# Oregon Broadband Office Strategic Plan

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Business Oregon

January 30, 2020

# Contents

# Executive Summary

This report presents the strategic plan of the Oregon Broadband Office to carry out its mission as defined in Executive Order and Statute. It is scalable to the resources available for state broadband programs.

Information and communications technologies have been the most disruptive and transformative technologies of the past one hundred years. Oregon's information and communication technology infrastructure and the capacity of Oregon to utilize these technologies for economic and community development is an important public policy issue, for it will determine the state's future economic growth and development. The internet has become **the platform** on which the world works and broadband **connectivity** is becoming the universal common denominator, important and essential for all sectors of the economy.

In December 2018, Governor Kate Brown ordered that the Oregon Broadband Office is created within Business Oregon.  In the 2019 Legislative Assembly, the Oregon Broadband Office was codified in statute providing the Office with specific directives [Executive Order Number 18-31 and HB 2173 Enrolled 2019]. The Broadband Office is directed to:

- Advocate for the adoption of public policies to close the continuing digital divide.
- Develop broadband investment and deployment strategies for unserved and underserved areas.
- Promote private sector, public sector, and cooperative broadband solutions.
- Support and promote local and regional broadband planning.
- Be provider and technology neutral focusing on desired outcomes.
- Pursue and leverage federal sources of broadband funding.
- Manage and award funds allocated to the office for broadband projects.
- Engage with stakeholders to make a business case for broadband investment.
- Promote digital literacy, equity, and inclusion.
- Generate public awareness of the value of broadband technologies and applications.
- Promote broadband adoption and utilization of broadband technologies and applications.
- Develop and maintain a broadband map.
- Convene state and federal agencies and advise the Governor, state agencies and the Congressional Delegation on broadband.
- Support and coordinate efforts with the Oregon Broadband Advisory Council.

The Oregon Broadband Office is currently staffed by one full time position, a Telecommunications Strategist.

**Broadband Strategic Plan**

The strategy of the Oregon Broadband Office is to follow the well-defined directives and goals established in the state's public policy with programs and activities to address each directive and achieve each goal, scaled to the resources available. To carry out these directives, an Oregon Broadband Office website was created with the URL broadband.oregon.gov to serve as a portal to the state's broadband activities, initiatives and resources. It is a key tool for promotion and information distribution. A new **Oregon Broadband Map** was also launched and is accessible through the Broadband Office website. The map is a platform for data collected to track the availability of broadband services, measure progress, provide related information and provide public access to the data. The map is searchable by city, county, tribal lands, specific address, or point selection on the map. An expanded Broadband Office with additional staff is planned scaled to available funds.

Business Oregon is conducting a *Statewide Broadband Assessment and Best Practices Study* to evaluate Oregon's current broadband infrastructure and broadband service availability, identify geographic areas of the state that are unserved and underserved, benchmark costs for broadband infrastructure deployment, identify best practice programs, policies, and strategies from across the nation, identify sources of funding, and improve the database used for the Oregon Broadband Map.

A **Rural Broadband Capacity Improvement Program** will be established, scaled to available funds, to support broadband planning, engineering, and/or infrastructure deployment projects targeting unserved and underserved rural areas. The program will provide grants and forgivable loans for planning, engineering, infrastructure deployment, and for matching funds to leverage grants and loans from federal and private funding programs.

A **Digital Literacy, Security and Inclusion Program** will be established, scaled to available funds, to provide grants and forgivable loans to projects to improve digital literacy, cybersecurity, and the digital inclusion of unserved and underserved populations so that the benefits of broadband connectivity may be realized.

A **Broadband Outreach Program** will be established, scaled to available funds, to engage stakeholders; elected officials, government officials, healthcare providers, educators, businesses, agriculture and other community leaders, and broadband service providers to facilitate communications, recruit local champions, and aggregate the demand of the different segments of the community to help to make a business case for broadband investment and to match projects with funding sources.

All programs will coordinate with and be guided by the Oregon Broadband Advisory Council. Competitive high-speed access to the internet and telecommunications networks is essential, **statewide***,* for Oregon's schools, libraries, businesses, agricultural producers, governments, first responders, healthcare providers, and individual residents. This is an aspirational strategic plan.

The scope of activities that the Office will ultimately undertake will be enabled, or limited, by the resources available.

# Broadband Public Policy

Information and communications technologies have been the most disruptive and transformative technologies of the past one hundred years. Oregon's information and communication technology infrastructure and the capacity of Oregon to utilize these technologies for economic and community development is an important public policy issue, for it will determine the state's future economic growth and development. The internet has become the platform on which the world works and broadband connectivity is becoming the universal common denominator, important and essential for all sectors of the economy.

The internet has grown from use by less than one percent of the world's population in 1995, just 25 years ago, when it was commercialized as the World Wide Web (16 million users), to use by over forty percent of the World's population in 2016 (over 3.4 billion users), and that will grow to use by over fifty percent of the world's population in 2020. Broadband telecommunications is now **essential service and infrastructure**.

We are experiencing rapid advances in technology, network performance, capacity, and capabilities and changes in industry structure, markets and applications. Because the telecommunications industry is so dynamic, we continue to have a "Digital Divide." Oregon has made significant progress in the deployment of broadband infrastructure throughout the state in recent years, but it is not enough. The Digital Divide continues to exist and what constitutes competitive quality broadband connectivity continues to change. It is a moving target.

According to the Federal Communications *Commission's 2019 Broadband Deployment Report*, nationally, 73.6 percent of people living in rural areas have access to the fixed terrestrial service transmission speeds that the FCC currently considers to be broadband (currently 25 Mbps down and 3 Mbps up), compared to 98.3 percent of people living in urban areas have access. And 67.9 percent of Americans living on Tribal Lands have access.

The Digital Divide is not just related to population density, but also to factors of income, age, ethnicity, and education. Less than 50 percent of households with income in the bottom 20 percent use the Internet at home, compared to 95 percent of households with income in the top 20 percent. The Digital Divide continues to exist and may well be contributing to the **economic divide** that also exists between urban and rural areas of the state.

In December 2018, Governor Kate Brown ordered that the Oregon Broadband Office is created within Business Oregon and in the 2019 Legislative Assembly, the Oregon Broadband Office was codified in statute providing the Office with specific directives [Executive Order Number 18-31 and HB 2173 Enrolled 2019].

The Oregon Broadband Office shall:

- Advocate for the adoption of public policies that close the continuing digital divide by removing barriers to and supporting broadband infrastructure deployment.

- Develop broadband investment and deployment strategies for unserved and underserved areas.

- Promote private sector, public sector and cooperative broadband solutions.

- Support and promote local and regional broadband planning.

- Promote technology and service provider neutrality by focusing on desired outcomes rather than specific technological solutions.

- Pursue and leverage federal sources of broadband funding to achieve state goals related to broadband.

- Manage and award funds allocated to the Business Oregon for use by the office for broadband projects.

- Engage with stakeholders representing a wide variety of interests, including but not limited to elected officials, government officials, healthcare providers, educators, business and agricultural community leaders and other community leaders and broadband service providers, to facilitate communications and collect information necessary to help make a business case for broadband investments.

- Promote digital literacy, equity, and inclusion.

- Generate public awareness of the value of broadband technologies and applications.

- Promote adoption and utilization of broadband technologies and applications.

- Develop, maintain, and provide public access to a statewide broadband map as a platform for data collection to track the availability of broadband services and to measure progress; and provide access to other information relating to broadband.

- Convene relevant state and federal agencies and advise the Governor, state agency leadership and the Oregon Congressional Delegation on actions to leverage state government activities to pursue state goals related to broadband.

- Support and coordinate efforts with the Oregon Broadband Advisory Council.

Oregon has been formally engaged in public policy development about telecommunications for more than 25 years and has an established broadband public policy in previous statutes and resolutions.

- The Legislative Assembly finds and declares: (1) that it is the goal of this state to promote access to broadband services for all Oregonians in order to improve the economy in Oregon, improve the quality of life in Oregon communities and reduce the economic gap between Oregon communities that have access to broadband digital applications and services and

those that do not, for both present and future generations; and (2) That the goal set forth in subsection (1) of this section may be achieved by:

- Expanding broadband and other telecommunications services;

- Creating incentives to establish and expand broadband and other telecommunications services;

- Undertaking telecommunications planning at the local, regional and state levels that includes participants from both the public and the private sectors;

- Removing barriers to the full deployment of broadband digital applications and

- services and providing incentives for the removal of those barriers; and

- Removing barriers to public-private partnerships in areas where the private

- sector cannot justify investments. [2003 c.775 §1] [ORS 759.016(1)]

- It is the policy of the State of Oregon to promote, facilitate and encourage activities, projects and businesses that improve Oregon's Internet Protocol network infrastructure, performance and connectivity to the Internet backbone network and World Wide Web for the benefit of Oregon's commercial, educational, governmental and individual users. [Senate Joint Resolution 19 (2007)]

- It is the policy of the State of Oregon to: (1) Encourage and support the development of public safety networks and an emergency communications system and the rapid deployment of broadband or other communications services in areas of the state in which the services do not exist; (2) Support redundancy of critical communications assets in order to ensure homeland security protections in the state; and (3) Ensure that a secure conduit is available for the emergency communications system and public safety networks in all Oregon communities. [ORS 403.100 Formerly 401.706; 2015 c.247 §1]

- It is the policy of the State of Oregon to promote and facilitate activities by Oregon's health care and education communities and their telecommunications providers to develop a network model that provides standards for interoperability, establishes a peering point for all health care and education telecommunications in Oregon and establishes peering agreements among health care and education networks that contain payment structures. To encourage the Oregon Telecommunications Coordinating Council Health-Education Committee, in collaboration with the Telehealth Alliance of Oregon, to:

  - Work with the health care and education communities and telecommunications providers to develop a telecommunications network model consistent with policy adopted in this resolution;

  - Report biennially to the Legislative Assembly on progress in developing a telecommunications network model consistent with policy adopted in this resolution; and

- Propose any legislation necessary to implement a telecommunications network model consistent with policy adopted in this resolution.

[Senate Joint Resolution 20 (2007)]

- The policy of the State of Oregon is that state government telecommunications networks should be designed to provide state-of-the-art services where economically and technically feasible, using shared, rather than dedicated, lines and facilities. The State Chief Information Officer shall, when procuring telecommunications network services, consider the goals and objectives outlined within the Enterprise Information Resources Management Strategy and the policy, acquisition, coordination and consolidation objectives for information technology that are specified in ORS 276A.400, i.e., (1) To use information technology in education, health care, economic development and government services to improve economic opportunities and quality of life for all Oregonians regardless of location or income. (2) To stimulate demand to encourage and enable long-term infrastructure innovation and improvement. (3) That telecommunications planning process shall: (a) Organize users in new ways to aggregate demand, reduce costs and create support networks; (b) Encourage collaboration between communities of interest by geographic area and economic sector; and (c) Encourage competition among technology and service providers. [ORS 276A.400]

## Broadband Strategy

The strategy of the Oregon Broadband Office is to follow the well-defined directives and goals established in the state's public policy with programs and activities to address each directive and achieve each goal, scaled to the resources available.

Oregon now has a formal organizational structure and policy in place to pursue, and support broadband opportunities, initiatives, programs and projects to accelerate the deployment, adoption and utilization of this essential infrastructure.

Oregon now has a vehicle:
- For state government to be a source of funding for planning, engineering and infrastructure projects.

- For state government to be a source of matching funds to help communities leverage federal and private foundation loan and grant programs.

- To be a source of technical assistance.

- To engage in primary data collection to measure performance.

- To promote statewide and national networking within the broadband community of interest to share information and leverage best practices.

- To promote education on broadband issues and promote engagement in broadband planning in local communities.
- To coordinate with state agencies to initiate and support programs that leverage the State's existing assets, capabilities and related expenditures to stimulate the broader deployment of broadband services for residences and businesses statewide.
- To support Digital Inclusion: the capability of individuals or groups to obtain the benefits of broadband connectivity and to be able to use information and telecommunications technology confidently, safely and securely to improve their lives.

**Oregon Broadband Portal**

In 2019, an Oregon Broadband Office website was created with the URL [broadband.oregon.gov](broadband.oregon.gov), hosted by Business Oregon. It will serve as a portal to state's broadband activities, initiatives, and resources. It will be a key tool for promotion and information distribution.

**Oregon Broadband Map**

The new Oregon Broadband Map was launched in 2019, and may be accessed through the Broadband Office website. As directed, the map will be a platform for data collected to track the availability of broadband services, measure progress, provide other related information and provide public access to the data. The map's current data layers include the state's anchor institutions (schools, universities, libraries, local government, healthcare facilities, and public safety facilities). The data layers include service providers, broadband technologies, service speeds, service availability as reported to the FCC by providers, and population density. The map is searchable by city, county, tribal lands, specific address, or point selection on the map. Additional data layers and capabilities will be added and data collection through primary research conducted as resources enable.

**Statewide Broadband Assessment and Best Practices Study**

Business Oregon is conducting a **Statewide Broadband Assessment and Best Practices Study** to validate current broadband infrastructure and broadband service availability, identify geographic areas of the state that are unserved and underserved. "Underserved" area means data published by the Federal Communications Commission, other federal agencies or the State of Oregon within which there is no terrestrial service provider offering residential wireline or wireless broadband service at a speed of at least twenty-five (25) megabits per second for downloads and three (3) megabit per second for uploads.

The study will also identify estimate costs for fiber infrastructure deployment to serve unserved and underserved areas, identify best practice programs, policies, and strategies from across the nation, and funding sources to promote and finance broadband infrastructure deployment, adoption, and utilization.

**Rural Broadband Capacity Improvement Program**

A Rural Broadband Capacity Improvement Program will be established, scaled to available funds, to support broadband planning, engineering, and/or infrastructure deployment projects targeting rural areas lacking adequate broadband access. Eligible recipients will be Oregon cities, counties, ports, tribes, cooperatives, non-profit corporations, and public-private partnerships.

The program will provide grants and forgivable loans for:
- Planning— for projects to organize and engage rural community stakeholders to develop broadband strategic plans for the deployment, adoption, and utilization of broadband infrastructure in their respective communities.

- Engineering— for projects that have completed plans, a grant may be used for the design and engineering of broadband infrastructure.

- Infrastructure— for projects that have completed plans and engineering designs, a grant may be used for the construction of broadband infrastructure.

- Matching Funds and Application Support— for use as matching funds and for grant application support to help eligible applicants to successfully apply for grants and loans from federal and private funding programs for broadband planning, engineering, and infrastructure deployment projects.

Successful applicants will be required to establish that:
- Broadband services delivering the current Federal Communications Commission benchmark of 25 Million bits per second (Mbps) downstream and 3 Mbps upstream are not available or planned to be available to residences and businesses in the community.

- A champion for the project defined as an official in government, education, healthcare, public safety, economic development, or business is willing to recruit other community leaders to participate in the project.

- The community can bring the key people to the table (members of the community representing areas such as business, education, healthcare, government and service providers), to identify community broadband needs, goals, and solutions.

- There is demonstrable community motivation and enthusiasm to participate in the project and to meet the project schedule and timelines.

In addition to the requirements above, preference will be given to proposals that identify the individuals who will fill key roles in the project. Additional preference may also be given to proposals that provide regional diversity, diversity of size and type of applicant and to maximize the distribution of the available program funds across the state.

The Oregon Broadband Office will develop a selection process with written guidelines to ensure a fair, inclusive and transparent award system. The Office will utilize the expertise of Business

Oregon staff and the Oregon Broadband Advisory Council to define program processes and requirements. Funded projects will be required to establish contractual terms and conditions between Business Oregon and recipients including performance objectives and target completion dates.

**Digital Literacy, Security, and Inclusion Program**

A Digital Literacy, Security, and Inclusion Program will be established, scaled to available funds, to support activities and projects to improve digital literacy, cybersecurity, and inclusion of unserved and underserved populations so that the benefits of broadband access to the internet may be realized within Oregon's communities throughout the state.

The program will provide grants and forgivable loans for projects that address:
- Digital Inclusion: Deploy state-level strategies and programs to ensure that all individuals and communities have access to affordable state of the art broadband communications services, and the skills, knowledge, and technical support needed to use them.

- Cybersecurity: The security of data and communications systems continues to be a critical risk exposure for government, public organizations, private sector businesses, and for individuals that is widely unrecognized and under managed. This program will support the state's 2017 cybersecurity initiatives for ongoing, expanded and pro-active cyber risk management www.cyberoregon.com.

- Education: Oregon's K-20 educational institutions and public libraries are positioned to realize significant economic, work force and community development benefits for the state through the utilization of broadband networks and applications. State level support and coordination is needed to leverage these resources to reach and assist unserved and underserved populations.

- Matching Funds—A grant or loan may also be used as matching funds and for grant application support to help eligible applicants to successfully apply for grants and loans from federal and private funding programs for digital literacy, digital inclusion and cybersecurity projects.

The Oregon Broadband Office will develop a selection process with written guidelines to ensure a fair, inclusive and transparent award system. The Office will utilize the expertise of Business Oregon staff and the Oregon Broadband Advisory Council to define program processes and requirements. Funded projects will be required to establish contractual terms and conditions between Business Oregon and recipients including performance objectives and target completion dates.

**Broadband Outreach Program**

A Broadband Outreach Program will be established, scaled to available funds, to engage stakeholders; elected officials, government officials, healthcare providers, educators, businesses, agricultural producers and other community leaders, and broadband service providers to facilitate

communications, recruit local champions and aggregate the demand of the different segments of the community to help to make a business case for broadband investment.

The Oregon Broadband Advisory Council (OBAC) conducted an online Outreach Survey to gauge current practices and knowledge involving broadband in the efforts of economic development organizations in Oregon. The survey showed that Oregon's economic development professionals see a strong relationship between broadband and economic development.

- 100% of the respondents believe that broadband enables local companies to increase their trading area.

- 91.7% believe that broadband enables new businesses to locate in their communities.

- 83.3% believe that broadband enables their communities to retain businesses

- 75.0% believe that broadband increases the number of business start-ups

- 41.7% believe that broadband increases individual's income earnings

- 75.0% of the respondents believe that broadband can encourage and enable entrepreneurship including starting new businesses, growing existing businesses and creating jobs. See: [www.broadband-oregon.org](www.broadband-oregon.org).


The Broadband Outreach Program will work to

- **Generate Awareness:** Improve public awareness of the value of broadband technologies and the applications they enable and promote the organization of task forces, committees and advocates to explore broadband needs, challenges, opportunities, and service availability.

- **Engage Community Anchor Institutions to drive infrastructure deployment and digital transformation:** Community Anchor Institutions such as schools, libraries, healthcare providers, and state and local governments are in a position as anchor tenants to help expand broadband infrastructure. As shared network infrastructure is built to serve applications for these users, the community quality of life is improved, and services then become available for others in the community as well.

- **Engage with Community of Interest Organizations:** Aggregating the demand of the different segments of the community such as business, education, libraries, healthcare, and government to help make a business case for private sector broadband investment or an economic case for public sector investment. Local, statewide and national community of interest organizations actively promoting expanded broadband access include:

  - National Association of Telecommunications Officers and Advisors (NATOA) [www.natoa.org](www.natoa.org)

  - Oregon Association of Telecommunications Officers and Advisors (OATOA) [https://www.natoa.org/web/chapters/oatoa.html](https://www.natoa.org/web/chapters/oatoa.html)

  - National Association of Counties (NACo) [http://www.naco.org/](http://www.naco.org/)

  - Association of Oregon Counties [http://oregoncounties.org/](http://oregoncounties.org/)

- National League of Cities http://www.nlc.org/

- League of Oregon Cities http://www.orcities.org/

- NTCA–The Rural Broadband Association http://www.ntca.org/

- Rural Telecommunications Congress  http://ruraltelecon.weebly.com/

- National Digital Inclusion Alliance https://www.digitalinclusion.org/

- State Educational Technology Directors Association https://www.setda.org/

- Schools, Health, and Libraries Broadband Coalition https://www.shlb.org/

- Oregon Cybersecurity Advisory Council https://cyberoregon.com/

- Oregon Cybersecurity Center of Excellence https://cyberoregon.com/

- Oregon Telecommunications Association https://www.ota-telecom.org/

- Oregon Cable Telecommunications Association https://oregoncable.com/

- Northwest Telecommunications Association http://www.nwta.biz/

- Oregon Farm Bureau  https://oregonfb.org/

- Oregon Rural Electric Cooperative Association https://www.oreca.org/


- **Promote Public Private Partnerships:** Public Private Partnerships between governmental, public sector, and private sector organizations to improve broadband infrastructure. These partnerships can be effective in identifying needs, defining solutions, distributing costs and sharing risks through mutually beneficial relationships.

- **Coordinate with Link Oregon:** Support and coordinate with Link Oregon in its efforts to enhance research, innovation, healthcare, education, and public service across the state through the delivery high-speed, facilities-based connectivity to K-12 and higher education, public agencies, research organizations, libraries, public healthcare organizations and Tribal facilities statewide. Formed as the Oregon Fiber Partnership, this new non-profit organization has the four state research universities and state government (through Enterprise Information Services) as founding entities.

- **Support electric cooperatives** in exploring, developing and funding broadband solutions for the rural areas they serve. Analogies have frequently been cited between the 21st Century challenge of broadband infrastructure and the 20th Century challenge of electric power infrastructure. In the 1930's, 90 percent of homes in rural America did not have electricity. The strategy employed for building out electric power grids to rural areas of the country in the last century was the use of electric cooperatives. These same electric cooperatives are a prospective solution to today's **broadband** challenge, and need smart grid technologies for their own operations. Electric cooperatives are in place in rural America with power grids that offer poles, towers, conduit and entry facilities into nearly all homes and businesses in their service territories, along with existing service organizations, systems and staff.

- **Support regional telephone companies and cooperatives** in exploring, developing and funding broadband solutions for the rural areas they serve. Rural independent telephone companies and cooperatives are motivated to develop broadband solutions as users steadily migrate away from "plain old telephone" voice service to wireless and broadband services for their voice.

- **Engage with and promote the development of Local Champions:** Perhaps the most effective strategy is to foster local champions: elected officials, government officials, educators, business people, and other community leaders as broadband champions. Those rural communities across Oregon and the nation that have competitive broadband services in place today often owe that status to a local champion that saw the need and took action.

- **Promote Digital Transformation:** Drive meaningful use of infrastructure to realize economic benefits, quality of life community benefits and sustainability.

- **Promote Network Interconnection:** Develop strategies to improve the state's connectivity to national and global networks and support the growth of network enabled datacenters, e-commerce businesses and agricultural producers. In particular, promote the development of neutral local exchange points to provide resilient, cost-effective interconnectivity in Oregon's communities by reducing the amount of traffic carried over backbones and external internet service providers.

- **Promote public policies at the local state and national levels to close the Digital Divide:** Broadband infrastructure will always be a work in progress as technologies and applications change over time. What constitutes broadband, e.g., transmission speeds of millions, billions, or trillions of bits per second will continue to be a moving target. Oregon needs to promote public policies that support and that remove barriers to the deployment of broadband infrastructure.

## Oregon Broadband Office Expansion

The Oregon Broadband Office is currently staffed by one full time position, a Telecommunications Strategist per the Executive Order. Business Oregon will expand the Office staff, scaled to available funds, to include a Manager, one to two Field Outreach and Technical Assistance Specialists and pooled FTE for administrative support, mapping and data analytics, procurement and contracting support, accounting support and information systems support.

# Concluding Remarks

Competitive high-speed access to the internet and telecommunications networks is essential, **statewide**, for Oregon's institutions including schools, libraries, businesses, governments, utilities, first responders, healthcare providers and its individual residents.

In its last report to the Legislative Assembly, the Oregon Broadband Advisory Council stated that it believes that Oregon's broadband public policy needs to be focused on the future, be more aggressive, be more financially supportive, be more specific, and have a renewed sense of urgency.

This aspirational strategic plan is designed to carry out the mission and directives charged to the Oregon Broadband Office. The scope of activities that the Office will ultimately undertake will be enabled, or limited, by the resources available.

# Appendix: What is Broadband?

Broadband is a general term used to represent a wide range of telecommunications technologies and services which utilize a faster data transmission rate than that available over the standard voice grade telephone line, which is 56 Kbps and usually less. Broadband is also widely referred to as "high-speed" Internet access service.

Until 2008, the FCC's official definition of broadband was a transport service offering a minimum data transmission rate of 200 Kbps in one direction. That year, the FCC established a set of Broadband Tiers:

| Tier | Rate |
|------|------|
| 1 | 200 Kbps up to 768 Kbps |
| 2 | 768 Kbps to 1.5 Mbps |
| 3 | 1.5 Mbps to < 3.0 Mbps |
| 4 | 3.0 Mbps to < 6.0 Mbps |
| 5 | 6.0 Mbps to < 10.0 Mbps |
| 6 | 10.0 Mbps to < 25.0 Mbps |
| 7 | 25.0 Mbps but < 100.0 Mbps |
| 8 | 100.0 Mbps and beyond |

FCC Broadband Service Speed Tiers

Tier 1 is characterized as "First Generation Data." 768 Kbps was the minimum data transmission rate for "Basic Broadband." Tiers 3 through 8 reflect the range of service speeds available and expected to become available from providers.

In its National Broadband Plan, the FCC proposed a goal that every household and business location in America should have access to affordable broadband service with actual download speeds of at least 4 million bits per second (Mbps) and actual upload speeds of at least 1 Mbps with the further recommendation that the FCC review and reset this target every four years. On January 29, 2015, the FCC raised the benchmark for broadband from 4 megabits per second (Mbps) down and 1 Mbps up to 25 Mbps down and 3 Mbps up, and it will be raised again.

Many different technologies are employed to deliver broadband services in Oregon including Digital Subscriber Line (DSL), Cable-Modem, wireless (mobile 3G, 4G, 5G, fixed wireless, satellite), and optic fiber-to-the-premises (FTTP). These service technologies range in transmission performance up to 1 billion bits per second (Gigabits per second) and beyond.

Broadband services in Oregon are available from a wide mix of service providers including telephone companies, cable companies, competitive access providers, fixed and mobile wireless providers, municipal and consortia providers, and satellite service providers.

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# Acknowledgements

Steve Corbató, Executive Director
Link Oregon

Michael Curri
Strategic Networks Group, Inc.

Andrew Henshaw
Learn Design Apply Inc.

Keith Mobley
Dufur, Oregon

Dr. Edwin Parker
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