

March 7, 2014

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  
Washington, DC 20024

**RE: Expression of Interest - Rural Broadband Experiments, Connect America Fund, WC Docket No. 10-90**

Dear Chairman Wheeler, Commissioners, and Mr. Chambers,

The following is an Expression of Interest for miSpot’s participation in the FCC Rural Broadband Experiments. The FCC has requested that miSpot provide information to them so they could learn more about how Connect America Fund subsidies could be used differently to bring broadband to high-cost areas. The FCC wants to “test how tailored economic incentives can advance the deployment of next-generation networks...in rural, high-cost areas” with the goal of “robust, scalable, last-mile broadband networks”. miSpot hopes the following information will answer some of these questions for them. miSpot has provided a lot of information but they think it will be worthwhile for the FCC to review and provide assistance in determining how to proceed forward.



miSpot is a current provider of 4G LTE high-speed fixed wireless broadband Internet service to many rural areas of Michigan. They are a prime example of the type of entity that can accomplish the goals of the FCC – to preserve voice and extend broadband networks in high-cost rural areas while building a robust, scalable network that is cost effective and provides an excellent quality of service to the customer. miSpot is continually expanding their coverage footprint and are “shovel ready” for any project that the FCC may grant them. The following information should convince the FCC of this and will provide them additional information on how to tailor their future programs for rural broadband deployment.

### **Identity and Nature of the Submitting Entity (and a little history)**

miSpot is a high-speed fixed wireless broadband Internet service provider that has been providing 4G LTE Internet service to the rural areas of Michigan (many of them previously unserved or underserved) for over a year. They are headquartered in Pigeon, Michigan, a rural community in the Thumb of Michigan (Huron, Sanilac and Tuscola Counties make up the area of Michigan that looks like a Thumb). Their parent company, Agri-Valley Communications, Inc. (AVCI), a multi-faceted communications company, has been providing telecommunications services to rural Michigan since the early 1900’s.

Along with miSpot, AVCI is the parent company to Pigeon Telephone Company, an independent telephone exchange carrier; Thumb Cellular, a cellular telephone and 4G Internet service provider to Michigan’s Thumb area; and Agri-Valley Services, Inc. (AVCI.net), a broadband Internet service provider to Michigan’s Thumb, Twining and the Alba/Lakes of the North areas.

miSpot was created to efficiently and cost effectively bring high-speed fixed wireless Internet service to rural Michigan. Because they are located in rural Michigan, miSpot understands the importance of providing urban services to rural communities. AVCI’s founding father, John E. Eichler, once stated “We should provide in the country what’s available in the city.”

AVCI owns licensed 700MHz and AWS spectrum for 40 counties in Michigan (see Attachment #1). Even though they had previously provided wireless internet to the Thumb of Michigan via another wireless technology, AVCI made the decision to invest capital in deploying a 4G LTE wireless broadband internet network utilizing the 700MHz and AWS spectrum that they own. The 4G LTE technology is the latest technology and provides better efficiency and performance than other wireless internet technologies and is an easy network to expand. AVCI purchased an Ericsson core and RAN equipment for the miSpot network and it has been commercially operational since early 2013.

4G LTE technology is the choice of the major Tier 1 carriers (i.e. Verizon, AT&T, Sprint, etc.) and because of this these Tier 1 carriers will drive the technology to evolve and get better (i.e. cost effectiveness, speed, capacity, etc.). The spectrum that AVCI owns is licensed (and protected from interference), unlike other wireless providers that don't have the spectrum or the same bandwidth capabilities. The speed, capacity and efficiency of 4G LTE will continue to be improved upon. Otherwise, these major carriers would not have invested so heavily in this technology.

Can miSpot guarantee 100% coverage in any selected area, probably not because topography has an impact, but no one can unless you run fiber to the home at an unacceptable cost. miSpot will provide the best service at the most economical cost.

The FCC has encouraged everyone to participate in your "Experiment" but then you require everyone to be an ETC (or have one as a lead partner). miSpot is not an ETC and they do not plan to be one. miSpot doesn't understand the FCC's reason to have a requirement to have an ETC involved in this process (by having this requirement they now limit who can participate even though the FCC has encouraged everyone to participate) and wonder what the FCC really wants from an ETC that other providers cannot give. miSpot would like to provide the FCC with what they want without being an ETC but the FCC needs to share with miSpot the reasons behind this requirement. As an Internet provider, miSpot has the capabilities of providing VoIP to their customers if that is the concern of the FCC. miSpot just needs to know what the FCC is looking for here.

miSpot applied previously for stimulus funds and were denied. Despite this, they went out on their own, with their own capital, and since early 2013 miSpot has been providing 4G LTE service to over 1000 customers in 54 different areas in their coverage footprint. Within 30-45 days that number of areas will be almost 70 and miSpot expects their customer base to grow to over 3000 by the end of this year. But there are still areas that even miSpot can't afford to go to. The population density is low, the cost of entry is too great and the economic environment is too weak. They can go where most providers can't but these are areas that are even tough for them. This is where miSpot could use the FCC's help.

### **Identification of the Proposed Service Area**

As previously stated, AVCI owns 700MHz and AWS licenses for 40 counties (39 that are eligible according to the FCC listing) in the state of Michigan. miSpot currently has 54 live sites and 13 sites that are going through final testing that should be live within 30-45 days (see Attachment #2). The FCC can see that miSpot is not new at securing and deploying sites in rural areas. In fact, they are now or will be shortly when the 13 sites go live, be serving some of the areas that the FCC listed as eligible. The FCC can see that miSpot has already started to do some of the work that the FCC wants done.

Because miSpot can provide service to any eligible area and almost anyone (i.e. residents, small businesses, schools, libraries, government buildings and public safety entities) within their service area (the 40 counties they own licenses for) for the sake of this submission miSpot chose just one area to use as example. That way miSpot can give the FCC an idea of the cost that would be typical for one of their deployments. If there are variables that could affect the cost those will be explained. The example used is a current project miSpot just started in Ogemaw County at the request of the Ogemaw County Economic Development Corporation. The main census tracts that this project overlaps are tracts 26129950100 and 26129950300 in Ogemaw County. There is also some coverage in census tracts 26069000700 and 26069000800 in Iosco County. miSpot's estimate of the cost and the required funding for this project will be addressed later in this letter.

## Technology to be Deployed

AVCI owns licensed 700 MHz and AWS spectrum in 40 counties in the state of Michigan. The 700MHz spectrum is a unique spectrum that travels great distances and penetrates buildings and trees well. The AWS spectrum is a good compliment to the 700MHz since it doesn't travel as far but it provides added capacity to a network. miSpot utilizes 4G LTE to provide high-speed fixed wireless Internet service to their customers. 4G LTE simply stands for 4th generation (4G) Long Term Evolution (LTE) – the highest standard in wireless broadband Internet service, which offers the lowest latency and the fastest speeds available in wireless technology. 4G LTE is up to 10 times faster than 3G and up to 200 times faster than dial up. In miSpot's initial drive testing of sites, they experienced download speeds up to 60+mbps and upload speeds of 20+mbps. This is in a testing environment and without customers and cannot be expected when a site is fully utilized but it is an example of the speeds that 4G LTE can provide.

As stated in the November 5, 2013 issue of FierceWireless “another key element of LTE and other high-speed wireless technologies is a reduction in latency. Indeed, when Verizon announced its LTE deployment in 2010 the operator boasted that “the user plane latency achieved in LTE is approximately 1/2 (one-half) corresponding latency in existing 3G technologies. This provides a direct service advantage for highly immersive and interactive application environments, such as multiplayer gaming and rich multimedia communications.”. The low latency (below 100 milliseconds) that LTE provides makes it possible for a great user experience and the use of Voice over the Internet.

In order to provide miSpot's Internet service, they have their own LTE core. The core and the associated site equipment is manufactured and supported by Ericsson, one of the leading providers of LTE equipment in the world. miSpot's core has the capacity to handle any future expansion that they perform. Their network is scalable – it easily expands (just by adding sites) and miSpot expects the LTE technology to continue to evolve so that there are greater speeds available and ways to compress the data that is being used. miSpot has made a

long-term investment in their core that can be leveraged at a minimal cost to cover their service areas in the northern half of the lower peninsula of Michigan.

### **Existing Service Offerings**

miSpot's service is for fixed wireless Internet to their customer's location. It is not mobile like phone companies offer, it is fixed (with an exception that will be explained later). miSpot has existing service plans that are not throttled for speed and are based on data usage only. So no matter what plan a customer gets, they get the best speed available. The speeds that miSpot customers get vary depending on the amount of spectrum that miSpot owns (i.e. 10MHz vs 5MHz), the number of active customers on the site, the strength of the RF signal and if any "noise" is in the area. miSpot customers typically experience DL speeds ranging from the low teens up to the low 30s and UL speeds from 5-6 up to the mid-teens. miSpot service plans have evolved since they first began providing their service and miSpot expects them to continue to change. miSpot was one of the first 4G LTE fixed wireless Internet providers in rural areas in the country and so there was not much existing data available to help them determine the capacity of a site, the speeds that can be achieved, the amount of data customers use and many other variables. miSpot continually looks for ways to decrease the amount of data usage a customer incurs (i.e. caching, setting up shaping rules to decrease data used for videos, etc.). The more experience they get and the more advanced the technology, the more miSpot will be able to tweak their service offerings to provide a better service at a better price.

The following are miSpot's current service offerings:

- mi **1** Spot Plan \$34.99 per month – **5GB\***
- mi **2** Spot Plan \$44.99 per month – **10GB\***
- mi **3** Spot Plan \$59.99 per month – **20GB\***
- mi **4** Spot Plan \$79.99 per month – **40GB\***
- mi **TOP** Spot Plan \$99.99 per month – **250GB\***

The price of the plans is all-inclusive. There are no additional fees for connection or activation, for the number of devices that are used by the customer, for modem rentals, for excise taxes – the price is what you see. These plans are competitively priced to what other services are available. miSpot also offers a risk-free guarantee to their customers. If a customer is not happy with their miSpot service within the first 30 days and they return their equipment to miSpot, they are released from any contract that they signed and only have to pay for the service that they used for the 30 days. The first two plans (mi 1 Spot Plan and mi 2 Spot Plan) are ideal for people that surf the web, participate in social media, use email, upload/download pictures and listen to music. The most popular plans are the mi 1 Spot and mi 2 Spot plans (they represent over 50% of what customers sign up for). Most things can be done with these two plans within the data caps unless the customer's primary use is for gaming, videos and movies. These are the types of things that currently accumulate the most data use. High definition movies require a large amount of data. As miSpot became more familiar with the capacity of their sites and their spectrum they added the mi TOP Spot Plan. It has been popular and now represents 15% of customer plans. As mentioned previously, miSpot is continually looking for ways to reduce the amount of data

that applications use so they can provide increases to the data caps of their plans. As time goes on and miSpot learns more about the LTE technology they are confident they will be able to include more data use for their customers.

As previously mentioned, miSpot service is for fixed wireless Internet. This being said, customers do have the ability to have their service be “nomadic”, which is not an option with fiber providers. miSpot offers a pocket router (a device that fits in the palm of your hand) that can act as a Wi-Fi hot spot and can work in any of the miSpot service areas. If a person is travelling in Michigan and they are inside one of miSpot’s service areas they can get access to miSpot Internet service. Because of the size of the router the user can’t be at the extreme edge of the service area, but they can get Internet in a majority of the area. This is a great option for someone that travels within miSpot service areas, some others that own a second property (i.e. a hunting cabin) or others that just want to stay connected when they go to the park to watch their kids play in a Little League game.

miSpot continues to look for additional ways that their service can be used. They are currently testing a device that was designed to be put in police, fire, public works and medical emergency vehicles so that those vehicles and the employees would have access to the Internet. miSpot is researching remote health monitoring and how that could fit into their plans. The possibilities are unlimited, but they are possibilities that should be available to those that live in the rural areas.

### **Support for the Project**

miSpot does not anticipate any monetary support from the State of Michigan or any local government entities. They do expect and have already received cooperation from local agencies when miSpot tries to bring much needed service to their areas.

Over the past three years miSpot has worked with over a dozen different local and regional community groups in an effort to bring high-speed wireless

broadband to their communities. Many of these contacts came as a direct result of working with the Connect Michigan staff. In 2013 Connect Michigan recognized miSpot for their work with these groups and miSpot's aggressive network build-out to targeted communities that are unserved or underserved in predominately rural areas of Michigan by presenting miSpot with the Connect Michigan Broadband Access Hero Award for a Michigan-Based Provider. This recognition was appreciated, but miSpot gets much more satisfaction when they are able to provide Internet to those that didn't have Internet available to them in the past.

miSpot has included a sampling of support letters from some of the groups and individuals that they have been working with over the years (see attached letters). The FCC will see that these groups and individuals are pleased with the work miSpot has done and excited about the prospects of the future. Expansion of broadband into many of these rural areas will be made easier because of the relationships miSpot has with these groups and individuals.

### **Nature and High Level Estimate of Funding to be Requested**

The process for deploying a site for miSpot's 4G LTE wireless Internet service takes approximately 3-9 months depending on lease negotiations, fiber and subcontractor availability and weather (the winter months in Michigan can sometimes all but shut down site development). The procedures miSpot follows are:

- Determine the area that miSpot wants to serve
- Perform a search for existing towers in the area. miSpot prefers to use existing towers to minimize the up-front cost and the time to deploy their service. miSpot has standard lease arrangements with major tower owners such as American Tower Corporation, SBA and KGI (Charter's tower subsidiary) which reduces the time frame to secure leases with these companies.
- Perform RF propagation models to see which tower provides the best coverage for that area.
- Determine the availability of fiber to the towers and the cost to bring the fiber to the tower. miSpot prefers to utilize existing middle-mile fiber for

their backhaul (they have used Lynx Network Group (a partner of Merit) for a majority of their middle-mile fiber) and have used microwave only once because of the need to get to a new tower that the cost of bringing fiber to that site was not economically feasible.

- Once miSpot decides on a specific tower, they enter into lease negotiations with the tower owner and typically get long-term leases with renewal options.

- With a signed lease, miSpot gets a notice to proceed and begins bringing in the electrical service and fiber. They install the equipment (radio heads and antennas on the tower and a cabinet on the ground) and begin the integration process.

- When the site is integrated miSpot begins drive testing to ensure that the site is performing properly. They optimize the site and once that is complete miSpot begins marketing and signing up customers.

For the Ogemaw County project miSpot found an existing tower that is privately owned. It has passed a structural test so miSpot knows it can handle their equipment. The estimated cost for this site (i.e. Ericsson eNodeB and radio heads, cabinet with backup batteries, antennas and other tower equipment, electrical work, fiber run and connection, tower climb to hang the equipment, engineering, legal fees and tower fees) is expected to be approximately \$135,000. The tower lease, backhaul fees and miscellaneous site costs will be approximately \$4000 per month.

With this site miSpot will cover portions of four census tracts - 26129950100 and 26129950300 in Ogemaw County and 26069000700 and 26069000800 in Iosco County. The number of Eligible Locations and annual subsidy amounts for these census tracts is 251 locations with \$232,519 annual subsidy, 214 and \$114,295, 603 and \$354,034 and 13 and \$25,336, respectively. This miSpot site will not serve all of these locations and if this were a formal funding request, miSpot would drill down into the census tracts to determine the total number of households and anchor institutions that are included in the coverage from this site. But for right now miSpot will only focus on the coverage area.

It should be noted that the 700MHz spectrum travels a great distance and miSpot found that with 4G LTE technology their sites can produce coverage up to a 9 mile radius from the tower. This “reach” can be affected by topography and it is in this example. Based on the RF propagation map (see Attachment # 3) miSpot coverage goes approximately 6 miles to the north, 9 miles to the east, 5 miles to the south, 9 miles to the west and 4 miles to the northwest. Based on this miSpot can provide high-speed fixed wireless broadband to approximately 140-150 square miles of homes for \$135,000 in up-front costs and \$4000 in monthly recurring costs, a substantially lower cost than what would be incurred by others bringing fiber to these locations.

Will all sites cost \$135,000 up front and have \$4000 of monthly recurring costs? No. miSpot has had some sites cost roughly \$30,000-40,000 more and have monthly recurring costs exceed \$6000, but most are typically what have been shown in this example. A major cost factor that might need to be addressed is the cost of a tower if there is not one that suits the needs of a targeted area. miSpot had this situation once and found a tower company to build the tower at the tower company’s own expense as long as they had a lease commitment from miSpot for that site. If miSpot can’t find an arrangement like this, some communities have expressed a desire to build towers at their own expense for broadband use. More than likely there will be sites that miSpot will need to have a tower built. Initial estimates that miSpot has received indicate a tower could be built for approximately \$200,000. So that cost, added to the “typical cost” of \$135,000 for the tower equipment, may have to be considered when looking to serve various remote census tracts. If miSpot is in a “real rural” area and they have to build a tower it is likely that there will not be middle-mile fiber close by. miSpot will spend a maximum of \$35,000-40,000 to bring fiber to a site (because fiber for backhaul is very reliable) and if the cost for fiber exceeds that amount miSpot will go with a microwave backhaul solution. By going with the microwave miSpot will be giving up some reliability but they will still achieve a quality product. The cost of the microwave equipment would be approximately what is spent for the fiber so there would not be any cost added to the \$135,000 cost that is used in this example.

In many of the “eligible areas” it is not cost effective for a provider to enter into that market. The funding of the upfront costs and maybe a portion or all of the monthly recurring costs might be needed, at least until there is a certain number of customers on the site. Another funding area might be a subsidy for a portion of the customer’s monthly service plan fees. A number of the “eligible areas” are not only sparsely populated, but they have higher than average unemployment and lower than average household income. Thus, even if broadband were available, many of these people couldn’t afford it. So there might be a need for an initial subsidy of a portion of the service plan fees. The other cost associated with getting service in some of the more remote areas is the CPU (customer premise unit). This includes the router in the house and often outside antennas that are installed by miSpot to assist in the reception of the broadband signal. These costs can be over \$500 per household. miSpot’s thought is that if there is a need for a subsidy and it is funded by the FCC, miSpot can contribute the CPU for the customer at no cost.

## **Summary**

The FCC has asked miSpot to provide information to them so they could learn more about how Connect America Fund subsidies could be used differently to bring broadband to high-cost areas. The FCC wants to “test how tailored economic incentives can advance the deployment of next-generation networks...in rural, high-cost areas” with the goal of “robust, scalable, last-mile broadband networks”. miSpot has provided the FCC with that information and shown that bringing broadband to high-cost rural areas can be done (miSpot is doing it now). miSpot can preserve voice and extend broadband networks in high-cost rural areas, they have a robust, scalable network that is cost effective and provides a quality of service that all Americans deserve. miSpot is engaged with community groups in an effort to bring broadband to their residents and anchor institutions. miSpot represents a viable way for the FCC to attack this project.

miSpot is ready to move forward. If the FCC has any questions or want to discuss any of the above further, please contact myself, the miSpot General Manager, at [rleppien@miSpot.net](mailto:rleppien@miSpot.net) or call me at 989-453-1776. miSpot is excited about what the Connect America Fund can do for the residents of Michigan.

Respectfully submitted,



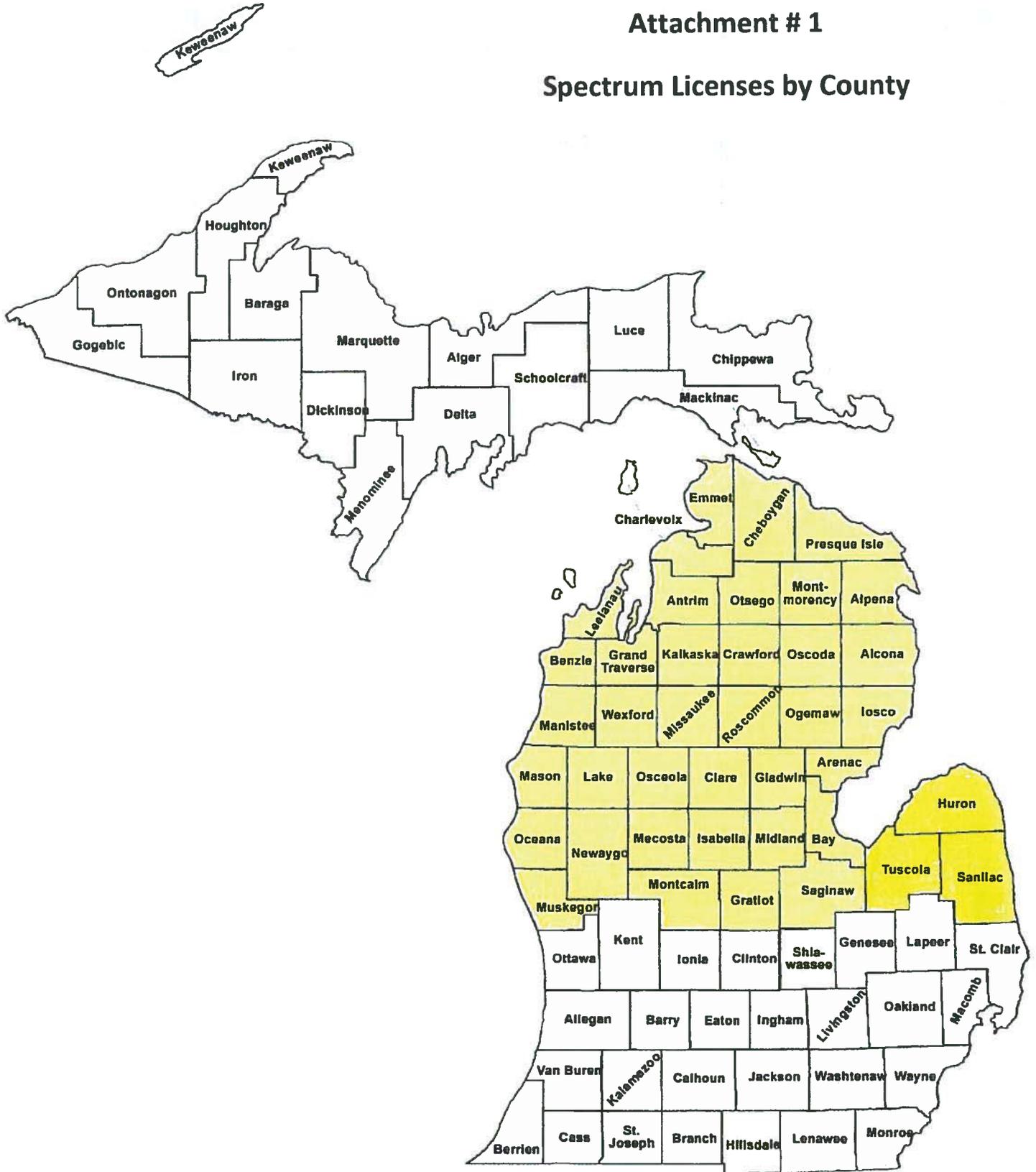
Raymond K. Leppien

General Manager, miSpot

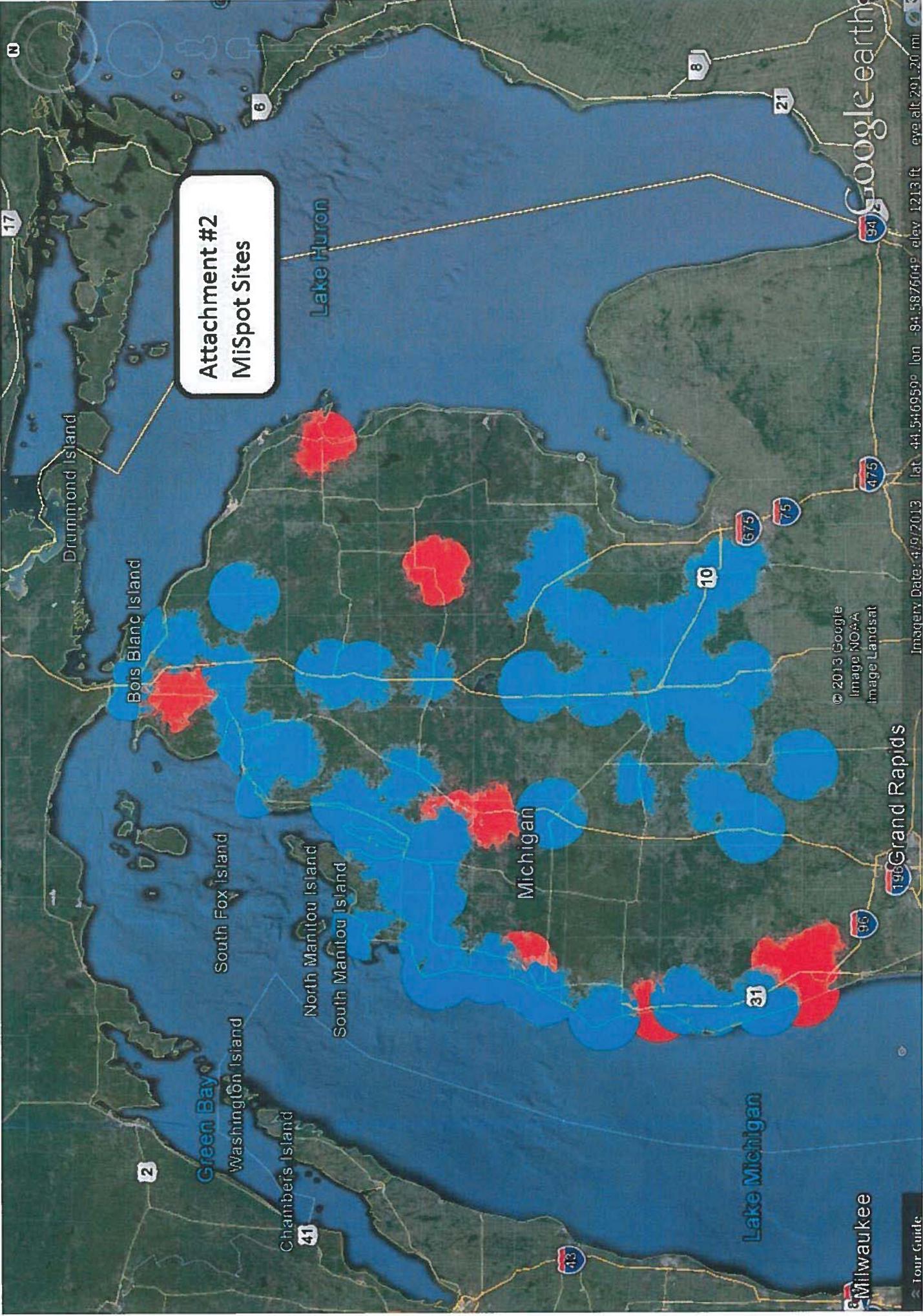
Attachments

# Attachment # 1

## Spectrum Licenses by County



**Attachment #2  
MiSpot Sites**



## **miSpot Support Letters**



**CONNECT**  
**Michigan**

6546 Mercantile Way, Lansing, Michigan 48911

March 6, 2014

Federal Communications Commission  
445 12th St SW  
Washington, D.C. 20536

On behalf of Connect Michigan, I am pleased to write in support of miSpot's Expression of Interest, an opportunity for funding through the Commission's Rural Broadband Experiments to deploy next-generation broadband networks and its corresponding benefits for rural Michigan.

As the leading nonprofit organization focused on the expansion of broadband access, adoption, and use in Michigan since 2009, we have witnessed first-hand the benefits of high-speed Internet access within a community. Unfortunately, broadband access is still devoid in multiple rural counties throughout our state.

The miSpot program described in the Expression of Interest will maximize the impact of the Rural Broadband Experiments by leveraging existing community resources and convening local broadband stakeholders who have been involved in our Connected Community Engagement Program. We can attest through our involvement with many rural communities that deploying robust broadband connectivity will catalyze improvements to economic development, education, healthcare, and overall quality of life provided through community anchor institutions in the region.

I want to express my unequivocal support for the organized effort by miSpot to enhance local broadband networks. These networks will significantly contribute to the state of Michigan, its communities, and residents now and in the future.

Sincerely,

Eric Frederick, AICP, LEED AP  
Executive Director, Connect Michigan



March 3, 2014

Chairman Thomas Wheeler  
Federal Communications Commission  
445 12<sup>th</sup> St., S.W.  
Washington, D.C. 20554

Dear Chairman Wheeler:

I am writing to express the support of the Northern Lakes Economic Alliance (NLEA) for MiSpot's intent to apply for funding under the "FCC Rural Broadband Experiment" program.

NLEA is a four-county economic development non-profit organization located in the northern tip of the Lower Peninsula of Michigan. We recognized several years ago that the dissemination of Broadband was going to be critical for our businesses and residents. Because this region is sparsely populated and the terrain very hilly and wooded, convincing private ISP's to service the more rural portions of this area has been extremely difficult. These companies have not been able to be profitable when installing hardware and equipment to service only a very few customers per mile.

MiSpot is one of the very few ISP's who is making a concerted effort at disseminating Broadband to our most rural areas. They are the only company, that we know of, doing this over such a broad coverage area. They are making amazing progress bringing high-speed and affordable wireless Internet to remote places in the NLEA region. There are still parts of this region and the State that they haven't been able to reach, however, so the need exists to continue to spread high-speed Internet to these hard to reach areas.

We have found MiSpot to be a reputable company that works well with local communities and customers. When they first approached the NLEA a few years ago, they laid out their plans for greatly expanding their wireless network in this area. We have been pleased, that they have been keeping those promises. We encourage you to give serious consideration to their proposal for funding.

Sincerely,

Andy Hayes  
President

1313 Boyne Ave / P.O. Box 8

Boyne City, Michigan 49712

Phone: 231.582.6482 - Fax: 231.582.3213

[www.northernlakes.net](http://www.northernlakes.net) \* [info@northernlakes.net](mailto:info@northernlakes.net)

Core Partners -



[www.everythingogemaw.com](http://www.everythingogemaw.com)

March 4, 2014

Dear Federal Communications Commission:

It is as Director of the Ogemaw County Economic Development Corporation and Chairperson of the Ogemaw County Technology Planning Team that I ask you to fund MiSpot's build-out in Ogemaw County, specifically in Hill Township, as part of the Rural Broadband Experiment. There is significant need there, as our survey and maps illustrate. It is also critically important for economic development.

It is noteworthy to include MiSpot has already brought service to areas in Ogemaw County that had spotty or only dial-up service. These areas are in Mills & Ogemaw Townships. Service providers have previously been very unwilling to do build-outs in these areas due to the low numbers in both population density and income.

Without the FCC's program, it will likely be sometime in the distant future before a provider agrees to make such a significant investment in Ogemaw County, including Hill Township. Please consider funding this project.

All my best.

Mandi Chasey, MPA  
Ogemaw County Economic Development  
2389 S. M-76  
West Branch, Michigan 48661  
[mchasey@michworks4u.org](mailto:mchasey@michworks4u.org)  
(O): 989.345.1090  
(C): 989.418.8107



**Clare County Broad band Network Users Group**  
**Jerry Becker: 255 West Main Street Harrison, Mi. 48625**  
**Ph. (989) 539-6161 Email: [Beckerj@clareco.net](mailto:Beckerj@clareco.net)**

**Date February 27, 2014**

**I am writing this letter in support of Mi-Spot in regards to the “FCC Experiment Project” letter of interest campaign that we support.**

**The Clare County Broadband Network Users Group has worked with Mi-Spot for the past several years and has members on our board and participates in events, workshops and, outreach programs. Mi-Spot recently this past fall helped in the development and sponsorship of a booth at the C-3 Broadband Business summit here in Clare County.**

**This Summit provided Vendors Booths, Training sessions, food and refreshments and followed up with door prizes, where we had a day and night session summit workshop that invited local businesses.**

**This Summit helped our local businesses in the development of Websites, Social Media and Broadband Internet access opportunities.**

**Mi-Spot was very instrumental in helping us accomplish this event and make it a great success! Because of Mi-Spots far reaching 700MHZ licensed signal, the penetration they are reaching out into the rural areas of Clare County with a wireless broadband footprint with speeds that would not be achievable normally.**

**Because of Clare Counties unique terrain and lower than normal population and economic status it is hard to develop a business model that works to get further development without wireless services that Mi-Spot can offer.**

**Mi-Spot has a stable signal platform that makes it very attractive to anyone looking for a Broadband connection in remote areas, further with their capability to roam outside of our county it makes it even more attractive to the travelling public.**

**We are in need of additional sites especially in the extreme Northwest portion of our county that has limited population and business activity but has robust recreational activity that currently is either underserved or not served at all.**

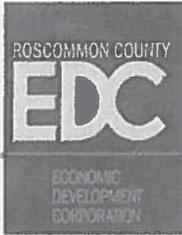
**These areas have smaller townships that have extremely limited resources to mount their own broadband build out or sustainability. They would welcome a presence by a company such as Mi-Spot.**

**This would build further interest in relocating to the area with not just residential development but businesses also as they need broadband services.**

**We also see as a caveat a potential local government access point that this build out might offer.**

**We support Mi-Spot and their efforts and appreciate having them aboard with us as a partner in our efforts.**

**Sincerely, Jerry Becker – Clare County Broadband Network Users Group Chairman**



***Roscommon County  
Home of Michigan's  
other Great Lakes!***

500 Lake St. ❖ Roscommon, MI 48653 ❖ 989-275-5268 ❖ 877-688-6687

February 26, 2014

FCC

To Whom It May Concern:

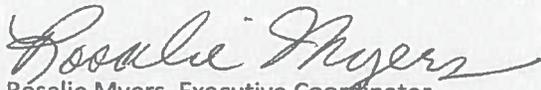
Roscommon County Broadband Committee has worked with Mi Spot to assist with our Broadband Certification process.

Mi Spot has increased its scope of service to include some areas in our County that were not served or had been unable to receive adequate Bandwith to conduct business. One such area that has had previous inconsistent service is the Roscommon County Animal Shelter which is now served by Mi Spot.

As with most rural communities we have residents and businesses that are not clustered in specific areas. It is very difficult financially to make a case to bring service providers into those areas of need with small populations due to the cost involved. However, those are the areas our residents and businesses chose to reside and we feel that they have the same needs to be part of the global community for work and/or education.

Roscommon County has 65% of our K-12 students receiving free lunches. These student's families need to have access to service that is affordable. Mi Spot has affordable packages and we need to extend that service to meet the needs of our county.

Sincerely;

  
Rosalie Myers, Executive Coordinator

Roscommon County EDC

989-275-5268

**Carolyn Flore**  
Missaukee County Clerk - Register

Barb Nietling, *Chief Deputy*  
Linda Westdorp, *Deputy*  
Jessica Nielsen, *Deputy*

111 S. Canal St. Box 800  
Lake City, MI 49651  
Phone: 231-839-4967  
Fax: 231-839-3684

March 4, 2014

Dear ISP's serving Missaukee County:

I am writing to offer assistance to any ISP considering submission of an "expression of interest" or application under the Federal Communication Commission's "rural broadband experiment" program.

After reviewing Connected Nation's materials, speaking with Tom Stephenson at Connect Michigan, and attending the FCC's webinar, we know applicants have a very short (March 7) time-frame for submitting their "expression of interest". To be successful, an application will need to be regional in nature. In order to help address both of these issues, I want to ensure that any ISP that applies understands that as the Director of the Missaukee County Broadband Team, I can serve as a point of contact for questions you may have, arrange meetings, gather community support, or assist in other ways.

Also, please note that Missaukee County now has a Technology Action Plan, a completed broadband survey (with 600 + respondents), and the resulting maps from the survey data.

If I can assist on this or any other project to expand broadband in Missaukee County please do not hesitate to contact me.

All my best,



Carolyn Flore  
Missaukee County Clerk-Register

cc: Broadband Committee  
Board of Commissioners

**Attachment #3**  
**MiSpot RF Map**

