LATAH COUNTY CAPITAL PROJECTS FUND PROPOSAL & APPLICATION

On behalf of the Latah County Broadband Coalition, Latah County submits this proposal and application to the Idaho Broadband Advisory Board for Capital Projects Funds. We are excited to present you with this comprehensive proposal to connect Latah County, which is the result of over a year and a half of collaboration among local stakeholders, including cities, libraries, schools, internet service providers, and many others.

As you'll see, we believe connecting all of the County will take a true public-private partnership. We aim to build an open access dark fiber network to support a hybrid approach that includes point-to-multi-point wireless and fiber-to-the-premise last-mile solutions. This involves building a multi-strand fiber backbone to support wireless towers as well as to deploy fiber directly to community anchor institutions and each community big enough to make builds feasible and justifiable, namely incorporated cities and select unincorporated areas.

THE STATE OF BROADBAND IN LATAH COUNTY

Latah County is 98% rural by geography and 32% rural by population, which makes reaching the 12,660 residents who live outside the City of Moscow exceptionally difficult.

Why?

Because the fiber corridor runs along the western-most edge of the County on the Washington side of the state line, which is closest to the University of Idaho, Washington State University, and the City of Moscow — each well-populated areas with relatively flat, clear paths for telecommunications infrastructure. Whereas the rest of the County consists of 1,070 square miles of expansive, topographically diverse terrain with schools, cities, businesses, and households spread out all across it. (See next page for maps.)
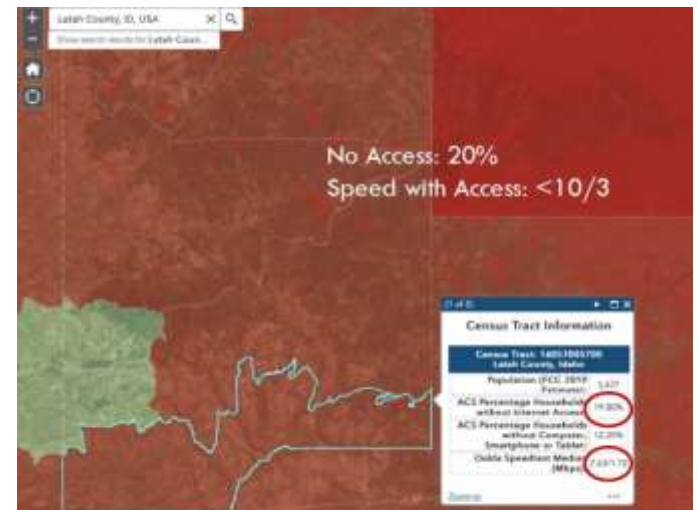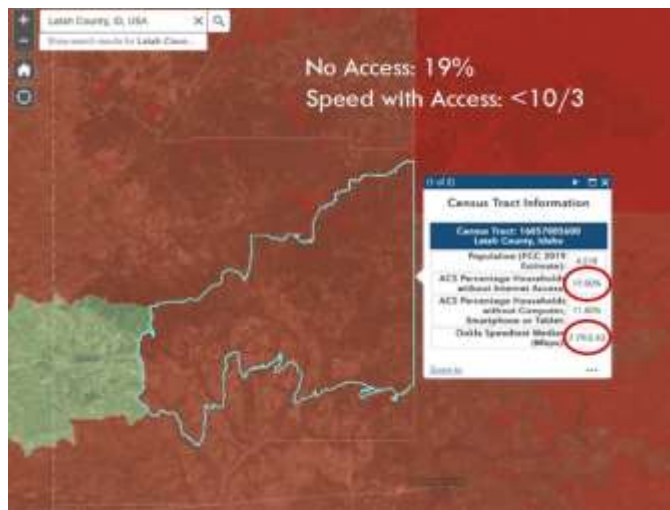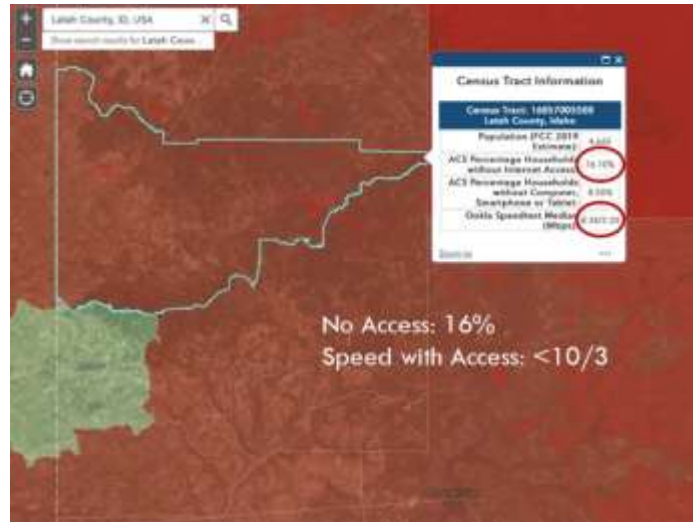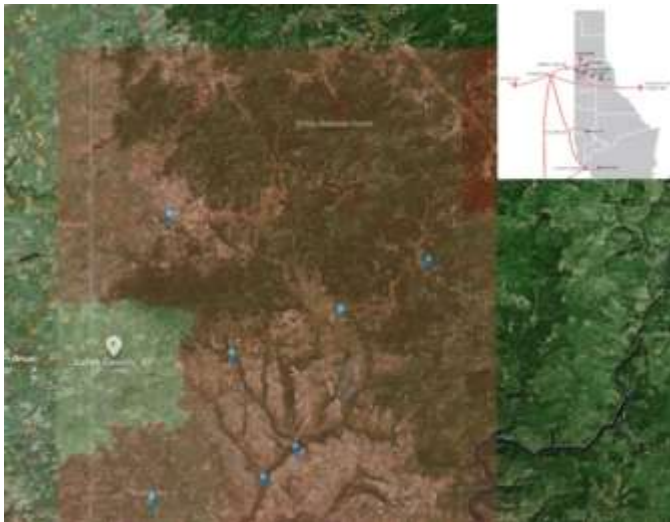
What's more: To the north, east, and south of rural Latah County is largely unpopulated timbered acreage, which provides no alternate route for connection — essentially cutting off rural residents from broadband infrastructure and modern-day internet services.

Roughly 20% of households in rural Latah County have no internet access at all and the rest have service at levels less than 10 megabits per second download speed and 3 megabits per second upload speed, according to new NTIA maps*. By new broadband standards, areas with less than 100/20 Mbps service are considered underserved and those with less than 25/3 Mbps service are considered unserved.

This means **rural Latah County is UNSERVED**.

Data displayed from the NTIA Indicators of Broadband Need map is from May 2022. While Ookla median speed tests show a small increase since then, the difference is not significant considering the size of the census tracts and services available based on known infrastructure.

Maps of Latah County Broadband Access

No Access: 16%
Speed with Access: <10/3

No Access: 19%
Speed with Access: <10/3

No Access: 20%
Speed with Access: <10/3

BUILDING THE LATAH COUNTY BROADBAND COALITION

The Latah County Broadband Coalition is made up of stakeholders from across the County that have pledged to participate in facilitating the build-out of future-proof broadband infrastructure throughout Latah County with the goal of capturing and applying available funding to ensure rural communities are connected with 21st-century services – once and for all.

The Pledge

The goal of the Latah County Broadband Coalition is to engage stakeholders across the County to communicate broadband needs and offer support in developing projects to address those needs. We aim to find local, state, and federal funding to build future-proof broadband infrastructure throughout Latah County. We are not interested in prescribed pathways to achieving this goal — rather, we're committed to working together to find the best solutions for our communities. Working together will only make pursuing partnerships and funding opportunities more possible and more potent.

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In establishing this coalition, we recognize the unmatched importance of broadband access and affordability for education, health, commerce, and community. Ensuring that every community member has access to reliable and affordable broadband is not only a key component to modern life but also to future development.

We undertake this work knowing that a robust broadband connection allows students greater access to educational opportunities, patients greater access to healthcare professionals, businesses access to customers around the world, and farmers the ability to increase productivity and profitability.

We are committed to providing the support our community and citizens need to enable us to build sound, future-proof broadband infrastructure and last mile connectivity to homes. To demonstrate that commitment, we sign on to join the Latah County Broadband Coalition with a pledge to participate in the following ways:

- Assign a representative to serve on the Latah County Broadband Coalition committee
- Participate in information sharing and gathering to inform broadband planning and projects
- Agree to leverage available funding to pursue future-proof broadband projects

Coalition Members

City of Potlatch	City of Troy	Potlatch School District
City of Bovill	City of Moscow	Troy School District
City of Genesee	Latah County Library District	University of Idaho
City of Kendrick	Moscow School District	Gritman Medical Center
City of Juliaetta	Kendrick Joint School District	South Latah Highway District
City of Deary	Genesee Joint School District	Latah County

Our Progress

Over the last year and a half, we've built a local coalition, established a committee, completed an asset report, developed relationships with providers, created a website, conducted public outreach, launched a speed test campaign, and begun the project planning process, among other activities.

Our Coalition Committee met regularly for the first six months to establish a baseline understanding of broadband and build common knowledge around the challenges and opportunities in Latah County. We engaged the Idaho Broadband Office, local providers, right-of-way owners, and consultants to equip ourselves with enough information to make decisions about projects, partnerships, and what makes the most sense for our communities.

A full account of the Coalition's activities can be found on our website: https://grants.latahcountyid.gov/updates/

PUBLIC INVESTMENT IN BROADBAND LOCALLY

Over the last 20 years, the US has spent over $80 billion trying to solve the broadband problem by funding a whole lot of federal programs designed specifically to serve rural areas. And yet all that's been accomplished is increasing the profit margins of high-cost private companies — and there's still no service to the high-cost rural customers. While this is true across the country, Idaho and its rural communities have been particularly left behind when this basic infrastructure issue is left to private companies to solve.

Below is an overview of the public investment made in Idaho, and Latah County, from just a handful of federal programs that have distributed billions of dollars for broadband expansion in rural, high-cost, hard-to-reach areas. These programs represent 10-year commitments by the Federal Communications Commission (FCC), mostly

through reverse auctions, to subsidize the cost for providers to bring service to unserved rural areas (previously 10/1 Mbps, now 25/3 Mbps), which simultaneously eliminates those areas from additional public investment for the decade-long period of performance.

Federal Program	Total Funding	Idaho vs. US Totals		Latah vs. Idaho Totals	
Connect America Fund	$1,500,000,000.00	$13,725,013.40	0.9%	$12,712.90	0.09%
Alternative Connect America Cost Model	$10,000,000,000.00	$118,632,966.59	1%	$12,589,052.32	11%
Rural Digital Opportunity Fund	$20,400,000,000.00	$112,489,827.90	0.5%	($4,364,895.70) $31,680.00	(4%) 0.028%
E-Rate, 2016-2022	$17,775,949,829.66	$102,264,617.20	0.5%	$2,129,256.41	2%
Broadband Technology Opportunity Program	$4,000,000,000.00	$100,880,031.00	2.5%	$2,393,623.00	2.9%

Connect American Fund (CAF)

CAF II dollars spent to connect 11 locations with GSO satellite service that does not exceed 10/1 Mbps, representing just over $1,000 per passing.

Alternative Connect America Cost Model (ACAM)

ACAM dollars are funding a single internet service provider to service 1,336 locations over 10 years with required offerings for 809 locations at 25/3 Mbps, 436 locations at 10/1 Mbps, 22 locations at 4/1 Mbps, and 69 locations with none. This is just under $9,500 per passing.

Rural Digital Opportunity Fund (RDOF)

RDOF dollars were awarded to SpaceX to deploy Starlink and have since been clawed back by the FCC, citing that the low-orbit satellite technology has not met advertised minimum speeds. This would have been just under $2,000 per passing.

E-Rate

Of the E-Rate funding awarded over the last 8 years, only one award has been for a major infrastructure project, which represents over 70% of all funding; the remaining funding pays for monthly service costs or internal upgrades at schools and libraries, which is matched by the state at roughly 30%.

Broadband Technology Opportunity Program (BTOP)

BTOP dollars represent the last most comprehensive proposal to connect our 5-county region via anchor institutions with a microwave network to serve roughly 2,800 locations – it was funded by the American Recovery and Reinvestment Act of 2009.

Links

See the above table for a link to each fund's allocation overview.

As well-intentioned as these rural broadband expansion efforts have been, the Universal Service Fund (USF) programs have not been successful — in large part because the appropriate definition of broadband and service level requirements are consistently a decade behind. But also because the barriers to entry for the small, local providers who most often serve rural areas are too high, which can leave them squeezed out altogether. And while

large commercial carriers continue to draw from these funding pools, most rural areas are still without basic broadband.

In part, this section is meant to demonstrate that our request of about $40 million over six distinct phases to build baseline infrastructure and connect Latah County communities for many decades is not really all that big of an ask. Especially with our promise of future-proofing with open access fiber infrastructure, and even more especially when compared with what's been spent to date. If the sums above (almost $25 million) are doled out every ten years ($75 million over 30 years, $125 million over 50 years) to upgrade to new minimums with the expectation of endless subsidies, our proposal starts to look pretty cheap in comparison.

CHALLENGES TO BROADBAND EXPANSION IN LATAH COUNTY

There are many challenges to broadband expansion in Latah County — most are not unique to Latah County and have been widely discussed at the state and national levels. These include issues surrounding territories, return on investment, permitting, politics, and right of way access.

Instead of rehashing each in turn, here we'll focus on the **main obstacle: <u>conflating infrastructure and service.</u>**

Currently, there are several facilities-based carriers offering broadband services in Latah County – both incumbent and competitive local exchange carriers (ILECs and CLECs). They each build their own network infrastructure, including fiber or copper cables, un/licensed spectrum, transmission equipment, and towers. While this complex broadband landscape makes for interesting partnership possibilities for today's projects, it also serves as stark evidence of the wasteful broadband subsidy programs of the past several decades.

An ILEC, or a CLEC with a near-monopoly service area, has very little incentive to enable competitors into their territory – whether via open access networks or networks owned by other carriers. To do so would erode their competitive advantage and lower their revenues. So these carriers are understandably more interested in opportunities to increase revenues, decrease competition, and/or increase margins on services being sold. The result is a patchwork of underbuilt, largely standalone networks knit together with near-obsolete technologies that provide the bare minimum levels of service, which is a strategy intended to hoard territory and avoid CapEx investments while relying on the government to subsidize the next round of upgrades to the next bare minimum.

Prior publicly funded programs and policies created this situation. It seems to us that the main mistake in implementing broadband expansion efforts has been the failure to separate the infrastructure from the service.

Much like roads, water, and power, **broadband is basic infrastructure**, and infrastructure is typically government's job. We think it's time to treat it – and fund it – that way.

OUR PHASED APPROACH

To address this main challenge, Latah County aims to build a dark fiber network along identified major gaps where there is no fiber optic cable infrastructure. This involves constructing conduit pathways along public rights-of-way filled with multiple strands of fiber optic cables. These pathways would form the baseline infrastructure needed to enable private providers to serve last-mile locations at speeds that exceed what's available today – and is scalable for what's needed tomorrow.

The proposed plan, outlined below, would connect existing wireless towers with fiber as well as make direct fiber connections to Community Anchor Institutions, like city halls and libraries, and to communities that are population-dense enough to make builds feasible and justifiable, including incorporated cities and, eventually, select unincorporated areas.

Phase 1

Fill in identified gaps to complete a redundant fiber optic cable loop with multiple strands of fiber on major routes throughout the County.

COST: $16,029,179.76

Phase 2

Connect unserved and underserved Community Anchor Institutions with dedicated fiber for minimum 1 Gigabit symmetrical service, scalable.

COST: $1,477,612.47

Phase 3

Prepare preliminary studies and design-engineered plans for fiber-to-the-premise builds in each participating incorporated City.

COST: $175,000

Phase 4

Connect identified tower locations with fiber backhaul for emergency communications and first responders as well as any providers who co-locate.

COST: $10,324,677.53

Phase 5

Deploy fiber-to-the-premise builds in participating incorporated cities using designs and studies completed in Phase 3.

COST: $4,282,600.00

Phase 6

Use infrastructure built in Phases 1-5 to continue to connect rural locations outside of cities, either with fiber line extensions or enhanced fixed wireless.

COST: $665,000.00 +

OUR FUTURE-PROOF PROPOSAL

About every six years, the FCC exponentially increases the definition of adequate broadband and, as mentioned previously, they are typically about a decade behind the mark. In 2010, the definition increased to 4/1 Mbps from 200/200 Kbps in 1996. In 2015, the definition increased to 25/3 Mbps and now it's widely considered to be 100/20 Mbps, though not yet blessed by the FCC. So, it stands to reason that by 2028, the download speed will increase to 1 Gbps, continuing to rise year over year.
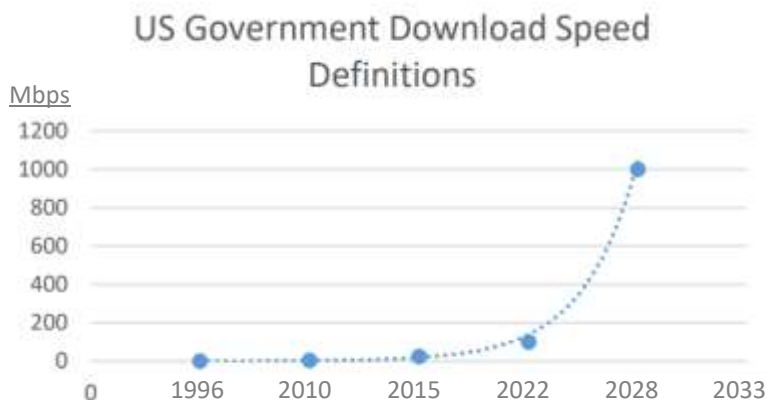
Considering that the funds being distributed today represent a historic infrastructure investment, we should focus on building networks that can accommodate growth for at least the next 30 years. Which is exactly what our future-proof approach proposes.

Future-Proof Means **Fiber**

Our comprehensive approach treats broadband infrastructure as a multi-decade investment. As such, we believe building conduit pathways throughout the County with multiple strands of fiber to serve current and future needs and locations is the most cost-effective approach. Fiber is a technology that will last for over 30 years and is the only technology capable of multi-Gigabit symmetrical speeds. We don't build dirt roads and expect them to handle main thoroughfare traffic; digital highways are no different.

Our estimate of the fiber capacity needed across the County to create a reliable, redundant, and scalable network is based on existing population and location data and accounts for growth as well as routes that might be extended to our neighboring counties of Benewah, Shoshone, and Clearwater.

Fiber strands are allocated based on number of locations at 1 strand of fiber per 50 connections, an average estimate given a community's choice to partner to deploy either a passive optical network with splitters or an active optical network with switches. Community Anchor Institutions (CAIs) and Towers have dedicated strands between 1-5 depending on the number and size of buildings or co-locating entities. Below is an outline of those calculations:

Incorporated Cities and Rural Areas	Locations	Calculation	Strands
Genesee	456	1 strand per 50 locations	9
Troy	407	1 strand per 50 locations	8
Potlatch	383	1 strand per 50 locations	8
Juliaetta	281	1 strand per 50 locations	5
Deary	296	1 strand per 50 locations	6
Kendrick	201	1 strand per 50 locations	4
Bovill	153	1 strand per 50 locations	3
Onaway	103	1 strand per 50 locations	2
CAIs	40	1-3 strands per CAI	60
Towers	8	5 strands per tower	40
Rural / Unincorporated Areas	3602	1 strand per 50 locations	72 (not included)
		GRAND TOTAL	145

As you can see, we're proposing no less than 144 strands of fiber (they come in pairs of 12) throughout the County to serve last-mile locations now and into the future. We've also included locations outside of incorporated cities but understand that connecting each and every location in the county with a wired fiber connection is cost prohibitive and time consuming, which is why our proposal includes enhanced fixed wireless in sparsely populated areas.

Below on the next page is a breakdown of costs per passing, first with fiber-to-the-premise builds for every single location in Latah County and second with our hybrid approach, including fiber-to-the-premise in incorporated cities and enhanced fixed wireless with fiber backhaul to towers in more remote areas.

- Total to connect all rural locations with fiber, including cost to build gap loop routes, fiber along all county roads (839 miles), and connections to all city and unincorporated area locations = $380,169,012.91
- Total to connect all rural city locations with fiber and rural unincorporated area locations with enhanced fixed wireless, including cost to build gap loop routes, fiber to towers, and connections to all city locations = $41,016,438.94
- ALL fiber cost per passing = $65,787.54
- HYBRID fiber/wireless cost per passing = $6,054.42
  - 15-25 additional locations annually if low-end of dark fiber lease revenue at $150,000
  - 60-75 additional locations annually if high-end of dark fiber lease revenue at $450,000

While our goal would be to connect each location in the County with a direct fiber connection, timeline and available funding constraints limit it as an option. However, a hybrid approach that connects densely populated rural areas directly with fiber and incorporates enhanced fixed wireless with fiber backhaul is much more feasible. Additionally, our proposed dark fiber model means that the network will not only be financially self-sustaining in that private providers pay a lease fee to "light" the fiber pathway for last-mile service, but it also means that 100% of those dark fiber lease fees will be invested back into continually expanding the fiber footprint in Latah County. We anticipate between $150,000 - $450,000 in revenue annually as strands are leased to serve last-mile locations.

Future-Proof Means **Open Access**

When it comes to broadband, we believe citizens are best served by a consistent approach to technologies and business models, which is why we hope to partner with the Port of Lewiston and Petrichor Broadband to implement their successful open access dark fiber model.

We are eager to implement this proven model developed by Ports to create publicly owned, open access dark fiber infrastructure. By leasing the dark fiber to retail service providers at a price point that allows competitive pricing to consumers, public entities facilitate economic development. The private sector competes to sell services while investing in employees and equipment to grow their business in unserved communities.

This proven approach, combining public fiber infrastructure with private sector service delivery, is addressing the inadequacies of past policies and investments. We urge the Board to invest in this true public-private partnership.

Future-Proof Means **Dig Once**

Our broadband utility assessment report allowed us to work with providers over the course of many months to understand where existing assets in the County are located. (Specific details in a KMZ on request.) Below is an overview of major fiber routes and gaps. In **blue**, you'll see existing known fiber routes and in **red**, proposed builds to fill gaps and expand.

It's worth noting that even though these routes exist, we don't know for sure the deployment type or fiber count. For instance: Is the fiber direct-buried or laid with conduit? Is it aerial? How many strands are available to purchase or lease as part of a dark fiber network? These factors make a difference for infrastructure longevity, climate resiliency, network redundancy, and eventual upgrade or replacement costs. Buried conduit adds multiple layers of protection from wildfires, high winds, and other types of potential hazards that can lead to blackouts on aerial deployments. It also prevents the infrastructure from having to be completely re-trenched or re-bored when additional fiber strands are needed — they can just be pulled through the previously buried conduit.

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< $2,624,951

< $4,133,318

$2,278,875 >

< $4,015,783

< $2,820,843
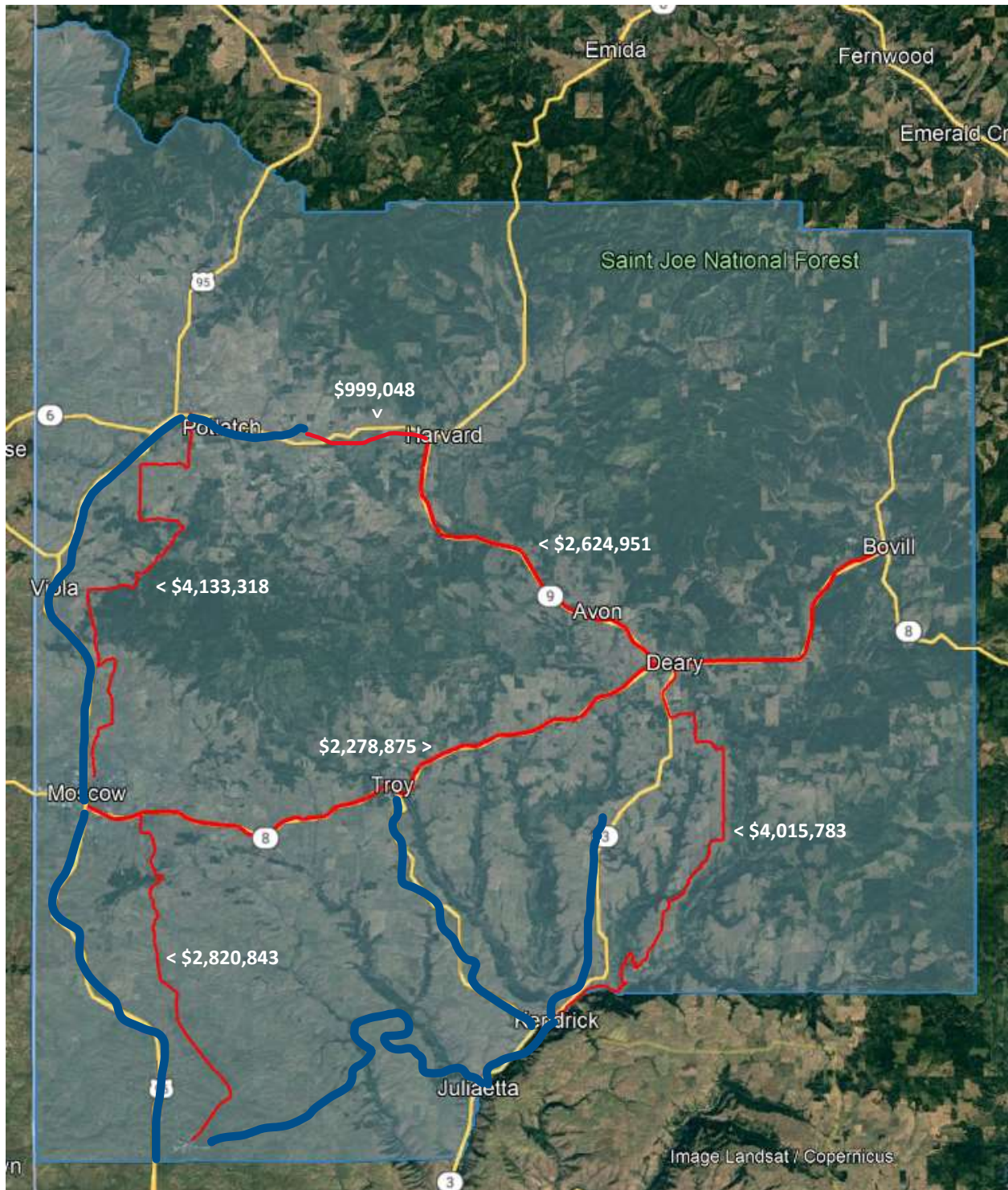
Although buried fiber protected by conduit represents higher up-front costs, it accommodates the Dig Once policy best when robustly built to accommodate all providers and needs, thereby leveraging public funds to the greatest extent possible and decreasing costs in the long run. Our ideal would be for the entire redundant loop to be buried conduit that could accommodate at least 144 open access dark fiber strands. However, to accommodate funding availability constraints and anticipated challenges from large TelCos, we have estimated costs based on a generalized average of 50% buried (at 80% trenching and 20% boring) and 50% aerial deployments for gaps only.

Brief Budget

Since our proposal is comprehensive, we are proposing our entire project with the understanding that a combination of Capital Project Funds (CPF) and Broadband Equity, Access, and Deployment (BEAD) funds would be required to complete the entire phased approach.

For CPF, we propose that the Board considers funding either Phases 1-3 or Phases 1-4. For BEAD, we propose that the Board consider funding either Phases 4-6 or Phases 5-6.

Phase	Cost	Locations
Phase 1 – Build fiber loop, fill gaps	$16,029,179.76	0
Phase 2 – Connect CAIs	$1,477,612.47	25
Phase 3 – FTTP design/engineering	$175,000.00	0
Phase 4 – Fiber to Towers	$10,324,677.53	1,222 - 4,423
Phase 5 – FTTP builds in Cities	$4,282,600.00	1,288
Phase 6 – Additional fiber expansion	$665,000.00	200+

Please see the included spreadsheet and materials for more specific details.

Locations Overview

In partnership with local providers, we propose to connect 25 Community Anchor Institutions, 1,288 rural incorporated city locations (Bovill, Deary, Genesee, Potlatch, Onaway), 200 unincorporated rural locations (Helmer, Harvard, Viola, Princeton-Hampton), and 8 communications towers with wired fiber lines, enabling between 1,222 and 4,423 unincorporated rural locations (NW, NE, SW, SE rural proposed service areas) access to improved fixed wireless with fiber backhaul. In other words, all unserved and underserved locations in Latah County. All locations will have access to a *minimum* of 100/20 Mbps, scalable, and direct fiber connections will be scalable to multi-Gigabits symmetrical.

While our goal is to include all unserved and underserved rural residents in this future-proof multi-phased build out, we understand that certain providers will challenge locations deemed in their territory or that they claim are served. We've worked very hard to ensure all providers feel they can participate in this model, but still some have declined support or have not responded. Because of this, our proposed service area polygons are drawn to exclude Charter-Spectrum's hybrid fiber-coax service boundaries and we are willing to eliminate rural residents from the Telephone and Data Systems (TDS) territory outside the cities of Kendrick, Juliaetta, and Troy, if needed.

Additionally, CARES Act dollars were previously awarded to bring fiber to Potlatch. This fiber is not currently serving all locations in Potlatch or Onaway, and city leaders would like the opportunity to plan their own city infrastructure. So, Potlatch and Onaway are included. And so is Genesee. We encourage the state to allow local communities to have a say in who they partner with and how their infrastructure is implemented. Funding open access dark fiber infrastructure is the surest way to allow locals a choice, ensuring a single private provider cannot monopolize rural infrastructure.

Regardless of whether an ISP chose to support this proposal, the infrastructure will be available for any one of them to use. All providers can ride publicly owned dark fiber; only one can ride privately owned fiber. If awarded,

we will continue to extend the option of working together, in partnership with providers, to serve these locations in Latah County.

Please see the included spreadsheet and materials for more specific details.

Permits, Easements, Readiness to Proceed

In addition to ongoing conversations with Coalition members and providers, we have consulted local ROW owners and managers, including the Idaho Transportation Department (ITD), our local Highways Districts, our local Cities, our local utilities, and select landowners. Forthcoming designed and engineered routes will dictate the contact agency and permitting and/or easement situation for each build. After that phase, we will work with the contracted firm to obtain the necessary permits and easements as the project progresses. ITD and other ROW managers do not issue permits for large projects along many miles all at once, so these applications and agreements will be obtained after engineered designs are complete and on an ongoing basis after a construction contractor is procured. That said, discussions with non-state ROW owners are well underway and securing formal franchise agreements will be quick, if awarded.

The following entities that manage ROWs are either aware of the proposed project or participated in project planning:

- ITD, North Latah Highway District, South Latah Highway District, City of Moscow, City of Potlatch, City of Genesee, City of Troy, City of Deary, City of Onaway, City of Kendrick, City of Juliaetta, City of Bovill, Latah County, Avista Utilities, Clearwater Power, select landowners.

Further, Latah County and many ISPs already have easement and colocation agreements in place — both in certain ROWs and on the 8 towers proposed to connect with fiber backhaul. There is also already power to these towers, so deploying licensed point-to-multi-point wireless to surrounding locations will be seamless and speedy.

Please see the included spreadsheet and materials for more specific details.

Project Schedule

Depending on how many phases the Board is interested in funding with CPF versus BEAD, the project schedule below is based on our most optimistic outcome.

Timeline	Project Activity
September – October 2023	Grant award notice
November 2023 – January 2024	RFP for design, engineering, project management developed and released
January – April 2024	Complete designed and engineered routes; materials procured
April – June 2024	RFP developed and released for construction bids
June – November 2024	First phase of construction complete; loop routes, fill gaps
November 2024 – February 2025	FTTP designed and engineered plans for cities, unincorporated areas
May – November 2025	Second phase of construction complete; fiber to the towers
May – November 2026	Possible third phase of construction complete, if needed

December 2026	CPF Project Closeout
May – November 2026	Fiber to the premise builds in incorporated cities, unincorporated areas
May – November 2027	Fiber to the premise builds in unincorporated areas, incorporated cities
May – November 2028	Fiber to the premise builds in incorporated cities, unincorporated areas
December 2028	BEAD Project Closeout

Note that cold winters with frozen ground limit construction seasons to 5-7 months per year. Also note that awarding all phases could cut down the time and costs associated with bidding separately funded projects, especially considering that it's much more cost-effective and time-efficient to transfer ARPA and IIJA funds to a political subdivision than it is to develop legal contracts with private companies.

DETAILED BUDGET

Build / Construction Cost			
Phase 1 - Build fiber loop, fill gaps	$ 16,029,179.76		
Phase 2 - Connect CAIs	$ 1,477,612.47		
Phase 3 - FTTP design/engineering	$ 175,000.00		
Phase 4 - Fiber to Towers	$ 10,324,677.53		
Phase 5 - FTTP builds in Cities	$ 4,282,600.00		
Phase 6 - Additional fiber expansion	$ 665,000.00		
	$ 32,954,069.76	TOTAL	

In-Kind Match			
Repeater Site Upgrades	$ 1,600,000.00		
Coalition Building, Planning	$ 71,760.00		
Broadband Asset Report	$ 21,500.00		
City & County ROWs	TBD		
FSI Route	$ 4,557,751.68		
POL Route	$ 3,467,286.31		
Towers	$ 1,200,000.00		
ISPs Make-Ready	$ 706,000.00		
	$ 11,624,297.99	TOTAL	

Cash Match			
Latah County	$ 1,000,000.00		
Latah County - Dark Fiber Revenue	$4,500,000.00 - $13,500,000.00		
	$ 1,000,000.00	TOTAL	

GRANT ASK TOTALS - SCENARIO 1			
PHASES 1-4 - CPF	$ 28,006,469.76		
Design, Engineering, Project Mgmt	$ 1,400,323.49		
Contingency	$ 5,601,293.95		
Indirect Costs	$ 700,161.74		
	$ 35,708,248.94	TOTAL	
PHASES 5-6 - BEAD	$ 4,947,600.00		
Design, Engineering, Project Mgmt	$ 247,380.00		
Contingency	$ 989,520.00		
Indirect Costs	$ 123,690.00		
	$ 6,308,190.00	TOTAL	

GRANT ASK TOTALS - SCENARIO 2			
PHASES 1-3 - CPF	$ 17,681,792.23		
Design, Engineering, Project Mgmt	$ 884,089.61		
Contingency	$ 3,536,358.45		
Indirect Costs	$ 442,044.81		
	$ 22,544,285.09	TOTAL	
PHASES 4-6 - BEAD	$ 15,272,277.53		
Design, Engineering, Project Mgmt	$ 763,613.88		
Contingency	$ 3,054,455.51		
Indirect Costs	$ 381,806.94		
	$ 19,472,153.85	TOTAL	

PROJECT BREAKDOWNS - SCENARIO 1			
CPF: Phases 1-4			
Grant Ask	$ 35,708,248.94	74%	
In-Kind Match	$ 11,624,297.99	24%	
Cash Match	$ 1,000,000.00	3%	
	$ 34,708,248.94	TOTAL	
BEAD: Phases 5-6			
Grant Ask	$ 6,308,190.00	15%	
In-Kind Match	$ 35,708,248.94	85%	
Cash Match	$ -	0%	
	$ 6,308,190.00	TOTAL	
	$ 41,016,438.94	GRAND TOTAL	

PROJECT BREAKDOWNS - SCENARIO 2			
CPF: Phases 1-3			
Grant Ask	$ 22,544,285.09	68%	
In-Kind Match	$ 9,718,297.99	29%	
Cash Match	$ 1,000,000.00	3%	
	$ 21,544,285.09	TOTAL	
BEAD: Phases 4-6			
Grant Ask	$ 19,472,153.85	44%	
In-Kind Match	$ 24,450,285.09	56%	
Cash Match	$ -	0%	
	$ 19,472,153.85	TOTAL	
	$ 41,016,438.94	GRAND TOTAL	

Build / Construction Cost	
Phase 1 - Build fiber loop, fill gaps	Estimates represent a generalized average of 50% buried (at 80/20 trenching/boring) and 50% aerial per mile and also include materials, permitting, traffic control, splicing, testing, and installation labor, with baseline costs as follows: aerial $85,000/mile, boring $775,000/mile, trenching $165,000/mile, vaults $2,300/each, conduit $17,680/mile, 12-strand $9,000/mile, 96-strand $25,000/mile, splice case $325/each, installation $720/each, etc., and including routes from (1) Moscow to Viola to Potlatch, (2) Moscow to Blaine to Genesee, (3) Moscow to Bovill, (4) Princeton to Harvard, (5) Harvard to Deary, and (6) Deary to Kendrick.
Phase 2 - Connect CAIs	Same cost calculations as above for 25 community anchor institution locations, including city and fire halls, libraries, community centers, governmental buildings, and others as outlined in detail tabs.
Phase 3 - FTTP design/engineering	Estimated at $25,000 per city or unincorporated area, including Bovill, Deary, Troy, Potlatch, Juliaetta, Kendrick, Onaway, Harvard, Princeton, Viola, and Helmer. Potentially provider-contested or excluded locations are: Troy, Kendrick, Potlatch, Juliaetta. 11 minus 4 = 7.
Phase 4 - Fiber to Towers	Same cost calculations as above for 8 towers as outlined in detail tabs for fiber backhaul for improved emergency communications used by first responders as well as enhanced fixed wireless for 4,423 rural locations by providers who co-locate.
Phase 5 - FTTP builds in Cities	Estimate based on number of identified un/underserved city locations (1,288) times an average connect cost for densley populated cities at an average of $3,500 per connection. Does not include Troy, Kendrick, or Juliaetta.
Phase 6 - Additional fiber expansion	Estimate based on number of identified unincorporated area locations (200) times an average connect cost for densley populated cities at an average of $3,500 per connection, including Harvard, Helmer, Viola, and Princeton.
Design, Engineering, Project Mgmt	Standard cost estimate of 5% of build costs for design, engineering, and project management per phase.
Contingency	Standard estimate for unanticipated costs associated with major construction projects. Though 10-15% is typically an acceptable threshold, we are including 20% due to recent experience and current circumstances which account for concerns related to inflation and supply chain issues.
Indirect Costs	Standard estimate for costs not directly associated with construction project completion but necessary for carrying it out, including grant administration and legal contracts and consultation, over the 2-3 year period of performance.

In-Kind Match	
Repeater Site Upgrades	Public safety communications upgrades to a Simulcast System enabling radio transmissions to synchronize so that multiple mountaintop sites can send the same radio transmission at the same time, upgrading to the basic modern standards for interoperable communications, which is to be P25 compliant, among other items.
Coalition Building, Planning	Estimate of staff time spent building and coordinating the coalition, consultation and provider meetings, outreach, planning activities, and grant application preparation at a loaded labor rate of $46/hour for an average of 15 hours/week over 2 years.
Broadband Asset Report	Cost to complete a Broadband Utility Assessment report including regular check-ins during the data gathering and discovery phase, mapping of existing and proposed networks, and cost estimates for fiber construction, networking equipment, and data center upgrades to enable minimum speeds of 100/20 Mbps, scalable to 100 Mbps symmetrical.
City & County ROWs	Unknown but demonstrable value of publicly owned and managed right of ways at the County and City levels made available in order to complete the proposed project.
FSI Route	Value of in-process fiber build from Moscow to Bovill funded in part by E-Rate. Estimate represents from-scratch build based on costs outlined above and including previously publicly funded portion and minus the proposed cost to add additional fiber strands and vaults, leaving the presumed value of the route to be leveraged for this project proposal.
POL Route	Value of in-process fiber build from Lewiston to Moscow funded in part by the Idaho Broadband Fund. Though the entire length of the build is integral to our project, the estimate is conservative and represents only the presumed value of the route stretching from Genesee to Moscow.
Towers	Estimated value of existing lattice and monopole towers and site infrastructure at an average of $250,000 per structure accounting for 8 structures. Valuation does not include land, land lease fees, power, or co-location fees.
ISPs Make-Ready	Rough estimate of costs anticipated to be incurred by participating ISPs to upgrade networking equipment and electronics to enable enhanced fixed wireless and/or connect last-mile locations. Conservative estimate for 28 CAIs at $6,500 per connection plus 8 towers at $65,500 per connection. Does not account for or include the cost of additional towers and/or access points.

Cash Match	
Latah County	"Up to" cash commitment from FY24 budget for broadband expansion.
Latah County - Dark Fiber Revenue	Estimated $150,000 - $450,000 annual revenue from dark fiber lease fees paid by private providers to ride and "light" dark fiber pathways to serve last-mile locations. Over the next 30 years, this represents an additional $4,500,000 - $13,500,000 continual cash investment toward expanding the dark fiber footprint in Latah County that will be leveraged against and in partership with private provider contributions to connect last-mile users. Not included in the budget.

SEE FULL SPREADSHEET
FOR COMPLETE DETAILED BUDGET AND NARRATIVE

	Unincorporated			TBD	
UNSERVED	Avon			TBD	
UNSERVED	Cedar Creek			TBD	
UNSERVED	Farmington			TBD	
UNSERVED	Harvard			TBD	
UNSERVED	Helmer			TBD	
UNSERVED	Howell			TBD	
UNSERVED	Joel			TBD	
UNSERVED	Princeton			TBD	
UNSERVED	Viola			TBD	
UNSERVED	Community Center	1007 Rothfork Rd, Viola ID	0.14	$ 27,424.86	
UNSERVED	Community Center	3487 Main St, Princeton ID	0.02	$ 3,917.84	
UNSERVED	Community Center	2017 Deary St, Harvard ID	0.06	$ 11,753.51	
UNSERVED	Community Center	1044 Mountain Home Rd, Cora ID	1.65	$ 323,221.61	
			1.87	$ 366,317.82	TOTALS

	Last-Mile Locations			
Fiber-to-the-Premise			$ 25,000.00	
Last-Mile Location Connections	Population (all unincorporated)	8284		
		Locations	3601.739	$12,606,086.96
		Fiber Strands	72.03478	
Last-Mile Location Connections	Population (4 unincorporated)	450		
		Locations	200	$ 700,000.00
		Fiber Strands	4	

UNSERVED - INCLUDED

	Bovill				
UNSERVED	City Hall	100 Railroad Ave, Bovill ID, 83806	0.28	$ 54,849.73	
UNSERVED	Fire Hall	205 3rd Ave, Bovill ID, 83806	0.05	$ 9,794.59	
UNSERVED	Library	310 1st Ave, Bovill ID, 83806	0.07	$ 13,712.43	
Served	School	410 3rd Ave, Bovill ID, 83806	na	na	
			0.4	$ 78,356.75	TOTALS

	Last-Mile Locations			
Fiber-to-the-Premise			$ 25,000.00	
Last-Mile Location Connections	Population	322		
	Locations	153	$ 535,500.00	
	Fiber Strands	3.06		

UNSERVED - INCLUDED

	Deary				
UNSERVED	City Hall	401 Line St, Deary ID, 83823	0.05	$ 9,794.59	
UNSERVED	Fire Hall	403 Main St, Deary ID, 83823	0.04	$ 7,835.68	
UNSERVED	IDL Office	3130 Highway 3, Deary ID, 838	0.5	$ 97,945.94	
UNSERVED	Library	304 2nd Ave, Deary ID, 83823	0.01	$ 1,958.92	
Served	School	502 1st Ave, Deary ID, 83823	na	na	
			0.6	$ 117,535.13	TOTALS

	Last-Mile Locations			
Fiber-to-the-Premise			$ 25,000.00	
Last-Mile Location Connections	Population	455		
	Locations	296	$ 1,036,000.00	
	Fiber Strands	5.92		

UNSERVED - INCLUDED

17

	Genesee					
UNSERVED	City Hall	140 E Walnut Ave, Genesee ID, 83832	0.01	$	1,958.92	
UNSERVED	Fire Hall	235 W Chestnut St, Genesee ID, 83832	0.17	$	33,301.62	
UNSERVED	Public Works	252 W Chestnut St, Genesee ID, 83832	0.03	$	5,876.76	
UNSERVED	Library	140 E Walnut Ave, Genesee ID, 83832	0.08	$	15,671.35	
UNSERVED	School	330 W Ash Ave, Genesee ID, 83832	0.14	$	27,424.86	
			0.43	$	84,233.51	TOTALS

Dedicated 500 Mbps to school but not 1/1 Gig
Could be an additional mile to bring in from Hwy 95 if existing Juliaetta asset route is unavailable / incorrect

			1.43	$	280,125.39	Alt. Total
Last-Mile Locations						
Fiber-to-the-Premise				$	25,000.00	
Last-Mile Location Connections		Population	1051	$	3,678,500.00	
		Locations	456	$	1,596,000.00	
		Fiber Strands	9.12			

UNSERVED - INCLUDED

	Potlatch					
UNSERVED	City Hall	195 6th St, Potlatch ID, 83855	0.01	$	1,958.92	
UNSERVED	Fire Hall	435 Pine St, Potlatch ID, 83855	0.1	$	19,589.19	
UNSERVED	Library	1010 Onaway Rd, Potlatch ID, 83855	0.13	$	25,465.94	
Served	School	130 6th St, Potlatch ID, 83855	na		na	
Served	School	510 Elm St, Potlatch ID, 83855	na		na	
Served	Hospital	156 6th St, Potlatch ID, 83855	na		na	
			0.24	$	47,014.05	TOTALS

Last-Mile Locations						
Fiber-to-the-Premise				$	25,000.00	
Last-Mile Location Connections		Population	708			
		Locations	383	$	1,340,500.00	
		Fiber Strands	7.66			

UNDERSERVED - INCLUDED

	Kendrick				
Served	City Hall	808 Railroad St, Kendrick ID, 83537	na		na
Served	Fire Hall	600 Main St, Kendrick ID, 83537	na		na
Served	School	2001 State Hwy 3, Kendrick ID, 83537	na		na
Served	Hospital	606 Main St, Kendrick ID, 83537	na		na

Last-Mile Locations					
Fiber-to-the-Premise				$	25,000.00
Last-Mile Location Connections		Population	360		
		Locations	201	$	703,500.00
		Fiber Strands	4.02		

CITY SERVED - NOT INCLUDED

Juliaetta				
Served	City Hall	203 Main St, Juliaetta ID, 83535	na	na
Served	Library	205 Main St, Juliaetta ID, 83535	na	na
Served	School	305 4th St, Juliaetta ID, 83535	na	na

Last-Mile Locations			
Fiber-to-the-Premise			$ 25,000.00
Last-Mile Location Connections	Population	586	
	Locations	281	$ 983,500.00
	Fiber Strands	5.62	

CITY SERVED - NOT INCLUDED

Troy				
Served	City Hall	519 S Main St, Troy ID, 83871	na	na
Served	Fire Hall	109 W 6th St, Troy ID, 83871	na	na
Served	Library	402 S Main St, Troy ID, 83871	na	na
Served	School	101/103 Trojan Dr, Troy ID, 83871	na	na
Served	Hospital	412 S Main St, Troy ID, 83871	na	na

Last-Mile Locations			
Fiber-to-the-Premise			$ 25,000.00
Last-Mile Location Connections	Population	739	
	Locations	407	$ 1,424,500.00
	Fiber Strands	8.14	

CITY SERVED - NOT INCLUDED

Moscow				
Served	City Hall	206 E 3rd St, Moscow ID, 83843	na	na
Served	Fire Hall	229 Pintail Ln, Moscow ID, 83843	na	na
Served	Fire Hall	1300 E White Ave, Moscow ID, 83843	na	na
Served	Fire Hall	603 S Main St, Moscow ID, 83843	na	na
Served	Library	110 S Jefferson St, Moscow ID, 83843	na	na
Served	School	402 E 5th St, Moscow ID, 83843	na	na
Served	School	2323 E D St, Moscow ID, 83843	na	na
Served	School	119 N Adams St, Moscow ID, 83843	na	na
Served	School	1410 E D St, Moscow ID, 83843	na	na
Served	School	110 S Blaine St, Moscow ID, 83843	na	na
Served	Hospital	623 S Main St, Moscow ID, 83843	na	na
Served	Hospital	2500 W A St, Moscow ID, 83843	na	na
Served	Hospital	510 W Palouse River Dr, Moscow ID 83843	na	na
Served	Hospital	803 S Main St, Moscow ID, 83843	na	na
Served	University of Idaho	875 Perimeter Dr, Moscow ID 83843	na	na
Served	Latah County	522 S Adams St, Moscow ID, 83843	na	na
Served	Latah County	200 S Almon St, Moscow ID 83843	na	na
Served	Latah County	1021 Harold St, Moscow ID 83843	na	na
UNSERVED	Latah County	5168 Robinson Park Rd, Moscow ID 83843	4.25	$ 832,540.50
UNDERSERVED	Latah County	327 Second St, Moscow ID 83843	0.13	$ 25,465.94
Served	Latah County	1313 S Blaine St, Moscow ID 83843	na	na
			4.25	$ 858,006.44 TOTALS

Last-Mile Locations			
Fiber-to-the-Premise			$ 25,000.00
Last-Mile Location Connections	Population	25319	
	Locations	7234	$ 25,319,000.00
	Fiber Strands	144.68	

CITY SERVED - NOT INCLUDED (except CAI locations)

	Towers							
Moscow Mountain	GPS lat/long on request			7.1	$	1,390,832.36		
Paradise Ridge	GPS lat/long on request			5.5	$	1,077,405.35		
Genesee Hill	GPS lat/long on request			0.75	$	146,918.91		
Juliaetta Hill	GPS lat/long on request			0.13	$	25,465.94		
Teaken Butte	GPS lat/long on request			18	$	3,526,053.87		
McGary Butte	GPS lat/long on request			6.5	$	1,273,297.23		
Spud Hill	GPS lat/long on request			2.5	$	489,729.70		
Bald Mountain	GPS lat/long on request			15	$	2,938,378.23		
				55.48	$	10,868,081.61	TOTAL for Fiber to Towers	
				22.48	$	4,403,649.51	MINUS Teaken and Bald	

Rural Proposed Service Area Polygons – NW, NE, SW, SE

SEE BELOW

Total of up to 4,500 locations, enhanced fixed wireless

with fiber to the towers = $10,324,677.53
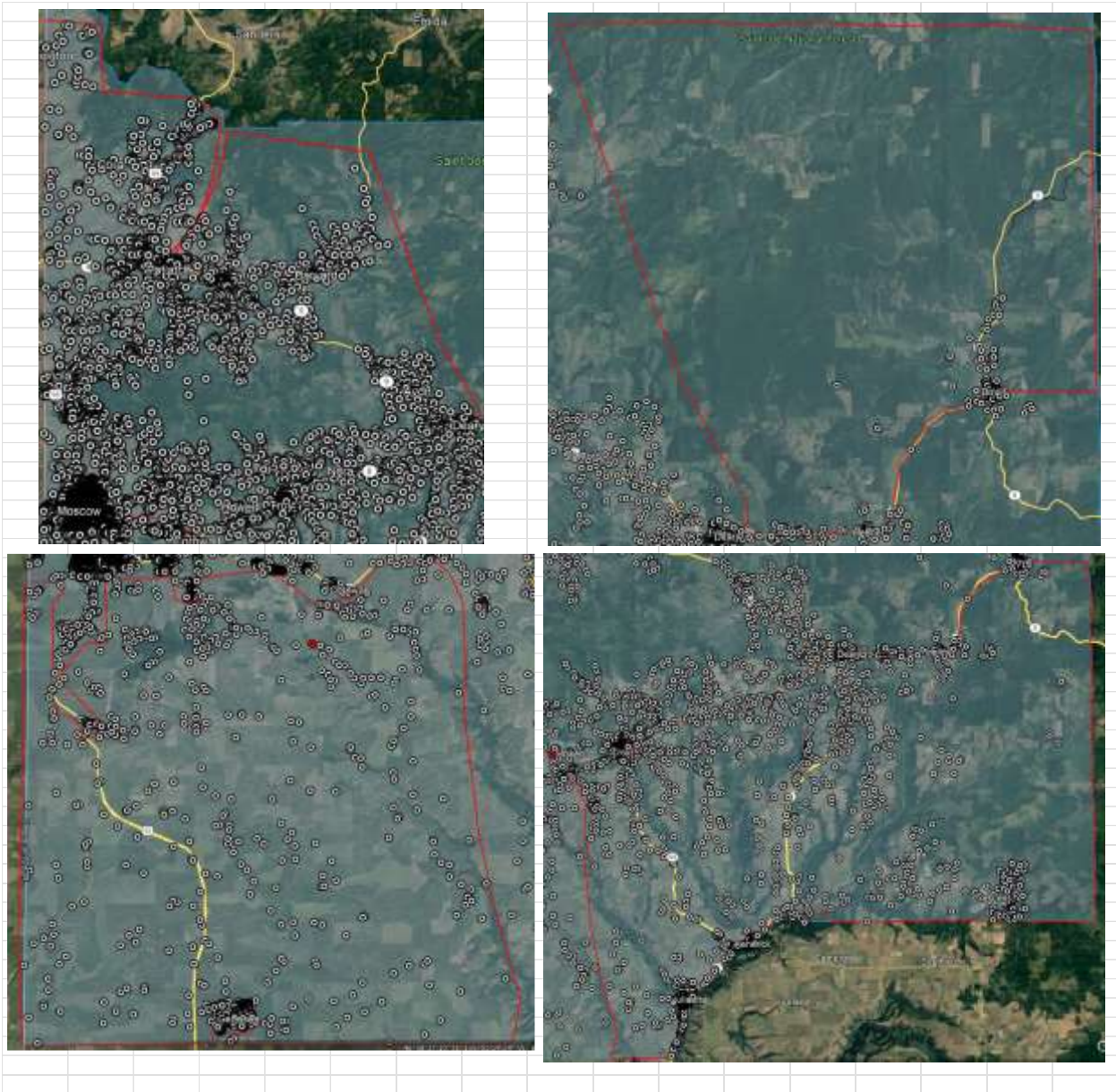
SEE FULL SPREADSHEET
FOR COMPLETE DETAILED BREAKDOWN WITH ADDRESSES

SUPPORT LETTERS

SEE ZIP FILE WITH SUPPORT LETTERS

MATCH & PARTNERSHIP COMMITMENTS

SEE ZIP FILE WITH COMMITMENTS

FINAL CHECKLIST AND GUIDELINES

Capital Projects Fund Requirements

☒   a. Will the broadband infrastructure project provide a network capable of 100/100 Mbps?

☒   b. Does the broadband provider participate in the Affordable Connectivity Program?

☒   c. Does this project comply with federal laws including the 2019 National Defense Authorization Act?

☒   d. List and provide all permits, easements, and ROWs obtained or needed, including regulatory authority involved and timeline to obtain permit.

☒   e. Does the project comply with all applicable environmental laws?

☒   f. Does the project commit to fair labor standards as required by US Treasury CPF guidance?

☒   g. Provide certification that all contracts made in excess of $100k that involve employment of mechanics or laborers include a provision for compliance with Contract Work Hours and Safety Standards Act.

☒   h. Does the project comply with the directives in the Idaho Broadband and ROW Act?

☒   i. Has the applicant and/or subgrantees contacted the appropriate federal, state, and local governments about any ROWs, easements, or pole attachments for this project?

☐   j. Does your project impact any of the five Idaho Tribal Reservations? **NO**

PURPOSE AND BENEFITS – 20 points

Extent to which the project will (a) facilitate deployment of high-speed broadband networks to currently unserved or underserved areas and (b) improve affordability in already-served markets by providing last-mile service.

(a) The project aims to deploy direct fiber connections to 25 Community Anchor Institutions and 1,288 rural city locations as well as wired fiber backhaul to 8 telecommunications towers, enabling improved wireless options for up to 4,500 unserved and underserved locations throughout Latah County that are scalable and reliable with reduced latency, improved redundancy, and lower operating costs for ISPs.

(b) Expanding access to publicly owned and openly available fiber strands at wholesale rates will improve affordability to the end user by decreasing capital expenditure costs for last-mile ISPs. Building redundant pathways is also integral for network resiliency, future-proofing, and long-term cost savings.

Please see the sections above for more detail.

ADDRESSES CRITICAL NEED – 15 points

Explain how the project addresses a critical need related to distance learning, telehealth, or remote work in the community. In your response, please provide data to support your argument as well as any testimonials, letters, etc. Information should include distance to hospital or clinic, poverty or education statistics, or examples from residents in the area who cannot work from home.

According to the Small Area Income and Poverty Estimates (SAIPE) program through the US Census Bureau, the population in Latah County that meets poverty thresholds is 13.6%. Until 2015, Latah County as a whole was considered a high-poverty county by the USDA Economic Research Service. Since the 2020 census, an influx of high-income residents from other states and other parts of Idaho, among other factors, has contributed to a skewed understanding of poverty in Latah County. We see this disparity even at the census tract or block levels, where clusters of rural residents on fixed incomes, for instance, are lumped in with owners of sprawling multi-million-dollar properties.

Digital Equity Covered Populations in the proposed service areas in Latah County as outlined in the Idaho Commerce broadband map include over 1,300 residents with disabilities, about 2,700 aging individuals, over 1,000 veterans, over 1,000 racial or ethnic minorities, and all of Latah County is considered rural.

For another take, below's enrollment data* outlining Latah County households eligible for the Affordable Connectivity Program (ACP), which is a need-based program with socioeconomic factors baked into the eligibility criteria.

Latah County Community	Eligible Households	Number Enrolled	Percentage with Benefit
Moscow	4,408	497	11%
Viola	30	3	10%
Potlatch & Onaway	368	13	3.5%
Princeton	73	2	2.7%
Harvard	14	2	14%
Deary & Bovill	136	3	2.2%
Troy	129	7	5.4%
Genesee	114	10	8.8%
Juliaetta	95	9	9.5%
Kendrick	112	4	3.6%

*Data pulled from enrollment map in March 2022.

Further, while Gritman Medical Center has established clinics in Potlatch, Troy, and Kendrick, residents east of Troy must travel many miles for healthcare. For specialized, critical, or even routine care, rural residents must currently travel to Moscow and sometimes even Spokane, especially if they're uninsured. Telehealth options in their communities would be game changing – not only for rural residents but also for healthcare providers, who have seen challenges recruiting and retaining medical professionals to serve Idaho, especially in its rural areas.

In general, our rural communities struggle to increase their tax base to pay for basic infrastructure and public services, like water and sewer, fire protection, etc. Attracting new residents who could telework would bolster a dwindling tax base, especially as costs generally continue to increase. This infrastructure would also allow existing residents to work from home, reducing transportation costs and their overall cost of living. Teleworking would also help to stimulate the hyper-local economy, ensuring local dollars are spent in local communities. New remote work jobs and jobs that require digital skills also come with the opportunity to secure higher-paying work, generally, and with adequate broadband connections, can increases the odds of born-and-raised residents being able to return to or remain in their communities to work and live. Currently, our rural cities struggle with breaking out of their role as bedroom communities for more densely populated cities, like Moscow. Broadband infrastructure will also open up the possibility to recruit or develop new businesses that require more bandwidth to operate or expand existing ones with options like e-commerce platforms.

Please see the sections above and attached Support Letters from community members for more detail.

ADDRESSES CRITICAL NEED – 10 points

Explain how this project addresses a critical need for the community. Include in the response how the project addresses future access, affordability, and reliability.

Our Coalition is made up of stakeholders from across the County who've expressed with one voice that this broadband infrastructure is a critical need for our communities. As such, we continue to work

together, especially with schools and libraries, on outreach related to access, affordability, and adoption. We've worked to market the Affordable Connectivity Program (ACP), participate in Digital Equity Act (DEA) planning through the Idaho Commission for Libraries (ICfL), and generally pursue activities that will bridge the digital divide. Our coalition members are the same folks who will be leading the digital equity efforts in our communities and their participation is integral to tackling the steps that come after infrastructure is available.

But it all starts with basic infrastructure. Dan Smith, a Coalition member and IT Director for the Kendrick Joint School District, might've put it best recently: "We can give students all the devices in the world, but if they can't connect it to broadband internet, it's a useless tool."

With local stakeholders and leaders, like city councils and special district commissioners, working in partnership with providers to design their community's basic infrastructure – something they already do with their roads, sidewalks, water and wastewater, and other public works projects – broadband access and adoption become a central part of the local conversation and economy. Digital skills are absolutely critical to workforce and economic development, and rural communities can't build them without being connected.

Below are a couple more comments to highlight, but please see letters of support from other local community members and leaders as well:

"Our students, faculty and staff live all throughout Latah County. Broadband is a recruitment tool, a retention tool, a driver in economic development and a critical component in improving life in our county. Education and research are no longer placed based activities – we use all of Latah County for our homes, our classrooms, and our laboratories. To be competitive in drawing the best and brightest to our county and to support growth and change in the future, we need fast, robust, redundant, and scalable broadband – which the proposed project will provide." – Dan Ewart, University of Idaho's Vice President for Information Technology and Chief Information Officer

"Broadband is the new essential utility, as vital to economic growth as reliable energy, clean water, and good roads. Access to, and use of, high-speed internet is vital for today's communities – large and small. Across the Inland Northwest, improving broadband access is now a top priority for many communities within the Avista service area. It's important as our region's energy provider, Avista stands with our rural leaders and communities as they create and build futures that are resilient, vibrant, and connected. Many opportunities for innovation and growth lie ahead, and it's important that we focus on helping these communities thrive." Paul Kimmell, Avista Utilities Business and Public Affairs – Palouse Region

Please see the above sections in the proposal for more detail.

OPEN ACCESS – 20 points

Explain how this project's middle-mile segment will be managed as open access, with the mission and goal of providing equal, affordable, and unrestricted access to the internet. Describe how the fiber network will be open to local governments, broadband providers, community anchor institutions, and state assets as well as promote competition and innovation.

When it comes to broadband, we believe citizens are best served by a consistent approach to technologies and business models, which is why we hope to partner with the Port of Lewiston and Petrichor Broadband to implement their successful open access dark fiber model.

We are eager to implement this proven model developed by Ports to create publicly owned, open access dark fiber infrastructure. By leasing the dark fiber to retail service providers at a price point that allows

competitive pricing to consumers, public entities facilitate economic development. The private sector competes to sell services while investing in employees and equipment to grow their business in unserved communities.

This proven approach, combining public fiber infrastructure with private sector service delivery, is addressing the inadequacies of past policies and investments. We urge the Board to invest in this true public-private partnership.

Please see the sections above for more detail.

COMPREHENSIVE TECHNICAL SOLUTION – 10 points

Explain the comprehensiveness and appropriateness of the proposed technical solution for meeting the community's needs, considering the offering's capacity and performance characteristics. Reviewers will consider the proposed network's ability to serve anticipated last-mile users and to meet the increasing needs of the households, businesses, and community anchor institutions in the proposed project areas.

In summer last year, the FCC reversed its decision to grant SpaceX (i.e., Starlink) many, many millions of dollars from the Rural Digital Opportunity Fund (RDOF) to serve unserved areas in Latah County (and elsewhere). RDOF is one of the "Universal Service Funds" managed by the FCC to subsidize the cost for providers to bring service to unserved rural areas. Typically, if a provider bids on and "wins" an eligible area in the reverse auction, that area is tied up for 10 years (the timeframe given to the winning bidder to roll out the promised service) and therefore makes it ineligible for other types of funding to bring better service. The FCC cited the provider's inability to meet minimum speed and latency requirements as reasons to reverse their decision to fund it.

With the FCC's decision reversal, the areas in Latah County shown above in red are now eligible for other types of funding and technologies. And (hopefully) communities will be able to decide things like which providers they want to partner with, what service levels they're willing to accept, and how we'll ensure they're set up for the future by carefully applying the historic investments made possible through programs like CPF and BEAD. The map's a good visual, but these aren't the only unserved and underserved areas in Latah County – they're merely the ones without a current claim to public investment.

Admittedly, our proposed plan will take several years. But we are hoping to connect anyone who doesn't have a minimum of 100/20 Mbps. If we're funded to build this fiber infrastructure over the next 3-5 years, the revenue from the dark fiber network will be continually reinvested into building out additional fiber lines to residents and communities that want it — 100% of fiber lease fees will be re-invested back into our community to connect homes and businesses. (During this process, it was interesting to learn that even low-orbit satellite services like Starlink requires wired fiber connections on the ground in order to be more reliable and communicate with internet exchanges and points of presence.)

We're also working with local wireline and wireless providers to add or expand their existing assets and access points. The idea is that any home within 3 miles of a tower and/or access point will be able to reliably receive 100/20 Mbps, *minimum*, until we can get more fiber built off the main routes into unincorporated areas, which would eventually mean symmetrical Gigabit speeds, if someone (or some business) wished to purchase that level of service. But, again, it'll be a long road and depends on whether we're awarded grant funding. Our hope is that this is a 30-50+ year infrastructure investment.

All of this makes any offering more affordable for the end user and also makes service scalable for the very long-term. We've heard feedback that many currently available options are too expensive, which is why we appreciate that the grant funding we're pursuing requires there be a service option available that can be free or close to free if a household is eligible for the Affordable Connectivity Program, which offers a $30/month subsidy. We've also heard feedback from locals, as well as in conversation with existing providers with assets in Latah County, that there's a bit of an "underbuilding" issue. So, there may be fiber running along a road or highway very near someone's home, but it's either a transport line, doesn't have enough capacity/strands to connect additional homes, or there's no ROI for the provider to do so. We're working closely with existing asset owners and internet service providers on how to leverage their footprint to connect additional locations.

Please see the sections above for more detail.

EXPERIENCE AND COMPETENCY – 20 points

Broadband experience and competency. Please describe successes and experience in building and operating broadband networks, maintaining project milestones and management of staff, capacity needs, and technologies.

As a government entity, Latah County is no stranger to responsibly stewarding federal and state funds as well as local taxpayer dollars. We manage a $25 million annual budget and, as recently as 2020, managed over $7.5 million in American Rescue Plan Act State and Local Fiscal Recovery Funds. We also have strong and established relationships with other local municipalities that manage rights-of-way and other important aspects of public works and infrastructure projects like this one, many of which are on our Coalition and have participated in the project planning.

Additionally, we are proud to have engaged local providers and other broadband partners over the last year as we developed our phased approach. They've been generous in lending insight and support, and we hope to be able to continue to lean on them for their experience, expertise, and even available assets. Providers who've committed to working with us are AirBridge Broadband, First Step Internet, Inland Cellular/EMERGE, and Ziply. In addition to the local providers who've supported and contributed to this proposal, two other potential partners are the Port of Lewiston and Petrichor Broadband.

All told, this group represents well over a century of broadband experience and expertise. The Port and Petrichor are local partners that have successfully built and manage hundreds of miles of non-

discriminatory, open access dark fiber – a model that is a true public-private partnership and enjoys a long list of local ISP advocates, including those above.

Finally, if awarded, we will procure for design, engineering, and project management as well as construction contractors with a qualifications-based selection process and bid criteria that prioritize local or Idaho-based companies.

Please see the sections above for more detail.

TECHNOLOGY TYPE – up to 15 points

Is the broadband infrastructure project using fiber, fixed wireless, cable, or other?

Technology Type	Points
Other	3
Fixed Wireless/Cable	7
Fiber	15

We believe future-proof means fiber, which is the basis of the infrastructure proposal. However, we are integrating a hybrid approach that uses enhanced wireless with fiber backhaul to reach the extremely sparsely populated areas, which reduces overall cost and time-to-completion.

Both approaches prioritize fiber optic technology and are considered "wireline" access to broadband that reliably deliver speeds that exceed 100/20Mbps as defined by the ARPA rules, where wireline is defined as access/service delivered via a hard-wired connection to infrastructure. Fiber to the tower and fiber to the premise both represent hard-wired connections to infrastructure.

Please see the sections above for more detail.

UNSERVED AND UNDERSERVED LOCATIONS – up to 20 points

Points are awarded based on the number of underserved and unserved locations impacted by the proposed grant project. Underserved is defined as locations without access to 100/20 Mbps fixed terrestrial service, unserved is defined as locations without access to 25/3 Mbps fixed terrestrial service.

Locations*	Points – 100/100 Mbps
0-100	4
101-200	8
201-400	12
401-600	16
601+	20

*Locations that fall within the project scope, whether contiguously connected or otherwise.

We aim to connect every unserved and underserved location in Latah County over the course of our multi-phased approach with wireline access to broadband that reliably delivers over 100/20 Mbps and above. Specifically, about 1,500 locations with direct fiber to the premise and up to 4,500 locations with fiber backhaul to towers.

Please see the sections above for more detail.

IDAHO STRATEGIC PRIORITIES – 25 points

Explain how the proposed project addresses priorities outlined in the Idaho Broadband Advisory Board's strategic plan. This includes addressing distance learning, telehealth, public safety, economic development/business opportunities, and promotes dig once policies. Points will be awarded based on the project's ability to address each item in detail.

Our proposed project meets every single one of the strategic objectives outlined in the Idaho Broadband Strategic Plan:

(1) Infrastructure and Technology – prioritize middle mile and last mile infrastructure investments to connect residents, businesses, and community anchor institutions that are unserved and underserved.
(2) Economic Development – prioritize broadband investments that strengthen the economic ecosystem for businesses and ensure access to broadband infrastructure that is reliable and affordable.
(3) Educational Access – prioritize that both students and educators have access to affordable and reliable broadband services in their homes as well as in schools, libraries, and communities in unserved and underserved locations.
(4) Operations and Data – support data-driven broadband infrastructure investments.
(5) Public Safety and Communications – prioritize broadband investments that strengthen access to reliable, resilient, scalable, and redundant services for emergency communications.

Please see the sections above for more detail.

FINANCIAL CAPABILITY – 20 points

Demonstrate the financial capability to complete the project within cost and by December 31, 2026. This includes the reasonableness of the proposed budget (10 points) and the project's fiscal sustainability beyond the award period (10 points).

We feel our phased approach not only includes reasonable cost estimates (outlined in the detailed budget and narrative) for future-proof infrastructure but also allows flexibility to accommodate grant period of performance timelines. While we're submitting our comprehensive, multi-phased approach, we don't expect all phases to be funded or completed under the Capital Projects Fund. We leave it to the Board to decide which phases they might consider funding through CPF versus BEAD.

It's also important to note that the dark fiber lease fees are anticipated to generate between $150,000 and $450,000 annually as strands are leased — all of which will be reinvested in expanding Latah County's dark fiber network. These investments will be leveraged against our private provider partners' own investments to continually build out and keep up with expansion and upgrades. For instance, private provider revenue based on charging an average of $60/month for last-mile connections to proposed service area locations translates to a minimum baseline of $3 million annually.

Please see the sections above for more detail.

MATCH – up to 15 points

Does the proposed project include match? Match includes financial and in-kind contributions. Points will be awarded based on the percentage of the total project costs. The Idaho Broadband Advisory Board reserves the right to waive the need for any match.

Match	Points
0-10%	3
11-30%	6
31-54%	9
55-79%	12
80-99%	15

We have included both cash and in-kind match totaling over $11 million and representing over 25% of total project costs.

We are also proposing project phases over two grant programs, ARPA Capital Projects Fund and IIJA Broadband Equity, Access, and Deployment, where we include any potential grant funds allocated from CPF for the multi-phased project as in-kind match for BEAD. This is because ARPA funds are explicitly called out in the enabling legislation as allowable matching funds for the BEAD program and its projects — and it's important to recognize how these projects and programs build on one another.

Please see the sections above and attached materials for more detail.

COMMUNITY SUPPORT – 20 points

Does this project have support from the communities impacted by the proposed project? Please provide current (January 1, 2023 to present) letters of support from communities (state agencies, local governments and subdivisions, tribal government, nonprofits, education institutions, healthcare facilities, community organizations). Grant applicants can also submit letters from the general public.

Support for this project is substantial. Letters outlining support and partnership total over 40 and include Latah County, University of Idaho, Gritman Medical Center, City of Potlatch, City of Bovill, City of Genesee, City of Kendrick, City of Juliaetta, City of Deary, City of Troy, City of Moscow, Latah County Library District, Moscow School District, Kendrick Joint School District, Genesee Joint School District, Troy School District, South Latah Highway District, Port of Lewiston, Petrichor Broadband, Inland Cellular/Emerge, First Step Internet, AirBridge Broadband, Ziply, Bennett Lumber, Fire Districts, Emergency Medical Services, and many community members.

Please see the sections above and the attached Support Letters for more detail.

BONUS POINTS – 5-10 points each

Connected locations in Idaho where students and educators do not have reliable access to broadband as defined as speeds less than 100/20Mbps as well as libraries, schools, and institutions of higher learning without access to fiber broadband infrastructure defined as 1/1Gbps. (7 points)

Bovill		
UNSERVED	City Hall	100 Railroad Ave, Bovill ID, 83806
UNSERVED	Community Center	306 Pine St, Bovill ID, 83806
UNSERVED	Fire Hall	205 3rd Ave, Bovill ID, 83806
UNSERVED	Library	310 1st Ave, Bovill ID, 83806
Served	School	410 3rd Ave, Bovill ID, 83806
Deary		
UNSERVED	City Hall	401 Line St, Deary ID, 83823
UNSERVED	Fire Hall	403 Main St, Deary ID, 83823
UNSERVED	IDL Office	3130 Highway 3, Deary ID, 83823
UNSERVED	Library	304 2nd Ave, Deary ID, 83823
Served	School	502 1st Ave, Deary ID, 83823
Kendrick		
Served	City Hall	808 Railroad St, Kendrick ID, 83537
Served	Fire Hall	600 Main St, Kendrick ID, 83537
Served	School	2001 State Hwy 3, Kendrick ID, 83537
Served	Hospital	606 Main St, Kendrick ID, 83537
Juliaetta		
Served	City Hall	203 Main St, Juliaetta ID, 83535
Served	Library	205 Main St, Juliaetta ID, 83535
Served	School	305 4th St, Juliaetta ID, 83535

Genesee		
UNSERVED	City Hall	140 E Walnut Ave, Genesee ID, 83832
UNSERVED	Fire Hall	235 W Chestnut St, Genesee ID, 83832
UNSERVED	Public Works	252 W Chestnut St, Genesee ID, 83832
UNSERVED	Library	140 E Walnut Ave, Genesee ID, 83832
UNSERVED	School	330 W Ash Ave, Genesee ID, 83832
Troy		
Served	City Hall	519 S Main St, Troy ID, 83871
Served	Fire Hall	109 W 6th St, Troy ID, 83871
Served	Library	402 S Main St, Troy ID, 83871
Served	Community Center	415 S Main St, Troy ID, 83871
Served	School	101/103 Trojan Dr, Troy ID, 83871
Served	Hospital	412 S Main St, Troy ID, 83871
Potlatch		
UNSERVED	City Hall	195 6th St, Potlatch ID, 83855
UNSERVED	Fire Hall	435 Pine St, Potlatch ID, 83855
UNSERVED	Library	1010 Onaway Rd, Potlatch ID, 83855
UNSERVED	Community Center	125 Sixth St, Potlatch ID, 83855
UNSERVED	Community Center	635 Pine St, Potlatch ID, 83855
Served	School	130 6th St, Potlatch ID, 83855
Served	School	510 Elm St, Potlatch ID, 83855
Served	Hospital	156 6th St, Potlatch ID, 83855

Moscow		
Served	City Hall	206 E 3rd St, Moscow ID, 83843
Served	Fire Hall	229 Pintail Ln, Moscow ID, 83843
Served	Fire Hall	1300 E White Ave, Moscow ID, 83843
Served	Fire Hall	603 S Main St, Moscow ID, 83843
UNDERSERVED	Library	110 S Jefferson St, Moscow ID, 83843
Served	School	402 E 5th St, Moscow ID, 83843
Served	School	2323 E D St, Moscow ID, 83843
Served	School	119 N Adams St, Moscow ID, 83843
Served	School	1410 E D St, Moscow ID, 83843
Served	School	110 S Blaine St, Moscow ID, 83843
Served	Hospital	623 S Main St, Moscow ID, 83843
Served	Hospital	2500 W A St, Moscow ID, 83843
Served	Hospital	510 W Palouse River Dr, Moscow ID 83843
Served	Hospital	803 S Main St, Moscow ID, 83843
Served	Latah County	522 S Adams St, Moscow ID, 83843
Served	Latah County	200 S Almon St, Moscow ID 83843
Served	Latah County	1021 Harold St, Moscow ID 83843
UNSERVED	Latah County	5168 Robinson Park Rd, Moscow ID 83843
UNDERSERVED	Latah County	327 Second St, Moscow ID 83843
Served	Latah County	1313 S Blaine St, Moscow ID 83843
Unincorporated		
UNSERVED	Community Center	1007 Rothfork Rd, Viola ID
UNSERVED	Community Center	3487 Main St, Princeton ID
UNSERVED	Community Center	2017 Deary St, Harvard ID
UNSERVED	Community Center	1044 Mountain Home Rd, Cora ID

Please see the sections above and attached materials for more detail.

Projects that connect a greater number of locations at the most economical cost. (3 points)

Our hybrid approach considers how to leverage available funds not only to establish future-proof infrastructure but also to make it affordable for today and scalable for tomorrow. As such, it contemplates an estimated $6,000 per passing for the proposed multi-phased project. Over 30 years — a very conservative estimate of the infrastructure's useful life — and with the self-sustaining reinvestment from the dark fiber network, the initial investment averages out to less than $200 per year, or $15 per month, per passing. These savings will be passed on to the consumer. And this minimal up-front investment will yield much larger and impactful savings and benefits over the long term.

Please see the sections above for more detail.

The applicant is Idaho based/headquartered in Idaho and/or is using Idaho labor for the construction of the broadband infrastructure project. (7 points)

Latah County and all member entities are Idaho-based, plus local ISPs and partners who build or manage outside plant typically use local construction contractors. If awarded, we will procure for design, engineering, and project management as well as construction with bid criteria that prioritize local or Idaho-based companies.

While large TelCos will extol the virtues of their ready-to-deploy teams, they're not based here. Local projects led by local leaders using local labor has the added benefit of stimulating the local economy and building the local workforce.

In addition to prioritizing local labor, our project has yet another benefit: Idaho-owned assets keep Idaho's dollars in Idaho.

Please see the sections above and attached Support and Partnership Letters for more detail.

How does this broadband infrastructure project address and enhance public safety and/or cybersecurity? (5 points)

As outlined in our phased approach, Phase 4 proposes to connect public safety towers with fiber backhaul for reliability, resilience, and redundancy. Moreover, other governmental and public safety agencies use these towers or lease services from providers who co-locate on them. We also propose to install dark fiber to enable direct connections to community anchor institutions, including governmental offices and buildings, like our Idaho Department of Lands field office for the Ponderosa Supervisory Area in Deary. Dedicated fiber strands lower risk associated with potential cyber attacks and substantially increase resiliency and enhance cybersecurity measures.

Please see the sections above and attached Support Letters for more detail.

What is the price and speed of the cheapest monthly broadband service plan offered for customers in the proposed project area? (5 points)

Price	Points
$70 or less	1
$50 or less	3
$35 or less	5

As a dark fiber infrastructure proposal, we will not be offering lit services to end users. However, all internet service providers in Latah County who will provide last-mile service participate in the ACP and offer plans that range from $30 - $150/month. (A list of participating providers is available here: https://www.fcc.gov/affordable-connectivity-program-providers)

We not only expect that publicly funded open access infrastructure will decrease costs for ISPs that will be passed on to end users, but we will also require ACP enrollment as a condition of dark fiber leases. In other words, in order to lease the dark fiber infrastructure, providers must be a participating ACP provider.

Please see the sections above for more detail.

The project includes the connection of unserved Community Anchor Institutions and/or government facilities without access to 1/1Gbps symmetrical (fiber) or 200/200Mbps symmetrical (fixed wireless) service. (7 points)

Yes.

Please see the sections above and attached materials for more detail.

Board Discretion: the Idaho Broadband Advisory Board may award up to 10 bonus points per proposal. Consideration may be based on any of the following, but is not limited to: location, costs, number of units served, community needs, government facility connections, etc. (10 points)

Yes.

Please see the sections above for more detail.

Is the project serving 80% or more unserved locations? (5 points)

Yes.

Please see the sections above and attached materials for more detail.

Dark fiber and/or broadband infrastructure is provided to government facilities for government usage; this includes fiber/broadband infrastructure, but not services. (5 points)

Yes.

Please see the sections above for more detail.