Frontier CASF Broadband Infrastructure Grant Application – Piercy/Leggett/Laytonville Item #1 - Project Summary

Applicant: Frontier California Inc. (U-1002-C)

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Project Title: Piercy/Leggett/Laytonville FTTP Project

Location: Piercy, Leggett and Laytonville/Mendocino County

Type: Middle-Mile / Last Mile

Grant Request: \$7,797,273 (100% Funding Requested)

PROJECT SUMMARY

Frontier California (U-1002-C) (Frontier) is applying for a \$7,797,273 grant from the California Advanced Services Fund (CASF) Broadband Infrastructure Grant Account to deploy middle mile and last mile fiber to the premises (FTTP) facilities that will provide HSI (HSI) to 805 unserved CASF-eligible households in the regions of Piercy, Leggett and Laytonville in Mendocino County. Frontier refers to the collective areas of this proposal as the Piercy/Leggett/Laytonville FTTP Project (Project). Frontier is requesting that the California Public Utilities Commission (Commission) grant full funding for this Project in the amount of \$7,797,273.

The Project would provide for middle-mile and last mile infrastructure deployment to provide service to customers with minimum symmetrical speeds of 50 Mbps and symmetrical speeds of up to 1 Gbps using fiber optic technology. The Project would place 109 miles of fiber optic cable for FTTP in each of the three wire centers covered by the Project (Piercy, Leggett, and Laytonville). Construction of new middle-mile facilities includes 12 miles of inter-office fiber between Piercy and Leggett and another 23 miles connecting Leggett to Laytonville. Nine fiber distribution cabinets and central office equipment upgrades will also be placed at each of the three wire centers. Major Project costs are for the deployment of packet switching network equipment that supports FTTP infrastructure.

This Project would offer these services to 13 community anchor institutions, including Cahto Peak COM, Iron Peak COM, Leggett Valley Fire Station, Laytonville Fire Station, Long Valley Heath Center, Long Valley Health Center Dental, Laytonville Elementary, Spy Rock Elementary, Branscomb Elementary, Leggett Valley Elementary, Laytonville Continuation High, Laytonville High and Leggett Valley High. The Project would also make broadband service available to five businesses. In addition, 63 non-CASF Frontier households will benefit from this network upgrade and will enjoy the same speeds as the CASF supported locations. Service will also be made available through Frontier's low-income broadband programs described later.

The Project would upgrade the Piercy, Leggett and Laytonville central office locations to deploy FTTP infrastructure that will support symmetrical speeds of up to 1 Gbps broadband services. The Project will leverage existing conduit or poles, where applicable. Where conduit or poles do not exist, fiber will be

placed in existing easements and/or right-of-way, following the existing copper facility path. The Project covers approximately 22.5 square miles and upgrades existing facilities capable of providing fiber optic HSI and OTT services. Specifically, Frontier will add a total of 35 inter-office miles (12 between Piercy and Leggett and 23 between Leggett and Laytonville) to access existing transport to peering points to the Internet. It is estimated that this Project will be approximately 70% aerial and 30% buried fiber installation with major equipment expenses including, but not limited to, fiber, fiber terminals and distribution hubs, optical line terminals, and Packet Optical Networking. The estimated construction timeline, after all permits are secured, is within the two-year window as required by D.18-12-018. Due to the rugged terrain, remote location and need to underground, Frontier does not anticipate this Project would be exempt from CEQA, and therefore, would not qualify for ministerial review.

FUNDING RATIONALE

Under the CASF rules adopted in D.18-12-018 (issued December 20, 2018) (Decision), Frontier believes that the proposed Project qualifies for 100% funding – \$7,797,273 — which represents the full projected costs to provide service to 805 unserved CASF-eligible households and an additional 63 non-CASF households.

The Decision provides a table which summarizes criteria for funding level determinations. According to this table, only Projects in low-income areas or without any service from an existing facilities-based provider (a "dial-up only" area) are eligible to receive up to 100% funding. According to the California Interactive Broadband Map, all census blocks are unserved and eligible for CASF funding. The Project qualifies for 100% funding as it meets the following criteria:

Criteria	Reimbursement
Baseline for Eligible Project	60%
Presence of dial-up only (all	
households)	40%
TOTAL	100%

- Areas with only dial-up or no Internet connectivity: The proposed build resides within an area
 that is currently not served by any form of wireline or wireless facilities-based broadband and
 proposes a cost-effective expansion of broadband access to 805 unserved CASF-eligible
 households; the proximity of this infrastructure upgrade will also enhance services to an
 additional 63 non-CASF households.
- Location and accessibility of the area: The Commission interprets this category to mean that the Legislature directed the Commission to award higher funding levels in remote areas, as specified. The Decision directs Staff to award more funding if an applicant proves a proposed Project area meets two of the five characteristics outlined below; this Project meets five of the five, as shown below in bold:
 - √ The proposed Project area contains rugged or difficult terrain (e.g., mountains, desert, national or state forest);
 - √ The proposed Project area is an unincorporated community;
 - √ The proposed Project area is more than 10 miles from the nearest hospital

- √ The proposed Project area is more than 10 miles from the nearest state or federal highway; and/or;
- ✓ The proposed Project area is located in a rural census block, as defined by the U.S. Census Bureau.
- Existence of communication facilities that may be upgraded to deploy broadband: The
 Commission interprets this category mean that the proposed Project relies primarily on existing
 infrastructure. This Project plans to leverage Frontier's existing infrastructure, and thus will be
 less expensive to build.
- Significant contribution to achieving the program goal:

 The proposed Project would make a significant contribution to the CASF program as the area within the North Bay/North Coast California Connect Consortium, a region which is served at
- 95.5% and falls below the 98% goal set forth in AB 1665.
 Low-Income Service: The proposed Project covers 717 houses in census blocks with incomes
- ranging \$28,021-\$50,299, qualifying as low-income communities. The remaining 88 households are in census blocks with a median income of \$53,341, very slightly above the CARE standard of \$52,400 as required by this Decision.
 - ✓ Low-Income Plan: Frontier features a choice of two low-income programs for customers: Frontier Fundamental and Frontier Affordable Broadband. The Frontier Affordable Broadband product requires customers to be enrolled in Lifeline telephone service. Alternatively, the Frontier Fundamental product is a stand-alone low-income broadband program that does not require a customer to purchase telephone service. Both products will provide minimum symmetrical speeds of 50 Mbps.

ADDITIONAL BENEFITS

This Project will support the goal of achieving 98% broadband service availability in the North Bay/North Coast California Connect Consortium. Based on latest CPUC broadband availability data (as of December 31, 2018), this consortium is served at 95.5%, with Mendocino County served at 75.2%. Frontier is the primary service provider in the region, rendering this Project vital in the larger goal of providing service to those on the wrong side of the Digital Divide.

In addition to the goal of providing broadband to 805 unserved households, the Project's 35 miles of middle-mile infrastructure will provide much needed route diversity for 3,000 households. The Project will expand and upgrade Internet service in Mendocino County, benefiting residents and community anchor institutions in areas such as schools, libraries, healthcare, economic and workforce development, and resiliency, among others. This enhanced Internet access will also allow this county to better reach and provide services and information to rural residents and businesses, and access tools and resources that can help to optimize internal processes to achieve cost efficiencies. Additionally, enhanced Internet service capabilities are critical for public safety communications allowing first responders to send and receive critical voice, video and data during emergencies and disasters.

This Project provides HSI access that is integral in connecting teachers to students, parents and educational resources. Rural school teachers and administrators acknowledge connectivity limitations as a primary obstacle to effectively using technology in the classroom. Additionally, students lacking

Internet connectivity at home are at a disadvantage when completing assignments that require online access and interaction. As more bandwidth intensive material moves online – such as educational videos, interactive learning tools, and video conferencing tools for teachers – connection speed is quickly becoming a major issue for rural educators. This Project will be important to reduce these barriers through expanded Internet access in Mendocino County.

The Project will provide high-speed access to the world, opening employment opportunities and economic growth in this rural area. This area, with lower population density, will be able to offer entrepreneurs, small businesses and individuals with work-at-home opportunities, the ability to live in more affordable rural areas, while contributing to the local economy. Businesses need broadband to access online training and classes to improve their employees' skills. Rural businesses do not have the budgets to send employees to professional development or are too small to send an employee away from operations. Bringing professional development in-house by enabling HSI access reduces those challenges. Additionally, improved broadband access, speed and capacity allows businesses to expand their markets, diversify their funding streams and attract their workforces.

The Project will serve Tier 2 High Fire Threat sites, per the Commission's fire map, expanding availability of faster and more reliable broadband capability to be available to four area fire stations.

Farmers and ranchers will also benefit from HSI service as it provides innovative technological tools use to maintain greater control over crop and livestock production, processing, distribution, and storage resulting in greater efficiencies, lower prices, safer growing conditions, safer foods and reduced environmental and ecological impact.

Rural healthcare facilities and rural residents seeking healthcare services will greatly benefit from this Project, as the healthcare sector is emerging as a heavy user of Internet services. The evidence is strong for technologies that lower costs, connect remote populations, and expand the reach of urban-centered medical expertise. Furthermore, telehealth can connect physicians with physicians and patients with physicians and provide access to specialists for treatment of multiple conditions.

The support of these organizations is highly important to ensure Internet service adoption as demand aggregation from residential, business and local government customers will ensure viability of broadband service expansion in Mendocino County.

Assemblymember Jim Wood also supports the Project which will greatly benefit area residents.

The application of Frontier for the Piercy/Leggett/Laytonville Middle Mile and FTTP Project is a modest funding request for a region of the state that is severely unserved and underserved, and therefore is a prudent use of funds to help close the Digital Divide.

In addition to preparing this application for the CASF Infrastructure Grant Account pursuant to the existing rules and regulations, we have worked with the Regional Consortium to identify anchor institutions within proximity of the fiber middle-mile backhaul deployment that would benefit from connectivity to the new network. If the Legislature and Administration authorize additional support to expand the opportunity for critical broadband expansion beyond last mile deployment, Frontier stands ready to work with qualified anchor institutions to support higher-speed Internet service.

This grant application creates important potential opportunities for anchor institutions help advance broadband in low-income, underserved communities along the path of deployment by supporting distance learning and telehealth-telemedicine, both in response to COVID-19 and to build for the future to secure "Broadband For All."

Census Blocks Covered

60230115003141	60230115003144	60230115003148	60230115003157
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60450102005076	60450102005078		

ZIP Codes Covered

Area Map

