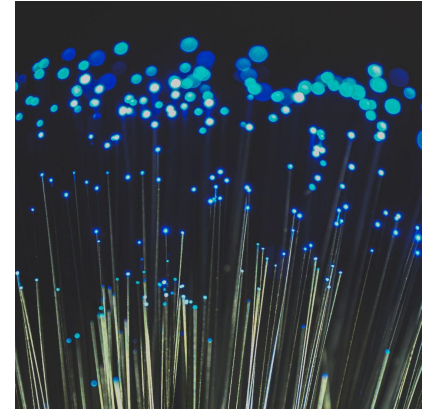


Minnesota Governor's Task Force on Broadband

2021 Annual Report

This document contains the Task Force's recommendations for policy makers and stakeholders to review and position for adoption in the 2022 legislative session.



OFFICE OF BROADBAND DEVELOPMENT

Table of Contents

Introduction

Executive Summary

Key Challenges and Concerns

Recommendations

Economic Impact

**Inter/Intra Agency
Cooperation/Coordination**

Policy and Statutory Goals

Appendixes

Introduction

The Governor's Task Force is composed of 15 appointed members from across the state*, representing multiple sectors. Meeting monthly, they review the current state of broadband deployment, access, adoption, and affordability relative to the MN statutory goals to serve 100% of Minnesota families and businesses.

This annual report is required under the Governor's Executive Order (EO19-10) that continues the work of the Task Force, which is to continuously evaluate the State's progress toward achieving the goals stipulated in the MN 2018 broadband statute, section 237.012. This report includes an inventory and assessment of the areas required by the statute. Additionally, the Task Force makes recommendations to the Governor, and the legislature, that if adopted, would improve the likelihood of achieving the state's broadband goals.

Executive Summary

One no longer needs to be a technical expert to understand the critical and essential need for every Minnesotan to have high speed broadband (homes and businesses). Broadband has become a primary and foundational way all households gain access to every day services: education, health access, employment resources, and transportation. Yet in MN, there are still well over 171,000* families that don't have this access (no service, or inadequate service). An even greater number of families all across the state (urban and rural) have access to broadband, but can't afford to purchase it.

As the pandemic continues, so does the heightened urgency for addressing the access and affordability issues facing families, particularly as it relates to meeting state education standards and mandates for equitable education. While many of the conditions that have been stated in past reports that deter full household broadband coverage have not changed substantially, the opportunities to do something more ambitious to address the needs have changed.

Billions of dollars of new funding have been allocated to MN via ARP, and soon new infrastructure dollars will be too (\$65 billion over 10 years for broadband nationwide). MN Regional development commissions (and the the communities they serve) have made it abundantly clear, that broadband and childcare must be the #1 priorities for leaders at all levels now, and the “once in a generation” federal money available is more than sufficient to insure Minnesotan's broadband needs are fully addressed if invested wisely.

Recap of Statutory Goals

ALL households and businesses in MN are to have access to at least these speeds by the stated date. (The links show a PDF map of the covered and uncovered areas.)

- [Wireline service of at least 25 Mbps download and 3Mbps upload \(2022 goal\)](#)
- [Wireline service of at least 100 Mbps download and 20Mbps upload \(2026 goal\)](#)



Key Challenges

While good progress has been made toward goals in the past, old and new obstacles remain:

Mapping of coverage isn't accurate across counties -

- Source data used to create the maps government & industry use to determine locations of unserved and underserved households relies heavily on data reported by providers to the FCC by census tract, which often overstates true coverage (e.g. 1 household in a tract can allow a provider to claim “served”)
- Map inaccuracies can block future investments in areas that still lack service that reliably meets the state goals

Advertised speed is often not the speed users experience -

- A number of factors determine the net speed a user receives, including their in home equipment, and connecting via wifi, and the number of connected devices in the home
- Many users in more remote areas still rely on old “last mile” infrastructure to their homes, even though a provider in their area may have fiber to a nearby node
- The technology approaches to speed testing are not uniform, and as a result, often provide an inaccurate picture of true user experience



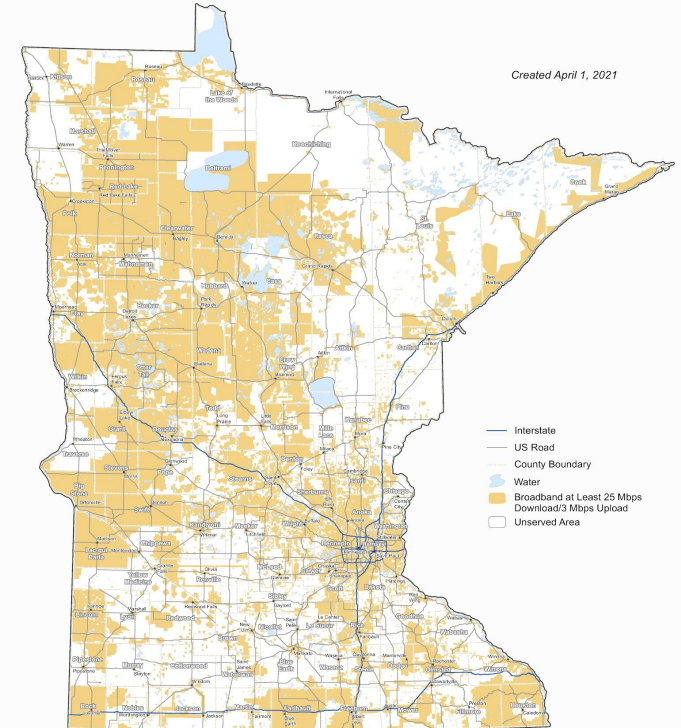
Key Challenges - Continued

Affordability and Accessibility for many is a substantial barrier -

- While many providers offer discounts and subsidies for low income households, they're frequently not accessed by targeted users for various reasons (e.g. language barriers, lack of trust, etc)
- Federal subsidy programs have been difficult to navigate to meet necessary eligibility requirements
- Some programs are short term (e.g. tied to the pandemic) and are not taken due to concerns of offers expiring and leaving users with service they can't afford
- 1 in 5 Minnesotans have an impairment that affects their lives, and use of broadband is no exception. There are insufficient supports for those less able bodied, and their need for use of broadband services is often greater than others to access specialized services (e.g. websites for health, transportation, jobs, education, etc)

2021 Provider Broadband Service Inventory

Wireline Broadband Service at Advertised Speeds of At Least
25 Mbps Downstream and 3 Mbps Upstream



0 12.5 25 50 75 100
miles

Submit questions or recommended changes to:
OEED.broadband@state.mn.us

This map was prepared by Connected Nation under contract with the Minnesota Department of Employment and Economic Development. The map represents areas of broadband service availability based on provider data submitted to and analyzed by Connected Nation. This data is current as of December 31, 2020.

Additional maps and data are available at <http://mn.gov/oeed/programs-services/broadband/maps>
Upon request, this information can be made available in alternate formats for people with disabilities by contacting the DEED Office of Broadband Development at 651-259-7610.

Key Challenges - Continued

Technology and program education (usage/digital navigation) -

- For many users the advancing sophistication of home technology (e.g. Wifi networks, streaming, etc), especially those for whom English is a second language, has increased the difficulty of getting & staying connected
- Providers are already stretched to maintain their networks, and some not yet prepared to offer more “past the demarc” assistance to customers who need more help getting & staying connected
- “Digital Navigation” services are new, not widespread, and in many cases underdeveloped due to limited experience in this new arena

Coordination of ARP federal funding opportunities for infrastructure build outs -

- Current ARP funds designated for infrastructure in the state of MN across all levels (state, county, city, township) offer what many are calling “once in a generation” support, yet many county, city, and townships have insufficient capacity to coordinate the use of their ARP dollars to maximize the opportunity to reach more unserved populations
- The state has set aside \$1.15 billion of ARP dollars for long term needs, a small fraction of which dedicated to this purpose could advance broadband deployment goals



Key Challenges - Continued

Broadband expansion in unserved/underserved areas -

- Building out provider networks in less densely populated areas of our state continues to be a problem, primarily due to the high cost per subscriber to reach remote and geographically difficult areas to build (e.g. the rocky and wooded terrain of the NE counties, etc)
- Insufficient Border-to-Border program grant dollars to fund all the construction needed to help providers reach service areas not economically viable otherwise
- Hesitancy to use viable “interim” solutions (e.g. fixed wireless) for fear of forestalling future federal funding for a given area ~~once it gets designated as “served”~~
- In 2021, the legislature’s decision to allocate funds from the federal Capital Projects Budget (instead of regular state funding) effectively eliminated the ability of OBD to award any construction grants for further build outs in 2021, delaying access for Minnesotans most in need of services



Recommendations



Each year the task force makes recommendations to the Governor and legislature to consider enacting, through enhancements to existing policy or new policy that aligns with MN statutory broadband goals.

The chart at the end of the recommendations section shows progress toward previous recommendations.

Recommendations - Access, Affordability & Education



- Establish and fund a position within the MN Department of Education to provide leadership and support to schools (and families) in areas of digital equity, digital literacy, funding (E-rate, etc.), cybersecurity, instructional technology and other areas of education technology.
- Provide funding to the Office of Broadband Development to promote broadband adoption and use to redress digital inequity.
- Fully fund the Telecommunications Access Equity Aid (TEA) program (by raising the funding cap to at least \$9 million) in order to allow school districts to equitably procure the Internet and network bandwidth needed to fully support digital learning. This state aid benefits school districts by making access to broadband more affordable by fully funding the eligible costs of the federal E-rate program.
- ~~Establish a state of MN Emergency Broadband Benefit Program that would continue benefits to eligible low income Minnesotans if the federal program is not continued.~~
- Provide funds to expand the Lead for MN program (AmeriCorp/Vista) - see appendix for more information

Recommendations - Mapping and Speed Goals



- The legislature should require all future projects funded by OBD grant dollars be *capable of* 100 Mbps download and 100 Mbps upload at the time of deployment, and meet network reliability requirements in the Infrastructure Investment and Jobs Act.
- The legislature should amend the governing statute (116J.395 subdivision 5 number 2) so it allows OBD to take into account or accommodate in its grant cycle the anticipated significant supply chain delays related to network construction.
- The legislature should continue to make the investments necessary to ensure that all Minnesotans, regardless of zip code, have access to broadband at speeds that meet state goals. Federal investments should not be seen as a substitute for ongoing state investment.
- MN should continue to invest in maintaining broadband maps
 - and strive to achieve ISP cooperation in producing address-level broadband maps (rather than rely on current FCC census tract data)
 - and include eligibility data related to the various federal programs supporting broadband infrastructure development
- OBD is encouraged to incorporate whenever possible data from reliable 3rd party 'crowd-sourced' maps when determining eligibility for Border-to-Border grants

Recommendations - *Unserved, Underserved, & Funding*



- The total \$180 million Capital Projects Budget allocated to Minnesota from the federal ARPA fund, should be allocated to OBD for funding the Border-to-Border Broadband program to attain broadband service to all Minnesota residents.
- To ensure broadband grant funds are being directed to the households most in need, the current definitions for 'unserved' and 'underserved' should remain unchanged, as they define geographic areas where there is little or no internet service available.
- All grant funds should be focused on unserved areas (~171,000 households fit this category). If necessary, the 100 synchronous requirement should be waived to provide the hardest to reach areas with at least 25/3 mbps by any technological means available.
- If a provider is delivering service under a waiver of the 100 synchronous requirement, the contribution from the OBD Grant Program should be reduced in recognition that: (1) the service is likely less costly to install, reducing the provider's need for state investment; and (2) the service does not provide the same value compared to service providers who are meeting the 100 synchronous requirement.
- Geographic considerations should be prioritized when allocating broadband grant funds. A "one-size fits all" grant allocation will not secure service for those areas of the state where a fiber/cable option is difficult or impossible. Unserved areas of the state that are difficult to reach due to density, geography etc. should receive a higher % of funding match to increase build out options.

Summary of Progress on Past Recommendations

Insert Summary Report Card on previous recommendations (what is the status?)

Economic Impact of Broadband

Universal, ubiquitous high speed internet (broadband) is proven to be a key foundation for every single business and household in the state of MN. Even the smallest restaurant, local merchant, and household relies on a high speed internet connection to function in daily life. Our economy, and the tax revenue it produces at all levels of government in MN is heavily reliant and impacted (positively or negatively) by access, and affordability/adoption of broadband for every Minnesotan.

"It's not just a luxury anymore, it's absolutely necessary to have this connectivity," said Matt Wohlman, senior director of State and Industry Affairs, Land O'Lakes. "This is not just a rural and urban issue, it's a national security issue, a food issue, an economic development issue and an equity issue."

Land O'Lakes convened a group of 145 major companies, trade associations and others from across the country to work on closing the digital divide because it impacts not only economic outcomes, but also health care, education, and workforce development outcomes.

Economic Impact of Broadband

The Brookings
Institute issued
a report in
August 2021
with these
findings:

Increasing access & adoption of broadband in rural areas (including digital skills, online education, & job search opportunities that come with it) lead to higher property values, increased job & population growth, higher rates of new business formation, & lower unemployment rates (findings from the Federal Reserve Bank, Richmond)

Broadband expansion also increases health and life outcomes, as it improves what the healthcare community refers to as the “social determinants of health” (e.g. offering remote access to providers, health education, social networks, etc)

A cost-benefit analysis in Indiana that focused on rural area expansion showed 3 to 4-fold returns (not including cost savings to state and local governments medical spending, or increases in tax revenues from increased incomes)

Importantly, while access to broadband services in urban areas is nearly 100%, non-use of broadband is 3 times higher due to affordability and adoption issues for lower income users, further restricting the economic benefits to the state as a result

Inter/Intra Agency Cooperation/Coordination

The DEED Office of Broadband Development (OBD) staff lead and manage key aspects of the state's broadband program:

- Conducts and administers the Border-to-Border grant program
- Coordinates and oversees the mapping program that governments and industry use to better determine served and unserved areas of the state
- Coordinates and guides the work of the Governor's Task Force on Broadband
- Advises DEED senior leaders and the legislature on policy and funding issues as they arise (e.g. application for federal ARP dollars)

Inter/Intra Agency Cooperation/Coordination

OBD staff have taken the initiative to invite other state agency leaders to participate in an interagency group to identify areas for further cooperation and coordination to improve the state's digital equity strategies. For instance, there are many small yet successful digital navigation activities happening in communities across the state that would benefit from guidance and support. This is a growth area for OBD, and the office is in a unique position to increase the impact of digital equity and navigation initiatives around the state given its experience and connections.

"Since 2014, the Border-to-Border Broadband Development Grant Program has invested \$126 million across Minnesota," said Office of Broadband Development Executive Director Angie Dickison. "These 179 projects have helped connect over 57,000 homes, businesses and farms."

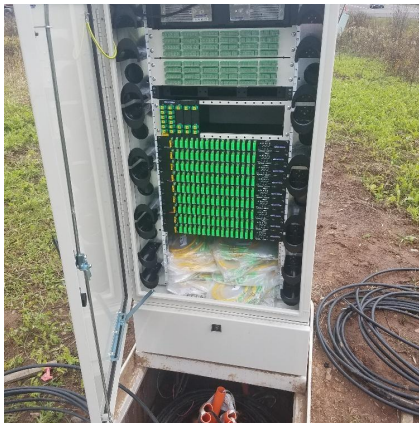
As indicated in the recommendations section earlier, allocating the balance (~\$110M) from the federal Capital Projects Budget to OBD would provide them sufficient resources to increase capacity to expand the Border-to-Border grant program and support its ability to lead in the Digital Equity strategy arena.

Goals & Stats



XXX

Increase in number of households connected



XXX

~ Number of households with inadequate internet speed

XX%

Increase in new households connected



XX%

Of households with inadequate internet speed



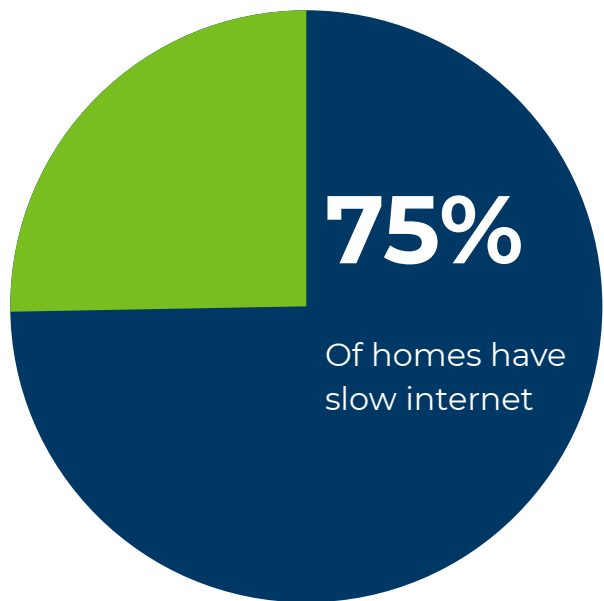


Chart Name

Chart Name



Appendix

- **Task Force Members**
- **Technology Updates**
 - Advances in technologies used to deploy services
 - Types of technologies in use for high-speed internet
- **Maps Showing Broadband Coverage**
 - Broadband availability and accessibility for unserved and underserved populations
- **Reference Material**
- **Glossary**
 - Unserved area
 - Underserved area
 - High-speed Internet

Task Force Members

Member Name	Title	Organization
Teddy Bekele	SVP & Chief Technology Officer	Land O'Lakes Technology
Yvonne Cariveau	CEO / President	Internet Connections
Nolan Cauthen	Broadband Technician	CenturyLink; CWA Crew Steward
Dale Cook	CEO	Learn to Live
Steve Fenske	General Counsel	Minnesota Association of Townships
Steve Giorgi	Former Executive Director, retired	Range Association of Municipalities & Schools
Jason Hollinday	Director of Planning	Fond du Lac Band of Lake Superior Chippewa
Marc Johnson	Executive Director	East Central MN Educational Cable Cooperative
Bernadine Joselyn	Director Public Policy and Engagement	Blandin Foundation
Brian Krambeer	President/CEO	MiEnergy
Micah Myers	IT Director	City of St. Cloud
Theresa Sunde	Senior Manager, Government Relations	Mediacom
James Weikum	Executive Director	Arrowhead Library System
Paul Weirtz	President	AT&T Minnesota
David Wolf	CEO	Gardonville Coop Telephone Association

Technology Updates

Advances in technologies used to deploy services

Types of technologies in use for high-speed internet

Maps Showing Broadband Coverage

LINKS

Reference Material

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Glossary

DEFINITIONS