

There are several important purposes behind the proposed San Isabel broadband network. First and foremost is to upgrade the available broadband access to schools, hospitals, police departments, fire departments, ambulance districts and other critical community institutions within the proposed service area. Second, the network will provide broadband service to rural, underserved areas. This broadband access will not only be significantly less expensive than the data services available today, it will also be mobile in nature, opening commercial opportunities and innovation previously reserved for those living in the nation's urban centers. The network design focuses on three counties located in Central Colorado: Eagle, Summit and Lake. Each of these counties is classified as both rural and remote.

The proposed network will involve two cutting edge technologies: WiMax (IEEE 802.16d) and Ethernet over Copper (EoC, IEEE 802.3ah). The WiMax network will utilize the 2.5 GHz EBS Licensed Spectrum currently controlled by San Isabel. This WiMax network will cover an estimated 85% of the population in the proposed service area. The additional 15% of the population as well as the residential and business customers demanding higher data rates will utilize the EoC network. San Isabel has experience with both technologies. Two WiMax base stations are currently operational in Western Eagle County. These base stations are [REDACTED] transmitters, each with three sectors. The base stations cover the towns of Gypsum and Eagle. The fact that San Isabel has already deployed this technology will make both the planning and deployment of the network much easier and faster than could be achieved by a startup entity.

San Isabel also has an EoC network deployed in Vail, Colorado. This network is hubbed in San Isabel's collocation in the Qwest Vail Central Office. From this collocation, San Isabel is able to provide high quality synchronous bandwidth to businesses and residents in the Vail area. The EoC network gives San Isabel the flexibility to offer customers bandwidth ranging from 1 Mbps all the way up to 100 Mbps or more. A good example of the EoC and its benefits can be seen in a current San Isabel customer, The [REDACTED] [REDACTED] is a [REDACTED] specializing in [REDACTED]. The [REDACTED] relies heavily on a stable broadband connection with high bandwidth availability. Today, the [REDACTED] subscribes to a 30 Mbps service with San Isabel but can upgrade at any time to 100 Mbps or more. This high bandwidth service allows [REDACTED] to offer [REDACTED] as well as the ability to receive and send large files such as [REDACTED]. This type of network allows a world-class organization such as [REDACTED] to flourish in a remote, rural area. Again, the experience of having already deployed an EoC network gives San Isabel an enormous advantage in both network understanding and speed of deployment over any organization starting from scratch.

Eagle County, the home to San Isabel Telecom, Inc., has seven communities: Gypsum, Eagle, Edwards, Avon, Eagle-Vail, Minturn and Vail. San Isabel currently serves the communities of Gypsum and Eagle with the WiMax technology that will be utilized across the proposed service area. Without the project funding, San Isabel's WiMax network would [REDACTED]. The proposed network in Eagle County will cover 6,632 households and pass 7,736 businesses. Summit County has six primary communities: Copper Mountain, Frisco, Breckenridge, Dillon, Silverthorne and Keystone. The proposed Summit County network will cover 8,438

households and pass 19,969 businesses. Lake County has only one primary community: the Town of Leadville. The proposed Lake County network will cover 3,091 households and pass 3,960 businesses.

Supplemental Information 2 lists the 55 community anchor institutions that will directly benefit from the proposed network buildout. San Isabel has worked with each of these entities to discover what broadband services they are currently using and to identify any problems with those services. What we discovered has driven this application. We found that nearly all of these anchor institutions struggle to meet their objectives because of serious limitations to their current broadband choices. Complicating the issue is the fact that each entity has unique problems. It became clear to us that high-speed, symmetrical Ethernet is necessary but it is also clear that a mobile component is also needed to meet the demands of the Public Safety Community. However, the needs of these organizations do not stop at access; they have other demands that are not being met. A good example of this is a local hospital. This hospital needs a large amount of bandwidth for sending and receiving large files including X-rays, MRIs and CT Scans. The only available option to this hospital is an asymmetrical service that provides 15 Mbps on the download but only 768 kbps on the upload. Essentially, this connection gives the hospital the ability to receive files but not the ability to send them. San Isabel's EoC network is a perfect solution. San Isabel can easily provide a symmetrical connection at almost any speed the hospital desires. Indeed, San Isabel has already agreed to provide this hospital (and every other medical entity listed in Supplemental Information 2) [REDACTED]

[REDACTED] if San Isabel is able to obtain the funds necessary to construct the network. In addition [REDACTED], the hospital will have the ability to upgrade the Ethernet speed [REDACTED]

Another example of unique network requirements is a local police department. There are several areas in the proposed service area where WiFi is currently available. The local police departments could utilize this service where it is available but there is a significant problem with such usage: security. A typical WiFi hotspot is an unsecured connection broadcast over a public frequency. The expansion of San Isabel's WiMax network will not only give the police department the speeds and coverage that they desperately need, it will also provide them with a secure connection. The San Isabel WiMax network is an encrypted service on a licensed, secure network. San Isabel [REDACTED] priority access [REDACTED] to every location of each of the public safety entities listed in Supplemental Information 2. For example, the [REDACTED] has several locations throughout [REDACTED]. They will receive [REDACTED] [REDACTED] per location, not just [REDACTED] for the entire organization. These [REDACTED]

[REDACTED] for them to use indefinitely and will be upgraded every 3 years to ensure that that every public safety entity in the proposed service area has access to free, state of the art, mobile broadband.

Having already built the types of networks that would effectively address their broadband dilemmas, we know that the services they need are not only a possibility, they can be easily achieved by extending our current networks to provide the necessary equipment and services. The final obstacle for these anchor institutions is the ability for San Isabel to fund the necessary construction to expand these networks.