

**Frontier CASF Broadband Infrastructure Grant Application – Lake Isabella/Weldon FTTP
Item #1 - Project Summary**

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

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Project Title: Lake Isabella/Weldon FTTP Project

Location: Lake Isabella and Weldon within Kern County

Type: Middle-Mile / Last Mile

Grant Request: \$9,595,168 (100% Funding Requested)

PROJECT SUMMARY

Frontier California, Inc. (U-1002-C) (Frontier) is applying for a \$9,595,168 grant from the California Advanced Services Fund (CASF) Broadband Infrastructure Grant Account to deploy middle and last mile fiber to the premises (FTTP) facilities that will provide HSI (HSI) to 405 unserved CASF-eligible households in the regions of Lake Isabella and Weldon within Kern County. Frontier refers to the collective areas of this proposal as the Lake Isabella and Weldon Middle-mile/FTTP Project (Project). Frontier requests that the California Public Utilities Commission (Commission) grant full funding for this Project in the amount of \$9,595,168.

The Project offer service to customers with minimum symmetrical speeds of 50 Mbps and maximum symmetrical speeds of up to 1 Gbps using fiber optic technology. The Project would offer these services to 15 community anchor institutions (13 in the Lake Isabella wire center and two in the Weldon wire center), which include KRN Fire Station 71, KRN Fire Station 72, Kern County Health Department (Lake Isabella Clinic), Kern Valley Healthcare District, Kern Valley Healthcare District D/P SNF, Kern County District Rural Health Clinic #2, Kern Valley Medical Care Center, Kern Valley Hospice Care, Kern River Valley Branch Library, Bookmobile II, Bookmobile III, Woodrow W. Wilson Elementary, South Fork Elementary, Kern Valley High School and Woodrow Wallace Middle School. The Project would also expand availability of broadband service to 445 businesses. In addition, 81 non-CASF Frontier households will benefit from the equipment upgrade and will enjoy the same speeds. Service will also be made available through Frontier’s low-income broadband programs described later.

The Project covers approximately 1.41 square miles in the Lake Isabella wire center and six square miles in the Weldon wire center. Infrastructure deployment would include 92 miles of fiber, five fiber distribution cabinets and upgrades to the equipment at the Lake Isabella and Weldon central office locations. Major equipment expenses include packet switching equipment, but are not limited to fiber, fiber terminals and distribution hubs, optical line terminals, and Packet Optical Networking. Frontier will leverage its existing middle-mile network as well as the new middle-mile network to be completed from the Project build. Fiber will be placed in existing conduit or on existing poles, where applicable. Where conduit or poles do not exist, fiber will be placed in existing easement and/or right of way following existing copper facility paths. It is estimated that this Project will be approximately 64% aerial and 36% buried installation in Lake Isabella and 5% aerial and 95% buried in the Weldon Wire Centers.

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 new CASF rules adopted in D.18-12-018 (issued December 20, 2018) (Decision), Frontier believes that the proposed Project qualifies for 100% funding – \$9,595,168 – which represents the full Projected costs to provide service to 405 unserved CASF-eligible 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:** There is currently no broadband infrastructure within the Weldon wire center area. Frontier has existing infrastructure providing 3M/768K Internet service in Lake Isabella. The Project proposes a cost-effective expansion of broadband access to 405 unserved CASF-eligible households; the proximity of this infrastructure upgrade will also enhance services to an additional 81 non-CASF Frontier 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 five of the five characteristics outlined below; this Project meets three 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 (not applicable);**
 - ✓ **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. As described above, the Project leverages 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 San Joaquin Valley Regional Broadband Consortium, a region which is served at 95.8% and falls below the 98% goal set forth in AB 1665.

- **Low-Income Service:** The proposed Project area is primarily defined as a low-income community with median household incomes ranging from \$0 - \$52,500 all of which, except two households, fall below 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 San Joaquin Valley Regional Broadband Consortium. Based on latest CPUC broadband availability data (as of December 31, 2018), this consortium is served at 95.8%, with Kern County being served at 96.1%. Frontier is one of the primary service providers in the San Joaquin Valley region, rendering this Project vital in the larger goal of providing service to those on the wrong side of the Digital Divide. The Project lays the necessary groundwork that will enable additional Project build opportunities and will allow Frontier more options as we continue to assess opportunities to connect some of the most remote areas of the San Joaquin Valley region.

While the foremost goal of the Project is to expand broadband availability to households, the Project has other significant benefits to well beyond the primary purpose. Frontier has designated this Project as a very high priority as it would provide transport infrastructure necessary to facilitate additional Projects in the area. The new, fiber-based inter-office transport includes 14 miles of inter-office fiber from Lake Isabella to Weldon and 39 miles of interoffice fiber from Weldon to Inyokern to support higher Internet speeds and Ethernet service offerings for 445 businesses.

The Project will serve Tier 3 fire zone sites, per the Commission's fire map, expanding availability of faster and more reliable broadband capability to be available to two area fire stations.

Expanding and upgrading Internet service in Kern County will benefit residents and community anchor institutions in areas such as education, healthcare, economic and workforce development, and resiliency, among others. This enhanced Internet access will also allow these counties 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.

The Project will provide 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 Kern County.

The Project would positively impact employment growth, especially in areas with lower population density consistent with the theory that rural remote areas may benefit more from HSI by giving businesses access to regional markets. Additionally, 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 increase their workforce.

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 application of Frontier for the Lake Isabella and Weldon 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.

Assemblyman Devon J. Mathis supports full funding of the Project for expanding digital access to rural Kern County.

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 CASF 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

60290052012017	60290052012078	60290052012266
60290052012021	60290052012080	60290052012267
60290052012023	60290052012081	60290052012268
60290052012024	60290052012082	60290052012269
60290052012025	60290052012083	60290052012270
60290052012029	60290052012087	60290052012271
60290052012035	60290052012088	60290052016000
60290052012037	60290052012089	60290052016011
60290052012041	60290052012090	60290052031057
60290052012042	60290052012091	60290052033015
60290052012043	60290052012093	
60290052012045	60290052012094	60290052033018
60290052012046	60290052012095	60290052033024
60290052012051	60290052012096	60290052033029
60290052012056	60290052012097	60290052033031
60290052012058	60290052012257	60290052033033
60290052012061	60290052012258	60290052041082
60290052012062	60290052012259	60290052042015
60290052012065	60290052012261	60290052042022
60290052012066	60290052012263	60290052042038
60290052012068	60290052012264	60290052042052
60290052012073	60290052012265	60290052042089

60290052045018

60290052045023

60290052045024

60290052045038

60290052045040

60290052045042

60290052045043

60290052045052

ZIP Codes Covered

93255

93238

93283

93240

93518

Area Map

