Vision Statement

Rio Blanco County (County) and its partners will implement and maintain IT infrastructure and services resulting in Rio Blanco County positioning itself as a modern, world class destination for tourism; business growth; safe, healthy, happy living; and as an ideal place to raise, educate, and retain your family. County will accomplish this by implementing a fiber to the home (FTTH) solution in Meeker and Rangely and a licensed high bandwidth fixed wireless backhaul system across a countywide tower network for the delivery of modern high speed broadband, cellular, and emergency services (ES) within the next 3 years.
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Introduction

Rio Blanco County (the “County”) is seeking Proposals to fill the key role of Network Operator of the County’s broadband, cellular, and emergency services network infrastructure and services project.

County may partner with multiple Proposers to form a group of Partners capable of best meeting the requirements of “Network Operator.” The term “Network Operator” will be henceforth interpreted as meaning either the Proposer as a stand alone partner or the Proposer as part of a partner group. Please respond to this RFP even if Proposer is only interested/able to meet part of the criteria. County realizes finding a single Proposer able to meet all of the Network Operator criteria may not be realistic and that two or more Proposers may form a more powerful combined solution than one.

Before beginning any Response work to this RFP, please read the entire RFP. There are some detailed instructions and specific format requirements for responses listed in the Response Instructions and Response Questions sections of this RFP.

Google Apps

Many hyperlinks and critical forms within this RFP work best and may require Proposer to use a GMail or Google Apps account.

20/20 Decision Matrix

County’s decision matrix on this project is called the 20/20 decision Matrix.

- **20 Year Lookback** - County will evaluate decisions under the assumption that none of current project staff exists in 20 years and apply the question, “Will project staff of 20 years from now determine that we made the best decisions we could at this time.”
- **20 Year Cost** - What does the decision cost the County over a 20 (as well as 40 or 60) year period. Often larger up front expenditures are a more responsible decision if they remove a persistent fee such as a lease.
Business Model

The National Telecommunications and Information Administration (NTIA) has a great analysis of the various common business model approaches to broadband as well as case studies. All of these business models discuss the critical role of Network Operator. They are presented in the following document:

- BroadbandUSA: The Business of Broadband - Getting Started

The following screenshots are from the above NTIA website.

Business Models: Balancing Cost & Control

Selecting a business model means balancing costs, risks, business realities, available partners, and more!

County’s Comments: County significantly prefers a business model that leans toward the upper right of the above NTIA graphic and is seeking a Network Operator to help facilitate this goal.

Below are the NTIA’s Business Model Overviews of some of the commonly used broadband approaches. Following them are County’s comments. As with nearly all complex and unique opportunities such as County’s broadband, cellular, and emergency services project, County’s solution will also be unique. County is willing to entertain, via this RFP, most of the business models listed below. County’s final solution will likely be a hybrid as County works to take the best elements from each and combine them into the ideal model for County’s particular situation and goals.
Privately-Led Broadband Projects

Business Model Overview

- **Investment, Ownership & Governance**: A commercial operator (private or non-profit) builds, owns, and operates the network. Funding is generally private, but may be augmented by grants.

- **Network Operation**: The network is operated by the commercial operator.

- **Community Role**: Community feasibility studies and planning by CAIs and economic development authorities may contribute to the business case. Commitment from, and aggregating demand among, community entities and CAIs can also support the project’s financial success and future expansion.

Benefits

- Capital from private investor(s) reduces the risks associated with public financing
- Generally led by incumbent service providers or existing providers entering new markets

Challenges

- Network planning does not center on community need
- Communities have little control over implementation and operation
- Financial success, not community goals, drives future expansion
- Networks are unlikely to be open access without some form of community financing

CAI means Community Anchor Institution

County’s Comments: This is the existing incumbent model in Rio Blanco County. The current challenge is overcoming the initial cost of modern infrastructure buildout. Incumbents do not forecast a high enough ROI to build out the infrastructure required for modern broadband to the majority of County’s residential and commercial customers. This does not imply that the incumbents are not serving County well, just that the model is not meeting County’s needs on a desired timeline.

Since County is investing significant capital in the initial infrastructure buildout, County will retain the Network Owner role, including future network expansion. County will require contract language ensuring appropriate balance between Network Operator ROI versus keeping operations costs low enough to provide a “world class” service at a “world class” price point such as Google’s $70/month for 1Gbps service. County will also require an open access network approach.
Publicly-Led Broadband Projects

**Business Model Overview**

- **Investment, Ownership & Governance**: A public entity (e.g., state, county or city government or municipal electric utility) owns the network. The public entity may either use an existing organization, such as a municipal electric system, or create an entirely new one. State and Federal grants may augment public funding sources.

- **Network Operation**: Operation may be public or private depending on community capabilities.

- **Community Role**: Community financing is the key driver, be it local, State, or Federal (or a combination). Communities may engage private partners in the construction, operation, and/or maintenance of the network. Support from CAs and economic development authorities, including demand aggregation, is critical to sustainability.

**Benefits**

- Goals, objectives, and network design are generally architected around community needs.
- Publicly-led does not mean public-only! Implementation and operation may be publicly-led, contracted to private entities, or a hybrid.

**Challenges**

- Communities must raise the capital – and take the fiduciary risk – necessary for construction and build-out of the network.
- Public finances and network operating revenues drive future expansion.

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**County’s Comments**: County’s preferred model is similar to the above Publicly-Led model, in that County’s goals and objectives are designed around community needs and regional plans such as Northwest Colorado Council of Government’s (NWCCOG’s) regional broadband plan.

This RFP’s goal is to secure a private partner or partner group to act as County’s Network Operator. The challenges of this model are initial capital and network expansion. County’s solution to both challenges are below:

- County has appropriated funds adequate to build out a large majority of the required network infrastructure. The need for future expansion will be significantly reduced. Additionally, County is aggressively pursuing outside funding opportunities to enhance the initial and ongoing buildout and expansion of the network. County is not building a model on any assumption of return on investment to County. County prefers that the Network Operator or group bring capital to the project, primarily to pay for operational costs as well as drop runs and last mile equipment. For details, please see the financials section below.
Broadband Cooperatives

Business Model Overview

- **Investment, Ownership & Governance**: Cooperatives may be public-centric utilities or consortia of private entities.

- **Investment**: Investors are generally public and may include State or Federal funding.

- **Community Role**: Community financing is the key driver, be it local, State, or Federal (or a combination). Communities may engage private partners in the construction, operation, and/or maintenance of the network. Support from Community Anchor Institutions (CAIs) and economic development authorities, including aggregating demand among community entities, is critical to sustainability.

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**Benefits**
- Capital from outside investor(s) reduces the risks associated with public financing.
- Generally led by experienced utilities that understand infrastructure projects.

**Challenges**
- Network planning is designed around sustainability, not community need.
- Cooperatives are not known for explosive growth; expansion is likely based upon the reinvestment of earnings and may be slow.
- Networks are unlikely to be open access without some form of community financing.

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*County’s Comments*: The existing Metropolitan Area Network (MAN) which serves many of the anchor institutions in Meeker has been using a cooperative model for the past 15 years as a public cooperative, not a private cooperative. The MAN has been operating under the locally adopted name of Western Colorado Information Technology Cooperative (WCITC). This group of people, not the network itself, has expanded to include most public anchor institutions in Rio Blanco County as seen on the Broadband & WCITC website. The advantage this arrangement provides County and this project is the long working relationship with these anchor institutions and their strong desire to aggregate demand in order to drive down the cost of Service Provider services such as Internet, IPTV (Internet Protocol television), VOIP (Voice Over Internet Protocol), and transport.
Public-Private Partnerships

Business Model Overview

- **Investment, Ownership & Governance**: One or more commercial operators (private or non-profit) and one or more public enterprises jointly invest in the network and share capacity. Either party may own the assets (or share ownership). State and Federal grants may augment other funding sources.

- **Network Operation**: The network is generally operated by the commercial partners.

- **Community Role**: Community financing is a key driver, while community feasibility studies, planning, and regulatory support are also critical to success. Communities must have a long-term commitment to the partnership. Support from CAs and economic development authorities is important for sustainability.

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**Benefits**
- Risk is shared among public and private investors
- Public objectives will contribute to the network design, subject to its overall financial success
- Provides many options for the method and economics of implementation, operation, etc.

**Challenges**
- Network planning decisions must balance community and private-sector needs
- Partnerships are subject to market conditions, the success of private partners, mergers & acquisitions
- Public and private entities will likely share ownership of assets, complicating some transactions

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**County’s Comments**: This model is the closest match to County’s desired model.
- County will own the assets.
- The Network Operator would be a commercial or non-profit private partner. With future options to return some or all of the sub-roles of Network Operator back to County.
- Community (County) financing is a key driver and has been secured. Additional capital for expansion is being actively sought from outside funding sources. Additionally County prefers a Network Operator or group that can bring initial capital to the project for drop run and last mile infrastructure buildout. County will require that all such buildout be conveyed to the county under terms to be negotiated.
- County has a long term, indefinite, commitment.
- County currently meets bi-monthly with economic development and governmental partners in both communities, building on the 15 year old WCITC group.
- This RFP’s goal is to secure a private partner as County’s Network Operator. But with future options to return some or all of the sub-roles of Network Operator back to County.
- **Challenges**
  - County is working with multiple private partner advisory groups (Forethought/Brainstorm and Fiber Community) as well as two engineering firms (Mid State Consultants and Centerline Solutions) to design and implement a network plan that meets County’s needs while still appealing to a private Network Operator’s business model.
  - In a worse case scenario, County is both able and willing to function as its own Network Operator utilizing the public entity partners that have run the Meeker MAN through the WCITC for the past 15 years. For example, County/WCITC currently owns and operates its own fusion splicer, budget loss meter, fiber certifier, etc. and has been managing all fiber runs and
locates for years. However, County sees a greater potential benefit in contracting with a long
term private entity Network Operator.

- The division of ownership will be greatly simplified over the above NTIA model as County
finances and implements the bulk of the infrastructure. County seeks a Network Operator
willing to fund the final drop runs and last mile connections and equipment.

## Primary Project Roles

County's business model requires the adoption of an Open Access Public Private Partnership (Open
Access PPP) approach that has proven highly successful throughout the United States and other countries
on similar projects. The five key Open Access PPP roles, on this project, are listed below. Read this section
carefully as several commonly used terms are very precisely defined and all use of these terms in this RFP
will follow from these definitions.

<table>
<thead>
<tr>
<th>Role</th>
<th>PPP</th>
<th>Description / Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Owner</td>
<td>Rio Blanco County</td>
<td>RBC will purchase and install the majority of the physical network assets such as conduit, fiber, towers, frequency licenses, backhaul, data center buildings known as Co-Location Facilities (Co-Lo). RBC will own the core infrastructure of this project. RBC will own future expansion infrastructure as the project grows.</td>
</tr>
<tr>
<td>Network Operator</td>
<td>Private Partner(s) - TBD via this RFP</td>
<td>The Network Operator will manage County's project assets, including maintaining and repairing these assets as well as arranging for the delivery of services across these assets and managing the VARs (Value Added Reseller). All billing between Service Provider and VARs will be accomplished by the Network Operator. The Network Operator role is the key role of the project and is absolutely critical to project success.</td>
</tr>
<tr>
<td>Service Provider</td>
<td>Private Partner(s) - TBD post this RFP</td>
<td>Services such as Internet, Internet Protocol Television (IPTV), Voice Over Internet Protocol (VOIP), etc. will be made available to the project by Service Providers. Due to County’s size, most such services will initially originate outside of the County and be delivered across Middle Mile to the Co-Lo facilities and then distributed across County infrastructure to the VAR’s customers. (see below)</td>
</tr>
<tr>
<td>Role</td>
<td>Partner(s)</td>
<td>Description</td>
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</tr>
<tr>
<td>Middle Mile Transport</td>
<td>Private Partner(s) - TBD post this RFP</td>
<td>The Middle Mile Transport will supply the Transport of Service Provider Services from outside Rio Blanco County into the Co-Lo facilities when such services are not locally hosted. Selecting, locating and arranging for Middle Mile Transport, maintenance arrangements for Transport, and billing will be the responsibility of the Network Operator and County.</td>
</tr>
<tr>
<td>Value Added Reseller (VAR)</td>
<td>Private Partners - TBD post this RFP</td>
<td>The Local Service Provider, known as the Value Added Reseller (VAR) will be the face of the project to the customer. They will install equipment and services into the customer premises, maintain the equipment and services, provide end customer service, provide equipment and service upgrades, and generally be responsible for customer service and satisfaction. The VAR will purchase services from the Network Operator, enhance and deliver these services, and bill the customer for delivery of these services. Selecting, locating and arranging for VAR services will be the responsibility of the Network Operator with County input.</td>
</tr>
</tbody>
</table>
Operations & Maintenance Plan

Once again, using screenshots from NTIA’s slidedeck, [BroadbandUSA: The Business of Broadband - Getting Started](#), County will discuss the proposed Operations & Maintenance Plan.

Operating Plan

- **Network Operations**
  - **Network Operator**: This role will be filled by the Network Operator (see table below). County will retain certain approval rights and most ownership rights as listed in the sections below.

- **Maintenance**
  - **Network Operator**: Infrastructure maintenance will be the responsibility of the Network Operator. This includes all infrastructure such as Colocation data centers (Co-LoS), Fiber to the Block (FTTB) and drop runs, towers, radios, and frequency management, all locates, all emergency repairs of infrastructure and Co-Lo equipment.
  - **VARs**: On premise customer support will be the responsibility of the VARs including install, service, and maintenance of all on premise equipment.

- **Network Expansion**
  - **Network Owner**: Network expansion planning, approval, and financing will lie with County. County will closely work with Network Operator during all phases of Network Expansion, ensuring that the partnership can meet the joint goals of each entity as well as the Rio Blanco County residents, businesses, and visitors. County’s goal is to provide modern, world class service to as many addresses as possible within the next three years at a modern world class price point such as Google’s $70/month for 1Gbps service.

- **Provisioning & Service Delivery**
Network Operator: Locating and provisioning service will be the responsibility of the Network Operator. County will work with Network Operator to continue to look for Service Provider options and alternatives to meet the ever growing and changing customer demand. Service delivery as a wholesale product to the VARs will be the responsibility of the Network Operator.

VARs: On premise (customer side) service delivery will be the responsibility of the VARs.

• Billing & Customer Care

• VARs: Billing and customer care will be the responsibility of the VARs. However, the Network Operator may arrange to augment or supplement the VAR’s role with VAR and County approval.

Network Operator Role

Now that the large scope of the project, including Business Model, Roles, and Operations & Maintenance, have been discussed, this RFP can address more precise details regarding the Network Operator for which this RFP seeks response.

County is looking for proposals from potential partners to manage this project as the Network Operator. The Network Operator is the key private partner role for the project. County will contract with a Network Operator or group, as a private partner(s), to perform the tasks below. This is not an exhaustive list, only representative. The tasks and the roles are negotiable.

County will retain ownership of all existing and future infrastructure so that County can contract with a different future Network Operator, either jointly or in order to replace the existing Network Operator, without disruption to customer service. County will not place itself into a position where a Network Operator retains an unchecked, non-competitive monopoly on the project. However, County hopes to form a successful, long term relationship with the Network Operator to the benefit of both partners.

The Network Operator will manage the network infrastructure, services, middle mile transport, and VARs in order to ultimately provide all customers with the best “world class” services possible as measured by a balance of performance and cost. Besides retaining ownership of of initial and future infrastructure, County will maintain suggestion and approval rights. Initially, County will not maintain, operate or be responsible for the daily functions of this project. As the project matures it may be in the best interest of the project goals for County to re-assume some of these roles, removing them from the Network Operator. County will retain the right to select, assign, and remove partner(s) from the Network Operator role. County is providing the Network Operator with a very robust and expensive network infrastructure for Network Operator to manage and leverage, but County will retain ownership.

Below is a non-exhaustive list of Tasks and role division between Network Operator and County as Network Owner.
### FTTB/FTTH Role Division

<table>
<thead>
<tr>
<th>Task</th>
<th>Network Operator’s Role</th>
<th>Network Owner’s Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTTB conduit, fiber, and handholes in Meeker &amp; Rangely</td>
<td>Maintain, Utilize, Advise during engineering &amp; construction</td>
<td>Engineer, Implement, Pay For, Ownership</td>
</tr>
<tr>
<td>FTTH Drop Runs</td>
<td>Design, Pay For, Implement, Maintain, Utilize</td>
<td>Run Approval, Ownership</td>
</tr>
<tr>
<td>Customer Premise Equipment</td>
<td>Select and Pay For, VAR will install and maintain.</td>
<td>Selection Approval, Ownership</td>
</tr>
<tr>
<td>Co-Lo Equipment (electronics)</td>
<td>Select, Setup, Install, Maintain all equipment. Possibly, Jointly Pay For.</td>
<td>Selection Approval, Pay For most or all, Ownership</td>
</tr>
<tr>
<td>Co-Lo Buildings</td>
<td>Access to Operate Equipment &amp; Services, Utilities negotiable</td>
<td>Buy, Ownership, Utilities negotiable</td>
</tr>
<tr>
<td>Infrastructure Expansion</td>
<td>Jointly Select, Engineer, Install with County, Network Operator will Maintain, Utilize</td>
<td>Jointly Select, Engineer, Install with Network Operator, Ownership</td>
</tr>
<tr>
<td>Task</td>
<td>Network Operator’s Role</td>
<td>County’s Role</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-------------------------------------------------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>Towers and Tower Backhaul</td>
<td>Maintain, Utilize, Advise during engineering &amp; construction</td>
<td>Engineer, Implement, Pay For, Ownership</td>
</tr>
<tr>
<td>Last Mile Antennas/Dishes/Radios and Other Equipment</td>
<td>Select, Setup, Install, Maintain and Pay For</td>
<td>Selection Approval, Ownership</td>
</tr>
<tr>
<td>Customer Premise Equipment</td>
<td>Select and Pay For. VAR will install and maintain.</td>
<td>Selection Approval, Ownership</td>
</tr>
<tr>
<td>Co-Lo Equipment (electronics)</td>
<td>Select, Setup, Install, Maintain all equipment. Possibly, Jointly Pay For.</td>
<td>Selection Approval, Pay For most or all, Ownership</td>
</tr>
<tr>
<td>Co-Lo Sheds</td>
<td>Access to Operate Equipment &amp; Services</td>
<td>Buy, Ownership</td>
</tr>
<tr>
<td>Infrastructure Expansion</td>
<td>Jointly Select, Engineer, Install with County, Network Operator will Maintain, Utilize</td>
<td>Jointly Select, Engineer, Install with Network Operator, Ownership</td>
</tr>
</tbody>
</table>
## Services Role Division

<table>
<thead>
<tr>
<th>Task</th>
<th>Network Operator’s Role</th>
<th>County’s Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Providers</td>
<td>Select, Contract With, Install/Connect, Maintain Connection, Jointly Pay For</td>
<td>Selection Approval &amp; Suggestions, Jointly Pay For</td>
</tr>
<tr>
<td>Middle Mile Transport</td>
<td>Select, Contract With, Install/Connect, Maintain Connection, Jointly Pay For</td>
<td>Selection Approval &amp; Suggestions, Jointly Pay For</td>
</tr>
<tr>
<td>VAR</td>
<td>Select, Contract With, monitor, perform all wholesale billing/payment interactions between VAR and Network Operator</td>
<td>Selection Approval &amp; Suggestions</td>
</tr>
<tr>
<td>Customer Billing</td>
<td>Typically this is a VAR role. Network Operator may perform this service on behalf of a VAR with VAR’s and County’s permission.</td>
<td>None</td>
</tr>
<tr>
<td>Customer Service</td>
<td>The VAR will be responsible for customer service. The Network Operator will monitor the VAR’s service and verify that VAR’s are meeting customer expectations.</td>
<td>None</td>
</tr>
<tr>
<td>Quality Control for Project</td>
<td>A Primary Responsibility</td>
<td>Suggestions</td>
</tr>
<tr>
<td>Marketing</td>
<td>A Primary Responsibility</td>
<td>Suggestions</td>
</tr>
<tr>
<td>New Services</td>
<td>A Primary Responsibility</td>
<td>Selection Discussion &amp; Suggestions</td>
</tr>
<tr>
<td>Project Vision</td>
<td>A Primary Responsibility</td>
<td>Selection Approval &amp; Suggestions</td>
</tr>
</tbody>
</table>
Required Skill Sets

This table covers some of the key skill sets the Network Operator or will need to bring to the project. County realizes that a single partner may not have all of the identified Skill Sets. Thus the role of Network Operator may be a group of partners. Please examine this list and respond to the RFP with the Skill Sets Proposer has in-house. Then suggest how Proposer might arrange solutions for those skill sets Proposer is missing, such as new hires, sub-contracting, or asking County to locate other partners as needed.

<table>
<thead>
<tr>
<th>Skill Set</th>
<th>Description</th>
<th>County’s Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Administrator/Network Engineer</td>
<td>A person(s) with the data center skill set to operate, program, maintain, repair the equipment such as: routes, switches, GPON ( Gigabit Passive Optical Network), etc.</td>
<td>This person will likely need to be located full or part time in the county, though much can be done with telecommuting.</td>
</tr>
<tr>
<td>Locates</td>
<td>Meet the 811 UNCC (Utility Notification Center of Colorado) locate needs for all underground assets.</td>
<td>Network Operator could perform this internally or contract this service out.</td>
</tr>
<tr>
<td>Drop Run Installs</td>
<td>Run the micro-trench or other solution to get conduit from FTTB handholes to the customer premise, then attach and run fiber.</td>
<td>Network Operator may perform this themselves, sub-contract, or work with VARs as best meets needs.</td>
</tr>
<tr>
<td>Fiber/Conduit/Run Hits</td>
<td>When the conduit/fiber is damaged, including Co-Lo facility, FTTB, and drop runs. The Network Manager will need to have it emergency repaired.</td>
<td>Network Operator will need to provide or arrange for this service on short notice with a defined maximum delay. This could be done with internal Network Operator staff or sub-contracted.</td>
</tr>
<tr>
<td>Maintenance</td>
<td>ALL maintenance including Co-Lo electronics, fiber plant, drop runs, hand holes, ONT repair/replacement, street damage, sidewalk damage, etc.</td>
<td>Network Operator will likely need to rely on internal staff, sub-contract, manufacturer warranty/repair, etc.</td>
</tr>
<tr>
<td>Tower/Dish/Radio Maintenance</td>
<td>All wireless ongoing maintenance other than VAR’s on-premise role. This includes roads to tower sites, buildings (paint, doors, roofs), generators, solar panels, guy-wires, grounds maintenance, security fences, tower integrity, dishes, radios,</td>
<td>Network Operator will likely need to rely on internal staff, sub-contract, manufacturer warranty/repair, hire-as-needed (such as carpenters and painters), etc. County, via Road &amp; Bridge, may be able to supply some of these services.</td>
</tr>
<tr>
<td><strong>Last Mile Installs</strong></td>
<td>Install sector antenna on towers as needed by customers/VARs.</td>
<td>Network Operator may perform this themselves, sub-contract, or work with VARs as best meets needs.</td>
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<tr>
<td>------------------------</td>
<td>-------------------------------------------------------------</td>
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</tr>
<tr>
<td><strong>Network Monitoring/Integrity, NOC (Network Operations Center) for County/VARs</strong></td>
<td>Integrity of the network services and traffic is a primary skill set and role of the Network Operator. The network must be actively monitored 24/7/365. If an issue arises County or VARs must be able to contact Network Operator’s NOC. This includes both terrestrial (underground such as fiber) as well as wireless (backhaul licensed frequencies, unlicensed frequencies, etc.) Note, initial customer support calls will be directed to the VARs.</td>
<td>Ideally the Network Operator will perform this internally. If not, it could be sub-contracted but County will need to examine this arrangement carefully to ensure network integrity. Minimum response times will be a contract requirement.</td>
</tr>
<tr>
<td><strong>Service Negotiations</strong></td>
<td>Identify needed services, locate Service Providers, negotiate delivery and pricing, contract with Service Providers, arrange for wholesale delivery/negotiations/contract with VARs. Service Examples: Internet, transport, VOIP, IPTV, Backup, High Availability (HA), disaster recovery (DR), cloud storage, Software as a Service (Saas).</td>
<td>This is a primary Network Operator role which will involve project management skills, legal, industry knowledge and contacts, etc.</td>
</tr>
<tr>
<td><strong>Managing VARs</strong></td>
<td>Identify and vet VARs. Arrange for wholesale service delivery and terms. Monitor VAR success and customer satisfaction. Respond to VAR support tickets via Proposer’s NOC (Network Operations Center).</td>
<td>This is a primary role of the Network Operator, requires management, legal, billing, NOC.</td>
</tr>
<tr>
<td>Marketing</td>
<td>The Network Manager will need to work with County and VARs in a joint marketing effort. Product labeling will need to be established.</td>
<td>This is a primary role of the Network Operator.</td>
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<tr>
<td>-----------------------------------------------</td>
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</tr>
<tr>
<td>Capital/Funding</td>
<td>Pay for above operational costs. Pay for drop run and last mile service expansion as customers choose to sign up with VARs.</td>
<td>County needs a Network Operator who can build a business model around this project as Network Operator. This includes bringing enough capital to the project to afford the last mile customer service drop runs and equipment (ONT, sector antennas, residential dish, etc.). Some of this expense may be offset via VAR negotiations between Network Operator and VARs. But County anticipates the bulk of it being an upfront investment in the project by the Network Operator in the estimated range of $1,000,000 to $1,500,000. Network Operator needs to analyze the project and build a business case with adequate ROI. Also, it is critical that Network Operator understand that County will own the drop runs, ONT devices, and last mile wireless solutions. This entire arrangement will require precise contractual wording to meet and protect both partner’s interests and assets.</td>
</tr>
<tr>
<td>Open Access Vetting &amp; Advisement</td>
<td>Vet Service Providers and VARs, retaining an Open Access Network that encourages competition between private partners while keeping the total number of private partners per group (Service Providers and VARs) low enough that they can still thrive with County’s limited customer base.</td>
<td>This is a primary role of the Network Operator and will be performed in close coordination with County. County will require Network Operator to foster an Open Access Network model. However, County will not allow a monopoly/trust or controlling vertical alignment condition to evolve. On the opposite extreme County will not allow a true vendor neutral situation where any company is allowed access to the network without a proper Vetting process as this too has proven disastrous in numerous case studies across the U.S. A careful balance must be maintained.</td>
</tr>
<tr>
<td>Vetting/Advising on larger incumbent use of the network</td>
<td>County requires this project foster better service and communications for all Rio Blanco citizens, businesses, and visitors. This means Network Operator will need to allow certain incumbents to serve customers as both Service Provider and VAR. Or,</td>
<td>Examples would be entity’s such as government facilities or business that have offices in multiple communities and have arranged for a large carrier to interconnect their branch offices as well as provide certain services. A specific example is the 9th Judicial District being connected by CenturyLink, or a bank chain with an arrangement from provider X. In these cases County will not allow this project to interfere with or adversely</td>
</tr>
</tbody>
</table>
Blending Roles

It is possible that the Network Operator may also serve in other roles. In this case, Network Operator will remain open to County inviting other partners in to compete with non-Network Operator roles in order to prevent a vertically aligned monopoly that is in violation of an Open Access Network approach or any other form of unfair or non-competitive environment. Possible examples are:

- Network Operator can also provide their own Middle Mile Transport. This is allowed as long as Network Operator’s Middle Mile Transport remains the best value available. If County identifies a better or alternate partner to fill or compete with this role, Network Operator will fully support this event to the best of their ability, including ending their Middle Mile Transport at County’s request.

- Network Operator can also provide Service Provider services such as Internet, IPTV, VOIP, etc. This is allowed as long as their Service(s) remain the best value available. If County identifies a better or alternate partner to fill or compete with this role, Network Operator will fully support this event to the best of their ability, including ending their Service Provider services at County’s request and fully supporting County’s identified alternative.

- Network Operator can also provide VAR services to the end customer. This is allowed only until another VAR is able to step in. Otherwise, it would be too difficult to determine if Network Operator was unfairly handing off wholesale services to other VARs at non-competitive rates. All VARs will be able to receive Network Operator supplied wholesale services and Network Operator support at ubiquitous levels and prices. County will not tolerate any favoritism, kickbacks, or any other non-equitable arrangements between Network Operator and VARs or Network Operator and Service Providers.

Municipal versus Rural Services

County seeks a Network Operator who can secure and offer the following minimum services for delivery across County’s network infrastructure:

- FTTH Services
  - Tripleplay - a la carte
• Internet, specifically Broadband with a 1Gbps/Month top tier offering
• VOIP or some other telephone service
• IPTV - beyond simple NetFlix style services

• Rural/Wireless Services
  ○ Internet, with an FCC defined Broadband (25Mbps x 3Mbps) or greater offering
  ○ VOIP or some other telephone service

County’s Contributions

County is funding the bulk of the project’s infrastructure buildout. County will provide the project with a fiber to the block (FTTB) network in Meeker and Rangely and a tower network with backhaul connectivity across the rural regions of Rio Blanco County. County will supply a data center in Meeker and Rangely each known as a Co-Locate Facility (Co-Lo). Initially, County will pay for a significant portion of the Middle Mile Transport and Internet Service. County will provide Rights of Way (ROW) access to all related facilities to Partners who will require such access to the extent the County is able.

All FTTB runs will be home run, from the Co-Lo to the FTTB handhole. All runs will have 110% strand count as compared to the number of likely customers in that block. This includes each unit of a multi-dwelling unit such as an apartment building, duplex, etc.

Public entity anchor institutions will be supplied with an additional 4 strands of fiber to their key facilities in order to establish their own municipal area networks (MANs). This will greatly benefit these anchor institutions for internal usage as well as stimulate their need for telecommunication services to be delivered by this project. A great benefit and win-win for all.

County’s Goals

County views this project similar to the County roads project. County owns the roads, arranges for maintenance of county roads, contracts for expansion of county roads, allows private industry and private citizens to utilize the roads, but County maintains all ownership of the roads. County does not directly charge for use of the roads, as in a toll road or toll bridge. County does not have a minimum vehicle utilization count per road in order for the road to be considered successful. The simple fact that the road exists as a functional means of transportation, enabling access to and across the County, is the measure of success. County is not trying to recapture the initial cost of creating the roads by charging a toll on the roads.

Similarly, the goal of the county on this project is to create modern infrastructure across the rural parts of the county and in the two municipalities of Meeker and Rangely to enable the potential delivery of modern telecommunications such as Broadband, Cellular Service, and Emergency Services (ES), as well as services yet to be determined and future services yet to be invented.

County, through extensive research, has come to the irrefutable conclusion that the expense of implementing modern telecommunication infrastructure is a significant obstacle to the goal of Rio Blanco County positioning itself as a modern, world class destination for tourism; business growth; safe, healthy, happy living; and as an ideal place to raise, educate, and retain your family. Given County’s complex topology and low population density, it is difficult for a private partner, alone, to front the expense of implementing such infrastructure. Even if such a partner chose to do this, the price point of services delivered across their infrastructure would be very high while that partner recaptured their initial investment through regular customer billing. Thus the ROI in delivering modern services at modern competitive prices
would be difficult if not impossible to realize, without County stepping in and solving this large initial infrastructure hurdle. This has been made quite evident through reading various case studies and the recent introduction of federal and state programs and grants to help rural areas, such as Rio Blanco County, solve this critical problem. Programs like the FCC Rural Broadband Experiment CAF fund, the USDA’s Community Connect Grant Program, or DOLA setting aside Energy Impact Assistance (EIA) funds for broadband, are examples.

County does not have direct goals concerning take rate (percent of actual customers/potential customers) or a timeline for the project to become profitable. During County’s research, such arbitrary measures of success often create false perceptions of project failure if such goals are not met at precise times. County will consider this project successful if high quality infrastructure is created and County either contracts with a Network Operator to deliver telecommunications such as Broadband, Cellular, and ES, at modern, world class speeds and price points, or this project prompts a third party to provide the desired telecommunications at modern, world class, speeds and price points. Though the second scenario is very unlikely, either will suffice to meet the County’s goals.

County’s “World Class” Broadband Goals

More precisely, County has identified three tiers of FTTH Broadband service available to all premises in Meeker and Rangely with a target speed and price as follows. These targets are negotiable.

<table>
<thead>
<tr>
<th>Service Tier</th>
<th>Speed (Download/Upload)</th>
<th>Customer Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Tier</td>
<td>1Gbps/100Mbps</td>
<td>$70/month</td>
</tr>
<tr>
<td>Middle Tier</td>
<td>100Mbps/10Mbps</td>
<td>TBD</td>
</tr>
<tr>
<td>Bottom Tier</td>
<td>25Mbps/5Mbps</td>
<td>TBD</td>
</tr>
</tbody>
</table>

**Services:** At a minimum, the services of Broadband, VOIP, and IPTV (Triple Play) will be available a la carte to all fiber customers.

In the rural parts of the County where the infrastructure is wireless rather than fiber, these targets have been identified. These targets are negotiable.

<table>
<thead>
<tr>
<th>Service Tier</th>
<th>Speed (Download/Upload)</th>
<th>Customer Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Tier</td>
<td>100Mbps/10Mbps</td>
<td>TBD</td>
</tr>
<tr>
<td>Middle Tier</td>
<td>25Mbps/5Mbps</td>
<td>$60/month</td>
</tr>
<tr>
<td>Bottom Tier</td>
<td>10Mbps/3Mbps</td>
<td>TBD</td>
</tr>
</tbody>
</table>

**Services:** At a minimum, the services of Broadband and VOIP will be available a la carte to all wireless customers.
County’s “World Class” Cellular Goals

County would prefer Tier I cellular providers (Verizon, AT&T, T-Mobile, Sprint) to service both municipalities and all state highways, major county roads, and key sites at which events are held in the county with the most modern “G” service (4G at this time). However, County realizes it is extremely unlikely such a cellular partner will be found.

Where Tier 1 providers are not willing/able to provide service, County desires to partner with Tier II or Tier III providers on this project to provide modern (4G) service. Where 4G service is not realizable, County requires 3G service as a minimum level of cellular service delivery.

Regardless of the Tier, county will require a cellular Service Provider partner to establish service across as much of the county as possible in order to deliver a ubiquitous and homogenous experience. County’s goals are that County’s citizens and visitors experience as similar coverage and service (such as speed, price plan, etc.) as possible across as much of the county as possible. County is not interested in supporting a solution that would divide its geographical region across multiple non-homogeneous cellular experiences.

County’s “World Class” ES Goals

County will have as much of the county to be covered with the State of Colorado’s current digital trunked radio system (DTRS) 800MHz service as possible with priorities defined by County’s emergency service providers such as 911 Dispatch, Sheriff’s Office, Police, Fire, Ambulance, etc.

Additionally, County requires all infrastructure plans to support easy adoption of future ES services such as hardened cellular like the national FirstNet initiative and future, yet to be determined, initiatives.

County’s Open Access and Competition Goals

The term “Open Access” will be precisely defined here and this definition will be utilized throughout this document and all future conversations. Open Access, as County defines it for this project, means that access to County infrastructure will be available to all partners in all partner roles, but that the quantity and quality of such partners will be governed through a vetting process. This is a subtle but critically important distinction from the classic Carrier Neutral concept.

In the classic Carrier Neutral scenario, any partner may utilize the infrastructure or provide services. It is a free-for-all environment, which usually results in project failure. The reasons for Carrier Neutral failure are many but can be distilled into two primary concerns:

- **Quality Control** is absent which means substandard and inferior services delivery and customer service can be delivered resulting in dissatisfied customers. Professionalism is absent.
- In a small market, the customer base is stretched so thin that no service partner is able to obtain a positive ROI or a positive ROI takes so long that quality and/or modern service to desired price point is not realized. Too many partners, not enough customers.

Another model is the franchise, which allows a partner a guaranteed amount of time to exist as a monopoly. This works great if the partner is altruistic toward the customer base. Unfortunately capitalism and customer altruism are not often synonymous, even though business research indicates that it should be.
So we finally come to County’s model of Open Access. Open Access means that access to the infrastructure and the project is governed by a vetting process, which establish a quantity (number of partners in a particular role) and quality (the partners are professional modern service providers). The word “Open” means that no potential partner is prevented from applying to the process and that all potential partners are evaluated as fairly and honestly as possible.

By utilizing the “Open Access” model, County will create competition between highly qualified partners but on a quantity limited basis. If a future partner desires to apply for a role, even compete with the incumbent partner(s), County and all partners will allow this if the vetting process indicates that the new partner qualifies and that an established maximum quantity of partners in that role is not violated.

However, County also realizes that during this project’s inception, very short term franchise arrangements may result in order to get the project started. The initial partners, particularly those who will be investing heavily in the project, may need a realistic opportunity to recapture their investment. However, County will keep such franchise agreements to a minimum; County will keep the term limit of such agreements to a minimum; and County will strive to eliminate all such agreements from the project in the very near future.

County’s project will provide the customers of Rio Blanco County with choices between competing partners for all services and service delivery. This is County’s goal and must be fully and wholly understood by all partners.

Regional Goals

- It is the goal of the County for this project to be a positive exemplar, for other rural counties and communities in Colorado and beyond. County is already actively engaged in sharing project details with the counties of the Northwest Colorado Council of Governments (NWCCOG), as well as, the counties of the Associated Governments of Northwest Colorado (AGNC), a total of nine counties.

- County is also working closely with the State of Colorado’s Office of Information Technology (OIT) on this and related projects.

- County hopes to create an innovative, high quality solution which others can emulate. Thus, County is seeking Proposers who may look beyond Rio Blanco County and this Project to other municipalities, counties, and regions.

Current Project Status

The information in this section is accurate as of the date of writing this RFP. County is making rapid strides on this project, so this situation report is a snapshot in time.

County’s Broadband Website

A lot of useful information can be found on County’s Broadband & WCITC website, including anchor institution and other partner business names, contacts, hyperlinks. Local, regional, and state broadband plans, and much more.

- Rio Blanco County’s website: Broadband & WCITC
FTTB in Meeker & Rangely

Mid State Consultants is only a few weeks out from being done with the fiber to the block (FTTB) engineering. Each block in Meeker and Rangely will be engineered to have at least one handhole with 110% fiber strand count per customer premises, home run back to that community’s Co-Lo.

The Network Operator will be responsible for installing all “last mile” fiber drop runs from the FTTB hand holes to the actual customer premises in order to create a fiber to the home (FTTH) network for service delivery. Last mile is an IT term which has no direct relationship to a mile. In most cases the last mile drop runs will be from the handhole in the alley to the homes or businesses on either side of that alley.

Mid State Consultants has provided several documents of interest. These are “working documents” and must only be referenced as approximate information, not as accurate information at this time.

- Meeker Proposed FTTB Fiber Pathways
- Rangely Proposed FTTB Fiber Pathways
- Estimated Construction Costs - County’s anticipated Expense

For Proposer’s reference, the original FTTx Engineering RFP is below. The actual FTTx Engineering contract was based on this RFP, though changes were made. This RFP is provided only for approximate reference purposes as a general idea of project scope.

- Original FTTx Engineering RFP

Rural Wireless

Centerline Solutions LLC was recently contracted to provide the wireless, tower, backhaul engineering across the County as core infrastructure for the eventual delivery of broadband, cellular service, and ES. The documents below are initial concept documents and are only representative of a possible solution.

- Project Kick Off & Status, Slide Deck by Centerline
- Possible 7 Mile Viewshed
- RBC Owned Property

In December, County commissioned Mountain Radio Systems, Inc. via Brainstorm Internet to perform tower loading studies on County’s Pollard, Marvine, and Cathedral towers. These three studies are done.

For Proposer’s reference, the original FTTx Engineering RFP is below. The actual FTTx Engineering contract was based on this RFP, though changes were made. This RFP is provided only for approximate reference purposes as a general idea of project scope.

- Original Tower/Backhaul Engineering RFP

Senate Bill SB05-152

Rio Blanco county went to public vote to override SB05-152 on November 4th, 2014. The override vote was a success. The ballot resolution and one news article are below.

- SB05-152 Resolution
Current Financial Status & Tool

County Approved Budget - 2015

County approved approximately $6,967,867 for the Broadband capital project during the 2015 County budget. An additional $93,406 was approved for Co-Lo electronics in the 2015 County capital budget.

DOLA Grant

On December 1, 2014, Rio Blanco County applied for a $2,000,000 DOLA Energy Impact Assistance (EIA) grant for the FTTB aspect of this project. County anticipates award results in mid to late March, 2015. Rio Blanco County is one of the first two entities in Colorado to apply for broadband infrastructure projects via this new funding mechanism. DOLA allows applicants to return for future requests, so regardless of the outcome during this round, this funding mechanism may potentially be utilized again. Below is the DOLA letter and background on this grant opportunity.

- DOLA EIA Grant

FCC Rural Broadband Experiment Grant

Currently Brainstorm Internet Inc. continues to pursue the $1,737,648 of funds provisionally selected for Rio Blanco County’s rural services component of this project. There are several, very challenging hurdles in front of Brainstorm at this time in the pursuit of these potential funds. Rio Blanco County’s project via Brainstorm is one of only two projects that have made it to this stage in Colorado.

- FCC Rural Broadband Experiment Winners… by telecompetitor
- Complete List of Provisional Winners

USDA - Community Connect Grant Program

County looked strongly at this grant opportunity but has elected to wait until the next grant cycle as County’s project does not quite meet the interpreted requirements. However, County intends to strongly re-evaluate this grant opportunity in the future.

- USDA - Community Connect Grant Notice
- USDA Official Website on Community Connect Grant

FTTH Preliminary ProForma Tool

Projects like this are very challenging to accurately forecast financials. County has engaged OHIvey and Fiber Community to provide a preliminary ProForma for financial modeling of the FTTB/FTTH portion of this project. The information is a current best guess using what County considers to be conservative information where actual facts are not available. However, this is only a modeling tool. Any respondent to this RFP must do their own financial workup of this project. County accepts no responsibility for the information provided by this tool or the tool’s accuracy. This is a “use at your own risk” tool.

- Preliminary ProForma Tool FTTB/FTTH
Rural Service
Since the rural engineering on the tower, wireless, cellular portion of the project had its kick off meeting on March 3rd, 2015, County does not yet have financial modeling of this portion of the project.

Internet Service & Transport
A significant driving factor to this project’s success and the ROI success of the Network Operator is the Internet service and transport costs into the County’s Co-Lo. The monthly price per Mbps in the above tool of $3.57/Mbps/month is based on two separate unsolicited bids for a 2Gbps rate.

Initial Take Rate
County has no direct take rate goals nor experience. However, County has been approached by a local service provider with approximately 180 wireless, municipal customers. This potential VAR appears very interested in the opportunity to convert their customers to fiber via this project.

County’s Project Momentum
Regardless of the above funding mechanism’s County is committed to moving forward to construction on the two municipal FTTH networks as well as the rural wireless solution. How much of the project County is able to build at this time will be scaled to meet County’s funding options. The initial capital the Network Operator is able to bring to the project for drop runs and last mile connections will have a noticeable impact on this project.

Other indicators of County’s commitment to this project are:
- The original “The Big RBC IT Infrastructure and Services Plan” was submitted on June 18, 2014.
- By reading this RFP Proposer can determine how much the plan has matured in the past year!
- The current County IT Director, Blake Mobley, was hired in spring of 2014 to head this project after successfully leading the Meeker fiber MAN project that linked together anchor institution facilities in Meeker for 15 years at speeds as high as 10Gbps.
- In August, County hired a new IT position, system administrator, further freeing up the County IT Director, Blake Mobley, to focus his time on this project.
- County has approved purchase of a 4-wheel drive vehicle for rural tower access for this project.
- The Western Colorado Information Technology Cooperative has regular broadband stakeholders meetings twice a month - one in Meeker and one in Rangely. Most of the Rio Blanco County local WCITC members have been meeting since 2001.
  - WCITC Member Entities
  - WCITC Member Contact List
- County presented at the Grand Junction Economic Development Partners meeting
- County regularly attends the Northwest Colorado Council of Governments (NWCCOG) regional broadband meetings, works closely with Nate Walowitz, the NWCCOG Regional Broadband Director, and has aligned County’s plan with the NWCCOG Broadband Plan.
- County recently was invited by Craig Settles, author of Building the Gigabit City, to present on an 8-person panel in Denver Colorado at the state Office of IT (OIT) quarterly broadband Meeting and presented elements of County’s project to the room of 50 broadband professionals including
CenturyLink, DOLA, Colorado State Library, OIT Director, the two organizers of Mountain Connect, Craig Settles author Building the Gigabit City, and many other key individuals in the broadband arena.

- County has attended many network and broadband meetings and summits such as: Mountain Connect 2014, Travis Pyne’s Duraline/Future path Summit in Salt Lake City UT, NWCCOG’s Broadband Workshop in Eagle Colorado, FirstNet presentation, Calix presentation, Moffat County’s regional broadband meetings, among others.

- County has met with and toured related projects such as Pitkin County, the Northwest Colorado Broadband project and CNL in Steamboat Springs CO, met with staff from the Utopia Project in Utah, met and toured the Community Broadband Network in Glenwood Springs, met multiple times with Paul Recanzone of OHlvey and Fiber Community, and others.
  - Watch Paul Recanzone Interview on BroadbandUS.TV

- County has established and read an electronic library of broadband reading material. Titles include:
  - Building the Gigabit City by Craig Settles
  - Broadband Network Architectures: Designing and Deploying Triple-Play Services by Chris Hellberg
  - Building Broadband by Siddhartha Raja
  - Captive Audience by Susan P. Crawford
  - Broadband At the Speed of Light: How Three Communities Built Next Generation Networks by Christopher Mitchell

- County has received letters of support for County’s DOLA grant request from:
  - VFW Meeker Post
  - WPX Energy
  - Town of Rangely
  - Meeker Chamber of Commerce
  - Broadband Advocacy Committee
  - Colorado Oil and Gas Association
  - Rangely Chamber of Commerce
  - Meeker School District
  - Bureau of Land Management, White River Field Office
  - Meeker Ranching Company
  - NWCCOG
  - Pioneers Medical Center
  - Town of Meeker

Work Timeline

County will begin construction on the FTTB/FTTH projects as soon as the current DOLA grant request cycle allows. This is expected to be in the April to July time period. It will be earlier if County is not funded and later if County is funded as County waits for DOLA approval to go to construction contract.

County will begin construction on the rural elements: towers, wireless backhaul, etc. As soon as engineering and weather permits. This is likely in the April to May time period.
County has set a goal that customers can sign up for and start receiving service from VARs, across the new County infrastructure, by 3rd or 4th quarter of 2015. County realizes that construction, particularly the rural tower buildout, will take many months to complete, so service offerings will initially be targeted and partial.
### Imminent Network Operator Tasks

To provide potential Network Operators with a concept of project progress and needs, below are some of the imminent tasks County would be seeking from Network Operator as soon as a contract is executed.

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPON Selection</td>
<td>Provide County with recommendations on model/brand/type of GPON (or other solution) equipment for the Co-Los.</td>
<td>County has looked at Calix and is having Zhone on site on 3/11/2015. County is strongly in favor of an AE/GPON solution for the FTTH portion of the project.</td>
</tr>
<tr>
<td>Co-Lo Center Electronics</td>
<td>Provide County with recommendations on the rest of the Co-Lo electronics: switches, routers, firewalls, etc.</td>
<td>County is currently standardizing on Brocade over County’s prior Cisco network plant. This will be weighed into the decision.</td>
</tr>
<tr>
<td>Help Monitor Engineering</td>
<td>Although the FTTB engineering is nearly complete, County may use Network Operators input on the ongoing Tower/Wireless engineering.</td>
<td>County is particularly unskilled in the Cellular and Emergency Services arena.</td>
</tr>
<tr>
<td>Construction RFP &amp; Process Monitoring</td>
<td>County looks forward to working with Network Operator regarding the RFPs for FTTB and tower/wireless construction in the next few months.</td>
<td>County would like these RFPs to be jointly written by County &amp; Network Operator.</td>
</tr>
<tr>
<td>Co-Lo Design Input</td>
<td>County’s Meeker Co-Lo will eventually be at the courthouse after its remodel in about 1 ½ years. Until then County has a temporary solution in mind using the old Meeker MAN’s DR facility and later the potential of using County’s new Justice Center’s MDF once built.</td>
<td>County has done a lot of preliminary work on this subject but is looking forward to Network Operator’s input. The Rangely Co-Lo will likely be identified prior to this RFPs conclusion, but there will still be ample opportunity for Network Manager input.</td>
</tr>
<tr>
<td>Section</td>
<td>Open Access model will also require cages and/or securable racks.</td>
<td>Secure Service Providers: County/Network Manager will need to secure a Middle Mile Internet, VOIP, IPTV and transport service ASAP.</td>
</tr>
<tr>
<td>Regional Planning</td>
<td>County will bring Network Manager up to speed on other regional broadband and telecommunications initiatives, projects, and opportunities.</td>
<td>There are some potentially larger roles for Network Manager to play outside of Rio Blanco County. County is committed to aligning itself with regional goals and supporting regional initiatives.</td>
</tr>
</tbody>
</table>

**Useful Information**

**Demographics**

- Rio Blanco County has 6807 residents according to [Here](#) with about 650 students in the Meeker and about 450 in the Rangely school districts.

- There are two municipalities in Rio Blanco County, Meeker and Rangely.
  - Meeker’s population was 2493 in 2013 according to [Here](#).
  - Rangely’s population was 2433 in 2013 according to [Here](#).

**Topology**

- Rio Blanco County is approximately 3600 square miles. Here are some Google Map Links for Proposers’ convenience.
  - [Rio Blanco County with Topology Overlay](#)
  - [Meeker with Topology Overlay](#)
  - [Rangely with Topology Overlay](#)
  - [Meeker to Rangely Drive with Topology Overlay](#)

- Primary Roads - The primary roads are
  - CDOT Hwy 13: The north to south Colorado Highway 13 which connects Meeker to Moffat County’s Craig on the North and Garfield County’s Rifle on the south.
  - CDOT Hwy 64: The east to west Colorado Highway 64 which connects Meeker to Rangely and then on west of Rangely to Vernal, Utah.
  - CDOT Hwy 139: The north to south Colorado Highway 139 which connects Rangely to Loma.
Response Instructions

General Instructions

- County requests the following proposal and qualification information from all Proposers. The following information will be used to evaluate the qualifications of Proposers. This information is not intended to restrict competition. The intent is to protect County’s interests by ensuring Proposer is competent, capable of quality work and financially able to complete the project it may be awarded.

- County will consider prior performance on similar projects in assessing the Proposer’s ability to complete the proposed project.

- Time extensions will not be given to this RFP’s Deadline. Please do not ask.

- Time is of the essence and any proposal received after the announced time and date for submittal will be rejected. It is the sole responsibility of the Proposer to ensure that its proposal is received by the deadline indicated. However, nothing in this RFP precludes the County from requesting additional information at any time during the RFP process.

- Nothing herein is intended to exclude any responsible Proposer or in any way restrain or restrict competition. On the contrary, all responsible Proposers are encouraged to submit their proposals. County reserves the right to reject any or all proposals.

- Any proposal submitted must include an RFP Proposal Form which has been signed by an individual authorized to bind the Proposer. All proposals submitted without such signature will be deemed non-responsive. The RFP Proposal Form is also attached to the end of this RFP for Proposer’s convenience.

- Any material that is to be considered as confidential in nature must be clearly marked as such, on every page, and will be treated as confidential by County to the extent permitted by law. Note, by submitting a Proposal, Proposer authorizes County to provide Proposal to the WCITC group to aide in Proposal evaluation, including sections marked confidential.

Pre Proposal Conference

- Due to the intricacies of this RFP, there will not be a pre-proposal meeting. However, County highly encourages each Proposer to contact the IT Director, Blake Mobley and setup a time for either a phone conference and/or a personal meeting. Proposer may contact Blake Mobley at:

<table>
<thead>
<tr>
<th>Pre Proposal Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rio Blanco County</td>
</tr>
<tr>
<td>Blake Mobley, IT Director</td>
</tr>
<tr>
<td><a href="mailto:Blake@rcb.us">Blake@rcb.us</a></td>
</tr>
<tr>
<td>970.878.9545</td>
</tr>
<tr>
<td>970.329.1188</td>
</tr>
</tbody>
</table>
Proposal Process

Proposal responses will be a double submission process:

- **Step 1: Paper Version**
  - To ensure equal and fair treatment of all respondents, a paper response will be required as explained below.

- **Step 2: Electronic Version**
  - For ease of evaluation, an electronic copy will be requested from all qualifying respondents post Proposal Opening as explained below.

- Each proposal must include the [RFP Proposal Form](#) which includes a cover sheet and signature page.

- A physical copy of the proposal, sealed and marked “Proposal for Rio Blanco County’s RFP for Network Operator” must be received by the County via one of two options:

  - **Mailed or Shipped**

    - Received no later than **4/10/2015** at:

    | Mailing (USPS)       | Physical Shipping               |
    |----------------------|---------------------------------|
    | Rio Blanco County    | Rio Blanco County               |
    | BOCC                 | BOCC                            |
    | PO Box i             | 200 Main Street Suite 100       |
    | Meeker CO 81641      | Meeker CO 81641                 |

  - If Proposer decides to utilize an express delivery service, please note that overnight services are not always delivered on the next day in County’s rural community. This has voided several Proposal submissions in the recent past.

- **Hand Delivered**

  - Received no later than **11:00 A.M**, Mountain Standard Time, on **4/13/2015** at the Commissioners’ meeting at the Freeman Fairfield Building, 200 Main Street, Suite 100, Meeker Colorado 81641.

- **Proposal Opening**

  - All proposals will be opened by the Commissioners during their meeting on 4/13/2015 at 11:15 am at the Freeman Fairfield Building, 200 Main Street, Suite 100, Meeker Colorado 81641. Proposer presence at the proposal opening is optional. A decision
may or may not be made at this meeting. Proposals submitted and opened shall not be withdrawn for 30 days thereafter.

○ **Proposal Withdrawal**

  - Proposals may be withdrawn prior to opening by sending written notice which must be **received** prior to proposal opening or by withdrawing the proposal at the Commissioners’ meeting prior to Proposal opening.

○ **Post Proposal Opening - Electronic Version**

  - After, Proposal Opening, County will email proposers a request for an electronic copy with identical wording to the already submitted paper version. The electronic copy will facilitate the evaluation process.

  - County will require the electronic copy be in either Microsoft Word or Google Docs format. Other formats, such as PDF will **not** be acceptable as they do not facilitate copy/paste into a Google Table for easy side-by-side comparison.

**Evaluation and Award Process**

- The Rio Blanco County IT Director, Blake Mobley will present his recommendations to the BOCC. County may engage the WCITC group in Proposal evaluations. Note, by submitting a Proposal, Proposer authorizes County to provide Proposal to the WCITC group including sections marked confidential.

- County may, at its discretion, request an interview with any Proposer with notice given via phone or email. Proposer will have two (2) days to accommodate such an interview.

- A Proposer may be selected and contractual negotiations may commence. The selected Proposer will have seven (7) days after notice to arrange for an in-person or by phone meeting, as determined by County.

- County will strongly consider all input, but County ultimately reserves the right to select Proposer at its sole discretion.

- County reserves the right to withdraw the entire project or any Project Element(s) from award consideration if it is in the best interest of the County to do so.
RESERVATIONS

The County herein expressly reserves the following rights:

1. To negotiate separately with any source whatsoever in any manner necessary to serve the best interests of the County. The County does not intend to award a contract solely on the basis of any response made to this request for proposals or in any way to pay for information solicited or obtained. The information obtained will be used in determining what seems to best serve the interest of the County.

2. To consider the competency and responsibility of Proposers and of their proposed sub consultants in awarding any contract.

3. To make the award based on the County’s best judgment as to which proposal best meets the County’s expectations of a project of the highest quality and innovation.

4. To negotiate the terms and conditions of the contract, including but not limited to the statement of work and contract price, in order to meet the County’s project expectations.

5. To make such changes or correction in plans, specifications or quantities of the RFP as County may deem necessary or desirable during the RFP process. It is Proposer’s responsibility to monitor the RFP throughout the RFP and subsequent processes.
Response Questions

Proposer’s, please fill out answers as specified below, and only as specified below. Please place answers inside the provided boxes.

Thorough but concise responses are appreciated. If Proposer’s answer is “Understood” or “Will Comply” then that is all that need be recorded. Conversely, if a proper response requires several paragraphs, then please write them.

Please do NOT add or remove cells to the tables below as the electronic version will be copy/pasted for easy comparison between respondents.

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Please list Proposer’s company information below.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Full Legal Name</td>
<td></td>
</tr>
<tr>
<td>Company Working Name</td>
<td></td>
</tr>
<tr>
<td>Legal Physical Address Include Street, City, State</td>
<td></td>
</tr>
</tbody>
</table>

Primary Contact
This is a repeat of information asked in the RFP Proposal Form, but is very useful here for evaluation purposes.

<table>
<thead>
<tr>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
</tr>
<tr>
<td>EMail</td>
</tr>
<tr>
<td>Office Phone</td>
</tr>
<tr>
<td>Cell Phone</td>
</tr>
</tbody>
</table>

RFP Proposal Form
Each proposal must include the RFP Proposal Form which includes a cover sheet and signature page. Follow the provided hyperlink and indicate compliance in the box below.

Done?
**Narrative**
Provide a general narrative summarizing Proposer’s proposal. This response may be provided by attachment rather than filing in the following box. Post Proposal opening, the attachment will be made available in Microsoft Word or Google Document format.

**Vision Statement**
Rio Blanco County (County) and its partners will implement and maintain IT infrastructure and services resulting in Rio Blanco County positioning itself as a modern, world class destination for tourism; business growth; safe, healthy, happy living; and as an ideal place to raise, educate, and retain your family. County will accomplish this by implementing a fiber to the home (FTTH) solution in Meeker and Rangely and a licensed high bandwidth fixed wireless backhaul system across a countywide tower network for the delivery of modern high speed broadband, cellular, and emergency services (ES) within the next 3 years. Please comment on County’s vision statement and Proposer’s alignment with it.

**Network Operator - One or Several Partners?**
County may partner with multiple Proposers to form a group of Partners capable of best meeting the requirements of “Network Operator.” The term “Network Operator” will be henceforth interpreted as meaning either the Proposer as a stand alone partner or the Proposer as part of a partner group. Please respond to this RFP even if Proposer is only interested/able to meet part of the criteria. County realizes finding a single Proposer able to meet all of the Network Operator criteria may not be realistic and that two or more Proposers may form a more powerful combined solution than one. Please comment.

**Google Apps**
County, BLM, State of Colorado, and several WCITC members use Google Apps for Work or equivalent. County would prefer a Network Operator either currently using or at least willing to adopt this environment as this project’s primary email, calendar, and document collaboration environment. Please comment.

**Business Model**
After reviewing the [Business Model](#) section of this RFP, please comment on the approach that would work best with Proposer and how Proposer envisions that approach meeting with County’s goals. Please be VERY detailed in Proposer’s response. This is a key question in this RFP.

**Major Project Roles**
After reviewing the [Primary Project Roles](#) section of this RFP, please comment. Does Proposer agree with
this division of roles? Does Proposer have questions, suggestions, or comments? This is a key question in this RFP.

Operations & Maintenance Plan
After reviewing the Operator & Maintenance Plan, please discuss how this plan aligns with Proposer’s approach to County’s project. This is a key question in this RFP.

County Retains Network Ownership
County will retain ownership of all existing and future infrastructure so that County can contract with a different future Network Operator, either jointly or in order to replace the existing Network Operator, without disruption to customer service. County will not place itself into a position where a Network Operator retains an unchecked, non-competitive monopoly on the project. However, County hopes to form a successful, long term relationship with the Network Operator to the benefit of both partners.

County will retain the right to select, assign, and remove partner(s) from the Network Operator role. County is providing the Network Operator with a very robust and expensive network infrastructure for Network Operator to manage and leverage, but County will retain ownership.

Please comment.

County Retains Suggestion & Approval Rights
The Network Operator will manage the network infrastructure, services, middle mile transport, and VARs in order to ultimately provide all customers with the best “world class” services possible as measured by a balance of performance and cost. Besides retaining ownership of of initial and future infrastructure, County will maintain suggestion and approval rights.

Please comment on how County and Proposer would work through such suggestion and approval rights. What type of language would Proposer like to see in the contract?

FTTB/FTTH Role Division
After reviewing the FTTB/FTTH Role Division table, please comment on the proposed division of Network Operator to network Owner Roles. Does Proposer have any concerns, suggestions, comments?

Tower/Wireless Role Division
After reviewing the Tower/Wireless Role Division table, please comment on the proposed division of Network Operator to network Owner Roles. Does Proposer have any concerns, suggestions, comments?

Services Role Division
After reviewing the Services Role Division table, please comment on the proposed division of Network Operator to network Owner Roles. Does Proposer have any concerns, suggestions, comments?

---

**Required Skill Sets**

This table covers some of the key skill sets the Network Operator or will need to bring to the project. County realizes that a single partner may not have all of the identified Skill Sets. Thus the role of Network Operator may be a group of partners. Please examine this list and respond to the RFP with the Skill Sets Proposer has in-house. Then suggest how Proposer might arrange solutions for those skill sets Proposer is missing, such as new hires, sub-contracting, or asking County to locate other partners as needed.

Please comment in the third column, below, under “Proposer’s Comments.” What skills does Proposer have in-house. For the rest, how does Proposer propose meeting those skills and/or will County be looking for another partner to group with Proposer to meet those skills?

<table>
<thead>
<tr>
<th>Skill Set</th>
<th>Description</th>
<th>Proposer’s Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Administrator/Network Engineer</td>
<td>A person with the data center skill set to operate, program, maintain, repair the equipment such as: routes, switches, GPON, etc.</td>
<td></td>
</tr>
<tr>
<td>Locates</td>
<td>Meet the 811 UNCC locates on all underground assets.</td>
<td></td>
</tr>
<tr>
<td>Drop Run Installs</td>
<td>Run the micro-trench or other solution to get conduit from FTTB handholes to the customer premise, then attach and run fiber.</td>
<td></td>
</tr>
<tr>
<td>Fiber/Conduit/Run Hits</td>
<td>When the conduit/fiber is damaged, including Co-Lo facility, FTTB, and drop runs. The Network Manager will need to have it emergency repaired.</td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>ALL maintenance including Co-Lo electronics, fiber plant, drop runs, hand holes, ONT repair/replacement, street damage, sidewalk damage, etc.</td>
<td></td>
</tr>
<tr>
<td>Tower/Dish/Radio Maintenance</td>
<td>All wireless ongoing maintenance other than VAR’s on-premise role. This includes roads to tower sites, buildings (paint, doors, roofs), generators, solar panels, guy-wires, grounds maintenance, security fences, tower integrity, dishes, radios, cabling, cameras, security, locks, gravel, etc.</td>
<td></td>
</tr>
<tr>
<td>Last Mile Installs</td>
<td>Install sector antenna on towers as needed by customers/VARs.</td>
<td></td>
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<td>-------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Network Monitoring/Integrity, NOC (Network Operations Center) for County/VARs</strong></td>
<td>Integrity of the network services and traffic is a primary skill set and role of the Network Operator. The network must be actively monitored 24/7/365. If an issue arises County or VARs will be able to contact Network Operator’s NOC. This includes both terrestrial (underground such as fiber) as well as wireless (backhaul licensed frequencies, unlicensed frequencies, etc.) Note, initial customer support calls will be directed to the VARs.</td>
<td></td>
</tr>
</tbody>
</table>
| **Service Negotiations** | Identify needed services, locate Service Providers, negotiate delivery and pricing, contract with Service Providers, arrange for wholesale delivery/negotiations/contract with VARs.  
Service Examples: Internet, transport, VOIP, IPTV, Backup, High Availability (HA), disaster recovery (DR), cloud storage, Software as a Service (Saas). |
| **Managing VARs** | Identify and vet VARs. Arrange for wholesale service delivery and terms. Monitor VAR success and customer satisfaction. Respond to VAR support tickets via Proposer’s NOC. |
| **Marketing** | The Network Manager will need to work with County and VARs in a joint marketing effort. Product labeling will need to be established. |
| **Capital/Funding** | Pay for above operational costs. Pay for drop run and last mile service expansion as customers choose to sign up with VARs. |
| **Open Access Vetting & Advisement** | Vet Service Providers and VARs, retaining an Open Access Network that encourages competition between private partners while keeping the total number of private partners per group (Service Providers and VARs) low enough that they can still thrive with County’s limited customer base. |
Vetting/Advising on larger incumbent use of the network

County requires that this project foster better service and communications for all Rio Blanco citizens, businesses, and visitors. This means Network Operator will need to allow certain incumbents to serve customers as both Service Provider and VAR. Or, simply put, to allow incumbents to pass traffic through County’s Open Access Network.

Tower Asset Management

Manage County’s tower assets for Broadband, but also for Cellular and Emergency Services Purposes. Specifically monitoring Co-Location agreements, tower loading, and service delivery rights.

Blending Roles
After reading the Blending Roles section, please comment on what other roles Proposer may wish to initially fill, how willing is Proposer to release those roles as indicated, and what Service Provider services, if any does proposer potentially bring to the project. Please answer thoroughly.

Municipal versus Rural Services
After reading the Municipal versus Rural Services section, please comment on this approach. Does Proposer have thoughts, questions, suggestions? If Proposer is also a potential Service Provider, what services might Proposer bring to the project. Does Proposer already have industry contacts able to provide these and/or other services?

MANs
As indicated below, some of Proposer’s Network Operations will help facilitate local anchor institution MANs.

Public entity anchor institutions will be supplied with an additional 4 strands of fiber to their key facilities in order to establish their own municipal area networks (MANs). This will greatly benefit these anchor institutions for internal usage as well as stimulate their need for telecommunication services to be delivered by this project. A great benefit and win-win for all.

Please comment.

County’s “World Class” Broadband Goals
After reading the County’s “World Class” Broadband Goals section, please provide a discussion of what tiers of municipal (FTTH) and rural (wireless) service and price points Proposer would like to set as targets
for this project.

**County’s “World Class” Cellular Goals**
After reading the [County’s “World Class” Cellular Goals](#) section, comment if Proposer’s skill sets are relevant. What experience does Proposer have in this area?

**County’s “World Class” ES Goals**
After reading the [County’s “World Class” ES Goals](#) section, comment if Proposer’s skill sets are relevant. What experience does Proposer have in this area?

**Open Access Model**
By utilizing the “Open Access” model, County will create competition between highly qualified partners but on a quantity limited basis. If a future partner desires to apply for a role, even compete with the incumbent partner(s), County and all partners will allow this if the vetting process indicates that the new partner qualifies and that an established maximum quantity of partners in that role is not violated.

County’s project will provide the customers of Rio Blanco County with choices between competing partners for all services and service delivery. This is County’s goal and must be fully and wholly understood by all partners.

Please comment. Is Proposer currently aligned with this model? Can Proposer adapt with alignment to this model on this County project? Does Proposer have questions, concerns, thoughts, comments? This is a key question on this RFP.

**Limit Franchise Agreements & Duration**
However, County also realizes that during this project’s inception, very short term franchise arrangements may result in order to get the project started. The initial partners, particularly those who will be investing heavily in the project, may need a realistic opportunity to recapture their investment. However, County will keep such franchise agreements to a minimum; County will keep the term limit of such agreements to a minimum; and County will strive to eliminate all such agreements from the project in the very near future.

Please comment.

**Regional Goals**
After reading the [Regional Goals](#) section, please comment on how Proposer might expand to meet regional opportunities. What interest does Proposer have in the region, beyond County’s project?

**Current Financial Status & Tool**
After reading the **Current Financial Status & Tool** section, comment. What financial challenges does Proposer see ahead for the project? Are their other funding opportunities County could actively pursue? Are there other funding resources Proposer can bring to the project?

**FTTH Preliminary ProForma Tool**
After examining the **FTTH Preliminary ProForma Tool** section, please provide comments & thoughts.

**Local VAR Opportunities**
County has no direct take rate goals nor experience. However county has been approached by a local service provider with approximately 180 wireless, municipal customers. The potential VAR appears very interested in the opportunity to convert them to fiber customers via this project.

Please comment. Proposer must be interested and willing to work with local VAR assets as a high priority.

**Initial Network Operator Capital**
The initial capital the Network Operator is able to bring to the project for drop runs and last mile connections will have a noticeable impact on this project. County anticipates this figure to be in the $1,000,000 to $1,500,000 rough range.

Please comment.

**Work Timeline**
After reading the **Work Timeline** section, please comment. Is Proposer ready to begin work immediately after going to contract? What thoughts or concerns does Proposer have with this timeline?

**Imminent Network Operator Tasks**
To provide potential Network Operators with a concept of project progress and needs, below are some of the imminent tasks County would be seeking from Network Operator as soon as a contract is executed.

Please comment in the third column, below, under "**Proposer’s Comments.**" Is Proposer ready for these tasks? What are Proposer’s thoughts at this time? If Proposer is unable to accomplish these tasks in-house, how will Proposer approach them?

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Proposer’s Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPON Selection</td>
<td>Provide County with recommendations on model/brand/type of GPON (or</td>
<td></td>
</tr>
<tr>
<td><strong>Co-Lo Center Electronics</strong></td>
<td>Provide County with recommendations on the rest of the Co-Lo electronics: switches, routers, firewalls, etc.</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Help Monitor Engineering</strong></td>
<td>Although the FTTB engineering is nearly complete, County may use Network Operators input on the ongoing Tower/Wireless engineering.</td>
<td></td>
</tr>
<tr>
<td><strong>Construction RFP &amp; Process Monitoring</strong></td>
<td>County looks forward to working with Network Operator regarding the RFPs for FTTB and tower/wireless construction in the next few months.</td>
<td></td>
</tr>
<tr>
<td><strong>Co-Lo Design Input</strong></td>
<td>County's Meeker Co-Lo will eventually be at the courthouse after its remodel in about 1 ½ years. Until then County has a temporary solution in mind using the old Meeker MAN's DR facility and later the potential of using County's new Justice Center's MDF once built. The Rangely Co-Lo will likely be identified prior to this RFPs conclusion, but there will still be ample opportunity for Network Manager input. Open Access model will also require cages and/or securable racks.</td>
<td></td>
</tr>
<tr>
<td><strong>Secure Service Providers</strong></td>
<td>County/Network Manager will need to secure a Middle Mile Internet, VOIP, IPTV and transport service ASAP.</td>
<td></td>
</tr>
<tr>
<td><strong>Secure VARs</strong></td>
<td>County/network Manager will need to approach incumbent VARs and seek new VARs.</td>
<td></td>
</tr>
<tr>
<td><strong>Meeker &lt;&gt; Rangely Link</strong></td>
<td>For this project to work well. County needs an affordable, high speed, redundant link between the Meeker and Rangely Co-Lo. County will engage Network Manager on possible solutions</td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Service Offerings</strong></td>
<td>County is excited to work with Network Manager and VARs to establish the initial service offerings and price points for all customers - municipal fiber, and rural wireless.</td>
<td></td>
</tr>
<tr>
<td><strong>Branding</strong></td>
<td>County needs to work with Network Manager and possibly VARs, right away to determine service branding.</td>
<td></td>
</tr>
<tr>
<td><strong>Marketing &amp; Community Relations</strong></td>
<td>County is excited to have Network Manager &amp; VARs, along with County input, begin a pre-service marketing campaign and hold community relations meetings for PR and information purposes.</td>
<td></td>
</tr>
<tr>
<td><strong>Grants/Funding</strong></td>
<td>County is very interested in Network Operator’s capital commitment. Also County is looking forward to working with network Operator on County’s current and future grants and grant opportunities.</td>
<td></td>
</tr>
<tr>
<td><strong>Regional Planning</strong></td>
<td>County will bring Network Manager up to speed on other regional broadband and telecommunications initiatives, projects, and opportunities.</td>
<td></td>
</tr>
</tbody>
</table>

**Time Extensions**
Time extensions will not be given to this RFP’s Deadline. Please do not ask.

Understood?
Pre Proposal Conference
Due to the intricacies of this RFP, there will not be a pre-proposal meeting. However, County highly encourages each Proposer to contact the IT Director, Blake Mobley and setup a time for either a phone conference and/or a personal meeting.
Accomplished?

Electronic Version
County will require the electronic copy be in either Microsoft Word or Google Docs format. Other formats, such as PDF will not be acceptable as they do not facilitate copy/paste into a Google Table for easy side-by-side comparison.
Will comply?

WCITC Review
Note, by submitting a Proposal, Proposer authorizes County to provide Proposal to the WCITC group including sections marked confidential.
Understood?

One Way Flow of Capital
Proposers for the Network Operations role must fully understand that County does not anticipate providing any Proposer any form of financial assistance nor compensation. On the contrary, County requires Proposer to bring capital to the project for operational expenses as well as drop run and last mile equipment and connections. Even if Proposer is only responding for a portion of the Network Operator role, such as Data Center work as a system engineer, for example, all compensation will be provided by the Network Operator group, not by County.
Please confirm understanding and comment.

References
Please provide reference contact information for at least three similar projects or work appropriate for County contact. Note, supplying this information will be construed as providing the County with permission to contact and discuss the results of Proposer’s company work with all such references and with the WCITC group.

Reference #1:  Company:
Proposer's Approach & Partners

- Clearly describe Proposer's organizational and staffing approach to this project.
- Describe current work load and priority of this project as it relates to overall workload.
- Provide information on all outside consultants Proposer anticipates using during this project, including a description of the proposed role on the project.

Why Does Proposer Stand Out?
What unique or special aspect will County consider when evaluating Proposer? Why does Proposer think this Proposal stands out?

Contract - Threshold for Capital Flow Back to County
If a contract be forthcoming, at what point, will Proposer be paying County for use of its infrastructure. This would provide the opportunity for County to enhance its financial ability to extend the fiber and wireless network. Is it at a certain ROI or after a defined number of months? County may not require such threshold be reached but County will require language addressing the possibility in the contract. County
wants its Network Operator to reasonably profit from this partnership. However, County will protect its taxpayer investment and provide assurances that the Network Operator isn’t going to extract an unreasonable profit off of County’s investment.

Please comment. This is a complex question, but needs addressed.

<table>
<thead>
<tr>
<th>Contract Length - Franchise Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>After evaluating this RFP, if a contract be forthcoming, what suggestion does Proposer have for the length of the initial contract between County and Proposer? How long will Proposer need to recapture Proposer’s initial investment into the project to cover operational expenses as well as drop run and last mile equipment and connections in order to meet Proposer’s business plan and ROI?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contract - County Audit of Network Operator</th>
</tr>
</thead>
<tbody>
<tr>
<td>County will require fair and open auditing of Network Operator’s financials as they relate to this project. If a contract be forthcoming, what suggested approach and mechanism does Proposer recommend?</td>
</tr>
</tbody>
</table>
Post RFP Release - Additional Information

As per #5 under the Reservation section of this RFP, clarifications throughout the RFP process are allowed and is the responsibility of Proposer to track. They are listed below:

Rio Blanco County’s Questions:

Wanted to see if you can ask Centerline to share the following information related to the RFP as a follow-up to our discussion this morning related to the fixed wireless broad band solution:

1. Number of towers at this time
2. Number of sectors per tower
3. Number of subscribers to be covered per tower
4. Average subscribers per sector
5. Average and farthest distance customers will be from tower

Centerline Solutions has provided the following information to aid Proposers with their responses to the rural tower/wireless component:

1. The number of towers is estimated at 8 for the initial deployment. Actual tower numbers will depend on bidders equipment, base station and subscriber antenna selection. Future towers can be added to cover additional population.
2. As in question #1 the number of sectors will depend on bidders equipment selection. End point maps and site locations will be provided to facilitate a preliminary design for budgetary purposes for the responder.
3. There are 1273 potential endpoints in the intended footprint. A few of these are commercial or multi-unit buildings but the majority are single family residences. End point maps and site locations will be provided to facilitate a preliminary design.
4. This number has not been calculated and will depend on the scheduling and throughput capability of the equipment selected.
5. Maximum distance was estimated based on the link budget below, average distance has not been calculated. The assumptions for the initial design were as follows:

### Assumed Link Budget for Initial Design

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td><strong>DOWNLINK</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BS Tx Power</td>
<td>dBm</td>
<td>19</td>
</tr>
<tr>
<td>Standard BS Antenna Gain</td>
<td>dBi</td>
<td>17</td>
</tr>
<tr>
<td>CPE Antenna Gain</td>
<td>dBi</td>
<td>25</td>
</tr>
</tbody>
</table>
16QAM Rx Sens           dBm  -74

Downlink Budget        dB  135

UPLINK

CPE Tx Power           dBm  24
CPE Antenna Gain       dBi  25
Standard BS Antenna Gain  dBi  17
16QAM Rx Sens           dBm  -74

Uplink Budget          dB  140

Limiting Link Budget Downlink

System Link Budget      dB  135
Fade Margin             dB  6.3
Path Loss (5.8GHz at 7 Miles)   dB  128.7

Bidders link budget may vary depending on equipment, fade margin, base station, subscriber antenna selections.