



Broadband Equity, Access, and Development (BEAD) Program

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Internet For All

1 Executive Summary

In its 2009 report, the Minnesota Ultra High-Speed Broadband Task Force stated, "We need to think of ultra high-speed broadband access both as a communication and transportation system, carrying massive amounts of electronic information for the 21st Century. We need to invest in it. It's good economics. Communities in which mass-market broadband was available experienced more rapid

growth in employment, the number of businesses overall, and businesses in IT-intensive sectors, relative to comparable communities without broadband at that time."¹

Based on the recommendations of that Task Force, the Minnesota Legislature adopted broadband speed goals in 2010, on the advice that "what gets measured, gets done." The Minnesota Legislature also followed the Task Force's advice and created and funded an Office of Broadband Development at the Minnesota Department of Employment and Economic Development in 2013. Showing incredible foresight SEVEN YEARS before the pandemic, the Minnesota

Broadband connects students to new educational opportunities, provides workers with more flexibility, expands access to healthcare resources and information, and helps us stay connected to the people who matter most. This investment is essential to making Minnesota the best state to live, work, and raise a family – no matter where you live." (Minnesota Gov. Tim Walz)

Legislature put into statute that the purpose of the Office was to: encourage, foster, develop, and improve broadband within the state in order to: (1) drive job creation, promote innovation, and expand markets for Minnesota businesses; (2) serve the ongoing and growing needs of Minnesota's education systems, health care systems, public safety systems, industries and businesses, governmental operations, and citizens; and (3) improve accessibility for underserved communities and populations. Following up on that commitment, and adopting another of the Task Force's recommendations, between 2014 and 2023, the Legislature directed over \$380M for broadband infrastructure deployment through Minnesota's traditional Border-to-Border Broadband Infrastructure grant program (established in law in 2014) and its two new programs: Lower Population Density and Line Extension Connection (both established in 2022).

Throughout Minnesota's journey to improve broadband access for all residents and businesses, the Task Forces (both Governor Dayton and current Governor Walz have established Governor's Task Forces on Broadband throughout their terms), the Legislature, and the Office of Broadband Development have consistently engaged with partners and stakeholders to ensure that the grant program has been structured to successfully deliver the broadband services desired by broadband users. As one attendee at a November 2013 listening session stated, talking about broadband is "like asking what you can do with the road to your community. If you have a gravel road, it limits what you can do. Not just here, but the country, we are falling behind the rest of the world. The possibilities are endless, we can't say what the future will bring but know we need roads--and digital roads."

¹ https://www.lrl.mn.gov/docs/2009/mandated/091056.pdf



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"I'm forever grateful for the work that the folks who are on the ground every single day worrying about this. I was merely the leader of the Task Force, but I think being able to lead that Task Force is still one of the greatest accomplishments and that's saying a lot having been Speaker of the House and the things we passed during that time. That was a huge life accomplishment that I will carry with me, that I am so proud of for our state, and I hope that all of you with these new federal resources will build from that." (Margaret Anderson Kelliher, Chair of Governor Dayton Task Force on Broadband)

With the passage of the Infrastructure Investment and Jobs Act, the Minnesota Legislature directed that all funds for broadband infrastructure received by Minnesota as a result of the Act should flow through the established, trusted, and successful Border-to-Border broadband grant program. As outlined in this Five-Year Action Plan, Minnesota is well positioned to meet the moment and use the existing grant framework (modified only as mandated by NTIA),

established relationships, and ongoing engagement, paired with the federal funding, to continue the process of delivering the desired results of meeting Minnesota's statutory broadband goals of Internet for All.

Timeline Minnesota Broadband Development Policy

• 2008 - First broadband taskforce created (by statute)

• 2009 - First broadband map created (prior to federal mapping program)

ullet 2010 - Broadband goals established (10/5 by 2015)

2008-2011 •2011 - Dayton Administration Broadband Task Force created (by executive order)

•2013 - Office of Broadband Development created in law, placed at DEED; "Dig Once" and coordination law passed

•2014 - Border to Border Broadband Infrastructure Grant Program (B2B) created in law; \$20M appropriated

2015 - Additional funding for B2B broadband grants: \$10.58M
2016 - Broadband goals revised (25/3 by 2022: 100/20 by 2026)

•2016 - Broadband goals revised (25/3 by 2022; 100/20 by 2026); \$35M appropriated for B2B grant program

2012-2018
•2017 - Border to Border program renewed; \$20M appropriated

2019-2023

•2018 - Bi-partisan support but no funding for grants appropriated in 2018 (omnibus bill vetoed)

 2019 - Border to Border grant: \$20M for FY20 and \$20M for FY21; Telecommuter Forward! program enacted; Walz Administration Task Force created (by executive order)

◆2020 - \$20M from biennial appropriation for B2B; some local govts using CARES Act funding for broadband

•2021 - Legislature approves use of \$70M in ARPA CPF funding for B2B grant program

•2022 - Legislature approves use of additional \$60.7M in ARPA CPF funding for broadband; appropriates \$25M in state general revenue funding for FY24; directs any funding from IIJA to MN for broadband flow through B2B program; creates Lower Population Density Pilot and Line Extension Connection Programs

•2023 - Legislature appropriates additional \$50M for FY24 and FY25 for broadband; makes Lower Population Density Program permanent; increases cap on grant award amounts for traditional B2B to \$10M. NTIA announces Minnesota's BEAD allocation to be \$651,839,368.

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2 Overview of the Five-Year Action Plan

2.1 Vision

Minnesota first set forth a vision for broadband in legislation passed in the 2008 session that recognized that all citizens should have the necessary access to broadband service for sending and receiving data. Details were left to be developed by a broadband task force created in that same law². The November 2009 report of the Ultra High-Speed Broadband Task Force³, a legislatively created body of 23 members representing a cross section of organizations that had an interest or a stake in broadband deployment,

laid out a path to high-speed internet access for all Minnesotans. That path included recommendations to set initial speed goal targets; implement policies and actions necessary to achieving ubiquitous broadband access (lead, incent, measure, evaluate); create opportunities for public and private sectors to cooperate; establish a broadband advisory council; conduct ongoing evaluation of strategies, financing and incentives used in other states and countries;

"So the lesson to take from all this, I think, is whenever it looks like it's a long way in the future it is not. It's going to come at people a lot faster and you will not be satisfied until you can do any process, anywhere in the state, at any time of day. It doesn't matter where you are, what you want to do. That's important." (Rick King, Chair of the Minnesota Ultra High-Speed Broadband Task Force)

evaluate to ensure reliability; recognize economic development opportunities; and evaluate the benefits of broadband access to organizations.

Since that initial Task Force report submission, Minnesota has implemented several of the recommendations, either in law or by Executive Order, including the establishment of broadband speed goals, a mapping program with ongoing funding to measure progress, the creation of an Office of Broadband Development located in the state's Department of Employment and Economic Development, a broadband infrastructure grant program reviewed annually by the legislature, and a Governor's Task Force on Broadband. The focus when implementing the recommendations has stayed true to the initial reason for creating the Task Force in 2008: how to get all residents and businesses connected.

2.2 Goals and Objectives

The first policy recommendation adopted into law was for the establishment of goals around the ubiquitous access to a broadband connection. The first round of goals adopted by the legislature happened in 2010. At the time, the speed goal was set for all homes and businesses to have access to 10-20 Mbps download by 5-10 Mbps upload by the year 2015. The 2015 task force reviewed the progress toward these goals and determined that, while progress had been made (91.45% state-wide and 80.16% rural), there was still a significant gap in access. New goals were proposed and adopted in 2016 that revised the speeds and extended the timeline.

The resulting 2016 law set a deadline of 2022 to achieve universal access to 25Mbps download by 3 Mbps upload, and another deadline of 2026 to achieve universal access to 100Mbps download by

² https://www.revisor.mn.gov/laws/2008/0/Session+Law/Chapter/212/

³ https://www.lrl.mn.gov/docs/2009/mandated/091056.pdf



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20Mbps upload. The statute also highlights competitive goals for being among the top states when it comes to broadband access and use.⁴

That broadband speed goal was, and remains, Minnesota's objective for broadband infrastructure deployment.

While the language creating the Office of Broadband Development included as a purpose to "improve accessibility for underserved communities and populations" and a duty to "make recommendations for increased usage, particularly in rural and other underserved areas," specific goals and objectives related to digital equity have not been adopted in Minnesota. That will change with the drafting and subsequent adoption of a Minnesota Digital Equity Plan by November 2023.



⁴ Section 237.012



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3 Current State of Broadband and Digital Inclusion

3.1 Existing Programs

Table 1: Current Activities that the Broadband Program/Office Conducts

Activity Name	Description	Intended Outcome(s)
Border-to-Border Broadband Infrastructure Grant Program (established in 2014 law) https://mn.gov/deed/programs- services/broadband/grant- program/	Grant program to provide financial incentive to applicants to deploy broadband service in unserved and underserved areas. Grant program can pay (reimbursement basis) for up to 50% of eligible expenditures with a \$10 million cap per award (increased from \$5 million cap in 2023 legislative session). See 116J.395	Increase the number of homes, businesses, farms, and community anchor institutions with broadband access at or above speeds of at least 100Mbps download and 20Mbps upload (100Mbps symmetrical if funded by ARPA CPF)
Lower Population Density Broadband Infrastructure Grant Program (established in 2022 law) https://mn.gov/deed/programs- services/broadband/grant- program/	Grant program to provide financial incentive to applicants to deploy broadband service in unserved and underserved areas. Grant program may pay (reimbursement basis) for up to 75% of eligible expenditures with a \$10 million cap per award	Increase the number of homes, businesses, farms, and community anchor institutions with broadband access at or above speeds of at least 100Mbps download and 20Mbps upload (100Mbps symmetrical if funded by ARPA CPF)
Line Extension Connection Grant Program (established in 2022 law) https://mn.gov/deed/programs- services/broadband/extension/	Grant program to award grants to eligible applicants (ISPs) to extend their existing broadband infrastructure to unserved locations identified by homes and businesses registering with OBD. See 116J.3951	Increase the number of homes, businesses, farms, and community anchor institutions with broadband access at or above speeds of at least 100Mbps download and 20Mbps upload (100Mbps symmetrical if funded by ARPA CPF). Incent providers to edge out their service offering to adjacent locations and/or address situations where an excess construction charge to connect to broadband serves as a barrier to adoption.



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Broadband Deployment Data and Maps https://mn.gov/deed/programs- services/broadband/maps/	Minnesota has had a state program to map broadband availability since 2008. With our mapping vendor partner, Connected Nation, data is collected from providers, verified by individuals and communities and field validation, and mapped.	Provides the initial basis for determining eligibility for grant programs; enables OBD to respond to consumer inquiries; what gets measured gets done.
Telecommuter Forward (established in 2019 law) https://mn.gov/deed/programs- services/broadband/telecommuter- forward/	Political subdivisions may apply for certification as a Telecommuter Forward community.	Enables a community to be publicly recognized as a place that promotes telecommuting opportunities and options.
Governor's Task Force on Broadband https://mn.gov/deed/programs- services/broadband/task-force/	Also listed as a partner. OBD provides administrative, technical, and staff support to the Task Force.	The Task Force provides policy advice to the Governor and Legislature.
K12 Connect Forward https://mn.gov/deed/programs- services/broadband/connect- forward/	Also listed as a partner. OBD provides administrative support to the group.	OBD Initially formed work group and entered a formal Scope of Work with EducationSuperhighway (ESH) in 2015 to measure and achieve school connectivity goals. Now the K12 Connect Forward work group provides a forum to share information and advise the K-12 representative on the Task Force.

Table 2: Current and Planned Full-Time and Part-Time Employees

Current/ Planned	Full-Time/ Part-time	Position	Description of Role
Current	FT	Executive Director	Oversees the overall work of the Office of Broadband Development (OBD); coordinates with the Governor, the Governor's Task Force on Broadband, the Workforce Development Board, and other State Agencies
Current	FT	Deputy Director	Oversees the work of the infrastructure side of OBD and the mapping contractor
Current	FT	Digital Equity Lead	Responsible for leading the Digital Equity work of OBD



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3 Current, 2	FT	Infrastructure Grants Program	Administer the broadband
·		Administrators	infrastructure grants programs of
i idillica		Administrators	OBD, the Telecommuter Forward
_			program
Current	FT	Digital Equity Grants Program	Work alongside the Digital Equity
		Administrator	Lead to stand up the state's
			Digital Equity work, coordinates
			DE grant programs
Current	FT	Program Administrator	Provides administrative support
			to all OBD personnel
Current	FT	GIS Analyst	Provides inhouse GIS expertise;
			coordinate with OBD mapping
			vendor data collection; work on
			mapping needs for both
			infrastructure and digital equity
2 Current	FT	Community Engagement and	Assist with community and
		Special Projects Coordinator	partner outreach for broadband
			infrastructure and digital equity;
			special projects as assigned

Table 3: Current and Planned Contractor Support

Current/ Planned	Time	Position	Description of Role
Current	FT	Connected Nation (since 2009)—broadband mapping vendor per 116J.397	Maps broadband availability data provided by broadband providers; verify based on customer/community feedback; field validation of data submitted; field validation of broadband infrastructure projects as completed and prior to close-out
Current		MNGEOMOU with state agency	MNGEO is working with individual counties in MN to develop maps showing broadband serviceable locations in the county
Current		MNDNRMOU with state agency	MNDNR is training personnel to handle the increased number of permits for public lands and waters crossing that will be submitted due to BEAD funding



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Table 4: Broadband Funding

Name of federal agency/other source of funding	Brief description of broadband deployment and other broadband-related activities	Total	Expended	Available
RDOF	FCC program to award funding in reverse auction held in late 2020. Construction over 6 years and funding over 10 years	Approx \$74M		
Community Connect	USDA program	\$14,182,711		
CDBG	Awarded by DEED Small Cities for broadband deployment in 2021	\$30,971,737		\$0
ReConnect	USDA program for rural broadband deployment	MN was announced to receive \$69M in ReConnect 3 and \$33.8M in ReConnect 4 grants todate.		
Tribal BB	NTIA program	Appears to be about \$52M to date		
Congressionally directed	Congressionally directed spending was approved for use in Pine and Goodhue Counties as we understand from press releases	Approx. \$8.8M based on press releases		
CARES	Broadband infrastructure was an allowed use; aware that some counties and townships in MN awarded such funding to providers in MN	Unknown by our office		
ARPA Local Fiscal Recovery	Broadband infrastructure was an allowed use; aware that some counties and townships in MN awarded such funding to providers in MN	Unknown by our office		
ARPA Capital Projects Fund	Each state received a formula-based allocation to use for broadband infrastructure or related purposes	\$130.8M	\$130.8M	\$0



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State of MN general fund	The State of MN has	FY15=\$20M	\$150.588M	\$100M to
appropriations	appropriated funding for	FY16=\$10.588		be
	broadband infrastructure in	FY17=\$35M		awarded
	legislative sessions in 2014-	FY18=\$20M		in FY24
	2017, 2019-2020 and 2022-	FY20=\$20M		and FY25
	2023 that totals \$250.588M	FY21=\$20M		
		FY24=\$75M		
		FY25=\$50M		

Community Connect: https://www.rd.usda.gov/sites/default/files/CCProjectSummariesMinnesota.pdf

3.2 Partnerships

Table 5: Partners

Partners	Description of Current or Planned Role in Broadband Deployment and Adoption
MNGEO	State agency responsible for overall GIS data; assists in challenging FCC map.
MNDNR	State agency responsible for processing permits that cross public lands and water.
MNDOT	State agency responsible for processing permits in highway rights of way.
MN Business First Stop Broadband Work Group	Coalition of state agencies (DNR, DOT, Dept. of Labor and Industry, DEED) to discuss broadband issues current and on the horizon.
Governor's Workforce Development Board/Workforce Division at DEED	Centralizing all workforce needs arising from IIJA for review by state workforce experts to develop overall plan.
Governor's Task Force on Broadband	Task Force provides policy advice to Governor and Legislature on policies (including statutory changes) necessary to achieve state's broadband goals. Anticipate an enhanced role on digital equity moving forward. New appointments for second term of Gov. Walz/Lt. Gov. Flanagan administration. https://mn.gov/deed/programs-services/broadband/task-force/
DEED/OBD Advisory Work Group	Select group of providers and users to advise OBD Executive Director.
K12 Connect Forward	Advisory group for education member of Governor's Task Force on Broadband and for OBD to raise and discuss issues related to K12 education. Group includes K12 school tech advisors, charter schools, school board administrators, school coop services provider, EducationSuperhighway, school principals, etc.
Blandin Foundation	Until mid-2022 when Blandin redirected its focus, OBD had partnered with the Blandin Foundation since 2010 on an annual broadband conference; the Blandin Foundation also provided technical assistance through several programs such as the Blandin Broadband Communities Program, technical assistance and grant funding for



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	feasibility studies. The Blandin on Broadband blog has been continued
	for the foreseeable future.
University of Minnesota	OBD is exploring ways to work with the University of Minnesota
Extension	Extension, a trusted rural partner, to fill some of the gap left by
	Blandin's exit from broadband work.
MN Housing	OBD is working to further engage with MN Housing agencies to
S	address broadband planning and needs.
MN Rural Broadband	While currently undergoing a leadership and future vision reset, OBD
Coalition	had previously worked closely with the MN Rural Broadband Coalition
	and its legislative lobbying efforts to ensure the Border-to-Border
	Broadband Grant Program statutory requirements were meeting the
	needs of areas without adequate broadband service.
	https://mnruralbroadbandcoalition.com
MN Public Broadband	The MPBA is a group of public entities engaged in the provision of
Alliance	broadband service to end users that meets monthly and lobbies the
	MN legislature. OBD has attended or provided updates for this
	organization's monthly meetings since the 2014 formation of this
	group. https://www.mnpb-alliance.org/
EducationSuperhighway	OBD brought together ESH, Hennepin County's Office of Broadband
(ESH), Hennepin County,	and Digital Inclusion and the University of Minnesota's Urban
University of MN Urban	Research and Outreach-Engagement Center to work towards
Research and Outreach-	addressing broadband availability in MDUs under ESH's Free
Engagement Center	Apartment Wi-Fi program.
Association of Minnesota	OBD has frequent communication with AMC, including participating in
Counties (AMC)	annual meetings over the years, conducting surveys, legislative
	coordination, virtual training sessions with counties.
League of MN Cities (LMC)	OBD has frequent communication with LMC, including participating in
	annual meetings over the years, legislative coordination,
	representation on Task Force.
MN Association of	Longstanding relationship with MAT, including through representation
Townships (MAT)	on Governor's Task Force on Broadband, presenting at the annual
	MAT meeting numerous times, participation in every regional training
	session of township clerks and supervisors in Spring 2023, legislative
	coordination, joint participation on MN Rural Broadband Coalition,
	presenting at various county's township meetings or individual
	township meetings over the years.
Economic Development	OBD is a member of EDAM, has participated in panels at annual
Association of MN (EDAM)	conferences.
MN Association of	OBD has frequently presented to this group at monthly or annual
Professional Economic	meetings over the years.
Development	
Administrators (MAPCED)	
MN Telecom Alliance	Frequent and regular communication with president of MTA since
	OBD was formed. Frequent speaker at annual and fall meetings.
	Coordinate on legislative activity.



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MN Cable Communications Association	Frequent and regular communication with executive director of MCCA since OBD was formed. Frequent speaker at annual meeting. Coordinate on legislative activity.
MN Rural Electric Association	Frequent and regular communication with government affairs director, especially in last five years as electric coops have entered the broadband marketplace. Coordinate on legislative activity.
Minnesota Association of Small Cities (MAOSC)	Regular communications between Executive Director and MAOSC. Coordinate on legislative activity.
Minnesota Rural Counties (MRC)	Regular communications between Executive Director and MRC. Coordinate on legislative activity.
Farmer's Union	Frequent and regular communication with Farmer's Union members on agricultural needs for broadband.
MN Department of Agriculture	Coordination between agency leadership on broadband issues important to the Department of Agriculture.
Minnesota Department of Human Services	Coordination between agency leadership on broadband issues important to the Department of Human Services.
Minnesota Marketing Partnership	Regular communication between Executive Director and MMP.
Minnesota Department of Education (MDE)	MDE representative participates on the K12 Connect Forward group. OBD has participated on MDE panels. MDE also houses the State Library with frequent interaction with OBD, especially the Digital Equity work.
Minnesota Department of Commerce/Minnesota Public Utilities Commission	Frequent and regular communications to update on OBD's work on broadband with the regulatory entity's telecom related work.
Regional/Economic Development Commissions	Frequent and regular communications and presentations with the Regional Development Commissions, Economic Development Regions, and Initiative Foundations that represent various geographically defined regions in Minnesota.

3.3 Asset Inventory

3.3.1 Broadband Deployment

- Statutorily defined grant programs (Border-to-Border Broadband Infrastructure Grant Program, Lower Population Density Program and Line Extension Connection Program) provide framework for distributing BEAD funds per statute: <u>116J.395</u>, <u>116J.3951</u>
- State funding in eight of last ten years plus ARPA Capital Projects Funding directed towards broadband infrastructure, totaling over \$265M awarded projects
- Ten years of experience administering broadband infrastructure grant programs (https://mn.gov/deed/programs-services/broadband/grant-program/)
- Over 15 years of working with broadband partners and stakeholders to understand what drives broadband deployment from the providers side and what users are most interested in receiving (speed, latency, technology, reliability, price)

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- State independent broadband mapping program since 2009. Sample of data collected online at https://mn.gov/deed/programs-services/broadband/maps/ and Minnesota creates its own broadband availability map (searchable by address) and has since 2009: Minnesota Map
- Governor's Task Force on Broadband consisting of appointed members representing a cross-section of partners and stakeholders with an interest in broadband to provide policy recommendations for the Governor and Legislature. Current Task Force created under this Executive Order: Executive Order 19-10 and more information on website here: https://mn.gov/deed/programs-services/broadband/task-force/
- Established formal interagency work group with state permitting agencies (Minnesota Business First Stop Broadband Work Group) which meets monthly
- Established broadband advisory group, initially to advise Commissioner of Minnesota
 Department of Employment and Economic Development and now meeting quarterly to advise
 OBD Executive Director
- Close and constant relationships with broadband providers and the technical consultants they use: MN Telecom Alliance, MN Cable Communications Assn., MN Rural Electric Assn. as well as knowing most providers individually, large and small, all technology types; CNS, Finley Engineering, Vantage Point Solutions, etc.



- Close and constant relationships with local government groups: Association of MN Counties, League of MN Cities, MN Association of Townships, Small Cities
- Utilizing the in-department expertise of DEED's workforce experts (Workforce Development division and Governor's Workforce Development Board) to address at a state level the workforce needs related to IIJA, including the workforce that will be needed for broadband, transportation, and clean energy jobs
- Unlike other states, Minnesota does not generally own fiber facilities. It does, however, own and
 operate the state's ARMER (Allied Radio Matrix for Emergency Response) system and lease
 excess capacity on MNDOT towers. Fixed wireless providers have frequently commented over
 the years on the willingness of MNDOT to prioritize providers offering broadband services in
 approving lease agreements

3.3.2 Broadband Adoption

The Digital Equity Plan due in November 2023 will address assets related to broadband adoption. To ensure all Minnesotans can connect, Minnesota must also address internet service affordability, device access, and digital skills. These three "digital inclusion" facets work together to build a "digitally equitable" Minnesota in which "all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy" (National Digital Inclusion Alliance). Through the federally funded Digital Equity Act, OBD is facilitating the development of a statewide digital equity plan to reduce gaps in access, device ownership, and digital skills.



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3.3.3 Broadband Affordability

The Digital Equity Plan due in November 2023 will address assets related to broadband affordability. To date, OBD has generally used two measures to determine that broadband is affordable. First, in reviewing grant applications, OBD does require that rates offered do not exceed the rates resulting from the FCC's Urban Rate Comparability standard. Second, OBD encourages public support (public-private partnerships) to be demonstrated in the applications submitted and the demonstration of such a partnership affirms that the community support for an application means that the community finds the rates offered by that provider to be affordable and reasonable.

According to the USAC website, as of mid-June 2023, there are 204,096 total Minnesota households registered for the FCC Affordable Connectivity Plan (ACP) program. The total amount claimed from January 2022 through April 2023 in Minnesota was \$64,849,447. According to ESH data, there are 774,310 eligible households in Minnesota so approximately 26 percent of eligible households are registered for ACP. The national ACP adoption rate, according to ESH, is 35 percent, so Minnesota is below the national rate. OBD did participate in ACP Week of Action. Fully embracing this plan is otherwise problematic given the uncertainty that funding will be available beyond mid-2024 based on reported projections. As required by the BEAD NOFO, participation in ACP (or an identified successor plan) will be required of BEAD subgrantees. Participation in ACP is also required of ARPA CPF grantees.

3.3.4 Broadband Access

Minnesota has not catalogued public Wi-Fi and networks, public access points, cellular connectivity, or open access middle mile networks. OBD's focus has been on measuring broadband availability at the household level which OBD believes to be the most equitable measure for ensuring broadband access.

3.3.5 Digital Equity

Minnesota has over 90 Community Connection Committees that are collecting data and information. Assets related to Digital Equity will be provided in Minnesota's Digital Equity Plan due in November 2023.





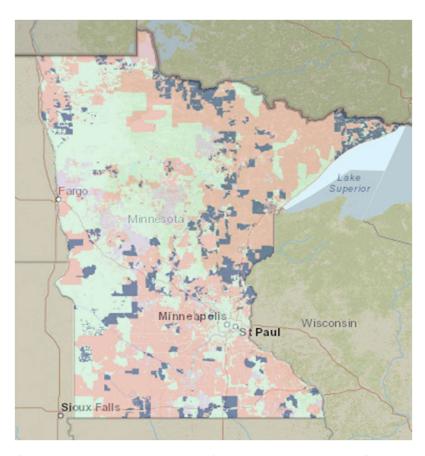


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3.4 Needs and Gaps Assessment

3.4.1 Broadband Deployment

Despite the many years and dollars that Minnesota has allocated state general revenue budget funds to broadband, and largely for fiber projects delivering gigabit symmetrical speeds as that has been what providers and communities have included in their project applications, there remain areas lacking high-speed, reliable broadband service as shown on the new FCC broadband maps and demonstrated by maps and data collected by the state:



The FCC data identified 134,850 unserved locations (lack broadband service of at least 25Mbps download/3Mbps upload by a wired or licensed fixed wireless service). That total includes 7,067 locations determined to be high cost for deploying broadband.

Minnesota's most recent data (as of 12/31/2022) identified 152,000 unserved locations without a wired broadband service delivering speeds of at least 25Mbps download/3Mbps upload (shown in pink on above map) and 229,000 underserved locations without a wired broadband service delivering speeds of at least 100Mbps download/20Mbps upload (total of pink and purple on above map). Minnesota statutes identify locations without a wired service of at least 100/20 as eligible for broadband grant funding, thus for purposes of determining grant eligibility, OBD focuses on those areas lacking a wired broadband service.

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3.4.2-3.4.5 Broadband Adoption, Broadband Affordability, Broadband Access, and Digital Equity

The needs and gaps assessment related to digital equity will be addressed in Minnesota's Digital Equity Plan due in November 2023. As the eligible entity responsible for creating both the BEAD Five-Year Action Plan, Initial Proposal, Final Proposal, and the Digital Equity Plan, OBD staff are in close and constant communication regarding all aspects of the plans. The work to craft the Digital Equity Plan is in the early stages and any statements in the BEAD Five-Year Action Plan regarding what the State Digital Equity Plan will contain would be irresponsible and premature.

Workforce needs related to broadband deployment are being addressed at a state level for all workforce needs created by the Infrastructure and Investment Act and will be reported on in the Initial Proposal. Minnesota has a Governor's Workforce Board that is working collectively with state agencies to understand the state's need.

Obstacles or Barriers

- Funding—despite the eight broadband infrastructure grant rounds funded and administered in Minnesota, awarding over \$280M, and two additional state funded grant rounds totaling \$100M anticipated in the next year, even with the BEAD allocation, Minnesota expects to be short funds to improve broadband speeds and reliability to all currently unserved and underserved locations. The most recent grant round saw funding requests at three times funding availability.
- An additional funding barrier for providers and communities is the lack of synchronization between the many and various state and federal grant programs, both in terms of timelines and application requirements.
- Short Minnesota Construction Seasons—in Minnesota, for buried construction, the season generally begins in mid-May and concludes by the end of October. Firm construction plans are bound by those parameters.
- Contractors—once contractors begin work in Minnesota, they need to stay busy through the whole season or they will move south to where the work is year-round and may be unlikely to return until the following year. This scenario is likely to be exasperated with all states engaged in broadband construction with CPF and BEAD funding.
- Supply Chain—there are examples of various component parts delaying construction. Again, with the increased dollars going towards broadband deployment, this could be a much broader issue going forward.
- Community based support and communities generally want fiber—in Minnesota, high speed broadband generally means fiber when speaking with communities. If the once-in-a-lifetime infusion of funding for broadband deployment is going to serve as the permanent solution for a community's broadband needs, then most every community wants that solution to be fiber. In most grant applications OBD has seen since 2014, fiber projects predominate.
- Attracting providers to some geographical areas—there are certain areas where Minnesota has had few, if any, grant applications received for broadband deployment. While the most recent round included the Lower Population Density Program where the state would fund up to 75 percent of eligible project costs, and that did attract applications from some new areas, OBD will

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need to reach out to providers to determine what is necessary to entice providers to go into certain geographic areas of the state.

- ISPs want to know requirements before applying—knowing what the requirements are to receive a grant, and what reporting requirements will be after an award, will help ISPs determine their additional costs for participating in the program when federally funded and thus whether to submit an application.
- CostQuest license barriers--OBD and its mapping partner are working through the licensing
 requirements of the CostQuest license to continue the Minnesota map which is familiar to our
 residents, businesses and providers. Hopefully the data can be as transparent as prior maps, but
 that remains to be determined.

5 Implementation Plan

5.1 Partner and Stakeholder Engagement Process

Minnesota has had a long history of engaging with partners and stakeholders, both at OBD, through the Governor's Task Force on Broadband (its members and the public comment period held at each meeting) and through the legislative process. Over many years, OBD has engaged in countless meetings with various partners and stakeholders to ensure the infrastructure grant program is addressing the needs of providers and communities (See Appendices 7.1 and 7.2). Prior to the program being initially stood up in statute, meetings were held across the state the winter of 2013-2014 to gather input on how a grant program should look. The result was the Border-to-Border Broadband Infrastructure grant

program created in statute in 2014. The Governor's Task Force on Broadband has annually reported to the legislature on recommended policy changes for addressing broadband needs in the state. The Minnesota Legislature has annually reviewed the program and made program modifications in several years—based on input from the Governor's Task Force on Broadband and community input to legislators-- along with approving funding. As examples, in 2016, the broadband goals were updated, funding was specified for projects in lowincome areas, and a challenge process was added. In 2022, two new programs were created, the Line Extension

"One of the things that I really care about, from even the job that I do every day in agriculture, is that if we have strong broadband, we can leverage all the wonderful things technology brings, and especially some of the emerging technologies." (Teddy Bekele, Chair of Governor Walz Task Force on Broadband)

Connection program and the Lower Population Density program; the first to fund extensions of high-speed broadband service to locations within close proximity to existing fiber and the second to allow for funding up to 75 percent of eligible project costs.

OBD would also note that tribal engagement has been ongoing since 2010. In Minnesota, that has occurred through presentations to the Minnesota Indian Affairs Council as well as tribal consultations by DEED's tribal liaison. Tribal ISPs have also been recipients of Border-to-Border broadband infrastructure grant funding directly (Fond du Lac Band of Lake Superior Chippewa and Bois Forte Reservation) as well as tribal lands funded by private providers with tribal support (White Earth Nation, Red Lake Reservation, Mille Lacs Band of Ojibwe, Leech Lake Band of Ojibwe).

With the addition of two newly hired Community Engagement and Special Projects Coordinators, OBD will continue to meet with providers and communities to explain the existing grant programs, the funding mechanisms, provide technical support, and listen to concerns. To the extent it is within OBD's ability to improve the program as a result, it will do so. To the extent the suggestions require statutory

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changes, OBD will connect the provider or community to the Governor's Task Force on Broadband for its consideration as a policy recommendation to the legislature, and/or directly to legislators for their consideration in a future session. Because the program is grounded in statute, changing the program framework does require a change in law during Minnesota's relatively short legislative sessions. The 2024 session is the only one remaining to inform the BEAD proposal and is scheduled to start February 12, 2024, and likely conclude by mid-May.

5.2 Priorities

Table 6: Priorities for Broadband Deployment and Digital Inclusion

Priority	Description
All homes and businesses have access to at least one provider offering broadband speeds of at least 100Mbps download/20Mbps upload by 2026. The statute also specifies broadband leadership goals: It is a goal of the state that by 2022 and thereafter, the state be in:	This is the priority for broadband infrastructure in Minnesota statutes, Section 237.012
(1) the top five states of the United States for broadband speed universally accessible to residents and businesses;	
(2) the top five states for broadband access; and	
(3) the top 15 when compared to countries globally for broadband penetration.	
Digital Inclusion goals are being developed and will be identified in Minnesota's corresponding Digital Equity Plan due November 2023.	

5.3 Planned Activities

As required by state law, OBD will increase broadband deployment by administering BEAD funds, and any other state allocated general revenue funding, through the state's traditional Border-to-Border Broadband Development grant program as well as the two new infrastructure programs: the Lower Population Density and Line Extension Connection programs. All three programs have established processes in law for the application and awarding of funds. Priority is given for the unserved over the underserved. OBD encourages communities to work with broadband providers to apply for funding for projects that meet both the provider needs and the desires of the community.

With an active Governor's Task Force on Broadband, a Legislature well accustomed to annually reviewing the broadband infrastructure needs of the state, organizations well versed in the prominent role that state law plays in the disbursement of broadband grant funding, and the ongoing and



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continuous engagement with the public, OBD anticipates that the grant programs that have worked successfully for providers to connect unserved and underserved Minnesotans over the past ten years will successfully transition to BEAD federal funding requirements going forward.

Sources of funding for OBD to carry out these activities include a direct appropriation of \$700,000 per biennium in state funding, up to three percent of state funds allocated to OBD for the grant programs, up to three percent of the CPF ARPA allocation approved by the state legislature for broadband deployment (including mapping), a \$200,000 HUD EDA grant for digital equity work, the BEAD five-year planning funds, and additional funds available from the BEAD allocation to Minnesota for administering the BEAD grant program funds.

5.4 Key Execution Strategies

Minnesota will retain the broadband framework that has guided our broadband efforts to date:



Minnesota's statutory goals directly align with those of the BEAD program, prioritizing the deployment of broadband infrastructure to locations that are unserved, then deploying infrastructure to locations that are underserved.

Minnesota has an Office of Broadband Development that has the experience, and the additional staff, necessary to develop the Initial Proposal and Final Proposal, administer a large grant program, provide technical support to communities and providers, and continue the state mapping program in combination with the new FCC maps and the NBAM maps. Minnesota also has a long running Governor's Task Force on Broadband that can provide the partners and stakeholder-focused view of any policy changes necessary to improve the goals, the Office, the data, and the grant programs.



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Minnesota has had a broadband mapping program since 2009, working with its mapping vendor to collect broadband data from providers serving in Minnesota. OBD is very familiar with the areas of the state in need of improved broadband service. A new GIS Analyst will provide additional resources to our existing mapping capabilities and help navigate federal mapping resources, including the FCC maps and NBAM, to ensure we are meeting the requirements for BEAD funding and can assist with any mapping needs for measuring and achieving the to be determined Digital Equity goals.

Finally, Minnesota has administered broadband infrastructure grant funding since 2014, through multiple rounds and with various statutory modifications to keep the program current and relevant. That grant program has been designated by the state legislature as the program to be used for disbursing the BEAD infrastructure grants. It is a time proven, successful program that will have no hiccups as it moves from using state funds, to a combination of state-federal funds, to predominantly federal funding under BEAD.





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5.5 Estimated Timeline for Universal Service



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5.6 Estimated Cost for Universal Service

The cost estimate to achieve universal broadband service in Minnesota is under development. In the Governor's Task Force on Broadband's Annual Report for 2022, the estimate necessary for achieving full coverage was \$2,764,500,000, using a cost per passing of \$9,500 and the number of homes without broadband service of at least 100Mbps download and 20Mbps upload as 291,000. The cost share attributable to provider/community match was then factored in at both 50 percent and 75 percent. The result was the need for public funding of \$1,382,250,000 with a 50 percent match and \$2,073,375,000 with a 75 percent match. Amounts calculated to be received from ARPA CPF, ReConnect 3, RDOF, NTIA Tribal awards, BEAD, and Federal Direct Appropriations were then factored in.

Prior to the submission of the Initial Proposal, OBD will do additional work to calculate a more accurate cost per passing by reviewing the results of our two most recent grant rounds (including the first round of our Lower Population Density Program), reviewing any data available from CostQuest, examining factors that would increase costs in various geographies of Minnesota, using NTIA's toolkit, and discussing with providers serving in the various regions of the state.

During the additional time to prepare the Initial Proposal, OBD will also have more recent numbers of unserved and underserved locations, federal funding awards and programs, and state awards that can be factored into the location count.

It does appear fairly certain at this point that Minnesota's BEAD allocation will need to be used towards getting reliable broadband service to unserved and underserved locations and that there will not be funding available from BEAD to address gigabit speeds to CAIs or to consider any non-deployment uses. (Data has long shown this to be the case for Minnesota under all scenarios since the BEAD program was announced.)

5.7 Alignment

Goals align—Minnesota's statutory broadband speed goals are in direct alignment with BEAD in that any area without reliable broadband service of at least 25Mbps download/3Mbps upload is considered unserved and any location with speeds of at least 25/3 but without at least 100Mbps download/20Mbps upload are considered underserved. OBD is awaiting NTIA guidance on the required showing that all unserved locations will be served prior to addressing funding for underserved locations and the demonstration required for what is reliable service.

Minnesota has directed state general fund appropriations, and ARPA CPF funds, to building out broadband infrastructure towards goals that directly align with what BEAD requires. Additionally, the Minnesota Legislature appropriated an additional \$100 million in the 2023 session to ensure that the state's progress to internet for all is not slowed down by BEAD funding availability. That \$100 million is planned to go out in two grant rounds over the next 12-15 months. Thus, a combination of state and CPF funding, then state general revenue funding, bridges time until BEAD should be available.

Because Minnesota has the same eligible entity, (the Minnesota Office of Broadband Development), for administering both BEAD and DE planning and funding, the two programs will align. At this stage of the planning process, however, the BEAD Five-Year Action Plan is due significantly before the Digital Equity Plan, so it is premature to discuss in this plan examples of the alignment.



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Workforce planning is also a priority of OBD and the state. Because the state has significant resources and the expertise to address workforce requirements in a holistic manner, additional information will be available on Minnesota's overall IIJA, and broadband specific, workforce efforts for inclusion in the Initial and Final Proposals.

5.8 Technical Assistance

OBD is fully participating in NTIA-sponsored meetings, webinars, conferences, and office hours. We are awaiting written guidance and additional templates. Should we have questions, we feel confident that we can reach out to NTIA as an individual state or within SBLN to obtain an answer. Because OBD's staff is experienced in administering broadband infrastructure grant programs, any support or technical assistance needed would be due to the unique requirements of the BEAD program.





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6 Conclusion

Minnesota has long had as a goal to achieve high speed, reliable broadband service for all homes and businesses in the state and has devoted significant state funding to achieve that goal. The cost to achieve that goal is high, and the state looks forward to the partnership with the federal government and the related funding, to help us make progress to what is now also a federal goal of Internet for All.



7 Appendices

- 7.1 OBD Meetings 2014 to 2022
- 7.2 NTIA Local Coordination Documentation Tracker