

**Governor's Task Force on Broadband
November 2, 2017
Minnesota Senate Office Building –Room 2308
95 University Avenue West
St. Paul, MN 55155
10:00 a.m. – 1:45 p.m.**

10:00 a.m. –10:10 a.m.	Introductions, Approval of Minutes, Public Comments
10:10 a.m. – 10:15 a.m.	Office of Broadband Development Update
10:15 a.m. – 10:45 a.m.	Discussion of Updated Cost to Deploy Broadband
10:45 a.m. – 11:45 a.m.	Subcommittee Review of Draft Report
11:45 a.m. – 12:30 p.m.	Lunch (Capitol basèment)
12:30 p.m. – 1:30 p.m.	Full Task Force Discussion of Report
1:30 p.m. – 1:45 p.m.	December Meeting/Wrap-up/Adjourn

Draft Annual Report

October 31, 2017

2017

This document contains the Task Force's 2017 Annual Report with recommendations for policy makers and stakeholders to consider in the 2018 legislative session.

Governor's Task
Force on Broadband

Draft Annual Report: 2017 Governor's Task Force on Broadband

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Members of the Governor's Task Force on Broadband

Margaret Anderson Kelliher (Chair), Minnesota High Tech Association

Hannah Buckland, Leech Lake Tribal College

Denise Dittrich, Minnesota School Boards Association

Kevin Hansen, Thomson Reuters

Shannon Heim, Dykema

Maureen Ideker, Essentia Health

Bernadine Joselyn, Blandin Foundation

Steve Lewsader, Communications Workers of America

Neela Mollgaard, Red Wing Ignite

Donald Niles, City of Wadena

Jody Reisch, Rock County

Daniel Richter, MVTW Wireless

Andrew Schriener, CenturyLink

Richard Sjoberg, Sjoberg's Cable

Paul Weirtz, AT&T

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Executive Summary

In 2011, Minnesota Governor Mark Dayton signed Executive Order 11-27 ([Executive Order 11-27](#)) establishing his first Governor's Task Force on Broadband. The current Task Force is the second under Governor Dayton, and as appointed in 2015. Fifteen members, representing a variety of backgrounds, serve on the Task Force which is charged with developing, implementing, and promoting state policy, planning and initiatives to achieve state broadband needs and goals.

This report highlights the work of the Task Force in 2017 and makes policy recommendations to the Governor and Legislature. This report is also the last report to Governor Dayton and this Legislature. Over the last six years, the Task Force on Broadband has studied issues related to broadband affordability, adoption, and accessibility, and has made recommendations to remove barriers to broadband deployment and modernize Minnesota's telecommunications regulatory framework.

The Task Force has also consistently recommended funding the Minnesota's Border-to-Border Broadband Development Grant Program. This program has leveraged state and private investment to provide broadband service to thousands of households and businesses across Minnesota, connecting unserved or underserved areas of the state.

Following the recommendations of the 2015 Task Force on Broadband, the Legislature updated Minnesota's broadband speed goals in 2016. The updated speed goals, which reflect the growing demand for broadband Internet and the Federal Communication Commission's updated definition of broadband, are found in Minn. Stat. §237.012:

It is a state goal that (1) no later than 2022, all Minnesota businesses and homes have access to high-speed broadband that provides minimum download speeds of at least 25 megabits per second and minimum upload speeds of at least three megabits per second; and (2) no later than 2026, all Minnesota businesses and homes have access to at least one provider of broadband with download speeds of at least 100 megabits per second and upload speeds of at least 20 megabits per second.

As of December 31, 2016, 87.94 percent of Minnesota households have wireline broadband access available at a speed of at least 25 megabits per second (Mbps) download and 3 Mbps upload (25 Mbps/3 Mbps), while 73.07 percent of rural Minnesota households have a wired broadband connection that meets these speeds. Nearly 70 percent (69.86 percent) of Minnesota households have wireline speeds of 100 Mbps/20 Mbps. In rural areas of Minnesota, 52.46 percent of households have access to these speeds. As Minnesota strives to meet its updated broadband speed goals, much work remains.

The report begins with a brief historical overview of the Governor's Task Force on Broadband, followed by overviews of the state's Border-to-Border Broadband Development Grant Program and the Office of Broadband Development. Then, the report details various recommendations to help expand broadband access throughout Minnesota.

Introduction

Throughout the course of 2017, the Governor's Task Force on Broadband has heard from a number of stakeholders, experts and those impacted by broadband. Broadband is more important today than ever before, and will play an increasingly important role in the lives of Minnesotans in the years and decades to come. With advent of telemedicine, the promise of driverless and connected vehicles, and the future of the next generation of wireless technology, technologies that depend on

a broadband connection are changing the ways we interact with each other and our (built) environment.

Leveraging the benefits of these technologies, however, requires a connection to the Internet. And while many Minnesotans already have a broadband connection, 12.06 percent of Minnesota households (252,000 households) lack access to broadband at speeds of at least 25 megabits per second (Mbps) download and 3 Mbps upload (25 Mbps/3 Mbps). Without access to broadband, these households have limited or no access to telemedicine (a service that is particularly important for residents of rural Minnesota), online curriculum for school or training, or online job search tools and job applications. Businesses without access to broadband lack a crucial connection necessary to compete in a global, 21st Century economy.

The benefits of broadband are not new, and have in fact been discussed in previous reports by the Governor's Task Force on Broadband. We encourage readers to consult past reports for more details on the associated benefits of broadband. The intent here is to highlight Minnesota's Border-to-Border Broadband Development Grant Program, along with the recommendations of the Task Force.

Overview of Governor's Task Force on Broadband

In 2011, Minnesota Governor Mark Dayton signed Executive Order 11-27 ([Executive Order 11-27](#)) establishing his first Governor's Task Force on Broadband. Fifteen members, representing a variety of backgrounds, serve on the Task Force which is charged with developing, implementing, and promoting state policy, planning and initiatives to achieve state broadband needs and goals. This Task Force—Governor Dayton's second—was appointed in 2015 and will serve through 2018.

Throughout each year, the Task Force hears presentations from various stakeholders interested in broadband, tours facilities and organizations that use broadband, and assembles the annual report to the Legislature and Governor Dayton. In 2014, the Task Force recognized the importance of having an office to help promote the expansion and adoption of broadband throughout Minnesota, and a dedicated fund to match private investment in broadband, successfully advocating for the creation of the Office of Broadband Development and establishment and funding of the Border-to-Border Broadband Development Grant Program.

These represent two key advocacy successes of the Governor's Task Force on Broadband. The Task Force has also helped advocate for funding for Telecommunications Access Equity Aid, E-Rate and Regional Library Telecommunications Aid, one-to-one devices in the classroom, the establishment of a cybersecurity legislative commission, along with other policy and funding recommendations. These recommendations, and more, are contained in past reports.

This report is our final report to this Legislature and Governor, that can produce measurable bipartisan legislative action on the critical issue of broadband.

Overview of Border-to-Border Broadband Development Grant Program

The Border-to-Border Broadband Development Grant Program, created by the Legislature in 2014 and initially funded at \$20 million, provides funding to build the state's broadband infrastructure and promote broadband access in unserved and underserved areas of the state, where "unserved" and "underserved" are defined in Minn. Stat. §116J.394(h) and Minn. Stat. §116J.394(i), respectively:

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(h) "Underserved areas" means areas of Minnesota in which households or businesses lack access to wire-line broadband service at speeds of at least 100 megabits per second download and at least 20 megabits per second upload.

(i) "Unserved areas" means areas of Minnesota in which households or businesses lack access to wire-line broadband service, as defined in section [116J.39](#).

The grants provide up to a dollar-for-dollar match on funds, not to exceed \$5 million for any one project, and are distributed to qualified entities, including a(n):

1. incorporated business or a partnership;
2. political subdivision;
3. Indian tribe;
4. Minnesota nonprofit organization organized under chapter 317A;
5. Minnesota cooperative association organized under chapter 308A or 308B; and
6. Minnesota limited liability corporation organized under chapter 322B for the purpose of expanding broadband access.

The Border-to-Border Broadband Development Grant Program has now been funded for four consecutive years, with grants distributed during 2015, 2016, and 2017. The Office of Broadband Development is in the process of reviewing 70 grant applications, with requests totaling more than \$50 million, for \$20 million in funding allocated to the grant program in 2017. Final announcement of the grant recipients is expected in early 2018.

In addition to updating the state's broadband speed goals and the state's definitions of unserved and underserved with respect to broadband availability, the 2016 Legislature added a formal challenge process to the grant program.¹ This process allows an incumbent broadband provider to challenge an application if the proposed broadband deployment infringes on the incumbent's territory.

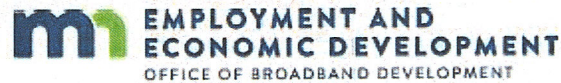
The State Speed Goals and the Grant Program

In 2016, the Legislature updated Minnesota's broadband speed goals (Minn. Stat. §237.012):

It is a state goal that (1) no later than 2022, all Minnesota businesses and homes have access to high-speed broadband that provides minimum download speeds of at least 25 megabits per second and minimum upload speeds of at least three megabits per second; and (2) no later than 2026, all Minnesota businesses and homes have access to at least one provider of broadband with download speeds of at least 100 megabits per second and upload speeds of at least 20 megabits per second.

The grant program provides matching funds to Internet Service Providers (ISPs) and community partners that agree to provide broadband service to unserved areas (i.e. areas that do not have access to speeds of 25 Mbps/3 Mbps) and underserved areas (i.e. areas that do not have access to speeds of 100 Mbps/20 Mbps) of the state. The grant program is helping connect unserved and underserved areas of the state, but more work remains to help close the broadband availability gap.

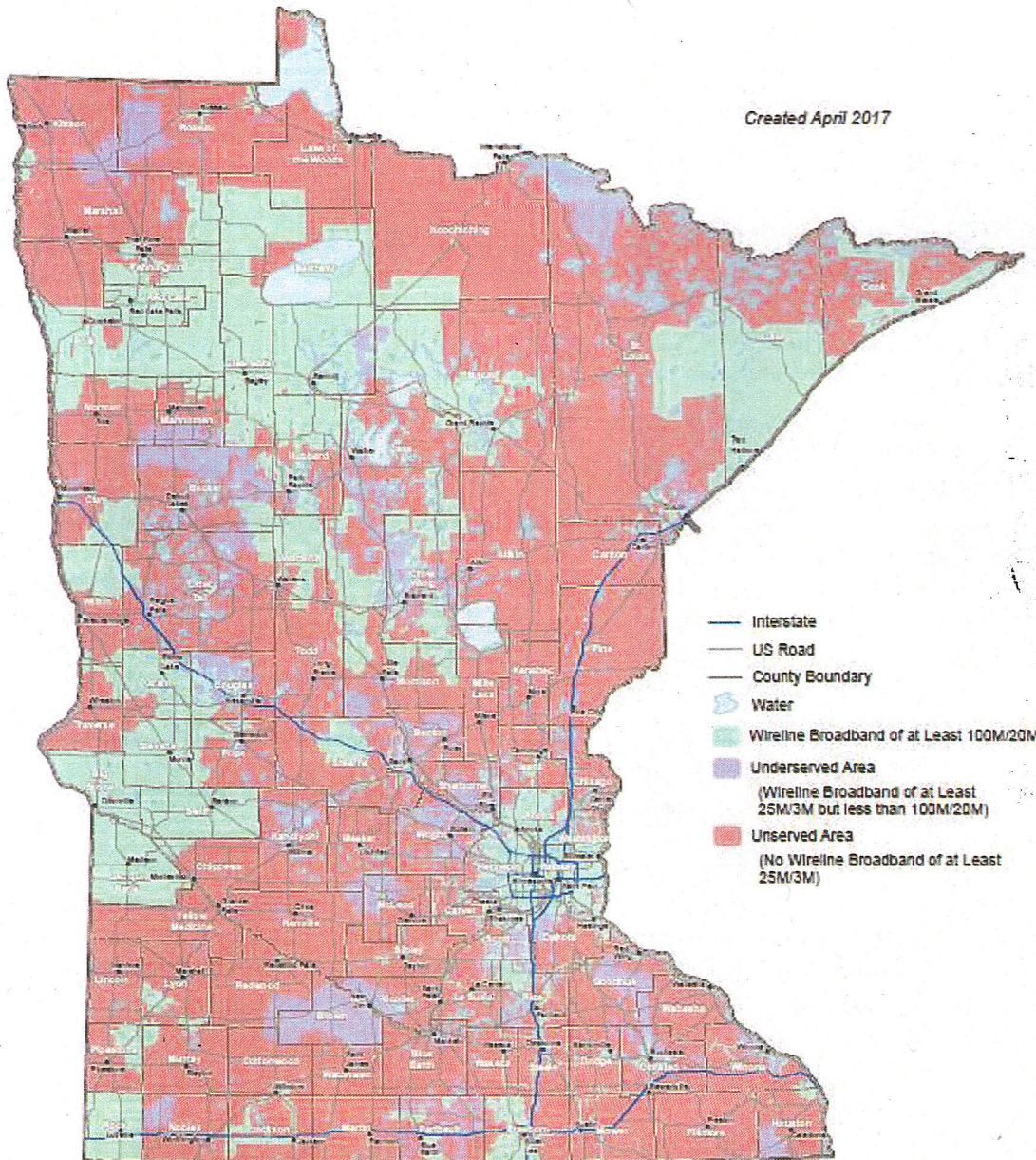
¹ The Office of Broadband Development provides a summary of the challenge process and procedures: https://mn.gov/deed/assets/grant-challenge-process-2016_tcm1045-257998.pdf.



2017 Broadband Service Inventory for the State of Minnesota

Border-to-Border Broadband Development Grant Program

Unserved, Underserved and Served Broadband Areas



Created April 2017

- Interstate
- US Road
- County Boundary
- Water
- Wireline Broadband of at Least 100M/20M
- Underserved Area
(Wireline Broadband of at Least 25M/3M but less than 100M/20M)
- Unserved Area
(No Wireline Broadband of at Least 25M/3M)



0 12.5 25 50 75 100
miles

Submit questions or recommended changes to:
DEED.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 and modified based on validation tools. The data is current as of December 31, 2016.

Additional maps and data are available at
<http://mn.gov/deed/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 651-369-7610.

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Historical Estimate of Wireline Broadband Service Availability in the State of Minnesota				
Date	10 Mbps/5 Mbps	25 Mbps/3 Mbps	100 Mbps/20 Mbps	1 Gbps/1 Gbps
February 2015	86.46	85.83	39.14	4.33
July 2016	87.54	87.72	68.45	14.00
October 2016	87.38	87.53	68.53	14.28
April 2017	87.02	87.94	69.86	16.93

Source: *Connected Nation, April 2017.*

Statewide, 87.94 percent of households have access to broadband at speeds of 25 Mbps/3 Mbps, while 69.86 percent of households have access to broadband at speeds of 100 Mbps/20 Mbps, as reported by Connected Nation in April 2017. In other words, 12.06 percent of Minnesota households are unserved (down from 14.17 percent in 2015), while 30.14 percent of Minnesota households are underserved (down from 60.86 percent in 2015).

Historical Estimate of Wireline Broadband Service Availability in the State of Minnesota (Rural Areas)				
Date	10 Mbps/5 Mbps	25 Mbps/3 Mbps	100 Mbps/20 Mbps	1 Gbps/1 Gbps
February 2015	69.55	68.08	40.68	5.81
July 2016	71.86	72.24	48.93	11.39
October 2016	71.69	72.03	49.33	12.03
April 2017	70.99	73.07	52.46	14.24

Source: *Connected Nation, April 2017.*

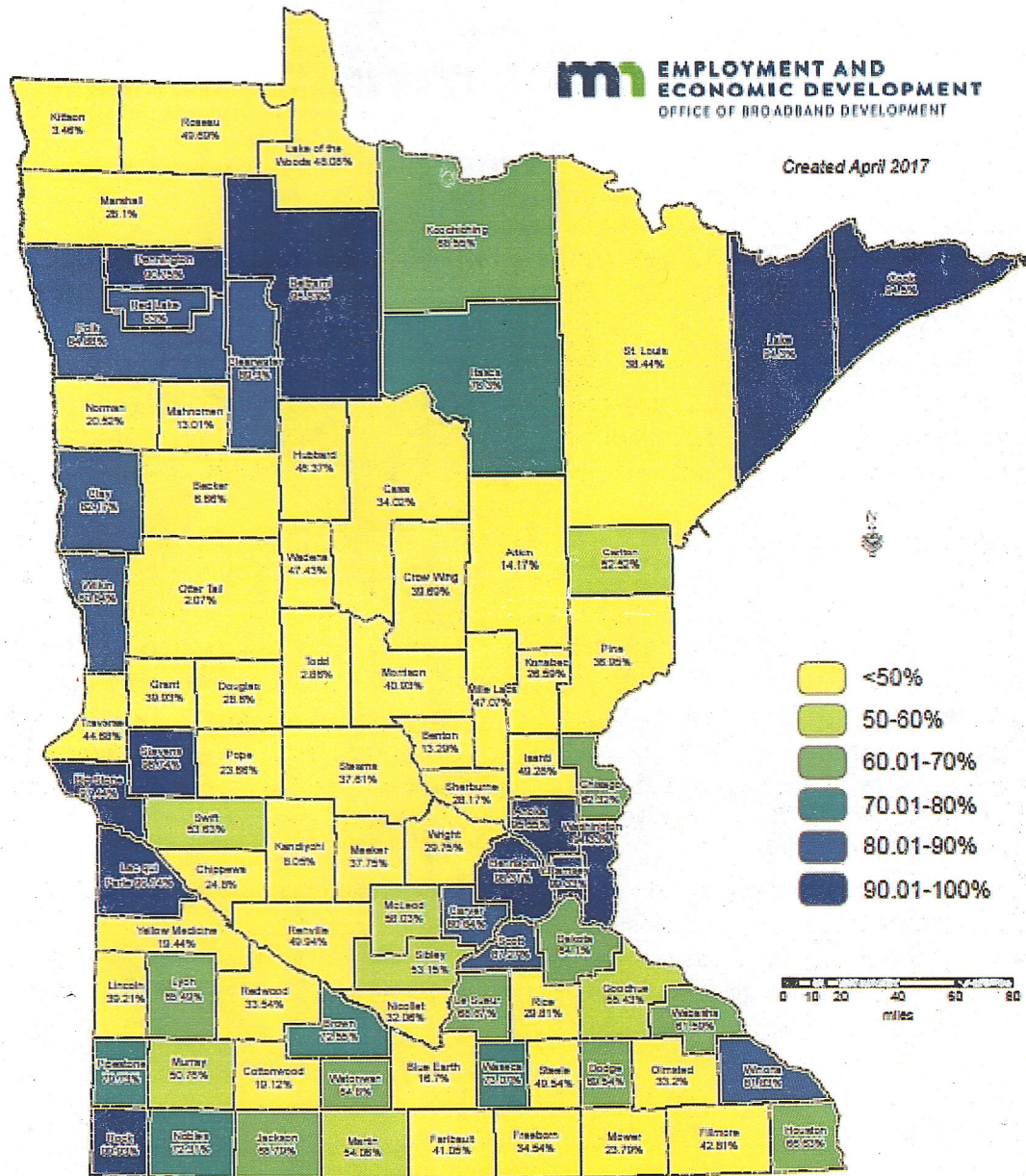
Examining households in rural Minnesota yields a different picture. A smaller share of households in rural Minnesota—73.07 percent—have access to broadband at speeds of 25 Mbps/3Mbps, while 52.46 percent of rural Minnesota households have access to broadband at speeds of 100 Mbps/20 Mbps, as reported by Connected Nation in April 2017. Within rural Minnesota, 26.93 percent of households are unserved (down from 31.92 percent in 2015), and 47.54 percent of households are underserved (down from 59.32 percent in 2015).

Despite the challenges that continue to face Minnesota, particularly rural Minnesota, the state continues to make progress toward connecting households with broadband. During 2014, 2015, and 2016, the Legislature allocated nearly \$66 million to the program, which has leveraged \$76 million in local and/or private investments, making service available to more than 23,500 households and 2,100 businesses. The 2017 Legislature allocated \$20 million to the grant program, with \$500,000 directed at delivering broadband to low-income areas of the state.

2017 Broadband Availability in the State of Minnesota

Percentage of Households Served by Wireline Broadband Service by County

At Least 100 Mbps Download/20 Mbps Upload Speeds
Statewide Availability: 69.86%, Rural: 52.46%



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 and modified based on validation tools. The data is current as of December 31, 2016.

Additional maps and data are available at <http://mn.gov/deed/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 651-250-7610.

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

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Impact of the Grant Program on Minnesota's Communities

The Border-to-Border Broadband Development Grant Program remains one of the state's primary methods to help connect unserved or underserved areas of the state with broadband. These areas of the state tend to be more rural than areas with broadband service, while also having terrain that is more difficult to navigate. This, in turn, drives up the cost for ISPs to connect households in these areas.

Minnesota's Border-to-Border Broadband Development Grant Program helps mitigate the cost for providers and the communities with which they partner. That is why continued, ongoing funding for the grant program is so important—to provide communities and ISPs with certainty, so they can make the informed, strategic investments necessary to expand broadband into the hardest-to-reach areas of Minnesota.

Communities that partner with ISPs, and who have received grants through the Border-to-Border Broadband Development Grant Program largely appreciate the program and recognize that without it, they would likely not have broadband available. From _____ to _____, to _____ and _____, stories of the importance of a broadband connection echo across the state.

INSERT QUOTE ABOUT GRANT PROGRAM

INSERT QUOTE ABOUT GRANT PROGRAM

INSERT QUOTE ABOUT GRANT PROGRAM

INSERT QUOTE ABOUT GRANT PROGRAM

We do not, however, recommend funding the grant program with a blank check. Instead, we recommend on-going biennial funding at \$XX million per biennia until the state achieves its broadband speed goals. This is a measured, responsible approach that provides fiscal constraint and guideposts for the Legislature, while providing ISPs and communities with the certainty they need to make advanced, long-term investment plans.

Recommendation

Provide \$XX million in on-going biennial funding for the Border-to-Border Broadband Development Grant Program, until the state achieves its broadband speed goals.

Overview of Office of Broadband Development

The Office of Broadband Development (OBD), located within the Department of Employment and Economic Development (DEED), was established during the 2013 Legislative Session.² OBD plays an important role in developing Minnesota's broadband infrastructure, including working with partners on mapping broadband availability to more effectively direct state investment. OBD also assists the Governor's Task Force on Broadband, the Governor's Broadband Subcabinet, and oversees the state's Border-to-Border Broadband Development Grant Program.³

The Office of Broadband Development considers a number of criteria, as defined in statute, in evaluating and awarding the grants to eligible entities, including cost, community support, the number of households and community institutions impacted by the project, demonstrated need for economic development, among others.⁴

In addition to administering the state's Border-to-Border Broadband Development Grant Program, the Office of Broadband Development is tasked with a number of other responsibilities. These responsibilities are assigned in state statute, and include serving as the central broadband planning body for the state of Minnesota; monitoring broadband development efforts of other states and nations in areas such as business, education, public safety, and health; driving job creation, promoting innovation, and expanding markets for Minnesota businesses.

Aside from the state speed goals identified in Minn. Stat. §237.012, the Office of Broadband Development has 27 statutory obligations, spread across four statutes (see Appendix A for a complete list of obligations):

- Statute 116.J.391,
- Statute 116.J.396,
- Statute 116J.39, and
- Statute 116J.395.

The Office's responsibilities are broken into eight broad categories, among three members of staff and an executive director: broadband access, measuring broadband, adoption and use, Broadband Task Force, resource center/information clearinghouse, outreach and engagement, policy, and planning.

Current Office Activities and Responsibilities⁵

Broadband Access

- B2B grant administration
- Community anchor institutions
- Deployment facilitation (permitting/ROW, dig once, etc.)

Measuring Broadband

- Mapping program
- Adoption and use survey

² Minnesota Session Laws, 2013 regular session, chapter 85 at Article 3, sections 13, 14, and 26

³ More information about the Office of Broadband Development can be found in its annual report: <http://www.mn.gov/deed/images/broadband-dev-report.pdf>.

⁴ Minnesota Session Laws, 2014 regular session, chapter 312 at Article 3, sections 3.

⁵ Provided by OBD. A list of OBD's statutory obligations is included in Appendix A.

Adoption and Use

Broadband Task Force

- Administrative and logistical support

Resource Center/Information Clearinghouse

- Coordination of OBD information resources

Outreach and Engagement

- Coordination of outreach and engagement
- Policy
- State policy development and consultation
- Federal policy analysis

Planning

- State broadband planning
- Local planning advancement and support

Currently, \$250,000 from the state's General Fund supports OBD's operations and administration, which include: two full-time employees; office space, utilities, computers, advertising, printing, supplies; expenses for holding meetings of the Governor's Task Force on Broadband; outreach; and staff research and development. The Minnesota Department of Commerce provides one full-time employee, as an analyst and general support to the program. Finally, as specified in statute, up to three percent of the grant appropriation is available for grant administration, mapping, data acquisition, and analysis.

Maintaining the volume and quality of work provided by OBD requires sufficient funding from the Legislature. While OBD has received sufficient funding, from one legislative session to the next, the uncertainty of biennial funding hinders long-term planning and could impair continued successful implementation of the Border-to-Border Broadband Development Grant Program. The success of the Border-to-Border Broadband Development Grant Program is in large part tied to the success of OBD. That's why providing OBD with full funding, on an ongoing basis is so important—and that is why we are including it as a recommendation.

Recommendation

Provide the Office of Broadband Development with full funding at \$XX per year in ongoing funding, until the state achieves its broadband speed goals.

Broadband and Transportation, Emergency Communications and Emergency Response Systems

Transportation systems, emergency communications systems and emergency response systems are rapidly becoming more dependent upon telecommunications infrastructure. Continued funding to deploy broadband infrastructure is key to assuring the viability of these systems as a matter of public safety and to drive economic growth and stability. The Task Force therefore recommends that:

The State of Minnesota support and fund deployment of broadband infrastructure as necessary to assure implementation of new transportation and emergency response technologies.

New technologies in the area of transportation are swiftly emerging with numerous tests and trial deployments occurring in the United States. These new technologies include various forms of vehicle-to-vehicle communications, self-driving autonomous vehicles, and smart highway systems to control traffic and directly interact with vehicles.⁶ "[N]early every major car manufacturer has set a deadline of producing autonomous cars by 2021, with China's Baidu aiming for 2019 and Tesla aiming for the end of 2017."⁷

Recommendation

The State of Minnesota should support and fund deployment of broadband infrastructure as necessary to assure implementation of new transportation and emergency response technologies.

Emergency communications and response systems are rapidly evolving to meet the critical needs of public safety and obtain the advantages of better and more secure technologies. Next Generation 911, for example, will include features such as text to 911; 911 video; vehicle sensor data transmission to 911; and interoperability of emergency networks. The decision announced on October 4, 2017 that Minnesota will participate in the FirstNet plan to deliver secure, dedicated wireless network services to Minnesota's public safety providers is a positive example of support of these new technologies.⁸

Broadband is a backbone for these technologies and essential to achieve the significant benefits these technologies will afford. New transportation technologies will result in increased telework opportunities, increased mobility for many, increased employment opportunities and decreased transportation costs. Moreover, autonomous vehicles hold the promise to reduce the number of crashes, injuries and deaths on our roads. Human choice or error are responsible for 94 percent of vehicle crashes.⁹ In 2016 there were 37,461 crash fatalities in the United States¹⁰ with 397 of those in Minnesota.¹¹ The annual economic cost of motor vehicle crashes in Minnesota exceeds \$3 billion.¹²

⁶ See "Federal Automated Vehicles Policy – Accelerating the Next Revolution in Roadway Safety," at 9-10, National Highway Traffic Safety Administration (Sept. 2016) (found at:

http://www.safetyresearch.net/Library/Federal_Automated_Vehicles_Policy.pdf).

⁷ "Autonomous Vehicles – A Policy Preparation Guide," at 2, National League of Cities Center for City Solutions (2017) (found at: <http://www.nlc.org/sites/default/files/2017-04/NLC%20AV%20Policy%20Prep%20Guide.pdf>).

⁸ "Minnesota to Transform Communications for Public Safety: Governor Dayton Approves Buildout Plan for First Responder Network," (Oct. 4, 2017) (found at: www.firstnet.gov/news/minnesota-transform-communications-public-safety).

⁹ Federal Automated Vehicles Policy, at 5.

¹⁰ "USDOT Releases 2016 Fatal Traffic Crash Data," (Oct. 6, 2017) (found at: www.nhtsa.gov/press-releases/usdot-releases-2016-fatal-traffic-crash-data).

¹¹ "Total Minnesota Road Fatalities in 2016 Approaching 400," Minnesota Office of Communications (Jan. 5, 2017) (found at: <https://dps.mn.gov/divisions/ooc/news-releases/Pages/Total-Minnesota-Road-Fatalities-in-2016-Approaching-400.aspx>).

¹² An NHTSA report in 2010 estimated Minnesota's economic costs due to motor vehicle crashes at \$3.057 billion. The Economic and Societal Impact of Motor Vehicle Crashes, 2010, at 145, NHTSA (Revised May 2015) (found at: <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812013>).

New transportation technologies and enhanced emergency response systems are important and dependent upon broadband infrastructure. The Task Force therefore recommends the State of Minnesota support and fund deployment of broadband infrastructure as necessary to assure implementation of new transportation and emergency response technologies.

Conclusion

We urge continued funding, on an on-going biennial basis, of Minnesota's Border-to-Border Broadband Development Grant Program. The grant program, funded now for four consecutive years, has leveraged \$76 million in local and/or private investments, making service available to more than 23,500 households and 2,100 businesses across the Minnesota. We know that broadband plays a critical role in helping educate our children, care for our infirmed and expand access to markets for our businesses.

Limited access to broadband will continue to be a challenge facing many Minnesotans, but the state continues to make progress toward connecting every Minnesotan with broadband service. Statewide, 87.94 percent of households have access to broadband at speeds of 25 Mbps/3 Mbps. In rural areas of Minnesota, however, 73.07 percent of households have access to those speeds—that is a difference of 14.87 percentage points. The disparity is even larger when considering the state's long-term speed goal of 100 Mbps/20 Mbps. Here, 69.86 percent of Minnesota households have access to broadband at speeds of 100 Mbps/20 Mbps, while 52.46 percent of rural Minnesota households have access to such speeds—a difference of 17.4 percentage points.

Achieving our state broadband speeds goals and reducing the broadband availability gap requires a commitment from the State Legislature and Governor to provide sustained funding to the Border-to-Border Broadband Development Grant Program.

The success of the grant program, however, depends in large part on the Office of Broadband Development and its ability to effectively administer the program and carry out its other statutory responsibilities. Without sufficient on-going funding, the Office of Broadband Development will not be able to achieve those outcomes.

The issue of broadband and funding for the grant program and the Office of Broadband Development has received various of levels of political support or opposition throughout the years. The Task Force has tried to stay out of those political debates and advocate for policies that most effectively expand access to broadband throughout Minnesota. This year is no different. Access to broadband is important regardless of political stripe. That is why urge continued, bipartisan leadership on helping expand broadband throughout Minnesota.

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Policy Recommendations to Governor Dayton and Members of the State Legislature

- Provide \$XX million in on-going biennial funding for the Border-to-Border Broadband Development Grant Program, until the state achieves its broadband speed goals.
- Provide the Office of Broadband Development with full funding at \$XX per year in ongoing funding, until the state achieves its broadband speed goals.
- The State of Minnesota should support and fund deployment of broadband infrastructure as necessary to assure implementation of new transportation and emergency response technologies.

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Appendix A: Office of Broadband Development Statutory Charges/KPI

Office of Broadband Development Statutory Charges/KPI	Source
All state residents and businesses have access to high-speed broadband that provides minimum download speeds of 25 megabits per second (Mbps) and minimum upload speeds of 3 Mbps by 2022; and 100 Mbps download and 20 Mbps upload by 2026.	Statute 237.012
The top five states of the United States for broadband speed universally accessible to residents and businesses	Statute 237.012
The top five states for broadband access	Statute 237.012
Rank among top 15 when compared to countries globally for broadband adoption	Statute 237.012
Encourage, foster, develop, and improve broadband within the state	Statute 116J.39
Drive job creation, promote innovation, and expand markets for Minnesota businesses	Statute 116J.39
Serve the ongoing and growing needs of Minnesota's education systems, health care system, public safety system, industries and businesses, governmental operations, and citizens	Statute 116J.39
Improve accessibility for underserved communities and populations	Statute 116J.39
Serve as the central broadband planning body for the state of Minnesota	Statute 116J.39
Coordinate with state, regional, local, and private entities to develop, to the maximum extent practicable, a uniform statewide broadband access and usage policy	Statute 116J.39
Develop, recommend, and implement a statewide plan to encourage cost-effective broadband access, and to make recommendations for increased usage, particularly in rural and other underserved areas	Statute 116J.39
Coordinate efforts, in consultation and cooperation with the commissioner of commerce, local units of government, and private entities, to meet the state's broadband goals in section 237.012	Statute 116J.39
Develop, coordinate, and implement the state's broadband infrastructure development program under section 116J.391	Statute 116J.39
Provide consultation services to local units of government or other project sponsors in connection with the planning, acquisition, improvement, construction, or development of any broadband deployment project	Statute 116J.39
Encourage public-private partnerships to increase deployment and adoption of broadband services and applications, including recommending funding options and possible incentives to encourage investment in broadband expansion	Statute 116J.39
Monitor the broadband development efforts of other states and nations in areas such as business, education, public safety, and health	Statute 116J.39

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Consult with the commissioner of Commerce to monitor broadband-related activities at the federal level, including regulatory and policy changes and the potential impact on broadband deployment and sustainability in the state	Statute 116J.39
Serve as an information clearinghouse for federal programs providing financial assistance to institutions located in rural areas seeking to obtain access to high-speed broadband service, and use this information as an outreach tool to make institutions located in rural areas that are unserved or underserved with respect to broadband service aware of the existence of federal assistance	Statute 116J.39
Provide logistical and administrative support for the Governor's Broadband Task Force	Statute 116J.39
Provide an annual report	Statute 116J.39
Coordinate an ongoing collaborative effort of stakeholders to evaluate and address security, vulnerability, and redundancy issues in order to ensure the reliability of broadband networks	Statute 116J.39
Perform an analysis of current availability and use of broadband, including average broadband speeds, within the state	Statute 116J.39
Analysis of actual speeds and unmet need for schools, libraries, hospitals, and public safety facilities	Statute 116J.39
Analysis of incumbent broadband infrastructure within the state and its ability to spur economic development	Statute 116J.39
Analysis of the degree to which new, additional, or improved broadband infrastructure would spur economic development in the state	Statute 116J.39
Encourage and coordinate "dig once" efforts for the planning, relocation, installation, or improvement of broadband conduit within the right-of-way in conjunction with any current or planned construction, including, but not limited to, trunk highways and bridges	Statute 116J.391
Develop a strategy to facilitate the timely and efficient deployment of broadband conduit or other broadband facilities on state-owned lands and buildings	Statute 116J.391
The office shall encourage and assist local units of government to adopt and implement policies similar to those under paragraphs (a) and (b) for construction or other improvements to county state-aid highways, municipal state-aid roads, and any other rights-of-way under the local unit of government's jurisdiction, and to other lands or buildings owned by the local unit of government.	Statute 116J.391
Administer the Border-to-Border Broadband Development Grant Program	Statute 116J.395
Contract for the collection of broadband deployment data from providers and the creation of maps showing the availability of broadband service. Household and business broadband use surveys.	Statute 116J.396

Healthcare Section of the Annual Report from ROI Subcommittee

Broadband has become a cornerstone utility in healthcare. Every day and every minute functions in hospitals, clinics, labs and medical provider offices are intricately entwined with high speed, reliable broadband. Applications span from:

- Ambulances "using Wi-Fi" to send cardiac tracings from the rig that is 30 miles away from the hospital;
- Rural ERs "sending" CT scans to a metro sub-specialist for interpretations, such as for strokes;
- "Sharing" the patients electronic medical record instantly with any Minnesota hospital or clinic or health care entity,
- Patients "using email" to communicate with their health care providers and teams,
- Providing telemedicine visits to the home
- Researching definitions, symptoms and treatment options.
- Sharing scarce medical specialty providers across MN

The Task Force therefore recommends that:

The State of Minnesota support and fund deployment of broadband infrastructure to assure availability of healthcare e-functions across all of MN.

One MN integrated health care provider Essentia Health, Duluth, is using a broadband application to meet with patients across Northern MN for tapering from opioids. With this telemedicine live interactive audio and video service, the clinical pharmacist meets with the patient for 5 visits to the primary care provider's one visit. The opioid dosing is tapered slowly at only a 10% decrease of the previous morphine equivalent amount. The pharmacist works closely with the patient to manage any symptoms and avoid any negative effects of the opioid withdrawal. This is an example of the MN licensed pharmacist functioning at the top of their licensure to help address MD shortages and the opioid crisis.

Elderly and disabled people want to stay home and be independent for as long as possible and software applications using broadband deliver that opportunity and reality. Making it easier for patients to be healthy at home is not only good for them, but saves dollars paid by counties toward Medical Assistance for long term care and assisted living stays, averaging about \$6,000 per month.

Telehome monitoring of vital signs and using video visits directly to the home helps reduce admissions to a higher level of care such as ER, Long Term Care or to the hospital. Research published in 2006, conducted by the University of MN and three MN Home Care agencies, showed that using telehome monitoring resulted in the group using it going to a higher level of care at a rate of 17%, while the research control group was at 42% rate.

As the legislators expressed when the 2015 Telemedicine Law was passed: "Citizens of MN need and expect us to use these technologies."

Making full use of the healthcare technologies that support all the critical functions, as well as the everyday infrastructure in health and medical care requires affordable and well-distributed broadband coverage across MN. The Task Force recommends the State of Minnesota support and fund deployment of broadband infrastructure to assure the availability of this needed utility cornerstone.

Governor's Task Force on Broadband
October 12, 2017
Minnesota Senate Office Building – Room 2308
95 University Avenue West
St. Paul, MN 55155
10:00 a.m. – 3:00 p.m.

Task Force Members present: Margaret Anderson Kelliher, Hannah Buckland, Kevin Hansen, Shannon Heim, Maureen Ideker, Bernadine Joselyn, Steve Lewsader, Neela Mollgaard, Don Niles, Andy Schriener, Dick Sjoberg and Paul Weirtz

Task Force Members Participating by Phone: Dan Richter

Task Force Members Absent: Denise Dittrich, Jody Reisch

Others in attendance: Anna Boroff, John Dukich, Danna MacKenzie, Emily Murray, Ann Treacy, Diane Wells, Pam Whitmore

I. Introductions, Approval of Minutes, Public Comments

Members of the Task Force and members of the public attending the meeting introduced themselves. The minutes of the September 28, 2017 Task Force meeting were approved. There were no public comments.

II. Update from the Office of Broadband Development

Danna Mackenzie provided an update on activities of the OBD.

III. Updated Cost to Deploy Broadband

The Task Force had a preliminary discussion of possible methods to calculate an updated cost to deploy broadband in Minnesota.

IV. Report Out from Subcommittees

The chairs of each subcommittee reported out to the full Task Force on their outline for content and recommendations for the annual report.

V. Setting the Bar: Minnesota's IT Security Strategic Plan

Chris Buse, Assistant Commissioner for Information and Security and CISO for MN-IT, provided an overview of the state's security efforts and responded to questions from Task Force members. A copy of his presentation is available at [MNIT- Securing Minnesota: A Plan to Fill the Gaps](#)

VI. Discussion of Task Force Report and Recommendations

The Task Force discussed the content and review process for the final report for the November meeting.

The meeting adjourned at 2:00 p.m.