Project Narrative

1. Project Description and Timeline

Nature of the improvements Valley Connections, LLC (VALLEY), will build out a fiber-optic network, enabling VALLEY to offer Internet services at reasonable costs to underserved beneficiaries within a vital section of Census Tract 04003000201 (see attached *Proposed Project Service Area Map*). This unincorporated residential community is in north central Cochise County, Arizona, immediately west of Willcox (see attached *Regional Location of Willcox, Arizona Map)*. The service area encompasses Interstate 10 to the Cochise County Airport, and the intersection of Marguerite and Taylor Roads south to Interstate 10. VALLEY's **Fiber Investment for West Willcox Rural Community Project** will accelerate local broadband infrastructure by enhancing the speed, redundancy, and reach of high-speed Internet for consumers, strengthening their capacity and competitiveness for economic growth – thereby improving economic conditions and quality of life in rural Cochise County.

How proposed project addresses the broadband needs of the area that it serves Broadband infrastructure improvements are desperately needed in this underserved community, given that services at minimum speeds of 25/3Mbps are not widely available. 20.80% of project area households have no Internet access, and 8.3% of households have no computer, smartphone, or tablet. The average Ookla Median Download Speed in the project area is 14.39Mbps; the average Ookla Median Upload Speed in the project area is 5.8Mbps (National Telecommunications and Information Administration, Indicators of Broadband Need Map, 11/15/2021). Since the average download speed in Arizona is 66.1Mbps, the project area is 78.2% slower (Broadbandnow.com, 11/22/2021).

The project area is adjacent to the 4,057-person, high-poverty area of Willcox, Arizona, where 23.30% of households have incomes below the poverty level. 31.80 % of households also do not have Internet access, and 19.60% lack computers, smartphones, or tablets. The average Ookla Median Download Speed is 48.19Mbps, while the average Ookla Median Upload is 10.57Mbps. Comparatively, Cochise County, located in the far southeastern corner of Arizona (bordering New Mexico to the east, Mexico to the south, and an array of other Arizona counties to the west and north), has 125,922 residents. 17.40 % of its households do not have Internet access, and 11.70% lack computers, smartphones, or tablets. The average Ookla Median Download Speed is 31.18Mbps, with the average Ookla Median Upload at 7.55Mbps; the average Measurement Lab Speed Test has a median of 32.26/4.52Mbps, and the Microsoft Percentage of Downloads Completed Over 25Mbps or Higher is 56.4% (National Telecommunications and Information Administration, Indicators of Broadband Need Map, 11/15/2021).

Many rural residents near Willcox will have access to fiber Internet for the first time. This project is welcomed by rural residents, business owners, students, and other community members who are increasingly reliant upon technology in their daily lives. Inadequate broadband service marginalizes rural residents, leaving them struggling to compete in the digital world. Our project area has a serious lack of capacity due to reliance on expensive satellite, unreliable wireless links, or point to multi-point wireless networks. None can deliver the reliability, bandwidth, and speed necessary for minimum acceptable download/upload speeds of 100/25Mbps, let alone support download/upload speeds of 100/100Mbps.

VALLEY will deploy an affordable fiber-based broadband service with speeds of up to 1Gbps. Our project helps to close the digital divide in the rural area adjacent to Willcox by providing reliable high-quality Internet access – thereby enhancing opportunities for education, telemedicine, and connection to broader society. We propose leveraging our existing fiber network and extending the network by building approximately 46.0 miles of new buried fiber, in order to connect this underserved residential community west of Willcox.

Number of community anchor institutions (CAIs) served 2: **Cochise County Airport** (see attached *Letter of Support*) and **Quail Park** owned by the City of Willcox (see attached Letter of Support)

Number of households served 513 (this number was derived by counting mapped addresses within the project area and represents 38% of the 1,358 homes in Census Tract 04003000201 per National Telecommunications and Information Administration, Indicators of Broadband Need Map, 11/15/2021)

Number of businesses served 5 (though this could be much higher, as an indeterminable number of small businesses operate from homes): **Travel Advantage Travel Center**, **Ark Mobile Veterinary Service, Paws N Polish**, **Cookshack Pistachios** (see attached *Letter of* Support), and **C & L Pumps, LLC**

Total population served 1,464 (3,852 persons reside in Census Tract 04003000201 – National Telecommunications and Information Administration, Indicators of Broadband Need Map, 11/15/2021; therefore, we used the same 38% that applied to the number of households to estimate this number)

Anticipated economic development benefit achieved by construction of such improvements This project directly supports the **Cochise County Board of Supervisors Strategic Work Plan 2021–2024**, specifically *"Priority 1: Economic Development Countywide – Enhance Broadband Capabilities in Rural Areas."* The County (see attached *Letter of Support*) aims to expand reliable high-speed broadband Internet access in communities like Willcox. The pandemic has underscored the need for essential access – especially for education, commerce, and healthcare. Increasing access to high-speed Internet translates to greater opportunities for residents to obtain critical telemedicine, higher education, and remote work – all of which greatly improve quality of life .

Furthermore, it bolsters the **SouthEastern Arizona Governments Organization's** (see attached *Letter of Support*) mission to enhance economic and social progress for communities in a four-county region, toward a goal of expanding reliable high-speed broadband Internet access across rural Arizona communities. Our project is also congruent with the following *State of Arizona Strategic Broadband Goals*, as delineated in the **Arizona Statewide Broadband Strategic Plan** (February 2018):

- *Goal 1: Broadband is accessible and affordable*
- *Goal 3: Existing broadband infrastructure is identified, leveraged, and expanded*
- *Goal 5: Citizens understand the impact of broadband and promote adoption*
- *Goal 6: Policies are implemented to incentivize provisioning of and/or reducing barriers to broadband*

VALLEY is not technically part of the Cross-Border Connected Cities Initiative, but VALLEY's parent company, Valley Telephone, has service to ports of entry in New Mexico. While we are not yet serving Arizona ports of entry, we work with United States Customs and Border Protection and related entities in southern Arizona – particularly in Douglas, Elfrida, Tombstone, and Willcox. Douglas is working toward a "Two-Port Solution" that would modernize the existing port, while creating a second port exclusively for commercial traffic; if this project moves forward, VALLEY would seek to become the port's preferred provider.

Reliable, affordable high-speed Internet is a game-changer for small rural communities. Our critical Cochise County Airport (one of two CAIs located within the proposed project footprint) will benefit immensely by having access to increased broadband speeds. Access to high-speed Internet would empower them to serve local residents and industries at a much higher level. Cochise County Airport serves a mixture of single and multi-engine piston aircraft, along with turboprop, turbojet, and helicopter aircraft; this fleet performs aeronautical activities pertaining to recreational transport, business transport, agriculture, emergency medical services (like medevacs), aerial firefighting, and even military operations. It is also used by students enrolled in Flight Fundamentals Instruction of Willcox and Cochise College's Flight Training Program (boasting one of the largest flight training programs in southeastern Arizona). Current regional Internet technology is wireless, inconsistent, and lagging. Compliance with Federal Aviation Administration regulations to ensure safety necessitate quality communication, such as transfer of reporting and flight plan information. This project assures fiber Internet services that facilitate more efficient reporting, thereby enhancing the airport's ability to better serve its mission, as well as that of Cochise County.

Similarly, the City of Willcox (see attached *Letter of Support*) will be better equipped to support residents' needs, including hosting multiple large-scale events at Quail Park (another CAI located within project area) with new fiber Internet capabilities. Small businesses that were once limited to homes and tiny storefronts can expand their reach, serving a broader customer base. The ability to attract and retain residents and businesses requires adequate broadband as a foundation. VALLEY therefore plays an important economic development role, since it helps the City to provide essential services and jobs that generate sales tax. As Willcox grows, many areas being annexed by the City do not have fiber. Simply connecting housing to Fiber Internet services increases the value on median-priced homes by at least $5,437 (Molnar, G., Savage, S., & Sicker, D. *Reevaluating the Broadband Bonus: Evidence from Neighborhood Access to Fiber and United States Housing Prices*. University of Colorado at Boulder. 2015). Appealing housing options for the local workforce in turn spur economic growth.

Residents increasingly rely upon online services, yet many are relegated to inadequate 10Mbps connection; this is the case for some small businesses operated from homes. Imagine migrating business functions (banking, ordering supplies, and so on) to online tasks and regularly encountering inconsistent Internet connectivity. We are trying to ease this strain for those who are working so hard to keep our community, and economy, vital.

Moreover, connectivity has a tremendous positive impact on students and school staff. Willcox Unified School District #13 (see attached *Letter of Support*) serves just over 1,000 regional students. As with the rest of the nation/world, COVID-19 had devastating impacts on their learning environment. They discovered that quality Internet services played a dramatic role, both in attendance and absorption of materials by students. Students rely upon Internet daily, to do homework and access related resources (regardless of whether instruction is being done virtually or

in-person). Fiber Internet expansion translates to access to resources for those who need it most – our future leaders.

Overall, enhanced connectivity for underserved persons, through VALLEY's *Fiber Investment for West Willcox Rural Community Project*, will support and enhance economic development, community resiliency, educational, healthcare, and public safety advancements. The project's return on investment is anticipated to be incredibly impactful for those living West of Willcox, including at least five small businesses and two local CAIs.

Total miles of fiber to be installed 46.0 miles – The proposed backbone infrastructure is comprised of approximately 1.75 miles of newly constructed backbone fiber, while utilizing 2.0 miles of VALLEY's existing backbone fiber infrastructure; proposed last-mile infrastructure entails constructing approximately 44.25 miles of new last-mile fiber (while the entire census track is 332 square miles, this project addresses eight square miles).

Location of new fiber Underground

Stated commitment to operate and maintain the network for a minimum of five years upon completion of the improvements Once construction has commenced, VALLEY will implement a maintenance plan. All facilities aspects undergo continuous inspections and are routinely monitored and evaluated to ensure optimal performance. Monitoring includes assessments of electronics, data collection and deficiency tracking. As a local Internet provider already committed to serving Cochise County residents and businesses, VALLEY is committed to constructing, operating, and maintaining the proposed fiber optic network for a term of at least five years beyond project completion.

Party or parties that will perform the infrastructure construction Historical data was used to price construction costs, as VALLEY has recently constructed fiber projects in some of its other service territories using the underground method. VALLEY will utilize its **Operations Manager** (see attached *Heath Bowen Resume*), in addition to bidding out the project and utilizing a well-established **Telecom Plant Construction Contractor** and **Contracted Telecom Engineering Firm**, all of whom would specialize in fiber optics for the project. VALLEY also will ensure the contractors and any subcontractors and vendors are licensed and bonded in accordance with Arizona laws and have sufficient experience designing and constructing fiber networks, and that all state-mandated procurement requirements are followed. VALLEY is committed to providing quality products and services and will oversee all aspects of the project throughout construction. VALLEY's **Project Manager** (see attached *Kristi Lee Resume*) will verify that all facets of work meet quality control guidelines, by working closely with the contractors responsible for construction. Lastly, VALLEY's Chief Executive Officer (see attached *Steven Metts Resume*) and Chief Financial Officer (see attached *Troy Judd Resume*) will oversee project administrative functions, ensuring the project is carried out as intended – on time, within budget, and following all required regulations.

Intended uses of Arizona Broadband Development Grant (ABDG) Rural funds in respect to the construction or planning ABDG Rural funds will be used for engineering plans, GPON electronics, and to construct the remainder of the proposed fiber optic network, including backbone and subscriber drops.

Details about how VALLEY will provide broadband service to unserved or underserved areas by actively providing speeds of 100/100 to the intended beneficiaries of the project, increase existing speeds to 100/100 to the intended beneficiaries of the project at costs that are lower or substantially equal to urban areas, and provide middle-mile redundancy to the region VALLEY's proposed design will deploy new fiber to deliver speeds of up to 1Gbps over the fiber network within two years (of project start). The project design is a 100% fiber optic network; therefore, the design and performance of this system reflects advantages available with state-of-the-art, carrier-grade advanced technologies operating at multi-gigabit rates. Unlike optical fiber networks typically designed by other area providers, VALLEY's system network design makes fiber available to every customer location, offering carrier-grade service at speeds of up to 400Gbps upon request. The result is a best-in-class, optical fiber network that ensures residents within the area west of Willcox have access to broadband services of *at least* 100/25Mbps.

VALLEY's broadband solution consists of underground placement of new conduit, with optical fiber cables placed inside the conduit. Two new optical fiber networks will be constructed: a Core Network and an Access Network (see attached *Network Diagram*). The Core and Access Networks are configured and controlled through Software Defined Network capabilities, which improve network availability, operational efficiencies, and reduce total cost of ownership. While the active Core and Access Network components are currently configured for 10/1Gbps traffic rates, this capacity exists only within the active electronic components, rather than the fiber infrastructure itself. The fiber has virtually limitless bandwidth, and, with future replacement of the active network components, readily supports higher traffic rates including 40Gbps and 100Gbps.

Core Network – The Core Network facilities will be a 144-count optical fiber cable, extended from VALLEY's existing fiber infrastructure in Willcox, terminating at a new communications cabinet to feed the project area (see attached *System Design Diagram*).

The full profile of MEF 3.0 Carrier Ethernet services (Access EPL, Access EVPL, EP-LAN, EVP-LAN, EP-Line, EVP-Line) and MPLS-TP transport services (with future support for the newly-defined segment routing) will be available from the Core Network from the start of service delivery, while advanced optical capability such as Wave Division, Multiplexing (WDM), Reconfigurable Optical Add-Drop Multiplexing (ROADM), and Optical Transport Networking (OTN) can be added to the same Core Network platforms to support additional revenue streams in the future.

Access Network – The Access Network will consist of distributed, passive optical networking architectures operating at the minimum data rate of 10Gbps, symmetrically. The access network is comprised of three network tiers:

- **Tier-1** holds the drop facilities which extend from an area drop closure to the customer premises, terminating at an outside interconnection point. The drop closure can support up to 6 drops to customer premises and are placed underground. All drop facilities contain two optical fibers: one active and one in reserve. Where warranted, drop cables containing up to 12 fibers can be economically provided as required.
- **Tier-2** comprises the distribution facilities that connect Fiber Distribution Hubs (FDHs) to the drop closures. These hubs distribute the optical power of the Optical Line Terminal (OLT) platforms, as received by feeder cables, to the drop closures.
- **Tier-3** contains the outside plant facilities that interconnect the OLT platform housed within the CO, to the Tier-2 FDHs. OLT platforms that provide access capability to every customer premise are placed as needed based upon network design.

Fiber to the Home/Business (FTTH/B) – VALLEY proposes to deploy Fiber-to-the-Home (FTTH) or Fiber-to-the-Business (FTTB). The FTTH/B distribution areas will utilize XGS-PON technology (10Gbps/10Gbps symmetrical service) and will also support NG-PON2 (40Gbps/40Gbps symmetrical service over Time and Wavelength Division Multiplexing (TWDM) with nothing more than a change of the optics in the OLT port. With all passive optical networks, the PON data rate is allocated across a number of users who efficiently share that bandwidth. An XGS-PON network can support up to 128 subscribers. However, in the interest of future growth in demand, VALLEY has used a 1:32 OLT/ONT split in the access network design.

The proposed project will connect VALLEY's existing fiber in Willcox, Arizona (VALLEY is the *only* provider offering fiber within an hour's drive of Willcox) to underserved areas of rural Cochise County. The availability of fiber in the area will improve redundancy and reliability for the county. The proposed project will enable residents and businesses of Cochise County to receive affordable broadband services. VALLEY's rates are as follows:

Residents	**Businesses**
100Mbps/25Mbps at [redacted]	100Mbps/50Mbps at [redacted]
300Mbps/50Mbps at [redacted]	300Mbps/100Mbps at [redacted]
500Mbps/75Mbps at [redacted]	500Mbps/150Mbps at [redacted]
1Gbps/100Mbps at [redacted]	1Gbps/200Mbps at [redacted]

These rates are comparable or lower than other regional broadband service providers, primarily because VALLEY offers Internet access with unlimited data usage. Additionally, VALLEY offers free installation and does not require customers to commit to annual contracts. Moreover, toward ensuring digital inclusion, VALLEY voluntarily participates in federal programs that provide low-income subsidies to families, such as the *National Affordable Connectivity Program* (ACP) that was implemented in January 2022 by the Federal Communications Commission; we provide [redacted] towards broadband service for qualifying eligible households. Prior to the ACP, VALLEY participated in the *Emergency Broadband Benefit Program* (which expired in December 2021). VALLEY also created the *Discounted Access for Student Homework Program* in-house, intended to provide data services for distance learning. Eligible households who qualify for the program are not committed to contracts and receive free equipment and installation. The service is provided for a [redacted]; the package provides up to 100Mbps, or the fastest speed available in the serving area. This Internet service also complies with the Children's Internet Protection Act. Eligibility is open to families with K-12 children who are enrolled in one of the following government programs: Supplemental Nutrition Assistance, Supplemental Security Income, Federal Public Housing Assistance, or through Annual Income Verification. VALLEY is currently developing a metered low-income plan that will be ready for launch in the first quarter of 2022. The anticipated price point for the [redacted].

<u>Timeline for completion of infrastructure improvements</u> Our timeline for completion of infrastructure improvements is contingent upon being notified of a grant award by early March 2022 and having the state contract executed within 60 days (by April 30th, 2022):

[redacted]

Amount of the cash "match" contribution to be provided Total project costs are estimated to be [redacted]. VALLEY commits to a [redacted] of total qualifying ABDG project costs, totaling [redacted], which would be used to assist with the required build of the new backbone infrastructure.

Timing of match This cash match will be provided during the first year of the project, while securing project materials.

Intended use(s) of match VALLEY's cash match will be used to assist with the required build of the new backbone infrastructure. In addition to the [redacted], VALLEY commits to utilizing existing backbone infrastructure to enhance the project (though not officially counted as match, the value of this existing backbone infrastructure is valued at [redacted]).

Sources other than VALLEY who are responsible for such match or portions thereof No sources other than VALLEY are contributing federal or other match to this project.

Nature of the commitment by VALLEY or other parties to deliver the match, including whether such commitment is in writing and binding in all circumstances The cash match is committed in writing and binding (see attached *Board Resolution*).

Circumstances as to why, in the absence of ABDG Rural funding, the proposed project would not proceed within the same time frame or would not otherwise be as effective in advancing the objectives of the program This community was selected for the project because it is cost-prohibitive for carriers to bring high-speed broadband to the area due to the high-cost, low-population density in this community. The *Fiber Investment for West Willcox Rural Community Project* would not occur without an ABDG Rural grant award, nor would VALLEY be as effective in advancing Arizona Commerce Authority (ACA) and State of Arizona Strategic Broadband Goals.

2. Project Description and Timeline – Development

Nature and scope of project In the near future, VALLEY would like to expand the backbone directly north of the proposed project area in Census Tract 04003000201 (see attached *Proposed Project Service Area Map for Phase II*), eventually serving the entire census tract, while utilizing existing electronics from this project to provide FTTH/B services to residential and business customers. While many details remain unknown, we imagine our timeline will look much like the one described for the initial project (see attached *Gantt Chart*).

Type of technology to be utilized FTTH/B

Type of construction to be undertaken (aerial, underground, or both?) Underground

Qualifications of the vendors/contractors VALLEY will utilize its **Operations Manager**, in addition to bidding out the project and utilizing a well-established **Telecom Plant Construction Contractor** and **Contracted Telecom Engineering Firm**, all of whom would specialize in fiber optics for the project.

Engineering analysis Engineering analysis will be completed by VALLEY staff once the project is determined viable (community impact and available funding will influence this).

Project approach This area north of the original proposed project has ample residents and businesses and is therefore a prime area for broadband expansion once the initial project is completed. Given VALLEY's existing fiber infrastructure and electronics that will be placed through this project, service to the area north of this project, encompassing 7.2 square miles, could be addressed in a Phase II project.

Background of project For Cochise County and local communities to successfully execute plans to achieve economic goals, high-speed broadband must be available and affordable to support business development, health care systems, and higher education areawide. Future business development is limited without necessary infrastructure, including high-speed broadband. The proposed fiber infrastructure is future-proof and has the capacity to add residences and businesses to its network.

Population to be served 1,079 (3,852 persons reside in Census Tract 04003000201 – National Telecommunications and Information Administration, Indicators of Broadband Need Map, 11/15/2021; 28% of households are in the Census Tract, so we applied that same percentage here)

Number of households served 380 (this number was derived by counting mapped addresses within the project area and represents 28% of the 1,358 homes in Census Tract 04003000201 per National Telecommunications and Information Administration, Indicators of Broadband Need Map, 11/15/2021)

Number of anchor institutions served 0

Number of businesses served 9 (this could be much higher, as many small businesses operate from homes; the ones we know about are listed here): **Lee's Pecan Farm**, **Willcox Meat Packing Plant**,

GM Propane, **Bill's Pump Service**, **Salvatore Vineyards**, **Passion Cellars**, **Kuhn Farms**, **Quail Crossing**, and **Willcox Livestock Auction** (owners partially work from home, which is located in this area)

Ways in which the project will improve redundancy and reliability, if any It will connect VALLEY's existing fiber in Willcox, Arizona to additional underserved areas of rural Cochise County. The availability of fiber in the area will improve redundancy and reliability for the county. The proposed project will enable residents and businesses of Cochise County to receive affordable broadband services.

3. Other Project Outcomes

Community resiliency This project addresses a critical need that resulted from (or was made apparent/exacerbated by) the COVID-19 public health crisis. Like other rural Arizona counties, COVID-19 has severely impacted Cochise County. 12% of the population (or one in eight persons) is testing positive, leading to 22,978 cases and 195 deaths (Arizona Department of Health Services, 1/16/2022). There has been a 394% increase in cases over the first two weeks in January 2022 (*Coronavirus Map and Cases*, New York Times, accessed on 1/14/2022). The impact of COVID on this rural community has been significant. Schools, public safety, and health care institutions are overwhelmed. In-demand telemedicine services are limited because of the lack of adequate and reliable broadband. Small businesses have also been adversely affected by the pandemic; without reliable and affordable broadband, these businesses have few options. COVID has shown communities that we can work remotely and be productive; however, the ability to thrive increasingly relies upon broadband.

Organizational finesse VALLEY has 16 years of operating history in the telecommunications industry. It initially operated a Competitive Local Exchange Carrier that began providing fiber-based services to both residential and business customers in Willcox and Safford, Arizona, markets in 2005. VALLEY has invested their own fiber infrastructure in both markets and does not rely upon purchasing or reselling facilities from incumbent local exchange carriers. In addition to providing competitive local exchange services in Willcox and Safford, VALLEY provides Ethernet Transport, Dedicated Internet Transport, and other progressive telecommunications services to rural markets in southeastern Arizona and southwestern New Mexico.

VALLEY is a wholly owned subsidiary of Valley Telephone Cooperative, Inc., a rural incumbent local exchange carrier that was founded in 1962 to provide telephone service in the most remote areas of southeastern Arizona and southwestern New Mexico. In addition to the fiber infrastructure within the communities of Willcox and Safford, the VALLEY organization has its own fiber network that spans between Tucson, Arizona and El Paso, Texas, following along the southern borders of Arizona and New Mexico. This fiber network connects all of VALLEY's serving areas and allows for diversification of traffic if one side of the network is compromised. As a telecommunications provider, VALLEY's practices are guided by the National Electrical Code, the National Electrical Safety Code, and all other applicable federal, state, or municipal laws, codes, regulations, and ordinances in place at the time of construction, to maintain compliance with industry standards.

VALLEY's current customers include several large back haul providers, medical professionals using telemedicine, schools, libraries, and government agencies. VALLEY's headquarters is located in Willcox, Arizona; its staff live, work, and have a vested interest in the communities we serve.

Technical and managerial capabilities of the project management team VALLEY's impressive core team (with a combined 145 years of service in the telecommunications industry) is comprised of:

Steven Metts – Chief Executive Officer Steven has been with VALLEY for 16 years. Prior to Valley, he was employed by telecommunications consulting firms and other telecommunications companies. His tenure in the telecommunications industry is 35 years.
Kristi Lee – Chief Operations Officer Kristi has worked for VALLEY her entire career and will celebrate 30 years of service with the organization in April 2022. Kristi's experience in the telecommunications industry spans customer service, billing, and accounting. She specializes in project management and currently oversees all outside plant departments.
Troy Judd, BBA – Chief Financial Officer Troy has been employed by VALLEY for 21 years and oversees all financial aspects, as well as customer service and marketing. Prior to joining VALLEY, Troy worked in the telecommunications division of the auditing firm Bolinger, Segars, and Gilbert & Moss.
Heath Bowen – Operations Manager Heath has been with VALLEY for 31 years. He performs and oversees design and engineering services on FTTH, DSL Broadband Data, TDM Optical Transport, and fiber duct and fixed wireless telecommunication facilities. He is also responsible for setup and maintenance of all hardware and software of VALLEY's Broadband Network, L2/L3, Transport, soft switch and general network services such as DHCP, DNS, FTP, Email, Firewalls, circuit provisioning, and SNP & Syslog.

Compliance with Administrative Requirements VALLEY will not procure, contract for, or otherwise incur costs prior to entering into an Agreement with ACA; eligible costs will be incurred only during the time frame allowed for project completion. VALLEY will adhere to ACA's Uniform Instructions for Solicitations throughout this project. For two years from the execution of our Agreement, VALLEY will provide quarterly activity reports to ACA, sharing updates on our performance measures. These reports will be submitted within 20 calendar days from the close of each calendar quarter, using ACA's forms. We will track the following project outcomes: (a) overall summary of the status of the project; (b) technology used to extend middle mile or last mile service, including CAIs and residences; (c) construction progress made, including costs expended to-date on the project; (d) current timeline addressing work remaining to complete the project in Gannt chart format; (e) name of construction contractors with copies of pricing and signature pages of contracts, if not provided in previous statements; (f) breakdown showing number of miles of fiber or coax deployed; (g) number of communities and corresponding population connected and capable of receiving reasonably-affordable broadband; (h) number of households served; (i) number of businesses served; (j) number of CAIs served; and (k) other benefits resulting from the project to-date. Reimbursement requests will also be submitted quarterly, in conjunction with activity reporting (also using ACA-provided forms, including copies of invoices paid and evidence of payment). Contractor Disclosure Forms will be provided at the time VALLEY enters into contracts with vendors; copies of vendor contracts for approved project costs will also be submitted. Also, for three years after project completion, we will submit an annual outcome report including information similar to that which will be provided in our quarterly progress reports. Lastly, VALLEY will facilitate ACA site visits during project construction, after project completion, or anytime – thereby providing full site access.