

December 26, 2017

FCC Commission
Proceeding 17-258
Comments on CBRS
Company: InvisiMax Inc. Warren MN

Dear Commissioners,

InvisiMax is a WISP in Northern MN and Eastern ND. It is 100% owned by my wife (Lori) and me (Dave Giles). We have been providing fixed wireless internet for 16 years. We employ 20 people, with operation centers in both ND & MN. With the constant changes in technology, we have invested and reinvested over \$9 million in our network, this at times feels never ending. We have done this with zero federal subsidy. We are blessed to have a very successful business model. Under the right conditions, we are able and willing to invest more, to serve more.

We currently serve over 4,000 customers touching 14 different counties in ND & MN. Some of those customers are larger employers, so we touch or impact about 30,000 people daily, and likely over 100,000 devices every day. This is impressive, in my opinion, for a small business in rural America.

3.65 Ghz – CBRS. What we do today has really evolved, and CBRS is an important way to help our rural users. CBRS will impact in two major ways for us, coverage and speed. With more spectrum & LTE technology, we can penetrate the environment better, getting more coverage, plus the 100MHz of additional spectrum will clearly affect the amount of bandwidth (speeds). There are more factors like less noise of other users in the spectrum, some competitors, some utilities, etc.

Maps- attached are two maps, both have our coverage in white, a Census block map and a PEA map. Competition in the PEA area for a PAL will be very limited. I would bid more for census block areas verses a PEA area. Look at area 1 for an example, it is across two states and very rural areas where big companies will not serve effectively. Who will bid large areas? Likely it will be big corporations or mobile carriers that bid for PEA areas that size, and how many years would it take to get 5G to these areas? With Fixed wireless technology, we can offer larger packages, than the promised 5G yet to come, plus serve rural America better, as we do today.

We have used the 3.65 spectrum for over 8 years. We have invested in the newest technology of LTE products. We did this with some understanding of the CBRS roadmap. We were willing and able to actively purchase PAL licenses until the new proposal of PEA-s, this will limit us.

Big companies, Mobile carriers – To date in our rural area, 1G mobile service is still not available everywhere. The promise of 5G? How long will 5G take to get here? This is the reason our WISP business is successful, no one else will do it here.

Today we are easily able to provide our rural customer 25/5 Mbps service, and in some cases 50Mbps, but with lack of spectrum the number is limited. With CBRS spectrum and the LTE technology we are both using and

experimenting with, our next goal is 100Mbps and then on to Gigabit connections. The Technology is here, but the spectrum is not.

Customers- More spectrum in addition with technology advancements provide great value for our rural customers, rural America. Many of them work remotely and today even a 25/5 broadband connection may not be enough. Today we provide special packages to provide more for those remote businesses that need more, but it is limited. CBRS will help bridge the digital divide. It is also more than a connection, as local service providers, we help with the technology advancements of the business we serve. Each is unique and important!

Commissioners, I plead with you to leave the CBRS rules as they are, not sell out RURAL AMERICANS. We need smaller PAL areas not bigger!! Thank you for your time and consideration. And Thank you for serving the Great Country of the United States of America.

Respectfully

A handwritten signature in black ink, appearing to read "David L. Giles". The signature is fluid and cursive, with the first name "David" being the most prominent part.

David L Giles, Pres
InvisiMax Inc
126 W Johnson Av
Warren MN 56762

PEA Map

1

Hallbrook

Grafton

Grand Forks

Cooperstown

Cassleton

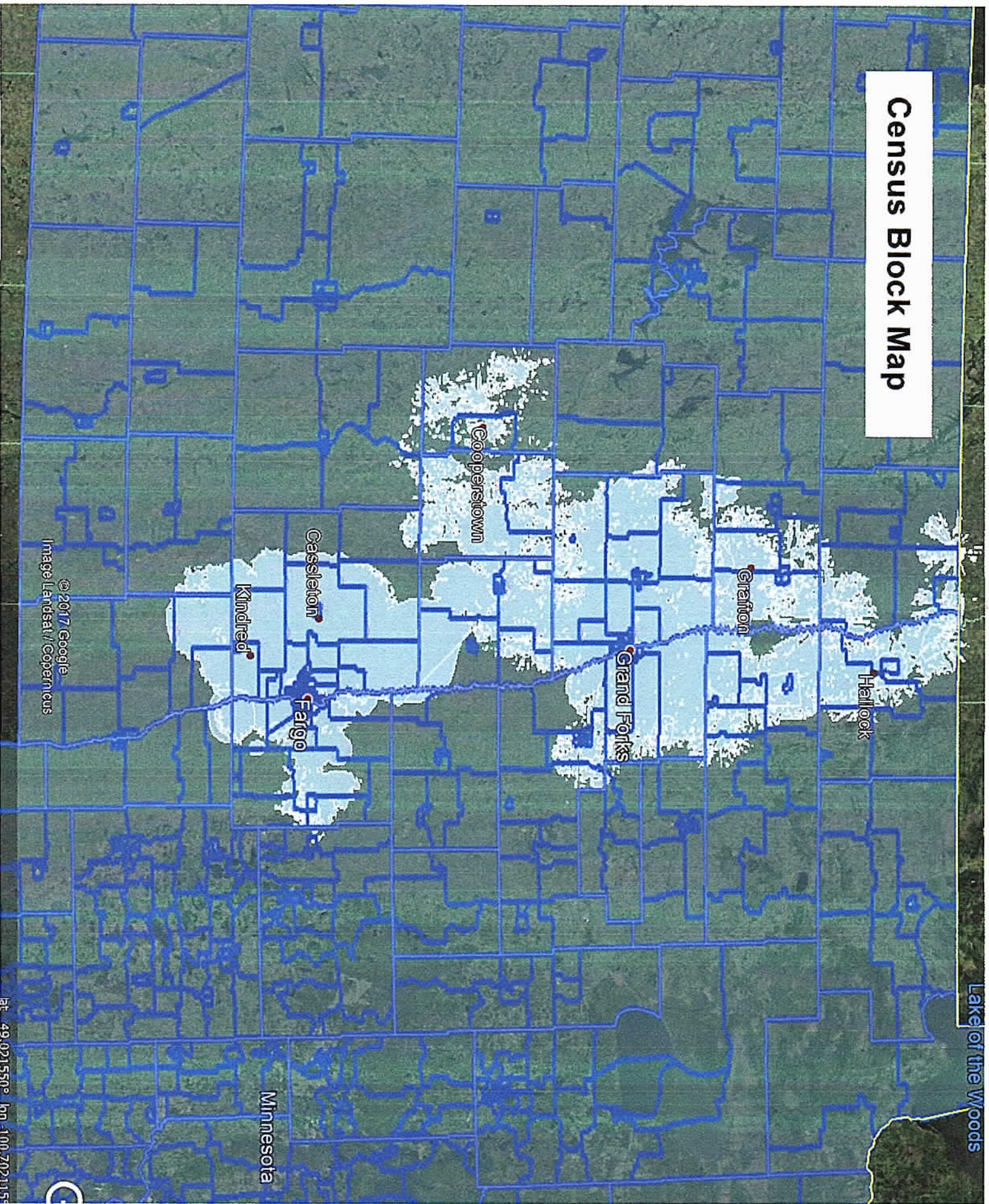
Kindred

Fargo

Minnesota

Lake of the Woods

Census Block Map



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