

Frontier CASF Broadband Infrastructure Grant Application Item 1 – Project Summary

Company/Applicant Name:	Frontier of California Inc. ("Frontier")
CPCN/U-Number:	U-1002-C
Contact Person:	Diane Williams-Stinson
	Vice President – Grant Administration
	401 Merritt 7
	Norwalk, CT 06851
	(260) 438-7003
	<u>Diane.Williams-Stinson@ftr.com</u>
Project Title:	Los Angeles County
Named Project Location:	Portions of the community of Lancaster in Los
	Angeles County
Project Type:	Last Mile
Amount of CASF Grant Funding	\$24,983,710.44
Requested	
Project Cost	\$27,852,520.00
Map of the proposed project Area:	Please see Attachment 1.01
Number of serviceable locations	876
Number of serviceable locations with no	727
internet connectivity	
Number of other CASF-eligible	149
serviceable locations	225/2 Mbos - Hassan and ///Drissitus Flisible//
Maximum mbps download and uploaded speed currently offered in the	≤25/3 Mbps – Unserved ("Priority Eligible")
serviceable area	Locations
	≤100/20 Mbps – Underserved ("Eligible")
Medium Household Income of the project area	\$54,597
Number of businesses	E
Number of businesses	5
Number of Anchor Institutions	0
Number of Public Safety Locations	0



Description of the Major Infrastructure to be Deployed

The project will place 185.07 miles of planned fiber and will utilize 2 central offices to connect 876 Priority Eligible and Eligible locations with premier Fiber-To-The-Premises ("FTTP") symmetrical services. It is estimated that this project will be approximately 15% aerial and 85% underground installation. This project involves 100% last mile fiber deployment.

Frontier will deploy best-in-class xPON - Gigabit Passive Optical Network ("GPON") (ITU-T G.984) and XGS-PON (ITU-T G.9807.1). Frontier currently uses xPON architecture throughout its network and has already made FTTP available to more than 5.2 million consumers across its 25-state footprint, including to homes and businesses in California.

The deployed network technology is 10 Gbps-capable, and currently supports symmetrical 5 Gbps residential broadband speeds. In addition, as reflected by the publicly available results of the FCC's Measuring Broadband America Program, xPON readily meets speed and latency requirements (i.e., <100 ms latency).1 In fact, Ookla, recently recognized Frontier's fiber network for its low latency and for having the fastest internet upload speeds in America.2 In California, the company ranked #1 for Top-Rated Internet, Fastest Internet Upload Speeds, and Lowest Internet Latency.3 Accordingly, the network to be deployed readily supports high bandwidth applications in use today like video conferencing, telehealth services, and gaming, as well as emerging augmented/virtual reality applications that are increasingly a part of daily living and a premium broadband service experience.

In short, Frontier is deploying FTTP—the most scalable, best-in-class broadband infrastructure—which is designed to accommodate ever-increasing bandwidth requirements and quality demands, and lower response/latency demands for ever-increasing usage of highly interactive applications.

Estimated Construction Timeline

The timeline for Construction through Project Closeout is estimated to be approximately 18 months after final permit approval if the project is categorically exempt from CEQA or approximately 24 months after CEQA resolution approval.

¹ See *generally* FCC, *Measuring Broadband America* (last accessed Jan. 30, 2021). https://www.fcc.gov/general/measuring-broadband-america

² According to Ookla Speedtest results for Q1 2023.

³ See Frontier Communications Parent, Inc. - Frontier Crushes the Competition with the Fastest Internet Upload Speeds in America



Description of proposed Broadband Project

Frontier proposes to deploy a last mile "future-proof" FTTP network that will make up to 5 Gbps symmetrical service available to 727 Priority Eligible and 149 Eligible homes and businesses primarily in portions of the community of Lancaster in Los Angeles County.

The project requires a capital investment of \$27,852,520 for the eligible locations. Frontier commits to cover 10.3% of the project costs and is requesting grant support for the remaining 89.7%. Frontier's funding request is limited to the identified grant-eligible project locations.

Frontier's proposed FTTP network will deliver a broad range of economic and quality of life benefits to the targeted locations by providing access to advanced, high-speed broadband services that improve economic opportunities, and support critical e-learning and healthcare applications. In addition, a defining and differentiating feature of the network is that it readily supports higher speed tiers as capacity needs grow. Frontier has already demonstrated this capability as the first provider nationwide to make 5 Gbps symmetrical service available to residential consumers.

Based on its current expansion capability of up to 10 Gbps (without the addition of system electronics), the Project proposes to deploy infrastructure robust enough to not only meet current need but also capacity needs well into the future. The proposed xPON fiber network is also capable of readily scaling to support 25 Gbps and 50 Gbps symmetrical speeds as capacity needs grow. Frontier has already started testing these speeds in preparation for deploying them as market demand and customer premises equipment becomes available in future years. Furthermore, future increases in capacity and performance can be achieved without major construction or cost through the addition of new and/or upgraded electronics—there is no need to replace or augment the transmission distribution facilities as is the case with other technologies. As a result, the planning and timing of future upgrades is driven by the comparatively short timelines for engineering, procurement, and installation of new electronics in the network and at the customer premises rather than major external construction factors. Because they are economically scalable for even faster speeds, fiber networks are frequently described as "future-proof."

Construction Detail to Enable Preliminary Indication of the need for a California Environmental Quality Act (CEQA) review



Frontier proposes to install 185.07 miles of new fiber-optic cable, which would extend high-speed internet service to unserved and underserved residents in Los Angeles County. Fiber installations would take place near the communities of Lancaster and Palmdale. Proposed fiber routes are located along local roadways.

Fiber would be installed using a combination of existing infrastructure, where available, supplemented by new underground conduit and/or aerial installations. New infrastructure would be installed within existing right-of-way and utility easements in developed areas where previous ground-disturbance activities have occurred.

Underground conduit would generally be installed at a depth of 18 to 48 inches by either boring, trenching, or plowing, depending on the location and local, state, and federal requirements. In some cases, to avoid existing infrastructure, new underground conduits may be required to be installed significantly deeper.

Frontier anticipates that the proposed project will either be categorically exempt from CEQA review, pursuant to CEQA guidelines 14 C.C.R. § 15301 regarding exemption for existing facilities and 14 C.C.R. § 15303 regarding minor modifications to existing structures; or will require development of a Mitigated Negative Declaration (MND). Final design and a more detailed review of resources present will inform the level of CEQA review required for the project.

Identification of the leveraging of existing available facilities

Frontier will leverage all existing infrastructure within the Right of Way, including existing poles, underground systems, and where Frontier currently has direct buried conduit and facilities. For project sections where boring and trenching is required, Frontier will restore those areas back to their original (or better) condition once construction is completed.

Statement of whether the applicant is disputing the Broadband Map depiction of served status.

Frontier does not dispute the Broadband Map depiction of served status.

A statement of whether the applicant is seeking Ministerial Review and, if so, information that the application meets all requirements for Ministerial Review.

Frontier is not seeking Ministerial Review for this project.



An explanation of why any middle mile facilities in the proposed project are necessary for accessing the proposed last-mile infrastructure.

Not applicable. Frontier is not seeking grant funding for any middle-mile facilities in this application.

A statement accepting the open access requirements for any middle mile facilities in the proposed project.

Not applicable. Frontier is not seeking grant funding for any middle-mile facilities in this application.