



ROB SUMMERFIELD

STATE REPRESENTATIVE • 67th ASSEMBLY DISTRICT

June 10, 2021

Representative Kuglitsch, Chair
Representative Steffen, Vice-Chair
Members of the Assembly Committee on Energy and Utilities

Testimony on 2021 Assembly Bill 371

Relating to: the broadband expansion grant program

Dear Chairman Kuglitsch, Vice-Chair Steffen, and Committee Members:

Thank you for providing me with the opportunity to testify at today's public hearing on Assembly Bill 371. I appreciate your time and consideration of this legislation.

The Broadband Expansion Grant Program was created in 2013 to meet the demand for broadband services in Wisconsin and encourage expansion into Wisconsin's unserved and underserved areas.

Wisconsin has made progress in recent years at connecting the state with high-speed internet services. According to the FCC, 93% of Wisconsinites have access to high-speed internet services. This leaves roughly 400,000 Wisconsinites without access to basic speeds, with roughly some 20% of rural residents falling into this category.

Unfortunately, as our technological landscape has evolved, our Broadband Expansion Grant Program has not. Under the current system, an "unserved" area is defined as an area that lacks a provider who offers speeds at 20% of the federal standard. That equates to speeds of approximately 5 Mbps, which is wholly inadequate if Wisconsin's economy is expected to remain competitive in the coming decades. The program also has an "underserved" category that allows for the state to subsidize internet expansion into areas that already have access to high-speed internet services. These inefficiencies are holding the program back from its maximum potential and hindering the state's progress on this issue.

Assembly Bill 371 will make the Broadband Expansion Grant Program more efficient and effective. It includes over 15 technical changes that will provide greater accountability and direction to the program. It encourages providers to divide and conquer the remaining locations in Wisconsin that are lacking basic internet speeds. It also encourages faster deployment of services and incentivizes expansion.

These changes are necessary for the long-term viability of the program and internet access in Wisconsin as a whole. I ask that you join me in supporting this bill.



Public Service Commission of Wisconsin

Rebecca Cameron Valcq, Chairperson
Ellen Nowak, Commissioner
Tyler Huebner, Commissioner

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PSC Testimony on Assembly Bill 371 – Changes to the Broadband Expansion Grant Program June 10, 2021

Chairman Kuglitsch and committee members, thank you for the opportunity to testify on behalf of the Public Service Commission of Wisconsin (PSC) on Assembly Bill 371 (AB 371), which makes several changes to Wisconsin's Broadband Expansion Grant Program. I am Matt Sweeney, the PSC's Director of Public and External Affairs, and I am here to testify for information on AB 371. I am joined today by three other PSC staff: Kristy Nieto, Administrator of the Division of Digital Access, Consumer and Environmental Affairs; Alyssa Kenney, Director of the Office of Digital Access, which houses the State Broadband Office; and Zach Ramirez, Assistant General Counsel. The PSC administers the Broadband Expansion Grant Program through the State Broadband Office in the Division of Digital Access and Consumer and Environmental Affairs.

As you know, the PSC is Wisconsin's independent utility regulator. It is the PSC's mission to ensure the delivery of safe, reliable, affordable, and environmentally responsible utility services and equitable access to telecommunication and broadband services.

Unlike other utilities in Wisconsin like electricity, water, and natural gas, the provision of high-speed broadband internet is largely unregulated. In the context of this hearing, this means that broadband providers cannot be required to serve unserved areas. If an area does not have access to broadband service, the residents and businesses have to wait until a provider decides to expand there or the current provider improves the internet service to provide broadband. Broadband providers are reluctant to expand into areas where the return on investment for the company is too little or not there. This may occur if there are too few customers or if the area is more expensive and difficult to serve. The unfortunate result of these circumstances is that large portions of our state and hundreds of thousands of our fellow Wisconsinites are left without access to broadband service while many others received access decades ago.

Our state has chosen to incent the expansion of broadband infrastructure into these areas by providing a grant to providers to help make up for that lack of return on their investment. We do that through the Broadband Expansion Grant Program by providing grants for projects in unserved and underserved areas of our state. Since the first grant round in 2014, the program has awarded \$72.5 million in grants including \$28.4 million awarded this last March.

The grant program has been incredibly successful. It has funded 268 projects that will add or improve broadband access to over 206,000 homes and over 20,000 businesses over the life of the program when construction is complete. It has funded the construction of over 200 miles of middle mile infrastructure providing the needed resources for future expansion into an

estimated 50,000 unserved areas of the state. That \$72.5 million state investment has leveraged an additional \$117 million dollars in private and local matching investment into our state's broadband infrastructure.

Much of the program's success can be attributed to how the state legislature has structured the program and placed it at the PSC. The PSC has special expertise and makes challenging decisions in the public interest when it comes to utility construction projects and changing utility rates, among other things. Allowing three independent commissioners to use their best judgement to make grant award decisions ensures that the projects that are awarded these very limited funds are in the public interest and are the best use of those dollars. Not everyone is going to agree with the PSC's decisions, but Commissioners have to look at the big picture along with the individual virtues of each project and make those hard choices. This flexibility and ability to nimbly adapt and change as industry, coverage, and technology changes has been the basis for the success of the grant program.

The grant program gives our state the ability to fund the most viable projects that also coincide with the highest need areas. It can be seen as a backstop. If providers will not expand to an area because the return on investment is not there, or if an area or project is not eligible to receive federal funding for expansion, or if barriers in state law are insurmountable for a community to provide broadband service to its own residents, our grant program can come in, fill that gap, and make sure that no one is left unserved. It can make sure that no one is left behind.

AB 371 makes several changes to the Broadband Expansion Grant Program. I am not going to list them all point by point, rather I will highlight a few that this committee should give some serious thought to as the bill makes broad and sweeping changes to the program, to the factors that drive the development of projects, and to who may or may not receive broadband funding assistance from the state.

Unserved Definition and Eligibility Criteria

AB 371 requires that eligible projects serve only unserved areas, which is redefined in the bill as places where there is no service capable of providing 100 megabit per second (Mbps) download and 20 Mbps upload speeds.

Under current law, for an area to be considered unserved, minimum upload and download speeds are tied to designations by the Federal Communications Commission (FCC). AB 371 would set the definition of unserved in state statute at a flat speed of 100 Mbps download, 20 Mbps upload. Make no mistake, faster is better, but what was considered a minimum needed speed just a few years ago will not cut it with children learning from home and parents working from home today. What happens in another few years when speed needs to go up again due to changing technology and societal needs? The Legislature would have to come back and make the changes again. Putting the minimum speeds for an area to be eligible as a flat Mbps value will become dated and may prove to be too inflexible.

We should be concentrating on getting service to areas without broadband. But what if to get to an area that is unserved a project must build through a served area? Or what if a village has a provider that offers fiber service to the home but outlying areas have nothing? If a fixed wireless project wants to put up a tower to serve those outlying areas, and by the imprecise nature of the technology it might overlap into a small part of the fiber service in the village, would this project be ineligible? Would it be subject to the challenge process that AB 371 sets up? Would people in those outlying areas get left behind with nothing? These sorts of unintended consequences can mean the difference between people in rural areas getting service or not.

Requiring Projects that are capable of 100/20 Mbps

We do not have concerns with this requirement. In March, when the PSC made its most recent awards, none of the projects would have fallen below the minimum threshold in the bill. The Commissioners are able to make this adaptation without rigidly setting it in statute, but setting it in statute would not have consequences (or make a difference) in practice.

40% Match Requirement

The bill requires that eligible projects have a minimum of 40% matching funding from the applicant(s). Matching funds are very important. Everyone involved should have a little skin in the game. This is why we currently consider matching funds as one of the priority factors when evaluating grant applications. We should take care when setting requirements for match funding. As the projects that could be considered “low-hanging fruit” receive funding and are built, the more difficult and expensive to serve projects apply for funding. As that happens more and more, we see requested dollar amounts increase and available matching funding percentage decrease. These sorts of projects are the ones that need the most help and probably will not get a project completed any time soon without state investment. If we decide to add a 40% or even a 30% minimum match requirement, it will exclude many places from even being able to apply, let alone receive help to from the state to get service. This change may unintentionally favor projects that already have favorable circumstances and need the program less. This may signal or encourage free ridership. Again, this is something to which this body should give very careful and deliberate consideration.

Reporting Requirement

The bill requires a final report to be filed with the PSC upon completion of a project before grant funds are disbursed. It requires the final report to include the number of customer locations passed, upgraded, or within range, and how many customers actually ordered broadband service as a result of the project, as well as an official certification of speeds. Generally, the PSC already does this.

Since its inception, the Broadband Expansion Grant Program has operated on a reimbursement basis. To measure the success of the program we collect data on the number of locations “passed” or receiving access to broadband service. This is an important metric that is easily

quantified and submitted and we are able to compare this to the project's proposed scope to ensure the project was completed as proposed. We also collect data on how many residents and businesses have actually ordered broadband service, however, we have found that this is a challenging data point. That is because it can take years for sales and marketing to take effect and get people signed up for service. Many people may have contracts with satellite internet service providers that need to run their course before they can switch services. In addition, providers frequently request that the sales data be treated confidentially. If the Legislature is to codify reporting requirements on the take rate of service, it may wish to require providers to submit that information after a project is fully operational in the market, for instance, one year after completion.

We would also note that data collected in program reporting has changed in some regards over time as technology, the program, funding levels, and the state's objectives have changed. Spelling out specific items on an administrative report in statute may become dated and will remove another degree of the PSC's ability to adapt, which has been a hallmark of the program's success and its gold standard level of accountability.

The bill also requires the PSC to disburse withheld funds no later than 30 days from the submission of a complete project completion final report. It should be noted that the PSC regularly has follow-up with grant recipients to obtain all of the information needed to deem a final report and reimbursement request complete. The bill also requires the PSC to send the reports to the Joint Committee on Finance and the appropriate standing committees of the Legislature. The PSC will need two positions to ensure that these statutory timelines are met, report data is tracked and analyzed properly, and all the required reporting is completed in a timely manner. The PSC would be able to meet the bill requirements with these additional human resources.

Technical Assistance

The bill requires the PSC to provide technical assistance and educational tools for broadband expansion grant project development. The PSC currently provides some limited technical assistance as well as educational tools. Limited staff resources prevent the PSC from providing the level of assistance and tools to meet demand in the state and as outlined in this statutory requirement. The PSC will need two positions to ensure the necessary outreach and education as provided for in the bill.

FCC Maps

The state and federal government are making unprecedented investments in broadband infrastructure to reach unserved and underserved locations. Similarly, many providers have been making substantial and sustained efforts to increase broadband access in the state. Granular, accurate, and up-to-date maps are vital to making smart investments for both the public and private sectors.

The bill creates a requirement that grant recipients disclose to the PSC broadband availability data in the same manner as it is required by the FCC. The PSC would be allowed to use this information to develop and maintain coverage maps. Once the in-process FCC Broadband Data Collection project is developed and maps are released, the bill requires the PSC to review the maps to determine if there is a continued need to separately report data to the PSC.

There are significant limitations to the data that providers currently report to the FCC and the timeline for the improved data through the FCC Broadband Data Collection project remains farther out than beneficial for granular, strategic investment uses. The FCC announced plans in 2020 to improve mapping granularity; however, these improved maps are still at least a year and a half away from being produced and shared.

Further, this data will continue to provide information about the “up to” advertised speeds. Sufficient broadband mapping data would require providers to report their speed information to the state based on average or minimum speeds available.

Waiting until the FCC complete its project puts our state at a further disadvantage when making investments in broadband expansion right now. The provision in the Governor’s budget, requiring providers to disclose to the state where they can serve, allows Wisconsin to create its own maps that are sufficiently detailed to make the precise improvements that are needed, and would allow that to occur sooner. To comply with the requirements in the bill, the PSC would need one additional mapping position to process the data and create useful maps.

Challenge Process

The bill creates a complex challenge process that could further restrict the Commissioners’ ability to decide to what degree to allow a challenge to factor into a final decision. The PSC already uses a challenge process that provides an opportunity for a competitor to make the PSC aware of potential overlap, and for the applicant to respond. Our process allows an opportunity for the Commissioners to modify and award or make a partial award, and not a simple up or down vote on a challenged project.

A more restrictive challenge process makes it very easy for a provider to prevent other providers from serving not only in their current and incumbent service footprint, but as I explained in the scenario with a village and outlying areas, in places nearby without any service. Possibly leaving those more rural residents unserved. The PSC would need one position to manage this challenge process and track throughout the life cycle of the awards.

The PSC appreciates the opportunity to discuss the grant program and how AB 371 would impact it. We feel that there are some major items in this bill that demand your contemplation as they will make some drastic changes to a very successful and effective program. Where there are opportunities to improve the program and what has been built over the years, we are happy to work with all to make that happen while maintaining our robust fiscal controls. We

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offer our skills and expertise to avoid any unintended consequences and make AB 371 and the Broadband Expansion Grant Program better.

**Bill Esbeck, Executive Director
Wisconsin State Telecommunications Association
Testimony for Information on AB 371 & ASA 1 to AB 371
Assembly Committee on Energy and Utilities
June 10, 2021**

Thank you Representative Kuglitsch and members of the committee for the opportunity to testify for information on Assembly Bill 371.

My name is Bill Esbeck. I am the executive director of the Wisconsin State Telecommunications Association (WSTA).

WSTA sincerely appreciates the leadership of the authors, Representative Summerfield and Senator Marklein, on broadband issues.

Specifically, we appreciate the efforts of Representative Summerfield and Senator Marklein to update the statutes governing Wisconsin's Broadband Expansion Grant Program contained in Assembly Bill 371.

- WSTA supports the approach taken to focus the Broadband Expansion Grant Program on unserved areas.
- We support the priority placed on grant projects capable of a combined upload and download speed of 900Mbps. Those speeds are a clear indication of a future-proof investment.
- We also recognize the value of matching funds and support the priority scoring for grant applications containing at least 50% matching funds.

However, there are sections the Substitute Amendment where we believe there is room for improvement.

On page 5, lines 12-14, the Substitute Amendment creates a minimum matching fund requirement for a Broadband Expansion Grant. The Substitute Amendment sets the minimum matching requirement at 30%. This is a step in the right direction compared to AB 371 as introduced. However, the minimum matching fund requirement is increased to 40% after three years. It is counterintuitive to increase the matching fund requirement in three years. There are no inexpensive areas remaining for broadband expansion in rural Wisconsin, but broadband projects in future years are likely to require a higher percentage of grant funding and a lower percentage of matching funds.

Furthermore, you will hear from WSTA members in a few minutes. These members will provide examples of grant projects that may need more than the 70% grant allowed with the 30% minimum matching fund requirement. Drawing a statutory line with the 30% minimum matching requirement could unnecessarily leave some rural communities without opportunities for future-proof fiber broadband solutions.

Again, referencing the Substitute Amendment... **on page 5, lines 17-20:** This language lowers the minimum speed requirement for a broadband grant project to 25Mbps/3Mbps if the grant project demonstrates it will provide 100Mbps/20Mbps service on or before January 1, 2025. As introduced, AB 371 set a minimum speed requirement of 100Mbps/20Mbps for grant projects.

The 25Mbps/3Mbps FCC definition of broadband was established in 2015. We believe it is counterproductive to fund grant projects that simply meet a six-year-old FCC definition of broadband. There are many providers capable of far exceeding that standard with future-proof solutions.

Furthermore, we might see, and I hope we do see, another update to these statutes before 2025 which would increase the minimum speed requirement beyond 100Mbps/20Mbps...making the 25/3 target even less relevant.

On page 8, line 3: The Substitute Amendment increases the challenge process buildout timeline from 24 months to 36 months, when compared to Assembly Bill 371.

I want to take a moment and put this in context. Section 12 of the Substitute Amendment, which begins on page 7, creates a challenge process where providers can object to a grant application.

The challenge process allows objections if a provider currently offers 100Mbps/20Mbps service or commits to complete construction to provide 100Mbps/20Mbps service within a specified timeline.

In Assembly Bill 371 as introduced, the challenge process buildout timeline was 24 months. WSTA supports the 24-month timeline. Significantly, the PSC timeline to complete a Broadband Expansion Grant project is 24 months. It makes sense to have a challenge process buildout commitment that is also 24 months, as opposed to the 36-month timeline proposed in the Substitute Amendment.

In summary, WSTA believes there are opportunities to improve the Assembly Substitute Amendment. We look forward to productive discussions that improve the bill and allow us to support the final product.

Thank you again for the opportunity to testify.

I look forward to your questions.

Cheryl Rue, CEO and General Manager
Tri-County Communications (DBA TCC)
Assembly Bill 371 and ASA 1 to AB 371
Assembly Committee on Energy and Utilities
June 10, 2021

Good morning. I would like to thank the members of the Assembly Committee on Energy and Utilities for the opportunity to testify on Assembly Bill 371.

I am Cheryl Rue, CEO and General Manager of Tri-County Communications Co-op (TCC), headquartered in Strum, Wisconsin. I have worked for Tri-County Communications for nearly 32 years. I am active in industry consortiums and associations, having served as a director and past President of the Wisconsin State Telecommunications Association.

Tri-County County Communications Cooperative was organized in 1964 as Tri-County Telephone Cooperative. In 2006, we merged with Western Wisconsin Communications Cooperative – a Cable TV company. Prior to the merger, we formed a partnership in Tri-West Communications to bring our rural cooperative members Internet service. TCC provides Internet, TV and phone services to over 8500 members distributed throughout portions of Trempealeau, Eau Claire, Buffalo and Jackson Counties covering approximately 850 miles in rural western Wisconsin, over a diverse network of fiber optics and coax.

I have concerns about some of the policies in the Assembly Substitute Amendment.

Specifically, I have concerns about the minimum matching funds requirement of 30 percent and increasing to a 40 percent minimum match in three years. This requirement is prohibitive and would hinder

getting broadband Internet services out to rural citizens. For example, TCC is considering expanding our serving area to fill the gaps in unserved areas adjacent to our current footprint. One town in eastern Buffalo County would require a build out of 38 miles of fiber-optics to serve 211 locations for a total of \$1.9 Million Dollars. In order to make a solid business plan, this project would require over a 70 percent match in funds to be viable. In the Town of Lincoln located in Trempealeau County in an area on County Rd Q, there are 9 locations requiring just over 3 miles of fiber-optics for a total of \$173,000. To be viable, this project would require over an 80 percent match. Neither of these projects would be eligible for a grant under this legislation. Without solid business plans, they would not be sustainable and may never have access to broadband services.

Citizens outside of our service area are calling and begging for broadband Internet service. They call us because they simply can't reach their current incumbent provider or can't find anyone that will listen. Everyone deserves quality broadband services.

I would like to add that I support the 24-month buildout timeline as a part of the challenge process in this legislation. Current Broadband Expansion Grant recipients are expected to adhere to the requirement of completing projects in 24 months. Extending the buildout timeline to 36 months, when another provider is willing to serve those customers sooner, is an unnecessary delay. Those customers have waited long enough already.

Thank you for your time.

I would be happy to answer any questions you may have.

Christy Berger, General Manager and Executive Vice President
Nelson Communications Cooperative (DBA Ntec)
Testimony for Information on Assembly Bill 371
Assembly Committee on Energy and Utilities
June 10, 2021

Good morning! Thank you Representative Kuglitsch and members of the Committee for giving me the opportunity to testify on Assembly Bill 371. My comments will reflect the proposed changes in the Assembly Substitute Amendment.

My name is Christy Berger. I am the General Manager and Executive Vice President of Nelson Communications Cooperative, doing business as Ntec. I am also a past president of the Wisconsin State Telecommunications Association, serving from June of 2019 until May of 2020.

NTec's main office is in Durand, and we serve the exchanges of Durand, Arkansaw, Nelson and Gilmanton with traditional telephone service, fiber-to-the-home broadband, and cable television.

We also serve the City of Mondovi and Plum City with high-speed internet and cable TV.

We were recently contacted by Buffalo County to help them build out areas of the county that do not have adequate internet speeds.

I am pleased to tell you there are areas of Buffalo County that are served very well by Ntec, Tri-County Communications and Cochrane Telephone Cooperative.

However, communities like Mondovi Township in Buffalo County are not well served...and will never have fiber-to-the-home broadband from their incumbent provider.

Mondovi Township contacted us asking if we would extend our fiber-to-the-home broadband to their residents and businesses.

We are in the process of developing a grant application for the Mondovi Township project. Due to the low population density and the expense of fiber

investments, this project may need more than a 70% grant to make the business case work. If we do not build out to areas such as the Township of Mondovi, they may never have access to future-proof fiber networks.

The situation in Mondovi is not unique. There are many other WSTA members exploring grant applications for rural communities that may require more than a 70% grant, which would be prohibited in the Assembly Substitute Amendment.

The need for quality broadband for remote working, distance learning and other business needs were highlighted during the COVID-19 pandemic. I have letters from business owners stating they cannot run their business properly without access to fiber internet.

We want to help them.

We want to extend our fiber and reach business owners like Mary Jo LaBeir, who manages an assisted living facility and in-home care service near Mondovi. Our fiber-fed broadband would give Mary Jo and her staff options that are simply not possible with their current internet alternatives.

I also support a 24-month buildout commitment for the challenge process in the proposed legislation. As mentioned earlier, the PSC currently expects grant recipients to complete grant projects within 24 months. I believe a company challenging a grant application should be held that same 24-month timeline instead of the 36-month timeline in the Assembly Substitute Amendment.

Thank you very much for the opportunity to testify. I would be happy to answer any questions.



WISCONSIN CABLE COMMUNICATIONS ASSOCIATION

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Executive Director – Thomas E. Moore

Statement of Tom Moore

Executive Director, Wisconsin Cable Communications Association

Before

Assembly Committee on Energy and Utilities

Speaking in Favor of Assembly Bill 371

Related to the Broadband Expansion Grant Program

Good morning Chairman Kuglitsch and Committee members. Thank you for the opportunity to testify in favor of Assembly Bill 371 today. My testimony will also consider Assembly Substitute Amendment 1 to AB 371 which has been made available to Committee members and the public.

I serve as the Executive Director of the Wisconsin Cable Communications Association. We are the state trade association for Wisconsin cable, broadband and voice providers. Our members provide these services to roughly 900 Wisconsin communities and include household names like Charter Communications and Comcast as well as smaller regional and community systems like Lakeland Cable and Astrea. We have invested billions of dollars in Wisconsin to deploy advanced digital services to over 2 million locations in the state and we continue to invest hundreds of millions of dollars each year to extend, upgrade and service our digital networks.

Wisconsin's communication technology sector has invested tens of billions of dollars to make broadband available to 93% of state addresses – including 99% of urban locations - and this for a technology that is barely 20 years old! But to those who are not able to connect this

has little meaning. FCC survey data puts the number of Wisconsin addresses unserved by at least 25/3 service at roughly 420,000 locations, virtually all of which are in rural areas.

Estimates of the resources needed to connect these 420,000 addresses range from \$700 million to \$1.5 billion, the state's share of which ranges from \$200 - \$700 million.

Connecting every location in Wisconsin to broadband has become one of the top priorities of both lawmakers and broadband service providers, but the state should not waste this opportunity to connect those 420,000 addresses by spending money on addresses that already have access to high speed broadband. Those homes and businesses not connected represent a serious challenge, as they tend to be the high-cost, low density locations most difficult to reach. Wisconsin's broadband providers are ready to do our part to connect the unserved but we recognize the need for public investment to supplement the tremendous private capital still necessary to complete the task.

The Broadband Expansion Grant program will continue to play a vital role in reaching unserved areas, and if adopted, Assembly Bill 371's modifications, updates and clarifications will better focus the program on its intended mission: to bring broadband service to Wisconsin locations which are not currently served. The bill would accomplish this goal primarily by increasing the minimum download and upload speeds that are considered broadband and by permitting state broadband grant dollars to only fund projects to locations lacking access to broadband at those speeds.

Focusing on the Unserved

Recognizing the public benefits of ubiquitous broadband connectivity, state and federal support for broadband supplements the capital investment needed for our nation's broadband

providers to extend service to areas which are otherwise too expensive to reach under normal return on investment models. Public funding which is utilized to build a second broadband line to a served location wastes valuable public resources that could and should have been used to connect an address currently lacking any broadband service. It reminds me of my mother's dinner time rule when she was feeding a house full of teenagers: "Everyone gets a chance to eat before anyone goes back for seconds".

What's more, government subsidized broadband expansion to locations already served by an existing provider creates an unfair marketplace advantage for the subsidized service and penalizes the existing provider that put its capital at risk to extend broadband in the first place. This principle is widely recognized by policymakers and underpins most state and federal broadband expansion programs.

Assembly Bill 371 recognizes and codifies this important principle by eliminating the ability of grant awards to "underserved" locations, which are those that already have access to broadband. This important modification to current law will both focus the program where it is most needed – reaching the unserved – and eliminate wasteful state supported duplication of broadband infrastructure.

Supporting True Broadband

Under the current program, "unserved areas" are those locations lacking access to service at speeds which are at least 20% of the FCC's 25/3 Mbps definition of broadband, which translates to 5 Mbps/600 Kbps service. 5 Mbps/600 Kbps service is not sufficient to be considered true broadband service. Assembly Bill 371 would establish 100 Mbps down/20 Mbps up as the minimum recognized broadband speed, qualifying homes and businesses which only have access to slower speeds to receive Broadband Expansion Grant support and upgrade to

service more compatible with today's online needs. Additionally, the bill would prioritize grant applications to build 450/450 Mbps symmetrical service or those with a combined download/upload speed of 900 Mbps.

High speed fiber optic and hybrid fiber coax connections deliver the most robust broadband speeds today and are scalable to deliver robust broadband for many years in the future. Virtually all Wisconsin cable broadband providers are offering customers 1 gigabit download speeds today over such networks, with the capability to offer service as fast as 10 gigabits in the near future. Increasing minimum broadband speed thresholds and prioritizing higher speed connections is a wise use of public funding and will result in networks which are capable of serving our state's connectivity needs well into the future. The state should prioritize and protect this investment in state of the art broadband networks by prioritizing these robust networks in its grant awards and eliminating grants to areas where such high speed service is already offered.

Conclusion

Wisconsin's Broadband Expansion Grant program has proven to be a critical tool to connect thousands of unserved locations to broadband service. But as we progress to serve more and more of the hardest and costliest to reach locations, it is time for the program to evolve to be more focused on reaching the unserved with a broadband product capable of the needs of today's online environment. Assembly Bill 371, particularly as amended by Assembly Substitute Amendment 1, will serve to more readily connect all who want to be connected and will do so with a greater cost and time efficiency over the current program.

**Testimony for the Assembly Energy and Utilities Committee
Assembly Bill 371/Substitute Amendment 1
Thursday, June 10th, 2021**

Good morning, Chairman Kuglitsch, members of the Committee. Thank you for the opportunity to testify today on Assembly Bill 371 and its substitute amendment. My name is Adam Raschka and I am the Senior Director for State Government Affairs for Charter Communications. Many of you may also know us as Spectrum.

Charter is the largest broadband provider in the state of Wisconsin with tens of thousands of miles of fiber and coax cable, which provide access to gigabit broadband speeds to more than 1.5 million customers across the state and with nearly 4,000 local employees. I'm here today to speak in favor of AB 371 and its substitute amendment.

As a company, Charter is embarking on a \$5 billion rural broadband expansion project. The federal government has awarded Charter more than \$1 billion dollars to expand gigabit service across 24 states. Charter has committed to invest approximately \$3.8 billion in private capital.

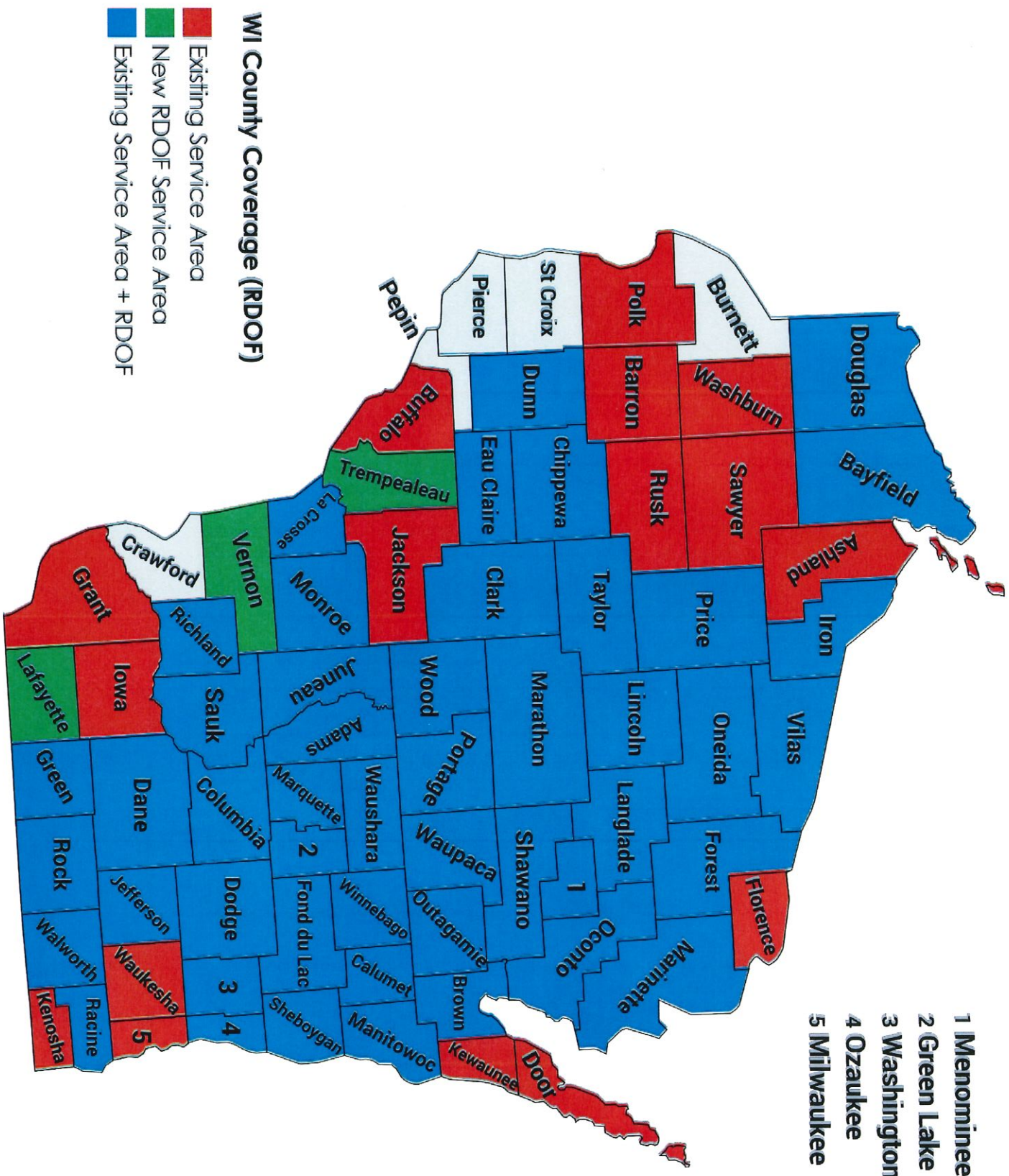
Wisconsin was awarded the single most Rural Digital Opportunity Fund (RDOF) locations in Charter's 41 state footprint with more than 140,000 locations. Through the competitive RDOF auction, in which Charter prioritized Wisconsin, the FCC awarded Charter over \$160 million to build fiber-to-the-home to areas of the state lacking broadband speeds of at least 25/3. Charter is investing another estimated \$500 million of its own private capital for a total investment in Wisconsin of approximately \$680 million for rural broadband expansion. We hope to have the first shovel in the ground this summer.

In light of our commitment to and investment in the state, we support Assembly Bill 371's goal of ensuring that state broadband resources are used to address last mile connectivity to unserved areas, which the current program, although well intended, does not achieve. We also support the bill's raising the current statutory definition of unserved from 25/3 to 100/20.

Charter believes AB 371 and its substitute amendment take an important step in strengthening Wisconsin's broadband grant program. Every grant dollar is precious and we believe grant dollars should not be awarded to communities that already have at least one provider delivering high speed broadband.

Charter asks the legislature to support AB 371 and substitute amendment 1.

I would be happy to take any questions.



- 1 Menominee
- 2 Green Lake
- 3 Washington
- 4 Ozaukee
- 5 Milwaukee

COMMITTEE ON ENERGY AND UTILITIES

Testimony on AB371 – relating to the Broadband Expansion Grant Program

Stephanie Cassioppi

U.S. Cellular

June 10, 2021

Chairperson Kuglitsch and members of the Committee, my name is Stephanie Cassioppi and I am the Senior Director of Government Affairs for U.S. Cellular. On behalf of U.S. Cellular and our approximately 1000 employees who call Wisconsin home (about 20% of our workforce), thank you for holding this important hearing and for the opportunity to testify on Assembly Bill 371 (“AB371”) relating to the Broadband Expansion Grant Program.

U.S. Cellular has been providing wireless service in Wisconsin since 1988. We take pride in the strength of our network, in both urban and rural areas of Wisconsin. Wisconsin is important to U.S. Cellular. Rural Wisconsin is important to U.S. Cellular. We know rural wireless and we do it better than anyone else. However, there are rural areas that we cannot cover, without a little help.

I want to thank the Committee, and Rep. Summerfield for recognizing the importance of fixed wireless and mobile broadband in rural Wisconsin, and recognizing it as a real option for the Broadband Expansion Grant program, with the addition of Section 8 196.504(2)(C)3, in the Assembly Substitute Amendment 1, filed June 4, 2021 (“Substitute Amendment”).

This Substitute Amendment gives the Commission additional options for providing broadband in the unserved areas of the state. Exciting Wireless technology changes are occurring daily. Rural communities should benefit from these changes and can’t be left behind. The digital divide cannot be closed through fiber, alone. Existing and future technologies and services will be denied to Americans living in rural or urban areas without sufficient mobile connectivity, and rural Wisconsin risks being left behind during post-COVID economic recovery. Policies that support wireless infrastructure simultaneously boost expansion of both fixed and mobile broadband. With wireless broadband, you get a two for one –fixed wireless and mobility, too.

Wireless broadband provides a superior fixed wireless service for the home and office that uses licensed spectrum and state of the art wireless infrastructure. Licensed spectrum offers increased reliability and performance and leverages exclusive and fully controlled subscriber access to protect against interference. Our 4G and 5G technology supports complete encryption of data between the network and the device to ensure data confidentiality and privacy protection. 5G networks are a critical national security asset. Our network is highly redundant, with generator backup and the ability to deploy cells on light trucks (“COLTS”) in emergency situations.

Robust deployment of wireless technology will also provide rural areas with additional mobile connectivity. Mobile broadband is the only technology capable of connecting many other technologies we rely on. Smart agriculture, connected vehicles, mobile payments, remote health monitoring, remote learning (mobile hotspots), the latest 911 and public safety services, and even soccer fields all leverage mobile connectivity. As we move out of the pandemic, and people resume normal activities, the mobility of wireless broadband will allow connectivity beyond the walls of their homes.

Technological advancements in wireless are happening at a rapid pace, and the ability to participate in this broadband program provides broadband now, and scalability in the future – future ready, if you will.

On the technology advancement front, just recently, U.S. Cellular spent \$1.5 billion on C-band, or mid-band, FCC spectrum licenses that will increase our speed capacities to 100/20 and higher by 2025 once this spectrum is cleared and deployed. Our purchase included spectrum in Wisconsin which will enable us to meet the requirements of the proposed amendment. This is exciting to us.

In addition, we recently conducted two technical trials, the first in Janesville, that increased the coverage capacity of our mm wave spectrum (currently used with small cells with a small coverage area) from a few hundred yards to several miles, while obtaining speeds of up to 1 GB. This is groundbreaking for rural areas as it will allow wider use of the mm wave spectrum that has been largely regarded as more suited to urban areas.

When you are considering program improvements, please also take into account the flexibility and capabilities of wireless for rural Wisconsin. Besides offering the “2 for 1” fixed wireless and mobile broadband, the speed to market is very efficient– quick and also cost effective. We can modernize our network in a matter of months, not years and the cost to deploy is very low, covering an entire area, not just one location at a time.

Recently, we won a broadband grant in Iowa where we modernized our existing voice towers in 49 rural areas with 5G. We finished this project in just 8 months. Customers who had data service around 10/3 mbps now have broadband at a minimum of 25/3 and usually higher. In addition, these areas are now scalable for future integration of our mid band spectrum and other advanced technology. This would not have happened without this Iowa grant opportunity. We would like, and welcome, the same opportunity in Wisconsin, for Wisconsin residents.

In addition to modernizing existing infrastructure, with help from this program, new infrastructure could provide new and enhanced coverage in areas where connectivity is currently limited.

Consumers depend on mobile connectivity. Mobility will continue to be a catalyst driving economic growth in rural America, and any infrastructure efforts that do not ensure ubiquitous mobile broadband could create a new digital divide. Last week, the Pew Research Center issued a new [report](#) that provides a key insight for the broadband infrastructure debate: Americans want flexibility and options when it comes to deciding how to connect digitally. That means meeting

Americans with broadband solutions that reflect their needs and how they use their broadband connections. And that means wireless. With the addition of Section 8 196.504(2)(C)3, we are able to participate in this Broadband Expansion Grant Program and provide both fixed wireless and mobile broadband to the eligible areas – a two for one, providing broadband in the home and also mobile connectivity, very efficiently, cost effectively and future ready.

Again, thank you for the opportunity to testify on AB371. On behalf of U.S. Cellular, I strongly support the inclusion of wireless in the Broadband Grant Expansion Program. Wireless broadband is essential for Wisconsin. It is vital to enhance the economic viability and lives of all those who call Wisconsin home.

UScellular's 5G HSI offers significant advantages over previous Fixed Wireless Solutions

Advantages/ Benefits of UScellular 3GPP 5G High Speed Internet

Speed & Capacity

- Adds new licensed spectrum bands across low, mid and mmWave bands to increase capacity and throughput
- Simultaneous support for multiple air interface technologies including 4G LTE and 5G NR via Dual Connectivity
- Further speed improvements due to 5G's enhanced spectral efficiency

Licensed Spectrum

- Increased reliability and performance as licensed spectrum leverages exclusive and fully controlled subscriber access to protect against interference, enforced by FCC

Security

- 4G and 5G technology support complete encryption of data between the network and the FWA device. This encryption ensures data confidentiality and protects the subscriber's privacy
- 5G networks are a critical national security asset; DoD currently has an RFP out to migrate its systems to 5G

Reliability

- X 9's reliability backed by a 30-year history of large-scale wireless network expertise
- UScellular equips sites with at least eight hours of battery back-up power to ensure functionality without an external power source
- Highly redundant network with generator & battery back-up, capability to rapidly deploy cell sites on light trucks ("COLTs") in emergency situations.

Scalability

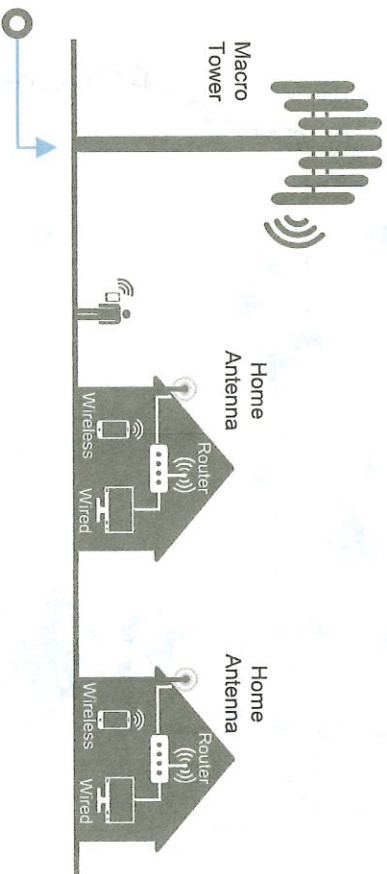
- Leveraging the collective R&D of the 5B subscriber, \$1 Trillion/year¹ mobile ecosystem including suppliers including Nokia, Ericsson, Cisco.
- Wireless operators are continually re-investing in the network to ensure ongoing competitiveness - \$282B by US MNO since 2010²



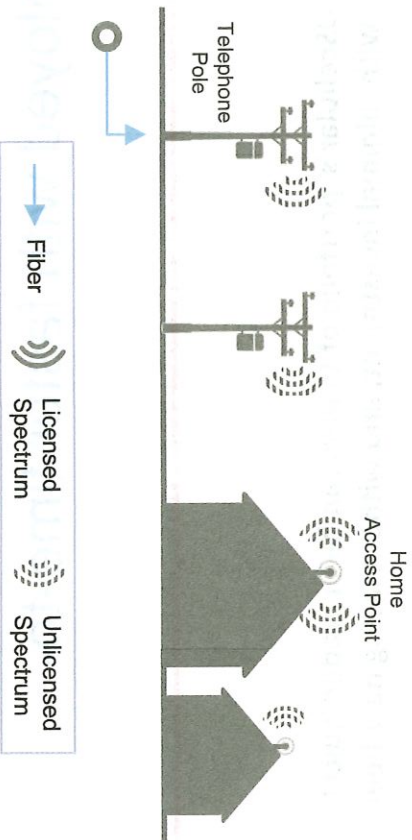
Consultant: USCellular confidential information. Not for external use or disclosure without proper authorization.

1 GSMA Intelligence
2 CTIA

UScellular 3GPP 5G HSI Solution



Typical WISP Architecture



Objective 1: 25/3 or 50/5 can be deployed with faster time-to-market and lower costs

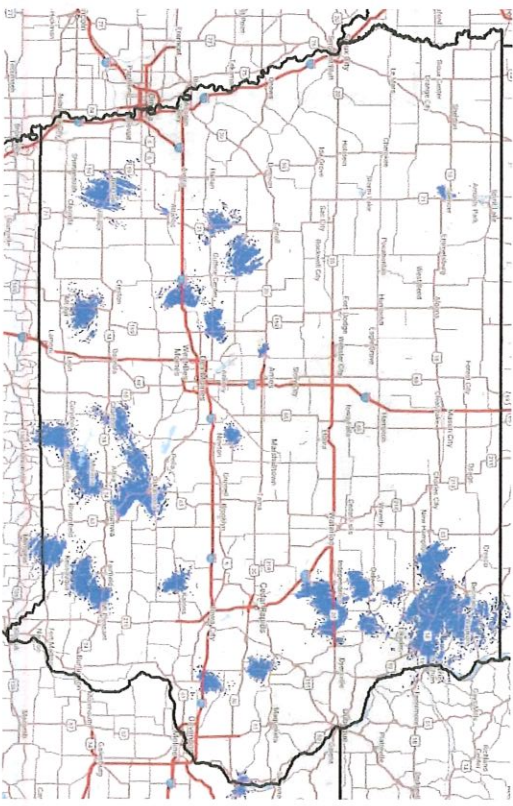
Leveraging existing wireless macro towers provide an unparalleled platform from which to cost-effectively deliver competitive fixed and mobile Broadband services

Recently, Uscellular was proud to partner with the state of Iowa to provide improved Broadband access to over 3,300 sq. miles and 37,000 households as part of the state's Empower Rural Iowa NOFA #003 program.

At under eight months from Award to deployment and just \$142 per location served, this program was both timely and cost-effective.



Uscellular's portfolio of towers can be upgraded quickly, with minimal investment, and without laying new fiber



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**WISCONSIN TOWNS
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Empowering Town Officials

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MEMO TO: Assembly Committee on Energy and Utilities
FROM: Joe Ruth, WTA Legal Counsel/Lobbyist
RE: AB 371, Refining the Broadband Expansion Grant Program
DATE: June 10, 2021

Chair Kuglitsch and members of the Assembly Committee on Energy and Utilities,

The Wisconsin Towns Association supports AB 371, refining the Wisconsin Broadband Expansion Grant Program. We thank Representative Summerfield and Senator Marklein for their leadership on this issue, and we encourage the Committee to support this legislation.

Widespread broadband access is vital to Wisconsin's socioeconomic and educational success. Unfortunately, vast areas of the state, largely rural, have been left behind without adequate access. Too often, public investment in broadband infrastructure has gone toward improving existing services rather than extending access to unserved areas. We must make a deliberate effort to refine broadband subsidies to target unserved areas and promote access where organic industry growth is unlikely to occur.

Increased investment in the Broadband Expansion Grant Program is a necessary step toward statewide broadband access, but investment alone will not solve our state's broadband problem. AB 371 acknowledges that fact and calls for a more deliberate approach to broadband subsidies by directing state funding to areas with the greatest need, increasing industry transparency and accountability, and fostering better data collection and mapping. AB 371 also promotes sufficient upload and download capacity, in line with recent federal broadband funding requirements, to sustain increasing technological needs.

Further, AB 371 provides for increased technical assistance and educational tools to help local governments and private organizations better collaborate and effectively utilize expansion grant resources. We believe that technical assistance and state leadership fostering industry connections are, above all else, the most important factors lacking in current broadband expansion efforts.

The Wisconsin Towns Association urges you to support AB 371 and its proposed improvements to the Broadband Expansion Grant Program. Thank you for your consideration.

DATE: June 10, 2021

TO: Chairperson Kuglitsch and
Members of the Assembly Committee on Energy and Utilities

FROM: Debi Towns, Sr. Director of Government Relations
WI Farm Bureau Federation

RE: Support for Assembly Bill 371 – Refining the Rural Broadband Expansion Grant
Program

Thank you for this opportunity to publicly support Assembly Bill 371 relating to the Rural Broadband Expansion Grant program. This grant program, administered by the Public Service Commission (PSC), has encouraged broadband expansion in underserved and unserved rural areas of Wisconsin using defined standards of quality for download and upload speeds.

The program has proven to be successful over the past eight years and has gone through several adjustments to try to use the grant dollars most effectively. Technology continually changes and this bill recognizes that the need for high-speed internet access impacts all of Wisconsin's citizens, even in areas where the population density is very low. Never had this need become more evident than in the past 15 months when the covid virus forced school children to learn virtually and businesses to rely on employees who worked remotely via technology.

The focus of this bill is to give priority to the areas in our state that are still totally unserved by access to the internet and to those projects which will provide the higher standard of speed necessary to meet the education and business needs in rural Wisconsin. Hopefully, we will never again have to have school children sitting in their cars in the Walmart parking lot just to be able to pick up the internet to join their classroom.

In like manner, today's agricultural businesses demand national and international access to be successful. We appreciate that legislators understand this access is the cost of doing business and are willing to be a partner in making it happen. State government is limited in the ways they can directly assist the agriculture industry in this state. There are many variables that legislation cannot address. However, AB 371 is one way you can help support the contribution of agriculture to our state's economy.

We encourage you to support AB 371. Thank you again for accepting this testimony.