Executive Summary

Western Iowa Wireless has been in business for over 11 years. We started with a passion to service the unserved and we have been very successful. We now service both rural and residential customers in portions of 12 counties in western Iowa. We've done this without grants, loans, or any outside funding whatsoever. While we take pride in this, it has hindered us from expanding into some areas where we see a need, due to financial constraints and the feasibility of expanding to those areas. With the proper funding we feel we could deliver excellent broadband service more efficiently to more underserved people than any other provider in the state. We pride ourselves in delivering what we advertise and taking care of our customers and doing so in the most efficient means available.

While we understand the benefits of deploying fiber where possible we also realize population densities can restrain the financial feasibility. Our deployment model does call for fiber installation from our current fiber points of presence to tower sites that will act as feeder hubs, but due to the areas listed in this application having low population densities we have chosen fixed wireless technology as our primary delivery medium along with licensed microwave for backhaul to the AP sites. This will allow for the most return on investment, increasing the households, business, and schools served while still delivering speeds in excess of 100mbps.

Our model calls for 107 new sites along with upgrades to 53 existing sites. The sites would consist of either a 60ft wooden pole or a 70ft monopole outfitted with 8 sector AP's providing 360 degrees of coverage. Each site will provide in excess of 1.4Gbps. Typically service offering will be asymmetrical and can exceed 100/15 Mbps. Well above the FCC's definition of real broadband. Also the network design will support very low latency(sub 30ms to our core).Sites will be fed via licensed microwave in the 11ghz and 6ghz bands. These radios are capable of 1.4gbps full duplex throughput which matches well with the aggregate throughput of the combined sectors per site. Depending on uptake, subscribers per pole would average between 45-65 given our best estimate. 1.4Gbps will be more than adequate to deliver service to all connected subscribers now and well into the future.

Our projected service offerings for the new areas.

20/2 Mbps	$49.95
30/3 Mbps	$64.95
40/4 Mbps	$79.95
60/6 Mbps	$99.95
100/15 Mbps	$149.95

Along with internet service we will continue to offer comprehensive unlimited VOIP service for $24.95/month.

As there is a demonstrated need in the targeted areas, along with the fact we will offer very competitive packages, we foresee a very high take rate in said areas. However in our budget and financial calculations we used what we feel is a conservative estimated take rate of 40%. Our aggressive project focuses on extending coverage to nearly 10,000 homes, schools, and businesses. With a take rate of 40% this would mean fast reliable service to 4000 new locations that previously were underserved.

We project the build out of an average of 3 new sites per month for a total of 35-40 per year. We project to average 6-7 upgraded sites per month. During the winter months we will focus more on upgrading sites and from April-October our primary focus will be new build outs. Weather conditions will play a big part of our day to day activities.

Build outs would commence in 5-6 months as planning and preparation wrap up and we anticipate project completion by the end of 2023.