C. PROJECT NARRATIVE

Company Background

Cable One, Inc. d/b/a Sparklight ("Sparklight") is headquartered in Phoenix, Arizona.

While Sparklight operates in various communities throughout the US, its heritage is really that of an Arizona telecommunications provider. Sparklight rebranded itself from Cable ONE to Sparklight in 2019 to signify the change from being a classic cable company providing video services to a broadband provider allowing our customers to choose products and services coming "Over the Top" or conducting business with a wide-range of web-based business applications online. These broadband services are on par with those found in some tier one markets and allow business customers in small and rural communities to transact business, utilize web applications, and provide mission critical connectivity equal to their urban counterparts. It also allows for individuals to work remotely, allowing the migration of highly skilled individuals to smaller cities for quality of life reasons.

Sparklight has over 900,000 customers in 21 states across the US. Sparklight currently serves customers in Prescott, Cottonwood, Jerome, Show Low, Globe, Winslow, Bisbee and other Arizona communities. Working with and serving these smaller communities provides Sparklight with a unique viewpoint on broadband development. Sparklight is large enough to generate economies of scale relating to purchasing, technical expertise, quality control, and operational ability to design, construct and operate a network in Payson, now and far into the future.

Broadband in Rural Communities

With the ACA providing $3M in rural development grants, it clearly recognizes the critical role of broadband in today's economic development. There have been several studies, which highlight the significant contribution broadband plays. The following 4 studies are cited as examples:

Traci Morris, director of the American Indian Policy Institute at Arizona State University, conducted research on the topic of connectivity in Indian country (one of the three communities served under this grant). It states that access to high-speed Internet service has become an essential component to the nation's economy, education, and healthcare. Federal data continues to show tribal lands are the least connected areas of the country. AIPI launched a survey to collect information from residents of tribal reservations to determine what levels of Internet access they had and what types of devices they are using to access it. The survey found that nearly 20% of Native Americans living on reservations do not have any internet access at home, and more than a third rely on their cellphones to get online while many are also

accessing it through public Wi-Fi or at a friend/relative's house. The study also identified potential barriers to access, such as the lack of availability. If you cannot connect, you cannot attend college, you cannot have economic development—Native art is huge and if you cannot connect, you cannot have an Etsy site to sell your items.

Howard, Brian and Morris, Traci, Tribal Technology Assessment: The State of Internet Service on Tribal Lands (July 27, 2019). Available at SSRN: https://ssrn.com/abstract=3427547 or http://dx.doi.org/10.2139/ssrn.3427547

Broadband Reduces Unemployment, Especially in Rural Areas

Research from the University of Tennessee at Chattanooga and Oklahoma State University suggests that broadband reduces unemployment especially in rural areas. In studying counties in Tennessee from 2011 to 2016, results showed reduced unemployment in those counties with access to high-speed broadband. The unemployment rate was approximately 26 basis points lower than compared to those with low speed connections.

Study: Broadband Reduces Unemployment, Especially in Rural Areas. (n.d.). Retrieved from https://www.telecompetitor.com/study-broadband-reduces-unemployment-especially-in-rural-areas/.

The Economic Impact of Rural Broadband

In 2015, the Hudson Institute released the report "The Economic Impact of Rural Broadband," commissioned by the Foundation for Rural Service. The report examines the economic impact of rural broadband and the critical issues facing rural communities in the United States. *"The report findings are further evidence that investing in rural broadband has far-reaching effects for both urban and rural America, creating efficiencies in health care, education, agriculture, energy, and commerce, and enhancing quality of life of citizens across the country,"* said Director Jessica Golden. *"The advancement and viability of our rural American communities is not just a rural issue but a national imperative. Rural broadband services are necessary in an economy where the ability to complete a transaction electronically has become indispensable."* Rural broadband companies have contributed $24.1 billion to the US economy in 2015, through their own operations and the follow-on impact of their operations. Over $100 billion in e-commerce was supported by rural broadband, expanding access for the nearly 20% of Americans living in rural communities, enabling the use of new technologies such as distance education, telemedicine, remote monitoring systems aided by live-stream video and multi-participant interactive programming.

Hudson Institute Releases Report on Economic Impact of Broadband in Rural Communities. (2016, November 12). Retrieved from https://nativenetwork.com/hudson-institute-releases-report-economic-impact-broadband-rural-communities/.

Estimate of the Net Benefits of Indiana Statewide Adoption of Rural Broadband

In this study, Purdue University examined the net benefits associated with investing in rural broadband infrastructure. It was noted that " It's unusual to see returns that significant. The finding of a 4:1 return validates the opportunity that could be created by full-broadband deployment…" Identified benefits would include increased tax revenue and improved healthcare, reducing the cost of Medicaid and Medicare.

Purdue News Service. (n.d.). Report: Broadband access would benefit rural areas, state. Retrieved from https://www.purdue.edu/newsroom/releases/2018/Q3/report-broadband-access-would-benefit-rural-areas,-state.html.

The full economic ripple effect of this project on the Payson area will be extremely positive. Payson has a large percentage of working poor. Broadband will spur investment in Payson from the outside. Payson is regularly visited by businesses looking for either new markets, relocation possibilities, and startups – but they usually find Payson infrastructure lacking. Payson with APS, has improved the power grid locally and the town has invested heavily to secure additional water resources. Broadband is the missing link. This level of development is critical for the high-quality jobs that come with it. Payson's tourism based economic, does not offer many high-quality jobs. Census data from 2017 lists Payson's Median Household Income (MHI) at $46,602, an increase of 2-3 percent over the previous period, which was driven by the increase in the state's minimum wage to its current $11.00 per hour. The MHI is calculated from two-wage earners each making minimum wage. Payson's MHI is 21% lower than the national figure, which is a huge delta. Further, Payson's MHI is inflated by the retired segment of the population who have investments, pensions, 401k funds. Although retirees spend money in Payson and contribute to the economy, most funds are not invested locally. However, retiree's investment earning do inflate Payson's MHI. Payson is positioned to grow the economy, but Payson needs broadband.

D. Project Description and Timeline – Infrastructure Matters

Nature of Improvements – Sparklight proposes building an all fiber optic network within Payson/Star Valley, which will also serve the Northeast corner of the Tonto-Apache Reservation. **This network is currently capable of providing symmetrical speeds from 50 Meg up to 2 Gig.** The network utilizes a Passive Optical Network (PON) architecture to deliver these speeds. The architecture is important because power is not a requirement along the fiber path unlike other technology which requires "active" equipment in the network. The lack of power requirement provides greater reliability for customers. The PON architecture far exceeds the capabilities currently provided in Payson. In addition, Sparklight will also be able to provide dedicated bandwidth on an all fiber optic, layer 2 network targeting those customers who demand mission critical services including monitoring and Service Level Agreements (SLAs). The advantages of dedicated bandwidth includes: access to more reliable services such as symmetrical upload and download speeds up to 10 Gig at all times, no slowing of response during peak use periods, and no limit on the amount of data that can be transferred. For businesses that rely on providing online services, having dedicated bandwidth can eliminate problems such as a slow ordering or purchasing process, and result in more satisfied customers.

Why the project is needed – As cited in the studies above, the availability of broadband in smaller communities is critical to their economic growth. Payson/Star Valley are vibrant communities with ample amenities for towns of their size, but they lack fast and reliable

broadband to boost economic development. Bringing an all-digital, all fiber optic network to this area will allow small and medium size businesses to grow their internet presence and allow telecommuters to live outside major urban areas and thereby contribute to the economic development of smaller markets. The current technology and bandwidth offered in Payson is provided using facilities that are decades old and currently unable to deliver adequate bandwidth, with deficiencies in upload speeds and in reliability.

Payson's Educational opportunities and economic growth are capped by today's limited broadband capability. Payson will benefit from the project in the following areas:

- Education
- Business
- Medical
- Municipal

How the proposed project addresses those needs – The proposed PON architecture at the pricing structure contemplated will be able to provide the requirements needed to conduct internet commerce and utilize web based applications at a high-level and at a reasonable cost. Finally, for telecommuters, the reliability of a PON architecture and speeds offered will allow employees to move from dense urban areas, inside and outside of Arizona, and move to this area without sacrificing productivity.

Sparklight has listened to Payson's leadership in creating a plan for success. Planned routing will provide service to Payson's established and planned schools, improve services to businesses on Main street and Highway 87 (critical business artery in Payson), and provide a link to the Tribe. Priorities for the distribution of the delivered capacity are addressed in the plan; the project will drive economic expansion and help to put Payson's schools on a level playing field.

Number of community anchor institutions served – Sparklight will be able to serve all the large governmental, medical, educational, and financial institutions in the Payson/Star Valley area. The design will incorporate a large concentration of small and medium-sized business (SMB) customers within proximity of key institutions. Also, as time progresses, the network will extend beyond the original design with additional "laterals" off the designed network. Most importantly, this demonstrates Sparklight does not consider this initial build as static, but rather dynamic, the start of a larger network as we continue to build out the area.

Number of households served – Sparklight's initial focus will be business customers. Serving these customers will be the major economic growth engine for the area. The number of established and potential businesses that could connect via our service will consume most of the delivered bandwidth, including a limited number of home-based businesses and

telecommuters. Over time as our network expands and actual usage rates are comprehended, additional residents should be able to be accommodated. However, full coverage for Payson will require additional projects.

Number of businesses served – In the initial design, there are over 1,000 businesses within 1,000 feet of the network. As mentioned before, this network will continue to expand over time to encompass more business connections. It is anticipated, based on experience that the number of businesses within 1,000 feet of the network will grow to over 1,200 in 3 to 5 years. Payson has a large amount of vacant retail and commercial space and can support the tremendous growth without having to complete brick and mortar builds. Sparklight's goal is to serve over 400 customers three (3) years after completion of the network.

Total population served – Total population of Payson/Star Valley is approximately 18,000. The total American Indian population of the Tonto Apache Tribe residing on the reservation in Payson is approximately 145 individuals. Additionally, Payson is a hub for rim country (larger surrounding area). People in the surrounding area depend on the educational, business, and medical care services of Payson. The estimated population including the surrounding area exceeds 25,000.

The anticipated economic development benefit achieved by construction of such improvements – Sparklight expects to achieve the benefits identified in the studies described above. Unemployment should decrease and overall the economic impact will be in the range of the 1:4 ratio of investment to economic benefit (noted in earlier Purdue University study). The primary economic impact of completing this project is estimated at an $8 million dollar annual increase to Payson's struggling economy. This project will be the last piece in the puzzle to enable the build out of the university campus in Payson. When the 264 acre University site becomes a reality coupled with the retail and commercial in-fill along the project routing (previously noted), this will become a game changer! A recent study of the economic impact of the Eastern Oregon University to the rural town of La Grande, estimated the full economic ripple effect at $41 million annually. The size of La Grande and the University enrollment are consistent with our effort in Payson. Sparklight receiving the ACA grant will enable this project and move all of Payson forward. Revitalization efforts are underway to restore Payson's historic Main Street. These efforts will also be furthered by this project. All these points demonstrate that Payson is positioned for tremendous growth – completion of this project will unlock the potential. While the current incumbents both have advertised speeds which are considered "broadband" in nature, however advertised versus actual speeds can be quite different. Based on feedback and informal information, both companies are having reliability and speed issues. This can be demonstrated by the letters of support by the leaders of the community who recognize the need for broadband found in Tier 1 markets.

Total miles of fiber to be installed – Total construction will be 19.27 miles. In addition to mileage, the fiber density is significant. The minimum fiber count along the route is 144, ranging up to 288. This high fiber count will serve the community well into the future. For further clarification, fiber mileage is typically more than network design. Fiber usage includes slack points allowing for quicker and better restoration if there is a fiber cut.

Location of new fiber – Reference Appendix C for more detail. However, the network will be composed of both aerial and underground portions. Also included is a map of the overall design in Appendix C.

Stated commitment to operate and maintain the network for a minimum of five (5) years upon completion of the improvements – Sparklight is committed to operate and maintain this network beyond five (5) years. Initially, Payson/Star Valley and the Tonto Apache Reservation will be maintained by our seasoned operations team out of Show Low, Arizona. Over time, as the network expands and our customer base grows, it may be possible to stage operations within the area. Bridging the distance to rural towns like Payson requires government grant support to make it commercially viable. Sparklight understands this and we are willing to do our part. Sparklight stands ready to support this growth and believe we are highly-qualified assist in the connection of rural Arizona.

Reference Appendix E for a letter of commitment from Sparklight, which intends to demonstrate Sparklight's long-term commitment to the small or rural communities in Arizona.

The party or parties that will perform the infrastructure construction – At this time, the construction company has not been identified. Sparklight's standard operating procedure is to distribute a request for proposal (RFP) to at least three (3) approved vendors in order to get the best bid possible. Bid requirements are not only price, but also an assurance of quality, construction timeline requirements, and financial wherewithal to complete a project of this size. The construction will be monitored and supervised by our experienced internal construction management team to ensure continued adherence.

The intended uses of the RBDG A funds in respect to the construction or planning – Reference Appendix A for a breakdown of both eligible and ineligible costs for the planned network. Overall, there are several broad eligible funding categories. These include construction labor, construction materials, a precast building to house network electronics, and network electronics.

Specific information required under Section 1.4 – The proposed PON architecture will provide a minimum service of 50 Meg symmetrical up to 2 Gig to this underserved business community which compares very favorably to major urban markets both in speed and price. Sparklight will also be able to provide dedicated optical services to anchor customers, offering up to 10 Gig, which also compares well to major markets. The construction of the network will be completed well within the 24 month time frame.

Timeline for completion of the infrastructure improvements – Reference Appendix B for more detail.

The amount of cash "match" contribution to be provided

Timing of such matches – Sparklight's cash match is outlined in Appendix A, which highlights both eligible and ineligible expenses. Sparklight will pay for all expenses and submit quarterly requests for matching funds from ACA as dictated in the Grant Application.

The intended uses of the match – Sparklight will be providing funds (matching to the ACA Grant) for all eligible categories that exceed the requested $1M grant (total eligible costs are forecasted at $2,079,000) as well as all ineligible categories. Total commitment by Sparklight exceeds $1,600,000.

The identity of any source other than the applicant who are responsible for such match or portion thereof – There are no other entities providing matching funds. However, the Rim Country Educational Alliance (RCEA) Separate Legal Entity (SLE), in recognizing the economic development opportunity of the proposed network, has given a long-term land lease for a site that will accommodate the precast building to house the electronics for the network at no cost. Without this generous offer, the cost of the project would increase in order to purchase land.

The nature of commitment by the Applicant or other parties to deliver match including whether such commitment is in writing and binding in all circumstances – Understood to the extent Sparklight receives the requested $1M grant commitment from the State of Arizona, Referencing Appendix A, **Project Budget Projections,** stating that Sparklight will commit to spend an additional $1,079,000 in eligible costs as well as $553,000 in ineligible costs above the requested $1M grant. Sparklight's commitment is for 62% of the entire project or over $1,600,000 in total expenditure.

E. Project Description and Timeline – Development Matters

The nature and scope of the project – This project will encompass building a PON architecture through business dense areas of Payson and Star Valley, and southward beyond Payson to service the Casino on the Tonto Apache Reservation to provide broadband with speeds from 50 Meg to 2 Gig symmetrical services. The pricing will be comparable to larger markets already launched by Sparklight including Fargo, North Dakota, Odessa, Texas, and Biloxi, Mississippi. The fiber optic network will also enable advanced data services for anchor institutions including all the large governmental, medical, educational, and financial institutions in the Payson/Star Valley area

The type of technology to be utilized – The fiber optic infrastructure will accommodate both a PON architecture to service SMB and telecommuters as well as more traditional fiber optic services for larger customers.
These services include both Dedicated Internet Access (DIA) as well as point to point which can network various locations together. The PON architecture can accommodate static Internet Protocol services (IPs) and customers can also utilize IP phones. Larger customers on dedicated services can also purchase Static IP blocks, BGP routing, and IP phone services like Session Initiation Protocol (SIP) trunks.

Type of construction to be undertaken – The Sparklight network will be composed of both aerial and underground portions. Many of our PON architecture builds require a combination of both. Aerial is preferred, but if the poles are too crowded or are in disrepair, the network will utilize more costly underground construction. Reference Appendix A for more detail on cost components. Regarding the timeline for the project, reference Appendix B for a project timeline. Sparklight is committed to beginning the project within 3 months of the award date. It is important to note, while underground construction can take place relatively quickly, aerial is dependent on obtaining permitting from the pole owners which in our experience, could take as long as 6 months.

Qualification of the vendor/contractors – The PON architecture being deployed in Payson/Star Valley is a technology that Sparklight has been deploying for several years in other markets, with a great deal of success. The equipment vendors being utilized both for electronics and fiber optic cabling, as well as other materials have been trusted suppliers for years. While the contractor for construction has not yet been selected, the RFP will be distributed to approved vendors which Sparklight has used previously who meet or exceed Sparklight's rigorous standards on quality and meeting deadlines.

Engineering analysis RBDG B – NA

Project approach RBDG B – NA

Background of the project –Sparklight sees an opportunity to provide the businesses in Star Valley and Payson with a fast and reliable broadband network. Bridging the distances, linking rural areas to metropolitan areas, is many times not commercially viable. Rural Arizona presents a significant challenge driven by the distances, routing, and hard dig requirements. It requires public (in this case state of Arizona) matching grant funds to make this project possible. Sparklight would not be able to undertake this build of the PON architecture without a substantial match from the state of Arizona. Due to the previous lack of investment in broadband facilities in this area, it has been difficult to attract businesses. Completion of this fiber network will enhance the business atmosphere of the area.

Population to be served – There are currently over 18,000 Arizona residents who will benefit from economic growth in Payson/Star Valley/and to the Tonto-Apache Tribe Reservation. They will benefit directly if their business or employer utilizes the bandwidth available. There will also be a direct benefit to residents from the opportunity for better healthcare, education, and efficiencies for governmental agencies. The population will also indirectly benefit as the economy increases from the direct impact of broadband availability. The Town of Payson has improved its water capacity and distribution to support roughly a doubling of Payson's population, APS has brought in additional main feeds and has substation planned. Broadband is lagging and limiting overall growth.

Maps – Reference Appendix C for more detail.

Numbers of households served – Initially, Sparklight's primary focus will be business customers. Serving these customers will be the major economic engine for the area. However, we will be able to serve home-based businesses and telecommuters over time as our network expands.

Number of anchor institutions served - Sparklight will be able to serve all the large governmental, medical, educational, and financial institutions in the Payson/Star Valley area. The design will incorporate a large concentration of SMB customers within proximity of key institutions. Also, in time, the network will extend beyond the original design with additional "laterals" off the designed network. Most importantly, this demonstrates Sparklight does not consider this initial build as static, but rather dynamic, the start of a larger network as we continue to build out the area.

Number of businesses served - In the initial design, there are 1,000 businesses within 1,000' of the network. As mentioned before, this network will continue to expand overtime to encompass more business connections. Realistically, based on past experiences, the number of businesses within 1,000 feet of network will grow to over 1,200 in 3 to 5 years.

F. Other Project Outcomes

This project has two primary drivers, public safety and economic development. Delivering this project will have a profound impact in both areas. The ripple effect of each will improve the standard of living for everyone in Payson. The over 18,000 men, women and children in Payson and the surrounding area are currently at risk daily due the fragile state of the limited broadband service in the area. Emergency services have failed and will fail again. With completion of this project, Sparklight's infrastructure will secure the hospital, emergency services, and provide necessary communication hubs.

Payson's economy is primarily tourism based. As Bobby Davis, Payson's former economic development specialist shared, he has had businesses decide not to set up shop in Rim Country because of the current state of broadband. *"It is an infrastructure we've got to have,"* he said, *"so you can sell your community. "*

Reference Appendix C to see that the current educational facilities (including the future University site) that will be included in the plan to receive broadband services.

Other potential benefits include:

- Integration of emergency service communications and potential expansion of coverage area. Payson could serve as a hub for a wider-area network.
- Support of the formation of corporate and municipal partnerships.
- New industries, call centers, as well as telecommuting opportunities.
- Expansion of aviation capabilities.

[redacted]