

November 29, 2021

Ms. Anna Coppola  
Contracts Administrator  
Cochise County Procurement Department  
1415 Melody Lane, Bldg. C  
Bisbee, AZ 85603

**Re: Cochise County Broadband Feasibility Study Proposal**

Ms. Coppola,

Please find attached our proposal to assist Cochise County with understanding the current state of broadband and to develop actionable information and plans to allow Cochise County or providers implement meaningful broadband solutions.

With our team you will receive expert analysis from two independent firms working jointly to provide an actionable plan with a goal of better broadband for the citizens within Cochise County.

Once you have reviewed our proposal, we can discuss any further specific needs and requirements of a Feasibility Study for Cochise County. If our proposal meets your needs, we are ready to execute an agreement with to proceed with the Feasibility Study work.

Sincerely,



Andy Heins  
Senior Consultant – Strategy and Operations  
Finley Engineering

## Our Approach

Together Finley Engineering and CCG Consulting have more combined experience assisting the widest variety of broadband operators build FTTH broadband networks.

Finley Engineering has completed more than 40,000 miles of FTTx projects in the last 15 years, those projects have been for a wide variety of broadband network operators including electric cooperatives, cities, counties, municipal utilities, competitive providers, telecom companies and wireless ISP's. While all fiber projects use very similar equipment and materials; none of these projects are identical in nature due to many of the other non-technical factors regarding projects. Finley recognizes that each broadband network operator has different goals for their projects, tolerance to risks, capital budgets, existing technical expertise and other decision-making points.

In addition to Design, Engineering and Project Management; Finley has also assisted more than multiple clients with Broadband Feasibility Studies over the last 5 years and assisted an equal number of clients with State and Federal grant funding applications and competitive bidding opportunities.

CCG Consulting has assisted more than 1,100 clients ranging from competitive fiber providers, telecom providers, cable companies, cooperatives, municipalities, and wireless companies.

## Scope of Work

The Feasibility Study work that Finley Engineering and CCG Consulting will address the following:

- Competitive and needs analysis to understand the existing broadband services and broadband needs.
- An understanding of possible broadband business operating models.
- A review of the current providers and existing broadband infrastructure within Cochise County.
- Pre-Engineering to estimate the cost of building broadband networks in Cochise County.
- Determination of potential projects, order of execution and project schedules.
- A review of technology trends, broadband policy and funding opportunities.
- Financial analysis estimating the incremental revenues and expenses from each of the opportunities as well as an analysis showing the profitability of each option.
- A report that will tell you what we did and what we found.

### 2.1.1 - Service and Infrastructure Analysis *(Completed by Finley & CCG)*

We don't think you want to hire us to simply spit back maps to you of publicly available data. We have been working with communities for years and we know that the FCC and other data is often incorrect. We are proposing an engineering analysis that will help us to create our own versions of the broadband maps that we know will be a lot more accurate. That process will include the following steps:

#### **Interview ISPs**

We propose to interview the ISPs that are offering service in and near to the County. We've often found that some of the larger incumbents are not willing to talk to us if what they say will go into a public study. We will ask each ISP about their current network, and also see if they will tell us about any upcoming plans to improve their networks. We will strive to identify all areas that are already slated to get faster broadband.

#### **Broadband Mapping**

We will map the existing broadband in the County. We'll start with publicly available mapping data like the FCC 477 database. We know the FCC data is flawed, but we think it's important to see what the FCC thinks is in the County since many grants start with the assumption that the FCC mapping is correct. We'll also look at any mapping done by the State and from any other sources we can find.

Our ultimate goal with the mapping will be to create a map that shows the real state of broadband, particularly in the rural areas. We want to give you a map and backup justification for being able to challenge the FCC maps if needed to win grant funding. We will make modifications to the maps based up other facts we gather during the study such as speed test data and an engineering inspection of the available broadband infrastructure.

#### **Map of Known Grant Awards**

There are likely federal and possibly state broadband grants awarded in parts of the County in recent years that have not yet been constructed. We will create a map showing the proposed solution coming from each grant. We will also provide an opinion of the likelihood of any grant winners building or not building the promised solution. We suggest this extraordinary step because there are grant winners in the FCC's RDOF auction completed in December 2020 that promised to bring technology and speed combinations that we don't think are possible. For example, if a grant winner in the County is promising to bring gigabit wireless, we'll tell you what they likely will be delivering instead.

#### **Hands-on Engineering Analysis**

After we have created the maps using publicly available data, and after we've talked to the ISPs, Finley Engineering will send an experience engineer to visit the County to visually verify the existing broadband environment. For instance, we can verify the age and likely speeds available on rural DSL by looking at DSL cabinets. We can better understand fixed wireless deployments by looking at the towers and sites used to broadcast broadband. We can visually verify if an ISP has extended a cable company or fiber network into rural areas if they claim such things. We've found that this on-site review is one of the most important steps in creating your own broadband map. A visual inspection verify truthful claims and invalidate untruthful ones made by ISPs .

## 2.1.2 - Needs Assessment and Outreach *(Completed by CCG)*

### **Interviews with Stakeholders**

We propose to interview up to a twenty key stakeholders in the County. We would ask your help to identify them. This could be key businesses, key government stakeholders like the schools, or health care providers. It could include others like major manufacturers or employers, but we also want to talk to some smaller and rural businesses. CCG Consulting has conducted thousands of similar interviews and we know how to tailor the questions we ask to fit each stakeholder. These interviews are more in-depth than surveys and tell us a lot about how the current state of broadband affects the community.

These interviews would be conducted by telephone and typically last about 30 minutes each (a few last longer). We will ask your help to identify the best contacts as the various stakeholders. In our experience we've learned that we will need your help to let these entities know that we will be contacting them – otherwise many of them will be reluctant to talk to a consultant they never heard of or to disclose things that might end up in a public report. We always give stakeholders the opportunity to keep their responses to us confidential if they don't want us to discuss their responses in the written report.

### **Residential Survey**

One of the most useful tools for reaching out to the public is through an online survey. The primary reason we do residential surveys is to understand the residential interest in better broadband. CCG has been conducting residential surveys for over twenty years. There are a few factors that are vital to create an accurate and believable survey. First, the questions asked must be unbiased and can't lead respondents into answering in a given way. CCG has administered hundreds of similar surveys and we can help you to prepare survey questions that are not biased, and for which you can then believe the answers.

Another important factor is to limit the number of questions. There is a well-known phenomenon called survey fatigue and a large percentage of people will hang up or walk away from a live survey if they feel it's taking too long. An online survey should not last for more than ten minutes, and hopefully for less time.

We propose to put the survey online, and the most effective way to do this is by using the County website or some other site that people will use locally. We must rely on the County to get the word out to ask citizens to take the survey. We can discuss techniques that other counties have used to get a good response to surveys.

### **Business Survey**

We also propose creating an online business survey. This has a different structure than the residential survey because we ask businesses to tell us their broadband story. We want to know if current broadband is adequate, and if not, what problems are businesses seeing. We also want to know what businesses could do better if they got better broadband.

We would also ask the county's help to advertise the business survey. We've found that there are generally a few ways in every community to distribute the survey and we will ask your help to distribute word of the survey.

### **Speed Tests**

We've found it important to gather speed test data from residents and businesses. This is best way we know to get a qualitative look at broadband performance in the County – are the ISPs delivering what they are advertising? Speed tests are becoming a standard component of broadband studies because it's clear that the FCC broadband data, particularly in rural areas is often vastly overstated. There are numerous grant programs that will allow you to challenge the bad FCC data if you can provide an alternative look at broadband speeds. We also would ask you to put the speed test on-line and advertise it.

We will also gather any speed test data that might be made available to us by the State. They may have gathered huge numbers of speed tests.

### **Broadband Gap Analysis**

Our study will discuss and identify different kinds of broadband gaps that are typically found in most communities. We will discuss any practical discussions of these solutions that might apply in the County. This includes gaps like the following:

- The Gap in Broadband Speeds. Much of the work discussed elsewhere in the proposal will examine the speed issue. We will separately discuss the issues and gaps in download speeds and upload speeds.
- The Gap in Broadband Availability. We routinely expect in rural areas to find homes that have no practical broadband alternatives. Even when there are alternatives, many will be slower than the FCC's definition of broadband.
- The Gap in Broadband Affordability. In every community, there are households that don't subscribe to broadband because of the cost.
- The Gap in Computer Ownership. There are households that don't subscribe to broadband because they can't afford a computer.
- The Gap in Broadband Skills. There are citizens who don't buy broadband because they lack the skills needed to operate in the digital age.
- Future Broadband Gaps. Even in parts of the County where broadband is adequate today, we will look out into the foreseeable future to discuss the likely needs for broadband speeds and usage a decade from now.

### **2.1.3 - Site Analysis *(Completed by Finley)***

As part of our Hands on Engineering Analysis we will review any existing public assets and/or land which might be used for network construction and operation.

### **2.1.4 - Market Analysis *(Completed by CCG)***

One of the aspects of the competitive market is understand existing products and prices, which is covered by the market analysis above where CCG will investigate prices and also look at customer bills.

### **Competition / Product and Price Research**

We know that prices for broadband and other triple play products vary by community. We think it's important to understand the broadband products and prices available in the County today. We generally undertake this in several ways. We start with standard research such as web searches to see if we can determine what existing service providers charge and the services they offer. We are also going to ask

questions in the surveys about broadband prices. We will ask if local ISPs will share their pricing with us. CCG Consulting works in communities all over the country and we give you our opinion on how pricing in the County compares to other similar communities.

We are also going to provide what we call a rate analysis. This will discuss the different kinds of rate structures that we see used around the country for broadband. We will recommend specific pricing that we think makes sense for the financial analysis that we discuss below – but we’ll get your feedback before setting prices for our analysis. Our studies will also look at the impact of charging higher and lower prices – so it’s not essential that we pick the exact right price up front.

### **Penetration Rates**

This is a difficult question to answer at the feasibility study level. We are going to get some feel from the online surveys if people are happy or unhappy with their broadband and if they might consider changing to a new broadband network. However, the online survey is not statistically significant and valid, meaning that we can’t use the results to estimate penetration rates.

There are only two ways to estimate possible penetration rates – a canvass or a statistically valid survey. A canvass means contacting every potential customer of a network. It only makes sense to do a canvass when an ISP is imminently ready to provide service and can talk about specific facts like prices, speeds, and availability. A canvass doesn’t mean much when asking the theoretical question of interest in broadband.

We recommend statistically valid surveys when ISPs want to understand a market to the level of detail if estimating the penetration rate. CCG Consulting has an in-house survey crew and we’ve been doing such surveys for twenty-five years. However, we don’t recommend a statistically valid survey for a county as large as yours. The County is really made up of multiple markets – there are the larger towns, the smaller towns, and the rural areas. The expected responses will likely be significantly different for each area. If an ISP was going to build into the rural area, then it would make sense to survey that area. A survey at this early stage across the whole county will not produce statistically believable results across all of the various markets. It’s likely that we will suggest a specific survey strategy as part of the recommendations of the study, but in our experience as a company that has been doing broadband surveys for decades, you don’t want a total-County survey at the feasibility study level. We will quote a price for such a survey if you want to pursue it, but we think it’s premature.

## **2.1.5 - Broadband Provider Business Model and Partnership Evaluation**

*(Completed by CCG & Finley)*

### **Operating Models**

Our first step when doing a feasibility study is to discuss the possible operating models you’ll want us to study. We can easily consider multiple option. Our report will discuss the pros and cons of any of the operating models you want to consider. Following are a few of the options we can study.

- **Single Provider ISP**. This ISP could be the county or could be a commercial ISP that decides to build broadband. We always study this option, because if a single ISP can’t be profitable in serving a market, then other operating models can’t work. If there is not the possibility of a profit for a single operator, then options where profits must satisfy several parties can’t work.

- Public-Private Partnership Options. There are numerous ways that commercial ISPs and governments can create a partnership. The different arrangements mostly differ by the amount of money and contribution that the government is willing to make. Note that the possible influx of huge federal funding changes the dynamics of all of these partnerships if the federal and state government pick up a bulk of the cost of building a network. The partnership then looks at who pays for the rest of the network. Some of the most common partnership options include:
  - Local Government Grants. We've seen examples in recent years where counties have offered local grants to go along with federal and state grants to lure an ISP to serve rural areas. With ARPA money this might be easier than normal, but we've also seen counties use general funds or even float bonds to help fund a broadband solution.
  - True Partnership. In this scenario a local government and an ISP form a partnership with each adding some of the funding. This benefits local governments by giving you some say in pricing and other key aspects of operating the business.
  - Operator for Hire. In this scenario the county would build the network and would hire an ISP to operate it. This means the county would take all of the risks, but also get all of the rewards in future profits. This scenario eliminates the fear of governments that don't want to operate an ISP business.
  - Leasing the Network. In this scenario a local government builds a broadband network and leases it to ISPs to operate. This would be low risk if you can find one or more ISPs to cover the cost of financing the network – and it is high risk if you don't.
- Open-Access. With open-access the local government would build the network and sell access to multiple ISPs.

### **How to Find a Partner**

CCG Consulting has worked with hundreds of communities that found broadband solutions without becoming ISPs. We will describe the specific processes that we've seen other communities undertake to identify, interview, and partner with other ISPs.

### **2.1.6 - Identify, Map, and Analyze current broadband infrastructure assets**

*(Completed by Finley)*

The work we complete in our Service and Infrastructure Analysis will provide the necessary information to complete a map which identifies existing providers, broadband assets, and other infrastructure which might be useful for the expansion of broadband networks. All of the information gathered in 2.1.1, 2.1.3 and this section all become part of the GIS dataset we use in preparation of network designs, proposed projects and a final report detailing broadband in Cochise County.

### **2.1.7 - Conceptual Network Design *(Completed by Finley)***

Finley Engineering will complete pre-engineering work; our FTTH network design will utilize the existing Cochise County GIS data. We recommend doing high level engineering with the goal of understanding the overall cost of building a fiber/broadband network. This sort of engineering is mostly done from our offices and involves only a few days of field work. In this high level engineering our goal is to estimate a high-level network cost to make sure we have estimated sufficient dollars for the overall project. Our goal in network design is to get as close as we can to the cost of the network while remaining slightly conservative to allow for variances.

The preliminary high-level design and estimate is not wasted work because we undertake the analysis in such a way that this would then be the beginning point for final field engineering should you decide to move forward.

We will evaluate all the services and assets needed to build and operate the network. This would include such things as the electronics needed to light the network, the drops and electronics needed to serve customers, the electronics needed to provide the triple play service and SCADA device connectivity. Finally, we will look at issues such as whether you need to build a new location to house the electronics, primary and backup power requirements, as well as the cost of ancillary equipment including vehicles, computers, furniture, software, etc.

We always build in a construction contingency, and we vary this between 5% and 10% percent of the project depending upon how good we feel about all of the assumptions used in the study.

We also do something in our business plans (described below) that many other consultants don't do. We know that assets have to be replaced. For example, vehicles rarely last more than five years. The core electronics are going to be obsolete within 7-10 years. The fiber is likely to have a lifespan which exceeds 30 years but there will still have to be repairs made every year. We make sure that we build replacement costs into the forecast so that you can always make sure that you will have sufficient cash in future years.

The deliverable for preliminary engineering is to produce a detailed narrative and cost estimate for each study scenario. The specific deliverables include:

- The cost to build broadband assets in different areas of Cochise County based upon recent actual construction costs from other projects in the area. Our review of broadband options will include fiber and fixed wireless options which private broadband providers might consider for providing service.
- The cost of the electronics needed to light the network and provide the desired services.
- The cost of ancillary assets needed to be in the business such as a building, vehicles, computers, and the electronics needed to provide the triple play services.
- We will prepare representative GIS FTTH network designs in select areas of Cochise County showing realistic fiber sizes, equipment and PON cabinet locations and proposed splice points. We will develop a cost of the network for these representative areas and use the results to develop costs on a County wide basis, we will also provide a written narrative detailing our assumptions and our results.

### **2.1.8 - Project Identification and Prioritization** *(Completed by Finley & CCG)*

Understanding potential project areas and assigning priority to these areas is an activity we have been assisting our broadband client providers for more than 5 years. We have worked with our clients to develop strategic plans which matched against potential funding opportunities to maximize success. We have been highly successful with our clients to secure funding for deployment and would utilize those same strategies with a network in Cochise County.

The information from sections 2.1.1, 2.1.3, 2.1.6 and 2.17 will be reviewed with Cochise County to understand some initial findings and concepts for potential middle and last mile projects. These potential priority areas will be identified for Cost Estimate purposes, so the County, stakeholders and potential broadband providers have a focused picture of actionable projects.

Our expectation is that we will identify specific potential projects that will need to align strategically for smart network deployment, we will also have some initial thoughts on the best potential funding mechanisms which can be pursued. Due to the dynamic nature of the industry and funding at this juncture in time we know these elements will take ongoing action and support so they can continue to be positioned for success.

### 2.1.9 - Technology and Trends Review *(Completed by CCG)*

The report will describe examine all of the broadband technologies in use in the county today. It turns out that almost every legacy technology has seen technical improvements just over the last few years, so we'll be able to describe not only the capabilities of the technology in use today, but talk about how these technologies are currently improving and how they might be further improved in the future. This discussion will likely include telephone company DSL over copper, cable company coaxial cable networks, fixed wireless technology, cellular broadband, and high orbit satellites.

The report will discuss the two primary fiber technology – active Ethernet (or Metro Ethernet) and passive optical network technology.

We will also discuss technologies that might be coming to the county in the future including low orbit satellites like Starlink, full 5G cellular, millimeter-wave mech wireless technology, and fiber-to-the-curb. We see all of these technologies being implemented in some places in the country, with the only one that is likely in the county today as a beta trial is Starlink.

Our analysis will be in plain English without a lot of technical jargon – our goal is to make the capabilities and weaknesses of each technology understandable.

### 2.1.10 - Policy Analysis *(Completed by CCG)*

Doug Dawson of CCG Consulting keeps track of regulations and legislation at the federal level and in each state. We will be able to provide you with an analysis of any pending legislation in Arizona and in the U.S. Congress at the time that we write the report. That analysis will make specific observations about whether given legislation will help or hinder broadband deployment for the County or for ISPs that might want to operate in the County.

Like anyone else, we don't have a crystal ball and we have no idea which legislation will pass or fail – but the analysis will arm you to support or oppose specific legislation that could help or hurt the effort to get more broadband.

Finally, we will provide an analysis of the current State laws that we think might be a hindrance to broadband deployment.

## 2.1.11 - Programming and Finance Evaluation *(Completed by CCG & Finley)*

### Financial Feasibility

CCG Consulting has prepared hundreds of financial business plans for clients. We have studied and helped implement almost every conceivable type of competitive communications network and venture. Through years of this experience, we have refined our business plan models such that they are thorough, focused and grounded in experience. Our business plans are not pie-in-the-sky since we have extensive experience of how companies function after they build the network.

The financial business plan will include in-depth detail relative to the organization, operating costs, overheads, equipment and materials required to operate the proposed business. This is a normal product of our business plan models due to the way we develop our plans. We build our business plans from the 'bottom up' and we make detailed projections for the required staffing, capital and equipment needed to meet the plan objectives. Consider the question of the proper level of staffing. We will not only suggest the right number of employees for the business, but we are going to suggest specific titles and salaries that we think are appropriate for your region.

We normally build our models to coincide with the expected length of the debt to be sure that there are no underlying assumptions that eventually mean trouble. Our models are banker-ready and will be sufficient to seek financing for a fiber project or to use for seeking grants. Many bankers have remarked that ours are the best telecom business plan they have ever seen. All of CCG's business plans provide monthly level of detail for the first two years of operation. Subsequent years are provided on an annual basis. Our models are so detailed and easy to use that many of our clients often utilize our models as budgetary and ongoing management control tools. The models include the full set of normal financial statements.

One of the most important variables in any financial model is the penetration rate, or the percentage of customers that select a new fiber business. We look at potential penetration rate in a few different ways:

- We'll use the market research above to estimate market demand. This will provide a starting point for what we call a base study.
- CCG also has vast experience in working in hundreds of markets and we can probably make a pretty decent educated guess of penetration rate based upon the size of the market, the broadband available today, and the specific incumbent providers.
- One of the most useful outputs of our studies is that we will calculate the breakeven penetration rate. This is the number of customers that are needed for the business plan to be cash self-sufficient, meaning that revenues cover all costs including operating expenses, debt, and ongoing operating capital.
- Finally, we will undertake a sensitivity analysis on the penetration rate so that you can understand the impact of having the market rate vary by 1%, 5% and 10% upward or downward from the penetration rate used in the base study.

We also will perform a sensitivity analysis on other important variables so that you can understand the range of results you might see in actual practice. We know that changes in key variables like broadband prices, interest rates on debt, or the cost of the network will have a big influence on the financial results. Once we've created a few base studies we will kick the tires on the key variables so that you can understand how they affect financial performance.

CCG is somewhat unique among telecom consultants in that we specialize in helping projects find funding. Doug Dawson at CCG has been successful over the years in helping to fund numerous fiber and other telecom projects. We've found that getting projects funded is the hardest step in launching a fiber business and many otherwise feasible projects have languished due to the inability to raise the needed funding. Because of this expertise, our assumptions used for the cost of debt will be detailed and realistic.

Our financial format creates GAAP accounting financial reports. This means that in addition to looking at capital and operating costs that we also calculate depreciation and amortization expense, look at the cash needed to float accounts payable, etc.

Our business plans differ from many consultants in that we always account for maintenance and replacement of electronics and other assets over time. Working with hundreds of clients has allowed CCG to understand how long fiber assets actually last (which is often quite different than the expected asset lives as predicted by the typical industry depreciation rates). We will predict the future needs to retire and replace assets to make sure that there is sufficient cash for future operations.

In our response to Task 2.1.5 above we discuss a willingness to consider different business models with different kinds of operators. We will want to discuss this with you first, but we can look at business plans from the perspective of commercial ISPs, government entities, non-profits, cooperatives, or any other scenario you want to consider. There are nuanced differences of operating the broadband business based upon the specific types of entity acting as the ISP.

### **Financing Options**

We also routinely consider multiple ideas on how to fund a network. In today's environment of potential huge federal and state grants, any rural project will be funded by a mix of grants and other funding sources. Some of the options we will consider include:

- Traditional Bank Financing. We'll look at realistic rates and loan terms for loans taken by ISPs. Bank loans almost always require some equity as well, meaning an ISP is expected to invest money in a project so that it has 'skin in the game'.
- Traditional Bond Funding. To the extent we look at municipal funding, we'll examine how bond funding might benefit some of the partnership scenarios. Bond funding has one huge benefit in that bonds can often be issued for 25 or 30 years compared to 12 to 15 years for bank loans.
- Non-Traditional Government Funding. We've seen communities that use other sources of funding like a sales tax or property tax increase to help pay for a broadband network. Such financing is usually only temporary to help the project through the early years until it becomes profitable.
- Customer Revenues. There is a growing trend of having customers contribute to get fiber. In Ammon, Idaho the homeowners contribute \$3,500 to join the fiber network, and this can be financed over time. In the Utopia project in Utah customers agree to accept property tax liens as a way to secure financing.

### 2.1.12 - Final Report *(Completed by CCG & Finley)*

Our quote includes a detailed written report that describes the broadband study process. Our report will answer all of the questions you've asked us. The report is also a great tool for educating politicians and the public on the complex issues involved with broadband. Our report will include the following:

- An executive summary of what we found.
- A description of the state of broadband in the County today.
- A description of the market research that was done and the results we obtained.
- A description of what we found from researching and talking to local and regional ISPs.
- A series of maps that help to visualize various aspects of broadband in the county.
- A description of the current technologies in use in the County today and a discussion of future technologies that might be coming to the County.
- A description of the engineering assumptions made in the analysis and the results we obtained.
- A discussion of specific projects you might want to consider.
- The assumptions used in the financial analysis and the results we obtained.
- An in-depth discussion about your financing options.
- A discussion of current and pending regulations and legislation that might impact broadband projects in the county.
- A list of specific recommendations and next steps that we think should be undertaken after receiving our report.

The written report will be authored by Doug Dawson of CCG Consulting. Doug writes these reports in plain English with the target audience being elected official and your citizens – we do our best to avoid industry jargon whenever possible. Doug has a casual writing style that the public seems to like.

Doug also has been writing a daily telecom blog since 2013 called Pots and Pans by CCG, found at <https://potsandpansbyccg.com/>. You can see more of Doug's writing style there, and also see the wide range of topics that are covered by CCG.

Our proposal includes a presentation of our findings in whatever forum you select. Both CCG Consulting and Finley Engineering will present our findings.

We expect to make several visits to the Cochise County as part of this project as follows:

- An engineering kick-off meeting by Finley Engineering to look in detail at local fiber assets, construction issues, make-ready evaluation, etc.
- A final presentation of the results of our analysis by phone prior to on-site presentation of results.
- A final in-person presentation of results as required by Cochise County. Our pricing includes an estimate of travel expenses. We bill actual travel expenses, without mark-up.

## FTTH Broadband Feasibility Study Pricing Proposal

• Service and Infrastructure Analysis	\$14,300
• Needs Assessment and Outreach	\$10,000
• Site Analysis	\$2,500
• Market Analysis	\$4,000
• Broadband Provider Business Model and Partnership Evaluation	\$3,500
• Identify, Map, and Analyze current broadband infrastructure assets	\$3,000
• Conceptual Network Design with multiple technology and cost options	\$22,300
• Project Identification and Prioritization	\$2,000
• Technology and Trends Review	\$2,000
• Policy Analysis	\$2,500
• Programming and Finance Evaluation	\$12,000
• Final Report and Presentations	\$16,300
• Estimated Travel and Onsite Incidental Expenses	<u>\$3,600</u>
Total	\$98,000