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Wisconsin Broadband Office

Public Service Commission of Wisconsin
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Wisconsin Digital Equity Plan

2023

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Glossary of Terms

Note: This Glossary is for the purpose of understanding the concepts discussed in this plan and do not represent an absolute technical definition.

Access (to broadband): The ability to connect to high-speed broadband internet using an internet-enabled device such as a desktop computer, laptop, or tablet.

Affordable Connectivity Program (ACP): The Affordable Connectivity Program is an FCC benefit program that helps ensure that households can afford the broadband they need for work, school, healthcare and more. The benefit provides a discount of up to $30 per month toward internet service for eligible households and up to $75 per month for households on qualifying Tribal lands. Eligible households can also receive a one-time discount of up to $100 to purchase a laptop, desktop computer, or tablet from participating providers if they contribute more than $10 and less than $50 toward the purchase price.

ACP Outreach Grant Program: Federal Communications Commission program that provides eligible governmental and non-governmental entities with the funding and resources needed to increase awareness of and participation in the ACP program.

Adoption (of broadband): The process of obtaining regular access to high-speed broadband internet through a secure and convenient network.

Affordability (of broadband): The ease of purchasing high-speed affordable broadband internet service relative to consumer income.

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Bipartisan Infrastructure Law: Also known as the Infrastructure Investment and Jobs Act (IIJA), signed into law November 15, 2021, provides federal funding for critical infrastructure including but not limited to roads, bridges, rails, and broadband.

Broadband Cost Burden: The cost burden experienced by households relative to consumer income.

Broadband Deployment: The process by which broadband internet infrastructure is constructed, installed, and access is made available.

Broadband Serviceable Location (BSL): A residential or business location where mass-market fixed broadband internet service is or can be installed. Each BSL has a unique identification number and is the official location unit used for mapping by the Federal Communications Commission (FCC), and required to be used by states when deploying funds through the Broadband Equity, Access and Deployment (BEAD) program.

Cable internet service: Cable modem broadband internet service is delivered using the same coaxial cables used for providing television service.

Census Block: The smallest unit used by the United States Census Bureau.

Copper internet service: Also referred to as Digital Subscriber Line (DSL), this is a wireline transmission technology that transmits data faster over traditional copper telephone lines already installed to homes and businesses.

Covered Populations: Populations recognized by the National Telecommunications and Information Association as having significant barriers to internet access and adoption, per the Digital Equity Planning Notice of Funding Opportunity, which includes:

- Individuals who live in Covered Households. Covered Households means a household, the income of which for the most recently completed year is not more than 150 percent of an amount equal to the poverty level, as determined by using criteria of poverty established by the Bureau of the Census.
- Aging individuals (60 and above)
- Incarcerated individuals, other than individuals who are incarcerated in a federal correctional facility
- Veterans
- Individuals with disabilities
- Individuals with language barriers, including individuals who are English language learners, and have low levels of literacy
- Individuals who are members of a racial or ethnic minority group
- Individuals who primarily reside in rural areas

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Digital Equity (DE): The state wherein all Wisconsinites have the information technology capacity that is needed for full participation in the society and economy of the United States.

Digital Equity Capacity Grant Program: Funded through the Bipartisan Infrastructure Law, $1.44 billion of formula funding that will be allocated to states who successfully complete their Digital Equity Plan, which can be used to administer a competitive state grant program to address digital equity needs.

Digital Equity Competitive Grant Program: Funded through the Bipartisan Infrastructure Law, a $1.25 billion grant program that will be open applicants nationwide that funds annual grant programs for five years to implement digital equity projects.

Digital Equity State Planning Funds: A $60 million grant program for states, territories and Tribal governments to develop digital equity plans.

Download speed: The performance of an Internet connection based on the number of megabytes per second (Mbps) that data travels from the internet to the user's device.

Emergency Connectivity Fund: A $7 billion program administered by the FCC that aims to help schools, libraries, and consortia of schools and libraries provide the tools and services their communities need for remote learning.

Federal Communications Commission (FCC): The federal agency that regulates interstate and international communications through cable, radio, television, satellite, and wire.

Fiber Optic internet service: A high-speed broadband internet technology that converts electrical signals carrying data to light and sends the light through transparent glass fibers.

Fixed-wireless internet service: Internet technology that delivers Internet access to a specific location using radio signals over different channels of spectrum, and often require a direct line-of-sight between the wireless transmitter and receiver.

Internet for All Programs: Funded through the Bipartisan Infrastructure Law, this is the name for the following grant programs: Digital Equity Act Programs, the Broadband Equity, Access, and Deployment (BEAD) program, and the Enabling Middle Mile Broadband Infrastructure Program.

Megabits per second (Mbps): The common measurement of data transfer rates (upload and download) between an internet-enabled device and the internet.

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Middle-Mile Broadband Infrastructure: The segment of a broadband telecommunications network that travels longer distances (often called "long-haul') and links the core network to the local broadband infrastructure that connects directly to homes and businesses.

National Broadband Map: Created by the Broadband DATA Act, the FCC developed a location-based broadband map that show where there is a broadband serviceable location (BSL), available providers, broadband technology and speeds, and a status of whether a location broadband "served" or "unserved."

National Telecommunications and Information Authority (NTIA): The federal agency in the Department of Commerce responsible for managing telecommunications and information policy programs and policymaking, including the Digital Equity and BEAD programs.

Plain Language Design: Clear writing so that readers can find, use and understand what they are reading.

Regional Economic Development Organizations (REDOs): Wisconsin Economic Development Corporation's nine regional economic development partners.

Stakeholders: Individuals or organizations with an interest and/or concern in broadband internet access and adoption.

Telehealth: The provision of healthcare remotely by means of telecommunications technology.

Tribe: The eleven federally recognized Native American Tribes in Wisconsin.

Underserved: Locations lacking access to Reliable Broadband Service offered with—(i) a speed of not less than 100 Mbps for downloads; and (ii) a speed of not less than 20 Mbps for uploads; and (iii) latency less than or equal to 100 milliseconds.

Unserved: Locations that have no access to broadband service, or (b) lacking access to Reliable Broadband Service offered with – (i) a speed of not less than 25 Mbps for download; and (ii) a speed of not less than 3 Mbps for uploads; and (iii) latency less than or equal to 100 milliseconds.

Upload speed: The performance of an Internet connection based on the number of megabytes per second (Mbps) that data travels from the user's device to the internet.

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Workforce Development Boards: Organizations dedicated to promoting innovation and providing quality local workforce development programs and services to businesses and residents.

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Executive Summary

The Wisconsin Broadband Office and its partners formed this Wisconsin Digital Equity Plan by engaging communities through targeted outreach, gathering data, and conducting analysis to understand the unique needs of Wisconsin's covered populations. While this plan is rooted in data and analysis of digital equity needs, it is also centered around stories and direct experiences of Wisconsinites engaged through this outreach. A deeper understanding of communities' needs and barriers to digital equity informed a digital equity vision and mission, supported by more detailed values that guide the goals of this plan.

The Wisconsin Digital Equity Plan sets an ambitious vision to make sure all Wisconsinites will have equitable access to affordable broadband service and the capacity to fully engage in a digital society is the foundation of the plan. The mission coalesces around five core values that capture the many pieces that are needed to achieve true digital equity across the state. The values that frame the plan are:

Access: *Expanding high speed internet access to every residence, business, and institution in the state.*
Affordability: *Ensuring broadband and key digital services are affordable for all.*
Adoption: *Ensuring all residents can connect to the internet, with the appropriate accessible, internet-enabled devices, skills, information, and services specific to their needs in real time.*
Trust: *Providing readily accessible resources and supports to build trust with communities and ensure all feel safe when accessing the internet.*
Sustainability: *Supporting intentional activities and investments for ongoing device access, digital skills education, and affordable broadband subscriptions.*

For each of these values, targeted goals and objectives were crafted to address specific digital equity gaps in Wisconsin. This includes both short- and long-term goals that are adaptable, knowing that digital equity needs are ongoing and evolving. The goals and objectives can be applied to each covered population, although not always to the same extent, particularly the strategies employed to achieve these goals will not be the same across all cover populations. Strategies will be different but the need for these strategies to be embedded in the community and culturally relevant to populations was a notable similarity across all covered populations. While targeted strategies to reach goals for each covered population will be different, the following overarching strategies have been identified to guide this digital equity plan:

1. Engage new stakeholders and grow existing partnerships to expand the Wisconsin Digital Equity ecosystem.
2. Develop programs and activities to support and compliment the Digital Equity Plan strategies.

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The Broadband Office identified existing digital equity assets across the state that can support this work. These assets are vital to the success of the plan and are considered partners in this work. Many of these assets were instrumental in outreach efforts to covered populations.

This Digital Equity Plan has been carefully aligned with Broadband Equity, Access and Deployment (BEAD) program, specifically the BEAD Five-Year Action Plan. As digital equity work progress and needs evolve, the broadband office will ensure ongoing alignment with BEAD and other broadband-related efforts in the state to achieve Internet for All Wisconsin.

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Wisconsin Digital Equity Plan

Values and Goals

ACCESS

Expanding high speed internet access to every residence, business, and institution in the state.

Goals

- Achieve the highest possible level of broadband deployment and adoption.
- Deliver sustained, long-term impact on broadband access and digital opportunity for all Wisconsin residents.

AFFORDABILITY

Ensuring broadband and key digital services are affordable for all.

Goal

- Increase the affordability and reliability of broadband service in Wisconsin.

ADOPTION

Ensuring all can connect to the internet, with the appropriate accessible, internet-enabled device, skills, information and services specific to their needs in real time.

Goals

- Support local digital literacy champions and digital navigators embedded within the community and trusted organizations that support the needs of covered populations.
- All Wisconsinites will have accessible, culturally responsive resources to grow their digital literacy skills.
- All Wisconsinites have access to resources and have the needed knowledge and resources to maintain cyber security.
- Ensure every Wisconsinite has access to an internet enabled device(s) and assistive technologies, that meets their needs.
- Ensure all Wisconsin populations and communities have accessible, first language, culturally responsive technical support.

TRUST

Providing readily accessible resources and supports to build trust and safety when accessing the internet.

Goals

- All WI communities have resources, access to training and support that is culturally relevant, in their native languages, and clearly provided by a legitimate source that they trust.
- Fostering trust and transparency among state government, local government, providers, and communities.

SUSTAINABILITY

Supporting intentional activities and investments for ongoing device access, literacy, and affordable broadband subscriptions.

Goals

- Support Digital Equity work by expanding cooperation and partnerships of community-based organizations, anchor institutions, local governments, philanthropic groups, and other trusted local entities.
- Ensure community-based organizations, anchor institutions, local governments, philanthropic groups, and other entities engaging in Digital Equity work are aware of and pursuing available funding sources.

Section I: Introduction and Vision for Digital Equity

1. Introduction

In developing this plan, the Public Service Commission (PSC) and partners engaged in over 184 meetings with members of the covered populations, the organizations representing them and other digital equity stakeholders from November of 2022 through September of 2023.
The National Telecommunications and Information Administration (NTIA) provided Census data that estimates that 79 percent of Wisconsinites are a covered population as defined by the Digital Equity Act.[i] The covered populations include:

- Individuals who live in Covered Households. Covered Households means a household, the income of which for the most recently completed year is not more than 150 percent of an amount equal to the poverty level, as determined by using criteria of poverty established by the Bureau of the Census.
- Aging individuals (60 and above)
- Incarcerated individuals
- Veterans
- Individuals with disabilities
- Individuals with language barriers, including individuals who are English language learners, and have low levels of literacy
- Individuals who are members of a racial or ethnic minority group
- Individuals who primarily reside in rural areas

The stories staff heard at those meetings are at the heart of this report. The PSC also worked with partners to develop surveys to capture the barriers to achieving digital equity (DE) as well as potential solutions to these barriers. The PSC hired a consultant to gather in-depth data on broadband access and affordability throughout the state. Using these resources, the agency was able to set meaningful goals and strategies aimed at ensuring the opportunity for full digital participation by every Wisconsinite.

Wisconsin is both an urban and rural state. Milwaukee and Madison are sizeable metropolitan areas located in the southern part of the state. The northern part of the state is extremely rural, with several counties having populations of less than 10,000 people. The interior of the northern part of the state is dominated by farms and forests. The state has coastlines on both Lake Michigan and Lake Superior. This unique geography and population demographics add to the challenges in achieving digital equity across the state.

With these unique challenges also come opportunities. This plan identifies Values, Goals, Objectives, Strategies and Metrics to not only address the current state of Digital Equity, but

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also to build out a sustainable ecosystem of digital opportunity and ensure that all Wisconsin residents and communities benefit from high-speed broadband.

2. Vision and Mission

Vision:
All Wisconsinites will have equitable access to affordable broadband service and the capacity to fully engage in a digital society. High-speed broadband will benefit all residents and communities.

Mission and Values:
This Wisconsin Digital Equity Plan coalesces around five core values that capture the many pieces that are needed to achieve true digital equity across the state. Goals and their respective detailed objectives within this plan are organized under these core values. The PSC and its partners will engage in activities pursuing these goals prioritizing the following five core digital equity values:

- **Access:** *Expanding high speed internet access to every residence, business, and institution in the state.*

  All Wisconsin residents require access to high speed, reliable internet service to meet their specific needs and fully engage in today's evolving digital society.

- **Affordability**: *Ensuring broadband and key digital services are affordable for all.*

  Across all geographies, demographics, and levels of access to broadband service, affordability is the largest barrier to adoption of internet service in Wisconsin.

- **Adoption**: *Ensuring all residents can connect to the internet, with the appropriate accessible, internet-enabled devices, skills, information, and services specific to their needs in real time.*

  Not only do Wisconsinites need access to affordable internet service, but they also require resources and services to ensure there is equity in adoption based on residents' specific needs.

- **Trust**: *Providing readily accessible resources and supports to build trust with communities and ensure all feel safe when accessing the internet.*

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All Wisconsinites and covered populations – particularly new adopters of internet service – need more trusted resources and support to increase confidence in accessing the internet and needed online services safely.

- **Sustainability**: *Supporting intentional activities and investments for ongoing device access, digital skills education, and affordable broadband subscriptions.*

  Wisconsin and its covered populations will require sustained efforts to meet both the funding required to reduce equity gaps and to respond to the evolving digital equity needs of communities.

3. Goals and Objectives

Based on engagement with a diverse set of stakeholders, covered population groups, and other partners, and further bolstered by subsequent data analysis, the following goals and objectives were identified as measurable priorities for Digital Equity in Wisconsin. Through the PSC's engagement and planning process, many recommendations and potential actions were provided, not all of which were incorporated into these final goals and objectives. The full set of recommendations can be found in Appendix 1 and can serve as a useful resource for consideration in future digital equity planning and initiatives.

Table 1 WI Digital Equity Plan Goals and Objectives

Value	Goals	Objectives
ACCESS *Expanding high speed internet access to every residence, business, and institution in the state.*	Achieve the highest possible level of broadband deployment and adoption.	• Connect all Wisconsin homes and businesses to broadband with speeds of at least 100 Mbps download and 20 Mbps upload service by 2030. • Connect Community Anchors Institutions to one Gig symmetrical service.
	Deliver sustained, long-term impact on broadband access and digital opportunity for all Wisconsin residents.	• Wisconsin plans, coordinates, and capitalizes on the federal funding dollars available, including those through the Bipartisan Infrastructure Law (BIL) such as the Broadband,

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		Equity, Access, and Deployment (BEAD) Program and Digital Equity Programs. • Where practicable, place a priority on reaching speeds beyond 100 Mbps download and 20 Mbps upload, including reaching speeds of 100/100 Mbps, 1000/1000 Mbps, and more.

Value	Goals	Objectives
AFFORDABILITY *Ensuring broadband and key digital services are affordable for all.*	Increase the affordability and reliability of broadband service in Wisconsin.	• Promote the ACP and other related resources for broadband affordability and adoption. • Households with income below 200 percent of the federal poverty level have access to fixed, home broadband at a cost of less than $30 per month. • All Wisconsin residents have access to reliable, high speed, affordable internet.

Value	Goals	Objectives
ADOPTION *Ensuring all can connect to the internet, with the appropriate accessible, internet-enabled device, skills, information, and services specific to their needs in real time.*	Support local digital literacy champions and digital navigators embedded within the community and trusted organizations that support the needs of covered populations.	Increase the number of digital navigator programs and other programs promoting digital skilling in the state by sharing best practices and making existing resources publicly available through the PSC and partners.

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	All Wisconsinites will have accessible, culturally responsive resources to grow their digital literacy skills.	• Identify and recommend standards for a statewide digital navigators training program that is accessible with online course work, exams, and digital navigator certification. • Those seeking digital skills training for telehealth, education, job readiness, and workforce development have the support required to achieve their goals.
	All Wisconsinites have access to resources and have the needed knowledge and resources to maintain cyber security.	• Identify cyber security standards in partnership with the state cyber security team. • Identify a cyber security training program with the state cyber security team.
	Ensure all Wisconsinites have access to an internet enabled device(s) and assistive technologies, that meets their needs, including for telehealth, education, job readiness and workforce development.	Identify a statewide process for a refurbished device program by supporting existing assistive technologies, device refurbishing, recycling, skills and distribution of devices.
	Ensure all Wisconsin populations and communities have accessible, first language, culturally responsive technical support.	Community based technical support from anchor institutions, trusted groups, and individuals, that is culturally responsive, accessible and in the covered populations' primary language and available for on-call assistance.

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Value	Goals	Objectives
TRUST *Providing readily accessible resources and supports to build trust with communities and ensure all feel safety when accessing the internet.*	All Wisconsin communities have resources, access to training and support that is culturally relevant, in their native languages, and clearly provided by a legitimate source that they trust.	PSC grant dollars will support covered populations most in need of training and support.
	Fostering trust and transparency among state government, local government, providers, and communities.	PSC will support continued partnership building activities that highlight actions to improve state and local internet access, accessibility, affordability, resources, devices, and support.

Value	Goals	Objectives
SUSTAINABILITY *Supporting intentional activities and investments for ongoing device access, digital skills education, and affordable broadband subscriptions.*	Support Digital Equity work by expanding cooperation and partnerships of community-based organizations, anchor institutions, local governments, philanthropic groups, and other trusted local entities striving to eliminate historical, institutional, and structural barriers.	Increase collaboration across state agencies and partners to leverage respective agency's skills and funding to forward digital equity efforts, particularly for covered populations. Support a sustainable model by increasing cooperation, combining resources among collaborators, and aligning messaging.
	Ensure community-based organizations, anchor institutions, local governments, philanthropic groups, and other entities engaging in Digital Equity work are aware of and pursuing available funding sources.	Encourage community organizations to fully access the existing government and non-government funding sources by supporting creative ways to braid or combine funding streams and identify best practices to improve sustainability of efforts.

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4. Alignment with Existing Efforts

Partnerships

Existing partnerships as well as connections with new stakeholders and organizations had voice in the creation of this plan. Established by the PSC in 2021, the Wisconsin Digital Equity and Inclusion (DEI) Stakeholder group is an open convening of community connectors, state and local leaders, schools, libraries, nonprofits, broadband providers, digital inclusion practitioners and other interested individuals. Through their monthly meetings, the DEI Stakeholder group has provided the PSC with important input on DE barriers, assets, opportunities, and help shaped the goals of this plan.

University of Wisconsin, Madison, Division of Extension (UW-Extension) has been a partner with the PSC for several broadband-related projects involving community outreach, engagement, and technical assistance. Given the existing working partnership and the growing rapport with community stakeholders related to broadband issues, the PSC found great value in growing this partnership to inform both DE and Broadband, Equity, Access and Deployment (BEAD) planning. UW-Extension worked in consultation with PSC staff to design and implement a comprehensive survey for counties and Tribes on broadband and digital equity. The survey collected qualitative and quantitative data related to local and regional broadband service needs and an inventory of assets related to adoption, affordability, equity, and access. UW-Extension also worked directly with the PSC Digital Equity Team, assisting with outreach to covered population and leading the team in analyzing outreach data that is cited throughout this plan.

The Wisconsin Department of Public Instruction (DPI) began working closely with the PSC as COVID-19 highlighted the need for students to have access to the internet. This partnership has strengthened and staff from DPI work directly with the PSC Digital Equity Team to help develop this plan. DPI has provided important data about the connectivity and digital equity needs of K-12 households in the state, as well as provide ongoing feedback and recommendation for this plan.

Regional Plans

The Wisconsin Department of Administration (DOA) hosts a Library of Plans which is updated regularly with county, municipal, Tribal, and regional planning commission plans. As of June 12, 2023, there were 67 county plans submitted, over 1,500 municipal plans, 4 Tribal plans, and 7 regional planning commission plans. Of these plans 271 have been submitted and/or updated since 2021 to the present. Some of the county plans have been shared with the Commission, and both the BEAD and DE planning teams will align their efforts where possible with regional plans submitted to DOA.

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County and Tribal Broadband Plans

The PSC used a portion of its BEAD planning funds to create the BEAD Local Planning Grant Program to engage counties and federally recognized Tribes in the BEAD planning process. The BEAD Local Grant Program provided a fixed funding amount through a formula to all counties and federally recognized Tribes that agreed to provide the PSC with their broadband plans, needs, and feedback to inform the BEAD plan and proposals required by NTIA. Counties and Tribes that elected to work in collaboration received an increase in their formula allocation.

PSC staff working on DE planning and implementation will continually sync and align their efforts to the forthcoming feedback and plans received from counties and Tribes through the BEAD Local Planning Grant Program.

5. Coordinating Funding

Digital Equity State Planning Funds

Planning funds have been coordinated by the PSC to inform this plan which will aid in the creation and ultimate award of capacity grant program funding. Of the $952,197 allocated to Wisconsin for DE planning, $335,000 was directed to the Digital Equity Outreach Planning Grant Program and awarded to seven subgrantees (see Section III.9). The remainder has been allocated for staff and partner activities – research, outreach and engagement, data collection and analysis, and drafting this plan and its related components.

Digital Equity Capacity Grant Program Funding

The DE Capacity Grant Program provides implementation funding to each state through a statutory allocation formula that will support Wisconsin's finalized digital equity plans and related projects through a state-created grant program. This funding can support a wide range of digital inclusion activities. Wisconsin's estimated share of capacity grant funding is $24 million to $30 million over four years. Following the release of the Notice of Funding Opportunity, the PSC will design programs to administer these funds, using this plan as the foundation, and ensuring the programs are crafted to complement and support existing funding that intersects with digital equity needs.

Digital Equity Competitive Grant Program

The DE Competitive Grant Program will be administered by NTIA and will be open to eligible applicants nationally to propose digital equity projects, based on forthcoming requirements. The PSC will continue engaging and communicating its digital equity work and will coordinate with Wisconsin partners that are considering applying for the competitive grant funding to ensure their proposal are aligned with this plan and the other efforts taking place within the Wisconsin digital equity ecosystem.

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State Universal Service Fund

The Wisconsin Universal Service Fund (USF) is funded by contributions from Wisconsin telecommunications providers based on gross operating revenue and the calculations detailed in state statute (section 196.218) and administrative code (Chapter PSC 160). The USF provides this funding to help Wisconsin residents get essential and advanced telecommunications services. The USF funds the following programs and grants to meet these goals:

- Lifeline Program: reduces the price of essential telecommunications service for low-income customers.
- State Broadband Grants Programs: helps get broadband service to all parts of Wisconsin and are partly funded by the USF.
- Telecommunications Equipment Purchase Program (TEPP): helps customers with disabilities get the special equipment they need to use telecommunications services.
- Telemedicine Grant Program: supports new and innovative means of using telecommunications to provide medical and psychiatric services.
- Low-income Outreach Grant Program: promotes the Lifeline program.
- Nonprofit Access Grant Program: this program funds nonprofits that are working to make telecommunications and broadband more accessible and useful to Wisconsin residents.
- TEPP Outreach Grant Program: funds Independent Living Centers (ILCs) to increase awareness of the TEPP program and assist individuals with disabilities in obtaining specialized telecommunication equipment.

The PSC is responsible for the policies and procedures of the USF and the programs it supports. It is assisted by a Universal Service Fund Council consisting of representatives of the telecommunications service providers and consumers in the state. This plan and its digital equity goals reflect both the needs and existing collective activities of these programs and grant-funded efforts. The PSC will continue to coordinate with the USF Council to ensure alignment and strategic coordination of digital equity funding going forward.

Enabling Middle Mile Broadband Infrastructure Program

Middle mile broadband infrastructure is the segment of a network that carries large quantities of data long distances (long-haul) at high speeds, which ultimately connects to last-mile infrastructure, which refers to the portion of the network that connects the middle mile to the end-user location for service. The Enabling Middle Mile Broadband Infrastructure Grant Program was created under the BIL, and is designed to expand and extend middle mile infrastructure to reduce the cost of connecting areas that are unserved or underserved. For the purposes of this plan, underserved locations are those that lack 100/20 speeds from a wired or licensed fixed wireless service, and unserved locations are those that lack wired or licensed fixed wireless service with speeds of 25/3.

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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. This funding should bring many new broadband connections to households in Western Wisconsin, potentially through several different providers. Knowing this, the PSC may have opportunities to partner DE and digital education efforts with those taking up new service or collaborate with ISPs (internet service providers that will be connecting to the new middle mile infrastructure to reach unserved households.

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 network 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.

The PSC will continue engaging Wisconsin Tribes through formal consultations as well as informal communication. The purpose of the engagements is to learn about their respective DE initiatives and how the state can both support this work, and how our future initiatives can best compliment these efforts. Tribes will also be eligible to apply directly to NTIA for Digital Equity Capacity Building Grants through a funding allocation set aside for Tribal applicants.

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, internet service, and supporting off-campus learning. DPI has assisted schools and libraries with applications and determining eligible use of funds. ECF funding has been awarded in three windows and to date $52 million has been dispersed to support the 350 different schools, school districts, and libraries in Wisconsin that applied for funding.

American Rescue Plan Act (ARPA) Capital Projects Fund (CPF)

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

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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 announced.

These forthcoming funds for broadband infrastructure will provide further opportunities for the PSC to work directly with potential ISP subgrantees to learn more about how they incorporate digital equity into their business model and may potentially provide opportunities for collaboration.

6. Planning Process Overview

Prior to the creation of the Digital Equity Programs through the enactment of BIL, the PSC had been actively engaged in DE work and had three ongoing activities that informed broadband planning: the Governor's Task Force on Broadband Access, the Digital Equity and Inclusion Stakeholder group, and the Wisconsin Internet Self-Report Survey (WISER). The PSC has aligned these existing efforts with the goals of both the DE and BEAD programs. New partnerships, data initiatives and activities to build the most comprehensive Digital Equity plan were created and the plan is informed by all the state's diverse stakeholders. Figure 1 Wisconsin Digital Equity Plan Input and Process below shows the many teams, groups and partners and their respective activities that have informed the creation of this plan.

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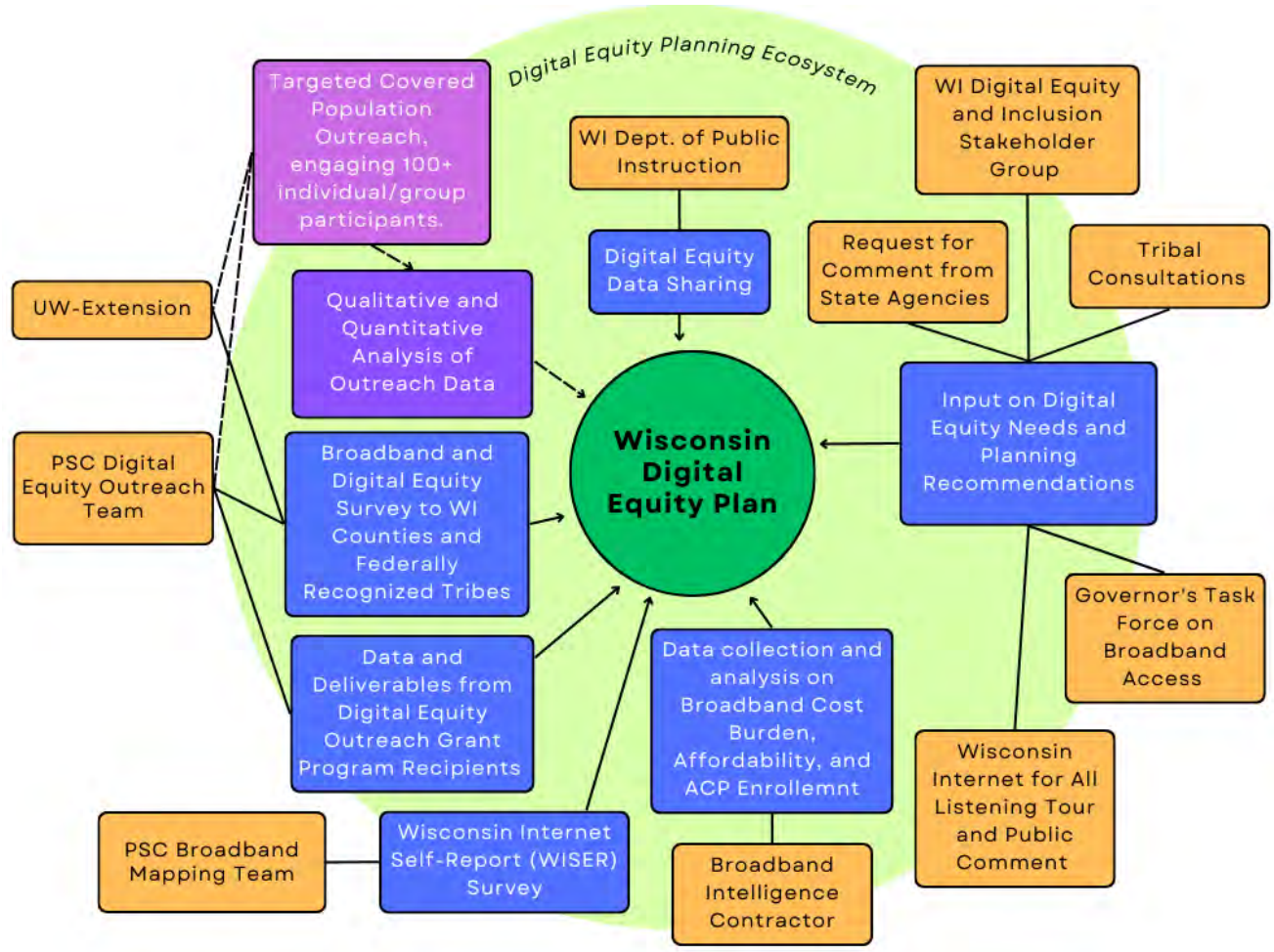
Figure 1 Wisconsin Digital Equity Plan Input and Process



Section II: Strategies and Objectives

1. Key Overarching Strategies

NTIA has directed states to craft a vision for digital equity, supported by goals and measurable objectives across all priority areas, what is termed here as 'values' (see *Table 1 WI Digital Equity Plan Goals and Objectives*). The PSC has also detailed the required strategies and metrics for each goal (see *Table 5 Implementation Plan*) across the five values - access, affordability, adoption, trust, and sustainability - using publicly available data, and qualitative and quantitative survey and outreach data that will be detailed in this plan. The PSC designed the objectives and the corresponding strategies and metrics using an iterative process, engaging multiple stakeholders to ensure broad feedback and inclusivity. These objectives, strategies and metrics are designed to be both short and long term, some extending beyond the 2030 timeline and created with the intention of sustainability beyond the initial funding.

The PSC, its partners, and a diverse group of stakeholder collaborators have centered this plan's detailed goals and objectives on the following core implementation strategies:

a) **Engage new stakeholders and grow existing partnerships to expand Wisconsin's Digital Equity ecosystem.**
    - Continue Stakeholder group and monthly meetings.
    - Conduct listening sessions and partnership activities.
    - Continue to engage with state agencies around cybersecurity, accessibility, and digital equity initiatives.
    - Identify and share best practices and standards for Digital Navigators, device programs, and culturally relevant training and support.

Within this strategy, the PSC will be partnering with organizations across the state. This includes state agencies, non-profits, healthcare, business, local government, volunteer organizations, philanthropy, educational institutions, and others. For example, the recommendations from DPI, Department of Corrections (DOC) and Department of Health Services (DHS) were used to inform this strategy. The three state agencies will continue to have input and access to the plan as it is implemented and refined.

Additionally, the PSC partnered with Regional Economic Development Organizations (REDOs) for listening sessions and community conversations. As part of this strategy PSC will continue this level of engagement in partnership with REDOs and others. In working with some of the Digital Navigators in the state, the need for standards and training has become a priority. PSC staff will continue to gather data from, and work with, the existing programs and staff, as well as new Digital Navigators to support the identification of training needed.

b) Develop programs and activities at the PSC to support and complement digital equity strategies.
    - Update grant programs to include DE values and goals.
    - Support and develop new and existing DE programs and best practices.
    - Coordinate with and support BEAD, Capital Projects Fund, and other funding programs.
    - Provide ACP outreach and engagement support.

While the first overarching strategy highlights work across the state, the second is designed around work that the PSC needs to accomplish internally. This includes embedding DE identified needs into existing and new grant language, developing standards and requirements for device programs, and coordinating funding across the agency and with other agencies as appropriate.

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The PSC will continue work to expand awareness of ACP and other available discounted internet service.

These two overarching strategies highlight the external and internal nature of the DE efforts moving forward. They also highlight the short- and long-term needs and how the PSC plans to coordinate strategies to improve DE outcomes across the state.

2. Planned collaborations with key stakeholders to achieve objectives.

The PSC has many partnerships that predate the building of this DE Plan. These include UW-Extension, DPI, and the network of recipients of USF grants. The DE Outreach Team consists of PSC and UW-Extension staff who meet weekly. UW-Extension has developed webinars and a toolkit of planning resources to assist local communities in reaching their broadband and digital equity goals. The DE Outreach Team will continue its work collecting data and community input to holistically implement this digital equity plan.

DPI has an Educational Consultant who is embedded with the DE Outreach Team and two library consultants who are part of the DEI Stakeholder group. They have several other consultants, including an American Indian Studies Consultant, a Curriculum Consultant, and a Migrant Education Consultant who are part of the Stakeholder group and/or are engaged with the team to assist in collecting data.

The Stakeholder group will continue to meet monthly and assist in implementation of the plan. With the diversity of membership there will be voices to both support and inform the implementation. Additionally, members will be able to coordinate with their organization and constituency to implement appropriate goals and objectives. There are currently many Digital Navigators who are working in communities around the state, who also serve on the DEI Stakeholder group. These navigators will continue to partner and help identify the standards and training needed to grow the program in other areas.

There are many partnership opportunities growing out of the DEI Stakeholder group. For example, the group includes DPI library consultants and the chair of the Wisconsin Consortium for Libraries and Network Development, industry leaders in rural healthcare, representation from the state technical college system, and other higher education institutions. DEI Stakeholder members have shown a commitment to building the plan and sustaining the work for over three years. DEI Stakeholder group members will continue to be asked to provide input on where the plan is succeeding and where adjustments may be necessary to meet the needs of covered populations.

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The PSC has engaged with the Wisconsin Department of Workforce Development (DWD) to both align BEAD workforce development strategies with their existing efforts and explore avenues for incorporating digital equity components to their work. DWD currently administers the Worker Connection program which provides free career navigators to county residents in two Workforce Development Board (WDB) regions. Career navigators provide one-on-one consultation and work to connect residents to resources, training, and in-demand career paths. Additionally, the PSC has met with representatives of the 11 regional WDBs that administer Workforce Innovation and Opportunity Act funds for the state. These partnerships with key stakeholders in workforce development will continue to grow to best understand the digital equity needs of jobseekers regionally, and to explore ways to work with DWD and WDB regions to achieve this plan's objectives.

The DOA has invited the PSC to partner with the state's cybersecurity group to engage in the work developing both standards and educational materials, as well as collaborate with a sperate group working on accessibility standards for digital resources across state agencies.

The DE Outreach Planning Grant Program is supporting the work of organizations like United Way, Urban League, workforce development organizations, county-based groups, and educational partners. These growing partnerships will be vital in facilitating ongoing listening sessions and community conversations, and additional partners and collaboration will emerge as the implementation of the digital equity plan and awardees projects moves forward.

3. Alignment with Wisconsin's Existing Efforts to Improve Outcomes

Wisconsin state entities and other stakeholders have ongoing efforts related to digital equity that the PSC has strategically aligned and incorporated into this plan. DPI provides publicly available data and resources that both highlight the digital equity needs and progress being made to improve access, adoption, and affordability allows the public to view aggregated digital equity data related to K-12 student households across the state, as well as maps that display broadband access and reliability data by school district. DPI also built individualized secure dashboards for schools to use to better understand and address individual student connectivity needs. PSC staff will continue to collaborate and share information with DPI to improve educational digital equity outcomes. DPI's Digital Equity Dashboard allows the public to view aggregated digital equity data related to K-12 student households across the state, as well as maps that display broadband access and reliability data by school district. DPI also built individualized secure dashboards for schools to use to better understand and address individual student connectivity needs. PSC staff will continue to collaborate and share information with DPI to improve educational digital equity outcomes.

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DPI also supports the state's school and public library system. The work of libraries is vital to all having access to the resources they need to be socially and civically engaged. The libraries are a safe place for people to learn, engage, apply for jobs or services, and receive needed assistance. The public library systems have already received federal grant dollars to support ACP outreach. They are deeply engaged in DE work and the PSC will continue to work with DPI to implement the DE goals across all libraries. This includes device access, digital navigators, culturally relevant training, and technology support. DPI was awarded an ACP Outreach Grant of $353,300 from the FCC to support ACP enrollment events at libraries, schools, and other community-based organizations. These targeted outreach events will result in improved awareness and increased enrollment in the ACP in Wisconsin.

DHS recognizes the link between health outcomes and internet access, as reported in its 2020 Statewide Health Assessment. The PSC will collaborate with DHS and provide data and information to aid in the agency's ongoing broadband access and digital equity efforts. Additionally, the PSC will assist in sharing out DHS best practices for healthy outcomes related in support of DE goals.

The PSC and its stakeholders that are collaborating on broadband workforce development planning to support BEAD implementation understand the necessity of digital skills, access, adoption, and device ownership for increasing the state labor force for both broadband expansion and all labor sectors. The PSC has engaged and will continue to collaborate with Wisconsin Department of Workforce Development (DWD), regional Job Centers that administer federal Workforce Innovation and Opportunity Act funding programs, technical colleges, educational institutions, and nonprofit entities to ensure our strategies and goals are aligned with their goals and needs. The PSC and the digital equity ecosystem work will align our strategies to increase workforce participation, secure financial stability for covered populations, and bolster state and local economies.

Section III: Collaboration and Stakeholder Engagement

1. Covered Population Outreach

The PSC DE Outreach Team, which includes Commission staff as well as two staff from UW-Extension, organized an outreach strategy that included identifying people within the covered populations and groups that worked with the covered population. A data collection process was identified that would assist in collecting both quantitative data, and qualitative data and stories. Staff quickly adapted their approach as it was discovered that the best way to get honest feedback was through conversations and careful listening. The team spent a great deal of time in conversations with covered populations and those who support them; this later facilitated faster data gathering as more people were willing to talk to and trust team members. Staff used

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a variety of techniques, including 1-1 phone calls, small and large group virtual sessions, face-to-face meetings, and participating in existing events to listen directly to covered populations.

The DE Outreach Team joined the Internet for All Wisconsin Listening Tour sessions across the state to collect data and stories on digital equity assets and barriers. The PSC also gathered data from organizations and agencies that have previously collected digital equity data, including United Way of Milwaukee and DPI. Data and insights from Digital Equity Outreach Grant recipients (see *Section III.9*) also informs this plan and will continue to inform digital equity planning.

2. Partnership with University of Wisconsin, Division of Extension

To inform Wisconsin's BEAD and DE plans, the PSC engaged counties and federally recognized Tribes through a survey developed in partnership with UW-Extension. The PSC entered a memorandum of understanding with UW-Extension for the creation and implementation of the survey for counties and Tribes. The survey was designed to collect critical information about broadband availability, access, and adoption to strategically inform both BEAD and DE planning. The surveys were distributed to the county and Tribal administrative contacts with the expectation that multiple representatives from counties and Tribes would contribute to the survey. The PSC also considered it important to authorize reimbursements for counties and Tribes who completed the survey to cover the time and expenses incurred. In total, 70 of 72 Wisconsin counties and 6 of the 11 Wisconsin federally recognized Tribes completed the survey. This valuable input has deepened staff's understanding of barriers, needs and the substantial gaps in digital equity from the county and Tribal administrative perspective. These insights and further analysis of the survey results are discussed in *Section III: Barriers and Assets.*

3. Partnership with Wisconsin Department of Public Instruction

The PSC and DPI have had a growing collaborative partnership relating to digital equity efforts that started with the creation of the DEI Stakeholder group in 2021. Stemming from their active role in the DEI Stakeholder group, DPI staff have regularly attended planning meetings with the PSC Digital Equity Team to inform this plan. DPI also submitted a letter in response to the PSC's request from agencies to provide details on their existing work related to digital equity and broadband planning, as well as recommendations they have for BEAD and DE plans (summarized on the following page, *Section III.5*).

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4. Digital Equity and Inclusion Stakeholder Group

The PSC started the DEI Stakeholder Group in 2021 to advise the agency on needs related to broadband affordability, and adoption They partnered with the DPI to grow and facilitate the group. The DEI Stakeholder group has representation from non-profits, state agencies, broadband groups, professional organizations, higher education, and other groups that align with the groups identified by NTIA in the DE Notice of Funding Opportunity (NOFO), which includes details on the requirements for engaging stakeholders. The group provided input to the PSC on what the needs are in all areas of the state as well as emerging needs. The DEI Stakeholder group met monthly and provided ongoing input on the plan and their perspective on existing and emerging needs across the state. They also assisted in data collection and connecting staff to members of the covered populations for outreach. They have been invaluable in the development of the plan. Members and their corresponding organizations can be found in Appendix 2.

5. PSC Outreach Letter to Other State Agencies

The PSC wants to ensure DE plan components align and complement existing DE efforts across the many state agencies in Wisconsin. The Commission sent a formal request to state agencies to specifically learn about any existing broadband and DE plans, needs or initiatives that agencies may wish to have incorporated into the state plan. The goal was to compile a complete picture of the broadband and digital equity work and needs of agencies across the state to inform the BEAD and DE plans. The letter also served to inform other state agencies on BEAD and DE funding coming to the state and the related activities that will be taking place over the next 4-plus years. The PSC received a total three agency letters sharing existing work related to digital equity and broadband, as well as providing guidance and recommendations for ongoing planning. The table below summarizes this information from agencies. Some of the recommendations are specific to the BEAD program and will be incorporated into those plans.

Table 2 Recommendations from State Agencies Related to Digital Equity

Agency Letter	**Existing Initiatives**	**Recommendations**
Department of Public Instruction (DPI)	1. 2020 began student household Internet Access Survey (Data collection) 2. Public Digital Equity dashboard and map	1. Require BEAD recipients to provide high-speed internet access at $30/month maximum to customers who qualify for the ACP. 2. Install fiber to connect our K-12 schools and public libraries that currently lack 1GB fiber connections. 3. Classify schools and libraries with less than 100/20 service as "underserved" and thus qualify for funding in this category.

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		4. Support funding for an internet-accessible device for every student and devices for library patron checkout. 5. Support funding for Wi-Fi on school buses. 6. Provide open education resources to support digital skills education.
Department of Health Services (DHS)	1. Ensure access to digital resources for BadgerCare (Medicaid) and FoodShare (Supplemental Nutrition Assistance Program) members 2. Work to address social isolation with digital access, particularly for those ageing in place 3. Teach digital skills and cyber security 4. Facilitate access to internet-enabled devices, including devices with assistive technology	1. Improve access to telehealth services 2. Ensure affordable broadband access for Medicaid members 3. Improve broadband access for people with disabilities 4. Align efforts with the digital equity goals of the Governor's Task Force on Broadband Access
Department of Corrections (DOC)	The Department of Corrections does not currently have any existing programs.	1. Increase fiber infrastructure across the state to expand broadband availability

6. Tribal Coordination and Survey

The PSC values the opportunity to listen and learn about the digital equity experiences of Wisconsin's Tribal nations. In January 2023, the Commission participated in a formal Tribal consultation to discuss upcoming BEAD and Digital Equity planning. The consultation was facilitated by the Great lakes Inter-Tribal Council, Inc. and included representatives from 8 of Wisconsin's 11 federally recognized Tribes. At the consultation, Tribal members shared challenges, details about implementation, and impacts of broadband planning, expansion, and DE related issues and activities, particularly as it will relate to BEAD and DE planning and implementation. See Appendix 3 for a detailed summary of the consultation.

Ongoing coordination with Tribes is important to ensure Tribal consent and sovereignty are respected throughout implementation of the BEAD and DE programs. In February, the PSC contacted each federally recognized Tribe to invite them to participate in BEAD Local Planning

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Grant program. Five of these federally recognized Tribes have elected to participate in the BEAD Local Planning Grant program.

As noted in *Section III.2*, UW – Extension led the development and implementation of a Tribal survey, which largely mirrored the survey designed for counties. The goal for the survey was to better understand existing broadband and digital equity planning and activities, needs and challenges, and priorities for each federally recognized Tribe in Wisconsin. For the six Tribes that completed the survey, data was gathered about DE needs, challenges, and priorities.

7. Internet for All Listening Tour

In the spring of 2023, the PSC hosted the Internet for All Wisconsin Listening Tour, a series of nine in-person and two virtual interactive meetings designed to help develop the Wisconsin BEAD Five-year Action Plan and this DE Plan. The PSC developed these events after consulting with Wisconsin's REDOs about the best way to engage local citizens. The events featured remarks from a representative from the REDO partners, a video from Governor Evers, and a welcome from a PSC Commissioner. Governor Evers appeared in person at the La Crosse event. For a full list of the listening tour meetings see Appendix 4 and here is the full listening tour report.

8. Governor's Taskforce

The Governor's Task Force on Broadband Access, created by Governor Evers in July 2020 via Executive Order #80, advises 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.

The Task Force meets monthly, and its members are key stakeholders in broadband deployment efforts statewide. The Task Force prepares an annual report that reflects the Task Force members' priorities based on the needs of the population(s) they represent, identifies state-wide challenges, and provides policy recommendations as it relates to broadband access and digital equity in Wisconsin. Task Force input and recommendations are key for BEAD and Digital Equity planning and implementation.

Looking to the federal funding opportunities on the horizon, the 2023 Task Force Report made some targeted recommendations related to digital equity across key areas - supporting local communities, mapping and data, workforce development, and affordability and adoption - that have been integrated and aligned within this plan.

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9. Digital Equity Outreach Grant Recipient Projects

Through a competitive application process, the PSC awarded $335,000 in Digital Equity Outreach Grants to nonprofit entities that have strong ties to local communities and other anchor institutions and provide existing services to the eight covered populations. The grant recipients' projects span multiple regions across the state and utilize a variety of outreach and engagement strategies to best learn about the digital inequities and barriers faced by the covered populations they work with.

Table 3 Digital Equity Outreach Grant Recipients and Project Summaries

Grant Recipient	**Digital Equity Outreach Grant Project Description**
United Way of Greater Milwaukee & Waukesha County	Leading three outreach strategies with trusted community partners: data collection, community conversations, and a text message survey campaign.
River Valley Commons, Inc	Facilitating focus groups and surveys with the help of local community volunteers.
Northwest Wisconsin Workforce Investment Board, Inc.	Producing an asset map and working with 10 counties and five Tribal nations to identify ways to address the digital divide.
Indianhead Community Action Agency	Conducting survey through existing outreach and messaging channels across six counties, utilizing partners that target specific covered population groups.
United Way of Wisconsin	Regional offices collaborating with Wisconsin Council of Churches to conduct in-person and virtual engagement regarding digital equity in multiple regions of the state.
Connect to Compete, Inc. (EveryoneOn)	Gathering data on digital inequities through existing digital inclusion programs.
Urban League of Racine & Kenosha	Conducting outreach and data analysis to understand the digital equity gaps in the two counties they serve.

10. Broadband Intelligence Consultant

The PSC procured the consultant Boston Consulting Group (BCG) 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 PSC will create useful new digital mapping components and dashboards displaying key broadband metrics to help guide the BEAD and DE programs as well as community broadband planning efforts. The PSC has a dedicated staff to manage this collaboration and BCG deliverables. To inform this digital equity plan, BCG has provided important data gathering and analysis on (1) ACP enrollment metrics, (2) the broadband subscription affordability gap, and (3) metrics on the broadband cost-burden in Wisconsin. This important data and analysis (see Section III.1) has provided this plan with an important baseline and revealed key insights that aided in shaping the state digital equity goals.

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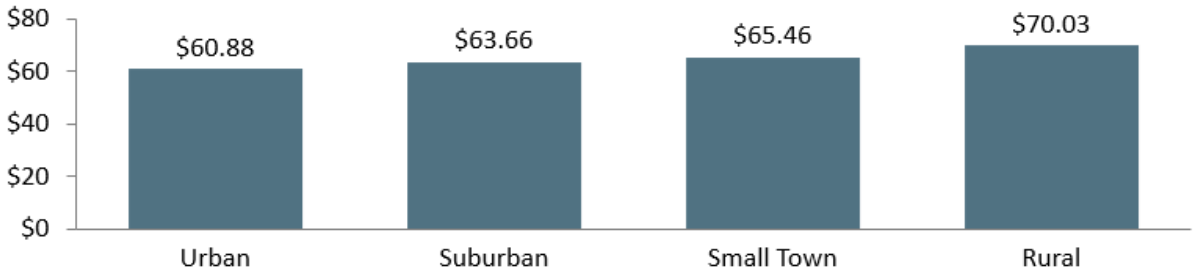
Section IV: Assets and Barriers

1. Assets

a. Current Adoption and Affordability Statistics

Affordability of broadband service is a critical component of ensuring digital equity across the state. The figure below shows the average minimum broadband monthly subscription price along the four levels of urbanicity (urban, suburban, small town, and rural) based on data at the census block level. This data represents locations in the state that are currently served, meaning they have a broadband service with speeds of 100 megabits per second (Mbps) download and 20 Mbps upload or greater available for subscription.

Figure 2 Average minimum broadband monthly subscription price for served locations by urbanicity (census block)



Of these served locations with an available broadband plan of 100/20 Mbps or greater, more than half only have cost prohibitive internet service plans available, based on the PSC's definition of broadband cost burden. The broadband cost burden is a threshold or benchmark for broadband subscription prices based on household income – monthly subscription costs at or below this threshold are considered affordable, and subscription costs above are not affordable. Households with only broadband subscription options above this threshold are broadband cost burdened (see Glossary for detailed definition).

Based on the FCC's National Broadband Map version 2 (updated June 2023), Wisconsin has 253,000 unserved locations – locations with broadband speeds less than 25/3 Mbps. Underserved locations, those lacking seeds of at least 100/20 Mbps, account for approximately 210,000 locations. Figure 4 below shows broadband service availability for Wisconsin by technology, which includes cable, fiber, copper, and fixed wireless (FW) – see the Glossary for definitions of these broadband technology types.

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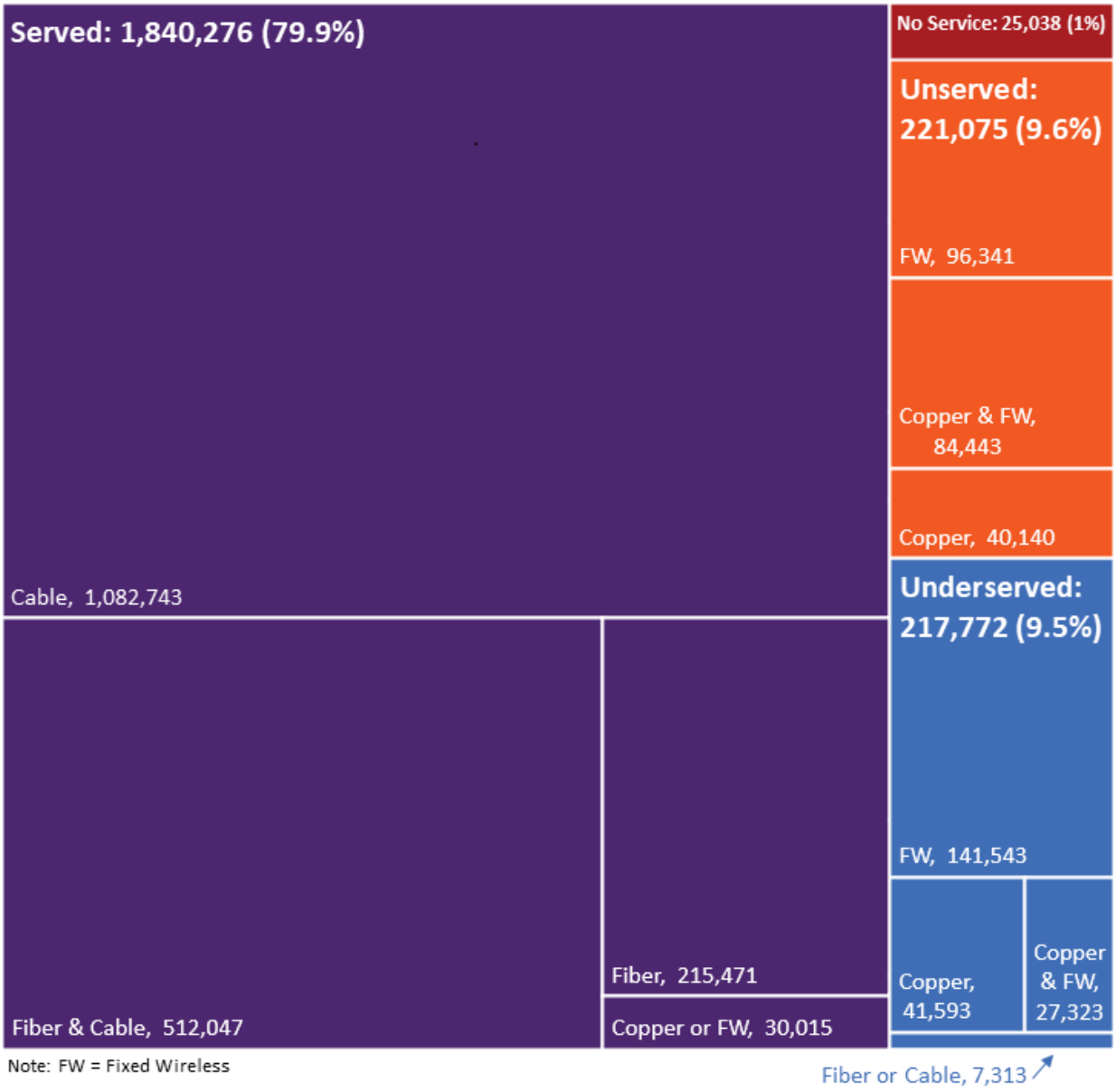
Figure 3 Broadband Service Availability



b. Affordability Programs and Resources

Affordable Connectivity Program

As of August 2023, approximately 387,000 of the estimated 894,005 eligible households in Wisconsin enrolled in the ACP . Approximately 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 $141,069,641 in benefit funding to provide internet service to enrolled households. ACP has the twofold benefit

of expanding connectivity for households in need of support to afford broadband, while also increasing adoption of broadband service. ACP enrollment is increasing over time, with many counties seeing participation double over the last year. The PSC has facilitated ACP application trainings in partnership with existing organizations in both rural and urban areas that focused on increasing outreach through a 'training the trainers' approach.

Importantly, ACP was funded with 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 the program on a long-term basis, estimates suggest program funding could be exhausted by mid-2024.

Lifeline Program

The Wisconsin Lifeline program, funded by the USF, provides low-income Wisconsin residents affordable access to essential telecommunications services by discounting the cost of phone, cell and internet service. One individual per eligible household is eligible for the Lifeline discount. As of August 2023, 116,374 Individuals have accessed the State Lifeline program in WI. Those who are eligible for Lifeline are also eligible for ACP.

Emergency Connectivity Funds in Wisconsin

ECF funding has been awarded in three windows and to-date $52 million has been dispersed to support 350 different schools, school districts, and libraries in Wisconsin that applied for funding. These funds support the purchase of devices and internet hotspots that are loaned out to students or library patrons at no cost.

Internet Discount Finder

The PSC and DPI created the Internet Discount Finder to help Wisconsin households find and access affordable internet. The new tool can assist in finding free and discounted internet service available to eligible Wisconsin residents. The Internet Discount Finder quickly matches eligible Wisconsin residents to low-cost home internet service and discount programs by entering their address and identifying their eligibility criteria. The tool will show available plans and describe next steps for enrollment in the ACP.

Other Assistance Programs

The PSC administers several assistance programs that provide financial assistance and guidance that overall can help reduce monthly financial burdens for households. The Commission also administers the Internet and Phone Helpline and other programs to provide telecommunications access to citizens with disabilities.

c. County and Tribal Government Assets and Existing Activities

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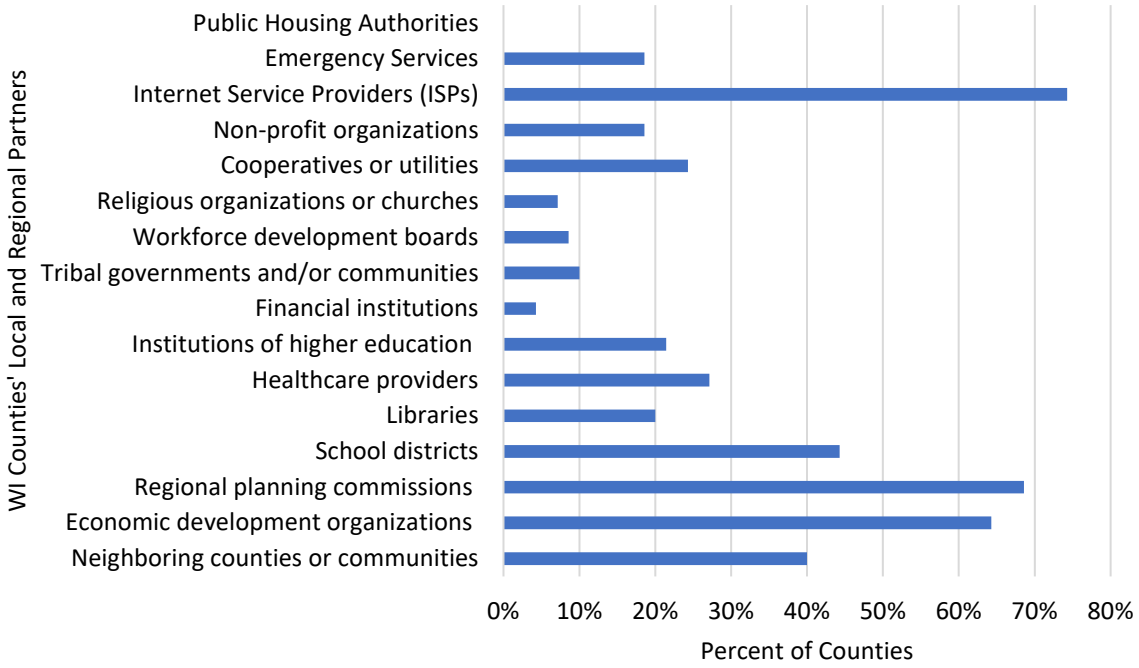
As described throughout *Section III* of this plan, the PSC engaged counties and federally recognized Tribes through a survey developed in partnership with UW-Extension. The survey collected information about broadband availability, access, and adoption to strategically inform both BEAD and DE planning. The surveys were distributed to the county and Tribal administrative contacts with the expectation that multiple representatives from counties and Tribes would contribute to the survey. In total, 70 of 72 Wisconsin counties and 6 of the 11 Wisconsin federally recognized Tribes completed the survey. What follows is a summary of existing assets and partnerships shared by counties and Tribes and respective barriers and obstacles identified from the survey are detailed in *Section IV.2 Barriers and Needs*.

Counties indicated an awareness of available digital equity resources in their communities – specifically 24 counties indicated there were organizations offering subsidized or low-cost devices, and 16 counties indicated knowing of entities in their county that provide broadband subscription subsidies. Regarding capacity and planning related to digital equity, few counties had positions dedicated to digital equity efforts (6 of 70) but many are partnering with agencies, organizations, or other groups to address digital equity issues (20 of 70). The figure below shows high rates of collaboration with ISPs, regional planning commissions, and economic development organizations.

Figure 4 Percentage of WI county survey respondents that are currently, or have in the past, worked with the local and regional partners below on broadband-related issues such as broadband internet access, adoption, or affordability



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Participating federally recognized Tribes were asked similar survey questions. Similar to counties, Tribes indicated high rates of collaboration with ISPs (5 of 6) and indicated working with neighboring counties or communities (4 of 6).

Participating Tribes indicated known assets related to digital equity in their communities. Four of six Tribes indicated they knew of existing subsidies for broadband subscriptions – specifically noting ACP and the Lifeline program, as well as economic support from within the Tribal community. Tribes also shared entities or programs that provide subsidized or low-cost devices, which included providers, federal funding sources, internal support from the Tribal community, and area public schools. Three of the participating Tribes have a written or dedicated plan related to broadband access and/or digital equity.

The BEAD Local Planning Grant program, which asked counties and Tribes to begin outreach, identify preliminary broadband vision and goals, and outline key barriers and opportunities related to Internet for All in their communities. Participants shared these preliminary deliverables, highlighting any existing assets, broadband planning progress, known and expected obstacles, as well as opportunities. The program was designed to meet counties and Tribes at whichever stage of the broadband planning process they are in, and enable them to continue, or simply start, that work. Some participants have existing broadband planning groups or committees and have shared existing plans with the PSC, and other participants convened new stakeholder groups and shared their process for beginning planning.

d. Existing Digital Equity Plans and Programs

The PSC approached the asset inventory by engaging with the members of the Digital Equity and Inclusion Stakeholder groups and then conducting additional searches for organizations engaged in digital equity and adjacent work. After forming an initial list, the PSC conducted periodic searches and bolstered efforts with referrals from existing assets and digital equity outreach meetings.

The PSC used NTIA's template to determine what information should be prioritized in data collection efforts. When paired with the needs assessment, this in-depth view of Wisconsin's digital equity landscape allows the PSC to identify gaps and opportunities. Across the state a variety of public and private organizations, government and non-government entities provide digital inclusion activities, programs and services for Wisconsin residents and small businesses. While an emerging and growing ecosystem of programs and services to help people use the internet exist, many communities still lack resources specific to their intersectional needs. Data gathered helped determine goals and objectives to address the identified gaps.

A key asset and strategy across multiple entities has been the formation of coalitions and community convenings and/or conversations. These may be broadband committees, digital

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equity and inclusion groups, technology councils or other groups that bring together local government, non-profits, private industry and other key stakeholders to garner resources and develop community solutions related to broadband access and digital equity. This strategy has been identified as effective and informs a need for the state to support existing coalitions and promote the creation of others. Communities with coalitions were able to develop digital navigator programs, secure devices for low-income households and were awarded more broadband expansion funding to meet access needs.

Broadband Committees

While broadband committees exist throughout the state, the asset map only details those explicitly working on digital equity efforts in addition to broadband deployment. The Door County Broadband Committee, Forest County Broadband Committee, Eau Claire County Broadband Committee, and Rock County Ad Hoc Broadband Committee stand out as committees explicitly tackling affordable and accessible broadband.

Housing Authorities

Except for two housing authorities, affordable access programs were not promoted on their websites. One exception is the Housing Authority of the City of Milwaukee, which offers a computer lab and "Internet Basics" classes. The Housing Authority of the City of Milwaukee also co-established the Milwaukee TechForce Training Center which provides a pathway to careers in technology to many of those in need.

Digital Equity Plans

Initially, the PSC performed a search for digital equity plans both at the local government and NGO levels. Based on publicly accessible information, the PSC found that the City of Madison had a digital inclusion plan. While they did not have a formal plan, Door County published its digital equity goals. Many of the organizations the PSC spoke with did not have formal plans but were eager to create them.

e. Wisconsin Digital Equity Asset Inventory

Covered Population key:
P = Individuals who live in household with income less than 150 percent of federal poverty level
A = Aging individuals
I = Incarcerated individuals
V = Veterans
D = Individual with disabilities

L = Individuals with language barriers
E = Individuals who are members of racial or ethnic minority group
R = Individual who primarily reside in rural areas
M = Multiple or all covered populations

Table 4: Wisconsin Digital Equity Asset Inventory

Entity Type	Examples and existing resources, programs strategies	Covered Pop.
Government		
State Government	Agencies such as Department of Administration (administers various low-income programs and BadgerNet) including Division of Enterprise Technology (helps Wisconsin residents be safe online), Department of Agriculture, Trade and Consumer Protection (consumer protections), Department of Children and Families (supports for covered populations) , Department of Corrections (incarcerated population), Department of Financial Institutions(digital and financial literacy), Department of Health Services (work with covered populations and telehealth) including the Office for the Deaf and Hard of Hearing (people with disabilities), Department of Public Instruction (connection to schools and libraries, e-rate), Department of Transportation (broadband permitting), Department of Workforce Development (workforce and upskilling), Wisconsin Economic Development Corporation (rural prosperity and economic development), Educational Communications Board (statewide communications network and early literacy), and Wisconsin Housing and Economic Development Authority (support for affordable housing with broadband access). Councils, Boards, Programs such as: Board of Aging and Long Term Care, Independent Living Councils of Wisconsin, Council on Equity and Inclusion, Serve Wisconsin, Wisconsin Board for People with Developmental Disabilities, Governor's Task Force on Broadband Access (makes recommendations and advocates for policy related to covered populations and draft plan goals).	M
Local Governments	Local governments throughout the state have broadband committees, digital access working groups and other coalitions working on broadband access, affordability and adoption. Local governments most often work directly with Internet Service Providers, schools and libraries on internet access and adoption projects.	M

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Tribal Governments	Tribal Governments lead and participate in broadband planning and in some cases operate broadband networks. Tribal Governments own and operate a number of community anchor intuitions including schools, health care facilities, elder care and other organizations that serve covered populations.	M, E
Education		
K-12 Schools	Schools play a critical role in supporting students and their families in connecting to internet access and access affordable service. Many schools have one-to-one device programs that provide students with Internet enabled devices. Many schools provide free Wi-Fi. Technology Directors and other school staff often support community wide planning.	M
Higher Education	University of Wisconsin System, Wisconsin Technical College System and private institutions of higher education support internet access, provide low-cost devices, basic digital literacy, and a wide variety of access to software, skills and education related to growing digital opportunities for Wisconsin residents.	M
Outreach and Referral Orgs.		
United Way 211	211 is a statewide one-stop connection available 24/7 including internet and utility assistance, internet telephone affordability, housing, food, elder care, and crisis intervention.	M
Aging and Disability Resource Centers	Over 40 centers located throughout the state offer free, unbiased answers to all questions and resources related to aging or living with disability including related internet access, accessible technology, and aging in place.	A, D
AARP of Wisconsin	Advocates for issues that matter to Americans age 50 and older including distributing information related to broadband access, affordable internet and device access to their members.	A
PSC Internet and Phone Helpline	The PSC has established a dedicated helpline for Wisconsin residents to get assistance or information on access phone or internet (608) 267-3595.	M
Internet Discount Finder	An online resource that matches eligible Wisconsin residents to low-cost home internet service and discount programs by entering their address and identifying their eligibility criteria.	M
Non-profits		
Out of School Time organizations	Boys and Girls Clubs, YMCAs, childcare providers, youth development organizations and other similar organization often provide access to technology, digital skills, and support for families.	M

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Organization for people with disabilities	Eight Independent Living Centers, Family Voices, HEAR Wisconsin, Wisconsin Council for the Blind and Visually Impaired, Vision Forward, Headwaters, Inc. Center for Deaf-Blind Persons, Inc. Council for People with Physical Disabilities and other organizations provide service, share information, promote independent living, provide advocacy and resources for people with disabilities including support for internet access and affordability, support for assistive technologies and devices and other inclusion activities.	D
Adult Literacy organizations	Wisconsin Literacy organizations, Literacy Green Bay, Wisconsin Health Literacy, The Literacy Network provide adult basic literacy and including digital literacy, some organization provide access to internet enabled devices and support internet access.	P, L, E
Employment training and upskilling	Big Step WRPT, Urban Leagues, YWCA's YWeb, Employ Milwaukee, Gener8tor, Job Centers, Latino Academy of Workforce Development, apprenticeship programs and others provide up workforce training, upskilling, reskilling and workforce readiness training that often includes digital skills training.	P, L, E, V
Community Action Agencies	Sixteen Community Action Agencies located throughout the state that provide direct services and coordinate community resources to low-income individuals including internet and utilities assistances, family support and health.	P
Organization that support low-income people	Benedict Center, Foundation for Rural Housing, Catholic Multicultural Center, Community Centers, The Road Home Dane County, UMOS and other organization are helping connect and support families to increased economic stability and internet access.	P
Organizations that support current and formerly incarcerated people	JustDane, WISDOM, Ex-Incarcerated Persons Organizing provide support and advocacy for people that are incarcerated and support for re-entry including help with technology and access to the internet.	I
Digital Equity and Inclusion Organizations	Digital Bridge, Techquity, DANEnet, Tech for Troops, PCs for People, United Way of Eau Claire, Forest County and other organizations are providing low cost devices, digital skills classes, technology Fix IT clinics and digital navigators.	M
Organizations that support racial and ethnic minority groups	Centro Hispano, Urban Leagues, Hmong American Association, Freedom Inc., We All Rise, YWCAs, Community and neighborhood centers and many other organizations throughout the state provide services, advocacy, and programming including digital skills and internet affordability outreach.	E

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Organizations that support veterans	VFW Districts and Regions, Veteran Farmers Coalition, Desert Vets of Wisconsin provide support and advocacy for veterans.	V
United Way Organizations	State and local United Ways serve as information hubs, community conveners, developers and funders of digital equity programming and provide community leadership.	M
Libraries		
Libraries	There are 388 public libraries in Wisconsin, they offer free internet access, devices access and in some locations hotspot check out. Libraries offer a variety of digital and technology skills support and learning opportunities.	M
Other		
Entrepreneur, small business support and incubators	Black Chamber of Commerce, Wisconsin Women's Business Initiative Corporation, Black Business Hub, Wisconsin Latino Chamber of Commerce, Gener8tor, and Hmong Wisconsin Chamber of Commerce provide resources and technology support for small and diverse-owned business including digital upskilling.	P, L. E, V
Technology Education Programs	Microsoft TechSpark, Maydm, BadgerBots, Milky Way Tech Hub, Gener8tor and other programs provide a range of technology education and digital upskilling for youth and adults.	M
Banking and Finance	Local and national banks, credit unions and community development financial institutions (CDFIs) provide support to residents for online banking and financial literacy in a digital age. Some institutions are investing in digital equity and broadband infrastructure to meet Community Reinvestment Act requirements and local community development needs.	M
Healthcare	Medical professionals, WI Hospital Association, Marshfield Clinic, rural health clinics and public health agencies often provide support to patients for accessing the internet for health monitoring, telehealth and online medical record access.	M
Philanthropy	Local community foundations, corporate giving, United Ways are funding digital inclusion programming.	M
National Non-profits	EducationSuperHighway, National Digital Inclusion Alliance, AARP, EveryoneOn and the National Skills Coalition serve as national resources for Wisconsin based organizations.	M
Internet Service Providers	Provide outreach for ACP, provide technical support for their customers in the state related to internet access, and some have additional digital skills resources. ISPs like PCs for People specifically work to support underconnected	M

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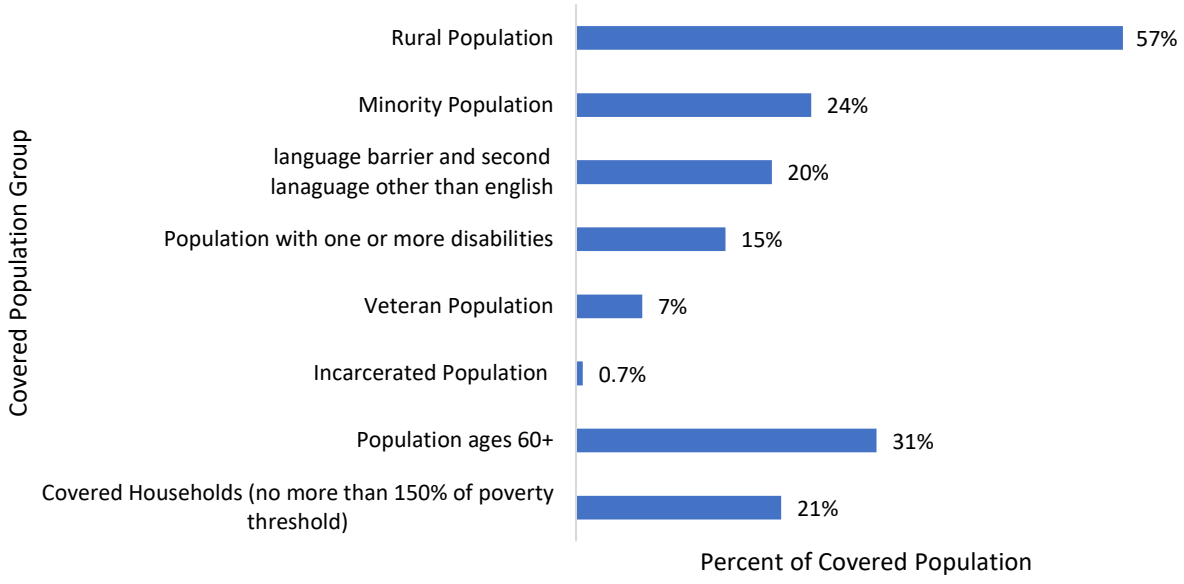
	households to access the internet. WiscNet is a membership organization for community anchor institutions that provides internet service.	
Regional Economic Development Organizations	Visions Northwest, Momentum West, 7 Rivers Alliance, Prosperity Southwest, Grow North, Centergy, Madison Region Economic Partnership, The New North, and Milwaukee 7 support regional broadband planning, economic prosperity and engage higher education and job centers to meet the labor market demands for their region.	M

2. Barriers and Needs

a. Introduction and Methodology

Approximately 79 percent of Wisconsin residents fall under one or more of the covered population groups – figure 6 displays the proportional percentage of each covered population group based on the Census data provided by NTIA.

Figure 5 Percent of Covered Population Groups in Wisconsin

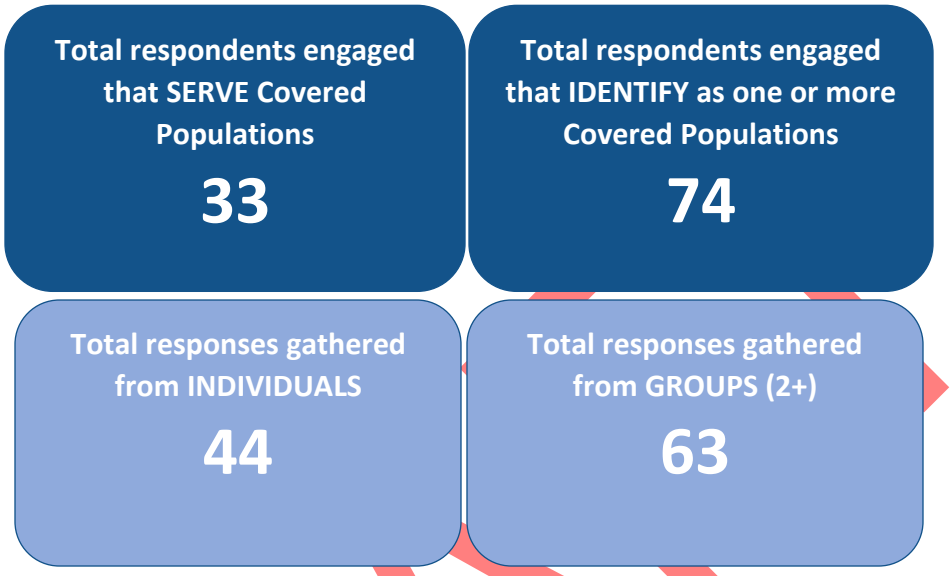


The PSC and partners tailored Digital Equity Outreach and Engagement efforts to ensure the input collected was as close to proportional to these percentages as possible. Note that this Census data provided by NTIA defines covered households, or low-income households, as any household up to 150 percent of the federal poverty line.

The PSC DE Outreach team collected quantitative and qualitative data using an interview methodology. A total of 107 interviews were done with individuals or groups (light blue boxes)

that either served or identified as one or more covered population group (dark blue boxes) – the two sets of shaded boxes in Figure 6 below show the number engaged across these categories.

Figure 6 Categories of Individuals Engaged by DE Outreach Team



When engaging an individual or group, the team used a set of five baseline questions. The engagements were structured as in-person surveys using these five baseline questions – three questions had predetermined category responses and two were narrative questions. The engagements also evolved into conversations, for which team members took detailed notes. Responses were tracked in a database - binary (yes/no) responses were quantified, and the qualitative data gathered from the narrative questions and conversations were coded – or categorized into groups - and analyzed. Qualitative responses were first coded as either access, affordability, or adoption barriers, and second assigned sub codes by types of access, affordability, and adoption barriers. Outreach staff also gathered many anecdotal stories, illustrating specific covered populations experiences and barriers to equitable access to high-quality internet. A selection of these stories is shared throughout the covered population sections to follow, with the respondents kept anonymous.

The following section examines needs and barriers using the PSC Digital Equity Outreach Data explained above, as well as survey response data from counites and federally recognized Tribes (see *Section III.2*) and data analysis from the broadband intelligence consultant (see *Section III.10*). These three streams of data offer a diverse and more nuanced understanding of digital equity barriers and needs from the perspective of those directly affected and from local governments and Tribal nations in Wisconsin.

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b. Baseline and Understanding Need

To establish a baseline, individuals and groups were asked by the PSC DE Outreach Team how they currently use the internet. Respondents elected whether they used the internet for a set of predetermined categories. Many indicated common uses such as email, remote learning, telehealth, online banking, news, social media, and 'other' uses which allowed for unique narrative responses. Some of these uses included: job searching activities, accessing government e-services, legal aid services, translation services, ordering groceries, running small businesses online, and farming activities.

When asked how individuals or groups would like to be able to use the internet, remote work, learning, and telehealth were among the activities most indicated. For those that selected 'other', respondents indicated a desire to use the internet for small business activities, English language learning, accessing needed services and resources, photography, and general content creation.

The PSC County and Tribal Broadband Surveys provided important insights on broadband need from the county and Tribal government perspectives. Figure 7 below shows the broadband access priorities of the participating counties. Just over 40 percent of participating counties responded that providing affordable broadband to all residents was a high priority, and roughly 18 percent indicated this is an urgent priority, with less than 5 percent indicating it is a low priority. Other urgent priorities include increasing access for K-12 students (25 percent), ensuring schools have reliable access (20 percent), and ensuring libraries have access (18 percent). Few of these items had a high response noting it was a low priority, except for 30 percent of counties responding that 'ensuring all residents in the county have a minimal level of digital skills' as a low priority. That said, another 30 percent marked digital skills as a moderate priority. This response compared to data gathered through direct engagement with covered populations highlights the differing perspectives and understanding of need between local government and covered populations – section IV.2.c shows that most of the coded qualitative response from covered populations indicated a greater need for digital skills.

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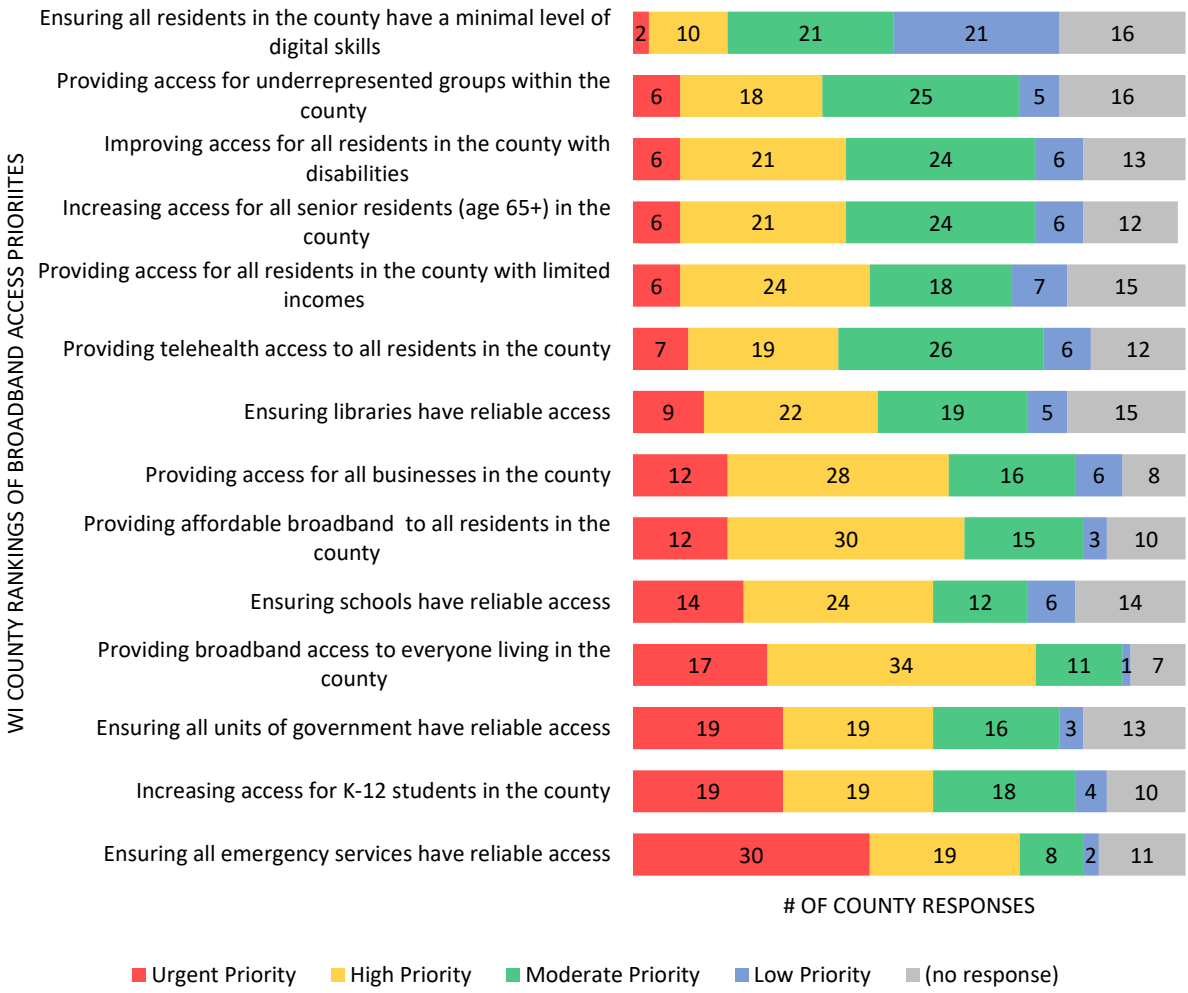
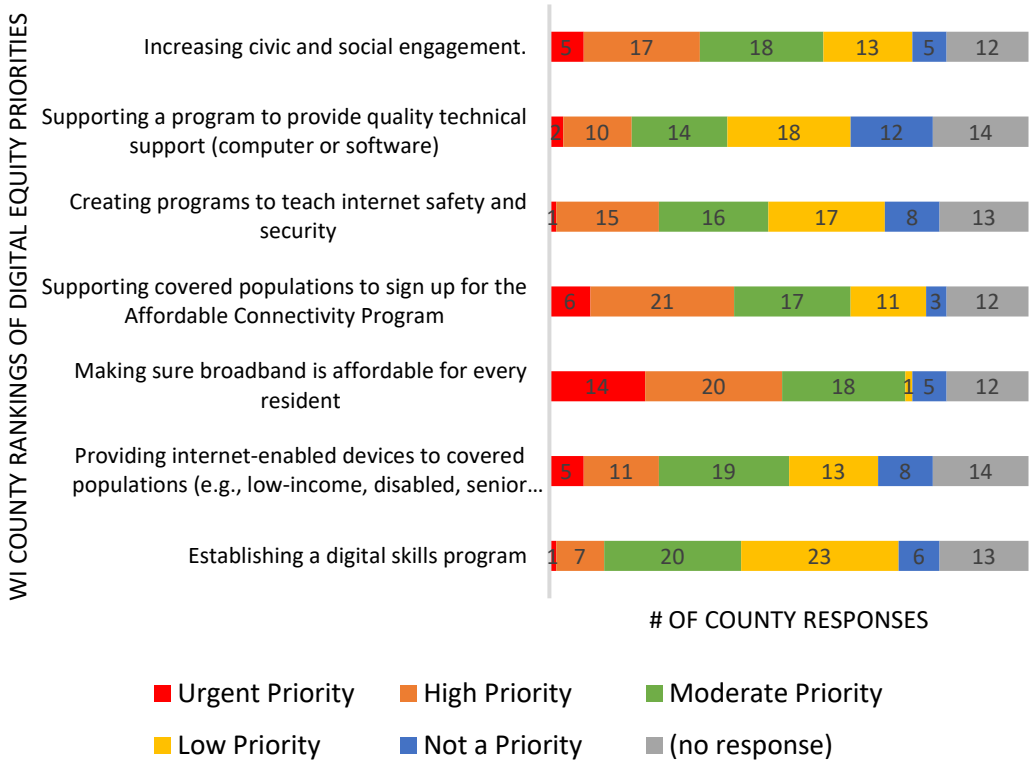
*Figure 7 Number of **WI Counties** (70 of 72) that ranked each item below related to **Broadband Access** as Not/Low/Moderate/High/Urgent Priority*



When asked to rank the level of priority for the items related to digital equity, counties' responses reiterated their focus on affordability – 'making sure broadband is affordable for every resident' was ranked as an urgent priority at the highest level (14 of 70) followed by 'supporting covered populations to sign up for ACP' (6 of 70) – roughly 20 other counties ranked both as high priorities. In-line with the previous graph 'establishing a digital skills program' is a low to moderate priority for 43 of 70 counties.

*Figure 8 Number of **WI Counties** (70 of 72) that ranked each item below related to **Digital Equity** as a Low/Moderate/High/Urgent priority*



Tribal respondents found all of the items in Figure 9 below related to broadband access to be a moderate, high, or urgent priority. Like county respondents, 'ensuring all Tribal members have a minimal level of digital skills' had the lowest frequency of being an urgent priority. Providing access to all, including those with limited incomes, elders, and businesses were all ranked as urgent and high priorities by all participants. Ensuring access for libraries and telehealth services was also highly prioritized by all.

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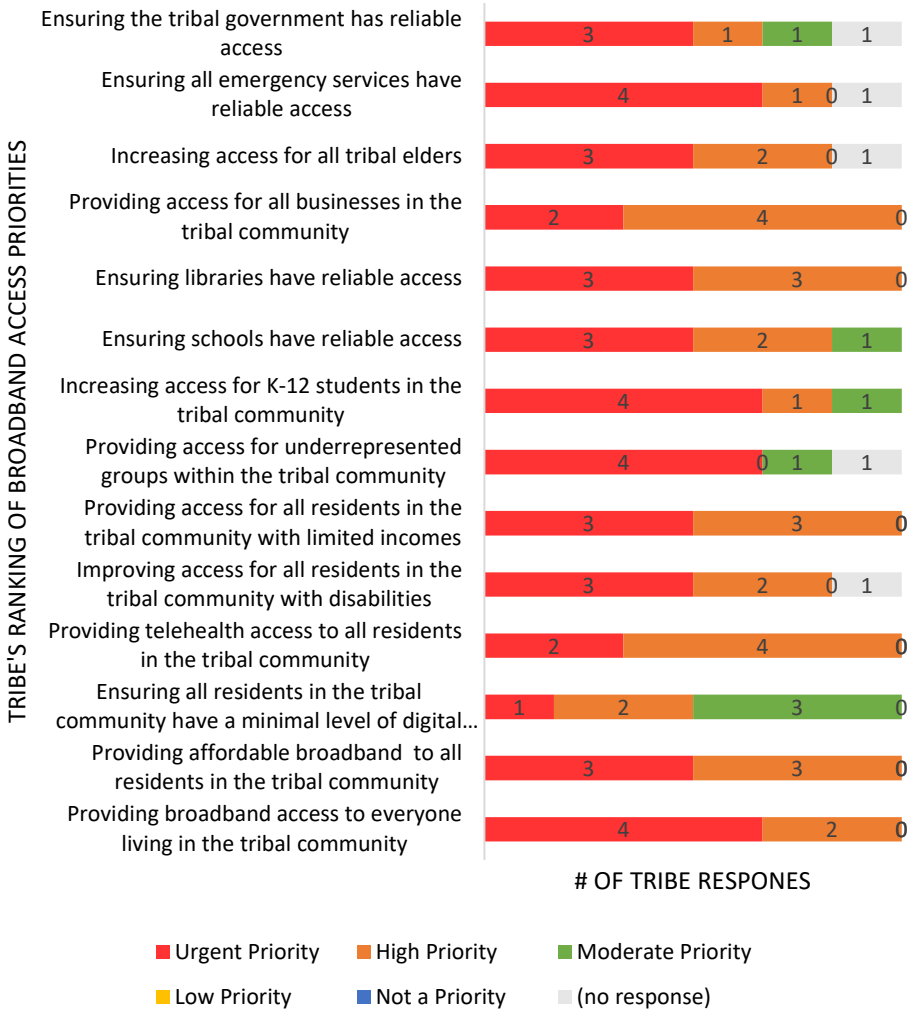
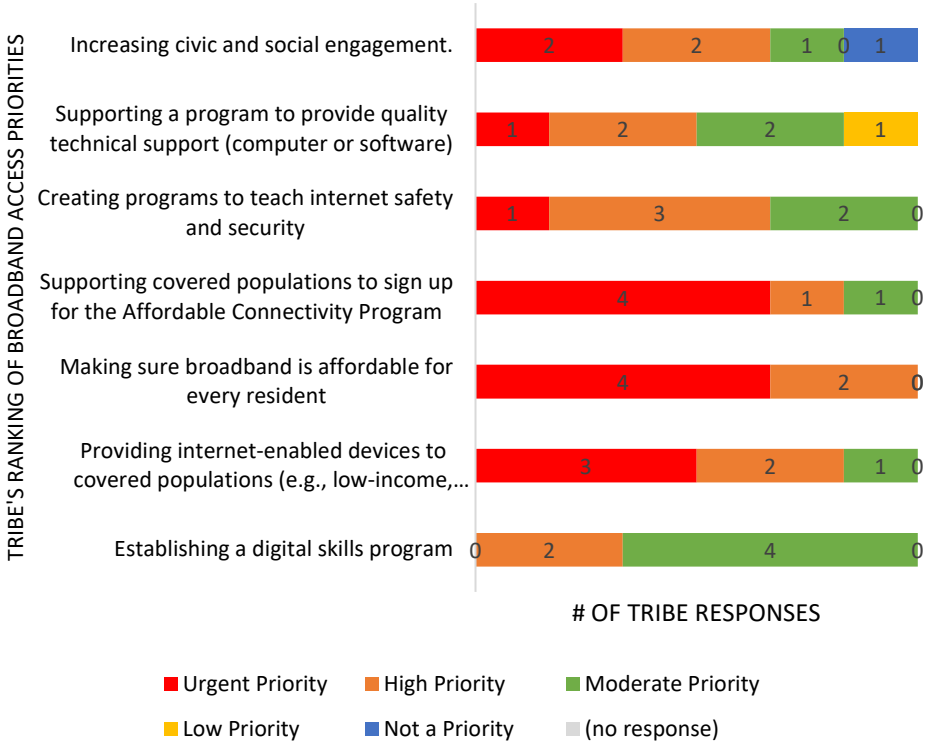
*Figure 9 Number of **WI federally recognized Tribes** (6 of 11) that ranked each item below related to **Broadband Access** as a Low/Moderate/High/Urgent priority*



Tribal respondents, when asked to rank the priority level for items related to digital equity, highlighted their focus on affordability, particularly to covered populations or groups most in need. Figure 10 shows these priority rankings and highlights priority levels for technical support, cyber security, and access to internet-enabled devices.

*Figure 10 Number **of WI federally recognized Tribes** (6 of 11) that ranked each item below related to **Digital Equity** as a Low/Moderate/High/Urgent priority*



c. Systemic Barriers

With this baseline established and a better understanding of priorities and needs among county and Tribal survey respondents and those engaged through PSC outreach, the following section looks at barriers and gaps across all populations, and thereafter examines barriers highlighted by specific cover populations.

Figure 11 below illustrates clearly that access and cost are primary barriers of those individuals and groups engaged by the PSC DE Outreach team. Many other barriers were recorded in the 'other' category, which is captured and analyzed in the following sections that look at the coded data from these and other qualitative responses.

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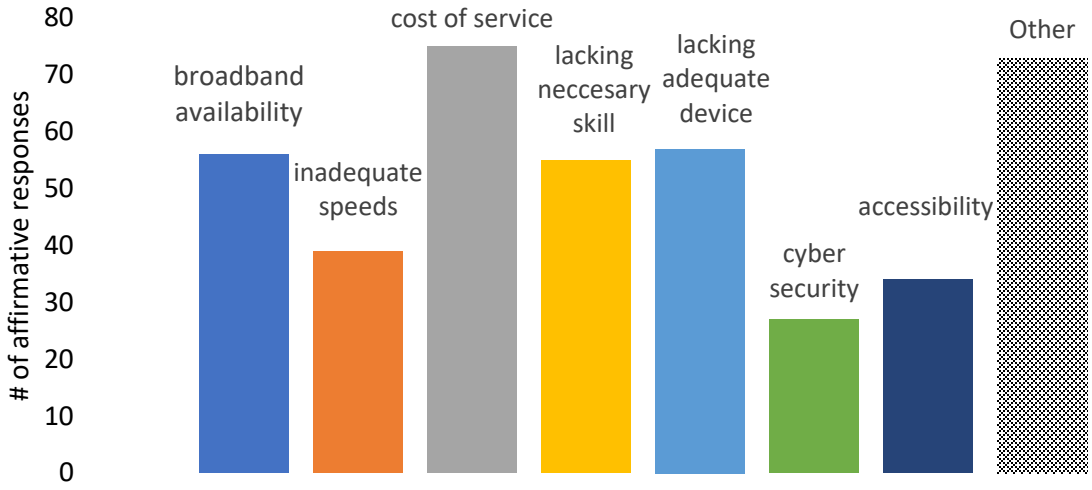
Figure 11 Those engaged were asked what prevents covered populations (or the groups they engage) from using the internet the way they want to



As noted earlier, qualitative questions and interview conversations conducted by the PSC DE Outreach Team were coded in two initial groups: barriers and assistance. Thereafter responses were coded with these two larger buckets as either being related to access, adoption, or affordability. Lastly, we coded each response into a more detailed category within each access, adoption, and affordability group.

Figure 12 below shows the number of instances coded as access, adoption, and affordability barriers. Adoption barriers have many more coded instances than access and affordability – this is due to engaging in more detailed conversations and is an anticipated outcome due to having already engaged participants about access and affordability barriers in previous questions. In short, the qualitative portion of the engagement interviews was designed to better understand the more complicated scenarios related to adoption barriers, thus the higher level of these coded instances.

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Figure 12 PSC Outreach Interviews, Responses coded as Barriers to Access, Adoption, and Affordability by Covered Population

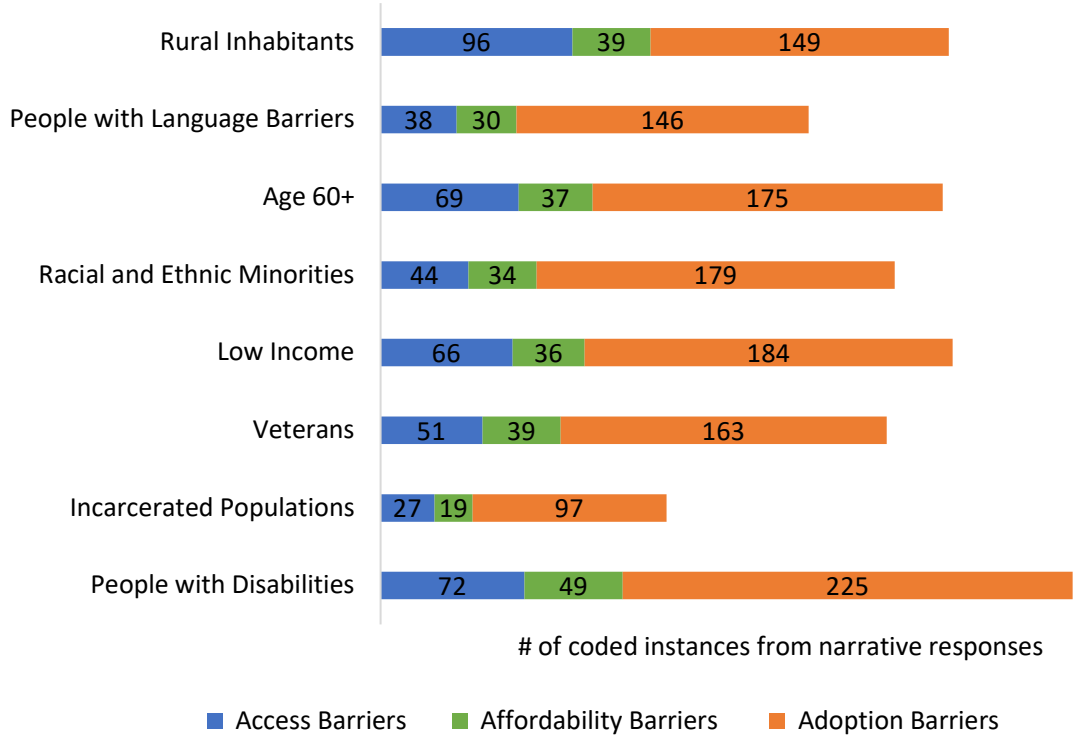

Figure 13 shows that among barriers to access 'bad service' or 'no service' have the highest number of coded instances from all covered populations. Most of the 'barriers to access' categories have a proportional number of coded instances for each covered population, but 'location (geography)' has markedly more coded instances those identified as rural covered populations.

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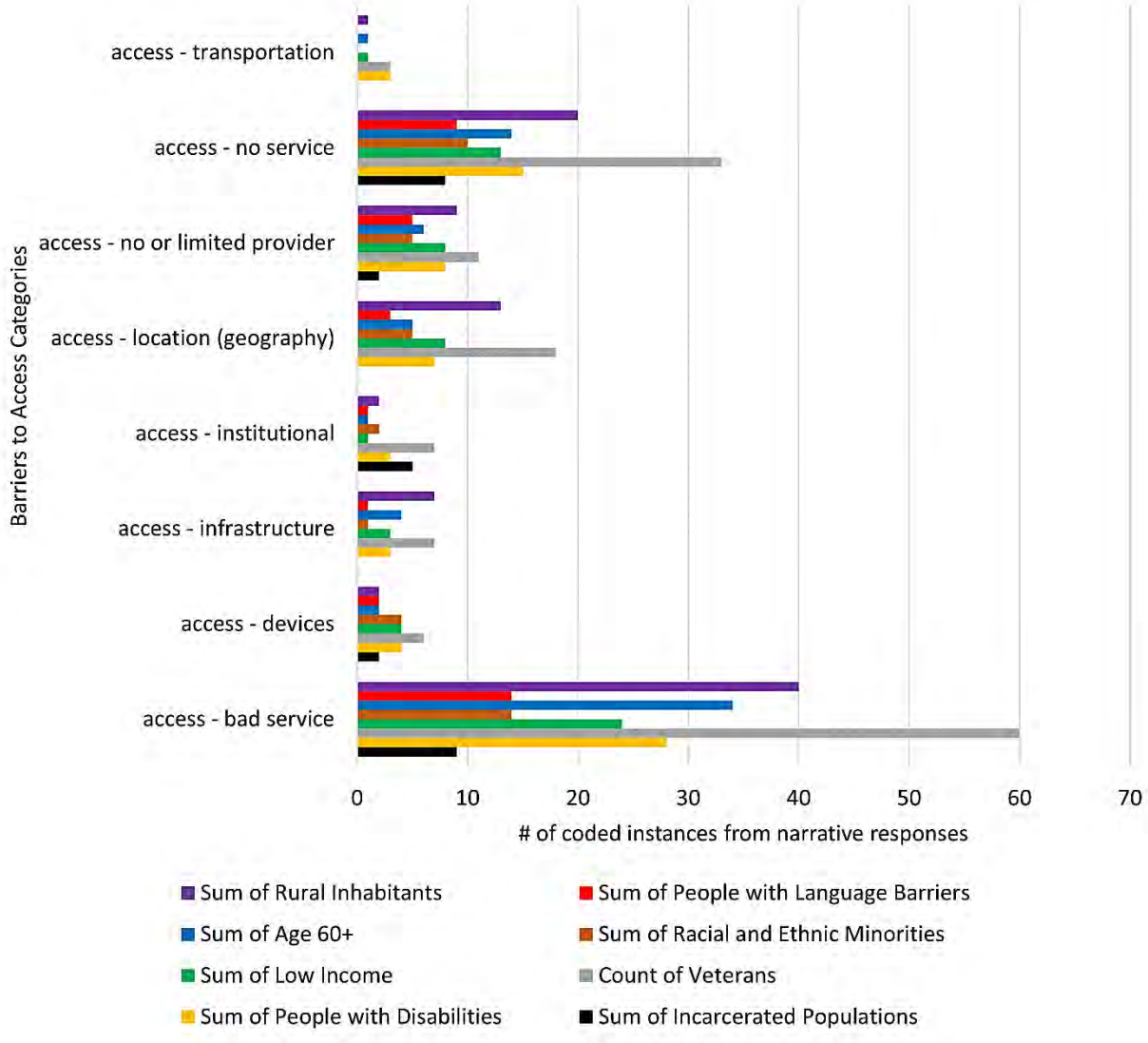
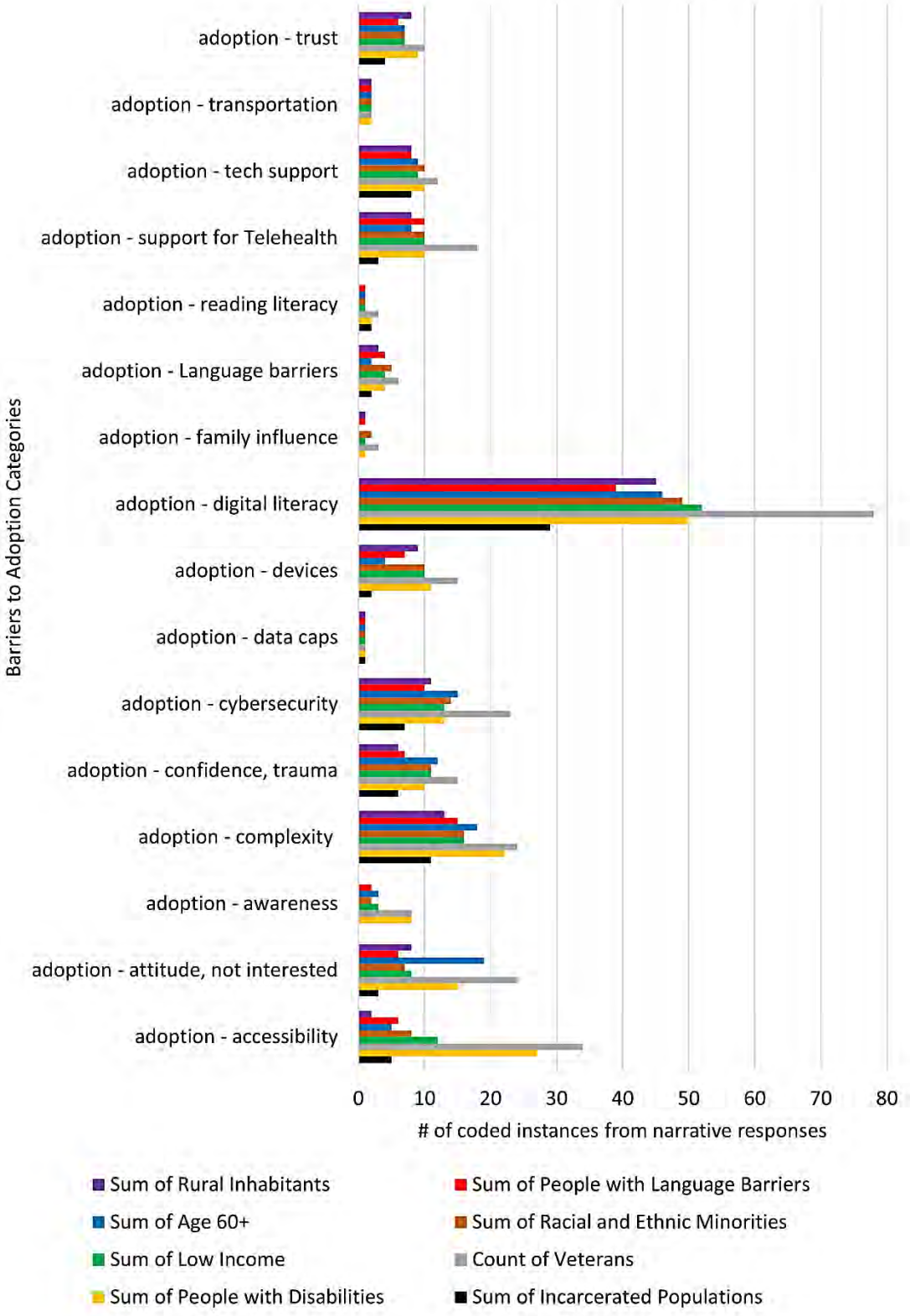
Figure 13 PSC Outreach Interviews, Responses coded as Barriers to Access Categories, by Covered Population



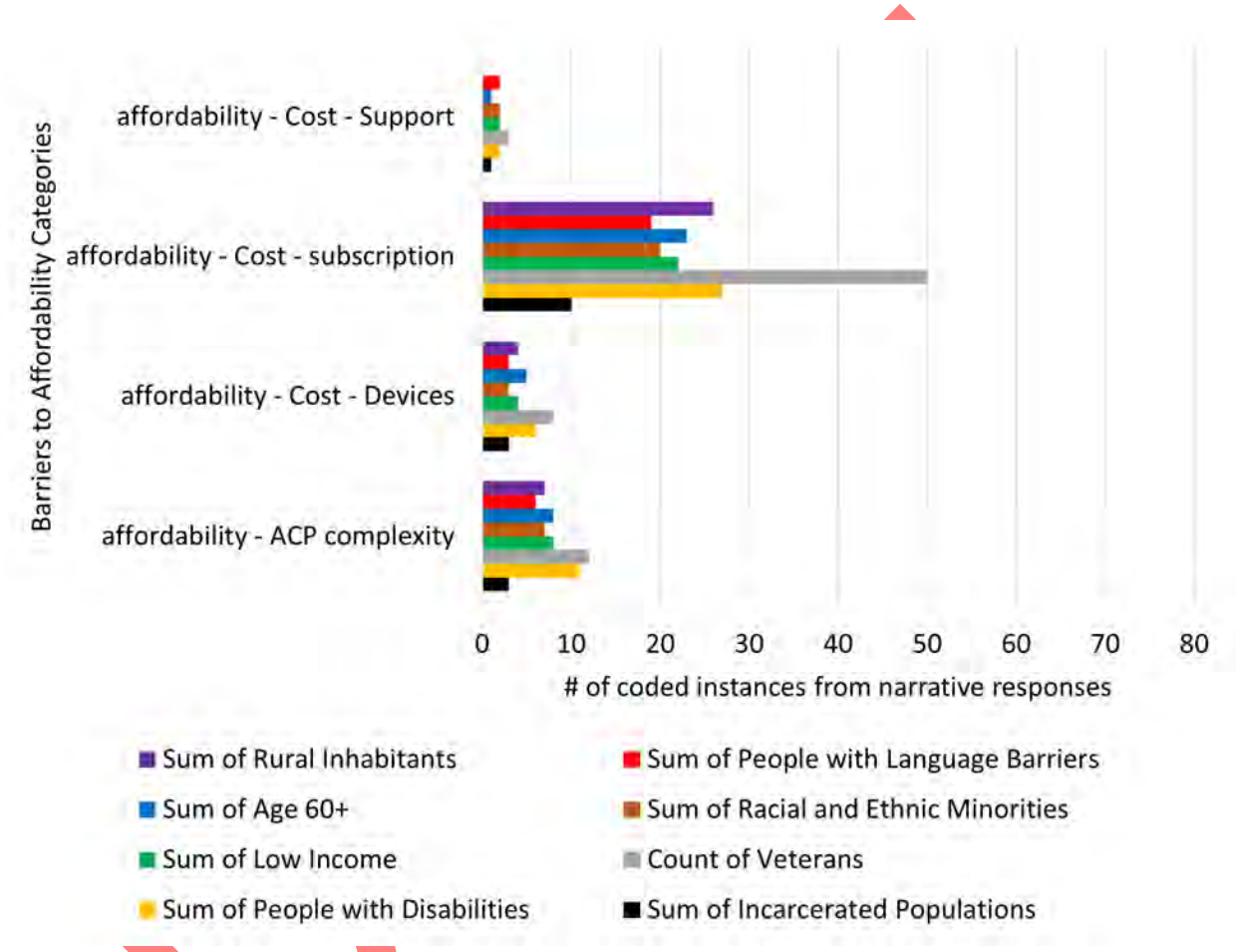
Barriers to adoption has the most categories, but Figure 14 shows the stark contrast between instances coded as 'digital literacy' barriers to adoption compared to all other categories - approximately 40 instances for 'digital literacy' barrier instances for each covered population except incarcerated. Digital literacy is defined as the ability to use technologies to find, evaluate, create, and communicate information.

Figure 14 PSC Outreach Interviews, Responses coded as Barriers to Adoption Categories, by Covered Population



Lastly, there is clear uniformity among covered populations in identifying barriers related to affordability, with subscription costs highlighted as the foremost barrier for all. Also notable in Figure 15 is that after subscription costs, ACP complexity is the next most frequent instance of barriers to affordability from the PSC's DE outreach data.

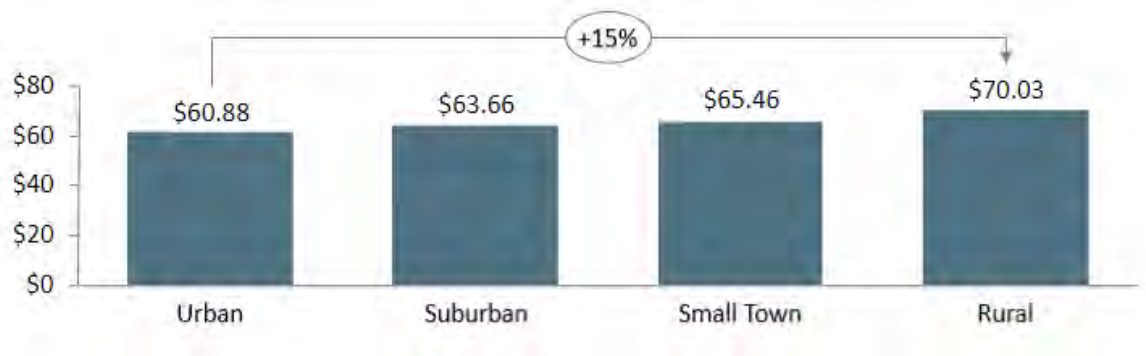
Figure 15 PSC Outreach Interviews, Responses coded as Barriers to Affordability Categories, by Covered Population



The PSC's ongoing WISER survey adds additional context and insight directly from households that are currently not using the internet responses. For responses gathered via a mailed postcard campaign in summer 2023, 304 or approximately 28 percent of respondents who were not using internet cited cost as a substantial barrier.

Across the state, average broadband subscription prices are less affordable in rural areas, compared to urban and suburban localities. Affordability analysis found that the median subscription cost was about $10 more per month in rural areas compared to urban, and the range in rural areas much larger, with the lowest available cost subscription price in some areas around $150 per month, compared to $90 in urban areas (see Figure 16 below).

Figure 16 Average minimum price for served speeds by urbanicity (census block)

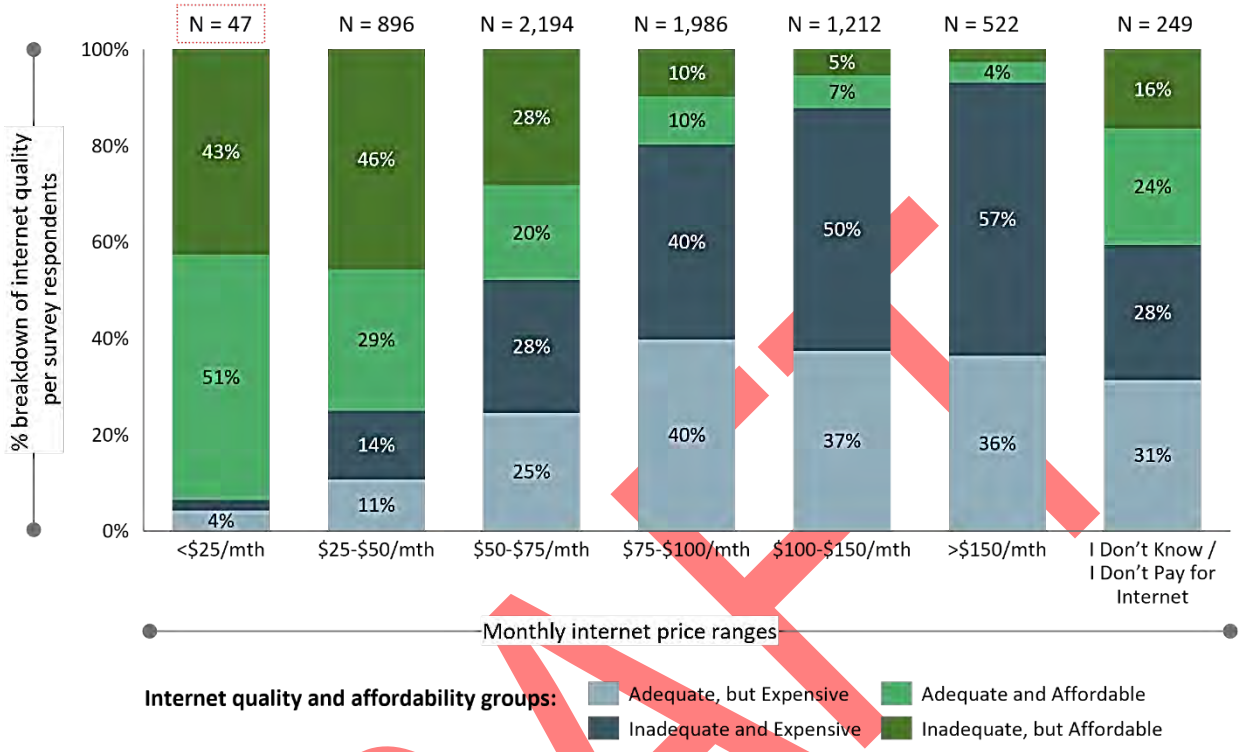


Provider competition plays a role in affordability of subscription plans across the state. Figure 17 shows a clear correlation between the number of providers and the average minimum price for broadband subscriptions. Census blocks with only one provider on average have subscription prices approximately 25 percent higher than census blocks with 3 or more provider options.

Figure 17 Average minimum price for served speeds by # of ISPs present (census block)

To understand what is considered both affordable and adequate internet service, the PSC's WISER survey also asked respondents to rank both affordability and performance. Figure 18 below shows responses, categorized by subscription price range. For respondents paying more than $75 monthly, upwards of 80 percent noted it was expensive, with roughly half reporting the service is inadequate.

Figure 18 WISER Survey Responses: Internet Value in Relation to Monthly Broadband Price Respondents Pay



County and Tribal participants in the PSC Broadband Surveys were asked to assess barriers to broadband access. The county response indicates they see limited obstacles related to digital skills, device ownership, language barriers, and others. This is a notable contrast from the responses received from covered populations and highlights the differences in perspectives and priorities between local government and residents. It's important to note that the majority of the survey was designed to probe issues related to broadband infrastructure and access, thus the responses may be more heavily weighted to these issues.

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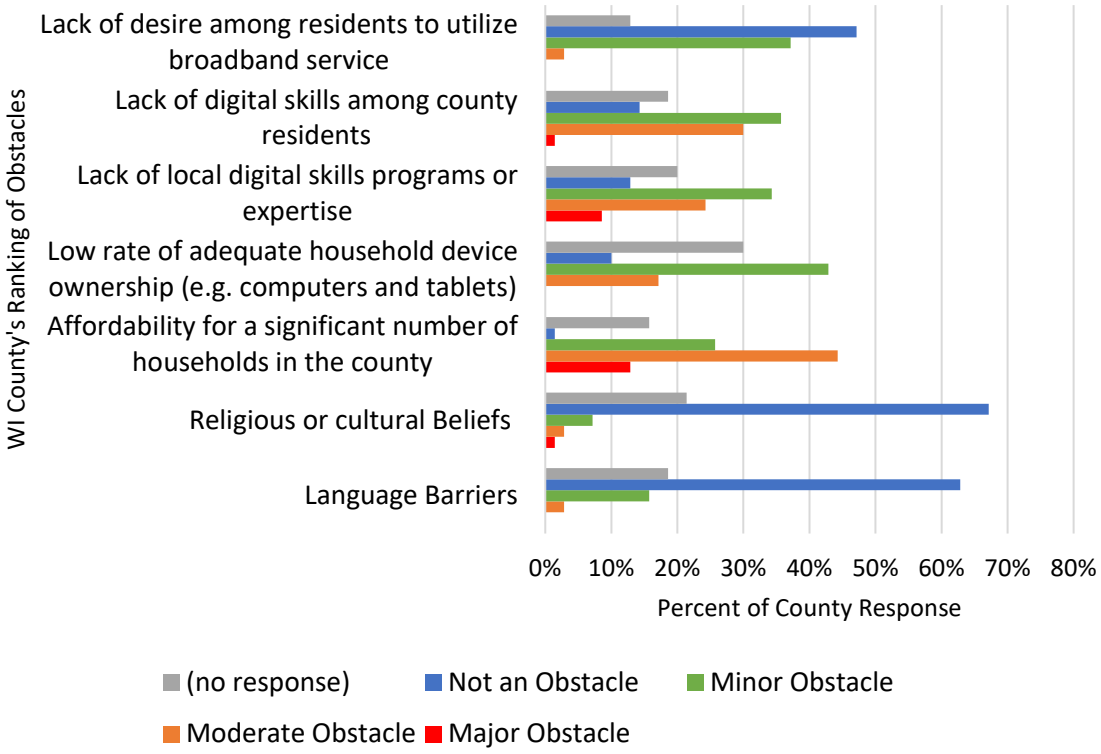
Figure 19 Percent of WI County's (70 of 72) that ranked each potential barrier below as a major, moderate, minor, or not an obstacle to broadband access



Similarly, Tribal participants see affordability and device ownership as moderate obstacles, but digital skills and other soft barriers are not indicated as prominent obstacles.

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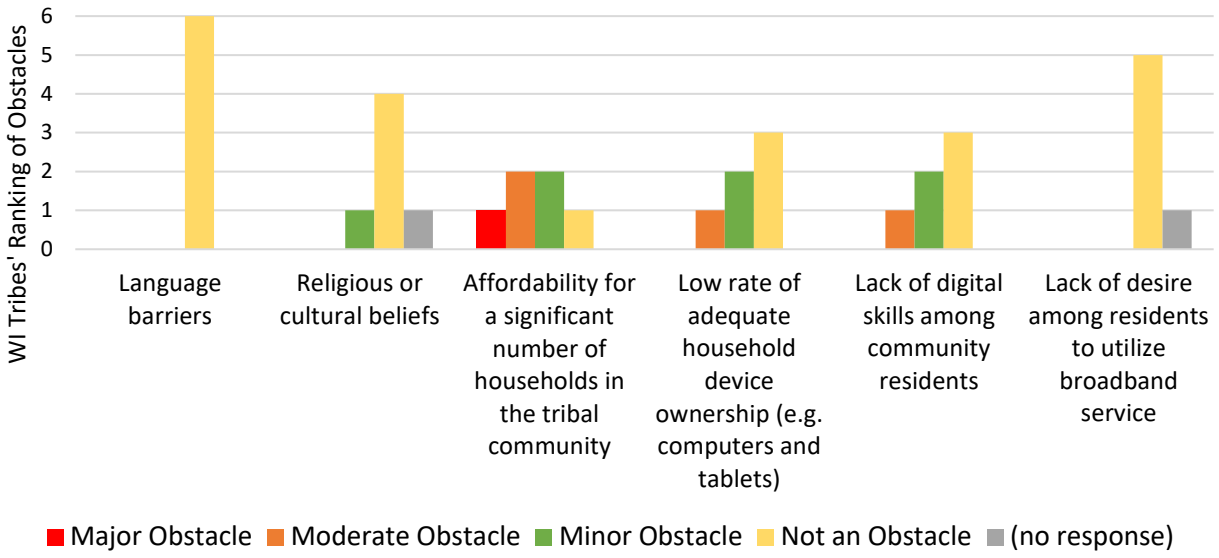
Figure 20 Number of WI Federally Recognized Tribes (6 of 11) that ranked each potential barrier below as a major, moderate, minor, or not an obstacle to broadband access



d. Needs and Barriers by Covered Population

The following section details the needs and barriers identified through the PSC DE Outreach Team's engagement with these populations, both through one-on-one interviews and group discussions. These findings are not comprehensive, but provide a useful sample, with insights directly from affected covered populations. Each covered population section opens with an anecdotal story compiled from interviews done directly with covered populations by the PSC DE Outreach Team – with permission from interviewees.

These sections also include some data from BCG, showing more nuanced dimensions of certain barriers and needs highlighted through these engagements. To provide a geographic understanding of where Wisconsin's covered populations reside, the maps below and throughout these covered population sections show the geographic location (by census tract) identified as high, medium, and low percentage rates of each covered population, using Census data provided by NTIA as displayed in Figure 21 below.

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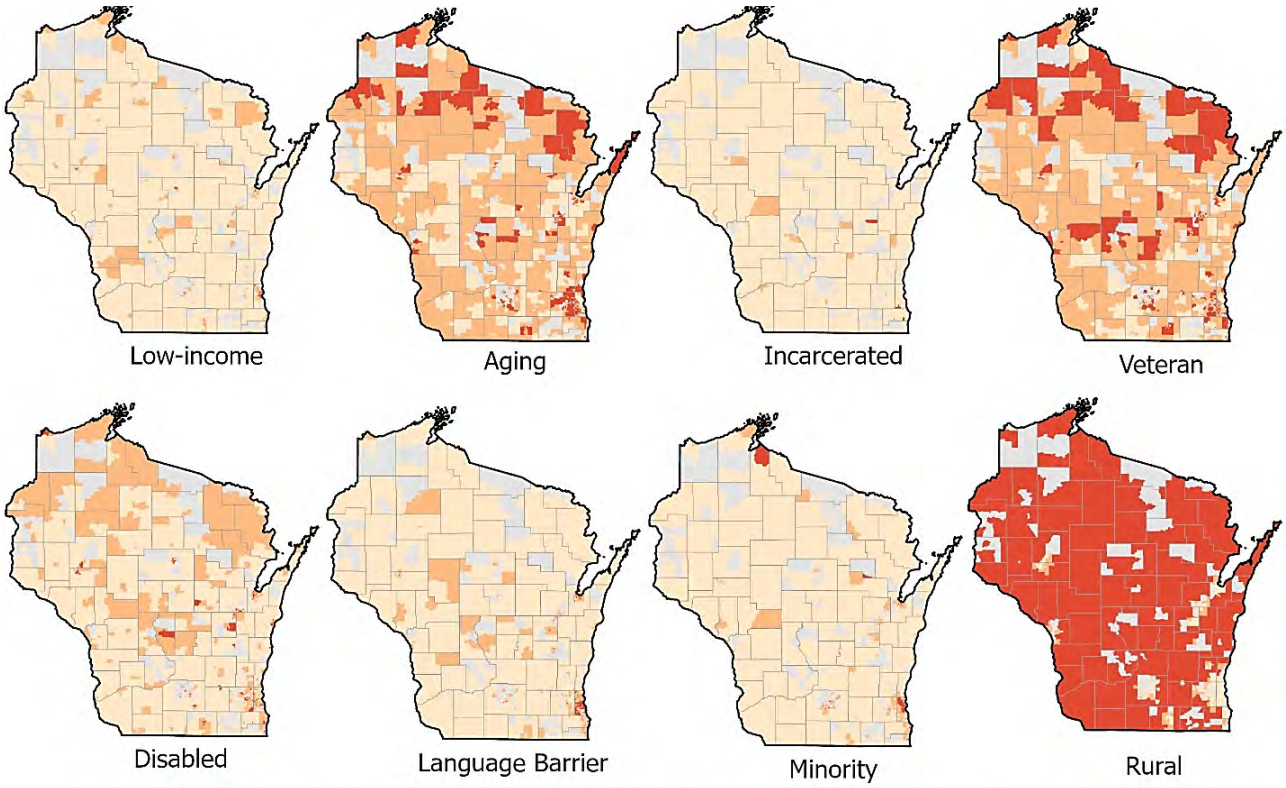
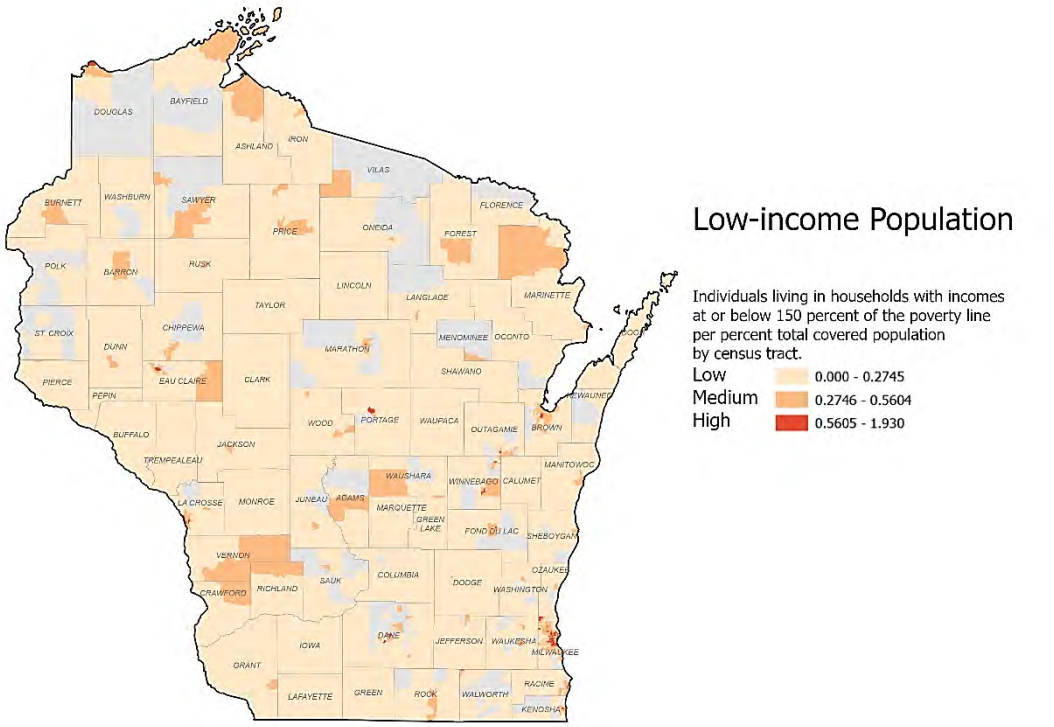
Figure 21 Percent of Covered Population (low, medium, high by Census Tract)



Low-income populations

He was sure his family qualified for ACP and really needed it for his two school aged children to be able to access virtual learning opportunities. He applied for ACP through EducationSuperHighway and was denied for having the wrong paperwork. He applied again and was denied. Finally, on his third application he was accepted. It was not easy and took a great deal of time.
(Compiled from interview with father of two school aged children)

Figure 22 Map of Low-Income Population



Across the state, access to virtual learning opportunities, telehealth, housing, benefits, and employment opportunities were all identified as prominent issues for low-income residents. For many of these low-income households with a limited budget, obtaining broadband access that met their specific needs was simply not an option due to their financial constraints and no available affordable broadband subscription options.

For some of these low-income populations, not having an affordable subscription available may be a barrier, and others live in a location with no internet access and thus no option. For low-income populations that do have an affordable, low-income plan option, the services often have data caps and are less reliable. Although most public libraries in the state provide both free internet access and devices, they have limited hours of operation for access to these resources, sometimes they lack privacy, and often require transportation. Low-income populations were one of the two covered population groups that identified transportation as a barrier to access.

Low-income populations faced some key adoption barriers, including a need for devices that met their needed, training, technical support, privacy, and cyber security. These barriers were all further pronounced by low-income populations' level of digital literacy. Engaged low-income groups and individuals expressed concern over cybersecurity issues, particularly in the areas of

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banking and telehealth. Personalized assistance or digital navigators were identified as a potential solution in helping overcome these adoption barriers. Program and resource complexity is another barrier for the low-income population in the state. This was largely revealed when discussing ACP and the challenges many experienced in completing the registration process, often attributed to overly complex enrollment processes and the need for improved digital literacy and skills.

Aging individuals

A family moved to Wisconsin to help care for their aging parents who live in a very rural area. Both parents worked from home in professional careers. They had three school aged children, so where they moved required high speed, dependable internet access. They found the perfect house five minutes from their parents. Then they learned there was not reliable internet. They had to move 15 minutes from their parents to a home in the next town over. They were not as close as they needed to be to help their parents, but they had to work and provide educational opportunities for their children. They asked staff during one of the listening sessions, "How are people going to age in place in rural areas? How are small towns and rural areas, including the schools, going to survive, attract business and families, and be innovative, if people cannot age in place or move there and work?" **(Compiled from listening session story, South-Central WI)**

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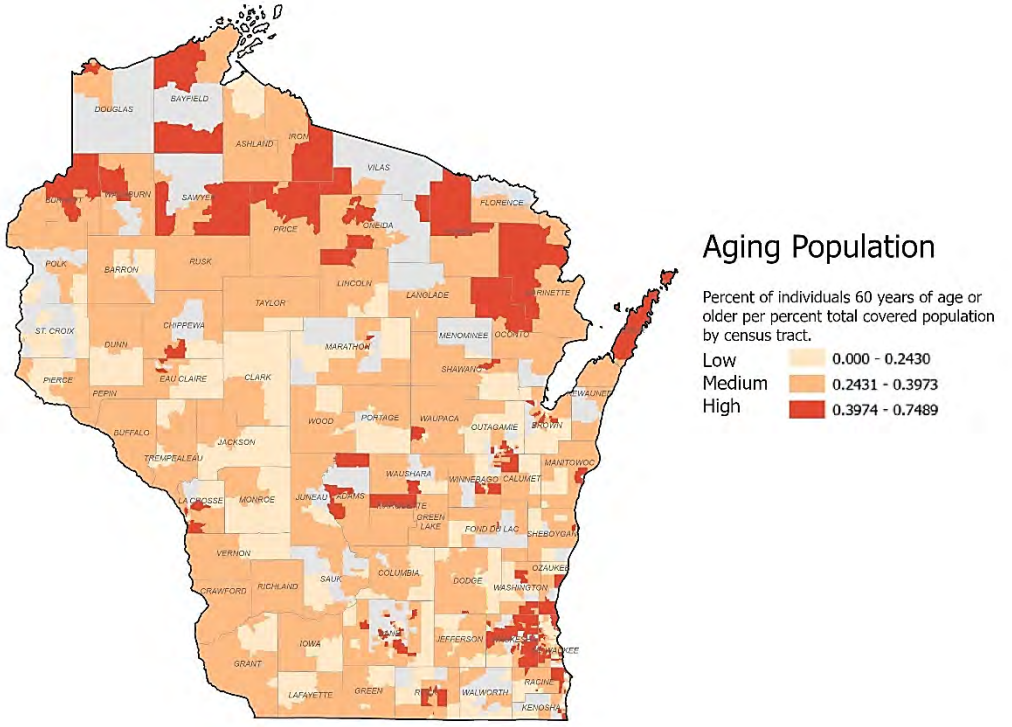
Figure 23 Map of Aging Population



UW-Extension staff conducted outreach at senior meal sites in rural counties across the state and found that 58 percent of those interviewed currently use the internet in some capacity, with usage ranging from very limited to daily usage. Additional data was gathered at listening sessions and other outreach efforts. Many that self-identified as being within the aging covered population group also identified as veterans.

Access for the population over the age of 60 mirrors that of other covered populations. Two thirds of the people interviewed said bad service, no service, and geography are the major barriers. Like the other covered populations, many of the elderly in rural areas identified lack of reliable access as their number one barrier. Many were dissatisfied with their provider, and some shared that their broadband speed was well below the unserved threshold of 25/3 Mbps despite being advertised as available.

Approximately one third of the aging individuals interviewed named affordability as a barrier to internet usage. For aging populations, often living on limited incomes through retirement and other means, high monthly costs for access are often not feasible.

Some of the aging populations that were interviewed lack the necessary digital skills to be able to use a computer or the internet effectively. Many groups and individuals expressed interest and a willingness to learn, noting that they learn from family members, especially younger

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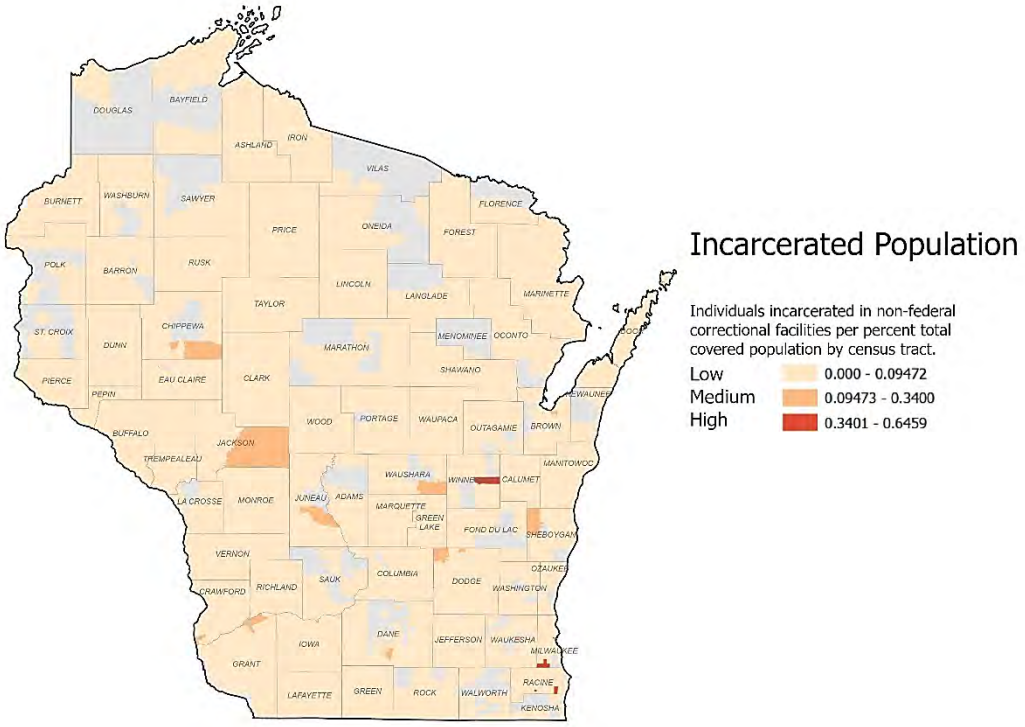
family members such as grandchildren. It was evident that these aging individuals want the option to be able to age in their communities and not have to move to live in new areas as they age. They understand internet is a vital part of being able to stay in their community, and that support for access and adoption is needed beyond their family. Two individuals specifically called out the beneficial support they receive from a digital navigator in northern WI. This access to digital literacy training and technical support is vital to being able to stay in their communities and homes as they age.

Many of the aging population engaged had either been scammed or were wary of internet scams. Some of those who used the internet regularly confessed to being scammed for amounts ranging from $60 to $300. The problems with hackers, scammers and cybersecurity are a major issue for the aging population, highlighting the need for cyber security support and education for this group and others across the state.

Incarcerated individuals

A recently released incarcerated individual shared that he was homeless before he was incarcerated, and he expected to be homeless when released. He could not afford access to the internet. When he could find transportation, he goes to the public library and to other locations that offer free Wi-Fi, but there is no privacy. If he needed telehealth at the library there is no way to keep his personal information private. Locations that do offer public Wi-Fi sometimes make you buy something so that you can access Wi-Fi and the restroom via a code on the receipt for your purchase. Some communities have public Wi-Fi available across the entire community which would make looking for housing, employment, and other basic needs much easier. Even though he had some skills before he was incarcerated, to go from prison life to being released is such a cultural shock that he felt numb and unable to cope and it took weeks to adjust and recover skills. The director of a homeless shelter located in a community with a prison shared that many people walk to the shelter after release. They arrive with nothing, no money, no phone, just the clothes and a few possessions. The shelter does not have Wi-Fi or devices to help. They send recently released individuals to the library.
(Compiled from interviews in South Central and West)

Figure 24 Map of Incarcerated Populations



People who are incarcerated in Wisconsin do not have regular access to the internet due to policies, safety, and security concerns. The COVID-19 pandemic resulted in even more strict isolation of people in jails and prisons, limiting traditional access to computers and the internet further. In response, programs were created to allow incarcerated individuals to purchase tablets that come pre-loaded with programs offering allowed (screened) books, music, and games for download. These devices also allow for video visitation of family and friends. There is a cost, depending on the location, to the person for these devices and for subscriptions to the content.

Most prisons and jails operate educational programs, and these have resumed as COVID-19 has receded. The DOC educational services include four elements:

- Adult Basic Education, HSED & GED serving about 1,700 persons yearly.
- Vocational training, 25 state institutions offer programs. A partnership with DWD has led to the establishment of DWD computer labs in four institutions and traveling vocational training programs. Persons near their release date do have supervised access

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to the internet in these labs for the purposes of developing resumes, searching for jobs, and scheduling job interviews.

- Higher Education funded by Second Chance Pell Grants at all institutions with an educational unit.
- The state system is also developing a pre-college curriculum that includes technical and digital skills.

Individuals in local (city or county) jails also do not have access to the internet. These sites may participate in the tablet program with secured subscription content. These sites may also have space for educational activities provided by outside groups. These services are dependent on the support of the local municipality.

A survey was conducted, by PSC staff, in the Eau Claire County Jail. Sixty people were interviewed (25 percent of the population), men and women, in groups of six to eight over a period of two days. Since the population does not have access to the internet while in jail, they were queried about their use of the internet before coming into jail and how they hoped to use the internet upon release. Several people mentioned that they were homeless before coming into jail and that they could not afford to pay for the monthly internet connection. Most were able to obtain a free phone that was WI-FI enabled before they were incarcerated, so they depended on access to free public wireless connections. Several people wanted to use the internet while incarcerated to work towards a degree, certification, or employment advancement. Like all covered populations, people used the internet for a variety of uses. Some seemed rather adept at digital skills, but others were less so. Several expressed frustrations that they are not allowed to search for things that they need when they are released such as employment, housing, food assistance, and supportive reentry programs.

Like all covered populations, recently released people used the internet for a variety of applications. Some seemed rather adept at digital skills, but others were less so. One individual was an eighth-grade dropout and said he needed help with everything. Some had experience with virtual meetings that made it easier to meet probation requirements such as virtual meetings with a probation officer or completion of a required therapy group such as anger management or cognitive/behavioral training. Jobs Centers and workforce resources were specifically mentioned as being helpful for accessing the internet and finding employment opportunities.

The consensus perspective is that costs for internet access are too high, and this puts the internet beyond their reach. Additionally, the need for devices and training were needed for this incarcerated population to re-enter their local communities successfully. One person who had served 25 years in state prisons and was nearing the term of his sentence put it this way, “I feel like I am on a gravel road driving a horse and buggy. But near me is a superhighway with

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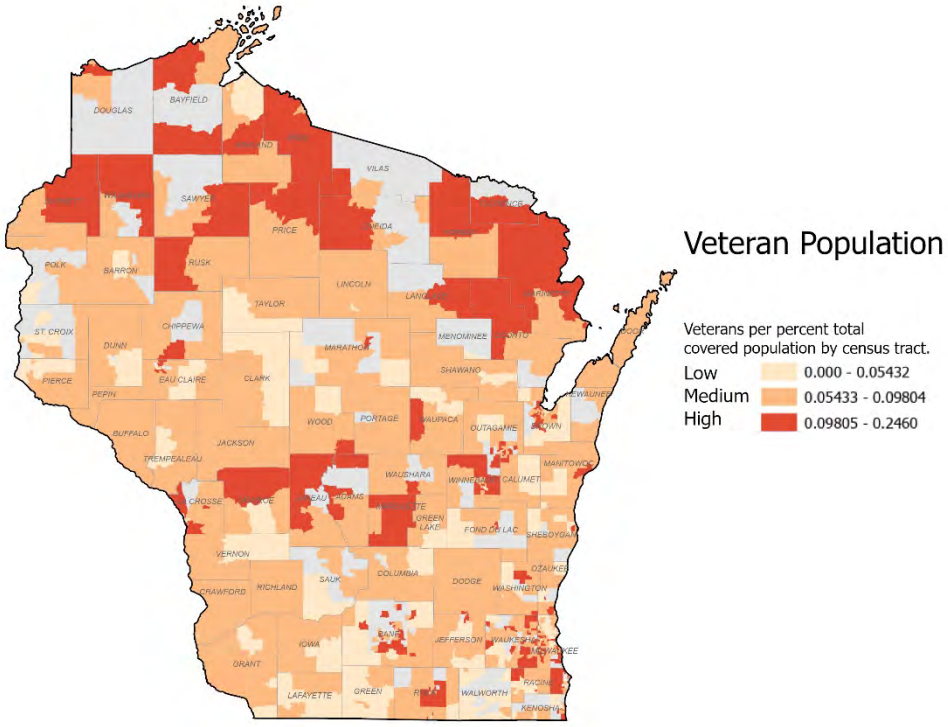
high technology devices roaring by at high speeds, I am very scared and anxious at the magnitude of what I will need to learn."

In working with DOC, the Education Director referenced "Building the Technology Ecosystem for Correctional Education: Brief and Discussion Guide" from the U.S. Department of Education: Office of Career, Technical, and Adult Education, August 2022 as a resource. Another useful document encountered was "How to Unlock the Power of Prison Education" by Stephen J. Steurer, Educational Testing Service, August 2020. Current increases in access to Second Chance Pell Grants may be a way to increase access to digital skills training. The Wisconsin prison that serves females has 50 people registered in the program. More individuals are on waiting lists to access these educational opportunities. Educational staff at the DOC are currently short staffed, which is impacting access to the program.

Veterans

A veteran with a disability shared that using technology and the internet is so complicated. She was trying to get telehealth appointments, often with only a cell phone. Coverage at her home was so bad she had to drive into her local Veterans of Foreign Wars (VFW) post for the telehealth appointment. That was a 30-minute drive while the Veterans Affairs (VA) center was a 3-hour drive. If she can't do telehealth it takes much longer to be seen by a doctor. If she drives, she must complete forms for reimbursement, and she shared she just doesn't apply for reimbursement. The form to receive reimbursement for mileage to an appointment has over 15 steps. She gives up the money. It is just too hard especially doing it on the phone with possibility of being disconnected mid-process. **(Compilation of interview, South-Central WI)**

Figure 25 Map of Veteran Population



Veterans' broadband needs and gaps vary by geography as well as intersect with other contributing factors. In rural areas, the VA continues to roll out more telehealth options, which provide an opportunity for timely care when veterans need it, but the lack of access to high-speed reliable internet and the lack of digital skills pose barriers for veterans who need such care. Those without access wait longer to get an in-person appointment and often travel farther distances if they can travel at all. Rural veterans with disabilities are particularly vulnerable when there is no or limited access to broadband. When access to high-speed internet is available, staff observed a lack of adoption, expressed by some of the more internet-savvy veterans as a "lack of will" to engage in online activities.

Telehealth through the VA, as well as applying for benefits and reimbursements online, provides an interesting opportunity for expanding adoption of broadband services as they become available. Providing training in ways more familiar to veterans, such as Standard Operating Procedures or peer-to-peer training as well as technical support will be necessary to support wider adoption. Veterans shared at VFW meetings, they use their fellow veterans for training and support.

Access to high-speed broadband is a clear barrier across all populations, but veterans are the only other population that identified transportation as an issue to gaining access at a library or other public space. This lack of access impacts the availability of needed services, such as health

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care and mental health services. As noted previously, when veteran populations can get access to transportation, lack of privacy can be a barrier when utilizing these public resources.

As with access, affordability of broadband subscriptions is a top barrier across all covered populations, but the magnitude of this barrier is more pronounced for veterans in rural areas. Veterans also identified device and equipment costs as a barrier. Veterans with disabilities often need assistive technologies that can be expensive. One veteran shared that his hearing aids required an internet enabled device to function properly, which he continually struggles to maintain, affecting his ability to reliably hear with the aids.

Adoption is impacted by a lack of digital skills. Veterans are also quite concerned about cyber security, and as noted in the aging population section, many respondents identified as both covered population groups, largely mirroring those barriers. They do not have the skills set to identify what types of devices they need and are concerned that their devices will 'work' the way they want them to. Like other covered populations trust is an issue and they would like to receive training and support from fellow veterans.

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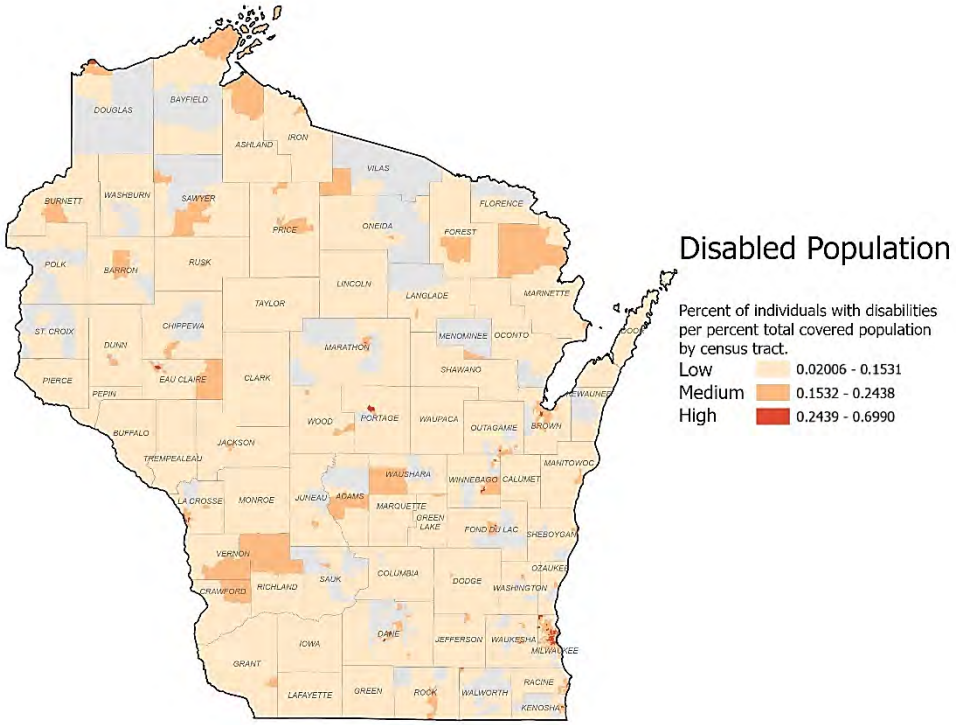
Individuals with disabilities

"Nice but not necessary is a theme that surfaces whenever I run into an accessibility barrier. I have a dream that someday I will have the same access that everyone else has. For example, I can use an accessible voting machine. However, I can only access this machine on the actual voting day, while everyone else has more options for pre-voting. I would like what everyone else has. I am on a local elected board which purchased an automated voting system. It does not have an option for persons who are not sighted—the company is developing a work around—but it never should have been purchased in the first place. My iPhone helps but it is not ideal for some things. The local library and the university library do have screen readers, but they are not totally accessible, and they lack the industry standard reader. Applications, webpages, and other online resources are not in compliance with the Americans with Disabilities Act. I worked with a group of blind folks and a sighted person to generate an accessible fix for the online WORDLE game. It may seem like a small win, but this is a social phenomenon and loneliness and isolation are a problem for persons with disabilities. A coding solution to change colors to something that could be understood by persons without adequate sight fixed the game, but only until another company acquired the game and it was made inaccessible again. The work group advocated again until the company responded and made the game accessible once more. It is a constant struggle and almost every day I find an opportunity to advocate for more accessibility. I offer a concluding story: I was once on an elevator and an adult and child joined me. The adult, who I imagine noticed my cane and my blindness, remarked to the child, "Oh, they have Braille for the floor numbers, isn't that nice!" I wanted to say, "And there are print numbers too, isn't that nice!". We seem to be where we were 30 years ago with physical disabilities. We need to get nice AND necessary in people's minds." **(Resident, West-Central WI)**

Figure 26 Map People with Disabilities Population



The experiences of individuals with disabilities and their digital inclusion challenges vary widely, even amongst those with the same type of disability. Mobility, cognition, independent living, hearing, vision, speech, and self-care services are often used for data collection to understand people with disabilities' experiences, but they are by no means comprehensive, and targeted outreach in communities is required to understand key barriers specific barriers to digital equity.

Access is often more complex and expensive for people with disabilities, as much of the common technology used for internet access was created by and for able-bodied and neurotypical people, and it often lacks features that allow people with disabilities to fully interact. Adequate adaptive technology is essential to an individual's ability to wholly benefit from Internet for All, and training for adaptive technology is necessary for full use. These adaptive technology needs vary from person to person but are often similar among the categories of disabilities in the tables below.

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Table 3 Categories of disabilities

Deaf & Hard of Hearing	Deaf & Hard of Hearing individuals in the United States often use American Sign Language to communicate. Communications technologies like video calls and video resources may use interpreters or captions which need to be received with high-speed internet. Slow or spotty connections can inhibit or outright prevent communication. Hospitals and other healthcare sites tend to use Video Remote Interpreting (VRI), which is often insufficient in medical settings. This can result in a lower standard of care for Deaf & Hard of Hearing individuals. Especially for native signers, maintaining videos in American Sign Language is essential for online resources.
Blind & vison-related disabilities	Accessible design of digital resources is necessary for screen readers or other technologies designed to assist in reading digital resources. Resources are often not formatted or consistently formatted for compatibility with these technologies. This is especially problematic when individuals are trying to reach necessary services like government assistance. Accessible applications and interfaces exist and need to be consistently implemented.
Deaf-Blind	Individuals who are Deaf-Blind experience additional barriers. Many people who are Deaf-Blind had one disability before the other. They may know how to use one technology and then must integrate or adapt to different accessible tools. As a progressive issue the needs to tools are ongoing. Training is central to access, and some of the most important characteristics of successful training are: ▪ Having a competent trainer is one's native language. ▪ Attending consistent & frequent training. ▪ Support from families and caregivers.
Cognitive disabilities	Plain language principals are needed and when resources are not it can pose barriers to comprehension. Caregiver's services are often advertised online. Those in group homes or similar settings may not have any or may have limited access to the internet making it challenging to find needed care.

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	Expanding awareness of how access can benefit those with cognitive disabilities is necessary for increased adoption.
Physical disabilities	Hands-free technology is not the only solution needed. Those with motor-skill related disabilities can struggle to use touch-screen interfaces. Yet, there are not many device options with interfaces that are easy to physically navigate while still being powerful. Electronic verification requirements are much more common post-Covid. Individuals who need to access things like telehealth care, must have an accessible device with relatively high-speed internet. Alongside device access, training on how to use devices and assistive technology is crucial to individuals' ability to fully use the internet and digital resources.

Adoption is often impacted by inaccessible digital content. People with disabilities often rely on screen readers or need plain language designs. Individuals may have multiple disabilities that prevent them from using the most popular adaptive technology. Access to social media is important for maintaining personal networks with other people with disabilities, who often share information and resources to each other that assist with adoption.

People with disabilities shared that the need for adaptive technology is often incorrectly associated with a lower level of digital skills. While those who lack adaptive technology may have less digital literacy as a result, those who have adequate access and support can excel. Many individuals and organizations we spoke with noted the transformation of individuals' internet use post-training. One individual had never used the internet prior to receiving training and the appropriate assistive technology. After, they used technology often and were considered an expert by their peers and now this person organizes expeditions to technology conferences with coworkers with to explore emerging assistive technology.

Access is a major issue, as has been shown across all covered populations. People with disabilities face additional barriers as there is a need for assistive technologies to aid in accessing the internet and digital resources. Because of systemic barriers that people with disabilities face, a high proportion are low-income. Census Data (2020) shows of individuals aged 18-64 in the U.S., approximately seven percent report being disabled. Yet nearly 18 percent of those in poverty report being disabled (Income and Poverty in the United States: 2020 (census.gov)). When combined with the high cost of adaptive technology, cost can be prohibitive as it concerns access and adoption.

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Individuals with a language barrier (including individuals who are English language learners, and have low levels of literacy)

She came to this country from a refugee camp in Thailand—she could not return to her homeland in the highlands of Laos because of the war. Growing up she had no chance to learn how to read and write in her own language. She started attending English language classes after she arrived in the US, but with caring for her children and work responsibilities, there was not enough time and she stopped. Now she is older, and it is hard to learn. Her daughter-in-law, nieces, and children sometimes help her learn how to use technology, but they are busy with life. She does not know how to drive so is home and feels sad. The language barrier is a large barrier and prevents her from talking to others without a translator. She attended the interview because the agency provided transportation. She does some things on the internet but needs support. She only knows how to answer her phone and dial numbers to call out. She is comfortable coming to the agency that hosted the interviews and wished the agency offered classes in how to use technology, as well as transportation so she could come to a familiar and comfortable place to learn.
(Compiled from interview with individual, West-Central WI)

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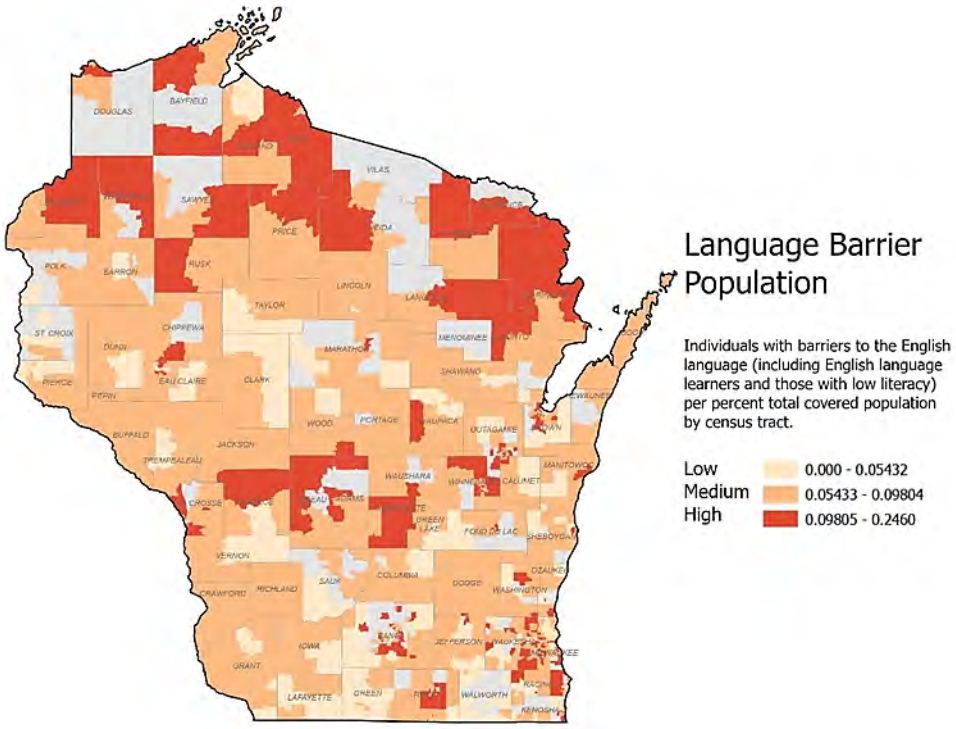
Figure 27 Map of population of people with a language barrier



Wisconsin has many populations who identify as English Language Learners. This includes a large Hmong population, Spanish speakers, Afghan immigrants and a significant migrant population. Access to the internet is vital for this population as they need access to learning resources, relocation services and connections back to their families in other parts of the world. Access is impacted by rural locations, the neighborhoods they live in and poor internet service.

As with other populations, cost is a significant barrier to full adoption of broadband service and internet-enabled devices. When it comes to choosing between food for the family and a monthly internet bill, the choice is driven by basic needs. Several educators also brought up the lack of credit cards or being unbanked. They might have a cell phone but no credit card to purchase the applications or materials they need for courses. Some programs provided laptops to students to eliminate device access as a barrier. However, they still directed them to community centers or libraries to obtain access to public Wi-Fi that may not be accessible at the time it is needed.

Individuals with 'language barriers' includes individuals of all ages, incomes, abilities, and ethnic groups. As a population, the primary barrier to being able to utilize the internet was identified as English language literacy, although reading literacy was also a concern. Data analysis findings

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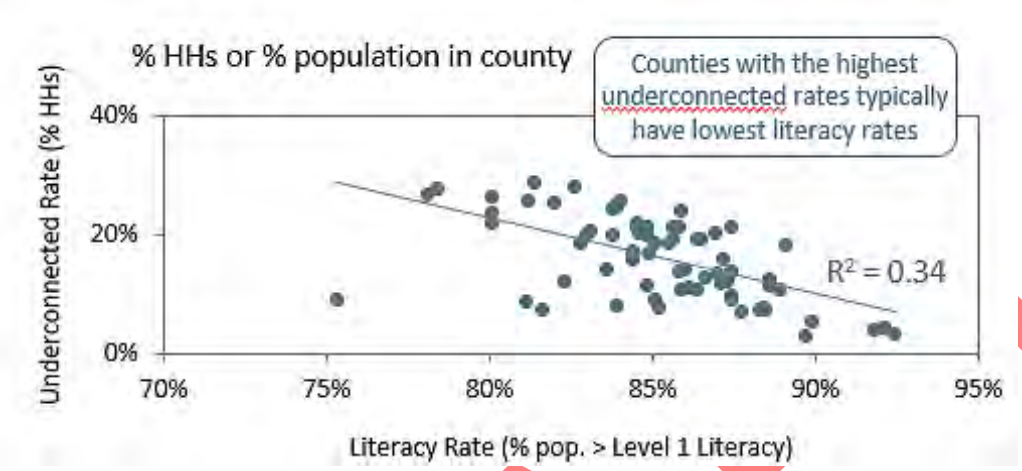
from the BCG supports this concern, showing a strong correlation between literacy rates and broadband adoption shown in Figure 28 below – those with a low level of reading literacy were less likely to subscribe to an available broadband service (underconnected).

Figure 28 underconnected households per county compared to % of literacy rate by county



During interviews and outreach events Hmong, Afghan and Latinx populations that identified as having a language barrier shared the following:

- The Hmong individuals engaged experienced access, affordability, and literacy barriers.
- Much of the Afghan population that has immigrated to Wisconsin is in transition as they identify places to live and seek out needed resources, which makes accessing the internet very important.
- Individuals shared that migrant populations tend to live in rural areas working in agriculture and dairy industries, noting that much of the migrant population is largely seasonal.

The rural location of many Wisconsinites with a language barrier magnifies their barriers to access. A value statement at Literacy Chippewa Valley sums this up as "Literacy Changes Everything." These barriers highlight the need for culturally relevant resources, digital literacy training and support.

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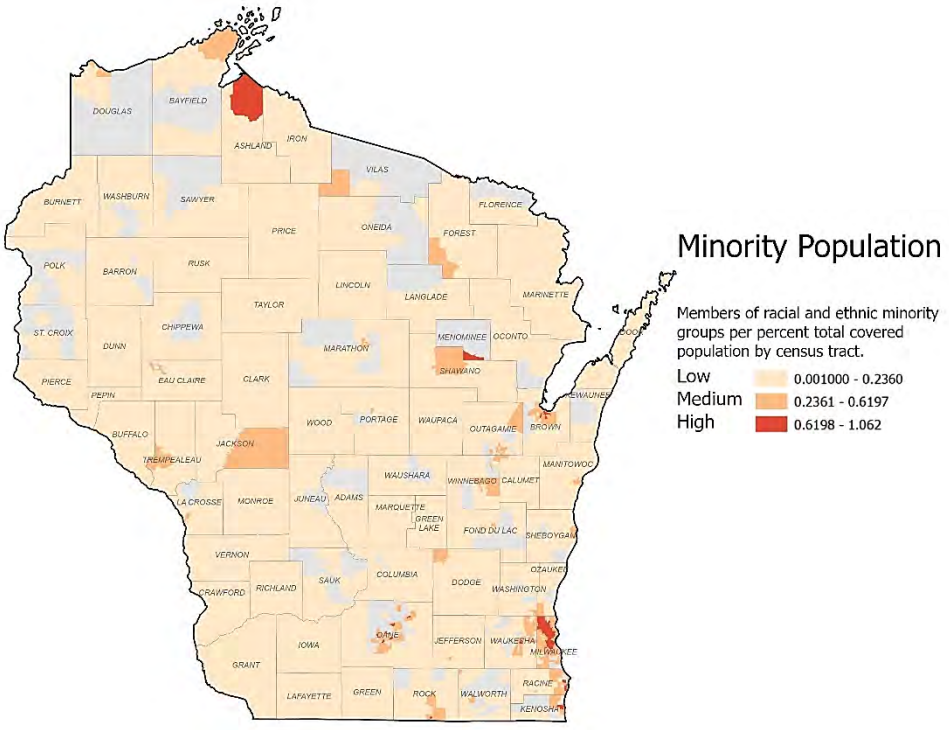
Individuals who are members of a racial or ethnic minority group

She noticed that small nonprofits run by and serving people of color are often asked for information regarding the populations they serve in extractive ways. Then, when resources are available through grant programs the money often goes to the larger organizations that are already well-resourced but not as embedded in the community. She shared that what's frustrating is that these small organizations are often the best candidates to make use of those resources because they have a longstanding, trusting relationship with the people they serve. Yet, because their resource and capacity levels are low it is hard for them to complete. **(Compiled from interview with non-profit leader of organization in Northern WI)**

Figure 29 Map of Minority Population



Many individuals of racial and ethnic minorities interviewed were impacted by the neighborhood they lived in, especially in some of Wisconsin's larger cities like Milwaukee and Madison. Some expressed concern that services systemically avoid areas where racial and ethnic minorities reside. In Milwaukee, individuals noted that areas with high populations of

people of color and low-income residents were neglected by internet service providers, causing some areas without internet access or with slower relative speeds within large cities.

Affordability was also noted as a major barrier and is supported with analysis by the BCG which found that black and Hispanic populations are disproportionately burdened by broadband subscription costs in Wisconsin. Figure 30 below shows much higher rates of cost burden for those populations that are currently served and subscribed to a broadband service. The map in Figure 31 also below shows cost burdened (purple) and not cost burdened (orange) locations in the greater Milwaukee area, showing clear geographic divisions that often largely align with racial demographics.

Figure 30 % of Cost Burdened, broadband served and unserved, by race

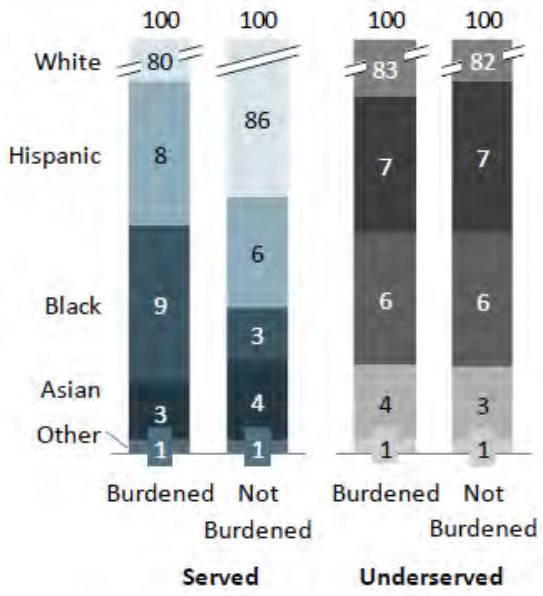


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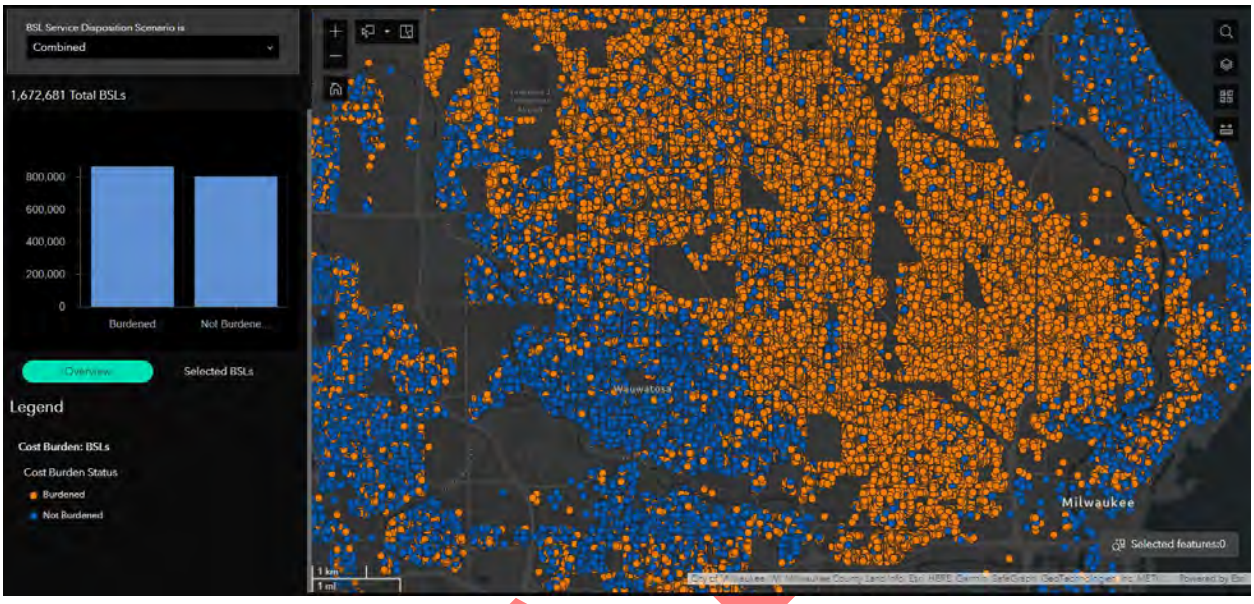
Figure 31 Cost Burdened Broadband Serviceable Locations, served and unserved, Milwaukee region



Individuals noted a need for privacy in locations with public device and Wi-Fi access. Consistently, the need for culturally responsive digital skills training and technical support arose. Both individuals and organizations reported increases in adoption when formal or informal digital navigators shared a similar background and culture. Many noted that this also allowed them to trust the navigator. In an interview with a group of digital navigators in Wisconsin, the navigators brought up the need to build trust, how living in the community helped and that it was important to invest the time needed to maintain those trusting relationships. Online connection consistently helped individuals engage culturally. For Hmong individuals and others that are a part of diasporas found the internet crucial to meeting and maintaining contact with others of similar backgrounds.

Many of those interviewed emphasized the relationship between race and ethnicity and other covered populations. Many Latinx and Hmong people emphasized that a lack of language-specific resources made adoption difficult. Culturally specific support was identified as a need. Across racial and ethnic minority groups, income presented barriers to both access and adoption.

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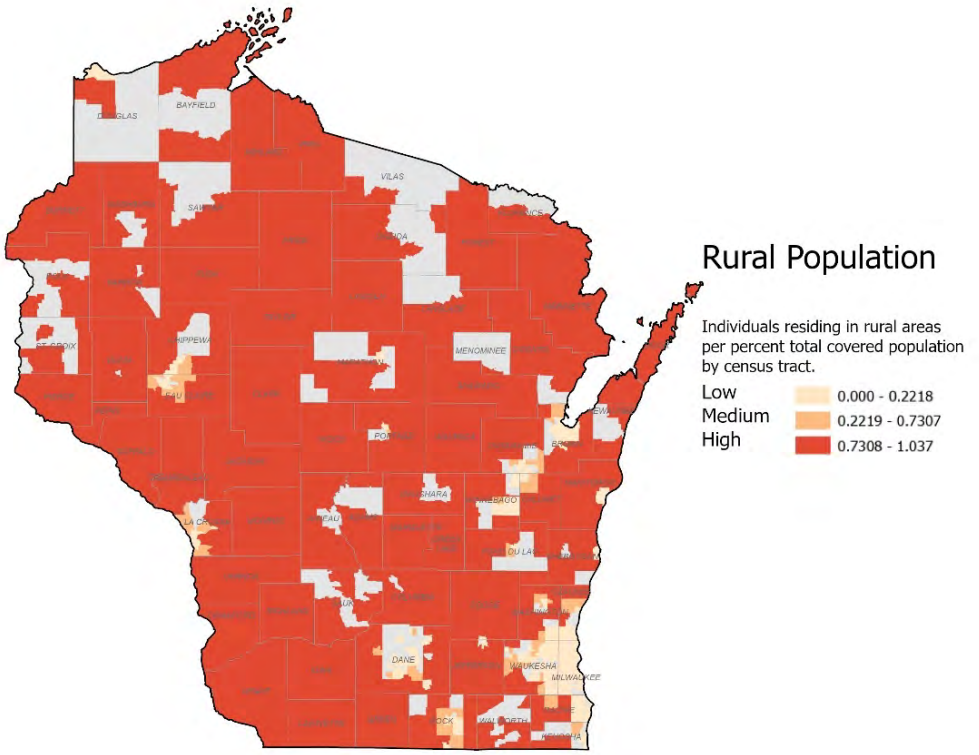
Individuals who primarily reside in a rural area

They own a farm in rural Wisconsin that raises black angus which is sold to grocery store chains. All sales are conducted online via auction. If the internet goes down, even for a few seconds, they lose thousands of dollars at auction. Their whole operation runs through hot spots and cell phones. More than anything they need fiber to their farm. It would not only reduce the cost of the multiple cell phones and hot spots they currently depend on and pay for but would radically improve their business model and open the door to new innovations and business opportunities. **(Compiled from interviews with farmers in central WI)**

Figure 32 Map of Rural Population



Wisconsin is a state with a large rural population, and many that identify as other covered populations also identity as rural. Farming, specifically dairy farming, is a vital piece of the state's economy, and one of the primary small businesses in rural areas. Farmers shared a need for access as a continuing barrier to growing, sustaining, and innovating. Dairy farmers emphasized how much they need reliable internet service to monitor their cows' activities, health, and production output. Almost all barriers for rural populations were related to a lack of

bandwidth, slow speeds, poor reliability, or lack of internet access all together. For many, if there was an available way to get broadband access, it was often exceedingly expensive.

Every survey, interview and data point related to rural populations identified access as the primary issue. Lack of competition from ISPs was noted by many rural residents as a concern, as well as numerous references to the poor or unresponsive customer service of their current incumbent providers. Those who had service expressed their frustration and mentioned the inadequate speeds they were receiving, often around 1 to 2 Mbps.

Affordability was a concern as many were angry about the service of their ISPs. Some quoted the price they were paying either now or in the past for the service from their ISP, including a couple of comments about not being able to understand their bill. One man said that he used to have to go up on the roof periodically to fix his satellite antenna. He noted that it was "awful service" and was finally able to switch to a non-satellite ISP that was more dependable. Throughout focus group visitations, complaints about a specific internet service providers were common.

Though digital literacy was identified as an issue for the rural areas of the state, it was far behind access and affordability. For most of the people interviewed, they just wanted affordable, reliable access. Once that is in place digital literacy training may become a more compelling need.

3. Summary of Covered Populations' Needs and Gaps

Many of the individuals engaged identified as more than one covered population, and many identified as multiple covered populations have overlapping barriers and needs related to broadband and digital equity. The PSC also found that there are geographic locations across the state that have a higher density of covered population groups, with more than one covered population group residing in an area. The map at Figure 33 below shows census tracts coded by the number of covered population groups residing there, based on Census data, darkest blue having five covered populations residing there, to lightest blue with only one covered population. This map demonstrates where there may be concentrated need in Wisconsin based on higher rates of covered populations.

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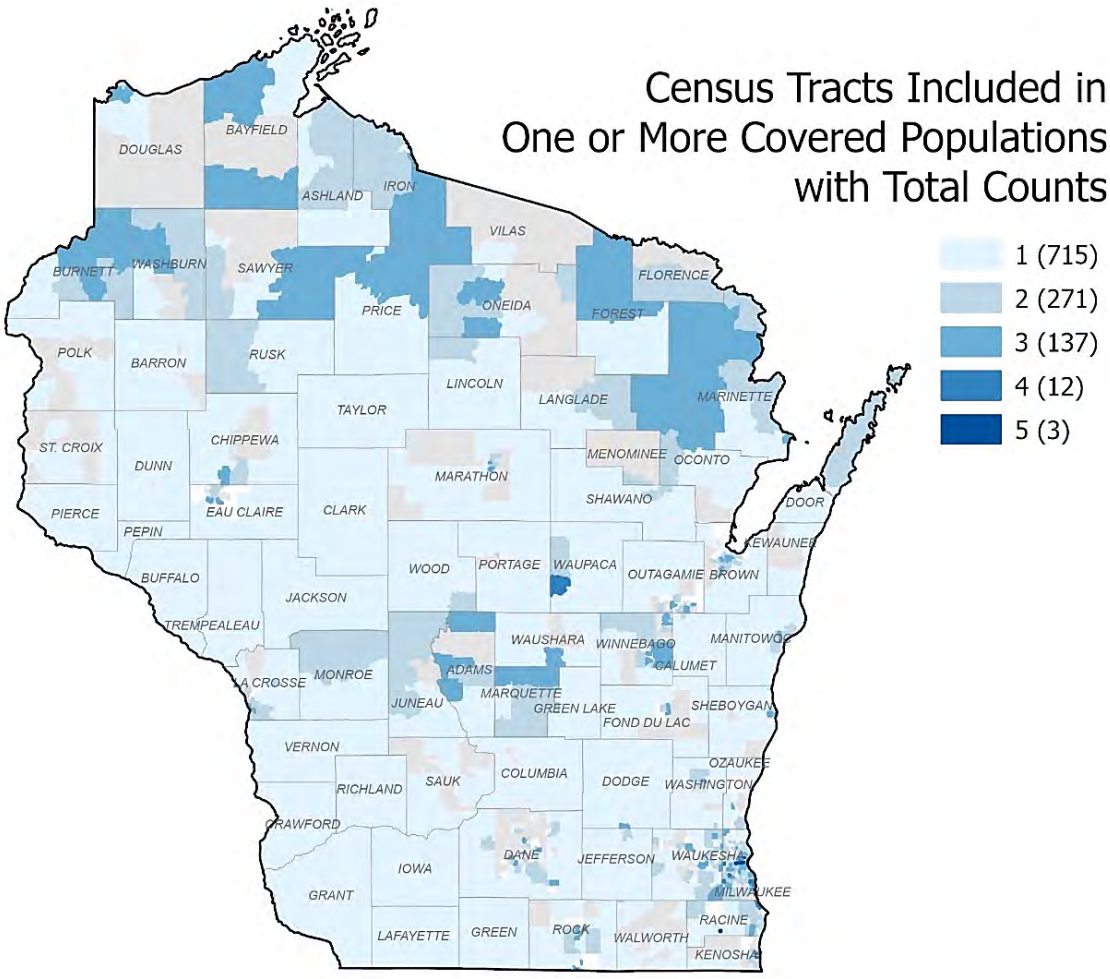
Figure 33 Number of covered population households, one or more, by census tract



Access

Every covered population in Wisconsin identified the need for reliable access to high-speed internet - for telework and small business uses, education, healthcare, and mental health services, and to sustain and grow their communities. Lack of infrastructure to access a reliable internet service is disproportionately affecting the rural populations in Wisconsin. For those that do have access to a broadband service, rural populations are paying the highest subscription prices in the state, often for inadequate speeds. Urban areas may not lack access due to broadband infrastructure gaps, but many areas can suffer from aging infrastructure and unreliable inadequate broadband speeds.

Affordability

Affordability is a universal barrier for all the covered populations. For low-income populations, often the cost of a broadband subscription is not feasible given a limited budget and other priorities such as housing, food, and healthcare. Aging populations, many of them retired or

living on limited incomes, are also constrained by the cost of subscriptions. Individuals with disabilities often must pay for additional accessibility technologies and may require higher speed broadband subscriptions to support these uses, often making affordability a hurdle. All these affordability barriers are compounded by geography, specifically those that live in rural areas, where on average the lowest priced available broadband subscription option is 15 percent higher than in urban areas. Affordability also affects all covered populations based on market competition, or the number of available broadband service providers – based on BCG analysis, when there are three or more providers subscription costs are on average 25 percent less than if there is only one provider (see Section III.2.c).

Adoption

Digital Skills and digital literacy were an overarching need across all populations, yet each populations needs were also unique. Lack of adequate digital skills and literacy often prevented individuals from adopting broadband service. For many, not having the needed skills and education presented a barrier to accessing a specific service or resource, which if they were able to access, may have led to seeking sustained access through broadband adoption. In some cases, the service sought was enrolling in ACP to enable them to adopt a broadband subscription, but due to both complexity of that process and lack of digital skills, were unable to enroll and ultimately adopt service. These experiences bolster the other clear need of tailored technical support, something expressed by all covered populations. Technical support and digital education include cyber security, which was highlighted as a barrier to adoption by all, but at the highest rates by aging individuals.

Covered populations facing barriers to adoption provided important insights on how they try to overcome these obstacles, revealing the specific gaps experienced by these groups. Many populations using social programs noted a need for privacy in locations with public device and Wi-Fi access. They often used libraries for device access but did not feel comfortable completing sensitive applications, accessing healthcare, and found it difficult to take any video calls.

Adoption has a strong cultural component – many groups experienced a lack of culturally-relevant support such as learning from peers, support in primary languages, and services supporting the needs of people with disabilities. Latinx and Hmong individuals reported a high need for technical support in their first languages. Hmong individuals noted that popular translation applications are often very inaccurate, and many resources are not professionally translated from English. Additionally, reading skills were also brought up as a concern. Some could not read in their first language and needed additional literacy support. Consistently, the need for culturally responsive digital skills training and technical support arose.

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Many covered populations noted that public spaces designed for access to the internet are helpful temporary resources but not long-term solutions. These spaces for example often don't have the capacity for children to engage with the internet and devices in enriching and constructive ways beyond necessities such as completing homework and do often do not offer the privacy needed for telehealth or virtual work.

Veteran groups mentioned the need to support veterans who were alone and homebound by connecting with them daily online. This isolation and need for connection to others via reliable broadband is shared by aging populations. A common response by all populations, when asked what they would like to do on the internet, was "the same things people who have high speed dependable service can do."

Trust

Every covered population brought up concerns around safety online and cyber security, particularly veterans and the aging population. Lack of trust among covered populations took many forms, including a fear of misinformation, scams, or lacking trust that public resources were available or reliable. Trust in relation to broadband was often connected to affordability, with many populations expressing some level of distrust of providers of broadband subscription plans, as well as resources from other organizations. Many individuals shared that they received technical assistance and help with broadband access from close family members or friends but lacked trust of outside expertise that could provide technical assistance and digital education and skilling. Multiple channels of trust between all stakeholders need to both be established and strengthened.

Sustainability

Underpinning this plan and all the initiatives to increase digital equity in Wisconsin are multiple facets of sustainability. Digital literacy, cyber security education, device and technology support are not one-off issues but rather evolving digital equity challenges that will require sustained funding and initiatives. Throughout the Internet for All Wisconsin Listening Tour sessions, participants echoed this with concern, highlighting that sustained funding to bridge these digital equity gaps is needed, often highlighting the need for ACP or something similar to become permanent. Capacity, ongoing outreach, and collaboration are also key concerns. The PSC Broadband Survey highlighted the differences in prioritization among local governments and ongoing engagement with these stakeholders and others is required to sustain digital equity advancement across the state.

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Section V: Implementation

1. Implementation Strategy and Key Activities Implementation Strategy and Key Activities

To holistically implement this DE Plan, existing partnerships will need to be sustained and new partnerships forged. The PSC will continue to partner with others, including with state agencies such as DPI, DOC and DHS. Each of these agencies provided specific feedback and recommendations for PSC's DE and BEAD planning. As the agency continues to expend funds and implement these plans, it will continue to collaborate with these agencies and others.

The PSC will also continue to collaborate with the DEI Stakeholder group. This group often gains new members and morphs to reflect the current digital equity ecosystem in Wisconsin. This group also supports goals including expanding outreach and voices across the state. The members are able to facilitate listening sessions, partnership activities, learning events, and provide expertise regarding programs and grants.

PSC staff will continue growing relationships with workforce agencies and institutions of higher learning. In planning for the BEAD Program in conjunction with creating this DE Plan, staff have engaged with workforce stakeholders across the state in private and non-profit sectors and had conversations with unions and labor organizations. The PSC's BEAD Workforce Planning Grant Program awarded two applicants that have statewide reach and connections to a diverse set of workforce stakeholders, and staff intend to grow these connections to best understand and address workforce gaps and the related digital equity needs. In addition, staff have communicated often with leaders within the Wisconsin Technical College System to understand the workforce training landscape and development needs related to digital skilling and education as reflected by industry demand in the different regions of Wisconsin.

The PSC is committed to designing future grant programs to support the goals of this plan and reflect the evolving DE needs of the state. This includes using Digital Equity Capacity Grant funds -which the PSC will apply for when the federal Notice of Funding Opportunity is released as well as the implementation of the forthcoming BEAD Program. These and other applicable grant programs will prioritize access, affordability, adoption, trust, and sustainability for all covered populations in Wisconsin.

The PSC will continue to deeply engage covered populations throughout the duration of its digital equity work which will include activities like meeting with organizations that represent covered populations, as well as individuals in covered populations. When working with federal agencies, the PSC will emphasize the need to align the 150 percent poverty rate in the Census data with the federal definition of poverty at 200 percent. Engaging with these populations throughout the process will provide a valuable feedback loop around the state's digital equity work.

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The PSC will regularly review and update this DE Plan. These updates will be based on internal work with programs and policies, as well as the external collaborations and ongoing data collection.

Table 5 Implementation Plan

Value	*Objectives*	*Strategies*	*Metrics*
ACCESS	Everyone connected to a minimum of 100/20 Mbps.	Prioritize grant applications that reach speeds beyond 100/20 including reaching speeds of 100/100 Mbps or more.	Increase by 5 percent a year the number of households that have access to 100/20 Mbps.
	All Community Anchor Institutions (CAI) connected to 1 Gb symmetrical service.	Prioritize grant applications that include 1 Gb to CAIs.	Annually track the number of CAIs with access to 1Gig service with a goal of all CAI's connected by 2030.
	Funding is coordinated across programs.	Develop and provide outreach to support coordinated efforts to braid funding, particularly for covered populations.	Annually track number of outreach efforts.
	Future planning for speeds beyond 100/20 Mbps.	PSC prioritizes grants that go beyond the minimum requirement of 100/20 Mbps.	Increase by 5 percent annually the number of grant applications that are 1G/1G.
Value	*Objectives*	*Strategies*	*Metrics*
AFFORDABILITY	Promote ACP.	PSC DE staff to offer ACP outreach and support.	5 percent annual increase of households enrolled in ACP.
	Low-income monthly internet costs less than $30 per month.	PSC work with partners/internal policy team to develop statewide program to expand beyond the ACP to support less than $30 cost program.	5 percent annual increase of households have access to broadband service for $30 or less per month.
	Everyone connected at affordable rates.	Include language in grant programs to encourage ISPs to adopt affordability definition.	5 percent increase the number of grant applications that include affordability.

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Value	*Objectives*	*Strategies*	*Metrics*
ADOPTION	Increase number of digital navigators.	1. PSC work with partners to develop a tracking system for digital navigator programs. 2. Include tracker in the PSC DE grants as part of reporting.	Increase the number of digital navigator programs by 10 percent a year in different geographical areas of the state.
	Training digital navigators.	1. PSC work with partners to identify standards for digital navigator programs. 2. Include standards in reporting requirement for DE grants.	A digital navigator training program has been adopted by 2026.
	Resources for digital navigators.	1. PSC work with partners to identify standards for digital navigator programs. 2. Include self-reporting of individual progress in DE Digital Navigator grants.	PSC supports the creation of a model for digital navigators to use with trainees to self-report progress on their individual goals.
	Identify cyber security standards.	1. Attend meetings and participate in the state adoption of minimal cyber security standards. 2. Partner to implement the standards by including them in DE and BEAD grants requirements.	The PSC will attend a minimum of two meetings a year with the state cyber security experts to identify minimum standards to be used when purchasing broadband services and assist in educating the public on these standards.
	Identify cyber security training program.	1. Attend meetings and participate in the state creation of educational materials.	The PSC will attend two meetings a year with cyber security experts across the state to develop educational

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		2. Partner in public education campaign.	resources and assist in educating the public on these standards.
	Identify device program.	1. PSC works with partners to identify criteria for a statewide program. 2. PSC recommends criteria for a program. 3. PSC includes unique needs of incarcerated populations in criteria.	A statewide program plan has been identified for funding by 2026.
	Identify device program for incarcerated population.	1. PSC partners with DOC to identify needs specific to incarcerated populations. 2. State includes this in the criteria for a statewide program.	In partnership with DOC a process for providing devices and skill training to incarcerated populations has been identified by 2030.
	Fund technical support resources.	1. DE and BEAD grants include these criteria in grant requirements.	DE and BEAD grant programs include language to encourage the inclusion of technical support programs that meet the above objective and are tracked annually for compliance by 2025.

Value	*Objectives*	*Strategies*	*Metrics*
TRUST	Fund community-based training programs.	1. DE and BEAD grants include these criteria.	For forthcoming Digital Equity Capacity Grant Program, give a minimum of 20 percent of grants to organizations that self-identify that they serve covered populations. Give an additional 10 percent of grants to organizations that self-

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			identify that covered populations are represented on their Board and staff.
	Fund community-based conversations.	1. PSC will work with partners to facilitate activities that expand partners. 2. PSC will fund grants that include partnership building activities.	PSC will foster 100 (20 a year) partnership building activities by 2030.
	Support accessibility updates to state resources.	1. PSC will work partner with state agencies to support updating online resources to meet the new federal standards. 2. PSC will update online resources to meet the new standards.	PSC will partner with other state agencies to work toward accessibility of all state resources.

Value	*Objectives*	*Strategies*	*Metrics*
SUSTAINABILITY	Increase community organization partnerships.	1. PSC DE and BEAD funding will encourage partnerships of three or more entities. This should include groups that are embedded in the community they serve.	For the forthcoming DE Capacity Program, PSC will encourage partnerships across sectors and stakeholders by prioritizing applicants with partnerships that include the covered populations.
	Develop resources to support community partnerships.	1. Create a map or comprehensive inventory of state assets. 2. Work with local, state and federal partners to share the assets and	The PSC will create a map or inventory of state assets for digital equity by 2025 and then track growth/partnerships over time.

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		encourage funding of DE efforts.	
	Encourage community partnership resource sharing.	1. PSC will work with partners to facilitate and fund community conversations and coalitions. 2. PSC will fund programs that include community conversations and coalition building.	PSC will support 100 (20 per year) workshops, technical assistance, and/or partnership building activities between community-based organizations, anchor institutions, local governments, philanthropic groups, and other local entities to disseminate best practices for broadband access, affordability, devices, internet adoption and digital literacy skills training.

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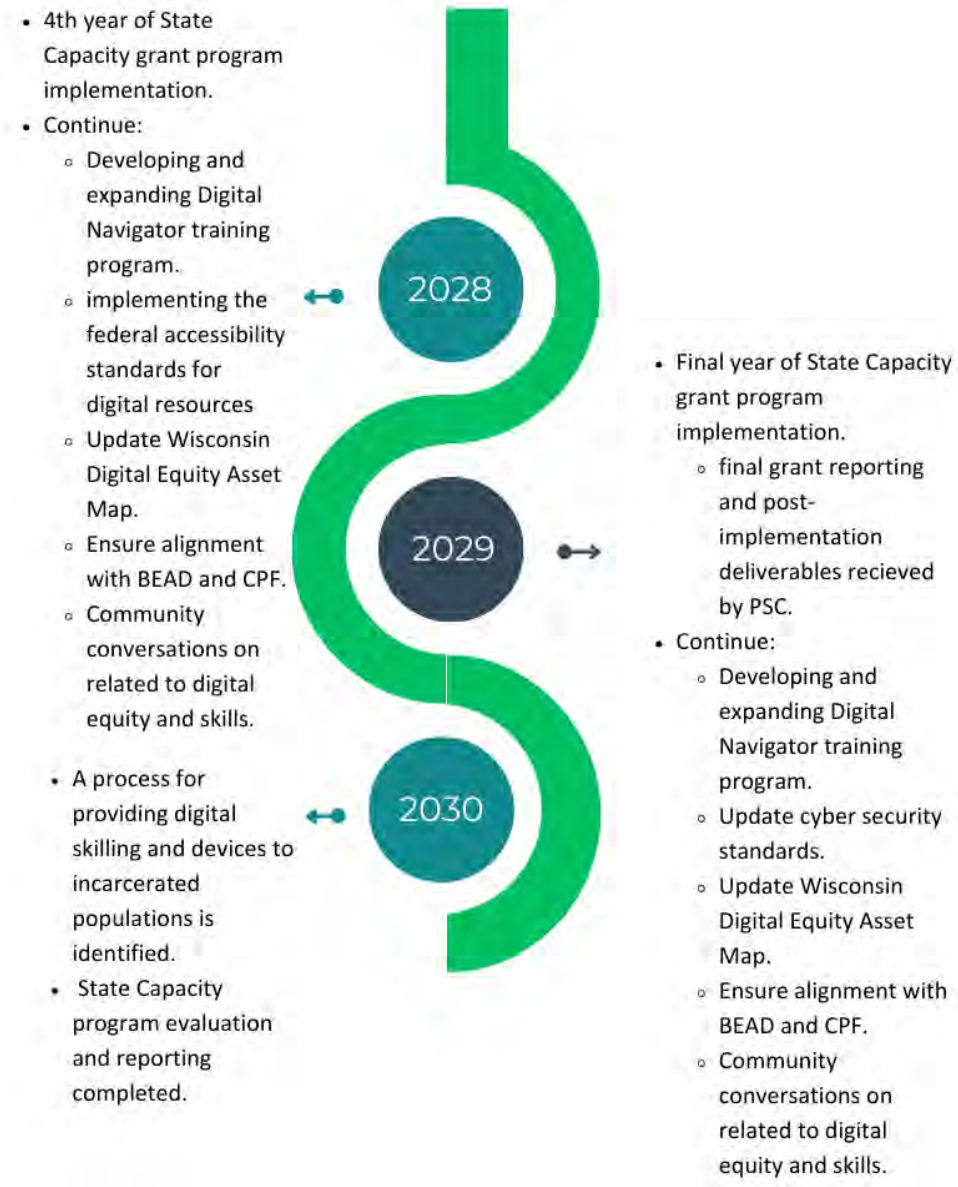
2. Timeline


2024
• Apply for Digital Equity Program State Capacity funding.
• Plan State Capacity Grant program to align with BEAD and Capital Projects Fund programs.
• Encourage state entities to apply for Digital Equity Competitive Grants to support this Plan.
2025
• Design BEAD and Digital Equity grant programs to include requirement that grantees provide technical support resources.
• Design State Capacity grant program to support community-based training programs.
• In collaboration with state experts, begin implementing the federal accessibility standards for digital resources.
• Create public-facing Wisconsin Digital Equity Asset Map.
• Begin holding community conversations on related to digital equity and skills.
2026
• 2nd year of State Capacity grant program implementation.
• State Digital Navigator training program created and implemented.
• Standards for a statewide device program identified.
• Continue:
◦ Community conversations on related to digital equity and skills.
2027
• 3rd year of State Capacity grant program implementation.
• Continue:
◦ Developing and expanding Digital Navigator training program.
◦ Implementing the federal accessibility standards for digital resources
◦ Update Wisconsin Digital Equity Asset Map.
◦ Ensure alignment with BEAD and CPF.
◦ Community conversations on related to digital equity and skills.



Coordination with BEAD and other DE programs

The Wisconsin State Digital Equity Plan and BEAD Five-Year Action Plan is strategically aligned, both of which, through their primary goals of connecting all Wisconsinites and respective and overlapping planning activities, will enable economic and workforce development, digital skill education, improved digital services such as telehealth and digital learning, and ultimately will improve the livelihoods of Wisconsinites. The alignment of these DE efforts and BEAD run alongside and are naturally enmeshed in the PSC's longstanding goal of universal service adoption and digital equity, evidenced by the Commission's history of successful state broadband programs and all the outreach and technical support that supports this effort.

The PSC's priority is to ensure the Digital Equity Plan and BEAD components align and complement the existing and aligned efforts across Wisconsin state agencies as well as with DE Assets across the state.

Section VI: Conclusion

By balancing the long- and short-term goals outlined in this plan, engaging in collaborative partnerships, and consistently listening to the stories of covered populations, this Wisconsin Digital Equity plan reflects the unique needs of the state. The PSC is confident that, working together, Internet for All Wisconsin will be achieved.

The PSC would like to thank all the partners, collaborators, and residents engaged who helped shape this comprehensive digital equity plan.

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Appendix 1: Stakeholder Recommendations for Digital Equity Plan Goals and Objectives

Create a policy or process that asks funded projects to detail how their project will expand access to covered populations
Incarcerated individuals, pre or post release from prison, get training in digital skills
Incarcerated individuals are issued an internet capable device so that they can access public Wi-Fi upon release
Larger cities could partner with providers to provide universal access within the city limits
Develop standards for PSC broadband grant awarding that promote provider competition across the state
Develop and maintain a map or tracker for level of provider competition across the state
Wisconsinites already enrolled in a government program like FoodShare or Medicaid are automatically sent a message stating that they are eligible for the ACP
Partner with United Way chapters throughout the state to host awareness events
Create and distribute Wisconsin specific ACP materials including local enrollment support
Develop a program and/or policy to provide consumer protections for Wisconsin broadband customers
Develop an educational program for consumers regarding the rights they have as broadband customers
Develop an educational program for ACP participants regarding the rights they have as participants of the program.
Outreach to local governments, nonprofit organizations, and community groups to communicate about how local digital navigators can address the needs of specific populations
Concept of a digital navigator- details, job description, etc. May be well suited to the technical college system
Security issues around who is in a person's home. How do you ensure the navigator is secure
Promote the development and use of open education resources that are accessible and in multiple languages for cyber security training
Support adoption of accessibility practices across state services and resources
Offer Wisconsinites all government affordability resources they are eligible to receive in one, concise, efficient place
Detail how the PSC will identify community anchor institutions that, how they will be mapped
Improve consumer protections in the state to help build trust in providers
Encourage transparency and accountability by providers with improved communication and customer service
Create a digital equity dashboard that tracks access and affordability metrics
PSC will create repository or "one stop shop" for digital equity organizations. The organizations listed will serve as the state digital equity coalition. Each year, annual updates will be managed by one or more coalition member, with support from PSC
Increase collaboration across state agencies and partners to leverage respective agencies' skills and funding to forward digital equity efforts

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Encourage community organizations to fully access the existing government and non-government funding sources by supporting creative ways to braid or combine funding streams to improve sustainability of efforts
Create and update a listing of private, state, and federal funding sources/opportunities available for digital equity work

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Appendix 2: Tribal Consultation Summary

Summary of Tribal Consultation with Public Service Commission of Wisconsin

Details:
Great Lakes Inter-Tribal Council, Inc.
January 11, 2023
Special Board of Directors Meeting -Tribal BEAD Consultation
Lac du Flambeau, Wisconsin

Attendance:

Bad River: Daniel Wiggins, Tribal Council Member
Forest County Potawatomi: Manny Johnson, Treasurer
Ho-Chunk Nation: Mark Leonard, Executive Director, Office of the President
Lac Courte Oreilles:
Lac du Flambeau: John Johnson, Tribal President
Menominee: Ron Corn, Tribal Chairman
Oneida: Tehassi Hill, Tribal Chairman
Red Cliff: Chris Boyd, Tribal Chairman
St. Croix: Michael Decorah, Senior Intergovernmental Affairs Specialist
Sokaogon Chippewa:
Stockbridge-Munsee:

GLITC CEO Bryan Bainbridge
GLITC IT Director Jake Valliere
Wisconsin Broadband Office Staff: Alyssa Kenney and Rory Tikalsky
National Telecommunications Information Administration Staff: Carah Koch and Theron Rutyna

Agenda: Agenda BOD and BEAD Consultation 1-11-2023.doc - DL: 1936382
Handout provided: Tribal Consultation Handout.docx - DL: 1936383

Themes and Notes

Challenges
Broadband and Cellular Connectivity Needs
The critical need for affordable, comprehensive broadband access was consistently voiced by every Tribal leader attending the consultation. Broadband access is seen as important to learning, health care access via telehealth, employment, economic opportunity, cultural preservation and access to more affordable goods and services. Several leaders expressed specific interest in fiber to home service or ensuring that residential locations have business class service available. During the consultation a few Tribal leaders discussed the need for not

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just for fixed broadband service to homes and business but also cellular service or mobile broadband. One leader indicated thick tree cover impacting the quality of cellular service.

Another Tribal leader indicated the public safety concerns associated with poor cellular service. There was interest in developing a coordinated approach to both fixed broadband and cellular service where practical.

Affordability

Throughout the consultation several Tribal leaders expressed concerns about the current cost of internet service, one leader cited monthly bills exceeding $140 as common among members. Another leader noted that members are held hostage by the local internet service provider, forced to pay increasing amounts for poor service. For several leaders ensuring affordability of service was a top concern and identified as a social justice issue for Tribes.

Tribal leaders were interested in how upcoming federal funding considers affordability in its prioritization and allocation of funding. Questions were raised about PSC's ability to regulate broadband rates, and concern expressed from Tribal members about the inability of PSC to regulate affordability.

Several members expressed that existing internet service providers have excessively high costs, are unreliable, or that advertise speeds that are not achievable.

One leader expressed concern that there was too much red tape and paperwork to access the ACP benefit. They expressed concern about those requirements limiting access to the program. However, they also expressed that ACP is proving to be impactful for those enrolled.

Devices

In the case of one Tribe, that spent CARES money to build infrastructure, they quickly learned that many people did not own internet enabled devices. Access to subsidized devices was important for some households to make use of the newly constructed internet. For other Tribes, access to libraries with devices and internet access was indicated as important.

Impact and Importance

Future Pandemic Preparedness and Response

Several Tribal leaders spoke about the profound impact of the pandemic on their communities. One leader indicated that the transition to online school was a total failure for many of their students and that many young adults in their community were now without a high school diploma as a result. Another Tribal leader indicated that the pandemic caused trauma for their community and leaders were still processing the impact of this sustained stress. Tribal leaders indicated more pandemics will come, and broadband connectivity may be critical to keep people alive. Broadband access is part of pandemic preparedness.

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Tribal leaders told stories of maintaining community and connection during lockdowns because of broadband access, and the profound impact and struggle for households lacking that access. Several Tribal leaders expressed profound concerns that broadband was a matter of personal and cultural safety and vitality, and that lack of broadband threatened the lives of their members.

Multiple leaders expressed the value of telehealth for supporting their Tribal elders both physical and social wellbeing.

Language and Cultural Preservation and Learning

For one Tribe that invested CARES funding into broadband infrastructure, access served to expand and accelerate language and cultural programming. Online attendance in language and culture classes during the pandemic was over 300 people, a much larger reach than the in-person class. Internet access was also a way to connect members on the Reservations with members off the Reservation. Broadband has allowed the Tribe to cultivate a vibrant online community and stay connected with both their younger, tech savvy, and older, previously isolated, members.

Another leader emphasized the opportunity for the internet to support preservation of culture and collect the extensive knowledge of Tribal elders. It was noted that, while some cultural knowledge is best shared face to face, the internet will be crucial for future generations connection to their culture and language. The internet may be able to serve as a repository of cultural knowledge.

Economic Prosperity

Through the consultation, some leaders indicated the important connection between broadband connectivity and economic prosperity for members. Tribal leaders provided examples of Bear Creek candle company and Red Cliff Fish Company as local businesses that were able to grow and expand because of the internet. One leader noted the contrast between their Tribe and the nearby county, whereas the county had focused economic development on mining, the Tribe was focusing on broadband connectivity as an economic development strategy.

Several leaders expressed broadband as essential for management of their businesses and for reaching, and being competitive in, a global market.

Environmental Sustainability and Longevity

Another issue that was discussed was the impact of broadband infrastructure deployment on the environment. Broadband deployment should not destroy the Anishinaabe way of life. Likewise, historical preservation review will be required for projects funded with federal money. A common thread through the consultation sustainable planning for long term success. The more people that are connected to service the more sustainable the network becomes.

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One Tribal leader explained that access to broadband would allow for more successful and sustainable development of the economy and society of Tribal communities. The leader explained that economic opportunities in and around Tribal lands have historically been extractive industries with environmental side effects such as damage to watersheds, but that broadband provides opportunities for creative and constructive industries and economic development. Several Tribal leaders see broadband as a way to pursue prosperity without damaging their environment.

One Tribal leader explained that access to broadband has allowed the Tribe to organize and advocate for protection of the environment and Native lands. Through connectivity, that leader has seen strength in coordination and advocacy, whereas prior to broadband access, Tribal members were disconnected and dispersed and more easily silenced.

Implementation

Tribal Ownership of Broadband Facilities and Spectrum Licenses

One Tribal leader expressed that it was a priority for their Tribe to own and operate the broadband facility that serves their members. This allows the Tribe to design and construct their own network and to keep monthly costs down for members. A number of Tribes mentioned winning 2.5 GHz spectrum in the FCC Rural Tribal auction and wanting future broadband expansion to complement and extend this spectrum.

Tribal ownership was mentioned as a matter of sovereignty, allowing Tribes to better respond to crises, such as the pandemic, and ensure sustainable, long-term service and support for Tribal members. One Tribal leader talked about how Tribal ownership allowed them to avoid disconnections during tough economic times brought on by the pandemic.

One leader suggested that Tribal ownership allows broadband networks to serve goals other than profitability, such as cultural preservation and education, economic opportunity, educational services, and universal access.

Building Partnerships with Internet Service Providers and Counties

While some leaders spoke about the importance of Tribal ownership of the broadband facility others considered partnership with internet service providers to connect their members. Different Tribes have specific geographic considerations, with a few Tribal nations having a checkerboard of Tribal Land that may make ownership of facilities more challenging. Some Tribes also indicated an interest in working with the adjacent counties to ensure broadband connectivity across a region and to take advantage of joint purchasing power.

Mapping

Tribal members expressed frustration with poor broadband availability maps and data. On Tribe described their experience compiling and submitting challenges to the FCC's map and submitting written feedback to FCC on the map.

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One Tribe found the FCC challenge process difficult and confusing to navigate.
Questions were raised about the process to build out and fill in the most remote locations, and concerns expressed that existing funding efforts only support deployment in areas adjacent to dense areas.

Federal Funding
Multiple Tribes expressed concern about rising costs of construction for grant projects related to workforce issues and supply chain issues and sought advice and guidance on how to resolve cost overruns.

Several leaders discussed their NTIA Tribal Connectivity Grants and expressed that those grant opportunities allowed them to "think big" and pursue ambitious broadband deployment goals in a way they have not before.

One Tribal leader talked about how their Tribe used federal COVID relief funding to make significant investments in broadband deployment. The Leader was concerned that they would not receive BEAD or TBCP funding because they had already invested COVID funding. While they were grateful for the opportunity being shared with their Tribal neighbors, they felt it was unfair their prior investments and diversion of scarce resources towards broadband deployment would limit their access to future broadband funding.

Planning for Federal Funding
Tribes asked questions and learned about the State's planning process for federal funding. Several leaders emphasized that each Tribe's experience with broadband has been different, and that planning, and outreach must be individualized to understand each Tribe's needs.

Tribal leaders were interested in learning more about funding opportunities under the BEAD program and asked about what entities would be responsible for administering and distributing BEAD funding, as well as the planning process and their opportunities for input in the state Five Year Plan.

Several Tribes expressed difficulty planning, coordinating, and applying for federal and state funding because of the dispersed nature of the Tribes across multiple counties and municipalities.

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Appendix 3: Wisconsin Internet for All Listening Tour Sessions

In person	
Monday, May 8 1:00-3:00 p.m.	UW Stout Memorial Student Center Menomonie
Tuesday, May 9 8:30-10:30 a.m.	Seven Winds Casino Lodge and Conference Center Hayward
Tuesday, May 9 2:30-4:30 p.m.	The Pines Event Center Rhinelander
Tuesday, May 9 1:00-3:00 p.m.	Milwaukee 7 Milwaukee
Monday, May 15 1:00-3:00 p.m.	La Crosse Public Library La Crosse
Friday, May 19 10:00 a.m.-12:00 p.m.	Fox Valley Technical College- Appleton Appleton
Tuesday, May 23 9:00-11:00 a.m.	Madison College Truax Campus Madison
Tuesday, May 23 1:00-3:00 p.m.	Platteville Public Library Platteville
Thursday, June 1 3:00-5:00 p.m.	Mid-State Technical College Wisconsin Rapids
Virtual	
Monday, May 22 6:00-7:30 p.m.	
June 6 8:30-10:00 a.m.	

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Appendix 4: Wisconsin Digital Equity Stakeholder Engagement

Local coordination, engagement meetings, and events with digital equity practitioners and covered populations to inform the BEAD Five-year Action Plan and Digital Equity Plan		
Aging and Disability Resource Center, Door County, Forest County & Vilas County	Aspirus, Rural Health Care Provider	Center for Deaf-Blind Persons
Agriculture & Natural Resources Institute	Augusta Senior Center	Chippewa Valley Technical College
American Association of Retired Persons (AARP), Wisconsin	Benedict Center	Cia Siab, Inc.
American Parkinson's Disease Association	Black and Brown Womyn's Power Coalition	ColorBold Business Association
The ARC, Wisconsin	Boulder Junction Senior Meals Site	Council of Chief State School Officers
Council of Chief State School Officers	Boulder Rural, Eagle River Rural, Phelps Rural	Council on Libraries and Network Development
WI Association of the Deaf	CAP Services	Council on Physical Disabilities
YWCA Madison	Center for Deaf-Blind Persons	Crandon Senior Meal Site
Council on Libraries and Network Development	Disabled American Veterans	Feeding America (Second Harvest Food Bank)
Council on Physical Disabilities	Disability Rights, WI	FoodWIse program Region Metro 2/3 (Milwaukee and Madison), North, South
Crandon Senior Meal Site	Door County, Door County Broadband Task Force, Do Good Door County, Veterans Services	Forest County, Senior Meal Site
Dane County	Eagle River Senior Meals Site, Volunteer Firefighters	Freedom, Inc.
Department of Aging	Eau Claire County, County Jail	Great Lakes Inter-Tribal Council, Inc.
Department of Public Instruction, Migrant Education, Public Libraries, School Libraries	Eau Claire Triomphe, LLC	Greater Wisconsin Agency on Aging Resources (GWAAR)
Jackson County	Ex-Incarcerated People Organizing (EXPO)	Hmong American Women's Association
Jefferson County Veteran Services Officer	Fairchild Public Library	Independent Living Centers of WI
Land O'Lakes Senior Meals	Family Resource Center of Sheboygan County	Iron County Extension Youth Development
Legal Action: Wisconsin Farmworkers Coalition Dairy Subcommittee	Family Voices	Pepin County Board

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Latino Academy of Workforce Development	Farmer Interviews, Iowa County, Argyle, Lodi, northern WI	Prairie Lakes Library System, Outagamie Waupaca Library System (OWLS)
Literacy Chippewa Valley	United Way of Greater Chippewa Valley, Greater Milwaukee and Waukesha County, Door County	Portage Area Workforce and Service Connection (PAWSC)
Local Initiative Support Corporation (LISC), Milwaukee	United Way, Milwaukee, Techquity Meeting	River Valley Broadband Coalition, River Valley Commons
Madison Metropolitan School District Library/Tech Team	Urban League of Greater Madison	Rural Iowa County Wisconsin farmer
National Association for the Advancement of Colored People (NAACP), Milwaukee	Veteran Farmers Coalition	Town of Colfax Plan Commission
Neighbor to Neighbor Resources Fair for Hispanic Families	Veterans of Foreign Wars (VFW), Districts, 1, 2, 4, 9, 10	WI Board for People with Developmental Disabilities
Office of Deaf and Hard of Hearing	Vilas County residents	WI Chief Technology Officers Clinic
WI Educational Technology Leaders Association (WETL)	Voices de la Frontera	WI Council for the Deaf and Hard of Hearing
Wisconsin's Independent Living Centers	Wabeno Senior Meal Site	Wisconsin's Independent Living Centers
WI Technical Colleges System	WI Prison System, Stanley, Taycheedah, Green Bay, Oakhill	WI Inter-Service Family Assistance Committee (ISFAC)
Wood County Digital Equity Solutions Team		
Technical assistance and presentations to inform about the 5-year action plan and Digital Equity Plan by PSC Staff		
Augusta Area Digital Learning Fair	Rock County Ad Hoc Broadband Committee	WI Department of Administration: Enterprise Technology Cyber Security
Common Sense Media	UW Extension, Chippewa County, Door County, Forest County, La Crosse County, Oneida County, Portage County, Sheboygan, Taylor County, Agriculture and Natural Resources Institute, Human Subjects, Local Government Education Center	WI DOC, Employment and Education
Educational Communications Board	Vilas County Economic Development Corporation	WI Digital Navigators (4)
Rock County Ad Hoc Broadband Committee		WI Primary Health Care Association

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Appendix 5: Wisconsin BEAD Stakeholder Engagement

Wisconsin Broadband Office local coordination, engagement meetings, and events to inform the BEAD Five-year Action Plan		
Internet for All: Connecting Wisconsin Kick-Off Event	Winning with Wisconsin's Workforce	University of Wisconsin Law and Entrepreneurship Clinic
Bay Area Workforce Development Board	Forest County Broadband Public Meeting	Wireless Internet Service Providers Association Listening Session
Wisconsin Community Action Program (WISCAP)	Jobs for the Future	Polk County Broadband Event
Nsight Telecommunications	Mount Horeb Telephone Company on FCC Challenge	County Association Regional Leadership Council
KES Excavating Services	UW-Extension Oneida County	Brightspeed Listening Session
International Union of Operating Engineers 139; Construction Business	Bug Tussel on FCC Challenge	AT&T Listening Session
Department of Workforce Development Bureau of Apprenticeship Standards	Wisconsin State Telecomm Association (WSTA) Listening Session	2 Virtual Internet for All Listening Sessions
Superior Days	Kenosha County Broadband Committee Kickoff	7 In Person Internet for All Listening Sessions
Wisconsin Department of Workforce Development and Northwood Technical College	Brightspeed/Lumen on FCC Challenge	Monthly Governor's Task Force on Broadband Access Meetings
Wisconsin Counties Association Annual Conference	Frontier on FCC Challenge	Farm Bureau
International Brotherhood of Electrical Workers (Local 2150 and 953)	Fox Valley Workforce Development Board	Columbia County Broadband Open Meeting
Urban League of Greater Madison	Blackhawk Technical College	Wisconsin Technical College System
Latino Academy of Workforce Development	Broadband Alliance	Wisconsin Land Information Association
Wisconsin Rural Partners Summit	JRM Advisors	Wisconsin Cable Communication Association
Wisconsin State Telecommunications Association Annual Meeting	Iron County Broadband Meeting	Wireless Internet Service Provider Association (WISPA) and Ethoplex
New North Broadband Study Event	WDA 11; WDA 7	West Central Wisconsin Broadband Alliance
Ho-Chunk Nation	Wisconsin Department of Corrections	Broadband Stakeholder Group

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9 Regions Broadband Meeting	Urban League of Racine and Kenosha	Nsight Telecommunications and Wisconsin Broadband Stakeholder Group
Techquity Advisory Council	Communication Workers of America	Eau Claire Broadband Committee Meeting
Technical assistance and presentations facilitated to inform stakeholders about the BEAD Five-year Action Plan		
Broadband Equity, Access, and Deployment (BEAD) Funding for Wisconsin Counties	Wisconsin Rural Broadband Connectivity Initiative Virtual Event	BEAD Local Planning Webinar
Next Steps in Broadband Equity, Access, and Deployment (BEAD) Planning for Counties, and REDOs Webinar series	League of Wisconsin Municipalities Broadband Webinar	Office Hours for Local Planning
Webinar, Information Technology (DOA hosted)	Wisconsin City/County Managers (WCMA) Broadband Professional Development Webinar	UW Extension BEAD Community Planning Webinars
	Wisconsin Counties Association Broadband Webinar	Wisconsin Rural Partners Network Webinar

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Appendix 6: Commission Order and Public Comments

[i] Digital Equity Act Population Viewer (census.gov)

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