2023 GOVERNOR'S TASK FORCE ON
BROADBAND ACCESS

REPORT TO GOVERNOR TONY EVERS
AND WISCONSIN STATE LEGISLATURE

Wisconsin
Broadband Office

PSC
of WISCONSIN

CONTENT

CASE STUDIES

EXECUTIVE SUMMARY

This is the third annual report of the Governor's Task Force on Broadband Access. The Task Force worked as the Public Service Commission of Wisconsin (PSC), Federal Communications Commission (FCC), National Telecommunications and Information Administration (NTIA), and other state and federal agencies prepare and plan to administer funding coming from the Bipartisan Infrastructure Law (BIL). Almost all the goals from the first and second annual Task Force report still ring true, and the Task Force members believe that the recommendations set within the first and second report should be advanced. Each annual Task Force report has its importance, and each report can be viewed as building from each other. This year, the Task Force continued to focus on gathering input from people and organizations that could inform the rollout of timely initiatives like the BIL programs, as well as continued administration of state programs.

The 2021 Task Force on Broadband report focused on five areas of concern in order for Broadband access to become broadly accessible, affordable, and adoptable.

The five areas were:

- Policy and Legislative
- Funding
- Data and Mapping
- Active Network Building and Community Alignment
- Digital Equity and Inclusion

In 2022, the focus was more specific. In the second year of work, the Task Force focused on options for Wisconsin to leverage the many broadband planning initiatives around the state to the benefit of the state's overall broadband goals. Task Force discussions coalesced around the *structural network advancements* necessary for local and regional planning work to be conducted, as well as a *toolkit* or resources that would benefit the work. The 2022 Task Force on Broadband report focused on three primary areas of concern.

The three areas were:

- Active Network Building and Community Alignment
- Resources for Planning and Action
- Policy

Similar to the first two years of work, the Task Force held up an equity lens up to all recommendations members brought forth. It is not enough to build the infrastructure if residents cannot afford or access the internet for bettering themselves and their communities.

In 2023, the Task Force continued to prepare for increased federal investment through the BIL Internet for All programs, including the Broadband, Equity, Access, and Deployment (BEAD) and Digital Equity (DE) Programs. The State of Wisconsin, the Task Force, and stakeholders alike collectively find themselves in a momentous point in time for broadband expansion. With over a billion dollars of federal funding coming, Wisconsin must position itself as best as possible to capitalize on this historic investment in connectivity.

This year, the Task Force took a closer look at past report goals and considered their relevance today. In the 2021 Annual Task Force Report, the Task Force set the following goals:

Ensure base level broadband service to all Wisconsinites with measurable goals:

- By 2025, all homes and businesses within the state have access to high-speed broadband that provides a download speed of at least 25 Mbps and an upload speed of at least 3 Mbps.

- By 2028, all homes and businesses within the state have access to 50 Mbps and an upload speed of at least 10 Mbps.

- By 2031, all homes and businesses within the state have access to 100 Mbps and an upload speed of at least 20 Mbps.

Point toward the future use of broadband infrastructure by measuring access to 1 Gbps download speed:

- By 2025, 50% of all homes and businesses within the state have access to high-speed broadband that provides a download speed of 1 Gbps.

- By 2030, 90% of all homes and businesses within the state have access to high-speed broadband that provides a download speed of 1 Gbps.

After discussions, the Task Force felt it was important to update these goals to more closely align with the requirements associated with current and upcoming federal sources of funds such as the Rural Digital Opportunity Fund (RDOF) and BEAD programs. As such, the Task Force agreed on the following updated goals for the 2023 report.

By 2028/2029, all homes and businesses will have access to high-speed broadband service that reliably provides a download speed of at least 100 Mbps and an upload speed of at least 20 Mbps.

By 2028/2029, all community anchor institutions will have access to high-speed broadband service that reliably provides a download speed of at least 1000 Mbps and an upload speed of at least 1000 Mbps.

These goals are written on the premise that the RDOF (phase 1) program via the FCC and BEAD program via the NTIA will be largely in-progress and/or complete in Wisconsin.

Additionally, the Task Force recognizes the importance of 'future-proofing' our goals and continuing to look beyond the needs of today.

Where practicable, a strong emphasis and priority should be placed on reaching speeds beyond 100 Mbps download and 20 Mbps upload. For example, going beyond includes reaching speeds of 100/100 Mbps, 1000/1000 Mbps, and more. The Task Force would like to see as many homes and businesses as possible reaching these speed thresholds to ensure their continued success and connectivity into the future.

Broadband access technologies need to be scalable and sustainable as demand grows and the Task Force believes fiber is the best solution. The Task Force believes that fiber technology should be prioritized, but not exclusively required in publicly funded broadband deployment. Terrestrial fixed wireless solutions are viable in particularly hard to reach areas and/or as a short-term solution.

The Task Force believes that all Wisconsinites should have the information technology capacity needed for full participation in our society, democracy, and economy. Broadband access is an essential catalyst for economic development, rural prosperity, educational opportunities, access to essential services, community health, entertainment, agriculture, quality of life, aging in place, and so much more across the state of Wisconsin. Access alone will not meet our goals; internet adoption, digital literacy, and affordability are key components of equitable and sustainable access. Solving Wisconsin's broadband challenges calls for a multifaceted strategic approach, with input from a variety of stakeholders.

This year's Task Force discussions produced recommendations in five areas:

- Preparing to Capitalize on Federal Funds
- Supporting Local Communities
- Workforce Development
- Mapping and Data
- Affordability and Adoption

PREPARING TO CAPITALIZE ON FEDERAL FUNDS

RECOMMENDATIONS

- Wisconsin needs to plan, coordinate, distribute, and capitalize on the increasing federal funding dollars available, including those through the Bipartisan Infrastructure Law (BIL) such as the Broadband, Equity, Access, and Deployment (BEAD) Program and Digital Equity Programs.
- Support the Wisconsin Broadband Office and Public Service Commission of Wisconsin in their drafting and submission of Wisconsin's 5-Year BEAD Action Plan and Digital Equity Plan.
- Find ways to reduce or combat the impacts of inflation and supply chain pressures to create a more hospitable environment for broadband expansion.
- Continue to find ways to braid BIL funds with other funding sources such as local, state, private, philanthropic, and other federal.
- Recognize and emphasize the importance of other sources of funding beyond the BIL. Advocate for increasing those funding sources to complement the BIL.
- Ensure that all Wisconsinites and broadband stakeholders are aware of federal and state funding opportunities by way of technical support, sharing best practices, webinars, workshops, newsletters, local, regional, and statewide in-person meetings, providing general assistance, and supporting applications.
- Help to secure Wisconsin's future by encouraging the use of federal dollars on forward thinking and future proof solutions.
- Support, engage with, and consider the needs of Internet Service Providers and Telecommunications Associations in their preparations for the BEAD program.
- Explore and promote available low-interest loan programs that help to support internet service providers in their pursuit of broadband infrastructure expansion.
- The Wisconsin State Legislature should consider flexibilities and/or waivers to existing State statutes that may be burdensome to federal funding investment.
- Fiber technology should be prioritized, but not exclusively required in publicly funded broadband deployment. Terrestrial fixed wireless solutions are viable in particularly hard to reach areas and/or as a short-term solution.

SUPPORTING LOCAL COMMUNITIES

RECOMMENDATIONS

- Support organizations such as the Public Service Commission of Wisconsin, University of Wisconsin – Madison, Division of Extension, and Wisconsin Economic Development Corporation in their technical assistance efforts.
- Maintain a continued focus on how best to assist local communities in broadband planning to ensure their involvement and participation in the rollout of federal funds.
- Support local broadband champions, including digital navigators embedded within the community. Help these champions and navigators carry out and see through their community connectivity vision.
- Continue to improve and promote broadband planning playbooks and toolkits available to local communities.
- Find more ways for the public to better understand and utilize broadband maps and data.
- Encourage public participation and input in the planning process where appropriate.
- Engage local communities through statewide listening sessions and take information and stories to the Task Force for continued advancement and strengthening of the Task Force annual report.

WORKFORCE DEVELOPMENT

RECOMMENDATIONS

- Support and include organizations such as workforce development boards, economic development, labor groups and unions, contractors, high schools, higher education and technical colleges, and State agencies (DPI, DWD, PSC). Ensure that these organizations are being connected with internet service providers and telecommunications associations to increase awareness and create a sustainable and viable pipeline of talent.
- Ensure a sufficient and trained telecom workforce for internet service providers, contractors and subcontractors to construct, operate and maintain current and new broadband infrastructure.
- Where practicable and with input from higher education and employers, Wisconsin should encourage hiring from within local communities to help retain local talent and grow good jobs within Wisconsin.

MAPPING AND DATA

RECOMMENDATIONS

- Promote the Federal Communications Commission's (FCC) National Broadband Map and the opportunities for the public and stakeholders to challenge availability and location data within the map.
- Continue to support statewide speed testing and surveying such as funding and promotion of the OptiMap (formerly known as Geo Partners) software and the Wisconsin Internet Self-Report (WISER) survey.
- Support local communities in their efforts to pursue, intake, and make meaning of local data.
- Align state mapping efforts and products with the federal government.
- Find ways to quantify and capture the quality of broadband service beyond basic metrics like download and upload speed.

AFFORDABILITY AND ADOPTION

RECOMMENDATIONS

- Continue outreach and promotion of the Affordable Connectivity Program (ACP) to reach the highest possible levels of participation in Wisconsin.
- Maintain federal funding for the ACP program to ensure access to this vital program for eligible households in Wisconsin. Consider establishing a state internet assistance affordability program.
- Increase outreach and engagement with underserved populations such as aging individuals, incarcerated individuals, veterans, individuals with disabilities, individuals with a language barrier, individuals who are members of racial or ethnic minority groups, and individuals who primarily reside in rural areas to ensure all Wisconsin residents can make full use of the internet.
- Wisconsin should develop and define standard metrics for affordability of broadband services for all Wisconsinites.

TASK FORCE MEMBERS

Governor Evers appointed members to the Task Force on Broadband Access to provide balanced perspectives, reflect individual's knowledge or expertise, or to represent an organization engaged in the expansion of broadband access, adoption, or affordability. The Governor's Task Force on Broadband Access members include:

Chris Meyer (Chair), Managing Director – Digital Health, Marshfield Consulting Group LLC

Robert Earl Baker III, Founder, RenderTech

Kwami Barnes, Broadband Coordinator, Communications Workers of America

Marta Bechtol, Executive Director, Educational Communications Board

Brittany Beyer, Consultant, Solarity

Salvador L. Carranza, Board Member, Latino Academy of Workforce Development

Shannon Clark, CEO & General Manager, Richland Electric Cooperative (retired in 2022)

Lori Collins, President/CEO, SonicNet Inc.

Douglas Cox, Director of Land Management, Menominee Indian Tribe of Wisconsin

Angie Dickison, State Government Affairs Manager, TDS Telecommunications

Emily Dittmar, Legislative Director, Wisconsin Educational Media and Technology Association

Russ Falkenberg, Board Member, Ntera, LLC

Celeste Flynn, Director of Government Affairs, Charter Communications

Chris Her-Xiong, Executive Director/Principal, Hmong American Peace Academy

Justin Huebner, CEO and General Manager, Solarus

Gail Huycke, Community Development Broadband Outreach Specialist, University of Wisconsin – Madison, Division of Extension

Barbara Koldos, Vice President of Business Development, New North, Inc.

Howard Marklein, State Senator (R-Spring Green)

Jose Martinez, Vice President, UMOS

Jeffrey Mursau, State Representative (R-Crivitz)

Brad Pfaff, State Senator (D-Onalaska)

Melissa Ratcliff, State Representative (D-Cottage Grove)

Rachel K. Schemelin, E-Rate and Broadband Education Consultant, Wisconsin Department of Public Instruction

Steve Schneider, President and Director, Bug Tussel Wireless

Michelle Schuler, Manager of TechSpark Wisconsin, Microsoft

Brett Schuppner, General Manager, Reedsburg Utility Commission

Jennifer Shilling, Government Relations Manager, Dairyland Power Cooperative

Dr. Chet Strebe, Associate Vice President of Information Technology, Chief Information Officer, Northcentral Technical College

Chad Young, CEO/General Manager, Norvado

LETTER FROM PSC CHAIR, REBECCA CAMERON VALCQ

Access to affordable, high-speed broadband internet connects Wisconsin—and in more ways than one. We know internet access is needed to participate in nearly all aspects of our modern-day society. Internet access makes it easier for the people of our state to live healthy, enriching lives; for businesses to reach new customers; and for our state to grow and reach its full potential. The goal of ensuring all can access the internet also connects us by bringing together communities who share a vested interest in bridging the state's digital divide.

Since Governor Tony Evers established the Task Force on Broadband Access in 2020, members have worked together to bring internet access, adoption, and affordability to all parts of our state. In the last three years, the Task Force has studied the issues, raised awareness, and delivered policy recommendations to the governor and the state legislature to bring broadband to all.

Since Gov. Evers took office in 2019, Wisconsin has disbursed or committed over $345 million towards expanding broadband to provide more than 395,000 homes and businesses access to new or improved service. We at the Public Service Commission of Wisconsin (PSC) are committed to supporting the governor's broadband expansion efforts.

For nearly a decade, the PSC's Wisconsin Broadband Office (WBO) has helped to expand broadband access throughout the state and promote internet affordability and adoption. The governor and I are working to ensure that all individuals and communities have access to broadband technology by focusing on internet adoption, device access, digital literacy, and more.

With recommendations and input from the Task Force, Wisconsin has come a long way in improving internet access. Looking to the months and years ahead as the state prepares to implement the Bipartisan Infrastructure Law's 'Internet for All' programs, we can see that there is still a lot of unfinished business. For Wisconsin to effectively administer funding under the Broadband Equity, Access, & Deployment Program (BEAD) program and Digital Equity programs, the WBO will continue counting on public involvement.

Task Force members, industry stakeholders, broadband service providers, and community members have already stepped up in meaningful ways. In October 2022, the WBO and the National Telecommunications and Information Administration (NTIA) hosted the "Internet for All: Connecting Wisconsin Kick-off" event in Wausau, which brought hundreds of Wisconsinites together to begin collaborating and planning for the next stage.

In December, we called on Wisconsinites to "Badger the FCC" by identifying and challenging inaccuracies from the Federal Communications Commission's (FCC) new national broadband maps. Challenges from residents, bulk challenges from the WBO, and improved reporting by broadband providers resulted in over 46,000 additional locations being correctly identified as unserved. This means that Wisconsin is receiving more federal funding to build broadband infrastructure because of the work we all did to improve the FCC's maps.

In May and June, the PSC hosted the 'Internet for All' Wisconsin Listening Tour, a series of nine in-person and two virtual public input sessions to help us develop the state 5-Year BEAD Action Plan and state Digital Equity Plan. From Rhinelander to Platteville, and Milwaukee to Hayward, Commissioners heard directly from local leaders and community members about the unique accessibility and affordability challenges that exist in our state's different regions. Hundreds of our friends and neighbors participated in the listening tour, sharing local insight and recommendations.

Public participation has been – and always will be – vital to this work. Finishing its third year, the Governor's Task Force on Broadband Access has shown what is possible when the people of our state get involved and work toward a shared goal. We have an historic opportunity right in front of us in implementing the Internet for All programs – and I believe we are ready for it.

I want to thank Chris Meyer, the Task Force Chair, for his leadership on the Task Force and Kristen Runge from UW Extension for her work facilitating the Task Force discussion. I appreciate all the hard work that the Task Force members and the Wisconsin Broadband Office contributed to complete this report. The recommendations in this and previous reports present a path forward as we work to meet the challenges of connecting all in Wisconsin to affordable, reliable, high-speed broadband internet.

Sincerely,

Rebecca Cameron Valcq
Chairperson, Public Service Commission of Wisconsin

LETTER FROM TASK FORCE CHAIR, CHRIS MEYER

I present the third annual report of the Governor's Task Force on Broadband Access.

This year, we continued preparations for the implementation of the Bipartisan Infrastructure Law and associated funding opportunities like the Broadband, Equity, Access, and Deployment and Digital Equity Programs. We collaborated with state and federal agencies to ensure effective planning and administration of these funds. Our goals for this report align closely with federal funding requirements. We aim to provide high-speed broadband to all homes, businesses, and community institutions, meeting the demands of the digital age. While we prioritize fiber technology, we recognize the need for scalable and sustainable options to reach every corner and every state resident.

The task force has generated recommendations in five key areas:
- Preparing to Capitalize on Federal Funds: Plan, coordinate, and distribute federal funding effectively while addressing inflation and supply chain pressures.
- Supporting Local Communities: Promoting playbooks, engaging champions, and facilitating public participation.
- Workforce Development: Connecting development boards, educational institutions, and labor groups with telecommunication providers and associations.
- Mapping and Data: Endorse the FCC's National Broadband Map and support statewide speed testing and surveying.
- Affordability and Adoption: Promote programs like the Affordable Connectivity Program and advocate for funding to sustain and expand them.

With the third year of this effort behind us, we turn our focus to next year and the recent announcement of BEAD funding allocations that will drive these efforts forward.

Thank you to all task force members, the State of Wisconsin Legislature, stakeholders, partners, and the Public Service Commission of Wisconsin for their dedication and commitment to our shared mission—a special thank you to the numerous experts who provided information at task force meetings throughout the year.

Together, we can expand broadband access and drive Wisconsin's success.

Forward,

Chris Meyer
Chair, Governor's Task Force on Broadband Access

ACKNOWLEDGEMENTS

We would like to acknowledge several individuals for their participation and effort in making this Task Force a success.

Thank you to our presenters, including:

- **Carah Koch**, Federal Program Officer, National Telecommunications and Information Administration

- **Theron Rutyna**, Federal Program Officer, National Telecommunications and Information Administration

- **Cort Buffington**, Technical Assistance Advisor, National Telecommunications and Information Administration

- **Brett Litzler**, Digital Equity Advisor, National Telecommunications and Information Administration

- **Dale Knapp**, Director of Research and Analytics, Wisconsin Counties Association

- **Zach Vruwink**, Deputy Executive Director, League of Wisconsin Municipalities

- **Joe Ruth**, Government Affairs Director/Legal Counsel, Wisconsin Towns Association

- **Chad Young**, CEO/General Manager, Norvado

- **Paul Kostner**, Broadband Academy Instructor, Northwood Technical College

- **Aliesha Crowe**, Vice President of Academic Affairs, Northwood Technical College

- **Dan Schullo**, Broadband Academy & TIRAP Project Coordinator, Northwood Technical College

- **BJ Williams**, Associate Dean of Continuing Education, Northwood Technical College

- **Megan Stritchko**, Policy Advisor, Wisconsin Technical College System

- **Rebecca Heth**, Reentry Employment Program Manager, Wisconsin Department of Corrections

- **Rhonda Suda**, Chief Executive Officer, Southwest Wisconsin Workforce Development Board, Inc.

- **Steven Deller**, Vilas Distinguished Achievement Professor, Department of Agricultural and Applied Economics, University of Wisconsin – Madison

- **Beth Haskovec**, Director, Office of Rural Prosperity, Wisconsin Economic Development Corporation

- **Kristin Runge**, Communications Research Specialist, University of Wisconsin – Madison, Division of Extension

- **Justin Huebner**, CEO and General Manager, Solarus

- **Gail Huycke**, Community Development Broadband Outreach Specialist, University of Wisconsin – Madison, Division of Extension

- **Hannah Hill**, Principal, Boston Consulting Group

- **Ana Mancia**, Project Leader, Boston Consulting Group

- **Kelsey Clark**, Managing Director & Partner, Boston Consulting Group

And thank you to:

TASK FORCE PROCESS AND METHODOLGY

The Governor's Task Force on Broadband Access (Task Force) was established by Governor Tony Evers via Executive Order #80 on July 14, 2020, and he appointed its members. On January 4, 2023, Governor Tony Evers issued Executive Order #182, relating to the recreation of Non-Statutory Committees, including this Task Force. The Task Force's charge is:

> "Advise the Governor and Wisconsin State Legislature on broadband actions and policy, including strategies for successfully expanding high speed internet access to every residence, business, and institution in the state; initiatives for digital inclusion; and pathways to unlocking and optimizing the benefits of statewide, affordable access to broadband for all communities in Wisconsin"

Task Force members are selected and appointed by Governor Tony Evers.

In the spring of 2022, the National Telecommunications, and Information Administration (NTIA), U.S. Department of Commerce published a notice of funding opportunity for the Broadband Access, Equity, and Deployment (BEAD) program. The Task Force and its leadership recognized that this funding would enable broadband stakeholders to pursue several recommendations from previous years and make significant progress in addressing access across Wisconsin. As a result, the overall work plan and monthly agendas were designed to advise and support the State of Wisconsin as it prepares to receive and distribute BEAD funding. Recommendations from previous reports that were especially helpful in this task were elevated as the 2022/23 Task Force undertook its work this year.

The facilitated Task Force process for this report began in September of 2022 and concluded in June of 2023. The work of the Task Force was coordinated by a five-member team which included Task Force Chair Christopher Meyer, Wisconsin Broadband Office Broadband Planning and Policy Coordinator Jaron McCallum, the State Broadband and Digital Equity Director Alyssa Kenney, Broadband Expansion Manager Rory Tikalsky, and UW Extension Community Economic Development Specialist Dr. Kristin Runge, who served as Task Force facilitator.

The coordination team met monthly to plan the meeting agenda, invite speakers, identify potential resources useful to the Task Force, and monitor progress towards Task Force goals.

A total of ten Task force meetings were held. From September to early June, each meeting theme focused on a different aspect of network expansion. From mid-April to June, meetings focused on identifying and refining recommendations. Prior to several meetings during the information gathering phase of the Task Force (September through April) members reviewed and responded to a series of advance preparation questions focusing on different aspects of network expansion. These answers were collected via Qualtrics survey, summarized, and then reviewed at each meeting. After an initial draft of recommendations in early April, the Task Force members were asked to rate each potential recommendation. The ratings were then used as the basis for discussion when Task Force members refined recommendations.

Meetings were designed with an appreciation of the complexity of attempting to identify a comprehensive statewide network of organizations that are involved in broadband deployment, and the challenges of coordinating these groups as part of network expansion efforts. In the first portion of each meeting the Task Force heard presentations from invited agencies and stakeholders on topics relevant to the day's topic. In the second portion of each meeting Task Force members engaged in a facilitated discussion related to both the day's presentations as well as pre-work that was assigned via Qualtrics. Discussions were designed to capture Task Force member knowledge and were structured such that participants initially met as small groups before discussing as a whole group. PSC staff members served as facilitators during the small group discussions, recording comments and input onto a publicly viewable Google document that served as a temporary workspace. The Google documents were downloaded for preservation, and then used as a resource during the writing of the report and its recommendations.

PRESENTATIONS TO AND WORK OF THE TASK FORCE

September 2022
- Task Force orientation
- Review of the charge to the Task Force
- Presentation from Wisconsin Broadband Office
- Remarks by PSC Chairperson Rebecca Cameron Valcq

October 2022
- Internet for All Meeting in Wausau, Wisconsin
- Introductions from Governor's Task Force on Broadband Access and Wisconsin Digital Equity and Inclusion Stakeholder Group
- National Telecommunications and Information (NTIA) Presentation
- Network Node Activity

November 2022
- Local Perspectives and Best Practices for Local Coordination
- Presentation from local Internet Service Providers

December 2022
- Panel Discussion on Workforce and Broadband Expansion
- Presentation from Northwood Technical College
- Overview of FCC Maps and Updates from the Wisconsin Broadband Office

January 2023
- Review of Broadband Internet and the Wisconsin Economy

February 2023
- Presentation: Broadband, Equity, Access, and Deployment (BEAD) and Digital Equity Planning by the Public Service Commission of Wisconsin
- Presentation: Technical Assistance Efforts by the Wisconsin Economic Development Corporation

The Task Force met in person during the October 2022 Internet for All event in Wausau, Wisconsin. Otherwise, the Task Force continued to meet virtually in its third year as it had during its initial two years. Meetings were conducted via Zoom, and a link was made available as part of the publicly posted agenda. Each meeting included time for public comment.
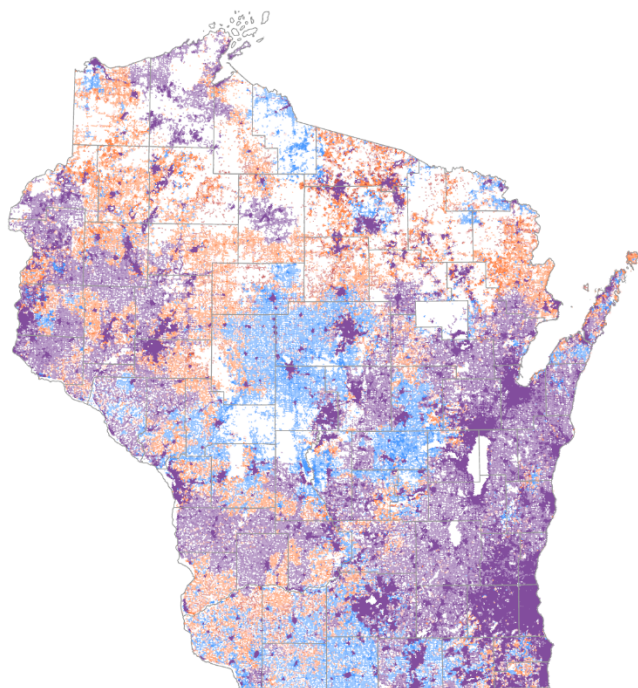
CURRENT STATE OF BROADBAND ACCESSS

Access to broadband remains challenging for a significant share of Wisconsin households and businesses, but the outlook is improving. Renewed urgency, heightened resources, and significant involvement from stakeholders at all levels of government and the private sector have built consensus and focus on universal deployment. During the past year, improved mapping capabilities and robust stakeholder challenges to data accuracy have vastly improved mapping and estimates of broadband service in Wisconsin. Further, growing public and private investments have continued to improve availability for many households. Since Governor Evers took office in 2019, Wisconsin has disbursed or committed over $345 million towards expanding broadband to provide more than 395,000 homes and businesses access to new or improved service. In the year ahead, the Commission will continue to enhance the breadth and accuracy of mapping data and will receive hundreds of millions of dollars in federal funding, leaving it well positioned for success in the pursuit of Internet for All.

AVAILABILITY ESTIMATES

On May 30, 2023 the FCC released version two of the National Broadband Map, the updated map estimates that Wisconsin has **246,113 unserved broadband** serviceable locations. Unserved, for purposes of the BEAD program, is defined as lacking wired or licensed fixed wireless service with speeds of 25/3. A further **217,772 locations are estimated to be underserved**, which lack 100/20 speeds from a wired or licensed fixed wireless service. The map below shows the availability of service by speed throughout Wisconsin. Orange represents areas lacking 25/3, blue represents areas with 25/3 to 100/20, and purple areas with 100/20 or better. Darker, more saturated areas are those with a larger density of locations.

WISCONSIN'S
Internet Coverage

Coverage by Most Available Local Speed

- 100+ Mbps Download/20+ Mbps Upload
- Between 25/3 and 100/20 Mbps
- Less Than 25/3 Mbps
- Even Mix of Speeds
- No Coverage
- No Broadband Serviceable Locations (BSLs)
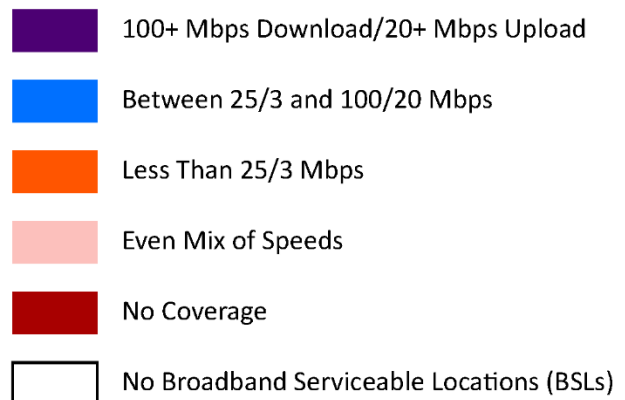
Note: Brightness of colors determined by density of BSLs. Brighter colors indicate areas with more BSLs.

0   50   100 Miles

N

A broadband serviceable location is defined as a location "where fixed broadband internet access service is or could be installed." Currently, the National Broadband Map lists 2,304,161 broadband serviceable locations in the Wisconsin. That means that approximately **10.7% of households and businesses in Wisconsin lack basic 25/3 broadband service** from wired or licensed fixed wireless technology, and **20.1% lack access to high speed 100/20 broadband service** from wired or licensed fixed wireless technology.

MAPPING ACCURACY

In November 2022, FCC released a groundbreaking update to the National Broadband Map, version one. The update shifted reporting of the availability of broadband service from census-block based geography to individual location points, showing broadband availability not as an estimate by neighborhood or city block, but actual availability for each structure. Location-level reporting has greatly improved the ability of the Commission to identify gaps in availability and direct funding to build reliable service.

The Commission, alongside countless stakeholders, the public, and internet service providers, undertook an extensive effort to evaluate, challenge, and improve the National Broadband Map. Alongside of the WBO, the Task Force has facilitated widespread outreach and engagement to validate and challenge the National Broadband Map through the Commission's [Badger the FCC](#) campaign. The National Broadband Map is now updated semiannually, with the initial draft released in November 2022 (version one), and a more accurate map released on May 30, 2023 (version two). This current version of the National Broadband Map reflects service availability as of December 31, 2022 and incorporates most challenges and validation efforts by the Wisconsin Broadband Office and others.

The Wisconsin broadband availability maps below show the improved accuracy and granularity achieved in the last year. The map on the left from the 2022 Task Force report reflects the Commission mapping of availability based on a mix of census block and voluntary location-level reporting as of December 31, 2021, whereas the map on the right reflects a fully location-level reporting of availability of the FCC's version two map.

0   50   100 Miles
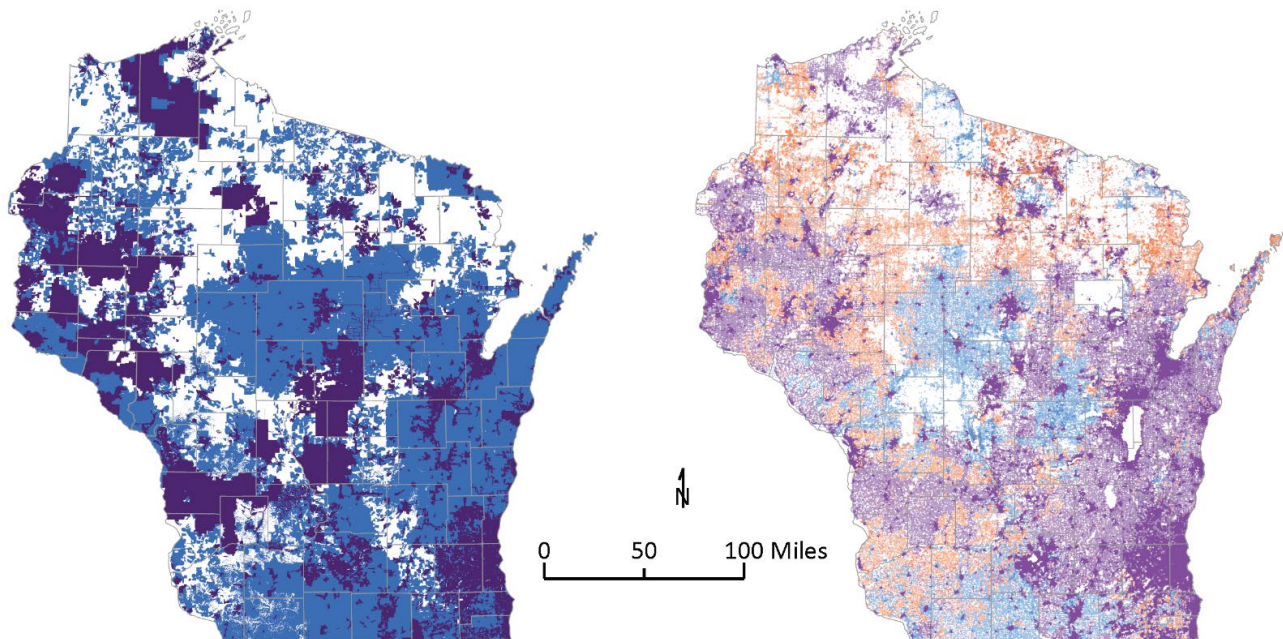
MORE PRECISE COVERAGE MAPPING

January 2022 Mapping Data:
Census Block and Coverage Area Boundaries
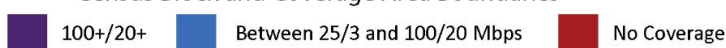
December 2022 Mapping Data:
Summary of Location-Level Mapping Data

| ■ 100+/20+ | ■ Between 25/3 and 100/20 Mbps | ■ No Coverage | ■ < 25/3 Mbps | ■ Mix of Speeds | □ No BSLs |

CHANGE OVER TIME

Service and mapping continues to improve across Wisconsin, and there were significant changes to estimates of availability between version one and version two of the National Broadband Map. **Between version one in November 2022 and version two release in May 2023, the estimated locations in Wisconsin able to receive service from a fiber internet subscription increased by 93,391**. At the same time, the number of reporting a lack of 25/3 service increased by 45,130.

This result is counterintuitive: reported service both improved and worsened. This is due to two competing effects: while many locations gained access to high-speed internet, other locations were found to be previously misreported. It is difficult to delineate the net effect of improving mapping efforts and improving infrastructure access. However, in general it is assumed that improved service in the most recent version of the National Broadband Map is primarily due to construction of infrastructure because staff have not often observed instances where maps underreported the available speed. Conversely, it is unlikely that once a location achieves actual infrastructure access to a certain speed that such service is revoked, except in cases where older infrastructure is retired and replaced, in which case the map would show improved service. The lesson from version two of the availability map is clear: **the gap is closing, and we now know better where the need remains.**

IMPACT OF STATE FUNDING

Increasing amounts of 100/20 service availability are undoubtedly driven in part by significant state investments in broadband grants in recent years. As grants take time from award to construction, service availability reported as of December 31, 2022 likely incorporates most of the impact of broadband grants from the FY2020 and FY2021 grant rounds, which included $52.4 million in state investment in broadband. Further, construction for grant awards of $125 million and $16.6 million during the FY2022 and FY2023 grant rounds is still in progress and these awards will further improve service primarily by the end of 2025.

AVAILABILITY BY TECHNOLOGY

Evolving data reporting underlying the National Broadband Map allows for insights related to the technology mix available in Wisconsin and the associated speeds. The graph to the right shows the distribution of the approximately 9 million service offerings in Wisconsin among various technologies and BEAD speed definitions. A service offering is one internet service provider's advertised service for a location. Some locations have multiple offerings, which results in

INTERNET SERVICE OFFERINGS
Displayed by Technology Type & BEAD Status

Licensed Fixed Wireless
Copper
Cable
Unlicensed Fixed Wireless
Fiber

0 — 1 Million — 2 M — 4 M

■ Unserved   ■ Underserved   ■ Served

approximately 9 million offerings across 2.3 million locations. In general, cable and fiber offer the highest speed service, while copper provides a mix of speeds under 100/20. Under the BEAD program, unlicensed fixed wireless is considered unserved, regardless of speed.

The graphic below shows how these service offerings result in actual served locations using BEAD eligibility criteria and service reporting as of version two of the FCC map. For locations with access to high-speed service of 100/20 or better (purple boxes), most all have service from a provider of fiber, cable, or both. Approximately 30,000 locations with 100/20 service lack fiber or cable, and instead receive it from a copper or fixed wireless provider. For locations that are underserved with 25/3 to 100/20 service (blue boxes) and unserved with less than 25/3 service (orange), most service is provided by fixed wireless or copper providers. Barely 1% of Wisconsin locations (red) lack access to any wired or fixed wireless technology of any speed. Across these technologies, basic internet access is available to most all Wisconsinites, although not all technologies provide speeds sufficient for modern demands of entire households or growing businesses.

SERVICE AVAILABILITY FOR 2,304,161 WISCONSIN LOCATIONS

Served: 1,840,276 (79.9%)

No Service: 25,038 (1%)

Unserved: 221,075 (9.6%)

FW, 96,341

Copper & FW, 84,443

Copper, 40,140

Cable, 1,082,743

Underserved: 217,772 (9.5%)

FW, 141,543

Fiber, 215,471

Copper, 41,593

Copper & FW, 27,323

Fiber & Cable, 512,047

Copper or FW, 30,015
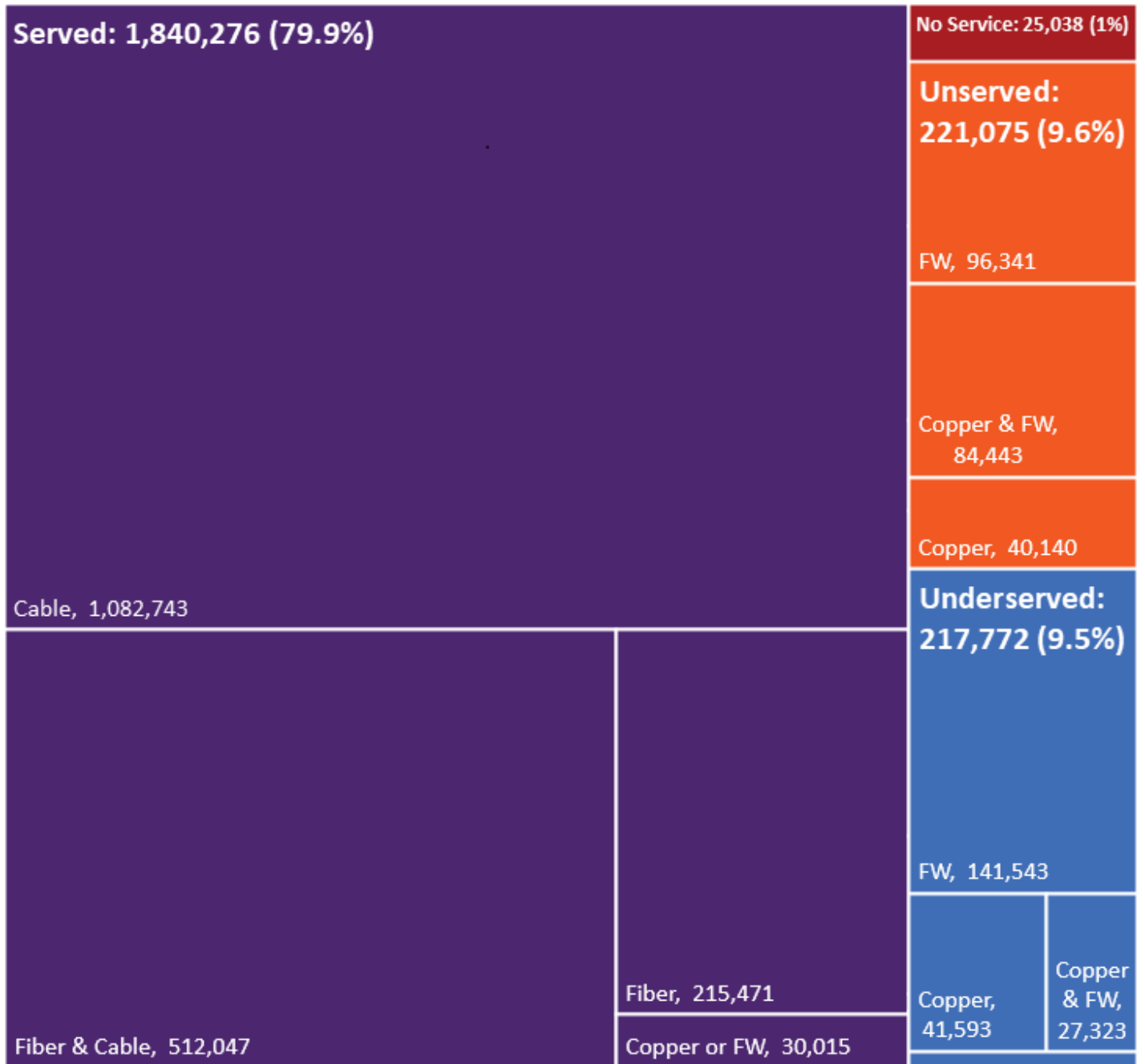
Note: FW = Fixed Wireless

Fiber or Cable, 7,313 ↗

SUMMARY

Accurate mapping of broadband availability is a critical step to successful deployment of Internet for All. Throughout the 2022-2023 period, the Task Force has seen the historic transition to location-level reporting of broadband service. Further, Wisconsin's continued investment in state funding for broadband deployment continues to show an impact, with over $214 million awarded to date. Governor Evers made the largest state investment in state history and thanks to him and this investment more than 395,000 homes and businesses will have new or improved service. These efforts have set the stage for robust and comprehensive deployment of state and federal funds to achieve Internet for All. As Wisconsin continues planning efforts for BEAD funding in the coming month, accurate maps will ensure it gets its fair share of federal funding to achieve Internet for All Wisconsinites.

CURRENT STATE OF DIGITAL EQUITY

The availability of broadband alone is not enough to expand high-speed internet access to every residence. A key component to successful deployment of broadband is digital equity. NTIA defines the term digital equity as a condition in which all individuals and communities have the information technology capacity needed for full participation in the society and economy of the United States. The key components that allow full use of the internet are robust affordable service, internet-enabled devices that meet user needs, applications and online content, access to digital literacy training, technology support, and measures to ensure privacy and cybersecurity are identified. The Wisconsin Broadband Office is currently engaging in the development of a detailed plan that will address Wisconsin's digital equity needs, including the Digital Equity programs within BIL.

ADOPTION

Broadband adoption is an important component of digital equity. The broadband adoption gap results from residences who have access to internet but decline to subscribe to internet service. In some cases, the broadband infrastructure is insufficient to meet the user's needs. Extensive research indicates that there are three principle causes of the adoption gap in the United States: affordability, digital readiness, and perceived relevance.

According to the 2021 American Community Survey, national internet adoption rates have increased have continued to rise. As of 2021, roughly 92 percent of adults use the internet regularly. In Wisconsin 89 percent of adults regularly use the internet, slightly below the national average. Across the country and in Wisconsin disparities in internet adoption continue to persist. Younger individuals have higher rates of internet adoption compared to older adults, and college graduates have higher rates of internet adoption compared to adults with a high school diploma.

Racial and ethnic disparities also continue to persist in internet adoption. According to the 2021 American Community Survey, historically marginalized communities, including some racial minorities have lower rates of home broadband access, with 18 percent of Black or African American households and 14 percent of Hispanic or Latinx households having no home broadband access compared to 10 percent of white households.

AFFORDABILITY

Many residences throughout the state do not have internet at home because it is cost prohibitive. The Pew Research Center found that although only 1 percent of adults with annual incomes over $75,000 do not use the internet, 14 percent of those with annual incomes under $30,000 are not online. Significant and varied research has indicated that the high monthly cost of internet service is the primary reason for non-adoption. The EducationSuperHighway's Report No Home Left Offline estimated that Wisconsin's broadband affordability gap prevents 273,415 households from accessing the internet at home and impacts 650,000 people in the state.

The map below shows the average cost for the lowest cost broadband only service subscription by county in 2021. The median county had a subscription cost of $47.60 per month. Due to data limitations, 19 counties are not represented in the map. The monthly service cost data does not include any additional company-imposed fees that appear on many consumers bills and can increase the actual cost to the consumer.

The Affordable Connectivity Program (ACP) provides a discount of up to $30 a month toward internet service for eligible households and up to $75 per month for households on qualifying Tribal lands. Eligible households include those with incomes below 200 percent of the federal poverty guideline, or participants in certain federal assistance programs such as SNAP, Medicaid, or public housing assistance, among others. When paired with discounted service offerings available from some internet service providers, in some cases the $30 per month benefit from ACP can result in a $0 monthly subscription for low-income families. The ACP benefit can be applied to either a fixed home internet service or a mobile internet service on a cell phone.

~ Broadband Cost for Terrestrial Plans 2021~
County Average Lower Monthly Prices ($)

County Average Lower Price 2021
- No data (19)
- $ 15 - 25 (none)
- $ 26 - 30 (1)
- $ 30 - 40 (4)
- $ 40 - 50 (48)
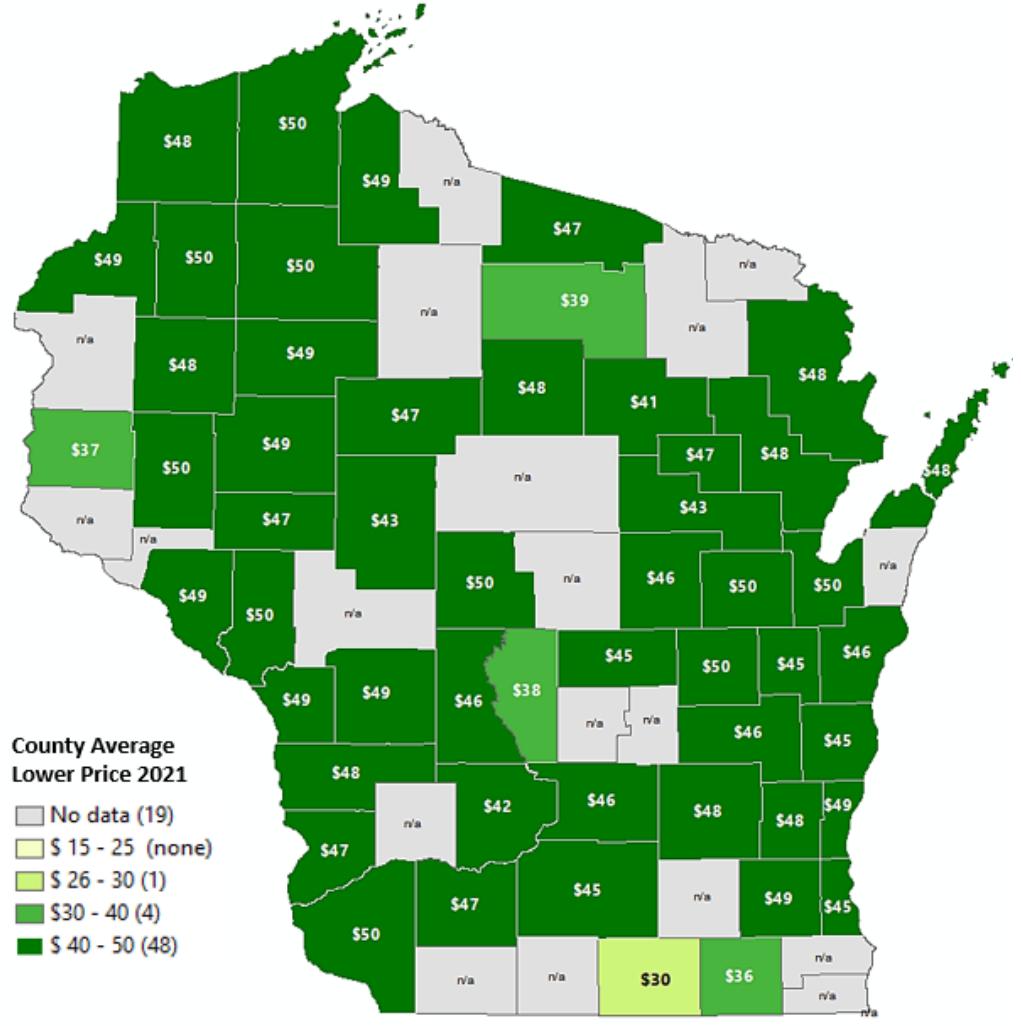
Source : NBAM – Community Report – County data aggregated from BBNow Average Census Block data

As of June 26, 2023, 368,481 of the estimated 894,005 eligible households in Wisconsin enrolled in ACP. 41 percent of eligible households in Wisconsin are enrolled in ACP, as compared with an estimated 34 percent of eligible households enrolled nationally. Since the program's inception Wisconsin providers have received $129,160,467 in benefit funding to provide internet service to enrolled households. ACP enrollment is increasing over time, with many counties seeing participation double over the last year. Enrollment by county can be seen in the map below, which compares 2022 participation to 2023 participation.

State Total HH ACP enrolled up to June 13, 2022 : **215,088**

~ ACP – Households Enrollment by County ~ 2022 vs. 2023

State Total HH ACP enrolled up to June 12, 2023 : **361,413**

HH ACP enrolled 2022

- 75 – 1,000
- 1,001 – 2,500
- 2,501 – 5,000
- 5,001 – 15,000
- 15,001 – 72,156

HH ACP enrolled 2023

- 75 – 1,000
- 1,003 – 2,500
- 2,530 – 5,000
- 5,943 – 15,000
- 15,313 – 109,807
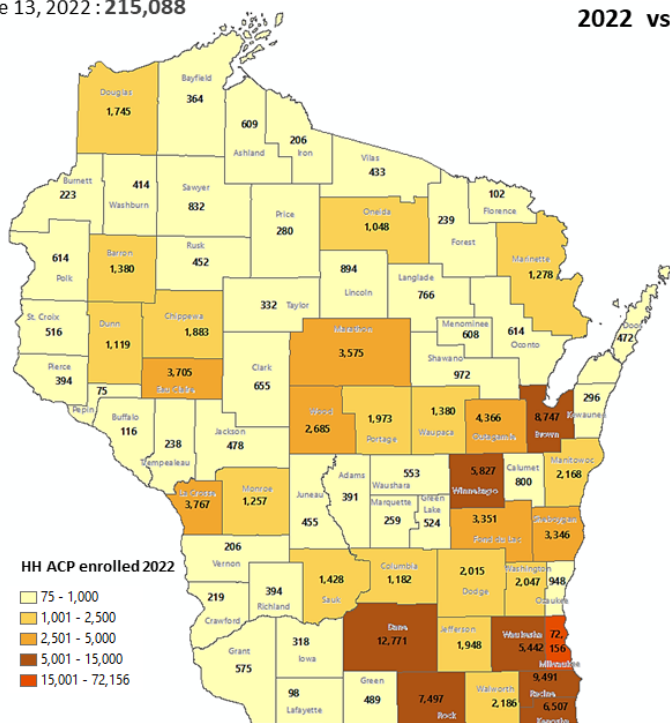
2022 Households Enrolled up to May 1,2022 - State Total: 198,051 | 2023 Households Enrolled up to May 1, 2023 - State Total: 344,572

ACP has the twofold benefit of expanding connectivity for households in need of support to afford broadband, while also increasing subscription rates to broadband service. Because ACP increases subscription rates, internet service providers are able to capture new customers and revenue that previously did not exist. As a result, higher subscription rates improve the business case for broadband deployment increase revenues and offset higher costs, making the cost-benefit calculation for internet service providers more feasible in areas of the state with more low-income households. Thus, ACP allows for cost-effective broadband infrastructure construction in higher cost areas and supports low-income households to afford home internet access. However, ACP was funded wit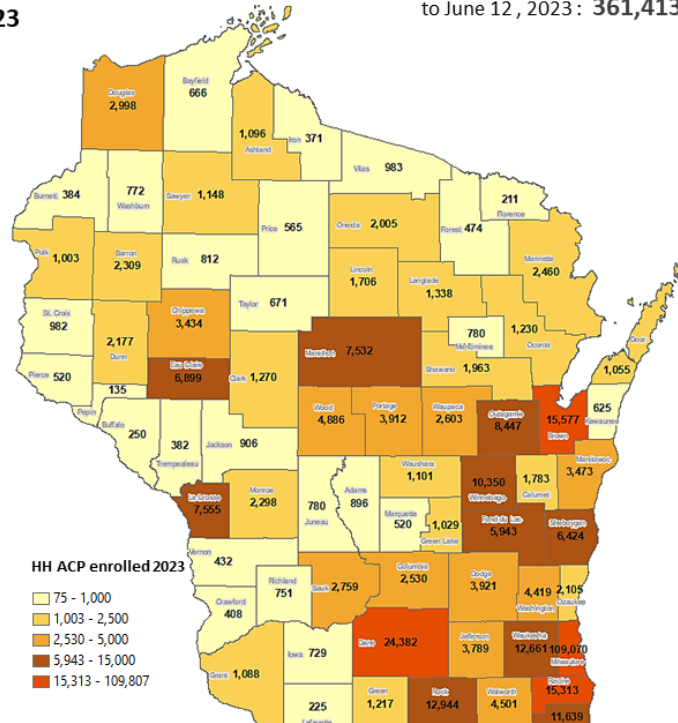h a one-time allocation of federal funds under the Infrastructure Investment and Jobs Act of 2021, which appropriated $14.2 billion for the program. If the federal government does not elect to continue funding for the program on a long-term basis, estimates suggest program funding could be exhausted by mid-2024.

DIGITAL INCLUSION

Digital equity does not occur without intentional strategies, policies, programs and organizations doing digital inclusion work. The National Digital Inclusion Alliance uses the following working definition:

Digital inclusion work entails efforts to ensure all individuals and communities, including the most disadvantaged, have access to and use of Information and Communication Technologies (ICTs). This includes five elements:

1. Affordable, robust broadband internet service
2. Internet-enabled devices that meet the need of the user
3. Access to digital literacy training
4. Quality technical support
5. Applications and online content designed to enable and encourage self-sufficiency, participation and collaboration

Digital inclusion must evolve as technologies advance. Digital inclusion requires intentional strategies and investments to reduce and eliminate historical, institutional, and structural barriers to access and use technology.

One strategy to reduce the barriers to access is the use of digital navigators. Digital navigators are individuals who address the digital inclusion process with community members through repeated interactions. Prior Task Force reports have recommended a that Wisconsin develop and fund a statewide Digital Navigator Program. Since that time, United Way of Greater Milwaukee and Waukesha County and United Way of Greater Chippewa Valley have created innovative digital navigator programs. The Forest County Broadband Committee also has worked through UW-Madison, Division of Extension to hire a digital navigator. Door County has also embraced the digital navigator model. Throughout the state more community organizations are embedding digital navigators within their own organization.

DIGITAL EQUITY OUTREACH GRANTS

The PSC made awards to seven entities totaling $335,000 under the Digital Equity Outreach Grants. This program supports grant recipients' efforts to collect locally-informed insights into digital equity needs and solutions for the communities they serve. The activities may include interactive workshops, surveys, townhall discussions, data collection, and interviews with underconnected populations.

ON THE HORIZON: FEDERAL FUNDING FOR INFRASTRUCTURE, ADOPTION, AND EQUITY

Recent authorizations of funding at the federal level have elevated opportunities for states to implement broad-reaching efforts to meet broadband access, affordability, and adoption goals. Under federal coronavirus relief legislation (the Coronavirus Aid, Relief, and Economic Security [CARES] Act, the American Rescue Plan Act [ARPA] and subsequently the Bipartisan Infrastructure Law [BIL]), funding is being allocated to support broadband deployment, affordability, and adoption. BIL – also referred to as the Infrastructure Investment and Jobs Act (IIJA) – is the largest infusion of federal dollars to implement the federal BEAD and Digital Equity programs and will have far reaching impacts for the state of Wisconsin.

Federal funds administered by the Wisconsin Broadband Office include:
- $100 million in ARPA State and Local Fiscal Recovery Funds for broadband infrastructure, awarded to 83 broadband expansion projects to build new or improved service to approximately 30,000 locations across the state.
- $5.3 million in Coronavirus Aid, Relief, and Economic Security [CARES] Act funds for 12 shovel-ready broadband infrastructure projects to build new or improved service to approximately 19,000 locations across the state.
- $42 million in federal ARPA Capital Projects Fund allocation which will provide grants to internet service providers to expand high-speed broadband infrastructure to unserved and unserved locations in Wisconsin. These grants are anticipated to be awarded in the coming year.
- Approximately $6 million in planning funds for the Broadband Equity, Access and Deployment (BEAD) program and Digital Equity (DE) programs under the Bipartisan Infrastructure Law.

On June 26, 2023, NTIA announced Wisconsin's allocation of $1,055,823,573.71 BEAD implementation funding to support construction of broadband infrastructure. Forthcoming announcements of DE capacity funding are anticipated to provide an additional $24 million to $30 million in affordability and adoption funding. Initial planning funds for both programs were authorized and allocated to the Commission in December 2022. In 2023, the Commission and its partners have been conducting outreach and engagement initiatives with stakeholders, undertaking several streams of data collection and analysis, and beginning to draft the necessary plans to ensure Wisconsin has both an accurate understanding of need and a comprehensive and equitable plan for implementing the state's BEAD and Digital Equity programs.

To facilitate inclusive planning and robust stakeholder engagement for both BEAD and Digital Equity programs, the Commission has implemented several initiatives and solidified important partnerships. A portion of the BEAD Planning funds were directed to the BEAD Local Planning Grant Program to incorporate county and tribal plans, needs, and feedback into BEAD planning. The Workforce Planning Grant Program awarded funds to two entities that are gathering important insights and recommendations for a workforce strategy to ensure BEAD implementation is successful in all regions of the state. A portion of the Digital Equity planning funds were directed to the Digital Equity Outreach Grant Program to gather data and insights from on-the-ground practitioners about specific Wisconsin populations' barriers to digital equity and needs across the state.

The Commission has partnered with University of Wisconsin Division of Extension and the Wisconsin Economic Development Corporation's Office of Rural Prosperity to provide technical assistance to local government and Regional Economic Development Organizations, as well as create and conduct a survey that has been distributed to all Wisconsin counties and federally recognized Tribes. The Commission has also hired an outside consultant to provide critical data and analysis around internet availability, performance, cost and subscription rates that will inform Wisconsin's broadband deployment strategy. With this data the Commission will create useful new mapping components and dashboards along key broadband metrics to help guide the BEAD and Digital Equity programs and community broadband planning efforts.

In June 2023, the Commission and its partners completed the "Wisconsin Internet for All Listening Tour", which included nine in-person events that took place in different regions across the state and two virtual events. The listening tour reached approximately 300 broadband stakeholders statewide. Listening sessions were open to the public and the Commission gathered important insights, needs, and suggestions that will be incorporated into ongoing BEAD and Digital Equity planning. A forthcoming report will summarize public comments and feedback from the Listening Tour and will be posted on the Commission website.

The Commission has also taken part in important Tribal consultations to learn the vision, needs, concerns, and feedback of Wisconsin's federally recognized Tribes regarding BEAD and Digital Equity planning in Wisconsin. Tribal consultations will ensure that Tribal sovereignty is respected throughout the implementation of BEAD and Digital Equity and that Wisconsin's Tribal neighbors have the capacity, support, and partnerships necessary to implement their vision for broadband deployment and digital equity within their communities.

BROADBAND EQUITY, ACCESS & DEPLOYMENT PROGRAM

The Broadband Equity, Access and Deployment (BEAD) program is the largest funding program in BIL and provides $42.5 billion in funding to states for building broadband infrastructure and increasing adoption of reliable internet. BEAD prioritizes fiber internet technology to connect *unserved* locations that have either no internet or speeds below 25/3 Mbps, and places secondary priority on *underserved* locations with less than 100/20 Mbps. Thereafter, other eligible uses include connecting community anchor institutions lacking 1 Gbps broadband capacity and digital equity and adoption efforts.

Wisconsin's BEAD allocation was determined through a formula based on the state's proportion of locations lacking access (unserved) to broadband service, calculated using FCC maps that were published in June 2023. The allocation of $1,055,823,573.71 for BEAD implementation was announced by NTIA on June 26, 2023.

The Governor has designated the PSC as the administrator of the BEAD program. The total funding amount awarded to Wisconsin will be allocated to the PSC in stages and awarded to eligible applicants through a competitive process estimated to begin in 2024. For more details and resources visit NTIA's BEAD program website. The graphic below shows an approximate timeline for deployment of BEAD funding, although this timeline may vary based on the timeline of federal review and approvals.

BROADBAND EQUITY, ACCESS & DEPLOYMENT TIMELINE

2022		2023			2024	2025	2026+
May 17	June – Dec.	Jan. – Aug.	Aug. 28	Dec. 27	Jan – Dec.	Jan. – Dec.	

| Gov. Evers submits Letter of Intent | Initial Planning Fund Application Submitted

$5 million in planning funds allocated to WBO starting December 1 | WBO BEAD Planning: Workforce and Local Planning Grant programs, Listening Tour, and surveys.

Allocation announced June 26 | 5-year State Action Plan Due | Initial Proposal due | State Challenge Process
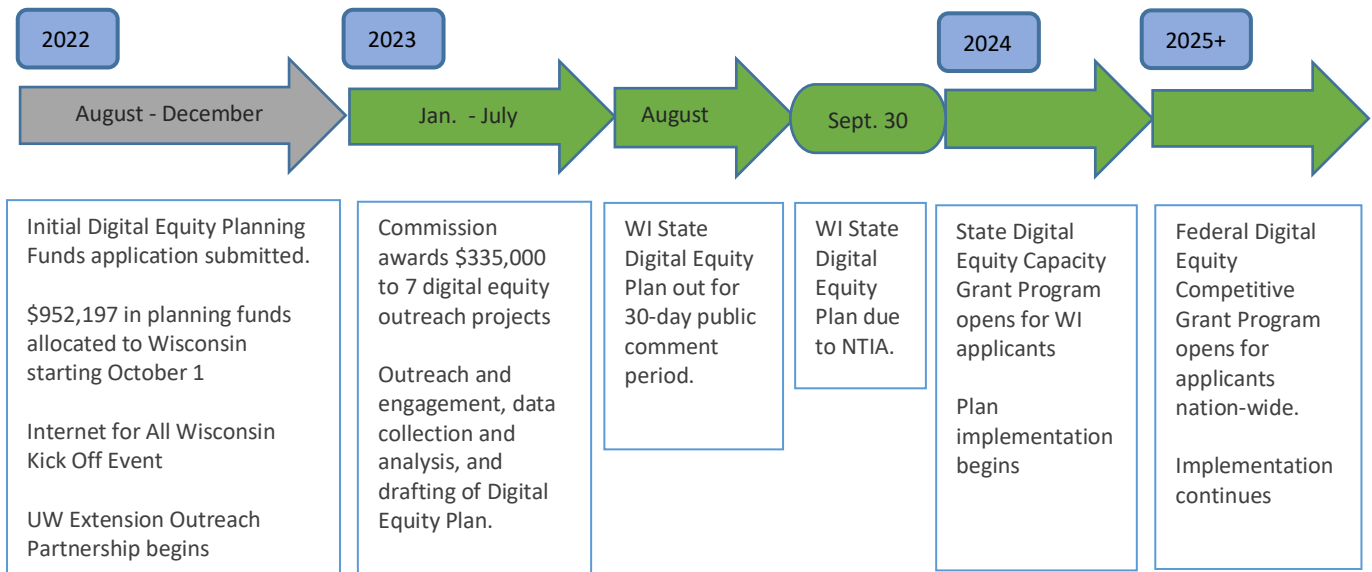
BEAD competitive subgrant rounds begin after approval of Initial Proposal | BEAD competitive subgrants awarded to successful applicants

Final Proposal due 365 Days after Initial Proposal approval | Ongoing Implementation

Subgrantees complete projects within four years of award receipt |

These are estimates and actual dates are contingent upon NTIA actions.

DIGITAL EQUITY PROGRAMS

The Digital Equity (DE) programs consist of three separate planning and implementation grant programs that promote digital equity and inclusion. The State Planning Program provided Wisconsin $952,197 to conduct outreach and create a state digital equity plan. The upcoming State Capacity Grant Program will provide funding to states through a formula to implement their digital equity plan through a state-designed grant program. Wisconsin's estimated share of capacity grant funding is approximately $24 million to $30 million over five years. Additionally, a Competitive Grant Program administered by NTIA will support digital equity projects nationally over a five-year period. For more details, visit NTIA's Digital Equity Act programs website.

In 2023, under the Digital Equity State Planning program, the Commission and its partners have conducted robust outreach, engagement, and surveying of key populations to inform the Wisconsin Digital Equity Plan. As noted above, the Digital Equity Outreach Grant Program was created to gather nuanced insights from practitioners that work directly with specific populations that most often face barriers to digital equity. The Commission has conducted direct outreach to learn about needs and barriers and have met with over 90 individuals or groups, as well as engaging state agencies and administering a survey to all counties and federally recognized Tribes. This qualitative and quantitative data gathered from subgrantees, staff and partners will be incorporated into the state digital equity plan. The Commission will release Wisconsin's state digital equity plan for public comment in early August 2023.

DIGITAL EQUITY TIMELINE

2022 | August - December → **2023** | Jan. - July → August → Sept. 30 → **2024** → **2025+**

2022	2023			2024	2025+
August - December	**Jan. - July**	**August**	**Sept. 30**		
Initial Digital Equity Planning Funds application submitted. $952,197 in planning funds allocated to Wisconsin starting October 1 Internet for All Wisconsin Kick Off Event UW Extension Outreach Partnership begins	Commission awards $335,000 to 7 digital equity outreach projects Outreach and engagement, data collection and analysis, and drafting of Digital Equity Plan.	WI State Digital Equity Plan out for 30-day public comment period.	WI State Digital Equity Plan due to NTIA.	State Digital Equity Capacity Grant Program opens for WI applicants Plan implementation begins	Federal Digital Equity Competitive Grant Program opens for applicants nation-wide. Implementation continues

These are estimates and actual dates are contingent upon NTIA actions.

ADDITIONAL PROGRAMS RECEIVING FEDERAL FUNDING

BIL also provides funding to the National Telecommunications Information Administration (NTIA) and U.S. Department of Agriculture (USDA) for federally administered broadband programs, as shown in the table below.

Program	Total Available Federal Funding	Funding Details	Purpose of Funding	Additional Information
ReConnect Loan and Grant Program	$2 Billion	USDA-administered grant and loan program open to eligible applicants nationally.	Broadband infrastructure construction, improvement, or acquisition	USDA program webpage
Rural Utilities Service Programs (RUS)	$2.7 Billion	USDA-administered competitive grant and loan programs open to eligible applicants nationally.	Broadband infrastructure and adoption to improve distance learning and telehealth services	RUS programs webpage
Enabling Middle Mile Broadband Infrastructure Program	$1 Billion	NTIA-administered competitive grant program open to eligible applicants nationally.	Middle Mile broadband infrastructure	NTIA program webpage NTIA MM fact sheet
Tribal Broadband Connectivity Program	$3 Billion	NTIA-administered competitive grant open to eligible tribal entities.	Broadband planning, infrastructure and adoption	NTIA program webpage

Enabling Middle Mile Broadband Infrastructure Program

Funded by the Bipartisan Infrastructure Law and Administered by NTIA, the Enabling Middle Mile Broadband Infrastructure Grant Program was designed to expand and extend middle mile infrastructure to reduce the cost of connecting areas that are unserved or underserved to the Internet backbone. In June 2023 Dairyland Power Cooperative was awarded a grant in the amount of $14.9 million for a project that will traverse western Wisconsin, Minnesota, and Iowa. The awarded project will deploy 240 miles of fiber optic network along Dairyland Power Cooperative's transmission lines. This fiber network deployment will provide enhanced capacity for last mile providers to reach unserved and underserved households and businesses.

Tribal Broadband Connectivity Program

Administered by NTIA, the Tribal Broadband Connectivity Program makes $3 billion of BIL funding available to federally recognized Tribes for broadband deployment and other critical needs such as telehealth, distance learning, digital inclusion, and affordability. With approximately $1.7 billion in funding committed to date, eight of the 11 federally recognized Tribes in Wisconsin have received a Tribal Broadband Connectivity Award totaling more than $36 million.

Wisconsin Federally Recognized Tribes	Federal Tribal Broadband Connectivity Grant Awards
Lac Courte Oreilles Band of Lake Superior Chippewa	$442,734
Lac du Flambeau Band of Lake Superior Chippewa	$25,660,167
Menominee Indian Tribe of Wisconsin	$500,000
Red Cliff Band of Lake Superior Chippewa	$8,047,002
St. Croix Chippewa Indians of Wisconsin	$302,032
Forest County Potawatomi Community	$125,232
Oneida Nation	$498,217
Sokaogon Chippewa Community, Mole Lake Band of Lake Superior Chippewa	$452,162
Stockbridge-Munsee Band of Mohican Indians	$499,571
Total	**$36,527,117**

Emergency Connectivity Fund

Launched in 2021, the Emergency Connectivity Fund (ECF) is administered by the FCC and provides funding for schools and libraries to support students digital learning needs such as purchasing devices and supporting off-campus learning. ECF funding has been awarded in three windows and to date the Department of Public Instruction and schools and libraries have successfully applied for and received an award commitment for over $90 million dollars that support over 450 different schools, school districts, and libraries that applied for funding.

RURAL DIGITAL OPPORTUNITY FUND (RDOF)

The Federal Communications Commission (FCC) administers the RDOF program. The FCC made eligible census blocks that lacked service of at least 25/3 Mbps. The $20.4 billion dollar program was divided into two phases. In 2020, Phase One was bid upon via a reverse auction mechanism and in Wisconsin 240,546 locations were assigned $373,715,051 in support over 10 years. After the reverse auction was complete and bids were assigned, winning bidders were to complete a long-form application process. LTD Broadband, the largest winning bidder in Wisconsin by total funding support, did not successfully complete the long-form process and was not authorized for funding by FCC. In total, that meant LTD's 88,070 locations and $189,270,184 were withdrawn, and remain unsupported by RDOF funding for broadband deployment. Within Wisconsin, other RDOF recipients defaulted on relatively minor portions of their award, including Wood County Telephone Company d/b/a Solarus, Pierce Pepin Cooperative Services, and small portions of Charter Fiberlink CCO, LLC. All authorized RDOF recipients in Wisconsin will build infrastructure in the gigabit service tier. Allocations of RDOF funding within Wisconsin can be seen as a layer in the Wisconsin Broadband Planning Map.

AMERICAN RESCUE PLAN ACT (ARPA) CAPITAL PROJECTS FUND

Governor Tony Evers has announced that the U.S. Department of Treasury has approved his plans to allocate $42 million in federal ARPA funds through the Capital Projects Fund. Funds will be made available via grants to ensure that all communities have access to the high-quality modern infrastructure including broadband needed to access critical services. Capital Projects Fund infrastructure funding will target locations in Wisconsin lacking access to wireline connections of 100/20 Mbps. Capital Projects Fund Broadband Infrastructure grants are anticipated to be awarded within the next year. Additional allocations of Capital Projects Fund program funding are still pending approval by Treasury and have not been determined.

FCC RELEASES BROADBAND FUNDING MAP

On May 15, 2023, the FCC released an initial draft of their Broadband Funding Map. BIL required the FCC to "to establish an online mapping tool to provide a locations overview of the overall geographic footprint of each broadband infrastructure deployment project funded by the Federal Government." The map provides users with the ability search by address and learn more about federal funding programs in their area. FCC continues to refine data in the Broadband Funding Map, and further updates are anticipated in the coming year.

PROGRESS UPDATE: RECOMMENDATIONS FROM YEARS PRIOR

Under the leadership of Governor Evers, the Task Force has overseen a historic shift in broadband connectivity in its three years of convenings. Recommendations of the Task Force serve as a catalyst for success and have led to Wisconsin being nationally recognized for its broadband grantmaking.

Since the publication of the inaugural Governor's Task Force on Broadband Access report in June 2021 and the publication of the second Governor's Task Force on Broadband Access report in June 2022, significant progress has been made on the Task Force's goals and recommendations. Below is a discussion of a number of 2021 and 2022 recommendations in which the state made notable progress.

In 2021 and 2022, the Task Force recommended to **collect internet access data from all ISPs at household and business levels of granularity**. In November of 2022, the FCC released a pre-production draft of its new National Broadband Map. This map was the first of its kind, showing address level broadband coverage data for homes and businesses in the nation. The release of this map was in response to the Broadband DATA Act. A recent update to the map was released in May of 2023 and considered millions of availability and location challenges from the public, state, local, and Tribal governments. The National Broadband Map will continue to improve and be updated twice a year.

In 2021 and 2022, the Task Force made several recommendations related to assisting local communities and regions with broadband planning. Those included:

- **Establish and support a coalition of willing, engaged broadband leaders to connect communities with providers, local and regional partners, planning and technical assistance opportunities, funding opportunities, and resources**.
- **Create planning and implementation grants for regions and communities**.
- **Create and fund technical assistance programs to guide communities in developing broadband plans, navigating funding opportunities, and achieving their broadband goals and make these funds available to existing trusted organizations such as schools, libraries, nonprofits, higher education, and economic development organizations**.
- **Create a 'playbook' or 'how-to' guide to assist communities and local leaders in broadband and digital equity planning efforts. The guide should include best practices, success stories or case studies, mapping resources, and models that have worked in Wisconsin or are working well in other states.**

In February of 2023, the PSC established a BEAD Local Planning Grant Program that is enabling eligible entities to opt-in to receive formula funding to participate in broadband planning activities that will inform the state 5-Year BEAD Action Plan which will guide broadband deployment and implementation of the BEAD program. The PSC is seeking to gain insight into each local community's vision for broadband development. Local plans can include outreach initiatives, conducting local needs assessment and developing local or regional broadband plans.

Eligible applicants for the BEAD Local Planning Grant formula funding included Wisconsin counties and federally recognized Tribes. Eligible regional groups included the nine Wisconsin Regional Economic Development Organizations as well as the Great Lakes Inter-Tribal Council. All 72 Wisconsin counties and five Tribes opted into the formula grant, with 48 of these entities collaborating through one of six participating Regional Economic Development Organizations. In total, $1.5 million dollars were allocated for this program. The performance period of the grant will run until May of 2025.

The PSC has since released Community Broadband Planning Resources to assist communities with planning and preparing for current and future funding sources. Additionally, the University of Wisconsin – Madison, Division of Extension (Extension) and the Office of Rural Prosperity, housed within the Wisconsin Economic Development Corporation (WEDC) are providing direct technical assistance to local communities and regions. Extension and WEDC are also working on an updated and revised 'toolkit' to assist communities. On behalf of the PSC, Extension is also conducting a county and Tribal broadband survey to better understand efforts being made at the local level towards increased broadband availability, access, and adoption.

The work of the PSC, Extension, WEDC, and other stakeholders has made meaningful progress towards creating a more robust, engaged, and informed community of local leaders and champions.

In 2022, the Task Force recommended to **Fund and support annual statewide mapping and data collection efforts (e.g., GEO software, Wisconsin Internet Self Report, Department of Public Instruction Digital Equity Surveys) that support stakeholder networks, physical infrastructure networking, and overall broadband planning efforts**. The GEO software, now known as Breaking Point Solution's OptiMap, has been funded for another year through an allocation of BEAD planning funding. Additionally, the PSC's Wisconsin Internet Self-Report (WISER) survey and tool continues to collect vital data regarding Wisconsin households and businesses access, cost, and adoption information. Wisconsin schools completed a third year of the optional Digital Equity Data collection to gather detailed information about student access to devices and broadband services. During the 2022-23 school year, 338 out of 421 school districts reported digital equity data to DPI.

In 2022, the Task Force recommended to **Encourage and support coordination with Tribal entities in broadband planning, resources deployment, and funding**. In 2023, the PSC engaged with Tribal leaders in consultations regarding the Infrastructure Investment and Jobs Act's BEAD and DE programs. Discussions included broadband needs, affordability, devices, and more. A key takeaway from the consultations were how each Tribe has had a unique experience, and unique needs, in their pursuit of digital equity and broadband deployment in their community.

And finally, in 2022, the Task Force recommended to **Continue advancing and reviewing the goals from the 2021 Task Force report**. Task Force members spent considerable time reviewing the goals of past reports and updated those goals to better reflect today's current environment. Reviewing goals is an annual exercise for the Task Force.

Since Gov. Evers took office in 2019, Wisconsin has disbursed or committed over $345 million towards expanding broadband to provide more than 395,000 homes and businesses access to new or improved service. As part of his 2023-25 Executive Budget, Governor Evers proposed several additional broadband provisions that would incorporate previous Task Force recommendations. His proposal included:

- Investing $750 million for the Broadband Expansion Grant program with a requirement that the Public Service Commission spend at least $75 million annually on grants.
- Updating the Broadband Expansion Grant program statutes, including:
    - Defining "unserved" areas as those that lack speeds of 100/20.
    - Allowing the Commission to reevaluate the statutory speed standard every two years to align with changes in technology and market conditions.
    - Requiring service to be "available, reliable, and affordable" for an area to be considered served. Otherwise, an area would be designated as unserved.
    - Increasing the priority of matching funds in grant awards by requiring higher priority for applications contributing at least 40% in matching funds.
    - Establishing a priority criterion for projects that propose to build speeds of 100/100.
    - Requiring the Commission to consider the affordability of service and existing federal funding for broadband in the proposed project area when evaluating grant applications.
    - Establishing a procedure for internet service providers to challenge a grant application by demonstrating it provides "available, reliable, and affordable" service or committing to do so within two years.
- Providing 2.0 additional permanent positions and funding to the State Broadband Office to assist with administration of the expanded Broadband Expansion Grant program and the challenge process.
- Eliminating several statutory restrictions for unserved municipalities to enable them to directly invest in broadband infrastructure and provide service to residents, and apply for grants directly with the Commission.
- Creating a Broadband Line Extension Grant Program, funded at $1.75 million in fiscal year 2023-24 and $3.5 million in fiscal year 2024-25, to provide grants and financial assistance to eligible households to subsidize the cost of a line extension from existing broadband infrastructure to a residence that is not served by a broadband provider.
- Creating consumer protections for broadband, including protecting against discrimination, limiting interruption of service, ensuring adequate service, and establishing standard advertising practices.
- Modifying current law to provide the commission with additional flexibility to reallocate state universal service funds for digital equity expansion initiatives.

PREPARING TO CAPITALIZE ON FEDERAL FUNDS

Preparing to capitalize on federal funds was a primary focus of the work of the Task Force this year. The Task Force heard from several presenters on this topic including the Public Service Commission of Wisconsin and the National Telecommunications and Information Administration (NTIA). Specifically, the Task Force heard from and engaged with NTIA's federal program officer for Wisconsin, Carah Koch. The BEAD and DE programs were particularly of interest to the Task Force.

The Task Force also engaged with the public on this topic. At the October meeting of the Task Force in 2022, there was an in-person, joint convening of the Task Force and the Wisconsin Digital Equity and Inclusion Stakeholders Group. Several members of the public attended this meeting and were provided with the opportunity to have their voice be heard. In addition to members of the public, other stakeholders like internet service providers, local communities, and economic development professionals weighed in with their voices. The communication and outreach of the Task Force played an important role in the promotion and opportunity to provide input on the State's plans for the BEAD and DE programs.

Additionally, the Task Force engaged with the perspectives of internet service providers as they prepare to deploy additional infrastructure as a result of the BEAD program. In particular, there was a desire to help smaller internet service providers prepare for the BEAD program. By nature, smaller providers have less resources at their disposal and promoting ways to assist them is key to ensure regulatory requirements are not exclusionary. Low interest loan opportunities such as the Board of Commissioners of Public Lands' State Trust Fund Loan Program are critical for smaller providers partnering with municipalities who might have less available cash-on-hand.

The BEAD and DE programs will provide a once-in-a-generation funding source to address broadband connectivity. These dollars are key for internet service providers to continue to reach those hardest and most costly to service locations in the state. However, additional funds may continue to put pressure on an already strained supply chain and inflationary market. While a complex and challenging issue, finding ways to combat supply chain and inflation issues was a large point of discussion for the Task Force.

When looking at the BEAD program, the Task Force expressed a strong preference for fiber technology to be the primary infrastructure deployed to meet the needs of Wisconsinites. Fiber provides a sustainable and 'future-proof' technology. However, the Task Force noted the value of fixed wireless solutions for the hardest to reach areas.

PREPARING TO CAPITALIZE ON FEDERAL FUNDS RECOMMENDATIONS

- Wisconsin needs to plan, coordinate, distribute, and capitalize on the increasing federal funding dollars available, including those through the Bipartisan Infrastructure Law (BIL) such as the Broadband, Equity, Access, and Deployment (BEAD) Program and Digital Equity Programs.
- Support the Wisconsin Broadband Office and Public Service Commission of Wisconsin in their drafting and submission of Wisconsin's 5-Year BEAD Action Plan and Digital Equity Plan.
- Find ways to reduce or combat the impacts of inflation and supply chain pressures to create a more hospitable environment for broadband expansion.
- Continue to find ways to braid BIL funds with other funding sources such as local, state, private, philanthropic, and other federal.
- Recognize and emphasize the importance of other sources of funding beyond the BIL. Advocate for increasing those funding sources to complement the BIL.
- Ensure that all Wisconsinites and broadband stakeholders are aware of federal and state funding opportunities by way of technical support, sharing best practices, webinars, workshops, newsletters, local, regional, and statewide in-person meetings, providing general assistance, and supporting applications.
- Help to secure Wisconsin's future by encouraging the use of federal dollars on forward thinking and future proof solutions.
- Support, engage with, and consider the needs of Internet Service Providers and Telecommunications Associations in their preparations for the BEAD program.
- Explore and promote available low-interest loan programs that help to support internet service providers in their pursuit of broadband infrastructure expansion.
- The Wisconsin State Legislature should consider flexibilities and/or waivers to existing State statutes that may be burdensome to federal funding investment.
- Fiber technology should be prioritized, but not exclusively required in publicly funded broadband deployment. Terrestrial fixed wireless solutions are viable in particularly hard to reach areas and/or as a short-term solution.

CASE STUDY 1: Internet for All Wisconsin Listening Tour

The Wisconsin Broadband Office, housed within the Public Service Commission of Wisconsin, recently hosted nine in-person and two virtual listening tours stops in the state. The in-person stops were hosted in partnership with Wisconsin's nine Regional Economic Development Organizations in Menomonie, Hayward, Rhinelander, Milwaukee, La Crosse, Appleton, Madison, Platteville, and Wisconsin Rapids. The Internet for All Wisconsin Listening Tour provided an opportunity for members of the public and other stakeholders to share their experiences, ideas, and vision for a more connected Wisconsin. Participants learned more about the Office's planning efforts to connect Wisconsin through two Internet for All programs, the BEAD and Digital Equity programs. Approximately 300 stakeholders attended Listening Tour events.

Meeting attendees formed small, staff facilitated groups and discussed questions such as "What barriers exist to providing access to high speed broadband for all homes and businesses within the state of Wisconsin?", "What would success look like for the people, businesses and organizations if Wisconsin had Internet for All?", "In locations where broadband infrastructure is not an issue, what other challenges exist to the everyday use of the internet?", and "What can the Wisconsin Broadband Office do to facilitate making high-speed broadband available for all homes and businesses in the state?" Following small group discussions, meeting attendees reported out on their conversations and had opportunity to provide feedback and opinions on other groups notes and ideas.

For any members of the public that were not able to attend the meetings in-person or virtually, there was opportunity to provide feedback through an online survey.

The Wisconsin Broadband Office will be compiling the experiences of Wisconsinites including their valuable feedback and notes collected during the meetings. This will help to inform the state's 5-Year BEAD Action Plan and State Digital Equity Plan, both of which the office is currently drafting. The summary of findings from the Listening Tour will be posted in the docket 5-BP-2023.

Photo: Meeting attendees discuss their vision for a more connected Wisconsin.

SUPPORTING LOCAL COMMUNITIES

Previous Task Force reports have heavily focused on the topic of supporting local communities, but the need remains and it carried through as a significant point of emphasis for the Task Force this year. The Task Force heard from several presenters on this topic, including the University of Wisconsin – Madison Division of Extension and the Wisconsin Economic Development Corporation's Office of Rural Prosperity. Local communities at all levels have smart, skilled, and diligent members but additional assistance is often still desired and necessary when it comes to broadband.

The Task Force spoke at length about what are essential components to a broadband planning toolkit. This included things like specific steps communities should be taking, success stories from in and outside of the Wisconsin, how to engage and partner with internet service providers, what stakeholders should be at the planning table, finding and support your local broadband champion, and who can be a trusted figure in the community to go to when additional technical assistance might be needed.

The efforts of the technical assistance providers across Wisconsin, coupled with toolkits, and financial resources such as those offered through the BEAD Local Planning Grant Program, will ultimately help local communities plan and prepare to execute their broadband vision.

SUPPORTING LOCAL COMMUNITIES RECOMMENDATIONS

- Support organizations such as the Public Service Commission of Wisconsin, University of Wisconsin – Madison Division of Extension, and Wisconsin Economic Development Corporation in their technical assistance efforts.
- Maintain a continued focus on how best to assist local communities in broadband planning to ensure their involvement and participation in the rollout of federal funds.
- Support local broadband champions, including digital navigators embedded within the community. Help these champions and navigators carry out and see through their community connectivity vision.
- Continue to improve and promote broadband planning playbooks and toolkits available to local communities.
- Find more ways for the public to better understand and utilize broadband maps and data.
- Encourage public participation and input in the planning process where appropriate.
- Engage local communities through statewide listening sessions and take information and stories to the Task Force for continued advancement and strengthening of the Task Force annual report.

CASE STUDY 2: K-12 School Districts as Partners in Broadband Expansion

In rural areas, the school is the center of community activity as well as possibly the largest employer. K-12 school districts are critical partners in broadband expansion efforts for several reasons:

- Knowledge on where coverage gaps exist;
- Mission is to serve *all* students;
- Effective partners for broad community outreach (not just K12 families, but also grandparents & other family members, as well as use of district social media);
- Resource for speed test data and letters of support.

These principles were utilized by two school districts in Central Wisconsin. And as with all community-based projects, each had a motivated leader.

Alma Center-Humbird-Merrillan – Jackson County

After attending an initial large, county-wide stakeholder meeting, Alma Center-Humbird-Merrillan (ACHM) then-Superintendent Paul Fischer volunteered to be a member of a smaller action group in Jackson County. He was well-aware of specific coverage gaps faced by students and faculty (even *with* hotspots), but during informal small-town conversations also heard from numerous residents frustrated with lack of broadband speed/reliability and knew the school could be part of the solution. The Jackson County action group provided the structure for identifying an ISP partner, and Fischer was off and running. The Town of Alma was identified as the geography for a fiber-to-the-premise (FTTP) grant application because it had the largest number of ACHM students and a Town Board willing to partner.

Under Fischer's leadership, the school district reached out to parents and community members for accurate speed test data and letters of support. He secured matching funds from traditional sources such as Jackson County, Town of Alma, and the ACHM Board of Education as well as from two area service clubs and two agricultural businesses. The result was a grant from the PSC bringing FTTP to 338 residential and 10 business locations.

Fischer is now CESA 4 Administrator and serves 26 school districts. Reflecting on lessons learned through the Town of Alma project he states, "This took a lot of time and commitment. As superintendent I was an advocate for students, but in a rural area also a community leader. As support builds energy is created and you see an impact for real people." Under the leadership of current ACHM Superintendent Lynn Halverson, the district is educating families on the Affordable Connectivity Plan (ACP).

Pittsville School District – Southwest Wood County

A local Pittsville community member frustrated with her internet service looked at the PSC broadband maps and learned that southwest Wood County was the most unserved/underserved area. Since that is primarily the geography of the 358 square mile Pittsville School District (PSD), she reached out to then- Superintendent Rodney Figuroa. He knew where the coverage gaps existed, even after distributing 60 hotspots. The PSD sprang into action gathering actual speed test data, reaching out to parents, faculty and the community for testimonials and letters of support. With matching funds from Wood County, this resulted in a successful PSC grant application for seven fixed wireless towers delivering up to 25/3 speeds to every corner of the district.

Current Superintendent Jason Knott shares "Now that our students have access to higher speeds, we are focusing on affordability by connecting families and community members to the ACP through personal outreach, social media and information at events."

CASE STUDY 3: Technical Assistance Efforts

The University of Wisconsin – Madison Division of Extension (Extension) and the Office of Rural Prosperity (ORP), housed with the Wisconsin Economic Development Corporation, have been engaging in technical assistance efforts with local communities across Wisconsin. There has long been a need for increased technical support at the local level to help bridge the staff, time, knowledge, and expertise gap that commonly exists at the local level when it comes to broadband connectivity. To help meet this need, Extension and ORP have been offering direct technical assistance to these communities.

Extension has been assisting Wisconsin's counties in their broadband planning efforts and the ORP has been assisting Wisconsin's Regional Economic Development Organizations. These technical assistance efforts include assisting communities that are applying and preparing for the BEAD Local Planning Grant Program, drafting a community broadband plan and vision, connecting and convening broadband stakeholders, identifying key barriers and opportunities, and much more.

In addition to direct assistance to communities, Extension and ORP are hosting webinars workshops to provide virtual learning opportunities to local broadband leaders. To complement these efforts, Extension and ORP are also developing a toolkit of broadband planning resources. This new and updated toolkit will build upon previous broadband toolkit efforts. Extension and ORP's efforts are working with the goal of a more informed, engaged, and robust network of local broadband champions.

Photo: University of Wisconsin – Madison Division of Extension's Community Economic Development logo and the Wisconsin Economic Development Corporation's Office of Rural Prosperity logo.

WORKFORCE DEVELOPMENT

Workforce development was another critical area of focus for the Task Force in this year of work. With significant funding already have been injected into the telecommunications industry, and even more on the way, meeting the ever-increasing need for more workforce has been a key challenge. The Task Force heard presentations from a panel of workforce experts and also from several Northwood Technical College representatives.

The Task Force felt that it was very important that Wisconsin create a sustainable pipeline of talent and help aid in the connection of that pipeline to potential employers. Workforce development boards, economic development organizations, high schools, technical colleges, internet service providers, state agencies, and more will all play an important role in ensuring this pipeline is available and sustainable. Wisconsin must include all available workforce and make concerted efforts to engage veterans, formerly incarcerated individuals, individuals who are members of a racial or ethnic minority group, and more.

The Task Force also felt that it was important to promote jobs in the broadband sphere as a viable, meaningful, well-paying career. Increased awareness in areas like high schools will lead to more talent and dollars staying inside Wisconsin's economy. Many internet service providers would prefer to hire local and train within their company. To do that, Wisconsin needs a local pipeline of talent.

Leveraging BIL dollars, the Workforce Planning Grant Program was created by the Public Service Commission of Wisconsin. This program awarded funds to two entities that are gathering important insights and recommendations for a workforce strategy to ensure BEAD implementation is successful in all regions of the state.

Workforce development needs to be an ongoing area of emphasis as the state plans to administer the BEAD and DE programs. Considering and executing these recommendations will put Wisconsin in a better position to succeed with respect to workforce development in the telecommunications industry.

WORKFORCE DEVELOPMENT RECOMMENDATIONS

- Support and include organizations such as workforce development boards, economic development, labor groups and unions, contractors, high schools, higher education and technical colleges, and State agencies (DPI, DWD, PSC). Ensure that these organizations are being connected with internet service providers and telecommunications associations to increase awareness and create a sustainable and viable pipeline of talent.

- Ensure sufficient and trained telecom workforce for internet service providers, contractors and subcontractors to construct, operate and maintain current and new broadband infrastructure.

- Where practicable and with input from higher education and employers, Wisconsin should encourage hiring from within local communities to help retain local talent and grow good jobs within Wisconsin.

CASE STUDY 4: Northwood Technical College

Northwood Technical College, formerly known as Wisconsin Indianhead Technical College, is primarily located in Rice Lake. Northwood offers several broadband academy courses including a Level 1: Broadband Customer Service Specialist Badge and a Level 2: Broadband Installer Badge. This virtual coursework prepares students for on-the-job work experience via the Broadband Apprenticeship program also offered at Northwood.

Northwood works with state and federal internet service provider associations such as the National Telephone Cooperative Association (NTCA) and Wisconsin State Telecommunications Association (WSTA) to develop a sustainable pipeline of talent for the telecommunications industry. This pipeline of talent will be an essential component to the success of the Internet for All programs.

Northwood was recently recognized for their partnership with NTCA at the White House. The event highlighted commitments in critical infrastructure sectors such as broadband under the Biden administration's "Talent Pipeline Challenge".

Photo: Northwood Technical College logo

MAPPING AND DATA

Mapping and data discussions played a large role in the work of the Task Force this year. They also played a significant role in the previous discussion and work of the Task Force in past reports. The Task Force regularly received updates from Public Service Commission of Wisconsin staff on the release, implementation, and refinement of the National Broadband Map, and other broadband mapping resources developments coming out of the Wisconsin Broadband Office.

The mapping and data discussion is even more significant with the FCC's transition from census block based broadband coverage mapping to address based broadband coverage mapping. The data and maps that decision makers are using has steadily been improving over the past year. Those improvements are in part due to the more robust challenge process offered by the FCC. They are also in part due to the increase in local data collected by the WISER survey and Breaking Point Solution's OptiMap software and speed testing.

Putting better maps and data in the hands of decision makers at the federal, state, and local levels will lead to better outcomes for all involved.

MAPPING AND DATA RECOMMENDATIONS

- Promote the Federal Communications Commission's (FCC) National Broadband Map and the opportunities for the public and stakeholders to challenge availability and location data within the map.

- Continue to support statewide speed testing and surveying such as funding and promotion of the OptiMap (formerly known as Geo Partners) software and the Wisconsin Internet Self-Report (WISER) survey.

- Support local communities in their efforts to pursue, intake, and make meaning of local data.

- Align state mapping efforts and products with the federal government.

- Find ways to quantify and capture the quality of broadband service beyond basic metrics like download and upload speed.

CASE STUDY 5: Wisconsin Broadband Planning Map

In May of 2023, the Wisconsin Broadband Office released its [Broadband Planning Map](#). The map displays Wisconsin Internet Self-Report (WISER) survey response data, state administered broadband infrastructure funding areas, federally administered broadband infrastructure funding areas, broadband internet coverage data, and coverage summaries by County, municipality, census tract, census block group, and census block.

This map provides local communities with valuable broadband planning layers in one convenient tool. As highlighted by past Task Force reports, accurate data and maps are critical to help community leaders make informed decisions. Maps also help to illustrate and identify key areas of need to help secure additional resources by applying for external grant funding.

We encourage Wisconsin communities to check out this resource and stay tuned as more updates and data are expected to be added to the map soon. Future updates will incorporate OptiMap speedtest data and location-level service data.

Photo: Screenshots of the Wisconsin Broadband Planning Map
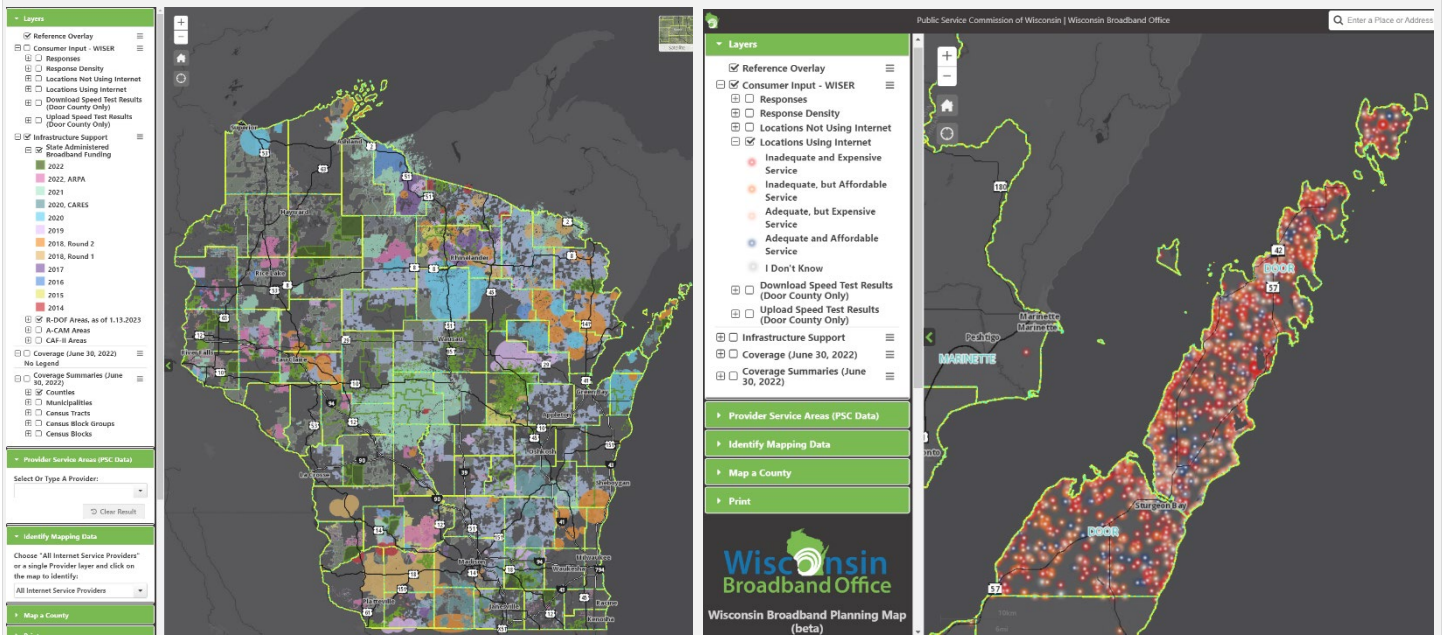
CASE STUDY 6: National Broadband Map

In November of 2022, the FCC released a pre-production draft of its new National Broadband Map. This map was the first of its kind, showing address level broadband coverage data for homes and businesses in the nation. Previously, the FCC had mapped broadband coverage data as reported by the census block. This led to the overstatement of broadband coverage and inaccuracies in the map. The new map displays fixed and mobile broadband availability in the United States and allows users to search by address, view provider coverage areas, display location and area summaries, download the data, and more. The map also allows users to filter by data vintage, residential vs business service, technology type, and speed.

A recent update to the map was released in May of 2023 and incorporated millions of availability and location challenges from the public, state, local, and Tribal governments nationwide. Challenges to the map are a critical mechanism to create the most accurate and up-to-date map possible. Location challenges allowed users, where appropriate, to challenge that an address was either incorrectly located, missing, an incorrect unit count, not contained within the correct building footprint, not broadband serviceable, or the wrong building type. Availability challenges allowed users to challenge that a provider was incorrectly reported at an address for reasons such as the provider requested more than the standard installation fee to connect service, failed to schedule a service installation within 10 business days of request, denied a request for service, or did not offer the technology reported to be available. As a result of other advancements and the challenge process, the National Broadband Map will continue to improve and be updated twice a year.

The Task Force encourages members of the public to check out their address and submit location and availability challenges as appropriate. The Public Service Commission of Wisconsin recently engaged in a "Badger the FCC" campaign encouraging Wisconsinites to check and challenge the map. This effort was to make sure the National Broadband Map was as accurate as possible so that Wisconsin could receive its fair share of federal broadband infrastructure funding.

Photo: Screenshot of the FCC's National Broadband Map
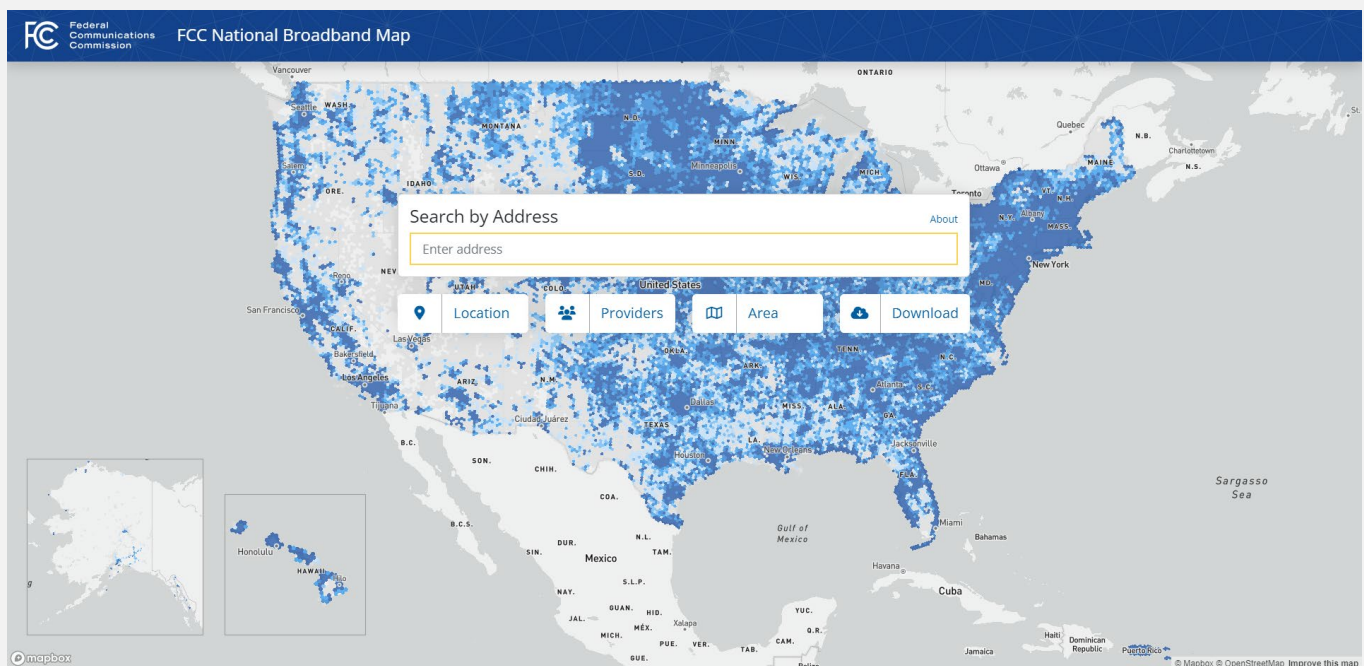
AFFORDABILITY AND ADOPTION

The fact that access to broadband infrastructure and services alone is not enough has been a large point of discussion for the Task Force for many years. Access to *affordable* and *adoptable* broadband service is critical to a more equitably connected Wisconsin. Wisconsin needs to continue their efforts to promote the Affordable Connectivity Program to eligible households. Wisconsin will be more connected and better off if we can maximize the percentage of eligible households that are taking advantage of the program. Additionally, the Task Force has made clear their desire to see funding for the ACP program continue in a more sustainable fashion. The program provides Wisconsin families and households with the financial means to access essential services.

AFFORDABILITY AND ADOPTION RECOMMENDATIONS

- Continue outreach and promotion of the Affordable Connectivity Program (ACP) to reach the highest possible levels of participation in Wisconsin.
- Maintain federal funding for the ACP program to ensure access to this vital program for eligible households in Wisconsin. Consider establishing a state internet assistance affordability program.
- Increase outreach and engagement with underserved populations such as aging individuals, incarcerated individuals, veterans, individuals with disabilities, individuals with a language barrier, individuals who are members of racial or ethnic minority groups, and individuals who primarily reside rural areas to ensure all Wisconsin residents can make full use of the internet.

- Wisconsin should develop and define standard metrics for affordability of broadband services for all Wisconsinites.

CONCLUSION

As the Task Force discussed priorities for report recommendations, it concentrated on five main themes and areas of focus: Preparing to Capitalize on Federal Funds, Supporting Local Communities, Workforce Development, Mapping and Data, and Affordability and Adoption. While these areas and recommendations are separated in the report, it is critical to recognize that these five areas of focus are interconnected. This report should be considered and viewed in its entirety. Connecting these areas of focus will be critical to accomplishing Wisconsin's goal of universal broadband access, affordability, and adoption.

This report also gives a nod to previous Task Force reports in 2021 and 2022. Each report builds upon the work and success of previous reports. It is key to remember this when looking at the year-to-year work of the Task Force. As such, the Task Force recommends that they continue to revisit, revise, and track the Task Force's goals and progress as needed.

The State of Wisconsin, Governor's Task Force on Broadband Access, Public Service Commission of Wisconsin, members of the public, and other broadband stakeholders find themselves in a momentous time with regard to broadband connectivity. Governor Evers has been a champion for broadband. Since he took office in 2019, Wisconsin has disbursed or committed over $345 million towards expanding broadband to provide more than 395,000 homes and businesses access to new or improved service. Wisconsin has an opportunity to continue to build on its successes. The Bipartisan Infrastructure Law provides a once-in-a-generation funding opportunity that must be maximized. Broadband is a complex yet solvable problem, and together we can truly achieve Internet for All.