



## Executive Project Summary:

Bits of Technology Wireless Internet (BTWI) has been providing high-quality internet to our customers for almost 10 years via a hybrid Fixed Wireless and Fiber network. We have focused our attention to the unserved and underserved rural areas and small communities of Iowa.

Our current coverage area includes portions of Dallas, Madison, Polk, Guthrie, Greene, Boone, Story, Butler, Grundy, Hardin, and Franklin counties.

We have always prided ourselves in providing "Consistently Reliable Internet". However with the advent of Covid-19, the increased use of internet services for telework, distance learning, and telehealth (along with the higher speeds needing for these things) has put a huge additional demand and strain on the overall capacity on the infrastructure of our fixed wireless network. Added to this is the large increase of new customers that are needing reliable internet in their homes for the first time.

The wireless links distributing internet between the tower structures broadcasting to our customers have reached full capacity. As this happens, the speeds that we currently offer to our customers at or above the 25/3 level are being reduced. These links need to be upgraded to more expensive licensed-frequency equipment that provides much higher capacity between the towers to be distributed to our customers. We also have the opportunity at a few tower locations to run fiber from a main fiber optic transmission line to our tower to increase capacity to these tower sites. This will increase total bandwidth available to our customers, plus increase the reliability of the overall network to decrease outages while they are working and learning from home.

We are in the planning process to replace these links to the higher cost licensed-frequencies and fiber connections, however without CARES Act funds, this process would take 5-7 years to implement and complete, which will be too late given the current pandemic situation. If we would receive these funds (along with some private investment that has committed if we do receive the funds), implementation could begin immediately and be completed in the time frame allowed by the program.