



## Wisconsin PSC Broadband Expansion Grant Program Application

Submitted March 20, 2014

### 3.2 Mandatory Application Requirements

#### 3.2.1.1. Applicant identification and contact information

**3.2.1.1.a.** The name of the entity applying for the grant, and the mailing address, telephone number and e-mail address of one or more contact persons representing the entity.

The organizational entity applying for the grant, as lead applicant, is detailed below.

**Contact Name/Title:** Cory Heigl, Director of Business Development

**Organization:** CCI Systems, d.b.a. Packerland Broadband

**Identity:** Private (Telecommunications Company)

**Mailing Address:** 105 Kent St., Iron Mountain, MI 49801

**Telephone:** (906) 282-3682 – Mobile; (906) 776-2634 - Office

**Email:** [cory.heigl@ccisystems.com](mailto:cory.heigl@ccisystems.com)

[See *Appendix* for Letter of Commitment.]

**Cash Match Commitment:** \$20,000

**3.2.1.1.b.** If the application proposes a public-private partnership, include the identity and contact information for all application partners.

The following public-private partners have joined CCI Systems in this application and have also committed a cash match to the project:

**Contact Name/Title:** Dave Hayden, Information Systems Director

**Identity:** Public (Municipality)

**Organization:** Eau Claire County

**Mailing Address:** 721 Oxford Avenue, Eau Claire, WI 54703

**Telephone:** (715) 839-4841

**Email:** [Dave.Hayden@co.eau-claire.wi.us](mailto:Dave.Hayden@co.eau-claire.wi.us)

[See *Appendix* for Letter of Commitment and Support from Eau Claire County Board Chair Gregg Moore.]

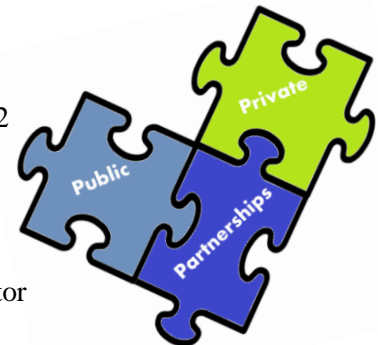
**Cash Match Commitment:** \$35,000

**Contact Name/Title:** Ross N. Wilson, Chair  
**Identity:** Private (Unincorporated Association)  
**Organization:** Chippewa Valley Inter Networking Consortium (CINC)  
**Mailing Address:** c/o CESA 10, 725 West Park Avenue, Chippewa Falls, WI 54729  
**Telephone:** (715) 720-2029  
**Email:** [wilson@cesa10.k12.wi.us](mailto:wilson@cesa10.k12.wi.us)  
[See *Appendix* for CINC Letter of Commitment from Ross Wilson, Chair.]  
**Cash Match Commitment:** \$10,000

**Contact Name/Title:** Kevin Groskreutz, Chief Information Officer  
**Identity:** Private (Nonprofit Health Care)  
**Organization:** Sacred Heart Hospital (Eau Claire) and St. Joseph's Hospital (Chippewa Falls); Hospital Sisters Health System Division (Western Wisconsin)  
**Mailing Address:** 900 West Clairemont Ave, Eau Claire, WI 54701  
**Telephone:** (715) 717-5030  
**Email:** [Kevin.Groskreutz@hshs.org](mailto:Kevin.Groskreutz@hshs.org)  
[See *Appendix* for Letter of Commitment and Support from David Nelson, CFO, HSHS]  
**Cash Match Commitment:** \$5,000

Other public and private partners are directly involved in planning this project and will directly benefit from this completed project. The following organizations have submitted letters of support to CCI for this project:

**Contact Name/Title:** William D. Perry, Administrator  
**Identity:** Public (School)  
**Organization:** Augusta School District  
**Mailing Address:** E 19320 Bartig Road, Augusta, WI 54722  
**Telephone:** (715) 286-3302  
**Email:** [perrybil@augusta.k12.wi.us](mailto:perrybil@augusta.k12.wi.us)  
[See *Appendix* for Letter of Support.]



**Contact Name/Title:** Jake Schoeder, Technology Coordinator  
**Identity:** Public (School)  
**Organization:** Fall Creek School District  
**Mailing Address:** 336 East Hoover Avenue, Fall Creek, WI 54742  
**Telephone:** (715) 877-2123 ext. 1007  
**Email:** [jakeschoeder@fallcreek.k12.wi.us](mailto:jakeschoeder@fallcreek.k12.wi.us)  
[See *Appendix* for Letter of Support.]

**Contact Name/Title:** Bill Tourdot, Superintendent  
**Identity:** Public (School)  
**Organization:** Osseo Fairchild School District  
**Mailing Address:** 50851 East Street, Osseo, WI 54758  
**Telephone:** (715) 597-3141  
**Email:** [dpocernich@ofsd.k12.wi.us](mailto:dpocernich@ofsd.k12.wi.us)  
[See *Appendix* for Letter of Support.]

**Contact Name/Title:** John LeBrun, Information Services Manager

**Organization:** City of Eau Claire

**Identity:** Public (Municipality)

**Mailing Address:** 203 South Farwell Street, Eau Claire, WI 54701

**Telephone:** (715) 839-5044

**Email:** [John.LeBrun@EauClaireWI.gov](mailto:John.LeBrun@EauClaireWI.gov)

[See *Appendix* for Support Letter from Lyle Koerner, Jr., Fire Chief, City of Eau Claire.]

**Contact Name/Title:** Michael Haynes, Agency Administrator

**Identity:** Private (Unincorporated Association)

**Organization:** Cooperative Educational Service Agency 10 (CESA 10)

**Mailing Address:** 725 West Park Avenue, Chippewa Falls, WI 54729

**Telephone:** (715) 723-0341

**Email:** [mhaynes@cesa10.k12.wi.us](mailto:mhaynes@cesa10.k12.wi.us)

[See *Appendix* for Letter of Support.]

**3.2.1.1.c. Requirement.** The application must show that the applicant is an organization, a telecommunications utility, or a city, village, town, or county that has established a legal partnership or joint venture arrangement with an otherwise qualified organization or telecommunications utility, and as such meets the eligibility requirements set forth in Wis. Stat. s. 196.504(1).

CCI Systems (CCI), d.b.a. Packerland Broadband, is an “eligible applicant” as defined in Wis. Stat. s. 196.504(1) because it is a for-profit telecommunications utility and has established a “legal partnership or joint venture arrangement” with the organizations listed above. The partner organizations listed above are known collectively as the Chippewa Valle Inter Networking Consortium or “CINC.” CINC is a community area network that is an Unincorporated Association (formed in 2011 under §184 WI Statutes), and includes city, and county members, all that are qualified organizations as defined in Wis. Stat. s. 196.504(1). [See *Appendix* for Letter of Support from Ross N. Wilson, Chair, CINC, which also includes an attachment that lists 30 current CINC members with a brief organizational description.] Although CCI and CINC have a longstanding collaborative relationship on various network projects, a Memorandum of Understanding (MOU) describing the joint venture arrangement for this project is attached to this application [See *Appendix* for CCI-CINC MOU.]

### **3.2.1.2. Description of the project**

**3.2.1.2.a.** A map and description of the area of the state that will be affected by the proposed project. If the area to be served lies within a census block designated as served, additional documentation to demonstrate the actual broadband service available in the proposed area of service.

**Total Project Cost:** \$538,849

**PSC Broadband Expansion Grant Program Grant Request:** \$239,253

**Project Description:** This project includes a total of four CINC towers with CINC Wi-Max equipment:

1. **Wilson Tower #1 (existing tower):** Adding service group shared access for CCI Systems to CINC Wi-Max equipment on current tower; 44° 36' 01" N, 90° 57' 59.50" W,

elevation 1143 feet; LLPX310R – 180 feet; BreezeMAX Extreme 3650 (on 180 foot high tower)

2. **Augusta Tower #2 (existing tower):** Adding service group shared access for CCI Systems to CINC Wi-Max equipment on current tower; 44° 40' 36" N, 91° 06' 53" W, elevation 966 feet; LLPX310R – 150 feet; BreezeMAX Extreme 3650 (on 150 foot high tower)
3. **Fairchild Tower #3 (existing tower):** Adding service group shared access for CCI Systems to CINC Wi-Max equipment on current tower; 44° 36' 01" N, 90° 57' 59.50" W, elevation 1143 feet; LLPX310R – 125 feet; BreezeMAX Extreme 3650 (on 125 foot high tower)
4. **Lake Eau Claire County Park Tower #4 (new tower):** Constructing a new tower at Lake Eau Claire County Park at 44° 45' 23.50" N, 91° 08' 18.50" W, elevation 944 feet, in north eastern Eau Claire County (See Map); tower will include CINC Wi-Max equipment with service group shared access provided to CCI Systems (on 80 foot high tower). This tower is a repurposed tower that has been decommissioned from another site and in an in-kind equipment contribution.

The project also includes new CINC fiber to the new CINC tower and new Wi-Max equipment:

5. Fiber to the new **Lake Eau Claire County Park Tower #4** from an existing handhold location to the tower (approximately 15,000 feet of underground fiber). This fiber will connect to a nearby Packerland Broadband and CINC fiber optic backbone. The strand count will be a minimum of 48ct cable. Some of these strands will be allocated to serve County parks facilities near the new tower location, as well as possible expansion of future hard-line networks in the area. [See Appendix for schematic titled, "CCI-CINC Public-Private Towers & Fiber Project."]
6. Tower and tower equipment that includes an LLPX310R (80 foot tower) and a BreezeMAX Extreme 3650 (at 80 feet). This equipment will be the gateway to the greater internet for serving the homes with the wireless internet in and around the Lake Eau Claire area.

**Ownership:** As described in the MOU, Eau Claire County owns the Lake Eau Claire County Park Tower #4 (new tower) and Wi-Max equipment, and CINC owns the fiber to the new tower.

**Description of Area Affected:** In partnership with the Chippewa Valley Inter Networking Consortium members (listed above), CCI will provide wireless internet from four Wi-Max towers in eastern Eau Claire County to customers. As described in the attached MOU, the combined new service area for customers will cover approximately 200 square miles which accounts for tower overlap. Note: All CCI and CINC calculations rely on a very conservative four mile radius of average coverage from each Wi-Max tower (providing approximately 50 square miles of coverage per tower). PCS Wireless is CINC's vendor for Wi-Max and has generated coverage maps based on tower height, altitude and GPS coordinates for this project. The four mile radius is a conservative estimate, since PCS tower radius estimates provide coverage of up to seven miles in areas without blockages, such as a high hill or large metal structure. (Using the more realistic

seven mile radius, each tower could provide approximately 150 square miles of coverage, or about 500 non-overlap square miles for all four towers.)

**Maps of Coverage Areas:** Three PCS coverage maps are included. [See Appendix for PCS Wireless Wi-Max Studies of Coverage Areas: Maps 1, 2 and 3.] These studies suggest a four mile radius is the standard for coverage in this area.

- **MAP #1: Proposed WiMax 2.5 GHz Mobile Indoor CPE Coverage** from the four towers: This map illustrates the expected coverage a vehicle (such as an ambulance or police car) would experience with two external roof antennas. The 2.5 GHz mobile CPE allows seamless handoffs between different sectors while the vehicle moves from one sector to another. The 2.5 GHz frequency is an exclusive licensed frequency.
- **MAP #2: Proposed WiMax 3650 MHz Fixed Outdoor CPE Coverage** from the four towers: This map illustrates the expected coverage from an outdoor fixed location CPE. The 3.650 MHz frequency is a non-exclusive licensed frequency.
- **MAP #3: Proposed WiMax 2.5 GHz Fixed Outdoor CPE Coverage** from the four towers: This map illustrates the expected coverage from a fixed outdoor 2.5 GHz CPE. With the antenna mounted outside, building materials that inherently shield radio waves for an indoor fixed CPE are not a factor in the expected coverage.

**Map of “Unserved” Areas:** This project’s target area (“affected area”) encompasses approximately 200 square miles. The “unserved area” of this target area is approximately 55 percent, or 110 square miles. [See Appendix for “PSC Broadband Expansion Grant Map of Eligible Areas and CCI-CINC Approximate Wi-Max Tower Service Areas.”] Per PSC Broadband Grant Program definition, “Underserved area means an area delimited by a census block boundary, as defined by the US Department of Commerce, that is served by fewer than two broadband service providers, or an area that an applicant has demonstrated in its application is underserved notwithstanding the fact that the proposed service area lies within a census block that has been designated as served.” Several Lake Eau Claire residents in this project’s affected area (quoted below, and with letters attached in the Appendix) dispute the accuracy of the PSC Broadband Expansion Grant Map of Eligible Areas.

**Numbers of Unserved:** The unserved area in this project’s affected area represents a population of approximately 7,610 individuals (representing 2,900 housing units). CCI’s goal is to subscribe 1,200 of these unserved customers. These numbers do not include underserved customers, which will also be allowed to subscribe. However, preference will be given to currently unserved customers. [See Appendix, “U.S. Census: Total Population and Occupied Housing Units” for census blocks in the target area and “Eau Claire County Census Tract Map Approximations.”]

**Map of “Served” Areas:** Because some areas to be served lie within census blocks designated as “served,” CINC and CCI will provide the following additional documentation below to demonstrate the actual broadband service available in the proposed area of service. [See also, Section 3.2.1.4.c. for a list of the broadband service providers in the area affected.] It is CINC’s and CCI’s belief that 85 percent of the target areas affected that are considered “served” in the PSC Map of Eligible Areas are technically “underserved,” and have service that is not dependable or very low speeds that are extremely limiting to customers. [See Appendix for “PSC Broadband

Expansion Grant Map of Eligible Areas and CCI-CINC Approximate Wi-Max Tower Service Areas.”] Letters from customers with homes or seasonal vacation homes in the affected area that describe this low speed and spotty service are included in the *Appendix*.

**PSC Map Limits:** Many “served” areas in the PSC map of eligible areas for this grant funding may actually have no reliable service. The PSC’s Broadband Provider Information may include providers “who may be willing to extend service to this area.” However, service may not be currently available to customers, and will not be available anytime in the near future because the sparse population cannot support a reasonable ROI after infrastructure investment to expand coverage.

**Inadequate cellphone wireless service in “served” areas:** Many residents, living in a “served” area according to the PSC map of eligible areas, complain that they have spotty or inadequate cellphone service. They also complain that this cellphone wireless service is slow, of low quality and dependability, and does not meet their needs for higher speed and more reliable Internet applications in their home that are required to run a business, conduct banking or perform community service.

**Testimonials of Residents in the proposed affected area (disputing accuracy of PSC Broadband Grant Eligibility Map):** Many residents living in the targeted area have shared their frustration with having no broadband service provider, and their inability to convince a provider to expand coverage in their rural area where population is sparse and ROI may be too low to sustain a business model. CCI and CINC have included six selected letters from residents that illustrate their personal and economic needs for broadband service and the difficulty of living on the other side of the digital divide. [See *Appendix* for complete copies of letters excerpted below]:

- This letter describes the difficulty of running an aviation consulting business from a residence with no broadband: *“We are currently completing our residence on Lake Eau Claire at E20675 North Shore Drive, Augusta, WI 54722. This new home is located in an area with little or no Internet Service. Currently I am unable to get Internet Service of sufficient speed, capacity and availability to support the following services which I would like to add or include in this new structure which will EVENTUALLY serve as our permanent family residence.”* (Robert G. Buley, 3/18/14). **Note: The PSC Broadband Grant Eligibility Map labels this residence near Lake Eau Claire as: “Served” by Sprint, Charter Communications, CenturyLink, UsCellular and Verizon Wireless, even though it has “little or no Internet service.”**
- The Eau Claire County Board formed a new Lake District around Lake Eau Claire to improve water quality, enhance the fishery and reduce sediment entering the lake. The District chair details the economic benefits that could come to the area with the CINC-CCI project: *“It would be a huge advantage if we had wireless service so we could record our research data on site out in the lake as well as monitor the work as it is done. Also, the more tourists we attract translates into more goods and services purchased, which boosts the area’s economy, (which we need) providing a benefit for the entire area. For us to reduce our costs and for us to communicate more effectively with County, State*



and Federal agencies we need this technology.” (Marlo Orth, Chair, Lake Eau Claire Protection and Rehabilitation District, Augusta, 3/19/2014). Note: The PSC Broadband Grant Eligibility Map correctly lists this Lake Eau Claire residence as “Unserved.”

- One family noted that their cottage cannot be used year-round because there is no broadband: *“Our cottage is located on Lake Eau Claire, at ES22040 SD in an area with no Internet service provider. We have no internet service at the lake, and we spend a lot of time at our cottage in the summer time. Internet service would be very helpful for us to keep in contact with our family, and my husband is on many volunteer boards, and would help him to keep in contact with the people that he needs to be in contact with. Plus our phone service in the area is not good.”* (Dean and Carolyn Boehne, 3/19/2014). **Note: the PSC Broadband Grant Eligibility Map labels this Lake Eau Claire residence as: “Served” by Verizon Wireless, CenturyLink and AT&T Mobility LLC, although it has no Internet.**
- The President of the Lake Eau Claire Association, an organization of more than one hundred families living on or near Lake Eau Claire, described the digital divide’s impact on members: *“Our organization and its individual family members consistently face the issues of slow internet or no internet at all. Both at the individual home level as well as the many home-located electronic businesses operated by our members, an increase in commercial internet services would make a major improvement in the business activity in our wilderness areas. And finally, the increased business activity this improvement could bring supports badly needed economic growth here. This in turn will increase property values, increase opportunities for small and large businesses to locate on or near the lake, and for employees to telecommunicate from home. All these factors eventually improve our tax base and support our local schools.”* (Frederick Poss, Lake Eau Claire Association President, 3/17/2014). **Note: The PSC Broadband Grant Eligibility Map labels this Lake Eau Claire residence as: “Served” by Verizon Wireless and CenturyLink, even though it has “slow” or “no Internet at all.”**
- One resident described the difficulty running his insurance business without reliable broadband connectivity: *“I live at E20845 County Road ND, Augusta, Wisconsin. My home is located in an area with very slow Internet service. There are times during the day that I have no access at all. Those times are usually afternoons when school is out and on weekends.”* (Daniel Esser, 3/17/2014). **Note: The PSC Broadband Grant Eligibility Map labels this Lake Eau Claire residence as: “Served” by Verizon Wireless, CenturyLink and AT&T Mobility LLC, even though it has “very slow” or “no [Internet] access at all.”**
- This resident described the inability to participate in critical daily health care and economic activities: *“I live at E22070 County Road SD, Augusta, WI 54722. My home is located in an area with no Internet service provider. It has been very difficult to stay in contact with family, living in a remote area, an area that we love. We cannot access internet service to pay our bills on line, shop or*

*communicate with our insurance company and other businesses. We also enjoy getting books through the library online. Our doctor now has an online communication service that we cannot access. It seems every day that we are asked to do things online from paying taxes to staying in touch with our church. To stay involved with community clubs and organizations, we must be able to receive the meeting updates and notes. Newspapers are not delivered to our area, but we would be able to access up to the minute news and weather online.”* (Andrew and Donna Prodoehl, 3/18/2014). **Note: The PSC Broadband Grant Eligibility Map labels this Lake Eau Claire residence as: “Served” by Verizon Wireless and CenturyLink even though it has “no Internet service provider.”**

**3.2.1.2.b.** An explanation of how the proposed project will increase broadband access.

**Significant Numbers Served:** CINC and CCI believe this project will serve up to 1,200 households in the target affected area that were previously underserved and unserved new subscribers. Further, the County estimates the Wi-Fi in three rural unserved parks will serve up to 45,000 recreational campers and visitors each year.

The proposed project will equip three existing Wi-Max towers and one new tower with CINC Wi-Max equipment to provide wireless Internet to approximately 200 square miles (a very conservative estimate) that includes substantial areas of unserved and underserved areas. [See *Appendix* for “PSC Broadband Expansion Grant Map of Eligible Areas and CCI-CINC Approximate Wi-Max Tower Service Areas.”]

**Increased Internet Access for Paid Commercial Subscribers (1,200):** The proposed project allows CCI to provide commercial wireless service from four CINC towers (using CINC Wi-Max equipment) located in underserved and unserved rural areas. Each tower will have a capacity of serving 300 commercial customers. **With four towers, 1,200 subscribers may be served in these unserved and underserved rural areas.** With future additions to the existing equipment on these towers, additional subscribership and speeds may be eventually attained.

**Increased Access to Park Patrons and Campers (a public safety benefit serving 45,000 people/year):** Broadband access will also be expanded to campers, hikers and other park and forest recreation participants at three County Parks that will provide no-cost Wi-Fi for public safety. Having free County Wi-Fi service for campers in the target areas will enhance the camping experience and increase public safety and Ranger services by giving campers access to information such as weather maps and emergency weather information and improved cell service for emergency calls and hiking and boating maps.

This additional service is anticipated to increase park utilization and increase collected visitor fees. According to the Eau Claire County Parks and Forest Department, the following three targeted service area parks and campgrounds include a significant transient population of campers and recreational visitors.

A very conservative estimate of overnight campers and day summer visitors for the three parks in the target service per year is 34,900. The actual estimate that includes unregistered guests may be closer to 45,000 park patrons. [See *Appendix* for Letter of Support from Eau Claire County signed by Gregg Moore, Eau Claire County Chairman.]



**Increasing Commercial Access:** To increase commercial broadband access, CCI will provide the following service and price points to its residential customers (estimates based on information presented in this proposal):

Approximate Speed	Approximate Monthly Customer Cost
1 Mbs.	\$49.00
3 Mbs.	\$59.00
5 Mbs.	\$69.00

**3.2.1.2.c.** A statement whether the proposed project is targeting the “last mile,” “middle mile,” or “backbone” infrastructure.

The proposed project targets:

1. Middle Mile: *Not applicable/none*
2. Last Mile (i.e. tower to home): CCI systems will provide CPE (Customer Premise Equipment) on each home to be served. This equipment will communicate with the WiMax Radio on the tower nearby
3. Backbone: *Not applicable/none*

**3.2.1.2.d.** A description of the broadband service to be provided, including estimated download and upload speeds, whether that speed is based on dedicated or shared bandwidth, and the technology that will be used. This description may be illustrated by a map or schematic diagram, as appropriate.

**Schematic Diagram:** See Appendix for schematic titled, “CCI-CINC Public-Private Towers & Fiber Project.”

1. **Speeds:** Description of the broadband service to be provided, including estimated download and upload speeds: The service will be estimated at 1,3,5 Mbps download speeds, and upload speeds of up to 1Mbps.
2. **Whether speed is based on dedicated or shared bandwidth:** Bandwidth will be dedicated to both CINC members and CCI.
3. **Technology** that will be used:

Existing County-owned towers have CINC Wi-Max equipment:

**Wilson Tower #1 (existing tower)**

- 44° 36' 01" N, 90° 57' 59.50" W
- Elevation 1,143 feet

- LLPX310R – 180 feet
- BreezeMAX Extreme 3650 – 180 feet

**Augusta Tower #2 (existing tower)**

- 44° 40' 36" N, 91° 06' 53" W
- Elevation 966 feet
- LLPX310R – 150 feet
- BreezeMAX Extreme 3650 – 150 feet

**Fairchild Tower #3 (existing tower):**

- 44° 36' 01" N, 90° 57' 59.50" W
- Elevation 1,143 feet
- LLPX310R – 125 feet
- BreezeMAX Extreme 3650 – 125 feet

The new County-owned tower will have the following CINC Wi-Max equipment:

**Lake Eau Claire County Park Tower #4 (new tower):**

- 44° 45' 23.50" N, 91° 08' 18.50" W
- Elevation 944 feet
- LLPX310R – 80 feet
- BreezeMAX Extreme 3650– 80 feet

4. **Map or schematic diagram:** See Appendix for schematic diagram titled, “CCI-CINC Public-Private Tower Project.”

**3.2.1.2.e.** A schedule by which the applicant intends to complete the components of the proposed project.

**Key Dates**

- Notification of Award followed by execution of Award Agreement: *May 15, 2014*
- Start Date *May 30, 2014* (maximum 24 months to complete and utilize grant funds)
- Construction will not take place during 3Q and 4Q (2014-2015) due to winter, but may be completed before the ground freezes in 2Q or as late as 2Q (2015-2016)
- Project completion is anticipated within 12-14 months (construction and fiber installation is seasonal, with limited work that can take place in the 3<sup>rd</sup> and 4<sup>th</sup> quarters (see Timeline below):

Timeline: Planned Activity for Project Components	Project Quarters [X=complete]							
	May 30, 2014 to May 29, 2015				May 30, 2015 to May 29, 2016			
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>
Execution of PSC Grant Agreement		X						
Bidding & Awarding Wireless Vendor Contracts			X					
Environmental Permitting			X					
FCC Permitting			X					
FAA Permitting			X					
Tower Construction (Base & Generator)						X		
Fiber (15,000 feet from current handhold to New Tower #4)						X		
Share CINC Equipment on Wilson Tower #1 (existing tower) with CCI						X		
Share CINC Equipment on Augusta Tower #2 (existing tower) with CCI						X		
Share CINC Equipment on Fairchild Tower #3 (existing tower) with CCI						X		
CINC Equipment installed on Lake Eau Claire County Park Tower #4 (new tower) & shared with CCI						X		
CCI Systems Internet Service to New Rural Customers								
CINC Wi-Max for County Services, Parks and Forest, Public Safety, EMS and home health care								

### 3.2.1.3. Itemized statement of funding request

**3.2.1.3.a.** An itemized statement of the investment and construction costs of the proposed project. This statement should include a price list or quote for any equipment the applicant intends to purchase, and salary information or similar information for any labor and training costs associated with the project. This statement should also indicate whether the facilities involved would be owned, rented or leased.

**Lease/Rental:** No equipment will be rented or leased.

**An itemized statement** of the investment and construction costs of the proposed project follows (based on a recent Hallie Tower project):

<b>Unit</b>	<b>Item Description (also listed in 3.2.1.3.c. Budget below)</b>
1	Electrical Hook-up for Lake Eau Claire County Park Tower #4 (new tower)
1	Equipment Building and Footing for Lake Eau Claire County Park Tower #4 (new tower)
1	Generator for Lake Eau Claire County Park Tower #4 (new tower)
1	Site Fencing for Lake Eau Claire County Park Tower #4 (new tower)
1	Site Grounding for Lake Eau Claire County Park Tower #4 (new tower)
1	Site Landscaping for Lake Eau Claire County Park Tower #4 (new tower)
1	Tower Footing for Lake Eau Claire County Park Tower #4 (new tower)
1	Tower and Tower Erection for Lake Eau Claire County Park Tower #4 (new tower)
1	Tower Cameras and installation for Lake Eau Claire County Park Tower #4 (new tower)
1	Engineering for Lake Eau Claire County Park Tower #4 (new) and fiber connection

- 1 Environmental Permitting for Lake Eau Claire County Park Tower #4 (new) and fiber installation
- 1 Network Gear for Lake Eau Claire County Park Tower #4 (new tower)
- 1 WiMax Equip. (2.5 Micro 3x120°) Based on St. Joseph's Hosp. for substantial service
- 1 WiMax Equip. (2.5 Move) of equipment to Lake Eau Claire County Park Tower #4 (new)
- 1 WiMax 2.5 Equipment for Lake Eau Claire County Park Tower #4 (new tower)
- 1 WiMax 3.65 Equipment for Lake Eau Claire County Park Tower #4 (new tower)
- 1 Fiber construction to Lake Eau Claire (an in-kind contribution by CCI Systems (reallocation of fiber cable inventory) installed at cost

**Ownership:** As described in the MOU, Eau Claire County owns the Lake Eau Claire County Park Tower #4 (new tower) and Wi-Max equipment, and CINC owns the fiber to the new tower.

**3.2.1.3.b. Requirement.** The application must show that the grant, if awarded, will not subsidize the expenses of a telecommunications provider or the monthly bills of telecommunications customers. For purposes of this grant program, subsidy means a contribution to the operating costs, including profit, of the telecommunications provider.

The grant, if awarded, will not subsidize the expenses of CCI Systems or any other telecommunications provider, nor will it subsidize the monthly bills of telecommunications customers. For purposes of this grant program, a “subsidy” is defined as “contribution to the operating costs, including profit, of the telecommunications provider.”

**3.2.1.3.c.** A summary showing a separate listing of itemized expenditures to be covered by each revenue source including grant funds and matching funds.

**Matching Funds:** With the CCI and CINC in kind equipment and labor match, and the additional cash match, CCI and CINC can assure the PSC that no grant dollars will be expended or used to provide service in served areas. Conversely, PSC grant dollars will only be used to provide broadband expansion and connectivity and service in underserved areas indicated on the PSC eligibility map. [See Appendix for “PSC Broadband Expansion Grant Map of Eligible Areas and CCI-CINC Approximate Wi-Max Tower Service Areas.”] CINC and CCI have pledged \$229,596 as an in-kind match of materials and labor, and a cash match of \$70,000.

**Itemized Expenditures:** A summary of itemized expenditures (with revenue source including grant funds and matching funds is below.

<b>Lake Eau Claire County Park WiMax Tower &amp; Fiber Estimate*</b>				
3/19/2014 (Final)				
<b>No.</b>	<b>Description</b>	<b>Estimated Cost</b>	<b>In Kind (Equip. &amp; Labor)</b>	<b>Needed</b>
1	Electrical Hook-up	\$9,339		\$9,339
1	Equipment Building and Footing	\$94,017	\$94,017	\$0
1	Generator	\$29,523		\$29,523
1	Site Fencing	\$6,137		\$6,137
1	Site Grounding	\$8,906		\$8,906
1	Site Landscaping	\$9,180	\$9,180	\$0
1	Tower Footing	\$32,711		\$32,711
1	Tower and Tower Erection	\$96,593	\$46,593	\$50,000
1	Tower Cameras and installation	\$6,318		\$6,318
1	Engineering	\$26,075		\$26,075
1	Environmental Permitting	\$3,000		\$3,000
1	Network Gear	\$18,000		\$18,000
1	WiMax Equip.( 2.5 Micro 3x120° ) **	\$72,306	\$72,306	\$0
1	WiMax Equip. (2.5 Move) **	\$20,000		\$20,000
1	WiMax 2.5 Equipment			\$0
1	WiMax 3.65 Equipment	\$24,744		\$24,744
1	Fiber construction to Lake Eau Claire ***	\$82,000	\$7,500	\$74,500
	<b>Total:</b>	<b>\$538,849</b>	<b>\$229,596</b>	<b>\$309,253</b>
	* <i>Based on Hallie Tower Estimates</i>			
	** <i>Based on Micros installed at St. Joseph's Hosptial for substantial service</i>			
	*** In Kind contributions CCI Systems reallocation of fiber cable inventory			

**3.2.1.3.d. Requirement.** The application must show that the grant funds requested will be used for the sole purpose of constructing broadband infrastructure in the underserved areas covered by the application.

Requested grant funds will be used for the sole purpose of constructing broadband infrastructure in the underserved areas described in our application and include:

- Project planning
- Obtaining construction permits
- Construction of facilities, including construction of both “middle mile” and “last mile” infrastructure
- Installation and testing of the broadband service

**Matching Funds:** CINC and CCI have pledged \$229,596 as an in-kind match of materials and labor, and a cash match of \$70,000. CINC Members and CCI will invest a total match that is 55.6 percent of the total project. (The cash match is 22.6 percent of the project cost after in-kind equipment and labor are subtracted.) With this match, CCI and CINC can assure the PSC that no

grant dollars will be expended or used to provide service in served areas. Conversely, PSC grant dollars will only be used to provide broadband expansion and connectivity and service in underserved areas indicated on the PSC eligibility map. [See Appendix for “PSC Broadband Expansion Grant Map of Eligible Areas and CCI-CINC Approximate Wi-Max Tower Service Areas.”]

### 3.2.1.4. Priority factors supporting the application

**3.2.1.4.a.** A description of the matching funds the applicant will invest in the proposed project, if any.

**Match Percent:** CINC Members and CCI will invest a total match that is 55.6 percent of the total project. (The cash match is 22.6 percent of the project cost after in-kind equipment and labor are subtracted.)

#### **In-Kind equipment and labor matching funds:**

The total in-kind CCI and CINC equipment and labor match (detailed in the budget in 3.2.1.3.c. above is: **\$229,596.**

	Total Project Cost:	\$538,849
	In-Kind Equipment & Labor Match:	<u>\$229,596</u>
	Total Project without in-kind Equip & Labor Match:	\$309,253
	In-Kind Cash Match Total:	<u>\$70,000</u>
	<b>Grant Request:</b>	<b>\$239,253</b>

This in-kind equipment and labor match includes:

#### **Unit    In-kind equipment and labor match description**

- 1    Equipment Building and Footing for Lake Eau Claire County Park Tower #4 (new tower); because this is County property, Eau Claire County will provide this building and footing (\$94,017)
- 1    Site Landscaping for Lake Eau Claire County Park Tower #4 (new tower); because this is County property, Eau Claire County will provide landscaping for the tower footing and equipment building (\$9,180)
- 1    Tower and Tower Erection for Lake Eau Claire County Park Tower #4 (new tower); because this is County property, Eau Claire County will provide a repurposed tower from another site (the cost of the tower structure) at an in-kind contribution of \$46,593; installation will cost \$50,000 and will not be an in-kind contribution (see budget in 3.2.1.3.c. above)
- 1    WiMax Equip. (2.5 Micro 3x120°) Based on St. Joseph's Hosp. for substantial service; this will be repurposed equipment at an in-kind value of \$72,306
- 1    Fiber construction to Lake Eau Claire (an in-kind contribution of the fiber by CCI Systems (reallocation of fiber cable inventory) installed at cost; in-kind value of fiber (\$7,500)

#### **Cash match:**

The total in-kind cash match provided by CCI and CINC members is: **\$70,000**



		In-Kind Cash Match
Hospital Sisters Health System (HSHS)		\$5,000
Eau Claire County		\$35,000
CCI Systems		\$20,000
CINC		\$10,000
<b>In-Kind Cash Match Total</b>		<b>\$70,000</b>

**3.2.1.4.b.** A description of any public-private partnership involved in the project.

CCI Systems is a private telecommunications utility that is partnering with these public and private members:

1. **CCI Systems:** A for-profit private telecommunications utility that started 50 years ago, CCI Systems has a significant presence in Wisconsin providing engineering for last mile, middle mile, and backbone infrastructure that includes both a fiber (ground) and wireless tower (air) strategy. CCI has supported federal, state and local projects with performance objectives, budget review and system requirements with the latest cutting-edge technology options. CCI helps partners plan cost-effective solutions with flexibility for easy, affordable future upgrades. CCI is a single point of contact that provides consulting, engineering, construction, integration, maintenance, testing, locates and support. [See 3.2.1.5.b. for a description of CCI's history and experience constructing broadband communications facilities in Wisconsin.] [See *Appendix* for Letter of Support and Commitment from CCI.]
2. **Eau Claire County:** Eau Claire County is located in west central Wisconsin. According to the 2010 census, the population was 98,736. The county seat is Eau Claire. According to the U.S. Census Bureau, the county has a total area of 645 square miles (1,670 km<sup>2</sup>), of which 638 square miles (1,650 km<sup>2</sup>) is land and 7 square miles (18.1 km<sup>2</sup>) (1.1%) is water. Eau Claire County is included in the Eau Claire, WI Metropolitan Statistical Area as well as the Eau Claire-Menomonie WI Combined Statistical Area. The adjacent Clark County (east) and Jackson County (southeast), partially included in the project's service area, are 100% federally designated "rural" by the HHS Health Resources and Services Administration Office of Rural Health Policy. Chippewa County (north), included in the service area, has two census blocks that are considered Rural (55017010900; 55017011200). Eau Claire County has three parks located in the project area: Harstad Park; Lake Eau Claire Park; Coon Fork Lake Park. These three parks have a total annual recreational visitor and camper population of approximately 45,000. The County is a CINC member (see CINC below). [See *Appendix* for Letter of Support and Commitment from Eau Claire County Board Chair Gregg Moore.]
3. **City of Eau Claire:** This city is located in northwestern Wisconsin about 85 miles east of Minneapolis-St. Paul, was incorporated in 1872, and currently has a population of over 65,000. The community has a diverse and expanding economic base in manufacturing, information technologies, health care, and retail trade. The city comprises 35 square miles and is home to the University of Wisconsin-Eau Claire, and Chippewa Valley Technical College. The City of Eau Claire is a partner in this project because city/county public safety/EMS will benefit from the expanded Wi-Max tower coverage in unserved and underserved areas. One service used by Wi-Max is the EMS 12-lead "live" EKG program, to provide real time data to physicians in hospital emergency rooms to expedite treatment. This project, titled, "Care begins with the Call," helps save lives and reduce disability and improve

outcomes for stroke and cardiac patients. The City is a CINC member (see CINC below). [See *Appendix* for Letter of Support and Commitment from Lyle Koerner, Jr., Fire Chief, City of Eau Claire.]

4. **Sacred Heart Hospital (Eau Claire); St. Joseph's Hospital (Chippewa Falls); Hospital Sisters Health System (HSHS):** These nonprofit hospitals and health system are partners in the project because the new wireless service in unserved rural areas of Eau Claire County will support a newly expanded St. Joseph's Home Health and Hospice program. This home health program requires wireless connectivity for home health staff during travels to visit patients. The program also is expanding its remote monitoring service for fragile and at-risk chronic disease patients in their homes. The home health and hospice program provides care for approximately three (unduplicated) and four (duplicated) fragile and high-risk patients each month in the rural underserved target affected area. (Determined by Zip Codes 54768, 54722 and 54741.) Improved commercial internet to customers would also support the hospital's telehealth remote monitoring program which cannot serve patients that live in underserved areas with no landline phone (because of the lack of cell and Internet connectivity). Both hospitals are CINC members (see CINC below). [See *Appendix* for Letter of Support and Commitment from David Nelson, CFO, HSHS, with a cash match commitment of \$5,000.]
5. **Chippewa Valley Internetworking Consortium (CINC):** A regional community area network formed in 1999 to allow members to collaborate, connect and save costs. CINC (pronounced "sink") became an Unincorporated Association in 2011 and enables application sharing between city, county and state government, educational institutions, libraries, nonprofits, healthcare organizations and technology providers that is innovative and sustainable. Through a coordinated regional communication infrastructure, captured in an online documentary (<http://bit.ly/yTIBIt>), CINC helps the Chippewa Valley be innovative, competitive, and economically viable for present and future generations. Additional CINC background is provided below. [See *Appendix* for Letter of Support and Commitment from Ross Wilson, Chair.]

**CINC Organizational Background:** CINC's network promotes economic development, expands educational opportunities, improves the availability of government services, and increases efficiency to reduce the burden on taxpayers. CINC is innovative and sustainable because it is a consortium ownership model with access to ECB frequencies, a robust backbone, and public-private WiFi and WiMax. The CINC infrastructure is fully mapped using Google Earth Mapping and Intermapper. CINC is comprised of:

- 230 miles of 96-strand fiber with a value in excess of \$13 million
- 244 connection points (community anchor institutions, traffic lights, etc.) and 643 terminations
- 16 towers and tower-type structures providing Wi-Max
- More than 25 city, county and state government, educational institution, library, nonprofit, healthcare organization and technology provider members

**Best Practice Model:** CINC is a role model community area network with officers and bylaws that utilizes inter-governmental agreements and memorandums of understanding. Should one party disengage, it does not diminish the operability and connectivity and infrastructure enjoyed by the other parties. CINC's low- or no-ownership capitalized multi-stakeholder model enhances collaboration and creates economies of scale. As a

community area network with minimal fees (for fiber locates, support and network maintenance), the outcome service level and advanced broadband speed and connectivity are far higher than any private provider. Redundant network design also allows members, including hospitals and emergency services such as police and fire, to utilize a dependent network for mission-critical applications.

**Sustainability:** CINC is a consortium with each organization-member invested and acting together to provide ongoing maintenance for a shared infrastructure that meets each party's needs, enabling organizations to provide greater and more dependable service at less cost to stakeholders and customers. This CINC community area network model generates a technical and fiscal synergy to create value that is greater than the sum of the stakeholders. CINC projects are funded by the institutions that receive the greatest benefit from the project. This process of capitalizing projects may also involve a lead organization with support from secondary stakeholders. Stakeholders individually determine their own return on investment on a project in order to justify project support. This process involves invitations for partnerships, negotiations, and allows each CINC member to evaluate their own benefit and ROI in order to make a proposal to their own governing board. Projects are sometimes completed in incremental phases. Through collaboration, one CINC member's need may become another's opportunity. Because organizations have different fiscal years, CINC is able to complete projects and accomplish timelines with exceptional agility.

**Organizational Structure & Leadership:** As an Unincorporated Association (formed in 2011 under §184 WI Statutes), CINC has no employees or payroll and does not sell any product or service. CINC has an Executive Committee, Officers, Bylaws, a Finance Committee, a Fiscal Agent, committees and an annual meeting. These structures provide the necessary workforce for physical and technical support to oversee infrastructure. Because it is a diverse group of CIOs and IT representatives from various public and private stakeholder organizations, CINC members provide the necessary operational staff resources themselves (much like a condo association). For some tasks vendors are hired. Members each share in the operational responsibilities, costs, and vendor oversight to further the organizational mission. CINC conducted its last strategic planning on July 2013.

**Awards & Honors:** [See *Appendix* for Letter of Support and Commitment from Ross Wilson, Chair, which includes a two-page attachment FAQ about CINC that lists awards and honors]

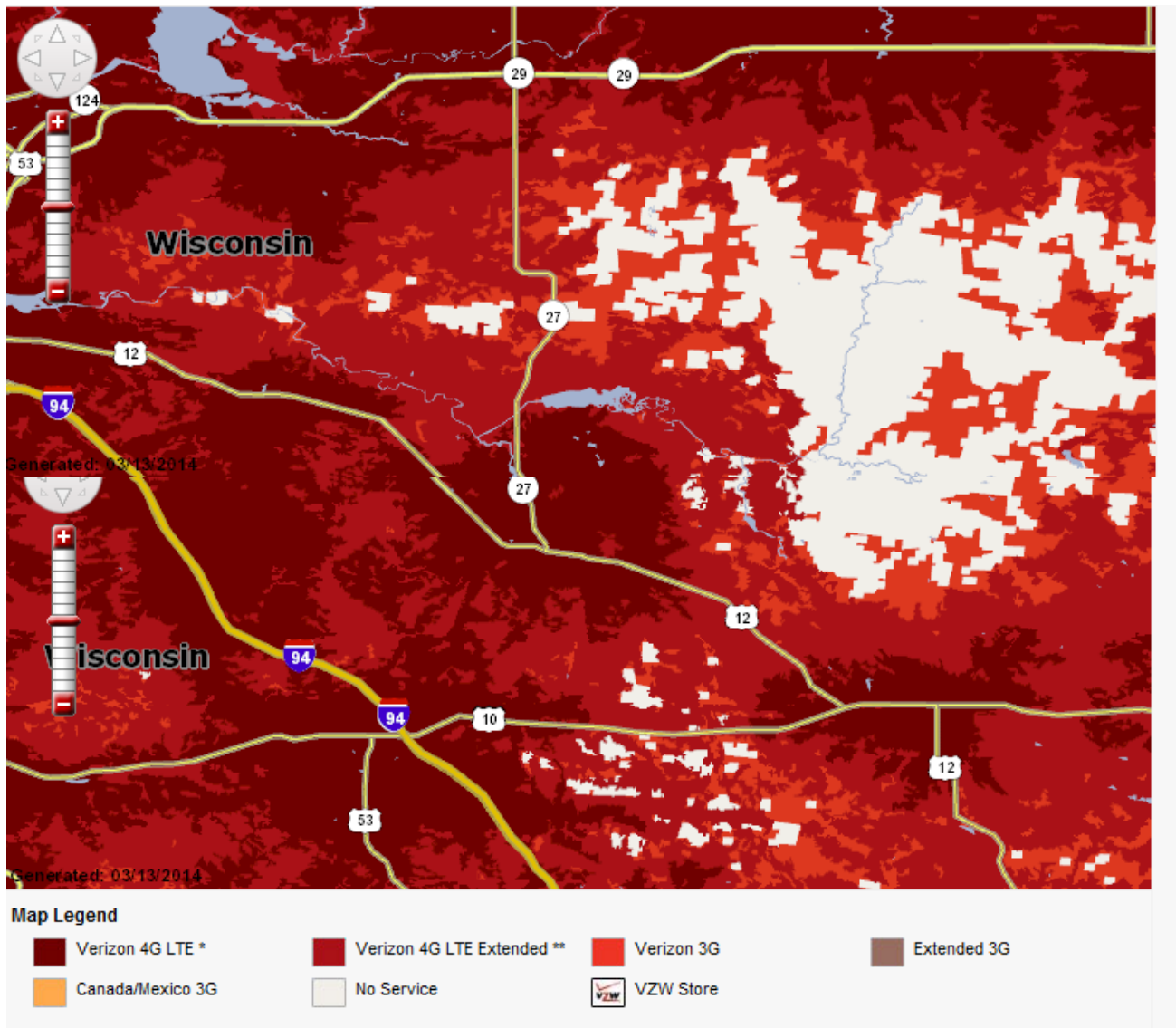
- Completion of \$33 million BTOP Grants “under budget” and “on time”
- CINC hosted two researchers from Japan's National Institute of Information and Communications Technology, and the Asia-Pacific Advanced Network (APAN), and the National Institute of Public Health
- CINC Papers Presented at International Conference
- UW-Extension and UW Colleges Chancellor's Friend and Advocate Award Presented to CINC

**3.2.1.4.c.** A list of the broadband service providers, if any, currently serving the area the applicant proposes to serve.

This targeted “area to be served” is a mix of unserved, underserved and some served areas. The unserved area in this project’s affected area represents a population of approximately 7,610 individuals (representing 2,900 housing units). CCI’s goal is to subscribe 1,200 of these underserved and unserved customers, defined as households “that have fewer than two broadband service providers to have the opportunity to subscribe to broadband service.” These numbers do not include underserved customers, which will also be allowed to subscribe. However, preference will be given to currently unserved customers. [See *Appendix*, “U.S. Census: Total Population and Occupied Housing Units” for census blocks in the target area and “Eau Claire County Census Tract Map Approximations.”] It is CINC’s and CCI’s belief that 85 percent of the target areas affected that are considered “served” in the PSC Map of Eligible Areas are technically “underserved” and have service that is not dependable or very low speeds that are extremely limiting to customers. The secondary goal of this project is to fill in those large service provider gaps in coverage by using a substantial in-kind equipment and labor match and a cash match.

**Broadband Expansion Grant Eligible Areas (Shaded areas on the PSC Eligibility Map):**

1. **No Service:** Several areas within the four Wi-Max tower service areas we propose to cover indicate “no broadband coverage reported.”
2. **One Provider:** A few areas have only “Verizon Wireless,” but this information may mean Verizon is a provider “who may be willing to extend service to this area.” This wireless service, if provided, would tend to be very slow speeds and more suited for a cellphone rather than other devices that require greater bandwidth. Residents and park visitors to these areas comment that cell coverage is “spotty” or “nonexistent” with large dead zones.
3. **Verizon Coverage:** According to the *Verizon Coverage Locator Map of the CCI target area*, there are approximately 100 square miles of “No Service” from Verizon. (<http://www.verizonwireless.com/wcms/consumer/explore/why-verizon.html#our-network-coverage>) Verizon notes: “Coverage Locator maps depict predicted and approximate wireless coverage. The coverage areas shown do not guarantee service availability, and may include locations with limited or no coverage. A screenshot of the Verizon map of the project area is below to illustrate extensive areas of “no service” and significant gaps of Verizon 3G, and almost no 4G LTE Extended and 4G LTE.



4. **Sprint Coverage:** According to the Sprint coverage and network maps below, there are large gaps in coverage in the CINC-CCI target areas. Sprint notes on its coverage maps: “Our coverage maps provide high-level estimates of our coverage areas when using your device outdoors under optimal conditions. Coverage isn't available everywhere. Estimating wireless coverage and signal strength is not an exact science. There are gaps in coverage within our estimated coverage areas that, along with other factors both within and beyond our control (network problems, software, signal strength, your wireless device, structures, buildings, weather, geography, topography, etc.), will result in dropped and blocked connections, slower data speeds, or otherwise impact the quality of services. Services that rely on location information, such as E911 and GPS navigation, depend on your device's ability to acquire satellite signals (typically not available indoors) and network coverage. E911 services also depend on local emergency service provider systems/support. Estimated future coverage subject to change.” Source: <http://coverage.sprint.com/IMPACT.jsp?INTNAV=ATG:HE:Cov#>

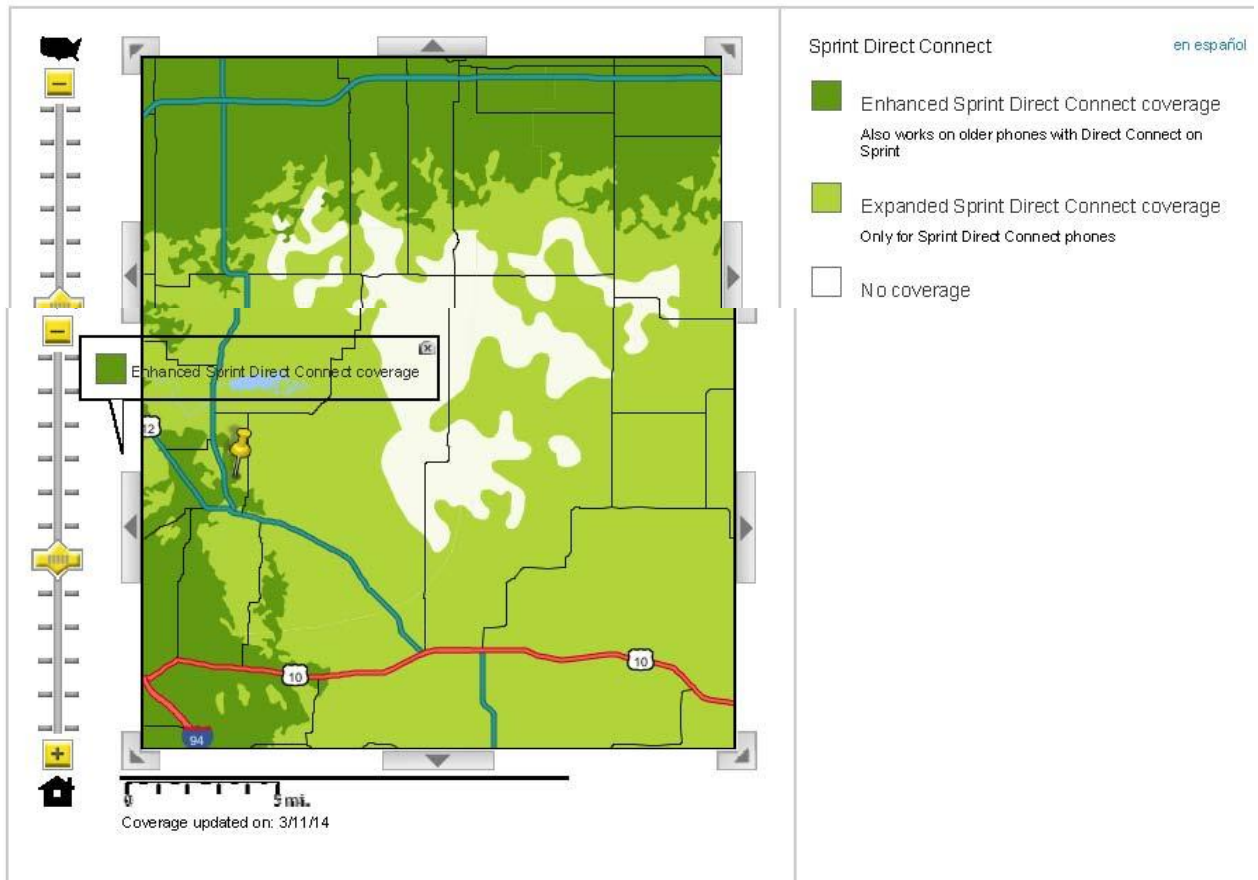


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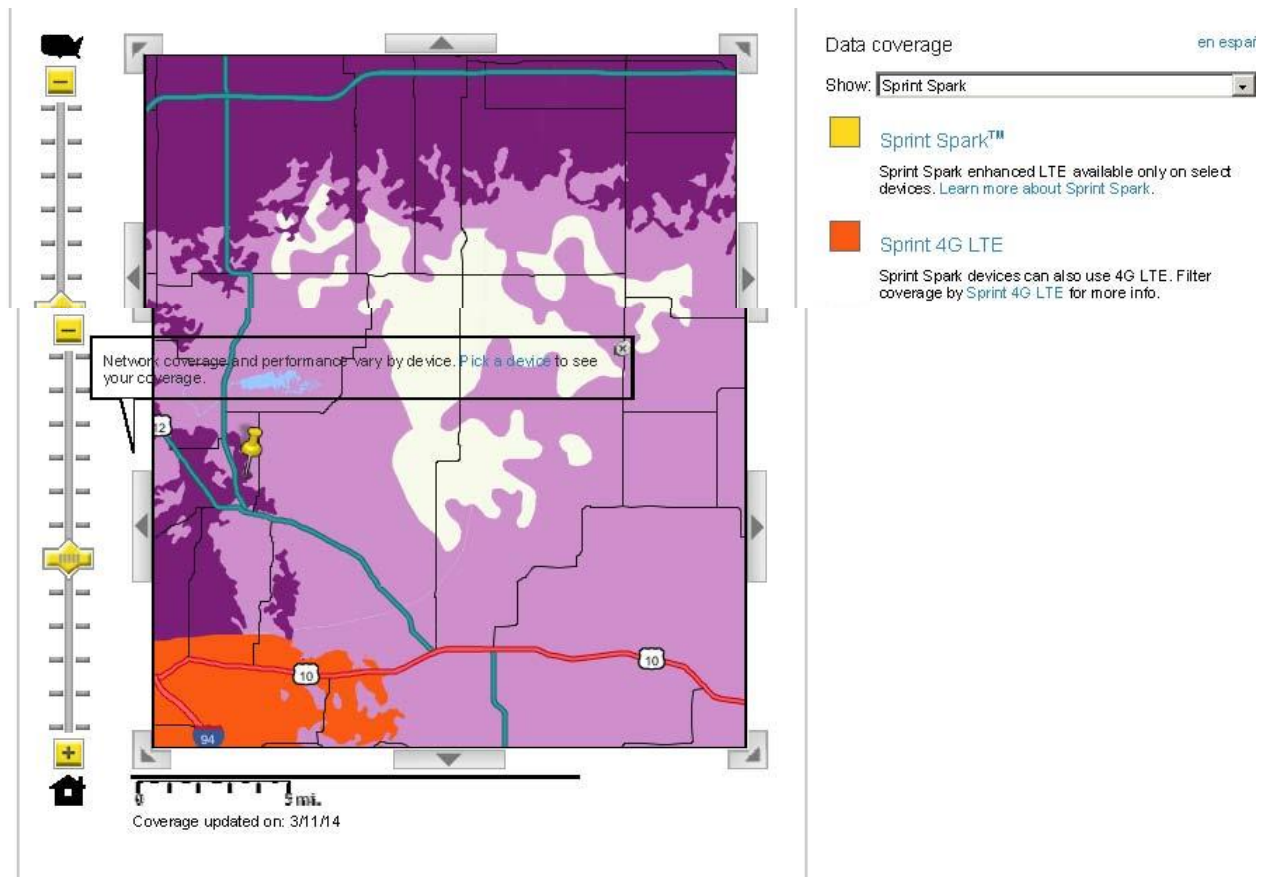


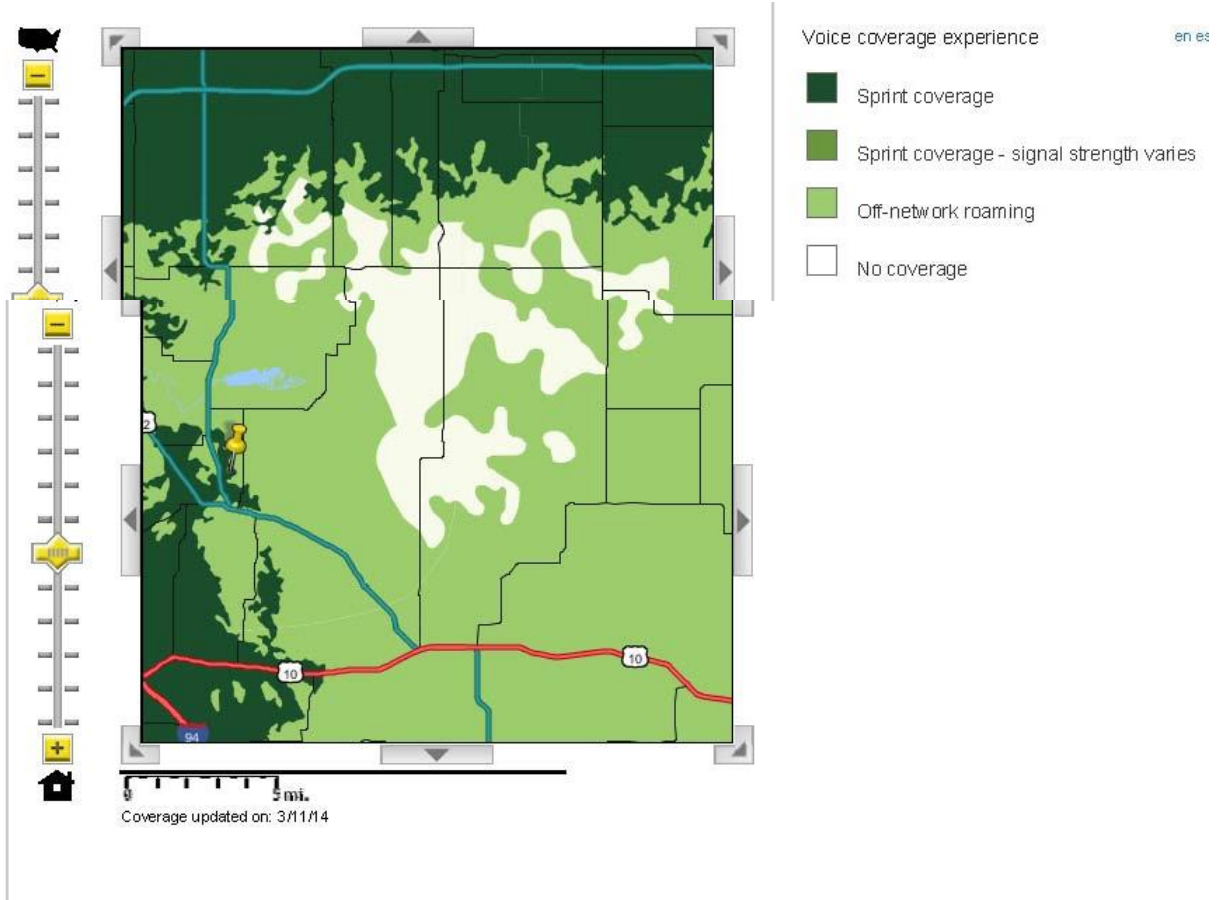
AUGUSTA, WI 54722

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5. **AT&T Mobility LLC Coverage:** AT&T does not provide a coverage and network map. Potential customers may enter their address and search for service coverage, and current phone customers may search for coverage using their phone number. However, no maps are provided. Each address provided by residents (submitting letters of support for this grant) that live in the targeted area of service was entered into the AT&T website, and “no service coverage” was indicated for each. See Attachments for Letters of Support by residents of the target area.
6. **CenturyLink Coverage:** CenturyLink provides no coverage or network map. It does, however, allow prospective customers to look up coverage for their home address. A customer, for example, with a residence on Lake Eau Claire at S5270 SD Lane, Augusta, WI 54722, must enter an address to make a query for service availability.

**3.2.1.4.d.** A description of the geographic area and the population, both in terms of absolute numbers and likely users, which will be served by the proposed project. Indicate the residence versus business customer impacts, if known.

This table quantifies “total population” (absolute numbers) as well as “occupied housing units” (likely users). This dataset is from the U.S. Census for the target affected area. The term “occupied housing units” was selected as a data set because it was the best count of actual household subscribers to CCI’s new commercial service.

For the six Census Blocks that contain the target affected area:

**Population:**

- Total Population: 34,592
- **Underserved residents (55%):** 19,026
- Potential Unserved Individual CCI Internet Customers within four mile tower range (approx. 40%): 7,610

**Housing Units:**

- Total Occupied Housing Units: 13,184
- **Underserved Housing Units (55%):** 7,251
- **Potential Unserved Housing Unit CCI Internet Customers within four mile tower range (approx. 40%):** 2,900
- **CCI Internet Subscriber Customers (Goal):** 1,200

[See *Appendix*, “U.S. Census: Total Population and Occupied Housing Units” for census blocks in the target area and “Eau Claire County Census Tract Map Approximations.”]

**Resident versus business customers:** Because the area is predominantly rural and underserved, there are few businesses currently in the area. However, seasonal residents with summer homes have expressed interest in working from their vacation homes year-round in the targeted affected area if they could receive broadband service. Others living in the area have indicated that the community served would be attractive to business for the first time if broadband could be provided [See *Appendix* Letters from Residents in the Target Area Affected.]

**3.2.1.5. Other information supporting the application**

**3.2.1.5.a.** An enumeration and description of expected secondary benefits from the proposed project, if any.

**Secondary Benefits:**

1. **Public Safety/EMS: Expand coverage for the Eau Claire City/County 12-lead EKG community EMS program:** By expanding the service area by more than 50 square miles in rural eastern Eau Claire County, this expanded program will enhance public safety and save lives. This program links EMS paramedics in the field to hospital Emergency Rooms with real-time 12-Lead EKG data for faster treatment decisions (see photo, inset, at right with EMS provider and EKG telemedicine equipment). The community began this program when three area hospitals found that 50% of cardiac and stroke patients were walk-ins that were not utilizing the EMS system. After implementing the program, hospitals and EMS launched a “Care Begins with a Call” public service campaign. This campaign helped educate the public to call 911 in case of heart attack or stroke because EMS care is faster and can help ensure that critical time is not lost. This collaboration began in 2008 and has saved lives and improved therapies and outcomes for patients with acute coronary syndrome and sudden cardiac arrest. This proposed broadband project will allow this program to be expanded into unserved rural areas. [See *Appendix* for Support Letter from Lyle Koerner, Jr., Fire Chief, City of Eau Claire, that describes this program.]



2. **Support for Disadvantaged and Underprivileged Students:** As detailed in the CCI-CINC MOU under “3. Public Interest, Community Benefit and Intended Use,” CCI and CINC will work with local school districts in the target area to support educational efforts to address the “Last Mile” needs of disadvantaged students (that receive National School Lunch Program Free or Reduced Lunch) to provide home-to-school connectivity
3. **Support connectivity for patient care data for home health nurses:** St. Joseph’s Hospital Home Health and Hospice provides care to many patients that live in rural areas that have no Internet service provider and no cell phone coverage. Patient referrals are provided by St. Joseph’s Hospital (Chippewa Falls) and Sacred Heart Hospital (Eau Claire) and other hospitals and clinics. Providing care to a patient that may or may not even have a landline telephone is difficult when the patient lives in a “no service” cell zone. Additional Wi-Max coverage further increases the CINC network that hospitals (which are also CINC members) can use to reach our nursing staff in the field. This expanded network allows home health caregivers to connect their laptops onsite to update patient visit information for better care integration and coordination to improve outcomes.
4. **Public Safety in Parks and Forest Preserves for Patrons and Campers (serving up to 45,000 people/year):** Broadband access will also be expanded to campers, hikers and other park and forest recreation participants at three County Parks that will provide no-cost Wi-Fi for public safety. Having free County Wi-Fi service for campers in the target areas will enhance the camping experience and increase public safety and Ranger services by giving campers access to information such as weather maps and emergency weather information and improved cell service for emergency calls and hiking and boating maps. This additional service is anticipated to increase park utilization and increase collected visitor fees. According to the Eau Claire County Parks and Forest Department, the following three targeted service area parks and campgrounds include a significant transient population of campers and recreational visitors. A very conservative estimate of overnight campers and day summer visitors for the three parks in the target service per year is 34,900. The actual estimate that includes unregistered guests may be closer to 45,000 park patrons. [See *Appendix* for Letter of Support from Eau Claire County signed by Gregg Moore, Eau Claire County Chairman.] The park and forest recreational areas include:
  - Harstad Park: An all-season County park open seven days/week with 43 acres 27 campsites, daily and annual visitor passes and shelter rentals.
  - Lake Eau Claire Park: An all-season County Park with a clubhouse with a capacity for 190 people, six picnic shelters, a ball diamond, volleyball courts, horseshoe pits, fishing pier, mooring dock and a playground; daily passes and annual passes.
  - Coon Fork Lake Park An all-season County Park with campsites, a boat landing, dumping station, swimming beach; volleyball court; playgrounds, shower buildings; hiking trails, and boat and canoe rentals; daily and annual visitor passes, shelter rental.

**3.2.1.5.b.** A description of applicant’s history or experience constructing broadband communications facilities in the state and elsewhere.

CCI Systems (d.b.a. Packerland Broadband) provides communication services in 67 different communities in Northern Wisconsin and Michigan’s Upper Peninsula. We operate nearly 2,100

miles of fiber in these areas and have an additional 550 miles of coaxial network. Our service offerings are typical of today's Cable TV companies with Digital Video, VoIP, and High Speed Cable Modems. Today, CCI serves approximately 5,500 homes and business with one or more of our service packages. CCI Systems has been designing, building, and upgrading Communication networks across the nation for over 50 years. At any time, CCI has ongoing projects in 25-30 states.

In Wisconsin, CCI Systems was an installation contractor that worked with the University of Wisconsin Extension's Building Community Capacity through Broadband (BCCB) Initiative grant. BCCB was awarded a federal infrastructure grant through the Broadband Technology Opportunities Program (BTOP) federal grant by the National Telecommunications and Information Administration, US Dept. of Commerce. This Comprehensive Community Infrastructure totaled \$29.8 Million and was awarded to four Wisconsin demonstration communities (including the Chippewa Valley). In this project, CCI helped CINC develop and deploy a fiber (ground) and wireless (air) strategy to allow municipalities, school districts, health care and other stakeholders connect, share applications and provide telemedicine. This project, with CCI's support, added \$8.3 million of fiber to the network in western Wisconsin and also added eight new towers with WiMax equipment over three years. CCI's work added 244 connection points, 355 vault locations, and 159 miles of fiber to the CINC and western and northern Wisconsin network. This three-year federal project in Wisconsin began in June 2011 and was completed on time and under budget.

CCI partners with more than 50 technology leaders throughout the industry. CCI holds numerous certifications, including Cisco SP Signature Partner and Cisco Authorized Service Provider Video Partner (both invitation-only). CCI professionals continually train and pursue additional certifications to maintain proficiency with that latest state-of-the-art technology. ‘

CCI's network mapping and design services include:

- Fiber audits & documentation
- RF & fiber network design
- FTTx – Fiber to the home
- RFoG – RF over Glass
- Bandwidth enhancement
- Node splits and segmentation
- Plant extensions & map updates
- Bentley conversions
- SpatialNET conversions
- As-built field audits
- Fiber quality assurance audits
- Commercial surveys/Desktop surveys
- Pole loading
- Complete system walkout and mapping
- GIS services
- GPS data collection

CCI's managed services for broadband and VoIP include:

- Hosted NOC services
- 24/7/365 monitoring, notification and troubleshooting
- Call center/customer care
- Field tech support
- Call logging

- Enterprise-level ticketing
- Email hosting
- Hospitality call center support
- VoIP wholesaler
- Provisioning and billing
- Wide Area Network (WAN) Services
- Local Area Network (LAN) Services

CCI's network engineering and integration services include:

- Custom solution engineering
- Evaluate and upgrade analog/digital headends
- TV Everywhere
- VoD/SDV
- Combining and splitting networks
- IPTV design and integration
- Satellite acquisition/off-air surveys
- Core IP/MPLS networks
- DWDM/SONET/Optical transport
- CMTS networks
- Cell tower backhaul solutions
- DAS and 4G networks
- Wireless (WiFi) networks

CCI's construction and field technical services include:

- Fiber optic and HFC construction
- Aerial: strand and lash, ADSS
- Underground: Directional boring, plowing/trenching
- Bandwidth upgrades
- Construction material sales
- Fiber optic splicing
- Fiber dispersion and bi-directional OTDR testing
- HFC sweep and certification
- FCC POP testing, FCC CLI
- System evaluation and due diligence
- Standard, full and economical upgrades
- Cell tower backhaul solutions
- DAS and 4G networks
- Wireless (WiFi) networks

**3.2.1.5.c.** Any other equitable factor that the applicant desires to include.

Additional public interest factors cited in Wis. Stat. § 196.03(6) that will be advanced by this applicant's project are described in support letters (from both project partners and residents of the target affected area). These letters are attached in the *Appendix*. These public interest factors include:

- Improved pricing structures with better consumer service and competition for affordability [§196.03(6)(a)]
- The promotion of greater consumer choices for service with additional price points and speeds with added CCI service [§196.03(6)(b)]



- Enhanced quality of life for the public, with improved EMS public safety for cardiac and stroke patients (expanding the EMS 12-lead EKG program), increased public safety on county highways, improved safety and quality of life in three County parks impacting up to 45,000 people/year (detailed above and in the Appendix letter from the County Board Chair). Because the Wi-Max is secure and in compliance with state and federal privacy laws, it furthers citizen privacy in County operations, EMS and health care [§196.03(6)(c)]
- Promotes universal service by providing an infrastructure for further tower expansion into unserved areas [§196.03(6)(d)]
- Promotes robust economic development, attracts new businesses, increases the tax base, improves property values, and allows residents to conduct work from their seasonal summer homes year-round; the project also enhances telecommunications infrastructure deployment for public safety [§196.03(6)(e)]
- Promotes efficiency and productivity of County public safety, forestry, parks, roads and EMS services to save costs and reduce the tax burden [§196.03(6)(f)]
- Promotes telecommunications services in geographical areas that are rural and experience disparities due to having no broadband connectivity, and that include diverse income populations. As detailed in the CCI-CINC MOU under “3. Public Interest, Community Benefit and Intended Use,” CCI and CINC will work with local school districts in the target area to support educational efforts to address the “Last Mile” needs of disadvantaged students (that receive National School Lunch Program Free or Reduced Lunch) to provide home-to-school connectivity [§196.03(6)(g)]



## Wisconsin PSC Broadband Expansion Grant Program Application

# *Appendix*

### **MEMORANDUM OF UNDERSTANDING (MOU)**

“Memorandum of Understanding between the Chippewa Valley Inter Networking Consortium and CCI Systems”

### **TABLE**

“Total Population and Occupied Housing Units (U.S. Census)” and “Eau Claire County Census Tract Map Approximations.”

### **MAPS**

1. **MAP:** “PSC Broadband Expansion Grant Map of Eligible Areas and CCI-CINC Approximate Wi-Max Tower Service Areas”
2. **SCHEMATIC:** “CCI-CINC Public-Private Tower Project”
3. PCS Wireless Wi-Max Studies of Coverage Areas:
  - a) **MAP #1:** “Proposed WiMax 2.5 GHz Mobile Indoor CPE Coverage”
  - b) **MAP #2:** “Proposed WiMax 3650 MHz Fixed Outdoor CPE Coverage”
  - c) **MAP #3:** “Proposed WiMax 2.5 GHz Fixed Outdoor CPE Coverage”

### **PUBLIC-PRIVATE PARTNER LETTERS OF COMMITMENT AND SUPPORT**

1. Cory Heigl, Director of Business Development  
Organization: CCI Systems, d.b.a. Packerland Broadband  
Identity: Private (Telecommunications Company)  
Address: 105 Kent St., Iron Mountain, MI 49801  
Cash Match Commitment: \$20,000

2. Gregg Moore, Eau Claire County Board Chair  
Identity: Public (Municipality)  
Organization: Eau Claire County  
Address: 721 Oxford Avenue, Eau Claire, WI 54703  
Cash Match Commitment: \$35,000
3. Ross N. Wilson, Chair  
Identity: Private (Unincorporated Association)  
Organization: Chippewa Valley Inter Networking Consortium (CINC)  
Address: c/o CESA 10, 725 West Park Avenue, Chippewa Falls, WI 54729  
Cash Match Commitment: \$10,000
4. David Nelson, CFO, Hospital Sisters Health System Division  
Identity: Private (Nonprofit Health Care)  
Organization: Sacred Heart Hospital (Eau Claire) and St. Joseph's Hospital (Chippewa Falls);  
Hospital Sisters Health System Division (Western Wisconsin)  
Address: 900 West Clairemont Ave, Eau Claire, WI 54701  
Cash Match Commitment: \$5,000
5. William D. Perry, Administrator  
Identity: Public (School)  
Organization: Augusta School District  
Address: E 19320 Bartig Road, Augusta, WI 54722
6. Jake Schoeder, Technology Coordinator  
Identity: Public (School)  
Organization: Fall Creek School District  
Address: 336 East Hoover Avenue, Fall Creek, WI 54742
7. Bill Tourdot, Superintendent  
Identity: Public (School)  
Organization: Osseo Fairchild School District  
Address: 50851 East Street, Osseo, WI 54758
8. Lyle Koerner, Jr., Fire Chief, City of Eau Claire  
Organization: City of Eau Claire  
Identity: Public (Municipality)  
Address: 203 South Farwell Street, Eau Claire, WI 54701
9. Michael Haynes, Agency Administrator  
Identity: Private (Unincorporated Association)  
Organization: Cooperative Educational Service Agency 10 (CESA 10)  
Address: 725 West Park Avenue, Chippewa Falls, WI 54729

**COMMUNITY RESIDENTS IN AFFECTED AREA:**  
**PERSONAL LETTERS DISPUTING ACCURACY OF PSC COVERAGE MAP**

1. Robert and Janet Buley, N8520 Holseth Road, Holmen, Wisconsin 54636 *[The PSC Broadband Grant Eligibility Map incorrectly labels this residence as “Served” by Sprint, Charter Communications, CenturyLink, UsCellular and Verizon Wireless]*
2. Marlo Orth, Chairman, Lake Eau Claire Protection and Rehabilitation District, South 4565 Cty. Rd. NL, Augusta, WI 54722 *[The PSC Broadband Grant Eligibility Map correctly labels this residence as “Unserved”]*
3. Dean and Carolyn Boehne, Lake cottage: Lake Eau Claire, at ES22040 SD Lane, Augusta, WI 54722 *[the PSC Broadband Grant Eligibility Map incorrectly labels this residence as “Served” by Verizon Wireless, CenturyLink and AT&T Mobility LLC]*
4. Mr. Frederick Poss, Lake Eau Claire Association President, S5270 SD Lane, Augusta, WI 54722 *[The PSC Broadband Grant Eligibility Map incorrectly labels this residence as “Served” by Verizon Wireless and CenturyLink]*
5. Daniel Esser, E20845 County Road ND, Augusta, WI 54722 *[The PSC Broadband Grant Eligibility Map incorrectly labels this residence as “Served” by Verizon Wireless, CenturyLink and AT&T Mobility LLC]*
6. Andrew and Donna Prodoehl, E22070 County Road SD, Augusta, WI 54722 *[The PSC Broadband Grant Eligibility Map incorrectly labels this residence as: “Served” by Verizon Wireless and CenturyLink]*



## **Memorandum of Understanding between the Chippewa Valley Inter Networking Consortium and CCI Systems**

### **1. Introduction**

The purpose of this Memorandum of Understanding (MOU) is to identify and define understandings concerning wireless infrastructure facilities that the Chippewa Valley Inter Networking Consortium (CINC) will provide CCI Systems (CCI), d.b.a. Packerland Broadband.

### **2. Collaboration Agreements**

- All collaboration agreements in this MOU are contingent upon successful award to CCI of a Wisconsin PSC Broadband Expansion Grant.
- CINC and Eau Claire County shall provide space on the Lake Eau Claire County Park property (E19230 County Road SD, Augusta, WI 54722) sufficient to place a telecommunication tower along with space inside an adjacent building appropriate for the necessary tower electronic equipment. The Lake Eau Claire County Park site is located at 44° 45' 23.50" N, 91° 08' 18.50" W.
- CINC and the City of Eau Claire shall provide a decommissioned tower (formerly erected on the site of Mt. Tom in the City of Eau Claire) for the tower structure to be used on the new Lake Eau Claire County Park tower site. The transfer of ownership of the decommissioned Mt. Tom tower structure is contingent upon engineering study results indicating that it is structurally sound and fit for repurposing for the use and purpose of the new Lake Eau Claire County Park tower site.
- CCI shall provide fiber connectivity from the CINC network to the Lake Eau Claire County Park tower site.
- CCI shall provide the necessary tower electronic equipment along with appropriate antennas and cabling.
- CINC shall provide CCI access to wireless service groups at the following Eau Claire County tower sites:
  - 1) Augusta – 605 E. Grant Street, Augusta, WI, 54722; 44° 40' 36" N, 91° 06' 53" W
  - 2) Fairchild – 233 W. Main Street, Fairchild, WI, 54741; 44° 36' 01" N, 90° 57' 59.50" W
  - 3) Wilson – Stoney Lonesome Road, Boyd, WI 54726; 44° 36' 01" N, 90° 57' 59.50" W
  - 4) Lake Eau Claire County Park (new site), E19230 County Road SD, Augusta, WI 54722; 44° 45' 23.50" N, 91° 08' 18.50" W
- See drawings titled "CINC and CCI Wireless Coverage" for approximations of coverage area, and also PCS coverage maps that account for terrain and tower equipment heights.
- Eau Claire County shall retain ownership of the Lake Eau Claire County Park tower along with all electronic equipment and be responsible for maintenance and support.

### **3. Public Interest, Community Benefit and Intended Use**

- CCI and CINC will work with local school districts in the target area to support educational efforts to address the "Last Mile" needs of disadvantaged students (that receive National School Lunch Program Free or Reduced Lunch) to provide home-to-school connectivity
- CCI will provide commercial broadband service with improved penetration into unserved and underserved rural markets using the four CINC towers and equipment
- CINC public safety members will use towers and equipment to expand service areas for the EMS 12-lead EKG "Care Begins with the Call" program that provides real time data to emergency room physicians to expedite treatment to save lives, reduce disability and improve outcomes for stroke and cardiac patients
- CINC hospital and health care members will be able to pilot new connectivity between hospital servers and home health nurses visiting patients in rural areas
- Eau Claire County's Aging and Disability Resource Center (ADRC), Lake Eau Claire County Park and Ranger Station (for year-round GIS mapping and forestry management), Lake Eau Claire County Park Shop, Harstad Park, and Coon Fork Lake Park can provide enhanced services to clients, park patrons, travelers and customers.

- The Eau Claire City-County Health Department will have additional rural connectivity for increased remote access capabilities to reach rural clients
- All wireless infrastructure facilities will be used in compliance with relevant federal, state and local statutes.

#### **4. Options**

If additional opportunities become available to CCI or CINC, the parties may amend this agreement to accommodate additional access as may be appropriate.

#### **5. Installation Dates**

- Construction of the new tower at the Lake Eau Claire County Park site shall be agreed upon by CCI, CINC and Eau Claire County Parks & Forest.
- Construction of the Augusta, Fairchild and Wilson towers (detailed above) in Eau Claire County is complete.

#### **6. Maintenance**

- CCI agrees to pay the annual assessment (maintenance fee) according to the annual fee schedule established by the CINC Finance Committee and approved by the CINC membership. This assessment is re-calculated annually.
- Each Organization will be responsible for the maintenance of its own equipment necessary to operate.
- Entities may be asked to contribute extra for any unforeseen expenditures.
- Payment will be submitted to an annually designated entity of CINC that will administer these funds.

#### **7. Term of Agreement**

The termination date for this MOU is December 31, 2016. At that time CINC and CCI will formalize a new MOU guiding ownership and maintenance of each of the four towers. The parties agree to use best efforts to negotiate an extension upon terms mutually agreeable. Before December 31, 2016, any party can request that such extension negotiations begin up to twelve (12) months prior to termination of the initial term, or such earlier date as is mutually agreeable. The entity entering into this agreement with CINC has the option for early termination with a 12-month notice.

#### **8. Service Level**

CCI and CINC will work collaboratively to develop and implement support procedures for both wireless and fiber infrastructure to provide the best service possible for all end-users.

#### **9. Dispute Resolution**

In the event that a dispute arises between the two organizations regarding the use of wireless or fiber infrastructure, the parties agree to meet on a regular basis until the dispute is resolved.


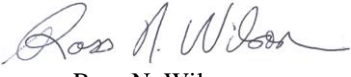
#### **10. Warranty of Authority**

The signatories hereto warrant that they have full authority to enter into this Memorandum of Understanding (MOU) and make it binding on the parties hereto without further action or approval. The effective date of this MOU shall be the date that the agreement has been signed by the last signing party.

#### **11. Hold Harmless**

By signing this agreement CCI agrees to hold harmless all CINC members from any actions related to the CINC network. CCI also agrees to hold harmless the fiscal agent with the exception of a financial misappropriation of funds.

IN WITNESS WHEREOF, the parties have caused this MOU to be executed in duplicate by their duly authorized and empowered officers or representatives:

<u>Entity</u>	<u>Representative Signature</u>	<u>Title/Organization/Address</u>	<u>Date</u>
CCI	 Cory Heigl	Director of Business Development, CCI Systems, d.b.a. Packerland Broadband, 105 Kent St., Iron Mountain, MI 49801	3/18/2014
CINC	 Ross N. Wilson	Chair, Chippewa Valley Inter Networking Consortium (CINC), 725 West Park Avenue, Chippewa Falls, WI 54729	3/20/2014



## Total Population and Occupied Housing Units (U.S. Census)

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Eau Claire County, WI	Census ID	Primary Township/Zip Code (this is a very rough approximation)	Total Population (Estimate)	Occupied Housing Units (Estimate)
Census Tract 4	55035000400	Ludington/54726	6,942	3,036
Census Tract 5.01	55035000501	Wilson/54768	5,020	2,013
Census Tract 5.02	55035000502	Wilson/54768	4,831	1,870
Census Tract 9	55035000900	Bridge Creek (Lake EC)/54722	4,588	2,096
Census Tract 10	55035001000	Bridge Creek/54722	3,477	40 *
Census Tract 14	55035001400	Bridge Creek/54722	7,052	3,092
Census Tract 15	55035001500	Fairchild/54741	2,682	1,037
<b>Total:</b>			<b>34,592</b>	<b>13,184</b>
<b>Unserved residents with no broadband service (55%)</b>			<b>19,026</b>	<b>7,251</b>
<b>tial Unserved CCI Internet Customers within 4 mi. tower range (approx. 40%):</b>			<b>7,610</b>	<b>2,900</b>
<b>CCI Internet Subscriber Customers (Goal):</b>				<b>1,200</b>

\* Anomaly noted; Census may have been conducted off-season in this rural area when summer homes/ and cabins were unoccupied. CCI could safely assume at least 1,000 seasonal customers in this Tract. Some seasonal visitors may live year-round with reliable broadband (or even work from their vacation home more often).

**Housing unit:** A house, apartment, mobile home, group of rooms, or single room that is occupied, or intended for occupancy, as separate living quarters. In separate living quarters, occupants live separately from any other people in the building... [U.S. Census definition]

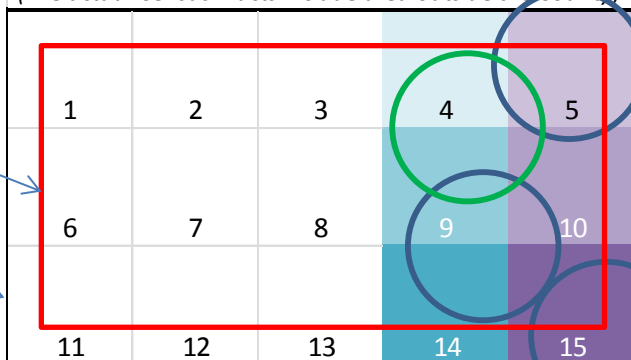
**Total population:** All people, male and female, child and adult, living in a given geographic area. [U.S. Census definition]

### Eau Claire County CensusTract Map Approximations

(The actual Census Tracts include area outside the County)

County Border

Census Border





Choose a Broadband Map:  
Broadband Expansion Grant Eligible Areas

This map provides a guideline of areas that qualify for the Public Service Commission of Wisconsin's Broadband Expansion Grant Program. To qualify for grant eligibility, areas must not have more than one provider offering speeds greater than 3 mbps download and 768 kbps upload. Due to data limitations, areas of eligibility may occur outside the mapped underserved areas. Visit the Broadband Expansion Program page for more information.

Note: This map layer was created to support the Broadband Expansion Grant Program. The mapping process for this layer may differ from Process and FAQ document links on this page which pertain to guidelines associated with the State Broadband Initiative.

Broadband Expansion Grant Eligible Areas

Broadband Map Transparency:

About the Map:

- Click the map to get a provider list.
- Maps updated in November 2013 based on coverage as of June 30, 2013.
- Maps not loading? Try a browser refresh.
- Tips for using the Interactive Map
- Frequently Asked Questions (FAQ)
- Overview of the Mapping Process
- How to Provide Feedback on the Map

All information presented herein is believed to be accurate but is not guaranteed to be without error. Maps may be printed but there are no claims of completeness or accuracy. All critical information should be independently verified. See FAQ for more information.



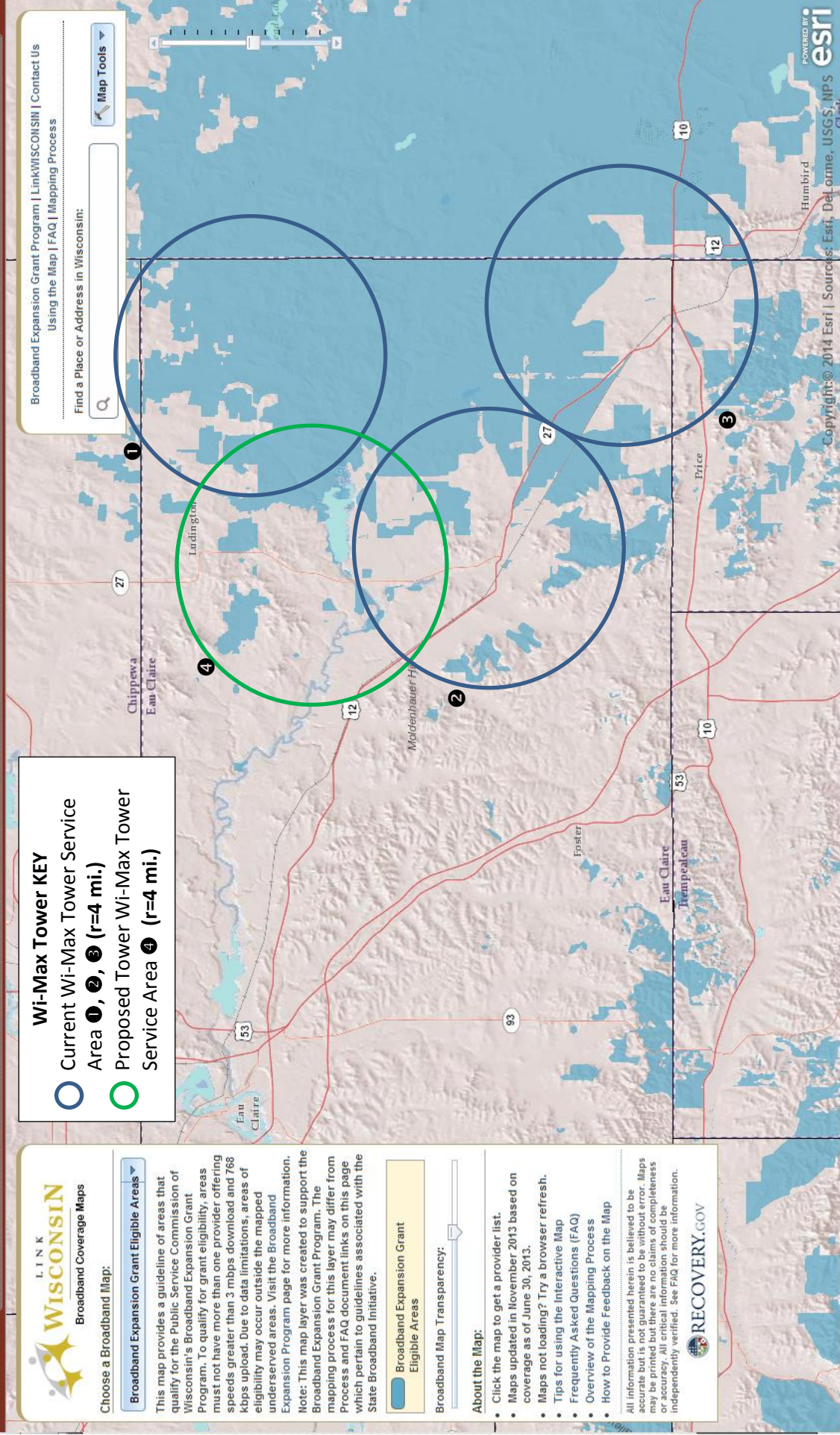
### Wi-Max Tower KEY

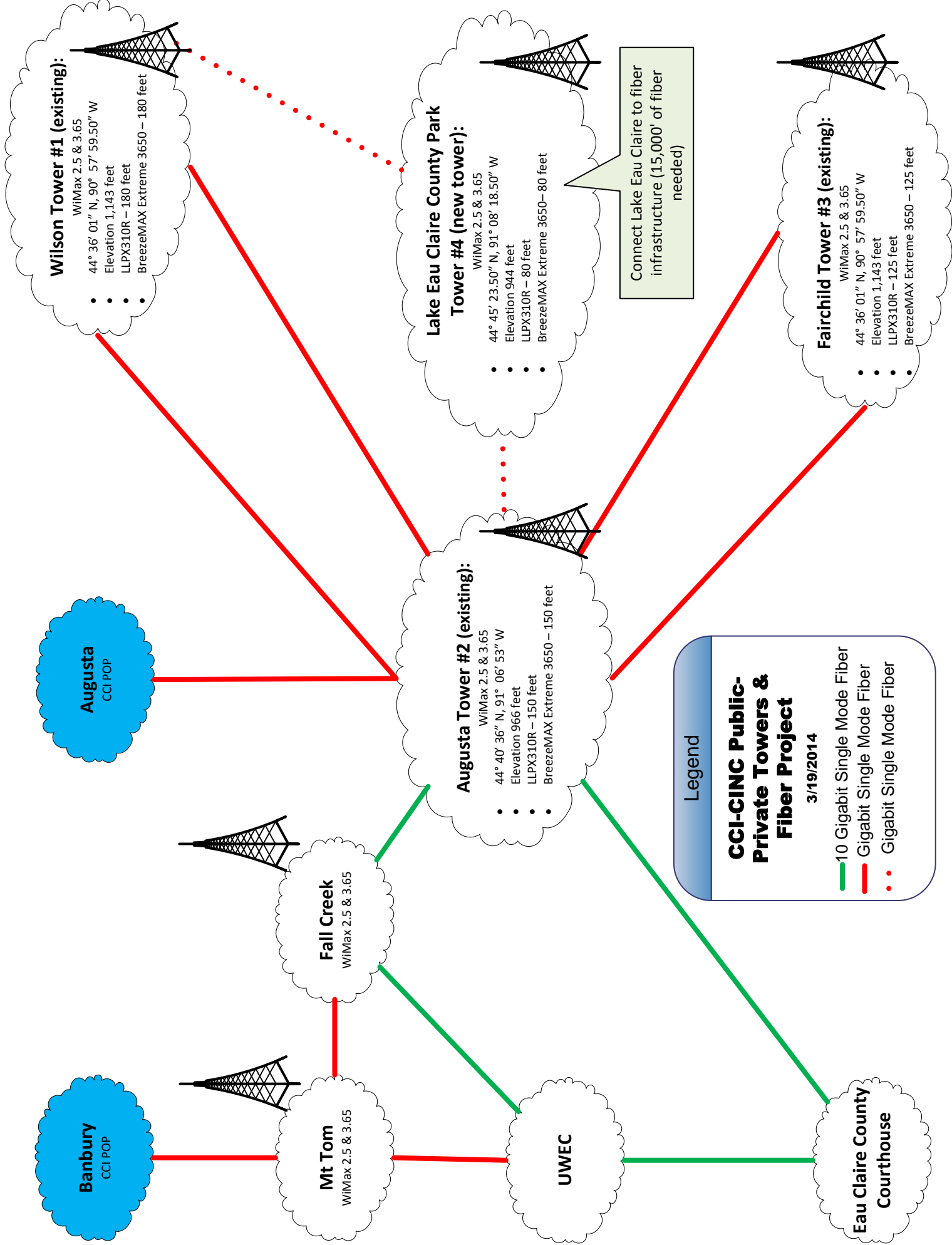
- Current Wi-Max Tower Service Area ①, ②, ③ (r=4 mi.)
- Proposed Tower Wi-Max Tower Service Area ④ (r=4 mi.)

Broadband Expansion Grant Program | LinkWISCONSIN | Contact Us  
Using the Map | FAQ | Mapping Process

Find a Place or Address in Wisconsin:

Map Tools

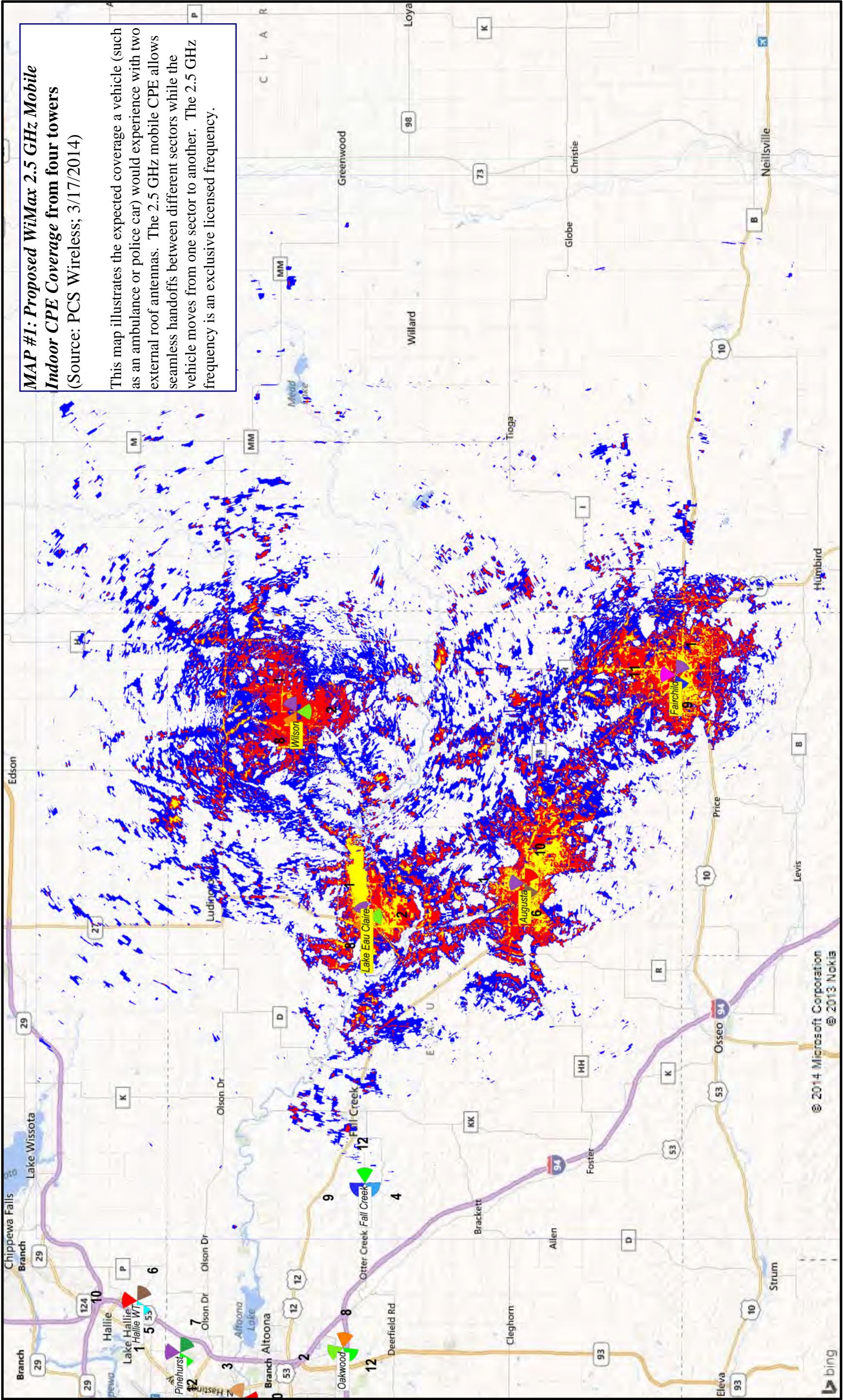






**MAP #1: Proposed WiMax 2.5 GHz Mobile Indoor CPE Coverage from four towers**  
(Source: PCS Wireless; 3/17/2014)

This map illustrates the expected coverage a vehicle (such as an ambulance or police car) would experience with two external roof antennas. The 2.5 GHz mobile CPE allows seamless handoffs between different sectors while the vehicle moves from one sector to another. The 2.5 GHz frequency is an exclusive licensed frequency.





Prop. model 1: Anderson-2D v1.00  
Time: 50.0% Loc.: 50.0%  
Prediction Confidence Margin: 0.0dB  
Climate: Continental Temperate  
Land use (clutter): EDX .GCV format  
Atmospheric Abs.: none  
K Factor: 1.333

Received Power at remote

<div></div>	>=	-60.0 dBmW
<div></div>	-70.0 to	-60.0 dBmW
<div></div>	-80.0 to	-70.0 dBmW
<div></div>	-90.0 to	-80.0 dBmW
<div></div>	<	-90.0 dBmW

Display threshold level: -80.0 dBmW  
RX Antenna - Type: ISOTROPIC  
Height: 5.0 ft AGL Gain: 3.85 dBd

● Major\_cities

Metro\_areas

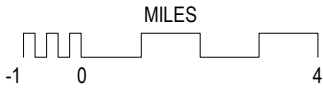
Interstates

Terrain elevations

☐ Shaded relief illumination color

Notes

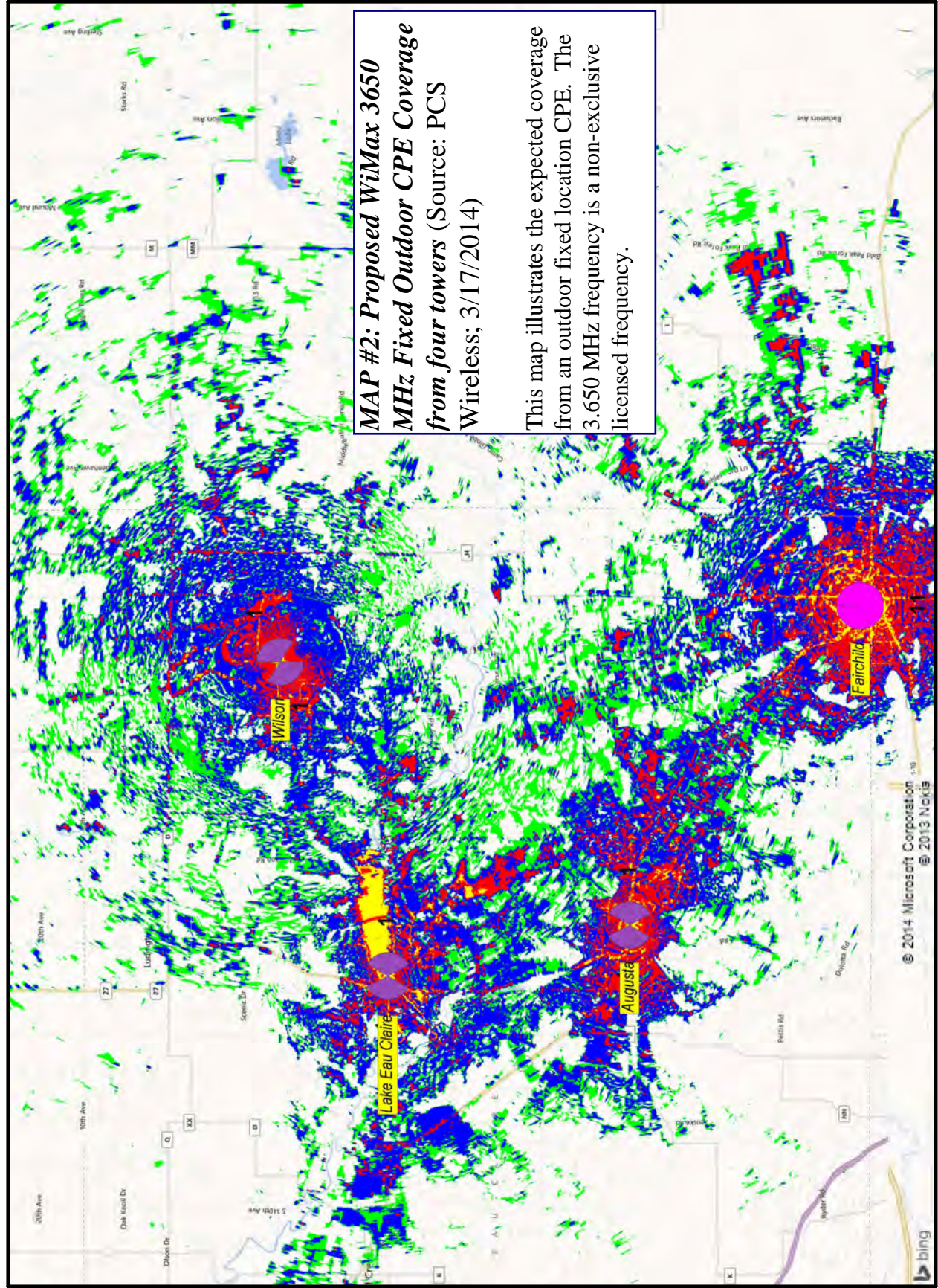
Channel Frequency Color Reference:  
RED: A1A2=2508.500 MHz  
YELLOW: A3B1= 2518.500 MHz  
BLUE: B2B3= 2528.500 MHz  
GREEN: A4B4=2578 MHz  
PURPLE: G2G3=2683.500 MHz



PCS Technologies

Eau Claire Mobile Public Network

WiMAX 2.5GHz - Segment Planning










Prop. model 1: Anderson-2D v1.00  
Time: 50.0% Loc.: 50.0%  
Prediction Confidence Margin: 0.0dB  
Climate: Continental Temperate  
Land use (clutter): EDX . GCV format  
Atmospheric Abs.: none  
K Factor: 1.333

---

Received Power at remote

	>=	-60.0 dBmW
		-70.0 to -60.0 dBmW
		-80.0 to -70.0 dBmW
		-90.0 to -80.0 dBmW
	<	-90.0 dBmW

Display threshold level: -85.0 dBmW  
RX Antenna - Type: ISOTROPIC  
Height: 15.0 ft AGL Gain: 14.85 dBd

● Major\_cities

Metro\_areas

Interstates

Terrain elevations

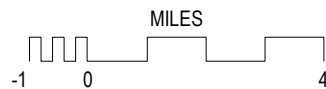
☐ Shaded relief illumination color

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Notes

Channel Frequency Color Reference:  
RED: A1A2=2508.500 MHz  
YELLOW: A3B1= 2518.500 MHz  
BLUE: B2B3= 2528.500 MHz  
GREEN: A4B4=2578 MHz  
PURPLE: G2G3=2683.500 MHz

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PCS Technologies

Eau Claire Mobile Public Network

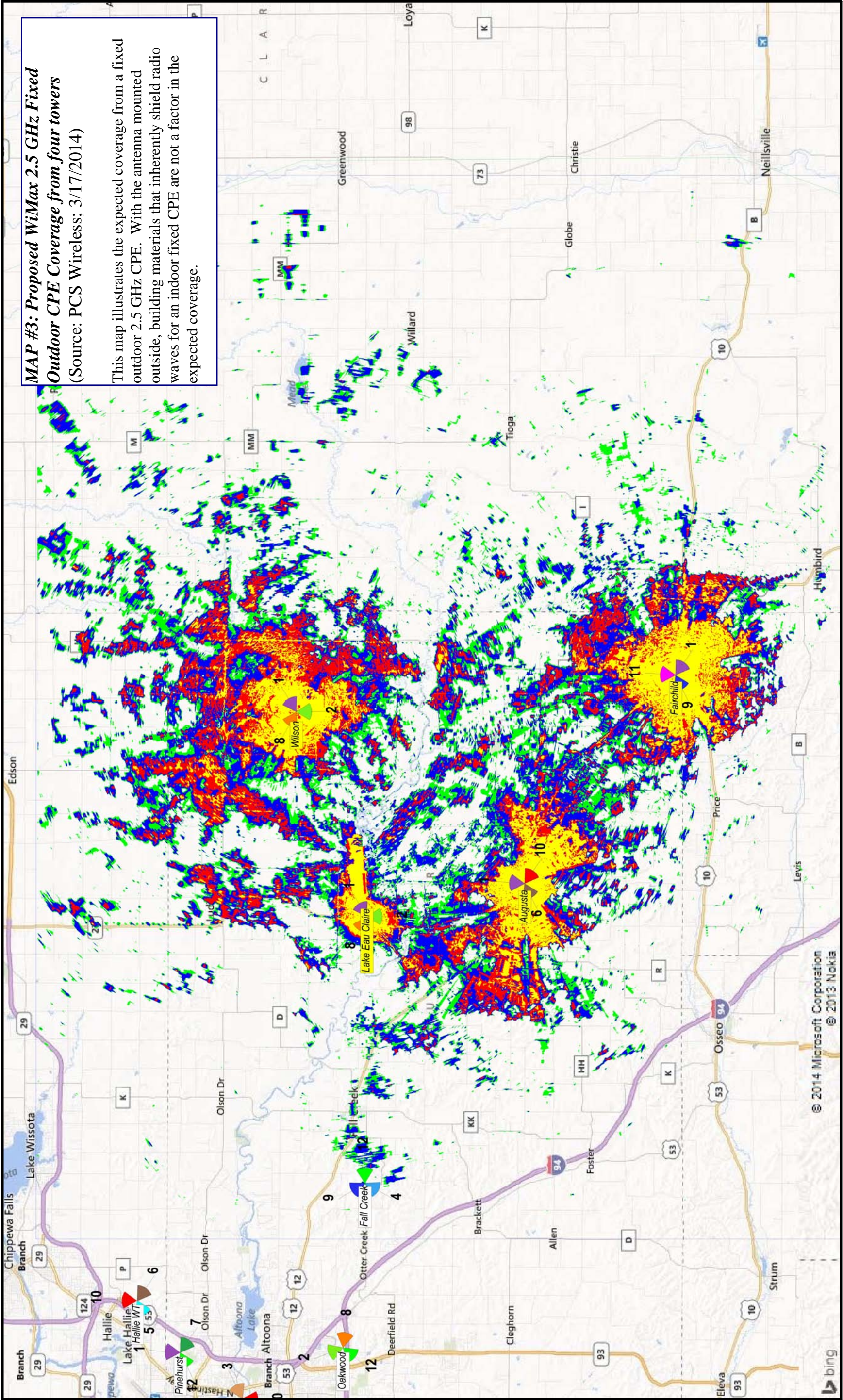
WiMAX 2.5GHz - Segment Planning

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**MAP #3: Proposed WiMax 2.5 GHz Fixed Outdoor CPE Coverage from four towers**  
(Source: PCS Wireless; 3/17/2014)

This map illustrates the expected coverage from a fixed outdoor 2.5 GHz CPE. With the antenna mounted outside, building materials that inherently shield radio waves for an indoor fixed CPE are not a factor in the expected coverage.





Prop. model 1: Anderson-2D v1.00  
Time: 50.0%    Loc.: 50.0%  
Prediction Confidence Margin: 0.0dB  
Climate: Continental Temperate  
Land use (clutter): EDX .GCV format  
Atmospheric Abs.: none  
K Factor: 1.333

Received Power at remote

<div></div>	>=	-60.0 dBmW
<div></div>	-70.0 to	-60.0 dBmW
<div></div>	-80.0 to	-70.0 dBmW
<div></div>	-90.0 to	-80.0 dBmW
<div></div>	<	-90.0 dBmW

Display threshold level: -85.0 dBmW  
RX Antenna - Type: ISOTROPIC  
Height: 15.0 ft AGL    Gain: 14.85 dBd

● Major\_cities

Metro\_areas

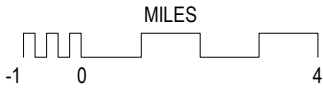
Interstates

Terrain elevations

☐ Shaded relief illumination color

Notes

Channel Frequency Color Reference:  
RED: A1A2=2508.500 MHz  
YELLOW: A3B1= 2518.500 MHz  
BLUE: B2B3= 2528.500 MHz  
GREEN: A4B4=2578 MHz  
PURPLE: G2G3=2683.500 MHz



PCS Technologies

Eau Claire Mobile Public Network

WiMAX 2.5GHz - Segment Planning



CCI Systems, Inc.  
105 Kent Street  
P.O. Box 190  
Iron Mountain, MI 49801

Tel (906) 774-6621  
Fax (906) 774-9120

ccisystems.com

March 19, 2014

Dennis Klaila  
Policy Analyst, Division of Business & Communications Services  
Public Service Commission of Wisconsin  
610 North Whitney Way, 2nd Floor  
Madison, Wisconsin 53705  
[dennis.klaila@wisconsin.gov](mailto:dennis.klaila@wisconsin.gov)

RE: Broadband Expansion Grant Application (submitted via ERF)

Dear Mr. Klaila:

Attached to this letter you will find a Broadband Expansion Grant Application uploaded in the Electronic Regulatory Filing (ERF) system for the construction of broadband facilities from CCI Systems, d.b.a Packerland Broadband (CCI). CCI is a private entity that meets the eligibility requirements set forth in Wis. Stat. §196.504.

CCI is partnering with several other public and private entities that also meet §196.504 eligibility requirements.

Our application also includes maps to illustrate our project, and letters of support from residents in the target unserved areas, and support letters from our public and private partners.

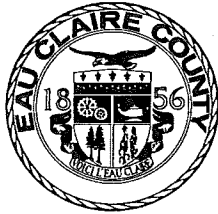
We are confident you will find our public-private effort has provided you with an application that demonstrates a clear and achievable plan to improve broadband communications services in several unserved and underserved areas of eastern Eau Claire County.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Cory Heigl", with a long, sweeping horizontal line extending to the right.

R. Cory Heigl  
Director of Business Development  
CCI Systems Inc. (d.b.a. Packerland Broadband)  
105 Kent St., Iron Mountain, MI 49801  
(906) 282-3682 – Mobile;  
(906) 776-2634 - Office  
Email: [cory.heigl@ccisystems.com](mailto:cory.heigl@ccisystems.com)



**Gregg Moore, County Board Chair**

Eau Claire County Board of Supervisors

721 Oxford Avenue, Room 3520

Eau Claire, WI 54703-5481

Phone: 715-839-5106 Fax: 715-839-6243

gregg.moore@co.eau-claire.wi.us



Mr. Cory Heigl  
Director of Business Development  
CCI Systems/Packerland Broadband  
105 Kent Street  
Iron Mountain, MI 49801

March 19, 2014

Re: Letter of Support for CCI Systems' Public-Private PSC Broadband Expansion Grant Application

Dear Cory,

As a partner in this project, I am writing in support of your Public Service Commission grant application to expand Wi-Max (wireless) broadband in rural unserved and underserved areas of eastern Eau Claire County. This public-private project involves a collaborative with the Chippewa Valley Inter Networking Consortium (CINC). This project allows CCI to sell commercial internet services to homes in the target areas (most with only one or no telecommunications internet service provider). This project will also advance the work of several educational, municipal and health care partners.

This project will enhance public safety/EMS services and increase efficiency by providing new tower connectivity at our facility at the Eau Claire County Parks and Forest (near Lake Eau Claire). Having a new tower at this location will enhance County services and reduce costs through service coordination. Having free County Wi-Fi service for campers in the target areas will also enhance the camping experience and increase public safety and Ranger services by giving campers access to information such as weather maps, emergency weather information and hiking and boating maps. This additional service would increase park utilization and increase visitor fees that are collected.

According to the Eau Claire County Parks and Forest Department, our targeted service area includes a significant transient population of campers and recreational visitors. A very conservative estimate of overnight campers and daytime summer visitors for the three parks in the target service area is 34,900 people per year. That number may be closer to 45,000 patrons if unregistered guests are included. A breakdown of each area includes:

1. Harstad Park: An all-season County park open seven days/week with 43 acres 27 campsites, daily and annual visitor passes and shelter rentals: Total annual self-registered visitors: 3,215
2. Lake Eau Claire Park: An all-season County Park with a clubhouse with a capacity for 190 people, six picnic shelters, a ball diamond, volleyball courts, horseshoe pits, fishing pier, mooring dock and a playground; daily passes and annual passes: Total annual self-registered visitors: 7,248
3. Coon Fork Lake Park: An all-season County Park with campsites, a boat landing, dumping station, swimming beach; volleyball court; playgrounds, shower buildings; hiking trails, and boat and canoe rentals; daily and annual visitor passes, shelter rental: Total annual self-registered visitors: 24,437

***Our Mission***

*To provide quality, innovative, and cost effective services that safeguard and enhance the well-being of residents and resources.*

Thank you for your work to seek this PSC grants funding to expand coverage and service to the residents and visitors of our County.

Sincerely,

A handwritten signature in black ink, appearing to read "Gregg Moore". The signature is fluid and cursive, with the first name "Gregg" being more prominent than the last name "Moore".

Gregg Moore  
Eau Claire County Chairman  
[gregg.moore@co.eau-claire.wi.us](mailto:gregg.moore@co.eau-claire.wi.us)  
(715) 839-5106

***Our Mission***

*To provide quality, innovative, and cost effective services that safeguard and enhance the well-being of residents and resources.*



March 18, 2014

Mr. Cory Heigl  
Dir. of Business Development  
CCI Systems/Packerland Broadband  
105 Kent Street  
Iron Mountain, MI 49801

Re: Support for Public-Private PSC Broadband Expansion Grant Application

Dear Mr. Heigl,

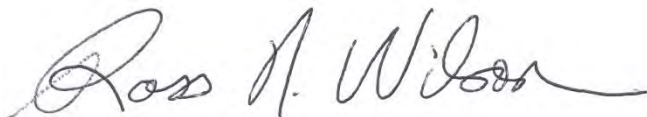
As a partner with you in your Public-Private PSC Broadband Expansion Grant Application, CINC fully supports your project to provide Wi-Max (wireless) broadband in rural unserved and underserved areas of eastern and Eau Claire County. As described in our Memorandum of Understanding (MOU), this project allows CCI Systems to sell commercial internet services to homes in the target areas—homes that mostly have poor telecommunications Internet service or no providers at all, or only one provider without competition.

Your project is primarily designed to increase commercial internet services to area homes in eastern Eau Claire County with no telecommunications internet service provider. It has an added value in advancing the public service work of several educational, municipal and health care CINC partners by:

- Expanding the City of Eau Claire's EMS Public Safety coverage for the 12-Lead EKG program to save lives and expedite emergency paramedic care for stroke and cardiac victims
- Increasing public safety and improving Ranger services for more than 35,000 year-round park patrons and campers in three County parks (by providing wireless access to emergency weather information and improved cell service for emergency calls, and hiking/boating maps)
- Supporting economic development by increasing property values, opportunities for business to locate in target communities, and providing infrastructure to allow employees to telecommute—all factors that can boost the communities' tax base and support schools
- Enhancing services while also increasing efficiency and reducing costs for Eau Claire County
- Helping residents—and students of three school districts—in eastern Eau Claire County bridge the "digital divide" and reduce disparities in health care and education

Thank you for your work to seek PSC grant funding to expand coverage and service in eastern Eau Claire County.

Sincerely,



Ross N. Wilson, Chair

**Attachment:** CINC FAQ & Member List



# Chippewa Valley Inter- Networking Consortium

*Collaborate→Connect→Save*

**website:**  
[cincua.org](http://cincua.org)

**Chair--Ross N. Wilson**  
CESA 10  
725 West Park Ave.  
Chippewa Falls, WI 54729  
v: 715.720.2029  
e: [wilson@cesa10.k12.wi.us](mailto:wilson@cesa10.k12.wi.us)

**Vice Chair—John LeBrun**  
City of Eau Claire

**Secretary—Dave Hayden**  
Eau Claire County

**Treasurer—Tom Lange**  
Chippewa Valley Technical College  
(Chippewa Falls, Eau Claire,  
Menomonie, Neillsville, and River Falls)

**Mission:**  
Through a coordinated regional community infrastructure, CINC will position the Chippewa Valley to be innovative, competitive and economically viable for present and future generations.

## Frequently Asked Questions

### Purpose

The [Chippewa Valley Internetworking Consortium](http://cincua.org) (CINC) is a regional Community Area Network (CAN) formed in 1999 to allow members to collaborate, connect and save costs. CINC (pronounced “sink”) became an Unincorporated Association in 2011 and enables application sharing between city, county and state government, educational institutions, libraries, nonprofits, healthcare organizations and technology providers that is innovative and sustainable. Through a coordinated regional communication infrastructure, captured in an online documentary (<http://bit.ly/yTIBit>), CINC helps the Chippewa Valley be innovative, competitive, and economically viable for present and future generations.

### Collaborate→Connect→Save

CINC’s network promotes economic development, expands educational opportunities, improves the availability of government services, and increases efficiency to reduce the burden on taxpayers. CINC is innovative and sustainable because it is a consortium ownership model with access to ECB frequencies, a robust backbone, and public-private WiFi and WiMax. The CINC infrastructure is fully mapped using Google Earth Mapping and Intermapper applications.

### Numbers

- 230 miles of 96-strand fiber with a value in excess of \$13.3 million
- 244 connection points (buildings, community anchor institutions, traffic lights, etc.) and 643 terminations
- 16 towers and tower-type structures providing Wi-Max

### Chippewa Valley Members (as of March 2014)

1. Altoona School District
2. Augusta School District
3. Cameron School District
4. Chetek-Weyerhaeuser School District
5. Chippewa County
6. Chippewa Falls Area Unified School District
7. Chippewa Valley Technical College
8. City of Altoona
9. City of Chippewa Falls
10. City of Eau Claire
11. Cooperative Educational Service Agency (CESA) 10
12. Covenant Healthcare LLC (dba Dove Healthcare)
13. Eau Claire Area School District
14. Eau Claire County
15. Fall Creek School District
16. Indianhead Federated Library System
17. Mayo Clinic Health System Eau Claire Clinic, Inc.
18. Mayo Clinic Health System Eau Claire Hospital, Inc.
19. McDonell Area Catholic Schools
20. Menomonie School District
21. Mondovi School District
22. Osseo-Fairchild School District
23. Rice Lake Area School District
24. Sacred Heart Hospital (Hospital Sisters Health System) in Eau Claire
25. Spooner Area School District
26. St. Joseph’s Hospital (Hospital Sisters Health System) in Chippewa Falls
27. University of Wisconsin-Madison, Department of Family Medicine
28. University of Wisconsin-Eau Claire
29. University of Wisconsin-Stout
30. (Other community non-profit organizations)

## Project Collaboration

CINC projects begin in a conceptual phase with a timeline and objectives. Shared interests and resources help identify technical solutions. Member needs (such as lowering costs through shared applications and sharing infrastructure) are met by working together to solve mutual problems. CINC members have found that solving problems together provides better solutions and identifies innovative and cost-effective solutions.

## A Best Practice Model

CINC is a role model community area network with officers and bylaws that utilizes inter-governmental agreements and memorandums of understanding. Should one party disengage from CINC, it does not diminish the operability and connectivity and infrastructure enjoyed by the other parties. CINC's low- or no-ownership capitalized multi-stakeholder model enhances collaboration and creates economies of scale. As a CAN with minimal fees (for fiber locates, support and network maintenance), the outcome service level and advanced broadband speed and connectivity are far higher than any private provider. Redundant network design also allows members, including hospitals and emergency services such as police and fire, to utilize a dependent network for mission-critical applications and direct their own future. The CINC model received inspiration from a book by the late Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action*. (Ostrom is the only woman to win the Nobel Memorial Prize in Economic Science.)

## Funding, Synergy & Sustainability

CINC is a consortium with each organization-member invested and acting together to provide ongoing maintenance for a shared infrastructure that meets each party's needs, enabling organizations to provide greater and more dependable service at less cost to stakeholders and customers. This CINC community area network model generates a technical and fiscal synergy to create value that is greater than the sum of the stakeholders. CINC projects are funded by the institutions that receive the greatest benefit from the project. This process of capitalizing projects may also involve a lead organization with support from secondary stakeholders. Stakeholders individually determine their own return on investment on a project in order to justify project support. This process involves invitations for partnerships, negotiations, and allows each CINC member to evaluate their own benefit and ROI in order to make a proposal to their own governing board. Projects are sometimes completed in incremental phases. Through collaboration, one CINC member's need may become another's opportunity. Because organizations have different fiscal years, CINC is able to complete projects and accomplish timelines with exceptional agility.

## Organizational Structure & Leadership

As an Unincorporated Association (formed in 2011 under §184 WI Statutes), CINC has no employees or payroll and does not sell any product or service. CINC has an Executive Committee, Officers, Bylaws, a Finance Committee, a Fiscal Agent, committees and an annual meeting. These structures provide the necessary workforce for physical and technical support to oversee infrastructure. Because it is a diverse group of CIOs and IT representatives from various public and private stakeholder organizations, CINC members provide the necessary operational staff resources themselves (much like a condo association). For some tasks vendors are hired. Members each share in the operational responsibilities, costs, and vendor oversight to further the organizational mission. CINC conducted its last strategic planning on July 2013.

## Awards & Honors

- **Completion of BTOP Grants “under budget” and “on time”:** Led by UW-Extension, CINC partnered to expand fiber infrastructure in several Wisconsin communities with two federal Broadband Technology Opportunities grants totaling nearly \$33 million (the [Building Community Capacity through Broadband](#) initiative). The project was completed on time and under budget (January 2014).
- **CINC hosted two researchers from Japan:** Mr. Yasuichi Kitamura, a researcher at the National Institute of Information and Communications Technology, Japan, and a member of the Asia-Pacific Advanced Network (APAN); Dr. Hiroshi Mizushima, Chief Senior Researcher at the National Institute of Public Health in Japan. They also visited colleagues at Internet2 and the NIH and best practice networks in North America to study innovative networks and learn about their impact on health care (March 25, 2013).
- **CINC Papers Presented at International Conference:** CINC members presented four CINC network case studies at the [Internet2 Member Meeting](#). The presentation, “Strengthening a Health Care Community with Advanced Networks: Care Integration at Two Wisconsin Hospitals,” examined operational advances that save lives and improve efficiency. The [presentation](#) and [slide deck](#) are online (September 2012).
- **CINC members were honored in with the “Chancellor’s Friend and Advocate Award,”** presented by Ray Cross, Chancellor, UW-Extension and UW Colleges, who commented, “The CINC model improves the way many local services are delivered to citizens, saves local taxpayer dollars and lays the foundation for healthy economic development and job growth” (September 2011).



March 20, 2014

Mr. Cory Heigl, Director of Business Development  
CCI Systems  
105 Kent Street  
Iron Mountain, MI 49801

Re: Letter of Support for Public-Private PSC Broadband Expansion Grant Application

Dear Cory,

I am writing in support of your PSC of Wisconsin grant application to expand Wi-Max (wireless) broadband in rural unserved and underserved areas of eastern and Eau Claire County. This project is a public-private collaborative of the Chippewa Valley Inter Networking Consortium (CINC) and will benefit other educational, municipal and health care partners. Sacred Heart Hospital (Eau Claire) and St. Joseph's Hospital (Chippewa Falls) are CINC members.

This CINC-CCI project constructs a new Wi-Max tower at Lake Eau Claire County Park. By increasing wireless coverage for approximately an additional 50 square miles, this project supports better health and better health care for underserved rural populations. It also helps reduce disparities in care that are encountered by caregivers in the field that regularly encounter a "digital divide" of little or no connectivity in rural areas. This broadband expansion project will:

1. **Expand coverage for our 12-lead EKG community EMS program in eastern Eau Claire County to enhance public safety and save lives:** This program links EMS paramedics in the field to hospital Emergency Rooms with real-time 12-Lead EKG data for faster treatment decisions. Our community began this program when our area hospitals found that 50% of cardiac and stroke patients were walk-ins that were not utilizing the EMS system. After implementing the program, we launched a "Care Begins with a Call" public service campaign. This campaign helped educate the public to call 911 in case of heart attack or stroke because EMS care is faster and can help ensure that critical time is not lost. This collaboration began in 2008 and has saved lives and improved therapies and outcomes for patients with acute coronary syndrome and sudden cardiac arrest.

Hospital Sisters Health System would be able to provide a cash match of \$5,000 if the grant application is approved. Thank you for your collaboration with CINC to seek this PSC grant funding to expand coverage in our County.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Nelson", written over a large, loopy circular flourish.

David A. Nelson, MHA, FACHE, FHFMA  
Chief Financial Officer

900 West Clairemont Avenue  
Eau Claire, WI 54701  
p: 715.717.4121  
sacredhearteauclaire.org

*Affiliate of  
Hospital Sisters  
Health System*





# School District of Augusta

E19320 Bartig Road, Augusta, WI 54722

March 15, 2014

Mr. R. Cory Heigl  
Director of Business Development  
CCI Systems  
105 Kent St.  
Iron Mountain, MI 49801

**RE: Letter of support for PSC Broadband Expansion Grant Program with CINC**

Dear Mr. Heigl,

I am writing on behalf of the Augusta Area School District in support of your Public Service Commission grant application to expand Wi-Max (wireless) broadband and commercial internet service in unserved and rural areas of eastern and southern Eau Claire County. I understand this project is a public-private collaborative of the Chippewa Valley Inter Networking Consortium (CINC), Eau Claire County, City and other educational, municipal, public safety and health care partners.

In addition to enhancing EMS and public safety, and increasing efficiency for services and reducing costs for County services, this project has great potential to enhance education and bridge the "digital divide" for disadvantaged students. We support this project because it: (a) increases commercial internet services to homes in areas of our District with no telecommunications internet service provider, and (b) enhances our ability as a School District to someday send a tablet or iPad home with a student that accesses our school network. Both of these enhancements help bridge the digital divide in areas in our District with no Internet, or very poor quality service that is slow or undependable.

The project also indirectly supports our schools by strengthening economic development opportunities: This project helps increase property values. It also increases the attractiveness of our community to new businesses who may consider locating in the area (and enhances the ability to tele-commute to work). These all are new opportunities that would help boost our community's tax base, increase employment opportunities, community growth, and further support our schools.

The Augusta Area School District, located in Eau Claire County in West Central Wisconsin, is a PreK-12 public school system. Our purpose is to provide our students with the knowledge, skills and attitudes which will help them become successful in an ever-changing society. Our very rural school district has many areas with no commercial Internet service and no public-private fiber network services. Our District is as rural today as when it was consolidated in 1960. It comprises 250 square miles, including the City of Augusta, all or part of seven surrounding townships, and includes more than 650 students.

Our District has 400 computers for student and staff access, 150 one-to-one computers in grades Three thru Five, three servers, numerous interactive Whiteboards, iPads, wireless capability throughout 90% of our buildings, fiber optic cabling between buildings, and connectivity to the CINC network.

Thank you for your leadership and planning to seek PSC grant funding to expand broadband and commercial internet service in unserved and rural areas of our school district.

Sincerely,

Wm. D. Perry – Augusta School District Administrator

**Elementary School**  
715-286-3303  
Fax: 715-286-3335

**District Office**  
715-286-3302  
Fax: 715-286-3336

**Middle/High School**  
715-286-3352  
Fax: 715-286-3393

SCHOOL DISTRICT  
OF

*Fall Creek*

FALL CREEK, WISCONSIN 54742

*Committed to Academic and  
Personal Excellence*

March 15, 2014

Mr. Cory Heigl, Director of Business Development  
CCI Systems  
105 Kent Street  
Iron Mountain, MI 49801

Re: Letter of support for public-private application to PSC Broadband Expansion Grant Program

Dear Mr. Heigl,

I am writing on behalf of the Fall Creek School District in support of your Public Service Commission grant application to expand Wi-Max (wireless) broadband and commercial Internet service in rural and unserved and areas of eastern and Eau Claire County.

I understand this project is a public-private collaborative of the Chippewa Valley Inter Networking Consortium (CINC), Eau Claire County, City and other educational, municipal, public safety and health care partners.

This project aligns with our Mission: "The School District of Fall Creek, along with the community, through meaningful personal connections, will provide a safe, supportive environment that inspires students to reach their academic and personal potential and to become responsible citizens."

In addition to enhancing public safety/EMS, and increasing efficiency for services and reducing costs for County services, this project has great potential to enhance education and bridge the "digital divide" for disadvantaged students in our school district. We support this project because it:

1. **Increases commercial internet services to homes** in areas of our District with no telecommunications internet service provider, and
2. **Enhances our ability as a School District to someday send a tablet or iPad home with a student** that accesses our school network. Both of these enhancements help bridge the digital divide in areas in our District with no Internet, or very poor quality service that is slow or undependable.
3. **Supports economic development** by increasing property values, opportunities for business to locate in our community, and for employees to telecommute—all factors that in the long term could boost our community's tax base and further support our schools.

Our District serves nearly 850 students in K-12, and many areas of our District where student families live are rural and do not even have one Internet provider. Thank you for your leadership and planning to seek PSC grant funding to expand broadband and commercial internet service in unserved and rural areas of our school district.

The school year of 2014-2015 Fall Creek School District will be offering the opportunity for students to take home the district's mobile devices so they may continue their school projects, homework etc., I realize this Wi-Max project will may not be completed for the coming school year, but will serve the future of the Fall Creek Community and students.

Sincerely,



Jake Schoeder  
Technology Coordinator  
Fall Creek School District  
336 East Hoover Avenue  
Fall Creek, WI 54742

**Follow Me On Twitter: @fcsdtechguy**

Office: 715-877-2123 x1007

Fax: 715-877-2911

336 EAST HOOVER AVENUE • FALL CREEK, WI 54742-9627 • (715) 877-2123



# OSSEO-FAIRCHILD SCHOOL DISTRICT

William J. Tourdot  
Superintendent  
[btourdot@ofsd.k12.wi.us](mailto:btourdot@ofsd.k12.wi.us)

Drew Semingson  
Middle/Senior High School Principal  
[dsemingson@ofsd.k12.wi.us](mailto:dsemingson@ofsd.k12.wi.us)

Lori Whelan  
Osseo Elementary & Fairchild Elementary Principal  
[lwhelan@ofsd.k12.wi.us](mailto:lwhelan@ofsd.k12.wi.us)

March 17, 2014

Mr. R. Cory Heigl  
Dir. of Business Development  
CCI Systems  
105 Kent St.  
Iron Mountain, MI 49801

Re: Letter of support for PSC Broadband Expansion Grant Program (in collaboration with CINC)

Dear Mr. Heigl,

On behalf of the Osseo-Fairchild School District, I am writing in support of your Public Service Commission (PSC) grant application to expand Wi-Max (wireless) broadband and commercial internet service in unserved and rural areas of southeastern Eau Claire County. I understand this project is a public-private collaborative of the Chippewa Valley Inter Networking Consortium (CINC), Eau Claire County, City and other educational, municipal, public safety and health care partners.

The Osseo-Fairchild School District, located in Eau Claire County in West Central Wisconsin, is a PreK-12 public school system. We have an enrollment of more than 950 students and many of our families live in rural areas with no Internet service provider.

In addition to enhancing EMS and public safety, and increasing efficiency for services and reducing costs for County services, this project has great potential to enhance education and bridge the "digital divide" for disadvantaged students. We support this project because it: (a) increases commercial Internet services to homes in areas of our District with no telecommunications internet service provider, and (b) enhances our ability as a School District to someday send a tablet or iPad home with a student that accesses our school network. Both of these enhancements help bridge the digital divide in areas in our District with no Internet, or very poor quality service that is slow or undependable.

Your project also indirectly supports our District schools by strengthening economic development opportunities: This project helps increase property values. It also increases the attractiveness of our community to new businesses who may consider locating in the area (and enhances the ability to tele-commute to work). These all are new opportunities that would help boost our community's tax base, increase employment opportunities, community growth, and further support our schools.

Thank you for your leadership and planning to seek PSC grant funding to expand broadband and commercial internet service in unserved and rural areas of our school district.

Sincerely,



Bill Tourdot, Superintendent

DISTRICT OFFICE  
50851 East Street  
Osseo, WI 54758  
Phone: 715-597-3141  
FAX: 715-597-3606

MIDDLE/SENIOR HIGH SCHOOL  
50851 East Street  
Osseo, WI 54758  
Phone: 715-597-3141  
FAX: 715-597-3647

OSSEO ELEMENTARY  
13025 15<sup>th</sup> Street  
Osseo, WI 54758  
Phone: 715-597-3196  
FAX: 715-597-3406

FAIRCHILD ELEMENTARY  
220 West Main Street, PO Box 100  
Fairchild, WI 54741-0100  
Phone: 715-334-3311  
FAX: 715-334-5461



**CITY OF EAU CLAIRE**  
*"Proudly Meeting the Needs of our Community"*

March 18, 2014

Mr. Cory Heigl, Director of Business Development  
CCI Systems  
105 Kent Street  
Iron Mountain, MI 49801

Re: Letter of Support for Public-Private PSC Broadband Expansion Grant Application

Dear Cory,

I am writing in support of your Public Service Commission grant application to expand Wi-Max (wireless) broadband in rural unserved and underserved areas of eastern and Eau Claire County. This project is a public-private collaborative of the Chippewa Valley Inter Networking Consortium (CINC) and Eau Claire County and will benefit other educational, municipal and health care partners.

The construction of a new Wi-Max tower in the Eau Claire County Park near Lake Eau Claire (44° 45' 23.50" N, 91° 08' 18.50" W) will help expand coverage for our 12-lead EKG community EMS program in eastern Eau Claire County. Grant funding would allow this care to be further expanded to enhance public safety and save lives.

This program began in 2008 and links EMS paramedics in the field to hospital Emergency Rooms with real-time 12-Lead EKG data for faster treatment decisions. Our community began this program when our area hospitals found that 50% of cardiac and stroke patients were walk-ins that were not utilizing the EMS system. After implementing the program, we launched a "Care Begins with a Call" public service campaign. This campaign helped educate the public to call 911 in case of heart attack or stroke because EMS care is faster and can help ensure that critical time is not lost. This collaboration is a best practice that has saved lives and improved therapies and outcomes for patients with acute coronary syndrome and sudden cardiac arrest.

Getting patients quickly to specialized care can shorten hospital stays, decrease mortality, and improve patient outcomes for cardiac and stroke patients. The 12-lead EKG implementation is the result of collaboration and resource sharing between the emergency departments and IT Staff at St. Joseph's Hospital (Chippewa Falls), Sacred Heart Hospital (Eau Claire), and Mayo Hospital (Eau Claire), all members of CINC. This program is expanding from the City of Eau Claire into Eau Claire County.

The proposed new tower in this grant proposal will provide approximately 50 square miles of new service area to improve emergency health care access and reduce disparities in rural areas.

Thank you for your work to seek this PSC grant funding to expand coverage and service in our County.

Sincerely,

Lyle N. Koerner, Jr. Fire Chief  
City of Eau Claire  
#2 Fire Station  
216 S. Dewey Street  
Eau Claire, WI 54701 (715) 839-5044  
Lyle.Koerner@EauClaireWI.gov

**FIRE AND RESCUE DEPARTMENT**

Lyle N. Koerner, Jr., Chief

Emergency Calls .....911  
Administration .....715/839-5012  
Inspections/Investigation .....715/839-4825  
After Hours .....715/839-5013  
E-mail .....ecfire@eauclairewi.gov  
City Website .....www.eauclairewi.gov



March 18, 2014

Mr. R. Cory Heigl  
CCI Systems/Packerland Broadband  
105 Kent Street  
Iron Mountain, MI 49801

Re: Letter of support for PSC Broadband Expansion Grant Program (in collaboration with CINC)

Dear Mr. Heigl,

On behalf of the CESA 10, I am writing in support of your Public Service Commission (PSC) grant application to expand Wi-Max (wireless) broadband and commercial internet service in unserved and underserved rural areas of eastern Eau Claire County.

This project is a public-private collaborative of the Chippewa Valley Inter Networking Consortium (CINC), Eau Claire County, City and other educational, municipal, public safety and health care partners. I understand the project will provide commercial Internet to approximately 200 square miles that include both unserved and underserved areas. These areas include the School Districts of Fall Creek, Augusta and Osseo-Fairchild (three of CESA 10's member districts).

Network connectivity and Internet access at school and home endpoints are critical backbone infrastructures to fulfilling our mission. This broadband expansion project also supports many of the priorities facing educators, students and families in our region, including the dramatic transformation of teaching and learning.

CESA 10 serves 29 constituent districts in northwest Wisconsin by:

- Coordinating collaborative efforts among educators in order to align curriculum, implement state and federal programs and comply with existing or future state and federal accountability systems;
- Facilitating data collection and warehousing and providing training and technical support for local districts in order to turn data into information that can inform instruction;
- Serving as a centralized hub for high quality professional development in order to bring the most effective presenters and relevant topics to local districts;
- Providing consultation services and facilitating networking among educators in order to implement best practices and ensure all students reach their fullest potential.

Unfortunately, some of the students that our school districts serve live in rural areas or live in poverty. Both of these can be substantial obstacles that can prevent even the most motivated student from reaching their fullest potential because they live on the wrong side of the "Digital Divide." Hundreds of families in these target areas have no Internet service provider, or may have one provider but very poor connectivity or spotty service or

undependable service. (Some of the target areas for this project do not even have Verizon cell connectivity.)

Your project has great potential to enhance education and bridge the "digital divide" for disadvantaged students. We support this project because it: (a) increases commercial Internet services to homes in areas of these school districts with no telecommunications internet service provider, and (b) enhances our ability to better serve these school districts and their students and families.

Thank you for your leadership and planning to seek PSC grant funding to expand broadband and commercial internet service in unserved and rural areas of our school district.

Sincerely,

A handwritten signature in black ink, appearing to read "M Haynes", with a stylized, cursive script.

Michael Haynes, Agency Administrator  
Cooperative Educational Service Agency 10  
[mhaynes@cesa10.k12.wi.us](mailto:mhaynes@cesa10.k12.wi.us)

**Robert and Janet Buley**  
**N8520 Holseth Road, Holmen, Wisconsin 54636**  
[convairbob@gmail.com](mailto:convairbob@gmail.com)

March 18, 2014

Mr. Cory Heigl  
Director of Business Development  
CCI Systems  
105 Kent Street  
Iron Mountain, MI 49801

Re: Letter of support for to PSC Broadband Expansion Grant Application

Dear Mr. Heigl,

I am writing in support of your Public Service Commission grant application to expand Wi-Max (wireless) broadband and commercial Internet service in rural and unserved and areas of eastern Eau Claire County. I understand you are working with the Chippewa Valley Inter Networking Consortium (CINC), a public-private collaborative that includes Eau Claire County, City and other educational, municipal, public safety and health care partners. In addition to enhancing public safety/EMS, and increasing efficiency for services and reducing costs for County services, this project can help bridge the “digital divide.”

We are currently completing our residence on Lake Eau Claire at E20675 North Shore Drive, Augusta, WI 54722. This new home is located in an area with little or no Internet Service. Currently I am unable to get Internet Service of sufficient speed, capacity and availability to support the following services which I would like to add or include in this new structure which will *EVENTUALLY* serve as our permanent family residence:

- Sufficient speed and capacity to support the Household Management and security system offered by Centurylink for residential properties
- Sufficient speed and capacity to offer and ultimately provide Television Service similar to that currently provided in other areas by Charter and CenturyLink.
- Sufficient speed and capacity which will allow me to operate my Aviation Consulting business in addition to satisfying our families need to research/shop/, and otherwise use this capability to maintain or even improve the quality of life at this Lake Eau Claire location.

I support this project because it will:

- Would help provide Internet service to my home which I need and desire.
- Increase commercial internet services to homes in areas of eastern Eau Claire County with no telecommunications internet service provider, and
- Support economic development by increasing property values, opportunities for business to locate in our community, and for employees to telecommute—all factors that in the long term could boost our community’s tax base and support our schools.

Thank you for your leadership and planning to seek PSC grant funding to expand broadband and commercial internet service in unserved and rural areas of my community.

Sincerely,

Robert G. Buley



## **Mortimer, David P**

---

**From:** marloorth@aol.com  
**Sent:** Wednesday, March 19, 2014 8:00 AM  
**To:** Mortimer, David P  
**Cc:** fredposs@gmail.com

March 19, 2014

Mr. Cory Heigl  
Director of Business Development  
CCI Systems  
105 Kent Street  
Iron Mountain, MI 49801

Re: Letter of support for PSC Broadband Expansion Grant Application

Dear Mr. Heigl:

Two years ago we (the residents who own property around Lake Eau Claire) petitioned the Eau Claire County Board to form a Lake District. The county honored our request and did form this Lake District. The reason for the Lake District is to provide a vehicle to raise funds by taxation) to improve water quality, enhance the fishery and reduce sediment entering the lake.

To do these projects we have to do research, prepare and submit a management plan, get permits from Eau Claire County, DNR, Army Corp of Engineers, and finally engage and work with contractors to do the work. These tasks are very labor intensive and we enlist many people. It would be a huge advantage if we had wireless service so we could record our research data on site out in the lake as well as monitor the work as it is done. Also, the more tourists we attract translates into more goods and services purchased, which boosts the areas economy, (which we need) providing a benefit for the entire area. These same tourists want the web.

For us to reduce our costs and for us to communicate more effectively with County, State and Federal agencies we need this technology.

Anything you can do to bring this enhanced service to Lake Eau Claire area will be appreciated by all and my grandkids would be overjoyed and they are our future.

Thank you.

Sincerely,  
Marlo Orth, Chairman  
Lake Eau Claire Protection and Rehabilitation District  
S4565 Cty. Rd. NL  
Augusta, WI 54722



March 19, 2014

Mr. Cory Heigl  
Director of Business Development  
CCI Systems  
105 Kent Street  
Iron Mountain, MI 49801

Re: Letter of support for to PSC Broadband Expansion Grant Application

Dear Mr. Heigl,

I am writing in support of your Public Service Commission grant application to expand Wi-Max (wireless) broadband and commercial Internet service in rural and unserved areas of eastern Eau Claire County.

I understand you are working with the Chippewa Valley Inter Networking Consortium (CINC), a public-private collaborative that includes Eau Claire County, City and other educational, municipal, public safety and health care partners.

In addition to enhancing public safety/EMS, and increasing efficiency for services and reducing costs for County services, this project can help bridge the “digital divide.”

I live at 512 5<sup>th</sup> Avenue North, Strum, WI 54770. Our cottage is located on Lake Eau Claire, at ES22040 SD in an area with no Internet service provider. We have no internet service at the lake, and we spend a lot of time at our cottage in the summer time. Internet service would be very helpful for us to keep in contact with our family, and my husband is on many volunteer boards, and would help him to keep in contact with the people that he needs to be in contact with. Plus our phone service in the area is not good. I support this project because it:

- Would help provide Internet service to our cottage which we would appreciate. Increases commercial internet services to homes in areas of eastern Eau Claire County with no telecommunications internet service provider, and
- Supports economic development by increasing property values, opportunities for business to locate in our community, and for employees to telecommute—all factors that in the long term could boost our community's tax base and support our schools.

Thank you for your leadership and planning to seek PSC grant funding to expand broadband and commercial internet service in unserved and rural areas of my community.

Sincerely,  
*[Submitted via email]*

Dean and Carolyn Boehne  
Lake cottage: Lake Eau Claire, at ES22040 SD  
Home: 512 5<sup>th</sup> Avenue North, Strum, WI 54770  
715-695-3131  
[dcboast@tcc.coop](mailto:dcboast@tcc.coop)

## Mortimer, David P

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**From:** Fred Poss <fredposs@gmail.com>  
**Sent:** Monday, March 17, 2014 9:47 PM  
**To:** Mortimer, David P  
**Subject:** Wi-Max and commercial internet services

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Dear Mr. Mortimer,

As President of the Lake Eau Claire Association, an organization of more than one hundred families living on or near Lake Eau Claire, I write to you today in support of bringing Wi-Max (wireless) broadband and commercial internet service in rural areas of eastern Eau Claire County like ours.

Our organization and its individual family members consistently face the issues of slow internet or no internet at all. Specifically, our organization is now trying to greatly expand our internet presence by creating a very large and powerful website. In our new website, [www.lakeeauclaire.org](http://www.lakeeauclaire.org), we hope to house major stores of electronic research data relating 75 years of research on our lake and river. We also aim to provide an electronic copy of our newsletter, our board minutes, and even advertising for our sponsors. Our June Triathlon is a major source of recreational fun and raises virtually all of our capital to pay for improving our lake. This triathlon needs to be out there on the web with an interactive feature to allow people to register and to use PayPal to pay for their registration, for joining our organization, and for making donations to our organization.

Both at the individual home level as well as the many home-located electronic businesses operated by our members, an increase in commercial internet services would make a major improvement in the business activity in our wilderness areas.

And finally, the increased business activity this improvement could bring supports badly needed economic growth here. This in turn will increase property values, increase opportunities for small and large businesses to locate on or near the lake, and for employees to telecommunicate from home. All these factors eventually improve our tax base and support our local schools.

Mr. Frederick Poss  
Lake Eau Claire Association President  
S5270 SD Lane  
Augusta, WI 54722  
715.286.9413

## Mortimer, David P

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**From:** Mortimer, David P  
**Sent:** Tuesday, March 18, 2014 8:48 AM  
**To:** Mortimer, David P  
**Subject:** Letter of support for to PSC Broadband Expansion Grant Application from Dan & Faith Esser (Augusta)

**From:** Dan & Faith Esser [<mailto:danesser@centurytel.net>]  
**Sent:** Monday, March 17, 2014 10:08 PM  
**To:** Mortimer, David P  
**Subject:** Letter of support for to PSC Broadband Expansion Grant Application

March 17, 2014

Re: Letter of support for to PSC Broadband Expansion Grant Application

Dear Mr. Heigl,

I am writing in support of your Public Service Commission grant application to expand Wi-Max (wireless) broadband and commercial Internet service in rural and unserved and areas of eastern Eau Claire County.

I understand you are working with the Chippewa Valley Inter Networking Consortium (CINC), a public-private collaborative that includes Eau Claire County, City and other educational, municipal, public safety and health care partners.

In addition to enhancing public safety/EMS, and increasing efficiency for services and reducing costs for County services, this project can help bridge the “digital divide.”

I live at E20845 County Road ND, Augusta, Wisconsin. My home is located in an area with very slow Internet service service. There are times during the day that I have no access at all. Those times are usually afternoons when school is out and on weekends.

I support this project because it:

- Would help provide a faster Internet service to my home which I need to be able to work my insurance business more efficiently from my home. What we currently have is not sufficient, as there are many slow times during the day.
- Increases commercial internet services to homes in areas of eastern Eau Claire County, and people need a dependable service for their day to day functions, such as banking and paying bills.
- Supports economic development by increasing property values, opportunities for business to locate in our community, and for employees to telecommute—all factors that in the long term could boost our community’s tax base and support our schools.

Thank you for your leadership and planning to seek PSC grant funding to expand broadband and commercial internet service in unserved and rural areas of my community.

Sincerely,  
Daniel Esser 715-286-2790

## Mortimer, David P

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**From:** Mortimer, David P  
**Sent:** Tuesday, March 18, 2014 11:02 AM  
**To:** Mortimer, David P  
**Subject:** PSC Broadband Expansion Grant

**From:** DProdoehl [<mailto:dprodoehl@aol.com>]  
**Sent:** Tuesday, March 18, 2014 10:46 AM  
**To:** Mortimer, David P  
**Subject:** PSC Broadband Expansion Grant

March 18, 2014

Mr. Cory Heigl, Director of Business Development  
CCI Systems, 105 Kent Street  
Iron Mountain, MI 49801

Re: Letter of support for to PSC Broadband Expansion Grant Application

Dear Mr. Heigl,

I am writing in support of your Public Service Commission grant application to expand Wi-Max (wireless) broadband and commercial Internet service in rural and unserved and areas of eastern Eau Claire County. I understand you are working with the Chippewa Valley Inter Networking Consortium (CINC), a public-private collaborative that includes Eau Claire County, City and other educational, municipal, public safety and health care partners.

In addition to enhancing public safety/EMS, and increasing efficiency for services and reducing costs for County services, this project can help bridge the "digital divide."

I live at E22070 County Road SD, Augusta, WI 54722. My home is located in an area with no Internet service provider. It has been very difficult to stay in contact with family, living in a remote area, an area that we love. We cannot access internet service to pay our bills on line, shop or communicate with our insurance company and other businesses. We also enjoy getting books through the library online. Our doctor now has an online communication service that we cannot access. It seems every day that we are asked to do things online from paying taxes to staying in touch with our church. To stay involved with community clubs and organizations, we must be able to receive the meeting updates and notes. Newspapers are not delivered to our area, but we would be able to access up to the minute news and weather online.

I support this project because it:

- Would help provide Internet service to my home which I need to carry out daily tasks.
- Increases commercial internet services to homes in areas of eastern Eau Claire County with no telecommunications internet service provider, and
- Supports economic development by increasing property values, opportunities for business to locate in our community, and for employees to telecommute—all factors that in the long term could boost our community's tax base and support our schools.

Thank you for your leadership and planning to seek PSC grant funding to expand broadband and commercial internet service in unserved and rural areas of my community.

Sincerely,  
Andrew and Donna Prodoehl