Project Overview

Mojo Broadband is seeking financial assistance to build a broadband wireless network to provide high speed Internet to the homes and businesses of Gisela, Arizona and the surrounding area. Currently, the only available form of broadband Internet in this area is satellite.

Gisela is an unincorporated community and census-designated place (CDP) in Gila County AZ. According to the 2020 census data, the Gisela CDP has 166 households and a total population of 536 people. Mojo's proposed network would also provide service to an additional 91 homes in the areas surrounding Gisela, for a total of 257 homes and businesses served. The Gisela Valley Fire Department is the only anchor institution located in the proposed service area. There are no schools in the area. Our searches found less than five businesses listed in the Gisela area. The lack of broadband Internet hinders the ability of businesses to operate in the area. It is our expectation that new businesses, some of which may be home based, will re-locate or be started in the area as a result of fast, affordable broadband Internet services being available.

Mojo Broadband was previously contacted by a few of the residents of Gisela asking if we could provide broadband Internet service to the area. However, the project was unfeasible due the costs to reach the small, isolated area. One of the concerns we've heard from some current residents is that lack of quality, high speed Internet is negatively impacting the ability of their children to do home schooling.

Mojo Broadband's planned total budget to build the broadband network that will provide service to the 257 homes/businesses is [redacted]. Of those costs, [redacted] in permit and application fees are ineligible for reimbursement. Mojo Broadband will match [redacted] of the total eligible project cost in cash. Mojo's total grant request is [redacted]. Mojo's grant request is [redacted].

Network Overview

Mojo's proposed network consists of licensed microwave backhaul from one of our facilities in the Northeast Phoenix area to an existing tower site located on Mount Ord. A second microwave backhaul link from the Mt. Ord tower to a new tower in Gisela will bring Internet capacity to the area. The microwave radios to be used will be the WTM4200 by Aviat Networks. Aviat is a wireless infrastructure manufacturer based in Austin, TX. The WTM4200 is a high capacity, point to point microwave radio operating the US part 101 licensed frequency bands, including 11, 18, and 23 GHz. Based upon channel configuration, the WTM4200 can have a capacity of up to 2.5 Gbps. The radio configuration planned for the Gisela network will have a capacity of nearly 1.5 Gbps. Additional channels and frequency bands can be added in the future to more than double the capacity of the backhaul to the area.

The Internet service will be distributed to the homes and businesses in the area via fixed wireless broadband equipment operating in the 5 GHz and 6 GHz frequency bands. All homes will be served from one of three towers to be built in the area. Each of the towers will be 45 ft. or less in height. The three towers will be connected to each other with point-to-point microwave links. Each link will have a capacity of over 1 Gbps. The access point radios planned to be used to provide Internet to the individual homes and businesses are the A6 from Mimosa Networks. The radios to be installed on the homes and businesses are the C5x, also from Mimosa Networks. Mimosa Networks is a subsidiary of Airspan Networks, a US based telecommunications equipment manufacturer. The A6 and C6x are part of a 6th generation point to multipoint system operating in the 5 GHz and 6 GHz frequency bands. The A6 access

point has an aggregate capacity of over 3 Gbps. The total capacity of the three towers will be over 20 Gbps. Each of the C6x subscriber radios have a capacity of up to 1 Gbps.

Below is a diagram to illustrate the general network layout.

[redacted]

Internet Service Offerings

If awarded the grant, Mojo would offer two Internet service plans. Our highest speed plan would start out at 200 Mbps download by 50 Mbps upload. When additional frequencies in the 6 GHz band become available sometime in early 2023, we will be able to add a 400 Mbps download by 100 Mbps upload service plan. Our premium service plan will be [redacted]. Mojo would also offer a lower cost service plan that would be 50 Mbps download by 10 Mbps upload for [redacted]. Monthly prices for these services would be approximately 15% below our current offerings in the outlying areas of Phoenix. Additionally, all customers that sign up for service in advance will have service installed with no installation fee.

Mojo Broadband is committed to providing these services to businesses and residents of the Gisela area for at least five years after the completion of the network buildout. Mojo cannot foresee any reason to discontinue service well after the five-year period.

Project Timeline

The Gisela project would commence within 30 days of notice of grant award. The network infrastructure buildout will take approximately 8 months. Customer installations would begin approximately 9 months after award notification. All customers requesting service would be installed within 15 months of award notification. The construction of the three tower sites will be completed by a yet to be determined contractor. All other work will be performed either by Mojo Broadband employees or employees of Mojo's primary engineering contractor, 3-dB Networks.

About KGT/Mojo Broadband

KGT, LLC. DBA Mojo Broadband was founded in 2016. Mojo Broadband began operating in 2017 with the acquisition of Western WiMAX. Western WiMAX had been providing broadband Internet services in the Phoenix metropolitan area since 2004. Mojo currently provides broadband Internet service to approximately 700 homes and 150 businesses in and around the Phoenix metropolitan area.

The founders of Mojo Broadband, Todd Bergstrom and Keith Bergstrom have been in the ISP business since 2000. Their first company, Mesa Networks, grew to be one of the largest fixed wireless Internet service providers in the US at that time, with over 7,500 subscribers, before being acquired in 2008. After the sale of Mesa Networks, Todd and Keith founded 3-dB Networks which assists Internet service providers with the design, installation, and operation of their fixed wireless networks. To date, 3-dB Networks has been involved in the build and operation of over 20 Internet Service Provider networks, providing broadband Internet to over 25,000 homes and businesses.

Type	Project	Applicant	GEOID
Rural	Gisela	KGT dba Mojo Broadband	04007000500
Rural	Gisela	KGT dba Mojo Broadband	04007000600