

A business plan for the proposed network: The business plan should include: details of the proposed project, including the objects and purpose of the project. Who will be served, what critical needs of the community will be met? A description of any risk factors or legal challenges that must be addressed prior to or during the project in question, such as local zoning, right of way, tribal approval, and permitting processes, and how the applicant intends to mitigate these risk factors or legal challenges. A financial analysis for the project including cash flow projections for the project for a minimum of 5 years, including an explanation of revenue assumptions and take rate. A description of the plans for long-term maintenance of the network built through the grant. Disclose any prior receipt of federally awarded grant funds for broadband deployment and provide copies of any past audits of federal awards. Community engagement demonstration including identification of the community leaders or individuals with decision making authority for the community/communities within the project area. NOTE: Projections that do not reflect positive capitalization should include a written explanation as to how a project will be maintained over the life of the facilities. For projects that involve broadband development on tribal lands, permission from and approved by tribes is required and documentation of the approval must be provided to the Commission no later than March 27, 2024.

Long-term viability of the project is a priority to the Commission. Applicants that choose to provide an additional demonstration showing its approach to extend the expected useful life of the facility and its long-term commitment to serve the area will be awarded additional points (see Scoring Reference Sheet for details). An applicant can demonstrate plans to extend expected useful life of the facility by providing specific details about the outside plant to be deployed, manufacturers projection of useful life, description of proactive maintenance practices including regular inspections, upgrades and repairs to extend useful life, and consideration of how the facility is designed to withstand environmental factors (i.e. weather conditions, soil composition, etc.). An applicant can demonstrate its long-term commitment to serve the area by providing evidence of a pre-existing commitment to the project area, community outreach efforts prior to filing the Application such as demonstrated participation in local government, townhall events or community forums, commitment to providing community benefit programs that provide discounted services for low-income households, the commitment to the establishment of a community outreach program during the construction phase and upon initiation of customer services, investing in customer support to ensure specific staff are trained in issues specific to the community and that they will address issues promptly. Scoring will be based on evaluation of the applicant's demonstration.

ALLO will deploy a 100% fiber optic network, providing symmetrical multi-gigabit fiber optic broadband services to rural homes and business in the Village of Lewellen. The proposed network will correct lack of access to the community, closing the digital divide between rural and urban areas.

The project will enable direct connections to 440 addresses in the community shown as either unserved or underserved through a Fiber-to-the-Premise (FTTP) network.

The proposed fiber network will establish and accelerate the enhancement of broadband infrastructure in the project area by providing reliable high-speed broadband service. The Village of Lewellen suffers from inadequate broadband availability. Like most rural areas,



residents and businesses within Lewellen have struggled with connectivity. Lack of access has resulted in community members being unable to access job, healthcare, and educational resources.

During the pandemic, there was a significant demand for reliable, high-speed internet as the extended business and school shutdowns resulted in employees working from home and students engaging in virtual learning. Those who didn't have high-speed connections were unable to compete everyday tasks or schoolwork. Telehealth became a critical need and a good alternative to in-person consultation with doctors, but only if the patients have internet connectivity.

The deficiency of reliable, high-speed, high-capacity internet continues to negatively affect the residents in this project area.

ALLO's fiber optic network will provide equitable access to fast and dependable internet service to residents and businesses, allowing them access to enhanced educational opportunities, work from home options, improved healthcare through telemedicine, and many more resources, all which contribute to a more vibrant and connected community.

The business approach ALLO intends to use for the Lewellen project will mirror the approach used in our other markets. The business model includes all stages of the project, from design through construction to sales, installation, and ongoing support. ALLO's process often reduces the overall cost of construction by more than 30%.

### **A Full-Service Solution**

**Design & Feasibility** – ALLO's approach provides the detailed designs that are used for construction design packages. ALLO will design the network using our playbook, auto-design programs, and available GIS information for the community and existing utilities to provide an optimized plan for fiber coverage in the project area including aerial, trench, bore, and other construction methods.

An integral part of this process includes collaboration with community officials to utilize local knowledge and expertise, including detailed knowledge of town-owned assets, construction requirements, upcoming capital projects, and permitting processes.

Utilizing this efficient process, the network construction cost will be refined with an estimated build interval. ALLO's proven design and construction management processes will be utilized in order to minimize construction and operational risk as well as reduce overall costs.

ALLO will utilize our playbook as the foundation to generate an appropriate design for the project area. As unique criteria are understood or known, including utility pole make ready, pole availability, availability of public space for certain structures, etc. additional design iterations will be run using mathematical optimization.

The GIS design will be finalized with inputs from local utility experts from local utilities and the ALLO construction team, resulting in a final comprehensive design for the defined area.

All required municipal, city, township, county, and state approvals necessary for this project to begin construction (e.g., area planning commission, railroad crossing entity, etc.) have been identified. The approvals are normal and consistent with ALLO's other communities. ALLO will work with the Village of Lewellen, Garden County, and State DOT on ROW permitting, the



Village and County on pole permitting/attachments, and the railroads on permitting crossings. ALLO will enter into a local franchise agreement.

**Construction Process** – The construction process will be managed by ALLO. Quality will be checked by the Village, County, ALLO, and others to verify that construction standards, budgets, and timelines meet expectations. Contractors and ALLO construction and splicing teams may be used in the process. The construction of a highly dependable network in a cost and time-efficient manner is the initial goal for all involved. Safety is a focus throughout the project.

**Connection to ALLO's Service Platform and Network Operations Center** – Concurrent with the construction effort, redundant connections to ALLO's service platform and Network Operations Center (NOC) will be completed. The connections will enable ALLO's NOC and service platform for the project area.

**Marketing** – ALLO will use various communication channels to reach customers, including website, direct sales, referrals, newspaper, radio, television, social media, and sponsorships. These marketing channels have been used successfully in our existing Fiber-to-the-Premise (FTTP) communities.

During the construction phase, our marketing strategy includes frequent communication to residents and businesses informing customers of the construction process, our core services, and the value of gigabit service. A combination of door-to-door community engagement representatives, direct mail, and signage is used during this phase.

**Service Launch** – Approximately 4-6 months after the start of construction, customers located in the initial service areas will be connected to the network. ALLO will provide a full suite of products and services using our existing service model.

**Customer Connections** – Connections from the easement to the home or building will be powered using a common GPON solution. A homogenous network ensures a cost-efficient design with network dependability and security. ALLO utilizes Calix GPON solution at the central office through the Wi-Fi6 router.

Connectivity for large businesses and large governmental entities will be provided with individualized solutions (such as Calix, Adtran, and Cisco), including active Ethernet connections and fully redundant paths and entrances, when required. The standard network design will accommodate both GPON and active solutions.

#### **Network Operations (NOC) / Customer Service**

ALLO operates all of our networks with the same professionalism by utilizing consistent technology, equipment, processes, and systems. ALLO will provide incremental personnel, systems, etc. to ensure a successfully operated network.

ALLO's customer service and support are the cornerstones of the customer experience. Proven processes and service expectations have resulted in ALLO's high customer acquisition and retention record.

ALLO will utilize our proven products and service model to support customers. With an experienced team of 1,500+ customer support personnel, ALLO's solution provides customer service excellence and is extremely scalable. Technicians, customer service representatives, sales engineers, and sales personnel hired and located in the area will be supported by ALLO's



24/7/365 NOC and existing customer service representatives to ensure the network is performing for all customers.

Customers can contact customer service via phone, email, text, social media, or our app and communicate with live representatives located in Nebraska. We pride ourselves on our consistent customer service process which includes very short wait times, minimal transfers, and a goal of issue resolution on the first call.

ALLO's Business Internet comes with a 24x7 local support team that is dedicated to our business customers. This allows ALLO to provide best-in-class commercial grade service and gives our partners a dependable source of information exactly when they need it.

# **Network Management**

ALLO has proven processes for managing the local network, including evaluating data to verify bandwidth sufficiency, evaluating alarms, monitoring overall performance, and escalating issues.

ALLO maintains sparing protocols, disaster plans and recovery testing, appropriate employee staffing, and other business processes to ensure uninterrupted service. ALLO's network management provides 24/7/365 service and support.

The network will be managed and operated using traditional service and support methods, which has been standard at ALLO for more than a decade. ALLO will control upgrades, releases, and other impacts to the overall network.

ALLO maintains the appropriate systems for network deployment and maintenance to operate a 24/7/365 network and support including 99.999% service up-time. The programs utilized are substantial and appropriate for ALLO's network.

#### **Financial Analysis**

ALLO has proven financial results. While the markets applied for under this program require financial support, most financial items are consistent even on a unit basis with ALLO's other markets. The financial results, when combined with the larger markets in the region and expected population growth, will result in a financially stable project.

In general, costs to construct and connect are considerably higher than in ALLO's existing markets. However, the support in this program mitigates those costs.

Additionally, the proximity of this market to ALLO's other markets provides operational efficiencies as ALLO's service, product, billing, connectivity and more can be provided on an incremental basis. With more than 155,000 lines (136,500 in Nebraska), ALLO's scale also provides operational efficiencies.

See the financial estimates in **Attachments H-1 and H-2**. Revenue assumptions are based on a 75% take rate when the market matures. With the limited service offerings currently available for residents and businesses in Lewellen, ALLO is confident that we will be able to achieve at or above 75% market share.

### **Federally Awarded Grants for Broadband Deployment**

In 2022, Arizona Commerce Authority (ACA), the state's leading economic development organization, awarded federal grants to ALLO through the Arizona Broadband Development



Grant (ABDG) Program to expand high-speed broadband to the state's unserved or underserved areas. Funding is being made available by the ARPA Coronavirus Capital Projects Funds allocated to the State of Arizona by the U.S. Department of Treasury.

ALLO received federal funding through ACA for two projects:

- To supplement ALLO's build of a FTTP network in San Luis.
- To provide middle mile fiber in Mohave County for redundancy for the cities of Lake Havasu City and Kingman.

ALLO was a subrecipient of a grant to design, build, and operate Yuma County's Middle Mile network; however, since the County owns the network, ALLO is not the grant recipient.

ALLO also received ARPA funds through Mohave County to build unserved and underserved areas in the communities of Kingman and Butler.

## **Long-Term Viability**

ALLO provides broadband service through an all FTTP gigabit network. ALLO's pure fiber-optic service connects directly to homes or businesses. ALLO utilizes proven methods to ensure long-term success including burying passings in conduit, protected aerial fiber, and techniques designed to support a 30+ year project.

**Network Design** - We design the fiber paths to provide fiber redundancy for the backbone and distribution network. ALLO's central offices are designed with complete redundancy between offices with two different carrier interconnection points ensuring a cable cut or carrier outage does not isolate the community or region in the community.

Each ALLO lit market has diverse connectivity to two of our seven backbone/peering locations. This provides each ALLO market both path and site redundancy, ensuring a cable cut or upstream carrier facility outage does not isolate any market or region. These backbone locations are leased carrier grade facilities where ALLO has a point of presence, and peers with numerous carriers and peers. We have direct peering agreements with most of the large content providers, resulting in approximately 15% of our customer traffic being sent to a internet drain.

Additionally, paths to the regional network will have diverse routes. ALLO's networks are fiber-rich GPON with available active fibers for future applications. The upgradability of a PON network is shown by looking at the 3 generations of PON - GPON (2.5G down/1.25G up), XGS-PON (10G down/10G up) and future 50G PON standards. All three generations of PON are able to operate over the same strand of fiber, at the same time.

ALLO fiber networks are designed to be a perpetual business with appropriate upgrades for the future. Existing networks have been operational for more than 20 years and are expected to be utilized for 30+ additional years.

Fiber benefits from a long useful life of 40+ years from installation. Fiber is more resilient than copper to severe weather events such as flooding and requires fewer pieces of equipment that can fail.

Fiber that has reached the end of its useful life, an occurrence which has yet to happen in the last 20 years given the relative naissance of the technology, could be removed from its



conduits, after which strand and new fiber could be installed in its place in a very efficient manner.

ALLO's design includes a central office with electronics in a secure facility with redundant power solutions, connectivity, and telco-grade dependability. The central office powers the fiber, and the only other electronics exist at customer or carrier sites.

From a production (customer) network perspective, ALLO maintains over \$1M in annual maintenance contracts with its various hardware vendors. This includes every piece of hardware/software from our core network elements down to ALLO's Customer Premise Equipment (CPE).

In addition to hardware "sparing" in our markets, each of ALLO's agreements also provides for an RMA process, whereby ALLO can quickly receive replacement hardware in the event that hardware is malfunctioning. Additionally, ALLO is constantly evaluating new technologies, including updated, higher performing hardware. This is all done at no expense to our customers or municipal partners.

**Sparing/Maintenance Contracts** - ALLO maintains support contracts with all our hardware and software vendors, totaling over \$2M annually. ALLO inventories 3% of deployed hardware as shelf spares in each operational region, with the goal of a 4-hour MTTR in the event of a hardware failure. Additionally, each of ALLO's agreements also provides an RMA process, whereby ALLO can quickly receive replacement hardware direct from each vendor to backfill our shelf spares inventory.

**Equipment Life** - We design the electronics throughout our network to have a 10–12-year lifespan. Throughout this 10–12-year lifespan, we often times perform incremental linecard upgrades to expand network capacity as well as add new features to maintain our cutting-edge service offerings. We design our networks to be below 40% peak utilization, so in the event of a cable cut or hardware failure, all traffic can converge to a single path and our customers do not experience any congestion or service-related issues.

**Proactive Maintenance** - ALLO does regular drive-throughs to inspect our plant and tickets are opened for any preventative maintenance that is required. Central offices and field electronics are inspected at regular, industry standard intervals with preventative maintenance and testing of backup systems.

## **Long-Term Commitment / Community Engagement**

One of ALLO's four core values is to be "Local". To support this core value, community engagement is an important component of the ALLO fiber buildout process.

ALLO emailed a community outreach feedback letter to Lewellen Clerk Ruth Radke on January 10, 2024, and copied in the Nebraska Public Service Commission. See **Attachment G-1**.

With ALLO's existing presence in nearby Ogallala, ALLO personnel will be available during the early stages of the project.

ALLO creates positive change in the communities we serve. One of our greatest joys is witnessing customers finding new and exciting ways to utilize technology and move their communities forward.



ALLO leads in the education and awareness of a fiber network which improves utilization and affordability of technology. We work with governmental programs, local non-profits, national science groups, and other organizations to eliminate the digital divide. Education, healthcare, government, and other areas will also benefit from the fiber capabilities.

ALLO will begin communications with the community immediately upon the launch of the project. ALLO's community outreach would include media discussions, town hall meetings, HOA meetings, and other forums to talk about the future network and the ultimate value it brings to residents and businesses. The plan would begin about 60 days before construction begins, continue through construction completion, and is ongoing throughout the life of the network.

Approximately 60-90 days before construction completion of a serving area, ALLO will begin sales/marketing efforts including door-to-door, social media, mailers, internet, local newspaper, and regional sales office to properly communicate the availability of the project.

We will be an ongoing visible part of the community through active participation with the chamber, civic organizations, and technology-focused organizations. Building a gigabit infrastructure is an important accomplishment; however, operating and utilizing the technology to the fullest extent is more impactful through adoption, education, and collaboration.

ALLO participates in numerous educational events in each of our communities, interacting with residents and business leaders and demonstrating the capabilities of our all-fiber network. Events include community forums, trade shows, innovation and broadband summits, open houses, exhibitions, and business showcases, as well as entertainment avenues such as concert series, sporting event tailgates, and many others.

As mentioned in other attachments, ALLO's customer service and support are the cornerstones of the customer experience. ALLO will utilize our proven service model to support customers in the project area. With an experienced team of 1,500+ customer support personnel, ALLO's solution provides customer service excellence. Technicians, customer service representatives, sales engineers, and sales personnel in the area will be supported by ALLO's 24/7/365 Network Operations Center and existing customer service representatives to ensure the network is performing for all customers.

As new markets are added to the ALLO footprint, customer service representatives are trained to handle the specific needs of each community. Customers can contact customer service with questions or to report problems via phone, email, text, social media, or our app and communicate with live representatives located in Nebraska. We pride ourselves on our consistent customer service process which includes short wait times, minimal transfers, and a goal of issue resolution on the first call.

As detailed in Attachment J, ALLO participates in the Affordable Connectivity Program. Program eligibility information is communicated to residents through the community outreach events mentioned above, and well as via our website and social media.