

San Joaquin One Voice® Project Request

City of Lodi Broadband Infrastructure Project

Project Summary:

In March 2020, the Lodi City Council approved a Professional Services Agreement with Magellan Advisors, LLC, of Denver, CO to perform a comprehensive Broadband Feasibility Study. The purpose of the Study was to evaluate the opportunities to expand Lodi’s existing fiber-optic network to meet the City’s growing needs for fiber connectivity as well as consider what additional future opportunities the fiber expansion could yield for the City in terms of enhancing local broadband services for residents and businesses.

On February 17, 2021, City Council accepted the City of Lodi Broadband Feasibility Study completed by Magellan Advisors, LLC. The results of the Study, including recommendations regarding a phased implementation approach, were presented to the City Council on January 19, 2021 with final acceptance of the Study by the City Council on February 17, 2021. The Project phases are illustrated and described in more detail below:



Phase I will include upgrading the existing fiber backbone to support the City’s growing needs across many departments and applications. The City of Lodi currently owns and maintains approximately 20 miles of fiber used to support communications for public safety, data collection for utility billing, utility operation software platforms, as well as citywide data and communication efforts. The existing fiber backbone is reaching the end of its useful life and additional fiber will be needed over the next 10 years to support existing and build upon future City and utility connectivity needs as well as enable a platform for possible opportunities benefitting Lodi residents and businesses. Phase I will include completing a full engineering design of the fiber backbone rebuild to identify all requirements and constraints; allocating funding for the upgrade; and developing a Request for Proposals to select a construction contractor for the rebuild. The new fiber backbone would be dimensioned with extra capacity that could be used to support potential future broadband services in Lodi.

Phase II entails Lodi developing a public-private partnership with a broadband provider that is aligned with the City's goals and leveraging the fiber backbone to bring new fiber connectivity to residential and/or business communities. The City would issue Requests for Proposals (RFPs) to solicit potential broadband partners and negotiate long-term agreements to provide services over the municipal infrastructure. This would give the City a detailed understanding of the provider landscape and allow Lodi to select a partner that is best aligned with the City's interests.

Phase III focuses on deployment of new fiber directly around the backbone, in cost-effective and incremental ways. Within 1,500 feet of the backbone, the City could reach nearly 10,000 homes and businesses, creating an opportunity to build additional fiber into these areas with a lower cost structure than without the fiber backbone.

Phase IV considers a broader deployment of fiber to all homes and businesses within the City, building on the prior Phases' successes. This phase could bring fiber broadband services to more neighborhoods, business districts or the entire City, based on the community's need. To do so would require significant capital investment by the City; however, it could utilize the same broadband public-private partnership model whereby the City finances the plant, the partner provides the service and revenues are shared to ensure the City's investment and debt service are repaid while the provider achieves its required rate of return.

Over 3,000 cities throughout the country own some form of municipal fiber and have used it for decades to support their communities. These networks are becoming increasingly important to cope with the rapid growth in connected devices, from utility assets, to streetlights, to traffic signals, to surveillance cameras. Cities that maintain these networks are able to accommodate "Smart City" technologies that make them more efficient, reduce costs and increase the value they deliver to their constituents.

Within the past 15 years, cities have expanded the use of these networks to enhance local broadband internet services in their communities in order to support the needs of residents, businesses, and community organizations. As high-speed internet access has become essential to support economic development, education, healthcare, and other community functions, the City of Lodi Broadband Infrastructure Project could eventually leverage the City's network to cost-effectively provide fiber-based internet services, either directly or through partnerships with private broadband providers.