March 6, 2014

Letter – Expression of Interest
VIA ECFS

Chairman Thomas Wheeler
Commissioner Mignon Clyburn
Commissioner Jessica Rosenworcel
Commissioner Ajit Pai
Commissioner Michael O’Rielly
Jonathan Chambers
Federal Communications Commission
445 12th Street, SW 20024
Washington, DC

Re: Expression of Interest – Rural Broadband Trials
Connect America Fund, WC Docket No. 10-90

Dear Chairman Wheeler, Commissioners, and Mr. Chambers,

This letter is to express LTD Broadband, LLC’s interest in receiving funding from the Rural Broadband Trials announced at the January 30th FCC Open Meeting.

I applaud the commission for recognizing that broadband availability is both a critical and solvable problem facing rural areas.

I can tell you from first hand experience bringing service to thousands of previously unserved, that making fast and reliable broadband available at affordable pricing has improved the quality of life in our rural communities.

If selected for the Rural Broadband Experiments, I believe that LTD Broadband will be a great example of how broadband can be deployed quickly
and cost-effectively. The commission should note that our proposal is to finish out the coverage in each county so that there is 100% coverage of all households.

**Nature of Entity:**
LTD Broadband, LLC is a wireless service provider with over 180 wireless base stations servicing 9,000 square miles in rural areas of southern Minnesota and northern Iowa.

Founded in 2010, LTD Broadband has had a very high sustained growth rate. As such, LTD Broadband is well suited to participate in the FCC’s Rural Broadband Experiment. LTD Broadband has the technical expertise and manpower to quickly build out the proposed infrastructure.

The principals have 30+ years combined experience building broadband infrastructure at CLECs, rural ILECs, cable companies and WISPs.

LTD Broadband’s fixed wireless offering is high-quality and favorably competes with subsidized FTTH deployments on speed, reliability and affordability.

**Technology:**
Terrestrial fixed wireless with speeds up to 50 megabit symmetrical to end users. Backbone infrastructure is microwave with primary backbone links at 750 Mbps and secondary backbone links of 5-600 Mbps.

LTD Broadband has found that fixed wireless is an excellent technology to bring reliable, fast and affordable broadband to rural areas.

**Anchor institutions:**
By the nature of unserved census blocks there is absence of anchor institutions in those blocks. However, LTD Broadband provides service in areas with
competitors and is able to leverage revenues from anchor institutions to pay for backbone infrastructure that serves previously unserved areas.

Even more important than the service of anchor institutions directly is the availability of reliable, fast and affordable broadband. LTD Broadband’s residential customers includes hundreds of telecommuters working for regional anchor institutions like the Mayo Clinic and IBM.

**Service pricing:**
LTD Broadband service is priced competitively. Broadband adoption in rural areas is directly tied to affordability and LTD has priced their service so that high speed service is very affordable.

<table>
<thead>
<tr>
<th>Speed</th>
<th>Price</th>
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<tr>
<td>3/1 Mbps</td>
<td>$30 / mo</td>
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<tr>
<td>6/2 Mbps</td>
<td>$50 / mo</td>
</tr>
<tr>
<td>10/3 Mbps</td>
<td>$70 / mo</td>
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Several school systems, libraries and other anchor institutions receive services from 6/6 Mbps to 100/100 Mbps from $70-$900/mo.

Over the next several years LTD Broadband will deploy radios that will offer service speeds of 50 mbps and higher.

**ETC Status:**
LTD Broadband will apply to become an ETC in Minnesota and Iowa if selected.

**Deployment schedule:**
Service will be deployed to all unserved census blocks proposed in this experiment within 12 months.
Funding Amount:
Looking towards the future implementation of CAF round II, LTD Broadband agrees with the commission that a reverse auction is the appropriate methodology for selecting funding recipients. As such, LTD Broadband is requesting funding levels of $700 for houses in census blocks that require whitespace radios and $300 for houses in census blocks that can be serviced using line-of-sight radios.

The total funding request is $1,506,900 which is the total of the attached list of unserved census blocks to be broadband enabled.

LTD Broadband's buildout is designed to serve 100% of households in the unserved census blocks and will use multiple radio technologies to accomplish this.

Because the unserved areas represent a small percentage of LTD Broadband's overall buildout plans in Minnesota and Iowa, the total deployment costs will be significantly more than we are seeking as part of the Rural Broadband Experiment funding.

Existing Providers:
LECs: LTD Broadband competes with ILECs Windstream, Centurylink and Frontier as well as a plethora of rural ILECs. Their offerings are mostly limited to 1 mbps for rural residents based on physical limitations of aging copper outside plant, wire gauge and distance from the DSLAM. In many cases DSL is unavailable at all because of distance limitations and copper condition.

Standalone DSL service from the ILECs if even offered costs $50/mo or more. Bundled DSL with voice service averages $75.

By contrast LTD Broadband customers can get standalone unlimited broadband service for $30/mo. For customers that want landline phone service they can choose Straight Talk Home Phone for $15/mo.
**FTTH Providers:** There are several subsidized FTTH companies including WCTA, Omnitel Communications and Jaguar Communications in parts of our service areas. Both Omnitel and Jaguar require bundled service with plans starting at $115. WCTA offers standalone 5 mbps fiber internet for $39.90 in a very small subset of our service area.

**Satellite:** Wild Blue and Hughesnet service are available in our markets, but increasingly we are finding that customers are choosing to use streaming video services which makes those services impractically priced. Wildblue and Hughesnet average $50/mo for 10 gigs of usage. There are no satellite carriers offering unlimited data in our markets. Speeds can be up to 15 mbps, but limitations of latency prevent usage for VPN, VOIP or other latency sensitive applications.

**Cell phone carriers:** In most of our service areas, Verizon is the only viable option for cell phone service because the other carriers have poor or no coverage. Verizon offers hotspot service for $50 for 5 gig. They also offer Home Fusion for $60/mo for 10 gig. There are no cell phone carriers offering unlimited data in our markets. Speeds vary from 1 mbps to 15 mbps depending on coverage area.

**Fixed Wireless Providers:** We compete with MVTV Wireless, Prairie Inet(JAB), Osage Municipal Utilities, Starnet, Omnitel, Radiolink Internet, MNWiFi, HBCI and Harmony Telephone in different parts of our service area. Each provider has their own speed and plan offerings. Some of these providers do not have the speed capabilities to provide 3M/768k service as they use technologies that only have 4 mbps of aggregate throughput per base station. Others use similar technology to LTD Broadband.
Criteria for Phase II CAF funds:
LTD Broadband agrees with the FCC that a reverse auction is the best way to distribute CAF Phase II funds. This allows the FCC to be technology agnostic and will enable services providers to select the most effective technology to service the customer.

Some of the census blocks will require using whitespace radios to penetrate significant foliage. The higher one-time support requested for these census blocks reflects the much higher cost of those radios.

Getting support to deploy equipment in this areas will help realize LTD Broadband’s goal of “no home unserved” in our rural markets.

Sincerely,

Corey Hauer
CEO