25% of that amount (\$12,500,000) will consist of cash contributed by Silver Star or other governmental or third party private parties or in kind match (in keeping with the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, 2 CFR Part 200).

As noted above, total project costs are estimated at \$50,000,000. Included in this amount are system engineering and planning, construction, materials, network and end user electronic equipment costs, construction oversight, permitting, legal and administrative costs. In Silver Star's experience, construction and materials cost are the majority of a project's budget and can make up nearly 90%. Silver Star has served the communities of Eastern Idaho for over 30 years. These include the communities of Idaho Falls, Rexburg, Rigby, Ammon, Swan Valley, Victor, Tetonia and Driggs. Silver Star provides basic and advanced communications services, via its fiber optic broadband facilities. Silver Star's role in these communities ranges from that of a critical services provider, investing millions of dollars in broadband infrastructure, to that of a community support organization, donating hundreds of hours each year toward community service projects. Silver Star's team of expert operations, engineering and customer service staff are dedicated professionals who take seriously their role in meeting customer needs and exceeding their expectations through collaborative and focused solutions.

Silver Star remains financially sound by exercising sound business principles and acting as a good corporate citizen, and its 120+ employees provide the necessary management and

support resources that ensure its success - from construction to network operations and from customer support to administrative/management functions.

Following project(s) completion, system ownership will vest in Silver Star. Silver Star intends to work with municipalities within our proposed project areas to provide affordable access at competitive rates. Silver Star understands that an open access network is important to some municipalities in order to accomplish these goals and would support offering access to other service providers for customer choice.

Silver Star will build, operate and manage a new fiber optic to the premise (FTTP) network and intends on leveraging existing middle mile facilities. The FTTP network will allow for high speed, low latency services that are critical to supporting work from home, Telehealth, and online educational opportunities along with any other video and data services. The network will be designed with the future in mind and be able to deliver 10 Gig services so that customer demands can be met now and far into the future.

Direct and indirect beneficiaries include:

- Unserved and underserved residential and business locations
- Public school facilities (online distance learning, tele-education)
- Critical community facilities (emergency, state/local/federal government); telehealth providers (hospitals, physicians, community mental health centers and substance abuse clinics)
- Federal, State and local emergency response teams and related initiatives
- Existing and start-up businesses looking for network reliability, seeking to expand to other communities or connect offices using less costly, shorter transport and circuit routes
- Telecommuters, those working from home by choice (e.g., self employed) or as a requirement of their employer, and small business owners
- Educators, students, emergency personnel, out-of-state visitors

The proposed (in preliminary planning) projects work directly in concert with the IBAB Strategic Plan by making available and providing access to reliable, high speed broadband access at up to 100 Mbps speeds to historically unserved and underserved populations throughout the State of Idaho.

Silver Star operates in a highly competitive environment and we decline to publicize in detail any expansion plans to our competition who most certainly will take advantage of the information. Further, we caution the Department and the IBAB not to fund competitive broadband services in areas where adequate service already exists, particularly areas where municipalities are seeking funding to overbuild where private entities already offer high speed

services. Further, the Department should take great care not to fund projects proposed by entities that lack a history of providing services with proven technology or that cannot demonstrate a financial and operational plan to support and maintain the network once the one-time grant dollars have been spent.

Thank you for the opportunity to respond; we look forward to participating in this exciting and worthy opportunity to connect under and unserved Idaho communities.

Sincerely,

Michelle Motzkus
Legal & Regulatory Administrator

Acknowledgment: Silver Star acknowledges that the submission of its proposal in no way guarantees funding in the future. Idaho Broadband Advisory Board projects will be awarded pursuant to future grant guidelines and application criteria for Capital Project Funds, BEAD Funds, and/or State funding, and in correlation with the statewide broadband plan.



PROJECT PROPOSAL

Connecting Caldwell, Notus, Parma and NW Canyon County to Middle Mile Infrastructure

a. Applicant's contact information:

- i. Name: Natasha Tattersall
- ii. Title/Position: General Manager Western Idaho/Nevada
- iii. Mailing address: 12301 W. Explorer Dr., Boise, ID 83713
- iv. Email address: ntattersall@syringanetworks.net
- v. Phone number: (208) 229-6108

b. Broadband project proposal outline and scope should include the following:

- i. Description of the extent to which the project will facilitate deployment of high-speed broadband networks to areas that are currently either unserved, underserved, or both.

Syringa Networks is proposing a 21-mile fiber backbone middle mile route in rural Southwestern Idaho. The route will connect Notus, Parma and rural Northwest Canyon County to our existing network, while interconnecting with Farmer's Mutual Telephone Company. The route achieves a primary Idaho Broadband Advisory Board objective which is to connect unserved and underserved areas as depicted for the service area on the NTIA's Indicators of Need website and confirmed by the most recent FCC (Federal Communications Commission) mapping data. In addition, the project substantially benefits and primarily serves areas that have household income at or below 200% of federal poverty guidelines.

The need to connect the above communities provides strong justification for the project to be built, while achieving the objectives of the Idaho Broadband Advisory Board. We have a secured community and business support for the project. Additionally, this project benefits national security in what local communities characterize as an "internet desert." The construction of this fiber path and its connectivity back to Syringa's existing network provides the means to connect critical national infrastructure such as the power grid, public safety infrastructure and communications towers to a modern high-capacity and resilient fiber network.

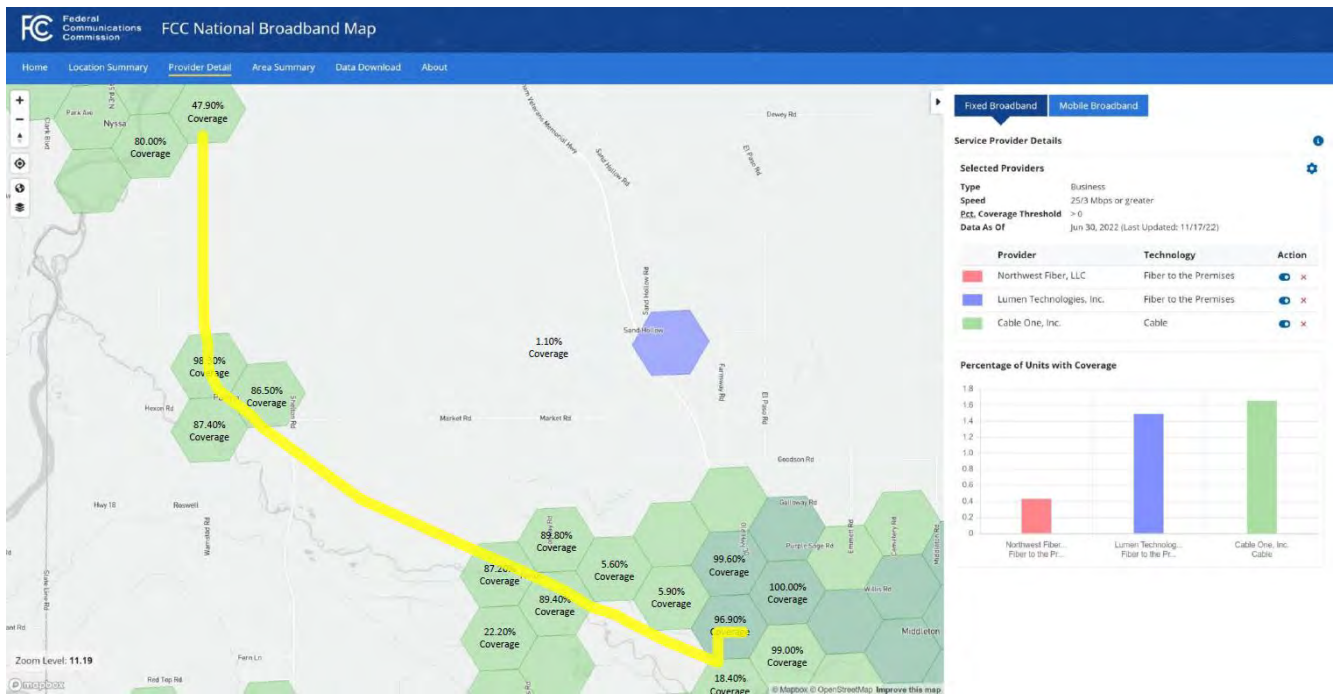
- ii. Description of type(s) of technology to be used (i.e., fiber, fixed wireless, cable etc.).

The proposed fiber cable route will be built entirely underground to provide climate resilience for the fiber infrastructure against forecasted wildfires, high winds, and severe winter weather for the system's life. The route will connect to existing Syringa Networks node (point of presence) in Caldwell and will connect with Farmer's Mutual Telephone Company near the intersection of Hwy 95 and Hwy 26 in Northwest Canyon County, creating the opportunity for a 100Gbps symmetrical, low latency ringed network for connectivity protection. The route is intentionally designed to follow the state highway roads and will provide fiber accessibility through the heart of main street corridors where most anchor institutions and key businesses reside. There are more than 33 anchor institutions (educational, government and healthcare related) and 88 businesses within 1000 feet of the planned route.

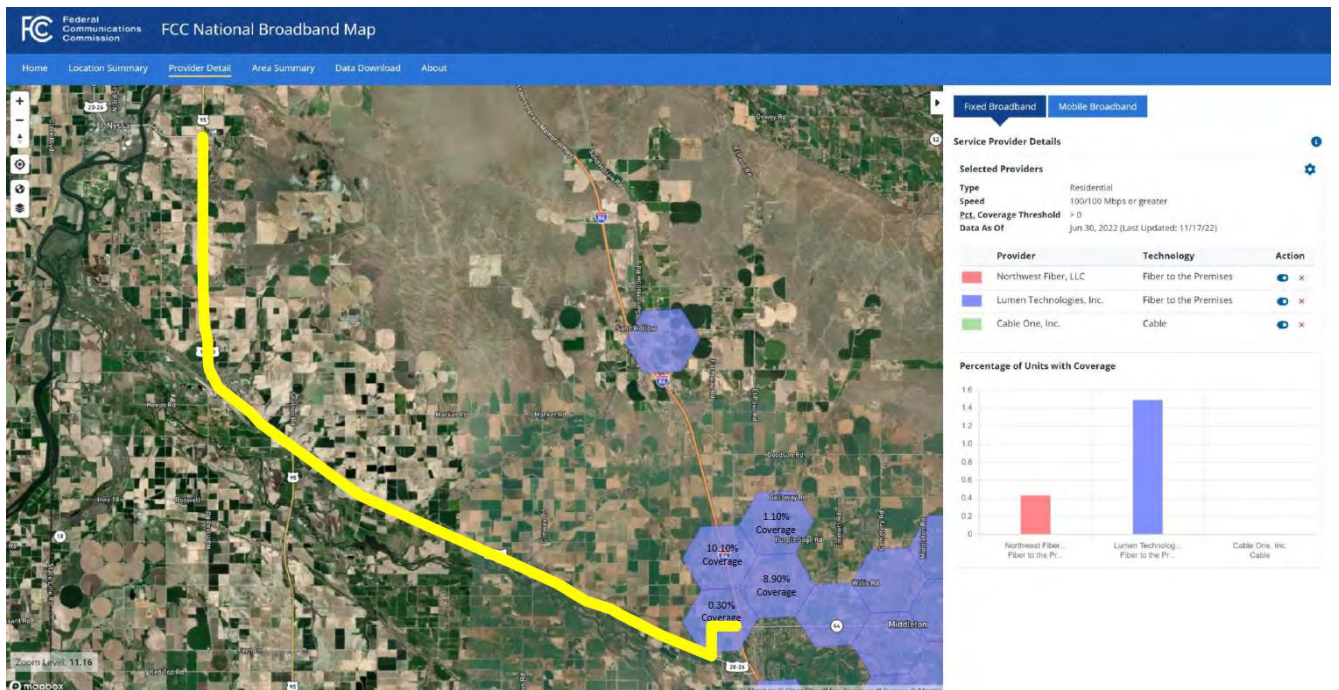
The proposed fiber route will provide a material increase in available bandwidth for end-users. Most of the area we are proposing to build our route has little to no fiber-based infrastructure today. These communities are currently paying much higher prices for substandard internet speeds on legacy facilities like copper and a patchwork of overlapping cable service in a few areas. This project will be the first purpose built, dedicated fiber middle mile route to interconnect the communities on the route. Once complete, Syringa Networks intends to help facilitate the build out of last mile laterals for services to homes and businesses. This will be accomplished by Syringa Networks extending its own fiber facilities and by offering (4) interconnection points on a carrier-neutral basis to Internet Service Providers to make last mile connections to the network.

- iii. Number of unserved or underserved locations and/or households that will be served by the project and at which speeds the locations will be connected (i.e., 25/3 Mbps, 100/20 Mbps, or 100/100 Mbps).

Displayed below is map of our planned route overlaid on the FCC National Broadband Map depicting current available providers in the area for 25/3Mbps or greater service. As you can see, more than 70% of the area we are proposing to build does not have access to even as little as 25/3Mbps from a cable or fiber provider.



Displayed below is map of our planned route overlaid on the FCC National Broadband Map depicting current available providers in the area for the ARPA specified 100/100 Mbps or greater service. As you can see, close to 100% of the area we are proposing to build does not have access to the ARPA required speed 100/100 Mbps or greater service from a cable or fiber provider.



In addition, the NTIA (National Telecommunications and Information Administration) Broadband Indicators of Need website represents the following data showing the need for greater availability and faster internet speeds in the unserved and underserved areas of our proposed route.

- Notus Census Block: 22.00% households without internet access,
 - Ookla speed test 13.06/2.77
- Parma/ Northwest Canyon County Census Block: 19.30% households without internet access,
 - Ookla speed test 9.65/2.48 (Mbps)

iv. Project term for the proposal (anticipated timeframe for project from start to finish in months).

The project will be built along existing highway right of way with limited environmental impact making permitting for the project straight forward and near immediately shovel-ready. We intend to leverage our strong project management skills, years of highly relevant construction management experience, and deep insight into the markets we serve to have the proposed middle mile route operational within a 2-year timeframe.

v. Funding Request.

Syringa Networks estimates a grant funding request in the amount \$1,260,000 which is 60% of the \$2,100,000 estimated total project cost.

vi. Anticipated total project costs and financing sources.

The estimate total project cost is \$2,100,000, of which \$1,260,000 will be supported by an Idaho Broadband Advisory Board grant and the remaining \$840,000 will be self-funded by Syringa Networks.

vii. Project Ownership (i.e., private, public, public/private partnership, other).

The proposed project will be owned by Syringa Networks, LLC.

About Syringa Networks: Syringa Networks was formed by 12 rural Idaho telephone companies who had the vision to provide an alternative internet solution to its unserved and underserved communities. From the executive leadership team to our directors and managers responsible for day-to-day operations, Syringa Networks has been successfully designing, project managing and operating middle mile fiber routes and network connections for over 20 years. Presently our owned and operated network traverses 3,377 fiber miles serving 440 towers and 1,350 buildings throughout Idaho and Utah with over 60 active fiber expansion projects underway. Syringa Networks has implemented various networking technologies including Ethernet, DWDM (Dense Wavelength Division Multiplexing), and microwave, along with augmenting a SoftSwitch to include Class 5 functionality. Syringa Networks has an internet peering network with connectivity in (13) major inter-exchanges across the United States with the ability to serve more than 1Tbps of internet connectivity. We provide proactive network monitoring and trouble-ticket response from our local Network Operations Center 24/7/365. With a network presence in 10 countries, our carrier-grade network was built to support the demanding needs of wholesalers, cellular operators, WISPs, local carriers, and public and private entities that require high availability services to support their end users and business operations.

- viii. Proposed project costs (include budget overview and estimated costs).

Engineering: \$80,000

Permitting and Traffic Control: \$80,000

Construction Materials & Labor, Splicing: \$1,515,000

Cabinets, Site Preparation and Electronics: \$250,000

Syringa Networks "In Kind" Administration, Inspection and Project Management: \$175,000

Total Project Cost \$2,100,000

- ix. Explanation and demonstration of the applicant's financial ability to complete the project within the applicant's proposed budget.

Syringa Networks is a privately-owned, debt-free, fiscally responsible company. We evaluate all strategic capital expenditure projects under strict ROI (return-on-investment) metrics. Our CEO leadership and executive team management ensure all capital expenditure budgeting and project scope decisions are made in the best interest of Syringa Networks and its Member Owners. Syringa's past sound decisions are reflected in our financial statements and we will continue to operate under the same guidelines. Syringa Networks has in the past, present, and will continue in the future to adopt fiscally sustainable middle mile strategies. We manage our contractors to exceptionally high-quality standards and our construction management team ensures that our contractors remain on time and on budget.

- x. Description of any proposed match. Match includes financial and in-kind contributions toward the project. In-kind contributions should be converted into monetary values for calculation.

Syringa Networks is projecting to contribute 40% of the estimated project cost in the amount of \$840,000 including "in kind" support for the project. The total estimated cost for this project is \$2,100,000.

- xi. Description of whether (and if so, how) this project works in conjunction with the Idaho Broadband Advisory Board's Strategic Plan. This includes addressing distance learning, telehealth, public safety, economic development, business opportunities, and/or promotes dig once policies.

There is an absence of fiber-based technology serving the communities we intend to reach with this project. Syringa Networks makes a binding commitment to provide open-access opportunity along this middle mile infrastructure to last mile networks that provide, or plan to provide, broadband services to distance learning, telehealth, public safety, and other businesses and household users. Indicating a broad base of support for our project, and the need for improved access to telehealth, remote work, and distance learning opportunities in these unserved/underserved areas, we have secured letters of support from the Idaho Libraries Commission and the State Board of Education along with support from numerous cities and schools along the proposed route. It is our commitment to provide an opportunity for connection to all anchor institutions such as city and county facilities, as well as libraries and schools within 1000 feet of the planned route. Such anchor institutions account for roughly 27% of the businesses within our build area. Additionally, we intend to use this middle mile project as a catalyst to deliver residential and B2B last mile services throughout the area both with our own additional investment and in partnership with other internet service providers.



PROJECT PROPOSAL

Connecting Marsing, Melba, and Kuna to Middle Mile Infrastructure

a. Applicant's contact information:

- i. Name: Natasha Tattersall
- ii. Title/Position: General Manager Western Idaho/Nevada
- iii. Mailing address: 12301 W. Explorer Dr., Boise, ID 83713
- iv. Email address: ntattersall@syringanetworks.net
- v. Phone number: (208) 229-6108

b. Broadband project proposal outline and scope should include the following:

- i. Description of the extent to which the project will facilitate deployment of high-speed broadband networks to areas that are currently either unserved, underserved, or both.

Syringa Networks is proposing a 41-mile fiber backbone middle mile route in rural Southwestern Idaho. The route will connect the following communities to our existing network: Melba and Bowmont in Canyon County, Marsing, Givens Hot Springs and Walters Ferry in Owyhee County and Kuna in Ada County. The route achieves a primary Idaho Broadband Advisory Board objective which is to connect unserved and underserved areas as depicted for the service area on the NTIA's Indicators of Need website and confirmed by the most recent FCC (Federal Communications Commission) mapping data. In addition, the project substantially benefits and primarily serves areas that have household income at or below 200% of federal poverty guidelines.

The need to connect the above communities provides strong justification for the project to be built, while achieving the objectives of the Idaho Broadband Advisory Board. For example, the unserved City of Melba, Idaho connected by this project was identified as one of the top three areas of need for broadband service in the State of Idaho by the 2019 Idaho Governor's Broadband Taskforce. Syringa Networks has remained passionate about the need to address this longstanding concern for Melba. We have pro-actively joined in residential joint trench activity within the city and have secured Letters of Support [to pursue broadband grant opportunities] from the City of Melba Mayor's Office and Melba School District. Additionally, this project benefits national security in what local communities characterize as an "internet desert." The construction of this fiber path and its connectivity back to Syringa existing network provides the means to connect critical national infrastructure such as the power grid, public safety infrastructure and communications towers to a modern high-capacity and resilient fiber network.

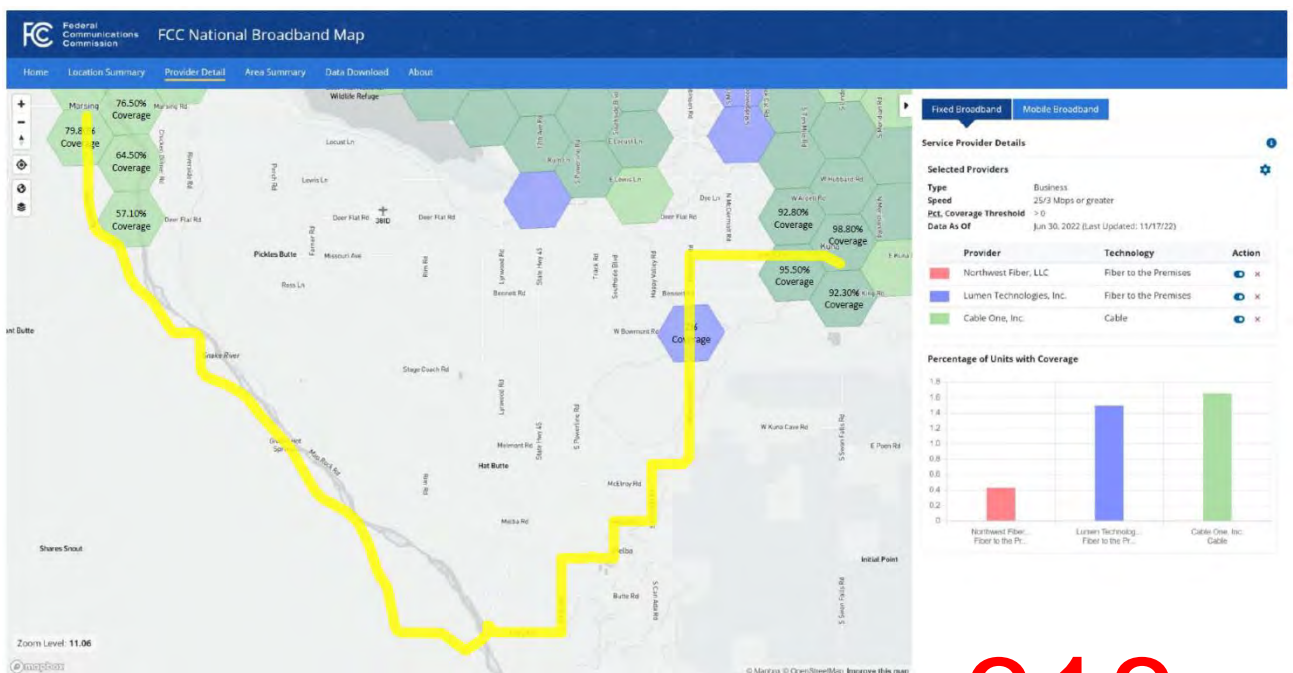
- ii. Description of type(s) of technology to be used (i.e., fiber, fixed wireless, cable etc.).

The proposed fiber cable route will be built entirely underground to provide climate resilience for the fiber infrastructure against forecasted wildfires, high winds, and severe winter weather for the system's life. The route will connect to existing Syringa Networks nodes (points of presence) in Marsing and Kuna, producing a 100Gbps symmetrical, low latency ringed network for connectivity protection. The route is intentionally designed to follow the state highway roads and will provide fiber accessibility through the heart of main street corridors where most anchor institutions and key businesses reside. There are more than 40 anchor institutions (educational, government and healthcare related) and 140 businesses within 1000 feet of the planned route.

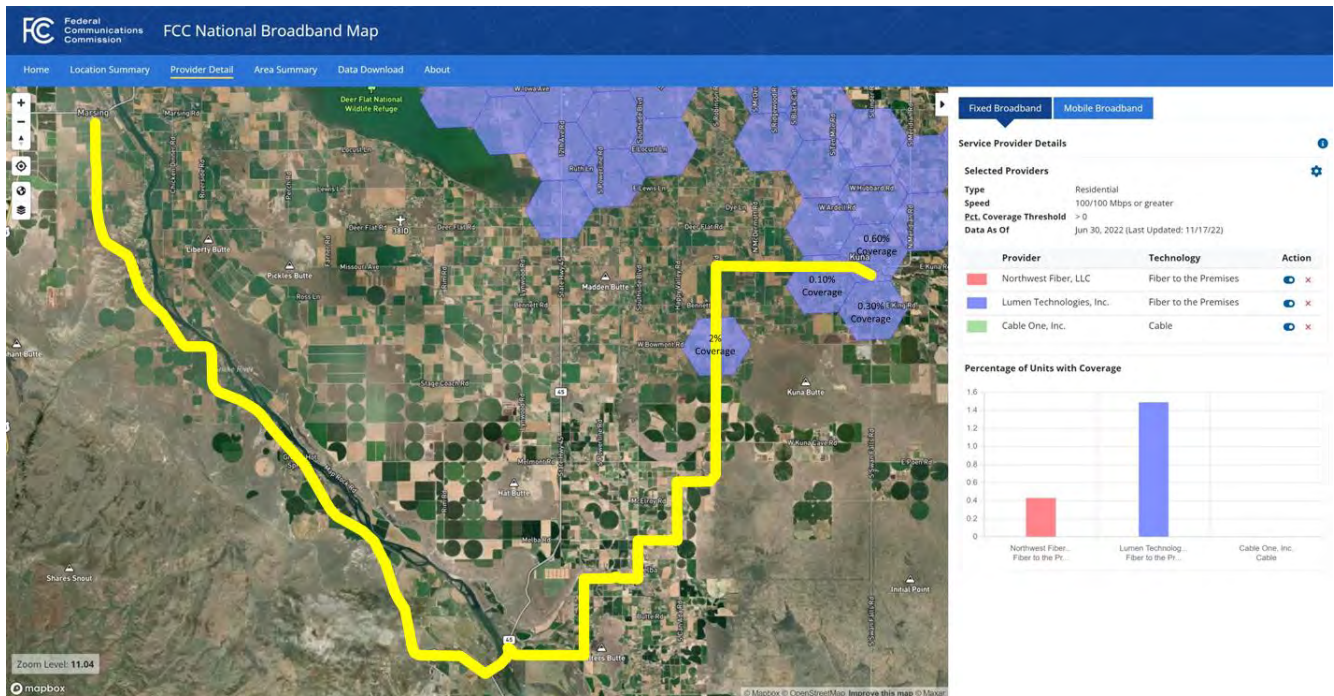
The proposed fiber route will provide a material increase in available bandwidth for end-users. Most of the area we are proposing to build our route has little to no fiber-based infrastructure today. These communities are currently paying much higher prices for substandard internet speeds on legacy facilities like copper and a patchwork of overlapping cable service in a few areas. This project will be the first purpose built, dedicated fiber middle mile route to interconnect the communities on the route. Once complete, Syringa Networks intends to help facilitate the build out of last mile laterals for services to homes and businesses. This will be accomplished by Syringa Networks extending its own fiber facilities and by offering (4) interconnection points on a carrier-neutral basis to Internet Service Providers to make last mile connections to the network.

- iii. Number of unserved or underserved locations and/or households that will be served by the project and at which speeds the locations will be connected (i.e., 25/3 Mbps, 100/20 Mbps, or 100/100 Mbps).

Displayed below is map of our planned route overlaid on the FCC National Broadband Map depicting current available providers in the area for 25/3Mbps or greater service. As you can see, more than 90% of the area we are proposing to build does not have access to even as little as 25/3Mbps from a cable or fiber provider.



Displayed below is map of our planned route overlaid on the FCC National Broadband Map depicting current available providers in the area for the ARPA specified 100/100 Mbps or greater service. As you can see, close to 100% of the area we are proposing to build does not have access to the ARPA required speed 100/100 Mbps or greater service from a cable or fiber provider.



In addition, the NTIA (National Telecommunications and Information Administration) Broadband Indicators of Need website represents the following data showing the need for greater availability and faster internet speeds in the unserved and underserved areas of our proposed route.

- Marsing Census Block: 19.70% households without internet access,
 - Ookla speed test 10.66/2.74
- Givens Hot Springs/Walter’s Ferry Census Block: 23.80% households without internet access,
 - Ookla speed test 8.68/2.45 (Mbps)
- Melba Census Block: 18.80% households without internet access,
 - Ookla speed test 9.10/2.09 (Mbps)
- Bowmont Census Block: 12% households without internet access,
 - Ookla speed test 9.51/2.04 (Mbps)
- Kuna Census Block: 7.3% households without internet access,
 - Ookla speed test 52.05/10.26 (Mbps)

iv. Project term for the proposal (anticipated timeframe for project from start to finish in months).

The project will be built along existing highway right of way with limited environmental impact making permitting for the project straight forward and near immediately shovel-ready. We intend to leverage our strong project management skills, years of highly relevant construction management experience,

and deep insight into the markets we serve to have the proposed middle mile route operational within a 2-year timeframe.

v. Funding Request.

Syringa Networks estimates a grant funding request in the amount \$3,000,000 which is 60% of the \$5,000,000 estimated total project cost.

vi. Anticipated total project costs and financing sources.

The estimate total project cost is \$5,000,000, of which \$3,000,000 will be supported by an Idaho Broadband Advisory Board grant and the remaining \$2,000,000 will be self-funded by Syringa Networks.

vii. Project Ownership (i.e., private, public, public/private partnership, other).

The proposed project will be owned by Syringa Networks, LLC.

About Syringa Networks: Syringa Networks was formed by 12 rural Idaho telephone companies who had the vision to provide an alternative internet solution to its unserved and underserved communities. From the executive leadership team to our directors and managers responsible for day-to-day operations, Syringa Networks has been successfully designing, project managing and operating middle mile fiber routes and network connections for over 20 years. Presently our owned and operated network traverses 3,377 fiber miles serving 440 towers and 1,350 buildings throughout Idaho and Utah with over 60 active fiber expansion projects underway. Syringa Networks has implemented various networking technologies including Ethernet, DWDM (Dense Wavelength Division Multiplexing), and microwave, along with augmenting a SoftSwitch to include Class 5 functionality. Syringa Networks has an internet peering network with connectivity in (13) major inter-exchanges across the United States with the ability to serve more than 1Tbps of internet connectivity. We provide proactive network monitoring and trouble-ticket response from our local Network Operations Center 24/7/365. With a network presence in 10 countries, our carrier-grade network was built to support the demanding needs of wholesalers, cellular operators, WISPs, local carriers, and public and private entities that require high availability services to support their end users and business operations.

viii. Proposed project costs (include budget overview and estimated costs).

Engineering: \$150,000

Permitting and Traffic Control: \$110,000

Construction Materials & Labor, Splicing: \$4,140,000

Cabinets, Site Preparation and Electronics: \$250,000

Syringa Networks "In Kind" Administration, Inspection and Project Management: \$350,000

Total Project Cost \$5,000,000.00

ix. Explanation and demonstration of the applicant's financial ability to complete the project within the applicant's proposed budget.

Syringa Networks is a privately-owned, debt-free, fiscally responsible company. We evaluate all strategic capital expenditure projects under strict ROI (return-on-investment) metrics. Our CEO leadership and executive team management ensure all capital expenditure budgeting and project scope decisions are made in the best interest of Syringa Networks and its Member Owners. Syringa's past sound decisions are reflected in our financial statements and we will continue to operate under the same guidelines. Syringa Networks has in the past, present, and will continue in the future to adopt fiscally sustainable middle mile strategies. We manage our contractors to exceptionally high-quality standards and our construction management team ensures that our contractors remain on time and on budget.

- x. Description of any proposed match. Match includes financial and in-kind contributions toward the project. In-kind contributions should be converted into monetary values for calculation.

Syringa Networks is projecting to contribute 40% of the estimated project cost in the amount of \$2,000,000 including "in kind" support for the project. The total estimated cost for this project is \$5,000,000.

- xi. Description of whether (and if so, how) this project works in conjunction with the Idaho Broadband Advisory Board's Strategic Plan. This includes addressing distance learning, telehealth, public safety, economic development, business opportunities, and/or promotes dig once policies.

There is an absence of fiber-based technology serving the communities we intend to reach with this project. Syringa Networks makes a binding commitment to provide open-access opportunity along this middle mile infrastructure to last mile networks that provide, or plan to provide, broadband services to distance learning, telehealth, public safety, and other businesses and household users. Indicating a broad base of support for our project, and the need for improved access to telehealth, remote work, and distance learning opportunities in these unserved/underserved areas, we have secured letters of support from the Idaho Libraries Commission and the State Board of Education along with support from numerous cities and schools along the proposed route. It is our commitment to provide an opportunity for connection to all anchor institutions such as city and county facilities, as well as libraries and schools within 1000 feet of the planned route. Such anchor institutions account for roughly 25% of the businesses within our build area. Additionally, we intend to use this middle mile project as a catalyst to deliver residential and B2B last mile services throughout the area both with our own additional investment and in partnership with other internet service providers.

From: Long, Gail <gail.long@tdstelecom.com>
Sent: Monday, November 14, 2022 11:26 AM
To: Ramon Hobdey-Sanchez <ramon.hobdeysanchez@commerce.idaho.gov>
Cc: Jake Reynolds <Jake.Reynolds@commerce.idaho.gov>; Ewa Szewczyk <Ewa.Szewczyk@commerce.idaho.gov>
Subject: RE: TDS Service Area Map - Request for Broadband Proposals

Good morning –

TDS doesn't have any planned project proposals in unserved parts of Idaho at this time but will evaluate this as we get closer to the grant application process. However, per our correspondence, I am attaching a map of our current service area that depicts areas served with greater than 100/20, under-served (over 25/3 but less than 100/20) and underserved (less than 25/3).

I hope this helps you identify target areas for broadband grant planning purposes.

Let me know if you have questions.

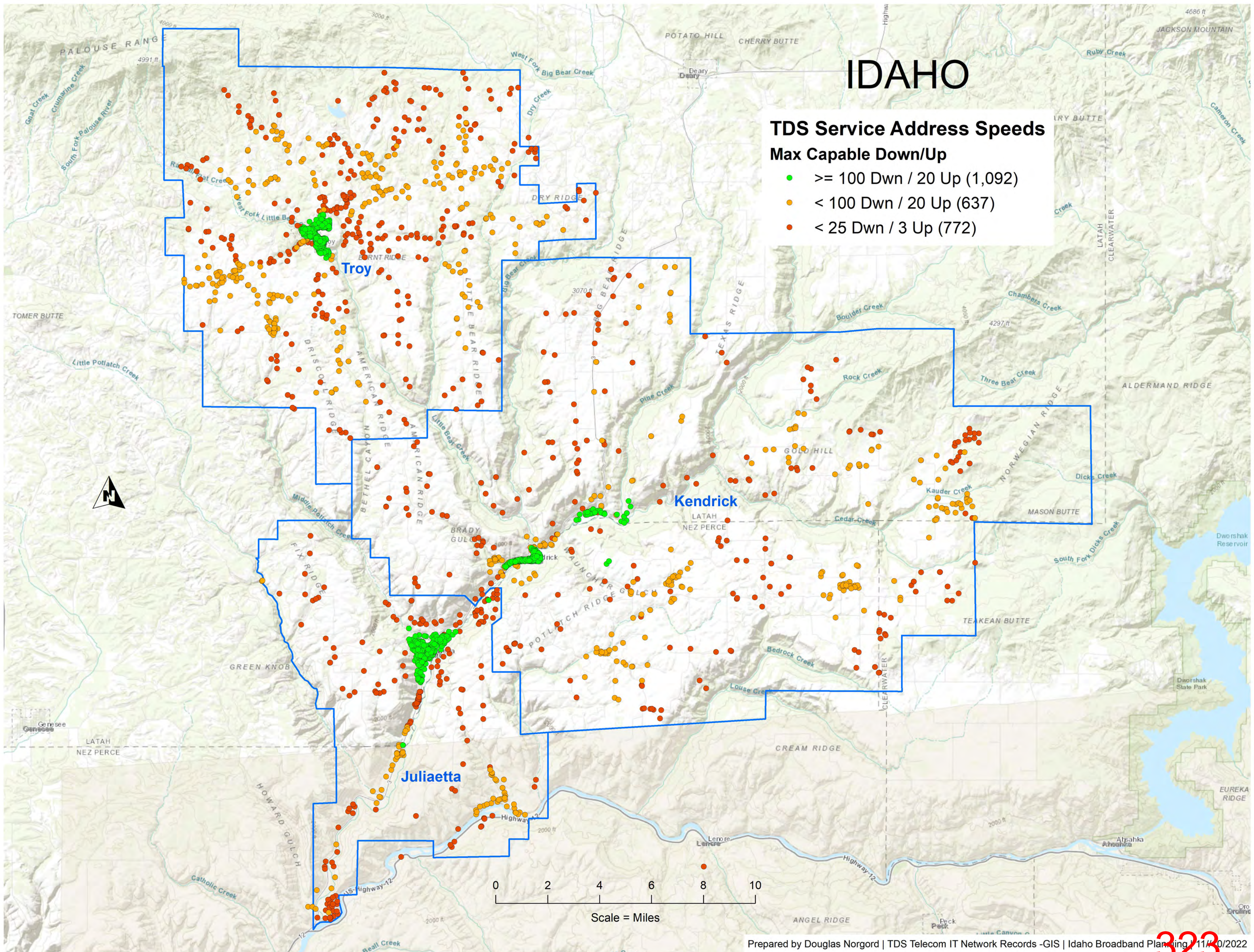
Gail Long
Manager-State Government Affairs
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TDS Telecom
525 Junction Road
Madison, WI 53717
W - 608-664-2923

IDAHO

TDS Service Address Speeds

Max Capable Down/Up

- ≥ 100 Dwn / 20 Up (1,092)
- < 100 Dwn / 20 Up (637)
- < 25 Dwn / 3 Up (772)





December 1, 2022

Tekniam LLC
15501 W. 100th Terrace
Lenexa, KS 66219

Dear Idaho Broadband Advisory Board,

Tekniam proposes to work with IDT to bridge the digital divide. We propose to expand last-mile infrastructure with as-yet-to-be-named projects and planning grants. These projects will connect unserved or underserved areas to the internet to improve access to telehealth, remote work, distance learning opportunities, and increase public safety infrastructure.

Tekniam LLC is a last-mile wireless infrastructure company whose products were developed for secure broadband in the public sector. Tekniam offers a flexible approach to bridging the digital divide. We work with public entities to build networks that are designed for open access. We also partner in collaboration with service providers to extend their serviceable coverage areas. Tekniam can fulfill both broadband planning and implementation projects with regard to our field of technology.

Broadband deployment is both costly and time consuming. Funding limits can leave areas without coverage. Supply chain issues delay projects. The result is that families, students, businesses, and healthcare services are left in the gap. Tekniam can accelerate the bridge.

Tekniam products receive inbound wired, fixed wireless, cellular and satellite broadband and deliver outbound internet at reliable (source-dependent) 100/20 Mbps speeds, with 100/100 Mbps capability. Whether by extending internet from existing fiber, installing interim broadband when other plans are in place, or deploying a Tekniam-specific design altogether, Tekniam can deliver last-mile connectivity as part of a more complete and affordable solution.

Tekniam project timelines, in general, are much smaller than typical broadband projects. Our ruggedized products are US-made with US technology. Supply chain issues are negligible. Projects are deployed in days/weeks, not months.

Telehealth

Access to comprehensive medical care varies in rural/tribal areas. Communities can have neither the means for true telehealth or telemedicine nor the ready connection to major medical centers of excellence. If it does exist, and disaster or a backhoe cut hits, they may not have the available critical network for remote acute care. A solution that can leverage wired, wireless and satellite internet with full broadband speed provides the measure of FEMA-approved security that a community needs.



Remote Work, Distance Learning

Rural and agricultural communities represent the end most of the last mile. Traditional solutions are not always suitable to run up a valley or down county road. Rural residents are the last to receive publicly funded broadband, and they are often the least likely to afford their infrastructure off a fiber mainline. Farms and ranches increasingly require internet access that goes well beyond home WiFi. Tekniam products can be configured in a chain and in a wireless mesh. They send wireless broadband along miles of road and in wide areas to hundreds of users and client devices.

Public Safety

Public safety is at risk along highways where no type of broadband coverage is in place. Tekniam can provide a wireless solution which enables communication bands for both public and emergency use. Open access WiFi will allow motorists to make emergency calls, connect with roadside services, etc. First responders will have a distinct band for secure communications. If an Idaho trenched- or tower-based network exists or is planned for rollout, Tekniam can provide the affordable local wireless infrastructure to support public safety along the road. If a need is identified which does not require or justify these options, Tekniam can provide a 'no-dig' solution.

Teknium offers its commitment to support IDT and its objective to fulfill broadband for all.

We look forward to this partnership.

Best regards,

KR Griffith
Business Development
info@tekniam.com
980-290-8305

// Teton County

Broadband Infrastructure Project Proposal Brief

This document serves as a guide and project brief for developing self-sustaining, high-quality Broadband Internet in, **Teton County, Idaho.**

The Overlook

In Teton County and across rural America, lack of access to reliable, fast, and affordable broadband internet is the largest roadblock to education, healthcare, and industry development. However, Teton County is taking a collaborative and proactive approach to addressing this deficit. This document serves as a *Planning Update and Guide to Developing Broadband Connectivity* across Teton County, serving our communities now and for generations to come.

Roadblocks

Like many other rural Counties and Municipalities, Teton and her cities, Driggs, Victor, and Teton, struggle with a lack of affordable and accessible broadband internet. Overall, the inequitable distribution of services, the high cost, and the complete dearth of competition make internet access and affordability difficult to overcome. *One company controls the only source of backhaul in the valley and is currently the only wired provider of internet services.* This has created a service vacuum that has been difficult to surmount. However, the innovative and strong leadership from the county, municipalities, and community anchors has bolstered new opportunities to overcome its connectivity deficits with an *innovative, collaborative effort to develop self-sustaining community-owned broadband infrastructure* that invites better service through RFP bids and allows citizens to access quality internet now and for years to come.

The Road Forward

The unified Teton County and Municipal Leadership have already made significant planning strides to create a complete County wide broadband plan that is firmly rooted in elements of the IBAB Strategic plan and the RIVDA Broadband Elements of Success (page 3). County and Municipal leaders have:

- Completed initial Broadband and IT Assessments in collaboration with RIVDA
 - Teton County, Driggs, Victor, Teton, and Teton School District have all completed initial assessments.
 - Completion of the compiled RIVDA Broadband reports is expected in early 2023.
- Begun planning for ACD and Preliminary Engineering Studies
- Begun planning for middle-mile transport

Preparing an Innovative Solution

Teton County is posed to overcome its connectivity deficits by investing in comprehensive **Community First Technology**. Teton seeks funding to *invest in secondary middle-mile infrastructure* and has in-roads to do so. Providing secondary backhaul to the valley owned by the County Coalition would provide desperately needed redundancy and competition to the area. Currently, damage to the main backhaul infrastructure causes county-wide outages for most services. Further, this middle-mile service can be leveraged and leased to *provide affordable backhaul to encourage service competition* in the area.

While the critical first step for Teton County is the acquisition of a reliable middle-mile alternative, we would also like to address the issue of inequitable access to services, especially prevalent in Teton and our more rural unincorporated areas. While we are in the middle of our planning and engineering phases, we expect that our network will utilize a multi-technology approach to connectivity. Phase-1 includes the construction of *wireless fiber infrastructure to serve the most rural residents* in the county and lay the fiber foundation for the area, while Phase-2, detailed in the engineering studies, includes *fiber to the premises for all locations within the city limits of Driggs, Teton, and Victor with speeds up to 1GB/1GB*. This 2 Phase approach can be completed as one continuous/simultaneous project, decreasing overall construction time and leveraging resources as efficiently as possible.

Potential Planning Costs

At the beginning of our collaborative planning and preparations for creating our shovel-ready solutions, we anticipate the need for planning funds to offset the cost of community and economic development research to better prepare to meet the expectations of the Elements of Success (page 3). While we have significant leads for middle-mile providers, further planning is needed to solidify those relationships and receive solid estimates of construction and cost in cooperation with the secondary provider. Planning funds to incorporate the new middle mile opportunities and ACD studies will be necessary as well. We are excited about the new opportunities around the corner for Teton and for Idahoans.

Elements of Success

- **Sustainability** – The aspects that encourage sustainability include grants (Federal and State), volunteer work, neighborhood champions and public engagement, broad use of the proposed infrastructure for ongoing maintenance.
- **Resource sharing** – Resource Sharing requires fewer resources and cost to maintain one set of servers vs. four. Collaborative cost reductions while maintaining independence and confidentiality through shared managed cloud-based resources.
- **Innovation** – Overcoming past paradigms of limited internet service, discipline for the collaborative process, creating plans for current and future needs.
- **Transformation** – Righting the past wrongs and looking towards the future on a solid foundation. This includes planning for the future with proactive concordant efforts by contractors to build access to services in new/future housing and developments. City planning with an eye to the future, including city easements to assets such as poles, towers, common ditches, new construction, etc., is essential to the overall success and sustainability of a well-integrated network.
- **Public Safety / Cybersecurity** – While seemingly less critical in the more rural areas, attacks on essential services provided by most counties and municipalities are becoming increasingly common. These attacks include water and other utilities as well as fire and police protection. As rural townships tend to have fewer resources to combat these attacks, they become more frequent targets ([NYTimes](#); [CBSNews](#)).
- **Educational Narrative** – This is an essential component to success. The digital divide and educational disconnect both in Idaho and the whole of rural America are well documented. The sustainment of population and economic health is critically impacted by the opportunities afforded to the youth of your communities. While the connectivity of our schools is vitally important, circumstances from the previous 18 months clearly show that individual student connectivity in the home is imperative for uninhibited, comprehensive education. Connectivity is essential to students at every level, from primary and secondary students to those continuing their education with trade certifications and university degrees.
- **Telehealth** – While telehealth programs do not lie directly within the cities' or county's purview, connectivity to available telehealth services does. Developing a high-speed network that meets the needs of telehealth providers brings more accessible primary care to citizens at a decreased cost. As the population in the United States ages, telehealth can also provide affordable, comprehensive care to more isolated and aged citizens.



11/29/2022
Idaho Department of Commerce
Attn: Ramón S. Hobdey-Sánchez
P.O. Box 83720
Boise, ID 83720-0093
email: broadband@commerce.idaho.gov

Re: COMMERCE DEPARTMENT RFI APPLICATIONS DUE DEC. 1, 2022

Dear Mr. Hobdey-Sánchez,

I am Bob Kraut, General Manager and COO of Filer Mutual Telephone Company, dba TruLeap Technologies. Thank you for the opportunity to respond to your RFI seeking information about our broadband expansion plans.

We were established in 1909 and reestablished in 2019 as TruLeap Technologies. TruLeap provides our customers with high-quality, reliable telecommunications services. For over 100 years we have brought to our customers the most modern technology, outstanding service, and first-class support. As a member-owned cooperative we operate for the benefit of our members and have a strong commitment to the communities in which they live and work. Over the past 11 years, TruLeap has invested over \$22M in fiber and electronics to overhaul its network to provide the latest technology for its customers.

We work in a highly competitive field and do not want to publicize our expansion plans to our competition who most certainly will take advantage of the information. They may also use it to compete against us when the official RFP's are announced.

We, along with Idaho Telecom Alliance, have requested that responses to the RFI be kept confidential and not shared with other broadband providers but the Department has said that cannot be done. Consequently, we have chosen not to provide a detailed explanation of our plans today.

We are planning to respond to an RFP if one is issued. We are pleased that money is available to address filling the gaps in current service and hope to participate by providing connectivity for the unserved and underserved areas of the state. We are deeply invested in Twin Falls County and the surrounding areas. We hope that we can continue our mission to provide the latest technology to more of the unserved and underserved populations with your help.

We caution the Department and the BBAB not to fund competitive broadband services in areas where adequate service already exists. Especially where cities/counties are seeking funding to overbuild where private entities already offer high speed services. The Department should also be careful to not fund projects by entities that lack a history of providing proven technology or cannot demonstrate a plan to support and maintain the network once the one-time grant dollars have been spent.

Robert Kraut
COO

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Planning grant funding proposal to the Idaho Broadband Advisory Board

Submitted by White Cloud Communications

November 30, 2022



WHITE CLOUD

Applicant information:

Joseph Shelton, *CEO/President*

Eric Smallwood, *Project Manager*

White Cloud Communications

663 Main Ave E Twin Falls ID 83301

eric@whitecloudcom.com

208-733-5470

Broadband planning grant proposal outline and scope

i. Description of the extent to which the project will facilitate deployment of high-speed broadband networks to areas that are currently either unserved, underserved, or both
 White Cloud Communications will utilize the planning grant to prepare a grant to deploy fixed wireless broadband internet service to residents throughout the Snake River Valley in Owyhee County, bringing up to 100/20 Mbps service to unserved and underserved residents from Givens Hot Springs to Indian Cove. At least 65% of addresses in the proposed project area are currently considered unserved or underserved, making the region an area in need of greater internet access and connectivity.

ii. Description or name of contractors or third-party vendors to be used to facilitate a planning study or strategic plan.

White Cloud will use CTC Technology and Energy. CTC is an independent broadband engineering, business, and strategic consulting firm with more than 35 years of experience in all aspects of wired and wireless network planning. They work primarily for local and state government clients and their partners—and have a long history of successful grant strategy and grant application engagements. They perform custom work for each client.

iii. Funding request.

White Cloud is requesting \$10,000.

iv. Planning proposal costs.

Labor Category	Hourly Rate
CTO/Director of Business Consulting	\$300
Principal Analyst / Engineer	\$250
Senior Analyst / Engineer	\$225
Staff Analyst / Engineer	\$175
Admin	\$100

CTC’s wireless and fiber engineers and GIS team will develop and refine technical data related to White Cloud’s planned “Grant Application” including by:

- Working with antenna sites selected by White Cloud that will enable effective wireless service to White Cloud’s targeted users
- Modeling wireless network coverage and capacity
- Optimizing antenna mounting heights on towers
- Estimating the number and locations of unserved addresses in the target service area using our GIS team’s established approaches in low-density rural areas
- Estimating the number and locations of addresses that could be served at 100/20 Mbps speeds, and providing the assumptions with regard to equipment
- Assisting in the selection of fiber routes to connect tower locations (using Lumen’s fiber backbone route information as a starting point)
- Developing cost estimates for fiber and wireless elements of the Project Proposal

The data and analysis we develop in this task will be focused on enabling White Cloud to present a competitive proposal to the State of Idaho's grant funding program.

Once the State issues rules for the grant program in the spring, CTC's Grant and Funding team will perform the following tasks (and other, related tasks) on an as-needed basis to support White Cloud in preparation of its full proposal to the Idaho Broadband Advisory Board:

- Develop a checklist of required project documentation and application requirements
- Review detailed budget and financial pro forma documentation as requested—working with information provided by White Cloud (such as cost estimates and project budgets), our team will review the documentation required
- Prepare draft narrative sections of the grant application—we will write compelling narrative responses that describe White Cloud's proposed project, its potential impact, and the likely benefits to the community; this will include evaluation of the strategic alignment of White Cloud's proposed project with the Idaho Broadband Advisory Board's Strategic Plan
- Prepare a draft application package for review and approval, using data and information supplied by White Cloud.
- Provide support through due diligence to award determination

v. [Project term in which the planning grant would start and be completed.](#)

The project term would start once the grant application window is open in Spring 2023. The project would be completed by the application deadline for the grant.

vi. [Explanation and demonstration of the applicant's financial ability to complete the planning process within the applicant's proposed budget.](#)

White Cloud Communications is a 40-year-old company based in Idaho. The company's headquarters are in Twin Falls with branch offices in Garden City, Burley, and Idaho Falls, as well as in Elko, Nevada. White Cloud started out as a two-way radio business focused on sales and service to both public and private entities. Over a decade ago, White Cloud expanded into the internet space as well.

The management team at White Cloud has about 50 years of combined experience. They have completed 10 fixed wireless network builds; these are located in Idaho, Texas, Arizona, Illinois, Indiana, and Kentucky. All are still successfully operating and we assist their owners in various capacities with keeping their networks running.

White Cloud currently operate White Cloud Networks in Idaho and White Cloud Networks Nevada. We serve about 3,700 customers. In Idaho we cover areas from Idaho Falls in the east to Vale, Oregon in the west. We are specialists in bringing bandwidth to remote rural areas.

White Cloud operates virtually debt free, which sets us up for success in projects like this.

White Cloud has a proven track record with the Idaho Department of Commerce. We have successfully completed four broadband grants in four communities totaling \$2.9 million. All projects were completed on time and in budget.

White Cloud has never filed for bankruptcy and is not subject to any other financial or legal issues.

vii. Description of any proposed match for the planning grant. Match includes financial and in-kind contributions toward the project. In-kind contributions should be converted in to monetary values for calculation.

White Cloud Communications estimates the overall cost of completion of the grant application using CTC Technology and Energy will cost \$15,000. White Cloud is proposing to match the planning grant of \$10,000 with \$5,000 contributed towards the project by White Cloud.

viii. Description of whether (and if so, how) this planning grant would help address broadband infrastructure in Idaho in conjunction with the Idaho Broadband Advisory Board’s Strategic Plan or federal fund guidelines.

The IBAB Strategic Plan strives for all of Idaho to have access to 100/20 speeds by 2027. This grant will help White Cloud prepare a grant for Owyhee County to apply for funding to bring 100/20 service to approximately 1959 households that do not currently have access to these speeds.

ix. Explain how the proposed planning grant would address priorities outlined in the Board’s Strategic Plan. This includes addressing distance learning, telehealth, public safety, economic development, and business opportunities, promotes dig once policies.

White Cloud Communications will use this planning grant to help prepare a grant to deploy fixed wireless broadband internet service to residents throughout the Snake River Valley in Owyhee County, bringing 100/20 Mbps service speeds to unserved and underserved residents. This project is completely aligned with the Idaho Broadband Advisory Board’s Strategic Plan, “which supports the board’s vision that Idahoans have access to affordable and reliable broadband infrastructure.”¹ White Cloud’s proposed project will enable currently unserved and underserved Idaho residents to reliably and affordably access broadband service that, in turn, enables distance learning (K-12, college, workforce training), telehealth, remote work, the operation of home-based businesses, and other economic development benefits in a region that currently lacks service. Additionally, as part of White Cloud’s discussions with Owyhee County, the towers will also be open to any first responder / public safety agency and other County users that Owyhee County identifies as needs arise.

¹ Idaho Broadband Advisory Board, <https://commerce.idaho.gov/broadband/idaho-broadband-advisory-board/>.

Grant funding proposal to the Idaho Broadband Advisory Board

Submitted by White Cloud Communications

November 30, 2022



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Broadband project proposal outline and scope

i. Description of the extent to which the project will facilitate deployment of high-speed broadband networks to areas that are currently either unserved, underserved, or both White Cloud Communications will deploy fixed wireless broadband internet service to residents throughout the Snake River Valley in Owyhee County, bringing up to 100/20 Mbps service to unserved and underserved residents from Givens Hot Springs to Indian Cove. At least 65% of addresses in the proposed project area are currently considered unserved or underserved, making the region an area in need of greater internet access and connectivity.

White Cloud's fixed wireless network will deploy wireless broadband internet service to 1,966 unserved and underserved households at speeds greater than 25/3 Mbps, and 1,938 of the households at a speed greater than 100/20 Mbps. Taking the difference, there are 28 households covered between speeds 25/3 and 100/20 Mbps. It will deploy eleven fixed wireless towers to serve communities utilizing Community Broadband Radio Spectrum (CBRS), including 40 MHz of licensed priority spectrum from White Cloud's Priority Access License (PAL). The sites will consist of ten new tower builds and one collocated on to an existing tower.

- The towers are planned to be located in the towns and areas of:
 - Eagle Cove
 - Bruneau
 - Black Sands
 - Grandview
 - Murphy
 - Noble
 - Oreana
 - Wilson
 - Guffey

Additionally, White Cloud has been in discussion with Owyhee County and will offer the County free or reduced pricing for County services. The towers will also be open to use by first responders and other County users as needs arise. For the actual grant, a letter of support from Owyhee County in support of this project will be provided.

The fixed wireless network is estimated to cost \$6.9 million for deployment, including design, tower construction, fiber backhaul construction, electronics, and customer premise equipment (CPEs). White Cloud will work to get the highest possible penetration of residents to subscribe to the broadband service.

ii. Description of type(s) of technology to be used (i.e., fiber, fixed wireless, cable etc.)

The fixed wireless network will deliver broadband service using CBRS spectrum.

CBRS is a federally regulated band of wireless spectrum spanning 3,350 to 3,700 MHz (commonly referred to as the 3.5 GHz band). This spectrum range is shared between three tiers of access priority, with higher tier users given preference for spectrum usage within a county. White Cloud Communications has four PALs for the Snake Valley region, granting it priority access to 40 MHz of spectrum. Also, White Cloud proposes to use an additional 40 MHz of GAA spectrum for a total of 80

MHz of spectrum. The combined spectrum will enable White Cloud to provide the needed capacity consistently across the service area.

White Cloud will deploy eleven wireless towers throughout the service area. Each tower will be equipped with four antennas with Massive MIMO/Beamforming capabilities. To achieve the 100/20 Mbps requirement, spectral efficiencies above what is available in conventional LTE technologies must be employed. Therefore, the technology chosen is a beamforming, high bandwidth solution from Tarana networks.

White Cloud is in a business relationship with Tarana and is currently trialing Tarana equipment. Beamforming is a type of signal management in which a wireless signal is directed toward a specific receiving device, instead of spreading out uniformly. Massive or FD MIMO (multiple-input and multiple output) is the ability to use beamforming and multiuser MIMO on a single antenna to create several simultaneous beams across a single antenna thus increasing system capacity. Using these technology enhancements, the sector level spectral efficiency can be from 3x to 10x higher than LTE technologies.

Figure 1 displays the coverage map for the fixed wireless network. Figures 2, 3, and 4 show the unserved, underserved, and currently served addresses that can be served by White Cloud Communications' fixed wireless network and at what speeds they can be served.

The address point data is sourced from Microsoft's county wide open building footprints dataset¹, with additional extensive analysis to remove errant records and extra locations to ensure the total locations would be as accurate as possible when identifying broadband serviceable locations. Service availability data is aggregated from the latest FCC data release²³ to the census block level, which was then used to apply to broadband serviceable locations to determine the totals of served, unserved, and underserved addresses.

¹ GitHub - microsoft/USBuildingFootprints: Computer generated building footprints for the United States, <https://github.com/microsoft/USBuildingFootprints>

² broadband-map-data-downloads.pdf | Powered by Box, <https://us-fcc.app.box.com/v/bdc-data-downloads-output>

³ Nationwide Data | FCC National Broadband Map, <https://broadbandmap.fcc.gov/data-download/nationwide-data>

Figure 1: Area wide coverage map

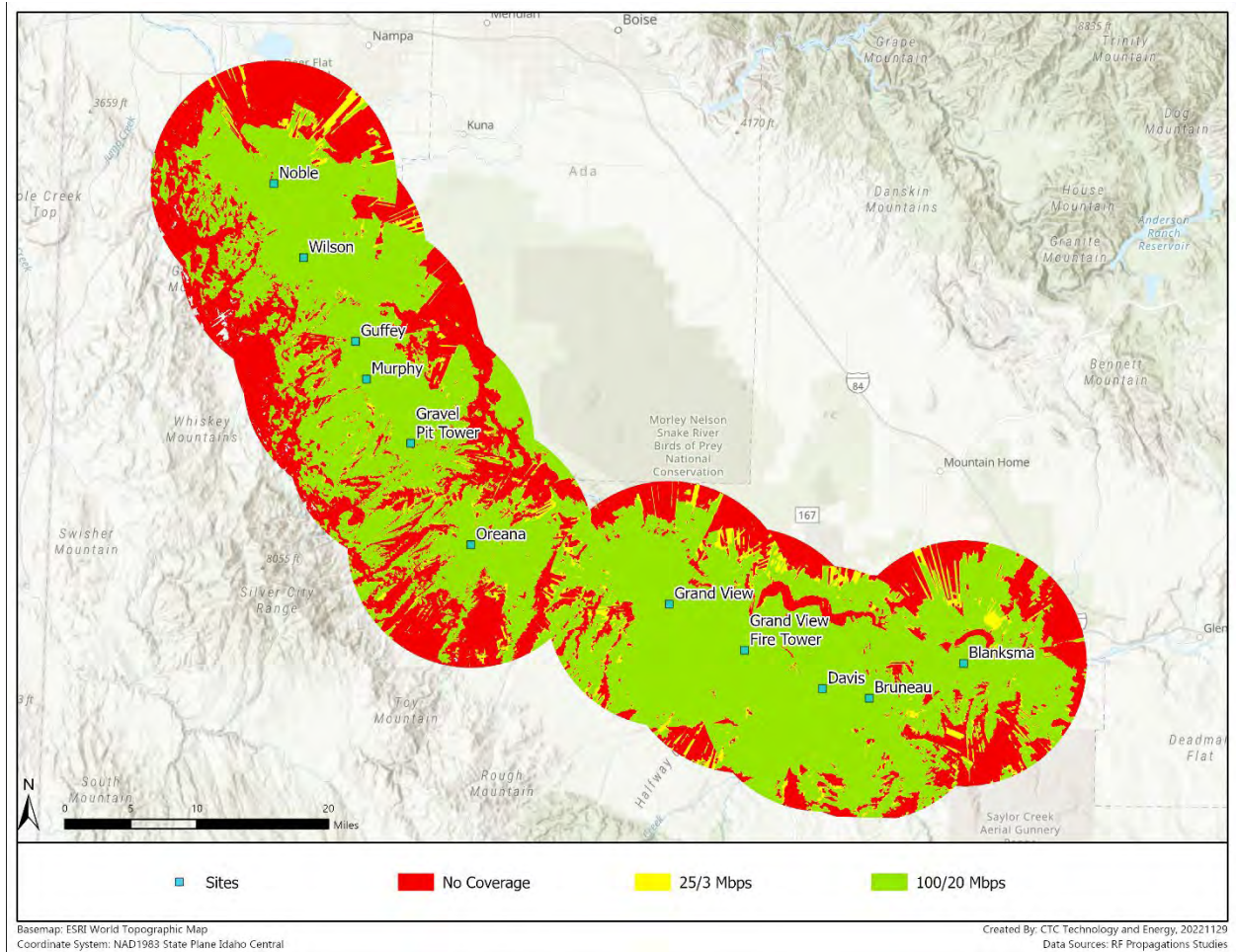


Figure 2: Coverage to unserved addresses

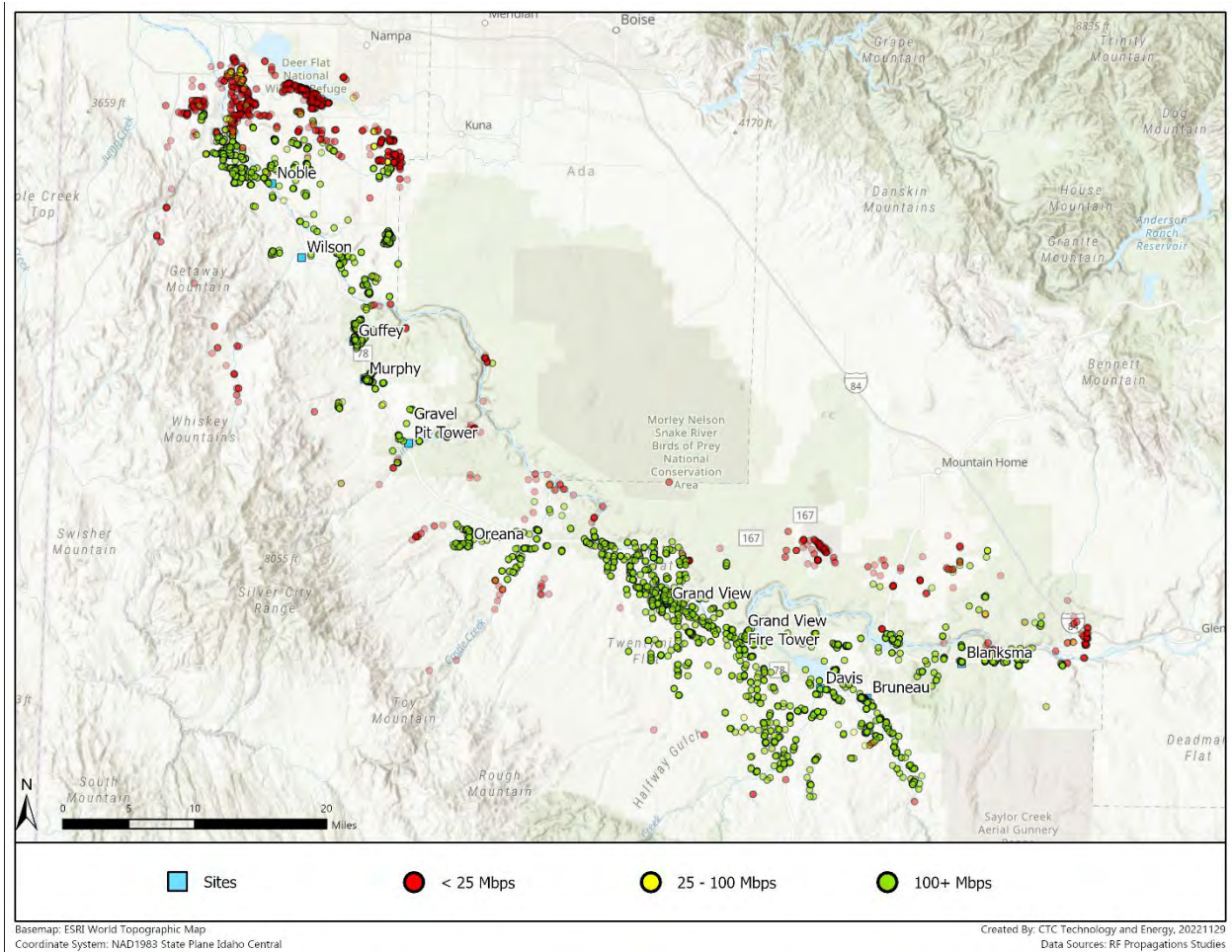


Figure 3: Coverage to underserved addresses

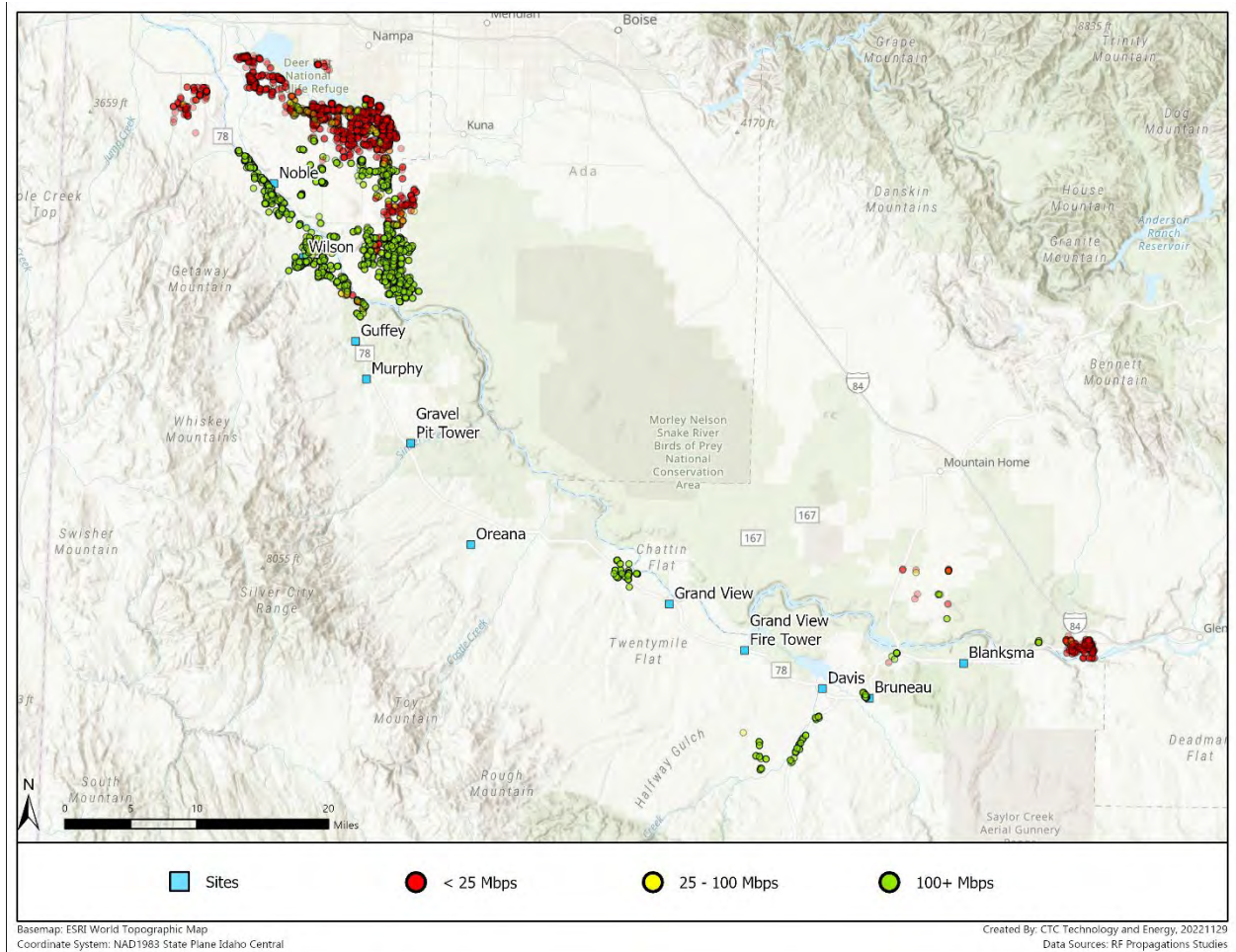
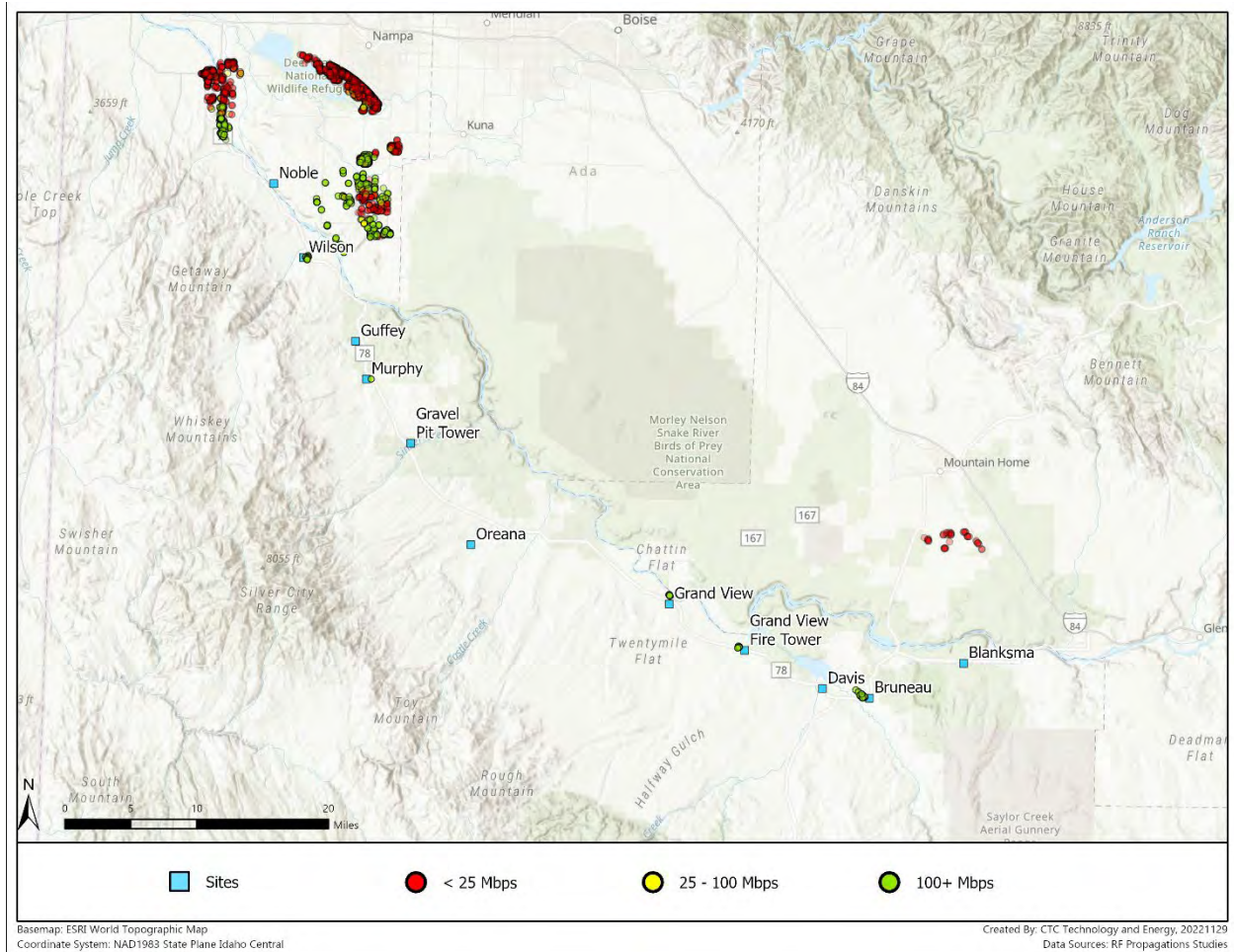


Figure 4: Coverage to served addresses



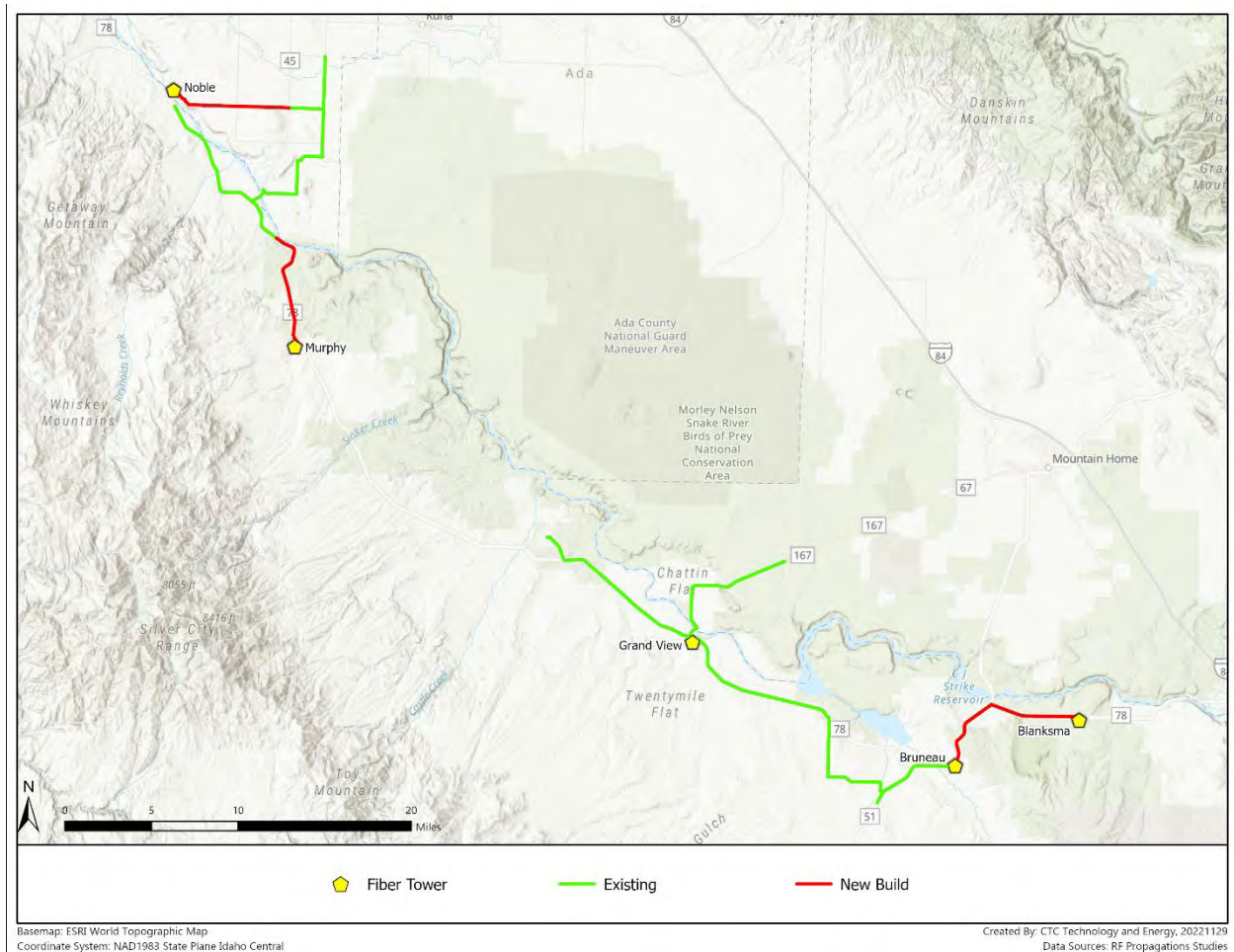
Approximately 25 miles of fiber backhaul will be constructed to selected towers, connecting them to an existing Lumen fiber backhaul network. These towers will then transport backhaul to other towers that do not have fiber backhaul using point-to-point microwave connections. The fiber routes were designed based on map images of Lumen’s fiber network, provided by Lumen, which were digitized for analysis.

The towers anticipated to receive the fiber backhaul are:

- Noble
- Murphy
- Grand View
- Bruneau
- Blanksma

Figure 5 shows the fiber routes to the targeted towers.

Figure 5: Fiber routes to towers



The proposed project will also provide customer premises equipment (CPE) manufactured by Tarana at each customer premises. The CPE consists of an antenna with an integrated modem installed outside the service location along the rooftop. The CPE antenna can employ beamforming, single user MIMO, and multi-user MIMO. The modem also contains an integrated home router.

iii. Number of unserved or underserved locations and/or households that will be served by the project and at which speeds the locations will be connected (i.e., 25/3 Mbps, 100/20 Mbps, or 100/100 Mbps)

Figure 5 presents the currently served, unserved, and underserved addresses that exist within the service area of the proposed fixed wireless network. For Owyhee County, 1,498 addresses are unserved, 1,966 addresses are underserved (inclusive of the unserved addresses), and 855 addresses are served.

The address point data is sourced from Microsoft’s county wide open building footprints dataset⁴, with additional extensive analysis to remove errant records and extra locations to ensure the total locations would be as accurate as possible when identifying broadband serviceable locations. Service availability

⁴ GitHub - microsoft/USBuildingFootprints: Computer generated building footprints for the United States, <https://github.com/microsoft/USBuildingFootprints>

data is aggregated from the latest FCC data release⁵⁶ to the census block level, which was then used to apply to broadband serviceable locations to determine the totals of served, unserved, and underserved addresses.

Figure 6: Currently served, unserved, and underserved addresses within the proposed service area (Source: Microsoft's county wide open building footprints dataset and FCC data release)

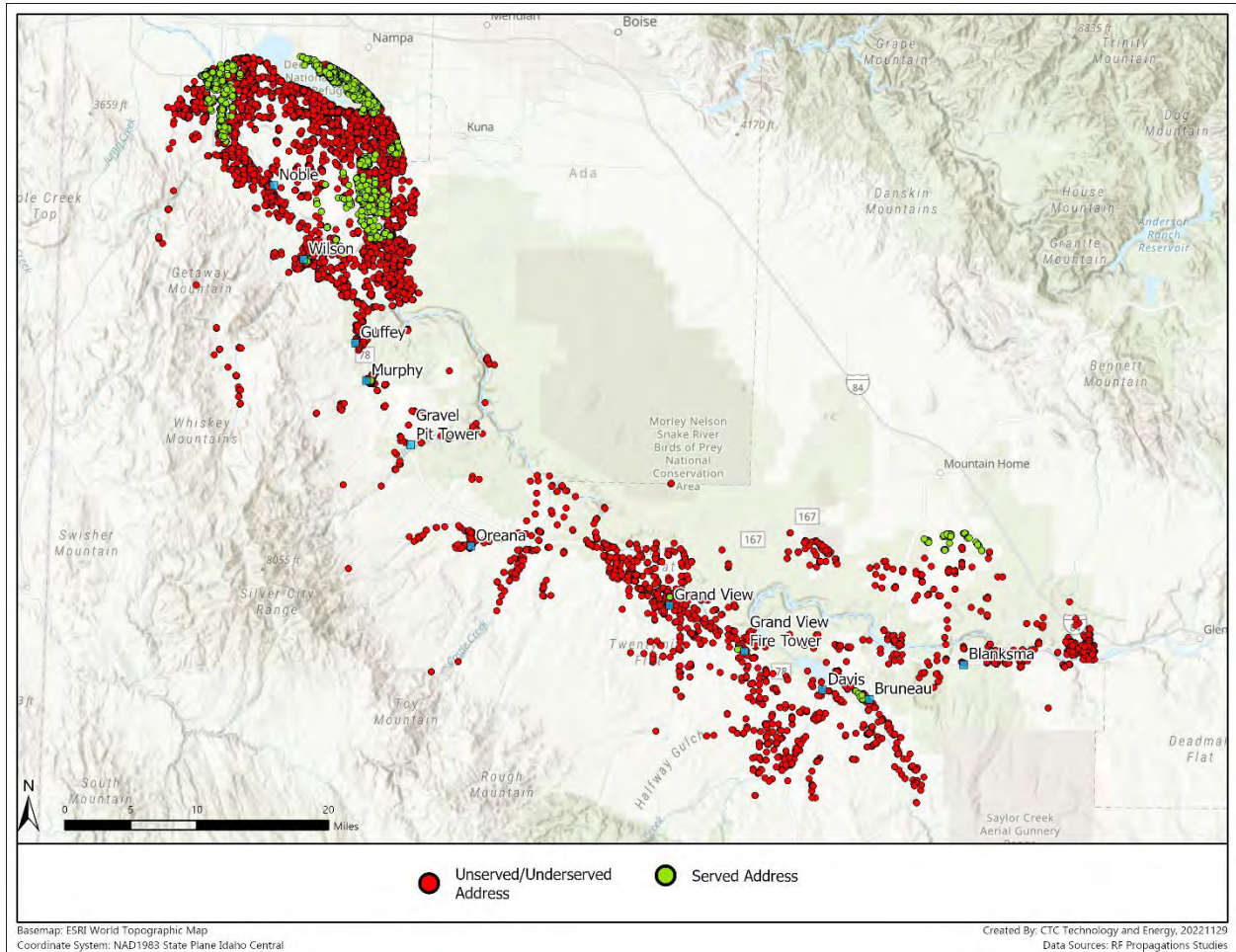


Table 1 details the coverage provided by the fixed wireless network to both unserved (<25/3 Mbps) and underserved (<100/20 Mbps) locations. The count of the underserved addresses in this table is inclusive of the unserved addresses, and the address counts for coverage greater than 100/20 Mbps are inclusive of addresses that can receive greater than 25/3 Mbps.

⁵ broadband-map-data-downloads.pdf | Powered by Box, <https://us-fcc.app.box.com/v/bdc-data-downloads-output>

⁶ Nationwide Data | FCC National Broadband Map, <https://broadbandmap.fcc.gov/data-download/nationwide-data>

Table 1: Addresses being served by the wireless network.

Site Name	Underserved-Coverage >100/20 Mbps	Underserved-Coverage >25/3 Mbps	Unserved-Coverage >100/20 Mbps	Unserved-Coverage >25/3 Mbps
Blanksma	101	100	97	95
Bruneau	174	171	167	164
Davis	209	206	167	164
Gravel Pit Tower	27	25	27	25
Guffey	86	81	76	74
Grand View Fire Tower	129	129	128	128
Grand View	458	458	428	428
Murphy	70	69	70	69
Noble	455	447	211	205
Oreana	113	112	113	112
Wilson	144	140	14	14
Grand Total	1,966	1,938	1,498	1,478

Table 2 present a sample of key locations are served by the proposed design.

Table 2: Sample anchor institutions in the service area

Name	Longitude	Latitude	Strongest Tower	Received Power (dBm)	Downlink Speed (Mbps)	Uplink Speed (Mbps)
Bruneau Fire Department	-115.798	42.88138	Bruneau	-59.9	652.6	145
Grand View Fire Department	-116.098	42.98516	GView	-65.8	652.6	145
Grand View Sewer Department	-116.098	42.98449	GView	-65.1	652.6	145
Melba Rural Fire Protection District	-116.529	43.37622	Guffey	-75.6	442.4	145
Murphy Reynolds Wilson Fire District	-116.7	43.40941	Noble	-76.6	442.4	145
Murphy Reynolds Wilson Fire District, Wilson Station	-116.652	43.3615	Wilson	-71.9	575	145
Owyhee County Community Development	-116.552	43.21635	Murphy	-63.2	652.6	145
Owyhee County Museum & Library	-116.551	43.21592	Murphy	-62.1	652.6	145
Owyhee County Sheriff's Office and the Owyhee County Court	-116.551	43.21656	Murphy	-62.1	652.6	145

The project will also build a fiber connection to the Owyhee County Court, providing broadband service to the multiple agencies that operate within the courthouse. This includes the County commissioners, clerks, courts, prosecuting attorney, assessor, treasurer, Building Department, and the County Road and Bridge District.

iv. Project term for the proposal (anticipated time frame for project from start to finish in months)

Deployment is estimated to take 18 – 24 months for completion. Construction of the towers and the buildout of the fiber will be managed in parallel. It is estimated that at least one tower and its fiber backhaul can be completed in 18 months, at which point it can begin serving residents. Each tower can begin operation to serve residents as they are completed.

v. Funding request

White Cloud Communications is requesting \$6.9 million to fund the deployment of the fixed wireless network.

vi. Anticipated total project costs and financing sources

The total project is estimated to cost \$6.9 million and will be funded entirely via the Idaho Broadband Advisory Board broadband project grant.

vii. Project ownership (i.e., private, public, public/private partnership, other)

White Cloud Communications will construct and own the entirety of the network. It will deploy and own all network equipment, procure internet backhaul, and provide service to residents.

White Cloud has been in discussion with Owyhee County and will offer the County free or reduced pricing for County services. Additionally, the towers will be open to use by first responders and other County users as needs arise. For the actual grant, a letter of support from Owyhee County in support of this project will be provided.

viii. Proposed project costs (include budget overview and estimated costs)

The estimated total project costs are provided in Table 3. This assumes a CPE count of 1,475 of the 1,996 for 75% of the underserved households to provide service at speeds greater than 25/3 Mbps. The fiber costs were estimated at an average cost of approximately \$80,000 per mile, based on costs from past projects in the region. Although the proposed project assumes a 75% penetration, White Cloud will work to get the highest possible penetration of residents to subscribe to the service.

Table 3: Estimated total project costs

CAPEX Report	Cost	Cost Per Subscriber	Cost Per Site
RAN Hardware Costs	\$669,548	\$341	\$60,868

CAPEX Report	Cost	Cost Per Subscriber	Cost Per Site
Fiber Cost to 5 sites	\$2,000,000	\$1,017	\$181,818
Wireless Backhaul to 6 sites	\$85,500	\$43	\$7,773
Installations Cost	\$30,000	\$15	\$2,727
New Tower Construction	\$2,000,000	\$1,017	\$181,818
Design Cost	\$243,617	\$124	\$22,147
Total Cost (Distribution Only)	\$5,028,665	\$2,558	\$457,151
CPE Costs (Electronics)	\$1,698,624	\$864	\$154,420
CPE Costs (Installation)	\$786,400	\$400	\$71,491
Total Cost (100% penetration)	\$7,513,689	\$3,822	\$683,063
Total Cost (75% penetration)	\$6,892,433	\$4,674	\$626,585

ix. Explanation and demonstration of the applicant’s financial ability to complete the project within the applicant’s proposed budget

White Cloud Communications is a 40-year-old company based in Idaho. The company’s headquarters are in Twin Falls with branch offices in Garden City, Burley, and Idaho Falls, as well as in Elko, Nevada. White Cloud started out as a two-way radio business focused on sales and service to both public and private entities. Over a decade ago, White Cloud expanded into the internet space as well.

The management team at White Cloud has about 50 years of combined experience. We have completed ten fixed wireless network builds; these are located in Idaho, Texas, Arizona, Illinois, Indiana, and Kentucky. All are still successfully operating, and we assist their owners in various capacities with keeping their networks running.

We currently operate White Cloud Networks in Idaho and White Cloud Networks Nevada. We serve about 3,700 customers. In Idaho we cover areas from Idaho Falls in the east to Vale, Oregon in the west. We are specialists in bringing bandwidth to remote rural areas.

White Cloud operates virtually debt free, which sets us up for success in projects like this. Due to our cash flow and the fact that we have no existing debt to service, we are capable of obtaining any short-term financing we would require to complete this project.

White Cloud has a proven track record with the Idaho Department of Commerce. We have successfully completed four broadband grants in four communities totaling \$2.9 million. All projects were completed on time and on budget.

White Cloud has never filed for bankruptcy and is not subject to any other financial or legal issues.

White Cloud has had a partnership with the Idaho National Laboratory for close to a decade. The INL is America’s premier nuclear lab. We currently maintain and oversee all of the INL’s radio communications infrastructure. This requires Q Clearance with the Department of Energy. White Cloud is also a trusted partner of Hill Air Force Base, overseeing the maintenance of their radio communications as well.

x. Description of any proposed match

No match is requested for this project. It will be funded entirely through the grant.

xi. Description of whether (and if so, how) this project works in conjunction with the Idaho Broadband Advisory Board's Strategic Plan

White Cloud Communications will deploy fixed wireless broadband internet service to residents throughout Snake Valley, bringing 100/20 Mbps service speeds to unserved and underserved residents. This project is completely aligned with the Idaho Broadband Advisory Board's Strategic Plan, "which supports the board's vision that Idahoans have access to affordable and reliable broadband infrastructure."⁷ White Cloud's proposed project will enable currently unserved and underserved Idaho residents to reliably and affordably access broadband service that, in turn, enables distance learning (K-12, college, workforce training), telehealth, remote work, the operation of home-based businesses, and other economic development benefits in a region that currently lacks service.

Additionally, as part of White Cloud's discussions with Owyhee County, the project will build a fiber connection to the Owyhee County Court, providing broadband service to the multiple agencies that operate within the courthouse. This includes the County commissioners, clerks, courts, prosecuting attorney, assessor, treasurer, Building Department, and the County Road and Bridge District. The towers will also be open to any first responder and other County users as needs arise.

⁷ Idaho Broadband Advisory Board, <https://commerce.idaho.gov/broadband/idaho-broadband-advisory-board/>.

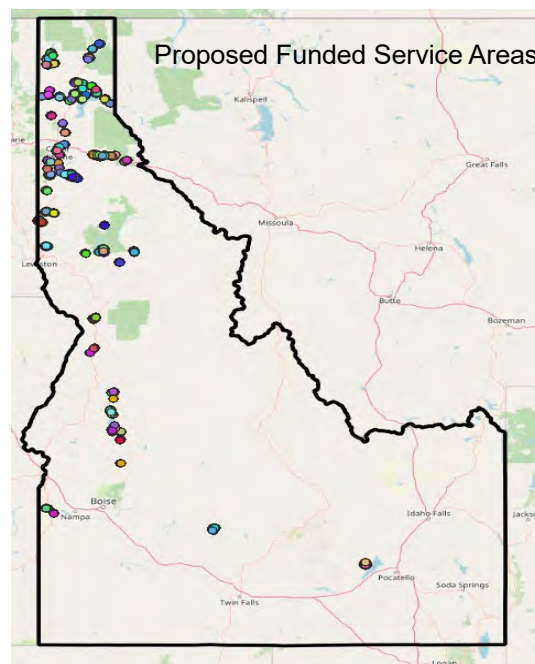
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11/23/22

1. Describe the extent to which the project will facilitate deployment of high-speed broadband networks to areas that are currently either unserved, underserved or both.

ZiPLY Fiber is an Incumbent Local Exchange Carrier in Idaho. The Federal Communication Commission Fabric (V1, 6/30/22) identified 178,000 addressable locations within our Idaho service territory. To identify the maximum speeds capable, we queried our service database. To identify other providers' service availability, we used the Federal Communications Commission Form 477 (6/30/2022) broadband service reported data. This data analysis indicated a total of 5,657 unserved (<25/3 Mbps) and 77,907 underserved (< 100/20 Mbps) addressable locations within the ZiPLY Fiber service territory across Idaho.

To maximize the efficiency and utilization of public funding, we clustered un and underserved addressable locations to determine where ZiPLY Fiber's fiber to the premise network could be built covering the greatest number of eligible addressable locations. It is from these clusters we present to the Idaho Broadband Advisory Board a set of Proposed Funded Service Areas (PFSA's). A funding award within a PFSA, will result in every addressable location being connected to ZiPLY Fiber's fiber optic network, enabling multi-gigabit residential and business service.



2. Describe type of technology to be used.

ZiPLY Fiber will deploy a fiber to the premise (FtTP) network, enabling multi-gigabit connectivity to end users.

3. The number of unserved or underserved locations and/or households that will be served by the project.

ZiPLY Fiber’s PFSA’s will serve 15,207 addressable locations across 14 Idaho counties. Within the 14 Idaho counties, we have 42 unique project clusters ranging in size from 146 to 4,535 locations.

4. Anticipated timeframe for project (start to finish)

ZiPLY Fiber has relationships with existing vendors to facilitate aggressive construction timelines. We are prepared to begin construction immediately upon receipt of an executed contract and deliver completion of the 15,207-address location passing’s within 36 months.

5. Funding request

To construct to each of the 15,207 locations, ZiPLY Fiber requests a total of \$ 78,920,863. We have broken out cost proposals by County for the Idaho Broadband Advisory Board consideration.

6. Total project costs and sources

County	Units	Project TOTAL	ID State Grant	ZiPLY Fiber Match
Benewah	1,531	\$ 11,761,496	\$ 9,280,422	\$ 2,481,074
Bingham	989	\$ 5,961,780	\$ 4,768,034	\$ 1,193,746
Boise	449	\$ 2,581,610	\$ 2,070,907	\$ 510,703
Bonner	4,535	\$ 32,296,463	\$ 25,582,847	\$ 6,713,616
Boundary	459	\$ 2,530,580	\$ 2,047,684	\$ 482,896
Camas	430	\$ 2,820,313	\$ 2,180,950	\$ 639,363
Clearwater	1,073	\$ 6,622,442	\$ 5,288,731	\$ 1,333,711
Idaho	471	\$ 2,059,852	\$ 1,686,189	\$ 373,663
Kootenai	1,249	\$ 9,226,995	\$ 7,294,946	\$ 1,932,049
Latah	991	\$ 6,676,244	\$ 5,304,483	\$ 1,371,761
Nez Perce	154	\$ 929,892	\$ 743,618	\$ 186,274
Owyhee	146	\$ 769,587	\$ 620,991	\$ 148,596
Shoshone	1,138	\$ 6,624,550	\$ 5,309,812	\$ 1,314,738
Valley	1,592	\$ 8,351,532	\$ 6,741,249	\$ 1,610,283
TOTAL	15,207	\$ 99,213,336	\$ 78,920,863	\$ 20,292,473

7. Project ownership

ZiPLY Fiber will build, operate, and maintain the constructed fiber network. ZiPLY Fiber provides both retail and wholesale access to our network with an extensive network of existing wholesale relationships in the Idaho. These newly constructed locations will be immediately eligible for our existing carrier customers as well as new market entrants. The proposed FttP network will consist of single-mode fiber configured to support a passive optical network architecture serving end users.

8. Proposed project costs explained

The proposed costs have been developed by our Fiber Design & Construction division, Network Planning team. Proposed cost modelling includes detailed engineering for the outside plant fiber and Central Office network equipment upgrades to deliver Gigabit Optical Network architecture to end users. The Outside plant fiber costs include deployment aerially, underground (where existing conduit exists) and buried fiber. Fiber cable sizes will range from 48, 72 or 144, depending on network capacity need. The outside plant fiber will connect FttP distributive split hubs throughout each project area; the hubs facilitate fiber deployment to each home within zones of a PFSA.

Additionally, we have included known cost considerations to ensure compliance with the federal 2 CFR §200, National Environmental Policy Act 42 USC §4321 and National Historic Preservation Act 54 USC §300101 in accordance with the US Treasury Guidance for ARPA Capital Projects Fund rules. ZiPLY Fiber is a committed partner for the State of Idaho; together, we can deliver to high-cost places by leveraging our investments with grant funding to bolster broadband connectivity.

9. Demonstration of applicants' financial ability to complete the project within proposed timeframe.

ZiPLY Fiber began operations on May 1, 2020, after acquiring the northwest operations of Frontier Communications in a \$1.35 billion transaction. Since acquisition, ZiPLY Fiber has secured and invested an additional \$500 million in its network infrastructure. We are investing our own money and engaging in Civic Partnerships to reach our goal of enabling access to our fiber network to at least 80% of our more than 1.8 million network passings. Since 2020, we have expanded our fiber network to more than 61,000 Idaho addressable locations.

Under the Idaho CARES Act, we committed to and accomplished FttP build outs within the 120-day project time limits. We have a skilled and ready contractor pool in Idaho and across our service territory enabling us to meet construction deadlines set by funding partners.

We have a skilled team and processes in place to track project financing and implement projects in accordance with applicable state and federal compliance procedures. ZiPLY Fiber has successfully managed projects funded from the FCC Connect America Fund II, RDOF, CARES Act, and ARPA-Capital Projects Fund.

10. Description of match (cash and in-kind)

We have completed desktop level network planning to determine where it makes economic sense to propose project areas given a threshold of 75% grant and 25% match. ZiPLY Fiber is committed to bring 25% of the project activity financial value to the partnership. The delineation of ZiPLY Fiber cash and in-kind breakout will be determined in response in the next level of project development.

11. Description of whether and how the proposed project works in conjunction with the Idaho Broadband Advisory Board's Strategic Plan.

a. Prioritize middle and last mile infrastructure investments to connect residents, businesses, and community anchor institutions that are unserved and underserved in Idaho

The proposed fiber deployment to serve Idaho’s currently un- and under-served locations will facilitate the Idaho Broadband Advisory Boards’ goal of delivering high speed internet access to all Idaho businesses and households by 2027. The Ziplly Fiber PFSA’s will enable multi-gigabit connectivity to households, businesses, and Community Anchor Institutions.

Using the Federal Communication Commission Broadband Serviceable Location Fabric *building_type_code*, we have we have identified the building types that will have access to gigabit connectivity as a result of our proposal.

County	Residential	Business	Enterprise	Mixed Use (Business & Residential)	Community Anchor Institution	Group Quarters
Benewah	1075	232	14	202	8	1
Bingham	702	159	0	58	3	0
Boise	376	46	2	25	0	0
Bonner	3141	362	2	179	9	0
Boundary	302	64	3	84	6	0
Camas	291	130	0	5	4	0
Clearwater	850	156	0	62	6	0
Idaho	311	107	0	51	1	0
Kootenai	1035	126	5	76	6	0
Latah	668	0	0	142	3	0
Nez Perce	114	19	0	19	2	0
Owyhee	87	15	0	45	0	0
Shoshone	775	201	4	73	1	1
Valley	1404	164	0	25	0	0

b. Prioritize broadband investments that strengthen the economic ecosystem for business and ensure access to broadband infrastructure that is both reliable and affordable.

A Ziplly Fiber expanded fiber network strengthens the economic ecosystem in markets we serve. Our core network provides scalable, redundant, and resilient connections. End users are connected directly to the core network through Central Office facilitates in each community. This direct connection enables end user access to unlimited bandwidth options and services. Through Ziplly Fiber’s wholesale sales team (<https://zipllyfiber.com/wholesale/home>) communications industry experts work alongside local service providers, network resellers, and Internet Service Providers (ISP’s) to expand consumer choices in built markets. Enterprises served on our network gain access to terabytes of capacity and ultra-low latency as compared to other broadband network architectures. Ziplly Fiber’s enterprise sales team (<https://enterprise.zipllyfiber.com/>) provides expert consultation on a wide variety of voice and data solutions to meet the needs of the business, no matter the scale.

- c. **Ensure students and educators have access to affordable and reliable broadband services across Idaho in their homes as well as across schools, libraries, and unserved and underserved locations.**

Our current residential service tiers and pricing plans offer families access to speeds to meet their needs at affordable rates.



In addition, Ziplly Fiber is an Eligible Telecommunications Carrier (ETC). As an ETC we enable qualifying low-income households access to the Federal Lifeline and Affordable Connectivity Program. Collectively, eligible households can receive up to \$39.25 in subsidies for their monthly internet service fee and router. On Tribal lands up to \$105 per month can be applied to monthly internet services and router.

Enabling access to Ziplly Fiber internet services facilitates high speed internet access to all Idaho residents, helps the Idaho Broadband Advisory Boards strategic objective to enable access to affordable and reliable broadband services.

- d. **Support data-driven broadband infrastructure investments in Idaho.**

The PFSA’s presented herein represent a thorough and thoughtfully vetted set of opportunities to deploy FttP in an efficient and cost-effective manner, maximizing the value of Idaho’s investment in broadband infrastructure. Our PFSA’s were built from current, private, and publicly available speed offerings by location. Our team identified un-served and underserved locations across the Ziplly Fiber service territory. These addresses were clustered to determine where a fiber to the premise network could be built covering the greatest number of eligible addressable locations cost effectively.

- e. **Prioritize broadband investments that provide access to reliable, resilient, scalable, and redundant broadband service to the Emergency Communications Centers in the State of Idaho.**

Emergency Communications Centers located within Ziplly Fiber service territory and within the PFSA’s will have access to our redundant, scalable, resilient network. End users of the proposed FttP network will have a fiber connection to a Central Office. Each of the Ziplly Fiber Central Office (CO) locations across the PFSA’s are connected to the core network through redundant, company controlled Dense Wavelength Division Multiplexing (DWDM) systems. Current lit capacities range from 400 to 800 gigabits per route with a maximum per routes capacity of 25,000 Gbps. The DWDM backbone is coupled with multi-terabit peering infrastructure at carrier neutral facilities to provide redundancy.

We own or control the fiber optic cable deployed along the network that serves as the primary transport technology between the host and remote central offices and interconnection points with other carriers. We couple our high performance DWDM backbone with a multi-terabit peering infrastructure at a number of carrier neutral facilities, which allows us to cost-effectively handle streaming video traffic delivered by peering partners while simultaneously striving to provide the best possible performance for our customers.