bonfire



BROADBAND PLANNING SERVICES | ENGINEERING | CONSTRUCTION | OPEN ACCESS OPERATIONS

CITY OF HARVARD, IL Request for Proposal (RFP)

BROADBAND FEASIBILITY STUDY

Bonfire 4500 Cherry Creek Drive South Suite 1200 Denver, CO 80246

I speak on behalf of the entire Bonfire team in saying how thrilled we are to have the opportunity to respond to the City of Harvard's ("City") Request for Proposal ("RFP") to develop a detailed and actionable broadband feasibility study. Bonfire's expertise in broadband deployment will allow us to create a comprehensive report that provides multiple financial models and business plans to best educate City leadership on creative paths forward to help expand next generation internet connections across the community. Our response will show why Bonfire is the right partner with the right experience to support this critical broadband initiative and has been developed in accordance with the City's response requirements for each section as requested:

- High-Level Project Plan
- City-Wide System IT Map
- Vendor Description
- Project Experience
- References
- Partner/Contractor Firms
- Resumes
- Community Experience
- Proposed Cost
- Project Schedule

Bonfire was founded in 2016 in response to the growing demand and complexity of designing and deploying broadband networks across the United States. Integrating multiple engineering disciplines, technology experience, and construction trades are a key aspect to our approach to being the best overall long-term partner for our customers. Our core belief is that all Americans deserve high-speed affordable internet because it makes their lives better.

We are excited to respond to this RFP and we are confident our response will show our dedication to collaboratively working with the City to achieve their goals. We understand the impact that high-speed broadband brings to the communities we work with, and we look forward to partnering with you on this project. Should your team have any questions or require additional information, please feel free to contact me at brian@bonfireig.com or 303-956-9853.

Thank you for your consideration,

Warm regards,

Brian Hollister

Co-Founder and CEO

Bonfire



PROJECT KICKOFF

Success of a project is built on a foundation of transparency. We understand the importance of communication and we strive to understand your goals, expectations, and personal styles during project startup. To kick the project off, we'll focus on aligning with all project members to provide clear visibility, create trust and drive accountability between all stakeholders. While our primary goal is always to ensure the project is completed on time and on budget, we will go above and beyond to deliver work that provides the City with an actionable plan to move toward superior broadband.

For this initiative, we will be assigning a dedicated project manager that will support our team of experts by assisting with scheduling, coordinating meetings, and tracking progress and milestones – in addition to always keeping an open line of communication with the City. Our project management team will act as the City's main point of contact (MPOC) for all invoicing and project status updates. Our team will be available daily to provide updates and answer any questions your team may have. Our project management platform revolves around four core aspects:

- **Plan:** The planning and forecasting of all activities.
- Process: The overall approach to activities and project governance.
- People: The dynamics of how stakeholders collaborate and communicate.
- Power: The lines of authority, decision-makers, organization, and policies for implementation.

DEMAND FOR BROADBAND SERVICES

Community leaders across the country are realizing the importance of next-generation broadband services to support a brighter future for their constituents. Affordable and high-speed broadband services, often powered by fiber optic technologies, are a reality across many cities nationwide. Studies have shown that broadband services have a net positive economic and social impact on communities by enhancing free enterprise, workforce development, educational opportunities, and smart city deployment. When community leaders are ready to address broadband issues and bring real change to their community - like Harvard is doing now - they look to our team to conduct a broadband market assessment. Bonfire will gather relevant data from surveys, research on existing providers, and interviews with a broad and representative group of stakeholders to deeply understand the broadband landscape in the City and make informed and actionable recommendations.

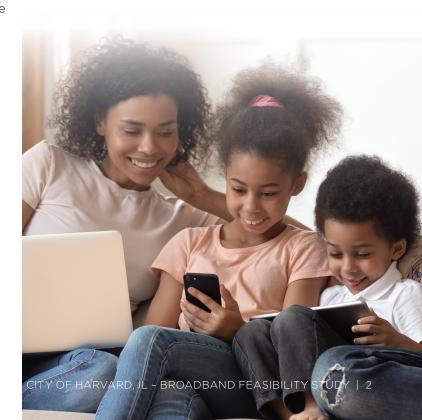
Bonfire will gather information on the current telecommunications needs and usage in the area. One of our most effective methods for determining fiber broadband demand is via interest and needs surveys for both business/institutional and residential customers.

The interest and needs survey will be distributed broadly across the City to a diverse group of end users (i.e., residents, businesses, libraries, public safety buildings, and educational institutions). The survey will include a list of questions that will consider age, gender, education, daily internet activities, devices used to connect to internet, internet speeds/pricing and digital literacy levels; we will also embed a live internet speed testing tool to get verified results from each respondent and better understand the true speeds and latency residents are experiencing today. We will work closely with the City for assistance to distribute this survey and drive high participation rates from the community. In our experience, we see a higher rate of engagement when this survey is coordinated with and endorsed by community leaders.

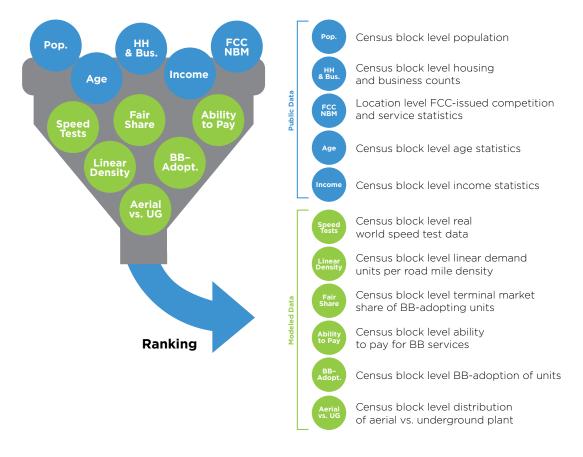
The information collected from these surveys can identify broadband demand in specific targeted areas. Our team also maps survey results by census block to help identify insights, patterns and areas of greatest need.

Along with our research and survey results, we will conduct interviews with key community representatives, including community leaders, anchor institutions, and more to more precisely identify the unserved, underserved, and served areas throughout the City.

We will then begin to examine consumer bandwidth usage by market segment (residential and business) and develop projections of potential broadband services in the area by using the FCC National Broadband Map and other publicly available data. Additionally, we will review all ongoing and future regional telecommunications efforts to understand their implications for Harvard. This allows us to paint a clear picture of the broadband footprint in Harvard and McHenry County.



DATA ANALYTICS PROCESS



Bonfire's proprietary tool takes in over a billion data points that will allow for the City to rank areas of need. This allows our team to drill down anywhere within Harvard, including area-by-area or to the census block level, to visually depict the broadband landscape. Data includes total demand points, broadband adoption rates, demand points per linear mile, median income, highspeed availability, etc. We quickly ingest all this data into the tool to provide accurate information on the local broadband footprint, giving us more time to spend on the critical decision points: engineering fiber routes, designing the financial and operational models, and providing the City with go-forward options to better connect more people.

EDUCATION/COMMUNITY ENGAGEMENT PLAN

Our education/community engagement plan will take the results of the research and data collection above, and lay out an informed, tactical, and innovative strategy to help the people of Harvard become advocates and active users of a future network. Particularly, the feedback and insights received in the community survey will be instrumental in how we shape our community engagement efforts in a way that uniquely resonates with the people of Harvard.

Our goal is to meet people where they are, understand their concerns and questions, help them understand the benefits of fiber broadband, and develop strong community support to make the network a reality.

We look to accomplish that goal by designing an engagement strategy focused around three core ideas:

The Right People

We'll work to engage community leaders and key organizations to spread the word about this opportunity, answer questions, and generate community support.

2. The Right Message

We'll ensure the messaging across all channels is accurate, transparent, and aligned to how the City wants to present the network to its citizens.

3. The Right Channels

We'll identify the channels to engage with the community most effectively, from social media, local advertisements, community forums, and more. We will work to ensure that people both feel heard and have an opportunity to listen.

Bonfire has combined decades of experience in both creating and successfully executing community engagement plans. In addition to identifying the core components mentioned above, our plan will include best practices for outreach that the City can implement immediately as they engage the network's stakeholders and create community buy-in. We will also include an implementation roadmap that provides specific timing of activities in relation to key milestones for broadband deployment, such as construction kickoff, network launch, etc.

EDUCATION/COMMUNITY ENGAGEMENT IMPLEMENTATION OPTIONAL ADD-ON

As we execute on the implementation roadmap, we will continually provide the City with progress updates, engagement statistics, pulse checks on sentiment across the City, and successes and challenges we face in engaging and educating the community. We are confident that through working together with your team and a focus on getting the details right, our community engagement strategy will deliver the fuel we need to make this network a true community effort.

Gaining community buy in for broadband projects begins with understanding the community needs and priorities and pinpointing ways they may be hesitant to adopt broadband. Learn Design Apply (LDA) will develop a suite of outreach tools, messaging, and tracking mechanisms to facilitate outreach to community members, local businesses, healthcare facilities, educational institutions, libraries, emergency services and public safety, and local government services. In addition to leveraging the results of the community engagement survey detailed above, we will conduct in-depth interviews with, at a minimum, 4 to 5 community leaders. These initial efforts will take three months and involve one in-person visit to the City. During this time, LDA will create marketing materials that inform on the efforts of Bonfire that can be easily shared and disseminated

Building off of this data collection and the work done by Bonfire, LDA will create a eight-month community engagement plan that includes social media campaigns, in-person meetings and information sessions, and creation of marketing materials that are accessible to diverse populations. The plan will be created, written, and prepared in a way that will allow easy implementation by the City. The information previously collected will assist in crafting messaging and materials that resonate with residents and is tailored to the specific needs identified. After three months of the City implementing the plan, LDA will conduct another survey to reassess community feelings towards broadband and broadband adoption. Based on the results, we will alter the strategy to ensure maximum impact.

Should the City wish, LDA can implement the community engagement for the eight-month period. Throughout the process, LDA will coordinate with Bonfire, key government stakeholders, and other parties as identified by the City. The combined experience and talent of these parties will make a significant and positive impact on community buy-in and adoption of broadband.

ENGINEERING DESIGN OPTIONS

As part of the feasibility study, Bonfire will create a preliminary high-level design (HLD) that includes conceptual fiber routes for the project. The design will include a bill of materials (BOM), project budget, and project mapping that will be included in the final report. Bonfire will evaluate both aerial (overhead) and underground (buried) construction options. Each has its advantages and challenges; aerial routes may be quicker to deploy, while underground routes offer better protection but require careful planning.

Bonfire will provide the City of Harvard with a flexible, scalable, and cost-effective fiber optic solution that will allow the network to utilize Active Ethernet for business/commercial demands, as well as Passive Optical Networking (PON) for small business and residential demands. We will consider several different architecture options and determine what solution will best serve the City of Harvard from both a capital and operating cost perspective.

COST ESTIMATES

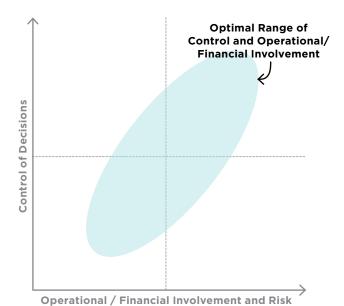
Bonfire's Estimating and Proposals team has over 25 years of experience working with subcontractors on various fiber projects. This group will work closely with the engineering team during the feasibility study, preliminary design, and final design to assist with providing updated costs for material, labor, etc. Our Estimating and Proposals team will collaborate with local subcontractors to gather real world data on labor prices in-market, providing accurate and up-to-date pricing for the build. We also work with multiple material and equipment vendors to secure competitive pricing. This market-specific pricing gives us the best insight into what a potential build will cost and equips the City to make strategic decisions on how best to move forward in your broadband journey.

BROADBAND MODEL OPTION(S) RECOMMENDATION

Bonfire's team has extensive experience crafting fiber-based business models that offer a wide range of feasible options for Harvard to improve the state of broadband throughout its City limits. We benchmark every assumption against our proprietary database of fiber business model operational datapoints from real operators and use our hyper-localized construction cost estimates to provide a realistic view of not only total revenues and costs, but also the timing associated, giving Harvard an accurate view of revenues, costs, and cash need by month.

Our analysis will present several business models that vary across the spectrum of control and operational/financial involvement and risk. We ground all our analysis against this paradigm (see chart below). This gives us a common framework and language with the City to develop and analyze business models that vary in ownership of the network, management and operations involvement, types of assets required (from our high-level design), amount of capital investment required (from our detailed costing), what product offerings and services should be offered, and which partners are required to implement each business model.





We will work with the City to recommend the most actionable business model options and build out monthly financial models for each of them. Our models are not just off the shelf templates but are bespoke models that are detailed enough to make strategic decisions on the best path forward, use for necessary financing, plan operational staffing, create monthly/quarterly/annual budgets, and plan for decades into the future. It is critical that all financial models project 20 to 30 years out, as that will be the likely term of any debt issued by the City.

Our models first start with a detailed revenue build up. We believe in the bottoms-up methodology, meaning we look at every individual household's and business's competition, demographics, likelihood to switch providers, ability to pay, and likely speed package purchased to produce a subscriber ramp that we believe the network can achieve. We stratify the subscribers by speed tiers purchased to get a realistic view on the overall ARPU (average revenue per user) of the network—a key metric in the broadband industry. With a subscriber ramp and ARPU forecast, we arrive at a very defensible and realistic revenue projection.

We next perform detailed operational expense projections. We start with variable costs, or those that will increase with increased subscribers and revenue. such as: marketing to acquire subscribers, software costs for OSS/BSS (operations support system and business support system, which includes billing), software costs for active equipment, networking costs such as colocation and transport, customer service representatives, etc. Another major variable cost is network infrastructure maintenance which typically varies with the overall size of the fiber network. Next, we consider fixed costs, or those that will remain constant as the network scales, such as: engineering labor, IT labor, management labor, marketing labor (e.g., the staff associated with running campaigns, which would be considered the variable cost component), office space, vehicle costs, etc.

The final cost component is capital expenditures, which include the cost to engineer and construct the network, customer installations, and equipment refresh. These costs are based on our detailed design work where we gather up to date, in-market pricing.

With revenues and costs fully accounted for, we will then understand the cash needs of the business before debt. We then look at various debt structures, such as GO (General Obligation) Bonds, Revenue Bonds, Local Improvement District financing, etc. We model various debt scenarios to understand the interplay between debt service and the free cash flow to ensure healthy operations and the ability to adequately service the debt.

Each model we develop will have flexibility on every single assumption, so the City can flex various assumptions to test the sensitivity of the business case.

We have a unique position as both a consultant and fiber operator to help the City with more than just a written business case. As a fiber operator ourselves, we have detailed playbooks and proven processes for marketing, operations and maintenance, governance structures, and network implementation. We are eager to share our learnings with the City to drive more fiber coverage throughout Harvard and the nation.

CAPITAL FUNDING OPTIONS

Bonfire has extensive experience working with municipalities, Tribal Nations, and ISPs in identifying and securing various funding sources. For instance, we have played an active role in major grant wins for our key clients, including over \$64 million across federal, state, and private programs for the Southern Ute Indian Tribe and \$19 million in incremental federal funding for Farmers Telephone Company, Inc.; we are currently working with several municipalities on feasibility studies aimed at understanding funding sources available and how best to apply for them. We seek to understand the full spectrum of funding sources, ranging from state and federal programs, Public-Private-Partnerships (PPP), and municipal bond / other municipal financing mechanisms.

State and Federal Funding Sources

Through our strategic partnership with LDA, we can offer a robust plan of attack for every one of our clients. LDA specializes in finding what grants are available and how to successfully submit in-compliance applications. Funding opportunities are not 'one size fits all'. LDA has cultivated knowledge of grant funding over the last two and a half decades to ensure we connect clients with programs where they are most competitive. They have honed a practice that helps clients develop a long-term funding strategy and an engagement method that ensures a full start-to-finish plan. They have deep experience surrounding a range of federal and state grant program best practices. This allows us to provide the level of support that fits each client's unique needs.



LDA will utilize the information gathered and created by Bonfire to create a grants strategy. Capitalizing on the strong relationships we have with USDA, NTIA, and other federal and state agencies, LDA will create a report of upcoming opportunities, the anticipated timelines, unique requirements of each, how the City can be strategically competitive, and which programs aren't a good fit. Furthermore, LDA will collaborate with Bonfire to look at hybrid funding approaches that utilize grants as a portion of capital funding required.

Public-Private-Partnerships

PPPs have many flavors, ranging in the level of investment and execution from the public and private sectors. We examine the full range of possibilities, and our report and guidance will outline and evaluate the benefits and drawbacks and a potential path forward for the City. There are generally three types of PPP models that are common in the U.S. today:

1. Private investment, public facilitation

In this approach to PPP, the public sector's cost is significantly reduced. The model focuses not on a public sector investment, but on measures the public sector can take to enable or encourage greater private sector investment.

2. Public risk, private execution

This model, which involves a substantial amount of public investment, is a variation on the traditional municipal ownership model for broadband infrastructure—but with private rather than public sector execution. In this model, a selected private partner takes responsibility for some combination of design, construction, financing, operations, and maintenance funded by the public partner over some period. At its core, this model involves the public sector essentially becoming a major guarantor of costs if the partnership does not secure sufficient revenue to cover all operating costs, including the profit margin required by the private partners. The model offers benefits to the public sector by removing significant logistical barriers from largescale public broadband projects and offering a comprehensive solution to the entire community. but it comes at a risk if the private partner cannot execute.

3. Shared risk and investment

A PPP model based on shared investment and risk plays to the strengths of both the public and private sector partners. Most localities consider Fiber-to-the-Home (FTTH) deployment not to be a profit center. but to be a powerful tool for economic development. In a shared investment model, the risk is shared but the community still receives 100 percent of the benefits it seeks—recognizing that the benefits do not all appear on the project's financial statements. For the private partner, a shared investment means less upfront capital (risk), with an opportunity for future revenues.

Municipal Bond / Other Municipal Financing Mechanisms

We have a close relationship and partnership with LRB Public Finance Advisors, Inc. (LRB), an independent financial advisor to municipalities. LRB has served as an advisor in structuring over \$13 billion in municipal bonds over a thousand transactions for fiber networks, utility districts, special districts, cities, towns, counties, redevelopment agencies, school districts, charter schools and many others throughout the United States.

Specific to fiber financing, the networks LRB has financed are collaborative with the municipal entities and have succeeded in delivering open-access fiber throughout their communities. Each has been structured to meet the needs of the community. The financings can utilize taxexempt municipal bonds to finance 100% of the project over a 20+ year period. Selected projects that LRB has successfully closed include:

- Lehi, UT (\$53,890,000)
- Ammon, ID (4 deals, <\$1,000,000)
- Bozeman Fiber (501C-3), Bozeman, MT (\$65,000,000)
- Powell, WY (\$6,500,000)
- UTOPIA, Interlocal Agency 11 member cities in Utah
- UIA, Interlocal Agency of 8 participating cities in Utah expanding with partner city agreements (\$2,550,000 - 73,905,000)

Through our work on this feasibility study, we will analyze various municipal financing tools such as: general obligation bonds, revenue bonds, special assessment areas, tax Increment areas / revenues, local improvement districts / public Improvement Districts, and American Rescue Plan Act (ARPA) monies. We will look at the financial, operational, and public impacts for each of these tools and create a recommendation and path forward that best serves the needs of the City.

FINAL REPORT

Our final report will include an array of maps at various scales and projections to provide a clear visual representation of areas of need, proposed infrastructure, and potential service areas. Our engineering team and GIS experts will utilize ArcGIS to build a comprehensive database to house the data gathered and provide the City with .shp files so it can be ingested into any GIS systems the City determines to use.

Using our experience in large-scale builds, we will develop a detailed action plan for Harvard. We will incorporate the City's feedback and desires in this plan. This will include an initial digestion period where the relevant members and teams within the City analyze the report and establish a task force. Once finalized, this plan will be comprehensive and will act as the City's playbook for how to successfully fill the broadband gaps in its geography.



CITY-WIDE SYSTEM IT MAP

Bonfire has extensive experience in creating IT maps for municipalities, including fiber/internet services, wireless point-to-point systems, and wireless cell data usage. We understand the importance of accurate and up-to-date mapping to enhance City services and improve overall efficiency. Our approach:

DATA COLLECTION

We will collaborate closely with the City's team to gather relevant data on existing infrastructure, including fiber networks, wireless access points, and cell towers.

Our experts will review existing documentation and engage with relevant stakeholders to ensure a thorough understanding of the current IT landscape.

GIS MAPPING

By leveraging Geographic Information Systems ("GIS"), we will create detailed maps that visualize the City's IT infrastructure.

Our GIS specialists will use industry-standard tools to accurately represent the location, capacity, and connectivity of each service.

LAYERED APPROACH

Our maps will be organized into layers, allowing the team to focus on specific services (e.g., fiber or wireless) or view the entire system.

Each layer will include relevant attributes, such as asset type, connectivity, capacity, coverage area, etc.

INTEGRATION WITH EXISTING SYSTEMS

We will ensure seamless integration of existing infrastructure into the proposed HLD.

USER-FRIENDLY INTERFACE

The IT map will be accessible via a user-friendly GIS interface based on the City's requirements.

Users can search, filter, and overlay different services to gain insights and make informed decisions.

Bonfire knows that accurate records are vital to drive future business decisions and the steps taken during this section of the project will provide the City with the following benefits:

IMPROVED DECISION MAKING

This will help identify gaps, plan expansions, and allocate resources effectively, to help City officials make the most informed decisions moving forward.

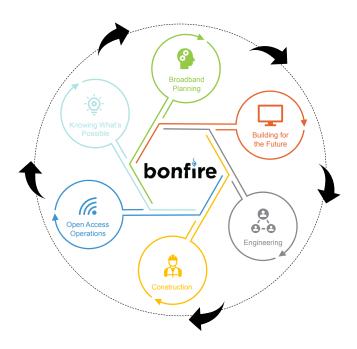
TRANSPARENCY

The City will have access to all GIS information for existing and proposed infrastructure, upon completion of the deliverable.



VENDOR DESCRIPTION

At Bonfire, we are uniquely qualified to provide all the services required for the successful implementation of this project. We are a values-based team of telecommunications and technology professionals that do the work to enable economic growth and access to quality education and healthcare through broadband connectivity, one community at a time. We are headquartered in Denver, CO and provide broadband planning, engineering, construction, and open access operation services nationwide. Our business operates under the EOS methodology which allows us to deliver a six-step proven process of quality, efficiency, and transparency with our clients.



Along with our proven process, we are a value driven company that enables us to hire, retain and grow the most talented people in the broadband industry, all focused on serving our clients and our purpose. Organizationally, we are structured with a strong leadership team and a deep bench of talent across all critical disciplines including engineering, project management, construction, permitting, vendor management, central office equipment, network operations, technical customer service, and network maintenance. At Bonfire, we love getting the chance to work with customers who have the same drive to get broadband to those that need it most. Our team has worked on projects of all sizes and understand the challenges that come with each of them. We believe the only way any project is successful is when there is an open and honest line of communication. Issues can come up on every project; however, how they are handled and what is done about them is what makes our business stand apart.

OUR PROJECT MANAGEMENT PHILOSOPHY



Set Up For Success

- Emphasize relationships not transactions
- Focus on the needs of the customer
- Adapt our approach to best address the challenge



Build Strong Foundations

- Verify the details before the work begins
- Provide insight and recommendations
- Align all stakeholders on the expected outcomes



Collaborate and Listen

- Always serve up the right people and processes
- Emphasize teamwork at every opportunity
- Seek out what's possible and where possible, redefine what's possible



Be Clear and Accountable

- Provide full visibility into project process
- We put our money where our mouth is and the buck stops here



Track the Progress

- Plan the work, work the plan
- Benchmark KPIs
- Be accountable at all times and in all matters



Go the Extra Mile

- See the project through to completion and remain committed beyond
- Expect the unexpected and be prepared to handle it
- · Be primed for the next engagement

FINANCIAL SUMMARY

We have ample financial capacity to support this type of project. We have a strong cash position, a multi-million-dollar line of credit agreement with InBank (our current bank in Denver, CO), and deep pockets behind us through our current investors. In addition, we have ample credit available with our equipment and material suppliers.

BALANCE SHEET

	2022
Current Assets	
Cash & Cash Equivalents	530,225
Account Receivable	2,498,920
Other Receivables	461,906
Inventories	11,580
Prepaid Expenses	10,525
Total Current Assets	3,513,156
Other Assets	
Property, Plant and Equipment	13,400
Accumulated Depreciation	(223)
Other Assets - Intercompany	(738,285)
Total Other Assets	(725,108)
Total Assets	2,788,048
LIABILITIES & EQUITY	
Current Liabilities	
Accounts Payable	1,344,408
Other Current liabilities	498,115
Total Current Liabilities	1,842,523
Other LT Liabilities	
Total Other LT Liabilities	0
Total Liabilities	1,842,523
Shareholders' Equity	0.45.505
Net Income / (Loss)	945,525
Total Shareholders' Equity	945,525
Total Liabilities & Shareholders' Equity	2,788,048



PROFIT AND LOSS (P&L) STATEMENT

	2022-12-31	<u>2021-12-3</u> 1	2020-12-31
SALES			
Construction Income	7,880,760	3,767,126	7,421,090
Engineering Income	2,084,190	4,084,239	3,212,076
Materials Procurement	1,973,059		
TOTAL SALES	11,938,010	7,851,365	10,633,166
COGS			
Material	1,601,589	899,684	64,738
Equipment Expense	285	9,425	44,349
Direct Labor Expenses	1,014,904	868,779	1,578,008
Subcontractors	4,981,536	1,667,800	3,364,763
Other Job Expense	171,336	260,871	208,701
Other Costs	44,397		
Indirect Costs - Allocated	242,621		
TOTAL COGS	8,056,668	3,706,559	5,260,559
Gross Profit	3,881,342	4,144,806	5,372,607
Overhead Expense/Indirect Costs			
Wages & Benefits	1,223,078	1,052,771	1,163,497
Equipment Shop	3,163	212,493	227,855
Occupancy Expenses	342,861	343,380	372,519
Software	306,449	119,162	49,340
Vehicle & Maintenance	65,862	189,242	209,790
Indirect Cost Allocation	-242,621		
Operating Exp/G&A			
Wages &Benefits	524,660	1,010,295	1,430,887
Professional fees	384,104	299,516	295,369
Office expenses	139,982	78,758	52,797
Meetings, Travel,	179,929	164,555	169,055
Other operating	8,547	676,213	437,322
Total Operating Expenses	2,936,013	4,146,385	4,408,431
Operating Income	945,329	-1,580	964,176
Other Income/Expense	-	-	-
Other Income	196	215,414	747,041
Interest Expense		68,583	79,196
Net Interest Expense/Income	196	146,831	667,845
Net Income (Loss)	945.525	145.251	1.632.021



SOUTHERN UTE TRIBE (CO)

Bonfire began engaging with the Southern Ute Tribe in October 2020. Initial high-level engineering work was completed soon after and Bonfire moved forward to working with the Tribe in submitting their National Telecommunications and Information Administration (NTIA) application in September 2021. Bonfire was selected to complete the low-level engineering and construction for the middle mile portion of this project (funded through \$10M in state funding). The middle mile project includes 52-miles of backbone fiber across the Reservation. Four key routes are leaving the Colorado location in Ignacio, CO placing seven-way microduct with a 144MF along those backbone routes.

The Tribe was then awarded \$42M from the NTIA to connect 1,900 Native American households (both Southern Ute Tribal Members and other Native Americans). Tribal homes with FTTH. The project includes placing another 275-miles of UG lateral, distribution, and drop fiber to connect all Tribal-owned homes and businesses. In addition to the funding to connect all Tribal locations on the Reservation, the project will also pass another 1,900 non-Tribal homes that can connect to the network. The Tribe selected Bonfire through RFP to provide engineering, procurement, and construction for the rest of the NTIA funded build, and also selected Bonfire Fiber as the open access network operator for the FTTH network.

To end 2023, the Tribe was awarded another \$8.6M in CPF from the state and will use that funding to connect another 550 homes to the network. We are currently placing drops to our initial Tribal homes and will connect customers to the network in April.

VINELAND, NEW JERSEY

Bonfire was awarded the RFP to conduct a broadband assessment and feasibility study for the City of Vineland, NJ in 2022. Project scope included discovery and research, creating a community engagement survey, evaluation of existing broadband services, grant/funding research, conduct gap analysis, planning and highlevel network design, business/financial models, and recommended next steps. Data was collected, analyzed, and put into the final Feasibility Report to be shared with City officials.

Bonfire reengaged with the City late in 2023 to assist them in creating their new broadband utility department. In February of this year the City passed an ordinance to create this broadband utility department and will continue to work with Bonfire as their broadband advisor as they begin the process of deploying a municipal-owned fiber network.

FRISCO, CO

Bonfire was awarded the RFP to conduct a broadband feasibility study and create a broadband master plan for the Town of Frisco, CO in 2023. Project scope includes competitive research, creation/deployment of a community engagement survey, interviews with key stakeholders, evaluation of existing broadband service by incumbents, grant/funding research, network highlevel network design and cost estimates, presentation of multiple operating models and associated financial profiles, financing opportunities and recommended next steps. The project kicked off in Q1 2024 and is expected to continue through Q1 2025.

LONE TREE, CO

Bonfire was recently awarded the RFP to conduct a broadband market assessment and feasibility study for the City of Lone Tree, CO. Project scope includes competitive research, creation/deployment of a community engagement survey, interviews with key stakeholders, evaluation of existing broadband service by incumbents, broadband strategy recommendations, cellular coverage review and recommendations, inventory of existing City fiber assets, and a City network growth plan. The project kicked off in Q1 2024 and is expected to continue through Q4 2024.

RIO BLANCO COUNTY, CO

Bonfire finalized a contract with the County in Q3 2023 to create a high-level design, bill of materials, and project budget for their two Capital Projects Fund (CPF) grant submissions. Bonfire also brought in grant partners to assist with grant narrative creation and submitting the application. Bonfire put together an approach for the County to expand its existing FTTP (fiber to the premise) footprint outside of their existing city limit builds to reach more of the unserved/underserved residents across the County.

Bonfire is currently finalizing a Master Services Agreement with the County to provide operational consulting services, Broadband Equity, Access, and Deployment (BEAD) grant application prep and additional services to help the County continue to move forward on their broadband journey.

CAPE MAY COUNTY, NJ

Bonfire was selected via RFP to conduct a broadband assessment and feasibility study for over 100,000 addresses in the County. Project scope included discovery and research, a city-by-city breakdown of the local broadband market, creation/deployment of a community engagement survey, interviews with key stakeholders, network high-level network design and cost estimates, presentation of multiple operating models and associated financial profiles, financing opportunities and recommended next steps. and recommended goforward strategies. The County has since released the report to the public and is working with City leaders to create broadband taskforces and implement the recommendations presented by Bonfire in the feasibility study.



REFERENCES

SOUTHERN UTE TRIBE

Jeff Engman (CIO) (970) 501-0518 jengman@southernute.com

VINELAND, NJ

Tony Quigley (IT Director) (609) 774-4323 aquigley@vinelandcity.org

RIO BLANCO COUNTY, CO

Eric Jacquez (Facilities Manager) (970) 756-0814 eric.jaquez@rbc.us

FARMERS TELEPHONE COMPANY

Bill Blackford (General Manager) (970) 394-0609 bblackford@farmerstelcom.com

PARTNER/CONTRACTOR FIRMS

For this project, Bonfire is bringing in our trusted partners at Learn Design Apply Inc. (LDA). Since 1998, the LDA team has supported winning applications for hundreds of millions of dollars, benefiting countless communities throughout the United States. They offer an array of services to both public and private sector clients so they have less work, better odds, and more funding available to them. With LDA's help, customers gain the confidence they need to boost their grants know-how and build capacity. LDA helps organizations access available funding to address pressing and systemic challenges facing communities in the U.S. Our services include grants reporting, consulting, project management, document creation, and writing/proposal development.

The LDA Infrastructure Team has won over \$370 million in broadband and digital equity funding over the past three years. However, their expertise expands beyond application assistance and touches all components of the grant ecosystem. LDA's Strategists coordinated the development of Washington's Broadband and Digital Equity Local Action Plans for the 39 counties and 12 federally recognized tribes for the purpose of supporting the Washington State Broadband Office's development of its 5-year BEAD/DEA action plan. The tools developed by LDA resulted in over 1,200 responses to surveys across the state by community anchor institutions, ISPs, digital equity service providers, and other community partners in under three months.



Please see below for background information on broadband planning team:



BRIAN HOLLISTER Co-Founder & CEO

Brian's professional experience includes working for internet service providers like AT&T, Level3 and MCI, as well as networking technology companies like Calix, Aktino and Vina Technologies. Brian holds a BS, Business Management from the University of Phoenix and is passionate about building the future of open access in the United States.

Role: As CEO, Brian is responsible for the strategy, corporate culture, and investor relations activities for the organization. With over 20 years of experience in the telecommunications business, his areas of expertise include sales leadership, operations, marketing, and business management. Brian believes that all Americans should have access to high-speed, affordable internet access through creating choice for consumers and demonopolizing the internet industry.



JUSTIN ROLLER

President

Justin has over 20 years of experience in the technology sector and specializes in helping public sector clients, ranging from municipal governments to federal departments, address their challenges in modernization and digital transformation. His work has included business process automation, cloud implementations, and network/system security. Justin problem solves through leveraging creative solutions which bridges the gap between technical details and real-world outcomes. Notable career accomplishments include leading the software team running a US federal government program distributing \$1 billion monthly. He has also served on the state of Colorado's Broadband Deployment initiative which provided him first-hand experience with grants, public private partnerships, and a unique perspective on how communities and ISPs are working together to close the digital divide.

Role: As Bonfire's President, Justin is passionate about applying his technical and strategic skills, in combination with his knowledge of the public sector and grant funding, to help address broadband issues facing American communities today. He believes that we have a rare opportunity now to solve the issues related to strategically providing fast and affordable broadband to provide long-term value to underserved communities.



JOSH ORLOWITZ

Director of Corporate Strategy

In his previous role, Josh was an Engagement Manager at CMA Strategy Consulting (acquired by EY-Parthenon, the consulting arm of Ernst & Young). CMA is a Boston-based telecommunications strategy consulting firm engaging in the most complex corporate strategy and M&A deals in the telecommunications industry. Josh has worked on over 35 projects ranging from capital deployment prioritization for rural ISPs, fiber M&A commercial due diligence for private equity and developing detailed FCC auction strategic plans for large telcos. In his role as Engagement Manager, Josh was responsible for all aspects of project and client management and overall strategic direction of the projects he managed.

Role: As Director of Corporate Strategy, Josh is responsible to productizing all aspects of Bonfire as it continues its exponential growth phase. Josh is also responsible for helping develop and drive the product and corporate strategy of Bonfire's FTTH efforts. This includes developing its product and pricing, market selection, capital optimization, and go-to-market planning.



JASON WISEMAN Principal Engineer

In his 25 years of experience in the communications industry, Jason has exhibited a strong work ethic and a wide range of leadership, technical and problem-solving skills that contribute to the success of his projects. Jason's experience allows him to be a valuable subject matter expert in every stage of the project, from budgeting through design and construction.

Role: As Principal Engineer, Jason oversees all activities related to the management, design, and construction of infrastructure projects. In his role, he also liaises with the project team and consultants to ensure project performance goals are achieved.



DREW PAPPAS

Director of Business Development & Community Engagement

As Director of Business Development, Drew is responsible for building long-term relationships with municipalities, Tribes, ISPs, co-ops, and private entities within the markets Bonfire works in. He acts as a liaises with different community leaders to show the tremendous value a FTTH network can bring to a community. He believes that broadband is for all, not for some, and is a strong proponent for eradicating digital inequity with infrastructure and services that lasts for generations.

Role: Drew is crucial in working with communities to help clarify stakeholder needs, navigate corporate process, and making sure that Bonfire is bringing choice, innovation, and competition into every market we work with. His work focuses more on the community engagement aspect during any broadband planning efforts and works closely with the engineering and construction teams to make sure all customer goals are exceeded.



TYLER THREW

Program Manager

With seven years of experience managing projects and leading teams in the telecommunications industry, Tyler is proficient at bringing teams together to deliver results. His experience managing the engineering of OSP fiber and wireless networks, as well as implementing PMO software and structure to better align the project portfolio with the larger business objectives makes him a valuable asset to the Bonfire PMO. His leadership, strategic problem solving, social facilitation and project management knowledge enables him to set projects up for success by continually analyzing efficiencies and effectiveness throughout the project/program lifecycle.

Role: As Program Manager, Tyler is responsible for strategically coordinating various functional activities of the PMO simultaneously to meet key project/program goals. This includes budget, resource management, risk mitigation, stakeholder engagement and aligning the PMO with the overarching organizational initiatives.



JOSH ANDERSON

Sr. Business Strategy Analyst

As a Senior Analyst on the Corporate Strategy team, Josh is responsible for helping to drive the corporate strategy of Bonfire's FTTH efforts. This includes market analysis and selection, financial due diligence, and competitive research.

Role: Josh also helps manages engagements for Bonfire's broadband planning teams as they support clients in becoming more efficient, expanding their service capabilities, and redefining what's possible in delivering broadband to their customers. Josh is passionate about Bonfire's mission to bring broadband connectivity to every American.



AMY GOLDSTEIN

Senior Engineer

Amy has over 12 years of experience in the communications industry, with deep experience across fiber network engineering, quality assurance, and field surveys. Amy also has a background in geospatial analysis for municipal utilities, where she built foundations that enhance her work in the fiber optic field today.

Role: At Bonfire Fiber, Amy serves our Network Operations teams in the role of Senior Engineer, designing networks with an eye for quality, capacity and scalability. She also supports our Broadband Planning teams with feasibility studies, greenfield fiber designs, and grant preparation.



LEX GOOLGASIAN

GIS Developer

In her previous role, Lex was a Distribution Designer at Stantec. Stantec is in the design and consulting industry - they provide professional consulting services in planning, engineering, architecture, surveying, and environmental sciences. Lex has worked on multiple projects ranging from providing power to 5G small cell antennas to fiber optic cable installation for Dominion Energy. In her role as Distribution Designer, Lex was responsible for analyzing, designing, and coding in ArcMap. She also created design packages which included construction prints, fiber optic sag and tension calculations, down guy calculations, pole loading calculations, NJUNS ticket creations, bill of material coding, and permit applications.

Role: As a GIS Developer, Lex is responsible for acquiring, analyzing, and compiling geospatial information of feature and terrain data utilizing imagery analysis techniques to develop accurate cartographic representation. She is also responsible for the production of sophisticated maps, reports, imagery, and custom geoprocessing tools to achieve maximum efficiency within ArcGIS Pro and Comsof. Additionally, Lex is responsible for software design and development on assigned projects for data automation and end user applications including desktop and web.



MEGAN BERESFORD - LEARN DESIGN APPLY (LDA)

Director of Broadband Programs

Since Megan joined the LDA team in 2019, she and her team have helped states, public entities, tribes, and private internet service providers secure over \$375 million in broadband infrastructure and digital equity funding. Well versed in both state and federal grant programs, Megan and her team assist clients in grant writing and the creation of full funding strategies. She brings a wealth of knowledge from years spent in Washington D.C., assisting elected state officials address pressing challenges from consumer protection to healthcare inequities.

Role: As Director of Broadband Programs, Megan manages a team of eight grant writers focused specifically on broadband funding opportunities. She is driven by LDA's mission of connecting communities with the monetary resources they need to create lasting, positive change.



KATE BRUNK - LEARN DESIGN APPLY (LDA)

Grant Writer - Broadband Programs

Before joining LDA as a grant writer for Broadband Programs, Kate Brunk had spent more than a decade in nonprofit work, approaching community development from various strategies, including education, workforce development, and human services. During that time, she completed two years of the AmeriCorps VISTA program, building relationships between K-12 schools and higher education to meet the experiential learning needs of college students while providing crucial mentoring and tutoring to elementary and middle school students. In 2019, she completed her M.A. in Community and Economic Development as a Stevenson Center Fellow at Illinois State University and then launched a social enterprise with YWCA McLean County to provide long-term employment to women who have experienced incarceration. These experiences not only gave her opportunities to build her skills in business, marketing, and community outreach, but it also demonstrated the critical importance of relationship building to form broad coalitions of support for a project.

Kate has leveraged this knowledge to better support the clients she has worked with at LDA, providing comprehensive support through the grant application process and exploring the ripple impacts that broadband access can have across their communities.



ANNIE SIRKI - LEARN DESIGN APPLY (LDA)

Digital Equity Strategist

Annie Sirski is an infrastructure grant writer, funding strategist, and project manager currently supporting clients with broadband and digital equity projects. She is passionate about community-centered efforts that provide durable, accessible infrastructure and meaningful programming. Recent projects include supporting the State of Washington's BEAD/DEA planning by developing systems for community engagement and local broadband planning, developing California Last Mile grant applications with municipal clients, and researching and applying for funding for research-related digital equity projects.

Outside of her broadband experience, Annie brings expertise from past roles in management consulting with enterprise technology companies, specializing in post-M&A integration and channel strategy. She is currently pursuing her Masters of Library and Information Science through the University of Washington with an emphasis on technology, information behaviors, and government information.

COMMUNITY EXPERIENCE

Bonfire has deep experience working with diverse communities to define the current state, explore new possibilities, and select and implement the right path forward for community broadband initiatives:

- Southern Ute Tribe (CO)
- Vineland, NJ
- Frisco, CO
- Lone Tree. CO
- Rio Blanco County, CO
- Cape May County, NJ

PROPOSED COST

1. Demand for Broadband Service

Competitive Data Review

Community Survey

Partnership Review

Task #1 Cost: \$26,808.84

2. Education/Community Engagement Plan

Competitive Data Review

Task #2 Cost: \$24,054.01

3. Engineering Design Options

Data Aggregation/Preparation

High-Level Network Design Creation

Bill of Materials

Task #3 Cost: \$18,896.98

4. Broadband Model Option(s) Recommendation

Financial Model Creation

Implementation & Operation Model Design

Review/Refinement with City

Task #4 Cost: \$23,002.81

5. Capital Funding Options

State/Federal Funding Opportunity Review

Municipal Financing and P3 Reviews

Task #5 Cost: \$17,473.10

6. Final Report

Draft Final Presentation

Deliver Final Presentation

Task #6 Cost: \$15,085.26

(Add-On) Community Engagement Implementation

In-Person Meetings

Community Outreach

Community Engagement Plan Finalization/Implementation

Add-On Cost: \$62,500.00

Proposed Cost: \$125,321.00

Community Engagement Implementation (Add-On): \$62,500.00

Total Cost w/ Optional Add-On: \$187,821.00

Project Costs

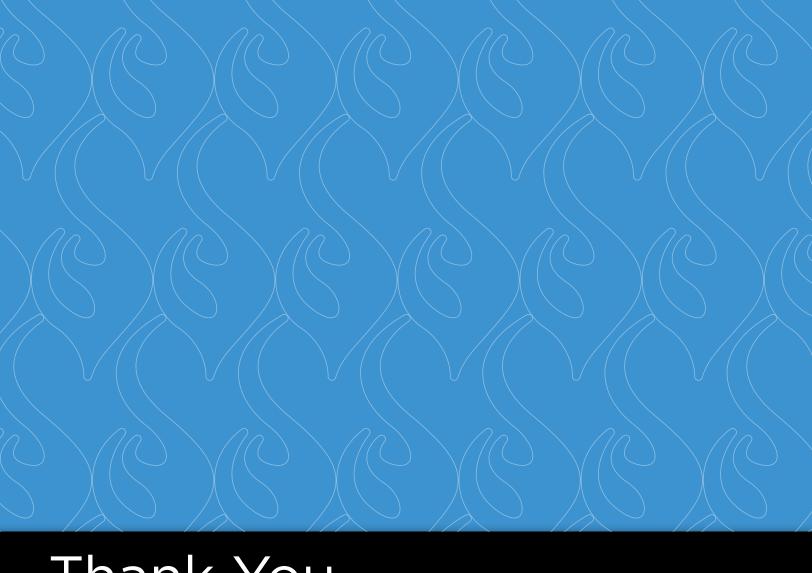
Bonfire's proposed cost for the scope of work provided by the City of Harvard is \$125,321.00 and includes all work to be completed as stated in our proposal. As requested in the RFP, we have provided an additional line item cost for any implementation of education/community engagement plan that is created during this feasibility study at the price of \$62,500.00. If the City decides to move forward with the proposed scope of work and the add-on implementation deliverable, the combined price from Bonfire totals \$187,821.00.

Bonfire proposes progressive billing throughout the project - meaning once each task is completed, Bonfire will invoice the City for that portion of work completed. Please see the provided project timeline that ties back to tasks and deliverables.

PROJECT SCHEDULE

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8
Project Kick-Off								
Project Kick-Off	X							
Travel for In-Person Meetings	X							
Refinement of PMP	X							
Demand for Broadband Service								
Discover Meetings w/ Taskforce	X	X						
Group Discussions	X	X	X					
Education/Community Engagement Plan								
Community Engagement Plan Creation		X	X					
In-Person Visits (Optional Add-On)		X	X	X				
Community Outreach (Optional Add-On)			X	X	X			
Engagement Plan Finalization (Optional Add-On)					X	X		
Engagement Plan Implementation (Optional Add-On)							X	X
Engineering Design Options								
Data Aggregation/Preparation	X							
High-Level Network Design Creation	X	X	X					
Bill of Materials			X					
Broadband Model Option(s) Recommendation								
Implementation & Operation Model Design		X	X					
Financial Model Creation			X	X				
Review/Refinement with City			X	X				
Capital Funding Options								
State/Federal Funding Opportunity Review				X	X			
Municipal Financing and PPP Reviews				X	X			
Final Report								
Draft Final Presentation				×	X			
Deliver Final Presentation					X			





Thank You

