

## Attachment G – Business Plan

ATC has provided internet services to homes and industry in the community of Arapahoe, NE since 1998. Even though the facilities have evolved over the decades, the current technology is unable to provide modern broadband services of 100 DL and 20 UL or greater to all locations. The project area is within the city limits of Arapahoe, NE. Location specific analysis has revealed that approximately 64% of the individual locations do not meet the Commissions required broadband service guideline of 100 Mbps DL and 20 Mbps UL. Of the 225 homes and businesses, approximately 145 locations in the area currently are underserved. Through this application, ATC proposes to deploy fiber to the home throughout the project area.

ATC intends to overbuild existing DLC technology with GPON Fiber to the Home. From our core infrastructure, ATC will leverage GPON fiber technology to provide broadband services to all homes, institutions, and business locations within the given geography. ATC will contract the construction of underground mainline fiber and fiber drops. ATC employees will oversee this construction, ensure permits and variances of ROW are obtained, ensure locates of existing infrastructure occur, and complete the installation of all components at each customer premise. Improvements planned within the study area will collapse aging equipment and facilities. This will streamline the ability of the company to support the locations while also modernizing the services offered. One advantage of fiber service delivery is that it will reduce the number of remote electronic cabinets. Having fewer remote cabinets will improve the company's ability to ensure service uptime.

Existing copper-based facilities will be retired. Locations within the project area will have access to broadband connections capable of 100 Mbps DL and 100 Mbps UL or greater. Once deployed, ongoing maintenance of the infrastructure will include regular inspection and repair of splice cases and grounding terminals facilitating cable locates. Electronic fiber components (OLT and ONT units) require regular software maintenance twice yearly. Customer premise equipment including Residential Gateways and UPS Battery system require service calls to maintain. The UPS will be repaired or replaced every 3-5 years or sooner on an as-needed basis. Residential Gateway hardware provided by ATC is regularly patched with security and software updates through an Automatic Configuration Server. The gateway device and UPS are the only two components directly connected to commercial power and occasionally are impacted by surge or low voltage events making their expected useful life less predictable.

Attachment G\_1 and Attachment H – Outline the project costs to deliver 100/100 Fiber to the home services to the 145 locations with no current broadband service, or services that are below 100 DL and 20 UL.

ATC will engage local community leadership, sharing scope and detail of the proposed project. ATC presented the application to the city council on February 21<sup>st</sup> to disclose the intent to apply for the grant. Feedback from that meeting is considered in the application. Other Community Leaders, including business owners, Public School Officials, and others received a copy of the proposition and were invited to comment to ATC directly and to the Public Service Commission. Copies of the circulated materials are attached as G\_2.