



# STATE OF OREGON

## DIGITAL EQUITY PLAN

April 2024

The State of Oregon Digital Equity Plan was released for public comment from November 1 to December 16, 2023, in advance of its submission by the Oregon Broadband Office (OBO), an office within the Oregon Business Development Department, to the National Telecommunications and Information Administration (NTIA). This ambitious Plan aligns with the state's BEAD Five-Year Action Plan and is intended to be a living document that enables OBO to measure and monitor the implementation of a range of strategies—and to change those strategies as data and conditions indicate. The fulfillment of this Plan is contingent upon the State of Oregon's receipt of its NTIA Digital Equity Capacity Grant Program allocation.

This report was prepared by OBO using federal funds under award (41-30-DP111) from the National Telecommunications and Information Administration (NTIA), U.S. Department of Commerce. The statements, findings, conclusions, and recommendations are those of the authors and do not necessarily reflect the views of NTIA or the U.S. Department of Commerce.

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## 1 EXECUTIVE SUMMARY

The Oregon Broadband Office (OBO) hereby submits to the National Telecommunications and Information Administration (NTIA) of the U.S. Department of Commerce this Statewide Digital Equity Plan (the Plan).

OBO is an office within the Oregon Business Development Department (Business Oregon) and is designated by the State of Oregon as the Eligible Entity for purposes of the federal Digital Equity Act. With the support of Oregon's elected leaders, OBO endeavors to ensure that all people in Oregon have access to reliable, affordable home broadband internet, an affordable, quality, internet-enabled computing device, digital skills, quality technical support in culturally and linguistically diverse in-community spaces, access to cybersecurity tools and the knowledge needed to stay safe online, and inclusive online content designed to enable and encourage self-sufficiency, participation, and collaboration.

As detailed in this Plan, OBO has conducted a comprehensive outreach effort, developed a data-driven digital equity needs assessment, and identified a clear implementation path for achieving digital equity objectives.

The Plan includes all 15 requirements outlined in NTIA's State Digital Equity Planning Grant Program Notice of Funding Opportunity (NOFO). For more information, see Appendix F.

### 1.1 Vision and principles for digital equity

It is the vision of the State of Oregon that all people in Oregon will have meaningful access to affordable and reliable high-speed broadband home internet, an internet-enabled computing device, digital literacy, technical support, and inclusive content. Each component of digital equity enables economic and educational opportunities and supports improved health outcomes and a robust democracy.

The state's commitment arises from Oregon's recognition of the criticality of attaining digital equity for the well-being of the many diverse people of Oregon. Meaningful access to the internet is an essential and critical component for thriving in the 21st century. Digital equity enables economic opportunity and supports educational, healthcare, and civic participation goals.



Digital equity allows people from diverse backgrounds to fully participate in the economy of innovation and creativity, which helps to foster the goal of economic opportunity. Civic participation goals can be achieved because digital equity allows all people to have the tools to register to vote, engage in meaningful online discourse, and be better connected to the communities in which they live. The goal of healthcare access for all people is fostered by digital equity because of the knowledge and confidence that is gained from learning new digital skillsets that can be applied to telemedicine and to gain easier access to personal healthcare information. Digital equity inherently supports educational goals, bringing learning to the home and on the go for all people of Oregon.

To achieve this vision for digital equity, the State of Oregon will work with its institutional, tribal, local, and nonprofit partners toward five key goals:

1. Universal access to affordable and reliable high-speed home internet.
2. Universal access to an affordable, quality, internet-enabled modern computing device that meets each person's needs.
3. Universal access to digital literacy skills<sup>1</sup> and quality technical support in culturally and linguistically diverse in-community spaces.

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<sup>1</sup> "The term "digital literacy" means the skills associated with using technology to enable users to find, evaluate, organize, create, and communicate information. [ . . . ] The term "digital equity" means the condition in which individuals and communities have the information technology capacity that is needed for full participation in the society and economy of the United States. The term "digital inclusion" means "the activities that are necessary to ensure that all individuals in the United States have access to, and the use of, affordable information and communication technologies, such as—reliable fixed and wireless broadband internet service; internet enabled devices that meet the needs of the user; and applications and online content designed to enable and encourage self-sufficiency, participation, and collaboration; and includes—obtaining access to digital literacy training; the provision of quality technical support; and obtaining basic awareness of measures to ensure online privacy and cybersecurity." The term "digital literacy" means "the skills associated with using technology to enable users to find, evaluate, organize, create, and communicate information." Infrastructure Investment and Jobs Act § 60302(10)-(12), <https://www.congress.gov/117/plaws/publ58/PLAW-117publ58.pdf>. OBO recognizes that digital literacy and digital skills evolve as technologies evolve and is inclusive of emerging technologies and, as such, inclusive of Artificial Intelligence (AI) technologies and the need for AI literacies. Also see Executive Order 23-26, Establishing a State Government Artificial Intelligence Advisory Council, <https://www.oregon.gov/gov/eo/eo-23-26.pdf>. To that end "Digital Literacy (DL) involves the

4. Universal access to the tools and information needed to protect oneself online.<sup>2</sup>
5. Universal access to inclusive state resources and online content to access essential services and programs.

Efforts toward these goals will be informed by four framework principles for Oregon's digital equity efforts:

1. Build on existing achievements and collaborations by acknowledging and incorporating the work and best practices accomplished statewide.
2. Engage and collaborate with a broad spectrum of diverse and representative stakeholders through processes that are inclusive and reach underserved and marginalized communities.
3. Build on existing achievements and collaborations by acknowledging and incorporating the work and best practices accomplished statewide.
4. Respect and incorporate culturally and linguistically diverse communities as partners in the process toward reaching established and agreed-upon goals and outcomes.

## 1.2 Current state of digital equity: Assets and barriers

In summary, the data indicate that Oregon's digital equity challenges include access to affordable broadband internet services, low participation rates in broadband

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confident and critical use of a full range of digital technologies for information, communication and basic problem-solving in all aspects of life. It is underpinned by basic skills in ICT: the use of computers to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in collaborative networks via the Internet." See, UNESCO; "Recommendations on Assessment tools for monitoring digital literacy within UNESCO's Digital Literacy Global Framework," UNESCO Institute for Statistics, 2019, <https://unesdoc.unesco.org/ark:/48223/pf0000366740>, and UNESCO, <https://tcg.uis.unesco.org/wp-content/uploads/sites/4/2021/08/Metadata-4.4.2.pdf>. See also, the American Library Association's definition of Digital Literacy via their Digital Literacy Task Force; American Library Association, <https://literacy.ala.org/digital-literacy/>. In order to fully realize Oregon's potential to deliver access to digital literacy skills, investments in the area and the cross-agency support will be critical.

<sup>2</sup> OBO will examine opportunities to collaborate with relevant entities such as the Department of Administrative Services (DAS) Cultural Change Officer to consider digital equity in future iterations of the state's Racial Equity Framework, or to partner to identify communities who would benefit from digital literacy, online privacy, or other technology education and outreach. As described elsewhere in this Plan, digital equity encompasses digital adoption as well as digital literacy.

internet service subsidy programs, computing device access, and digital literacy and skills training, including cybersecurity and privacy.

**Critical barrier 1: Lack of broadband availability.** A significant barrier to digital equity is inadequate broadband infrastructure in rural areas of Oregon. Within rural areas of the state, infrastructure is not as ubiquitous as it is in urban areas with greater population density. Some people who reside in rural areas do not have the opportunity to use the internet at home or, in some cases, at their places of work or even at the community anchor institutions (CAI) that serve them.

**Critical barrier 2: Low-income households struggle to consistently afford broadband internet services, internet-enabled computing devices, and technical support.** The second barrier to digital equity in Oregon is that many people struggle to consistently afford access to the internet, a modern, fully capable, internet-enabled computing device, and the technical services to support those devices and internet use. For this reason, this Plan recognizes internet and computing device affordability as a key priority for digital equity efforts in Oregon.

**Critical barrier 3: Individuals who are members of covered populations require support to develop digital literacy skills.** A third critical barrier to attaining digital equity in Oregon is that some people who are members of covered populations (including older adults, individuals who live in low-income households, individuals with disabilities, veterans, incarcerated individuals, individuals who are English-language learners or have low levels of literacy, individuals who are members of racial and ethnic minority groups, and people living in rural areas)<sup>3</sup> do not yet have

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<sup>3</sup> Covered populations are defined in the Infrastructure Investment and Jobs Act, Section 60301 et seq. (known as the Digital Equity Act of 2021) as: "(A) individuals who live in covered households; (B) aging individuals; (C) incarcerated individuals, other than individuals who are incarcerated in a Federal correctional facility; (D) veterans; (E) individuals with disabilities; (F) individuals with a language barrier, including individuals who (i) are English learners; and (ii) have low levels of literacy; (G) individuals who are members of a racial or ethnic minority group; and (H) individuals who primarily reside in a rural area." "Infrastructure Investment and Jobs Act, Section 60302 (Definitions), paragraph 8," Congress, <https://www.congress.gov/bill/117th-congress/house-bill/3684/text>. Covered households are those for which "the income of which for the most recently completed year is not more than 150 percent of an amount equal to the poverty level, as determined by using criteria of poverty established by the Bureau of the Census." "Infrastructure Investment and Jobs Act, Section 60302 (Definitions), paragraph 7," Congress,

updated digital literacy skills to navigate the modern internet and to do so without risk to their personal privacy and security. Given these challenges, this Plan prioritizes skills training as a key area of Oregon's digital equity effort.<sup>4</sup>

**Critical barrier 4: Local communities require resources and expertise for digital equity efforts.** Oregon's commitment to digital equity means a significant commitment of resources to sustain the initiatives contemplated in this Plan and to support local communities, nonprofits, and CAIs to develop local capacity.

To sustain these efforts over time, Oregon will require resources beyond what NTIA will provide under the Digital Equity Capacity Grant Program. OBO seeks to develop strategies for continuing the work launched under this Plan by partnering with philanthropy and seeking other funding sources, and by tracking the impact of Oregon's digital equity efforts to quantify the business case for further investment in digital equity programs.

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<https://www.congress.gov/bill/117th-congress/house-bill/3684/text>. For the definition of "aging individuals," the statute uses the definition of "older individual" as "an individual who is 60 years of age or older" from the United States Code. "42 U.S.C. Section 2003, paragraph 40," Findlaw, <https://codes.findlaw.com/us/title-42-the-public-health-and-welfare/42-usc-sect-3002.html>. In reference to the covered population group (C) incarcerated individuals, other than individuals who are incarcerated in a Federal correctional facility, OBO interprets this statutory definition to include individuals who are or have reentered society. This interpretation is further applicable to covered population discussions of the identified barriers to digital equity throughout this Plan and corresponding KPIs in Section 2.22.

<sup>4</sup> Digital adoption encompasses the use of home broadband internet, the access and use of computing devices, and digital readiness. Digital adoption efforts and digital equity programs deliver significant synergies when linked.

### 1.3 Needs assessment

Through data collection, community engagement,<sup>5</sup> and analysis,<sup>6</sup> OBO has identified a range of critical barriers associated with the needs of Oregon households and communities. These are described in detail below. In brief, the key identified challenges include:

1. Rural households lack broadband internet availability.
2. Low-income households struggle to afford broadband internet services, computing devices, and technical support.
3. Individuals in covered populations need digital literacy and digital skills.

The state's comprehensive stakeholder outreach program included extensive efforts to identify the needs of covered populations. Outreach and data collection efforts included questionnaires, mapping efforts, public meetings, focus groups, and meetings with key state and local stakeholders to develop broadband strategic plans, objectives for this Digital Equity Plan, and the state's BEAD Five-Year Action Plan. Current and ongoing outreach includes engagement with key stakeholders during local and regional meetings, as well as data collection through end user questionnaires with ongoing analysis of results.

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<sup>5</sup> The state's comprehensive stakeholder outreach program included extensive efforts to identify the needs of all communities with an emphasis on those belonging to covered populations. Outreach and data collection efforts were made to assess the baseline from which the state is working and to identify the barriers to digital equity faced generally and specifically by each of the covered populations in Oregon. The research and analysis are based on available and relevant data from the American Community Survey (ACS), NTIA's Internet Use Survey (administered as a supplement to the Current Population Survey), FCC's National Broadband Map, and OBO's custom scientific phone survey (administered in 2023). As described in detail in Section 3.2, the data and analysis are intended to facilitate understanding of the extent to which: (1) broadband internet service is available to and adopted by residents; (2) residents are confidently performing various digital skills; (3) residents are aware of and impacted by online security and privacy concerns; (4) computer devices are abundant and adequate for meaningful internet use; and (5) online government resources and services are accessibly built and maintained.

<sup>6</sup> Analysis was undertaken to benchmark Oregon against national averages, and to benchmark its residents belonging to covered populations against those that do not belong to covered populations. Analytical tools include a range of statistical tools and models, including regression analysis, in order to isolate factors and make appropriate conclusions regarding correlation and causation, thereby shaping the selection of metrics.

The table below summarizes key digital adoption barriers for each covered population. It is important to note that barriers to digital adoption are considered opportunities.

**Table 1: Key barriers and opportunities for covered populations**

Covered population	Identified barriers and opportunities
Aging individuals (older adults)	Not having the digital literacy skills and comfort levels to use online tools to access public service or social and civic opportunities or entertainment; affordability of services and devices; inadequate services to receive remote healthcare in appropriate/private places; lack of device loan or PC refurbishment programs; difficulty accessing documents online necessary for proving eligibility for other programs; need for digital literacy and online safety programs.
Incarcerated individuals	Lack of adequate funding for digital literacy and higher education opportunities, including workforce training, inside correctional institutions; scant opportunity for digital literacy and job training for formerly incarcerated to expand job/educational opportunities.
Individuals who are members of a racial or ethnic minority group	Not having access to digital technologies further exacerbates and compounds historical and existing inequities in health, education, and economic opportunities.
Individuals who primarily reside in a rural area	Lack of access to affordable and reliable broadband internet that, in turn, creates barriers to developing digital literacy skills; lack of access to public computing spaces and support for digital literacy and workforce development skill programming.
Individuals with disabilities	Access to inclusive technology is cost-prohibitive or the available assistive technology device (hardware/software) is ill-suited to the user; lack of inclusive online content; lack of access to adequate services to allow work, education, and telehealth at home.
Individuals who are English learners or have low levels of literacy	Limited or lack of language accessible online content including plain language principles; low knowledge of or access to language accessibility tools to support online activity; need for digital literacy skills and online

Covered population	Identified barriers and opportunities
	safety training in languages other than English.
Individuals who live in covered households <sup>7</sup>	Need for digital literacy programs, unaffordable cost of service for speeds and at the data capacity necessary to meet critical needs such as education and working from home; low levels of knowledge of or access to discount internet subsidy programs; living in public housing, rural, or low-income communities with outdated, unreliable, and slow service; old buildings with inadequate wiring; and multigenerational households.
Veterans	Oregon’s veterans face challenges that intersect with those of aging individuals (older adults), individuals from racial and ethnic minoritized groups, individuals with disabilities, individuals living in rural areas, and individuals from covered households. These challenges are compounded in rural areas where lack of terrestrial and cellular broadband access is coupled with the inherent limitations of smartphones as inadequate to complete complex online benefits forms, participate in video hearings, or access other online veterans’ services. There is a need to improve veterans’ access to broadband internet discount programs such as the ACP and Lifeline, and workforce training and digital literacy skills improvement that could expand employment opportunities beyond skills developed in the military.

#### 1.4 Collaboration and stakeholder engagement

OBO’s approach to collaborating with key constituencies and stakeholders in the state has been thorough, extensive, inclusive, and transparent. The agency conducted a comprehensive and coordinated external engagement process in preparation of this Plan (see Appendix B).

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<sup>7</sup> Defined as “a household, the income of which for the most recently completed year is not more than 150 percent of an amount equal to the poverty level, as determined by using criteria of poverty established by the Bureau of the Census” by “Digital Equity Act: State Capacity Grant Program, Planning Grants, and Competitive Grant Frequently Asked Questions (FAQs),” NTIA, <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-06/DE-FAQs.pdf>.

This outreach approach included:

- **In-person engagements in 12 local communities and with tribal authorities** to solicit input, insights, priorities, and guidance.
- **Partner organization engagement** through virtual workshops that were accessible to participating entities and through distribution of online surveys for government agencies, nonprofit entities, internet service providers, and community anchor institutions.
- **Scientific residential phone survey of Oregon households** on digital equity topics.
- **Online Public Surveys** for government agencies, nonprofit entities, internet service providers, community anchor institutions, covered populations, and the public at-large. (Oregon Internet Accessibility, Covered Population and Digital Equity Needs Assessment Surveys.)
- **Ongoing meetings** with state agencies and community organizations that represent covered populations.
- **Lived Experience Expert Focus Groups** with covered population(s) serving nonprofit organizations statewide.
- **Public Comment Feedback** from organizations representing covered populations, as well as other Oregon stakeholders to this Plan.

OBO conducted a series of virtual workshops with government agencies and anchor institutions, community-based organizations representing covered populations, and internet service providers. In parallel to outreach through in-person engagements, OBO used a statistically valid data collection methodology to conduct a statewide residential phone survey to inform this Plan and capture resident input across the state. Given the diversity of experience there is to be gleaned from Oregon's vast network of key stakeholders representing community anchor institutions, tribal and local governments, educational agencies, nonprofit organizations, civil rights organizations, workforce development organizations, public housing authorities, adult education agencies, as well as organizations that represent individuals that are aging, have language barriers, have disabilities, are veterans, or incarcerated and residents more broadly, OBO has compiled a list of



organizations with which it will conduct further outreach: organizations such as the Oregon Department of Education (ODE), the Oregon Department of Health and Human Services (ODHHS), Oregon Department of Veterans' Affairs, Oregon Enterprise Information Service (EIS) E-Government Program, as examples. This list (Appendices B, D) is by no means exhaustive; however, quite like the State Digital Equity Plan, it is a living document, frequently revised to be more inclusive. Accordingly, OBO continues to conduct ongoing outreach to tribal governments, state agencies, and nonprofit organizations serving covered populations.

## 1.5 Implementation plan

OBO looks forward to the opportunity to use its Digital Equity Capacity Grant to support and develop further digital equity capacity in Oregon, in partnership as feasible and when aligned with this Plan.

At the same time, OBO notes that the ability to develop and sustain these initiatives is dependent on the availability of sustained resources—including the ways in which digital equity is understood to support other policy priorities, such as how universal internet access can enable improved access to education and healthcare. For that reason, these potential initiatives are offered as examples of what may be possible if resources are available.

Consistent with its efforts to expand access to broadband internet, OBO has designed these initiatives in the most pragmatic way possible—to be actionable, measurable, and sustainable—rather than risk designing more ambitious initiatives that are not financially or practically actionable.

As described in detail (including activities and timelines) in Section 2.2 and Section 5, the following are potential strategies aligned with each key digital equity challenge:

1. **Critical barrier:** Lack of broadband internet availability.

**Strategy 1:** Increase access to residential broadband internet.

2. **Critical barrier:** Low-income households struggle to consistently afford broadband internet services, internet-enabled computing devices, and technical support.

**Strategy 1:** Increase Affordable Connectivity Program<sup>8</sup> (and any subsequent or similar initiatives should they be funded) and ISP low-cost program enrollment among eligible households (e.g., those earning 200 percent or less than the federal poverty guideline).

**Strategy 2:** Increase Internet Service Providers' (ISPs) low-cost service offerings.

**Strategy 3:** Expand access to affordable computing devices and technical support.

**Strategy 4:** Develop data and informational resources to enable application of a digital equity lens to state infrastructure and program decisions.

3. **Critical barrier:** Individuals who are members of covered populations require support to develop digital literacy skills.

**Strategy 1:** Increase the opportunity to learn digital literacy skills in culturally and linguistically in-community spaces.<sup>9</sup>

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<sup>8</sup> ACP or a successor program. As of the writing of this Plan, participants have claimed \$8.5 billion of the \$14.2 billion allocated to the program, according to the most recent data published by the Universal Service Administrative Corp. See: "EBB & ACP Funding Summary," USAC, <https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/> (accessed October 9, 2023). The ACP could run out of funding by mid-2024 if Congress does not allocate additional funds. See: "Time Is Ticking on the Affordable Connectivity Program," GovTech, July 21, 2023, <https://www.govtech.com/network/time-is-ticking-on-the-affordable-connectivity-program>.

<sup>9</sup> "In-community spaces" refer to culturally and linguistically community-centered spaces, either in-person or virtual.

**Strategy 2:** Expand accessibility of information for persons with disabilities and accessibility of information in multiple languages for people who speak a language other than English.

**Strategy 3:** Promote information about the availability of digital literacy programming.

**Strategy 4:** Expand opportunities to learn online safety and privacy to covered populations.

4. **Critical barrier:** Local communities require resources and expertise for digital equity efforts.

**Strategy 1:** Build collaboration among state, tribal, local, and nonprofit entities.

**Strategy 2:** Support and develop local organizational and community capacity for digital equity programs.

**Strategy 3:** Sustain and grow the state's efforts in digital equity.

## 2 INTRODUCTION AND VISION FOR DIGITAL EQUITY

### 2.1 Vision

It is the vision of the State of Oregon that all people in Oregon will have access to affordable and reliable high-speed broadband internet to attain positive economic, educational, and health outcomes and to participate in social and civic life. The state's commitment arises from Oregon's recognition of the criticality of digital equity to the well-being of the many diverse people of Oregon. Meaningful access to the internet is essential to thriving in the 21<sup>st</sup> century. Digital equity enables economic opportunity and supports educational, healthcare, and civic participation goals.

Digital equity allows all people to fully participate in the economy of innovation and creativity, which helps to foster the goal of economic opportunity. Civic participation goals can be achieved because digital equity allows all people to have the tools to register to vote, engage in meaningful online discourse, and be better connected to the communities in which they live. The goal of healthcare access for all people is fostered by digital equity because of the knowledge and confidence that is gained from learning new digital skillsets that can be applied to telemedicine and to enable easier access to personal healthcare information. Digital equity acknowledges tribal self-determination and tribal regulatory jurisdiction over tribal lands. Digital equity inherently supports educational goals, bringing learning to the home and on the go for all people of Oregon.

In the state's vision, all people in Oregon will have access to the following **five critical elements of digital equity**:

1. **Universal access to affordable and reliable high-speed home internet.** Consistent with the Oregon Five-Year Action Plan and considerable efforts of recent years, OBO seeks to ensure that all people in Oregon have access to a robust fixed broadband connection at their home. As addressed in the Five-Year Action Plan, OBO will seek to maximize the reach and impact of various funding sources, including the BEAD Program allocation, to extend broadband infrastructure throughout the state. OBO furthermore seeks to work with partners on strategies that can improve affordability, particularly for the covered populations for whom this is a significant barrier. This effort will

involve coordination with entities dedicated to enabling eligible households to access federal support programs such as the Affordable Connectivity Program (ACP) and Lifeline, as well as mandating affordability into the scoring and requirements for all broadband grant programs.

2. **Universal access to an affordable, quality, internet-enabled computing device that meets the person's needs.** OBO seeks to work with nonprofit and public partners to expand ownership of computing devices and to support, maintain, and repair them. Among other approaches, OBO will work with partners to support eligible households in their purchase of computing devices under the ACP during the life of the program, and any subsequent or similar initiatives should they be funded.
3. **Universal access to digital literacy skills and quality technical support in culturally and linguistically diverse in-community spaces.** OBO seeks to expand access to digital literacy skills training, recognizing that covered populations face significant challenges in this area. OBO will work through experienced stakeholders that have established skills training courses and to support and expand existing efforts to serve more people in Oregon.
4. **Universal access to the tools and information necessary to protect one's online safety and privacy.** OBO recognizes that some people in Oregon, particularly those that are lower-income or older adults, report greater challenges and more discomfort regarding their ability to protect themselves online. OBO seeks to work through experienced stakeholders that have established training courses in this space, leveraging existing capabilities and expanding outcome-driven programs to reach more communities.
5. **Universal access to inclusive state resources and online content for essential services and programs.** Oregon seeks to ensure inclusive design of online content by collaborating with state agencies that serve people with disabilities and people who speak a language other than English so that these community members have full access to needed digital tools and content.

To achieve this vision for digital equity, OBO will adopt the following four framework principles for its digital equity efforts:

1. **Prioritize data and rigorous information gathering that helps drive decision making on the prioritization of limited resources.** As it has done in awarding broadband infrastructure grants, Oregon will adopt a data-driven approach to grantmaking for digital equity. Data will similarly be the basis for measuring both needs and achievements over time and OBO will continue to lead in data collection. This will enable progress toward digital equity to be measured on an ongoing basis using data on access, usage, skills, and outcomes. Regular evaluations will ensure that programs are effective, adaptable, and responsive to evolving needs.
2. **Engage and collaborate with a broad spectrum of diverse and representative stakeholders through processes that are inclusive and reach underserved and marginalized communities.** As part of this process, OBO will continue its efforts to collaborate with tribal nations, enrolled members of other tribes that reside in Oregon, and other indigenous populations, another important and critical constituency in Oregon. Digital equity work requires collaboration and partnerships. OBO will continue to engage with its local government, ISP, organized labor, and CAI stakeholders to solicit ideas, insights, priorities, and lessons learned. OBO also recognizes the layered complexities that members of covered populations may experience and as such will seek to be intentional and proactive in its engagement.
3. **Build on existing achievements and collaboration by acknowledging and incorporating the work and best practices that have been accomplished statewide.** The State of Oregon will leverage and benefit from the efforts of other entities that have spent years developing expertise and capabilities with proven success in digital inclusion programming. Rather than attempt to replicate or recreate those capabilities, OBO will provide data, support, and resources to entities that already have developed, and proven the efficacy and efficiency of, existing programs to address digital equity. In this way, the State of Oregon will respect local and community experience and know-how, working to support its stakeholders that have proven capabilities in digital inclusion work. This collaboration is particularly important with respect to utilizing proven best practices on inclusivity with members of covered populations.

4. **Respect and incorporate culturally and linguistically diverse communities as partners of the process towards reaching established and agreed-upon goals and outcomes.** Respecting and incorporating the cultural and linguistic diversity of communities is essential for creating inclusive and effective programs that serve the needs of all people in Oregon. OBO will be thoughtful and inclusive when conducting outreach on affordable internet and digital literacy programs, ensuring alignment with existing efforts to improve outcomes.

OBO’s role in administering digital equity efforts and broadband infrastructure development is fully aligned with state priorities. This section of the Plan describes other State of Oregon programs and priorities how they align, and in some cases complement, this Plan and OBO’s overall broadband expansion efforts.

The following table shows the alignment between a sample of key partners, plans, goals, and outcomes and applies to each covered population.

**Table 2: Digital equity alignment with state outcomes**

Outcome	Key agency partners	Plan	Goals / priorities	Digital equity alignment
Economic & workforce development	OBO	Strategic Plan <sup>10</sup>	Rural broadband, including the Rural Broadband Capacity Improvement Program	Improved access for covered populations (rural residents, low-income households)
	Business Oregon	Equitable Economic Recovery Plan <sup>11</sup>	Ensure that gains in the post-Covid recovery reach all populations; set	Improved opportunities for covered populations

<sup>10</sup> “Oregon Broadband Office Strategic Plan,” OBO, January 30, 2020, <https://www.oregon.gov/biz/Publications/BroadbandStratPlan2020.pdf>.

<sup>11</sup> “Equitable Economic Recovery Plan,” Business Oregon, March 2022, [https://www.oregon.gov/biz/Publications/OR\\_Recovery\\_Plan\\_FINAL.pdf](https://www.oregon.gov/biz/Publications/OR_Recovery_Plan_FINAL.pdf); “Economic Recovery Plan,” Business Oregon, <https://www.oregon.gov/biz/reports/pages/economic-recovery-plan.aspx>.

Outcome	Key agency partners	Plan	Goals / priorities	Digital equity alignment
			broadband price and availability goals	(aging individuals, racial and ethnic minority groups, rural residents)
	Oregon Corrections Enterprises (OCE)	2021-2022 Annual Report <sup>12</sup>	Training, certification, and job experience for adults in custody	Improved skills for covered populations (incarcerated individuals)
	Oregon Employment Department	WorkSource Oregon <sup>13</sup>	Partnership with the Oregon Employment Department and state, local, and nonprofit agencies	Improved skills for covered populations (veterans, individuals with disabilities, English learners and those with low literacy)
Education	OBO	Strategic Plan <sup>14</sup>	Digital Literacy, Security, and Inclusion Program	Improved skills for covered populations (all covered populations,

<sup>12</sup> “2021-2022 Annual Report,” OCE, [https://d18hjk6wpm1fl5.cloudfront.net/public/446/documents/Current-OCE-INFORMATION-2022\\_ANNUAL\\_REPORT\\_PDF-446-52152-1.PDF](https://d18hjk6wpm1fl5.cloudfront.net/public/446/documents/Current-OCE-INFORMATION-2022_ANNUAL_REPORT_PDF-446-52152-1.PDF).

<sup>13</sup> “What Is WorkSource Oregon?” WorkSource Oregon, <https://worksourceoregon.org/about>.

<sup>14</sup> “Oregon Broadband Office Strategic Plan,” OBO, January 30, 2020, <https://www.oregon.gov/biz/Publications/BroadbandStratPlan2020.pdf>.



Outcome	Key agency partners	Plan	Goals / priorities	Digital equity alignment
				including incarcerated individuals, veterans, and aging individuals)
	Oregon Department of Education (ODE)	Broadband connectivity policy <sup>15</sup>	Equitable access to devices and internet for students	Improved access for covered populations (low-income households, individuals with disabilities, English learners and those with low literacy, racial and ethnic minorities, and rural residents)
	Oregon Department of Education (ODE)	Oregon’s Consolidated State Plan Under the Every Student Succeeds Act <sup>16</sup>	Calls for a comprehensive statewide computer and digital literacy plan for students	Improved skills for covered populations (low-income households,

<sup>15</sup> “Broadband Connectivity,” ODE, <https://www.oregon.gov/ode/schools-and-districts/pages/state-e-rate-program-and-broadband-connectivity.aspx>.

<sup>16</sup> “Oregon’s Consolidated State Plan Under the Every Student Succeeds Act,” ODE, August 30, 2017, [https://www.oregon.gov/ode/rules-and-policies/ESSA/Documents/APPROVED%20OR\\_ConsolidatedStateplan8-30-17.pdf](https://www.oregon.gov/ode/rules-and-policies/ESSA/Documents/APPROVED%20OR_ConsolidatedStateplan8-30-17.pdf); “Every Student Succeeds Act (ESSA),” ODE, <https://www.oregon.gov/ode/rules-and-policies/ESSA/Pages/default.aspx>.

Outcome	Key agency partners	Plan	Goals / priorities	Digital equity alignment
				individuals with disabilities, English learners and those with low literacy, racial and ethnic minorities, and rural residents)
	Higher Education Coordinating Commission (HECC)	State Educational Attainment Goals and Equity Lens <sup>17</sup>	Enhance access to higher education and workforce training	Improved skills for covered populations (all covered populations, including veterans and aging individuals)
Health	Oregon Health Authority (OHA)	2020-2024 State Health Improvement Plan <sup>18</sup>	Increase access to health services in rural areas	Improved access and services for covered populations (aging individuals, veterans, rural

<sup>17</sup> “State Educational Attainment Goals and Equity Lens,” Higher Education Coordinating Commission (HECC), <https://www.oregon.gov/highered/policy-collaboration/Pages/state-goals.aspx>.

<sup>18</sup> “2020-2024 State Health Improvement Plan,” Oregon Health Authority, September 2020, <https://www.oregon.gov/oha/PH/ABOUT/Documents/ship/2020-2024/Healthier-Together-Oregon-full-plan.pdf>.

Outcome	Key agency partners	Plan	Goals / priorities	Digital equity alignment
				households, and low-income households)
	Oregon Health Authority (OHA) – Health Equity Goal	Health equity and language and disability access <sup>19</sup>	OHA established a strategic goal to eliminate health inequities by 2030	Improved services for covered populations (all covered populations, including incarcerated individuals, racial and ethnic minorities, individuals with disabilities, and English learners and those with low literacy)
	Oregon Department of Human Services – Deaf and Hard of Hearing Services (ODHHS)	Community-Based Needs Assessment of Oregon’s Deaf and Hard of Hearing Communities: Final Report <sup>20</sup>	Internet access improves safety and provides, for example, information about assistive devices and software	Improved access and services for covered populations (individuals with disabilities)

<sup>19</sup> “Language and Disability Access,” OHA, <https://www.oregon.gov/oha/ei/pages/language-disability-access.aspx>.

<sup>20</sup> Denise Thew Hackett, Ph.D., M.S.C.I, et al., “Community-Based Needs Assessment of Oregon’s Deaf and Hard of Hearing Communities: Final Report,” Oregon Department of Human Services, December

Outcome	Key agency partners	Plan	Goals / priorities	Digital equity alignment
				and aging individuals)
Civic and social engagement	State Library of Oregon	LSTA Five-Year Plan 2023-2027 <sup>21</sup>	Increase internet and technology access and digital literacy skills	Improved skills for covered populations (all covered populations, including English learners, aging individuals, individuals with disabilities, and low-income households)
	Oregon Youth Authority	10-Year Strategic Plan for Close Custody Facilities <sup>22</sup>	Broadband access for imprisoned youth for virtual family visits	Improved access and services for covered populations (incarcerated individuals)
	Oregon Department of	Electronic communication	Communications with friends and	Access and service for

30, 2016, <https://www.oregon.gov/odhs/aging-disability-services/Documents/deaf-hard-of-hearing-community-needs-assessment-2016.pdf>; "Deaf and Hard of Hearing Services," ODHHS, <https://www.oregon.gov/odhs/aging-disability-services/pages/deaf-hard-of-hearing-services.aspx>.

<sup>21</sup> "Library Services and Technology Act (LSTA) Five-Year Plan, 2023-2027," State Library of Oregon, <https://www.oregon.gov/library/libraries/Documents/LSTA/2023-2027LSTAFiveYearPlan.pdf>; see also "Library Services and Technology Act (LSTA) Program in Oregon," State Library of Oregon, <https://www.oregon.gov/library/libraries/pages/lsta.aspx>.

<sup>22</sup> "10-Year Strategic Plan for Close Custody Facilities," Oregon Youth Authority, August 26, 2014, <https://www.oregon.gov/oia/Reports/OYA%2010-Yr%20Strategic%20Plan.pdf>, section 4, p. 4 (4-4).

Outcome	Key agency partners	Plan	Goals / priorities	Digital equity alignment
	Corrections (DOC)	with the incarcerated <sup>23</sup>	loved ones. Broadband access for imprisoned youth for virtual family visits	covered populations (incarcerated individuals)
		Adult in Custody Programs and Educational Pilot Programs <sup>24</sup>	Opportunities for education and job training at a variety of levels, including GED, community college, and online courses; <sup>25</sup> social activities and clubs for social engagement.	Access and service for covered populations (incarcerated individuals)
	Oregon Serves	2022-2024 State Service Plan for Oregon <sup>26</sup>	Goals include equity, dismantling the school-to-prison pipeline, serving rural communities, and addressing other disparities	Improved access and services for covered populations (low-income households, rural residents,

<sup>23</sup> “Electronic Communications,” Oregon Department of Corrections, <https://www.oregon.gov/doc/contact-inmate/pages/electronic-communications.aspx>.

<sup>24</sup> “Adult in Custody Programs,” Oregon Department of Corrections, <https://www.oregon.gov/doc/aic-programs/Pages/home.aspx>.

<sup>25</sup> Natalie Pate, “Oregon expands education programs for incarcerated adults, but gaps remain,” Oregon Capital Chronicle, July 13, 2023, <https://oregoncapitalchronicle.com/2023/07/13/oregon-expands-education-programs-for-incarcerated-adults-but-gaps-remain/>.

<sup>26</sup> “2022-2024 State Service Plan for Oregon,” Oregon Serves, <https://www.oregon.gov/oregonserves/about-us/Documents/oregonserves-state-service-plan-2022-2024.pdf>.

Outcome	Key agency partners	Plan	Goals / priorities	Digital equity alignment
				veterans)
	Environmental Justice Council (EJC) <sup>27</sup>		The five Governor’s Councils provide an opportunity for civic engagement, allowing Oregonians to address critical issues <sup>28</sup>	Improved access, policy roles, and services for covered populations (all covered populations, including English learners and those with low literacy, low-income households, rural residents, and racial and ethnic minorities)
	Early Literacy Educator Preparation Council <sup>29</sup>			
	Racial Justice Council <sup>30</sup>			
	Wildfire Programs Advisory Council <sup>31</sup>			
	Housing Production Advisory Council <sup>32</sup>			
	State of Oregon Boards and Commissions <sup>33</sup>		Oregon’s Governor appoints	Improved access, policy roles, and

<sup>27</sup> “Environmental Justice Council,” Office of the Oregon Governor, <https://www.oregon.gov/gov/policies/Pages/environmental-justice-council.aspx>.

<sup>28</sup> “Governor’s Councils,” Office of the Oregon Governor, <https://www.oregon.gov/gov/policies/pages/default.aspx>.

<sup>29</sup> “Early Literacy Educator Preparation Council,” Office of the Oregon Governor, <https://www.oregon.gov/gov/policies/Pages/Early-Literacy-Educator-Prep-Council.aspx>.

<sup>30</sup> “Racial Justice Council,” Office of the Oregon Governor, <https://www.oregon.gov/gov/policies/Pages/racial-justice-council.aspx>.

<sup>31</sup> “Wildfire Programs Advisory Council,” Office of the Oregon Governor, <https://www.oregon.gov/gov/policies/Pages/wildfire-programs-council.aspx>.

<sup>32</sup> “Housing Production Advisory Council,” Office of the Oregon Governor, <https://www.oregon.gov/gov/policies/Pages/Housing-Production-Advisory-Council.aspx>.

<sup>33</sup> “Boards & Commissions,” Office of Oregon Governor, <https://www.oregon.gov/gov/Pages/board-list.aspx>.

Outcome	Key agency partners	Plan	Goals / priorities	Digital equity alignment
			members to over 250 Boards and Commissions including major state agencies. Members are vital participants in statewide decision-making.	services for covered populations
Delivery of essential health and human services	Oregon Health Plan (OHP)		Enable online access to eligibility and account information for eligible people in Oregon	Improved services for covered populations (individuals with disabilities, veterans, aging individuals)
	Oregon Housing Stability Council (OHSC)	"Utility Bill Payment Assistance" <sup>34</sup>	Assist those in need with energy costs	Improved services for covered populations (low-income households, those with low literacy skills, English language learners, and racial and ethnic

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<sup>34</sup> "Utility Bill Payment Assistance," OHSC, <https://www.oregon.gov/ohcs/energy-weatherization/pages/utility-bill-payment-assistance.aspx>. See also "Home Weatherization Services," OHSC, <https://www.oregon.gov/ohcs/energy-weatherization/Pages/weatherization-services.aspx>.

Outcome	Key agency partners	Plan	Goals / priorities	Digital equity alignment
				minorities)
	Oregon Department of Transportation	Strategic Action Plan, Revised July 2023 <sup>35</sup>	Provide equitable access to transportation and integrate broadband into the transportation system	Improved services for covered populations (racial and ethnic minorities, rural residents, individuals with disabilities, aging individuals, low-income households)
	Oregon Department of Human Services (ODHS) <sup>36</sup>	Strategic plan underway <sup>37</sup>	Numerous ODHS services will complement this Plan	Improved services for covered populations (all covered populations, including veterans, low-income households, aging individuals, rural households)

<sup>35</sup> "Strategic Action Plan, Revised July 2023," Oregon Department of Transportation, <https://www.oregon.gov/odot/SAPDocs/Strategic-Action-Plan.pdf>.

<sup>36</sup> "Supporting well-being for everyone in Oregon," Oregon Department of Human Services, <https://www.oregon.gov/odhs>.

<sup>37</sup> "Strategic planning process," ODHS, <https://www.oregon.gov/odhs/building-wellbeing/Pages/strategic-plan.aspx>.



Outcome	Key agency partners	Plan	Goals / priorities	Digital equity alignment
	Oregon Department of Emergency Management (OEM)	Comprehensive Emergency Management Plan (CEMP) <sup>38</sup>	In addition to the goals in the Plan, OEM provides equity, inclusion, and language support for emergency preparedness agencies across the state of Oregon for all covered populations <sup>39</sup>	Improved safety for covered populations (all covered populations, including rural households and incarcerated individuals)

### 2.1.1 Economic and workforce development goals, plans, and outcomes

This Plan, drafted by OBO, aligns with OBO’s own strategic plan. In 2020, OBO issued a Broadband Strategic Plan<sup>40</sup> establishing how OBO will carry out its mission as defined by executive order and statute<sup>41</sup> and documenting its activities and planned programs to meet the state’s policy goals. The plan called for a Rural Broadband Capacity Improvement Program to support broadband planning, engineering, and/or infrastructure deployment projects targeting unserved and underserved rural areas. According to the Broadband Strategic Plan, the digital divide “may well be contributing to the economic divide that also exists between urban and rural areas of the state.”

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<sup>38</sup> “Comprehensive Emergency Management Plan (CEMP),” OEM, [https://www.oregon.gov/oem/emresources/Plans\\_Assessments/Pages/CEMP.aspx](https://www.oregon.gov/oem/emresources/Plans_Assessments/Pages/CEMP.aspx).

<sup>39</sup> “Equity, Inclusion and Language Access,” OEM, <https://www.oregon.gov/oem/equity/Pages/default.aspx>. For a list of organizations, see “Oregon ESFs and Organizations,” OEM, January 2021, [https://www.oregon.gov/OEM/Documents/Oregon\\_ESF\\_Agency\\_Table\\_Job\\_Aid.pdf](https://www.oregon.gov/OEM/Documents/Oregon_ESF_Agency_Table_Job_Aid.pdf).

<sup>40</sup> Oregon Broadband Office Strategic Plan, January 30, 2020, <https://www.oregon.gov/biz/Publications/BroadbandStratPlan2020.pdf>.

<sup>41</sup> Executive Order Number 18-31 and HB 2173 Enrolled 2019.

OBO's Broadband Strategic Plan called for an additional program, the Broadband Outreach Program, 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 broadband service demand in communities to help to make a business case for broadband investment and to match projects with funding sources.

The global Covid-19 pandemic changed the economy of the United States and Oregon and highlighted the importance of broadband in daily life. The Equitable Economic Recovery Plan<sup>42</sup> report prepared for Business Oregon and published in March 2022, defined an equitable recovery as one where gains reach “Black, Indigenous, and People of Color and rural communities.” It detailed seven issues stifling Oregon's economic recovery from the effects of the Covid-19 pandemic.

One of the seven issues was a lack of access to affordable broadband. According to the most recent data available at the time, just 24 percent of Oregon's population had access to a low-priced internet plan priced at \$60 per month or less. The report stated:

Access to technology and high-speed internet is essential for workers, families, and businesses. The [ . . . ] pandemic amplified existing issues and inequities. Without access to broadband, e-commerce and small business competition will lag behind in Oregon. Students and workers will be unable to match the trend of increased learning via remote or online methods and the pandemic will continue to perpetuate public safety concerns and impact student learning growth.

Other barriers to an equitable recovery identified in the Equitable Economic Recovery Plan and addressed in this Digital Equity Plan are:

- Workforce development and retraining to address skill mismatches as employees change industries and embrace new opportunities.

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<sup>42</sup> “Equitable Economic Recovery Plan,” Business Oregon, March 2022, [https://www.oregon.gov/biz/Publications/OR\\_Recovery\\_Plan\\_FINAL.pdf](https://www.oregon.gov/biz/Publications/OR_Recovery_Plan_FINAL.pdf); “Economic Recovery Plan,” Business Oregon, <https://www.oregon.gov/biz/reports/pages/economic-recovery-plan.aspx>.

- Workforce attraction as older workers retire and leave positions open. “Tracking retirements and training mid-career workers will be important to the replacement of knowledge, though employers will continue to face temporary challenges during this workforce transition.”

Oregon Corrections Enterprises (OCE), a self-sustaining organization under the Department of Corrections Director, is designed to engage adults in custody in work and provide on-the-job training.<sup>43</sup> Programs include a contact center, graphic design program, office services, and print services. All programs offer training and certifications. The contact center had 402 participants during the period covered by the 2021-2022 Annual Report.<sup>44</sup> OCE is partnering with stakeholders to launch a Pre-Release Hiring Program (PREHP), designed to provide AICs (Adults In Custody) with a job immediately at release. PREHP is also designed to provide employers with “a way to proactively advance social justice issues and contribute to reducing inequality in Oregon communities.” Relatedly, Re-entry Resource Center (RRC) workshops and the associated computer lab are open to everyone in Lane County, and other counties have similar resource centers. Participants may drop in during regular business hours for computer use, including for job searches, resume creation and necessary communication.

This Plan aligns with the work of WorkSource Oregon, a statewide partnership between the Oregon Employment Department and state, local, and nonprofit agencies. It provides a variety of employment and training services to job seekers and employers in Oregon.<sup>45</sup> WorkSource Oregon’s website offers content in 12 languages, including English, Spanish, Russian, Chinese (separate offerings in Traditional Chinese and Simplified Chinese), and Korean, and aids people with low literacy levels, people with disabilities, and veterans seeking employment opportunities.

This Plan also aligns with the goals of the Oregon Higher Education Coordinating Commission (HECC). The “Future Ready Oregon” program “supports the education and training Oregonians need for good-paying jobs. This package includes strategic

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<sup>43</sup> Oregon Corrections Enterprises, <https://oce.oregon.gov/>.

<sup>44</sup> “2021-2022 Annual Report,” OCE, [https://d18hjk6wpm1fl5.cloudfront.net/public/446/documents/Current-OCE-INFORMATION-2022\\_ANNUAL\\_REPORT\\_PDF-446-52152-1.PDF](https://d18hjk6wpm1fl5.cloudfront.net/public/446/documents/Current-OCE-INFORMATION-2022_ANNUAL_REPORT_PDF-446-52152-1.PDF).

<sup>45</sup> “What Is WorkSource Oregon?” WorkSource Oregon, <https://worksourceoregon.org/about>.

and targeted investments focused on advancing opportunities for historically underserved communities.”<sup>46</sup>

### 2.1.2 Educational outcomes

The 2020 OBO Broadband Strategic Plan<sup>47</sup> called for a Digital Literacy, Security, and Inclusion Program “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.” These unserved and underserved populations include members of covered populations such as aging individuals, rural households, incarcerated individuals, veterans, people with disabilities, English language learners, those with low literacy, and racial or ethnic minorities.

The Oregon Department of Education (ODE) promotes “equitable access to digital devices and internet connectivity” in support of its vision that “every student will have access to and benefit from a world-class, well-rounded, and equitable educational system.”<sup>48</sup>

ODE sets digital equity goals under the federal Every Student Succeeds Act (ESSA), a school accountability law rooted in supporting all students equitably and building systems that eliminate barriers to student success. Oregon’s Consolidated State Plan Under the Every Student Succeeds Act<sup>49</sup> calls for increased availability of digital learning, and the “creation of a long-term strategy to transform learning experiences by providing all students equitable access to digital age learning and teaching,” which aligns with 2022 guidance by the U.S. Department of Education that “calls on state and local leaders to also bridge existing [broadband] adoption barriers”

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<sup>46</sup> “Future Ready Oregon: Workforce Training and Education Investment Package,” Oregon Higher Education Coordinating Commission, <https://www.oregon.gov/highered/policy-collaboration/Pages/Future-Ready.aspx>.

<sup>47</sup> Oregon Broadband Office Strategic Plan, January 30, 2020, <https://www.oregon.gov/biz/Publications/BroadbandStratPlan2020.pdf>.

<sup>48</sup> “Broadband Connectivity,” Oregon Department of Education, <https://www.oregon.gov/ode/schools-and-districts/pages/state-e-rate-program-and-broadband-connectivity.aspx>.

<sup>49</sup> “Oregon’s Consolidated State Plan Under the Every Student Succeeds Act,” ODE, August 30, 2017, [https://www.oregon.gov/ode/rules-and-policies/ESSA/Documents/APPROVED%20OR\\_ConsolidatedStateplan8-30-17.pdf](https://www.oregon.gov/ode/rules-and-policies/ESSA/Documents/APPROVED%20OR_ConsolidatedStateplan8-30-17.pdf); “Every Student Succeeds Act (ESSA),” ODE, <https://www.oregon.gov/ode/rules-and-policies/ESSA/Pages/default.aspx>.

while “other federal agencies work to make internet access more available and affordable across the nation.”<sup>50</sup> The Oregon Virtual School District (ORVSD), cited by ODE’s plan, served 15,030 students statewide during the 2021-2022 school year, according to the Digital Learning Collaborative.<sup>51</sup>

The Oregon Department of Education and the HECC developed a Computer Science Education Statewide Implementation Plan that relates directly to digital equity in the state.<sup>52</sup> It establishes goals, strategies, and implementation activities for making computer science available to public school students on an equitable basis and basing computer science education on a guiding and practical framework for students, including requiring public schools to offer opportunities to learn computer science and establishing systems to recruit, support, and retain computer science teachers, fund computer science, align with postsecondary and career options, and expand participation. The Plan was made in response to direction from former Governor Kate Brown, who also signed a National Governors Association compact to expand K-12 computer science education.<sup>53</sup>

This Plan aligns with the online access and digital equity programming goals of the HECC. Improved online access and digital equity programming will support the state’s “40-40-20” goal, which states that, by 2024: “40% of Oregonians will complete a 4-year degree, 40% of Oregonians will complete a 2-year degree or certificate, 20% will earn a high school diploma or the equivalent.”<sup>54</sup>

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<sup>50</sup> “Advancing Digital Equity for All: Community-Based Recommendations for Developing Effective Digital Equity Plans to Close the Digital Divide and Enable Technology-Empowered Learning,” U.S. Department of Education Office of Educational Technology, September 2022, [https://tech.ed.gov/files/2022/09/DEER-Resource-Guide\\_FINAL.pdf](https://tech.ed.gov/files/2022/09/DEER-Resource-Guide_FINAL.pdf).

<sup>51</sup> “Oregon Digital Learning Landscape,” Digital Learning Collaborative, last updated December 2022, <https://www.digitallearningcollab.com/state-profiles/oregon>.

<sup>52</sup> “Computer Science Education Statewide Implementation Plan,” Oregon Department of Education, November 2023, <https://www.oregon.gov/ode/schools-and-districts/grants/Documents/Preview%20Draft%20CS%20Education%20Statewide%20Implementation%20Plan.pdf>.

<sup>53</sup> “2021-2022 Chairman’s Initiative: Computer Science Education,” National Governors Association, <https://www.nga.org/computerscience/>.

<sup>54</sup> “State Educational Attainment Goals and Equity Lens,” Oregon Higher Education Coordinating Commission, <https://www.oregon.gov/highered/policy-collaboration/Pages/state-goals.aspx>.

In addition, this Plan's goals to address covered populations' access to broadband are aligned with the state's adult education and training goal established in 2018, which is designed to improve job opportunities and solve industry needs, and states:

Oregon anticipates more than 120,000 additional jobs requiring post-secondary training or education between now and 2030. In order to meet this need, 300,000 additional adult Oregonians should earn a new degree, certificate or credential valued in the workforce during that time. Because Oregon has substantial attainment gaps among minority, low-income, and rural Oregonians, the state will also commit to reducing those attainment gaps by half during the decade.<sup>55</sup>

### 2.1.3 Health outcomes

Recognizing the intersection of broadband and health and the importance of built infrastructure to support access to health, one goal of the Oregon Health Authority's "Healthier Together Oregon: 2020-2024 State Health Improvement Plan" is to "increase affordable access to high-speed internet in rural Oregon."<sup>56</sup> OHA states that it "is committed to partnerships, co-creation and co-ownership of solutions with communities disproportionately affected by health issues so they can actively participate in planning, implementing, and evaluating efforts to address health issues."<sup>57</sup> Those communities disproportionately affected by health issues include covered populations, such as aging individuals, veterans, and low-income households. OHA's Health Improvement Plan addresses several potential benefits of technology, noting that telehealth can improve equitable access to healthcare in rural areas.

OHA has established a strategic goal to eliminate health inequities by 2030.<sup>58</sup> OHA defines health equity as "a health system where all people can reach their full health

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<sup>55</sup> "Oregon's Adult Education and Training Goal," Oregon Higher Education Coordinating Commission, <https://www.oregon.gov/highered/policy-collaboration/Pages/state-goals.aspx>.

<sup>56</sup> "Healthier Together Oregon: 2020-2024 State Health Improvement Plan," Oregon Health Authority, September 2020, <https://www.oregon.gov/oha/PH/ABOUT/Documents/ship/2020-2024/Healthier-Together-Oregon-full-plan.pdf>.

<sup>57</sup> "Healthier Together Oregon: 2020-2024 State Health Improvement Plan," Oregon Health Authority, September 2020, <https://www.oregon.gov/oha/PH/ABOUT/Documents/ship/2020-2024/Healthier-Together-Oregon-full-plan.pdf>.

<sup>58</sup> "Language and Disability Access," OHA, <https://www.oregon.gov/oha/ei/pages/language-disability-access.aspx>.

potential and well-being and are not disadvantaged by their race, ethnicity, language, disability, age, gender, gender identity, sexual orientation, social class, intersections among these communities or identities, or other socially determined circumstances.”<sup>59</sup> These populations experiencing socially determined circumstances that OHA describes include covered populations, such as the incarcerated, members of racial or ethnic minorities, English language learners, those with low literacy, individuals with disabilities, and others. Achieving health equity requires collaboration across all sectors of healthcare and all regions of the state. Achieving health equity begins with communication. It starts by adding a step to patient intake in which patients are asked, “Will you need support to talk with us?” To support this communication, OHA has created Race, Ethnicity, Language and Disability (REALD) templates, which are available online, tailored for different settings and audiences, and produced in 23 languages.<sup>60</sup> This initiative aims at inclusion of covered populations in health-related digital equity, including those with low literacy skills, English language learners, individuals with disabilities, and members of racial or ethnic minorities. The templates are the work of OHA’s Office of Equity & Inclusion.

The Oregon Legislative Assembly in 2015 appropriated \$200,000 for a comprehensive study to identify the social, health, and educational disparities experienced by the Deaf and Hard of Hearing Communities. The contract was awarded to Western Oregon University’s (WOU) Regional Resource Center on Deafness (RRCD) in 2016. The resulting report, the Community-Based Needs Assessment of Oregon’s Deaf and Hard of Hearing Communities: Final Report,<sup>61</sup> was the result of months of focus groups and studies across Oregon. The report highlighted the health and safety benefits of internet access for the deaf and hard of hearing. For example, the “vast majority of individuals with hearing loss are not aware of other types of assistive technology which can be used with or without

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<sup>59</sup> “Language and Disability Access,” OHA, <https://www.oregon.gov/oha/ei/pages/language-disability-access.aspx>.

<sup>60</sup> “Race, Ethnicity, Language and Disability (REALD) templates,” OHA, <https://sharedsystems.dhsoha.state.or.us/DHSForms/Served/le7721c.pdf>.

<sup>61</sup> Denise Thew Hackett, Ph.D., M.S.C.I, et al., “Community-Based Needs Assessment of Oregon’s Deaf and Hard of Hearing Communities: Final Report,” December 30, 2016, Oregon Department of Human Services, <https://www.oregon.gov/odhs/aging-disability-services/Documents/deaf-hard-of-hearing-community-needs-assessment-2016.pdf>; ODHHS, <https://www.oregon.gov/odhs/aging-disability-services/pages/deaf-hard-of-hearing-services.aspx>.

hearing aids and cochlear implants... This information is found through consumer groups and internet searches.”<sup>62</sup>

#### 2.1.4 Civic and social engagement

Civic and social engagement is a critical component to a thriving democracy. And to healthy communities. Civic engagement means participating in the electoral process, attending a town hall to engage elected leadership, volunteerism, advocacy and activism; these civic activities are all ways to improve communities or address wider social issues.

Among the state entities that have civic and social engagement efforts in alignment with this Plan are:

- **Oregon Serves:** The 2022-2024 State Service Plan for Oregon<sup>63</sup> directs efforts toward addressing equity and systemic economic disadvantages, serving rural communities, and dismantling the school-to-prison pipeline. Oregon Serves also addresses resource gaps, disparities, and crises in “the national service focus areas of disaster response, healthy futures, economic opportunity, education, environmental stewardship, and veterans and military families.”
- **Governor’s Councils:** These councils provide the people of Oregon with the opportunity to address crucial issues. The five councils are: Environmental Justice Council (EJC),<sup>64</sup> Early Literacy Educator Preparation Council,<sup>65</sup> Racial

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<sup>62</sup> Denise Thew Hackett, Ph.D., M.S.C.I, et al., “Community-Based Needs Assessment of Oregon’s Deaf and Hard of Hearing Communities: Final Report,” December 30, 2016, Oregon Department of Human Services, <https://www.oregon.gov/odhs/aging-disability-services/Documents/deaf-hard-of-hearing-community-needs-assessment-2016.pdf>; ODHHS, <https://www.oregon.gov/odhs/aging-disability-services/pages/deaf-hard-of-hearing-services.aspx>.

<sup>63</sup> “2022-2024 State Service Plan for Oregon,” Oregon Serves, <https://www.oregon.gov/oregonserves/about-us/Documents/oregonserves-state-service-plan-2022-2024.pdf>. See also, Oregon Serves, <https://www.oregon.gov/oregonserves/>.

<sup>64</sup> “Environmental Justice Council,” Office of the Oregon Governor, <https://www.oregon.gov/gov/policies/Pages/environmental-justice-council.aspx>.

<sup>65</sup> “Early Literacy Educator Preparation Council,” Office of the Oregon Governor, <https://www.oregon.gov/gov/policies/Pages/Early-Literacy-Educator-Prep-Council.aspx>.



Justice Council,<sup>66</sup> Wildfire Programs Advisory Council,<sup>67</sup> and Housing Production Advisory Council.<sup>68</sup>

- **State of Oregon Boards and Commissions:** The Governor appoints members to more than 250 state boards and commissions, including the OBDD Commission and the Oregon Broadband Advisory Council. Members of Oregon State Boards and Commissions<sup>69</sup> are vital participants in statewide decision-making, individuals that serve on boards and commissions can participate in developing a wide variety of important governmental policies. Issues range from consumer protection, economic development, education, conservation, and health care, all of which are critical to the ongoing success of the State of Oregon.

One local example of online civic engagement is the City of Eugene’s “Engage Eugene” online engagement platform.<sup>70</sup> This platform allows for online engagement on a variety of policies and projects, ensuring programs and policies reflect the needs of the people. Online engagement is especially important for covered populations with limited mobility, including aging individuals and individuals with disabilities.

The State Library of Oregon (State Library) Library Services and Technology Act (LSTA) Five-Year Plan, 2023-2027, identifies digital equity as one of the five key needs to be addressed for library users. It also sets a goal of Oregon libraries to close the digital divide through projects that spur connectivity and technology, digital equity, and digital heritage collections. Under connectivity and technology, the objectives are to support projects that increase broadband, connectivity, and technology access with the outcome being to better meet community needs with high-speed internet and internet-enabled technology. Under digital equity, the objective is to encourage libraries’ digital inclusion and skills training efforts in their

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<sup>66</sup> “Racial Justice Council,” Office of the Oregon Governor, <https://www.oregon.gov/gov/policies/Pages/racial-justice-council.aspx>.

<sup>67</sup> “Wildfire Programs Advisory Council,” Office of the Oregon Governor, <https://www.oregon.gov/gov/policies/Pages/wildfire-programs-council.aspx>.

<sup>68</sup> “Housing Production Advisory Council,” Office of the Oregon Governor, <https://www.oregon.gov/gov/policies/Pages/Housing-Production-Advisory-Council.aspx>.

<sup>69</sup> “Boards & Commissions,” Office of Oregon Governor, <https://www.oregon.gov/gov/Pages/board-list.aspx>.

<sup>70</sup> “Engage Eugene,” City of Eugene, <https://engage.eugene-or.gov/>.

communities.<sup>71</sup> Multilingual resources and books are part of the libraries' goals and projects, which help English learners.

This Plan aligns with a key goal of the Oregon Youth Authority's 10-Year Strategic Plan for Close Custody Facilities.<sup>72</sup> Among the ideal characteristics of facilities for youth offenders is, "[h]igh-speed internet capacity to support... video-based family visits."

The Oregon Department of Corrections (DOC) offers means for electronic communications with incarcerated friends or loved ones.<sup>73</sup> DOC also provides rules regarding sending publications to adults in custody (AIC).<sup>74</sup>

### 2.1.5 Delivery of other essential services

The examples in this section illustrate a sample of state programs that demonstrate the importance of broadband to enable people to access inclusive online content related to the delivery of essential services.

The Oregon Housing Stability Council (OHSC) provides leadership in, and reviews and sets policy for, the development and financing of affordable housing throughout the state.<sup>75</sup> Programs include funding to local community agencies that provide bill payment assistance programs to help low-income households meet their energy costs and to prevent the loss of home energy service.<sup>76</sup> Power is an essential service. OHSC also provides funding for home weatherization to low-income households, delivering long-term energy cost savings, which potentially improves financial resilience as well as health.<sup>77</sup> As income often intersects with other demographic categories of covered populations, these benefits for low-income households also

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<sup>71</sup> "Library Services and Technology Act (LSTA) Five-Year Plan, 2023-2027," State Library of Oregon, <https://www.oregon.gov/library/libraries/Documents/LSTA/2023-2027LSTAFiveYearPlan.pdf>.

<sup>72</sup> "10-Year Strategic Plan for Close Custody Facilities," Oregon Youth Authority, August 26, 2014, <https://www.oregon.gov/oya/Reports/OYA%2010-Yr%20Strategic%20Plan.pdf>, p.4-4.

<sup>73</sup> "Electronic Communications," DOC, <https://www.oregon.gov/doc/contact-inmate/pages/electronic-communications.aspx>.

<sup>74</sup> "Publications," DOC, <https://www.oregon.gov/doc/contact-inmate/Pages/Publications.aspx>.

<sup>75</sup> "About the Council," OHSC, <https://www.oregon.gov/ohcs/hsc/Pages/index.aspx>. OHSC is part of Oregon Housing and Community Services (OHCS), Oregon's housing finance agency.

<sup>76</sup> "Utility Bill Payment Assistance," OHSC, <https://www.oregon.gov/ohcs/energy-weatherization/pages/utility-bill-payment-assistance.aspx>.

<sup>77</sup> "Home Weatherization Services," OHSC, <https://www.oregon.gov/ohcs/energy-weatherization/Pages/weatherization-services.aspx>.

help those with low literacy skills, English language learners, and racial and ethnic minorities.

The Oregon Department of Transportation Strategic Action Plan, revised July 2023,<sup>78</sup> cites equity as a priority, defined as: “Prioritize diversity, equity, and inclusion by identifying and addressing systemic barriers to ensure all Oregonians benefit from transportation services and investments.” Some groups that have systemic barriers that ODOT proposes to address include racial and ethnic minorities and rural residents. Transportation is not specifically cited as an essential service in NTIA guidance, but it is essential in daily life. The Oregon Department of Transportation seeks to provide “greater transportation access and a broader range of mobility options for Oregonians.” It says that nearly one-third of Americans are unable to drive due to age, disability, or because they cannot afford a car.

The Oregon Department of Human Services (ODHS) is in its planning process, with a strategic plan due in 2024, to be created with community partners.<sup>79</sup> ODHS services include SNAP food benefits,<sup>80</sup> the Employment Related Day Care program (ERDC),<sup>81</sup> Home Care Services for seniors,<sup>82</sup> and other services too numerous to mention, all of which benefit covered populations (including veterans, low-income households, aging individuals, and rural households) and will complement the activities in this Plan. ODHS’ community partner connections can also add value to this Plan.

The Oregon Department of Corrections provides essential services to the incarcerated, including health and wellness, food, and other essential activities for their mental and physical wellbeing.<sup>83</sup> Broadband access is crucial for

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<sup>78</sup> “Strategic Action Plan,” Oregon Department of Transportation, revised July 2023, <https://www.oregon.gov/odot/SAPDocs/Strategic-Action-Plan.pdf>.

<sup>79</sup> “Strategic planning process,” ODHS, <https://www.oregon.gov/odhs/building-wellbeing/Pages/strategic-plan.aspx>.

<sup>80</sup> “SNAP Food Benefits,” ODHS, <https://www.oregon.gov/odhs/food/pages/snap.aspx>.

<sup>81</sup> “Employment Related Day Care program (ERDC),” <https://www.oregon.gov/delc/programs/pages/erdc.aspx>.

<sup>82</sup> “Home Care Services,” ODHS, <https://www.oregon.gov/odhs/home-care-consumers/Pages/default.aspx>.

<sup>83</sup> “Adult in Custody Services,” Oregon Department of Corrections, <https://www.oregon.gov/doc/inmate-services/Pages/home.aspx>.

communications and legal information, which impact incarcerated individuals' mental and physical wellness and access to crucial justice-related information.

The Oregon Department of Emergency Management<sup>84</sup> is built to deliver safety for all residents of Oregon. Its Equity, Inclusion, and Language Access Program consults, advises, trains, and provides policy development in the areas of equity, inclusion, diversity, equal opportunity, and affirmative action for emergency preparedness agencies across the state of Oregon.<sup>85</sup> The Comprehensive Emergency Management Plan (CEMP)<sup>86</sup> covers training, mitigation, and recovery in addition to emergency response.

## 2.2 Strategy and objectives

This section of the Plan describes, at a high level, key strategies and objectives designed to address the critical digital equity challenges described below. As OBO has identified strategies to critical barriers for each covered population, it is critical to keep in mind the intersectionality of Oregon's covered populations, as well as the overlapping nature of identified critical barriers. These overlapping experiences may create implementation risks that the state will continue to evaluate and will adjust its strategy accordingly. Additional detail regarding the strategies and their associated initiatives is provided in Section 5, which details OBO's plans for execution.

### 2.2.1 Strategies

In brief, the strategies are as follows (see Section 5 for detail), organized based on the critical barrier they are designed to address:

1. **Critical barrier: Lack of broadband availability.** OBO recognizes the extent of broadband's far-reaching impacts on individuals, communities, businesses, education, healthcare, and overall economic and social development.

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<sup>84</sup> Oregon Department of Emergency Management, <https://www.oregon.gov/OEM/Pages/default.aspx>.

<sup>85</sup> "Equity, Inclusion and Language Access," OEM, <https://www.oregon.gov/oem/equity/Pages/default.aspx>. For a list of organizations, see "Oregon ESFs and Organizations," OEM, January 2021, [https://www.oregon.gov/OEM/Documents/Oregon\\_ESF\\_Agency\\_Table\\_Job\\_Aid.pdf](https://www.oregon.gov/OEM/Documents/Oregon_ESF_Agency_Table_Job_Aid.pdf).

<sup>86</sup> "Comprehensive Emergency Management Plan (CEMP)," OEM, [https://www.oregon.gov/oem/emresources/Plans\\_Assessments/Pages/CEMP.aspx](https://www.oregon.gov/oem/emresources/Plans_Assessments/Pages/CEMP.aspx).

Broadband facilitates online learning, enabling students of all ages to access educational materials, participate in virtual classrooms, and engage in distance education programs. It bridges the gap in educational opportunities, especially for those in remote or underserved areas.

Broadband stimulates economic growth and innovation, enables e-commerce and remote workforce training and work opportunities, and enables access to government services.

Broadband enables remote healthcare services, such as telemedicine and in-home health monitoring. It helps people stay or become connected to healthcare professionals regardless of geographical distances.

Broadband allows for access to public social resources such as housing, health and nutrition resources, and resources to pay utility bills including electricity or heating, ensuring people have the resources to thrive.

Broadband facilitates access to online public spaces and information, strengthening democracy.<sup>87</sup>

Broadband supports precision agriculture and rural economic development by enabling farmers to access online resources to improve farming techniques, track weather patterns, manage crops, and access market information.

This Digital Equity Plan and OBO's BEAD broadband infrastructure program will work together to ensure the availability of broadband for all people in Oregon.

**Strategy:** Increase access to residential broadband through the deployment of the BEAD Program and the American Rescue Plan Act Capital Infrastructure Program.

- 2. Critical barrier: Low-income households struggle to consistently afford broadband services, internet-enabled computing devices, and technical support.** Affordability of broadband services and computing devices is essential for ensuring that all members of society can participate in the digital world and

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<sup>87</sup> "The Future of Digital Spaces and Their Role in Democracy," Pew Research Center, November 22, 2021, <https://www.pewresearch.org/internet/2021/11/22/the-future-of-digital-spaces-and-their-role-in-democracy/>.

the digital economy. Affordability reduces the scope of the digital divide and supports the State of Oregon's economy and residents.<sup>88</sup>

Through this Digital Equity Plan, OBO seeks to increase affordability of broadband services and devices through collaboration with local, ISP, and community partners.

**Strategy 1:** Increase Affordable Connectivity Program (and any subsequent or similarly funded program) enrollment among eligible households (e.g., those earning 200 percent or less than the federal poverty guideline).

**Strategy 2:** Increase Internet Service Providers' (ISPs') low-cost service offerings.

**Strategy 3:** Expand access to affordable computing devices and technical support.

**Strategy 4:** Develop data and informational resources to enable application of a digital equity lens to state infrastructure and program decisions.

- 3. Critical barrier: Individuals who are members of covered populations require support to develop digital literacy skills.** Digital literacy and digital skills are not only about using technology but also about fostering empowerment, critical thinking, and full participation in society. They enhance people's abilities to learn, work, communicate, and engage effectively in the rapidly evolving digital economy by promoting education, employability, small business and entrepreneurship, healthcare access, financial management, and lifelong learning.

Through this Digital Equity Plan, OBO seeks to develop partnerships and strategies to expand access to digital skills training and support tribal and local entities that train people in Oregon to access the internet and to do so with their safety and privacy protected.

**Strategy 1:** Expand opportunity to learn digital literacy and digital skills.

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<sup>88</sup> The Federal Communications Commission (FCC) will require broadband nutrition labels in 2024. They are designed to deliver better information to consumers. See, "Broadband Consumer Labels," FCC, <https://www.fcc.gov/broadbandlabels>.

**Strategy 2:** Increase accessibility of information for persons with disabilities and for persons who speak a language other than English.

**Strategy 3:** Promote information about the availability of digital literacy and digital skills programming.

**Strategy 4:** Promote information about online safety and privacy to covered populations.

- 4. Critical barrier: Local communities require resources and expertise for digital equity efforts.** Oregon's commitment to digital equity means a significant commitment of resources to sustain the initiatives contemplated in this Plan and to support local communities, nonprofits, and CAIs to develop local capacity.

To sustain these efforts over time, Oregon will require resources beyond what NTIA will provide under the Digital Equity Capacity Grant Program. OBO seeks to develop strategies for continuing the work launched under this Plan by partnering with philanthropy and seeking other funding sources, and by tracking the impact of Oregon's digital equity efforts to quantify the business case for further investment in digital equity programs.

**Strategy 1:** Build collaboration among state, tribal, local, and nonprofit entities.

**Strategy 2:** Support and develop local organizational and community capacity for digital equity programs.

**Strategy 3:** Sustain and grow state and local efforts in digital equity.

### 2.2.2 Measurable objectives and key performance indicators

In connection with each of the key digital equity challenges described above, OBO has established the following initial measurable objectives and key performance indicators (KPI) with short- and long-term goals<sup>89</sup> toward achieving digital equity in Oregon. These objectives, KPIs, and goals may change over time to meet the evolving challenges of the digital divide in Oregon.

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<sup>89</sup> In this Plan, short-term goals operate on a timescale of five years, while long-term goals operate on a scale of ten years.

### 2.2.2.1 Critical barrier: Lack of broadband availability

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
Every location in Oregon can access 100/20 Mbps at home <sup>90</sup>	Percentage of locations with access to 100/20 broadband <sup>91</sup>	89%	95%	100%	FCC National Broadband Map
	Percentage for covered households <sup>92</sup>	TBD	95%	100%	TBD
	Percentage for aging individuals	89%	95%	98%	FCC National Broadband Map

<sup>90</sup> These coverage metrics reflect current state as reported by the FCC in the National Broadband Map as of July 25, 2023. They do not include grant funded or planned deployments for the future.

<sup>91</sup> The state goal for broadband deployment as established in the BEAD Five-Year Action Plan and Initial Proposal Volume II is to deploy broadband to 100 percent of unserved and underserved locations. The Initial Proposal Volume II draft released for public comment notes that “Oregon’s internal modeling suggests that the funds available may provide for fiber-to-the-premises to the majority of unserved and underserved locations, with the remainder served with alternative technologies. However, OBO believes it is possible that Oregon’s BEAD allocation will be insufficient to fund deployment to all underserved locations.” (“Initial Proposal Volume II,” OBO, November 2023, [https://broadbandexpanded.com/files/ijja\\_plans/OR%20-%20BEAD%20Initial%20Proposal%20-%20Volume%202%20Draft.pdf](https://broadbandexpanded.com/files/ijja_plans/OR%20-%20BEAD%20Initial%20Proposal%20-%20Volume%202%20Draft.pdf).) Given the uncertainty regarding the cost of deployment and sufficiency of funding, the long-term goal of 100 percent may be updated following further development of the BEAD Program to better reflect Oregon’s state plans.

<sup>92</sup> Baseline value and data source to be determined. The FCC National Broadband Map does not provide specific data on covered (low-income) households; as referenced elsewhere in this Plan, the U.S. Census Bureau’s American Community Survey indicated 84.4 percent of low-income Oregon households have an internet subscription of any kind and only 64.0 percent have a wireline internet subscription. As such, the baseline percentage of covered households with 100/20 Mbps service at home is likely between 64 and 84.4 percent, but this value is not yet confirmed. OBO will continue to work with the relevant agencies to acquire information both prior and during implementation to determine baseline data where currently TBD is noted. For more specifics on timelines and methods of data gathering and updates, see Section 5.1 and 5.2. Stated short- and long-term goal percentages are based on a reasonable estimate at the time of this writing. The short- and long-term goals will be evaluated and updated according to the baseline data once the data are received and recorded.



Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
	Percentage for incarcerated individuals (other than in a federal facility) <sup>93</sup>	100%	100%	100%	Oregon Department of Corrections; FCC National Broadband Map
	Percentage for veterans	89%	95%	98%	FCC National Broadband Map
	Percentage for individuals with disabilities	89%	95%	98%	FCC National Broadband Map

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<sup>93</sup> For this measurable objective, OBO defines “home” for incarcerated individuals as their current place of physical residence (i.e. the correctional facility), as that is the location that directly determines their accessibility to broadband. Oregon state law and Department of Corrections policy and administrative rules govern which incarcerated individuals can access the internet and when [Incarcerated individuals can access the internet, but the only allowable use is specific educational programs such as ABS/D/GED, law library access, and secured use of educational computer programs and applications for literacy, language learning, and other educational goals, and this use is subject to state law and Oregon DOC administrative rules and department policy regarding who can access which services and when]. This means that the rates of individual use are indicative not of OBO digital equity efforts but of Oregon law and correctional facility administration. Instead, tracking correctional facilities’ broadband service better parallels other covered populations’ KPIs (i.e., measuring service, not use or subscription) and better indicates digital equity efforts related to availability. As a result, this KPI measures the percentage of correctional facilities with access to broadband of at least 100/20 Mbps. All 12 Oregon correctional facilities are served by 1 Gigabit broadband service (according to the FCC National Broadband Map and OBO communications with the Department of Corrections), making the baseline, short-term goal, and long-term goal all 100 percent.

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
	Percentage for individuals with a language barrier (English language learners or low levels of literacy)	89%	95%	98%	FCC National Broadband Map
	Percentage for members of racial or ethnic minorities	89%	95%	98%	FCC National Broadband Map
	Percentage of rural residents	57%	95%	98%	FCC National Broadband Map

**2.2.2.2 Critical barrier: Low-income households struggle to afford broadband services, internet-enabled computing devices, and technical support**

To track the affordability of home internet service, OBO intends to measure ACP enrollment (or a successor program, should one be authorized and funded) as well as the number of ISPs in Oregon that offer low-cost products for qualifying low-income households. These plans typically offer a service option at low or no cost with application of the ACP subsidy and may offer subscribers a discount on the purchase of a device.

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
Increase enrollment in the Affordable Connectivity Program (and any subsequent or similarly funded program)	Percentage of eligible households participating in ACP	28%	50%	75%	USAC <sup>94</sup>
Increase the percentage of ISPs that offer low-cost products <sup>95</sup> (including a computing device) for lower-income households	Percentage of ISPs that offer low-cost products (including a computing device) for lower-income households	64%	75%	95%	USAC <sup>96</sup>
All people in Oregon pay an affordable amount for home internet use	Average cost of home internet for Oregon residents	\$83.77	\$80.00	\$75.00	OBO residential phone survey
	Average cost of home internet for individuals in covered households	\$74.20	\$60.00	\$30.00	
	Average for aging	\$72.30	\$74.00	\$75.00	

<sup>94</sup> Baseline estimate based on USAC ACP Enrollment and Claims Tracker, see also Enrollment and Claims by Zip Code and County.

<sup>95</sup> "Low-cost product" is defined as broadband internet service and/or a personal computing device that can be obtained at a low-cost comparative to other internet services and/or computing devices and that are attainable by low-income households at or below 200% Federal Poverty Level.

<sup>96</sup> Baseline estimate based on ACP participation data from USAC and known ISPs in Oregon from OBO's internal data.

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
	individuals <sup>97</sup>				
	Average for incarcerated individuals (other than in a federal facility) <sup>98</sup>	\$96.86	\$85.00	\$75.00	
	Average for veterans	\$78.23	\$76.00	\$75.00	
	Average for individuals with disabilities	\$80.52	\$76.00	\$75.00	
	Average for individuals with a language barrier (English language learner or low literacy)	\$88.69	\$85.00	\$75.00	
	Average for members of racial or ethnic minorities	\$88.63	\$85.00	\$75.00	
	Average of residents in rural ZIP codes	\$81.80	\$80.00	\$75.00	
All people in Oregon have access to an affordable, workable, internet-enabled	Percentage of all survey respondents who report they use at least one laptop or desktop computer at home	84%	88%	90%	OBO residential phone survey

<sup>97</sup> Data gathered through the OBO residential phone survey categorized individuals aged 65 or older. Future survey instruments will reflect the NTIA's definition of aging individuals as 60 or older. The low baseline average price for this covered population and subsequent increase in price in the short- and long-term goals indicate that aging individuals are likely subscribing to lower service tiers and lower service quality, and therefore pay less than other covered populations. OBO's goal is for aging individuals to receive significantly increased service quality, and therefore they may experience a small increase in price, reflected in the values in this table.

<sup>98</sup> Dollar amount determined through data gathered through the OBO residential phone survey, which was available as it is inclusive of reentering individuals per state interpretation of statutory definition cited above.

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
computing device					
All members of covered populations in Oregon have access to an affordable, workable, internet-enabled computing device	Percentage of respondents in covered households who report they use at least one laptop or desktop computer at home	77%	85%	90%	OBO residential phone survey
	Percentage for aging individuals	71%	85%	90%	
	Percentage of households with an incarcerated individual <sup>99</sup>	TBD	85%	90%	
	Percentage of currently incarcerated individuals <sup>100</sup>	TBD	5%	10%	

<sup>99</sup> Baseline value to be determined. Data were unavailable specific to households with incarcerated individuals (not in a Federal facility) covered population group. OBO is unable to collect neither quantitative nor qualitative data regarding incarcerated individuals gathered from the OBO residential phone survey and/or the online public survey specific to covered populations, given human subjects research (HSR) regulation restrictions as part of the National Telecommunications and Information Administration (NTIA) State Digital Equity Planning Grant (provisions of which are outlined in NTIA’s State Digital Equity Planning Grant HSR Guidance, see <https://broadbandusa.ntia.gov/sites/default/files/2022-08/State-Digital-Equity-Planning-Grant-HSR-Guidance-8-29-2022.pdf>) and to which the state strictly adhered. OBO will continue to work with the relevant agencies to acquire information both prior and during implementation to determine baseline data where currently TBD is noted. For more specifics on timelines and methods of data gathering and updates, see Section 5.1 and 5.2. Stated short- and long-term goals percentages are based on a reasonable estimate. The short- and long-term goals will be evaluated and updated according to the baseline data once the data are received and recorded.

<sup>100</sup> Baseline value to be determined. Data were unavailable specific to the currently incarcerated individuals (not in a Federal facility) covered population group. OBO is unable to collect neither quantitative nor qualitative data regarding incarcerated individuals gathered from the OBO residential phone survey and/or the online public survey specific to covered populations, given human subjects research (HSR) regulation restrictions as part of the National Telecommunications

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
	Percentage of households with a veteran	85%	88%	90%	
	Percentage of households with an individual with a disability	83%	85%	90%	
	Percentage of households with an individual with a language barrier (English language learners or low literacy)	90%	91%	92%	
	Percentage of households with a member of a racial or ethnic minority	84%	88%	90%	
	Percentage of households in rural ZIP codes <sup>101</sup>	TBD	85%	90%	
All people in Oregon have	Percentage of all survey respondents	77%	85%	90%	OBO residential

and Information Administration (NTIA) State Digital Equity Planning Grant (provisions of which are outlined in NTIA’s State Digital Equity Planning Grant HSR Guidance, see <https://broadbandusa.ntia.gov/sites/default/files/2022-08/State-Digital-Equity-Planning-Grant-HSR-Guidance-8-29-2022.pdf>) and to which the state strictly adhered. OBO will continue to work with the relevant agencies to acquire information both prior and during implementation to determine baseline data where currently TBD is noted. For more specifics on timelines and methods of data gathering and updates, see Section 5.1 and 5.2. Stated short- and long-term goal percentages are based on a reasonable estimate. The short- and long-term goals will be evaluated and updated according to the baseline data once the data are received and recorded.

<sup>101</sup> Baseline value to be determined. Data are not currently available due to incompatible data formats and data tools currently accessible to OBO. OBO will work with the relevant agencies and data analysts to acquire information both prior and during implementation to determine baseline data where currently TBD is noted. For more specifics on timelines and methods of data gathering and updates, see Section 5.1 and 5.2. For more specifics on timelines and methods of data gathering and updates, see Section 5.1 and 5.2. Stated short- and long-term goal percentages are based on a reasonable estimate. The short- and long-term goals will be evaluated and updated according to the baseline data once the data are received and recorded.

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
access to computer repair services	who report they can get a broken or lost computing device fixed or replaced within a week <sup>102</sup>				phone survey
Members of all covered populations have access to computer repair services	Percentage of all covered population survey respondents who report they can get a broken or lost computing device fixed or replaced within a week	76%	85%	90%	OBO residential phone survey
	Percentage of covered households	66%	85%	90%	
	Percentage for aging individuals <sup>103</sup>	76%	85%	90%	
	Percentage of households with an incarcerated individual <sup>104</sup>	TBD	85%	90%	

<sup>102</sup> OBO’s scientific residential phone survey of people in Oregon was unable to gather data for individuals who are currently incarcerated in a state facility due to strict HSR guidelines.

<sup>103</sup> Data gathered through the residential phone survey categorized individuals aged 65 or older. Future survey instruments will reflect the NTIA’s definition of aging individuals as 60 or older.

<sup>104</sup> Baseline value to be determined. Data were unavailable specific to the incarcerated individuals (other than individuals incarcerated in a Federal facility) covered population group. OBO is unable to collect neither quantitative nor qualitative data regarding incarcerated individuals gathered from the OBO residential phone survey and/or the online public survey specific to covered populations, given human subjects research (HSR) regulation restrictions as part of the National Telecommunications and Information Administration (NTIA) State Digital Equity Planning Grant (provisions of which are outlined in NTIA’s State Digital Equity Planning Grant HSR Guidance, see <https://broadbandusa.ntia.gov/sites/default/files/2022-08/State-Digital-Equity-Planning-Grant-HSR-Guidance-8-29-2022.pdf>) and to which the state strictly adhered. OBO will continue to work with the relevant agencies to acquire information both prior and during implementation to determine baseline data where currently TBD is noted. For more specifics on timelines and methods of data gathering and updates, see Section 5.1 and 5.2. Stated short- and long-term goals percentages are based on a reasonable estimate. The short- and long-term goals will be evaluated and updated according to the baseline data once the data are received and recorded.

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
	Percentage of currently incarcerated individuals <sup>105</sup>	33%	85%	90%	
	Percentage of households with a veteran	79%	85%	90%	
	Percentage of households with an individual with a disability	77%	85%	90%	
	Percentage of households with an individual with a	TBD	85%	90%	

<sup>105</sup> The KPI and corresponding MO baseline data and short- and long-term goals for this covered population were developed based on Oregon Department of Corrections (DOC) data provided to OBO and is specific to the Oregon DOC Pell Grant Pilot Program. The baseline value was calculated by determining the percentage of DOC Pilot Program participants with access to computing devices, which totals 25 out of 75, or 33%. The numbers were sourced from the following programs: Pilot Program participants enrolled in Treasure Valley Community College at Snake River Correctional Institute (SRCI) total 25 students, and all of the 25 students have access to a computing device (25/25). Pilot Program participants enrolled at Chemeketa Community College at Oregon State Penitentiary (OSP) and Santiam Correctional Institute (SCI) total 50 students, and none of the students have access to a computing device (0/50). The KPI and corresponding MO refers to the current lack of computing devices available to Pilot Program students; a total of 50 out of 75 Pilot program students lack a computing device to attend educational programs, resulting in a baseline number of 25 out of 75 (33%) with access to a device. See, Corrections Education at Chemeketa program which “helps inmates earn their GED and college certificates and degrees to reduce their recidivism and support their productive participation in the workforce.” See <https://www.chemeketa.edu/about/corrections-education/>; see also Portland State University, Higher Education in Prison (HEP) Program which include (Project) Rebound Peer Support Specialists that assist “students” returning to higher education after incarceration.” (See <https://www.pdx.edu/liberal-arts-sciences/higher-education-prison.>) Information provided to OBO notes that as of Winter Term 2024 there are currently 20 students part of the Project Rebound program with increased participation each term. Reference Oregon SB 1522, effective as of March 23, 2022, required the DOC to develop a plan to offer access to certain online educational programs to adults in custody (AIC) at Coffee Creek Correctional Facility and the Snake River Correctional Institution. Oregon SB 269 and SB 270, passed during the 2023 session, is effective as of January 1, 2024. SB 270 permits DOC to enter into agreements to offer education to AICs, including post-secondary distance education academic programs (subject to DOC rules and federal regulations relating to Pell Grants).



Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
	language barrier (English language learners or low literacy) <sup>106</sup>				
	Percentage of households with a member of a racial or ethnic minority	76%	93%	95%	
	Percentage of households in rural ZIP codes	78%	93%	95%	

### 2.2.2.3 Critical barrier: Members of covered populations need support to develop digital skills

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
All people in Oregon are able to use the internet if they so choose	Average number of key digital skills performed (out of 14)	11.5	12/14	13/14	OBO residential phone survey

<sup>106</sup> Baseline value to be determined. Data were unavailable specific to households with an individual with a language barrier (English language learners or low literacy) due to an insufficient sample size of responses to OBO’s scientific residential phone survey of people in Oregon. OBO undertook several measures to include covered populations, as described in section 4.1.3, including oversampling low-income and rural households, but the sample of individuals with a language barrier was still too small to provide data here. OBO will continue to work with the relevant agencies to acquire information for setting baseline and short- and long-term goals both prior and during implementation to determine baseline data where currently TBD is noted. OBO will reevaluate and update the short-term and long-term goals based on what the baseline data indicate once the data are confirmed for this covered population. For more specifics on timelines and methods of data gathering and updates, see Section 5.1 and 5.2. Stated short- and long-term goals percentages are based on a reasonable estimate. The short- and long-term goals will be evaluated and updated according to the baseline data once the data are received and recorded.

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
	factors <sup>107</sup> measured)				
Members of all covered populations are able to use the internet if they so choose	Average number of key digital skills performed by members of covered populations (out of 14 factors measured)	11.1	12/14	13/14	OBO residential phone survey
	Average for covered households	10.7	12/14	13/14	
	Average for aging individuals	9.6	12/14	13/14	
	Average for incarcerated individuals (other than in a federal	TBD	5%	10%	

<sup>107</sup> The residential phone survey asked respondents how many digital skills they could perform out of 14 skill factors. These skill factors are based on those in the NTIA Internet Use Survey but were slightly modified for use in the residential phone survey. The following skill factors were used in the phone survey: 1. Sending and receiving emails; 2. Using social media; 3. Participating in online video, voice, or conference calls (such as Zoom, Skype, or FaceTime); 4. Operating a small home business; 5. Working remotely and telecommuting; 6. Searching for a job online; 7. Taking classes or participating in job training online; 8. Accessing medical services online; 9. Accessing government services online; 10. Shopping, making travel reservations, or using other online consumer service; 11. Accessing online financial services; 12. Identifying online fraud (such as phishing schemes); 13. Identifying misleading information or disinformation; 14. Adjusting privacy settings online (such as on social media). Respondents indicated how many of each of the 14 skills they could perform; the baseline value in the table indicates the average number of skills reported (out of 14) for members of the specified group. The baseline value was determined by deriving a mean value of skills for members of a covered population. To determine the average or mean, the sum for all respondents was determined by adding together the number of reported skills for all respondents in the survey and dividing that sum by the total number of responses, weighted to correct for sampling, resulting in the mean or average reported in the baseline column. For covered populations or other subgroups, a mean of the subgroup was calculated by taking the sum total number of skills reported by all respondents of the subgroup and dividing it by number of respondents in the subgroup. See also Appendix D Residential Survey Instrument.

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
	facility) <sup>108</sup>				
	Average for veterans	10.8	12/14	13/14	
	Average for individuals with disabilities	10.7	12/14	13/14	
	Average for individuals with a language barrier (English language learners or low literacy) <sup>109</sup>	TBD	12/14	13/14	

<sup>108</sup> Baseline values to be determined. While OBO’s scientific residential phone survey of people in Oregon was able to gather details on digital skills for households with formerly incarcerated individuals, OBO was not able to gather these data for currently incarcerated individuals. OBO is unable to collect neither quantitative nor qualitative data regarding incarcerated individuals gathered from the OBO residential phone survey and/or the online public survey specific to covered populations, given human subjects research (HSR) regulation restrictions as part of the National Telecommunications and Information Administration (NTIA) State Digital Equity Planning Grant (provisions of which are outlined in NTIA’s State Digital Equity Planning Grant HSR Guidance) and to which the state strictly adhered. OBO will continue to work with the relevant agencies to acquire information for setting baseline values both prior and during implementation. OBO will reevaluate and update the short-term and long-term goals based on what the baseline data indicate once the data are confirmed for this covered population. For more specifics on timelines and methods of data gathering and updates, see Section 5.1 and 5.2. Stated short- and long-term goals are based on a reasonable estimate. The short- and long-term goals will be evaluated and updated according to the baseline data once the data are received and recorded.

<sup>109</sup> Baseline values to be determined. Data unavailable specific to households with an individual with a language barrier (English language learners or low literacy) due to an insufficient sample size of responses to OBO’s scientific residential phone survey of people in Oregon. OBO undertook several measures to include covered populations, as described in section 4.1.3, including oversampling low-income and rural households, but the sample of individuals with a language barrier was still too small to provide data here. OBO will continue to work with the relevant agencies to acquire information for setting baseline and short- and long-term goals both prior and during implementation to determine baseline data where currently TBD is noted. OBO will reevaluate and update the short-term and long-term goals based on what the baseline data indicate

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
	Average for members of racial or ethnic minorities	11.8	12/14	13/14	
	Average of residents in rural ZIP codes	11.5	12/14	13/14	
All people in Oregon can access information or training to learn how to protect their personal security online	Percentage of all survey respondents who say they are confident they can protect their personal security online	85%	87%	90%	OBO residential phone survey
Members of all covered populations can access information or training to learn how to protect their personal security online	Percentage of all covered population survey respondents who say they are confident they can protect their personal security online	83%	85%	90%	OBO residential phone survey
	Percentage for covered households	81%	85%	90%	
	Percentage for aging individuals (60+)	74%	85%	90%	
	Percentage of households with an incarcerated	TBD	85%	90%	

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once the data are confirmed for this covered population. For more specifics on timelines and methods of data gathering and updates, see Section 5.1 and 5.2. Stated short- and long-term goals are based on a reasonable estimate. The short- and long-term goals will be evaluated and updated according to the baseline data once the data are received and recorded.

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
	individual <sup>110</sup>				
	Percentage of households with a veteran	77%	85%	90%	
	Percentage of households with a disabled individual	80%	85%	90%	
	Percentage of households with an individual with a language barrier (English language learners or low literacy)	82%	85%	90%	
	Percentage of households with a member of a racial or ethnic minority	87%	88%	90%	
	Percentage of households in rural ZIP codes	85%	87%	90%	
All people in Oregon can access information	Percentage of all survey respondents who say they are confident they can	80%	85%	90%	OBO residential phone survey

<sup>110</sup> Baseline values to be determined. While OBO's scientific residential phone survey of people in Oregon was able to gather details on digital skills for households with formerly incarcerated individuals, OBO was not able to gather these data for currently incarcerated individuals. OBO is unable to collect neither quantitative nor qualitative data regarding incarcerated individuals gathered from the OBO residential phone survey and/or the online public survey specific to covered populations, given human subjects research (HSR) regulation restrictions as part of the National Telecommunications and Information Administration (NTIA) State Digital Equity Planning Grant (provisions of which are outlined in NTIA's State Digital Equity Planning Grant HSR Guidance) and to which the state strictly adhered. OBO will continue to work with the relevant agencies to acquire information for setting baseline and short- and long-term goals both prior and during implementation. OBO will reevaluate and update the short-term and long-term goals based on what the baseline data indicate once the data are confirmed for this covered population.

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
or training to learn how to protect their privacy online	protect their privacy online				
Members of all covered populations can access information or training to learn how to protect their privacy online	Percentage of all covered population survey respondents who say they are confident they can protect their privacy online	75%	85%	90%	OBO residential phone survey
	Percentage for covered households	72%	85%	90%	
	Percentage for aging individuals (60+)	55%	85%	90%	
	Percentage of households with an incarcerated individual <sup>111</sup>	TBD	85%	90%	
	Percentage of households with a veteran	68%	85%	90%	

<sup>111</sup> Baseline values to be determined. While OBO’s scientific residential phone survey of people in Oregon was able to gather details on digital skills for households with formerly incarcerated individuals, OBO was not able to gather these data for currently incarcerated individuals. OBO is unable to collect neither quantitative nor qualitative data regarding incarcerated individuals gathered from the OBO residential phone survey and/or the online public survey specific to covered populations, given human subjects research (HSR) regulation restrictions as part of the National Telecommunications and Information Administration (NTIA) State Digital Equity Planning Grant (provisions of which are outlined in NTIA’s State Digital Equity Planning Grant HSR Guidance) and to which the state strictly adhered. OBO will continue to work with the relevant agencies to acquire information for setting baseline and short- and long-term goals both prior and during implementation. For more specifics on timelines and methods of data gathering and updates, see Section 5.1 and 5.2. Stated short-term and long-term goals are reasonable estimates established based on the best information available at the time of the writing of this Plan, but OBO will reevaluate and update the short-term and long-term goals based on what the baseline data indicate once the data are confirmed for this covered population.

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
	Percentage of households with an individual with a disability	69%	85%	90%	
	Percentage of households with an individual with a language barrier (English language learners or low literacy) <sup>112</sup>	TBD	85%	90%	
	Percentage of households with a member of a racial or ethnic minority	82%	85%	90%	
	Percentage of households in rural ZIP codes	77%	85%	90%	
All people in Oregon can access government services online	Percentage of all survey respondents who say they are very confident using the internet to access government services online	83%	85%	90%	OBO residential phone survey

<sup>112</sup> Baseline values to be determined. Data were unavailable specific to households with an individual with a language barrier (English language learners or low literacy) due to an insufficient sample size of responses to OBO’s scientific residential phone survey of people in Oregon. OBO undertook several measures to include covered populations, as described in section 4.1.3, including oversampling low-income and rural households, but the sample of individuals with a language barrier was still too small to provide data here. OBO will continue to work with the relevant agencies to acquire information for setting baseline and short- and long-term goals both prior and during implementation to determine baseline data where currently TBD is noted. For more specifics on timelines and methods of data gathering and updates, see Section 5.1 and 5.2. Current stated short- and long-term goals are reasonable estimates established based on the best information available at the time of the writing of this Plan, but OBO will reevaluate and update the short-term and long-term goals based on what the baseline data indicate once the data are confirmed for this covered population.

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
Members of all covered populations can access government services online	Percentage of all covered population survey respondents who say they are very confident accessing government services online	78%	85%	90%	OBO residential phone survey
	Percentage for covered households	73%	85%	90%	
	Percentage for aging individuals (60+)	70%	85%	90%	
	Percentage of households with an incarcerated individual	83%	85%	90%	
	Percentage of households with a veteran	74%	85%	90%	
	Percentage of households with an individual with a disability	79%	85%	90%	
	Percentage of households with an individual with a language barrier (English language learners or low literacy) <sup>113</sup>	TBD	85%	90%	

<sup>113</sup> Baseline values to be determined. Data unavailable specific to households with an individual with a language barrier (English language learners or low literacy) due to an insufficient sample size of responses to OBO’s scientific residential phone survey of people in Oregon. OBO undertook several measures to include covered populations, as described in section 4.1.3, including oversampling low-income and rural households, but the sample of individuals with a language barrier was still too small to provide data here. OBO will continue to work with the relevant



Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
	Percentage of households with a member of a racial or ethnic minority	79%	85%	90%	
	Percentage of households in rural ZIP codes	85%	87%	90%	

#### 2.2.2.4 Critical barrier: Local communities require resources and expertise for digital equity efforts

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
Data are available to all local communities regarding the status of broadband and digital equity in their communities	Availability of federal and state broadband data, including phone survey results (measured by percentage of areas with available federal or state data)	50%	75%	100%	FCC map, OBO data
Partnership opportunities are available for localities, nonprofits, and CAIs	Number of convening events per year	4	12	12	OBO data

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agencies to acquire information for setting baseline and short- and long-term goals both prior and during implementation to determine baseline data where currently TBD is noted. OBO will reevaluate and update the short-term and long-term goals based on what the baseline data indicate once the data are confirmed for this covered population. For more specifics on timelines and methods of data gathering and updates, see Section 5.1 and 5.2. Stated short- and long-term goals percentages are based on a reasonable estimate. The short- and long-term goals will be evaluated and updated according to the baseline data once the data are received and recorded.

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
Localities have access to grant writing guidance and expertise for accessing federal digital equity funds	Percentage of localities that participate in OBO seminars regarding applying for federal digital equity funds	0%	50% in 2025	N/A	OBO data

### **3 CURRENT STATE OF DIGITAL EQUITY: BARRIERS AND ASSETS**

This section describes the current state of digital equity in Oregon, as documented through rigorous and comprehensive data collection and outreach efforts. It describes the resources and relationships available to OBO to promote digital equity; presents detailed asset inventories related to digital equity and broadband adoption, affordability, and access; and presents a needs assessment.

#### **3.1 Asset inventory**

This section identifies assets that promote digital equity for each of the state's covered populations, including resources, programs, plans, and strategies from public and private entities.

##### **3.1.1 Digital inclusion assets by covered population**

Through its outreach and research, OBO has identified key digital inclusion assets that support covered populations in the state, including workforce development training and employment services related to broadband adoption; technical assistance programs aimed at supporting digital inclusion; and nonprofits, partnerships, and coalitions that work toward digital inclusion. Table 3 lists a selection of representative digital inclusion assets and indicates the primary population(s) they serve.

**Table 3: Digital inclusion assets by covered population(s)**

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
Access Technologies, Inc. (ATI)	Oregon’s Statewide Assistive Technology Program, administered by the nonprofit ATI, is part of a national network of programs to “increase access to assistive technology (AT) devices and services for individuals with disabilities and their families, and to facilitate the development of a consumer-responsive AT service delivery system.” <sup>114</sup> Through the Assistive Technology MarketPlace, individuals can buy and sell used AT devices at a reduced cost. <sup>115</sup> The iCanConnect program offers equipment at no cost to qualifying low-income individuals with significant combined vision and hearing loss. <sup>116</sup>	x		x	x	x	x	x	x	x	x

<sup>114</sup> “Oregon Statewide AT Program,” Access Technologies, Inc., <https://www.accesstechnologiesinc.org/about/oregon-statewide-at-program>.

<sup>115</sup> “Assistive Technology Marketplace,” Access Technologies, Inc., <https://www.accesstechnologiesinc.org/marketplace>.

<sup>116</sup> “iCanConnect-Oregon,” Access Technologies Inc., <https://www.accesstechnologiesinc.org/about/icanconnect-oregon>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
AfroVillage	AfroVillage, which works with unhoused individuals with a focus on racial inequities, received a grant from the City of Portland Digital Inclusion Fund in 2022 to facilitate “ongoing digital skills training and technical support” to people in the community that face greater obstacles to digital equity. Its Community Digital Navigator program, Hook A Neighbor Up, sought to aid “community members that identify as Black, and that are displaced, unhoused, housing insecure, low and fixed income, or elders.” <sup>117</sup>	x					x		x		
Baker County Library District	All locations maintain computers for public use with access to the internet. <sup>118</sup> The Library District also offers “one-on-one” computer aid sessions with its IT	x		x	x	x	x	x	x	x	

<sup>117</sup> “2022 Digital Inclusion Fund Grantees!” City of Portland, <https://www.portland.gov/bps/com-tech/digital-equity/news/2022/5/27/2022-digital-inclusion-fund-grantees>; AfroVillage, <https://www.afrovillagepdx.org/>.

<sup>118</sup> “Computers,” Baker County Library District, <https://bakerlib.specialdistrict.org/computers>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
	representative, free online digital skills tutorials, and children’s tablets for loan. <sup>119</sup> Additionally, it grants patrons access to Tech-Talk, a “self-help resource” for growing digital skills; and a resource called LearningExpress Library, which offers users digital skills tutorials, resources in Spanish, and other virtual tutorials. <sup>120</sup>										
Beaverton, Oregon School District	The district implemented multiple programs to bridge the homework gap, such as extending library hours to provide internet access, community Wi-Fi services, and providing hotspots to high school students. <sup>121</sup>				X	X	X		X	X	
Blue Mountain	Blue Mountain Community College Library offers students access to Digital Literacy				X	X	X		X		

<sup>119</sup> “Services,” Baker County Library District, <https://www.bakerlib.org/services>.

<sup>120</sup> “Job seeking,” Baker County Library District, <https://bakerlib.specialdistrict.org/job-seeking>.

<sup>121</sup> “Five Opportunities to Tackle Digital Equity at the Start of the School Year!”, COSN, <https://www.cosn.org/five-opportunities-to-tackle-digital-equity-at-the-start-of-the-school-year/>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
Community College	training, <sup>122</sup> available in English and Spanish. <sup>123</sup> The library also operates a laptop checkout program which is available to all students. <sup>124</sup>										
Burnt River School District	Burnt River is a public charter school that offers a free, virtual K-12 program available to all students in Oregon. Students are “provided with technology and support” by the school. <sup>125</sup>				X	X	X	X	X	X	
Central Oregon Community College	The Central Oregon Community College Library offers students, staff, and members of the surrounding community free access to Northstar Digital Literacy training, <sup>126</sup> which offers resources in English and Spanish.			X	X	X	X		X		

<sup>122</sup> “What is Northstar Digital Literacy?” Blue Mountain Community College, <https://libguides.bluecc.edu/c.php?g=787177&p=9096338>.

<sup>123</sup> “Tutorials,” Blue Mountain Community College, <https://libguides.bluecc.edu/c.php?g=787177&p=9096803>.

<sup>124</sup> “Laptop Checkout,” Blue Mountain Community College, <https://libguides.bluecc.edu/c.php?g=787177&p=9284013>.

<sup>125</sup> “Online Program,” Burnt River School District, <https://www.burntriver.k12.or.us/page/online-program>.

<sup>126</sup> “Northstar Digital Literacy,” Central Oregon Community College, <https://www.cocc.edu/departments/library/resources/northstar.aspx>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
Chemeketa Cooperative Regional Library Service	Mobile hotspot lending program made possible through funding from the Institute of Museum and Library Services (CAGML-248046-OMLS-20), and in cooperation with Chemeketa Community College. <sup>127</sup>	x		x	x	x	x	x	x	x	x
ChickTech	ChickTech, a national nonprofit headquartered in Portland, provides programs to help women and non-binary people enter the technology field, and works to create a more inclusive tech industry. The organization also has a location in Central Oregon. <sup>128</sup>						x		x	x	
City of Eugene Equity Panel	In 2021 the City of Eugene invited applications from organizations serving covered populations to convene a panel to inform work across multiple sectors “at	x			x	x	x		x	x	x

<sup>127</sup> “Hotspot Checkout,” City of McMinnville, <https://www.mcminnvilleoregon.gov/library/page/hotspot-checkout>; “Circulating Wifi Hotspots,” Chemeketa Cooperative Regional Library Service, <https://ccrls.org/library-standard-service/circulating-wifi-hotspots/>.

<sup>128</sup> ChickTech, <https://chicktech.org/about/>.



Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
	the intersections of environmental, economic, racial, and social equity, <sup>129</sup> including recommendations around housing and transportation. <sup>130</sup>										
City of Salem	Tech +50, which covers basic tech skills, is part of the City of Salem’s +50 initiative that assists older residents with several different needs. <sup>131</sup>	x			x		x		x		
City of Tigard	Laptop lending program and digital skills classes. <sup>132</sup>	x		x	x	x	x		x		
Clackamas Community College	The Clackamas Community College Library offers students, staff, and members of the surrounding community			x	x	x	x		x		

<sup>129</sup> “City of Eugene Equity Panel Application,” City of Eugene, <https://www.eugene-or.gov/DocumentCenter/View/60986/Equity-Panel-Application-Final>.

<sup>130</sup> “2021 Eugene Equity Panel Update September 2021,” City of Eugene, <https://www.eugene-or.gov/DocumentCenter/View/63819/City-of-Eugen-Equity-Panel-Update-Sept-2021>.

<sup>131</sup> City of Salem “Learn Computers at Tech +50,” <https://www.cityofsalem.net/community/seniors-and-center-50/increase-your-skills-with-center-50-classes/learn-computers-at-tech-50>.

<sup>132</sup> “Borrow a Laptop,” City of Tigard, <https://www.tigard-or.gov/your-government/departments/library/books-more/library-of-things/borrow-a-laptop>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
	free access to Northstar Digital Literacy training, <sup>133</sup> which is available in Spanish. <sup>134</sup>										
Code Fellows	Code Fellows has partnered with the Oregon Department of Education (ODE) and Central Oregon STEM Hub to launch a program to provide technical education to high school students throughout central Oregon that will help prepare them for a successful career in tech industry. <sup>135</sup>						X	X	X	X	
College Possible Oregon	College Possible Oregon partnered with Free Geek to provide 80 graduating high school seniors in their Navigate program with refurbished computers for college							X	X	X	

<sup>133</sup> "Northstar Digital Literacy," Clackamas Community College, <https://libguides.clackamas.edu/northstar>.

<sup>134</sup> "Northstar Digital Literacy: Access Northstar in Spanish," Clackamas Community College, <https://libguides.clackamas.edu/c.php?g=1163522&p=9436792>.

<sup>135</sup> "Partnering to Increase Digital Equity in K-12", Code Fellows, <https://www.codefellows.org/blog/partnering-to-increasing-digital-equity-in-k-12/>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
	and one year of free support from Free Geek. <sup>136</sup>										
Confederated Tribes of Grand Ronde (CTGR) Tribal Library	With the assistance of grant funding from the Institute of Museum and Library Services (IMLS), the CTGR library maintains five computer stations equipped with access to the library's Wi-Fi. <sup>137</sup>							X		X	X
Confederated Tribes of Siletz Indians (CTSI)	The Confederated Tribes of Siletz Indians are “the most diverse confederation of Tribes and Bands on a single reservation” in the U.S. <sup>138</sup> Their Student Laptop Stipend Program grants tribal members enrolled in college a \$1,000 stipend for the purpose of buying a laptop. <sup>139</sup> Additionally, the CTSI operate a computer lab open to all tribal	X							X		X

<sup>136</sup> “Free Geek Donates Computers to Oregon Navigate Graduates,” College Possible, July 26, 2021, <https://collegepossible.org/news/free-geek-donates-computers/>.

<sup>137</sup> “Library,” Confederated Tribes of Grand Ronde, <https://www.grandronde.org/services/education/library/>.

<sup>138</sup> “Confederated Tribes of Siletz Indians,” Confederated Tribes of Siletz Indians, <https://www.ctsi.nsn.us/>.

<sup>139</sup> “Student Laptop Stipend Program,” Confederated Tribes of Siletz Indians, <https://www.ctsi.nsn.us/student-laptop-stipend-program/>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
	members <sup>140</sup> and every area office maintains a computer with access to the internet that Elders can use through the One-on-One Assistance program. <sup>141</sup>										
Corvallis-Benton County Public Library	The library operates a tech aid support program in which residents can schedule appointments and receive assistance “with a variety of basic tech needs.” <sup>142</sup> The library also offers free public Wi-Fi, computers for patron-use, <sup>143</sup> and digital skills courses. <sup>144</sup>	x		x	x	x	x		x	x	
Corvallis School District	The district provides every student with a computing device such as an iPad. <sup>145</sup>				x	x	x	x	x	x	

<sup>140</sup> “CTSI Computer Lab,” Confederated Tribes of Siletz Indians, <https://www.ctsi.nsn.us/computer-lab/>.

<sup>141</sup> “Nutrition & Support Services,” Confederated Tribes of Siletz Indians, <https://www.ctsi.nsn.us/nutrition-support-services/>.

<sup>142</sup> “Tech Aid Support,” Corvallis-Benton County Public Library, <https://cbcpubliclibrary.net/tech-aid-support/>.

<sup>143</sup> “Services,” Corvallis-Benton County Public Library, <https://cbcpubliclibrary.net/about/services/>.

<sup>144</sup> “Digital Life,” Corvallis-Benton County Public Library, <https://cbcpubliclibrary.net/about/services/>.

<sup>145</sup> “Care and Maintenance,” Corvallis School District, <https://www.csd509j.net/departments/technology-services/student-devices/care-and-maintenance/>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
Crook County Library	The Crook County Library maintains various computers for the use of its patrons, in addition to its publicly available Wi-Fi and AWE Early Literacy stations with “over 60 bilingual educational games.” <sup>146</sup> Using a grant from Facebook, the library also provides its patrons the opportunity to loan technology kits, that include devices such as Samsung Galaxy tablets and Wi-Fi hotspots. <sup>147</sup> The library also offers individual 30-minute technology assistance sessions with its librarians. <sup>148</sup>	x		x	x	x	x		x	x	
Cow Creek Band of Umpqua Tribe of	The Education Division operates a College Computer Program which contributes up to \$500 to purchase a computer to Cow Creek tribal members “pursuing a							x	x		x

<sup>146</sup> “Printers, Computers, & Faxing,” Crook County Library, <https://www.crooklib.org/library/page/printers-computers-faxing>.

<sup>147</sup> “Take-home Technology Kits,” Crook County Library, <https://www.crooklib.org/library/page/take-home-technology-kits>.

<sup>148</sup> “Sign-up for one-on-one computer help with a librarian,” Crook County Library, <https://www.crooklib.org/library/webform/sign-one-one-computer-help-librarian>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
Indians	Certification, Associate’s, Bachelor’s, or Graduate Degree on a full-time basis from a regionally accredited Title IV institution. <sup>149</sup>										
CyberLynx	Provides free computer literacy classes in collaboration with the Bandon Public Library. <sup>150</sup>	x		x	x		x	x	x		
Deschutes Public Library	Provides hotspots to patrons which can be checked-out from the library catalogue. <sup>151</sup>	x		x	x	x	x	x	x	x	
Eugene Public Library	Offers computer use, including adaptive technology options. Supplies free Wi-Fi as well as lending mobile hotspots and laptops. <sup>152</sup>	x		x	x	x	x		x	x	

<sup>149</sup> “Forms & Resources,” Cow Creek Band of Umpqua Tribe of Indians, <https://www.cowcreekeeducation.com/forms-resources/#:~:text=College%20Computer-,The%20Cow%20Creek%20Band%20of%20Umpqua%20Tribe%20of%20Indians%20Education,basis%20from%20a%20regionally%20accredited.>

<sup>150</sup> CyberLynx, <https://cyberlynxoregon.org/>.

<sup>151</sup> Tina Walker Davis, “Leveling the Playing Field: Library Launches Mobile Hotspot Lending Program,” Deschutes Public Library blog, November 10, 2021, <https://www.deschuteslibrary.org/about/news/news?newsid=18354>. See also: “Deschutes Public Library Hotspot [catalog entry],” <https://dpl.bibliocommons.com/v2/record/S94C1878809>.

<sup>152</sup> “Computers and Printing,” Eugene Public Library, <https://www.eugene-or.gov/1022/Computers-and-printing>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
Eugene Service Station (ESS)	The ESS day shelter provides adults experiencing homelessness with access to computers and telephones, message services, and job and housing referrals, among other services. <sup>153</sup>	x		x	x	x	x		x		
Free Geek	Free Geek is a nonprofit that operates in Portland to increase digital inclusion and access through discounted tech programs. These include a computer lending program for K-12 students, hardware grants, an online low-cost tech shop, annual memberships for low-cost tech, business partnerships to fill technology needs, and an open community center. <sup>154</sup> Through the Welcome to Computers program, the organization offers digital skills training to low-income adults in the	x			x	x	x	x	x	x	

<sup>153</sup> "Emergency Assistance at the Eugene Service Station," Eugene Service Station. <https://www.svdp.us/services/emergency-services/eugene-service-station/>.

<sup>154</sup> "About," Free Geek, <https://www.freegeek.org/about>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
	Portland metro area and provides them with a free computer upon completion of the program. <sup>155</sup>										
Fresh Out Community Based Reentry Program	Fresh Out Community Based Reentry Program provides services and assistance for formerly incarcerated individuals to transition from prison to the community, focusing on the African American population. It provides transportation resources, job mentoring and assistance, clothing, and other support. <sup>156</sup>		x				x				
Goodwill Industries of Lane and South Coast Counties	Through its Job Connections program, Goodwill Industries of Lane and South Coast Counties offers online guidance with “resumes, applications, cover letters, networking strategies, interviewing techniques, community resource referrals and much more,” in addition to free, live	x		x	x		x	x	x		

<sup>155</sup> “Welcome to Computers,” Free Geek, <https://www.freegeek.org/welcometocomputers>.

<sup>156</sup> “Fresh Out Community Based Reentry Program,” Fresh Out CBRP, <https://freshoutcbrp.org/>.



Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
	and pre-recorded, online workshops. <sup>157</sup> Also offers support and career assistance services for veterans, with access to computers at its service centers. <sup>158</sup>										
Grant County CyberMill	The nonprofit has opened two community hubs in the county that provide internet access and resources to “encourage Adult Distance Learning, innovation, and entrepreneurship,” <sup>159</sup> with a third location planned. <sup>160</sup>							X			
Hispanic Metropolitan Chamber (HMC)	The Hispanic Metropolitan Chamber (HMC) received a grant from the City of Portland Digital Inclusion Fund in 2022 to provide small businesses and BIPOC entrepreneurs opportunities to improve					X	X	X	X		

<sup>157</sup> “Job Connections,” Goodwill Industries of Lane and South Coast Counties, <https://goodwill-oregon.org/job-connections/>.

<sup>158</sup> “Goodwill Veteran Services,” Goodwill Industries of Lane and South Coast Counties, <https://goodwill-oregon.org/veteranservices/>.

<sup>159</sup> Grant County CyberMill, <https://gccybermill.com/about/>.

<sup>160</sup> Christen McCurdy, “Logged On,” Oregon Business, February 2023, <http://www.journalgraphicsdigitalpublications.com/epubs/MEDIAMERICA/MediamericaOBMFeb2023/viewer/desktop/#page/28>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
	fundamental digital skills. <sup>161</sup> Through its Small Business Technical Assistance program, the HMC provides local businesses free technical aid in Spanish and English. <sup>162</sup>										
Hosea Youth Services Resource Center	Provides services, including computer and internet access, to young people ages 16-24 who are experiencing homelessness or otherwise impacted by life on the streets. <sup>163</sup>								X	X	
Jackson County Library	Offers computer access, lends mobile hotspots, supplies free wireless internet access, <sup>164</sup> and offers technology support in person or online. <sup>165</sup> Jackson County Library Services' DART (Direct Access to	X		X	X	X	X	X	X		

<sup>161</sup> "2022 Digital Inclusion Fund Grantees!" City of Portland, <https://www.portland.gov/bps/com-tech/digital-equity/news/2022/5/27/2022-digital-inclusion-fund-grantees>.

<sup>162</sup> "Small Business Technical Assistance," Hispanic Metropolitan Chamber, [hmccoregon.com/business/](http://hmccoregon.com/business/).

<sup>163</sup> "Drop-In Center," Hosea Youth Services, <https://www.hoseayouth.org/drop-in-center/>.

<sup>164</sup> "Computers & WiFi," Jackson County Library Services, <https://jcls.org/services/computers-wifi/>.

<sup>165</sup> "Computer & Tech Help," Jackson County Library, <https://jcls.org/resources/computer-tech-help/>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
	Resources and Technology) mobile library van provides Wi-Fi access and additional services. <sup>166</sup>										
Jefferson County School District 509J (JCSD 509J)	The Jefferson County School District operates an online K-12 “tuition-free” public school called 509J Online. The district will provide a Chromebook and hotspot for checkout to students without a computer and internet access. <sup>167</sup>				X		X	X	X	X	
Klamath County Public Library	The library offers “Kindle tablets, Chromebooks, Wi-Fi Hotspots and other devices” for loan <sup>168</sup> and maintains computers with internet access for the use of all residents of Klamath County. <sup>169</sup> The library also grants residents access to a	X		X	X	X	X	X	X	X	X

<sup>166</sup> “JCLS Announces Mobile Tech Van,” JCLS, June 17, 2021, <https://jcls.org/2021/06/17/jackson-county-library-services-announces-new-mobile-tech-van/>.

<sup>167</sup> “About 509J Online,” Jefferson County School District 509J, <https://www.jcsd.k12.or.us/schools/509j-online/about-509j-online/>.

<sup>168</sup> “Library of Things,” Klamath County Library, <https://klamathlibrary.org/libraryofthings>.

<sup>169</sup> “Acceptable Use of the Internet and Library Public Computers,” Klamath County Library, <https://klamathlibrary.org/acceptable-use-internet-and-library-public-computers>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
	resource called LearningExpress Library, which offers users digital skills tutorials and resources in Spanish. <sup>170</sup>										
Klamath Tribes	The Planning & Enterprise Department of the Klamath Tribes, consisting of the Klamath, Modoc, and Yahooskin Bands of Snake Indians, <sup>171</sup> offers access to computers for preparing and developing business plans. These computers are connected to the Small Business Administration and the Oregon Native American Entrepreneurial Network. <sup>172</sup> The Education & Employment department also subsidizes the cost of computer skills	x		x	x	x		x	x	x	x

<sup>170</sup> "Welcome to LearningExpress Library," EBSCO LearningExpress, <https://www.learningexpresshub.com/productengine/LELIndex.html#/learningexpresslibrary/libraryhome?AuthToken=3F2FF6E7-F4B0-44C3-9832-6E03AFFB1D69>.

<sup>171</sup> "The Klamath Tribes," Klamath County Library, <https://klamathlibrary.org/learn/klamath-tribes>.

<sup>172</sup> "Planning & Enterprise Department," The Klamath Tribes, <https://klamathtribes.org/planning-and-enterprise-department/>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
	courses. <sup>173</sup> The Klamath Tribes also recently received a \$500,000 Tribal Broadband Connectivity Program grant award for a project that includes “network design and engineering to support the future deployment of a fixed wireless backhaul and last mile fiber-optic network”—which will address the digital equity barrier posed by lack of broadband availability. <sup>174</sup>										
Linn-Benton Community College (LBCC)	LBCC offers free digital skills workshops to its students. <sup>175</sup>			x	x		x		x		

<sup>173</sup> “Klamath Tribes Social Services,” The Klamath Tribes, <https://klamathtribes.org/wp-content/uploads/2022/06/SSD-Website-Resources-1.pdf>.

<sup>174</sup> “Biden-Harris Administration Announces Over \$74.4 Million in Internet for All Grants to Tribal Lands,” NTIA, September 27, 2023, <https://www.ntia.gov/press-release/2023/biden-harris-administration-announces-over-744-million-internet-all-grants>.

<sup>175</sup> “Academic Coaching,” Linn-Benton Community College, [https://www.linnbenton.edu/student-services/library-tutoring-testing/learning-center/academic-coaching/college\\_digital\\_skills.php](https://www.linnbenton.edu/student-services/library-tutoring-testing/learning-center/academic-coaching/college_digital_skills.php).

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
Maggie Osgood Library	This library in the City of Lowell offers digital literacy learning for residents through DigitalLearn.org, a website launched by the Public Library Association which includes self-directed tutorials on basic skills like using a computer and searching online. <sup>176</sup> The library also offers access to Office 365 in its computer workstations. <sup>177</sup>	x		x	x	x	x	x	x		
Mt. Hood Cable Regulatory Commission (MHCRC)	The Community Technology Grants Program provides support for organizations, schools, libraries, and government agencies to create content for Multnomah County community access channels to address local needs such as education, workforce training, access to social services, and civic participation. <sup>178</sup>	x		x	x	x	x		x	x	

<sup>176</sup> "Digital Literacy," City of Lowell, <https://www.ci.lowell.or.us/library/page/digital-literacy>.

<sup>177</sup> "Digital Literacy," City of Lowell, <https://www.ci.lowell.or.us/library/page/digital-literacy>.

<sup>178</sup> "Community Technology Grants Program," City of Portland, <https://www.portland.gov/bps/com-tech/mhcr/tech-grants>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
Multnomah County Library	Has loaned Chromebooks and hotspots and offers digital skills classes. <sup>179</sup> Offers Northstar Digital Literacy training. <sup>180</sup> The mobile library brings library services to the mid-county area while some library locations are closed for construction. The mobile library features Wi-Fi access, tech help, and Digital Literacy Classes. <sup>181</sup>	x		x	x	x	x		x	x	
NewStart Reentry Resource Center	NewStart Reentry Resource Center supports recently incarcerated individuals in successfully reentering the community in Multnomah County. It assists in access to phone, email, fax, internet, and mail; support services funding; navigating community resources for housing, health, treatment, family reunification, and disability services; and housing referrals		x								

<sup>179</sup> "Chromebook and Hotspot lending application," Multnomah County Library, <https://multcolib.org/chromebook-and-hotspot-lending-application>; "Computer Help," Multnomah County Library, <https://multcolib.org/events/computer-help-0>.

<sup>180</sup> "Northstar Online Learning," Multnomah County Library, <https://multcolib.org/northstar-online-learning>.

<sup>181</sup> "The Mobile Library – a branch on wheels," Multnomah County Library, <https://multcolib.org/mobile-library-branch-wheels>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
	and emergency vouchers. <sup>182</sup>										
Oregon City Library	Hosts a public computing lab. <sup>183</sup>			X	X	X	X		X	X	
Oregon Corrections Enterprises (OCE)	OCE provides work experiences, including training and guidance, for incarcerated individuals in Oregon. This includes technology and certifications through digitally-oriented programs in CADD, graphic design, scanning, and website remediation. <sup>184</sup>		X								
Oregon Department of Corrections	Incarcerated individuals can use monitored video call and text message services. <sup>185</sup> Incarcerated individuals have access to legal information through a		X								

<sup>182</sup> "NewStart Reentry Resource Center," WorkSource Oregon SE Portland, <https://seworks.org/newstart/>.

<sup>183</sup> "Public Computers," Oregon City, <https://www.orcity.org/library/public-computers>.

<sup>184</sup> "OCE Digital Programs," Oregon Corrections Enterprises, <https://oce.oregon.gov/digital/>.

<sup>185</sup> "Electronic Communications," Oregon Department of Corrections, <https://www.oregon.gov/doc/contact-inmate/pages/electronic-communications.aspx>.



Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
	partnership with the State of Oregon Law Library. <sup>186</sup>										
Oregon Department of Education	The Department of Education oversees the education of hundreds of thousands of students across Oregon. It directly engages in digital and technological education for students and career and technical education, including programs in industrial and engineering systems and arts, information, and communications. The Department of Education and the Higher Education Coordinating Commission established a plan in 2023 to promote equitable access to computer science education. <sup>187</sup> It also partners with						x	x		x	

<sup>186</sup> Lynne Palombo, "Oregon's innovative approach to prison law libraries improves access, value, security," State of Oregon Law Library Legal Research Blog, December 3, 2019, <https://soll.libguides.com/blog/Oregons-new-approach-to-prison-law-libraries-improves-access-value-and-security>.

<sup>187</sup> "Computer Science Education Statewide Implementation Plan," Oregon Department of Education, November 2023, <https://www.oregon.gov/ode/schools-and-districts/grants/Documents/Preview%20Draft%20CS%20Education%20Statewide%20Implementation%20Plan.pdf>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
	assets listed here for digital equity and STEM education programs.										
Oregon Digital Safety Net (ORDSN)	An initiative of the nonprofit Charitable Partnership Fund that aims to combat “digital exclusion” among marginalized populations in Oregon, including individuals living in poverty or experiencing homelessness, transient workers, and individuals returning from incarceration, who may not be able to maintain the same phone number or physical address for extended periods and may rely on a mobile phone as their sole point of contact and communications. The program aims to provide “evergreen” (i.e., long-lasting) phone numbers and email addresses to enable access to social services, employment and housing	x		x	x	x	x	x	x		x

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
	opportunities, support networks, and more. <sup>188</sup>										
Oregon State University College of Health Hallie E. Ford Center for Healthy Children and Families	Through the Early Learning System Initiative (ELSI), the Oregon State University College of Health Hallie E. Ford Center for Healthy Children and Families is collaborating with community partners to identify existing resources and develop digital literacy training. <sup>189</sup>				X	X	X	X	X	X	X
Oregon State University Extension Service	Oregon State Extension has worked to promote the Affordable Connectivity Program in Oregon and to gather data on actual broadband speeds. <sup>190</sup> Oregon State University Extension runs several programs for young people, including	X		X	X	X	X	X	X	X	

<sup>188</sup> ORDSN, <https://www.ordsn.org/home>.

<sup>189</sup> "Digital Literacy," Oregon State University, <https://health.oregonstate.edu/elsi/training/digital-literacy>.

<sup>190</sup> "OSU Extension Service," Oregon State University, <https://extension.oregonstate.edu/broadband>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
	Juntos and 4H, including camps that offer STEAM education and other digital literacy efforts. <sup>191</sup>										
Oregon Workforce Partnership and East Cascades WORK Reentry Initiative	The Reentry Programs Project is a partnership between Oregon Workforce Partnership and the Oregon Department of Corrections and contracts with East Cascades WORKS to provide pre- and post-release job training services for incarcerated and formerly incarcerated people in the state’s 12 prisons, serving at least 900 individuals in the next three years. <sup>192</sup>		x								
Portland Community College	Portland Community College helps students, teachers, and staff stay up to date with current technologies and learn new computer skills through online			x	x	x	x		x		x

<sup>191</sup> "JUNTOS," OSU Extension Service, <https://extension.oregonstate.edu/video/juntos>; "Mariachi STEAM camp," OSU, [http://mariachisteam.com/wp-content/uploads/2023/05/Maraichi\\_STEAM\\_Camp\\_Packet-English.pdf](http://mariachisteam.com/wp-content/uploads/2023/05/Maraichi_STEAM_Camp_Packet-English.pdf); "What is 4H?," OSU Extension Service, <https://extension.oregonstate.edu/4h>.

<sup>192</sup> "Reentry Initiative," Oregon Workforce Partnership, <https://oregonworkforcepartnership.org/reentry/>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
	learning resources and Digital Navigators on campus. <sup>193</sup> Portland Community College also offers free, monthly digital skills workshops for both native English speakers and English-language learners. <sup>194</sup>										
Portland Opportunities Industrialization Center + Rosemary Anderson High School (POIC + RAHS)	POIC + RAHS provides education, outreach, mentoring, housing, employment training, and job placement for middle school and high school students and individuals rejoining the workforce after incarceration, including pre-apprenticeships, certifications, internships, and tech career prep. <sup>195</sup>		x			x	x		x	x	

<sup>193</sup> "Digital Literacy," Portland Community College, <https://www.pcc.edu/digital-literacy-support/>.

<sup>194</sup> "Computer Basics Workshops," Portland Community College, <https://www.pcc.edu/opportunity-center/jobs/computer-basics/>.

<sup>195</sup> "Employment Resources," POIC + RAHS, <https://www.portlandoic.org/employment-resources>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
Portland Public Schools	Utilizes a 1:1 take-home computer program for all students. <sup>196</sup>				X	X	X		X	X	
Portland State University Higher Education in Prison (HEP)	PSU's HEP program has the mission to expand quality higher education opportunities to incarcerated individuals at Coffee Creek Correctional Facility and to support students post-release. Offerings include degrees, interdisciplinary programs that include liberal arts, literacy, social science, health, science, and business. <sup>197</sup>		X								
The Rosewood Initiative	The Rosewood Initiative, a community organization in the Rosewood neighborhood of Portland and Gresham, partnered with the City of Portland to provide devices and no-cost Wi-Fi to over 1,000 residents during the Covid-19					X	X		X		

<sup>196</sup> "PPS 1:1," Portland Public Schools, <https://www.pps.net/Page/17529>.

<sup>197</sup> "Higher Education in Prison," Portland State University, <https://www.pdx.edu/liberal-arts-sciences/higher-education-prison>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
	<p>pandemic,<sup>198</sup> and received a 2022 grant from Portland’s Digital Inclusion Fund to develop a Digital Navigator program building on this work. Through the Digital Equity &amp; Literacy (DEL) program, the organization’s Community Organizers will partner with MetroEast Community Media and provide individual and small group training in Spanish, Nepali, Burmese, and Rohingya.<sup>199</sup> Other learning opportunities include a four-week course, culturally specific cohorts, and workshops.</p>										
Senior Planet from AARP	<p>Provides free technology classes and other services for people aged 60 and older. A collaboration between AARP and Older Adults Technology Services (OATS).<sup>200</sup> Senior Planet Trainers also staff</p>	x									

<sup>198</sup> “Community Resilience,” The Rosewood Initiative, <https://www.rosewoodinitiative.org/community-resilience>.

<sup>199</sup> “2022 Digital Inclusion Fund Grantees!” City of Portland, <https://www.portland.gov/bps/com-tech/digital-equity/news/2022/5/27/2022-digital-inclusion-fund-grantees>.

<sup>200</sup> “Welcome to Senior Planet,” Senior Planet, <https://seniorplanet.org/>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
	a National Tech Hotline, 888-713-3495, from 6am to 2pm PDT, Monday through Friday.										
Sheridan AllPrep Academy	"Empowering families by creating an online learning community that offers academic and social support while preparing students for a successful transition to post-secondary and the world of work." <sup>201</sup>				x	x	x	x	x	x	x
Sherwood Public Library	The Sherwood Public Library offers its patrons basic technological assistance in both Spanish and English. <sup>202</sup>	x		x	x	x	x				
South Wasco County School District	The rural district, comprised of two schools that are developed from many neighboring small communities, implemented digital learning initiatives including offering tablets to every student				x	x	x	x	x	x	

<sup>201</sup> Sheridan AllPrep Academy, <https://sheridanallprep.org/>.

<sup>202</sup> "Diversidad, igualdad, inclusión y accesibilidad," City of Sherwood, Oregon, <https://www.sherwoodoregon.gov/library/page/diversidad-igualdad-inclusi%C3%B3n-y-accesibilidad>; "Tech Help," City of Sherwood, Oregon, <https://www.sherwoodoregon.gov/library/webform/tech-help>.



Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
	in grades 3-8 and installing interactive whiteboards in classrooms. The district provides training to teachers on best technology practices. <sup>203</sup>										
Southwestern Oregon Community College (SWOCC)	The SWOCC library operates a publicly available computer lab and offers laptops for loan to students. <sup>204</sup>			x	x		x	x	x		
State Library of Oregon	Through the Digital Inclusion Cohort for Public Libraries, a peer learning cohort, the State Library offers support and training to library staff on designing digital inclusion programs and services. <sup>205</sup> The Library also offered up to 10 Digital Equity Grants worth \$5,000 in 2023 to libraries who participated in a cohort to implement	x		x	x	x	x	x	x	x	x

<sup>203</sup> "Wanted: A Bandwidth Upgrade", Office of Educational Technology, <https://tech.ed.gov/stories/wanted-a-bandwidth-upgrade/>.

<sup>204</sup> "Library," Southwestern Oregon Community College, <https://www.socc.edu/resources/library/>.

<sup>205</sup> "Digital Inclusion Cohort for Public Libraries", State Library of Oregon, <https://libguides.osl.state.or.us/conted/edgecohorts2023>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
	digital inclusion programs and services for underserved communities. <sup>206</sup> Each year, the State Library conducts the Public Library Statistical survey to confirm libraries' continued compliance with minimum conditions as well as gather other types of data on library operations and offered data to OBO regarding internet access at libraries, for example. According to the State Library, 216 neighborhoods and communities across the state have at least one access point for free internet access, with wireless access available 24/7 at two-thirds of library facilities and into the evening for nearly all the remaining locations.										
U.S. Department	Nationwide and in Oregon, the VA is supporting telehealth services. <sup>207</sup> Through	x		x	x	x	x	x	x		x

<sup>206</sup> "2023 Digital Equity Grant", State Library of Oregon, <https://libguides.osl.state.or.us/lstagrants/digitalequity>.

<sup>207</sup> "Welcome to VA Telehealth Services," U.S. Department of Veterans Affairs, <https://telehealth.va.gov/>.

Asset name	Description	Aging (older adults)	Incarcerated	Veterans	Disabilities	English learner/ low literacy	Racial/ethnic minority	Rural	Low-income	Youth	Tribal
of Veterans Affairs (VA)	the VA Digital Divide Consult program, <sup>208</sup> the VA helps veterans who do not have internet service, or an internet-connected device get the access they need for telehealth care.										
Willamette ESD	Willamette ESD provides approximately 61 services related to Special Education, Technology, School Improvement, and Administrative Services to school districts.				x	x	x	x	x	x	
YourTechQ	A youth-led nonprofit organization that provides free computer classes to older adults. <sup>209</sup>	x									

<sup>208</sup> "Bridging the Digital Divide," U.S. Department of Veterans Affairs, <https://telehealth.va.gov/digital-divide>.

<sup>209</sup> YourTechQ, <https://www.yourtechq.org/>.

### 3.1.2 Existing digital equity plans

In addition to the state plans discussed in Section 4, some tribal, regional, and municipal entities have incorporated broadband and/or digital equity elements into their strategic planning. These plans, which have informed the preparation of this Plan, include:

- **Burns Paiute Tribe:** The Tribe’s Community Strategic Plan<sup>210</sup> sets a goal, Goal 3, to document current levels of need and explore options to provide low-cost community broadband so that all community members have broadband access. Namely to “expand and improve Tribal infrastructure—including buildings, equipment, and technology—to ensure our community can grow and prosper.”
- **Clatsop County:** Under Policy C of the “Clatsop County Comprehensive Plan: Clatsop 2040,” “Telecommunications is a critical component of infrastructure and efforts to further develop broadband throughout the county shall be considered a priority.”<sup>211</sup>
- **Crook County Library:** The Crook County Library Strategic Plan, 2019-24<sup>212</sup> states that a survey found that, “One of the most common needs identified was more technology education, as navigating the modern world increasingly requires digital skills.” Also, the plan lists as one priority, “Renovate public computer lab to be [Americans with Disabilities Act] ADA accessible.”
- **Josephine Community Library:** The library’s goals, according to its 2021-2024 Strategic Plan,<sup>213</sup> include digital skills training, providing access to the internet, and offering lifelong learning for teens and adults.

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<sup>210</sup> “Burns Paiute Tribe 2022-26 Strategic Plan,” Burns Paiute Tribe, September 28, 2022, [https://burnspaiute-nsn.gov/wp-content/uploads/2022/10/Burns-Paiute-Tribe\\_Strategic-Plan-FINAL-Approved-by-Council-9.28.2022.pdf](https://burnspaiute-nsn.gov/wp-content/uploads/2022/10/Burns-Paiute-Tribe_Strategic-Plan-FINAL-Approved-by-Council-9.28.2022.pdf), p.22.

<sup>211</sup> “Clatsop County Comprehensive Plan: Clatsop 2040,” Clatsop County, <https://www.clatsopcounty.gov/media/11901>.

<sup>212</sup> “Strategic Plan,” Crook County Library, <https://www.crooklib.org/library/page/strategic-plan>; “Strategy Plan 2019-24,” Crook County Library, [https://www.crooklib.org/sites/default/files/fileattachments/library/page/8684/strategic\\_plan\\_2019-24.pdf](https://www.crooklib.org/sites/default/files/fileattachments/library/page/8684/strategic_plan_2019-24.pdf).

<sup>213</sup> “2021-2024 Strategic Plan,” Josephine Community Library, [https://josephinelibrary.org/wp-content/uploads/2021/08/JCLD-Strat-Plan\\_21-24\\_d.pdf](https://josephinelibrary.org/wp-content/uploads/2021/08/JCLD-Strat-Plan_21-24_d.pdf).

- **City of Portland and Multnomah County working together with the Coalition of Digital Equity (CODE), formerly the Digital Inclusion Network (DIN):** The Digital Equity Action Plan<sup>214</sup> has five key goals:
  - Access to affordable high-speed internet and devices for those in need.
  - Training and support to ensure that everyone has the skills to use digital technology to enhance their quality of life.
  - Empower community partners to bridge the digital divide through funding, coordination, training, and staff resources.
  - Create opportunities for jobs in the digital economy for underserved populations.
  - Build a policy framework that supports digital equity and meaningful internet adoption, leading to better community outcomes.
- **Tillamook County Library:** The library's goals, according to its 2023-2027 Strategic Plan,<sup>215</sup> include, "Provide technology tools and resources to bridge the digital divide and increase digital literacy."
- **City of Eugene:** The City of Eugene's Community Broadband Strategic Plan (2013) set a goal to close the City's digital divide by "tak[ing] actions towards universal digital literacy and access to affordable, robust broadband connections."<sup>216</sup> In 2021, the City established an Equity Panel composed of representatives from organizations serving covered populations<sup>217</sup> to advise on its work across multiple sectors.

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<sup>214</sup> "Digital Equity Action Plan," Portland, April 2016, <https://www.portland.gov/oct/digital-equity-strategic-initiatives/documents/digital-equity-action-plan/download>; "About the Digital Equity Action Plan," Portland, <https://www.portland.gov/bps/com-tech/digital-equity/deap/digital-equity-action-plan>.

<sup>215</sup> "2023-2027 Strategic Plan," Tillamook County Library, [https://www.tillamook.org/sites/default/files/fileattachments/library/page/27588/tcl\\_strategic\\_plan.pdf](https://www.tillamook.org/sites/default/files/fileattachments/library/page/27588/tcl_strategic_plan.pdf); "Planning for the Future," Tillamook County Library, <https://www.tillamook.org/library/page/planning-future>.

<sup>216</sup> "City of Eugene Community Broadband Strategic Plan," City of Eugene, August 27, 2013, <https://www.eugene-or.gov/DocumentCenter/View/19699/City-of-Eugene-Community-Broadband-Strategic-Plan>.

<sup>217</sup> "2021 Eugene Equity Panel Update September 2021," City of Eugene, <https://www.eugene-or.gov/DocumentCenter/View/63819/City-of-Eugen-Equity-Panel-Update-Sept-2021>.

- **Oregon’s Kitchen Table (OKT) and AGE+:** OKT, a program of the National Policy Consensus Center in the College of Urban and Public Affairs at Portland State University, and the nonprofit AGE+ conducted community engagements in all of Oregon’s counties in 2021-2022 to inform the development of a potential Comprehensive Plan for Aging in Oregon. The summary report identifies “internet and computer literacy” as a resource to support Oregonians in aging by enabling older adults to access relevant information.<sup>218</sup>

Although several local strategic plans mention diversity, equity, and inclusion (DEI), such as the “City of Albany, Oregon, Strategic Plan, FY 2022 – FY 2026,”<sup>219</sup> OBO’s research and outreach did not identify any other tribal or local municipal digital equity plans other than that of the City of Portland (working with Multnomah County), cited above.

The plans listed above were reviewed and have informed the State’s approach as building blocks to this Digital Equity Plan. This Plan goes beyond many of the above plans in its scope, and as such, it breaks new ground while still drawing from and to a certain extent aligns to the principles of past plans.

OBO noted multiple recurring themes in the above plans that clearly align with the state goals to address barriers to digital equity including access to affordable and reliable broadband internet, the importance of internet-enabled computing devices, digital skills and digital literacy—inclusive of not only foundational digital skills but further the importance of privacy and cybersecurity knowledge, access to inclusive and assistive technologies and that plain language and language access play an essential role in ensuring individuals are able to meaningfully access the internet. It is further clear that tribal, local, municipal, and nonprofit communities recognize the importance of the inclusion of diverse communities in planning processes and the strategic design of goals and outcomes, and the link between access to

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<sup>218</sup> “Oregon’s Kitchen Table – Community Engagement to Inform the Building of a Comprehensive Plan for Aging in Oregon,” OKT, March 2022, <https://www.oregonskitchentable.org/sites/default/files/results/okt-community-engagement-report-age%2B.pdf>.

<sup>219</sup> “City of Albany, Oregon Strategic Plan, FY 2022 – FY 2026,” City of Albany, <https://www.cityofalbany.net/images/stories/citymanager/coa-strategicplan.pdf>; “Strategic Plan,” City of Albany, <https://www.cityofalbany.net/strategic-plan>.

affordable broadband internet and educational, health, and civic outcomes as evidenced in some of the plans. In their priorities, goals, and outcomes these plans both individually and collectively align with the state goals set forth in this Plan.

Of note: the Burns Paiute Tribe's goal toward affordable broadband internet is accompanied by the strategy to "expand and improve Tribal infrastructure—including buildings, equipment, and technology—to ensure our community can grow and prosper." Further noted is the Paiute tribe's goal to "improve the quality of life for all tribal members through childcare, K-12 and higher education investments, expanding healthcare services on tribal land, affordable housing, and increasing economic opportunities." The broadband internet expansion strategy goes hand in hand with the tribe's goals of improving overall quality of life via the expansion of other public services and investments.<sup>220</sup>

The Clatsop County Comprehensive Plan is broad in scope of which goals span from inclusive public involvement and economic development wherein Policy C prioritizes efforts to further develop broadband infrastructure throughout the county as part of economic development goals and further links (in Policy F) in particular start-ups in as part of a strategy to diversify the county's economy.

In its introductory section, the Josephine County Community Library 2021-2024 Strategic Plan recognition of diverse populations residing in the county—such as citing its diverse community members and that, "an attention to diversity" lens had been applied to the creation of the plan but further ensured diverse perspectives contributed of which are reflected in the overall goal toward "bringing opportunity, literacy, and connectivity to diverse patrons." The Strategic Plan focuses on four primary themes including Basic Needs, Diverse Perspectives, Civic Engagement, and Library Systems and Structures and include corresponding goals and objectives, such as increasing multilingual materials, developing a civics program so that "residents have the information and learning opportunities they need to participate in local, state, and national issues and decision making" and notes digital

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<sup>220</sup> "Burns Paiute Tribe 2022-26 Strategic Plan," Burns Paiute Tribe, September 28, 2022, [https://burnspaiute-nsn.gov/wp-content/uploads/2022/10/Burns-Paiute-Tribe\\_Strategic-Plan-FINAL-Approved-by-Council-9.28.2022.pdf](https://burnspaiute-nsn.gov/wp-content/uploads/2022/10/Burns-Paiute-Tribe_Strategic-Plan-FINAL-Approved-by-Council-9.28.2022.pdf), p.22.

literacy as a means by which to increase civic engagement.<sup>221</sup> Tillamook County Library additionally includes the goal to “expand library services to Spanish-speakers, school-age children, and seniors.” The library is further invested, through its Lifelong Learning goal, to develop an adult literacy program, and “to support learning with technology” through increased “access to digital materials,” as well as to “provide technology tools and resources to bridge the digital divide and increase digital literacy.”<sup>222</sup> The goals set forth in the Crook County Library Strategic Plan focuses on the goals of “serving underserved communities such as older adults, people with disabilities, and Latinx communities through multiple initiatives aimed at increasing library use by covered populations.” Other goals include ensuring people with disabilities are able to access the library’s core services including ADA-accessible public computer labs, installing computers that are inclusive of assistive technology and outreach to homebound individuals. The library further aims to ensure that digital spaces are accessible and inclusive by launching an accessible website.<sup>223</sup>

Though the City of Eugene first published its Community Broadband Strategic Plan in 2013, the planning process cites contributions from a broad range of sectors and stakeholders involved in the planning process, including economic opportunity, the education and education technology sector, inclusion and adoption (including nonprofit organizations, health and human services and human rights agencies, K-12 and higher education entities, IPSs and more) in the development of Eugene’s Broadband Strategic Plan which includes goals to “close the digital divide in our communities,” and further notes “universal digital literacy and access to affordable, robust broadband connections.”<sup>224</sup> This strategic plan is the result of an inclusive

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<sup>221</sup> “2021-2024 Strategic Plan,” Josephine Community Library, [https://josephinelibrary.org/wp-content/uploads/2021/08/JCLD-Strat-Plan\\_21-24\\_d.pdf](https://josephinelibrary.org/wp-content/uploads/2021/08/JCLD-Strat-Plan_21-24_d.pdf).

<sup>222</sup> “2023-2027 Strategic Plan,” Tillamook County Library, [https://www.tillabook.org/sites/default/files/fileattachments/library/page/27588/tcl\\_strategic\\_plan.pdf](https://www.tillabook.org/sites/default/files/fileattachments/library/page/27588/tcl_strategic_plan.pdf); “Planning for the Future,” Tillamook County Library, <https://www.tillabook.org/library/page/planning-future>.

<sup>223</sup> “Strategic Plan,” Crook County Library, <https://www.crooklib.org/library/page/strategic-plan>; “Strategy Plan 2019-24,” Crook County Library, [https://www.crooklib.org/sites/default/files/fileattachments/library/page/8684/strategic\\_plan\\_2019-24.pdf](https://www.crooklib.org/sites/default/files/fileattachments/library/page/8684/strategic_plan_2019-24.pdf).

<sup>224</sup> “City of Eugene Community Broadband Strategic Plan,” City of Eugene, August 27, 2013, <https://www.eugene-or.gov/DocumentCenter/View/19699/City-of-Eugene-Community-Broadband-Strategic-Plan>.



planning process, lists goals and strategies specific to Eugene’s communities; and while it is uncertain of the extent to which these have been implemented, the City of Eugene has once again taken up these efforts by establishing an Equity Panel comprised primarily of local covered population serving nonprofit organizations. Similarly, Multnomah County together with the City of Portland drafted the Digital Equity Action Plan in 2016 based on the work of the Digital Inclusion Network—a coalition of digital equity stakeholders and the precursor to CODE (Coalition of Digital Equity). The plan’s goal is “to bridge the digital divide for excluded members of our community with affordable access, training, and tools,” and aims to address “access and [digital] adoption gaps for excluded and disadvantaged communities, specifically with those with low incomes, older adults, communities of color, people with disabilities and those with limited English proficiency.”<sup>225</sup>

AGE+ together with Oregon’s Kitchen Table and Portland State University collaborated on a potential Comprehensive Plan for older adults. This report is community-informed through a series of regional roundtables (inclusive of rural communities)—held in Tillamook County, Jackson County, the Dalles / Wasco County, and Jefferson County. The study highlights access to information broadly for older adults. Study participants noted either/or lack of access to the internet or limited skills with computers and the internet,” as challenges to finding information. Other noted challenges include complex information that is “overwhelming and confusing” and “internet scam” concerns in addition to language barriers and internet and computer literacy.<sup>226</sup>

As is clear in the close review and discussion of these plans these themes align with the goals set forth in this state Plan (see the above summaries of tribal, municipal, regional plans for an account of which plans include each theme). In addition, the strategic plans of libraries encouraged OBO to reemphasize the vital role libraries play as a trusted local partner in digital equity work. Consistent with these previous

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<sup>225</sup> “Digital Equity Action Plan,” Portland, April 2016, <https://www.portland.gov/oct/digital-equity-strategic-initiatives/documents/digital-equity-action-plan/download>; “About the Digital Equity Action Plan,” Portland, <https://www.portland.gov/bps/com-tech/digital-equity/deap/digital-equity-action-plan>.

<sup>226</sup> “Oregon’s Kitchen Table – Community Engagement to Inform the Building of a Comprehensive Plan for Aging in Oregon,” OKT, March 2022, <https://www.oregonskitchentable.org/sites/default/files/results/okt-community-engagement-report-age%2B.pdf>.

efforts for identifying and incorporating local plans, OBO aims to identify any other existing tribal, regional, and municipal strategic and/or digital equity plans. Through its formal tribal consultations and ongoing engagement with tribal, regional, and municipal partners during the implementation phase, OBO will seek to incorporate any additional plans into its Digital Equity Capacity Grant Program as well as future iterations of this Plan. This continued engagement may include meeting with partners to provide subject matter expertise and community-centered digital equity best practice guidance in group informational meetings or formal or informal consultations, consistent with tribal consultation policies and guidelines.

Although it does not fit the category of tribal, regional, or municipal plans, on the state level, the Oregon Department of Education and Higher Education Coordinating Commission developed a Computer Science Education Statewide Implementation Plan that can be seen as a companion to many of this Plan's goals and activities.<sup>227</sup> It establishes goals, strategies, and implementation activities for making computer science available to public school students on an equitable basis and basing computer science education on a guiding and practical framework for students, including requiring public schools to offer opportunities to learn computer science, establishing systems to recruit, support, and retain computer science teachers, fund computer science, align with postsecondary and career options, and expand participation. The Plan was made in response to direction from former Governor Kate Brown, who also signed a National Governors Association compact to expand K-12 computer science education.<sup>228</sup>

The state is committed to ongoing engagement with tribal, local, and municipal entities to determine if such plans are available or forthcoming. The state seeks to align the state Plan by providing requisite resources and updating the Plan to reflect tribal and local digital equity needs, accordingly.

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<sup>227</sup> "Computer Science Education Statewide Implementation Plan," Oregon Department of Education, November 2023, <https://www.oregon.gov/ode/schools-and-districts/grants/Documents/Preview%20Draft%20CS%20Education%20Statewide%20Implementation%20Plan.pdf>.

<sup>228</sup> "2021-2022 Chairman's Initiative: Computer Science Education," National Governors Association, <https://www.nga.org/computerscience/>.

### 3.1.3 Existing digital equity programs

Table 4 lists programs and resources (state and federal) related to digital equity in Oregon, including OBO’s two significant grant programs (the Broadband Deployment Program and the Broadband Technical Assistance Program)—both of which focus on unserved and underserved areas. OBO has identified gap areas which include programs specifically for covered populations including people with disabilities and incarcerated individuals.

**Table 4: Existing digital equity programs**

Program name	Description
OBO Broadband Deployment Program (BDP)	Recently approved by the U.S. Treasury, <sup>229</sup> this OBO grant program will utilize the state’s full allocation of American Rescue Plan Act (ARPA) Capital Projects Fund (CPF) funding (\$156,795,418) to support broadband infrastructure projects that deliver reliable 100/100 Mbps service to locations lacking reliable 100/20 Mbps service. Thousands of Oregon households will get access to high-speed internet. <sup>230</sup> To be eligible for BDP funding, wireline and wireless internet service providers must participate in the Federal Communications Commission’s Affordable Connectivity Program (ACP). <sup>231</sup> The BDP prioritizes projects that address affordability, digital equity, and close the digital divide at a

<sup>229</sup> “Treasury Department Announces Approval of Federal Funds to Connect Over 17,000 Oregon Homes and Businesses to Affordable, High-Speed Internet as Part of President Biden’s Investing in America Agenda,” U.S. Treasury, Press Release, September 27, 2023, <https://home.treasury.gov/news/press-releases/jy1767>. For a status tracker of OBO’s current programs, see [https://www.oregon.gov/biz/programs/Oregon\\_Broadband\\_Office/Pages/2021-22\\_Oregon\\_Broadband\\_Office\\_Priorities.aspx](https://www.oregon.gov/biz/programs/Oregon_Broadband_Office/Pages/2021-22_Oregon_Broadband_Office_Priorities.aspx).

<sup>230</sup> “Draft Rules for Broadband Programs,” OBO, [https://www.oregon.gov/biz/Publications/Broadband/Broadband\\_Rules\\_Rollout.pdf](https://www.oregon.gov/biz/Publications/Broadband/Broadband_Rules_Rollout.pdf). OBO is located within Business Oregon, which is the Eligible Entity.

<sup>231</sup> “Applicant’s Handbook & Program Guidelines (“CPF Handbook”) DRAFT – subject to 2023 legislation,” Business Oregon, [https://www.oregon.gov/biz/Publications/Broadband/Draft\\_ARPA\\_CP\\_BDP\\_Handbook.pdf](https://www.oregon.gov/biz/Publications/Broadband/Draft_ARPA_CP_BDP_Handbook.pdf).

Program name	Description
	regional scale, among its eight priorities. <sup>232</sup> Thus, this program will enhance internet affordability across Oregon by ensuring that broadband networks funded by this program participate in the ACP and address digital equity.
OBO Broadband Technical Assistance Program (BTAP)	Currently in development, this program, supported by the Oregon Broadband Fund, will award grants to assist eligible applicants <sup>233</sup> with strategic planning, conducting feasibility studies or business plans, and preliminary engineering to develop strategies to serve unserved and underserved areas.
Connecting Oregon Schools Fund	Established in HB 2173 (2019), <sup>234</sup> moneys in the fund are continuously appropriated to the Department of Education for the purpose of providing matching funds for federal moneys received by school districts, education service districts, public charter schools or a consortium that is any combination of school districts, education service districts and public charter schools for the purpose of providing broadband access to eligible education facilities in the state. <sup>235</sup>
Oregon Broadband Map <sup>236</sup>	OBO maintains an online interactive map of broadband availability in the state, created in

<sup>232</sup> “Applicant’s Handbook & Program Guidelines (“CPF Handbook”) DRAFT – subject to 2023 legislation,” Business Oregon,

[https://www.oregon.gov/biz/Publications/Broadband/Draft\\_ARPA\\_CP\\_BDP\\_Handbook.pdf](https://www.oregon.gov/biz/Publications/Broadband/Draft_ARPA_CP_BDP_Handbook.pdf).

<sup>233</sup> Eligible applicants include municipalities, electric cooperatives, nonprofits, municipal affiliates, and the nine federally recognized tribes in Oregon; private for-profit providers are ineligible but may partner with eligible applicants.

<sup>234</sup> “HB 2173,” Oregon Legislature, <https://olis.oregonlegislature.gov/liz/2019R1/Downloads/MeasureDocument/HB2173>.

<sup>235</sup> ORS 276A.424, “Connecting Oregon Schools Fund,” Oregon Revised Statutes, [https://oregon.public.law/statutes/ors\\_276a.424](https://oregon.public.law/statutes/ors_276a.424).

<sup>236</sup> Oregon Broadband Map, <https://geo.maps.arcgis.com/apps/webappviewer/index.html?id=002a3eee6efb48a1868b4494168d730a>.

Program name	Description
	<p>2009 with a new version launched in 2019.<sup>237</sup> Data layers currently include service providers, broadband technologies, service speeds, service availability as reported to the FCC by providers, population density, and anchor institutions.<sup>238</sup> Oregon has received funding from the U.S. Economic Development Administration. With this funding, and OBO's partnership with Oregon State University, the map will be upgraded to include an application portal, dig once map, and data submission portal. The map has several layers of information that will enable OBO to support Oregon's Digital Equity Plan. New layers added as part of the upgrade include a map of the maximum download speed available, a layer showing locations that lack service, and separate layers for each of the following categories of community anchor institution: community support (government), community support (non-government), library, hospital, fire station, law enforcement, school (K-12), higher education, inclusive of a covered population layer.</p>
<p>City of Portland, Bureau of Planning and Sustainability, Community Technology group</p>	<p>City of Portland, Bureau of Planning and Sustainability promotes investment into communications technology to increase equity for the whole community.<sup>239</sup> Utilizing \$3.5 million in ARPA funding, the City launched the Digital Divide Response project in 2021 to address internet access and device needs for "Black, Indigenous, People of Color (BIPOC), older adults, LGBTQIA+, immigrants and</p>

<sup>237</sup> "Business Oregon Broadband Timeline," OBO, [https://www.oregon.gov/biz/programs/Oregon\\_Broadband\\_Office/Pages/timeline.aspx](https://www.oregon.gov/biz/programs/Oregon_Broadband_Office/Pages/timeline.aspx).

<sup>238</sup> Oregon Broadband Office Strategic Plan, OBO, January 30, 2020, <https://www.oregon.gov/biz/Publications/BroadbandStratPlan2020.pdf>.

<sup>239</sup> "Digital Equity Strategic Initiatives Program," City of Portland, <https://www.portland.gov/bps/com-tech/digital-equity>.

Program name	Description
	refugees, houseless or housing insecure, foster youth, domestic violence survivors, people impacted by incarceration, people with disabilities, and those living in poverty (priority populations) who face barriers to being digitally connected." <sup>240</sup>
Rural Capacity Fund Program of the Columbia Pacific Economic Development District	The Rural Capacity Fund Program <sup>241</sup> provides development funds for several purposes including for workforce development.
Grant to the Burns Paiute Tribe under the Tribal Broadband Connectivity Program	A grant of \$499,728 <sup>242</sup> will fund the construction of a 195-foot self-sustaining communications tower to serve 20 Native American community anchor institutions and 60 unserved Native American households.
Grant to the Confederated Tribes of Siletz Indians under the Tribal Broadband Connectivity Program	A grant of \$500,000 <sup>243</sup> will fund network planning activities for broadband infrastructure connection, construction, and service deployment for currently unserved Native American households, businesses, and community anchor institutions in and around reservation land located in Lincoln County, Oregon.
Grant to the Confederated Tribes of the Grand Ronde Community of Oregon under the Tribal Broadband Connectivity Program	A grant of \$500,000 <sup>244</sup> will fund the construction of a fixed wireless network delivering 100/20 Mbps to 200 unserved Native American households.

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<sup>240</sup> "Digital Divide Response Project Overview," City of Portland, <https://www.portland.gov/united/digital-divide-response>.

<sup>241</sup> "Rural Capacity Fund Program," Columbia Pacific Economic Development District, <https://nworegon.org/regional-economic-development/rural-capacity-fund/>.

<sup>242</sup> "Burns Paiute Tribe," Internet For All, <https://internetforall.gov/funding-recipients/burns-paiute-tribe>.

<sup>243</sup> "Confederated Tribes of Siletz Indians," Internet For All, <https://internetforall.gov/funding-recipients/confederated-tribes-siletz-indians>.

<sup>244</sup> "Confederated Tribes of the Grand Ronde Community of Oregon," Internet For All, <https://internetforall.gov/funding-recipients/confederated-tribes-grand-ronde-community-oregon>.

Program name	Description
Grant to the Confederated Tribes of the Umatilla Reservation under the Tribal Broadband Connectivity Program	A grant of \$15,504,758 <sup>245</sup> will fund the construction of fiber to deliver 100/100 Mbps broadband to 342 unserved tribal households.
Grant to the Confederated Tribes of Warm Springs under the Tribal Broadband Connectivity Program	A grant of \$6,988,050 <sup>246</sup> will fund the construction of fiber to deliver speeds of between 25/3 Mbps and 1000/50 Mbps to 936 unserved tribal households, 21 unserved tribal businesses, and five unserved tribal community anchor institutions.
Grant to the Cow Creek Band of Umpqua Tribe of Indians under the Tribal Broadband Connectivity Program	A grant of \$482,325 <sup>247</sup> to utilize 2.5 GHz spectrum to create a fixed wireless network that will deliver 25/3 Mbps service to all residents, businesses, and anchor institutions in the community.
Covid-19 Chromebook Distribution Program funded by Indian Housing Block Grant (IHBG) from the U.S. Department of Housing and Urban Development	The Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians used IHBG funding to deliver Google Chromebook devices to those who needed them for such purposes as distance learning and telehealth. <sup>248</sup>
Spectrum licenses under the FCC's 2.5 GHz Rural Tribal Priority Window	The FCC granted licenses to use the 2.5 GHz band to close the digital divide and to provide broadband and other advanced wireless services to rural tribal communities to the following Oregon tribes: Confederated Tribes of the Grand Ronde Community of Oregon; Confederated Tribes of the Umatilla Indian Reservation; Coquille Indian Tribe; Cow Creek

<sup>245</sup> "Confederated Tribes of the Umatilla Reservation," Internet For All,

<https://internetforall.gov/funding-recipients/confederated-tribes-umatilla-reservation>.

<sup>246</sup> "Confederated Tribes of Warm Springs," Internet For All, <https://internetforall.gov/funding-recipients/confederated-tribes-warm-springs>.

<sup>247</sup> "Cow Creek Band of Umpqua Tribe of Indians," Internet for All, <https://internetforall.gov/funding-recipients/cow-creek-band-umpqua-tribe-indians>.

<sup>248</sup> Margan Gaines, "IHBG Covid-19 Chrome Book Distribution Program," Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians, February 24, 2021, <https://ctclusi.org/ihbg-covid-19-chrome-book-distribution-program/>.

Program name	Description
	Band of Umpqua Tribe of Indians; Warm Springs Telecommunications Company; and Confederated Tribes of the Coos, Lower Umpqua and Siuslaw Indians. <sup>249</sup>
Cayuse Native Solutions	With funding from the National Digital Inclusion Alliance, Cayuse Native Solutions operates its Digital Inclusion program which aims to facilitate the growth of digital skills, “distribute[s] technology equipment,” and employs a digital navigator for the Confederated Tribes of the Umatilla Indian Reservation. <sup>250</sup>
2022-2024 Culturally Specific After School Learning (CASL) Grants of the Oregon Department of Education (ODE)	<p>Culturally Specific After School Learning (CASL) Grants<sup>251</sup> offered by the Oregon Department of Education’s (ODE) Office of Equity, Diversity, and Inclusion (OEDI) offer funding to eligible organizations for programming anchored in the following essential pillars of practice:</p> <ol style="list-style-type: none"> <li>1. Addressing unfinished learning through academic and mental health support,</li> <li>2. Culturally affirming practices, including cultural identity development,</li> <li>3. Leadership and self-advocacy skills, and</li> <li>4. Giving back to the community.</li> </ol> <p>Applicants must be either community-based organizations (CBOs), culturally specific organizations, school districts, charter schools,</p>

<sup>249</sup> “FCC Grants First Licenses in 2.5 GHz Rural Tribal Priority Window,” FCC, October 23, 2020, <https://www.fcc.gov/document/fcc-grants-first-licenses-25-ghz-rural-tribal-priority-window> (for grantees by state, see <https://docs.fcc.gov/public/attachments/DOC-367726A3.pdf>); “FCC Grants Additional 2.5 GHz Rural Tribal Priority Window Licenses,” FCC, December 30, 2020, <https://www.fcc.gov/document/fcc-grants-additional-25-ghz-rural-tribal-priority-window-licenses> (for grantees by state, see <https://docs.fcc.gov/public/attachments/DOC-369004A3.pdf>).

<sup>250</sup> “Cayuse will boost digital skills on Umatilla Rez!” Cayuse Native Solutions, <https://www.cayusenativesolutions.com/post/cayuse-will-boost-digital-skills-on-umatilla-rez>.

<sup>251</sup> “Culturally Specific After School Learning (CSASL) Grants,” ODE, [https://www.oregon.gov/ode/students-and-family/equity/CulturallySpecificAfterSchoolLearning/Pages/Culturally-Specific-After-School-Learning-\(CSASL\)-Grants.aspx](https://www.oregon.gov/ode/students-and-family/equity/CulturallySpecificAfterSchoolLearning/Pages/Culturally-Specific-After-School-Learning-(CSASL)-Grants.aspx).



Program name	Description
	early learning hubs or early learning providers, tribal governments, education service districts (ESDs), and post-secondary institutions of education or a partnership of these entities. Student participation in these programs is voluntary.
ODE’s Oregon Technology Access Program award to Douglas Education Service District for technology for children with disabilities	The Oregon Technology Access Program (OTAP) <sup>252</sup> provides training, information, technical assistance, and resources regarding the uses of technology for children with disabilities. Online resources include educational materials. Funding is provided by the U.S. Department of Education via the Individuals with Disabilities Education Act (IDEA). <sup>253</sup>
Adaptive Devices class and other programs offered by the Oregon Commission for the Blind	The Oregon Commission for the Blind offers an adaptive devices class <sup>254</sup> that teaches students to use VoiceOver, Apple’s built-in accessibility answer for blind or visually impaired individuals. The Commission has other resources for the blind and visually impaired, including the Orientation and Career Center for the Blind (OCCB), a free residential program that teaches basic skills. The Commission also teaches reading braille, offers a class in Living With Blindness (LWB) class, and offers communication/socialization training.
Jobs for Veterans State Grant (JVSG)	A Jobs for Veterans State Grant (JVSG), part of \$2,518,504, via the U.S. Department of Labor,

<sup>252</sup> “Oregon Technology Access Program,” Douglas Education Service District, <https://douglassesd.k12.or.us/oregon-technology-access-program-otap/>; “Assistive Technology for Students with Disabilities,” ODE, [https://www.oregon.gov/ode/students-and-family/specialeducation/regprograms\\_bestpractice/pages/assistive-technology-for-students-with-disabilities.aspx](https://www.oregon.gov/ode/students-and-family/specialeducation/regprograms_bestpractice/pages/assistive-technology-for-students-with-disabilities.aspx).

<sup>253</sup> “Individuals with Disabilities Education Act (IDEA),” U.S. Department of Education, <https://sites.ed.gov/idea/>.

<sup>254</sup> “Vocational Rehabilitation,” Oregon Commission for the Blind, <https://www.oregon.gov/blind/livingwithvisionloss/Pages/Vocational-Rehabilitation.aspx>.

Program name	Description
	<p>Veterans' Employment and Training Service (USDOL-VETS), to the Oregon Employment Department, provides federal funding to conduct outreach to the business community to increase employment opportunities for veterans. The grant also provides funding for individualized career and training-related services to veterans and eligible persons with significant barriers to employment.<sup>255</sup></p>
<p>Rural Broadband Capacity Program</p>	<p>The Oregon Legislative Assembly Joint Emergency Board allocated \$10 million for grants from funds received by the state of Oregon under the CARES Act of 2020. Awards included \$750,000 to the Confederated Tribes of Umatilla Indian Reservation for a last mile delivery system.<sup>256</sup></p>
<p>Parrott Creek Behavioral Healthcare Expansion</p>	<p>With \$600,000 in Coronavirus State and Local Fiscal Recovery Funds (SLFRF), Parrott Creek Child &amp; Family Services is increasing the availability of child welfare beds "particularly for youth at risk of out-of-state placement." The project is using interviews, focus groups, Zoom forums, coalition meetings, and electronic surveys to engage with "multiple community stakeholders including adjudicated and foster youth, our local and statewide Tribal Community, Latino and Hispanic youth from rural parts of Clackamas County, and undocumented and uninsured members of our local communities" and with "other nonprofit social service providers." The project is due to</p>

<sup>255</sup> "Veterans Services," Oregon Employment Department, <https://www.oregon.gov/employ/jobseekers/Pages/Veterans.aspx>.

<sup>256</sup> "Projects Funded with CARES Act of 2020 funding, through the Rural Broadband Capacity Program," Business Oregon, January 20, 2022, <https://www.oregon.gov/biz/programs/RuralBroadbandCapacityProgram/Documents/Broadband%20Projects%202022.pdf>; "Rural Broadband Capacity Program," Business Oregon, <https://www.oregon.gov/biz/programs/RuralBroadbandCapacityProgram/Pages/default.aspx>.

Program name	Description
	be complete in late 2024. <sup>257</sup> The goal is a modern, culturally responsive health treatment campus that will include an on-site school for credit recovery.
Digital Equity Planning Grant Program	The following Oregon Tribal entities filed letters of intent for NTIA’s Digital Equity Planning Grant Program: Burns Paiute Tribe, Confederated Tribes of the Umatilla Indian Reservation, and Warm Springs Telecom. <sup>258</sup>
Lifelong Information for Entrepreneurs (LIFE) program of Mercy Corps Northwest	Offered at Oregon’s only women’s prison, Coffee Creek Correctional Facility since 2007 and expanded to Columbia River Correctional Institution, a men’s prison, in 2019, this 32-week program offers entrepreneurial training for incarcerated people in Oregon “who are within 18 to 24 months of release and post-prison re-entry.” <sup>259</sup>
Worksource Portland Metro-SE (WSPM-SE) re-entry programs	Worksource Portland Metro-SE (WSPM-SE) offers several re-entry programs to build skills, provide a path to employment, and deliver follow up support. <sup>260</sup>
State of Oregon Justice Reinvestment Program (JRP)	Provides fundings for programs designed to reduce recidivism and state prison usage, while protecting public safety and holding individuals

<sup>257</sup> “State of Oregon Recovery Plan: State and Local Fiscal Recovery Funds 2023 Report,” Department of Administrative Services, <https://www.oregon.gov/das/Financial/Acctng/Documents/SLFRF-Recovery-Plan-Performance-Report-2023.pdf>. Also see Parrott Creek Child & Family Services, <https://www.pccreek.org/>.

<sup>258</sup> “Letters of Intent Submitted for the Digital Equity Planning Program by Tribal Organization and State,” NTIA, August 2022, <https://www.internet4all.gov/sites/default/files/2022-08/Tribal%20DE%20LOIs%20Web%20Doc%20FINAL.pdf>.

<sup>259</sup> “Prison and re-entry,” Mercy Corps Northwest, <https://nw.mercycorps.org/what-we-do/prison-and-reentry>.

<sup>260</sup> “Resources for Justice Involved Individuals,” Worksource Portland Metro-SE (WSPM-SE), <https://seworks.org/ex-offenders/>.

Program name	Description
	accountable. <sup>261</sup> One such program is Washington County’s Integrative Re-Entry Intensive Supervision Services (IRISS), which moves non-violent drug and property crime offenders from prison to enhanced community supervision. <sup>262</sup>
Bills enabling the Department of Corrections (DOC) to enter into partnerships to offer educational programs	Oregon SB 1522, effective as of March 23, 2022, required the DOC to develop a plan to offer access to certain online educational programs to adults in custody (AIC) at Coffee Creek Correctional Facility and the Snake River Correctional Institution. <sup>263</sup> Oregon SB 269 and SB 270, passed during the 2023 session, is effective as of January 1, 2024. <sup>264</sup> SB 270 permits DOC to enter into agreements to offer education to AICs, including post-secondary distance education academic programs (subject to DOC rules and federal regulations relating to Pell Grants). <sup>265</sup> SB 269 requires DOC to enter into a memorandum of understanding with the

<sup>261</sup> “Justice Reinvestment,” Oregon Criminal Justice Commission, <https://www.oregon.gov/cjc/jri/pages/default.aspx>. See also, “Oregon Justice Reinvestment Initiative: Return on Investment,” submitted to the Oregon Criminal Justice Commission, September 20, 2022, <https://www.oregon.gov/cjc/CJC%20Document%20Library/2023%20JRI%20ROI%20Final%20Report.pdf>.

<sup>262</sup> “Integrative Re-Entry Intensive Supervision Services (IRISS),” Washington County District Attorney, <https://www.washingtoncountyda.org/integrative-re-entry-intensive-supervision-services-iriss>.

<sup>263</sup> “2022 Regular Session: SB 1522 Enrolled,” Oregon State Legislature, <https://olis.oregonlegislature.gov/liz/2022R1/Measures/Overview/SB1522>.

<sup>264</sup> “2023 Regular Session: SB 270,” Oregon State Legislature, <https://olis.oregonlegislature.gov/liz/2023R1/Measures/Overview/SB270>.

<sup>265</sup> “2023 Regular Session: Senate Bill 270,” Oregon State Legislature, <https://olis.oregonlegislature.gov/liz/2023R1/Measures/Overview/SB270>. Also see, “Enrolled Senate Bill 270,” Oregon State Legislature, <https://olis.oregonlegislature.gov/liz/2023R1/Downloads/MeasureDocument/SB270/Enrolled>. Also see, Sami Edge, “Bills aim to make it easier for incarcerated individuals to pursue higher education,” *The Oregonian/Oregon Live*, March 29, 2023, <https://www.oregonlive.com/education/2023/03/bills-aim-to-make-it-easier-for-incarcerated-individuals-to-pursue-higher-education.html>.

Program name	Description
	Higher Education Coordinating Commission (HECC) for the purpose of improving the prison education system in Oregon. <sup>266</sup>
State and Local Cybersecurity Grant Program (SLCGP)	The SLCGP, a federally funded grant program <sup>267</sup> administered by the Oregon Department of Emergency Management (OEM), <sup>268</sup> assists local and Tribal governments in managing and reducing systemic cyber risk by funding the development of cybersecurity plans and projects. Projects applying for funding in Round 1 of the program must align with the Oregon Cybersecurity Plan. <sup>269</sup> Applicants for Round 1 must register by November 15, 2023, and applications will be accepted through January 10, 2024.

### 3.1.4 Broadband adoption

According to the most recent NTIA data (November 2021), 78.9 percent of Oregon residents have high-speed wired internet access at home (with a margin of error of plus or minus 4.0 percent), compared to a national average of 71.3 percent (with a margin of error of plus or minus 0.5 percent).<sup>270</sup>

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<sup>266</sup> “2023 Regular Session: Senate Bill 269,” Oregon State Legislature, <https://olis.oregonlegislature.gov/liz/2023R1/Measures/Overview/SB269>; “Enrolled Senate Bill 269,” Oregon State Legislature, <https://olis.oregonlegislature.gov/liz/2023R1/Downloads/MeasureDocument/SB269/Enrolled>.

<sup>267</sup> “State and Local Cybersecurity Grant Program,” Cybersecurity and Infrastructure Security Agency, <https://www.oregon.gov/oem/emresources/Grants/Pages/State-and-Local-Cybersecurity-Grant-Program.aspx>.

<sup>268</sup> “State and Local Cybersecurity Grant Program,” OEM, <https://www.oregon.gov/oem/emresources/Grants/Pages/State-and-Local-Cybersecurity-Grant-Program.aspx>.

<sup>269</sup> “State and Local Cybersecurity Grant Program: Program Guidance,” released October 1, 2023, <https://www.oregon.gov/oem/Documents/SLCGP-Program-Guidance.pdf>.

<sup>270</sup> “Digital Nation Data Explorer: Wired High-Speed Internet Service Used at Home,” NTIA, November 2021, <https://ntia.gov/other-publication/2022/digital-nation-data-explorer#sel=wiredHighSpeedAtHome&disp=map>. This data set does not provide the percentage of

The digital inclusion assets identified in Section 3.1.1 are intended to support broadband adoption by all people in Oregon, in general, and by covered populations, in particular.

In focus groups OBO conducted with community-based organizations, representatives emphasized the importance of local entities to provide services and promote initiatives by the state. Local groups can overcome trust barriers and tailor information to the needs and lived experiences of the communities they serve, with the state providing training and resources to support and scale their work.

Attendees that work with refugees, immigrants, low-income families, and veterans in urban areas of the state noted that working with a community organization can be more comfortable and accessible for some than visiting the office of a government agency—particularly for veterans who experience post-traumatic stress disorder (PTSD), one representative noted.

Organizations working with older adults similarly suggested senior centers as hubs to connect individuals with services; a representative noted, however, that many centers in the state are underfunded. As not all older adults can travel, OBO will explore, with partners, methods of delivering broadband adoption services and digital skills training to people where they live. Caregivers and others who support older adults may also benefit from training and may, in turn, be able to train covered populations.

In listening sessions OBO conducted in communities across the state, including Roseburg, Klamath Falls, Ruch, Baker City, and McMinnville, residents reported that in rural areas those who do not have service at home often rely on community anchor institutions such as schools and libraries for access and that these entities can also provide digital literacy training and technical support.

Responding to OBO's Community Anchor Institution Broadband Access Survey, a library staff member noted their organization's important role in supporting

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households using wireless or mobile high-speed internet service at home. In Oregon, 4.4 percent use satellite internet service at home (with a margin of error of plus or minus 1.3 percent), compared to a national average of 3.5 percent (with a margin of error of 0.2 percent), according to the data as of November 2021. "Digital Nation Data Explorer: Satellite Internet Service Used at Home," NTIA, November 2021, <https://ntia.gov/other-publication/2022/digital-nation-data-explorer#sel=satelliteAtHome&disp=map>.

broadband adoption: “As a public library we are a critical partner in providing broadband access and training to communities. Aside from providing 24/7 free Wi-Fi up to 200 feet outside our building, we promote speed tests, help people apply for financial support, show people how to use devices and hotspots, provide public computers to use for free, and continuously educate people on how to connect and find resources online.”

As one participant noted, however, in remote areas “driving back and forth to get access at a public space isn’t accessible,” and residents need affordable, reliable connectivity at their homes and businesses. Telemedicine decreases travel time and increases personal benefits like work opportunities and societal environmental benefits.

Community members may need additional training and support around devices and digital literacy and digital skills to support meaningful use of available connectivity. Organizations that work with individuals with disabilities and individuals with language barriers also emphasized the need for accessibly designed content and services; access to assistive technologies, which Oregon’s Statewide Assistive Technology program (see Table 3) helps to facilitate; and content, education, and support available in multiple languages.

### **3.1.5 Broadband affordability**

The Federal Communications Commission’s (FCC) Affordable Connectivity Program (ACP), which offers eligible households a discount of \$30 per month on their internet service (\$75 for households on qualifying tribal lands) and a one-time discount of up to \$100 towards the purchase of a device, is one of the most significant programs available to low-income Oregon households to reduce the cost of broadband service.

In addition to participating in the program, some ISPs also offer low-cost plans for qualifying low-income households that effectively provide service at no cost to subscribers enrolled in the ACP.<sup>271</sup> Some also offer discounts on the purchase of a device. Per data from USAC (see Appendix A), 40 of the 154 providers in Oregon that

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<sup>271</sup> See FCC Fourth Report and Order and Further Notice of Rulemaking, FCC-22-87 (Nov. 30, 2022) at ¶ 101 (noting that the FCC declined to collect detailed demographic for ACP, so tracking increased enrollment among covered populations other than low-income populations may be limited), <https://docs.fcc.gov/public/attachments/FCC-22-87A1.pdf>.

participate in the ACP (including mobile providers) as of August 2023 indicate that they offer “no cost” plans, and 64 offer device discounts.

As of July 2023, 190,362 Oregon households were enrolled in the ACP,<sup>272</sup> representing about 25 percent of the estimated 719,513 eligible households in the state.<sup>273</sup> (See additional analysis in Section 3.2.)

Nationwide and in Oregon, outreach from trusted community groups and institutions has proven key to overcoming trust barriers and increase enrollment in the program. Several entities in the state have received grant funding from the FCC to conduct outreach (see Table 5).

The Confederated Tribes of Siletz Indians and the Burnes Paiute Tribe received grants through the Tribal Competitive Outreach Program (TCOP) to promote enrollment by tribal members. With support from the National Competitive Outreach Program (NCOP), the nonprofit consultant Oregon Institute for a Better Way will conduct outreach through Regional Navigators<sup>274</sup> in partnership with the National Grange (an agricultural advocacy organization with a presence in rural areas).<sup>275</sup> Josephine County and the South Central Oregon Economic Development District also received awards to conduct local outreach. Home Forward, a public housing corporation serving Multnomah County, received a similar grant through the Your Home, Your Internet pilot program to support enrollment among low-income households it serves.

Oregon has identified a broad suite of state agencies that can continue to help raise awareness of ACP among eligible people in Oregon, including, but not limited to the Oregon Department of Human Services (ODHS), Oregon Employment Department

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<sup>272</sup> “ACP Enrollment and Claims Tracker,” USAC, <https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/#enrollment-by-state> (accessed July 27, 2023).

<sup>273</sup> “Oregon Bipartisan Infrastructure Law Fact Sheet,” White House Briefing Room, as of July 2022, <https://www.whitehouse.gov/wp-content/uploads/2022/08/Oregon-BIL-Fact-Sheet.pdf>. According to the U.S. Census Bureau, Current Population Survey, 2022 Annual Social and Economic Supplement (CPS ASEC), that figure may be as high as 854,000.

<sup>274</sup> “Affordable Connectivity Program | ACPRC,” <https://www.acprc.org/>.

<sup>275</sup> National Grange of the Order of Patrons of Husbandry, <https://www.nationalgrange.org/>.



(OED), Oregon Department of Education (ODE), and Oregon Health Authority (OHA) in addition to the resources of Business Oregon, the parent agency of OBO.

The table below lists representative assets in the state related to broadband affordability, including efforts to increase enrollment in the ACP and discounted or subsidized broadband service and equipment programs for low-income subscribers.

**Table 5: Broadband affordability assets**

Asset name	Description
Your Home, Your Internet Pilot Program of the FCC	Award of \$331,989 to Home Forward, <sup>276</sup> a public housing corporation incorporated by the City of Portland, to provide ACP outreach and application assistance to eligible households. <sup>277</sup>
FCC ACP Outreach Grant Program recipients under the National Competitive Outreach Program (NCOP) and Tribal Competitive Outreach Program (TCOP)	Five entities in Oregon were awarded grants: Oregon Institute for A Better Way (\$420,000), Josephine County (\$209,780), South Central Oregon Economic Development District (\$150,000), the Confederated Tribes of Siletz Indians (\$245,000), <sup>278</sup> and the Burns Paiute Tribe (\$87,360). <sup>279</sup>
Tillamook County Creamery Association <sup>280</sup>	Partnered with the American Connection Corps (ACC) <sup>281</sup> to raise awareness of affordable broadband in Tillamook County. <sup>282</sup>

<sup>276</sup> Home Forward, <https://www.homeforward.org/>.

<sup>277</sup> "Consumer and Governmental Affairs Bureau and Wireline Competition Bureau announce ACP Pilot Program Grants target funding," FCC, March 15, 2023, <https://docs.fcc.gov/public/attachments/DA-23-219A1.pdf>.

<sup>278</sup> "Consumer and Governmental Affairs Bureau Announces ACP Outreach Grant Program Target Funding," FCC public notice, March 10, 2023, <https://docs.fcc.gov/public/attachments/DA-23-194A1.pdf>.

<sup>279</sup> "Consumer and Governmental Affairs Bureau Announces Second Round Of ACP Tribal Outreach Grant Program Awards," FCC public notice, September 6, 2023, <https://docs.fcc.gov/public/attachments/DA-23-815A1.pdf>.

<sup>280</sup> Tillamook, <https://www.tillamook.com>

<sup>281</sup> American Connection Corps, <https://www.americanconnectioncorps.org/>.

<sup>282</sup> "Tillamook County Creamery Association Shares Climate Action Plan Updates," Press Release, April 13, 2023, <https://www.prnewswire.com/news-releases/tillamook-county-creamery-association-shares-climate-action-plan-updates-301796893.html>.

Asset name	Description
Oregon State University Extension Service	Provides ACP outreach, with websites in English and Spanish. <sup>283</sup>
OBO broadband service assistance	OBO has been allocated funding to provide assistance to households that have potential internet access yet cannot afford service. <sup>284</sup>
Oregon Lifeline	A federal and state government program that provides a monthly discount on phone or broadband service for qualifying low-income Oregon households. Participants can receive a discount on their phone bill of up to \$15.25 per month; receive a discount on their broadband bill of up to \$19.25 per month; or receive a free cell phone and data service. <sup>285</sup>
Tribal Lifeline & Link Up	Oregon residents on federally recognized tribal lands who meet Oregon Lifeline program requirements (e.g., based on income) may qualify for an additional \$25 discount per month on broadband service. <sup>286</sup> The Tribal Link Up program also offers a one-time \$100 discount on the initial activation of wireline or wireless service for qualifying residents. Residents may qualify again after they move to a new primary residence. This program also allows residents to pay the remaining amount they owe on a deferred schedule, interest free.
ISPs participating in ACP	Appendix A lists all ISPs participating in the ACP in Oregon.

### 3.2 Needs assessment

The state's comprehensive partner outreach program included extensive efforts to identify the needs of all people in Oregon with an emphasis on those belonging to covered populations. Outreach and data collection efforts were made to assess the

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<sup>283</sup> "Affordable Connectivity Program," OSU Extension Service, <https://extension.oregonstate.edu/affordable-connectivity-program>.

<sup>284</sup> "Governor's Budget, 2023-2025, State of Oregon," Oregon, [https://www.oregon.gov/das/financial/documents/2023-25\\_gb.pdf](https://www.oregon.gov/das/financial/documents/2023-25_gb.pdf), p.116.

<sup>285</sup> "Oregon Lifeline," Oregon Public Utility Commission, <https://www.oregon.gov/puc/Pages/Oregon-Lifeline.aspx>.

<sup>286</sup> "Tribal Lifeline and Linkup," Oregon Public Utility Commission, <https://www.oregon.gov/puc/Pages/Oregon-Lifeline.aspx>.

baseline from which the state is working and to identify the barriers to digital equity faced generally and by each of the covered populations in Oregon.

The state's research and analysis are based on available and relevant data from the American Community Survey (ACS), NTIA's Internet Use Survey (administered as a supplement to the Current Population Survey), FCC's National Broadband Map, and ADECA's custom scientific phone survey (administered in 2023). Analysis was undertaken to benchmark Oregon against national averages, and to benchmark its residents belonging to covered populations against those that do not belong to covered populations. Analysis focused on capturing inclusive insights subject to the limits of the data available.

The data and analysis are intended to facilitate understanding of the extent to which:

1. Broadband internet service is available to and adopted by all people.
2. People are confidently performing various digital skills.
3. People are aware of and impacted by online security and privacy concerns.
4. Computer devices are abundant and adequate for meaningful internet use.
5. Online government resources and services are accessibly built and maintained.

In brief, a lack of need or interest in home internet use is the primary reason cited by Oregon households that do not subscribe to broadband. This is followed by issues of affordability of service, a lack of available service offerings, and the ability to use the internet outside the home. Notably, very few respondents claimed that inadequate device access or online security or privacy concerns prevented them from home internet use, although other survey data may suggest otherwise. Reasons cited for a lack of home internet use are outlined in Table 6.

**Table 6: Reported reasons for no home internet use<sup>287</sup>**

Reasons for no home internet use	Oregon
Can't afford it	16%
Not worth the cost	1%
Can use it elsewhere	4%
Not available in area	4%
Don't need or not interested	57%
Online privacy or security concerns	1%
No or inadequate computing device	1%

The data indicates that Oregon’s digital equity needs encompass access to affordable broadband services, increased enrollment in broadband service subsidy programs, device access, and digital literacy and digital skills training. The table below summarizes key barriers for each covered population identified through this assessment.

**Table 7: Key barriers and obstacles for covered populations**

Covered population	Broadband availability	Broadband adoption	Digital literacy skills	Online security	Device adoption
Low-income households	It is likely that very-low-income households are disproportionately less covered by broadband	Low-income populations display the most urgent needs for more affordable broadband <sup>288</sup>	The Oregon-specific analysis did not conclude a specific barrier or need	Low-income individuals report needs for increased awareness of and confidence in protecting themselves from online	Low-income populations display the most urgent needs for increased device access <sup>290</sup>

<sup>287</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.

<sup>288</sup> U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.

<sup>290</sup> U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.

Covered population	Broadband availability	Broadband adoption	Digital literacy skills	Online security	Device adoption
				security and privacy threats <sup>289</sup>	
Older adults	Older adults are less likely to be served by broadband <sup>291</sup>	Older adults display needs for greater internet adoption <sup>292</sup>	Older adults indicate the most urgent need for digital skills and telemedicine training <sup>293</sup>	Older adults report needs for increased confidence in protecting themselves from online security and privacy threats <sup>294</sup>	Older adults display a need for greater device adoption <sup>295</sup>
Incarcerated individuals	Formerly incarcerated individuals are less likely to be served by broadband <sup>296</sup>	While no data are currently available in these areas, Oregon is endeavoring to develop relevant data in partnership with other state agencies			
Veterans	The Oregon-specific	There exists a material	Veterans indicate	Veterans report needs	There exists a slight gap

<sup>289</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.

<sup>291</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.

<sup>292</sup> U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.

<sup>293</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.

<sup>294</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.

<sup>295</sup> U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.

<sup>296</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.

Covered population	Broadband availability	Broadband adoption	Digital literacy skills	Online security	Device adoption
	analysis did not conclude a specific barrier or need	gap between veterans and people who are not veterans in internet adoption rates <sup>297</sup>	need for digital skills training <sup>298</sup>	for increased awareness of and confidence in protecting themselves from online security and privacy threats <sup>299</sup>	between veterans and people who are not veterans in device adoption rates <sup>300</sup>
Individuals with disabilities	The Oregon-specific analysis did not conclude a specific barrier or need	Individuals with disabilities display a need for greater internet adoption <sup>301</sup>	Individuals living with disabilities indicate need for digital skills training <sup>302</sup>	Individuals with disabilities report needs for increased confidence in protecting themselves from online security and privacy	Individuals living with disabilities display a need for greater device adoption <sup>304</sup>

<sup>297</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.

<sup>298</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.

<sup>299</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.

<sup>300</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.

<sup>301</sup> U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.

<sup>302</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.

<sup>304</sup> U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.

Covered population	Broadband availability	Broadband adoption	Digital literacy skills	Online security	Device adoption
				threats <sup>303</sup>	
Individuals who are English learners or who have low literacy	Individuals who are either English learners or who have low literacy are disproportionately unserved by broadband <sup>305</sup>	While no data are currently available in these areas, Oregon is endeavoring to develop relevant data in partnership with other state agencies			
Individuals who are English learners (alone)	The Oregon-specific analysis did not conclude a specific barrier or need	There exists a material gap between English language learners and those fluent in English in internet adoption rates <sup>306</sup>	The Oregon-specific analysis did not conclude a specific barrier or need	English language learners report needs for confidence in protecting themselves from online security and privacy threats <sup>307</sup>	English language learners display a need for greater device adoption <sup>308</sup>

<sup>303</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.

<sup>305</sup> U.S. Census Bureau, Digital Equity Act of 2021, State Data. <https://www.census.gov/programs-surveys/community-resilience-estimates/partnerships/ntia/digital-equity.html>. Accessed August 29, 2023.

<sup>306</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.

<sup>307</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.

<sup>308</sup> U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.

Covered population	Broadband availability	Broadband adoption	Digital literacy skills	Online security	Device adoption
Individuals who have low levels of literacy (alone)	It is likely that individuals with low levels of literacy are disproportionately unserved by broadband <sup>309</sup>	While no data are currently available in these areas, Oregon is endeavoring to develop relevant data in partnership with other state agencies			
Individuals who are members of racial and ethnic minorities	The Oregon-specific analysis did not conclude a specific barrier or need	The Oregon-specific analysis did not conclude a specific barrier or need	The Oregon-specific analysis did not conclude a specific barrier or need	Racial and ethnic minorities report need for increased confidence in protecting themselves from online security and privacy threats <sup>310</sup>	The Oregon-specific analysis did not conclude a specific barrier or need
Rural residents	Rural individuals are in the most urgent need of increased broadband	While no data are currently available in these areas, Oregon is endeavoring to develop relevant data	Rural individuals indicate need for digital skills and telemedicine	Rural individuals report needs for confidence in protecting themselves from online security and	While no data are currently available in these areas, Oregon is endeavoring to develop relevant

<sup>309</sup> U.S. Census Bureau, Digital Equity Act of 2021, State Data. <https://www.census.gov/programs-surveys/community-resilience-estimates/partnerships/ntia/digital-equity.html>. Accessed August 29, 2023.

<sup>310</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.



Covered population	Broadband availability	Broadband adoption	Digital literacy skills	Online security	Device adoption
	availability <sup>311</sup>	in partnership with other state agencies	training <sup>312</sup>	privacy threats <sup>313</sup>	data in partnership with other state agencies

During the outreach OBO conducted for this Plan, community members and representatives of organizations serving covered populations provided anecdotal insights that inform and provide valuable context for the analysis of data sources described above and presented in the following sections. A list of barriers mentioned in OBO’s outreach sessions is provided in Appendix E.

### 3.2.1 Covered populations in Oregon

To understand the challenges of digital equity for covered populations<sup>314</sup> it is necessary to define those groups. Due to the unique constraints of each data source,

<sup>311</sup> U.S. Census Bureau, Digital Equity Act of 2021, State Data. <https://www.census.gov/programs-surveys/community-resilience-estimates/partnerships/ntia/digital-equity.html>. Accessed August 29, 2023.

<sup>312</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.

<sup>313</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.

<sup>314</sup> Covered populations are defined in the Infrastructure Investment and Jobs Act, Section 60301 et seq. (known as the Digital Equity Act of 2021) as: “(A) individuals who live in covered households; (B) aging individuals; (C) incarcerated individuals, other than individuals who are incarcerated in a Federal correctional facility; (D) veterans; (E) individuals with disabilities; (F) individuals with a language barrier, including individuals who (i) are English learners; and (ii) have low levels of literacy; (G) individuals who are members of a racial or ethnic minority group; and (H) individuals who primarily reside in a rural area.” “Infrastructure Investment and Jobs Act, Section 60302 (Definitions), paragraph 8,” Congress, <https://www.congress.gov/bill/117th-congress/house-bill/3684/text>. Covered households are those “the income of which for the most recently completed year is not more than 150 percent of an amount equal to the poverty level, as determined by using criteria of poverty established by the Bureau of the Census.” “Infrastructure Investment and Jobs Act, Section 60302 (Definitions), paragraph 7,” Congress, <https://www.congress.gov/bill/117th-congress/house-bill/3684/text>. For the definition of “aging individuals,” the statute uses the

various analyses focus on different subsets of covered populations. Based on the availability of reliable data,<sup>315</sup> the covered populations analyzed in this needs assessment are as follows:

**Table 8: Covered populations**

Covered population	Covered definition	Broadband availability	Broadband adoption	Digital literacy skills	Online security	Device adoption
Low-income households	Any individual in a household earning less than 150 percent of the federal poverty line	✓	✓	✓	✓	✓
Older adults (aging populations)	Any individual who is 60 years of age or older	✓	✓	✓	✓	✓
Incarcerated individuals	Any individual currently or formerly incarcerated in a non-federal	✓				

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definition of “older individual” as “an individual who is 60 years of age or older” from the United States Code. “42 U.S.C. Section 2003, paragraph 40,” Findlaw, <https://codes.findlaw.com/us/title-42-the-public-health-and-welfare/42-usc-sect-3002.html>.

<sup>315</sup> This Plan relies on rigorously collected and reliable data to make statistically significant conclusions regarding each covered population. The data used include those collected by the U.S. Census Bureau through the American Community Survey and the Current Population Survey. Where the data are not available, the Plan does not attempt to speculate.

Covered population	Covered definition	Broadband availability	Broadband adoption	Digital literacy skills	Online security	Device adoption
	correctional facility					
Veterans	Any individual formerly on active duty	✓	✓	✓	✓	✓
Individuals with disabilities	Any individual living with a self-identified physical or mental disability	✓	✓	✓	✓	✓
Individuals who are English learners or who have low literacy (Individuals with language barriers)	Any individual that either reports an English language proficiency less than “very well” or with a literacy level beneath that of a grade 6 student <sup>316</sup>	✓				

<sup>316</sup> Grade 6 has been adopted as a reasonable threshold for practical purposes. Neither NTIA nor the U.S. Census Bureau define low literacy. Census has developed probabilistic estimates using

Covered population	Covered definition	Broadband availability	Broadband adoption	Digital literacy skills	Online security	Device adoption
Individuals who are English learners (alone)	Any individual that reports an English language proficiency less than “very well”	✓	✓	✓	✓	✓
Individuals who have low levels of literacy (alone)	Any individual with a literacy level beneath that of a grade 6 student	✓				
Racial and ethnic minorities	Any individual that is not white (non-Hispanic) alone	✓	✓	✓	✓	✓
Rural inhabitants	Any individual living outside of a census-identified metropolitan	✓		✓	✓	

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National Center for Education Statistics data assigning “low literacy” to Level 1 (i.e., the lowest out of five levels). See “2019 State Total Covered Populations Under the Digital Equity Act of 2021: Quick Guide,” U.S. Census Bureau, NTIA. 2022, [https://www2.census.gov/programs-surveys/demo/technical-documentation/community-resilience/state\\_total\\_covered\\_populations\\_quick\\_guide.pdf](https://www2.census.gov/programs-surveys/demo/technical-documentation/community-resilience/state_total_covered_populations_quick_guide.pdf).

Covered population	Covered definition	Broadband availability	Broadband adoption	Digital literacy skills	Online security	Device adoption
	service area					

In Oregon, 76.1 percent<sup>317</sup> of the state belongs to a covered population. This implies that the interests of covered populations closely align to those of the whole state. Therefore, by planning to increase digital equity for covered populations, the state is taking meaningful steps to address the entirety of its digital equity needs.

Within Oregon, most individuals belonging to covered populations live in rural areas, are racial or ethnic minorities, have a relatively low income, or are 60 years of age or older. These covered populations are much larger in the state than those defined by incarceration status, English language proficiency, and veteran status. Perhaps most notable is the size of Oregon’s rural population: An estimated 32.6 percent of the state lives in a rural area (as compared d to only 28.5 percent nationally). Oregon and national demographics are illustrated in Table 9 below.

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<sup>317</sup> U.S. Census Bureau, Digital Equity Act of 2021, State Data. <https://www.census.gov/programs-surveys/community-resilience-estimates/partnerships/ntia/digital-equity.html>. Accessed August 29, 2023.

**Table 9: Portion of Oregon and U.S. in various covered populations**<sup>318, 319</sup>

Covered group	Oregon	Nation	Gap
Any covered group	76.1%	81.5%	-5.4%
Low-income	18.8%	20.1%	-1.3%
Aging adults	24.7%	22.9%	1.8%
Incarcerated	0.5%	0.6%	-0.1%
Veteran	6.3%	5.3%	1.0%
People with disabilities	15.1%	13.3%	1.8%
Language barrier	15.7%	21.4%	-5.7%
English language learner	5.1%	8.4%	-3.3%
Low levels of literacy	16.8%	21.9%	-5.1%
Ethnic and racial minority	25.1%	40.6%	-15.5%
Rural	32.6%	28.5%	4.1%

The demographic groups illustrated above are not mutually exclusive and many individuals belonging to a covered population belong to multiple covered populations (for example, many individuals living in rural areas are also low-income). Further, many of these traits are related (for example, individuals living with disabilities have higher tendencies to be on fixed incomes because of their disabilities). In this case, their presence in one covered population (individuals living with disabilities) directly affects their likelihood to appear in another covered population (individuals living in lower-income households). Additionally, individuals living with disabilities are in many cases more likely to be precluded from meaningful use of the internet by their relatively low income as opposed to

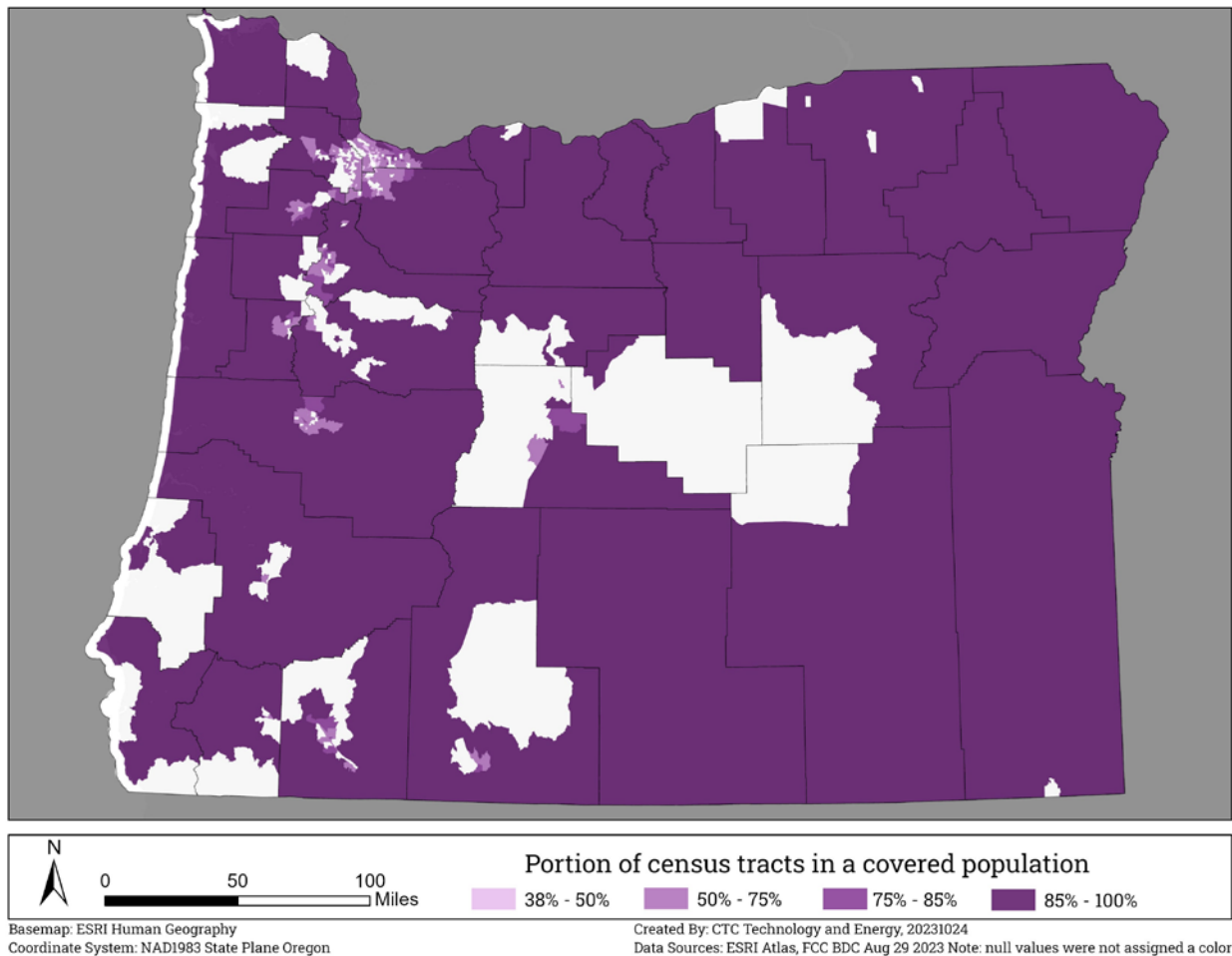
<sup>318</sup> U.S. Census Bureau, Digital Equity Act of 2021, State Data. <https://www.census.gov/programs-surveys/community-resilience-estimates/partnerships/ntia/digital-equity.html>. Accessed August 29, 2023.

<sup>319</sup> These data are sourced from the Census Bureau’s Digital Equity Act of 2021 collection, which includes ACS and NTIA Internet Use Survey data as well as imputations from external data sources such as the National Center for Education Statistics to create the most comprehensive set of covered populations data. However, the data set is slightly outdated, sourcing ACS data from 2019 (most recent) to as far back as 2015. Additionally, the full data set is difficult to update given the limited documentation on the imputations performed. Therefore, for many of the remaining sections wherein analysis is performed on more specific broadband barriers rather than wholistic demographic statistics, more easily repeatable analysis is performed on more up-to-date data from the ACS and the NTIA Internet Use Survey (via the Current Population Survey). As a tradeoff with the increased data quality and useability, some insight into covered populations is lost, especially with regard to formerly incarcerated individuals and individuals with low levels of literacy.

their disability. Therefore, caution is urged in attributing causes of broadband outcomes to the nature of the affected covered populations.

Individuals belonging to covered populations are present throughout the entirety of Oregon. A general overview of the geographic distribution of covered populations is shown in the map in Figure 1; a high-resolution depiction of this data is available at the U.S. Census Bureau’s Digital Equity Act Population Viewer website.<sup>320</sup>

**Figure 1: Map of covered populations in Oregon<sup>321</sup>**



<sup>320</sup> U.S. Census Bureau, Digital Equity Act of 2021, State Data. <https://www.census.gov/programs-surveys/community-resilience-estimates/partnerships/ntia/digital-equity.html>.

<sup>321</sup> U.S. Census Bureau, Digital Equity Act of 2021, State Data. <https://www.census.gov/programs-surveys/community-resilience-estimates/partnerships/ntia/digital-equity.html>. Accessed August 29, 2023.

### **3.2.2 Access to broadband service**

Access to broadband service is the primary prerequisite for using the internet meaningfully to participate in the increasingly digital economy and world. For that reason, the state has completed a robust geographic analysis of broadband service offerings, a regression analysis of covered population presence and broadband availability, a comparative analysis of internet adoption rates across covered populations, and an analysis of ACP uptake and eligibility to understand residents' remaining needs in terms of access to broadband internet service. These analyses show:

1. Oregon is in line with the rest of the nation in most meaningful indicators of broadband availability.
2. Individuals living in rural areas face the most urgent needs for broadband availability.
3. Oregon outpaces the national averages in internet and wireline internet adoption and subscription rates.
4. Covered populations in Oregon are uniformly adopting the internet less frequently than individuals that do not belong to a covered population. This gap is largest when compared across incomes.
5. Oregon outperforms the national average for the percentage of eligible households enrolled in the ACP subsidy program, but Oregon still has a large opportunity for enrollment growth.

#### **3.2.2.1 Availability of service**

Of all Oregon households that do not use internet at home, an estimated 4 percent<sup>322</sup> claim that the main reason for their lack of internet use is a lack of available internet service. While this is not the most frequently cited cause for lack of broadband use at home, the availability of service is an absolute condition to achieve digital equity, and therefore deserves substantial attention.

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<sup>322</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.



Oregon performs similarly to the nation across most meaningful indicators of broadband availability. When considering all internet delivery technologies (including those that are known to be less reliable such as satellite-based services), the FCC reports that Oregon and the nation are entirely served through speeds of 25/3 Mbps, which is the federal threshold for broadband service of any kind. However, Oregon has 3.5 percentage points fewer units served by speeds of at least 250/25 Mbps than the nation.

This trend continues once service is limited to wireline technologies, which are known to be more reliable than other internet-delivery technologies. 90 percent of units in Oregon are within a coverage footprint for wireline internet delivering 25/3 Mbps, a rate which is almost identical to the 89.8 percent nationally.

For licensed fixed wireless (LFW), which can be helpful for delivering service to rural areas that present difficulty for wireline construction, Oregon outpaces the nation in slower speed service availability. This is possibly due to an increased market for fixed wireless internet service in Oregon's mountainous terrains. However, Oregon lags behind the national rate for high-speed licensed fixed wireless, with only 11.9 percent of all residents in a coverage footprint for 100/20 Mbps service (compared to 19.2 percent nationally). High-speed fixed wireless antennas are a relatively new technology and many companies have only recently upgraded their service offerings to speeds above 100/20 Mbps, suggesting that perhaps the market has simply been slow to change in Oregon, rather than an absence of a compelling profit incentive for change (Table 10).

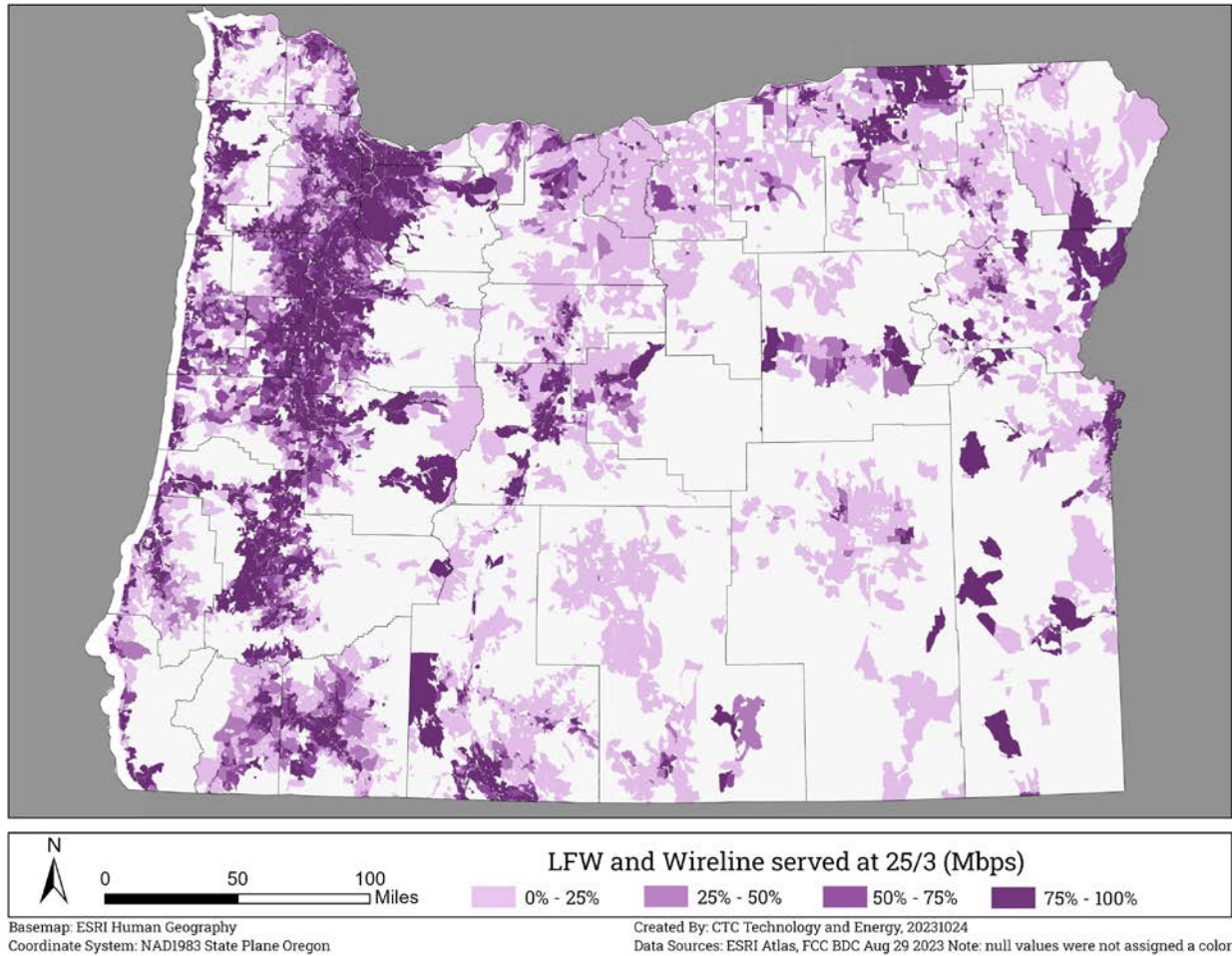
**Table 10: Portion of units served with internet at various speeds in Oregon and the U.S.<sup>323</sup>**

	Coverage (Mbps)	Oregon	Nation	Gap
	<b>All technologies</b>			
	0.2 / 0.2	100.0%	100.0%	0.0%
	10 / 1	100.0%	100.0%	0.0%
	25 / 3	100.0%	100.0%	0.0%
	100 / 20	91.4%	92.1%	-0.7%
	250 / 25	83.8%	87.2%	-3.5%
	1000 / 100	28.5%	33.2%	-4.7%
<b>Wireline</b>				
	0.2 / 0.2	95.0%	93.4%	1.5%
	10 / 1	92.5%	91.7%	0.9%
	25 / 3	90.0%	89.8%	0.2%
	100 / 20	88.6%	88.4%	0.2%
	250 / 25	83.7%	86.6%	-2.9%
	1000 / 100	28.5%	32.3%	-3.8%
<b>Licensed fixed wireless</b>				
	0.2 / 0.2	83.3%	79.5%	3.8%
	10 / 1	60.6%	54.9%	5.7%
	25 / 3	52.8%	51.7%	1.1%
	100 / 20	11.9%	19.2%	-7.4%
	250 / 25	0.8%	2.6%	-1.9%
	1000 / 100	0.0%	0.2%	-0.2%

Certain areas of Oregon see low levels of coverage because private ISPs choose to invest elsewhere, where return on investment will presumably be greater. The availability of wireline or robust licensed fixed wireless broadband service in Oregon tends to correlate with the density of population. In more densely populated areas, there are more potential customers relative to construction costs. As a result, consistent with patterns throughout the United States, service in Oregon is frequently spotty in rural areas, as shown below for speeds of 25/3 Mbps (Figure 2), and 100/20 Mbps (Figure 3). High-resolution depictions of these data are available on the FCC’s National Broadband Map.

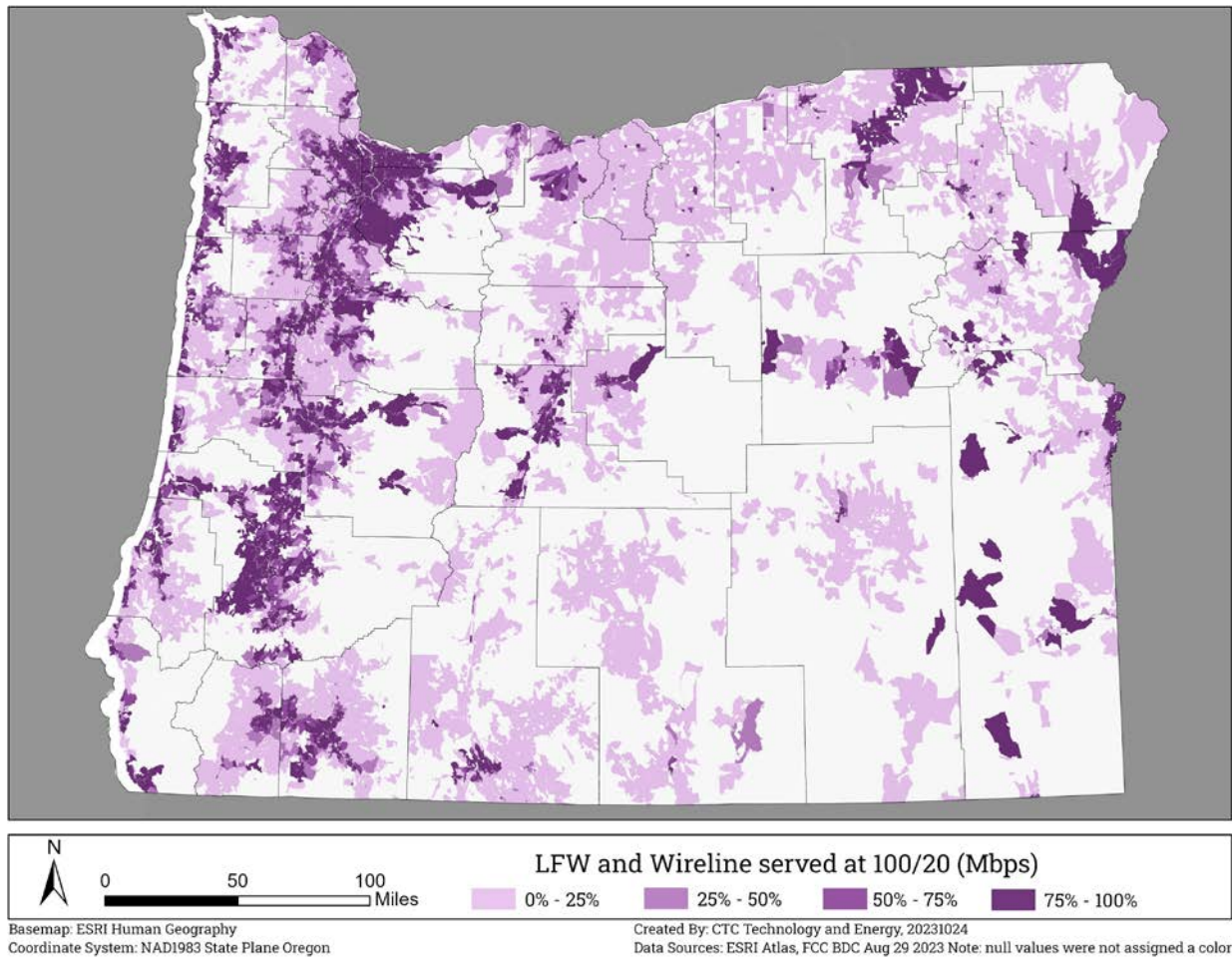
<sup>323</sup> FCC, National Broadband Map, <https://broadbandmap.fcc.gov/home>. Last updated August 16, 2023. Accessed August 29, 2023.

**Figure 2: Map of units served by 25/3 Mbps<sup>324</sup>**



<sup>324</sup> FCC, National Broadband Map, <https://broadbandmap.fcc.gov/home>. Last updated August 9, 2023. Accessed August 29, 2023.

**Figure 3: Map of units served by 100/20 Mbps<sup>325</sup>**



A regression analysis was undertaken by comparing the prevalence of various covered populations in each census tract in Oregon with the portion of units served by at least one broadband internet option with speeds of 25/3 Mbps or greater. The resulting correlation was relatively weak, with an  $R^2$  value of 0.44. However, the analysis does further underline the relationship between rurality and broadband availability, as it was the most statistically significant correlation of all covered populations by a wide margin.

Three other covered populations had correlation that was statistically significant as relates to a lack of availability: aging individuals, formerly incarcerated individuals,

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<sup>325</sup> FCC, National Broadband Map, <https://broadbandmap.fcc.gov/home>. Last updated August 9, 2023. Accessed August 29, 2023.

and English language learners and those with low literacy. All of these groups appear to be disproportionately unserved by broadband.

Both English language learners and those living with disabilities also achieved statistical significance but were negatively correlated with the portion of units unserved in a census tract (i.e., a greater portion of these covered populations indicated fewer units were unserved). In both cases, it is likely that these covered populations reside largely in urban areas where service is more available.

The full results of the regression analysis are presented in Table 11.

**Table 11: Regression analysis of portion of census tract belonging to covered populations and portion of units unserved<sup>326</sup>**

Regression statistics	
Multiple R	0.664
R Square	0.441
Adjusted R Square	0.434
Standard Error	0.136
Observations	667

Variables	Coefficients	Standard error	t Stat	P-value	Statistically significant
Intercept	-0.108	0.031	-3.514	0.000	Yes
Income	0.107	0.063	1.697	0.090	
Age	0.389	0.103	3.761	0.000	Yes
Incarceration status	0.441	0.134	3.293	1.04E-03	Yes
Veteran status	0.516	0.290	1.776	0.076	
Disability status	-0.741	0.149	-4.970	0.000	Yes

<sup>326</sup> Portion of census tract populations belonging to various covered populations from U.S. Census Bureau, Digital Equity Act of 2021, State Data. <https://www.census.gov/programs-surveys/community-resilience-estimates/partnerships/ntia/digital-equity.html>. Accessed August 29, 2023. Portion of units served in each census tract from FCC's National Broadband Map. Accessed August 29, 2023. A number of outlier tracts were removed.

Variables	Coefficients	Standard error	t Stat	P-value	Statistically significant
Language barrier (including low literacy)	0.621	0.185	3.351	0.001	Yes
English proficiency	-0.940	0.223	-4.225	0.000	Yes
Race and ethnicity	0.127	0.080	1.583	0.114	
Rurality	0.201	0.015	13.532	5.60E-37	Yes

Neither broadband availability nor many of these demographic characteristics are uniform throughout census tracts. For example, very low-income groups tend to cluster in areas that are much smaller than census tracts boundaries. Very low-income groups face higher internet availability obstacles versus other individuals that still belong to the “low-income” covered population definition. It is overwhelmingly likely that low-income households are less well served than higher-income households, although those trends have not appeared statistically when evaluating this exact partitioning of the state. It is possible that a more granular study would reveal more informative relationships between various covered populations and service availability.

Ultimately, all people in Oregon would benefit greatly from investment in increased service availability. For rural residents specifically, additional service availability could have significant impacts on achieving digital equity.

### 3.2.2.2 Adoption of service

Of all Oregon households that do not use internet at home, an estimated 16 percent<sup>327</sup> claim that a main reason for their lack of internet use at home is an inability to afford service, which impacts an overlapping group of covered populations who also fall within income ranges for covered households and above. Challenges relating to service affordability, and the closely linked concept of

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<sup>327</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.

reliability, seem to be high-priority obstacles to digital equity for many people in Oregon.

According to the American Community Survey, 94.3 percent of Oregon residents have a home internet subscription (of any kind) –surpassing the national rate by 4.0 percentage points. Accordingly, Oregon also outperforms the national rate in the portion of residents with a wireline home internet subscription with a rate of 78.6 percent versus the national rate of 75.5 percent. Wireline internet subscriptions tend to be more reliable than others, and therefore can represent a more meaningful measure of useful internet adoption.

However, 12.8 percent of Oregon residents rely on a cellular data plan alone for home internet service, which is slightly more than the national figure of 10.9 percent and is considered to be insufficient to realize the many benefits of broadband. Individuals with mobile-only service typically cite affordability, their smartphone being good enough, and/or having access to broadband somewhere else as the reasons for not having home internet connectivity.

**Table 12: Internet adoption rates in Oregon and the U.S.**<sup>328</sup>

<b>Internet in the house</b>	<b>Oregon</b>	<b>Nation</b>	<b>Gap</b>
Internet subscription of any kind	94.3%	90.3%	4.0%
Internet subscription via wireline technology (i.e. fiber, cable, DSL)	78.6%	75.5%	3.1%
Only subscription via cellular data plan	12.8%	10.9%	1.9%

Within Oregon, individuals belonging to covered populations fare worse than others in home internet adoption. 91.9 percent of individuals belonging to a covered population report having a home internet subscription as opposed to 98.5 percent of those outside of covered populations. The gap widens for wireline internet connections, for which 74.2 percent of individuals belonging to covered populations claim adoption compared to 86.2 percent of non-covered populations.

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<sup>328</sup> U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.

**Table 13: Internet adoption rates in covered and non-covered populations<sup>329</sup>**

Internet in the house	Covered groups	Non covered groups	Gap
Internet subscription of any kind	91.9%	98.5%	-6.6%
Internet subscription via wireline technology (i.e. fiber, cable, DSL)	74.2%	86.2%	-12.0%
Only subscription via cellular data plan	14.3%	10.2%	4.1%

Individuals living in low-income households constitute the covered population with the largest adoption gaps. Low-income individuals are 12.7 percentage points less likely than higher-income individuals to have a home internet subscription, and they are 18.6 percentage points less likely to have a wireline internet subscription. People with disabilities and older adults constitute two more groups with somewhat meaningful adoption gaps; they were 13.4 and 12 percentage points, respectively, and less likely to have a wireline internet subscription than their non-covered population counterparts. Additionally, English language learners and veterans each had gaps in wireline internet adoption greater than or equal to 6 percentage points, which constitutes a material gap. Full breakdowns of each covered population’s adoption rates are included in Table 14.<sup>330</sup>

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<sup>329</sup> U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.

<sup>330</sup> This Plan follows the U.S. Census Bureau’s standards on reporting data related to the terms “minority” and “white.” See: “About the topic of race,” U.S. Census Bureau, <https://www.census.gov/topics/population/race/about.html>.



**Table 14: Internet adoption rates in various covered populations<sup>331</sup>**

Income	Internet in the house		Low-income	Higher-income	Gap
	Internet subscription of any kind		84.4%	97.1%	-12.7%
	Internet subscription via wireline technology (i.e. fiber, cable, DSL)		64.0%	82.7%	-18.6%
	Only subscription via cellular data plan		15.8%	11.9%	3.9%
Race	Internet in the house		Ethnic or racial minority	White alone	Gap
	Internet subscription of any kind		94.3%	94.3%	0.1%
	Internet subscription via wireline technology (i.e. fiber, cable, DSL)		78.5%	78.6%	-0.1%
	Only subscription via cellular data plan		13.7%	12.5%	1.2%
Age	Internet in the house		Aging adults	Younger	Gap
	Internet subscription of any kind		90.1%	95.7%	-5.6%
	Internet subscription via wireline technology (i.e. fiber, cable, DSL)		69.6%	81.6%	-12.0%
	Only subscription via cellular data plan		16.2%	11.6%	4.5%
Disability	Internet in the house		With disabilities	Without disabilities	Gap
	Internet subscription of any kind		86.2%	95.8%	-9.6%
	Internet subscription via wireline technology (i.e. fiber, cable, DSL)		67.2%	80.7%	-13.4%
	Only subscription via cellular data plan		14.8%	12.4%	2.4%
English proficiency	Internet in the house		English learner	Fluent	Gap
	Internet subscription of any kind		95.8%	94.2%	1.6%
	Internet subscription via wireline technology (i.e. fiber, cable, DSL)		72.9%	78.9%	-6.0%
	Only subscription via cellular data plan		19.9%	12.4%	7.6%
Veteran status	Internet in the house		Veteran	Non-veteran	Gap
	Internet subscription of any kind		91.2%	94.5%	-3.3%
	Internet subscription via wireline technology (i.e. fiber, cable, DSL)		72.3%	79.0%	-6.7%
	Only subscription via cellular data plan		15.0%	12.6%	2.3%

In addition to the considerable gap between low- and higher-income individuals in internet adoption, the reported frequency of inability (and unwillingness) to pay for home internet use suggests that the state has substantial needs for increased efforts to bring down the cost of home internet subscriptions and use.

Perhaps the most widely known and used effort to lower the cost of internet access is the Affordable Connectivity Program (ACP). The ACP subsidizes up to \$30 per month (or \$75 for households living on tribal lands) for broadband for qualifying households and may include a one-time subsidy toward buying a laptop or tablet. However, despite the benefit of the subsidy, the ACP is known to be chronically undersubscribed—which is especially true in Oregon where only about 26 percent of eligible households have enrolled and highlights the significant opportunity for growth.

<sup>331</sup> U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.

**Table 15: Affordable Connectivity Program enrollment in Oregon and the U.S.**<sup>332</sup>

	Oregon	Nation
Households enrolled	199,575	19,903,735
Households estimated eligible	776,163	55,266,900
Portion of eligible households enrolled	26%	36%

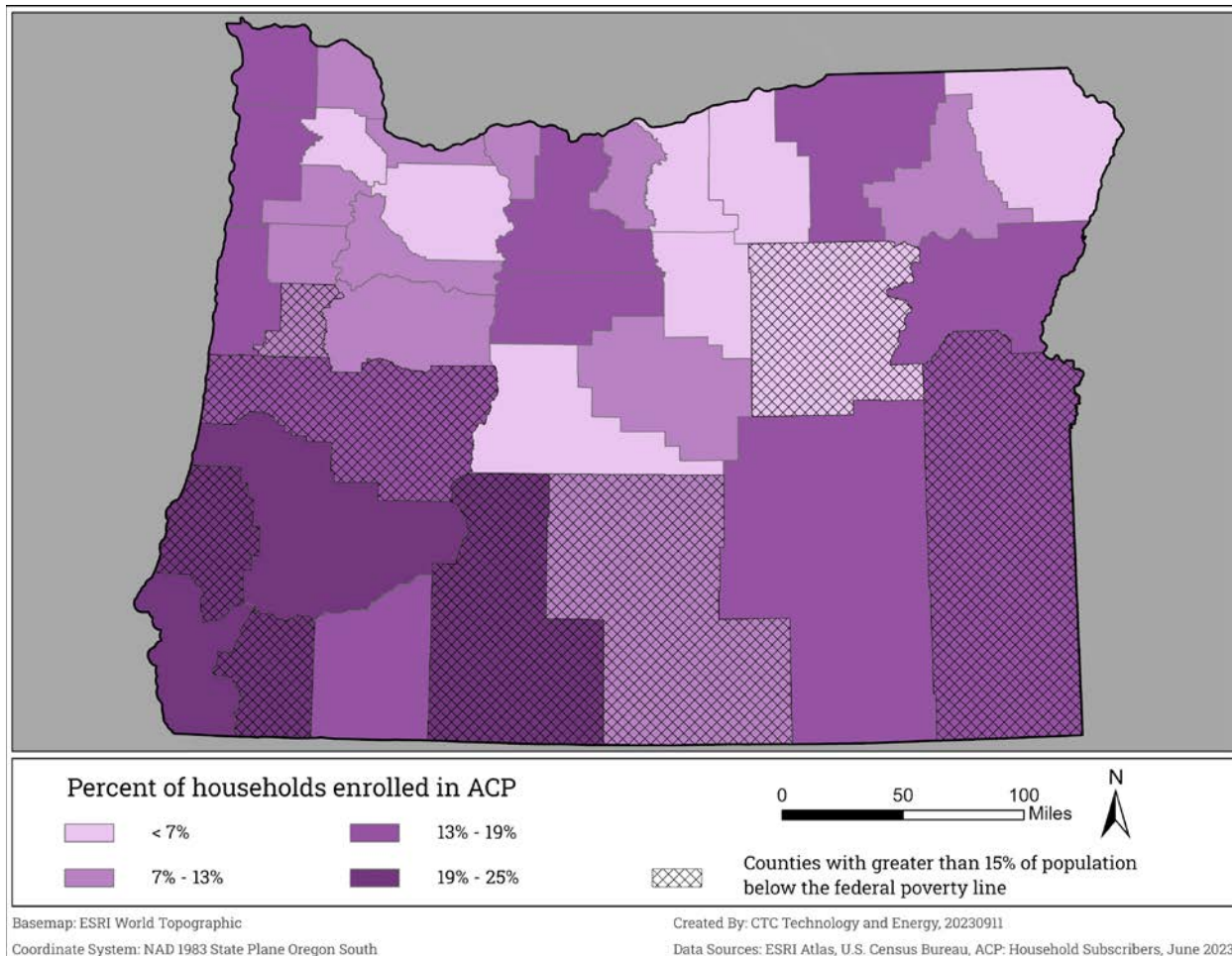
Households can be determined to be eligible through many criteria, including if they earn up to 200 percent of the federal poverty level or participate in one of many federal or state support programs (e.g., National School Lunch Program). As a result, eligibility for the program is highly aligned with members of covered populations. An estimated 53 percent of individuals belonging to covered populations are eligible for the ACP.

Figure 4 shows the percentage of households in each Oregon county that participate in the ACP.

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<sup>332</sup> Enrollment counts from USAC's ACP Enrollment and Claims Tracker, accurate as of August 28, 2023. <https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/>. Accessed August 29, 2023. Estimates of eligible households based on proprietary model that uses American Community Survey Public Use Microdata to estimate number of households qualifying for ACP via several of its eligibility criteria.

**Figure 4: ACP enrollment in Oregon by county**



### 3.2.3 Digital literacy and digital skills

For individuals to meaningfully use the internet, they must practice and be confident in their ability to perform digital skills. Although some individuals may have internet service and a working computer, they can frequently be functionally limited by their inability to navigate the internet effectively. In Oregon, 57 percent of residents without home internet use cite a lack of need or interest in the internet as a reason why they do not use internet in the home, making digital increasing literacy the highest priority need for achieving digital equity in the state. These findings suggest that some Oregon residents may be more inclined to use the internet at home if they understand the full use, and therefore value, of having fluency in various digital skills.

The State of Oregon used data from the Current Population Survey and the NTIA Internet Use Survey to evaluate the extent to which various covered populations engage in key online activities. These key findings are as follows:

1. Oregon outpaces the nation, but not significantly, in frequency of online digital skill use. Further, members of covered populations underperform compared to non-covered populations.
2. Individuals at or above 60 years of age, individuals living with disabilities, individuals living in rural areas, and veterans express the most urgent need for digital skills programming.
3. Oregon outperforms compared to the nation across almost all measured telemedicine-related online activities, and members of covered populations tend to underperform compared to non-covered populations.
4. In Oregon, all covered populations—except racial or ethnic minorities—express needs for telemedicine digital skills programming.

While a greater portion of Oregon residents tend to regularly perform online activities compared to the national rates, the data is not uniform and does not fully account for overlapping experiences among covered populations. In addition, there are many activities in which the inverse is true. People in Oregon outpace the nation in activities such as streaming or downloading music, radio, and podcasts—with a gap of 8.4 percentage points between Oregon and the nation.

Also significant are the gaps for shopping, making travel reservations (or using other consumer services), and watching videos online, in which Oregon outperforms the nation by 8.3 percentage points and 7.4 percentage points, respectively. Even though Oregon exceeds the nation in performing many of these activities, there is still opportunity for improvement as the national figures mostly help contextualize Oregon's positionality in a broader context rather than serve as the ceiling for achievement.

**Table 16: Digital literacy in Oregon and the U.S.**<sup>333</sup>

Online activity	Oregon	Nation	Gap
Uses text messaging or instant messaging	94.9%	93.3%	1.6%
Uses email	94.8%	91.8%	3.0%
Uses online social networks	71.3%	74.6%	-3.2%
Shops, makes travel reservations, or uses other consumer services online	82.4%	74.1%	8.3%
Uses online financial services like banking, investing, paying bills	81.4%	74.3%	7.1%
Watches videos online	77.5%	70.1%	7.4%
Participates in online video or voice calls or conferencing	72.4%	65.6%	6.8%
Streams or downloads music, radio, podcasts, etc.	68.4%	60.0%	8.4%
Requests services provided by other people via the internet	48.0%	43.0%	5.0%
Accessing government services	43.8%	38.4%	5.5%
Takes class or participates in job training online	31.1%	25.7%	5.3%
Interacts with household equipment using the internet	23.6%	22.3%	1.2%
Telecommutes using the internet	26.2%	27.7%	-1.5%
Searches for a job online	20.3%	21.3%	-1.0%
Posts or uploads blog posts, videos, or other original content	16.0%	17.0%	-1.0%
Uses the internet to sell goods	13.7%	10.5%	3.2%
Offers services for sale via the internet	6.8%	8.8%	-1.9%

Individuals belonging to covered populations uniformly practice digital skills at a lower rate than those that do not belong to covered populations. Here, the largest gaps can be found in telecommuting using the internet (25.3 percentage point gap), streaming or downloading music, radio, podcasts, etc. (22.4 percentage point gap), requesting services provided by other people via the internet (20.5 percentage point gap), and watching videos online (16.9 percentage point gap).

**Table 17: Digital literacy in Oregon covered populations**<sup>334</sup>

Online activity	Covered group	Non-covered group	Gap
Uses text messaging or instant messaging	93.0%	97.9%	-4.9%
Uses email	92.9%	97.7%	-4.8%
Uses online social networks	67.5%	77.9%	-10.4%
Shops, makes travel reservations, or uses other consumer services online	78.1%	89.7%	-11.6%
Uses online financial services like banking, investing, paying bills	76.1%	90.9%	-14.8%
Watches videos online	70.8%	87.7%	-16.9%
Participates in online video or voice calls or conferencing	67.8%	79.3%	-11.4%
Streams or downloads music, radio, podcasts, etc.	60.2%	82.5%	-22.4%
Requests services provided by other people via the internet	40.4%	60.8%	-20.5%
Accessing government services	42.0%	47.4%	-5.4%
Takes class or participates in job training online	26.4%	37.4%	-11.0%
Interacts with household equipment using the internet	18.7%	31.7%	-13.0%
Telecommutes using the internet	16.6%	41.9%	-25.3%
Searches for a job online	17.2%	25.6%	-8.4%
Posts or uploads blog posts, videos, or other original content	14.7%	18.4%	-3.7%
Uses the internet to sell goods	11.4%	17.7%	-6.3%
Offers services for sale via the internet	6.7%	7.1%	-0.4%

<sup>333</sup> NTIA, 2021 Internet Use Survey. Accessed August 29, 2023.

<sup>334</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.

Of all covered populations in the State of Oregon, the digital skills discrepancies are greatest for individuals who are at or above 60 years of age. The online activity where this group trails its non-covered counterpart the most is in streaming or downloading music, radio, and podcasts—with a gap of 36.7 percentage points. However, the disproportionate nature of this figure is not an exception; of the 17 total online activities, individuals who are at or above 60 years of age underperformed younger individuals by gaps of greater than 20 percentage points for eight activities (three of which exceeded 30 percent). As such, these data demonstrate that individuals at or above the age of 60 in Oregon urgently need digital skills training.

**Table 18: Digital literacy in aging and younger populations<sup>335</sup>**

Online activity	Aging adults	Younger	Gap
Uses text messaging or instant messaging	87.5%	97.9%	-10.5%
Uses email	89.1%	97.1%	-8.0%
Uses online social networks	51.0%	79.7%	-28.7%
Shops, makes travel reservations, or uses other consumer services online	75.8%	85.2%	-9.4%
Uses online financial services like banking, investing, paying bills	67.8%	86.9%	-19.1%
Watches videos online	56.0%	86.3%	-30.3%
Participates in online video or voice calls or conferencing	54.4%	79.8%	-25.4%
Streams or downloads music, radio, podcasts, etc.	42.4%	79.0%	-36.7%
Requests services provided by other people via the internet	26.5%	56.8%	-30.3%
Accessing government services	40.0%	45.4%	-5.5%
Takes class or participates in job training online	12.2%	38.7%	-26.5%
Interacts with household equipment using the internet	9.9%	29.2%	-19.3%
Telecommutes using the internet	9.4%	33.1%	-23.7%
Searches for a job online	5.2%	26.5%	-21.3%
Posts or uploads blog posts, videos, or other original content	7.4%	19.5%	-12.0%
Uses the internet to sell goods	8.9%	15.7%	-6.8%
Offers services for sale via the internet	5.9%	7.2%	-1.3%

People with disabilities almost uniformly practice digital skills at lower rates than people without disabilities. Further, the largest gaps are found in activities such as streaming or downloading music, radio, podcasts, etc. (21.0 percentage points), telecommuting using the internet (17.6 percentage points), requesting services provided by other people via the internet (16.2 percentage points), and participating in online video or voice calls or conferencing (15.2 percentage points).

<sup>335</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.

The only online activity for which people with disabilities in Oregon outpace their counterparts is in offering services for sale via the internet, which 7.5 percent performed recently compared to 6.7 percent of individuals without disabilities. The relatively small nature of this gap and the overwhelming discrepancies for many other digital skills indicate that people with disabilities in Oregon would greatly benefit from digital skills training.

**Table 19: Digital literacy in people with disabilities and people without disabilities<sup>336</sup>**

Online activity	With disabilities	Without disabilities	Gap
Uses text messaging or instant messaging	89.4%	95.9%	-6.5%
Uses email	89.9%	95.7%	-5.8%
Uses online social networks	67.6%	72.0%	-4.4%
Shops, makes travel reservations, or uses other consumer services online	78.3%	83.2%	-4.9%
Uses online financial services like banking, investing, paying bills	74.9%	82.5%	-7.6%
Watches videos online	69.6%	78.9%	-9.3%
Participates in online video or voice calls or conferencing	59.5%	74.7%	-15.2%
Streams or downloads music, radio, podcasts, etc.	50.6%	71.6%	-21.0%
Requests services provided by other people via the internet	34.3%	50.5%	-16.2%
Accessing government services	40.3%	44.5%	-4.1%
Takes class or participates in job training online	27.9%	31.6%	-3.8%
Interacts with household equipment using the internet	21.1%	24.0%	-3.0%
Telecommutes using the internet	11.3%	28.9%	-17.6%
Searches for a job online	16.4%	21.0%	-4.6%
Posts or uploads blog posts, videos, or other original content	13.3%	16.5%	-3.1%
Uses the internet to sell goods	5.4%	15.3%	-9.8%
Offers services for sale via the internet	7.5%	6.7%	0.8%

Despite outpacing their counterparts in a couple of online activities, overall, individuals living in rural areas use other digital skills significantly less frequently than their metropolitan counterparts—most notably in requesting services provided by other people via the internet with a gap of 25.7 percentage points. It is possible that some online services are less accessible as a result of living in a rural area and, in turn, could explain this large gap.

For example, using rideshare apps such as Uber or Lyft for personal transportation or food delivery is frequently not possible in rural areas because of a limited pool of individuals offering to drive in very rural areas. However, there are many other

<sup>336</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.

online activities where individuals in rural areas fall behind that would be difficult to explain by location—such as accessing government services (registering to vote, for example). As such, individuals living in rural areas may greatly benefit from digital skills training.

**Table 20: Digital literacy in rural and metropolitan populations<sup>337</sup>**

Online activity	Rural	Metropolitan	Gap
Uses text messaging or instant messaging	90.0%	95.4%	-5.4%
Uses email	92.6%	95.0%	-2.4%
Uses online social networks	71.2%	71.4%	-0.2%
Shops, makes travel reservations, or uses other consumer services online	75.0%	83.2%	-8.2%
Uses online financial services like banking, investing, paying bills	68.2%	82.7%	-14.5%
Watches videos online	58.0%	79.5%	-21.5%
Participates in online video or voice calls or conferencing	52.9%	74.4%	-21.5%
Streams or downloads music, radio, podcasts, etc.	62.6%	69.0%	-6.4%
Requests services provided by other people via the internet	24.7%	50.4%	-25.7%
Accessing government services	21.8%	46.1%	-24.3%
Takes class or participates in job training online	18.9%	32.3%	-13.4%
Interacts with household equipment using the internet	20.2%	23.9%	-3.7%
Telecommutes using the internet	7.5%	28.1%	-20.6%
Searches for a job online	25.1%	19.8%	5.3%
Posts or uploads blog posts, videos, or other original content	28.1%	14.8%	13.3%
Uses the internet to sell goods	7.7%	14.4%	-6.6%
Offers services for sale via the internet	2.8%	7.2%	-4.4%

Low-income individuals perform about half of the measured online activities more frequently than higher-income individuals—indicating a less urgent need for digital skills training for this covered population. However, there are much larger gaps for many of the digital skills that low-income individuals perform less frequently than their counterparts. For example, low-income individuals are 14.6 percentage points less likely to telecommute using the internet and 11.7 percentage points less likely to shop, make travel reservations, or use other consumer services online.

Comparatively, the greatest gap by which low-income populations outperform higher-income populations is in posting or uploading blog posts, videos, or other original content, where low-income individuals lead by 7.0 percentage points. Nevertheless, the disparity in the size of the gaps can possibly be explained by the

<sup>337</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.



nature of the digital skills being performed, such as telecommuting—an online activity that would not be applicable for many jobs performed by low-income individuals.

**Table 21: Digital literacy in low and higher-income populations<sup>338</sup>**

Online activity	Low-income	Higher-income	Gap
Uses text messaging or instant messaging	95.8%	94.7%	1.1%
Uses email	91.5%	95.5%	-4.0%
Uses online social networks	72.8%	71.0%	1.8%
Shops, makes travel reservations, or uses other consumer services online	72.8%	84.5%	-11.7%
Uses online financial services like banking, investing, paying bills	72.4%	83.3%	-10.9%
Watches videos online	76.2%	77.7%	-1.5%
Participates in online video or voice calls or conferencing	72.6%	72.4%	0.2%
Streams or downloads music, radio, podcasts, etc.	65.8%	69.0%	-3.2%
Requests services provided by other people via the internet	43.6%	48.9%	-5.4%
Accessing government services	48.1%	42.9%	5.2%
Takes class or participates in job training online	31.7%	30.9%	0.8%
Interacts with household equipment using the internet	16.4%	25.1%	-8.7%
Telecommutes using the internet	14.2%	28.8%	-14.6%
Searches for a job online	21.8%	20.0%	1.8%
Posts or uploads blog posts, videos, or other original content	21.8%	14.7%	7.0%
Uses the internet to sell goods	13.0%	13.9%	-0.9%
Offers services for sale via the internet	9.7%	6.2%	3.4%

Veterans are another covered population that could greatly benefit from—and urgently need—digital skills training. Compared to their non-veteran counterparts, veterans consistently underperform online activities—with the sole exception of using the internet to sell goods, where veterans outperform non-veterans by 0.3 percentage points. Accordingly, of the 17 measured online activities, veterans trailed behind non-veterans by margins of greater than 10 percentage points in nine activities—demonstrating the need for digital skills education for the group.

<sup>338</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.

**Table 22: Digital literacy in veteran and non-veteran populations<sup>339</sup>**

Online activity	Veteran	Non-veteran	Gap
Uses text messaging or instant messaging	91.1%	95.1%	-4.0%
Uses email	85.8%	96.0%	-10.2%
Uses online social networks	63.6%	72.0%	-8.4%
Shops, makes travel reservations, or uses other consumer services online	79.6%	83.3%	-3.7%
Uses online financial services like banking, investing, paying bills	76.7%	83.4%	-6.7%
Watches videos online	62.4%	78.4%	-16.0%
Participates in online video or voice calls or conferencing	57.1%	73.6%	-16.5%
Streams or downloads music, radio, podcasts, etc.	49.5%	70.4%	-20.9%
Requests services provided by other people via the internet	29.9%	50.9%	-21.0%
Accessing government services	34.0%	45.8%	-11.8%
Takes class or participates in job training online	9.6%	31.7%	-22.0%
Interacts with household equipment using the internet	20.5%	24.2%	-3.7%
Telecommutes using the internet	14.1%	28.3%	-14.2%
Searches for a job online	5.3%	22.0%	-16.7%
Posts or uploads blog posts, videos, or other original content	7.0%	16.6%	-9.6%
Uses the internet to sell goods	14.3%	14.1%	0.3%
Offers services for sale via the internet	6.8%	7.0%	-0.2%

Racial or ethnic minorities were also evaluated for digital skills use, although this demographic does not illustrate a particularly urgent need for skills training. Rather, racial or ethnic minorities outperform white Oregonians in more than half the measured online activities.

<sup>339</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.

**Table 23: Digital literacy in racial/ethnic minority and white populations<sup>340</sup>**

Online activity	Ethnic or racial minority	White alone	Gap
Uses text messaging or instant messaging	97.0%	94.5%	2.5%
Uses email	94.8%	94.8%	0.0%
Uses online social networks	79.7%	70.0%	9.8%
Shops, makes travel reservations, or uses other consumer services online	71.8%	84.2%	-12.4%
Uses online financial services like banking, investing, paying bills	80.5%	81.5%	-1.0%
Watches videos online	84.0%	76.4%	7.6%
Participates in online video or voice calls or conferencing	77.4%	71.6%	5.8%
Streams or downloads music, radio, podcasts, etc.	80.9%	66.3%	14.6%
Requests services provided by other people via the internet	44.7%	48.5%	-3.9%
Accessing government services	41.1%	44.3%	-3.2%
Takes class or participates in job training online	41.0%	29.4%	11.5%
Interacts with household equipment using the internet	31.9%	22.2%	9.8%
Telecommutes using the internet	18.9%	27.4%	-8.4%
Searches for a job online	26.3%	19.3%	7.0%
Posts or uploads blog posts, videos, or other original content	17.0%	15.8%	1.2%
Uses the internet to sell goods	12.0%	14.0%	-2.0%
Offers services for sale via the internet	5.0%	7.1%	-2.2%

### 3.2.4 Telemedicine

Increasingly, there is a use and need for a distinguished set of digital skills involved in telemedicine and remote healthcare. These activities include communicating with health professionals over the internet, researching health information online, using an electronic health monitoring device (for example, sending data to a provider from a smart watch or pacemaker), and accessing health or health insurance records online. Oregon significantly outpaces the nation in frequency of performance of each of these telemedicine activities; the only exception is in using an electronic health monitoring service, where the state slightly lags behind (2.4 percentage point gap).

<sup>340</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.

**Table 24: Telemedicine digital literacy in Oregon and the U.S.<sup>341</sup>**

Telemedicine activity	Oregon	Nation	Gap
Communicates with a health professional over the internet	65.7%	48.1%	17.6%
Researches health information online	70.1%	52.9%	17.2%
Uses an electronic health monitoring service	6.1%	8.4%	-2.4%
Accesses health or insurance records online	71.2%	53.1%	18.1%

Among people in Oregon belonging to covered populations, telemedicine is less frequently practiced compared to non-covered populations. These gaps are especially prevalent in researching health information online (13.5 percentage point gap) and accessing health or insurance records online (10.4 percentage point gap). Individuals in covered populations do just outpace non-covered populations in the rate of use of electronic health monitoring services (0.9 percentage point gap), but this outcome may be skewed by a higher rate of medical needs among covered populations rather than a higher degree of digital literacy.

**Table 25: Telemedicine digital literacy in covered and non-covered populations<sup>342</sup>**

Telemedicine activity	Covered groups	Non-covered groups	Gap
Communicates with a health professional over the internet	62.6%	70.7%	-8.1%
Researches health information online	64.7%	78.2%	-13.5%
Uses an electronic health monitoring service	6.5%	5.5%	0.9%
Accesses health or insurance records online	67.0%	77.4%	-10.4%

Among the covered populations, individuals living in rural areas and adults at or above 60 years of age exhibit the most urgent needs for increased telemedicine skills—based on both their reported frequency of participation in telemedicine (which is notably low) and given the difficulties in traveling long distances and at inconvenient times for rural individuals and given older adults’ increased risk for medical needs. Low-income individuals, people with disabilities, and veterans also would greatly benefit from specific telemedicine education, as each of these populations also noticeably lag their counterparts in telemedicine participation.

<sup>341</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.

<sup>342</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.

**Table 26: Telemedicine digital literacy in various covered populations<sup>343</sup>**

<b>Income</b>		<b>Low-income</b>	<b>Higher-income</b>	<b>Gap</b>
<b>Income</b>	<b>Telemedicine activity</b>			
	Communicates with a health professional over the internet	61.2%	66.6%	-5.4%
	Researches health information online	65.1%	71.2%	-6.1%
	Uses an electronic health monitoring service	6.4%	6.0%	0.4%
Accesses health or insurance records online	64.3%	72.7%	-8.3%	
<b>Age</b>		<b>Aging adults</b>	<b>Younger</b>	<b>Gap</b>
<b>Age</b>	<b>Telemedicine activity</b>			
	Communicates with a health professional over the internet	58.4%	68.7%	-10.3%
	Researches health information online	59.4%	74.4%	-15.0%
	Uses an electronic health monitoring service	7.9%	5.3%	2.6%
Accesses health or insurance records online	64.5%	73.9%	-9.4%	
<b>Veteran status</b>		<b>Veteran</b>	<b>Non-veteran</b>	<b>Gap</b>
<b>Veteran status</b>	<b>Telemedicine activity</b>			
	Communicates with a health professional over the internet	58.4%	66.1%	-7.7%
	Researches health information online	59.5%	70.6%	-11.1%
	Uses an electronic health monitoring service	4.4%	6.4%	-2.0%
Accesses health or insurance records online	69.1%	71.1%	-2.1%	
<b>Disability</b>		<b>With disabilities</b>	<b>Without disabilities</b>	<b>Gap</b>
<b>Disability</b>	<b>Telemedicine activity</b>			
	Communicates with a health professional over the internet	63.4%	66.1%	-2.7%
	Researches health information online	59.1%	72.1%	-13.0%
	Uses an electronic health monitoring service	10.0%	5.3%	4.6%
Accesses health or insurance records online	59.4%	73.3%	-13.9%	
<b>Race</b>		<b>Ethnic or racial minority</b>	<b>White alone</b>	<b>Gap</b>
<b>Race</b>	<b>Telemedicine activity</b>			
	Communicates with a health professional over the internet	66.3%	65.6%	0.7%
	Researches health information online	72.2%	69.7%	2.4%
	Uses an electronic health monitoring service	3.7%	6.4%	-2.7%
Accesses health or insurance records online	65.7%	72.1%	-6.4%	
<b>Rurality</b>		<b>Rural</b>	<b>Metropolitan</b>	<b>Gap</b>
<b>Rurality</b>	<b>Telemedicine activity</b>			
	Communicates with a health professional over the internet	46.0%	67.7%	-21.7%
	Researches health information online	52.3%	71.9%	-19.6%
	Uses an electronic health monitoring service	4.7%	6.2%	-1.5%
Accesses health or insurance records online	59.2%	72.4%	-13.3%	

### 3.2.5 Online security and privacy

Theft, fraud, phishing, and misinformation are all commonplace on the internet, and fully realizing digital equity in Oregon requires users to be safe from such online risks. In Oregon, only 1 percent of all households that do not use the internet at home cited online security or privacy concerns as a reason for their lack of use. However, in the past year, 20.3 percent of individuals in covered populations report having been the victim of an online security or privacy breach.

Therefore, the State of Oregon used data from the Current Population Survey and the NTIA Internet Use Survey to evaluate the extents to which various covered

<sup>343</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.

populations perceive and feel confident in their ability to disarm online security and privacy threats. The key findings are as follows:

1. Oregon residents are similarly concerned by online security and privacy concerns when compared against the nation.
2. Identity theft and credit card fraud are the two online security breaches that are concerning to most Oregon residents.
3. Covered populations are similarly concerned by online security and privacy risks when compared against non-covered populations.
4. Members of covered populations do not appear meaningfully more dissuaded than non-covered populations to undertake various online activities because of security or privacy concerns.

Oregon residents tended to be slightly less concerned overall about online security or privacy than the nation, though not significantly so. Identity theft and credit card fraud were the two online security risks that concerned the most Oregon residents. This is in line with the national ranking. Other concerns such as third-party tracking, government tracking, and online threats were of less concern.

**Table 27: Main online security or privacy concerns in Oregon and the U.S.<sup>344</sup>**

(Non-exclusive) main online security or privacy concerns	Oregon	Nation	Gap
Identity theft	45.7%	50.7%	-5.0%
Credit card fraud	39.8%	42.1%	-2.3%
Third party tracking	25.8%	26.4%	-0.6%
Government tracking	16.6%	19.0%	-2.4%
Online threats	23.7%	23.1%	0.5%
Other	10.1%	13.1%	-3.0%

Individuals belonging to covered populations and non-covered individuals were similarly concerned about online security or privacy risks in Oregon. However, the relative similarities in rates of online security or privacy concerns do not necessarily indicate sufficient awareness of extant risks for either population. The

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<sup>344</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.

data indicate that both covered and non-covered populations could benefit from additional educational programming.

**Table 28: Primary online security or privacy concerns in covered and non-covered populations<sup>345</sup>**

(Non-exclusive) main online security or privacy concerns	Covered groups	Non-covered groups	Gap
Identity theft	44.4%	47.0%	-2.7%
Credit card fraud	39.9%	39.4%	0.5%
Third party tracking	25.1%	27.4%	-2.3%
Government tracking	17.4%	15.4%	2.0%
Online threats	21.8%	27.0%	-5.2%
Other	10.2%	10.1%	0.1%

Among the specific covered populations, people with disabilities tended to be the most concerned about these risks. Lower-income individuals and veterans expressed the least concern over these issues. Online security education both from the state and through trusted organizations may increase awareness of these concerns in a positive way, especially for lower-income households and veterans.

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<sup>345</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.

**Table 29: Main online security or privacy concerns in various covered populations<sup>346</sup>**

	(Non-exclusive) main online security or privacy concerns		Low-income	Higher-income	Gap
	<b>Income</b>	Identity theft	38.2%	47.3%	-9.1%
	Credit card fraud	33.7%	41.1%	-7.3%	
	Third party tracking	20.7%	27.0%	-6.3%	
	Government tracking	14.9%	16.9%	-2.0%	
	Online threats	20.1%	24.5%	-4.3%	
	Other	8.9%	10.3%	-1.4%	
	(Non-exclusive) main online security or privacy concerns		Aging adults	Younger	Gap
	<b>Age</b>	Identity theft	47.6%	44.9%	2.7%
	Credit card fraud	45.0%	37.7%	7.3%	
	Third party tracking	26.1%	25.8%	0.3%	
	Government tracking	17.2%	16.3%	0.9%	
	Online threats	20.7%	24.9%	-4.3%	
	Other	8.0%	10.9%	-2.9%	
	(Non-exclusive) main online security or privacy concerns		Veterans	Non-veterans	Gap
	<b>Veteran status</b>	Identity theft	41.1%	45.7%	-4.6%
	Credit card fraud	34.5%	40.2%	-5.7%	
	Third party tracking	23.0%	26.5%	-3.5%	
	Government tracking	18.2%	16.5%	1.8%	
	Online threats	18.1%	24.6%	-6.5%	
	Other	8.6%	9.6%	-1.0%	
	(Non-exclusive) main online security or privacy concerns		With disabilities	Without disabilities	Gap
	<b>Disability</b>	Identity theft	48.5%	45.2%	3.3%
	Credit card fraud	45.7%	38.7%	7.0%	
	Third party tracking	29.3%	25.2%	4.1%	
	Government tracking	19.2%	16.1%	3.1%	
	Online threats	20.9%	24.2%	-3.3%	
	Other	10.8%	9.9%	0.9%	
	(Non-exclusive) main online security or privacy concerns		Ethnic or racial minority	White alone	Gap
	<b>Race</b>	Identity theft	39.8%	46.7%	-6.8%
	Credit card fraud	40.0%	39.7%	0.2%	
	Third party tracking	22.9%	26.3%	-3.4%	
	Government tracking	15.4%	16.7%	-1.3%	
	Online threats	27.9%	23.0%	4.8%	
	Other	15.3%	9.2%	6.2%	
	(Non-exclusive) main online security or privacy concerns		Rural	Metropolitan	Gap
	<b>Rurality</b>	Identity theft	47.8%	45.5%	2.3%
	Credit card fraud	45.8%	39.2%	6.6%	
	Third party tracking	23.2%	26.1%	-2.9%	
	Government tracking	19.1%	16.3%	2.8%	
	Online threats	16.0%	24.5%	-8.4%	
	Other	9.7%	10.1%	-0.4%	

<sup>346</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.



It may be more meaningful for the identification of barriers to examine the impacts of concern rather than level of concern. An estimated 17.4 percent of Oregon residents chose not to buy goods or services online in the past year because of concerns regarding privacy or security. Similarly, 17.4 percent chose not to search for information on a web search engine for these reasons. Oregon residents appear slightly more or similarly dissuaded from online activities (depending on activity) because of security concerns than the rest of the nation. While the goal is for all individuals to feel safe and confident in their performance of online activities, it remains possible that this data is more suggestive of the level of information or awareness rather than capacity for self-protection.

**Table 30: Portion of individuals dissuaded from performing online activities by privacy or security concerns in Oregon and the U.S.<sup>347</sup>**

Concerns about privacy or security stopped someone in your household from:	Oregon	Nation	Gap
Conducting financial transactions online	7.3%	3.2%	4.1%
Buying goods or services online	17.4%	18.0%	-0.6%
Posting photos or other information to social media	13.4%	13.5%	-0.1%
Expressing an opinion on a controversial or political issue online	17.1%	13.7%	3.5%
Searching for information on a web search engine	17.4%	13.0%	4.4%

Members of covered populations do not meaningfully differ from non-covered populations by these metrics—with the exception of expressing an opinion on a controversial or political issue online, where covered populations were 8 percent less likely to be dissuaded than non-covered populations. Nevertheless, it is likely that security and privacy-based educational programming may be similarly beneficial to covered and non-covered populations.

**Table 31: Portion of individuals dissuaded from performing online activities by privacy or security concerns in covered and non-covered populations<sup>348</sup>**

Concerns about privacy or security stopped someone in your household from:	Covered groups	Non-covered groups	Gap
Conducting financial transactions online	8.0%	6.2%	1.8%
Buying goods or services online	18.8%	14.0%	4.8%
Posting photos or other information to social media	14.3%	11.5%	2.8%
Expressing an opinion on a controversial or political issue online	14.1%	22.2%	-8.0%
Searching for information on a web search engine	16.2%	18.8%	-2.5%

<sup>347</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.

<sup>348</sup> U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.

### 3.2.6 Device adoption

Meaningful use of the internet requires the meaningful use of internet-enabled modern devices such as desktop and laptop computers, tablets, and, in some instances, smartphones. While Oregon residents who do not use internet at home did not self-identify adequate computer device access as a substantial barrier to their households' connectivity, other data suggests a computer device ownership gap among covered populations. Therefore, the State of Oregon used data from the American Community Survey to evaluate the extent to which Oregon residents as a whole, and various covered populations specifically, have access to computer devices in their homes. The key findings are as follows:

1. Oregon outperforms the national average in desktop or laptop access rates.
2. Device access rates are uniformly lower for members of covered populations compared to non-covered populations.
3. Low-income households are in the most urgent need for increased desktop or laptop computer access. However, all covered populations lag behind their non-covered counterparts in desktop or laptop ownership (to varying degrees) and would benefit from increased device access.

The State of Oregon performs similarly to the nation in computer device ownership of any kind, with 95.9 percent of individuals claiming to have access to a computer in the house compared to 95.0 percent nationally. However, these devices are not uniformly capable. While tablets and smartphones are increasingly effective for many online tasks, they are still ultimately not adequate for full realization of achieving digital equity. In Oregon, 86.3 percent of individuals have access to a desktop or laptop in their home, which is 5.8 percentage points more than the national rate of 80.5 percent. Device adoption statistics for the state and nation are presented in Table 32 below:

**Table 32: Device adoption rates in Oregon and the U.S.**<sup>349</sup>

Computer in the house	Oregon	Nation	Gap
Computer device of any kind	95.9%	95.0%	0.9%
Desktop or laptop	86.3%	80.5%	5.8%
Tablet	71.8%	63.8%	8.0%
Smartphone only	5.3%	9.1%	-3.8%

Evidently, device ownership is affected by membership in covered populations. For example, 99.5 percent of individuals not belonging to a covered population have access to a computer at home, while only 93.8 percent of individuals belonging to covered populations report the same access. This device gap grows when limiting the inquiry to tablets, or to desktop or laptop devices, to which members of covered populations are reportedly 14.0 and 13.3 percentage points less likely to have access at the home, respectively.

Additionally, 6.8 percent of members of covered populations (compared to 2.6 percent of non-covered populations) report only having access to a smartphone at home. While this is technically counted as a computer device of any kind, a smartphone alone is insufficient for a myriad of key online activities. These data suggest that device ownership is still a meaningful barrier to connectivity for members of covered populations in Oregon.

**Table 33: Device adoption rates in Oregon covered populations**<sup>350</sup>

Computer in the house	Covered groups	Non-covered groups	Gap
Computer device of any kind	93.8%	99.5%	-5.7%
Desktop or laptop	81.4%	94.8%	-13.3%
Tablet	66.6%	80.7%	-14.0%
Smartphone only	6.8%	2.6%	4.2%

Among various covered populations, individuals living in low-income households display the most urgent needs for adequate computer devices. Low-income individuals underperformed every other covered population in ownership of computer devices of any kind, desktop or laptop computers, and tablet computers.

<sup>349</sup> U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.

<sup>350</sup> U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.

People with disabilities also demonstrate relatively urgent needs for adequate computer devices—with gaps between people with and without disabilities of 13.7 percentage points for laptop or desktop device ownership and 14.9 percentage points for tablet ownership. Aging individuals also lagged younger individuals by significant gaps in device adoption—9.0 percentage points for desktop or laptop ownership and 16.8 percentage points for tablets. This data might be explained by accessibility concerns regarding various devices, which only serve to reemphasize the need for adequate devices.

English language learners also exhibit a need in device adoption. In addition to being 10.5 percent less likely to own a desktop or laptop device than fluent English speakers, a notably outsized portion of English language learners only use a smartphone at the home (12.0 percent). This is related to their tendency to only subscribe to cellular data plans for broadband access, although it is unclear which factor influences the other. In either case, smartphone only use is not sufficient for fully realizing the benefits of internet (e.g., digital skills training, workforce and economic development).

**Table 34: Device adoption rates in various covered populations<sup>351</sup>**

Income	Computer in the house	Low-income	Higher-income	Gap	
	Computer device of any kind	87.0%		98.4%	-11.4%
Desktop or laptop	70.1%		90.9%	-20.7%	
Tablet	57.3%		75.8%	-18.6%	
Smartphone only	9.5%		4.1%	5.4%	
Race	Computer in the house	Ethnic or racial minority	White alone	Gap	
	Computer device of any kind	96.0%		95.9%	0.1%
Desktop or laptop	83.4%		87.3%	-3.9%	
Tablet	73.6%		71.1%	2.4%	
Smartphone only	6.6%		4.8%	1.8%	
Age	Computer in the house	Aging adults	Younger	Gap	
	Computer device of any kind	92.1%		97.2%	-5.0%
Desktop or laptop	79.6%		88.6%	-9.0%	
Tablet	59.2%		76.0%	-16.8%	
Smartphone only	6.7%		4.8%	1.9%	
Disability	Computer in the house	With disabilities	Without disabilities	Gap	
	Computer device of any kind	88.4%		97.3%	-8.8%
Desktop or laptop	74.7%		88.4%	-13.7%	
Tablet	59.2%		74.1%	-14.9%	
Smartphone only	7.6%		4.9%	2.8%	
English proficiency	Computer in the house	English learner	English fluency	Gap	
	Computer device of any kind	96.7%		95.9%	0.8%
Desktop or laptop	76.4%		86.9%	-10.5%	
Tablet	64.7%		72.2%	-7.4%	
Smartphone only	12.0%		4.9%	7.0%	
Veteran status	Computer in the house	Veteran	Non-veteran	Gap	
	Computer device of any k	92.7%		96.1%	-3.4%
Desktop or laptop	82.3%		86.6%	-4.3%	
Tablet	63.3%		72.3%	-9.0%	
Smartphone only	5.7%		5.3%	0.5%	

In addition to the need for devices, many of the above groups may have needs for access to device repair and tech support programs. For many individuals learning how to use a computer for the first time, a lack of proper training or support may dissuade continued digital adoption. This data unfortunately does not suggest meaningful insights on those needs.

<sup>351</sup> U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.

### 3.2.7 Online accessibility and inclusivity of public resources and services

The promise of internet accessibility for all requires the use of universal design principles that embrace people with disabilities and those with low levels of digital literacy and digital skills. These groups include people with disabilities, older adults, those with lower levels of literacy, and those who are English language learners. These design principles encompass cultural and linguistic considerations.<sup>352</sup>

Without universal, inclusive, and accessible online content and resources, many individuals will be precluded from meaningfully using the internet to access resources critical to health, emergency services, and civic engagement opportunities, to name a few. The accessibility of online content and services is an essential measurement for benchmarking digital equity.

Oregon is committed to providing all populations, including individuals with disabilities, equal access to web-based information and services and is continually engaged in the process of improving the web experience for all constituencies.<sup>353</sup>

Oregon's Electronic Government Program (E-Government Program)<sup>354</sup> provides residents, businesses, and visitors with online access to government services through a desktop or mobile device. The Program consists of more than 300 State agency services as of December 2022, including the Oregon.gov website and agency, board, and commission websites that use this domain.<sup>355</sup> Enterprise Information Services (EIS)<sup>356</sup> manages the program with input from the Electronic Government Portal Advisory Board (EPAB), established by State statute,<sup>357</sup> and contracts with an e-government portal provider to offer a secure solution that meets industry standards and the standards for usability developed with the EPAB.

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<sup>352</sup> See, e.g., "Guidance on Web Accessibility and the ADA," U.S. Department of Justice, Civil Rights Division, March 18, 2022, <https://www.ada.gov/resources/web-guidance/>.

<sup>353</sup> "Website Accessibility," Oregon.gov, <https://www.oregon.gov/pages/accessibility.aspx>.

<sup>354</sup> "About Oregon's E-Government Program," EIS, <https://www.oregon.gov/eis/shared-services/Pages/e-government-program.aspx>.

<sup>355</sup> "Enterprise Information Services' Biennial Report on Electronic Government Portal Activities for January 2021 – December 2022," EIS, January 2023, <https://www.oregon.gov/epab/Documents/2022-EPAB-Legislative-Report.pdf>.

<sup>356</sup> Enterprise Information Services, <https://www.oregon.gov/eis/Pages/default.aspx>.

<sup>357</sup> The EPAB consists of 13 members, staffed by EIS, and was established by ORS 276A.273; see, [https://www.oregonlegislature.gov/bills\\_laws/ors/ors276A.html](https://www.oregonlegislature.gov/bills_laws/ors/ors276A.html).

In 2022, EIS initiated two initiatives to improve the accessibility of E-Government Program services: the publication of a guidance document<sup>358</sup> to improve usability and accessibility for end-users and the selection of an enterprise tool that scans State websites to identify and fix accessibility issues.

A 2022 survey of Oregonians about their use of online State services sponsored by EPAB<sup>359</sup> found that while accessing government services online, particularly from a mobile device, is becoming increasingly important for Oregonians, disparities in access exist for some communities—particularly among individuals with disabilities and individuals with a language barrier. Of the approximately 11 percent of respondents who indicated that a member of their household experiences a barrier to accessing the State of Oregon website, “discomfort with technology” was the most commonly reported barrier (51.9 percent) followed by “other” (36 percent) and a “barrier due to disability” (22.3 percent). (Respondents could choose more than one response.) The survey report recommended further engagement with residents who are immigrants, refugees, and asylees and those who speak a language other than English to identify barriers they experience.

In 2023, the research team conducted a follow-up series of focus groups and interviews with individuals from immigrant communities and communities of color to better understand their experiences with online State services.<sup>360</sup> While “many people found the website easy to navigate and straightforward,” key recommendations included more translation of chat and audio resources in addition to text, making more resources available in multiple languages, greater continuity across State websites, and outreach to community partners to help make new immigrants, in particular, aware of resources available online.

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<sup>358</sup> “Guidance on Accessibility for E-Government Program Services,” EIS, March 22, 2022, <https://www.oregon.gov/eis/shared-services/Documents/eis-ss-guidance-egov-accessibility.pdf>.

<sup>359</sup> “Oregon E-Government Program & NICUSA 2022 Benchmark Survey Report,” Portland State University, <https://www.oregon.gov/epab/Documents/2022-PSU-Research-Benchmark-Survey-6-28-2022.pdf>.

<sup>360</sup> Nishishiba, Masami, Ph.D. et al, “The experiences among communities of color with the State of Oregon’s online services: A qualitative analysis,” prepared by the Center For Public Service, Mark O. Hatfield School Of Government, Portland State University, July 2023, [https://www.oregon.gov/epab/Documents/Oregon%20Resident%20E-Government%20Survey%20Phase%20%20Report\\_20230809.pdf](https://www.oregon.gov/epab/Documents/Oregon%20Resident%20E-Government%20Survey%20Phase%20%20Report_20230809.pdf).

An audit of government websites would organize, document, and measure the accessibility of the various resources and services offered online. There are low burden means by which state or local agencies can review individual websites via online accessibility calculators. These calculators examine source code for websites to check against the most recent WCAG 2.1<sup>361</sup> online accessibility standards. These standards include best practices for content perceivability, resource operability, information understandability, and tool robustness.

As emphasized by the findings of the 2022 E-Government Program Benchmark Survey, mobile apps are increasingly important in accessing government services. “Sometimes, inaccessible websites and mobile apps can keep people with disabilities from joining civic or other community events like town meetings or programs at their child’s school, or make it harder for them to join,” the U.S. Department of Justice (DOJ) stated in a Notice of Proposed Rulemaking directed at state and local governments.<sup>362</sup> The Oregon Health Authority (OHA) first engaged digital accessibility expert consultants in 2021 during the COVID-19 vaccine response in Oregon. These experts identified the need for immediate digital accessibility improvements, including training and programming at OHA and Oregon Department of Human Services (ODHS) as part of regular operations. As part of the post-emergency transition, OHA and ODHS convened a Digital Accessibility Workgroup sponsored by the OHA Chief Operating Officer and the Chief Information Officer. The workgroup includes representation from agency and division level leads, and observers from state-level administrative and information services. The workgroup has proposed two agency-level policies that are in draft phases—one to address Hardware, Software and Systems and a companion policy to address Content Creation and Sharing. The workgroup paused policy development to respond to the DOJ and HHS proposed rules and recent change to WCAG 2.2 standards; upon submitting these responses, the workgroup will complete the policy proposal process, plan a digital accessibility maturity assessment, and conduct a preliminary inventory of digital materials to estimate the potential remediation

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<sup>361</sup> W3C, Web Content Accessibility Guidelines (WCAG) 2.1. <https://www.w3.org/TR/WCAG21/>. Accessed August 19, 2023.

<sup>362</sup> “Fact Sheet: Notice of Proposed Rulemaking on Accessibility of Web Information and Services of State and Local Government Entities,” U.S. Department of Justice Civil Rights Division, <https://www.ada.gov/resources/2023-07-20-web-nprm/>.



workload. OHA continues to pursue funding to establish a centralized digital accessibility program that will move the agencies towards conformance to WCAG guidelines and compliance with federal law.<sup>363, 364</sup> The DOJ proposes WCAG Version 2.1, Level AA<sup>365</sup> as the technical standard for web content and mobile apps that state and local governments would be required to follow and notes that any “technical standard says specifically what is required for something to be accessible.”<sup>366</sup>

Further guidance is provided by Section 508 of the Rehabilitation Act,<sup>367</sup> the Plain Writing Act of 2010 (which applies to federal agencies but provides useful guidance),<sup>368</sup> and EIS.<sup>369</sup>

Also of note, the Oregon Department of Human Services is conducting a pilot project to incorporate technology solutions to improve the accessibility of on-site services for community and staff members. The Department has found that communication between Deaf and Hard-of-Hearing individuals and hearing individuals can be challenging when in-person interpretation and captioning is not available, which happens more often in rural areas—and some workarounds in use, such as passing written notes, introduce a further barrier for individuals with limited written English skills. The Department is conducting a pilot of assistive technology tools at five Aging & People with Disabilities (APD) sites to improve ease of communication, noting that “use of these tools is one example of how we can guide our agency closer to [its] goals of equity and inclusion by making our services and workplaces more

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<sup>363</sup> Information in regard to OHA DOJ NPRM activities provided to OBO.

<sup>364</sup> “Fact Sheet: Notice of Proposed Rulemaking on Accessibility of Web Information and Services of State and Local Government Entities,” DOJ, July 20, 2023, <https://www.ada.gov/notices/2023/07/20/web-nprm/>.

<sup>365</sup> W3C, Web Content Accessibility Guidelines (WCAG) 2.1. <https://www.w3.org/TR/WCAG21/>. Accessed August 19, 2023.

<sup>366</sup> “Fact Sheet: Notice of Proposed Rulemaking on Accessibility of Web Information and Services of State and Local Government Entities,” DOJ, July 20, 2023, <https://www.ada.gov/notices/2023/07/20/web-nprm/>.

<sup>367</sup> “Section 508 Home Page,” U.S. Department of Justice, Civil Rights Division, <https://www.justice.gov/crt/section-508-home-page-0>. See also “Section 508.gov,” General Services Administration, <https://www.section508.gov/>.

<sup>368</sup> “Plain Language,” U.S. Department of Labor, <https://www.dol.gov/general/plainwriting>.

<sup>369</sup> “Shared Services,” EIS, <https://www.oregon.gov/eis/shared-services/Pages/e-governance-guidance.aspx>; “State Agencies’ Website Guidelines for Usability and Accessibility,” EIS, <https://www.oregon.gov/eis/shared-services/Documents/eis-ss-website-style-guidelines.pdf>.

accessible and welcoming.” The pilot is expected to conclude at the end of 2023 and the Department anticipates expanding use of these tools based on the results.<sup>370</sup>

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<sup>370</sup> “Assistive Technology for On-Demand Sign Language Interpreting, Captioning, and Amplification,” presentation by a representative of Oregon Deaf and Hard of Hearing Services, Oregon Department of Human Services, shared with OBO.

## 4 COLLABORATION AND PARTNER ENGAGEMENT

This section of the Plan describes OBO's approach to engaging and collaborating with key stakeholders and partners throughout Oregon engaging in a thorough, extensive, inclusive, and transparent engagement process.

To develop this Digital Equity Plan, as well as the plans required for the Broadband Equity, Access, and Deployment (BEAD) Program, OBO undertook the activities described in Section 4.1 below. OBO will continue to engage and collaborate with key partners—with an emphasis on those representing covered populations—to implement the Plan; strategies for ongoing coordination are described in Section 0.

### 4.1 Coordination and outreach strategy

OBO staff have worked to build trusting relationships with stakeholders and the public through longstanding collaboration and advocacy to ensure broadband needs are heard. As part of Business Oregon, OBO works with the Regional Development Officers in each of the Business Oregon regional offices to reach local stakeholders across the state.

OBO's outreach approach includes:

- **In-person engagements** in dozens of local communities and with tribal authorities to solicit input, insights, priorities, and guidance.
- **Partner organization engagement** through virtual workshops and distribution of online surveys for government agencies, nonprofit entities, internet service providers, community anchor institutions, and other institutional stakeholders.
- **Scientific phone survey** of Oregon households on digital equity topics.
- **Ongoing meetings** with state agencies and community organizations that represent covered populations.
- **Lived Experience Expert Focus Groups** with covered population serving nonprofit organizations statewide.
- **Public Comment Feedback** from organizations representing covered populations and other Oregon stakeholders.

OBO conducted a series of virtual workshops with government agencies and anchor institutions, community-based organizations representing covered populations, and internet service providers. In parallel to outreach through in-person engagements, OBO used a statistically valid data collection methodology to conduct a statewide residential phone survey to inform this Plan and capture resident input across the state. Given the diversity of experience there is to be gleaned from Oregon's vast network of broadband and digital equity stakeholders and its residents more broadly, OBO has compiled a list of organizations with which it will conduct further outreach. This list is by no means exhaustive; however, quite like the State Digital Equity Plan, it is a living document, frequently revised to be more inclusive. Accordingly, OBO continues to conduct ongoing outreach to tribal governments and state agencies serving covered populations and collaboration with higher education and workforce organizations in workforce development.

Much of this outreach was conducted leading up to the state's submission of the BEAD Five-Year Action Plan in August 2023 and is included in detail in that Plan.<sup>371</sup> Additional outreach to state agencies and community organization partners has continued and is highlighted in this Digital Equity Plan. (Appendix B lists the organizations with which OBO collaborated in developing the Plan.)

#### **4.1.1 In-person engagement**

OBO engaged with the public in open meetings in 12 locations around the state to ensure regional diversity was core to the engagement efforts. Engagement with partners and tribal governments continues through ongoing virtual and in-person meetings. Invitations for the regional meetings were sent to regional partners and stakeholders, such as libraries and local governments, to help distribute the promotional flyer along with local radio spots and social media posts on OBO's Facebook, Twitter, and LinkedIn pages. In May, OBO had 12 posts on each of OBO's three social media sites. In June, OBO had eight posts on each site and had four posts on each site in July. In addition, Business Oregon representatives in each of its 12 regions also invited diverse groups of local stakeholders to join these meetings.<sup>372</sup>

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<sup>371</sup> "Five-year action plan, Broadband Equity, Access, and Deployment (BEAD) Program - August 2023," State Library of Oregon, <https://digital.osl.state.or.us/islandora/object/osl:1016422>.

<sup>372</sup> See "Regional Service Areas," Business Oregon, <https://www.oregon.gov/biz/aboutus/regions/Pages/default.aspx>.

During the month of July 2023, OBO held five Lived Experience Expert Focus Group discussions to understand the lived experiences of specific population groups in the state. OBO identified and engaged representatives from stakeholder organizations that serve covered populations to attend the sessions.<sup>373</sup>

- Urban Lived Experience Expert Focus Group: Hybrid, Portland, July 11, 2023
- Rural Lived Experience Expert Focus Group: Hybrid, Lakeview, July 13, 2023
- Tribal Lived Experience Expert Focus Group: Virtual, July 19, 2023
- Seniors (Older Adults) Lived Experience Expert Focus Group: Virtual, July 21, 2023
- Persons with Disabilities Lived Experience Expert Focus Group: Virtual, July 23, 2023

OBO ensured that each Lived Experience Expert Focus Group was not only designed to obtain information and learn about specific lived experiences of each noted covered population but also included representatives who serve multiple covered populations (for example, older adults, veterans, persons with disabilities) and could speak to that intersection. OBO recognizes that these groups not only have unique barriers to full digital equity, but they also have intersecting barriers that the state will look to address in its Digital Equity Plan. OBO also worked to ensure that each Lived Experience Expert Focus Group was fully accessible for attendees by offering native language translations and accommodations such as sign language interpreters.

Previously, OBO had prepared for this Plan and the BEAD Five-Year Action Plan during 2022 with a series of listening sessions designed to elicit relevant information at an early stage of the planning process. In April 2022, OBO held five

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<sup>373</sup> As defined in NTIA's Digital Equity Notice of Funding Opportunities (last accessed July 28, 2023), covered populations includes the following groups: individuals who live in covered households (i.e., low-income); aging individuals (60 and above); incarcerated individuals, other than individuals who are incarcerated in a Federal correctional facility; veterans; individuals with disabilities; individuals with a language barrier, including individuals who are English learners; and have low levels of literacy; individuals who are members of a racial or ethnic minority groups; and individuals who primarily reside in a rural area.

community listening sessions<sup>374</sup> with the intended purpose of gaining insight into how to provide broadband access and services to specific groups.

#### 4.1.2 Partner organization engagement

During spring 2023, OBO conducted a series of virtual workshops with government agencies, anchor institutions, community-based organizations representing covered populations, and internet service providers. These facilitated workshops captured knowledge from a range of engaged professionals throughout the state. Through these sessions, OBO collected input on digital equity needs and issues, and how existing programs could be improved with additional resources.

In addition to these partner workshops, OBO captured information through a series of questionnaires (Appendix D):

- **Oregon agency asset inventory**—requested information about agency type, agency assets that could spur broadband deployment, agency broadband access and digital inclusion programs and covered populations served, the impact of broadband access upon the communities served, and agency workforce development programs.
- **Community anchor institution broadband access**—requested information about organization type, services to covered populations, types of programs offered, the organization’s own use and need for access to broadband, and workforce readiness and workforce development programs.
- **Internet service providers**—requested information about sources used for hiring workers for broadband service deployment, workforce development or apprenticeship programs, participation in the ACP and subsidized service offerings speeds and costs, internet skills and adoption programs, collaboration with communities to close the digital divide, approaches to deploying broadband in areas most expensive to serve, and continuity and disaster recovery plans.

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<sup>374</sup> “Oregon Broadband Community Listening Sessions,” OBO, [https://www.oregon.gov/biz/programs/oregon\\_broadband\\_office/pages/oregon\\_broadband\\_community\\_listening\\_sessions.aspx](https://www.oregon.gov/biz/programs/oregon_broadband_office/pages/oregon_broadband_community_listening_sessions.aspx).

- **Digital equity program inventory**—requested information from tribal governments, covered population-serving organizations, local governments, state agencies, and other partners about current programs that provide community members with the skills and tools needed to participate in broadband-related and digital equity opportunities.
- **Covered populations broadband barriers analysis**—requested information from organizations that serve or represent unserved and underserved populations, with a focus on covered populations' access to services and devices; digital literacy; inclusive and accessible content; data privacy.
- **Oregon workforce development opportunity**—requested information from labor unions, trade associations, workforce development agencies, economic development entities, and educational entities about opportunities for workforce training and readiness programs to prepare residents for opportunities in the broadband field.

#### 4.1.3 Residential phone survey

Along with virtual sessions and in-person engagements, OBO conducted a statewide phone survey to inform the plan and capture input from residents across the state. The survey aimed to inform the needs and gaps analysis by gathering data on the residents' perceived reliability of home internet, household monthly internet expenses, device access, and other topics. The survey collected a total of 1,605 responses, supporting estimation of true population proportions within  $\pm 2.5$  percent.

OBO conducted surveys over the phone to better reach those without internet access. Calls were made from the morning through the early evening to capture input from those with various hours of availability. OBO intended to target Oregon residents that identify as members of covered populations. This included oversampling in surveys for low-income households as well as residents within the rural communities of Oregon. OBO did comprehensively engage with community anchor institutions, nonprofit organizations, and internet service providers in the process of conducting the residential surveys as well.

Survey results are summarized in Appendix C, and inform the strategies and objectives outlined in this Plan.

#### **4.1.4 Tribal outreach**

OBO met with the following tribes and attended the following tribal gatherings:

- 1<sup>st</sup> NTIA Tribal Broadband Leaders Network Summit, March 23, 2023
- Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians, March 27, 2023
- Coquille Indian Tribe, March 30, 2023
- Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians, March 31, 2023
- Native American Advisory Council (Chiloquin, OR), April 5, 2023
- Burns Paiute Tribe, April 7, 2023
- Confederated Tribes of Umatilla Reservation, April 19, 2023
- Affiliated Tribes of the Northwest Indians, May 7, 2023
- Legislative Commission on Indian Services, May 17, 2023
- Confederated Tribes of Siletz Indians, August 2, 2023; tribal consultation.
- Economic Development and Community Services State-Tribal Cluster, August 25, 2023
- Confederated Tribes of the Umatilla Indian Reservation, October 12, 2023; tribal consultation.
- Confederated Tribes of Grande Ronde, October 20, 2023; tribal consultation.
- Cow Creek Band of Umpqua Tribe of Indians, October 20, 2023; tribal consultation.

#### **4.1.5 Public comment**

Oregon's Digital Equity Plan was made available for public comment from November 1, 2023, through December 16, 2023. OBO posted the draft of the Plan publicly, prominently on its website with an invitation to submit comments via the Oregon Broadband Office Public Comment Portal. OBO used existing and ongoing outreach, with a focus on stakeholders, covered populations, and covered population-serving agencies and organizations, and followed a specific communications plan for



promoting public comment participation. All covered populations and covered population-serving stakeholders had the same opportunity to participate in the public comment period. Outreach included:

- Promotion and distribution of the Plan and public comment portal through OBO's extensive e-mail list which drew upon the Agency's contacts to reach statewide recipients, including relevant state stakeholders and organizations serving and representing covered populations.
- Additional public engagement session held virtually specific and scheduled to coincide to the release of the draft Oregon Digital Equity Plan for public comment, the session included presentation from the NTIA Digital Equity team.
- Advertisement of the opportunity for public comment on social media accounts to reach a wide audience not traditionally reached by other outreach methods.
- Direct engagement of covered population-serving agencies, and organizations to invite them to provide comment.
- Promotion of the opportunity for public comment in every engagement meeting undertaken to prepare this Plan, including those with covered populations, stakeholders, and covered population-serving organizations and agencies.
- Contribution to standing stakeholder meetings (including covered population-serving agencies and organizations) to introduce the draft Plan, including the Oregon Broadband Advisory Council.
- Advance notice before the release of the Plan about the upcoming opening of the public comment period through all media noted here, allowing organizations to schedule and prepare their participation, and reminders sent throughout the public comment period.

OBO was heartened to receive extensive comments from nonprofits, local governments, state government entities, and other individuals supportive of OBO's digital equity work.

Entities as diverse as AARP, the State Library of Oregon, Comcast, nonprofit EducationSuperHighway, the City of Eugene, and Oregon Enterprise Information

Services (EIS), among others, submitted plans and programs and offered to support the Plan. Tribal entities and other commenters requested that the role of tribal nations be clarified, and appropriate changes were made, for example noting that tribal libraries can play a significant role in support of digital equity efforts, acknowledging tribal sovereignty more explicitly, and other language more inclusive of tribal considerations.

Several entities, relying on their own expertise, requested specific changes to the Plan, those suggestions are on file at OBO and could potentially inform the program as it is developed. For example, commenters noted that funding for the ACP may run out in 2024 and asked OBO to develop a contingency plan. Due to the uncertainty of the ACP and variety of possible outcomes relating to federal affordability programs, no specific contingency plan is possible at the time of the writing of the Plan; however, language was added throughout the Plan acknowledging this uncertainty more clearly. Others asked that OBO publish additional data regarding digital equity needs; some of these requests will be considered for future OBO outreach and reports, while others were not possible as it asked for data not available to OBO.

Several commenters requested that OBO add to the Plan ideas or goals that are already part of the Plan. Others requested OBO change or develop programmatic aspects of the Digital Equity Plan or alter statutory and mandatory aspects of the Digital Equity Act or the BEAD Program, including the definition of covered populations or of served, unserved, and underserved locations. These requests are not within the purview of this Plan; as a result, no action was taken.

Some commenters used the opportunity for public comment to propose OBO extend partnership or funding to their organization, advocating for their organization's strengths and usefulness for digital equity. OBO appreciates Oregon's many skilled, enthusiastic, and experienced digital equity organizations. As the purpose of this document is to provide a balanced Plan to pursue digital equity for the people of Oregon, and not to allocate funding or commit to specific organizations, OBO did not commit to partnerships but did add relevant organizations to the asset inventory in section 3.1.1 where possible. OBO will review a wide array of qualified potential partners and consultants for digital equity in the implementation phase of this Plan, potentially including the potential assets and partners identified in Section 3.1, Section 5, and Appendix B.

Several commenters requested that specific information be added to supplement the Digital Equity Plan. This included: relevant digital equity plans and programs which were added to the relevant subsections in Section 3.1; an Oregon Executive Order regarding artificial intelligence in Section 1; more specific information about needs for device repair and technical support on pages 14 and 152; further discussion of the benefits of telework and telehealth; inclusion of the Public Library Statistical survey on pp. 85-86; expansion of the pool of types of potential community partners for Section 5.1.2.1; and other appreciated additions.

It is clear from public comments (Appendix G) that digital equity stakeholders support the Plan's goals and objectives and are supportive of OBO's efforts.

#### **4.2 Ongoing collaboration to implement this Plan**

As described above and in accordance with the NOFO, OBO collaborated with key partners in the state in the development of this Plan and will continue to collaborate with such partners to achieve the measurable objectives for digital equity identified in the Plan. Potential strategies for ongoing coordination and engagement include:

- Gather data to establish KPIs for measurable objectives without sufficient data for covered populations (see Section 2.3.2).
- Recognizing the intersectionality of needs across covered populations as defined, OBO will work with organizations representing each of these populations (as well as those representing multiple covered populations) to further refine implementation activities that address these intersectional ties to achieve measurable objectives.
- Conduct ongoing check-ins with organizations that work with and represent each and multiple covered populations to review Digital Equity Plan goals, data, objectives, and hear from organizations about needs and new data.
- Convene key partners to facilitate achieving the State's measurable objectives and outcome areas outlined in this Plan (e.g., Connecting Oregon Schools Fund to provide match to help increase broadband availability to eligible schools).
- Establish an inclusive quarterly Digital Equity public meeting consisting of members of covered populations inclusive of diverse covered population

serving organizations to provide information on state implementation activities and to receive feedback.

- Include diverse covered population serving organizations on outreach for the Digital Equity Capacity Grant Program.
- Include diverse covered population serving organizations on outreach for facilitating technical assistance for forthcoming digital equity competitive grants.

Comprehensive, continued engagement with partners will be key to the Plan's implementation, as discussed further in Section 5. Implementation of the Plan anticipates engaging and/or partnering with: (a) workforce agencies such as state workforce agencies and workforce organizations; (b) labor organizations and community-based organizations; and (c) institutions of higher learning, including but not limited to four-year colleges and universities, community colleges, education and training providers, and educational service agencies. OBO plans to collaborate with these organizations, as appropriate, as it continues the building blocks of this plan towards its Digital Equity Capacity Grant Program application and implementation. OBO also plans to connect and engage with additional stakeholder organizations suggested in NTIA's guidance (i.e., civil rights organizations and public housing authorities) during the public comment period and throughout the implementation process to gather feedback and ensure the equitable and effective implementation of this Plan.

As described in Section 2.2, this Plan is also aligned with the efforts and priorities of state agencies, including (but not limited to) the following agencies involved in workforce development and higher education: Business Oregon, Oregon Corrections Enterprises, the Oregon Employment Department, the Oregon Department of Education, and the Higher Education Coordinating Commission. It is aligned with other state plans relating to digital equity, including the Computer Science Implementation Plan. OBO has also gathered a collection of organizations and programs dedicated to digital equity, listed in Section 3.1.1, Section 3.1.3, and Appendix B, that they may draw upon to implement this plan. OBO will work to further strengthen partnerships by sustaining engagement which will include extending forums for engagement and outreach developed during the digital equity planning process to consult and empower covered populations to implement

strategies to achieve digital equity. Those intended to be served must be involved in planning and delivering the services.

As OBO transitions from the planning phase into the implementation phase, intentional collaboration will continue, with a focus on other state agencies that serve and/or engage with covered population groups in the areas of health, education, workforce and economic development, essential services, accessibility, civic engagement, and tribal nations.

Comparable to the stakeholder and community outreach and engagement efforts that informed the development of this Plan, implementation will include a series of approaches to collaboration, insofar as feasible:

- Establish a quarterly meeting consisting of the above-mentioned (and others identified through Plan implementation engagement) state entities, focusing on covered populations and other digitally disadvantaged and underserved groups to support learning, information sharing and the collaboration and coordination of digital equity initiatives.
- Convene local and municipal governments, local libraries, K-12 and institutions of higher learning digital equity stakeholders, inclusive of covered populations and covered-population-serving nonprofit organizations commiserate with those that participated in the Focus Groups, through public meetings and webinars, developed in partnership with state entities in order to foster and continue collaboration on digital equity and broadband internet adoption efforts, strongly emphasizing engagement with covered populations.
- Proactively engage each of Oregon's nine federally recognized tribes and other tribal entities inclusive of other indigenous populations and enrolled members of tribes based outside of the state but that reside in Oregon.

OBO, in coordination with the Oregon Business Development Department's (OBDD) tribal liaison, continues a longstanding coordination approach. This approach includes presenting at quarterly Economic Development and Community Services State-Tribal Cluster meetings, Legislative Commission on Indian Services, and Affiliated Tribes of the Northwest Indians; formal tribal consultations; informal meetings (virtual and in person); monthly office hours since July 2023; sponsorship

of the first Tribal Broadband Bootcamp at University of Oregon in July 2022; and the annual preparation of a government-to-government report. OBO has worked diligently to seek input and feedback from these partners and will continue to engage these organizations as it implements this Plan. For example, it may seek expertise from organizations representing covered populations to help build capacity on barrier reduction opportunities across the state by convening these partners, as noted in Section 5. OBO's plans for its State Digital Equity Capacity Grant Program will be informed by input from its partners, including state and local governments and nonprofits.

Through the above plans, and others that OBO may consider, OBO will engage with all of the covered populations during the implementation phase and will pursue varied strategies (such as those above) to ensure equitable outreach and meaningful opportunities for feedback.

## 5 IMPLEMENTATION

This section of the Plan describes, at a high level, the implementation strategy and potential future initiatives that relate to each of the key strategies of the Plan, as well as potential timelines.

Digital equity in Oregon will likely involve multiple initiatives and efforts associated with each strategy and objective. OBO looks forward to the opportunity to use its Digital Equity Capacity Grant to support and develop further digital equity capacity in Oregon, in partnership, as feasible and when aligned with this Plan, with the many local and regional entities that have participated in OBO's community engagement work, including workforce agencies, labor organizations, and institutions of higher learning. Given that Oregon does not anticipate having additional BEAD funds to support its digital equity objectives, OBO plans to coordinate between these programs by making broadband infrastructure subgrantees aware of digital equity capacity grant initiatives. OBO has not yet identified private digital equity funding for Oregon but will continue to seek partners during the implementation phase of this Plan. OBO will continue to seek federal funding sources beyond the Digital Equity Capacity Program to reach its digital equity objectives.

At the same time, OBO notes that the ability to develop and sustain these initiatives depends on the availability of resources, the many other priorities policymakers have for those resources, and the determination of how state priorities for economic development, education, health, civic and social engagement, and the delivery of other essential services may be augmented by digital equity investments. For that reason, these potential initiatives are offered as examples of what may be possible if resources are available.

Consistent with its efforts to expand broadband, OBO has designed these initiatives in the most pragmatic way possible—to be actionable, measurable, and sustainable—rather than risk designing more ambitious initiatives that are not financially or practically actionable.

### 5.1 Implementation strategy and key activities

The following are potential strategies, initiatives, and timelines tied to the digital equity barriers described in the sections above:

These key challenges represent areas of gaps in state, local, and private efforts to address the barriers identified in this Plan. These stem from OBO’s extensive assessment of needs (Section 3.2), its collection of data on the current digital equity ecosystem through its asset inventory (Section 3.1), and its state agency alignment and partner outreach and coordination (Section 2.2 and Section 4). Through its assessment and outreach, OBO has identified gaps in supporting broadband availability, affordability of broadband services and devices with adequate technical support, and digital skills. The strategies and activities in Sections 5.1.1, 5.1.2, and 5.1.3 below are designed to address these gaps. Furthermore, an underlying factor throughout is a lack of funding to meet the needs of covered populations and the need for greater local capacity to support these efforts. Accordingly, the strategies and activities in Section 5.1.4—and a key component of strategies across preceding sections—address growing local resources and partnerships between localities and community organizations.

### 5.1.1 Critical barrier: Lack of broadband availability

The following proposed strategies and associated core activities and measurable objectives are designed to address the barriers for covered populations identified in Table 1 and Table 7 as they relate to broadband availability.

The strategies and associated core activities work towards milestones of short-term and long-term goals as identified in sections 2.2.2 and 5.2.

#### 5.1.1.1 Strategy 1: Increase access to residential broadband internet

Measurable Objective: Every location in Oregon can access 100/20 Mbps at home			
Activity	Description	Timeline	Gaps addressed
Execute Capital Projects Fund Program	Extend last-mile broadband infrastructure throughout Oregon.	2023 to 2026 (consistent with ARPA requirements)	The buildout of last-mile infrastructure will close and lessen existing availability gaps primarily affecting Oregon's rural and low-income residents and will address the barrier to affordable broadband internet for rural and low-income.



<b>Measurable Objective: Every location in Oregon can access 100/20 Mbps at home</b>			
<b>Activity</b>	<b>Description</b>	<b>Timeline</b>	<b>Gaps addressed</b>
Execute BEAD Program	Extend last-mile broadband infrastructure throughout Oregon.	2023 to 2030 (consistent with IIJA BEAD requirements)	The buildout of last-mile infrastructure will close and lessen existing availability gaps primarily affecting Oregon's rural and low-income residents and will address the barrier to affordable broadband internet for rural and low-income.

**5.1.2 Critical barrier: Low-income households struggle to consistently afford home broadband internet services, devices, and technical support**

The following proposed strategies and associated core activities and measurable objectives are designed to address the barriers for covered populations identified in Table 1 and Table 7 as they relate to broadband affordability and adoption and device adoption.

The strategies and associated core activities work towards milestones of short-term and long-term goals as identified in sections 2.2.2 and 5.2. Each strategy and activity work towards the objectives indicated in the table, as well as the measurable objective that all people in Oregon pay an affordable amount for home internet use (see Section 2.2.2.2).

**5.1.2.1 Strategy 1: Increase Affordable Connectivity Program<sup>375</sup> and ISP low-cost program enrollment among eligible households**

<b>Measurable Objective: Increase enrollment in the Affordable Connectivity Program (and any subsequent or similarly funded program)</b>			
<b>Activity</b>	<b>Description</b>	<b>Timeline</b>	<b>Gaps addressed</b>
Develop educational materials	Provide content and support for educational campaigns among organizations that focus on ACP and ISPs' low-cost programs as well as for localities, CAIs, and nonprofits that have not previously worked to extend ACP and ISP-offered discount program enrollment.	2024 and thereafter, evaluated biennially against corresponding measurable objectives (Section 2.2.2.2)	These campaigns have the potential to be crucial in reaching all covered populations (low-income households) in the state, who may be unaware of such programs. The development of educational materials will help to address existing informational gaps in the availability of broadband internet discount programs. This strategy aims to increase enrollment in ACP (and/or any subsequent or similarly funded program) and further supports trusted covered populations serving local organizations and entities for which the needs of covered populations are best met, thereby increasing the percentage of low-income households that

<sup>375</sup> ACP or a successor program. As of the writing of this Plan, participants have claimed \$8.5 billion of the \$14.2 billion allocated to the program, according to the most recent data published by the Universal Service Administrative Corp. See: "EBB & ACP Funding Summary," USAC, <https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/> (accessed October 9, 2023). The ACP could run out of funding by mid-2024 if Congress does not allocate additional funds. See: "Time Is Ticking on the Affordable Connectivity Program," *GovTech*, July 21, 2023, <https://www.govtech.com/network/time-is-ticking-on-the-affordable-connectivity-program>.

<b>Measurable Objective: Increase enrollment in the Affordable Connectivity Program (and any subsequent or similarly funded program)</b>			
<b>Activity</b>	<b>Description</b>	<b>Timeline</b>	<b>Gaps addressed</b>
			adopt broadband internet.
Encourage ISP partnerships for ACP enrollment drives	Encourage ISPs to partner with localities, CAIs, and nonprofits to develop ACP and low-cost ISP program enrollment drives and initiatives (and alternatives if ACP is not reauthorized).	2024 and thereafter, evaluated biennially against corresponding measurable objectives (Section 2.2.2.2)	These campaigns have the potential to be crucial in reaching all covered populations (low-income households). This strategy will partner local ISPs to corresponding service area localities, CAIs and trusted nonprofit organizations for which the needs of covered populations are best met to collaborate on ISP ACP initiatives to increase the percentage of low-income households that subscribe to low-cost broadband internet offerings.
Fund library-based ACP enrollment drives and other community organizations	Provide funding for libraries and other community organizations to offer ACP/ISP low-cost program enrollment drives for eligible households to inform the public about the availability of broadband internet discount programs.	2024 to 2029, based on availability/allocation of Digital Equity Capacity Grant, evaluated biennially against corresponding measurable objectives (Section 2.2.2.2)	This strategy aims to increase enrollment in ACP (and/or any subsequent or similarly funded program) and further supports trusted covered population serving local organizations and entities thereby increasing the percentage of low-income households that subscribe to low-cost broadband internet.

### 5.1.2.2 Strategy 2: Increase low-cost service offerings

<b>Measurable Objective: Increase the percentage of ISPs that offer low-cost products (including a computing device) for lower-income households</b>			
<b>Activity</b>	<b>Description</b>	<b>Timeline</b>	<b>Gaps addressed</b>
Require grantee low-cost offerings	Build requirements and enhanced scoring for affordable service offerings into BEAD grant program.	2023 to 2025, with monitoring and enforcement consistent with BEAD Final Proposal; evaluated biennially against corresponding measurable objectives (Section 2.2.2.2)	This strategy addresses the broadband affordability gap for low-income rural households for which cost is a barrier to broadband adoption. This activity will address the cost barrier in rural areas.
Encourage ISP low-cost offerings	Work with ISPs throughout the state to encourage adoption and expansion of low-cost broadband internet service and modern computing device (i.e., laptop or desktop) offerings for lower-income households.	2024 and thereafter, evaluated biennially against corresponding measurable objectives (Section 2.2.2.2)	This strategy addresses the broadband internet and computing device affordability gap for low-income households for which cost is a barrier to broadband and device adoption. This strategy and corresponding activities will address the cost barrier.

### 5.1.2.3 Strategy 3: Expand access to affordable computing devices and technical support

<b>Measurable Objective: All people in Oregon have access to an affordable, workable, internet-enabled computing device</b>			
<b>Activity</b>	<b>Description</b>	<b>Timeline</b>	<b>Gaps addressed</b>
Provide information	Provide guidance regarding best practices, expertise, and partnership opportunities	2024 and thereafter, evaluated biennially	This strategy lessens gaps in existing efforts and existing barriers in serving lower-income

<b>Measurable Objective: All people in Oregon have access to an affordable, workable, internet-enabled computing device</b>			
<b>Activity</b>	<b>Description</b>	<b>Timeline</b>	<b>Gaps addressed</b>
	to localities and nonprofits to develop and expand existing programs that provide free or low-cost devices <sup>376</sup> to lower-income households.	against corresponding measurable objectives (Section 2.2.2.2)	households and aims to address the cost barrier for low-income households, increase local collaboration, support existing programs, and ultimately increase access to an affordable computing device for low-income households and other covered populations that struggle to maintain working computing devices.
Support ACP enrollment	Work with partners to support eligible households to purchase computing devices under ACP.	Ongoing, evaluated biennially against corresponding measurable objectives (Section 2.2.2.2)	This strategy addresses gaps and barriers in serving lower-income households obtain an affordable computing device and will lower the percentage of individuals for which access to a computing device is a barrier. This is especially important for individuals with disabilities, for whom inclusive devices may be economically infeasible, and for individuals who are members of a racial or

<sup>376</sup> There is no single definition of a “low-cost device.” The ACP offers participants a one-time \$100 discount on a laptop or desktop computer “if they contribute more than \$10 and less than \$50 toward the purchase price” (<https://www.fcc.gov/acp>). Eligible low-income subscribers to Comcast’s Internet Essentials program can purchase a laptop for \$149.99 (<https://www.xfinity.com/learn/internet-service/internet-essentials/low-cost-computer>), which would qualify for the \$100 ACP discount and result in a \$49.99 total price.

<b>Measurable Objective: All people in Oregon have access to an affordable, workable, internet-enabled computing device</b>			
<b>Activity</b>	<b>Description</b>	<b>Timeline</b>	<b>Gaps addressed</b>
			ethnic minority group, for whom lack of access to adequate devices further exacerbates existing societal inequities.
Fund community anchor-based tech support	Provide funding for libraries, <sup>377</sup> K-12 schools (particularly Title I schools), institutions of higher education, and other community anchor institutions to offer language-inclusive technical support.	2024 to 2029, based on availability of Digital Equity Capacity Grant; evaluated biennially against corresponding measurable objectives (Section 2.2.2.2)	This strategy seeks to lessen gaps in existing efforts and existing barriers for Oregon’s population of English language learners (or those who speak a language other than English) or those who have low levels of literacy.

**5.1.2.4 Strategy 4: Develop data and informational resources to enable application of a digital equity lens to infrastructure and program decisions**

<b>Measurable Objectives: All people in Oregon pay an affordable amount for home internet use; All people in Oregon have access to an affordable, workable, internet-enabled computing device</b>			
<b>Activity</b>	<b>Description</b>	<b>Timeline</b>	<b>Gaps addressed</b>
Provide asset information	Update OBO’s Digital Equity Asset Inventory periodically so that communities have access to resources for identifying partners and	2024 and thereafter	This strategy addresses existing data and informational resource gaps available to digital equity stakeholders statewide, especially

<sup>377</sup> For a definition of “library,” see “Definition of a Library: General Definition,” American Library Association, <https://libguides.ala.org/library-definition>. This includes, as public commenters noted, tribal libraries. An example of a tribal library is that of the Confederated Tribes of Grand Ronde (see <https://www.grandronde.org/services/education/library/>).

Measurable Objectives: All people in Oregon pay an affordable amount for home internet use; All people in Oregon have access to an affordable, workable, internet-enabled computing device			
Activity	Description	Timeline	Gaps addressed
	best practices.		needed for helping low-income households but also all covered populations.
Develop education and informational resources	Work with collaborators to design and share data and informational resources promoting internet safety, ACP awareness, and device donation and refurbishment (including basic software with all devices) and develop online resources on digital equity best practices for reference by stakeholders statewide.	2024 and thereafter, evaluated biennially against corresponding measurable objectives (Section 2.2.2.2)	This strategy addresses existing gaps in data and informational resources tailored to the needs of covered populations. Resources enable community based organizations and other collaborating partners to expand awareness on ACP and other subsidy device, and digital skills programs to all covered populations.

### 5.1.3 Critical barrier: Members of covered populations need support to develop digital skills

The following proposed strategies and associated core activities and measurable objectives are designed to address the barriers for covered populations identified in Table 1 and Table 7 as they relate to the development of digital skills and online security.

The strategies and associated core activities work towards milestones of short-term and long-term goals as identified in sections 2.2.2 and 5.2.

**5.1.3.1 Strategy 1: Enable digital literacy skills development through training courses**

<b>Measurable Objective: All people in Oregon are able to use the internet if they so choose</b>			
<b>Activity</b>	<b>Description</b>	<b>Timeline</b>	<b>Gaps addressed</b>
Enable partnerships	Connect communities with expert partners that have established training courses, working with a full range of stakeholders that are engaged in digital equity efforts to enable partners to benefit from each other’s expertise and lessons learned.	2024 and thereafter, evaluated biennially against corresponding measurable objectives (Section 2.2.2.3)	This strategy connects low-income covered populations with access to digital skills training opportunities to enable the development of digital skills.
Fund nonprofit and agency skills centers	Provide funding for organizations that bring expertise and employ best practices in offering digital skills training, based on standardized and tested curricula that reflect cultural appropriateness.	2024 to 2029, based on availability of Digital Equity Capacity Grant; evaluated biennially against corresponding measurable objectives (Section 2.2.2.3)	This strategy connects low-income and all covered populations with access to training that will develop needed digital skills.
Provide informational resources and guidance	Distribute relevant materials to share expertise and guidance so that communities have access to resources for identifying partners and best practices.	2024 and thereafter, evaluated biennially against corresponding measurable objectives (Section 2.2.2.3)	This strategy creates opportunities to access organizational resources that will help develop needed digital skills amongst all covered populations.



**5.1.3.2 Strategy 2: Expand opportunity to learn digital literacy skills for persons with disabilities and persons with English as a second language**

<b>Measurable Objective: All people in Oregon are able to use the internet if they so choose</b>			
<b>Activity</b>	<b>Description</b>	<b>Timeline</b>	<b>Gaps addressed</b>
Enable partnerships	Use OBO’s convening capabilities to connect communities with expert partners that have established training courses, to enable stakeholders to benefit from each other’s expertise and lessons learned.	2024 and thereafter, evaluated biennially against corresponding measurable objectives (Section 2.2.2.3)	This strategy creates opportunities to access organizational resources that will help develop needed digital skills amongst all covered populations, including persons with disabilities and persons with English as a second language.
Provide informational resources and expert data and guidance	Develop and distribute relevant materials to share expertise and guidance so that communities have access to resources for identifying cost-effective strategies and best practices.	2024 and thereafter, evaluated biennially against corresponding measurable objectives (Section 2.2.2.3)	This strategy creates opportunities to access organizational resources that will help develop needed digital skills amongst all covered populations, including persons with disabilities and persons with English as a second language.
Fund library-based training	Provide funding for libraries to offer training at the local level regarding online safety and privacy, based on standardized and tested curricula that reflect cultural appropriateness.	2024 to 2029, based on availability of Digital Equity Capacity Grant; evaluated biennially against corresponding measurable objectives (Section 2.2.2.3)	This strategy creates opportunities to access organizational resources that will help develop needed digital skills amongst all covered populations, including persons with disabilities and persons with English as a second language.

### 5.1.3.3 Strategy 3: Promote information about the availability of digital literacy programming

<b>Measurable Objective: All people in Oregon are able to use the internet if they so choose</b>			
<b>Activity</b>	<b>Description</b>	<b>Timeline</b>	<b>Gaps addressed</b>
Promote and encourage the development and distribution of accessibility guidance.	Promote the development and distribution of best practices and guidance materials regarding website design that aligns with accessibility standards.	2024 and thereafter, evaluated biennially against corresponding measurable objectives (Section 2.2.2.3)	This strategy will address existing gaps in and the barriers to accessing online information and resources that are inclusive for individuals with disabilities.
Promote and encourage the development and distribution of information on digital literacy and digital skills training programs.	Promote information about the availability of digital literacy programming.	2024 and thereafter, evaluated biennially against corresponding measurable objectives (Section 2.2.2.3)	This strategy will address the existing gaps in information about digital literacy and digital skills programs for members of all covered populations that will help to develop the knowledge and skills necessary to meaningfully use the internet if they so choose.

### 5.1.3.4 Strategy 4: Promote information about online safety and privacy to covered populations.

<b>Measurable Objective: All people in Oregon can access information or training to learn how to protect their personal security online</b>			
<b>Activity</b>	<b>Description</b>	<b>Timeline</b>	<b>Gaps addressed</b>
Promote and encourage the development and distribution of online safety and privacy	Promote the development and distribution of best practices and guidance materials regarding online safety and privacy, especially	2023 and thereafter, evaluated biennially against corresponding measurable	This strategy will address existing gaps in knowledge related to one’s ability to protect personal security online. By developing and distributing materials

<b>Measurable Objective: All people in Oregon can access information or training to learn how to protect their personal security online</b>			
<b>Activity</b>	<b>Description</b>	<b>Timeline</b>	<b>Gaps addressed</b>
guidance for all covered populations, including older adults.	focused on older adults.	objectives (Section 2.2.2.3)	related to online safety and privacy individuals for which privacy is a concern or cited reason for not adopting broadband internet and a computing device these activities will address the digital literacy barrier. This also has the potential to be of great benefit to formerly incarcerated individuals—for which the greatest gap exists—adjusting to life after incarceration.

**5.1.4 Critical barrier: Local communities require resources and expertise for digital equity efforts**

The following proposed strategies and associated core activities and measurable objectives are designed to address the barriers for covered populations identified in Table 1 and Table 7 as they relate to broadband availability, broadband adoption, digital skills, online security, and device adoption. Due to the interlinked nature of activities that address communities’ needs and the measurable objectives that indicate successful progress on this barrier, each strategy contributes to and can be measured by multiple measurable objectives.

The strategies and associated core activities work towards milestones of short-term and long-term goals for measurable objectives as identified in sections 2.2.2 and 5.2.

### 5.1.4.1 Strategy 1: Build collaboration among state, tribal, local, and nonprofit entities

Measurable Objectives: Data are available to all local communities regarding the status of broadband and digital equity in their communities; Partnership opportunities are available for localities, nonprofits, and CAIs; Localities have access to grant writing guidance and expertise for accessing federal digital equity funds			
Activity	Description	Timeline	Gaps addressed
Convene stakeholders	Build structures to enable stakeholders to work together across the state and across different demographics, to enable shared lessons and resources to support those who face the greatest barriers to digital equity, as well as to help organizations leverage others' capabilities and help stakeholders serving specific covered populations to share best practices and digital equity expertise.	2024 and thereafter, evaluated biennially against corresponding measurable objectives (Section 2.2.2.4)	This strategy will address and lessen the gaps in existing efforts and the barrier faced by localities' need for resources and subject matter expertise for local digital equity efforts.
Enable funders to connect with program experts	Convene stakeholders to enable organizations that run digital equity programs to request resources from private sector partners, ISPs, philanthropic entities, and other potential funding organizations.	2024 and thereafter, evaluated biennially against corresponding measurable objectives (Section 2.2.2.4)	This strategy will address and lessen the gaps in existing efforts and the barrier faced by localities' need for resources and subject matter expertise for local digital equity efforts.

### 5.1.4.2 Strategy 2: Support and develop local capacity

Community needs are best understood—and community members are best able to effect change—at the local level. OBO therefore seeks to support development at the local level of expertise and staffing to work on digital equity initiatives and to enable

communities to prioritize the efforts and goals that are best suited to their unique circumstances.

<b>Measurable Objectives: Partnership opportunities are available for localities, nonprofits, and CAIs; Localities have access to grant writing guidance and expertise for accessing federal digital equity funds</b>			
<b>Activity</b>	<b>Description</b>	<b>Timeline</b>	<b>Gaps addressed</b>
Convene funders	Use OBO’s convening capabilities to connect local communities and organizations with philanthropy and other potential digital equity funding sources.	2024 and thereafter	This strategy will address and lessen the gaps in existing efforts and the barrier faced by localities’ need for resources and subject matter expertise for local digital equity efforts.
Promote technical assistance	Promote technical assistance to localities, nonprofits, and Anchors that seek to compete for NTIA’s Digital Equity Competitive Grant funds in 2025.	2025, evaluated biennially against corresponding measurable objectives (Section 2.2.2.4)	This strategy will address and lessen the gaps in existing efforts and the barrier faced by localities’ need for resources and subject matter expertise for local digital equity efforts.

**5.1.4.3 Strategy 3: Sustain and grow the state’s efforts in digital equity**

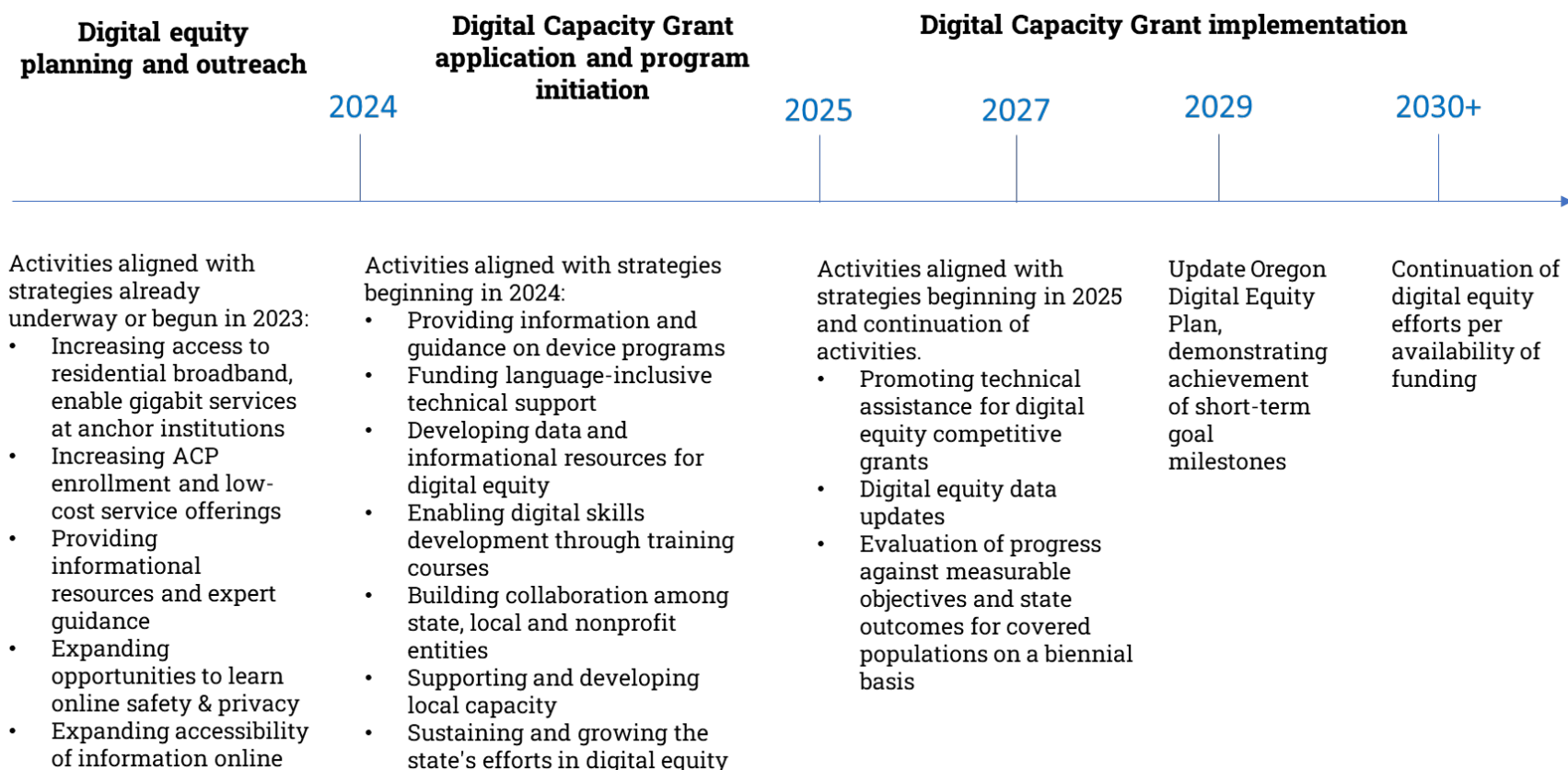
Oregon’s commitment to digital equity means a significant commitment of resources to sustain the initiatives contemplated in this Plan. To sustain these efforts over time, Oregon will require resources beyond what NTIA will provide under the Digital Equity Capacity Grant Program. OBO will develop strategies for continuing the work launched under this Plan by partnering with philanthropy, seeking other funding sources, and tracking the impact of Oregon’s digital equity efforts to quantify the business case for further digital equity program investment.

<b>Measurable Objectives: Data are available to all local communities regarding the status of broadband and digital equity in their communities; Partnership opportunities are available for localities, nonprofits, and CAIs; Localities have access to grant writing guidance and expertise for accessing federal digital equity funds</b>			
Activity	Description	Timeline	Gaps addressed
Infuse digital equity considerations into related areas	Develop materials to enable understanding by other state entities on how to use digital equity as a lens when making program decisions and prioritizing investments.	2024	This strategy will address and lessen the gaps in existing efforts and the barrier faced by localities' need for resources and subject matter expertise for local digital equity efforts. This strategy will address sustained funding beyond the Capacity Grant Program in which a digital equity lens is complimentary to and/or align to related programs.
Convene nonprofit and philanthropy partners		2024 and thereafter	Use OBO's convening ability and outreach capabilities to encourage collaboration and communications among organizations that operate digital equity programs and philanthropic funders. This is especially important for addressing how the digital divide affects groups, such as veterans, who have specific concerns best met via trusted organizations advocating specifically on their behalf.
Collect, analyze, and publish relevant data to demonstrate	Publish relevant data analytics related to barriers and obstacles to covered populations and review, evaluate, and update Plan	2024 and thereafter	This strategy will address and lessen the gaps in existing efforts and the barrier faced by localities' need for resources and

Measurable Objectives: Data are available to all local communities regarding the status of broadband and digital equity in their communities; Partnership opportunities are available for localities, nonprofits, and CAIs; Localities have access to grant writing guidance and expertise for accessing federal digital equity funds			
Activity	Description	Timeline	Gaps addressed
changes in digital equity metrics and outcomes as part of updates to the Oregon Digital Equity Plan	goals in alignment with state priorities, measurable objectives, KPIs, and implementation activities as needed to guide nonprofits, ISPs, and philanthropy regarding potential impactful investment.		subject matter expertise for local digital equity efforts
Promote technical assistance	Promote technical assistance to localities, nonprofits, and CAIs that will compete for NTIA’s Digital Equity Competitive Grant funds in 2025.	2025	This strategy will support localities, nonprofits and CAIs technical assistance support needs so as to ensure these entities are competitive at a national level ultimately bridging funding gaps in Oregon with the goal of sustained funding in addition to the State Capacity allocation and thus potentially continued efforts to address the barriers to digital equity for all covered populations and to build on this Plan.

## 5.2 Timeline

This timeline of potential implementation activities is an estimate, contingent on the availability of state and federal government resources, and subject to flexibility and change depending on conditions that could extend or escalate the state’s ability to develop and sustain these initiatives. As indicated in Section 2.2.2, short-term goals operate on a five-year timescale and long-term goals on a ten-year timescale. Note: Details of these timelines and goals include tangible milestones that are aligned to stated strategic goals listed in Section 2.2.1 and measurable objectives listed in Section 2.2.2.





Challenge	Strategy	Key activities	2023	2024		2025		2026		2027		2028		2029		2030	2035	
				Q1-2	Q3-4	Q1-2	Q3-4	Q1-2	Q3-4	Q1-2	Q3-4	Q1-2	Q3-4	Q1-2	Q3-4			
Lack of broadband availability	Increase access to residential broadband infrastructure	Execute Capital Projects Fund Program																
		Execute BEAD Program																
Low-income households struggle to afford home broadband services, devices, and technical support	Increase Affordable Connectivity Program and ISP low-cost program enrollment among eligible households	Develop educational materials																
		Encourage ISP partnerships for ACP enrollment drives																
		Fund library-based ACP enrollment drives																
	Increase low-cost service offerings	Require BEAD subgrantee low-cost offerings																
		Encourage ISP low-cost offerings																
	Expand access to computing devices and tech support	Provide information																
		Support ACP enrollment	Ongoing															
		Fund community anchor-based tech support																
	Develop data and	Provide asset information																

State of Oregon Digital Equity Plan

Challenge	Strategy	Key activities	2023	2024		2025		2026		2027		2028		2029		2030	2035
				Q1-2	Q3-4	Q1-2	Q3-4	Q1-2	Q3-4	Q1-2	Q3-4	Q1-2	Q3-4	Q1-2	Q3-4		
	informational resources to enable application of a digital equity lens to infrastructure and program decisions	Develop education and informational resources															
Members of covered populations need support to develop digital skills	Enable digital literacy skills development through training courses	Enable partnerships															
		Fund nonprofit and agency skills centers															
		Provide informational resources and guidance															
	Expand opportunity to learn digital literacy skills for persons with disabilities and persons with English as a second language	Enable partnerships															
		Provide informational resources and expert data and guidance															
		Fund library-based training															

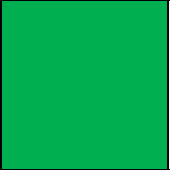
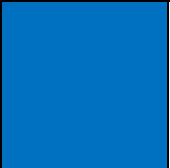

State of Oregon Digital Equity Plan

Challenge	Strategy	Key activities	2023	2024		2025		2026		2027		2028		2029		2030	2035		
				Q1-2	Q3-4	Q1-2	Q3-4	Q1-2	Q3-4	Q1-2	Q3-4	Q1-2	Q3-4	Q1-2	Q3-4				
	Expand/promote information about the availability of digital literacy programming	Promote and encourage the development and distribution of accessibility guidance																	
	Promote information about online safety and privacy to covered populations, including older adults	Promote and encourage the development and distribution of online safety and privacy guidance, especially focused on older adults																	
Local communities require resources and expertise for digital equity efforts	Build collaboration among state, tribal, local, and nonprofit entities	Convene stakeholders																	
		Enable funders to connect with program experts																	
	Support and develop local capacity	Convene funders																	
		Promote technical assistance																	
	Sustain and grow the state's efforts in	Infuse digital equity considerations into related																	

Challenge	Strategy	Key activities	2023	2024		2025		2026		2027		2028		2029		2030	2035		
				Q1-2	Q3-4	Q1-2	Q3-4	Q1-2	Q3-4	Q1-2	Q3-4	Q1-2	Q3-4	Q1-2	Q3-4				
	digital equity	areas																	
		Convene nonprofit and philanthropy partners																	
		Collect, analyze, and publish relevant data to demonstrate changes in digital equity metrics and outcomes as part of updates to the Oregon Digital Equity Plan																	
		Promote technical assistance																	

Note: Long-term goals have a target milestone to be met ten years following the beginning of the relevant implementation activity (which is typically 2035, with the exception of activities with set end dates such as “Promote technical assistance,” “Execute Capital Projects Fund Program,” and “Require grantee low-cost offerings,” The five- and ten-year mark is measured from anticipated receipt of funding, which is not precisely known at the time of writing of this Plan (for this reason, they are measured from the beginning of 2025). As grant funding for many of the programs cited above (including the BEAD Program and the Digital Equity Capacity and Competitive Grant Programs) is scheduled to end before the 2030s, many implementation activities will need to wind down or receive alternate sources of funding before the year of the long-term goal milestone. As mentioned above, dates and milestones are flexible and subject to other considerations.

**Timeline Legend**

	<p>Indicates target milestone to meet short-term goals for measurable objectives related to the implementation activity. Note that most milestones to meet short-term goals are aligned with the updated Oregon Digital Equity Plan.</p>
	<p>Indicates target milestone to meet long-term goals for measurable objectives related to the implementation activity. Note that most milestones to meet long-term goals are aligned with the activities to update Oregon Digital Equity Plan.</p>
	<p>Indicates implementation activity underway and subject to biennial evaluation of relevant measurable objectives.</p>

## 6 CONCLUSION

Broadband is the infrastructure investment of the future and a critical platform for economic and community development in the 21<sup>st</sup> century just as electricity and phone service were in the 20<sup>th</sup> century.

The state's commitment arises from Oregon's recognition of the criticality of digital equity to the well-being of the many diverse people of Oregon. Meaningful access to the internet is an essential ingredient for thriving in the 21<sup>st</sup> century. Digital equity supports economic opportunity, education, healthcare, and civic and social participation goals.

It is the vision of the State of Oregon that all people in Oregon will have access to affordable and reliable high-speed broadband internet to attain positive economic, educational, and health outcomes and to participate in social and civic life.

Achieving digital equity allows all people to fully participate in the economy of innovation and creativity, which helps to foster the goal of economic opportunity. Civic participation goals can be achieved because digital equity allows all people to have the tools to register to vote, engage in meaningful online discourse, and be better connected to the communities in which they live. The goal of healthcare access for all people is fostered by digital equity because of the knowledge and confidence that is gained from learning new digital skillsets that can be applied to telemedicine and to access personal healthcare information more easily. Digital equity inherently supports educational goals, bringing learning to the home and on the go for all people of Oregon. To achieve this vision for digital equity, the State of Oregon will work with its local, tribal, nonprofit, and institutional partners toward five key goals:

1. Universal access to affordable and reliable high-speed home internet.
2. Universal access to an affordable, quality, internet-enabled computing device that meets the person's needs.
3. Universal access to digital literacy skills and quality technical support in culturally and linguistically diverse in-community spaces.
4. Universal access to the tools and information needed to protect themselves online.

5. Universal access to inclusive state resources and online content to essential services and programs.

The state will achieve its vision of digital equity through the coordinated efforts of key constituencies and stakeholders across Oregon—and through ongoing engagement and collaboration with partners working together toward shared goals.

## APPENDIX A: ISPS THAT PARTICIPATE IN THE ACP

The following table lists ISPs in the state (including mobile service providers) that participate in the ACP.<sup>378</sup> The table also indicates providers that offer a plan that provides service at effectively no cost with the application of the ACP subsidy (“no cost with ACP”), and whether the provider offers eligible customers the option to purchase a device at a discount.<sup>379</sup>

**Table 35: ISPs participating in the ACP (including no-cost plans and device discounts)**

Provider name	Service type	No cost with ACP	Device discount
Access Wireless*	Mobile Internet	Yes	
AFNET, LLC	Mobile Internet		Yes
Airtalk Wireless	Mobile Internet		Yes
Althea – Hawk Networks, Inc.	Home Internet		Yes
Alyrica Networks Inc	Home Internet		
Anthem Broadband	Home Internet		
Assurance Wireless*	Mobile Internet	Yes	
Astound Broadband powered by Wave	Mobile Internet	Yes	
Astound Broadband powered by Wave	Home Internet	Yes	
AT&T Mobility LLC*	Mobile Internet	Yes	
Beacon Broadband, Inc.	Home Internet		
Beaver Creek Cooperative Telephone Company*	Home Internet		
blazinghog	Mobile Internet		
Boomerang Wireless, LLC*	Mobile Internet		Yes
Boost Mobile	Mobile Internet		Yes
Cal-Ore Communications	Home Internet		
Canby Telephone Association	Home Internet		
Canby Telephone Association*	Home Internet		
Casco Communications, Inc.	Home Internet		
CenturyLink or Quantum Fiber	Home Internet		
Cintex Wireless, LLC	Mobile Internet	Yes	Yes

<sup>378</sup> Based on data provided to USAC by service providers, available at <https://cnm.universalservice.org/> (accessed August 30, 2023).

<sup>379</sup> Per USAC, customers must pay more than \$10 but not more than \$50 and must purchase the device through the provider; “Companies Near Me,” USAC, <https://cnm.universalservice.org/>.



Provider name	Service type	No cost with ACP	Device discount
Clear Creek Communications*	Home Internet		
Clear Wireless, LLC	Home Internet		Yes
Clear Wireless, LLC	Mobile Internet		Yes
Colton Telephone Company*	Home Internet		
Columbia iConnect	Home Internet		Yes
Comcast Xfinity	Home Internet	Yes	
Comcast Xfinity	Mobile Internet	Yes	
Comlink Total Solutions Corp	Mobile Internet		
Connect Us Wireless	Mobile Internet	Yes	
CresComm Broadband	Home Internet	Yes	
Cricket Wireless	Mobile Internet	Yes	
CTC Telecom	Mobile Internet		
Culture Wireless	Home Internet		Yes
Culture Wireless	Mobile Internet		Yes
Culture Wireless Group, LLC	Mobile Internet		Yes
Dailytel Inc.	Mobile Internet		
Datavision Communications, LLC*	Home Internet		
Digital Aid, LLC	Mobile Internet		Yes
Douglas Services, Inc.	Home Internet		
E4 Connect, Inc.*	Home Internet		
EARTHLINK, LLC	Home Internet		
Eastern Oregon Telecom	Home Internet		
Easy Wireless	Mobile Internet	Yes	
ECOMOBILE, INC.	Mobile Internet		Yes
ECOMOBILE, INC.	Home Internet		Yes
Emerald Broadband, LLC	Home Internet		
Excess Telecom, Inc.	Mobile Internet	Yes	Yes
Farmers Mutual Telephone Company	Home Internet		
FastMesh LLC	Home Internet		Yes
Fidelity Cablevision, LLC	Home Internet		
Figgers Communication Inc.	Home Internet		Yes
Freemo	Mobile Internet		Yes
Global Connection Inc. of America	Mobile Internet	Yes	Yes
GO MD USA LLC	Mobile Internet		Yes
Go Technology Management, LLC	Mobile Internet		Yes
Gorge Networks LLC	Home Internet		
Helio Broadband	Home Internet		

Provider name	Service type	No cost with ACP	Device discount
Helix Telephone*	Home Internet		
Hello Mobile Telecom LLC	Mobile Internet	Yes	
Home Telephone*	Home Internet		
Hood River Electric Co-op	Home Internet		
Hoop Wireless, LLC	Mobile Internet	Yes	Yes
Hughes Network Systems, LLC	Home Internet		
humanIT	Mobile Internet		Yes
Hunter Communications	Home Internet		
Hyak	Home Internet		
IDT Domestic Telecom, Inc.	Mobile Internet		Yes
IJ Wireless	Home Internet		Yes
IJ Wireless	Mobile Internet		Yes
Illinois Valley Data Center, LLC	Home Internet		
Infiniti Mobile	Mobile Internet	Yes	Yes
Insight Mobile, Inc.	Mobile Internet		Yes
Integrated Path Communications, LLC	Home Internet	Yes	
InterConnection	Mobile Internet		Yes
K20 Wireless	Mobile Internet	Yes	Yes
Lane Fi	Home Internet		
Life Wireless	Mobile Internet		
Lingo	Home Internet		
LTE Wireless	Mobile Internet		Yes
Maxsip Telecom Corporation	Home Internet		
Metro by T-Mobile	Home Internet	Yes	
Metro by T-Mobile	Mobile Internet	Yes	
MINET	Home Internet		
Molalla Telephone Company*	Home Internet		
Monitor Cooperative Telephone Company*	Home Internet		
Monroe Telephone Company*	Home Internet		
National Wireless	Mobile Internet		Yes
Native Network, Inc.	Home Internet		Yes
NewPhone Wireless, LLC	Mobile Internet	Yes	Yes
Nexus Telecom	Home Internet		Yes
Nexus Telecom	Mobile Internet		Yes
North American Local, LLC	Mobile Internet	Yes	Yes
North-State Telephone*	Home Internet		

Provider name	Service type	No cost with ACP	Device discount
Oregon Telephone Corporation*	Home Internet		
Oregon-Idaho Utilities, Inc.*	Home Internet		
PDTFast	Home Internet		
Pendleton Fiber	Home Internet		
Pine Telephone System Inc.*	Home Internet		
Pioneer Telephone Cooperative*	Home Internet		
PocketiNet Communications, Inc.	Home Internet		
PTC	Home Internet		
Public Wireless, LLC	Home Internet		Yes
Q Link Wireless LLC	Mobile Internet	Yes	Yes
Red Pocket & FreedomPop	Mobile Internet		Yes
Reliance Connects	Home Internet		Yes
Reliance Connects*	Home Internet		Yes
Rogue Mobile Inc.	Mobile Internet	Yes	Yes
Roome Telecommunications Inc.*	Home Internet		
RTI*	Home Internet	Yes	
Rural4G	Mobile Internet	Yes	Yes
SafetyNet Wireless	Mobile Internet	Yes	Yes
SandyNet	Home Internet		
Sano Health LLC	Mobile Internet	Yes	Yes
Sarver Wireless	Mobile Internet	Yes	Yes
SCTC*	Home Internet		
Selectel Wireless	Mobile Internet	Yes	Yes
Sherwood Broadband	Home Internet	Yes	
Skybeam, LLC	Home Internet		
SMTA, SMT-Net*	Home Internet		
Snapfon	Mobile Internet	Yes	Yes
Sparklight	Home Internet		
Spectrum (Charter Communications Operating, LLC)	Home Internet	Yes	
Spot On Networks, LLC	Home Internet		
Straight Talk, Total Wireless, Simple Mobile, Walmart Family Mobile, TracFone, Net10, Page Plus & Go Smart	Mobile Internet		Yes
SWA Connect, LLC	Home Internet		Yes
Tablet Mobile	Mobile Internet		Yes
TDS	Home Internet		

<b>Provider name</b>	<b>Service type</b>	<b>No cost with ACP</b>	<b>Device discount</b>
TDS Telecommunications Corporation	Home Internet		
Telispire, Affinity Cellular, Club Cellular, Flex Cellular	Home Internet	Yes	Yes
Tone Communication Services LLC	Mobile Internet		
Torch Wireless	Mobile Internet		
TruConnect Communications, Inc.	Mobile Internet	Yes	Yes
Twigby	Mobile Internet		
U2 CONNECT NOW	Home Internet		
United States Cellular Corporation*	Home Internet		
United States Cellular Corporation*	Mobile Internet		
Unity Wireless Inc.	Mobile Internet	Yes	Yes
Uprise Fiber	Home Internet		
Upward Mobile LLC	Mobile Internet		Yes
Verizon Wireless	Mobile Internet		
Verizon Wireless	Home Internet		
Via Wireless, LLC	Mobile Internet		Yes
Viasat	Home Internet		
VOLT MOBILE INC.	Home Internet	Yes	Yes
VOLT MOBILE INC.	Mobile Internet	Yes	Yes
Warm Springs Telecom*	Home Internet		
Whoop Connect Inc.	Mobile Internet		Yes
Wrizzle, Inc.	Mobile Internet		Yes
Yellowknife Wireless	Home Internet		
Ziplay Fiber	Home Internet		
Ziplay Fiber*	Home Internet		
Ztar Mobile, Inc.	Mobile Internet		Yes

## APPENDIX B: ORGANIZATIONS WITH WHICH OBO COLLABORATED IN DEVELOPING THE PLAN

The following tables list the partners and others who provided input and insights to OBO through a range of engagement mechanisms, including in-person meetings, follow-up calls, and online questionnaires.

### Stakeholder engagement session 1: Government

Organization
InterMountain ESD
League of Oregon Cities
Oregon Department of Education
City of Sherwood
USBS Cloud Consulting

### Stakeholder engagement session 2: ISPs

Organization
ACC/Josephine County IT
Beacon Broadband
City of Eugene
Clear Creek Communications
Colton Telephone and Monitor Telecom
Columbia Fiber LLC
Datavision Communications
DirectLink BCT
Douglas Fast Net (DFN)
Eagle Telephone System, Inc.
HiLight fiber (City of Hillsboro)
Hunter Communications
Hyak
Lane ESD
Link Oregon (dba Oregon Fiber Partnership)

Organization
Lumen (CenturyLink, Quantum Fiber)
Molalla Communications
Monmouth Independence Networks
National Telecommunications and Information Administration (NTIA)
Oregon Telecommunications Association
PEAK Internet
Pioneer Connect
Rally Networks
Reliance Connects
Rogue Broadband/Umpqua Broadband
Room Telecommunications Inc./VARCOMM
City of Sandy
Stayton Cooperative Telephone Company (SCTC)
St Paul Telephone Cooperative Association
TNET Broadband Internet
USBS Cloud Consulting
Wtechlink Inc, Pendleton Fiber, Layer 7 LLC
ZiPLY Fiber

### Stakeholder engagement session 3: Workforce development

Organization
American Connection Corps/Josephine County IT
Beacon Broadband
Clear Creek
Douglas Fast Net
Hunter Communications
Link Oregon (Oregon Fiber Partnership)
Monmouth Independence Networks
MTC
Oregon Cascades West Council of Governments (OCWCOG)
Oregon Coast Community College

Organization
Oregon State University
Pioneer Connect
TNET Broadband Internet
USBS Cloud Consulting
Ziplay Fiber

### Stakeholder engagement session 4: Community anchor institutions

Organization
Central Oregon Community College – Barber Library
Centro Cultural
Chemeketa Community College
Clackamas County
COIC
COIC/Little River Strategies, Inc
Curry Public Library
City of Eugene
Free Geek
Hillsboro Public Library
Jackson County Library Services
Lake County Library District
Lane Education Service District
Link Oregon (dba for Oregon Fiber Partnership)
Linn-Benton Community College
NTIA
OBC
OHSU
Oregon State University
City of Portland
City of Sherwood
Solarity
State Library of Oregon
USDA Rural Development
Willamette Education Service District

## Stakeholder engagement session 5: Public

Organization
Alyrica Networks
Axiom Connectivity
Charter Communications
Columbia Pacific Economic Development District
Comcast Cable
EOCIL
City of Eugene
Farallon Consulting LLC
Global Grant Service
Indian Country Broadband LLC
Link Oregon
Marion County
Marion County Board of Commissioners
Mighty.net LLC – Business Technology Consulting
MINET
Morrow County Broadband Project
City of Mt. Vernon
NWAX
Oregon Advocacy Commissions Office (OACO)
Oregon State Treasury
Oregon State University
Oregon State University Libraries and Press
Rep. Andrea Salinas
Rockaway Beach Planning Commission
South Umpqua Rural Community Partnership
Southern Oregon ESD
Suma
The Greater Eastern Oregon Network LLC
Tigard Public Library
VCTI <sup>380</sup>
Ziplay Fiber

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<sup>380</sup> VCTI, <https://www.vcti.io/>.



## Stakeholder engagement session 6: General sectors

Organization
Alyrica Networks
American Connection Corps/Josephine County IT
Beacon Broadband
Centro Cultural
Chemeketa Community College
Clackamas County
Clear Creek Communications
COIC/Little River Strategies, Inc
Columbia Basin Electric Cooperative
Comcast
Community for Positive Aging
Consolidated Business Services
Converge Communications
City of Creswell
Douglas Fast Net
City of Eugene
Free Geek
Guerreras Latinas
HiLight fiber (City of Hillsboro)
Housing Authority of Jackson County
Hunter Communications
Hyak
Indian Country Broadband LLC
Jackson County Oregon
Klamath County Economic Development Association (KCEDA)
Lake County
Link Oregon (Oregon Fiber Partnership)
Linn-Benton Community College
Monmouth Independence Networks
City of Mt. Vernon
Multnomah County
NTIA

Organization
OBC
ODOT
Oregon Department of Education
Oregon State University
OSU Extension Service
Pioneer Connect
Portland Community College
Qlife
Sequoia Consulting
True North Marketing
University of Oregon
USBS Cloud Consulting
Ziply Fiber

### Stakeholder engagement session 7: Government (part 2)

Organization
City of Amity
Burns Paiute Tribe
City of Carlton
City of Cave Junction
City of Chiloquin
Confederated Tribes of Siletz Indians
Confederated Tribes of the Umatilla Indian Reservation
City of Coos Bay
City of Eugene
Global Grant Services
City of Halfway
City of Hermiston
City of Hillsboro
City of Hines
City of Hubbard
City of Klamath Falls
League of Oregon Cities
City of Lincoln City

Organization
Link Oregon (Oregon Fiber Partnership)
LOC
Marion County
City of McMinnville
Mitchell Oregon City Council
City of Mt. Vernon
MWVCOG
NTIA
City of Oakland
Oregon City Economic Development
Oregon House of Representatives
Oregon Racing Commission
Polk County
City of Portland
City of Sherwood
City of Stanfield
City of Veneta
City of Yamhill

**Stakeholder survey respondents: Agency asset inventory**

Organization
City of Condon
Gilliam County Court
Klamath County
Multnomah County
City of Toledo

**Stakeholder survey respondents: Community anchor institutions (CAI)**

Organization
Amity Public Library
Astoria Public Library

Organization
Athena Public Library
Baker County Library District
Bandon Public Library
Bushnell University
Central Oregon Community College
Central Oregon Intergovernmental Council (COIC)
Clatsop Community College
Clatsop Community College Library
Cook Memorial Library
Coquille School District 8
Cornelius Library
Corvallis-Benton County Public Library
Cottage Grove Public Library
Crook County Library
Curry Public Library
Dora Public Library
Driftwood Public Library
Eagle Point School District 9
Elgin Public Library
Flora M. Laird Memorial Library
Hermiston School District
High Desert Education Service District
Hillsboro Public Library, City of Hillsboro
Independence Public Library
Jackson County Library Services
Josephine Community Library District
Lake County Library District
Lebanon Public Library
Maggie Osgood Library
Marion County
Marion County Community Services Department
Multnomah County
Multnomah County Library
Multnomah University
North Bend Public Library
North Plains Public Library
Northwest Regional Educational Service District

Organization
Oakland Public Library
Oregon Trail Library District
Personal Telco Project
Portland Bureau of Planning & Sustainability – Community Technology Team
Portland Community College
Salem Public Library
Sandy and Hoodland Public Libraries
Scappoose Public Library
Sherwood Public Library
Silver Falls Library District
St. Helens Public Library
Stayton Public Library
Sweet Home Public Library
The Confederated Tribes of Grand Ronde Tribal Library
Tillamook Bay Community College
Tillamook County Library
Umatilla County Special Library District
University of Oregon Libraries
Warrenton Hammond School District
Western Oregon University
Weston Public Library
Yoncalla Public Library

### Stakeholder survey respondents: Covered populations

Organization
211info
AGE+
City of Eugene
First Church Love & Love and Unity in the Community
Historic Parkrose
Lane Community College
Marion County – Community Services Department
City of Mt. Vernon

Organization
NE STEAM Coalition
Oregon Department of Human Services
City of Portland Bureau of Planning & Sustainability – Community Technology Team
Portland Community College
City of Sandy
City of Wilsonville
YourTechQ

### Stakeholder survey respondents: Digital equity

Organization
AGE+
Barber Library – Central Oregon Community College
Beacon Broadband
Coquille School District 8
Eagle Point School District 9
City of Eugene
Evergreen Virtual Academy
Forest Grove School District
Gladstone School District
Hermiston School District 8R
High Desert Education Service District
HiLight broadband (City of Hillsboro)
Hillsboro Public Library
Jackson County Library Services
Klamath Community College
Lake County Library District
Lane Education Service District
Learning.com
Lumen (Quantum Fiber)
Marion County – Community Services Department
McKenzie School District #68
Medford School District 549c
Metropolitan Family Service

Organization
MiWave
Mt. Hood Community College
City of Mt. Vernon
Multnomah County
Multnomah County Library
Northeast Oregon Economic Development District
Northwest Regional Educational Service District
City of Portland Bureau of Planning & Sustainability – Community Technology Team
Portland Community College
Redmond School District
Rogue Community College
Sheridan AllPrep Academy
State Library of Oregon
City of Veneta
Willamette Education Service District
YourTechQ

**Stakeholder survey respondents: Internet service providers (ISP)**

Organization
Astound Broadband
Beacon Broadband
Gervais Telephone Company dba Datavision Communications
HiLight broadband (City of Hillsboro)
Lane Workforce Partnership
Link Oregon
Monitor Cooperative Telephone Company
Stayton Cooperative Telephone Company (SCTC)
TDS
The Greater Eastern Oregon Network (The GEO)
Viser
Wtechlink

## Stakeholder survey respondents: Workforce development organizations

Organization
City of Eugene
Lumen (Quantum Fiber)
City of Mt. Vernon
Northeast Oregon Economic Development District
Oregon State University
City of Portland Bureau of Planning & Sustainability – Community Technology Team
Stayton Cooperative Telephone Company (SCTC)
TDS
City of Woodburn



## APPENDIX C: RESIDENTIAL BROADBAND AND DIGITAL EQUITY NEEDS

### ASSESSMENT SURVEY RESULTS

The results presented in this appendix are based on analysis of information provided by 1,605 residents of Oregon, from an estimated 1,702,599 households. Results are representative of the set of households with a confidence interval of  $\pm 2.5$  percent at the aggregate level.

The survey responses were entered into SPSS<sup>381</sup> software and the entries were coded and labeled. SPSS databases were formatted, cleaned, and verified prior to the data analysis. The survey data was evaluated using techniques in SPSS including frequency tables, cross-tabulations, and means functions. Statistically significant differences between subgroups of response categories are highlighted and discussed where relevant.

The survey responses were weighted based on household income, respondent age, and ethnicity. Since respondents in lower income households, racial or ethnic minorities, and younger individuals were less likely to respond, the weighting corrects for the potential bias based on the household income, ethnicity, and age of the respondent. In this manner, the results more closely reflect the opinions of the state's adult population.

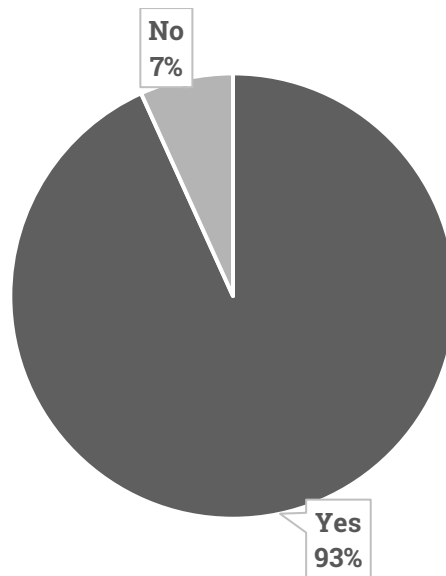
Unless otherwise indicated, the percentages reported are based on the "valid" responses from those who provided a definite answer and do not reflect individuals who said "don't know" or otherwise did not supply an answer because the question did not apply to them. Key statistically significant results ( $p \leq 0.05$ ) are noted where appropriate.

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<sup>381</sup> Statistical Package for the Social Sciences ( <http://www-01.ibm.com/software/analytics/spss/>)

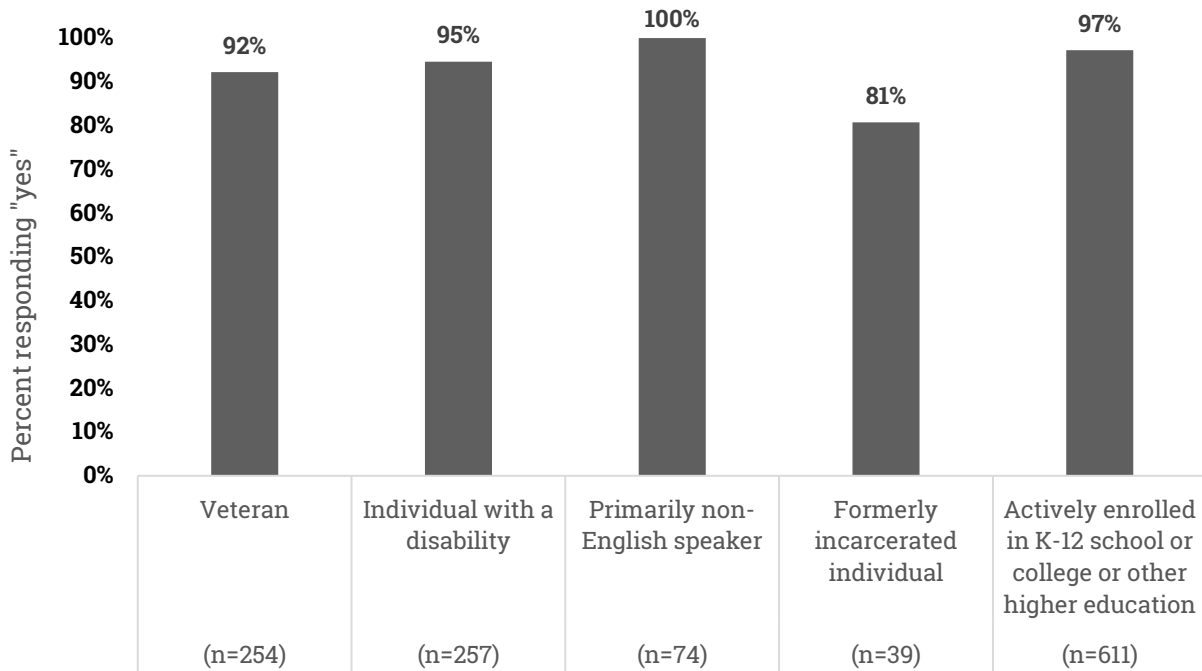
Seven percent of surveyed households report not having home internet service.

**Figure 5: Percent of households with home internet service**



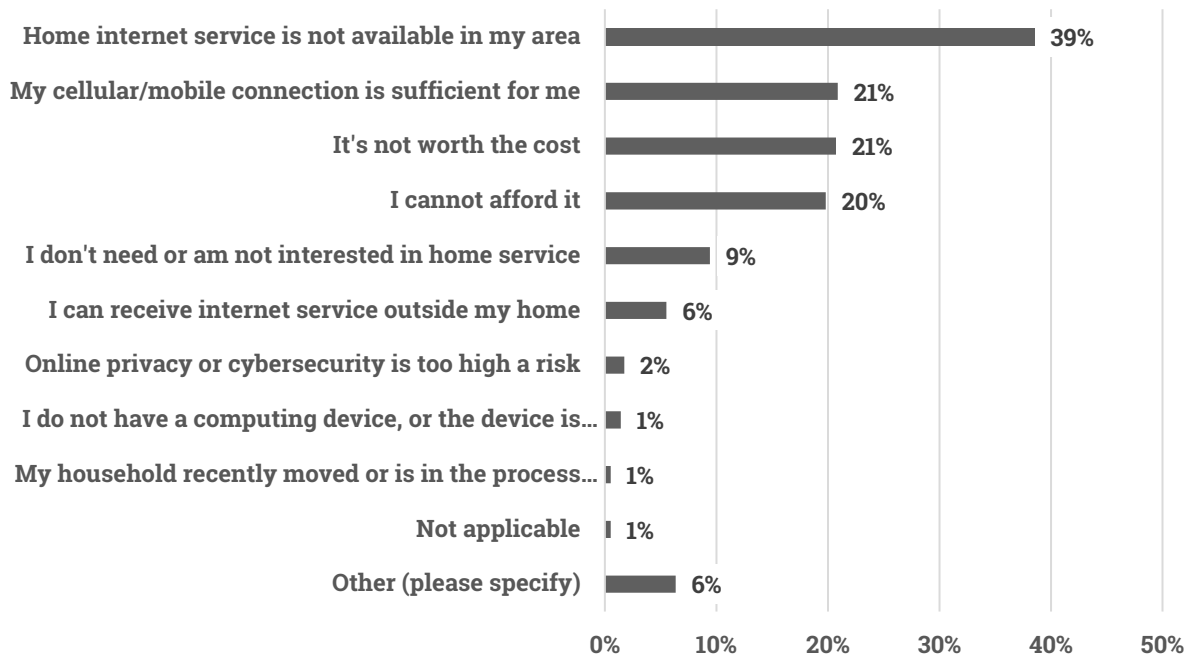
19 percent of households with a formerly incarcerated individual report not having home internet service, compared to the 5 percent of households with an individual with a disability. 100 percent of surveyed households with a primary language other than English report having home internet service.

**Figure 6: Percent of covered population households that receive home internet service**



Of the households who report they do not purchase home internet service, the most common reason is that home internet service is not available in the area (39 percent). Secondary reasons are that a mobile connection is sufficient, and that home internet service is not worth the cost.

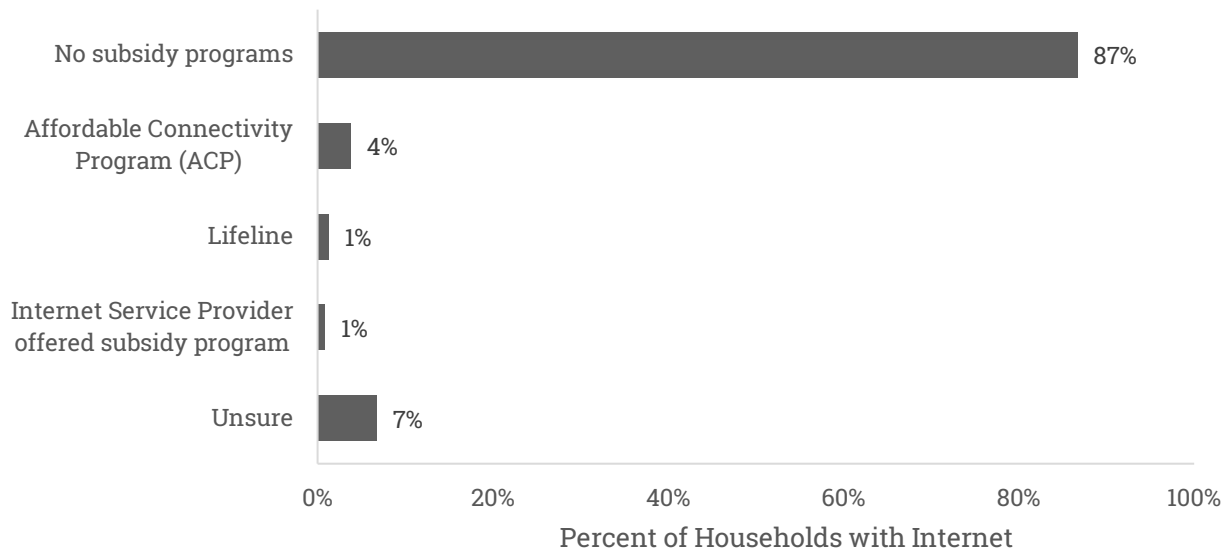
**Figure 7: Reasons households do not purchase home internet service**



Percent of respondents (out of 119 who do not purchase home internet)

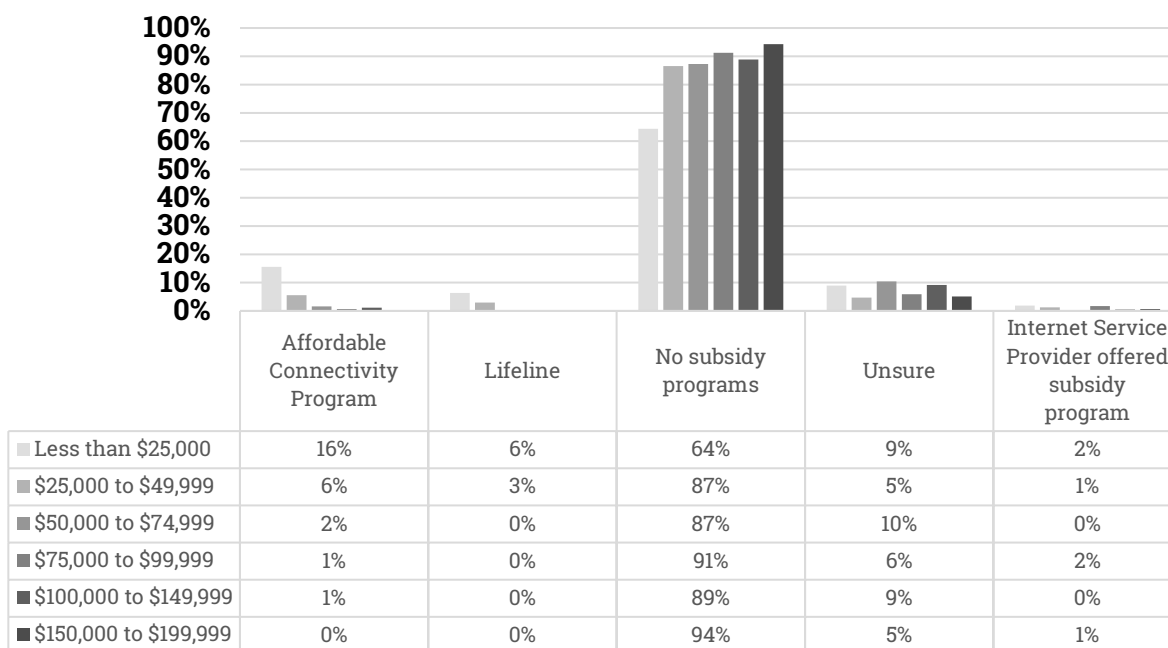
Only 4 percent of households with internet report being enrolled in the federal Affordable Connectivity Program (ACP) while an additional 1 percent report being enrolled in an internet service provider offered subsidy program.

**Figure 8: Percent of households with home internet service that are enrolled in subsidy programs**



Only 16 percent of households earning less than \$25,000 report being enrolled in the ACP and 6 percent of households with an income between \$25,000 to \$49,999 report being enrolled.

**Figure 9: Percent of households with internet service that are enrolled in subsidy programs by household income**



27 percent of households earning less than \$25,000 report they have no computers. 20 percent of households earning between \$25,000 and \$49,999 report they have no computers. For high-income households earning between \$100,000 and \$149,999, only 7 percent report not having a single computer.

**Table 36: Number of computers by household income**

Computers	<\$25k	\$25-\$49k	\$50-\$74k	\$75-\$99k	\$100-\$149k	\$150-\$199k	\$200k +
None	27%	20%	18%	9%	7%	11%	4%
One	38%	47%	39%	37%	25%	21%	15%
Two	21%	22%	27%	28%	42%	34%	46%
Three or more	13%	11%	16%	26%	26%	34%	35%
Total weighted count	215	261	241	192	247	110	119

32 percent of surveyed Black households report not owning a single computer, compared to the 15 percent of surveyed White households.

**Table 37: Number of computers by race/ethnicity**

Computers	Black/African American	White	Other
None	32%	15%	14%
One	36%	36%	30%
Two	27%	29%	32%
Three or more	5%	20%	23%
Total weighted count	26	1,071	350

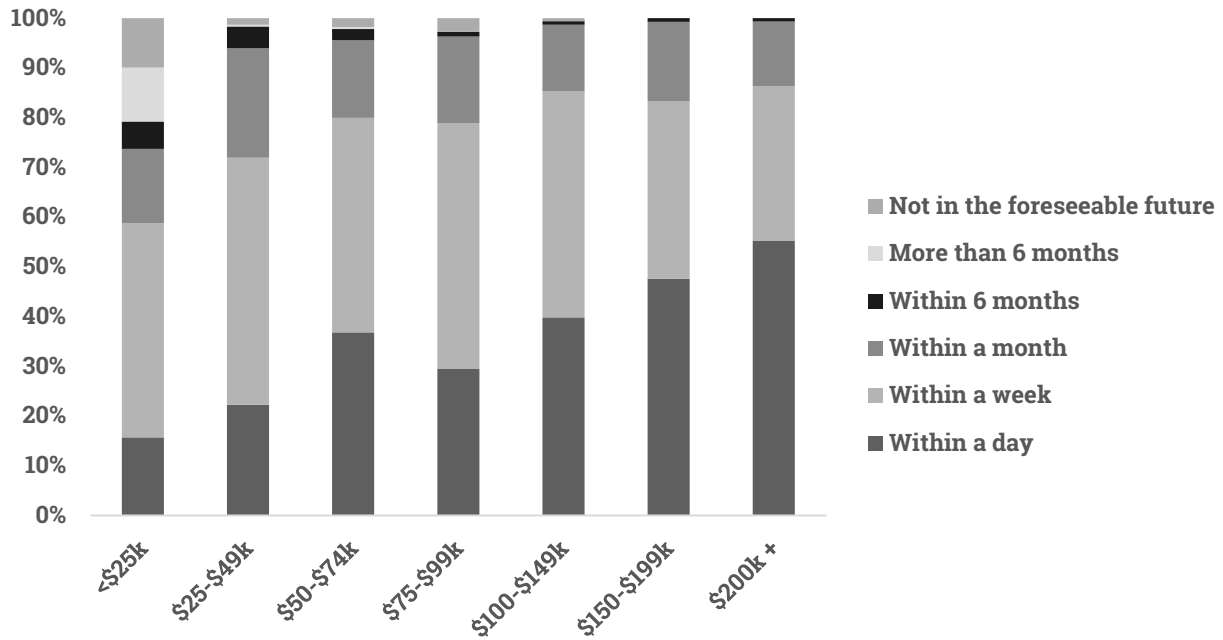
37 percent of surveyed households with a formerly incarcerated individual report not owning a single computer, compared to 10 percent of households whose language is not primarily English. 21 percent of households with a veteran report not owning a single computer.

**Table 38: Number of computers in covered population households**

Computers	Veteran	Individual with a disability	Primarily non-English speaker	Formerly incarcerated individual	Actively enrolled in K-12 school or college or other higher education
None	21%	17%	10%	37%	5%
One	29%	41%	8%	30%	24%
Two	30%	27%	72%	21%	41%
Three or more	20%	14%	9%	13%	30%
Total weighted count	254	257	74	39	611

20 percent of households earning less than \$25,000 report they could not replace a lost or damaged device within 6 months.

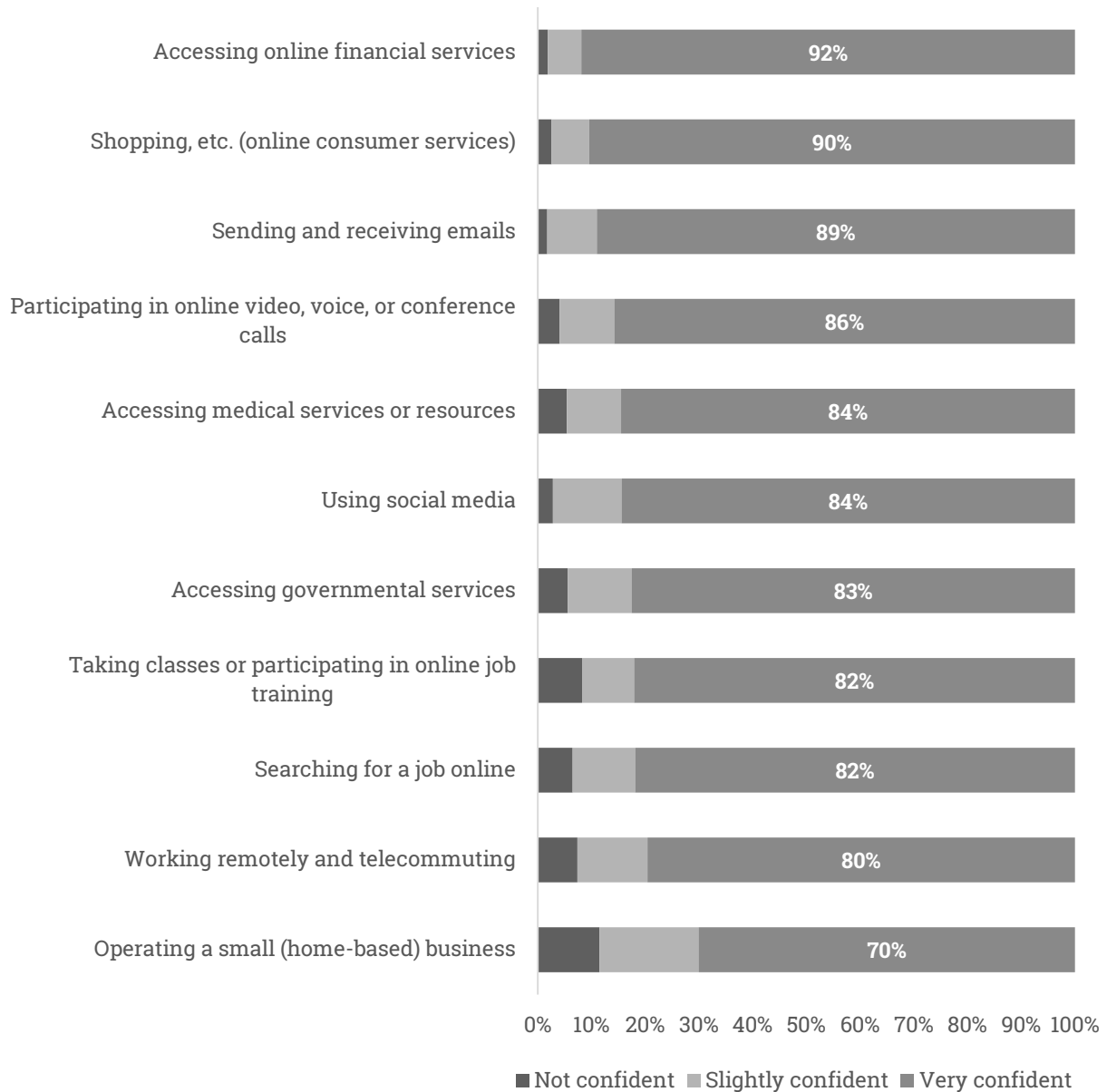
**Figure 10: How long it would take to replace a lost or damaged computing device by household income**





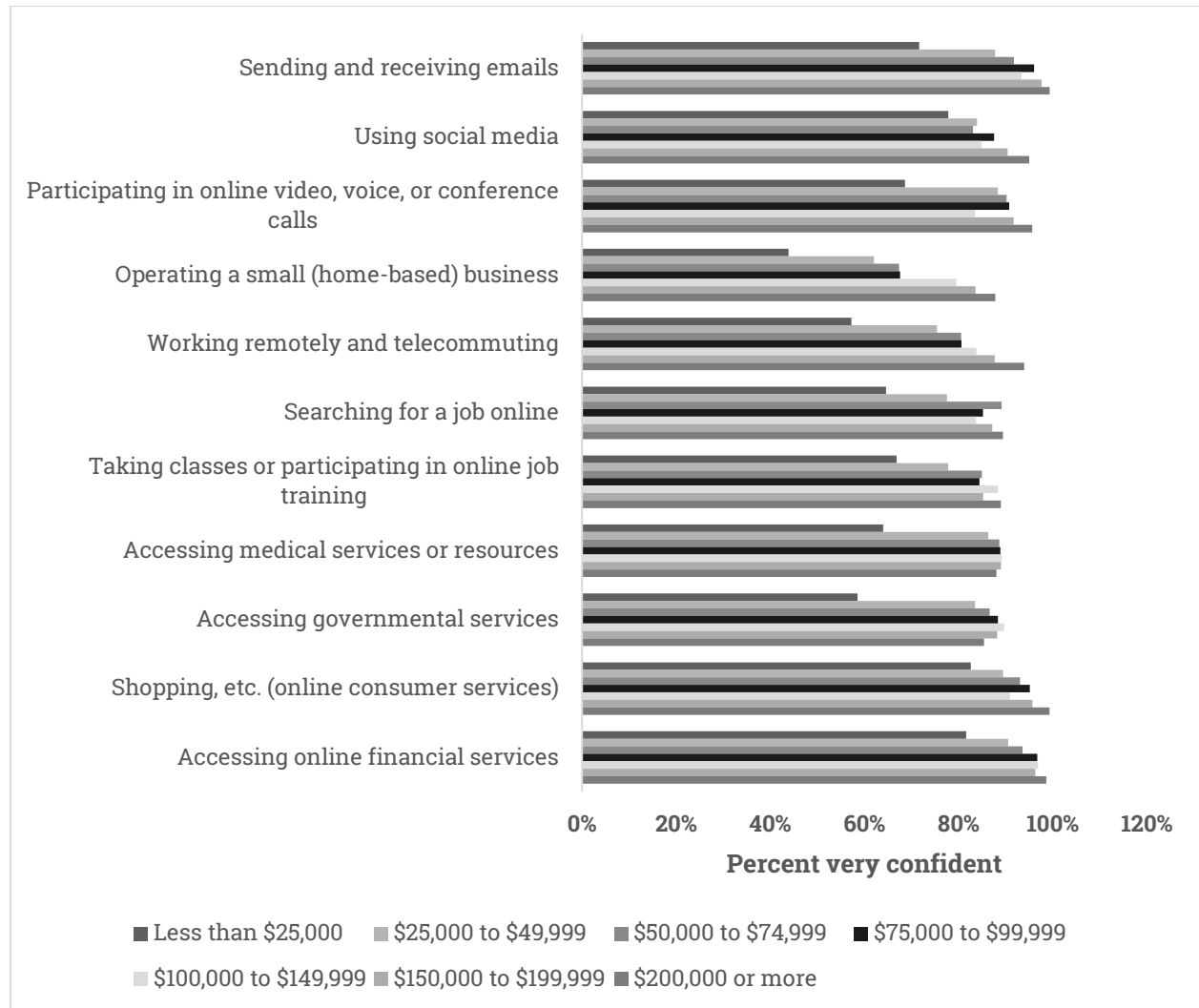
Households generally report feeling more confident in their ability to access online financial services and send/receive emails in comparison to activities such as searching for jobs online or working remotely.

**Figure 11: Confidence in using the internet for various activities**



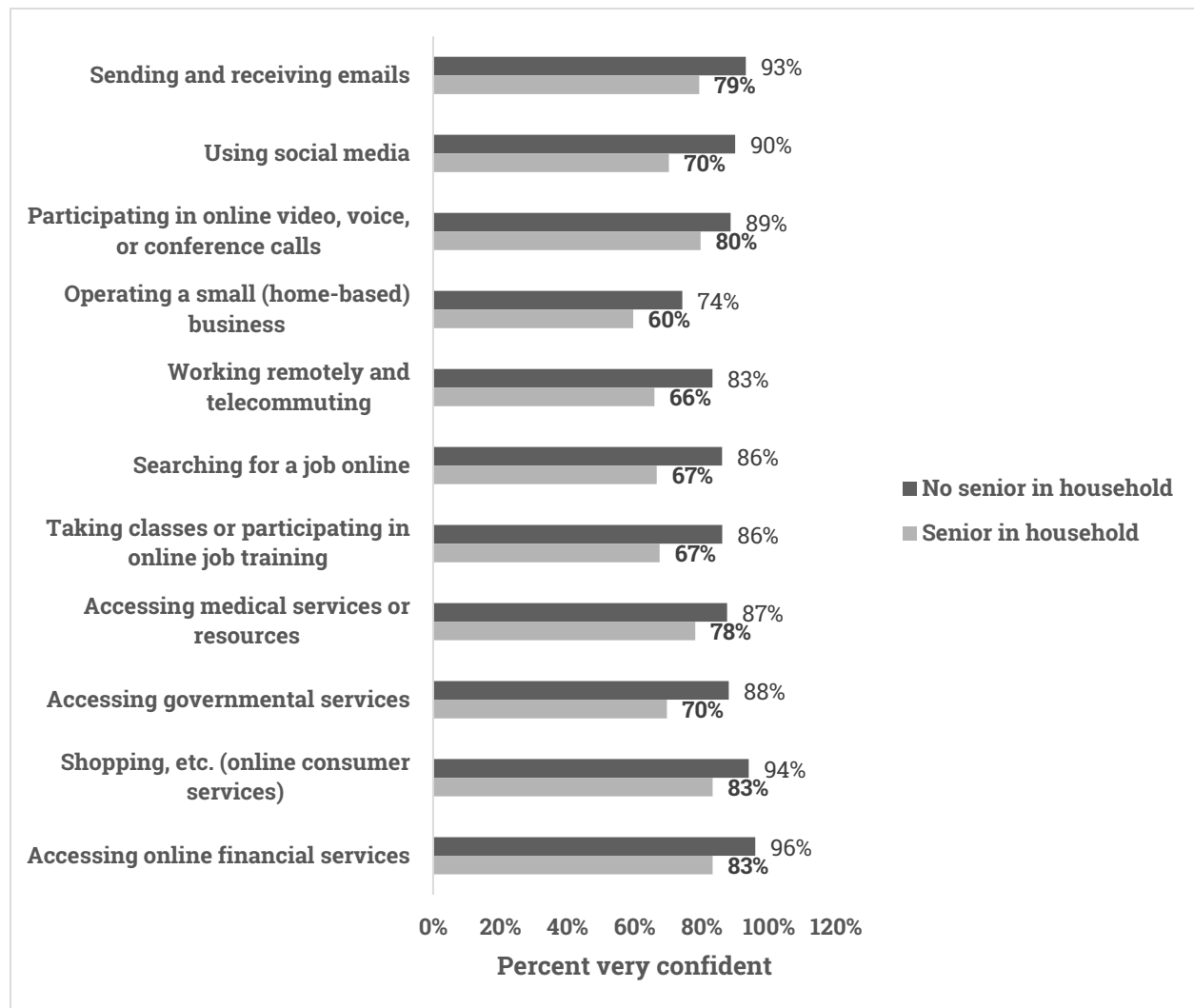
For all critical online activities, low-income households report feeling less confident in their ability to complete tasks than high-income households.

**Figure 12: Very confident in using the internet for various activities by household income**



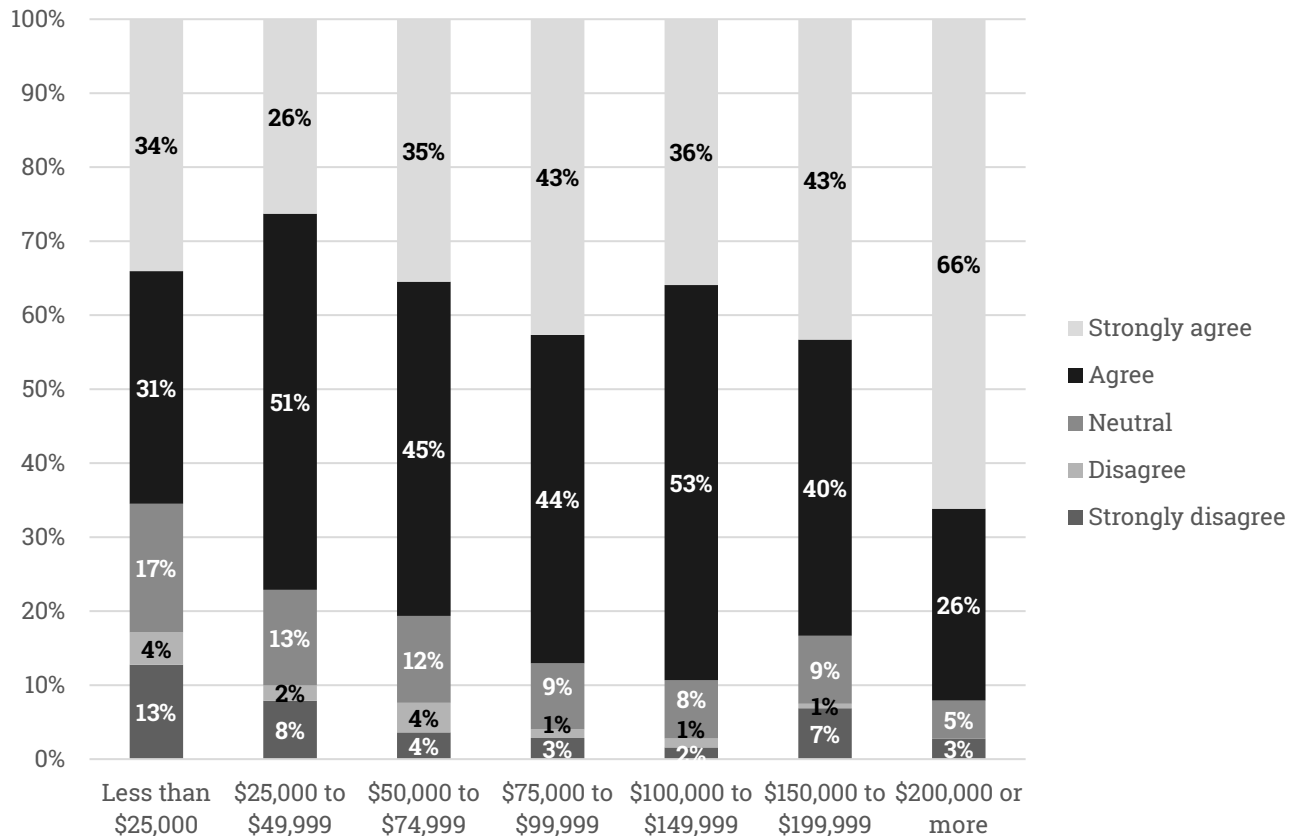
For all critical online activities, households with an older adult report feeling less confident than households without an older adult. Only 67 percent of households with an older adult feel very confident with searching for a job online, compared to 86 percent of households without an older adult. 88 percent of households without an older adult feel very confident in accessing governmental services whereas only 70 percent of households with an older adult feel very confident in the same task.

**Figure 13: Very confident in using the internet for various activities by older adults in households**



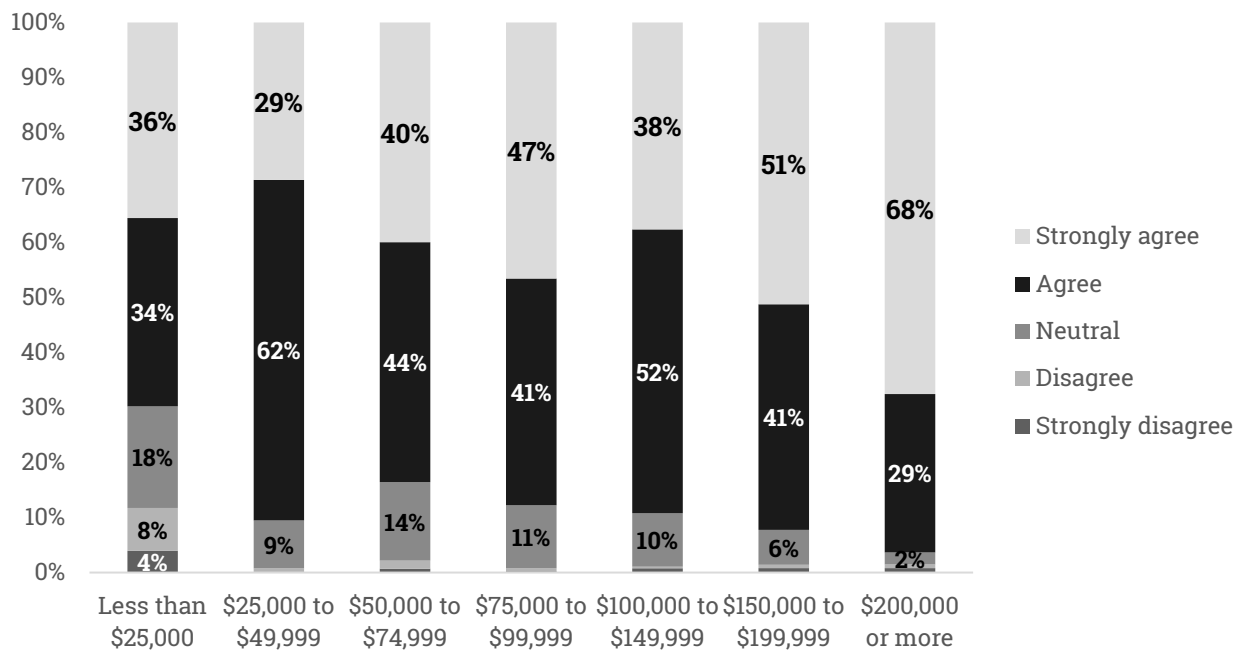
Low-income households report they are less likely to be able to use and adjust privacy settings on social media than high-income households. Only 26 percent of households earning between \$25,000 and \$49,999 strongly agree as compared to 66 percent of households earning \$200,000 or more.

**Figure 14: Response to “I can use and adjust privacy settings on social media” by household income**



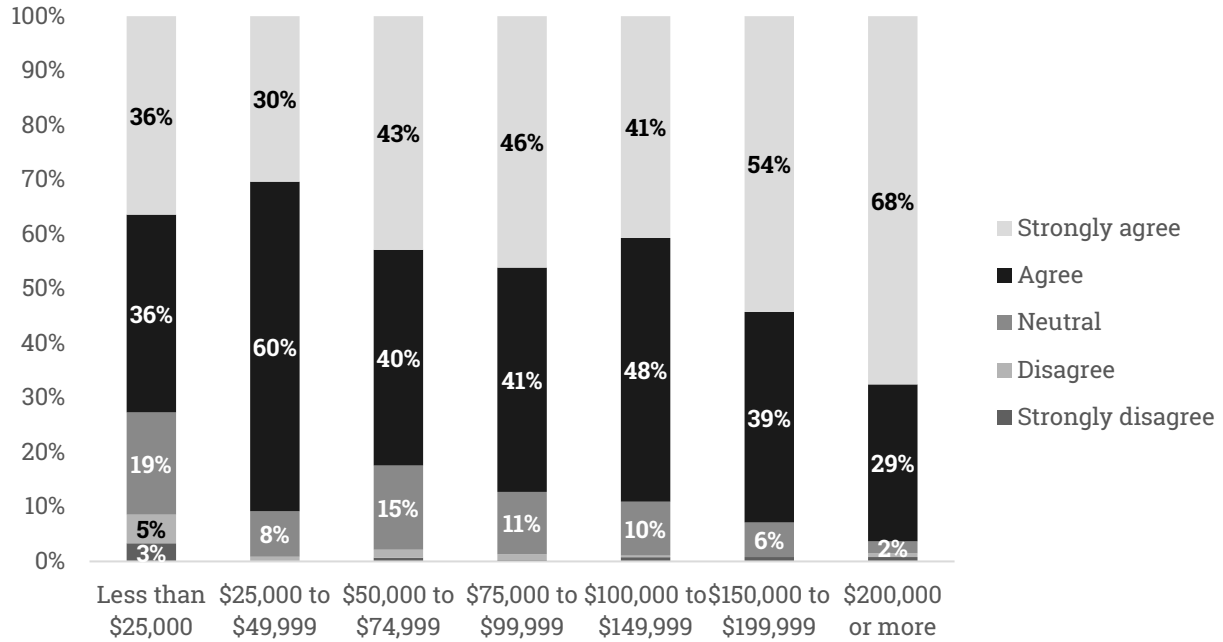
High-income households report they are more likely to be able to recognize and avoid online fraud. 47 percent of households earning between \$75,000 and \$99,999 strongly agree versus only 29 percent of households earning between \$25,000 and \$49,999.

**Figure 15: Response to “I can recognize and avoid online fraud” by household income**



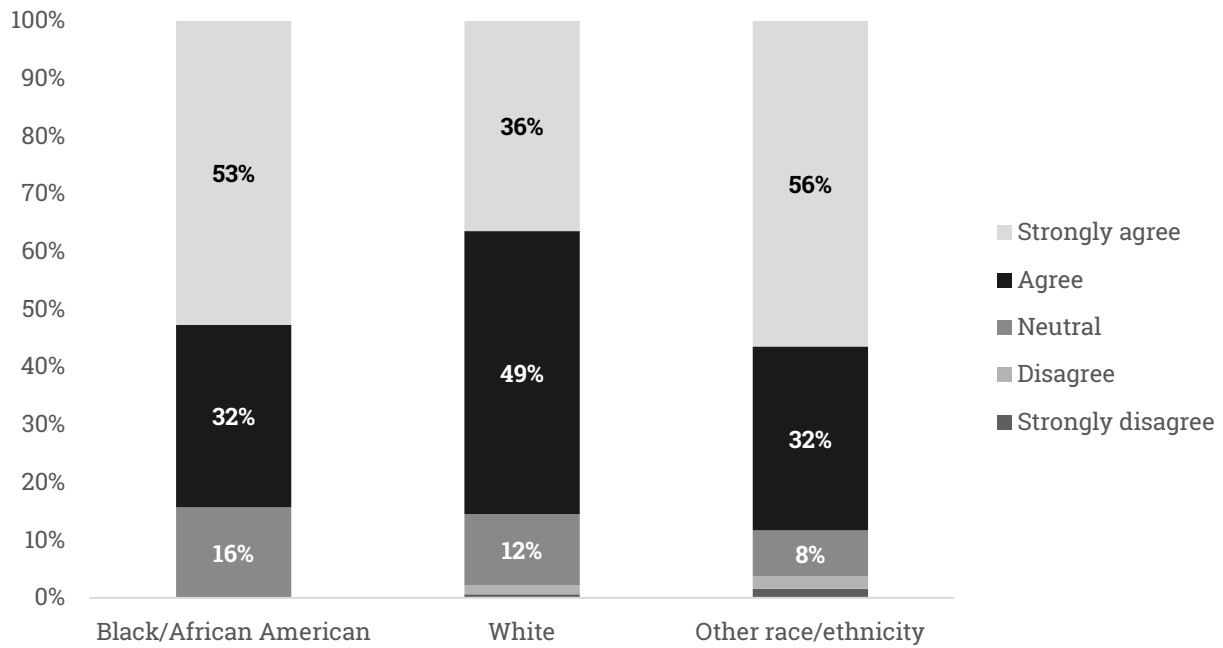
8 percent of households earning less than \$25,000 report they are unable to identify false or misleading information. Comparatively, 46 percent of households earning between \$75,000 and \$99,999 strongly agree they can identify false or misleading information.

**Figure 16: Response to “I can identify false or misleading information” by household income**



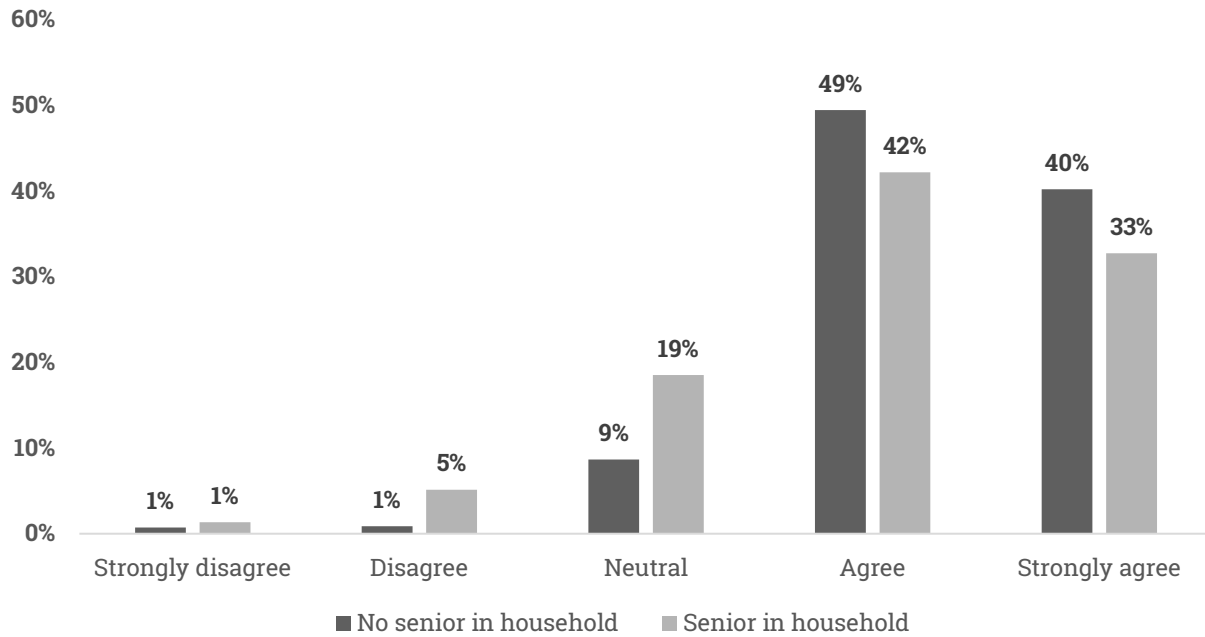
53 percent of Black households responded “strongly agree” when asked if they could identify false or misleading information and 36 percent of White households responded similarly.

**Figure 17: Response to “I can identify false or misleading information” by race/ethnicity**



89 percent of households without an older adult report they can recognize and avoid online fraud, in comparison to 75 percent of households with an older adult.

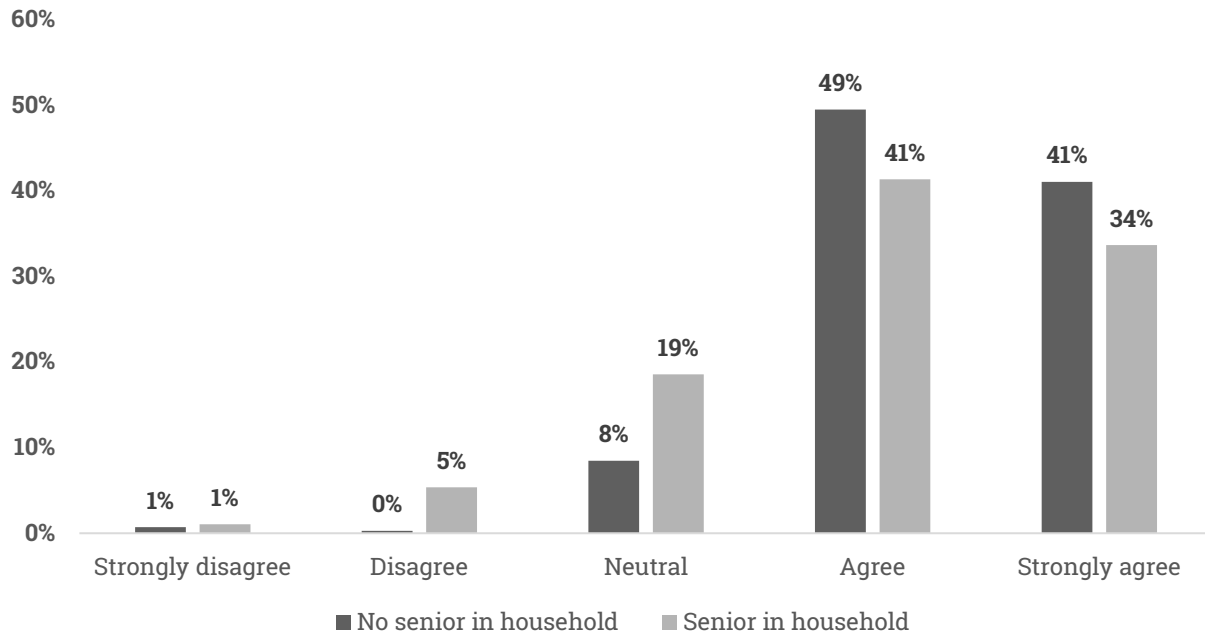
**Figure 18: Response to “I can recognize and avoid online fraud” by older adults in household**





90 percent of households without an older adult report that they can identify false and misleading information, compared to 75 percent of households with an older adult.

**Figure 19: Response to “I can identify false and misleading information” by older adults in household**



## APPENDIX D: RESIDENTIAL SURVEY INSTRUMENT AND STAKEHOLDER QUESTIONNAIRES

### Survey instrument 1: BEAD/Digital Equity Needs Assessment

#### BEAD/DE Needs Assessment Survey

Hello, my name is \_\_\_\_\_. I'm calling on behalf of the Oregon Broadband Office. They are seeking your help to improve internet accessibility and affordability throughout the state. The information gathered will not be used to sell you anything and your responses will be kept strictly confidential. We will not ask you for your name or other identifying information.

Even if you do not have home internet service, please answer the relevant questions as your opinions are important to us.

1. [Input the phone number called] \_\_\_\_\_
2. Are you 18 or older?
  - a. Yes
  - b. No [ask for someone else in the household who is over 18]
  - c. Refuse [thank and terminate]

First, we have a few questions to understand what kinds of internet services you use and subscribe to.

3. Does your household receive home internet service - not mobile data?
  - a. Yes
  - b. No
4. Does your household purchase home internet service from an internet service provider? [if they answer yes, proceed to Q8. If they answer no, proceed to Q5]
  - a. Yes
  - b. No
5. We understand that you don't purchase a home internet service. If you access the internet at home in other ways, which of the following about your service at home is correct:
  - a. My household uses cellular/mobile connection
  - b. My household uses a mobile hotspot, provided to us by a school, library, or other party
  - c. My household uses free WiFi in the building or from a neighbor
  - d. I don't have any internet service at my home
  - e. I don't know
6. What are the main reasons why your household does not purchase home internet service? Please say yes, no, or don't know to the following statements [check only where respondent says yes]

- a. I can receive free internet service at home [if yes here, skip to devices Q11]
- b. My cellular/mobile connection is sufficient for me
- c. I don't need or am not interested in home service
- d. I cannot afford it
- e. It's not worth the cost
- f. I can receive internet service outside my home
- g. Home internet service is not available in my area
- h. I do not have a computing device, or the device is inadequate or broken
- i. Online privacy or cybersecurity is too high a risk
- j. I have serious personal safety concerns
- k. My household recently moved or is in the process of moving
- l. Not applicable
- m. Other (please specify) \_\_\_\_  
[if only a single reason was picked, skip to Q8]

7. Of the reasons you picked for not purchasing a home internet service, which do you and the members of your household consider to be the most important? [if needed, read reasons that respondent gave; select best match or enter verbatim response if other]

- a. I can receive free internet service at home
- b. My cellular/mobile connection is sufficient for me
- c. I don't need or am not interested in home service
- d. I cannot afford it
- e. It's not worth the cost
- f. I can receive internet service outside my home
- g. Home internet service is not available in my area
- h. I do not have a computing device, or the device is inadequate or broken
- i. Online privacy or cybersecurity is too high a risk
- j. I have serious personal safety concerns
- k. My household recently moved or is in the process of moving

- l. Not applicable
        - m. Other reason that I listed
- 8. How reliable is your home internet service? - for example, unreliable service could mean that the service is not available, or experience sudden drops in speed
  - a. Not at all reliable
  - b. Slightly reliable
  - c. Moderately reliable
  - d. Very reliable
  - e. Extremely reliable
  - f. Unsure
- 9. Are you currently enrolled in the Affordable Connectivity Program, Lifeline, or a subsidy program offered by your Internet Service Provider? [if needed, give the following background dialogue on ACP: The Affordable Connectivity Program is a federal subsidy program providing up to \$30 per month for a fixed home internet subscription to qualifying households] - Please indicate with a yes if any of the following apply
  - a. Affordable Connectivity Program (ACP)
  - b. Lifeline
  - c. No subsidy programs
  - d. Unsure
  - e. Internet Service Provider offered subsidy program \_\_\_\_\_
- 10. Please estimate how much you pay per month for your home internet service
  - a. \$0 - \$19
  - b. \$20 - \$39
  - c. \$40 - \$59
  - d. \$60 - \$79
  - e. \$80 - \$99
  - f. \$100 or more
  - g. Unsure

11. Please estimate how much you are willing to pay per month for high-speed, reliable home internet service.

- a. \$0 - \$19
- b. \$20 - \$39
- c. \$40 - \$59
- d. \$60 - \$79
- e. \$80 - \$99
- f. \$100 or more
- g. Unsure

To use the internet, people need devices like laptops or smartphones. These next questions are about what types of devices you have and how well they work.

12. For each of the following devices, how many does your household use that are in good working condition? Laptop or desktop computer, tablet, smartphone

Computer (laptop or desktop)	
Tablet	
Smartphone	

13. Thinking about the computing device you primarily use, if it were lost or damaged beyond repair, how long do you think it would take you to replace it?

- a. Within a day
- b. Within a week
- c. Within a month
- d. Within 6 months
- e. More than 6 months
- f. I could not do so in the foreseeable future

To make the best use of the internet, people need a range of skills in using computers and navigating websites. This next question is about digital literacy and digital skills.

14. Please rate how confident you or the primary use are in doing the following activities on the internet:

	Not confident	Slightly confident	Very confident	Not applicable
Send and receive emails?				
Use social media?				
Participate in online video, voice, or conference calls (such as Zoom, Skype)				
Operate a small (home-based) business?				
Work remotely or telecommute?				
Search for a job online?				
Take classes or participate in online job training?				
Access medical service or resource?				
Access governmental services (such as DMV, benefits enrollments, etc.)?				
Shop, make travel reservations, or use other online consumer services?				
Access online financial services such as banking and paying bills?				

15. To what extent do you agree or disagree with the following statements about your internet and computer skills?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I can use and adjust privacy settings on social media					
I can identify false or misleading information					

I can recognize and avoid online fraud (or phishing schemes).					
---	--	--	--	--	--

The remaining questions are meant to capture household demographic information. This information will be anonymized so you cannot be individually identified.

16. How many people live in your household, and what are their approximate ages?

Under 18	
18-29	
30-39	
40-49	
50-64	
65+	

17. What is your approximate annual household income? **[begin to read answers]**

- a. Less than \$25,000
- b. \$25,000 to \$49,999
- c. \$50,000 to \$74,999
- d. \$75,000 to \$99,999
- e. \$100,000 to \$124,999
- f. \$125,000 to \$149,999
- g. \$150,000 to \$174,999
- h. \$175,000to \$199,999
- i. \$200,000 or more
- j. Prefer not to answer

18. What races/ethnicities are represented in your household? **[Check all that apply, do not read answers]**

- a. Black/African American
- b. Asian/Asian American
- c. Hispanic/Latino –
- d. Native American/Indigenous American

- e. White
- f. Middle Eastern/Arab American
- g. Native Hawaiian/Pacific Islander
- h. Prefer not to answer

19. Are you or anyone else living in your household a(n): **[read and check all that apply]**

- a. Veteran
- b. Individual with a disability
- c. Primarily non-English speaking
- d. Formerly incarcerated individual
- e. Actively enrolled in K-12 school or college or other higher education



## Survey instrument 2: Oregon Agency Asset Inventory

### Oregon Agency Asset Inventory Questionnaire

By completing this short questionnaire, you will help the Oregon Broadband Office (OBO) identify infrastructure-related assets that may facilitate broadband deployment in Oregon. As the State engages with internet service providers (ISPs) to extend their networks and services, this information will support Oregon's goal of optimizing federal Broadband Equity, Access, and Deployment (BEAD) funding to achieve statewide universal access to high-speed broadband.

#### 1. Please provide your contact information

- Agency name
- Government level (state, regional, county, local, tribal)
- Name of jurisdiction
- First and last name
- Title
- Email
- Phone number
- Agency website URL (if any)

2. Does your agency own or manage physical assets (e.g., conduit, fiber, structures, real estate, poles) that are available for lease to ISPs to enable broadband deployment? (Yes/No)
  - A. What information about these leasable assets would you like the State to include in its broadband planning and communications with ISPs? [text box]
3. Will your agency oversee capital construction projects between now and 2027 that include opportunities for the placement of communications facilities by your agency, other state or local agencies, regional or local consortia, or ISPs? (Yes/No)
  - A. What information about these projects (i.e., scope, location, schedule) would you like included in State broadband planning and in communications with ISPs? [text box]
4. Has your agency analyzed workforce readiness (i.e., the availability of skilled labor) in Oregon as it may impact State broadband policies and deployment goals? (Yes/No)
  - A. Please provide a URL link where relevant documents, presentations, or analyses are located or email to [insert email address]. [text box]
5. Does your agency have a role in workforce development that would support wired or wireless broadband deployment (including training and recruitment for equipment technicians, cable installation and repair, and construction jobs)? (Yes/No)
  - A. Please describe programs or initiatives that your agency operates or supports or relevant programs operated by other agencies [text box]
6. Are you aware of, or does your agency have reason to track and monitor, frequent or widespread broadband or other communications outages that have significant impact on your community (or, if you represent a statewide organization, on the communities in Oregon)? (Yes/No)

- A. If yes, please describe your agency's role in monitoring or tracking communications reliability in your community and discuss the impact of significant outages. [text box]

7. Are you aware of, or is your agency involved in, planning efforts or development of regulations related to reliable and resilient emergency-level broadband or other communications services, especially services for critical facilities in Oregon (e.g., hospitals, schools, evacuation sites, utilities, data centers, public safety locations)? (Yes/No)
  - A. Please provide a URL link to any publicly available materials relating to these issues and briefly describe the relevant issues related to critical facilities, including planning for climate and weather-related hazards. You may also email these materials to [insert email address]. [text box]
  
8. Has your agency developed any policies, regulations, or guidance regarding emergency communications, network redundancy, climate resilience, disaster preparedness, or disaster recovery planning applicable to the broadband and communications industry in Oregon? (Yes/No)
  - A. Please provide a URL link to any publicly available documents and briefly describe policies and other materials that you believe would be helpful to Oregon's broadband planning efforts. You may also email these materials to [insert email address]. [text box]
  
9. Has your agency developed policies or strategic planning documents that will facilitate broadband access efforts in Oregon (e.g., publicly available information that directly addresses digital equity, infrastructure deployment, economic development, network resilience, partnerships, business planning, or other related efforts)? (Yes/No)
  - A. Please briefly summarize the material and provide a URL link or email information to [insert email address]. [text box]

10.If applicable, please share information regarding broadband-related planning efforts of other Oregon state and local agencies or contact information for agencies involved in broadband-related planning efforts that you believe would be helpful to OBAC's broadband planning efforts. [text box]

11.Please describe how your agency can collaborate with OBAC and participate in its efforts to achieve statewide universal access to high-speed broadband. [text box]

## Survey instrument 3: Community Anchor Institution Broadband Access

### Oregon Community Anchor Institution Broadband Access Questionnaire

Community anchor institutions play a critical role in facilitating greater use of broadband by unserved and underserved populations. Your responses to this brief questionnaire will help the Oregon Broadband Office (OBO) identify programs to advance all Oregonians to use broadband to work, learn, receive health care, and participate in civic events. This information will be an important part of Oregon's work toward achieving statewide universal access to high-speed broadband with federal funding through the Broadband, Equity, Access, and Deployment (BEAD) and Digital Equity Act programs.

#### 1. Contact Information

- Your name
- Your job title
- Your e-mail
- Your phone number
- Organization name
- Organization address
- Organization website URL
- Organization's number of employees
- Please indicate if your organization serves statewide, regionally, or locally

#### 2. Choose the option that best describes your organization (Select the one that best applies)

- a. K-12 school
- b. Higher education entity
- c. Library
- d. Health clinic, health center, hospital, or other medical provider
- e. Public safety entity
- f. Public housing organization (including HUD-assisted housing and Tribal housing organizations)
- g. Neighborhood organization or community center
- h. Faith-based organization

- i. Community support organization that facilitates use of broadband service by low-income or other underserved populations
3. Which of the following programs or services do you offer to facilitate the use of broadband services by your constituents or clients? (Select all that apply)
- a. Support for applicants to broadband subsidy programs such as the Affordable Connectivity Program (ACP)
  - b. Lifeline
  - c. Loans or donations of devices (computers, tablets) to access the internet
  - d. Hotspots and free or subsidized internet access
  - e. Cybersecurity training
  - f. Other digital skills or digital literacy training
  - g. Training, equipment, subsidized services, or other resources to facilitate access to telehealth and telemedicine services
  - h. Training teachers in broadband skills and digital literacy
  - i. Developing and distributing accessible online content or devices designed for use by persons with disabilities
  - j. Developing and distributing accessible online content directed at populations with specific needs, such as seniors, low-income residents, those with low-literacy, and those whose first language is not English
  - k. Broadband internet access services at community centers or other gathering spaces used by clients and constituents
  - l. Funding of programs that provide any of the above programs, including broadband infrastructure, devices, and subsidies to support affordability
  - m. Program development and planning of broadband-related services
  - n. Advocacy for digital inclusion, affordability, and the broadband-related needs of vulnerable populations
  - o. Emergency and disaster relief services such as evacuation centers, charging stations, replacement equipment, and information on grants, loans, and services to those impacted by disasters
  - p. Other (please specify)
  - q. My organization does not offer programs that facilitate the use of broadband services

4. Is your organization located on Tribal land, affiliated with a Tribal or Native entity, or primarily serving Tribal or Native populations? (Yes/No)
5. Does your organization conduct outreach or tailor its broadband-related services to the needs of any of the following communities or groups? (Select all that apply)
  - a. Veterans or current military personnel
  - b. People with disabilities
  - c. Seniors
  - d. Incarcerated or formerly incarcerated residents
  - e. Those in low-income households or without reliable housing
  - f. Those with a language barrier including English learners
  - g. Those with a low level of literacy
  - h. Specific racial or ethnic minority group(s)
  - i. Those living in rural communities
  - j. Other (please specify)
  - k. Not applicable
6. Based on your organization's observations and experience, please describe the barriers and obstacles (e.g., affordability, lack of digital literacy, language barriers) that prevent members of the communities your organization serves, including Tribal and Native populations, from accessing or using broadband internet services.
7. Do all of your organization's locations, offices, or community centers have access to broadband internet services at speeds of at least 1 Gigabit per second (Gbps) symmetrical (both upload and download)? (Yes/No/Don't Know)
  - A. If no, please provide the addresses of the locations where your organization does not have access to broadband internet services of at least 1 Gbps symmetrical.



8. If your organization does not have access to, or does not purchase, service with symmetrical speeds of at least 1 Gbps, please describe why. (Select all that apply)

- a. Service is unavailable
- b. Service is unreliable
- c. Service is too expensive
- d. Customer service is inadequate
- e. Our operations do not require Gigabit-level services
- f. I do not know if 1 Gbps service is available to my location
- g. Other. Please specify:

9. Does your current internet service meet the needs of your organization to deliver broadband-related programs to your clients and constituents?

- a. Yes
- b. No, service is too slow
- c. No, service is unreliable
- d. No, service is too expensive
- e. No, customer service is inadequate
- f. No, service is too complicated to set up and/or maintain
- g. No, redundant connectivity necessary for our operations is too expensive/unavailable
- h. Other (please specify)

10. How essential is symmetrical Gigabit connectivity at your facilities to your ability to deliver your broadband-related services?

<i>Not important</i>			<i>Critically important</i>	
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

11. Does your organization provide access to broadband internet services to clients, constituents, or visitors at each of your locations? (Yes/No)

If yes, does your broadband internet service provide sufficient capacity to accommodate peak demand for such services at all of your locations? If no, is a lack of access to adequate broadband internet services at your location preventing you from serving users? [text box]

12. Is it critical to your organization's mission and service delivery to maintain communications with **critical facilities** such as hospitals, schools, data centers, and public safety agencies during natural disasters and emergencies? (Yes/No)

A. If yes, please briefly describe your organization's need to remain connected to critical facilities and whether you believe your organization's current communications services meet this need. (text box)

13. Has your organization been consulted on disaster planning, emergency communications, or disaster recovery by your communications service provider or a local/regional government agency? (Yes/No)

A. If yes, please briefly describe any plans or reports you think would be useful to the State's broadband and emergency communications planning efforts. (text box)

14. If your organization operates or sponsors any workforce development or training programs in the fields of telecommunications or technology, select all that apply:

- a. We do not sponsor or operate these programs
- b. Mentorships
- c. Certification programs

- d. Registered apprenticeships
- e. Unregistered apprenticeships
- f. Pre-apprenticeships
- g. Internships
- h. Digital literacy trainings for specific employment opportunities
- i. Job placement and recruitment services
- j. Sponsorships/scholarships for third-party training and classes
- k. Other. Please specify:

15. Would your organization offer additional broadband-related services or programs to its constituents or clients if it had additional resources? (Yes/No)

- A. If yes, please describe those additional broadband-related services and the additional resources your organization would need to offer them (e.g., funding, skilled workforce, access to broadband internet services with faster speeds or more capacity).

16. Please describe how your organization can collaborate with The Oregon Broadband Office and participate in its efforts to achieve statewide universal access to high-speed broadband.

## Survey instrument 4: Internet Service Provider Engagement

# Internet Service Provider Engagement Questionnaire

The Oregon Broadband Office (OBO) seeks your input on a range of broadband-related issues. Your responses to this brief questionnaire will be an important part of Oregon's work toward achieving statewide universal access to high-speed broadband with federal funding through the Broadband, Equity, Access, and Deployment (BEAD) and Digital Equity Planning programs.

### 1. Contact Information

- Your name
- Your job title
- Your e-mail
- Your phone number
- Organization name
- Organization address
- Organization website URL
- Organization's number of employees (number)

### 2. Choose the option that best describes your organization and the services it offers:

Internet service provider (ISP)

- a. Telephone company or cooperative
- b. Cable company
- c. Fiber internet provider
- d. Municipal provider
- e. Electric / utility provider
- f. Wireless internet service provider (WISP) / fixed wireless access provider
- g. Mobile internet provider
- h. Satellite internet provider

Other provider

- i. Middle-mile provider

- j. Construction company
- k. Internet equipment provider
- l. Data center operator
- m. Cloud services provider
- n. Engineering and design services

3. What recruitment and hiring sources does your organization use to hire technicians, lineworkers, engineers, construction laborers and managers, and similar positions? (Select all that apply)

- a. Internet-based employment posting sites
- b. Workforce development and community job placement centers
- c. Communications industry-specific training classes
- d. Third-party hiring and recruitment firms
- e. Advertisements in trade association publications and websites
- f. Incentivizing employee referrals

4. Does your organization offer, sponsor, or participate in any workforce development or apprenticeship programs? (Yes/No)

5. If you answered yes to Q.4, please specify the type of programs. (select all that apply)

- a. Mentorship
- b. Certification programs
- c. Apprenticeship
- d. Internship
- e. Sponsorships/scholarships for third-party training and classes
- f. Other (please describe) [text box]

6. How would you propose to work with Oregon on workforce development issues related to broadband deployment, including programs to support diversity among your organization's employees? (Text box reply)
7. Does your organization participate in the Affordable Connectivity Program (ACP)? (Yes/No)
8. What is the monthly post-subsidy price of your lowest-price ACP-eligible tier for participating subscribers?
  - a. \$0
  - b. \$1 - \$10
  - c. \$11 - \$20
  - d. \$21 - \$30
  - e. More than \$30
9. What is the speed of your lowest-price ACP-eligible tier?
  - a. 25/3 Mbps
  - b. Up to 50/5 Mbps
  - c. Up to 100/20 Mbps
  - d. Greater than 100/20 Mbps but less than 100/100 Mbps
  - e. 100/100 Mbps or more
10. How do you advertise or promote your participation in the ACP? (text box)
11. Does your organization offer other programs for low-income customers? (Yes/No)
  - A. Please provide service speeds, monthly pricing, and a description of your low-income or discounted offerings. (text box reply)

12. Does your organization have programs to support consumer broadband skills or use of the internet? (Yes/No)

A. If yes, please describe and provide URL links to relevant materials. (text box reply)

13. Does your organization have programs to support internet adoption? (Yes/No)

A. If yes, please describe and provide URL links to relevant materials. (text box reply)

14. Please describe how your organization can collaborate with local communities on efforts to close the digital divide and, if applicable, please provide specific examples where you have done this successfully. (text box reply)

15. What strategies has your organization used to deploy broadband in the areas of Oregon that are most expensive to serve? (text box reply)

16. Please discuss your continuity and disaster recovery plans in the event of a natural disaster or human error, such as a fiber cut, and whether any of your plans target specific geographic areas. (text box reply)

## Survey instrument 5: Digital Equity Program Inventory

### Digital Equity Program Inventory

#### Introduction

Hello! Your responses to this brief questionnaire will help the Oregon Broadband Office (OBO) identify current and active programs that provide community members the skills and tools to participate in broadband-related and Digital Equity opportunities that supports community development goals.

This information will be an important part of Oregon's work toward achieving statewide universal access to high-speed broadband with federal funding through the Broadband, Equity, Access, and Deployment (BEAD) and Digital Equity ACT programs.

1. Which category best describes your organization? Please select all that apply
  - Public Schools
  - Community colleges and institutions of higher education
  - Libraries
  - Medical and health care providers
  - State government
  - County government
  - Municipal government
  - Council of governments (COG) or regional authority
  - Tribal governments
  - Public housing authorities
  - Civil rights organizations
  - Workforce development and adult literacy organizations
  - Internet Service Provider (ISP)
  - Nonprofit organization that represents persons with disabilities
  - Nonprofit organization that represents veterans
  - Nonprofit organization that represents aging individuals
  - Nonprofit organization that represents incarcerated or formerly incarcerated individuals
  - Nonprofit organization that represents English learners



2. Has your organization created a broadband and/or digital equity plan?
  - o Yes (Include Text Box)
  - o No
  
3. Is your organization part of a broadband coalition?
  - o Yes (If yes, list the coalitions involved) (Include Text Box)
  - o No

4. Please provide the information for a point of contact in your organization

Name

Organization name

Address

Address 2

City/Town

State/Province

ZIP/Postal Code

Email Address

Phone Number

### Program Details

**Digital equity programs aim to ensure that communities have the skills, technology, and capacity to fully engage in the digital economy. Certain programs may target priority populations which include low-income households, seniors, veterans, people with disabilities, incarcerated, English learners, ethnic minorities, and people in rural areas. Examples of digital equity programs include those that promote computer skills, internet access, and computing device access.**

5. Does your organization offer digital equity programs? (If no, skip to question 38)

- Yes
- No

6. What is the name of the program?

Program Name

7. \*What aspects of digital equity does the program address? Please select at least one.

- Availability and affordability of internet

- Digital literacy
- Cybersecurity
- Devices and technical support
- Online accessibility and inclusivity

8. Does the program focus on certain populations? Check all that apply.

- Individuals with disabilities
- Veterans
- Aging individuals (60 and above)
- Incarcerated individuals
- Individuals with a language barrier, including individuals who are English learners; and have low levels of literacy
- Individuals who primarily reside in a rural area
- Individuals who are members of a racial or ethnic minority group
- Individuals who live in a covered household (household income is lower than 150% of the poverty level)
- No particular focus on a population
- Other (please specify)

9. What is the program budget?

- \$1 to \$24,999
- \$25,000 to \$49,999
- \$50,000 to \$99,999
- \$100,000 to \$249,999
- \$250,000 to \$499,999
- Over \$500,000

10. How much does the program cost the participant?

Cost in dollars:

11. Please give us a sense of the geography you serve.

- State-wide

- County-wide
- City-wide
- Neighborhood-wide
- Other (please specify)

12. How long has the program been active, in months?

Program length in months:

13. How many people were served by the program in the last fiscal year?

- Under 25 people
- 26 to 50 people
- 51 to 100 people
- More than 100 people

14. How many users do you expect to serve over the life of the program?

- 1 to 50
- 51 to 100 people
- 101 to 250 people
- 251 to 500 people
- More than 500 people

15. If you had the resources, would you want to scale the project to serve more communities and people?

- Yes
- No

16. Does your organization have another digital equity program? (If no, skip to question 39)

- Yes
- No

**[NEXT PROGRAM]**

17. What is the name of the program?

18. \*What aspects of digital equity does the program address? Please select at least one.

- Availability and affordability of internet

- Digital literacy
- Cybersecurity
- Devices and technical support
- Online accessibility and inclusivity

19. Does the program focus on certain populations? Check all that apply.

- Individuals with disabilities
- Veterans
- Aging individuals (60 and above)
- Incarcerated individuals
- Individuals with a language barrier, including individuals who are English learners; and have low levels of literacy
- Individuals who primarily reside in a rural area
- Individuals who are members of a racial or ethnic minority group
- Individuals who live in a covered household (household income is lower than 150% of the poverty level)
- No particular focus on a population
- Other (please specify)

20. What is the program budget?

- \$1 to \$24,999
- \$25,000 to \$49,999
- \$50,000 to \$99,999
- \$100,000 to \$249,999
- \$250,000 to \$499,999
- Over \$500,000

21. How much does the program cost the participant?

Cost in dollars:

22. Please give us a sense of the geography you serve.

- State-wide
- County-wide

- City-wide
- Neighborhood-wide
- Other (please specify)

23. How long has the program been active, in months?

Program length in months:

24. How many people were served by the program in the last fiscal year?

- Under 25 people
- 26 to 50 people
- 51 to 100 people
- More than 100 people

25. How many users do you expect to serve over the life of the program?

- 1 to 50
- 51 to 100 people
- 101 to 250 people
- 251 to 500 people
- More than 500 people

26. If you had the resources, would you want to scale the project to serve more communities and people?

- Yes
- No

27. Does your organization have another digital equity program? (If no, skip to question 39)

- Yes
- No

**[NEXT PROGRAM]**

28. What is the name of the program?

Program Name

29. \*What aspects of digital equity does the program address? Please select at least one.

- Availability and affordability of internet

- Digital literacy
- Cybersecurity
- Devices and technical support
- Online accessibility and inclusivity

30. Does the program focus on certain populations? Check all that apply.

- Individuals with disabilities
- Veterans
- Aging individuals (60 and above)
- Incarcerated individuals
- Individuals with a language barrier, including individuals who are English learners; and have low levels of literacy
- Individuals who primarily reside in a rural area
- Individuals who are members of a racial or ethnic minority group
- Individuals who live in a covered household (household income is lower than 150% of the poverty level)
- No particular focus on a population
- Other (please specify)

31. What is the program budget?

- \$1 to \$24,999
- \$25,000 to \$49,999
- \$50,000 to \$99,999
- \$100,000 to \$249,999
- \$250,000 to \$499,999
- Over \$500,000

32. How much does the program cost the participant?

Cost in dollars:

33. Please give us a sense of the geography you serve.

- State-wide
- County-wide

- City-wide
- Neighborhood-wide
- Other (please specify)

34. How long has the program been active, in months?

Program length in months:

35. How many people were served by the program in the last fiscal year?

- Under 25 people
- 26 to 50 people
- 51 to 100 people
- More than 100 people

36. How many users do you expect to serve over the life of the program?

- 1 to 50
- 51 to 100 people
- 101 to 250 people
- 251 to 500 people
- More than 500 people

37. If you had the resources, would you want to scale the project to serve more communities and people?

- Yes
- No

### Planned Programs

38. Is your organization in the process of developing a digital equity program?

- Yes
- No

39. What kind of digital equity program(s) is your organization developing? Please select the categories that best fit the program type.

- Digital skills and literacy
- Data privacy and cybersecurity



- Devices (laptops, computers, tablets)
- Technical support
- Digital navigators
- Broadband access
- Creating accessible and inclusive internet content
- Other (please specify) [text box]

40. Does your organization want to develop a digital equity program?

- Yes
- No

41. What kind of digital equity program(s) is your organization interested in developing?  
Please select the categories that best fit the program type.

- Digital skills and literacy
- Data privacy and cybersecurity
- Devices (laptops, computers, tablets)
- Technical support
- Digital navigators
- Broadband access
- Creating accessible and inclusive internet content

### **Programmatic Impact of Broadband Access**

42. Please describe how access to affordable, reliable, and secure high-speed broadband by the communities that you serve may impact programmatic outcomes of your organization? [text box]

43. Do you have metrics to measure progress on your programmatic outcomes? (yes/no)

- a. If yes, please describe or provide a URL link with documentation. [text box]

Please provide examples or a discussion of metrics that you believe would be useful to track broadband-related inputs and outcomes for areas that are relevant to your mission, programs, and services:

44. Economic and workforce development outcomes – input and outcome metrics [text box]

45. Educational outcomes – input and outcome metrics [text box]

46. Health outcomes – input and outcome metrics [text box]

47. Civic and social engagement outcomes – input and outcome metrics [text box]

48. Delivery of other essential services outcomes – input and outcome metrics [text box]

## Survey instrument 6: Covered Populations Broadband Barriers Analysis

### Oregon Covered Populations Broadband Barriers Analysis Questionnaire

Organizations that serve or represent unserved and underserved populations have a critical role in shedding light on the unique barriers such populations face, and how their unique needs can best be addressed. Your responses to this brief questionnaire will help the Oregon Broadband Office (OBO) identify opportunities for programs to advance vulnerable residents' full participation in broadband-related opportunities to work, learn, receive health care, and participate in civic events. This information will be an important part of Oregon's work toward achieving statewide universal access to high-speed broadband with federal funding through the Broadband, Equity, Access, and Deployment (BEAD) and Digital Equity Act Planning programs.

#### 1. Contact Information

- Your name
- Your job title
- Your e-mail
- Your phone number
- Organization name
- Organization address
- Organization website URL
- Organization's number of employees (number)

#### 2. Does your organization provide programs and services that are primarily targeted to any of the following communities? (Select all that apply)

- Individuals with disabilities
- Veterans or current military personnel
- Aging individuals
- Incarcerated or formally incarcerated individuals
- Individuals with low levels of literacy
- Individuals with a language barrier
- Individuals who primarily reside in a rural area
- Individuals who are members of a racial or ethnic minority group

- No particular focus on a population or community
- Other (please specify)

### Internet Service

3. Please indicate your agreement or disagreement with the following statements describing individuals from the population(s) you serve or represent. On a scale of 1 – 5, where 1 is "strongly agree" and 5 is "strongly disagree" as represented on this spectrum:

	1	2	3	4	5
Their households have access to some type of home internet service.					
The available internet service is high-speed, sufficient for their needs, and reliable.					
The available internet service is affordable.					
Their households can choose from among more than one provider for high-speed, reliable, and affordable broadband service					

4. Are there any unique barriers to reliable, affordable, and high-speed internet service for the population(s) you serve? (Yes/No)

Please describe these barriers to accessing reliable, affordable, and high-speed internet service:

### Access to Computers

5. Please indicate your agreement or disagreement with the following statements describing households from the population you serve or represent. On a scale of 1 – 5, where 1 is "strongly agree" and 5 is "strongly disagree" as represented on this spectrum:

	1	2	3	4	5
There are computers in the households of the populations we serve or represent					
The households can troubleshoot computer issues					

The households can afford computer repairs or service					
The households have enough devices to serve their needs					
There are public computers that are convenient to use and close by to these households					

6. Are there any unique barriers to accessing home computers for the population(s) you serve? (Yes/No)

Please describe these barriers to accessing computers and similar devices:

### Digital Literacy and Digital Skills

7. Please indicate your agreement or disagreement with the following statements describing individuals from the population you serve or represent. On a scale of 1 – 5, where 1 is "strongly agree" and 5 is "strongly disagree" as represented on this spectrum:

	1	2	3	4	5
Individuals can find, understand, evaluate, create, and communicate digital information					
Individuals can use technologies appropriately and effectively to retrieve information, interpret results, and judge the quality of that information					
Individuals can use the internet to support education, employment, health, and personal needs					
Individuals have access to convenient and comprehensive digital literacy training					

8. Are there any unique barriers to acquiring or learning digital skills for the population(s) you serve? (Yes/No)

Please describe these barriers to acquiring necessary digital skills:

### Inclusive and Accessible Content

9. Please indicate your agreement or disagreement with the following statements describing individuals from the population you serve or represent. On a scale of 1 – 5, where 1 is "strongly agree" and 5 is "strongly disagree" as represented on this spectrum:

	1	2	3	4	5
Individuals have access to meaningful website content that is written in plain language and is appropriate for the targeted user or audience					
Individuals have access to meaningful website content that is accurately translated into necessary languages					
Individuals have access to meaningful website content that can be read by a screen reader					
Individuals have access to meaningful website content with closed captioning					
Individuals have access to adequate and appropriate assistive technologies to support access to the internet and use of website content by people with disabilities					

10. Are there any unique barriers to inclusive and accessible content for the population(s) you serve? (Yes/No)

Please describe these barriers to inclusive and accessible content:

### Data Privacy and Cyber Security

11. Please indicate your agreement or disagreement with the following statements describing individuals from the population you serve or represent. On a scale of 1 – 5, where 1 is "strongly agree" and 5 is "strongly disagree" as represented on this spectrum:

	1	2	3	4	5
Individuals know how to protect their information online					
Individuals can recognize a phishing scam or other types of scams and illegal activity					
Individuals use anti-virus and anti-malware software on their computers					

12. Are there any unique barriers to data privacy and cyber security for the population(s) you serve? (Yes/No)

Please describe these barriers to acquiring knowledge in data privacy and cyber security literacy:

### Initiatives to Address Barriers

Thinking about the unique barriers you discussed

13. What types of programs and initiatives would you recommend addressing these barriers?

14. Does your organization currently offer any of these types of programs or initiatives? (Yes/No)

a. If yes, please describe if you are interested in expanding your programs and, if so, what types of resources would you need to expand

15. Would your organization be interested in adding new programs to its current portfolio? (Yes/No)

b. If yes, what types of resources do you believe would be necessary to add new programs to your current portfolio?

## Programmatic Impact of Broadband Access

16. Please describe how access to affordable, reliable, and secure high-speed broadband by the communities that you serve may impact the programmatic outcomes of your organization. [text box]

17. Do you have metrics to measure progress on your programmatic outcomes? (yes/no)

c. If yes, please describe [text box]

Please provide examples or a discussion of metrics that you believe would be useful to track broadband-related inputs and outcomes that are relevant to your mission, programs, and services, such as:

18. Economic and workforce development outcomes – input and outcome metrics

19. Educational outcomes – input and outcome metrics

20. Health outcomes – input and outcome metrics

21. Civic and social engagement outcomes – input and outcome metrics

22. Delivery of other essential services outcomes – input and outcome metrics



## Survey instrument 7: Oregon Workforce Development Opportunity

### Oregon Workforce Development Opportunity Questionnaire

Broadband infrastructure deployment and network operations require a highly skilled workforce. Your responses to this brief questionnaire will help the Oregon Broadband Office (OBO) identify opportunities for workforce training and readiness programs to prepare residents for new job opportunities in this field. This information will be an important part of Oregon's work toward achieving statewide universal access to high-speed broadband with federal funding through the Broadband, Equity, Access, and Deployment (BEAD) and Digital Equity Act Planning programs.

#### 1. Contact Information

- Your name
- Your job title
- Your e-mail
- Your phone number
- Organization name
- Organization address
- Organization website URL

#### 2. Type of organization (one selection only)

1. Internet service provider (ISP) **Skip to Questions 14-18**
2. Labor union
3. Trade association
4. Industry certification or standards body
5. Government agency (state, county, local, tribal, or regional consortia)
6. Economic development association or agency
7. Regional or local workforce development board or agency
8. K-12 education (private, charter, public)
9. Higher education organization (all levels, public or private)
10. Trade, technical or vocational school (public, nonprofit, or for-profit)
11. Community based or nonprofit organization

- 3. Do you offer workforce development programs for job placement and training in the communications industry in Oregon? (Yes/No) (If Yes, skip Q5; if no, end survey after Q5)**
- 4. Do you offer training in any of the following industries that have transferable skills that can be applied to communications network deployment? (Select all that apply)**
  1. Utilities such as electricity
  2. HVAC
  3. Computer science
  4. Cybersecurity
  5. General electrician
  6. General construction
  7. Other
- 5. If you answered no to Question 3, are you interested in developing programs specifically targeted at employment opportunities in the communications industry? (Yes/No) (Please skip this question if you answered "yes" to Question 3.)**
  - A. Please describe your interest in developing these programs [text box]**
- 6. What type of workforce development programs do you offer? (Select all that apply)**
  1. On-the-job training placement
  2. Standards certification and safety programs
  3. Training programs through a public or private K-12 school
  4. Training programs through a school of higher education
  5. Trade or vocational certificate programs
  6. Job placement and recruiting services
  7. Formal apprenticeship opportunities

**7. Which of the following communications professional designations are included in your programs? (Select all that apply)**

1. Construction laborers and heavy equipment operators
2. Tower, line, equipment, maintenance, and testing specialists
3. Supervisors / project managers
4. Network design roles
5. Locators

**8. Does your program specifically reach out to any of the following populations for participation in your programs? (Select all that apply)**

1. Veterans or current military personnel
2. People with disabilities
3. Seniors
4. Incarcerated or formerly incarcerated individuals
5. Those in low-income households or without reliable housing
6. Those with a language barrier including English learners
7. Those with a low level of literacy
8. Specific racial or ethnic minority group(s)
9. Those living in rural communities

**9. How would you characterize your current capacity for developing and offering training programs to meet current workforce demands in the communications industry? (Select one)**

1. Underutilized
2. Adequately utilized
3. At capacity

**10. How would you characterize your plans for developing and offering additional programs to meet future workforce demands in the communications industry? (Select one)**

1. We have plans to add capacity

2. We have no plans to add capacity
3. We are reducing our training capacity
4. We are interested in adding capacity, but do not have resources to do so

**A. Please describe your plans for additional or expanded programs or explain what additional resources you would need to add capacity. [text box]**

**11. What are the sources of funding for your training programs?  
(Select all that apply)**

1. Federal agencies and programs
2. State agencies and programs
3. County or local funding and programs
4. Private foundations
5. Fundraising and community grants
6. Partnerships with employers
7. Partnerships with unions or trade associations
8. Fee-based services
9. Other – specify [text box]

**12. Do you serve rural communities? (Yes/No)**

**A. What types of incentives are effective to recruit both skilled and manual labor to your rural community? [text box]**

**13. Describe barriers to developing a diverse, skilled workforce in your community that can fill employment opportunities in the communications industry. [text box]**

**14. Provide examples or ideas of incentives and programs that can mitigate those barriers to create a diverse pool of highly skilled workers. [text box]**

**For ISPs only:**

**15. Do you provide any in-house skills training, workforce development, or apprenticeship programs for your employees to support a highly skilled workforce? (Yes/No)**

**16. If yes, please identify the types of programs (Select all that apply)**

- a. Mentorship
- b. Certification programs
- c. Apprenticeship
- d. Internship
- e. Sponsorships/scholarships for third-party training and classes
- f. Other (Please describe) [text box]

**17. In addition to any programs you directly provide, what other sources or programs do you use in Oregon to train and support workforce readiness among your employees? (Select all that apply)**

- a. Standards certification and safety programs
- b. Training programs through a public or private K-12 school
- c. Training programs through a school of higher education
- d. Trade or vocational certificate programs
- e. Formal apprenticeship programs

**18. What sources or programs do you use to recruit and hire employees, including technicians, linemen, construction laborers and managers, and similar positions? (Select all that apply)**

- a. Internet-based employment posting sites
- b. Workforce development and community job placement centers
- c. Communications industry specific training classes
- d. Third-party hiring and recruitment firms
- e. Advertisements in relevant trade association publications and websites
- f. Incentivizing employee referrals

- 19. Do you have programs or incentives to support diversity among your employees when considering methods to attract, retain, and promote a skilled workforce? [text box]**
- 20. Please describe your vision for workforce readiness programs, recruitment practices, and wrap around services to support broadband expansion in Oregon over the next five years. [text box]**

## Appendix E: Anecdotal barriers identified through outreach sessions

The following table lists barriers described in outreach sessions OBO conducted during the development of this Plan. As some sessions included representation from multiple defined covered populations and barriers mentioned are intersectional, barriers are listed by the session in which they were identified.

**Table 39: Barriers identified through OBO's outreach**

Outreach session type	Barriers described
<p>Urban lived experience expert focus group (participants represented refugees, immigrants, Latino communities, low-income families, veterans)</p>	<ul style="list-style-type: none"> <li>• Access to high-speed internet is a major issue for all.</li> <li>• The cost for internet service is prohibitive.</li> <li>• Internet literacy is a barrier—mostly for parents rather than youth.</li> <li>• Many students lack devices needed for remote learning.</li> <li>• Access to devices can be difficult with families that are seven or more (common with some refugees and immigrant families).               <ul style="list-style-type: none"> <li>○ Additionally, there is no support when devices break or need other troubleshooting help. Families lack the knowledge to fix their devices.</li> </ul> </li> <li>• Many people use their phone for internet access.</li> <li>• Some agencies are communicating with their constituency via telephones (rather than internet) because it's more accessible for their community.</li> <li>• Refugees also experience language barriers with accessing information.</li> <li>• Providing access to information is key (especially for refugees) and providing information in multiple languages is preferred.               <ul style="list-style-type: none"> <li>○ Even if someone speaks English as a second language, many people</li> </ul> </li> </ul>

Outreach session type	Barriers described
	<p>prefer to read information in their own language.</p>
<p>Rural lived experience (participants served areas across Oregon and within populations such as refugees, immigrants, Latino communities, low-income families, veterans)</p>	<ul style="list-style-type: none"> <li>• One person noted that their Wi-Fi bandwidth hits capacity with three people using it.</li> <li>• Many Lakeview residents do not have internet in their home (and use mobile devices instead).</li> <li>• Lakeview broadband is not always dependable.</li> <li>• Rural areas have very limited access to internet.</li> <li>• Coverage is sporadic in the Mid-Willamette Valley.</li> <li>• Online schooling was difficult during the Covid-19 pandemic. Some students did not have internet access.</li> <li>• Many individuals cannot afford devices.</li> <li>• Some providers and clinicians do not have reliable access to telementoring or education opportunities.             <ul style="list-style-type: none"> <li>○ Seeing fewer rural participants for telementoring but they are unsure what the actual barrier is—marketing, internet access, capacity, etc.</li> </ul> </li> <li>• Lake County is low income, which creates barriers for online access.</li> <li>• Low-income households do not have the internet services they need, especially for multi-person households.</li> <li>• There are also language barriers for accessing information in order to participate in online meetings, work, school, etc.             <ul style="list-style-type: none"> <li>○ There is also a language barrier for individuals who speak a specific dialect of a language.</li> </ul> </li> </ul>



Outreach session type	Barriers described
	<ul style="list-style-type: none"> <li>• Chromebooks were purchased for students during the pandemic. However, they are not able to run Zoom.</li> <li>• Rural areas (predominantly agriculture and processing plants) are increasing and have low pay, poor internet signal, and lack of reliable services and coverage. There is a monopoly on the service provider options.</li> <li>• Latino students are missing school assignments due to lack of internet service at their home (family cannot afford it).</li> <li>• Accessing online resources and information for seniors who need to navigate paperwork.</li> <li>• In Mid-Willamette Valley and Josephine County, availability and access of internet services is a barrier.</li> <li>• In Josephine County, there is a need for meeting spaces with high-speed internet for virtual meetings.</li> </ul>
<p>Seniors lived experience expert focus group</p>	<ul style="list-style-type: none"> <li>• Cost is prohibitive; people cannot afford internet services or devices.</li> <li>• Many of the affordability programs only offer internet or cell phone (many clients chose phone instead).               <ul style="list-style-type: none"> <li>○ Many choose a flip phone (instead of smartphone) for lack of knowledge on how to use those devices.</li> <li>○ Survey in 2020 showed only 53% of low-income people in downtown Portland had internet services and only 67% have a smart phone.</li> </ul> </li> <li>• These issues are worse for individuals who live in rural areas who may not have access to internet or have a poor connection.</li> </ul>

Outreach session type	Barriers described
	<ul style="list-style-type: none"> <li>• Not all people are aware of existing resources. It depends on if their social circle is aware of the resources.</li> <li>• Some feel uncomfortable calling their ISP and asking for discounted service. Others distrust government services or have a mixed perception of welfare programs.</li> <li>• Many lack information because the information is not available in their native language.             <ul style="list-style-type: none"> <li>○ CBOs are having to translate information to share with their communities (especially Asian communities).</li> </ul> </li> <li>• Funding streams change and service program names change, which can cause confusion when people are trying to find out information about services (referring to their former name).             <ul style="list-style-type: none"> <li>○ This also causes another round of paperwork and additional set up support.</li> </ul> </li> <li>• The application process is difficult and cumbersome, which is another barrier for access.</li> <li>• In some instances, people need to have SNAP to qualify for some internet programs. However, not all people who qualify for SNAP sign up for it, which causes ineligibility for the internet services program.             <ul style="list-style-type: none"> <li>○ Others are just above the poverty line (and/or do not meet SSI limits), but they still need access to the programs. The internet is seen as a bonus to their monthly budget, rather than a necessity.</li> </ul> </li> <li>• The state needs to understand concepts around the aging community. Many are</li> </ul>

Outreach session type	Barriers described
	<p>socially isolated, and this means everything in terms of planning. Planning needs to be framed within this language and understanding.</p> <ul style="list-style-type: none"> <li>• Some aging adults also face other barriers e.g., cognitive challenges. This can make it even more difficult to learn new skills.               <ul style="list-style-type: none"> <li>○ Another additional barrier is hearing challenges.</li> </ul> </li> </ul>
<p>Persons with disabilities lived experience expert focus group</p>	<ul style="list-style-type: none"> <li>• The disabled community is more likely to be in a low-income category; therefore, affordability is the biggest barrier.               <ul style="list-style-type: none"> <li>○ This is heavily connected to employment issues.</li> </ul> </li> <li>• The second barrier is digital literacy. Some groups are currently offering technology resources to help people gain access.               <ul style="list-style-type: none"> <li>○ They are seeing a need for support on how to use devices.</li> </ul> </li> <li>• Some households have multiple users and need more access to speed and bandwidth since they are using multiple devices at once.</li> <li>• Access to devices is also a barrier (e.g., computers, iPads, laptops, etc.)               <ul style="list-style-type: none"> <li>○ This can be a major barrier for some members of the disability community who use devices to communicate.</li> <li>○ Some devices do not have accessibility features, or they are not reliable.</li> <li>○ Many communication apps are expensive.</li> </ul> </li> <li>• Additionally, some members of the disability community also have a language barrier. Therefore, TV</li> </ul>

Outreach session type	Barriers described
	<p>programming in their native language could be cost prohibitive.</p> <ul style="list-style-type: none"> <li>• Those who are hard of hearing/blind also have a language barrier. Some have a less than fourth grade reading level. Some members may not know ASL or other signed languages.               <ul style="list-style-type: none"> <li>○ Visual support is great for those with a literacy barrier.</li> </ul> </li> <li>• Another concern is whether tech resources are accessible.               <ul style="list-style-type: none"> <li>○ There needs to be more intention around physical features of media –high contrast for readability, plain language, less distracting graphics, etc.</li> <li>○ This is especially true for individuals who have cognitive processing disabilities and those who are deaf, hard of hearing, or blind.</li> <li>○ Sometimes the translation is not accurate.</li> </ul> </li> <li>• For those experiencing houselessness, the main barrier is access. They likely do not have money to pay for internet services, and they face discrimination when trying to use public Wi-Fi.</li> <li>• Reliability of internet (especially in rural areas) is also an issue. The services that do provide reliable internet are cost prohibitive.</li> <li>• Lack of internet means individuals are cut off from what is needed to be functional in today's society.</li> <li>• Another barrier is many people do not know where to find resources.</li> <li>• Some people have a perception of getting help and feel embarrassed for asking.</li> </ul>

Outreach session type	Barriers described
	<ul style="list-style-type: none"> <li>○ Developing trusted places and advocates that people can connect with can help mitigate this need.</li> <li>● Another thing to consider with this community is understanding the vulnerability of people who have intellectual disability. Many are not aware of scams/fraudulent activity.</li> <li>● People on SSI can be targeted for scams. SSI is a common monetary resource for the Deaf and Deaf/senior community.</li> <li>● For the Deaf community, frauds/scams can have a huge impact as they are already low-income. They also experience despair after being a victim.</li> </ul>
<p>Tribal lived experience expert focus group</p>	<ul style="list-style-type: none"> <li>● The first barrier to high-speed internet is the cost of devices.</li> <li>● The cost of service is prohibitive.               <ul style="list-style-type: none"> <li>○ \$110 per month for high-speed internet service.</li> </ul> </li> <li>● Private providers either do not offer high speeds or their services are too expensive.               <ul style="list-style-type: none"> <li>○ There are currently no language/requirements around providing affordable alternatives.</li> </ul> </li> <li>● Digital literacy is a barrier for elders.               <ul style="list-style-type: none"> <li>○ They need tech support as well as education on how to use devices.</li> </ul> </li> <li>● There are geographical and topographical challenges to serving these areas; some are rural, and some are checkerboarded across an area.</li> <li>● Tribal areas need more fiber infrastructure to be able to serve their communities.               <ul style="list-style-type: none"> <li>○ Some only have access to low speeds (1.5 or 2 Mbps)</li> </ul> </li> </ul>

Outreach session type	Barriers described
	<ul style="list-style-type: none"> <li>• Multi-generational houses need more bandwidth. Some are averaging at least 100 Mbps per month.</li> <li>• Some places do not have internet service at all. They should be serviced first.</li> <li>• The ACP process is difficult to navigate. Many faced a challenge with the application process.             <ul style="list-style-type: none"> <li>○ The burden is put on the tribes to get people signed up for the program.</li> <li>○ Many tribal members are experiencing application fatigue. These services should just be automatically offered to tribal members.</li> </ul> </li> <li>• Others are not aware of ACP and other program opportunities.</li> <li>• Tribes are seeing grant money go to large companies rather than offering that funding to tribes that have greater needs.</li> <li>• Currently, some tribes do not offer broadband programs as part of their services.             <ul style="list-style-type: none"> <li>○ During Covid-19, the City of Portland provided funding for internet and devices, but the funding went fast, and they were not able to serve all who needed assistance.</li> <li>○ There is currently a waiting list if additional funding becomes available.</li> </ul> </li> <li>• Generally, people are not aware of the assistance programs and skills training that may be available.</li> <li>• They may have an elder call and say they feel socially isolated and are wanting resources to reduce those barriers.</li> </ul>

Outreach session type	Barriers described
	<ul style="list-style-type: none"><li>• Some tribes are not on federally-recognized tribal lands, which creates a problem for funding eligibility.</li><li>• There is a lack of understanding and technical skills that creates a barrier in addition to the affordability and availability of internet.</li><li>• Online scams are a barrier but secondary to affordability and availability of internet. Fear of online scams is not preventing people from accessing the internet.</li></ul>

## APPENDIX F: ALIGNMENT OF PLAN WITH DIGITAL EQUITY ACT REQUIREMENTS

The following table displays this Plan’s fulfilment of all requirements of the Digital Equity Act as outlined in the NOFO and in other guidance from the NTIA.

**Table 40: Digital Equity Act requirements corresponding to sections of this Plan**

	Requirement	Details	Section	Page
<b>Requirement 1</b>				
1	Identification of digital equity barriers for each covered population.	Individuals who live in covered households	3.2	106-117
		Aging individuals	3.2	106-117
		Incarcerated individuals	3.2	106-117
		Veterans	3.2	106-117
		Individuals with disabilities	3.2	106-117
		Individuals with a language barrier	3.2	106-117
		Individuals who are members of a racial or ethnic minority group	3.2	106-117
		Individuals who primarily reside in a rural area.	3.2	106-117
<b>Requirement 2</b>				
2a	<b>Measurable objectives</b> for documenting and promoting the <b>availability of, and affordability of access to, fixed and wireless broadband technology.</b>	Individuals who live in covered households	2.2.2.1	40-42
		Aging individuals	2.2.2.1	40-42
		Incarcerated individuals	2.2.2.1	40-42
		Veterans	2.2.2.1	40-42
		Individuals with disabilities	2.2.2.1	40-42
		Individuals with a language barrier	2.2.2.1	40-42
		Individuals who are members of a racial or ethnic minority group	2.2.2.1	40-42
		Individuals who primarily reside in a rural area.	2.2.2.1	40-42
2b	<b>Measurable objectives</b> for documenting and promoting the <b>online</b>	Individuals who live in covered households	2.2.2.3	52-54
		Aging individuals	2.2.2.3	52-54



	Requirement	Details	Section	Page
	<b>accessibility and inclusivity of public resources and services.</b>	Incarcerated individuals	2.2.2.3	52-54
		Veterans	2.2.2.3	52-54
		Individuals with disabilities	2.2.2.3	52-54
		Individuals with a language barrier	2.2.2.3	52-54
		Individuals who are members of a racial or ethnic minority group	2.2.2.3	52-54
		Individuals who primarily reside in a rural area.	2.2.2.3	52-54
2c	<b>Measurable objectives for documenting and promoting digital literacy.</b>	Individuals who live in covered households	2.2.2.3	47-49
		Aging individuals	2.2.2.3	47-49
		Incarcerated individuals	2.2.2.3	47-49
		Veterans	2.2.2.3	47-49
		Individuals with disabilities	2.2.2.3	47-49
		Individuals with a language barrier	2.2.2.3	47-49
		Individuals who are members of a racial or ethnic minority group	2.2.2.3	47-49
		Individuals who primarily reside in a rural area.	2.2.2.3	47-49
2d	<b>Measurable objectives for documenting and promoting awareness of and use of measures to secure the online privacy of, and cybersecurity with respect to an individual.</b>	Individuals who live in covered households	2.2.2.3	49-52
		Aging individuals	2.2.2.3	49-52
		Incarcerated individuals	2.2.2.3	49-52
		Veterans	2.2.2.3	49-52
		Individuals with disabilities	2.2.2.3	49-52
		Individuals with a language barrier	2.2.2.3	49-52
		Individuals who are members of a racial or ethnic minority group	2.2.2.3	49-52
		Individuals who primarily reside in a rural area.	2.2.2.3	49-52
2e	<b>Measurable objectives for documenting and</b>	Individuals who live in covered households	2.2.2.2	43-47

	Requirement	Details	Section	Page
	promoting <b>availability and affordability of consumer devices and technical support for those devices.</b>	Aging individuals	2.2.2.2	43-47
		Incarcerated individuals	2.2.2.2	43-47
		Veterans	2.2.2.2	43-47
		Individuals with disabilities	2.2.2.2	43-47
		Individuals with a language barrier	2.2.2.2	43-47
		Individuals who are members of a racial or ethnic minority group	2.2.2.2	43-47
		Individuals who primarily reside in a rural area.	2.2.2.2	43-47
	<b>Measurable objectives</b> are all:	Future focused	2.2.2	40-55
		Quantifiable	2.2.2	40-55
<b>Requirement 3</b>				
3	Assessment of how aforementioned measurable objectives interact with States’s outcomes, including:	Economic and workforce development goals, plans, and outcomes	2.1 2.1.1	13-26 26-29
		Educational outcomes	2.1 2.1.2	13-26 29-30
		Health outcomes	2.2 2.1.3	13-26 31-32
		Civic and social engagement	2.1 2.1.4	13-26 32-34
		Delivery of other essential services	2.1 2.1.5	13-26 34-36
		All five items are mentioned for each covered population	2.1	13-36
		<b>Requirement 4</b>		
4	A description of how the State plans to <b>collaborate with key stakeholders</b> in the State, which may include:	Community anchor institutions	4.2 5.1	161-164 166-181
		County and municipal governments	4.2 2.1.1	161-164 26-29
		Local education agencies	3.1.1	56-84
			3.1.3	90-101
			5.1	166-181
		Where applicable, Indian Tribes, Alaska Native entities,	4.1.4 4.2	160-161 161-164

	Requirement	Details	Section	Page
		or Native Hawaiian organizations		
		Nonprofit organizations	3.1.1 3.1.3 4.2 5.1	56-84 90-101 161-164 166-181
		Organizations that represent:		
		Individuals with disabilities, including organizations that represent children with disabilities	4.2	161-164
		Aging individuals	4.2	161-164
		Individuals with language barriers	4.2	161-164
		Veterans	4.2	161-164
		Individuals in Oregon who are incarcerated	4.2	161-164
		Civil rights organizations	4.2	161-164
		Entities that carry out workforce development programs	4.1.2 4.2	158-159 161-164
		Agencies of the State that are responsible for administering or supervising adult education and literacy activities in the State	4.2	161-164
		Public housing authorities in Oregon	4.2	161-164
		A partnership between any of the above entities	5.1	166-181
<b>Requirement 5</b>				
5	A list of organizations with which OBO collaborated in developing the Plan.		Appendix B	194-205
<b>Programmatic Requirements 6, 7, 8, 9, 10, 11, 12, 13, 14, 15</b>				
6	<b>Requirement 6:</b> A stated vision for digital equity.	Vision states and defines digital equity in Oregon	2.1	13-16

	Requirement	Details	Section	Page
7	<b>Requirement 7: A digital equity needs assessment, including:</b>	A comprehensive assessment of the baseline from which the State is working	3.2 2.2.2	106-154 40-55
		The State’s identification of the barriers to digital equity faced generally	3.2 2.2.1	106-154 37-40
	The State’s identification of <b>the barriers to digital equity</b> faced by:	Individuals who live in covered households	3.2.1	106-117
		Aging individuals	3.2.1	106-117
		Incarcerated individuals	3.2.1	106-117
		Veterans;	3.2.1	106-117
		Individuals with disabilities;	3.2.1	106-117
		Individuals with a language barrier	3.2.1	106-117
		Individuals who are members of a racial or ethnic minority group	3.2.1	106-117
		Individuals who primarily reside in a rural area.	3.2.1	106-117
8	<b>Requirement 8: An asset inventory, including current resources, programs, and strategies that promote digital equity, whether publicly or privately funded, for:</b>	Individuals who live in covered households	3.1.1 3.1.3	56-84 90-101
		Aging individuals	3.1.1	56-84
		Incarcerated individuals	3.1.1 3.1.3	56-84 90-101
		Veterans	3.1.1 3.1.3	56-84 90-101
		Individuals with disabilities	3.1.1 3.1.3	56-84 90-101
		Individuals with a language barrier	3.1.1 3.1.3	56-84 90-101
		Individuals who are members of a racial or ethnic minority group	3.1.1 3.1.3	56-84 90-101
		Individuals who primarily reside in a rural area.	3.1.1 3.1.3	56-84 90-101
		An asset inventory including existing digital plans and programs already in place among tribal, municipal, and regional governments.		3.1.2 3.1.3

	Requirement	Details	Section	Page
9	<b>Requirement 9: A coordination and outreach strategy,</b> including opportunities for public comment by, collaboration with, and ongoing engagement with representatives of:	Individuals who live in covered households	4.1	155-161
		Aging individuals	4.1	155-161
		Incarcerated individuals	4.1	155-161
		Veterans	4.1	155-161
		Individuals with disabilities	4.1	155-161
		Individuals with a language barrier	4.1	155-161
		Individuals who are members of a racial or ethnic minority group	4.1	155-161
		Individuals who primarily reside in a rural area.	4.1	155-161
		The full range of stakeholders within the State	4.1	155-161
10	<b>Requirement 10: A description of how municipal, regional, and/or Tribal digital equity plans</b> will be incorporated into the State Digital Equity Plan.		3.1.2	85-90
11	<b>Requirement 11: An implementation strategy</b> that:	Is holistic	5	165-186
		Addresses barriers to participation in the digital world, including affordability, devices, digital skills, technical support, and digital navigation	5.1	166-181
		Establishes measurable goals and objectives	5.1 2.2.2	166-181 40-55
		Establishes proposed core activities to address the needs of covered populations	5.1	166-181
		Sets out measures ensuring the plan’s sustainability and effectiveness across State communities	5.1	166-181
		Adopts mechanisms to ensure that the plan is regularly evaluated and updated	5.1	166-181

	Requirement	Details	Section	Page
12	<b>Requirement 12:</b> An explanation of how the implementation strategy addresses gaps in existing state, local, and private efforts to address barriers identified pursuant to NOFO Section IV.C.1.b.i, item 1.		5.1	166-181
13	<b>Requirement 13:</b> A description of how the State intends to accomplish the implementation strategy by <b>engaging or partnering</b> with:	Workforce agencies such as state workforce agencies and state/local workforce boards and workforce organizations	4.2	161-164
		Labor organizations and community-based organizations	4.2	161-164
		Institutions of higher learning, including but not limited to four-year colleges and universities, community colleges, education and training providers, and educational service agencies	4.2	161-164
14	<b>Requirement 14:</b> A <b>timeline</b> for implementation of the plan.		5.1 5.2	166-181 182-186
15	<b>Requirement 15:</b> A description of how the State will <b>coordinate its use of State Digital Equity Capacity Grant funding</b> and its use of any funds it receives in connection with the BEAD Program, other federal or private digital equity funding.		2.2	36-55
			5.1	166-181
			5.2	182-186

## APPENDIX G: DRAFT STATE OF OREGON DIGITAL EQUITY PLAN PUBLIC COMMENT

### **Commenter 1**

#### **1. Executive Summary**

So far, I really like the summary, it [is] easy to read and understand. Like the focus on rural areas, especially the ones with no or very limited access, how does this apply to the more “urban” areas? As a Black woman in a low-income bracket with a need for internet to perform my job duties, Critical Barrier 3 really speaks to my heart and I would like to know how we can specifically address this barrier. How can people who may be naturally skeptical of technology be assured and encouraged to develop tech skills? One way I think would work is contracting with local trusted organizations/individuals to offer classes in digital literacy for free and not just offer the classes but really reach out to specified populations and have a system for measuring impact with possible ideas for growth. Yes, and Yes to Barrier #4—resources are needed and by that, I mean money, money for people, money for infrastructure, money to document and record, money to invest in new pathways of digital equity and so much more will require money. We cannot expect that people will just volunteer because the effort is important, and we should not expect people to. In addition, connection to larger organizations doing the same work is always beneficial.

#### **2. Introduction and Vision for Digital Equity**

I like the 4 framework principles. I am little concerned that in the table the “covered populations” are not laid out. I figure it is because of the compactness of the table. It is important to keep repeating who the people are that we are trying to serve so we do not lose sight of the mission and who we should be highlighting. I have seen many a well-laid plan be developed and implemented without any consultation with the population it is supposed to serve. It may seem redundant to keep reiterating and it is necessary. As a Black woman I can tell you all about the programs that started out to help Black populations and were deterred from that focus to serving a wider population better than the original mission of Black populations. The term “multicultural” comes to mind which allows for lack of specificity.

In the broader descriptions, there is no mention of race/ethnicity (REALD) until the Health section and only in lines with communication which makes me think this is more for English as a second language or providing materials for people with different abilities. People of color, especially Black have been mistreated the healthcare system in this country that it is going to take more than just materials to effectively provide digital equity access.

Happy that there is a plan for measuring data. I do find it interesting that aging individuals, veterans, individuals with disabilities, individuals with a language barrier and members of racial or ethnic minorities are all at 89%. I would love to see the details on that data. It seems to me that there may be some grouping going on that does not allow for true access percentage for each population. I would love to see us disaggregate the data by race and ethnicity\_combined with rural populations.

Table 2.2.2.3 also concerns me. How can we determine who needs support with digital skills when most of those people probably never filled out the survey? I do like that we are tracking the different types of skills.

### 3. Current State of Digital Equity: Barriers and Assets

Nice to see that the Tribes are getting highlighted in this. I feel that they live on federal land they should have access to [the] internet, but I hear things as simple as not having a[n] address can prevent access. It just makes no sense to me. Just like many of the ways we treat the Native owners of this land. When talking about "broadband availability" is cost included in the consideration? I think that is a barrier to availability. Table 9 shows that the biggest gap in Oregon when weighted against the Nation is ethnic and racial minorities. Why do you think that is? Also, there is not an explanation or even mention of it in the summary below the table.

### 4. Collaboration and Stakeholder Engagement

Again, happy to see the intentional outreach to the Tribal community.

### 5. Implementation

The activities and descriptions are pretty broad, and I understand why. I would love to see more detail how each activity will intentionally focus on the "covered populations." I really like the timeline. Even if dates and things have to be adjusted, we can at least see what we're aiming for and by when.

### 6 Conclusion

Good.

### 7. Appendices

Did not have time to read.

### Written Responses and Actions Taken by State in Response

#### Digital Equity – 1. Executive Summary

Comments considered. Comment suggests item or items that are already part of the Plan so no action taken. OBO plans to partner with trusted community organizations for the very reasons identified in the comment.

#### Digital Equity – 2. Introduction and Vision for Digital Equity

Comments under review for follow-up in future stages of the program, specifically on ensuring funded programs maintain focus on the covered population they aim to serve.

#### Digital Equity – 3. Current State of Digital Equity: Barriers and Assets



Comment suggests item or items that are already part of the Plan. The Plan includes cost in the affordability section.

Digital Equity – 4. Collaboration and Stakeholder Engagement and Sections 5 and 6

Thank you. No response or action required.

**Commenter 2**

Grant Program Name: NTIA Digital Equity Capacity Grant Program

Proposal Subject to Comment: Draft State of Oregon Digital Equity Plan

Proposal Release Date: November 1, 2023

Public Comment Deadline: December 16, 2023

Commenting Organization: Confederated Tribes of the Umatilla Indian Reservation

Dear Mr. Batz,

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) appreciate the opportunity to offer comments on the draft State of Oregon Digital Equity Plan released for public comment on November 1, 2023, by the Oregon Broadband Office (OBO) (Draft Statewide DE Plan).

Part I: CTUIR General Comments

The CTUIR is a Federally Recognized Indian Tribe exercising sovereign governmental authority within the boundaries of the Umatilla Indian Reservation (UIR), a geographical area of land encompassing approximately 273 square miles in a rural and remote part of northeastern Oregon. The CTUIR believes it important that the OBO recognize that residences and business located on the UIR have decades of experience with what is know[n] as the “digital divide.” Specifically, the UIR has a long history of experiences involving the failure of incumbent providers installing landlines far past the date they were promised or required by the terms of their regulated tariffs. The same is true for UIR residents with respect to mobile phone coverage promises made by incumbent cellular carriers, and more recently by unfulfilled promises made from private companies regarding the installation of the infrastructure and service offerings needed to provide modern broadband internet service access. Still to this day, some areas of the Reservation do not have mobile phone coverage. As our comments below reflect, one of our biggest obstacles has been the lack of accurate data about communication infrastructure and the availability of services including internet access on our rural, tribal lands or digital literacy among our populations. This lack of local, covered population data along with high costs of equipment and subscription rates coupled with economic conditions and unemployment rates are key factors and barriers to broadband use and internet connectivity in our area.

The CTUIR intends to develop a Tribally-produce[d] digital equity plan that is specific to, and focused on, the needs of UIR residents. Attached as Exhibit 1 is a July 12, 2022, letter from the CTUIR Board of

Trustees to Alan Davidson, Assistant Secretary of Commerce for NTIA, notifying the NTIA of the CTUIR's intent to fully participate in the State Digital Equity (DE) Program and to undertake the development of a Digital Equity Plan for all residence[s] within UIR boundaries. One of the main objectives of this CTUIR Digital Equity Plan would be to address the lack of reliable and affordable broadband services to all locations with the Reservation. This same message was discussed [with] Senator Ron Wyden and his staff in [a] meeting on the Reservation with the BOT about the critical need to provide sufficient funding so that every location within the Reservation can have access to affordable and reliable broadband services provide a fiber optic network connection.

Please note that CTUIR comments concerning the State of Oregon Digital Equity Plan are being provided via email so that OBO Staff can review comments with the supporting attachments.

## Part II: Section-by-Section Comments Meeting OBO's Comment Portal Submission Requirement Format

The following comments are organized using the Comment Portal's outline and the Sections/Captions/page numbers of the Draft Statewide DE Plan.

### A. Section 1 (Executive Summary) Comments.

#### 1) Sections 1.1 (Vision) and 1.2 (Critical Barriers)

We support the 5 key goals and 4 framework principles (but see our fifth framework principle under the comments on Section 2.1, below) and agree that the 4 critical barriers are lack of infrastructure in rural areas, affordability, lack of digital literacy among "covered populations" and lack of funding in sustaining efforts towards digital equity.

#### 2) Sections 1.3 (Needs Assessment) and 1.4 (Collaboration)

While we are satisfied with the Executive Summary discussion of needs assessment and collaboration, we do have specific concerns in both of these areas as discussed in more detail further below.

#### 3) Section 1.5 (Implementation Plan)

##### 1. Critical Barrier No. 1 add mapping and scalability

On page 9 of the Draft DEP, under 1. Critical Barrier: Lack of broadband internet availability," we recommend adding two additional strategies:

##### 2. Critical Barrier No. 2

##### Strategy 2. Accurate Mapping of Unserved and Underserved Area

As the U.S. General Accounting Office (GAO) reported in 2016 and again in 2018, the FCC and service providers often overstate the amount of broadband coverage on tribal lands due to data capturing methods that include tribal lands having the infrastructure for broadband, rather than actual access

to broadband. The National Tribal Broadband Strategy, adopted by the U.S. Department of Interior in 2021, emphasizes the need for more accurate data including mapping broadband infrastructure as well as service coverage on tribal lands. A large number of homes and other locations needing broadband connectivity do not show up on the FCC National Broadband Map or the Oregon Broadband Map because they do not have standard street addresses and/or specific 911 location information. As a result, we recommend that this strategy should include using unique GPS coordinates for every such service location on Tribal lands, especially if it impacts the allocation of federal funds.

As California noted in its draft Digital Equity Plan Executive Summary, a key activity of the OBO should be a commitment “to improving broadband mapping efforts” and continue “collection of granular broadband deployment and subscriber data [to] allow for better understanding and assessment of unserved and underserved locations . . . to effectively target resources as needed.” See p. 22, California Digital Equity Plan (Draft 2023).

### Strategy 3. Wireline and/or fixed robust high speed wireless scalability

We recommend that the Draft Statewide DE Plan set a strategy of not only meeting the minimum requirements of 100 Mbps/20 Mbps hourly service, but that such service be scalable to 1 Gbps within 5 years.

#### D. Critical Barrier No. 3 Add “Tribal”

On page 10 of the Draft Statewide DE Plan, under “4. Critical barrier: Local communities require resources and expertise for digital equity efforts” under “Strategy 1” you should add “tribal” to the list of governments and nonprofits to include in your efforts to build collaboration to not only accurately capture that “tribal” is not the same as “local” but to also recognize the unique sovereign role of tribal governments in your collaboration efforts.

### B. Section 2 (Introduction and Vision for Digital Equity) Comments

#### Framework Principles

Under Section 2.1 Vision, we recommend adding a fifth “framework principle.”

D. Recognize Tribal self-determination and regulatory jurisdiction over Indian lands and collaborate with Oregon’s nine federally recognized Indian tribes in support of their mutually agreed upon goals. Oregon’s nine indigenous tribes have a unique relationship with the United States based on a mix of treaty rights. Congress’s primary role in regulating Indian affairs, and the federal government’s trust relationship with Indian tribes which is why, in part, the NTIA’s requirements for states receiving digital equity funding is to work closely with Indian tribes. Because Indian tribes are also political and government entities and have sovereignty and regulatory jurisdiction over the digital networks and data on Tribal lands, in addition to being racial or ethnic minorities, OBO will collaborate and work closely with the nine Oregon tribes through the State’s well established government-to-government working relationship with such

tribes and Oregon’s statutory authority for its political subdivisions to enter into intergovernmental agreements with Indian tribes.”

#### Additional Strategies for improving broadband availability

On page 31, under Section 2.2.1 Strategies, under “1. Critical barrier: Lack of broadband availability,” we recommend adding the same additional strategies, discussed above, of improved mapping and scalability of service speeds in the near future. See our comments pertaining to Section 1.5.

#### Workforce Development

On page 32, under Section 2.2.1, under “3. Critical barrier: Individuals who are members of covered populations require support to develop digital literacy skills,” in the second full paragraph, we recommend adding “tribal” so that it reads “. . . support local and tribal entities that train people in Oregon to access the internet . . .”. Throughout this Draft Statewide DE Plan there is no mention of the role of the nine tribes in workforce development, training, or education, and yet these tribes routinely engage in such activities, often in partnership with local governments and non-profit entities.

#### “Local” v. “Tribal”

On page 32, under Section 2.2.1, under “4. Critical barrier: Local communities require resources and expertise for digital equity efforts,” it should read “Local and tribal communities . . .” and on page 33 after “Strategy 1,” it should read “. . . state, local, tribal, and nonprofit entities,” not only to accurately capture that “tribal” is not the same as “local” but to also recognize the unique sovereign role of tribal governments in such localized efforts.

#### C. Section 3 (Current State of Digital Equity: Barriers and Assets) Comments.

##### Needs Assessment

On page 92, under Section 3.2 Needs Assessment (and the related Appendix C Assessment Survey Results), we question whether the data bases used are sufficient in data to build an informed digital equity plan. We have already discussed our concerns, above, about the failure of the FCC’s National Broadband Map to accurately capture unserved and underserved populations on rural and tribal lands. But we are also concerned that the small sampling and the sampling methodology of the assessment survey, detailed in Appendix C, are woefully inadequate to capture an accurate assessment of digital equity needs in remote rural and tribal community locations. Appendix C lacks a breakdown of how many respondents out of the 1605 households sampled were located in remote rural locations or on tribal lands. The sparse data in “Table 7 Key barriers and obstacles for covered populations” for “Individuals who are members of racial and ethnic minorities” reflects the underlying problems with the needs assessment.

This is why we strongly recommend adoption of an additional “Strategy 2 Accurate Mapping of Unserved and Underserved Areas” as part of the implementation plan in this Draft Statewide DE Plan. See our comments on this issue above, under Section 1.5.

#### Climate Change

Finally, there is a curious lack of discussion of climate change as a barrier to digital equity in “Section 3 Current State of Digital Equity: Barriers and Assets.” Our experience is that the heightened level of wildfires and flooding have had serious impacts on the local infrastructure resulting in extensive areas and extended periods of no internet service. Internet connectivity, access and digital equity are frequently impacted by climate change and the frequency and severity is only likely to increase over the next decade. As a result, our goal has been to focus on underground wireline deployment as opposed to the use of wood utility poles that are vulnerable to fires and flooding erosion.

While we recognize that this adds to the cost of rural deployment, OBO should at least acknowledge the role of climate change in addressing digital equity and the aspirational goal of helping local groups and entities to address it.

#### D. Section 5 (Implementation) Comments.

Strategies for expanding broadband service.

As noted above, in our comments on Section 1.5, we recommend adding a Section “5.1.1.2, Strategy 2: Accurate mapping of unserved and underserved populations, ” and a Section “5.1.1.3, Strategy 3: Wireline and/or fixed robust high speed wireless scalability” at page 149.

#### “Libraries”

We also note that the Draft Statewide DE Plan does not offer any definitions of “libraries,” see e.g. sections 5.1.2.3 on page 150 and 5.1.3.2 on page 152. We hope that the OBO will be inclusive in these efforts and include Tribal libraries, as designated by tribal governments. For example, the CTUIR has libraries in its charter high school, at its senior center, at its Head Start and Education Department and at its tribal culture and history museum.

#### Affordability

While the Draft Statewide DE Plan discusses affordability as one of the critical barriers there is no discussion of the limits of the current competitive model in rural areas due to low population density. Artificial subsidies, while helpful, do not help create robust broadband access and use by covered populations. While the BEAD volumes address this to some extent, the Draft Statewide DE Plan should include implementation strategies that focus on developing in depth understanding of rural local and rural tribal markets, new models of sustainability and specific solutions for effective collaboration to address the rural digital divide. “Part III:

## CTUIR Comments Conclusion

CTUIR appreciates and supports the OBO's ongoing efforts to maximize the receipt and equitable distribution of broadband infrastructure and deployment funding offered by the Federal government through the NTIA's various programs. And we look forward to continuing in a productive and fruitful collaboration.

Cc: Daniel Holbrook, OBO Broadband Manager

Leina Gonzalez-Baird, DE BEAD Program Coordinator

Eric Forsch, Federal Program Officer, Idaho & Oregon, NTIA

Crystal Hottowe, Broadband Program Specialist

OBO's preparation of the Draft Statewide DE Plan and its issuance for public comment is a required condition of the grant award (41-30-DP11) made to OBO by the National Telecommunications and Information Administration (NTIA) under NTIA's State Digital Equity Planning Program.

The CTUIR is one of the 547 Indian Tribes named on the list of federally-recognized Indian Tribes maintained by the BIA pursuant to section 104 of the Federally Recognized Indian Tribe List Act of 1994 (25 U.S.C. 5131). See Department of the Interior, Bureau of Indian Affairs, Indian Entities Recognized by and Eligible to Receive Services From the United States Bureau of Indian Affairs, 87 Fed. Reg. 4637 (Jan. 28, 2022),

Attached as Exhibit 2 is the CTUIR's April 12, 2023, letter to Senator Wyden.

See "Telecommunications: Additional Coordination and Performance Measurement Needed for High-Speed Internet Access Programs on Tribal Lands? (February 2016, GAO-16-222) at <https://www.gao.gov/products/gao-16-222> and "Broadband Internet: FCC's Data Overstate Access on Tribal Lands? (September 2018, GAO-18-630) at <https://www.gao.gov/products/gao-18-630>

See "National Tribal Broadband Policy" (2021) at <https://www.bia.gov/sites/default/files/dup/assets/as-ia/doc/2020.%20December.%20National%20Tribal%20Broadband%20Strategy%20FINAL-cover%20change.pdf>

See ORS 190.110 "Authority of units of local government and state agencies to cooperate: agreements with American Indian tribes."

## Written Responses and Actions Taken by State in Response

Some comments incorporated into document and some comments under review for follow-up in future stages of the program. Some comments incorporated into document (including the request to include Tribal libraries as community anchor institutions, which are included in the asset inventory, in Appendix B, and p. 171 and p. 175; including tribal-inclusive language on page 46; acknowledging tribal self-determination and jurisdiction on page 20) and some comments under review for follow-

up in future stages of the program (including developing in depth understanding of rural local and rural tribal markets, new models of sustainability and specific solutions for effective collaboration to address the rural digital divide, and improving mapping as that is part of the BEAD Challenge process). For some comments, no action was required as they are part of the statutory requirements for broadband programs (for example, the definitions of unserved, underserved, and served) or as comments praise existing parts of the Plan.

### **Commenter 3**

#### **1. Executive Summary**

Page 2, Vision and Principles for Digital Equity:

The first goal, as written, does not include unhoused Oregonians. Suma supports changing the language of the first goal to: "Universal Access to affordable and reliable high-speed internet at the primary place of residence." This change would allow for considerations beyond the home and include all Oregonians, including those who are unhoused. It is crucial to acknowledge the necessity and importance of broadband connectivity in terms of workforce development and creating pathways for the most vulnerable Oregonians to access services and become self-sufficient. We recommend making this language change throughout the document.

Page 3, Vision and Principles for Digital Equity: Suma would like to see an additional framework added surrounding transparency for the remaining OBO process as a means of ensuring further participation. For example, "Rigorously pursue public transparency and participation in all planning processes through the use of promotional material, communication platforms, and extensive co-creation methodologies."

Page 4, Current state of digital equity: Suma would like to see critical barriers one and two flipped. Highlighting affordability as critical barrier one is a more accurate representation of connectivity barriers for rural, frontier, suburban, and urban Oregonians. Even with massive federal investment in broadband deployment, if affordability issues are not properly addressed in this plan, the digital divide will continue to persist in Oregon. This should be recognized in these documents as the legislature will reference this document in the future to understand where gaps continue to exist. Furthermore, identifying affordability as the key barrier to connectivity across the state is the first step to creating pathways for long-term sustainable digital equity funding.

Page 4, Current state of digital equity: We would like to see the removal of phrase "or have low levels of literacy." This phrase and its location in the section imply that non-native English speakers lack the ability to read any script. A more accurate statement of the barrier is that there is a lack of multi-lingual resources for non-native English readers.

Page 10, Implementation Plan: We recommend changing Strategy 3 for Critical Barrier 4 to "Develop a strategic plan highlighting the need for long-term, sustainable state investments for statewide digital equity efforts to close the Digital Divide." This highlights the importance of the State's efforts

to create opportunities to bring stakeholders together and meaningfully collaborate and co-create this strategic plan.

## 2. Introduction and Vision for Digital Equity

Introduction and Vision for Digital Equity Page 30, Strategies: This section is missing a discussion of Cybersecurity and Online privacy. This is required by the NTIA NOFO Statutory Requirement 2.

Page 31, Strategies, Low-income barrier: The strategies to overcome the affordability barrier presented here fail to acknowledge increased competition among ISPs as a potential way to improve affordability in Oregon. We recommend adding the following strategy: "Develop data and informational resources for communities seeking alternatives to privately owned ISPs such as cooperatives or municipally owned networks."

## 3. Current State of Digital Equity: Barriers and Assets

Page 89, 3.1.5 Broadband Affordability: This section fails to highlight some of the key factors that influence affordability. While ACP might be the largest program dedicated exclusively to broadband affordability, several communities in Oregon have successfully pursued alternative models to fill gaps left by privately owned ISPs. We recommend adding a short paragraph to this section to highlight how some communities have successfully utilized cooperative or municipally owned models to improve affordability.

Page 105, 3.2.2.1 Availability of service: This section should include a discussion on the need for accurate service data. The FCC allows ISPs to report advertised service areas rather than actual service areas. This has the effect of obfuscating the real service availability, particularly in urban areas, but also in suburban, rural, and frontier regions. It is extremely difficult to fully understand the availability of broadband service without more accurate data. This needs to be noted in this section as a significant barrier to fully understanding broadband availability across the state.

Page 126, 3.2.5 Online Security and Privacy: Suma would like to see a discussion of the Oregon Consumer Privacy Act in this section. The act grants consumers significant rights with respect to how organizations use their personal data, and informing Oregonians of those rights could help alleviate online security as a barrier to broadband adoption.

## 4. Collaboration and Stakeholder Engagement

We believe that there is a significant need to better engage covered populations in urban and suburban areas of Oregon, and suma would be happy to further engage with the broadband office, in addition to several other groups, to make sure stakeholders across the state are engaged.

## 5. Implementation

Suma strongly supports OBO's strategy to encourage higher rates of ACP enrollment. However, suma encourages the state to go further in its strategies to ensure long-term sustainable broadband affordability for all Oregonians. The ACP is expected to run out of funds in 2024, and there are no



potential alternative permanent funding sources at this time. There are currently 220,131 households enrolled in ACP in Oregon. For many of those households, the ACP is necessary for them to remain connected. We strongly urge OBO to adopt a strategy of advocating for and facilitating the creation of new funding sources for the ACP at the State and Federal levels. Additional strategies aimed at improving competition in areas of the state that lack sufficient competition to drive down prices are needed. This strategy should also prioritize providers who are receptive and accountable to the needs of their subscribers, such as cooperatives, publicly owned ISPs, public-private partnerships, and small locally owned private ISPs.

## 6. Conclusion

The digital divide is not limited to unserved and underserved communities, but it also exists in served communities, which are often left out of the conversation. This creates gaps in rural, frontier, urban, and suburban areas, leaving many historically underserved communities behind. While federal funding primarily aims to cover unserved and underserved locations, it's equally important to recognize the challenges that exist in urban and suburban spaces. It's important that this is recognized in these documents as the legislature will reference this document in the future to understand where gaps continue to exist. Oregon should set a higher standard for what it considers unserved, underserved, and served. The state should push service providers to have higher standards for service and affordability. This is beneficial for our communities, businesses, students, healthcare industry, government, and the state of Oregon. It recognizes that just because an area has service does not mean that the people are truly served. It also acknowledges the historical disadvantages that many populations have experienced, and it allows Oregon to be at the forefront in this field. Moreover, the state of Oregon should recognize that technology evolves rapidly, and to truly close the digital divide, we should not be aiming for the bare minimum of high speed and instead should have evolving definitions that recognize the current technology of the time. While our aim is to close the digital divide at this moment in time, by the time these communities are caught up, other communities are already at 1 gig of service and most likely much higher. Suma believes that a data-driven approach is crucial to addressing the digital divide. Key to this effort is better service availability data. The FCC's broadband maps are currently the standard; however, the FCC allows ISPs to report advertised service rather than actual service. This prevents the State and communities across Oregon from truly understanding where connectivity gaps exist or potentially identifying instances of digital redlining. The State should continue to invest in innovative solutions to address the digital divide, such as public/private partnerships, community-based broadband initiatives, and other creative approaches. The State has the unique ability to bring together stakeholders from across Oregon to participate in deep collaboration and co-creation of long-term sustainable connectivity solutions.

We believe that the State can and should do more to address the digital equity challenges that exist in Oregon. By recognizing the challenges that exist in rural, frontier, urban, and suburban areas, prioritizing the needs of historically underserved communities, and investing in data-driven and innovative solutions, Oregon can build a more equitable and prosperous future for all its residents.

## 7. Appendices

No response.

Written Responses and Actions Taken by State in Response

Comments considered with some comments incorporated into document and some under review for follow-up in future stages of the program. For some comments, no action was required because they address statutory requirements of the program (for example, the definitions of served, unserved, and underserved, or the definition of covered populations, or the need to address barriers in served areas [which focusing on covered populations can help, as addressed in this plan]). Some comments addressed, including discussions of ACP's expiry if it is not renewed. Some comments will be addressed in this and other programs in future stages, including the updating of mapping and information in the BEAD program challenge process and development of affordability programs.

**Commenter 4**

1.Executive Summary

No response.

2.Introduction and Vision for Digital Equity

We support the vision of universal access to high-speed internet, computing devices, digital literacy and technical support as well as providing tools for online safety and privacy and essential services. Building on existing achievements and collaboration is crucial for supporting ongoing digital equity programs. However, we did not see consideration of a strategy to cultivate existing local programs and provide guidance for digital equity governance and/or cooperation between the state and local communities. Based on our experience in working with local stakeholders and assessing digital equity needs, leaders in communities value and can engage with governance and organization at a local level so that they can make an impact on broadband and digital equity gaps. Sustainable change only happens when grounded with local input and ownership. Beyond striving to provide universal access, there are many interests in Hermiston that can be advanced through improved digital infrastructure and equity programs that engage the community. The state digital equity plan includes a range of strategies that address a variety of digital equity challenges, but these lack detail and in its current state the plan cannot be implemented. A more comprehensive understanding of needs at a localized level should be developed to have meaningful impacts from investments in digital equity.

3. Current State of Digital equity: Barriers and Assets

Other state digital equity plans have included online, living documents that catalog the available digital equity resources, which allows for more collaboration and interaction with various entities and organizations that are currently or interested in providing digital equity programming support. The Asset Inventory as is falls short in providing a comprehensive resource for communities to use and to contribute (e.g. lessons learned and best practices; collaboration across regions).

Section 3.2 Needs Assessment:

The regression analysis in Section 3.2 Needs Assessment does not give Oregon actionable information. ACS data already provides the relative adoption rates for different groups, so we have a scale of the challenge overall and for each group. Instead of running regressions on relationships that are already known based on existing literature and local data, time and effort should be spent on better understanding the gaps, barriers, and needs of individuals in these covered populations so digital inclusion programming can provide actionable intelligence to help targeted populations become aware of and be able to take advantage of the opportunities for increasing their income, improving their access to services, etc.

#### Data-driven Planning

Section 3.2.2.1 Availability of Service section utilizes the FCC BDC broadband availability data in comparing the prevalence of covered populations in census tracts. While taking into account the broad scope of this plan and available tools, there seems to be inadequate consideration of the risks of planning that is too reliant on data that is already recognized as incomplete and not an accurate depiction of the current state of broadband availability. Various challenges to the FCC broadband data, as well as our own local data and findings, indicate that the FCC generally overstates available coverage to varying degrees, but especially throughout rural Oregon. In providing guidance and stronger language to support community-related digital equity programs, the state digital equity plan could be improved by:

- Accounting for gaps in the existing broadband availability and covered population data.
- More efficiently utilizing existing available local resources that may not currently be included in the existing state digital equity asset inventory.

As reported in the U.S. census data in the Digital Equity plan, 57% of non-adopters cite as explanation “Don’t need or are not interested.” This finding concurs with the findings of the Hermiston Broadband Assessment and Strategic Plan (2023) (Section 3.2, Table 6). There is a strong need for outreach to engage those individuals and households; however, this is not referenced in the state needs and implementation sections. From 2021, Hermiston has invested in the preparation of a broadband assessment and preparing a strategic plan. We collected data from households, organizations, and businesses and had very high participation rates and interest from the community, a household sample size of 13% from our online Broadband assessment. This research and community participation has provided significant data and actionable intelligence. Without this sort of ground-truthed data, how can a locality such as Hermiston show that span, scope, and scale of demand for digital equity programs?

#### Teleworking Advantages

The reduction of travel times is noted as a benefit of Telemedicine (Section 3.2.4) and is also discussed in Hermiston’s Broadband Assessment and Strategic Plan, especially as travel among aging populations to required medical appointments and working from home is an effective means to generate additional household income. Reduction of travel times have broader benefits that also need to be recognized in the State’s Digital Equity Plan. For example, increasing digital skilling and

providing access to resources that allow individuals to work from home not only reduces travel time with personal and environmental benefits but also has been shown to open the door to remote job opportunities that can increase earning potential. This is particularly relevant for individuals with disabilities and other challenges to traditional workplace models.

#### Privacy and Security

In reviewing the state's digital equity plan Data from Current Population Survey and NTIA Internet Use Survey key findings (Section 3.2.5), the finding that "members of covered populations do not appear meaningfully more dissuaded than non-covered populations to undertake various online activities because of security or privacy concerns." However, our experience has shown that security and privacy concerns do impact Internet adoption among covered populations to a significantly greater degree. Security and privacy concerns were shown to have strong effects on minority and low-income populations willingness to engage in digital equity and inclusion activities. These gaps and barriers should be taken into consideration when planning outreach, engagement, and training recognizes and addresses Internet security/privacy concerns among those populations. The above example speaks to a larger element that is missing from the overall state digital equity plan, the State of Oregon needs to understand the barriers and drivers to digital equity of the targeted groups, then design programs to overcome those barriers and leverage those drivers with the appropriate local stakeholder organizations. There is not a one-size-fits-all digital inclusion solution. To be effective the efforts need to be contextually aligned with the needs of the digitally-disenfranchised individuals and populations.

#### Mapping and Assessment Accuracy

While the statewide residential survey collected responses from 1,605 Oregon residents, there is no indication of the geographic distribution of responses. We collected much more granular data, with findings from over 800 households and over 60 businesses within Hermiston as preparation of our Broadband Assessment and Strategic Plan. The extensive community outreach and planning related to digital inclusion and broadband infrastructure done in support of our Plan allowed us to develop a comprehensive understanding of our local needs and demand for digital equity programming. With this data, we know who to engage in digital inclusion programming. Existing relationships with the community increase ability to engage target groups (covered populations) and effectively coordinate resources to meet localized needs. Our ability to more effectively coordinate digital equity programs based on previous research should be taken into account. However, we do not see in the State of Oregon's Digital Equity Plan the necessary support mechanisms for communities to develop local digital equity ecosystems. This is a gap which needs to be addressed to make effective use of funds and to reach intended outcomes, otherwise the State risks ineffective use of funds. Information and support from the state can enable and augment the development of these resource-intensive activities that are important to launching digital equity initiatives, such as start-up training for digital navigator programs or providing devices to rural community members. These types of activities, once operating at a local capacity, require reduced administrative oversight when coordinated through local organizations and agencies. Furthermore, there is the opportunity to utilize resources such as utility mail-outs or other community-focused methods for reaching the community to

engage in digital equity activities. The state would also benefit from more effectively outlining the ability of cities, counties, or regions of the state to coordinate local digital equity projects according to their identified needs.

#### 4. Collaboration and Stakeholder Engagement

The plan presents an overview of previous collaboration efforts throughout Oregon in Section 4.1, but in discussing implementation the plan does not fully make clear the criteria, nor the eligible entities, that could be considered for partnering in digital equity outreach and engagement. Organizations referenced in Section 4.2 to implement this plan in collaboration with the state does not include reference to municipalities, which the state directly funds and who are included in the BTAP eligible entities. Instead, the presented Digital Equity plan indicates that the state “anticipates and/or partnering” with organizations for workforce development, community-based organizations, educational institutions, and other NTIA recommended organizations such as public housing and civil rights groups. The Digital Equity plan does not make clear a plan to collaborate with communities who have established local digital equity initiatives. Hermiston has conducted outreach to local leaders, including business owners and city council members, and determined readiness for action on broadband activities. While there is a recognized gap that several local strategic plans mention diversity, equity, and inclusion, but have not formally declared as digital equity plans (Section 3.1.2), there is no strategy related to strengthening local governance and the ability to implement and administer digital equity programming in their communities. Guidance on how this governance can be cultivated and then work in conjunction with state resources to accomplish digital equity goals. Furthermore, the state digital equity plan should make clear what constitutes an eligible entity to be a state digital equity partner.

#### 5. Implementation

The implementation overview provides approaches for the development of statewide digital equity but does not provide implementable details to indicate the state’s strategic actions and/or tactical considerations for each item. Hermiston has a large Hispanic population (over 50%) and while the state plan includes working with organizations who support individuals with language barriers, we hope every available resource is used to support this population both in statewide digital equity programs as well as supporting those initiatives on a local level. Many individuals experiencing digital divide challenges are in multiple covered population categories (for instance, language barrier and low-income). Support on a local level for these populations helps the community adapt to the digital economy and way of life. As a City we are also aiming to implement many platforms online and hope that the state includes support that allows us to work in collaboration on this effort.

##### ACP Enrollment and Outreach

With 43% current enrollment among eligible populations, our city has shown the ability to support broadband funding efforts and take advantage of available programs that address Internet affordability challenges. Per the timeline provided in Section 5.2, ACP outreach programs are funded in Oregon ongoing through 2030; however, many are anticipating that those federal funds will not be

available in the near future based on current available funds and rate of program expenditure. There is no reference of a contingency plan in the event that this program is discontinued. This information would make the digital equity plan stronger by accounting for the very likely risk these funds won't be available to reduce costs for Internet service to households and suggesting options for addressing the ongoing need of low-income households for subsidized access.

#### Outcome Monitoring of Implementation

This section of the Digital Equity plan does not include measurable impacts (which are referenced in Section 2.2.2) as part of the strategy and for ongoing monitoring of program implementation. We suggest including metrics on outcomes to assess progress towards stated objectives within the implementation plan strategies. This would increase the sections' readability and mirror other state digital equity plan documents. The information gathered or presented within the Digital Equity plan does not fully explain how the state is going to use available technology to administer programs (such as technical assistance to localities, nonprofits and CAIs), which are vital in preparation for the mentioned NTIA Digital Equity Competitive Grants funds to be administered in 2025. Also, there is concern regarding the state's capacity and ability to curate and distribute the learning material in a manner that is efficient and that meets evolving local program resource needs, as is indicated in Section 5.1.3. There is no detail as to the extent of the relevant materials that will be made available in order for local organizations to start these programs. As such, there is a risk that digital equity initiatives across Oregon will have the know-how, time, or resources to prepare competitive proposals by 2025.

The Oregon Broadband Strategic Plan (2020), which is referenced throughout the Digital Equity Plan relating to digital literacy and workforce development, indicates in communities throughout the state, grants or loans may be used as matching funds and for grant application support to help eligible applicants apply for federal and private funding programs for digital literacy, inclusion, and cybersecurity projects. There is no mention of the state administering these types of programs in the draft Digital Equity Plan document. This information is needed for program planning and identifying the need for matching funds to secure necessary financing.

#### 6. Conclusion

No response.

#### 7. Appendices

As referenced in previous comments, the Residential survey instrument and stakeholder questionnaire does not indicate the geographic or other demographic distribution of respondents. Furthermore, there is no data collected on demand and the use of online tools and services.

#### Written Responses and Actions Taken by State in Response

Comments under review for follow-up in future stages of the program. Comments considered and some will be reviewed for consideration in future stages of the program (including more local

outreach and coordination as programs are developed and funded and further data collection and mapping). Some are incorporated into the plan, including considering the expiry of the ACP if it is not renewed and the benefits of teleworking. No action was taken for other comments, including providing data that OBO does not currently have access to.

**Commenter 5**

**1. Executive Summary**

Compudopt is thrilled to be able to read and comment on Oregon’s Digital Equity Plan. We applaud the Oregon Broadband Office for a clear, comprehensive and ambitious roadmap to achieving digital equity for all Oregonians. Compudopt is one of the largest and oldest nonprofits in the country to specifically focus on holistic digital inclusion solutions for underserved youth and their communities. We offer free device access, digital literacy skills, afterschool STEM enrichment programs, as well connectivity through either our own internet networks or through ACP enrollment. We strongly endorse the plan’s inclusive digital equity strategy as laid out in its Executive Summary by addressing all the core components that make up the digital divide. We believe that this section, in particular the section that refers to making low-cost, internet-capable computing devices available should take advantage of existing groups that have a long history of providing said devices at scale, such as Compudopt and other nonprofit computer refurbishers. Our only comment is that instead of trying new, untested approaches, that the Oregon Broadband Office look to work collaboratively with groups like ours in order to meet the demand for devices. All our devices are free of cost to recipients and come with a 2-year warranty and support through our Compudopt Support Center for technical assistance, whether the challenge is hardware, software or one of digital literacy. We refurbish as many devices as we can but are able to procure others at significantly lower costs due to our volume. Oregon already has a strong local partner in Free Geek out of Portland, but the state’s needs are vast and the more partners that can be brought to bear on device access (as well as the other components that make up the digital divide), the more effective the solutions can be.

**2. Introduction and Vision for Digital Equity**

No response.

**3. Current State of Digital Equity: Barriers and Assets**

No response.

**4. Collaboration and Stakeholder Engagement**

No response.

**5. Implementation**

We believe that this section, in particular the section that refers to making low-cost, internet-capable computing devices available should take advantage of existing groups that have a long history of providing said devices at scale, such as Compudopt and other nonprofit computer refurbishers. Our

only comment is that instead of trying new, untested approaches, that the Oregon Broadband Office look to work collaboratively with groups like ours in order to meet the demand for devices. All our devices are free of cost to recipients and come with a 2-year warranty and support through our Compudopt Support Center for technical assistance, whether the challenge is hardware, software or one of digital literacy. We refurbish as many devices as we can but are able to procure others at significantly lower costs due to our volume. Oregon already has a strong local partner in Free Geek out of Portland, but the state's needs are vast and the more partners that can be brought to bear on device access (as well as the other components that make up the digital divide), the more effective the solutions can be.

## 6. Conclusion

No response.

## 7. Appendices

No response.

### Written Responses and Actions Taken by State in Response

Comments considered and some under review for future stages of the program. The commenter requested to be a partner in the Digital Equity program and this will be considered as the plan is implemented and partners are chosen and identified. No action necessary, as the selection of grantees and partners will occur later in the Digital Equity program process.

### **Commenter 6**

#### 1. Executive Summary

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering-wireless technology. Our pristine forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon. We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages. "Three people died trying to escape the fire," Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. "Families had to flee into the ocean with their



children on their shoulders.” McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that “present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. “This leads to failure and a fire,” McCollough said. There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom’s for-profit agenda.

## 2. Introduction and Vision for Digital Equity

No response.

## 3. Current State of Digital Equity: Barriers and Assets

No response.

## 4. Collaboration and Stakeholder Engagement

No response.

## 5. Implementation

No response.

## 6. Conclusion

No response.

## 7. Appendices

No response.

## Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter’s support for wired technology, particularly fiber, as that support aligns with NTIA’s instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA’s policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and

important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

### **Commenter 7**

#### **1. Executive Summary**

EIS supports the Digital Equity Plan and is excited to see commitments to building and advancing digital equity throughout the state. EIS looks forward to partnering closely with OBDD in the following areas mentioned throughout the plan:

**Universal Access to Digital Literacy Skills:** EIS recognizes the invaluable role and contribution of the State Chief Information Officer as the State's digital and technology policy leader to advance community outreach, engagement, and educational opportunities to expand access to learning about technology and investing in digital literacy. Additionally, EIS recognizes the previous investments through programs such as Future Ready Oregon within the Department of Education and Higher Education Coordinating Commission to expand training and educational opportunities for Oregonians of all ages to develop digital literacy skills. EIS recommends that OBO consider opportunities within the plan to acknowledge the roles these partner agencies play within the expansion of digital literacy skills within Oregon, and to underscore the importance of these actions as enterprise actions that require investment and participation from multiple agencies in order to be successful.

**Universal Access to the Tools and Information Necessary to Protect One's Online Safety and Privacy:** EIS agrees that it is vital that constituents receive education and training in order to make empowered decisions about their online privacy and digital footprint to protect themselves online. EIS has continued to encourage the creation and resourcing of a Chief Privacy Officer that will lead enterprise privacy efforts, including developing tools to engage and educate the public about online privacy. EIS recommends inclusion of the need for enterprise privacy approaches and greater statewide investment in privacy risk management and infrastructure as part of the resourcing and implementation needs to support this strategy.

EIS also recommends that opportunities for partnership to advance digital equity as a framework and a lens be incorporated into the Digital Equity Strategy to showcase some of the potential areas for collaboration between the State CIO, state agency partners, and Business Oregon. Examples include: incorporating digital equity as a framework into IT oversight and planning requirements, examining opportunities to collaborate with the DAS Cultural Change Officer to consider digital equity in future iterations of the state's Racial Equity Framework, or partnering to identify communities who would benefit from digital literacy, online privacy, or other technology education and outreach.

Regarding the reference to Artificial Intelligence (footnote 1, page 2), EIS suggests including Governor Kotek's Executive Order 23-26 (Establishing A State Government Artificial Intelligence Advisory Council) as it shows that Oregon is aware of the need to evaluate the technology and instantiate

standards for the protection of Oregonians, particularly for those who are most vulnerable to misuse or mistakes of AI.

For section 3.2.2.2 Adoption of Service (Page 111/112), EIS suggests an opportunity to discuss resiliency/reliability of broadband services (both Wireline and Wireless) and create an additional section, especially in light of increasing impacts of climate change seen in rural areas related to flooding and wildfire.

Consider mention of the “carrier of last resort” and their responsibilities and how they do (or do not) fulfill them in rural locations that need coverage but are not amongst the most profitable and are not prioritized.

EIS offers the following additional proposed activities:

- Proposed Activity for Strategy 5.1.1.1: Activity: Ensure new construction projects funded through BEAD and Capital Fund Programs are evaluated through a lens of resilience and reliability.
- Proposed Activity for Strategy 5.1.4.1: Activity: Collaborate with SIEC Description: Collaborate with the State Interoperability Executive Council to engage with and educate the public safety and emergency management community on the role broadband and digital technology adoption can play in increasing public safety and building local community resilience to hazards.

Table 4: Existing digital equity programs: Related to the State and Local Cybersecurity Grant Program, EIS plays a role in the context of helping to instantiate cyber improvements for state and local governments that serve residents in Oregon.

EIS is available to collaborate on all of the above topics as well as mentions of E-Government and EPAB. Enterprise Information Service is available to collaborate on all comments provided in the Executive Summary field.

## 2. Introduction and Vision for Digital Equity

No response.

## 3. Current State of Digital Equity: Barriers and Assets

No response.

## 4. Collaboration and Stakeholder Engagement

Enterprise Information Service is available to collaborate on all comments provided in the Executive Summary field.

## 5. Implementation

No response.

#### 6. Conclusion

Enterprise Information Service is available to collaborate on all comments provided in the Executive Summary field.

#### 7. Appendices

No response.

#### Written Responses and Actions Taken by State in Response

Comments considered, with some incorporated into the document and some no action is required. The commenter requested to collaborate with OBO, which will be considered as the program continues. Other collaborations suggested by the commenter will also be considered in future stages. The Artificial Intelligence executive order was included in the Plan on page 2.

#### **Commenter 8**

##### 1. Executive Summary

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering-wireless technology. Our pristine forests, desserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon. We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages. "Three people died trying to escape the fire," Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. "Families had to flee into the ocean with their children on their shoulders." McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that "present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. "This leads to failure and a fire," McCollough said. There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the

advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom's for-profit agenda.

## 2. Introduction and Vision for Digital Equity

No response.

## 3. Current State of Digital Equity Barriers and Assets

No response.

## 4. Collaboration and Stakeholder Engagement

No response.

## 5. Implementation

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering-wireless technology. Our pristine forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon. We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages. "Three people died trying to escape the fire," Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. "Families had to flee into the ocean with their children on their shoulders." McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that "present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. This leads to failure and a fire," McCollough said. There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP)

have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom's for-profit agenda.

## 6. Conclusion

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering—wireless technology. Our pristine forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon. We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages. "Three people died trying to escape the fire," Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender, "Families had to flee into the ocean with their children on their shoulders." McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that "present significant fire risks because of a mismatch between load, connectors, and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. "This leads to failure and a fire," McCollough said. There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom's for-profit agenda.

## 7. Appendices

No response.

### Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of

deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

### **Commenter 9**

#### **1. Executive Summary**

No response.

#### **2. Introduction and Vision for Digital Equity**

No response.

#### **3. Current State of Digital Equity: Barriers and Assets**

##### **3.2.2. Access to Broadband Service**

In the implementation of last-mile broadband infrastructure in Oregon, it's a priority without compromises to protect the health and safety of broadband subscribers rather than telecom-industry profits. This can be accomplished by requiring the use of fiber-optic cables to the premises rather than wireless technology wherever possible. Cell tower failures have been the source of the most serious fires in California history. Cell towers and small-cell wireless facilities emit man-made pulsed and modulated radio-frequency radiation at levels that have been shown in thousands of independent scientific studies to be harmful to humans and all life forms. (See [www.ehtrust.org](http://www.ehtrust.org).) Fiber-optic-cable broadband offers survivability in fires, low power requirements, a smaller carbon footprint, the fastest possible data rates, no harmful radio frequency radiation, and a 25- to 50-year service life without the need for cable upgrades for new technologies. Fiber optics beats wireless technology on all counts, with the exception of initial installation cost; however, this may not be a major factor in total network infrastructure cost over 25 to 50 years. Also, with regard to public safety, please note that FCC radio frequency radiation exposure regulations from 1997 are not safety standards based on biology and biochemistry at the cellular level, and these regulations are not protecting the public and those who already suffer from electromagnetic sensitivity (EMS). Fiber-optic technology does not produce this radiation, which is making adults and children sick, especially in 5G networks (see [www.ehtrust.org](http://www.ehtrust.org)). I have EMS from accumulated exposures to city cell towers and Wi-Fi in homes, businesses, and public places. I must avoid restaurants, theaters, and other public places that have Wi-Fi. I cannot use a cell phone or I-phone. Feel free to contact me. I'm a retired engineer.

#### **4. Collaboration and Stakeholder Engagement**

No response.

5. Implementation

No response.

6. Conclusion

No response.

7. Appendices

No response.

Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

**Commenter 10**

1. Executive Summary

No response.

2. Introduction and Vision for Digital Equity

No response.

3. Current State of Digital Equity: Barriers and Assets

No response.

4. Collaboration and Stakeholder Engagement

No response.

5. Implementation

No response.



## 6. Conclusion

Personal Health Risk and Fire Threat Demand Wired technology, NOT Wireless. I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering- wireless technology. Our pristine forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon. We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages. "Three people died trying to escape the fire," Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. "Families had to flee into the ocean with their children on their shoulders." McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that "present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. This leads to failure and a fire," McCollough said. There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom's for-profit agenda.

## 7. Appendices

No response.

### Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal

for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

**Commenter 11**

**1. Executive Summary**

No response.

**2. Introduction and Vision for Digital Equity**

It is imperative the rural areas in Oregon (and all of Oregon) use fiber optic cables to provide universal safe access to the internet. As far back in 2015, In 2015, more than 250 scientists from more than 40 countries expressed their "serious concerns" in an EMF Appeal regarding the ubiquitous and increasing exposure to EMF generated by electric and wireless devices even before the additional 5G Internet of Things rollout. Today, almost ten years later, the death and destruction of all living things—our pollinators, birds, animal life, the health of the soil itself—from intensive electromagnetic frequencies from wireless devices is common knowledge (2). If we are to grow food and raise healthy animals, we must use fiber optic cable rather than the wireless antennas to provide internet access. "Priority funding," will be given by the government to projects that provide fiberoptic connections from end to end. Fiberoptics are hundreds of times faster than even 5G, are safer, less easily hacked, are resistant to weather disasters, do not require regular upgrades, will not catch or start a fire, and do not include the intense EMFs that cause electrical illnesses and devastation to the environment (3) Wireless antennas, in addition, are always a potential fire hazard. There is no justification for using wireless antennas anywhere, knowing the harm they cause to human and environmental health.

(1) <https://www.facebook.com/101371591212972/posts/an-urgent-call-for-a-moratorium-on-5th-generation-wireless-technologies-pending-/154537375896393/>

(2) <https://rense.com/general81/emfs.h>

(3) <https://resources.system-analysis.cadence.com/blog/msa2021-the-advantages-of-optical-fiber-cables>"

**2. Current State of Digital Equity: Barriers and Assets**

No response.

**4. Collaboration and Stakeholder Engagement**

No response.

**5. Implementation**

No response.

## 6. Conclusion

No response.

## 7. Appendices

No response.

### Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

### Commenter 12

#### 1. Executive Summary

The Oregon Broadband Office (OBO), an office within the Oregon Business Development Department, released its draft State of Oregon Digital Equity Plan (Plan) for public comment. OBO explains its role:

"With the support of Oregon's elected leaders, OBO endeavors to ensure that all people in Oregon have access to reliable, affordable home broadband internet, an affordable, quality, internet-enabled computing device, digital skills, quality technical support in culturally and linguistically diverse in-community spaces, access to cybersecurity tools and the knowledge needed to stay safe online, and inclusive online content designed to enable and encourage self-sufficiency, participation, and collaboration."

AARP commends OBO for its thoughtful, comprehensive and, clearly written draft Digital Equity Plan (Plan). AARP also appreciates OBO's alignment of its planning processes for Broadband Equity Access and Deployment (BEAD) and Digital Equity Act (DEA).

The Plan is supported by extensive data analyses and research, captured in many tables and figures. The Executive Summary at the Plan's outset provides an excellent overview of the key elements in the Plan (introduction and vision for digital equity; current state of digital equity: barriers and assets; collaboration and partner engagement; implementation; and conclusion).

AARP's comments reflect a perspective based on many years of advocacy for older adults on many issues (transportation, housing, health care, etc.) and its decade-long engagement with federal and state advocacy for affordable, reliable, sustainable high-speed internet access and devices, supported by digital literacy training and tech support. AARP has now reviewed twenty-three draft state digital equity plans and so brings that perspective as well to its review of Oregon's Plan. AARP welcomes the opportunity to work with OBO and other partners to contribute to the Plan's successful implementation in the years ahead.

## 2. Introduction and Vision for Digital Equity

### Section 2.1: Vision

AARP supports fully the vision set forth in the Plan:

"It is the vision of the State of Oregon that all people in Oregon will have access to affordable and reliable high-speed broadband internet to attain positive economic, educational, and health outcomes and to participate in social and civic life. The state's commitment arises from Oregon's recognition of the criticality of digital equity to the well-being of the many diverse people of Oregon. Meaningful access to the internet is essential to thriving in the 21st century. Digital equity enables economic opportunity as well as supports educational, healthcare, and civic participation goals. Digital equity allows all people to fully participate in the economy of innovation and creativity, which helps to foster the goal of economic opportunity. Civic participation goals can be achieved because digital equity allows all people to have the tools to register to vote, engage in meaningful online discourse, and be better connected to the communities in which they live. The goal of healthcare access for all people is fostered by digital equity because of the knowledge and confidence that is gained from learning new digital skillsets that can be applied to telemedicine and to enable easier access to personal healthcare information. Digital equity inherently supports educational goals, bringing learning to the home and on the go for all people of Oregon."

For many years, AARP has advocated on behalf of older adults for programs and policies to promote reliable, affordable high-speed internet access and devices, supported by digital training. As part of this advocacy, AARP has, among other many things, analyzed proposed state legislation concerning high-speed internet services, participated in the Federal Communications Commission's proceedings regarding the Emergency Broadband Benefit and Affordable Connectivity Program (and AARP is presently actively engaged with efforts to ensure the continuation of the ACP or a successor program), conducted surveys of its members regarding their access to high-speed internet access, analyzed the extent to which providers' deployment of technology (speeds and reliability) vary depending on the community served, and much more. Reliable affordable internet access is critically important to aging individuals because it helps them to age in place safely and with a higher quality of life than would otherwise be available to them. AARP also engages with advocacy on other related issues such as health care, transportation, housing, and livability of communities. AARP brings these various experiences and the perspective of older adults to its review of OBO's Plan.

AARP commends OBO for the five key goals laid out on page 2 and 11-13. In particular, “Universal access to an affordable, quality, internet-enabled modern computing device that meets each person’s needs,” and “Universal access to digital literacy skills and quality technical support in culturally and linguistically diverse in-community spaces,” especially consider the needs of covered populations. We encourage OBO to incorporate language that describes adoption, as well as access (e.g., “Universal access and adoption of digital literacy skills . . .?”).

AARP also commends the inclusion of OBO’s four framework principles. On page 12, please expand upon “utiliz(ing) data and rigorous information gathering . . . to help drive decision making? (e.g., will this be stakeholder engagement, participatory research design, GIS mapping?).

## Section 2.2: Strategy and Objectives

### Strategies

The Plan clearly lays out the barriers to digital equity and the strategies associated with overcoming each of the following:

- Lack of broadband availability: Increase to residential broadband through the deployment of the BEAD Program and the American Rescue Plan Act Capital Infrastructure Program.
- Low-income households struggle to consistently afford broadband services, internet-enabled computing devices, and technical support:
- Strategy 1: Increase Affordable Connectivity Program (and any subsequent or similarly funded program) enrollment among eligible households (e.g., those earning 200 percent or less than the federal poverty guideline).
- Strategy 2: Increase Internet Service Providers? (ISPs?) low-cost service offerings.
- Strategy 3: Expand access to affordable computing devices and technical support.
- Strategy 4: Develop data and informational resources to enable application of a digital equity lens to state infrastructure and program decisions.
- Individuals who are members of covered populations require support to develop digital literacy skills:
- Strategy 1: Expand opportunity to learn digital literacy and digital skills.
- Strategy 2: Increase accessibility of information for persons with disabilities and for persons who speak a language other than English.
- Strategy 3: Promote information about the availability of digital literacy and digital skills programming.
- Strategy 4: Promote information about online safety and privacy to covered populations.

- Local communities require resources and expertise for digital equity efforts:
- Strategy 1: Build collaboration among state, local, and nonprofit entities.
- Strategy 2: Support and develop local organizational and community capacity for digital equity programs.
- Strategy 3: Sustain and grow state and local efforts in digital equity.

### 2.2.2 Measurable objectives and key performance indicators

OBO established measurable objectives and key performance indicators (KPI) with short- and long-term goals toward achieving digital equity in Oregon, and indicates that the “objectives, KPIs, and goals may change over time to meet the evolving challenges of the digital divide in Oregon.” OBO includes a detailed table setting forth the objectives, the KPIs associated with measuring progress in achieving the objectives, the baseline levels, short-term and long-term goals for the KPIs and the data sources to be used for measurement. AARP appreciates the clarity, ambitiousness, and transparency of these metrics.

For example:

The baseline level, short-term goal, and long-term goal for the objective of every location in Oregon having access 100/20 Mbps at home are 89%, 95%, and 98%, respectively. The data source to be used is the FCC’s broadband map. Across all populations, OBO seeks to increase enrollment in the Affordable Connectivity Program (ACP), any successor program and ISPs’ low-cost programs from its current level of 28% to 50% in the short-term and 95% in the long-term, with USAC providing the source of data for this metric.

AARP supports the many important objectives, KPIs, goals, and data sources that OBO has identified and established, all of which relate to the barriers and strategies discussed earlier in Section 2. AARP has been advocating for many years for reliable, available, and affordable high-speed internet access and devices, supported by digital literacy training, and so AARP fully supports the vision, objectives, and goals articulated in the Plan. AARP has also recently adopted sustainability as part of its digital equity advocacy because the need for digital equity programs and projects is not a one-time need but rather will continue for the indefinite future as individuals move in and out of covered populations (incomes change, people get older, etc.). AARP welcomes the opportunity to work with OBO, other partners, and representatives of the various covered populations to assist with educating aging individuals on how broadband adoption can enhance their lives, helping them to overcome social isolation, obtain access to state-of-the-art remote health care, pursue new employment opportunities and support their civic engagement. Among other things, high-speed internet access is invaluable as a way to help older adults overcome social isolation, which, in turn, fosters health.

See, e.g., <https://www.nytimes.com/2023/09/06/opinion/loneliness-epidemic-solutions.html> and <https://www.nytimes.com/2023/04/30/opinion/loneliness-epidemic-america.html>

<https://www.nia.nih.gov/news/social-isolation-loneliness-older-people-pose-health-risks>

AARP recommends that OBO also incorporate the following key performance indicators of affordability:

1. The number and scope of publicly owned and operated networks, and public-private networks, which can lead to more affordable high-speed internet access than that which commercial providers offer.
2. The extent to which BEAD recipients offer and publicize affordable low-income and middle-income high-speed internet access services.
3. The extent to which BEAD recipients, and indeed, all service providers offer unbundled high-speed internet access. By way of illustration, another state's draft digital equity plan states that as part of its BEAD middle-class affordability plan, it will "require prospective subgrantees to offer at least one unbundled broadband product with a transparent price (i.e., no hidden fees) and certify that it will continue to provide this option to middle-income households for six years."

In addition:

- On page 35, please consider including the percentage of eligible 60+ households participating in ACP.
- On page 35, ISPs' low-cost programs are also referenced as a measurable objective, however, do not have a related KPI. Please include a KPI metric for enrollment in low-cost programs offered in Oregon.
- The KPI "Percentage of all covered population survey respondents who report they can get a broken or lost computing device fixed or replaced within a week," on page 35 and 36 only accounts for current users, rather than new users. Please include a KPI for new users of the device program OBO is proposing.
- The KPI "Percentage of all survey respondents who say they are confident they can protect their personal security online" on page 41 should state "Percentage of all survey respondents who say they are more confident due to (related activities implemented by OBO) to measure the difference from baselines stated on pages 41 and 42.
- The KPI "Percentage of all covered population survey respondents who say they are very confident accessing government services online," on page 43 should state "Percentage of all survey respondents who say they are more confident due to (related activities implemented by OBO)" to measure the difference from baselines stated on page 43 and 44.

AARP commends OBO for including measurable objective "Localities have access to grant writing guidance and expertise for accessing federal digital equity funds," on page 45. Support with grant writing will afford resource-strapped community anchor institutions (CAIs) essential resources to sustain and promote their services. We understand OBO cannot provide one-on-one support to local CAIs; however, we recommend OBO provide additional support through static materials such as a guide or reference book, available online, printed, and in languages spoken within the community.

### 3. Current State of Digital Equity: Barriers and Assets

This section of the Plan “describes the current state of digital equity in Oregon, as documented through rigorous and comprehensive data collection and outreach efforts,” and also “describes the resources and relationships available to OBO to promote digital equity; presents detailed asset inventories related to digital equity and broadband adoption, affordability, and access; and presents a needs assessment.”

OBO’s comprehensive assessment of Oregon’s assets and needs provides a valuable foundation for implementing programs and projects to contribute toward the achievement of digital equity for all. Assets and needs will evolve over time, and, for that reason, AARP appreciates OBO’s commitment to update this inventory during upcoming years.

#### 3.1.1 Digital inclusion assets by covered population

Table 3 assesses digital inclusion assets separately by each of the needs and covered populations. Among the many assets shown, are, for example: “Oregon’s Statewide Assistive Technology Program, administered by the nonprofit ATI, is part of a national network of programs to “increase access to assistive technology (AT) devices and services for individuals with disabilities and their families, and to facilitate the development of a consumer-responsive AT service delivery system,” and also YourTechQ, a “youth-led nonprofit organization that provides free computer classes to older adults.”

In Table 3, AARP appreciates OBO’s inclusion of Older Adults Technology Services (OATS) from AARP’s program, “Aging Connected,” however this program is no longer active. Active programs that OATS continues to offer 60+ Oregonians include, Senior Planet from AARP’s virtual tech programming and a National Tech Hotline, providing tech assistance and class information on 888-713-3495. This hotline is monitored by Senior Planet Trainers from 6am - 2pm PDT, Monday through Friday.

We confirm Meals on Wheels People in Portland is a Senior Planet licensed partner providing services in Portland. The Senior Planet licensing program equips local organizations across the country with the tools and curriculum to help older adults access technology and use it to enhance their lives. This program is open to non-profit, community anchor institutions within Oregon wishing to teach older adults technology.

Page 88 states, “Organizations working with older adults similarly suggested senior centers as hubs to connect individuals with services; a representative noted, however, that many centers in the state are underfunded.” Please elaborate on any identified places to teach older adults technology programs.

#### 3.1.2 Existing digital equity plans

OBO summarizes existing broadband and digital equity elements of the strategic plans of tribal, regional, and municipal entities, and indicates that these plans have informed OBO’s preparation of the Plan. These efforts can inform best practices as Oregon implements its digital equity plan.



### 3.1.3 Existing digital equity programs

In Table 4, OBO lists many programs and resources (state and federal) related to digital equity in Oregon, which also can inform best practices and provide a valuable foundation for continuing to achieve digital equity statewide.

### 3.1.4 Broadband adoption

OBO reports that based on “the most recent NTIA data (November 2021), 78.9 percent of Oregon residents have high-speed wired internet access at home (with a margin of error of plus or minus 4.0 percent), compared to a national average of 71.3 percent (with a margin of error of plus or minus 0.5 percent).” OBO also links this section to the digital inclusion assets, which it identifies in Section 3.1.1, and which “are intended to support broadband adoption by all people in Oregon, in general, and by covered populations, in particular.”

OBO reports that in focus groups, representatives of community-based organizations “emphasized the importance of local entities to provide services and promote initiatives by the state.” Relative to aging individuals, OBO states: “Organizations working with older adults similarly suggested senior centers as hubs to connect individuals with services; a representative noted, however, that many centers in the state are underfunded.” AARP is hopeful that during the implementation phase of the Plan, sufficient resources are provided to senior centers and to organizations that work with aging individuals so that Oregon can successfully close age-based digital equity gaps. Also, it is important in some situations to bring digital equity solutions to where people live, not all aging individuals can travel, for example, to senior centers, libraries and community centers for digital literacy training.

Aging individuals include people with a wide range of abilities and potential to navigate high-speed internet access applications. Nonetheless a high-speed internet connection can enhance the lives of all, even those who are not able to tap into internet-based applications without real-time assistance. For that reason, high-speed internet access adoption and literacy training programs should also include caregivers so that they, in turn, can facilitate aging individuals, digital connections (videoconferencing with their grandchildren, getting remote health care, watching a movie, etc.), not all aging individuals—even with training—will be able to navigate internet-based applications on their own yet they can still benefit from having access to internet-based applications, which, with adequate training, their caregivers can facilitate in real-time.

### 3.1.5 Broadband affordability

OBO describes the ACP and indicates that some ISPs also offer low-cost plans for qualifying low-income households that effectively provide service at no cost to subscribers enrolled in the ACP. Some ISPs also offer discounts on the purchase of a device. Based on USAC data, OBO reports that 40 of the 154 providers in Oregon that participate in the ACP (including mobile providers) as of August 2023 indicate that they offer “no cost” plans, and 64 offer device discounts. OBO also reports that as of July 2023, 190,362 Oregon households were enrolled in the ACP, which represents approximately 25 percent of the estimated 719,513 eligible households in Oregon. AARP is actively advocating for continuing funding for the ACP or a successor program. AARP has also participated in outreach for

the ACP and is willing to contribute to outreach programs in Oregon to assist the state in achieving its ambitious ACP participation goals (see Section 2).

AARP recommends that OBO monitor ACP participants' form of high-speed internet access. USAC reports data on a national level regarding participants' platform—it would be helpful to have that data provided on a statewide level. AARP raises this issue because wireless internet service is distinctly inferior to wireline access. Even where wireline access is an option, residents may nonetheless rely on wireless access (for example, many low-income residents cannot afford both a cell phone and a separate wireline connection to the internet).

USAC reports that 54.2% of ACP participants subscribe to mobile broadband, 44.9% to fixed broadband (cable, DSL, and fiber), and 0.9% to fixed wireless or satellite. <https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/additional-acp-data/>, site checked December 13, 2023.

True digital equity would result in comparable modes of adoption regardless of one's income and one's geography. When the quality of internet access (e.g., speed, reliability, technology) varies significantly depending on where a person lives or when it depends on a person's income, digital equity has not yet been achieved. AARP urges the final Plan to include a commitment to regularly collect, analyze, and report internet access adoption and deployment, by technology and speed, at a geographically granular level so that OBO can monitor the extent to which some communities and some populations may be relying on inferior high-speed internet access.

### 3.2 Needs assessment

AARP commends OBO for its comprehensive and clearly presented assessment of needs relating to the achievement of digital equity. Table 7 summarizes the key barriers and obstacles for each of the covered populations, and shows, for example, these barriers for aging individuals:

- Older adults are less likely to be served by broadband;
- Older adults display needs for greater internet adoption;
- Older adults indicate the most urgent need for digital skills and telemedicine training;
- Older adults report needs for increased confidence in protecting themselves from online security and privacy threats; and
- Older adults display a need for greater device adoption.

These findings are consistent with AARP's experience: The high price of internet access and devices; a lack of familiarity with how internet-based applications can enhance lives; a lack of digital skills; and concerns about threats to privacy as well as scams all act to deter older adults' broadband adoption. Of course, older adults overlap with the other covered populations: for example, older adults with disabilities may require specialized devices for easy-to-use internet access; telemedicine training for older adults living in rural areas is especially critical to help them age in place safely with

access to state-of-the-art health care; etc. OBO's comprehensive assessment of needs will provide a useful guide to the programs and projects that are necessary to close digital gaps.

OBO reports (footnotes omitted):

"In Oregon, 76.1 percent of the state belongs to a covered population." This implies that the interests of covered populations closely align to those of the whole state. Therefore, by planning to increase digital equity for covered populations, the state is taking meaningful steps to address the entirety of its digital equity needs.

Within Oregon, most individuals belonging to covered populations live in rural areas, are racial or ethnic minorities, have a relatively low income, or are 60 years of age or older. These covered populations are much larger in the state than those defined by incarceration status, English language proficiency, and veteran status. Perhaps most notable is the size of Oregon's rural population: "An estimated 32.6 percent of the state lives in a rural area (as opposed to only 28.5 percent nationally)."

In Oregon, 24.7% of the population are aging adults, in comparison with the national average of 22.9%.

### 3.2.2.2 Adoption of service

Advocacy regarding high-speed internet access adoption has been a long-time area of AARP's advocacy. Especially where substantial public monies are being used to subsidize deployment (availability), it is particularly important to ensure that all households, regardless of income, can afford to take advantage of that access. Reliability is also critically important. OBO reports (cite omitted):

"Of all Oregon households that do not use internet at home, an estimated 16 percent claim that a main reason for their lack of internet use at home is an inability to afford service. Challenges relating to service affordability, and the closely linked concept of reliability, seem to be high-priority obstacles to digital equity for many people in Oregon."

A stark age-based gap in high-speed internet access adoption persists, and older adults are more likely to rely on a cellular data plan than are younger adults: 69.2% of older adults have wireline internet access, far less than the 81.6% of younger adults; 16.2% of older adults rely on wireless access, more than the 11.6% of younger adults (see Table 14). Table 16 shows that only 26% of eligible households in Oregon participate in the ACP, far less than the national average of 36%. AARP appreciates that OBO recognizes the substantial potential for improvement in this regard.

### 3.2.3 Digital literacy and digital skills

OBO explains aptly the importance of digital literacy and digital literacy skills:

"For individuals to meaningfully use the internet, they must practice and be confident in their ability to perform digital skills. Although some individuals may have internet service and a working computer, they can frequently be functionally limited by their inability to navigate the internet effectively. In Oregon, 57 percent of residents without home internet use cite a lack of need or interest

in the internet as a reason why they do not use internet in the home, making digital increasing literacy the highest priority need for achieving digital equity in the state. These findings suggest that some Oregon residents may be more inclined to use the internet at home if they understand the full use, and therefore value, of having fluency in various digital skills.”

Among OBO’s findings of interest to older adults:

- Individuals at or above 60 years of age, individuals living with disabilities, individuals living in rural areas, and veterans express the most urgent need for digital skills programming.
- In Oregon, all covered populations, except racial or ethnic minorities, express needs for telemedicine digital skills programming.
- Table 18 compares older adults’ digital skills with those of younger adults for many different online activities (e.g., email, videos, banking, and many more) and shows a wide gap. This table can inform OBO’s digital literacy program for older adults.
- Tables 19 through 23 provide similar comparisons for other covered populations, which, in turn, can inform training for older adults who overlap with the other covered populations.

### 3.2.4 Telemedicine

AARP appreciates OBO’s analysis and discussion of telemedicine, an area of great importance to older adults seeking to age in place safely. OBO states:

“Increasingly, there is a use and need for a distinguished set of digital skills involved in telemedicine and remote healthcare. These activities include communicating with health professionals over the internet, researching health information online, using an electronic health monitoring device (for example, sending data to a provider from a smart watch or pacemaker), and accessing health or health insurance records online. Oregon significantly outpaces the nation in frequency of performance of each of these telemedicine activities; the only exception is in using an electronic health monitoring service, where the state slightly lags behind (2.4 percentage point gap).”

OBO’s observation resonates with AARP’s high-speed internet access advocacy:

“Among the covered populations, individuals living in rural areas and areas adults at or above 60 years of age exhibit the most urgent needs for increased telemedicine skills, based on both their reported frequency of participation in telemedicine (which is notably low) and given the difficulties in traveling long distances and at inconvenient times for rural individuals and given older adults? increased risk for medical needs.”

AARP appreciates OBO’s recognition of this important digital equity gap (see also Table 26): Closing the telemedicine gap can profoundly improve older adults’ quality and safety of life.

### 3.2.5 Online security and privacy

Online security and protection of privacy are critically important to older adults. In AARP's experience, aging individuals are especially susceptible to scams and are concerned about their privacy being jeopardized. Concerns over internet safety present a barrier to the adoption and use of high-speed internet access by older adults.

### 3.2.6 Device adoption

AARP appreciates OBO's detailed assessment of device adoption needs. Among other things, OBO states:

"Aging individuals also lagged younger individuals by significant gaps in device adoption, 9.0 percentage points for desktop or laptop ownership and 16.8 percentage points for tablets." This data might be explained by accessibility concerns regarding various devices, which only serve to reemphasize the need for adequate devices.

In addition to the need for devices, many of the above groups may have needs for access to device repair and tech support programs. For many individuals learning how to use a computer for the first time, a lack of proper training or support may dissuade continued digital adoption."

AARP is hopeful that during the Plan's implementation, programs will facilitate older adults' device adoption.

### 3.2.7 Online accessibility and inclusivity of public resources and services

OBO describes the importance of online accessibility and inclusivity of public resources and services, which AARP fully supports. OBO states, among other things (cites omitted):

"The promise of internet accessibility for all requires the use of universal design principles that embrace people with disabilities and those with low levels of digital literacy and digital skills. These groups include people with disabilities, older adults, those with lower levels of literacy, and those who are English language learners. These design principles encompass cultural and linguistic considerations.

Without universal, inclusive, and accessible online content and resources, many individuals will be precluded from meaningfully using the internet to access resources critical to health, emergency services, and civic engagement opportunities, to name a few. The accessibility of online content and services is an essential measurement for benchmarking digital equity."

### Concluding comments regarding OBO's needs assessment

OBO has clearly and usefully identified and described the barriers to aging individuals' digital equity. AARP welcomes the opportunity to work with OBO, other partners, and community-based organizations to facilitate older adults' adoption and effective, safe use of the internet.

During its many years of high-speed internet access advocacy, AARP has given thought to the barriers to and benefits from older adults' adoption and use of internet-based applications. In AARP's

view, aging individuals need confidence and skills to protect themselves from online security and privacy threats. Also, digital equity needs vary: aging individuals encompass adults with a wide range of comfort levels and digital know-how, with some perhaps needing periodic “refresher courses” as well as adults who may also be part of other covered populations (lacking English proficiency, having a disability, etc.). AARP welcomes digital literacy and cybersecurity training programs.

#### 4. Collaboration and Stakeholder Engagement

AARP commends OBO for its comprehensive engagement with stakeholders and representatives of covered populations from throughout the State. AARP is hopeful this collaboration will provide a solid foundation for the successful implementation of the Plan in the years to come.

AARP recommends that OBO’s website provide links to languages in addition to English so that as Oregon implements its plan, all can stay informed about and engaged with digital equity efforts throughout the state.

#### 5. Implementation

The Implementation section dovetails well with the strategies described in Section 2 as well as the barriers and needs identified in Section 3, and also builds off of the partnerships and relationships described in Section 4. The implementation plan is practical and ambitious, and also acknowledges the importance of sustainability. The need to devote coordinated efforts to achieve and to maintain digital equity likely will continue for many years in the future.

AARP supports OBO’s implementation plans, which it describes:

“This section of the Plan describes, at a high level, the implementation strategy and potential future initiatives that relate to each of the key strategies of the Plan, as well as potential timelines. Digital equity in Oregon will likely involve multiple initiatives and efforts associated with each strategy and objective. OBO looks forward to the opportunity to use its Digital Equity Capacity Grant to support and develop further digital equity capacity in Oregon, in partnership, as feasible and when aligned with this Plan, with the many local and regional entities that have participated in OBO’s community engagement work.” At the same time, OBO notes that “the ability to develop and sustain these initiatives depends on the availability of resources and the many other priorities policymakers have for those resources and determination of how state priorities for economic development, education, health, civic and social engagement, and the delivery of other essential services may be augmented by digital equity investments. For that reason, these potential initiatives are offered as examples of what may be possible if resources are available. Consistent with its efforts to expand broadband, OBO has designed these initiatives in the most pragmatic way possible—to be actionable, measurable, and sustainable—rather than risk designing more ambitious initiatives that are not financially or practically actionable.”

AARP encourages OBO to expand its commitment to the gathering, analysis, and reporting of data. Oregon could tap into the expertise in its educational institutions to bring GIS, statistical, digital literacy, and other skills to the State’s efforts to identify and to close gaps in digital equity and to

monitor its success in closing those gaps. Making this information readily available to all can help community-based organizations tailor programs and adopt best practices. For example, Table 3 in Section 3 indicates that Oregon State Extension has worked to promote the Affordable Connectivity Program in Oregon and to gather data on actual broadband speeds, and that Portland Community College offers free, monthly digital skills workshops for both native English speakers and English-language learners. AARP is hopeful that Oregon's universities and colleges will continue to assist with data analyses, mapping, and digital literacy training.

AARP recommends that the Plan include a commitment to track ACP participation, and, to the extent feasible, to track the participation by geography, age, and any other attribute for which data are available. It would of course be useful if the USAC age categories coincided with the Digital Equity Act's definition of older adults: The final Plan could also point out that it would be helpful, if USAC's age brackets aligned with the Digital Equity Act's definition of older adults (aged 60 and over).

A goal of and plans for transparency and widespread access to data, which will inform state agencies and stakeholders as they measure progress in achieving digital equity and can guide and inform the adoption of best practices.

Although OBO states on page 119, "Of all covered populations in the State of Oregon, the digital skills discrepancies are greatest for individuals who are at or above 60 years of age," OBO's 5.1.3 Critical barrier: "Members of covered populations need support to develop digital skills, only calls out persons with disabilities and persons with English as a second language as covered populations in need of digital skills training." Please include a strategy that considered digital skills training programs for older adults, especially for social engagement and essential services.

To further bolster strategies 5.1.3.2 and 5.1.4.3, OBO should consider delivering more than 4 CAI convenings per year. Each community anchor institution will have different needs, languages, and accessibility needs.

AARP recommends OBO includes a technical assistance platform such as a hotline or digital navigation program to provide wrap-around services to ACP enrollment, digital skills training classes or device adoption programs. Please ensure individuals are trained and monitored for customer service, speak the language of community members and if possible, have lived experience.

Also, if needed, AARP urges OBO to seek legislative authority to require providers to submit data to assist with the implementation and assessment of the progress of the Digital Equity Plan (e.g., regarding deployment, prices, adoption, speeds, and technology). AARP has engaged in state legislative high-speed internet access advocacy in many jurisdictions throughout the country and is fully prepared to assist with legislative advocacy that would facilitate OBO's achievement of digital equity.

## 6. Conclusion

AARP echoes the vision in the Plan's concluding section, which states, among other things:

“Broadband is the infrastructure investment of the future and a critical platform for economic and community development in the 21st century just as electricity and phone service were in the 20th century. The state’s commitment arises from Oregon’s recognition of the criticality of digital equity to the well-being of the many diverse people of Oregon. Meaningful access to the internet is an essential ingredient for thriving in the 21st century. Digital equity supports economic opportunity, education, healthcare, and civic and social participation goals. It is the vision of the State of Oregon that all people in Oregon will have access to affordable and reliable high-speed broadband internet to attain positive economic, educational, and health outcomes and to participate in social and civic life.”

AARP looks forward to working with OBO and other partners throughout Oregon to contribute to the achievement (and sustainability) of digital equity.

## 7. Appendices

No response.

### Written Responses and Actions Taken by State in Response

Comments considered, and some comments incorporated into the Plan, including: updating KPIs in section 2.2.2.2 and including suggested language about needs for device repair and tech support programs on pages 14 and 152. Some comments required no action (including comments of support or praise, and the suggestion to link to alternate languages for OBO’s website, as it already contains an extensive translation option under the “Languages” button at the top of the webpage).

### Commenter 13

#### 1. Executive Summary

No response.

#### 2. Introduction and Vision for Digital Equity

The City of Madras supports the vision of universal access to high-speed internet, computing devices, digital literacy and technical support as well as providing tools for online safety and privacy and essential services. We have established goals related to digital equity to create a digital innovation hub at the library and increase access to digital literacy and workforce training programs. Building on existing achievements and collaboration is crucial for supporting ongoing digital equity programs. In the State’s plan we did not see support for local digital equity governance to accomplish the goals we have set forth. Working towards these would enhance our ability to support regional cooperation between the state and local communities. Based on our experience in working with local leaders and assessing digital equity needs, leaders in communities value and can engage with governance and organization at a local level so that they can make an impact on broadband and digital equity gaps. Our city chamber and recreation district had strong representation in the local digital need assessment recently conducted. We are interested in working to facilitate these local resources and city assets to address digital equity issues. Sustainable change only happens when



grounded with local input and ownership. Beyond striving to provide universal access, there are many interests in Madras that can be advanced through improved digital infrastructure and equity programs that engage the community. The state digital equity plan includes a range of strategies that address a variety of digital equity challenges, but these lack detail and in its current state the plan cannot be implemented. A more comprehensive understanding of needs at a localized level should be developed to have meaningful impacts from investments in digital equity.

### 3. Current State of Digital Equity: Barriers and Assets

#### Section 3.1 Asset Inventory:

Other state digital equity plans have included online, living documents that catalog the available digital equity resources, which allows for more collaboration and interaction with various entities and organizations that are currently or interested in providing digital equity programming support. The Asset Inventory as is falls short in providing a comprehensive resource for communities to use and to contribute (e.g. lessons learned and best practices; collaboration across regions). If there are city locations that are not included in the presented list is there a process for us to add them to this inventory?

#### Section 3.2 Needs Assessment:

The regression analysis in Section 3.2 Needs Assessment does not give Oregon actionable information. ACS data already provides the relative adoption rates for different groups so we have a scale of the challenge overall and for each group. Instead of running regressions on relationships that are already known based on existing literature and local data, time and effort should be spent on better understanding the gaps, barriers, and needs of individuals in these covered populations so digital inclusion programming can provide actionable intelligence to help targeted populations become aware of and be able to take advantage of the opportunities for increasing their income, improving their access to services, etc.

#### Data-driven Planning

Section 3.2.2.1 Availability of Service section utilizes the FCC BDC broadband availability data in comparing the prevalence of covered populations in census tracts. While taking into account the broad scope of this plan and available tools, there seems to be inadequate consideration of the risks of planning that is too reliant on data that is already recognized as incomplete and not an accurate depiction of the current state of broadband availability. Various challenges to the FCC broadband data, as well as our own local data and findings, indicate that the FCC generally overstates available coverage to varying degrees, but especially throughout rural Oregon.

In providing guidance and stronger language to support community-related digital equity programs, the state digital equity plan could be improved by:

- Accounting for gaps in the existing broadband availability and covered population data.

- More efficiently utilizing existing available local resources that may not currently be included in the existing state digital equity asset inventory.

Between 2021 to 2023, the city of Madras, in partnership with Jefferson County, invested in the preparation of a broadband assessment and preparing a strategic plan. We collected data from households, organizations, and businesses and had very high participation rates and interest from the community. How can a locality such as Madras show that span, scope and scale of demand for digital equity programs in the city? Having an ongoing dialogue to achieve this would allow us to advocate for the resources needed to carry out programs that align with the state's objectives. The city can act as a regional hub to the more surrounding rural area in Jefferson County. We look forward to working towards this and appreciate the state's past and ongoing efforts to help our communities face these challenges. Additionally, as reported in the U.S. census data in the Digital Equity plan (Section 3.2, Table 6), 57% of non-adopters cite as explanation "Don't need or are not interested." This finding concurs with findings of our local broadband assessments' findings (2023). We acknowledge there is difficulty in engaging many people in the community about Internet topics, especially those who do not want to use the Internet in the first place. However, these populations should be included in the covered populations discussion of the state digital equity plan.

#### Teleworking Advantages

The reduction of travel times is noted as a benefit of Telemedicine (Section 3.2.4) in Jefferson County's Broadband Assessment and Strategic Plan, especially reducing required travel among aging populations to required medical appointments. Reduction of travel times have broader benefits that also need to be recognized in the State's Digital Equity Plan. For example, increasing digital skilling and providing access to resources that allow individuals to work from home not only reduces travel time with personal and environmental benefits but also has been shown to open the door to remote job opportunities that can increase earning potential. This is particularly relevant for individuals with disabilities and other challenges to traditional workplace models.

Data from Current Population Survey and NTIA Internet Use Survey key findings (Section 3.2.5) indicate that:

1. Covered populations are similarly concerned by online security and privacy risks when compared against non-covered populations
2. Members of covered populations do not appear meaningfully more dissuaded than non-covered populations to undertake various online activities because of security or privacy concerns.

#### Privacy and Security

In our experience, security and privacy concerns have a strong effect on populations willingness to engage in digital equity and inclusion activities. These gaps and barriers should be taken into consideration when planning outreach, engagement, and training recognizes and addresses Internet security/privacy concerns among those populations.

The above example speaks to a larger element that is missing from the overall state digital equity plan, the State of Oregon needs to understand the barriers and drivers to digital equity of the targeted groups, then design programs to overcome those barriers and leverage those drivers with the appropriate local stakeholder organizations. There is not a one-size-fits-all digital inclusion solution. To be effective the efforts need to be contextually aligned with the needs of the digitally-disenfranchised individuals and populations.

#### Mapping and Assessment Accuracy

While the statewide residential survey collected responses from 1,605 Oregon residents, there is no indication of the geographic distribution of responses. We collected much more granular data, with findings from 790 households and 90 businesses within Jefferson County as preparation of our Broadband Assessment and Strategic Plan. The extensive community outreach and planning related to digital inclusion and broadband infrastructure done in support of our Plan allowed us to develop a comprehensive understanding of our local needs and demand for digital equity programming. With this data, we know who to engage in digital inclusion programming. Existing relationships with the community increase ability to engage target groups (covered populations) and effectively coordinate resources to meet localized needs.

Our ability to more effectively coordinate digital equity programs based on previous research should be taken into account. However, we do not see in the State of Oregon's Digital Equity Plan the necessary support mechanisms for communities to develop local digital equity ecosystems. This is a gap which needs to be addressed to make effective use of funds and to reach intended outcomes, otherwise the State risks ineffective use of funds.

Information and support from the state can enable and augment the development of these resource-intensive activities that are important to launching digital equity initiatives, such as start-up training for digital navigator programs or providing devices to rural community members. These types of activities, once operating at a local capacity, require reduced administrative oversight when coordinated through local organizations and agencies. Furthermore, there is the opportunity to utilize resources such as utility mail-outs or other community-focused methods for reaching the community to engage in digital equity activities. The state would also benefit from more effectively outlining the ability of cities, counties, or regions of the state to coordinate local digital equity projects according to their identified needs.

#### 4. Collaboration and Stakeholder Engagement

The state presents an overview of previous collaboration efforts throughout Oregon in Section 4.1, but in discussing implementation does not fully make clear the criteria, nor the eligible entities, that could be considered for partnering in digital equity outreach and engagement. Organizations referenced in collaboration to implement this plan in Section 4.2 do not include reference to the state directly funding municipalities, as is included in the BTAP eligible entities. Instead, the presented Digital Equity plan indicates that the state "anticipates and/or partnering" organizations for workforce development, community-based organizations, educational institutions, and other NTIA

recommended organizations such as public housing and civil rights groups. The Digital Equity plan does not make clear a plan collaborate with communities who have established local digital equity initiatives. In other words, the state digital equity plan should make clear what constitutes an eligible entity to be a state digital equity partner. While there is a recognized gap that several local strategic plans mention diversity, equity, and inclusion, but have not formally declared as digital equity plans (Section 3.1.2), there is no strategy related to strengthening local governance and the ability to implement and administer digital equity programming in their communities. Guidance on how this governance can be cultivated and then work in conjunction with state resources to accomplish digital equity goals.

## 5. Implementation

The implementation overview provides approaches for the development of statewide digital equity but does not provide implementable details to indicate the state's strategic actions and/or tactical considerations for each item. This section of the Digital Equity plan does not include measurable impacts (which are referenced in Section 2.2.2) as recognized impact metrics for ongoing monitoring of program implementation. We suggest including metrics for measurable objectives within the implementation plan strategies. This would increase the sections' readability and mirror other state digital equity plan documents. Per the timeline provided in Section 5.2, ACP outreach programs are funded in Oregon ongoing through 2030; however, many are anticipating that those federal funds will not be available in the near future based on current available funds and rate of program expenditure. There is no reference of a contingency plan in the event that this program is discontinued. This information would make the digital equity plan stronger by accounting for the very likely risk these funds won't be available to reduce costs for Internet service to households and suggesting options for addressing the ongoing need of low-income households for subsidized access. The information gathered or presented within the Digital Equity plan does not fully explain how the state is going to use available technology to administer programs (such as technical assistance to localities, nonprofits and CAIs), which are vital in preparation for the mentioned NTIA Digital Equity Competitive Grants funds to be administered in 2025. Also, there is concern regarding the state's capacity and ability to curate and distribute the learning material in a manner that is efficient and that meets evolving local program resource needs, as is indicated in Section 5.1.3. There is no detail as to the extent of the relevant materials that will be made available in order for local organizations to start these programs. As such, there is a risk that digital equity initiatives across Oregon will have the know-how, time, or resources to prepare competitive proposals by 2025.

The state will have one year to plan and then state capacity funds are administered followed by a competitive program launching within 1 month of first capacity awards. <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-06/IFA-Overview-IFA-Launch-Final-Updated.pdf>

We would like to do everything possible to situate our community to benefit from these available funds by establishing local digital equity programming to make a case in grant applications.

The Oregon Broadband Strategic Plan (2020), which is referenced throughout the Digital Equity Plan relating to digital literacy and workforce development, indicates in communities throughout the state, grants or loans may be used as matching funds and for grant application support to help eligible applicants apply for federal and private funding programs for digital literacy, inclusion, and cybersecurity projects. There is no mention of the state administering these types of programs in the draft Digital Equity Plan document. This information is needed for program planning and identifying the need for matching funds to secure necessary financing.

## 6. Conclusion

No response.

## 7. Appendices

As referenced in previous comments, the Residential survey instrument and stakeholder questionnaire does not indicate the geographic or other demographic distribution of respondents. Furthermore, there is no data collected on demand and the use of online tools and services. This is the data we collected with Jefferson County that could supplement the state's efforts in broadband planning efforts and establishing local leadership and digital equity program implementation.

### Written Responses and Actions Taken by State in Response

Comments considered and some will be reviewed for consideration in future stages of the program (including more local outreach and coordination as programs are developed and funded and further data collection and mapping). Some are incorporated into the Plan, including considering the expiry of the ACP if it is not renewed and the benefits of teleworking. No action was taken for other comments, including providing data that OBO does not currently have access to.

## **Commenter 14**

### 1. Executive Summary

No response.

### 2. Introduction and Vision for Digital Equity

We support the vision of universal access to high-speed internet, computing devices, digital literacy and technical support as well as providing tools for online safety and privacy and essential services. Building on existing achievements and collaboration is crucial for supporting ongoing digital equity programs. However, we did not see consideration of a strategy to cultivate existing local programs and provide guidance for digital equity governance and/or cooperation between the state and local communities. Based on our experience in working with local stakeholders and assessing digital equity needs, leaders in communities value and can engage with governance and organization at a local level so that they can make an impact on broadband and digital equity gaps. Sustainable change only happens when grounded with local input and ownership. Beyond striving to provide universal access, there are many interests in Jefferson County that can be advanced through improved digital

infrastructure and equity programs that engage the community. The state digital equity plan includes a range of strategies that address a variety of digital equity challenges, but these lack detail and in its current state the plan cannot be implemented.

A more comprehensive understanding of needs at a localized level should be developed to have meaningful impacts from investments in digital equity.

### 3. Current State of Digital Equity

#### Section 3.1 Asset Inventory:

Other state digital equity plans have included online, living documents that catalog the available digital equity resources, which allows for more collaboration and interaction with various entities and organizations that are currently or interested in providing digital equity programming support. The Asset Inventory as is falls short in providing a comprehensive resource for communities to use and to contribute (e.g. lessons learned and best practices; collaboration across regions).

#### Section 3.2 Needs Assessment:

The regression analysis in Section 3.2 Needs Assessment does not give Oregon actionable information. ACS data already provides the relative adoption rates for different groups so we have a scale of the challenge overall and for each group. Instead of running regressions on relationships that are already known based on existing literature and local data, time and effort should be spent on better understanding the gaps, barriers, and needs of individuals in these covered populations so digital inclusion programming can provide actionable intelligence to help targeted populations become aware of and be able to take advantage of the opportunities for increasing their income, improving their access to services, etc.

#### Data-driven Planning

Section 3.2.2.1 Availability of Service section utilizes the FCC BDC broadband availability data in comparing the prevalence of covered populations in census tracts. While taking into account the broad scope of this plan and available tools, there seems to be inadequate consideration of the risks of planning that is too reliant on data that is already recognized as incomplete and not an accurate depiction of the current state of broadband availability. Various challenges to the FCC broadband data, as well as our own local data and findings, indicate that the FCC generally overstates available coverage to varying degrees, but especially throughout rural Oregon.

In providing guidance and stronger language to support community-related digital equity programs, the state digital equity plan could be improved by:

- Accounting for gaps in the existing broadband availability and covered population data.
- More efficiently utilizing existing available local resources that may not currently be included in the existing state digital equity asset inventory.

Between 2021 to 2023, Jefferson County invested in the preparation of a broadband assessment and preparing a strategic plan. We collected data from households, organizations, and businesses and had very high participation rates and interest from the community—for example in Crooked River Ranch and Camp Sherman in Jefferson County—which provided significant data and actionable intelligence. Without this sort of ground-truthed data, how can a locality such as Jefferson County show that span, scope and scale of demand for digital equity programs? Additionally, as reported in the U.S. census data in the Digital Equity plan, 57% of non-adopters cite as explanation “Don’t need or are not interested.” This finding concurs with the findings of the Jefferson County Broadband Assessment and Strategic Plan (2023) (Section 3.2, Table 6). There is a strong need for outreach to engage those individuals and households; however, this is not referenced in the state needs and implementation sections.

### Teleworking Advantages

The reduction of travel times is noted as a benefit of Telemedicine (Section 3.2.4) in Jefferson County’s Broadband Assessment and Strategic Plan, especially reducing required travel among aging populations to required medical appointments. Reduction of travel times have broader benefits that also need to be recognized in the State’s Digital Equity Plan. For example, increasing digital skilling and providing access to resources that allow individuals to work from home not only reduces travel time with personal and environmental benefits but also has been shown to open the door to remote job opportunities that can increase earning potential. This is particularly relevant for individuals with disabilities and other challenges to traditional workplace models.

Data from Current Population Survey and NTIA Internet Use Survey key findings (Section 3.2.5) indicate that:

- (1.) Covered populations are similarly concerned by online security and privacy risks when compared against non-covered populations.
- (2.) Members of covered populations do not appear meaningfully more dissuaded than non-covered populations to undertake various online activities because of security or privacy concerns.

### Privacy and Security

In our experience and revealed in Broadband Assessment and Strategic Plan, security and privacy concerns have a strong effect on populations willingness to engage in digital equity and inclusion activities. These gaps and barriers should be taken into consideration when planning outreach, engagement, and training recognizes and addresses Internet security/privacy concerns among those populations. The above example speaks to a larger element that is missing from the overall state digital equity plan, the State of Oregon needs to understand the barriers and drivers to digital equity of the targeted groups, then design programs to overcome those barriers and leverage those drivers with the appropriate local stakeholder organizations. There is not a one-size-fits-all digital inclusion solution. To be effective the efforts need to be contextually aligned with the needs of the digitally-disenfranchised individuals and populations.

### Mapping and Assessment Accuracy

While the statewide residential survey collected responses from 1,605 Oregon residents, there is no indication of the geographic distribution of responses. We collected much more granular data, with findings from 790 households and 90 businesses within Jefferson County as preparation of our Broadband Assessment and Strategic Plan. The extensive community outreach and planning related to digital inclusion and broadband infrastructure done in support of our Plan allowed us to develop a comprehensive understanding of our local needs and demand for digital equity programming. With this data, we know who to engage in digital inclusion programming. Existing relationships with the community increase ability to engage target groups (covered populations) and effectively coordinate resources to meet localized needs.

Our ability to more effectively coordinate digital equity programs based on previous research should be taken into account. However, we do not see in the State of Oregon's Digital Equity Plan the necessary support mechanisms for communities to develop local digital equity ecosystems. This is a gap which needs to be addressed to make effective use of funds and to reach intended outcomes, otherwise the State risks ineffective use of funds.

Information and support from the state can enable and augment the development of these resource-intensive activities that are important to launching digital equity initiatives, such as start-up training for digital navigator programs or providing devices to rural community members. These types of activities, once operating at a local capacity, require reduced administrative oversight when coordinated through local organizations and agencies. Furthermore, there is the opportunity to utilize resources such as utility mail-outs or other community-focused methods for reaching the community to engage in digital equity activities. The state would also benefit from more effectively outlining the ability of cities, counties, or regions of the state to coordinate local digital equity projects according to their identified needs.

### 4. Stakeholder Engagement

The plan presents an overview of previous collaboration efforts throughout Oregon in Section 4.1, but in discussing implementation the plan does not fully make clear the criteria, nor the eligible entities, that could be considered for partnering in digital equity outreach and engagement. Organizations referenced in Section 4.2 to implement this plan in collaboration with the state does not include reference to municipalities, which the state directly funds and who are included in the BTAP eligible entities. Instead, the presented Digital Equity plan indicates that the state "anticipates and/or partnering" with organizations for workforce development, community-based organizations, educational institutions, and other NTIA recommended organizations such as public housing and civil rights groups. The Digital Equity plan does not make clear a plan to collaborate with communities who have established local digital equity initiatives. Furthermore, the state digital equity plan should make clear what constitutes an eligible entity to be a state digital equity partner. While there is a recognized gap that several local strategic plans mention diversity, equity, and inclusion, but have not formally declared as digital equity plans (Section 3.1.2), there is no strategy related to strengthening local governance and the ability to implement and administer digital equity



programming in their communities. Guidance on how this governance can be cultivated and then work in conjunction with state resources to accomplish digital equity goals.

## 5. Implementation

The implementation overview provides approaches for the development of statewide digital equity but does not provide implementable details to indicate the state's strategic actions and/or tactical considerations for each item. This section of the Digital Equity plan does not include measurable impacts (which are referenced in Section 2.2.2) as part of the strategy and for ongoing monitoring of program implementation. We suggest including metrics on outcomes to assess progress towards stated objectives within the implementation plan strategies. This would increase the sections' readability and mirror other state digital equity plan documents. Per the timeline provided in Section 5.2, ACP outreach programs are funded in Oregon ongoing through 2030; however, many are anticipating that those federal funds will not be available in the near future based on current available funds and rate of program expenditure. There is no reference of a contingency plan in the event that this program is discontinued. This information would make the digital equity plan stronger by accounting for the very likely risk these funds won't be available to reduce costs for Internet service to households and suggesting options for addressing the ongoing need of low-income households for subsidized access. The information gathered or presented within the Digital Equity plan does not fully explain how the state is going to use available technology to administer programs (such as technical assistance to localities, nonprofits and CAIs), which are vital in preparation for the mentioned NTIA Digital Equity Competitive Grants funds to be administered in 2025. Also, there is concern regarding the state's capacity and ability to curate and distribute the learning material in a manner that is efficient and that meets evolving local program resource needs, as is indicated in Section 5.1.3. There is no detail as to the extent of the relevant materials that will be made available in order for local organizations to start these programs. As such, there is a risk that digital equity initiatives across Oregon will have the know-how, time, or resources to prepare competitive proposals by 2025.

The Oregon Broadband Strategic Plan (2020), which is referenced throughout the Digital Equity Plan relating to digital literacy and workforce development, indicates in communities throughout the state, grants or loans may be used as matching funds and for grant application support to help eligible applicants apply for federal and private funding programs for digital literacy, inclusion, and cybersecurity projects. There is no mention of the state administering these types of programs in the draft Digital Equity Plan document. This information is needed for program planning and identifying the need for matching funds to secure necessary financing.

## 6. Conclusion

No response.

## 7. Appendices

As referenced in previous comments, the Residential survey instrument and stakeholder questionnaire does not indicate the geographic or other demographic distribution of respondents.

While the demographic breakdown of covered groups included in the sampling, a respondent's rural vs urban status and also ensuring that respondents were a representative sample of the entire state's population.

### Written Responses and Actions Taken by State in Response

Comments considered and some will be reviewed for consideration in future stages of the program (including more local outreach and coordination as programs are developed and funded and further data collection and mapping). Some are incorporated into the Plan, including considering the expiry of the ACP if it is not renewed and the benefits of teleworking. No action was taken for other comments, including providing data that OBO does not currently have access to.

### Commenter 15

#### 1. Executive Summary

No response.

#### 2. Introduction and Vision for Digital Equity

We support the vision of universal access to high-speed internet, computing devices, digital literacy and technical support as well as providing tools for online safety and privacy and essential services. Building on existing achievements and collaboration is crucial for supporting ongoing digital equity programs. However, we did not see consideration of a strategy to cultivate existing local programs and provide guidance for digital equity governance and/or cooperation between the state and local communities.

Based on our experience in working with local stakeholders and assessing digital equity needs, leaders in communities value and can engage with governance and organization at a local level so that they can make an impact on broadband and digital equity gaps. Sustainable change only happens when grounded with local input and ownership. The state digital equity plan includes a range of strategies that address a variety of digital equity challenges, but these lack detail and in its current state the plan cannot be implemented. A more comprehensive understanding of needs at a localized level should be developed to have meaningful impacts from investments in digital equity. Beyond striving to provide universal access, there are many interests in St. Helens that can be advanced through improved digital infrastructure and equity programs that engage the community. St. Helens has identified affordability challenges where most of our residents are paying over \$100 for Internet service (based on St. Helens online broadband assessment), as well as a strong business community that are heavily engaged in broadband planning discussions within the community.

#### 3. Current State of Digital equity: Barriers and Assets

##### Section 3.1 Asset Inventory:

Other state digital equity plans have included online, living documents that catalog the available digital equity resources, which allows for more collaboration and interaction with various entities

and organizations that are currently or interested in providing digital equity programming support. The Asset Inventory as is falls short in providing a comprehensive resource for communities to use and to contribute (e.g. lessons learned and best practices; collaboration across regions).

### Section 3.2 Needs Assessment:

#### Data-driven Planning

ACS data already provides the relative adoption rates for different groups so we have a scale of the challenge overall and for each group. Instead of running regressions on relationships that are already known based on existing literature and local data, time and effort should be spent on better understanding the gaps, barriers, and needs of individuals in these covered populations so digital inclusion programming can provide actionable intelligence to help targeted populations become aware of and be able to take advantage of the opportunities for increasing their income, improving their access to services, etc.

Section 3.2.2.1 Availability of Service section utilizes the FCC BDC broadband availability data in comparing the prevalence of covered populations in census tracts. While taking into account the broad scope of this plan and available tools, there seems to be inadequate consideration of the risks of planning that is too reliant on data that is already recognized as incomplete and not an accurate depiction of the current state of broadband availability. Various challenges to the FCC broadband data, as well as our own local data and findings, indicate that the FCC generally overstates available coverage to varying degrees, but especially throughout rural Oregon.

In providing guidance and stronger language to support community-related digital equity programs, the state digital equity plan could be improved by:

- Accounting for gaps in the existing broadband availability and covered population data
- More efficiently utilizing existing available local resources that may not currently be included in the existing state digital equity asset inventory.

As reported in the U.S. census data in the Digital Equity plan, 57% of non-adopters cite as explanation "Don't need or are not interested." This finding concurs with findings of the St. Helens Broadband Assessment and Strategic Plan (2023) (Section 3.2, Table 6). There is a strong need for outreach to engage those individuals and households; however, this is not referenced in the state needs and implementation sections.

#### Teleworking Advantages

The reduction of travel times is noted as a benefit of Telemedicine (Section 3.2.4) and is also discussed in St. Helens? Broadband Assessment and Strategic Plan, especially as travel among aging populations to required medical appointments and working from home is an effective means to generate additional household income. Reduction of travel times have broader benefits that also need to be recognized in the State's Digital Equity Plan. For example, increasing digital skills and providing access to resources that allow individuals to work from home not only reduces travel time

with personal and environmental benefits but also has been shown to open the door to remote job opportunities that can increase earning potential. This is particularly relevant for individuals with disabilities and other challenges to traditional workplace models.

#### Privacy and Security

In reviewing the state's digital equity plan Data from Current Population Survey and NTIA Internet Use Survey key findings (Section 3.2.5), the finding that "members of covered populations do not appear meaningfully more dissuaded than non-covered populations to undertake various online activities because of security or privacy concerns." However, our experience has shown that security and privacy concerns do impact Internet adoption among covered populations to a significantly greater degree. Security and privacy concerns were shown to have strong effects on minority and low-income populations willingness to engage in digital equity and inclusion activities. These gaps and barriers should be taken into consideration when planning outreach, engagement, and training recognizes and addresses Internet security/privacy concerns among those populations. The above example speaks to a larger element that is missing from the overall state digital equity plan, the State of Oregon needs to understand the barriers and drivers to digital equity of the targeted groups, then design programs to overcome those barriers and leverage those drivers with the appropriate local stakeholder organizations. There is not a one-size-fits-all digital inclusion solution. To be effective the efforts need to be contextually aligned with the needs of the digitally-disenfranchised individuals and populations.

#### Mapping and Assessment Accuracy

While the statewide residential survey collected responses from 1,605 Oregon residents, there is no indication of the geographic distribution of responses. We collected much more granular data, with findings from 580 households and over 80 businesses within St. Helens as preparation of our Broadband Assessment and Strategic Plan. The extensive community outreach and planning related to digital inclusion and broadband infrastructure done in support of our Plan allowed us to develop a comprehensive understanding of our local needs and demand for digital equity programming. With this data, we know who to engage in digital inclusion programming. Existing relationships with the community increase ability to engage target groups (covered populations) and effectively coordinate resources to meet localized needs.

Our ability to more effectively coordinate digital equity programs based on previous research should be taken into account. However, we do not see in the State of Oregon's Digital Equity Plan the necessary support mechanisms for communities to develop local digital equity ecosystems. This is a gap which needs to be addressed to make effective use of funds and to reach intended outcomes, otherwise the State risks ineffective use of funds.

Information and support from the state can enable and augment the development of these resource-intensive activities that are important to launching digital equity initiatives, such as start-up training for digital navigator programs or providing devices to rural community members. These types of activities, once operating at a local capacity, require reduced administrative oversight when

coordinated through local organizations and agencies. Furthermore, there is the opportunity to utilize resources such as utility mail-outs or other community-focused methods for reaching the community to engage in digital equity activities. The state would also benefit from more effectively outlining the ability of cities, counties, or regions of the state to coordinate local digital equity projects according to their identified needs.

#### 4. Collaboration and Stakeholder Engagement

The plan presents an overview of previous collaboration efforts throughout Oregon in Section 4.1, but in discussing implementation the plan does not fully make clear the criteria, nor the eligible entities, that could be considered for partnering in digital equity outreach and engagement. Organizations referenced in Section 4.2 to implement this plan in collaboration with the state does not include reference to municipalities, which the state directly funds and who are included in the BTAP eligible entities. Instead, the presented Digital Equity plan indicates that the state “anticipates and/or partnering” with organizations for workforce development, community-based organizations, educational institutions, and other NTIA recommended organizations such as public housing and civil rights groups. The Digital Equity plan does not make clear a plan to collaborate with communities who have established local digital equity initiatives. St. Helens has conducted outreach to local leaders, including business owners and city council members, and determined readiness for action on broadband activities. While there is a recognized gap that several local strategic plans mention diversity, equity, and inclusion, but have not formally declared as digital equity plans (Section 3.1.2), there is no strategy related to strengthening local governance and the ability to implement and administer digital equity programming in their communities. Guidance on how this governance can be cultivated and then work in conjunction with state resources to accomplish digital equity goals. Furthermore, the state digital equity plan should make clear what constitutes an eligible entity to be a state digital equity partner.

#### 5. Implementation

The implementation overview provides approaches for the development of statewide digital equity but does not provide implementable details to indicate the state’s strategic actions and/or tactical considerations for each item.

##### ACP Enrollment and Outreach

In review of the Implementation timeline in Section 5.2, the ACP outreach programs are funded in Oregon ongoing through 2030; however, many are anticipating that those federal funds will not be available in the near future based on current available funds and rate of program expenditure. There is no reference of a contingency plan in the event that this program is discontinued. This information would make the digital equity plan stronger by accounting for the very likely risk these funds won’t be available to reduce costs for Internet service to households and suggesting options for addressing the ongoing need of low-income households for subsidized access.

##### Outcome Monitoring of Implementation

This section of the Digital Equity plan does not include measurable impacts (which are referenced in Section 2.2.2) as part of the strategy and for ongoing monitoring of program implementation. We suggest including metrics on outcomes to assess progress towards stated objectives within the implementation plan strategies. This would increase the sections readability and mirror other state digital equity plan documents. The information gathered or presented within the Digital Equity plan does not fully explain how the state is going to use available technology to administer programs (such as technical assistance to localities, nonprofits and CAIs), which are vital in preparation for the mentioned NTIA Digital Equity Competitive Grants funds to be administered in 2025. Also, there is concern regarding the state's capacity and ability to curate and distribute the learning material in a manner that is efficient and that meets evolving local program resource needs, as is indicated in Section 5.1.3. There is no detail as to the extent of the relevant materials that will be made available in order for local organizations to start these programs. As such, there is a risk that digital equity initiatives across Oregon will have the know-how, time, or resources to prepare competitive proposals by 2025.

The Oregon Broadband Strategic Plan (2020), which is referenced throughout the Digital Equity Plan relating to digital literacy and workforce development, indicates in communities throughout the state, grants or loans may be used as matching funds and for grant application support to help eligible applicants apply for federal and private funding programs for digital literacy, inclusion, and cybersecurity projects. There is no mention of the state administering these types of programs in the draft Digital Equity Plan document. This information is needed for program planning and identifying the need for matching funds to secure necessary financing.

## 6. Conclusion

No response.

## 7. Appendices

As referenced in previous comments, the Residential survey instrument and stakeholder questionnaire does not indicate the geographic or other demographic distribution of respondents. Furthermore, there is no data collected on demand and the use of online tools and services.

## Written Responses and Actions Taken by State in Response

Comments considered and some will be reviewed for consideration in future stages of the program (including more local outreach and coordination as programs are developed and funded and further data collection and mapping). Some are incorporated into the Plan, including considering the expiry of the ACP if it is not renewed and the benefits of teleworking. No action was taken for other comments, including providing data that OBO does not currently have access to.

## **Commenter 16**

### 1. Executive Summary

Link Oregon appreciates this opportunity to provide public comment to the Oregon Broadband Office (OBO) on its Draft State of Oregon Digital Equity (DE) Plan as part of its application for the State Digital Equity Planning Grant Program, part of the larger State Digital Equity Capacity Grant Program overseen by the National Telecommunications and Information Administration (NTIA) in the U.S. Department of Commerce. The purpose of the grant is to promote the achievement of digital equity, support digital inclusion activities, and build capacity for efforts by States relating to the adoption of broadband by residents of those States. As a general comment on the plan, we recommend that the OBO include more emphasized callouts to unique opportunities and barriers as they apply to Oregon's federally recognized Tribes. The NTIA Digital Equity Planning Grant NOFO specifically highlights the requirement of a description of how municipal, regional, and/or Tribal digital equity plans will be incorporated into State Digital Equity Plans (as applicable). We believe spotlighting this within the OBO plan would make for a stronger overall proposal. We also want to express appreciation to the OBO for the quality of the demographic data sets included in the draft proposal and advocate for enabling broader and easier public access to these data to grow awareness of specific DE challenges and gaps as they relate to covered populations.

#### 1.1 Vision and Principles of Digital Equity

"It is the vision of the State of Oregon that all people in Oregon will have meaningful access." We suggest that the term "meaningful access" be explicitly defined as it is used throughout this section and could be subject to varying interpretations.

#### 1.2 Current State of Digital Equity- Assets & Barriers

##### Critical barrier #2

In this section, it's worth noting that lack of awareness of available programs such as the FCC Affordable Connectivity Program (ACP), which addresses affordability, is also a key barrier. This recommendation is supported by statements in the draft (p114) about how the ACP is chronically undersubscribed. We believe that highlighting lack of awareness of such programs as a key barrier aligns well with the strategy that the OBO has outlined to address this specific barrier, i.e. growing enrollment in the program. We also recommend that wherever broadband affordability is noted as a key barrier in the proposal, mention be made of the need for greater awareness of existing funding opportunities that address affordability within covered communities.

#### 1.5 Implementation Plan

With ACP funding projected to run out by April 2024, it is worth calling out here that continuing advocacy by all states (including Oregon) for renewal of federal funding of this critical program is key to sustaining progress against one of the stated goals of this DE plan "affordable internet access and computing devices."

## 2. Introduction and Vision for Digital Equity

2.1 (#1) In the section discussing framework principles for DE efforts, we appreciate and strongly support OBO's callout to the use of data in driving decision making and prioritization of projects with limited resources— "Prioritize data and rigorous information gathering that helps drive decision making on the prioritization of limited resources." We recommend that the OBO provide in as much detail as possible in its initial proposal specific methodologies and approaches for ongoing performance data collection, both at the outset and during the entire period of the grant.

(#3) In the section discussing building on established best practices, we support OBO's approach of avoiding replication of DE efforts by empowering those entities who already have deep and proven experience in this space. ("OBO will provide data, support, and resources to entities that already have developed, and proven the efficacy and efficiency of, existing programs to address digital equity."). The OBO should emphasize if it already has a comprehensive listing of such DE-focused organizations across the state and if not, then identify that as a gap that it will address. The OBO should also note how it will make DE-focused independent entities across the state aware that such help will be available to them from the OBO.

(#4) "Respect and incorporate culturally and linguistically diverse communities as partners of the process." We recommend that the OBO give a specific callout to Oregon's Tribes as a unique covered population where all DE engagements should and will be guided by principles of tribal digital sovereignty.

#### Section 2.2.1- Strategies

(#1) Critical barrier: Lack of broadband availability. This section discusses lack of broadband access and its impact broadly across businesses, communities, students, etc., but the Strategy focuses just on residential broadband. We recommend that the Strategy be broadened to include Community Anchor Institutions (CAIs) as well.

(#3) Critical barrier: Individuals who are members of covered populations require support to develop digital literacy skills. It is important to note in this section that while ALL covered populations have this barrier, the problem is more acutely experienced by populations living in Oregon's remote terrains (e.g. Tribes) where there are even fewer public CAIs to offer digital literacy training and support.

#### 2.2.2. Measurable objectives and key performance indicators

How (and how frequently) will the OBO report out on the State's progress against stated KPIs?

### 3. Current State of Digital Equity: Barriers and Assets

#### 3.1.1 Table 1: Digital Inclusion Assets by Covered Population:

We appreciate the work done here by the OBO to provide a solid representative view of the state's digital equity assets. This will be invaluable to all entities and stakeholders involved in this grant. We recommend that OBO publish this for broader access and also maintain it as a "living document" that is maintained as the DE landscape within Oregon evolves over the duration of the grant.



### 3.1.2 Existing digital equity plans

We recognize that the Burns Paiute Tribe is among entities listed in this section as having a Strategic Plan that incorporates broadband/DE elements. It would be worth highlighting here for OR's Tribal audiences that the NTIA encourages them to submit letters of intent to build their own digital equity plans and/or participate in the development of relevant State Digital Equity Plans, which would make them eligible for planning grant funds from the set-aside for Tribal organizations described in Section 60304(i)(2) of the Infrastructure Act (as noted on page 18 of the NTIA Digital Equity Notice of Funding Opportunity or NOFO).

### 3.2 Needs Assessment

We appreciate the OBO's inclusion of rich, demographically granular data sets in this section and believe these can serve as solid baseline benchmark to assess progress in DE in Oregon over time. Beyond the informational value, we would recommend that the OBO include some commentary in the plan on how these data will be actionable and help inform DE strategies included in this plan. As an example, in Table 22, "online job training" shows a -22% gap between veteran and non-veteran populations (as it relates to internet use), the OBO could state that digital literacy programs will be tailored for specific priority needs across covered populations.

## 4. Collaboration and Stakeholder Engagement

No response.

## 5. Implementation

How will funded entities within Oregon report out their progress and success metrics to align with OBO's stated KPIs?

5.1.2.1 Strategy 1: Increase Affordable Connectivity Program 327 and ISP low-cost program enrollment among eligible households. We believe the OBO needs a stronger call to action here for ISPs than "Encourage ISPs to partner with localities." What specific strategies will the OBO use to incentivize ISPs to play a role in growing ACP enrollments? We also believe that K-12 institutions could be included among listed entities to drive greater awareness among disenfranchised student populations to utilize ACP funding for at-home broadband services/devices.

5.1.3.1 Strategy 1: Enable digital literacy skills development through training courses. Established CAIs, such as public libraries, community colleges, and senior centers (especially rural senior centers), deserve a strong mention here as they already play an important role in communities to advance digital literacy through their respective curricula. With growth of Oregon's older adult population outpacing national trends, this segment is particularly vulnerable to cybersecurity risks, financial exploitations and online privacy violations and we recommend inclusion of focused digital literacy efforts in these specific areas. We also believe that relying exclusively on established partners to advance digital literacy may limit opportunities for populations in remote regions of the state. New local partners who can fill this vacuum for such constituents must be identified.

5.1.3.2 Strategy 2: Expand opportunity to learn digital literacy skills for persons with disabilities and persons with English as a second language. Same comment as in 5.1.3.1.

## 6. Conclusion

No response.

## 7. Appendices

No response.

## Written Responses and Actions Taken by State in Response

Comments considered, and some implemented into the Plan. More references to tribal considerations were added as a result of this comment and the comment from the Confederated Tribes of the Umatilla Indian Reservation. Otherwise, no action taken. OBO appreciates the commenter's expressions of support.

## **Commenter 17**

### 1. Executive Summary

The LOC supports the efforts and actions taken by the Oregon Broadband Office (OBO) in their endeavors to engage communities in every region of the state that helped to inform Oregon's Digital Equity Plan. Additionally, the LOC applauds the OBO for calling out cybersecurity tools and the knowledge needed to stay safe online as an important piece towards any digital equity plan. 1.3 Under definitions of covered populations, low-income families should be expanded beyond the 150% federal poverty level. It's well understood that this number is incredibly low and does not reflect the reality of many low-income families that fall beyond that threshold. These thresholds change per region, county, and city and should reflect the true cost of living and recognize that a low-income threshold should be much higher.

### 2. Introduction and Vision for Digital Equity

Vision and principles for digital equity—The LOC supports the state of Oregon's definition and vision of digital equity and wants to additionally lift up the piece around affordability. The affordability of reliable high-speed broadband home internet and digital devices is a major barrier to access in all regions of the state, regardless of whether or not they are unserved, underserved or served. It's important to the members of the LOC to recognize that digital equity challenges exist in every community, whether it's urban, suburban, rural, frontier or for Tribal communities. The LOC supports the goals and framework of principles laid out in the vision and principles for digital equity and how they will be informed by data. We encourage the OBO to continue to work with the LOC members and community partners to compile that data, recognizing that data provided by ISPs is not always accurate and may not truly inform a picture of people's lived experience. The LOC has heard that some community-based organizations have had trouble connecting with the OBO and just encourages continued outreach to these organizations as trusted partners within their communities.

We support and encourage the OBO to continue their collaboration with local governments, community partners, businesses, and Tribal partners. In addition, the state should consider ways that other state agencies could play a role in supporting the OBO's digital equity efforts and how they may help providing access to resources such as devices and programs like the ACP or lifeline that can support affordability. There are often many touchpoints that agencies have with Oregonians and are in a unique position to help support the state's digital equity goals.

### 3. Current State of Digital Equity: Barriers and Assets

Current state of digital equity: Assets and barriers—The outline laid out recognizes many of the barriers that the LOC members face, and we support the outline in the digital equity plan. In addition, the LOC recognizes that a critical barrier for all communities is the lack of true competition or competitive options in urban, suburban, rural and frontier areas. Even in our most populated areas, there seems to be a major lack of true competition and options available for consumers for reliable high-speed broadband for home internet. It's often unclear which providers actually serve an area, what options are truly available for their location, whether it is reliable and meets the speeds offered, and whether price options will remain the same or change the next year, making it no longer affordable. Many low-income Oregonians turn to mobile devices in lieu of home internet due to these challenges which create inequities in all Oregon communities.

3.1.4 Broadband Adoption—The LOC supports the role of community-based and local community anchor institutions as trusted resources to promote digital equity initiatives from the state. The LOC would also like to lift up the point about the need for more digital literacy and digital skills and recognize language barriers that exist throughout Oregon that should be recognized in each program. The OBO has recognized this in the plan as well as the need to provide information in multiple languages and the LOC supports those efforts. In addition, while cybersecurity was not considered a major barrier, the threat can severely impact a household financially and disrupt their ability to get online. Programs that support cybersecurity for covered populations and resources to understand the impacts is vitally important.

3.1.5 Broadband Affordability—The Affordable Connectivity Program (ACP) is an incredibly important program that the LOC supports along with Oregon's Lifeline program. Together, these programs have the ability to reduce internet costs or the cost of phone service. The LOC recognizes that the ACP is underutilized and has a role in helping to make more Oregonians aware of these programs. However, the LOC also believes that state agencies outside of the OBO can play a coordinating role with their many programs to also provide information about these programs. Similarly, schools, school districts, and community groups should also be promoting these programs whenever possible. Additionally, as ISPs and other entities receive grant awards, Oregon's digital equity plan should recognize that providers must promote the ACP program up front for all customers. While only some will qualify, it's important to encourage more customers to apply for the program up front as part of the process when signing up for internet. This will increase the chances that more households will be captured by the program, even if some are denied due to being ineligible. More should be done to ensure these programs are promoted, regardless of an ISPs connection with BEAD or other federal programs. Moreover, the future of the ACP or a possible successor program is uncertain. While

Oregon's Lifeline program will continue, Oregon should consider ways to continue the subsidies that boost Oregonians ability to afford reliable high-speed broadband. Lastly, while it's an important part of the ACP program to provide up to \$100 one time for digital devices, they will not last forever. It's important to consider how Oregon can support replacement of those devices in the future when a household is eligible for the ACP program or a successor program.

3.2 Needs assessment—The OBO has done an extensive job utilizing data from multiple sources to build a more comprehensive map to understand where broadband service is available and adopted, and to build a better understanding of why some who choose not to have home internet access. However, we also believe some data provided by ISPs is not always accurate nor reflective of the experiences households encounter. We believe better map data from ISP should be made available and a strong emphasis on the need for providers to prove their accuracy when it's challenged by a household or local government. Additionally, for true partnerships to exist between local governments and ISPs, it's important that this information is provided to local governments to help inform the process to ensure their communities are served. The LOC also recognizes that local governments can play a role but often lack the information or real data from providers that would be necessary to provide a complete assessment. Any additional support for local governments or regions to assist in this process would be welcome. Additionally, as noted, affordability remains a challenge for many covered populations, along with digital literacy skills that include cybersecurity. Many cities are also recognizing the need for ongoing education, lifelong learning, and support for distance learning post Covid and will be key to support covered populations where applicable. The need for these skills also resonates with many older populations and their need to access telemedicine. Lastly, the LOC recognizes a need for ongoing conversation on how to create recurring revenue to address these issues on a long-term basis, beyond what federal funding will support.

#### 4. Collaboration and Stakeholder Engagement

All municipalities across Oregon have a vested interest in the ongoing stewardship of digital infrastructure so that all residents and businesses have access to affordable and reliable broadband and have the ability to participate in an increasingly digital world. Whether at a state, county, or municipal level, public interests need to be part of the decision process and be represented in the ongoing maintenance and evolution over the 50+ year lifetime of the BEAD network investments. To that end, the state should continue to build upon collaboration efforts to create a governance structure so that municipalities have a say in how public monies are spent in bridging their broadband gaps and addressing their evolving digital needs. In addition, any effort needs to engage community groups that have built trust between themselves and covered populations and are therefore in the best position to engage covered communities. The state should work to continue to strengthen outreach efforts and find additional ways to connect with communities that may have more of a challenge engaging in the process. These collaboration efforts will increase Oregon's ability to administer and monitor BEAD while improving our digital equity efforts.

#### 5. Implementation

The LOC recognizes the goal and need for ongoing support to bridge the digital divide by ensuring more households have access to wireline internet services. While fixed wireless might be cheaper and, in some places, the only affordable options at this time. As the state works to address the inequities in the state, wireline services offer the most reliable service for households. While the focus for service is a minimum of 100/20, the LOC recognizes that those speeds are already below where many urban areas are moving. If we want to address the inequities within and between communities, we need to focus support towards technologies that will be future proof to avoid communities getting caught up, only to fall behind digitally once again. The LOC strongly supports the state's effort towards supporting wireline services and other technologies where and when appropriate.

Additionally, the LOC strongly supports efforts to educate households about the ACP, Lifeline, and any successor programs to reduce costs for low-income households. Cities recognize the need for low-income rate plans by ISPs and supports the state's plan to offer a \$30 low-income fee that can be paired with other programs to reduce the burden on households where even \$10 is an obstacle. It's also true that many households that fall outside 200% below the federal poverty level also struggle to afford reliable high-speed internet. The LOC will continue to support any low-income rate options that reduce barriers to affordability and access. Lastly, the LOC strongly supports the efforts to increase access to digital literacy skills, and online safety and privacy. The OBO's recognition that many local communities need additional resources to support digital literacy and only safety for their communities is welcomed and strongly encouraged. For many rural covered populations, access to these services is limited, especially for historically underrepresented communities and Tribes. We welcome efforts to support and develop local capacity to ensure the state and local governments can reach their goals. As important partners for these efforts, local governments want to work closely with the state, Tribes, and community partners to identify ongoing support beyond what these programs and federal funding provide.

## 6. Conclusion

The LOC strongly supports the state's efforts, as noted, to achieve their vision for digital equity. The State of Oregon will need to work and collaborate with local, tribal, nonprofit, and institutional partners toward their five key goals:

1. Universal access to affordable and reliable high-speed home internet.
2. Universal access to an affordable, quality, internet-enabled computing device that meets the person's needs.
3. Universal access to digital literacy skills and quality technical support in culturally and linguistically diverse in-community spaces.
4. Universal access to the tools and information needed to protect themselves online.
5. Universal access to inclusive state resources and online content to essential services and programs.

Cities strongly support these goals and efforts to identify future and ongoing revenue sources to support these goals. It's not enough to for this one-time funding and cities stand by to partner with the state, Tribes, community partners and other interest groups to identify any efforts to continue to address the digital divide and digital inequities within and between communities. No one city, community or region is the same, and we'll need to be flexible to ensure Oregon meets their goals and addresses the needs of all Oregonians.

## 7. Appendices

No response.

### Written Responses and Actions Taken by State in Response

Comments considered, and some incorporated into the plan. OBO incorporated language about the uncertain status of the ACP. OBO appreciates the support of the commenter and no action is required for those comments of support.

### **Commenter 18**

#### 1. Executive Summary

No response.

#### 2. Introduction and Vision for Digital Equity

Advocating for the following:

- Adding "safe and secure" to the vision statement "It is the vision of the State of Oregon that all people in Oregon will have meaningful access to affordable and reliable high-speed broadband home internet, an internet-enabled computing device, digital literacy, technical support, and inclusive content."
- Define "Universal Access" on the five key goals. I assume what is meant by Universal Access is "equal or barrier free opportunities in broadband and internet access, regardless of social income, race, ethnicity, age, physical or mental ability, language, and veteran status (other covered populations)?"

#### 3. Current State of Digital Equity: Barriers and Assets

Can you invest dollars proportional to the needs across Oregon? e.g., Figure 4: ACP enrollment in Oregon by county shows the different levels of ACP enrollment based on county boundaries. Hypothetically, can we designate priority areas based on figure 4 to implement Strategy 1: Increase ACP and ISP low-cost program enrollment among eligible households—where lower enrolled counties are prioritized for this strategy?

#### 4. Collaboration and Stakeholder Engagement

Can you provide a map of where stakeholders are located across the state? This could help encourage and remove barriers to collaboration with stakeholders by providing this information.

## 5. Implementation

Strategy 1: Increase Affordable Connectivity Program and ISP low-cost program enrollment among eligible households. I'd like to advocate to remove or edit to add clarity to the following activity "Develop educational materials." Reason: the FCC provides a robust ACP outreach toolkit, and they also offer to provide them in print for free by request.

Strategy 3: Expand access to affordable computing devices and technical support. Advocating to add activity focused on expanding centers like Free Geek and NextStep Recycling that help refurbish donated devices and provide them at affordable prices or free to eligible individuals and families. The activity could be to support new startups with similar missions or provide funding and support to expand current services and locations for existing organizations doing this work. This could include resourcing libraries to collect donated devices.

## 6. Conclusion

No response.

## 7. Appendices

No response.

## Written Responses and Actions Taken by State in Response

Comments considered, and no action taken. There are several ideas suggested which may be considered as the program continues, including releasing a map of stakeholders. Some comments regarding the ACP are no longer urgent given the uncertain status of the ACP.

## Commenter 19

### 1. Executive Summary

One key requirement of state digital equity plans is that they include a state's vision of digital equity. The National Telecommunications and Information Administration (NTIA) suggests that digital equity visions address at least these two questions:

1. What will digital equity look like in the context of your state?
2. What are the broad goals that should be accomplished in executing this plan (e.g., improve rural health outcomes, increase underrepresented youth employment in technology-related fields)?

NTIA has specifically advised states to "lead with equity," intentionally identifying, amplifying, and centering the voices of those most affected by the digital divide and disconnected communities. With the extraordinary task and responsibility of state policymakers and local communities in mind, the

Benton Institute for Broadband & Society launched the Visions of Digital Equity project to aid both in ensuring that more community voices are heard in crafting visions that increase opportunity for all. Through surveys, community meetings, interviews, conversations, and a collaborative writing process with community contributors, we have arrived at a set of principles to help guide both the process and the resulting visions of digital equity.

We learned that a well-crafted vision of digital equity has the potential to be very powerful. It can:

- Offer a glimpse of a state transformed by universal connectivity,
- Provide a roadmap and resources for the digital inclusion efforts to come, and
- Act as a north star for goal setting, planning, and implementation efforts over the months and years to come.

The best visions of digital equity will be community centered and focused on creating change, specific and clearly articulated, and ambitious but attainable. The Benton Institute for Broadband & Society reviewed the Draft State of Oregon Digital Equity Plan and shared a summary of it with our readers (<https://www.benton.org/blog/oregons-plan-meaningful-broadband-access>). Upon review, we offer 10 Principles for Digital Equity Visions (see <https://www.benton.org/sites/default/files/VisionsDigitalEquity.pdf>). We hope these principles help the people of Oregon evaluate both the state's Draft State of Oregon Digital Equity Plan and the Oregon Broadband Office's revision of the plan. To that end, we also offer A Checklist for Evaluating Digital Equity Visions (see [https://www.benton.org/sites/default/files/DEV\\_checklist.pdf](https://www.benton.org/sites/default/files/DEV_checklist.pdf)) Thank you for the opportunity to weigh in on the plan; I would be happy to answer any questions or discuss the potential of Oregon's vision for digital equity.

### 3. Current State of Digital Equity: Barriers and Assets

No response.

### 4. Collaboration and Stakeholder Engagement

No response.

### 5. Implementation

No response.

### 6. Conclusion

No response.

### 7. Appendices

No response.

### Written Responses and Actions Taken by State in Response



Comments considered, and no action required. OBO appreciates the principles and advice given by the commenter and will consider them as it revises and implements the Digital Equity Plan.

**Commenter 20**

**1. Executive Summary**

Thank you for the opportunity for AGE+ to provide feedback to the Oregon Broadband Office's Digital Equity Plan.

AGE+ is very pleased that older adults are mentioned more than 70 times, seniors 14 times, and elders 4 times. We take this as a strong indicator that the Oregon Broadband Office (OBO) understands that Oregon is older on average than the United States. One in five Oregonians are 65 or over, compared to one in six people nationally. We also take this to mean that OBO understands that the population of older adults as a percentage of Oregonians is also projected to increase from 18% to 24% in 2050 with most increases in our rural counties. We are particularly grateful for the recognition that digital access is part of the social isolation solution for everyone, including older adults in rural Oregon. No one experienced more social isolation and dire health access consequences than older adults in rural communities. We agree with OBO that access includes affordability and ongoing literacy for older adults. We are pleased the Oregon Kitchen Table research completed by Portland State University and commissioned by AGE+ was highlighted as the document highlights the current activity, desire and opportunity for more intergenerational digital literacy programming. We agree that digital literacy is a critical support and engagement mechanism for aging Oregonians. The idea of considering senior centers as Community Anchor Institutions (CAI) compels us to ask further questions. We are particularly interested in how we may support rural senior centers in becoming a CAI. It is our experience that senior centers can be safe places filled with older adult peers willing and interested in engaging in topics like digital literacy. However, we understand from OBO staff that the window to add to the CAI list closed when the comments closed for Volume 1 of the plan. We respect that but do hope to learn of opportunities in the future that may open that door again.

**2. Introduction and Vision for Digital Equity**

No response.

**3. Current State of Digital Equity: Barriers and Assets**

No response.

**4. Collaboration and Stakeholder Engagement**

No response.

**5. Implementation**

In reviewing the high-level Implementation Strategies to address Critical Barriers, AGE+ has considered these individually. In some cases, we are currently supporting this work, and in others, we are already generating ideas about how we can impact and achieve those listed below.

1. Lack of broadband availability

a. See our suggestion to include senior centers as Community Anchor Institutions above.

2. Low-income affordability for internet, devices, and tech support

a. STRATEGY: Increase enrollments of two low-cost programs (Affordability Connectivity Program and the ISP low-cost program)

- AGE+ currently does and can continue disseminating age-friendly communiques, announcements, and providing information in appropriate forums.

b. STRATEGY: Expand access to affordable devices and tech support

- AGE+ can partner with device and tech support experts for distribution opportunities.

c. STRATEGY: Develop data and informational resources to enable the application of digital equity lens to infrastructure and program decisions

- AGE+ can bring an age-inclusive lens to inform, collect, and contribute to infrastructure and programmatic decisions.

3. Covered populations need support to develop digital skills

a. STRATEGY: Digital Literacy Training, partnerships, established programs

- AGE+ can train, partner, and participate in or distribute existing programs.

b. STRATEGY: Expand digital literacy skills for people with disabilities and ESL.

- AGE+ can train, inform, and partner to expand digital literacy skills.

c. STRATEGY: Promote information about existing digital literacy programming

- AGE+ can disseminate information in age-friendly ways that will be impactful and effective.

d. STRATEGY: Promote information about online safety and privacy to covered populations

- AGE+ can disseminate information in age-friendly ways that will be impactful and effective across generations.

4. Local community require resources and expertise for digital equity efforts

a. STRATEGY: Build collaboration among state, local and nonprofit entities.

- b. STRATEGY: Support and develop local capacity
- c. STRATEGY: Sustain and grow the state's efforts in digital equity

AGE+ is ready to build collaborative efforts, continue increasing local capacity (it's in our mission!), and grow the state's digital equity impact across generations.

## 6. Conclusion

In summary, we are enthusiastic about the potential opportunities on behalf of older adults and their support networks in Oregon, particularly in our rural communities the Digital Equity Plan suggests is possible. AGE+ is ready to partner and engage in meaningful work. Thank you.

## 7. Appendices

No response.

### Written Responses and Actions Taken by State in Response

Comments considered, and no action required. OBO appreciates the support for the Plan's contents regarding older adults. OBO may consider this comment in future stages of the program, specifically the request to be a partner for Digital Equity efforts in Oregon. This consideration will not occur at the Plan stage but may occur in the implementation stage of the Plan.

## **Commenter 21**

### 1. Executive Summary

No response.

### 2. Introduction and Vision for Digital Equity

No response.

### 3. Current State of Digital Equity: Barriers and Assets

In the State Library's previously submitted comments on section 3 of the plan, I neglected to include a link to the Public Library Statistical report for 2022-23 data set. I am including that link in this submission.

Section 3.1

Assets survey

As currently written, the plan's asset list highlights a sample of the library services offered across the state and lists just a subset of responses from libraries from Broadband Office's survey of community anchor institutions. To accurately describe the full network of free public internet access

in Oregon, we believe that this section of the plan should provide a fuller summary of the internet access and services libraries provide.

All legally-established public libraries in Oregon must meet minimum conditions set by the State Library of Oregon in OAR 543-010-0036. Among these conditions are the requirement to offer at least one free public computer with internet access and wireless internet access to the public. With these requirements in place, we can confirm that 216 neighborhoods and communities across the state have at least one access point for free Internet access, with wireless access available 24/7 at two-thirds of library facilities and into the evening for nearly all the remaining locations. In many cases, a public library branch may be the only nearby source of free Internet access in a community, especially in rural areas. Those libraries also are the most likely to have inadequate broadband speeds themselves.

Each year, the State Library conducts the Public Library Statistical survey to confirm libraries' continued compliance with minimum conditions as well as gather other types of data on library operations. The State Library is happy to offer data from the latest Public Library Statistical report (from 2022-23) to help develop a more complete picture of public internet access across the state. We offer the attached data from the latest survey to help update the plan accordingly.

Among the relevant data is that in 2022-23, public computers in libraries were used at least one million times, and there were over 8 million Wi-Fi sessions.

Most of Oregon's libraries, including those in academic institutions and school districts, provide some level of internet connectivity and computing devices to the communities they serve. A subset of those libraries may also loan devices, including Wi-Fi hotspots. What is unique about libraries in comparison to other community anchor institutions is the level of support provided to community users of these services. Most libraries provide at least informal assistance for those seeking digital access, including technical assistance in using devices, obtaining internet access, and building digital skills. Some provide more structured training through digital skills workshops or classes in an in-person or asynchronous setting. We appreciate the Broadband Office's efforts to assess the state's ecosystem supporting digital equity and the recognition of Oregon libraries as a key asset in that ecosystem. We look forward to continued opportunities to share data, both quantitative and qualitative, as well as continuing to explore ways to share expertise and communication networks to help grow and strengthen digital equity services in Oregon.

#### 4. Collaboration and Stakeholder Engagement

No response.

#### 5. Implementation

No response.

#### 6. Conclusion

No response.

## 7. Appendices

No response.

[The above is an addendum to Commenter 21, provided here (for completeness' sake)and as Commenter 26 (as it was submitted separately); below is the original comment by Commenter 21]

### 1. Executive Summary

No response.

### 2. Introduction and Vision for Digital Equity

No Response.

Section 2, Table 2

Section 2.1.2

We would like to draw attention to the role of libraries in assisting with education as well as civic and social engagement outcomes. Librarians and library staff in K-12 and higher education institutions actively contribute to literacy training in those institutions as well as skill building for media literacy and navigating in the digital world safely. Also, the State Library's LSTA Five-Year Plan 2023-2027 articulates educational goals to advance information literacy and education through libraries. We believe that librarians can play a productive role in strategic planning to address digital equity needs in both formal and informal educational settings.

Section 2.2

We appreciate the outreach that the Broadband Office undertook to identify barriers of covered populations to digital equity in Oregon and believe that the plan articulates these barriers well. We did see, however, some information gaps where engagement activities did not generate adequate data to build robust strategies for addressing some of these barriers. We strongly believe that strategies to successfully address barriers to digital equity should be community-driven, with solutions that resonate with the targeted groups. For example, the broad strategy to increase enrollment in the Affordable Connectivity Program does not necessarily address needs for those that struggle to access government assistance programs, have low literacy skills or language barriers. Digital navigators may be a more effective strategy for meeting individual needs, as they can evaluate barriers and investigate potential solutions for an individual to access connectivity or a device. Libraries, workforce development organizations, public health agencies, and other community anchor institutions often struggle with similar challenges in reaching and engaging many of the covered population groups. Building trust with covered population groups takes time and needs a long-term investment in relationship-building. We believe the Broadband Office could do more to convene local meetings of agencies, groups, and organizations that have pre-existing relationships with these populations to share anecdotal information where data has not been able to be gathered. These meetings could also be used to generate strategies for creating more meaningful

and targeted engagement where these groups do not already collaborate. Organizations working together could leverage the time-consuming work of building community-based solutions to these difficult digital equity challenges. We recognize that there is a large amount of work involved with convening and building coalitions at the local level. We believe more staff at the Broadband Office are needed to successfully accomplish the outreach and engagement work needed to fill information gaps. The State Library and other state agencies and organizations are also available to assist with these a convening staff are also willing to assist with outreach efforts when possible.

### Section 3.1

#### Assets survey

As currently written, the plan's asset list highlights a sample of the library services offered across the state and lists just a subset of responses from libraries from Broadband Office's survey of community anchor institutions. To accurately describe the full network of free public internet access in Oregon, we believe that this section of the plan should provide a fuller summary of the internet access and services libraries provide.

All legally established public libraries in Oregon must meet minimum conditions set by the State Library of Oregon in OAR 543-010-0036. Among these conditions are the requirement to offer at least one free public computer with internet access and wireless internet access to the public. With these requirements in place, we can confirm that 216 neighborhoods and communities across the state have at least one access point for free Internet access, with wireless access available 24/7 at two-thirds of library facilities and into the evening for nearly all the remaining locations. In many cases, a public library branch may be the only nearby source of free Internet access in a community, especially in rural areas. Those libraries also are the most likely to have inadequate broadband speeds themselves.

Each year, the State Library conducts the Public Library Statistical survey to confirm libraries' continued compliance with minimum conditions as well as gather other types of data on library operations.

The State Library is happy to offer data from the latest Public Library Statistical report (from 2022-23) to help develop a more complete picture of public internet access across the state. We offer the attached data from the latest survey to help update the plan accordingly. Among the relevant data is that in 2022-23, public computers in libraries were used at least one million times, and there were over 8 million Wi-Fi sessions. Most of Oregon's libraries, including those in academic institutions and school districts, provide some level of internet connectivity and computing devices to the communities they serve. A subset of those libraries may also loan devices, including Wi-Fi hotspots. What is unique about libraries in comparison to other community anchor institutions is the level of support provided to community users of these services. Most libraries provide at least informal assistance for those seeking digital access, including technical assistance in using devices, obtaining internet access, and building digital skills. Some provide more structured training through digital skills workshops or classes in an in-person or asynchronous setting. We appreciate the

Broadband Office's efforts to assess the state's ecosystem supporting digital equity and the recognition of Oregon libraries as a key asset in that ecosystem. We look forward to continued opportunities to share data, both quantitative and qualitative, as well as continuing to explore ways to share expertise and communication networks to help grow and strengthen digital equity services in Oregon.

## 5. Implementation

Section 5 We are pleased to see the inclusion of libraries in planned strategies and activities to address the barriers to digital inclusion that covered populations face in Oregon. We believe that libraries are well positioned to assist with digital skills development for most of the populations targeted in this plan. In our review of the plan, we note that libraries are specifically mentioned in strategies to offer training at the local level regarding online safety and privacy for persons with disabilities and with English as a second language (5.1.3.2) yet are not mentioned as potential organizations that could contribute to the broader strategy of digital literacy skills development in 5.1.3.1. Libraries currently offer a low barrier entry point for a broad range of individuals seeking assistance in gaining digital access, technical support in using devices, and basic digital literacy skills. We would like to see the plan recognize the broad reach of institutions like libraries, rather than assume interest in working with a narrowed range of covered population groups or within focused areas of digital skills needs. Any strategic initiatives and activities that propose to further develop digital literacy skills across the range of covered populations should be open to all institutions and organizations that currently operate in this environment. Also, there are significant challenges to developing services that specifically meet needs of persons with disabilities and individuals without English language proficiency, including meeting accessibility requirements and access to multi-lingual instruction tools and instructors. These targeted services require resources and staffing levels that many libraries in Oregon would be challenged to meet. Grant funding can assist libraries in developing services and programs, yet there may be opportunities to leverage ideas and resources among different types of organizations if partnerships were prioritized in grant-funded programs. While grant funding will be helpful to implement more robust digital literacy skills development programs across Oregon, there is also a great need for state-level coordination or development of digital skills curriculum, instructional standards, and best practices for organizations working with covered populations. Libraries and other organizations could move more quickly if they had access to a vetted digital literacy curriculum tool and standards to implement their programs. State-level support of standard set tools such as Northstar Digital Literacy would also assist with consistent measurement of program outcomes. Northstar also offers a credentialing system for learners that could be used to recognize skills development with potential employers. State-level coordination, licensing, and access to tools like Northstar would be very beneficial to organizations who are seeking to develop digital literacy training programs but have limited resources to research and evaluate the growing number of tools available.

### Other

As another state agency that administers a federal pass-through grant program for all sizes of libraries, the State Library staff advises that the Broadband Office not underestimate the amount of

technical assistance required for small agencies and organizations to successfully apply for grants, provide necessary reporting, and comply with grant requirements. To assure equitable access to agencies and organizations in areas with smaller population and limited staff capacity, grant application and administration processes are often a barrier to obtaining resources for digital equity services. The State Library staff are happy to offer our advice, lessons learned, and assistance to the Broadband Office staff as grant programs around digital equity are developed. We also observe that the staffing level of the Broadband Office will need to grow to successfully implement many of the goals around building local networks, including convening meetings, cultivating relationships, and data tracking at the state-level. Even if some of this work is contracted to other entities, staff at the state level will need to be in place to monitor this work. As currently written, we do not see recognition of this need explicitly mentioned and believe it would be helpful to document those needs within this plan. Finally, we hope that the final version of this plan will be edited to eliminate redundancies, define, and consistently use specific terminology such as collaborators, partners, and stakeholders, and to improve clarity and readability.

#### Written Responses and Actions Taken by State in Response

Some comments incorporated into document. OBO included suggested references to the Public Library Statistical survey on pp. 85-86. Other comments are considered and appreciated with no further action taken but may be considered in later stages of the Plan, including partnering with the commenter and other libraries in implementation of the plan.

#### **Commenter 22**

##### 1. Executive Summary

Very nice summarization of OBO's Digital Equity vision, goals, and objectives! Outstanding work!

##### 2. Introduction and Vision for Digital Equity

Upon review of Table 2: Digital equity alignment with state outcomes it is clear OBO and partner agencies are making an extraordinary effort developing and implementing goals and priorities that foster digital equity. In collaboration with agency partners what strategies will OBO utilize to promote government agency resources and services to be inclusive of the top languages spoken in the State? These include Spanish (353,257), Chinese (30,809), Vietnamese (27,353), Russian (22,754)

<https://acutrans.com/top-10-languages-of-oregon/> retrieved December 13, 2023.

##### 3. Current State of Digital Equity: Barriers and Assets

Today's Communications Daily reports as follows on the Bureau of Labor Statistics? (BLS) November 2023 CPI results: Residential phone service rose 4.7% year over year, while cable, satellite and livestreaming TV service cost were up 4.3%. Wireless phone service costs declined 2.8% year over year, but internet service was up 3.7% [ . . . ] BLS said [November] prices for all items rose 3.1% year over year before seasonal adjustment. With the cost of communications going up, in particular internet, how can OBO and key partners persuade ISPs serving in metro locations that are considered served



to lower their cost to a rate that is inclusive of covered populations. Comcast tends to dominate the metro market deterring smaller ISP's who want to provide affordable rates from competing. The average cost for Comcast service effective January 1, 2024, that includes adequate speeds ranges from \$83 - \$93 monthly. Affordable Connectivity Program (ACP) is an amazing resource bridging affordability to many nationally, however, given the ever-increasing annual rates for many in Oregon a \$30 reduction is still not affordable.

#### 4. Collaboration and Stakeholder Engagement

The agency asset inventory, equity program inventory, and the workforce development opportunities spotlight current and future efforts. Furthermore, it serves as a significant resource to stakeholders and partners that are interested in collaborating on legislative efforts, exchanging information, and resources, expanding collective reach. I am curious with support from partners if a potential long-term goal of OBO could be to develop a statewide consortium to encourage and strengthen partnership opportunities. As a key partner, the City of Eugene, Oregon is committed to providing OBO with the deliverables and outcomes from the Digital Equity Panel which concludes in April 2024. We are hopeful this will complement the information collected as part of the Lived Experience Expert Focus Group outreach initiative.

#### 5. Implementation

Per the NDIA, nationally it is commonplace for state based Digital Equity Plans to rely on extension to the Affordable Connectivity Program (ACP). Lifeline is a permanent program; however, it only allows one benefit per household. OBO acknowledges "to sustain these initiatives depends on the availability of resources." If ACP is not extended and given the benefits under the Lifeline Program are limited has OBO explored strategies and/or potential alternatives to bridge broadband and device affordability for covered populations? How can key partners support OBO in this effort?"

#### 6. Conclusion

No comment.

#### 7. Appendices

No comment.

#### Written Responses and Actions Taken by State in Response

Comments considered and some incorporated into the plan, some under review for future stages of the program, and some no action is required. Reference to the ACP expiry was added. Requests to continue to partner and provide resources to OBO and questions about accessibility and translation are under review for follow-up in future stages of the program as further materials and programs are developed. OBO appreciates the support of the commenter and no action is required for the expressions of support.

#### **Commenter 23**

## 1. Executive Summary

### General comments

On behalf of the Oregon Library Association's subcommittee on Broadband, we want to thank the Broadband Office for the heavy lift that went into creating the Digital Equity Plan on a tight timeline. We recognize that a lot of research, conversations, and engagement went into creating this plan. Libraries look forward to working with constituents and partners across the state to achieve digital equity in our communities. The comments collected here represent thoughtful feedback from the subcommittee as a whole, which represents libraries of different sizes and different regions of the state.

It is great to see that the Oregon Broadband Office is putting parameters and guidelines in place so that Oregon is prepared to receive and distribute the federal funding coming soon. As the specific grant funding opportunities are identified, we want to point out that libraries already work with The State Library of Oregon to apply for state funds for the Ready to Read grant and federal funds available through the Library Services and Technology Act (LSTA). Their grant portal is user-friendly, and they have staff who are available to provide technical assistance as needed. We encourage the Broadband Office to collaborate with the State Library to best leverage their grant infrastructure to assist with the administration of Digital Equity grants to libraries.

## 2. Introduction and Vision for Digital Equity

Section 2, Table 2 We suggest adding the State Library of Oregon to the Education section as well—both school and public libraries offer training and skills-building opportunities on computers, technology, digital literacy, and media literacy. Public libraries also provide space and resources for families who choose to homeschool their children or otherwise opt out of the public education system.

In section 2.2.2.1, we want to note that, while the focus for the critical barrier: lack of broadband availability, is focused on households, Community Anchor Institutions such as public libraries need to be brought up to speed as well, particularly as a bridge for households that do not meet the minimum definition for high-speed internet. Many libraries across the state currently lend Wi-Fi hotspots and other devices to help connect households that lack direct service. The State Library of Oregon can provide data on the current connection speeds at all public libraries.

## 3. Current State of Digital Equity: Barriers and Assets

No comment.

## 4. Collaboration and Stakeholder Engagement

No comment.

## 5. Implementation

Section 5: Implementation Just a general note that terminology in this section is inconsistent. Specifically noted were the terms collaborators, stakeholders, and partners. We suggest defining what is meant by each term, and that it be applied consistently.

Under 5.1.2.1, for the activity “fund library-based ACP enrollment drives,” we recommend adding “and other community partners,” as there may be other community anchor institutions who could help promote such drives.

There were a couple places where the proposed activity seemed a little too vague – 5.1.2.3, for example, the activity is “provide information.” Another activity in that section, “to fund community anchor-based tech support to provide language-inclusive technical support,” is that to address the needs of one of the specific Covered Populations? We’re not sure what is intended by “Language-inclusive.” 5.1.3 – Critical barrier: Members of covered populations need support to develop digital literacy skills. This is an area where we believe that both schools and libraries, as community anchor institutions, will be invaluable in this plan. Many libraries already provide this kind of training, and we recommend that libraries be included in the activity in 5.1.3.1 to “fund nonprofit and agency skills centers.” For the activity to fund library-based training in 5.1.3.2 and 5.1.3.4, we want to note that there are several agencies that provide curriculum and resources for digital literacy training, including the Public Library Association and American Library Association, Goodwill, and the Northstar Digital Literacy Initiative. How is the Oregon Broadband Office going to gather the experts, test curricula, and develop standards? The activity listed under 5.1.3.3 focuses on accessibility guidance and website design, which doesn’t seem to match the strategy “to promote information about the availability of digital literacy programming.”

## 6. Conclusion

No response.

## 7. Appendices

No response.

## Written Responses and Actions Taken by State in Response

Comments considered, with some incorporated and some under review for future stages of the program. Language was updated in 5.1.2.1 to include other community partners. The availability of the commenter and other libraries to assist with digital equity is appreciated and will be reviewed in future stages of the program. OBO thanks the commenter for the expressions of support.

## **Commenter 24**

### 1. Executive Summary

Comcast Cable Communications, LLC, on behalf of its subsidiaries (together, “Comcast”), submits this letter in response to the State of Oregon’s Draft Digital Equity Plan (“Draft Plan,” or “Plan”). Comcast thanks the Oregon Broadband Office (“OBO”) for seeking stakeholder comment and commends it for

an exemplary start to achieving digital connectivity for all Oregon residents and communities. Supporting our local communities has been core to Comcast's DNA and given Comcast's long and proven track record of success expanding broadband access and adoption in Oregon, Comcast stands ready to partner with the State in its digital connectivity efforts through various existing programs. Comcast offers these comments to the Draft Plan in the spirit of longstanding partnership and looks forward to continuing this critical work to close Oregon's digital divide. Comcast strongly supports broadband deployment and adoption initiatives in Oregon and stands ready to further support the State's efforts. Comcast continues to invest heavily in the State, with investments during the past three years totaling \$1.2 billion, including \$534 million toward technology and infrastructure improvements like Internet network upgrades. More than 1.2 million Oregon homes and businesses have access to Xfinity Internet and Comcast Business products and services, including speeds of 1.2 gigabits per second or more. Over the past three years, Comcast has added and upgraded nearly 10,000 miles of our network to connect homes and businesses and is preparing for the rollout of our next generation 10G network across the United States, including Oregon. For example, Comcast invested \$15 million to deliver its full suite of broadband products and services to homes and businesses in Hubbard and Woodburn. In addition, Comcast is continuing its commitment to expansion efforts with planned network investments to include Estacada, Mt. Angel, and Silverton. This growth is all part of the more than \$20 billion investment Comcast made nationwide from 2018 to 2022 in our networks, which now cover more than 60 million U.S. homes and businesses.

## 2. Introduction and Vision for Digital Equity

No comment.

## 3. Current State of Digital Equity: Barriers and Assets

**Barriers to Broadband Adoption.** Both longitudinal research and empirical evidence demonstrate that the primary barriers to broadband adoption extend beyond affordability and include perceived relevance and digital readiness, among others:

**Perceived Relevance.** A significant population of Americans who have not yet adopted home broadband do not recognize the relevance of such connectivity. The National Urban League ("NUL") Lewis Latimer Plan explains that perceived relevance may be tied to a lack of awareness and understanding of the Internet's uses and capabilities, in addition to the necessary skills needed to use it. NTIA's Internet Use Survey data showed that 58 percent of the 21 million offline households indicated no interest in or need to be online. Moreover, a 2021 Pew Research Center survey found that 71 percent of non-broadband users say that they would not be interested in an at-home broadband connection. These numbers help demonstrate why education for and outreach to the unconnected and newly connected regarding broadband and its associated benefits is imperative for closing the digital divide.

**Digital Readiness.** Digital readiness is "the sum of the technical skills and cognitive skills people employ to use computers to retrieve information, interpret what they find, and judge the quality of that information," and "the ability to communicate and collaborate using the Internet." Digital

readiness challenges impact different parts of people's lives, including the use of developing technologies, online educational resources, and telehealth capabilities. While the U.S. workforce has a high demand for digital skills, many workers, especially workers of color and those without higher education, lack these skills.

**Other Adoption Barriers.** Other adoption barriers pertain to information and language, distrust, and structural issues tied to poverty. Information and language barriers may pertain to individuals determining program eligibility, parsing an application process, and setting up devices and services. Addressing language barriers is important for Comcast, which is why IE call center agents can help IE applicants in more than 240 languages, in addition to American Sign Language. Distrust may pertain to biases against free services and government programs, as well as uncertainty about additional costs and privacy concerns. Structural barriers may include complicated housing situations, such as recent moves or plans to relocate. Comcast recognizes that just like there is no single solution to addressing broadband adoption, the underlying challenges are also not monolithic.

**Bridging the Adoption Gap.** Empirical evidence demonstrates that community outreach and engagement—by digital navigators, community-based organizations, community anchor institutions, faith-based leaders, and other trusted voices—is vital to overcoming complex adoption barriers.

To this end, Comcast has been investing for more than a decade to expand digital equity and inclusion in Oregon, including through community outreach and engagement efforts. Project UP is our comprehensive initiative to advance digital equity and help build a future of unlimited possibilities. Backed by a \$1 billion commitment to reach tens of millions of people, Project UP encompasses the programs and community partnerships across Comcast, NBCUniversal, and Sky that connect people to the Internet, advance economic mobility, and open doors for the next generation of innovators, entrepreneurs, storytellers, and creators.

Additionally, Comcast has Internet Essentials ("IE"), the largest and most successful broadband adoption initiative in the industry, connecting more than 10 million Americans to broadband Internet at home since launching in 2011. IE is designed to be a wrap-around solution that addresses the main barriers to broadband adoption. IE provides subscribers with access to broadband service at speeds of 50/10 Mbps for \$9.95 per month or 100/20 Mbps for \$29.95 per month (for IE Plus), access to millions of Xfinity Wi-Fi hotspots, a wireless gateway at no additional cost, the ability to obtain low-cost or no-cost computers, unlimited data, and free digital skills training. Notably, while the IE price of \$9.95 per month has remained steady since the program launched, speeds for that service have increased seven times, including more than doubling during the early days of the pandemic. Recognizing the critical need for Internet-ready devices in addition to a broadband connection, Comcast has distributed more than 200,000 free and subsidized laptops. The IE program has been designed to eliminate barriers for financially constrained households and help more families benefit from home Internet access. To become an IE customer, there is no credit check required, no term contract requirement, and customers who do not have a social security number (or prefer not to provide their social security number) may provide other forms of identification to apply. Since 2011, 412,000 low-income Oregon residents in 103,000 homes have connected to the Internet through IE. The top cities

for IE connections include Portland (160,000 residents), Salem (52,000 residents), Eugene (31,000 residents), Beaverton (20,000 residents), and Gresham (16,000 residents). Comcast/Xfinity proudly participates in the Affordable Connectivity Program's ("ACP") service discount with all tiers of Internet service the company offers, including two tiers (IE and IE Plus) that are fully covered by the \$30 ACP benefit. Beyond connectivity, we work with tens of thousands of partners across the country, including nonprofits and city leaders, to support digital skills training to improve economic mobility. We offer free training through our IE Learning Center: Internet Essentials, Free Internet from Xfinity (xfinity.com), which features hundreds of modules on Internet basics, online safety, digital skills for everyday life, and advanced skill-building. The content is curated from partners like Common Sense Media, Goodwill, CNBC, Women in Sports Technology, and more. In addition, Comcast has partnered with several experts, including ConnectSafely, Older Adults Technology Services ("OATS"), and Council for Opportunity in Education, to develop printed digital skills curricula that are distributed to thousands of community partners free of cost. These include several online safety toolkits for seniors and students, discussion guides for parents, and our Jurassic World Science, Technology, Engineering, Arts, and Math ("STEAM") curricula. Comcast has long invested in nonprofit partners focused on digital skills via the Comcast NBCUniversal Foundation to help provide skills-building, job training, and other career development offerings for the full spectrum of learners, from elementary, middle and high school students to adults. Locally, these organizations include Self Enhancement, Inc., which supports STEAM programming and development of digital skills by using digital media and product-creation tools through The Maker Space for racially-diverse youth and young adults; Boys & Girls Clubs throughout the Portland Metro Area, Salem, Albany, and Emerald Valley, which provide K-12 students digital skills training and access to tech; Girls, Inc. of the Pacific NW. to provide internships, exploration and training in digital skills such as coding and digital design through the STEM-focused "Eureka" program for girls and gender-expansive individuals; and Adelante Mujeres to support the Chica's STEM camp and after-school Digital Skills Workforce sessions centered on Latine high-school students. According to a recent study, "Wired and Hired: Employment Effects of Subsidized Broadband Internet for low-Income Americans," published in the American Economic Journal, IE customers make an average of \$1,385 more per year and are 8 percent more likely to be employed than those eligible for but not connected through IE.

#### 4. Collaboration and Stakeholder Engagement

Project UP encompasses a number of longstanding and new initiatives in collaboration with local communities, including:

**Digital Navigator Programs.** Digital navigators are a powerful and proven tool to aid broadband adoption. Digital navigators are typically hired volunteers or staff from trusted community institutions—such as libraries, social or public service agencies, and community-based organizations—who can assist users in overcoming barriers to adoption in a tailored manner.

Digital navigators can address the relevance of broadband by demonstrating benefits like access to information, telehealth capabilities, and introduction to upskilling programs that serve as pathways to education, employment, and more. A recent Boston Consulting Group ("BCG") study supported by Comcast surveyed 1,500 people who have participated in programs with digital navigators and found

that 65 percent of respondents were able to obtain Internet connectivity or a connected device, and 85 percent of respondents now use the Internet more frequently. The same research demonstrates that the benefits of digital navigators extend beyond individuals obtaining Internet access—almost 50 percent of respondents obtained better health care; more than 40 percent of respondents received support for essentials like food, rent, and housing; and more than one in three respondents found a new job or secured higher incomes. Given the importance of digital navigators, in 2022 alone, Comcast invested \$11.4 million in more than 225 nonprofits to support digital navigator programs across our service areas. Comcast currently partners with organizations in Oregon to create and support digital navigator programs, including The Salvation Army Veterans and Family Center, providing laptops, funding for an updated, accessible computer lab, and digital navigator staffing; Free Geek, one of the anchor institutions in Oregon, supporting digital navigator staffing, offering device resources, and providing funding and creative supports to help produce free digital skills webinars in both English and Spanish; and the Immigrant and Refugee Community Organization (“IRCO”), providing support for bilingual, bicultural digital navigator staffing and digital devices as part of the “Getting Started” wraparound services program for newly arrived families. Additionally, investing in digital navigators will provide individuals from all racial/ethnic and educational backgrounds with the opportunity to learn more from members of their own communities about how broadband-connected technology can be relevant to their lives. Research from BCG revealed several other key findings, including that (1) trust and relationship-building are key to reaching disconnected communities; (2) familiar outreach channels are most effective at getting learners in the door; (3) one-on-one attention is often most effective, especially for learning fundamental skills; (4) resource-sharing and local coordination can minimize burdens on individual digital navigators; and (5) digital navigators are the trusted voice on the ground for understanding community needs. These solutions address the main barriers to broadband adoption, as described above, and increase digital opportunity for all Oregonians.

**Digital Skills Programs.** As digital navigators play a critical role in helping members of Covered Populations overcome adoption barriers, a related component of successful digital adoption efforts is programming to help people develop digital skills once they are connected. Comcast works with organizations that provide skills building, job training, and other career development offerings for the full spectrum of learners, from high school students to adults.

A February 2023 report from the National Skills Coalition and Federal Reserve Bank of Atlanta indicated that 92 percent of jobs available today require digital skills, yet almost one-third of U.S. workers lack opportunities to build these skills. Jobs that require even one digital skill can earn an average of 23 percent more than jobs requiring no digital skills, which translates to an increase of \$8,000 in annual income. Developing these digital skills is not only a value add for individual workers, especially for workers of color, but a benefit to the larger U.S. economy. Comcast supports digital exploration initiatives that teach individuals the basic skills needed to increase competency and confidence in using technology, spark interest in technology careers, and prepare individuals for the jobs of the future through early exposure to technology fields, in-school and after-school programming, technology and computer science programs, and soft skills training. Comcast supports Dress for Success Oregon, which provides coaching and training for women to learn job

skills and build interest and awareness in new technical skills like coding. Comcast also partners with Hacienda Community Development Corporation (“CDC”), providing support for culturally relevant digital skills-building workshops and one-on-one support for the Empresarios program, helping small business entrepreneurs develop and enhance their digital skills to generate business growth.

Lift Zones. Comcast, together with nonprofit partners and city leaders, has created more than 1,250 Lift Zones in community centers nationwide, including 22 Lift Zones in Oregon. In April 2023, Comcast, in partnership with the Boys & Girls Club of Salem, Marion, and Polk Counties, opened a new Lift Zone at the Woodburn Teen Center that will offer immersive tech and STEM-related activities. Along with free Internet connectivity, Lift Zones offer hundreds of hours of free educational and digital skills content. Not only are 50 percent of low-income households in major Comcast markets within walking distance of a Lift Zone, 40 percent of users report that they would not have had Internet access without the Lift Zone, and 58 percent report that the Lift Zone reduces stress for studying, working remotely, and managing online tasks.

Internet Essentials Partnership Program. In addition to IE, the Internet Essentials Partnership Program (“IEPP”) is designed to help accelerate Internet adoption and provides the opportunity for school districts and other organizations to fund and quickly connect large numbers of students and families to broadband access. Several educational institutions including Portland Community College, Portland Public Schools, Salem-Keizer Public Schools, Eugene School District, Centennial School District, and Hillsboro School District, as well as community-based organizations such as Worksystems, Inc. and Clackamas Workforce Partnership, have been partners.

ACP support. Among other significant investments in affordability initiatives, Comcast is committed to promoting ACP. Comcast has translated ACP information into over 30 different languages that we provide at no cost to our community partners for the populations that they serve. Comcast has supported and/or co-hosted nearly 900 ACP sign-up events nationwide since October 2022, resulting in thousands of ACP enrollments. These events have taken place at senior centers, back-to-school fairs, public housing facilities, festivals, fiestas, and in parks.

In Oregon, Comcast, in partnership with LSG, provided support at over 185 grassroots events throughout 2023 to provide ACP information and enrollment assistance, connecting over 840 people to this important benefit. With partners such as IRCO and Community Services Network, Comcast participated in more than 15 community resource fairs that helped inform and enroll households in ACP, along with access to food pantries and in-language support. In partnership with Schoolhouse Supplies in Portland and Project Hope in Eugene, Comcast provided over 11,000 bi-lingual ACP/IE flyers in new backpacks filled with school supplies for under-resourced students in Multnomah, Washington, and Lane Counties. In addition, Comcast partnered with the Portland Timbers mascot, Timber Joey, to produce and air an ACP public service announcement in both English and Spanish on television.

Comcast RISE. Through Comcast’s Representation, Investment, Strength, and Empowerment (“RISE”) program, we awarded more than \$110 million in monetary and in-kind support to 13,000 small



businesses owned by women and people of color hard hit by the pandemic in more than 1,300 cities across 38 states. In August 2023, Comcast announced that 100 small businesses in Multnomah County would receive comprehensive grant packages, which consist of consultation services; educational resources; a \$5,000 monetary grant; creative production and media support, including a 30-second TV commercial, media strategy consultation, and 180-day media placement schedule; and a technology makeover involving computer equipment and Internet, voice, and cybersecurity services.

**Other Initiatives: Accessibility.** Comcast remains focused on helping members of Covered Populations, including individuals with disabilities. In addition to accessible technology innovations such as the X1 Voice Remote and the Xfinity Adaptive Web Remote, Comcast supports several partner organizations to promote digital equity for individuals with disabilities. For example, we partner with Adaptive Sports NW to help ensure that athletes living with disabilities are aware of and informed of the ACP program and assisted with enrollment support. And through its partnership with Comcast, The Arc of the United States established more Tech Coaching Centers to foster digital and advocacy skills in people with intellectual and developmental disabilities, including a fully accessible center at The Arc Lane County, which is also a Comcast Lift Zone. In addition, the Comcast NBCUniversal Foundation recently awarded a \$1.3 million two-year grant to Easterseals to expand digital literacy training for young adults with disabilities enrolled in Easterseals employment programs, including Easterseals Oregon. Students with intellectual and/or developmental disabilities ages 16 to 24 will be trained on how to navigate the Internet, communicate through email, create PowerPoint presentations, prepare resumes, use assistive technology, and more.

## 5. Implementation

No comment.

## 6. Conclusion

Comcast encourages Oregon to focus on digital equity efforts that will be the most impactful, including digital navigators, digital skills training programs, and partnerships. Comcast believes that partnerships are paramount to advancing digital equity efforts because closing the digital divide starts at the local level by meeting people where they are and responding to their specific needs. Communities win when the private sector, government, and community organizations join forces to achieve shared goals. To that end, Oregon should create an inclusive framework that allows many organizations to participate directly in grant programs and fosters such participation through partnerships and coalitions. Comcast's more than a decade of dedicated digital adoption and community engagement efforts demonstrate that the private sector has been a critical partner in facilitating digital equity efforts to date. Oregon's Digital Equity Act implementation should seek to amplify and scale the efforts of these existing successful relationships and ensure that the private sector continues to be a force multiplier for public funding.

Thank you again for the chance to offer our thoughts on the State's Draft Plan. Comcast looks forward to continuing to work with OBO as it refines and implements its Digital Equity Plan.

## 7. Appendices

No comment.

### Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the expression of support and inclusion of general information about digital equity and no action is required for those comments. For descriptions of the commenter's programs and assets, OBO will review the comment in future stages of the program if needed.

#### **Commenter 25**

##### 1. Executive Summary

I am a 23-year resident of Southern Oregon and a sensitive who has been using every mitigation I can find to allow me to live in my little home in Phoenix without headaches, upset stomachs and autoimmune issues. I do not use wireless devices in my home, except my cell phone. My computer is hardwired broadband. I oppose deployment of wireless towers in my city and neighborhood for health and fire risk reasons.

##### 2. Introduction and Vision for Digital Equity

No response.

##### 3. Current State of Digital Equity: Barriers and Assets

No response.

##### 4. Collaboration and Stakeholder Engagement

No response.

##### 5. Implementation

No response.

##### 6. Conclusion

Personal Health Risk and Fire Threat Demand Wired technology, NOT Wireless.

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering

and to those who may soon discover the cause of their suffering- wireless technology. Our pristine forests, desserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon.

We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages.

“Three people died trying to escape the fire,” Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. “Families had to flee into the ocean with their children on their shoulders.”

McCullough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that “present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. This leads to failure and a fire,” McCullough said.

There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom’s for-profit agenda.

## 7. Appendices

No comment.

### Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter’s support for wired technology, particularly fiber, as that support aligns with NTIA’s instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA’s policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan’s goals and maximize broadband’s availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

**Commenter 26; addendum to Commenter 21**

In the State Library's previously submitted comments on section 3 of the plan, I neglected to include a link to the Public Library Statistical report for 2022-23 data set. I am including that link in this submission.

Section 3.1

Assets survey

As currently written, the plan's asset list highlights a sample of the library services offered across the state and lists just a subset of responses from libraries from Broadband Office's survey of community anchor institutions. To accurately describe the full network of free public internet access in Oregon, we believe that this section of the plan should provide a fuller summary of the internet access and services libraries provide.

All legally-established public libraries in Oregon must meet minimum conditions set by the State Library of Oregon in OAR 543-010-0036. Among these conditions are the requirement to offer at least one free public computer with internet access and wireless internet access to the public. With these requirements in place, we can confirm that 216 neighborhoods and communities across the state have at least one access point for free Internet access, with wireless access available 24/7 at two-thirds of library facilities and into the evening for nearly all the remaining locations. In many cases, a public library branch may be the only nearby source of free Internet access in a community, especially in rural areas. Those libraries also are the most likely to have inadequate broadband speeds themselves.

Each year, the State Library conducts the Public Library Statistical survey to confirm libraries' continued compliance with minimum conditions as well as gather other types of data on library operations. The State Library is happy to offer data from the latest Public Library Statistical report (from 2022-23) to help develop a more complete picture of public internet access across the state. We offer the attached data from the latest survey to help update the plan accordingly. Among the relevant data is that in 2022-23, public computers in libraries were used at least one million times, and there were over 8 million Wi-Fi sessions.

Most of Oregon's libraries, including those in academic institutions and school districts, provide some level of internet connectivity and computing devices to the communities they serve. A subset of those libraries may also loan devices, including Wi-Fi hotspots. What is unique about libraries in comparison to other community anchor institutions is the level of support provided to community users of these services. Most libraries provide at least informal assistance for those seeking digital access, including technical assistance in using devices, obtaining internet access, and building digital skills. Some provide more structured training through digital skills workshops or classes in an in-person or asynchronous setting.

We appreciate the Broadband Office's efforts to assess the state's ecosystem supporting digital equity and the recognition of Oregon libraries as a key asset in that ecosystem. We look forward to continued opportunities to share data, both quantitative and qualitative, as well as continuing to explore ways to share expertise and communication networks to help grow and strengthen digital equity services in Oregon.

Written Responses and Actions Taken by State in Response

Comments considered. Response already included above, due to repeated submission of comments. Thank you for the updated comment.

**Commenter 27**

1. Executive Summary

On behalf of Lead for America (LFA) and our American Connection Corps (ACC) program and partners at LISC and Rural LISC, we would like to take this opportunity to thank your office and governor for prioritizing digital inclusion opportunities strategically in your state, particularly in regards to reaching rural and underserved communities and incorporating more boots-on-the-ground approaches through non-profit and community partnerships and Digital Navigator models like the American Connection Corps. We have witnessed firsthand the transformative impact of both the Rural LISC cohort model, American Connection Corps and AmeriCorps on individuals and communities alike. Currently we have two members of the American Connection Corps serving in Oregon. Alexandra Bakie & Christina Berger are serving in Oregon and one of our host sites was highlighted in your plan: Rouge Valley Council of Governments. We applaud the historic investment to enhance digital equity efforts afforded by the Infrastructure Investment and Jobs Act. Implemented strategically, these funds will reduce and eliminate historical, institutional, and structural barriers to technology access and use. We greatly appreciate the NTIA's leadership and comprehensive approach to designing and implementing the State Digital Equity Capacity Grant Program and the Digital Equity Competitive Grant Program, which will significantly increase and improve the direction of resources dedicated to removing systemic barriers and providing equal access to opportunity. The Current draft of the Oregon Digital Opportunity plan effectively prioritizes the needs of rural communities. Specifically on page 7 it highlights that rural communities are a covered population and in that respect, should be prioritized throughout the plan with all other covered populations.

2. Introduction and Vision for Digital Equity

During this section, we appreciate that on pages 14-20 of the current draft, the plan highlights rural communities that are listed in multiple priorities.

3. Current State of Digital Equity: Assets and Barriers

Emphasis on rural communities: We would like to see an expanded focus on rural communities. On page 110 there is not an emphasis on rural community adoption & device adoption. We believe that this is a priority that should be considered & incorporated into the plan.

Housing Authority partnerships: LISC is a nonprofit housing and community organization and certified Community Development Financial Institution (CDFI) with offices in 38 cities nationwide and a rural network encompassing 140 partners serving 49 states and Puerto Rico. LISC's work supports a wide range of activities, including affordable housing, digital inclusion, economic development, building family wealth and incomes, education, community safety, and community health. LISC mobilizes corporate, government, and philanthropic support to provide local community development and business development organizations with loans, grants, equity investments, capacity building, and technical assistance. On page 90-92 the current draft of the plan identifies a broad suite of state agencies that can continue to help raise awareness of ACP among eligible people in Oregon. We appreciate the approach to incorporate partnerships with multiple agencies across the state, and would love to offer an approach based on the American Connection Corps. Our program has been able to successfully build statewide capacity to help increase the reach to unserved and underserved communities. On page 91, the plan does mention the partnership between Tillamook County Creamery Association and the American Connection Corps (ACC) to raise awareness of affordable broadband.

For example, in 2023, Lead for America implemented a groundbreaking public private partnership with the state of Massachusetts and Comcast to provide Digital Navigators to nonprofits and regional planning organizations statewide by placing 15 American Connection Corps members across the state of MA. Read more about this innovative partnership approach to digital navigation here: <https://masstech.org/news/mbi-comcast-partners-to-expand-broadband-adoption>. We would like to see a mention of boots on the ground support such as: volunteers, interns and or Americorps programs such as the American Connection Corps.

#### 4. Collaboration and Stakeholder Engagement

The American Connection Corps' mission is to build a leadership force of moral, dynamic and locally-rooted leaders committed to serving the communities they call home in every corner of this country. ACC commits to building strong communities through service and bridging people together across lines of difference. There is an increasing need for boots-on-the-ground capacity in rural and emerging communities and ACC's model has proven successful in helping to meet this need. Since 2021, ACC has successfully graduated 75 AmeriCorps members, members have hosted over 360+ digital skill-building workshops and community forums and launched 75+ public-private partnerships. As a result of these members' service they have enrolled 6,500+ households into the American Connectivity Program (ACP) Benefits and channeled over \$63,000,000 to local communities.

LISC supports digital inclusion initiatives in rural and urban communities to ensure that all individuals and communities can fully participate in our society and economy. We believe resilient communities necessitate digital inclusion activities that provide affordable, robust broadband

internet options, widely available internet-enabled devices and equipment that meet users' needs, and access to digital literacy training and technical support.

### 5. Implementation

As noted above, ACC & LISC can help to build capacity in rural communities. LISC's Digital Connector program has helped to build the capacity of 55 organizations across 22 states. Part of the ACC model is to support existing organizations on the ground through a train-the-trainer program. This model helps to enhance sustainability & compound the impact in rural communities across the country.

### 6. Conclusion

ACC & LISC appreciates the opportunity to provide these comments to Oregon and looks forward to continued engagement.

### 7. Appendices

No comment.

### Written Responses and Actions Taken by State in Response

Comments considered, and some will be reviewed for follow-up in future stages of the program. The commenter's expressions of support are appreciated and no action is required. The description of potential assets and programs may be reviewed for follow-up in the implementation portion of the program.

### **Commenter 28**

#### 1. Executive Summary

No response.

#### 2. Introduction and Vision for Digital Equity

No response.

#### 3. Current State of Digital Equity: Barriers and Assets

No response.

#### 4. Collaboration and Stakeholder Engagement

I have added my brief commentary on this topic as well as pasted the form letter below from OR-CHD (Oregon Chapter of Children's Health Defense) since it is well written and also accurately reflects my views.

I personally have EMF sensitivities and have had substantial health improvements moving to a wired Internet connection. Without fail, I still encounter health issues when I enter areas of limited to high EMFs.

I will reference Arther Furstenberg's book, "The Invisible Rainbow," where he does a thorough job documenting the history and provides references in one place. We know from the early days of electricity with Ampere, monestaries, etc., that low voltages (< 1 V) from metal plates placed together can impact the growth and quality of health of plants. We know Shuman resonances, low freq earth resonances, can alter mood and disposition of individuals. We know humans when looking at screens can transition from alpha-brain waves to delta in under 30 seconds. I also know from my prior academic life that electromagnetic effects can be used to detect cancer cells and gene expression, this work easily dates back to the early 2000s. We know there are militarized EMF devices to help with crowd control due to the known ability to impact humans and the military, DARPA, etc. continue to spend billions of dollars researching these phenomena and inventing new technologies. There are recent peer reviewed studies showing that all of the symptoms of the alleged SARS-COV2 virus are synonymous to 5G, see Beverly Rubik's, Ph.D. work.

The Oregonians for Medical Freedom documented in 2020, among many other entities, that over ½ of American and Oregonian children have chronic health conditions. These numbers show a dramatic increase from several decades ago. During this period the increase in wireless technology has become more ubiquitous in 3G, 4G and now 5G as well as wireless devices in houses and schools. We are immersed in these fields and there are no easy escape. Firstenberg's book documents solid history that many of the current symptoms plaguing society and correlated to the health issues children are now experiencing. EMF radiation does not impact all equally which leads to confusion of symptoms between people. While correlation does not prove causality, it also does not prove lack of causality.

The prior studies have not proved lack of harm which provides an excellent opportunity for Oregon to take the lead showing this technology demonstrates no harm. This technology is untraceable without expensive meters.

End Matthew Sztelle, Ph.D.'s own comment, start OR-CHD's commentary.

Personal Health Risk and Fire Threat Demand Wired technology, NOT Wireless.

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering-wireless technology. Our pristine forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening



macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon. We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages. “Three people died trying to escape the fire,” Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. “Families had to flee into the ocean with their children on their shoulders.” McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that “present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. “This leads to failure and a fire,” McCollough said. There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom’s for-profit agenda.

#### 5. Implementation

No response.

#### 6. Conclusion

No response.

#### 7. Appendices

No response.

#### Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter’s support for wired technology, particularly fiber, as that support aligns with NTIA’s instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA’s policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan’s goals and maximize broadband’s availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

**Commenter 29**

**1. Executive Summary**

In response to the State of Oregon's Digital Equity Plan, the Siletz Indian Tribe acknowledges the State's comprehensive efforts to address the digital needs of communities across the state. The plan demonstrates a commitment to fostering digital inclusion and bridging existing gaps in access and resources.

However, from the perspective of the Siletz Indian Tribe, and recognizing that tribal communities, including ours, often face heightened challenges as some of the most underserved populations, we propose a change to the plan. Specifically, we recommend the inclusion of explicit goals and a clear vision tailored to the unique needs of tribal communities in the Executive Summary. Tribal communities face distinct challenges, including remote locations, limited infrastructure, and cultural considerations. By incorporating explicit goals and a vision for tribal communities within the Digital Equity Plan's Executive Summary, the State can better address these challenges and ensure that the benefits of digital equity initiatives extend to all Oregonians.

We appreciate the opportunity to provide input and look forward to ongoing collaboration to refine the Digital Equity Plan, making it more inclusive and impactful for tribal communities.

**2. Introduction and Vision for Digital Equity**

No comment.

**3. Current State of Digital Equity: Barriers and Assets**

No comment.

**4. Collaboration and Stakeholder Engagement**

No comment.

**5. Implementation**

No comment.

**6. Conclusion**

No comment.

**7. Appendices**

No comment.

**Written Responses and Actions Taken by State in Response**

Comments considered. More language regarding tribal considerations was added as a result of this comment, the comment from Link Oregon, and from the Confederated Tribes of the Umatilla Reservation. OBO appreciates the opportunity to receive feedback from the commenter. Otherwise, no action taken.

**Commenter 30**

**1. Executive Summary**

Please hear and heed my plea to protect Oregon from further EMF intrusion. I love the internet BUT not at the expense of human and environmental health. There are many studies showing adverse effects of exposure to EMF radiation although they are ignored and downplayed by the industry. I also know several people that are highly sensitive to wireless exposure. Please reach the areas that need access to the worldwide web with hard wire fiber optic cable as much as possible. Thank You!!

**2. Introduction and Vision for Digital Equity**

No response.

**3. Current State of Digital Equity: Barriers and Assets**

No response.

**4. Collaboration and Stakeholder Engagement**

No response.

**5. Implementation**

No response.

**6. Conclusion**

No response.

**7. Appendices**

No response.

**Written Responses and Actions Taken by State in Response**

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and

personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

**Commenter 31**

**1. Executive Summary**

No response.

**2. Introduction and Vision for Digital Equity**

Personal Health Risk and Fire Threat Demand Wired technology, NOT Wireless.

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering-wireless technology. Our pristine forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon. We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages. "Three people died trying to escape the fire," Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. "Families had to flee into the ocean with their children on their shoulders." McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that "present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. "This leads to failure and a fire," McCollough said. There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom's for-profit agenda.

**3. Current State of Digital Equity: Barriers and Assets**

No response.

4. Collaboration and Stakeholder Engagement

No response.

5. Implementation

No response.

6. Conclusion

No response.

7. Appendices

No response.

Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

**Commenter 32**

1. Executive Summary

No response.

2. Introduction and Vision for Digital Equity

No response.

3. Current State of Digital Equity: Barriers and Assets

Personal Health Risk and Fire Threat Demand Wired technology, NOT Wireless.

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the

deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering-wireless technology. Our pristine forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon. We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages. "Three people died trying to escape the fire," Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. "Families had to flee into the ocean with their children on their shoulders." McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that "present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. "This leads to failure and a fire," McCollough said. There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom's for-profit agenda.

#### 4. Collaboration and Stakeholder Engagement

No response.

#### 5. Implementation

No response.

#### 6. Conclusion

No response.

#### 7. Appendices

No response.

#### Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

**Commenter 33**

1. Executive Summary

No comment.

2. Introduction and Vision for Digital Equity

No comment.

3. Current State of Digital Equity: Barriers and Assets

No comment.

4. Collaboration and Stakeholder Engagement

No comment.

5. Implementation

EducationSuperHighway Comments for Oregon's Digital Equity Proposal

Summary

EducationSuperHighway commends the Oregon Broadband Office (OBO) for a forward-looking digital equity plan. We are excited for the opportunity to share our experiences with internet access, the digital divide, and programmatic strategies that can ensure digital equity.

Importantly, Oregon has already taken the laudable step of coordinating a statewide ACP-focused cohort to convene the FCC grantees in Oregon, with the pro-bono support of EducationSuperHighway. Through this partnership, OBO, the FCC grantees, and other cohort members will leverage EducationSuperHighway's tools and resources (described in the appendix) to amplify ACP awareness and enrollment activities, and share best practices for implementing digital and on-the-ground ACP campaigns to help their communities overcome barriers to ACP adoption. A

series of ongoing workshops, running from August 2023 to April 2024, have created a collaborative space where organizations can learn from and inform each other's work.

Our comments today suggest a similar statewide ACP-focused cohort model, but powered by the digital equity grant dollars that will be forthcoming in 2024. We will describe such a cohort below and how EducationSuperHighway can again support this pro bono.

## Background

Approximately 28 million households in the United States do not have high-speed broadband. 18 million of these households are offline because they cannot afford an available Internet connection. This broadband affordability gap is concentrated in America's cities and has become one of the primary inhibitors of access to economic security and opportunity. It is a reality centered in our nation's poorest communities and disproportionately impacts people of color. The Affordable Connectivity Program (ACP) can connect millions of unconnected households. Achieving national best practice ACP adoption rates can significantly accelerate closing the broadband affordability gap, connecting two-thirds of the 18 million households impacted by this gap. States should use 5-Year Action plans, Digital Equity Act plans and funding to outline and implement key strategies to increase ACP adoption.

The impact of the ACP can be felt equally across partisan lines, with participation rates nearly identical in Republican (31.2% of eligible households) and Democrat states (30.8%). (1) And contrary to the historical narrative that suggests broadband affordability is predominantly an urban issue, rural America has taken the greatest advantage of the ACP to-date. Through April 2023, ACP enrollment data shows that 15% of all rural households have enrolled in ACP, while 14% of households in metro or urban areas have enrolled in the benefit. (2)

Millions of eligible households are not taking advantage of the program as they are unaware that the ACP exists. Surveys of low- and lower-middle-income households have found that in some communities, up to 75% of eligible households are unaware that they might be eligible for federal broadband benefits. Trust in the program is another critical barrier, as many eligible households are concerned about sharing personal information as part of the enrollment process. Finally, enrollment barriers such as application accessibility, language assistance, and documentation challenges necessitate direct support for a portion of eligible households that cannot complete the enrollment process independently.

Broad outreach alone often fails to build the trust needed to drive people to action and should be paired with outreach and enrollment support from trusted sources such as government agencies that administer benefit programs, school districts, community health centers, faith leaders, community-based organizations, and businesses they regularly interact with. These organizations have existing relationships with eligible households, know the most effective time, place, and manner to increase awareness in the communities they serve, and have established outreach channels such as in-person community events, digital marketing, emailing, phone banking, text messaging, physical information distribution and posters in high-traffic target areas. Furthermore, they provide trusted



space and avenues to support enrollment in the ACP and can help mitigate some of the challenges households face when they enroll.

To overcome the complex barriers that keep under-resourced households offline, EducationSuperHighway believes that state leaders should, as OBO has done, take action to convene a state-wide ACP-focused cohort that brings together these critical trusted government agencies and institutions, leveraging Broadband Equity, Access, and Deployment (BEAD) and Digital Equity Act (DEA) funds to enable outreach to and support for unconnected households. At a micro level, the cohort provides a collective framework to ensure the creation and sustainability of an ecosystem of organizations and stakeholders working on digital equity initiatives, with a particular focus on the ACP. At a macro level, this work will build on OBO's FCC Grantee cohort to scale state-wide ACP implementation. Learnings from OBO's current cohort can inform the most effective role that the state may play in convening future capacity or competitive grant-funded recipients in alignment with OBO's 5-Year Action and Digital Equity Plans.

As mentioned in the summary, the cohort consists of a series of workshops intended to promote ways in which leveraging the ACP contributes to achieving digital equity across the state. To facilitate this, EducationSuperHighway will again provide pro-bono co-facilitation of the cohort and serve as a subject matter expert and technical advisor, providing its expertise to the cohort community. The group will again create a collaborative space where organizations can learn from and inform one another's work across the state. It will also promote coordination and collaboration between the state, its agencies, and other stakeholders, alleviating the unintentional creation of silos, gaps, and/or redundancies in programming.

The workshop topics will include: 1) how the ACP or any successor program operates; 2) tools, training, and resources with respect to awareness and enrollment activities and tactics; 3) the intricacies of cross-sector partnerships and campaign execution; and 4) best practices for implementing digital and on-the-ground ACP campaigns.

#### Roles & Responsibilities

As OBO knows, state broadband offices and their staff are uniquely positioned to lead the creation and facilitation of a statewide ACP Cohort. In order to ensure an effective and streamlined cohort implementation, a Broadband Office staff member should be designated to lead the cohort engagement. It is also a best practice to include additional staffing resources with a focus on communications, who can assist with managing state-led communications, campaigns, messaging, and awareness initiatives related to the cohort. A critical element of the state's role will be to incentivize motivation and participation, and states should set an ACP enrollment goal in order to achieve this that is measurable and can be used to regularly assess progress and course-correct where appropriate.

#### Objectives and Programming

The main objective of the ACP Cohort is to combine the expertise and experience of key state agencies/offices, trusted institutions, organizations, and stakeholders to make a larger impact on the

state's most unconnected communities. An important output of this cohort should be to increase ACP enrollment across the state. Through the creation of curated resources and programming, and a series of workshops, the cohort should:

Create a forum for knowledge sharing, including an understanding of current ACP-related work across the state and specific ACP enrollment goal setting through guest speakers and cohort member updates:

- Share lessons learned and emerging best practices.
- Address common barriers.
- Provide opportunities for cohort members to support and reinforce one another.
- Supplement and leverage needed resources where possible (i.e., cross-posting marketing outreach and sharing digital equity advocate personnel)
- Create a pipeline for future funding opportunities, including identifying funding intermediaries that can help expand the funds' reach and impact by supporting smaller and less resourced organizations, to ensure that key state organizations can contribute to ACP adoption.

In closing, the running of a new statewide ACP-focused cohort with Digital Equity funding will ensure that mechanisms for increasing broadband affordability and connecting unconnected households remain a cornerstone of the state's digital equity work. The cohort will secure cohesion between the state's plans, the execution of their capacity grant funds, and alignment with the ecosystem of competitive grant funded institutions to bolster successful ACP adoption statewide.

(1) <https://arnicusc.org/broadband-for-all-the-affordable-connectivity-program-acp-benefits-households-across-party-lines>

(2) <https://www.benton.org/blog/affordable-connectivity-program-and-rural-america>

## APPENDIX

### EducationSuperHighway Resources & Tools

The following are examples of the tools and resources that EducationSuperHighway can incorporate into an ACP-focused Cohort curriculum.

- Promote ACP Resource Hub: A hub of free-to-download awareness and marketing materials (collateral, social media text, event toolkits and resources, FAQs, and more) developed based on partner and consumer feedback. The materials complement resources provided by USAC and the FCC, and serve as a strong foundation for new and improved promotional materials for the pilot. <https://www.educationsuperhighway.org/acpbenefit/resource-hub/>

- LearnACP Certification Course: An interactive and self-paced online course that equips community advocates with the knowledge and resources to support its members when applying to the ACP. In addition to an overview of the benefit and how the applicant can enroll, the course provides practical scenarios for the advocate to confirm their understanding of ACP eligibility, common issues, and considerations. <https://www.educationsuperhighway.org/learnacp/>
- GetACP.org pre-enrollment tool: This mobile website helps applicants find out if they're eligible for the ACP, determine the easiest way to qualify, identify documents they'll need for the application, and find broadband plans in their area. In addition, the tool provides a personalized checklist of documents the applicant should have available when they apply, and key information for enrollment in an internet service plan. The tool supplies a list of low-cost and eligible plans in the applicant's area with direct contact information for providers. <https://getacp.org/>
- ACP Enrollment Dashboard: An easy-to-navigate dashboard of state and city enrollment data. Users can navigate to a state, see city-specific data, filter, and download reports. With data updated monthly, the dashboard can help local leaders effectively target ACP awareness and adoption efforts, and demonstrate the impact that programming is having on ACP adoption. <https://www.educationsuperhighway.org/no-home-left-offline/acp-data/#dashboard>

## 6. Conclusion

No comment.

## 7. Appendices

No comment.

### Written Responses and Actions Taken by State in Response

Comments under review for follow-up in future stages of the program. OBO appreciates the comments and information. Language regarding ACP's uncertain status is added to the Plan, and as a result of the uncertainty around the ACP, comments regarding ACP planning, outreach, and enrollment are not urgent. No action required.

### **Commenter 34**

#### 1. Executive Summary

No response.

#### 2. Introduction and Vision for Digital Equity

No response.

#### 3. Current State of Digital Equity: Barriers and Assets

No response.

4. Collaboration and Stakeholder Engagement

No response.

5. Implementation

No response.

6. Conclusion

No response.

7. Appendices

No response.

Written Responses and Actions Taken by State in Response

Thank you. No response required.

**Commenter 35**

1. Executive Summary

No response.

2. Introduction and Vision for Digital Equity

No response.

3. Current State of Digital Equity: Barriers and Assets

No response.

4. Collaboration and Stakeholder Engagement

No response.

5. Implementation

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering-wireless technology. Our pristine

forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon. We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages. “Three people died trying to escape the fire,” Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. “Families had to flee into the ocean with their children on their shoulders.” McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that “present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. “This leads to failure and a fire,” McCollough said. There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom’s for-profit agenda.

#### 6. Conclusion

No response.

#### 7. Appendices

No response.

#### Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter’s support for wired technology, particularly fiber, as that support aligns with NTIA’s instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA’s policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan’s goals and maximize broadband’s availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

#### Commenter 36

## 1. Executive Summary

Personal Health Risk and Fire Threat Demand Wired technology, NOT Wireless.

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms.

## 2. Introduction and Vision for Digital Equity

Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering—wireless technology. Our pristine forests, desserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon.

## 3. Current State of Digital Equity: Barriers and Assets

There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe.

## 4. Collaboration and Stakeholder Engagement

Oregon legislators need to stand firm against corporate interests and deny Telecom's for profit agenda. Do the right thing, not the most profitable thing.

## 5. Implementation

Install wired (fiber optic) cable to areas lacking internet service. Let this be the first step to replacing existing wi-fi with wired fiber optic everywhere.

## 6. Conclusion

Do what is best for the environment, the wildlife that lives here, and all the people of Oregon. Use the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. Stand firm against corporate interests. Do whatever it takes to do the right thing for Oregon.

## 7. Appendices

No comment.

Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

**Commenter 37**

1. Executive Summary

Personal Health Risk and Fire Threat Demand Wired technology, NOT Wireless.

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering-wireless technology. Our pristine forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon. We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages. "Three people died trying to escape the fire," Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. "Families had to flee into the ocean with their children on their shoulders." McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that "present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. "This leads to failure and a fire," McCollough said. There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies

on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom's for-profit agenda.

## 2. Introduction and Vision for Digital Equity

No response.

## 3. Current State of Digital Equity: Barriers and Assets

No response.

## 4. Collaboration and Stakeholder Engagement

No response.

## 5. Implementation

We want wired technology.

## 6. Conclusion

Wireless technology is unsafe and jeopardizes the health (and lives) of humans and animals!

## 7. Appendices

One reference regarding the dangers of wireless technology is Martin Pall, Ph.D. There are many others.

## Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.



**Commenter 38**

1. Executive Summary

No where in this document does it discuss what broadband entails for “mediums” of transmission. Examples would include coaxial cable, optical fiber, satellite, wireless technologies. Because there is no mention of what the key medium of transmission would ideally be, I am highly concerned b/c my intuition tells me the goal will be to add additional wireless antennas throughout the community to support this initiative—which, I am highly against. I do NOT support any addition of wireless antennas due to health concerns for our community. See the loads of scientific evidence at [www.ehtrust.org](http://www.ehtrust.org) on the health issues resulting from the increase in wireless usage.

2. Introduction and Vision for Digital Equity

No response.

3. Current State of Digital Equity: Barriers and Assets

No response.

4. Collaboration and Stakeholder Engagement

No response.

5. Implementation

No response.

6. Conclusion

I do not support additional cellular antennas to support this initiative. Let's do it smartly and with concern of the health of our community in mind.

7. Appendices

No response.

Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter’s support for wired technology, particularly fiber, as that support aligns with NTIA’s instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA’s policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate

technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

**Commenter 39**

**1. Executive Summary**

I am a Family Nurse Practitioner over a 42 year period. I am EMF Disabled since 143~ 5G towers and 462 antennae have been turned on within 3 miles of my home and my previous office that I had to give up due to my physical symptoms of EMF exposure. The state needs to put money into SAFE BROADBAND and coaxial cable that does not emit these life threatening symptoms. We need to STOP the 5G exposure and what is being beamed at us through satellites. We need to transition to BROADBAND. Protect the health of citizens!

**2. Introduction and Vision for Digital Equity**

I am a Family Nurse Practitioner over a 42 year period. I am EMF Disabled since 143~ 5G towers and 462 antennae have been turned on within 3 miles of my home and my previous office that I had to give up due to my physical symptoms of EMF exposure. The state needs to put money into SAFE BROADBAND and coaxial cable that does not emit these life threatening symptoms. We need to STOP the 5G exposure and what is being beamed at us through satellites. We need to transition to BROADBAND. Protect the health of citizens!

**3. Current State of Digital Equity: Barriers and Assets**

I am a Family Nurse Practitioner over a 42 year period. I am EMF Disabled since 143~ 5G towers and 462 antennae have been turned on within 3 miles of my home and my previous office that I had to give up due to my physical symptoms of EMF exposure. The state needs to put money into SAFE BROADBAND and coaxial cable that does not emit these life threatening symptoms. We need to STOP the 5G exposure and what is being beamed at us through satellites. We need to transition to BROADBAND. Protect the health of citizens!

**4. Collaboration and Stakeholder Engagement**

I am a Family Nurse Practitioner over a 42 year period. I am EMF Disabled since 143~ 5G towers and 462 antennae have been turned on within 3 miles of my home and my previous office that I had to give up due to my physical symptoms of EMF exposure. The state needs to put money into SAFE BROADBAND and coaxial cable that does not emit these life threatening symptoms. We need to STOP the 5G exposure and what is being beamed at us through satellites. We need to transition to BROADBAND. Protect the health of citizens!

**5. Implementation**

No response.

**6. Conclusion**

Change all of this back to SAFE Broadband!

## 7. Appendices

No response.

### Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

### **Commenter 40**

#### 1. Executive Summary

No response.

#### 2. Introduction and Vision for Digital Equity

No response.

#### 3. Current State of Digital Equity: Barriers and Assets

No response.

#### 4. Collaboration and Stakeholder Engagement

No response.

#### 5. Implementation

Personal Health Risk and Fire Threat Demand Wired technology, NOT Wireless.

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas

wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering-wireless technology. Our pristine forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon. We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages. "Three people died trying to escape the fire," Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. "Families had to flee into the ocean with their children on their shoulders." McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that "present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. "This leads to failure and a fire," McCollough said. There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom's for-profit agenda.

## 6. Conclusion

No response.

## 7. Appendices

No response.

## Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

**Commenter 41**

**1. Executive Summary**

No response.

**2. Introduction and Vision for Digital Equity**

No response.

**3. Current State of Digital Equity: Barriers and Assets**

No response.

**4. Collaboration and Stakeholder Engagement**

No response.

**5. Implementation**

No response.

**6. Conclusion**

Personal Health Risk and Fire Threat Demand Wired technology, NOT Wireless.

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering-wireless technology. Our pristine forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon. We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages. "Three people died trying to escape the fire," Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. "Families had to flee into the ocean with their children on their shoulders." McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that "present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. "This leads to failure and a fire," McCollough said. There is growing concern

that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom's for-profit agenda.

## 7. Appendices

<https://mdsafetech.org/problems/electro-sensitivity/>

<https://www.cnn.com/2020/10/30/us/southern-california-edison-responsible-woolsey-fire/index.html>

<https://ehtrust.org/a-cautionary-tale-from-firefighters-of-california-fighting-cell-towers-on-stations/>

<https://childrenshealthdefense.org/wp-content/uploads/chd-v-fcc-we-won-decision.pdf>

## Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

## Commenter 42

### 1. Executive Summary

No response.

### 2. Introduction and Vision for Digital Equity

I am one of the people who have moved to a rural area for the sole purpose of getting away from emfs and for quiet and solitude. I do not want there to be barriers for me to be able to shut off these external things. With my own home I can shut it down if I need to but if this "noise" is coming through the air I will not have control over it. I don't feel it is equitable for others people to make this decision for me

and wired fiber optic cable would be a better solution. I am also thinking of nature. Take an emf reader into the forest and you will find that it is 0 or 1 mv/nm. I aim to "sleep in the forest" in my own home and want to be able to get away from all of that in town.

### 3. Current State of Digital Equity: Barriers and Assets

No response.

### 4. Collaboration and Stakeholder Engagement

Just the title of this section makes me nervous because if you watch all the world economic forum videos you hear these words over and over and these groups always talk about equity and engagement but really what you mean is that you are trying to implement a plan to control others. You may not be aware of it at the level you are at but when you are doing things for "stake holders" you are doing it for a greater plan and purpose and we don't want to become "useful idiots" as part of a greater plan that has been broadcast all over this planet for the last three years and even longer when you actually look at it. Please do look up these plans and make sure you personally are not an unknowing participant.

### 5. Implementation

Personal Health Risk and Fire Threat Demand Wired technology, NOT Wireless.

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering-wireless technology. Our pristine forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon. We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages. "Three people died trying to escape the fire," Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. "Families had to flee into the ocean with their children on their shoulders." McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that "present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. "This leads to failure and a fire," McCollough said. There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies

on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom's for-profit agenda.

### Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

### **Commenter 43**

#### 1. Executive Summary

Personal Health Risk and Fire Threat Demand Wired technology, NOT Wireless.

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering—wireless technology. Our pristine forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon.

#### 2. Introduction and Vision for Digital Equity

Please see above.

#### 3. Current State of Digital Equity

Please see above.



#### 4. Collaboration and Stakeholder Engagement

Please see above.

#### 5. Implementation

Please see above.

#### 6. Conclusion

I believe everyone will benefit from the absence of wireless towers in our neighborhoods and near our schools, hospitals etc. The health of all Americans, especially our children, is being unmined by wireless technology. PLEASE stop this health hazard from its unrelentless increases around the country and world. Our children are counting on us to keep them safe.

#### 7. Appendices

No response.

#### Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

#### **Commenter 44**

##### 1. Executive Summary

If you can imagine the extreme stress endured by a brain whose neurons communicate with each other at the level of only a few millionths of one volt being assaulted by a cell phone's full-on radiation which is powered at 5 million times the neurons' operating power, then you can begin to see why the proliferation of wireless radiation is a hazard the injuries from which can only accumulate with continued exposure. This hazard from towers, antennas, and routers extends to very existence of tiny animals such as insects that form the basis of the food web and this hazard of wireless radiation extends to all plant and animal life each of which depends on the tiny levels of natural background radiation on the Earth to orient, navigate, procure food and avoid enemies. This fact gives deep and frightening meaning to the meme "Your Phone or Your Food!" The solution? Simple: Wired internet

with fiber optic or cable connectivity, not wireless radiation. Fiber optic to every door has already been paid for by the public and the public deserves only this safe and less hackable solution."

## 2. Introduction and Vision for Digital Equity

The internet is only possible because of the hardwired infrastructure of fiber optic cable connecting to and feeding every cell tower. Tax dollar funding set aside by the federal government for broadband over the last decades has not been used to build internet connectivity to rural areas as it has been intended to do. And now, telecom intends to use the monies currently set aside to build out the hazardous wireless networks because it is more profitable to do that than bring rural residents the hard wired fiber optic that they have already contributed money to fund. This needs to change now by bringing safe connectivity to rural areas through fiber optic.

## 3. Current State of Digital Equity: Barriers and Assets

No response.

## 4. Collaboration and Stakeholder Engagement

Humans using the internet cannot demand safe internet as long as they are purposefully being kept in the dark about wireless hazards. The 2nd Court of Appeals, Washington D.C. ruled in August 2021 that the FDA and FCC cannot simply reference each other's declaration that wireless radiation is safe as proof of safety. The FDA and FCC were mandated by the court of appeals to go back and demonstrably use all the independent scientific data that was submitted to them in an open docket in advance of setting new wireless levels to determine new emissions safety levels for the country. The two agencies' recalcitrance in honest review of scientific data encompassing research from decades cataloguing harms result in a total lack of ability for individuals and communities to understand how to shepherd the safe development of internet connectivity in their environments.

## 5. Implementation

No response.

## 6. Conclusion

Fund fiber optic cable to every door as per the High Performance Computing Act of 1991.

## 7. Appendices

The FCC and FDA's own archives house the 11,000 pages of independent scientific studies submitted in the FCC's open docket before the issuance of their ""arbitrary and capricious"" (as per the 2nd Court of Appeals) decision to leave radio frequency radiation emission guidelines for wireless communications at the 1996 level.

## Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

### **Commenter 45**

#### **1. Executive Summary**

As somebody in a rural area that has already experienced level 3 emergency fire evacuation, I urge you to seriously consider the fire risks associated with these wireless connections. As an organic gardener, I cannot urge you strongly enough to consider the unintended consequences of wireless technologies not only to human health, but to plants, and all living creatures. Bees, bats, and so many other creatures are impacted by these decisions. Please do the right thing, and use the Federal grant money to install safe, wired technology!

Personal Health Risk and Fire Threat Demand Wired technology, NOT Wireless.

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering-wireless technology. Our pristine forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon. We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages. "Three people died trying to escape the fire," Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. "Families had to flee into the ocean with their children on their shoulders." McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that "present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring,

so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. "This leads to failure and a fire," McCollough said. There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom's for-profit agenda.

## 2. Introduction and Vision for Digital Equity

No response.

## 3. Current State of Digital Equity: Barriers and Assets

No response.

## 4. Collaboration and Stakeholder Engagement

No response.

## 5. Implementation

No response.

## 6. Conclusion

No response.

## 7. Appendices

No response.

## Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

**Commenter 46**

**1. Executive Summary**

I live in the country and do everything I can to avoid wireless. Please don't make that impossible for me to protect my sanity and my life. I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering- wireless technology. Our pristine forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon.

**2. Introduction and Vision for Digital Equity**

No response.

**3. Current State of Digital Equity: Barriers and Assets**

No response.

**4. Collaboration and Stakeholder Engagement**

No response.

**5. Implementation**

No response.

**6. Conclusion**

No response.

**7. Appendices**

No response.

**Written Responses and Actions Taken by State in Response**

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such

there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

**Commenter 47**

**1. Executive Summary**

Personal Health Risk and Fire Threat Demand Wired technology, NOT Wireless.

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering-wireless technology. Our pristine forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon. We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages. "Three people died trying to escape the fire," Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. "Families had to flee into the ocean with their children on their shoulders." McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that "present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. "This leads to failure and a fire," McCollough said. There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom's for-profit agenda.

**2. Introduction and Vision for Digital Equity**

No response.

3. Current State of Digital Equity: Barriers and Assets

No response.

4. Collaboration and Stakeholder Engagement

No response.

5. Implementation

No response.

6. Conclusion

No response.

7. Appendices

No response.

Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

**Commenter 48**

1. Executive Summary

No response.

2. Introduction and Vision for Digital Equity

No response.

3. Current State of Digital Equity: Barriers and Assets

No response.

#### 4. Collaboration and Stakeholder Engagement

No response.

#### 5. Implementation

Personal Health Risk and Fire Threat Demand Wired technology, NOT Wireless.

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering- wireless technology. Our pristine forests, desserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon.

#### 6. Conclusion

No response.

#### 7. Appendices

No response.

#### Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

#### **Commenter 49**

##### 1. Executive Summary



I am opposed to wireless technology due its safety problems. There is ample evidence that wireless technology are a major health concern that must be stopped by choosing a wired solution.

## 2. Introduction and Vision for Digital Equity

The wired solution that provides safety for all.

## 3. Current State of Digital Equity: Barriers and Assets

No response.

## 4. Collaboration and Stakeholder Engagement

No response.

## 5. Implementation

Install a wired solution.

## 6. Conclusion

Safety first for our citizens over profit and control.

## 7. Appendices

No response.

## Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

## **Commenter 50**

### 1. Executive Summary

Personal Health Risk and Fire Threat Demand Wired technology, NOT Wireless.

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering-wireless technology. Our pristine forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon. We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages. "Three people died trying to escape the fire," Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. "Families had to flee into the ocean with their children on their shoulders." McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that "present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. "This leads to failure and a fire," McCollough said. There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom's for-profit agenda.

## 2. Introduction and Vision for Digital Equity

No response.

## 3. Current State of Digital Equity: Barriers and Assets

No response.

## 4. Collaboration and Stakeholder Engagement

No response.

## 5. Implementation

No response.

## 6. Conclusion

No response.

## 7. Appendices

No response.

### Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

### **Commenter 51**

#### 1. Executive Summary

Personal Health Risk and Fire Threat Demand Wired technology, NOT Wireless.

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms.

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering-wireless technology. Our pristine forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon. We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for

over a month, destroying over 400 homes and resulting in \$6 billion in damages. “Three people died trying to escape the fire,” Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. “Families had to flee into the ocean with their children on their shoulders.” McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that “present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. “This leads to failure and a fire,” McCollough said. There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom’s for-profit agenda.

## 2. Introduction and Vision for Digital Equity

No response.

## 3. Current State of Digital Equity: Barriers and Assets

No response.

## 4. Collaboration and Stakeholder Engagement

No response.

## 5. Implementation

No response.

## 6. Conclusion

No response.

## 7. Appendices

No response.

## Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter’s support for wired technology, particularly fiber, as that support aligns with NTIA’s instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA’s

policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

## **Commenter 52**

### **1. Executive Summary**

No response.

### **2. Introduction and Vision for Digital Equity**

2.1 #3 says "... OBO will work through experienced stakeholders that have established skills training courses and to support and expand existing efforts to serve more people in Oregon." This statement seems to imply that only established providers of courses would be taken into account. As new digital technologies and skills are being developed and introduced continually, it is important to recognize new courses will need to be developed. To ensure equity, it is important that OBO also consider working with new stakeholders who might be looking to create new courses which may be needed to support their communities receive the support and training they need and equally deserve. Relying only on current, established courses would not allow flexibility to address dynamically changing needs.

2.1 #4 says "... OBO seeks to work through experienced stakeholders that have established training courses in this space, leveraging existing capabilities and expanding outcome-driven programs to reach more communities." OBO should consider not limiting working with only established training stakeholders and courses. To provide equitable trainings and support, there should be an allowance for working with new stakeholders who might be working on developing new courses for emerging technologies for which there might be limited or currently nonexistent courses for yet. For example, courses for AI for the public are still currently being developed. There are new groups working in this space and it would be good to enable, support and collaborate with them to create new courses, not just established ones.

### **3. Current State of Digital Equity: Barriers and Assets**

Table 3: Digital inclusion assets by covered population(s), Will this be maintained as a separate and updateable online resource? This could allow for easier mapping, lookup and filtering of relevant sources and improve the accessibility of the information.

Table 3: How will OBO plan to manage this data long-term. These resources will evolve over time and should. This data needs to be dynamic and accessible for individuals and communities that are looking for resources. Will OBO establish and publish guidelines or requirements to be listed in this data set?

Table 3: We respectfully request to add OSU Extension Youth Programs as a Table 3 entry. OSU Extension runs multiple youth programs including Juntos and 4-H that deliver programming and camps, for example Mariachi STEAM camp, integrating digital skills into their curriculum.

Tables 16-23 are wonderful. This data is not easily accessible for most, so thank you for publishing this. Is the intent for this data to be informative, or to help drive specific actions? For example, there are many online activities where the gap is relatively small, and others where the gap is quite large. Is there a statistical cut-off where the state would highlight a given activity and demographic group to say this should be a priority to affect change?

For Tables 16-23, will the OBO begin longitudinal tracking of these data points to track and present regular periodic changes that would help identify if DE investments from the state are making a difference, or not? This is identified as a KPI, but the plan is unspecific how this data will be tracked and presented and on what frequency.

For Tables 16-23, how far back does the ACS data go? Is it possible to show a multi-year history of these trends to understand if rates of activities are increasing, decreasing, or stagnant? Will all of the tables in this report that are pictures be converted to actual data so that people with visual impairments or otherly abled be able to access this information via screen reader? Thank you for ensuring these at least have alt-tag information.

3.2.7 Page 143 Many counties and municipalities also provide digital services to the public. It is good the State has procured a solution to identify accessibility issues. Could this solution be expanded (scale of economy) to allow county and municipal digital system to opt-in for this same service?

#### 4. Collaboration and Stakeholder Engagement

No response.

#### 5. Implementation

Will there be requirements for funded projects to report metrics that are in line with the KPI's described in section 2?

5.1.2.1 Increase ACP enrollment and ISP low-cost program enrollment—due to the political and volatile nature of the federal ACP program, are there additional opportunities to consider in this area? For example, it is our understanding that the FCC will be requiring additional plan reporting by ISP's. Will OBO plan to consume and do any analysis on this data to help identify (show transparency) which ISPs provide low-cost plans, and which don't? Would OBO consider outreach programs to support understanding and using the newly legislated Broadband Label to support adoption. <https://www.fcc.gov/broadbandlabels>. Implementation timeline April 10, 2024, for providers with 100,000 or fewer subscriber lines must do so by October 10, 2024.

5.1.2.2 – Increase low-cost service offerings.

- Would OBO consider creating an annual report of which ISPs do not provide a low-cost service offering? Currently there are very few ACP registered ISPs that have also enrolled in the “Offering Connected Devices” option. What type of incentive or encouragement can OBO provide to Oregon ISPs to enroll in this or provide a comparable service?
- Requiring guarantee low-cost offerings as part of BEAD scoring will be helpful. Will there be any kind of accountability/audit at regular intervals for BEAD funded ISPs to ensure maintenance of these low-cost offerings? This would be to mitigate introductory or short-term pricing models that would assist in BEAD scoring, but not benefit communities long-term.

5.1.2.3 – Expand access to affordable computing devices and technical support. 5.1.2 specifically refers to low-income households. 5.1.2.3 suggest that K12 and higher education are the right providers to expand device and technical support. We disagree that K12 and institutions of higher education are the right places to offer technical support for devices. We only provide devices to enrolled students, which is a subset of low-income households. These organizations are not funded or set up to provide technical support broadly, other than enough to use a provided device for enrolled students.

5.1.2.4 - Develop data and informational resources to enable application of a digital equity lens to infrastructure and program decisions. Does OBO plan to publish DE Asset data in an updated version of this report over time, or create a separate resource that would make the consumption and presentation of this data more accessible and user-friendly for consumers to leverage?

5.1.3.1 – Enable digital literacy skills development through training courses

- Would OBO consider funding the establishment of additional local Digital Equity plans for communities to increase understanding and partnerships?
- K12 and Higher Education currently contribute in digital skills training but are not listed here.
- Especially in rural locations that lack DE programming, the reliance upon “established” providers will be very limiting to the state’s ability to address digital literacy or other DE topics if we only rely upon established partners. We also need to develop new partners, providers, and content in this space. Please consider updating the language in this report to include opportunities for new partners in the DE space.

5.1.4.2 - Support and develop local capacity

- Does OBO feel the development of additional local DE plans would be of significant benefit to support this goal? Development of local plans would support local capacity building and fund acquisition.

5.1.4.3 - Sustain and grow the state’s efforts in digital equity

- Are there key areas or domains of expertise that OBO would consider higher priority for development. For example, are there governors' priority areas that should be prioritized?
- Are there geographic or other sector alignment with Business Oregon's economic development plan to align broadband digital equity considerations into?
- We are super excited to see the in-progress publishing of relevant data to demonstrate digital equity metrics and outcomes.
- Who will "Develop materials to enable understanding by the state on how to use digital equity as a lens when making program decisions and prioritizing investments." Is this OBO or someone else?

## 6. Conclusion

No response.

## 7. Appendices

Appendix A: ISPs that participate in the ACP. This is a wonderful list to have narrowed down. Will this data be incorporated into the Oregon Broadband map to be able to visualize areas where there is/not ACP provider coverage across the state? Could the OBO create a list of ISPs, according to the FCC map, in the state that are not enrolled and providing ACP benefits to their customer?

## Written Responses and Actions Taken by State in Response

Comments considered, with some incorporated and some no action taken. Language about the ACP's expiry added to the Plan and the OSU Extension Youth programs added to Table 3, and additional language added to extend technical support community anchor institutions beyond K12 and institutions of higher education. Suggestions for future efforts by OBO may be reviewed in future stages of this program but no action is required as of the writing of the Plan. OBO appreciates the commenter's expressions of support and no action is required.

## **Commenter 53**

### 1. Executive Summary

No response.

### 2. Introduction and Visions for Digital Equity

No response.

### 3. Current State of Digital Equity: Barriers and Assets

No response.

### 4. Collaboration and Stakeholder Engagement



No response.

### 5. Implementation

Hardwiring digital resources rather than using wireless transmission is the only safe way for human evolution to develop and our lives to be healthy. The radiation from wireless technology may be convenient to use but will kill us all in the long term. I have electronic measurement devices that show electronic radiation to be hazardous and have friends who are physicists who can verify this also. Wireless technology will slowly degrade our human experience both individually and as a species. Please do not allow cell towers and mini cell towers in our human environment. Hardwire all our communication systems.

Personal Health Risk and Fire Threat Demand Wired technology, NOT Wireless.

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering- wireless technology. Our pristine forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon.

We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages. "Three people died trying to escape the fire," Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. "Families had to flee into the ocean with their children on their shoulders." McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that "present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. "This leads to failure and a fire," McCollough said. There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom's for-profit agenda.

Thank you for what you do, and please thoroughly research this issue for all our and our children's safety and posterity.

2. Introduction and Vision for Digital Equity

No response.

3. Current State of Digital Equity: Barriers and Assets

No response.

4. Collaboration and Stakeholder Engagement

No response.

5. Implementation

No response.

6. Conclusion

No response.

7. Appendices

No response.

Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

**Commenter 54**

1. Executive Summary

I endorse the following statement:

Personal Health Risk and Fire Threat Demand Wired technology, NOT Wireless.

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering- wireless technology. Our pristine forests, desserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon. We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages. "Three people died trying to escape the fire," Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. "Families had to flee into the ocean with their children on their shoulders." McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that "present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. "This leads to failure and a fire," McCollough said. There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom's for-profit agenda.

## 2. Introduction and Vision for Digital Equity

See #1, above.

## 3. Current State of Digital Equity: Barriers and Assets

See #1.

## 4. Collaboration and Stakeholder Engagement

See #1.

## 5. Implementation

See #1.

## 6. Conclusion

See #1.

## 7. Appendices

Not Applicable.

### Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

### Commenter 55

#### 1. Executive Summary

Personal Health Risk and Fire Threat Demand Wired technology, NOT Wireless.

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering-wireless technology. Our pristine forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon. We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages. "Three people died

trying to escape the fire,” Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. “Families had to flee into the ocean with their children on their shoulders.” McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that “present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. “This leads to failure and a fire,” McCollough said. There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom’s for-profit agenda.

## 2. Introduction and Vision for Digital Equity

No response.

## 3. Current State of Digital Equity: Barriers and Assets

No response.

## 4. Collaboration and Stakeholder Engagement

No response.

## 5. Implementation

No response.

## 6. Conclusion

Pacific Power installed a smart meter on my house, and since then, I have had severe tinnitus that no medicines will address. When I turn off the power to my whole house, the tinnitus goes away. When I demanded they replace the meter with the style I had before, they refuse. They are unauthorized to sell my personal information and have created a fire hazard at my residence with the smart meter. These meters are a fire hazard.

## 7. Appendices

No response.

## Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter’s support for wired technology, particularly fiber, as that support aligns with NTIA’s instructions in the BEAD Program

for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

## **Commenter 56**

### **1. Executive Summary**

Personal Health Risk and Fire Threat demand wired technology.

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering-wireless technology. Our pristine forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon. We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages. "Three people died trying to escape the fire," Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. "Families had to flee into the ocean with their children on their shoulders." McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that "present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. "This leads to failure and a fire," McCollough said. There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom's for-profit agenda.

## 2. Introduction and Visions for Digital Equity

No response.

## 3. Current State of Digital Equity: Barriers and Assets

Wireless proliferation does not solve the equity issue. Newer generations of cell phones require consumers to purchase new phones, widening the digital divide, not solving it. People with EMS will be forced to flee (where?) to places that do not have rampant wireless technology. That is discrimination.

## 4. Collaboration and Stakeholder Engagement

No response.

## 5. Implementation

No response.

## 6. Conclusion

Personal Health Risk and Fire Threat demand wired technology.

I encourage the BEAD Oregon office to ensure the safety of all Oregonians by using the Federal grant money to install wired (fiber optic) cable to areas lacking internet service. I strongly object to the deployment of wireless antennas throughout rural Oregon as the research has shown that wireless communications facilities severely impact the health of all life forms. Oregonians with the disease known as Electromagnetic Sensitivity (EMS) need protection from the onslaught of wireless technology. Oregon is a refuge for many with EMS and the threat of having wireless antennas wantonly placed for profit by the Telecom industry is a grave injustice to those currently suffering and to those who may soon discover the cause of their suffering-wireless technology. Our pristine forests, deserts, rivers, lakes and coastlines need to stay clean and safe from radiating and sickening macro and micro (5G) cell towers. Wired technology that allows users to connect to the internet via fiber optic cables is the gold standard in creating a safer and more secure Oregon. We need to ensure that our safety is the number one priority of our State government as fire threat increases with cell tower installations. In 2018, telecom equipment sparked the Woolsey Fire in Malibu that burned for over a month, destroying over 400 homes and resulting in \$6 billion in damages. "Three people died trying to escape the fire," Susan Foster, a fire and utility consultant who co-founded the nonprofit California Fires & Firefighters, told The Defender. "Families had to flee into the ocean with their children on their shoulders." McCollough told The Defender he and Anderson also identified faulty design issues in some of the proposed projects that "present significant fire risks because of a mismatch between load, connectors and breakers. Stated simply, the fuses are too big for the wiring, so more load can be put on the wires than they are designed to handle. This excessive load causes the wiring to overheat. "This leads to failure and a fire," McCollough said. There is growing concern that over the last four decades, the telecommunications industry has influenced regulatory agencies on a global scale to set regulatory limits (which are not necessarily safety limits) that favor the

advancement of telecom objectives over the safety of the public. The Federal Communications Commission (FCC) and International Commission on Non-Ionizing Radiation Protection (ICNIRP) have come under increasing criticism for their ties to the telecommunications industry both in the U.S. and throughout Europe. Oregon legislators need to stand firm against corporate interests and deny Telecom's for-profit agenda.

## 7. Appendices

No response.

### Written Responses and Actions Taken by State in Response

Comments considered and no action taken. OBO appreciates the commenter's support for wired technology, particularly fiber, as that support aligns with NTIA's instructions in the BEAD Program for states to prioritize fiber when feasible. The focus of this Plan is not on the technical medium of deployment (the BEAD Program Initial Proposal provides discussion of this decision), and as such there is not a place in this Plan to include a preference for fiber. However, OBO supports the NTIA's policy to prefer fiber when financially and technically possible. As this Plan sets an ambitious goal for connectivity in order to extend digital benefits, including economic, health care, educational, and personal benefits and opportunities to unserved and underserved communities in Oregon and important covered populations and historically marginalized groups, the deployment of alternate technologies beyond fiber may be necessary to pursue this Plan's goals and maximize broadband's availability and benefits, as discussed in the Initial Proposal Volume II released for public comment.

### **Commenter 57**

#### 1. Executive Summary

As a rural government program, our team has identified three potential paths forward for us for Broadband funding. Here they are ranked in order of feasibility:

1. ISPs or other local governments in our county apply for funding against community support data in the red areas of the Biz OR map. Non-applicants can work cooperatively to generate and share this data with potential applicants. The state can integrate community support data directly into the map. This would eliminate our ISP's biggest barrier and local government's first barrier to accessing funding.

2. Marion County has a 49%/51% lottery-funded cost sharing pilot program with local ISPs. Because it was relatively easy for us to implement, it could potentially be an equitable way to fund rural governments. This is our approach to solving the matchmaking issue of matching a local government with an ISP with a project. The state could develop a federally-scaled approach to a similar cost sharing program that gets passed down with the funding.

3. Take a traditional approach and engineer a project and apply for funding against it and take it to a construction bid and own and operate the infrastructure. We were stuck at this idea until we began engaging in the statewide conversation.



2. Introduction and Vision for Digital Equity

No response.

3. Current State of digital equity: Barriers and Assets

No response.

4. Collaboration and Stakeholder Engagement

No response.

5. Implementation

No response.

6. Conclusion

No response.

7. Appendices

No response.

Written Responses and Actions Taken by State in Response

Comments under review for follow-up in future stages of the program. OBO appreciates the information and feedback and it requires no current action or incorporation into the Plan.

**Commenter 58**

1. Executive Summary

As the leading digital equity nonprofit in the nation with more than a decade of experience providing digital inclusion services, we believe access to technology is a right, not a privilege and that the following best practices are critical to best bridge the digital divide:

Holistic Digital Navigation: Focus on addressing all aspects of digital inclusion, including connectivity, access to devices, digital skills, and technical support. Provide comprehensive support to individuals or communities to ensure they have the necessary resources and knowledge to fully participate in the digital world.

Assisted at Time of Call, Not "Air Traffic Control": Be responsive and proactive in assisting individuals seeking support. Instead of acting as a controlling authority, aim to provide personalized assistance in real-time, addressing their specific needs and challenges, with solutions in-the-moment rather than pushing them to make additional phone calls or visit additional websites.

**Culturally Competent Services:** Recognize and respect the diverse cultural backgrounds and identities of the communities served. Tailor services to meet the unique needs and preferences of different cultural groups, ensuring that everyone feels included and valued.

**Collaborative Process with Trusted Partners:** Foster partnerships with community-based organizations (CBOs), local governments, educational entities, and other trusted stakeholders. Work together to identify and address digital inequities, leveraging collective expertise and resources to achieve more significant impact.

**In-person and Remote Support through Various Communication Channels:** Offer both in-person and remote support options to accommodate different circumstances and preferences. Utilize multiple communication channels, such as phone, email, chat, or video conferencing, to ensure accessibility and convenience for individuals seeking assistance.

Providing broadband alone is not enough. We need to provide devices, digital literacy training, and technical support. It is not “if you build it, they will come.” Without providing these critical wrap-around services, broadband will go unused and there will still be a significant portion of the population on the wrong side of the digital divide. Furthermore, as a technology refurbisher we support programs that refurbish and redistribute existing devices.

By implementing these best practices, your state can enhance digital equity and digital inclusion efforts, making a positive impact on individuals and communities. Digital equity is social equity.

2. Introduction and Vision for Digital Equity

No response.

3. Current State of digital equity: Barriers and Assets

No response.

4. Collaboration and Stakeholder Engagement

No response.

5. Implementation

No response.

6. Conclusion

No response.

7. Appendices

No response.

Written Responses and Actions Taken by State in Response

Comments under review for follow-up in future stages of the program, particularly the specific suggestions for programs and attributes of programs to fund. Other parts of the comments address themes like device access, digital literacy, and technical support that are already addressed in the Plan, and therefore no action is required.

**Commenter 59**

**1. Executive Summary**

Page 2, Vision and Principles for Digital Equity: The first goal, as written, does not include unhoused Oregonians. The City of Portland suggests changing the first goal to: "Universal Access to affordable and reliable high-speed internet at the primary place of residence." This issue is present throughout the document, and we recommend making this edit consistently. It is crucial to acknowledge the necessity and importance of broadband connectivity in terms of workforce development and creating pathways for the most vulnerable Oregonians to access services and become self-sufficient.

Page 3, Vision and Principles for Digital Equity: The City of Portland suggests adding a fifth framework principle around transparency. For example, "Rigorously pursue public transparency and participation in all planning processes through the use of promotional material, communication platforms, and extensive co-creation methodologies."

Page 4, Current state of digital equity: The City of Portland strongly agrees with the inclusion of affordability as a critical barrier. However, the structure of this section implies a hierarchy that could result in an ineffective distribution of any future digital equity funding in Oregon. Lack of broadband availability is a significant barrier to digital equity, especially in rural areas. However, according to census data, a much greater proportion of unconnected Oregonians cite affordability as the primary barrier to getting connected. Our suggestion is to flip critical barriers one and two. Highlighting affordability as critical barrier one is a more accurate representation of connectivity barriers for rural, frontier, suburban, and urban Oregonians. Even with massive federal investment in broadband deployment, if affordability issues are not properly addressed in this plan, the digital divide will continue to persist in Oregon. It's important to the City that this is recognized in these documents as the legislature will reference this document in the future to understand where gaps continue to exist. Furthermore, identifying affordability as the key barrier to connectivity across the state is the first step to creating pathways for long-term sustainable digital equity funding.

Page 4, Current state of digital equity: We recommend removing the phrase "or have low levels of literacy." This phrase and its location in the section imply that non-native English speakers lack the ability to read any script. A more accurate statement of the barrier is that there is a lack of multi-lingual resources for non-native English readers.

Page 10, Implementation Plan: We recommend changing Strategy 3 for Critical Barrier 4 to "Develop a strategic plan highlighting the need for long-term, sustainable state investments for statewide digital equity efforts to close the Digital Divide." The City of Portland believes that this strategy highlights the need for a long-term, sustainable state investments for statewide digital equity efforts.

Furthermore, it is important that the State's efforts include creating opportunities to bring stakeholders together and meaningfully collaborate and co-create this strategic plan.

## 2. Introduction and Vision for Digital Equity

Introduction and Vision for Digital Equity: This section is missing some key requirements from the NTIA. Here are the Relevant Requirements from the NOFO with respect to what is supposed to be section 2.2 Alignment with Existing Efforts to Improve Outcomes.

1) Additional Requirement 5: A description of how municipal, regional, and/or Tribal digital equity plans will be incorporated into the State Digital Equity Plan.

2) Additional Requirement 10: A description of how the State will coordinate its use of State Digital Equity Capacity Grant funding and its use of any funds it receives in connection with the Broadband Equity, Access, and Deployment Program, other Federal or private digital equity funding.

Page 30, Strategies: This section is missing a discussion of Cybersecurity and Online privacy. This is required by the NTIA NOFO Statutory Requirement 2.

Page 31, Strategies, Low-income barrier: The strategies to overcome the affordability barrier presented here fail to acknowledge increased competition among ISPs as a potential way to improve affordability in Oregon. We recommend adding the following strategy: "Develop data and informational resources for communities seeking alternatives to privately owned ISPs such as cooperatives or municipally owned networks."

## 3. Current State of Digital Equity: Barriers and Assets

Page 65, Multnomah County Library: The Multnomah County Library can provide services for incarcerated and recently released individuals, so the box for that covered population should be checked.

Page 89, 3.1.5 Broadband Affordability: This section fails to highlight some of the key factors that influence affordability. While ACP might be the largest program dedicated exclusively to broadband affordability, several communities in Oregon have successfully pursued alternative models to fill gaps left by privately owned ISPs. We recommend adding a short paragraph to this section to highlight how some communities have successfully utilized cooperative or municipally owned models to improve affordability.

Page 105, 3.2.2.1 Availability of service: This section should include a discussion on the need for accurate service data. The FCC allows ISPs to report advertised service areas rather than actual service areas. This has the effect of obfuscating the real service availability, particularly in urban areas, but also in suburban, rural, and frontier regions. It is extremely difficult to fully understand the availability of broadband service without more accurate data. This needs to be noted in this section as a significant barrier to fully understanding broadband availability across the state.

Page 126, 3.2.5 Online Security and Privacy: We recommend including a discussion of the Oregon Consumer Privacy Act in this section. The act grants consumers significant rights with respect to how organizations use their personal data, and informing Oregonians of those rights could help alleviate online security as a barrier to broadband adoption.

#### 4. Collaboration and Stakeholder Engagement

The City of Portland Community Technology group would like to offer our services for any future and ongoing engagement activities related to this plan. We recognize the immense lift that was required of OBO to meet the extremely challenging timeline for both BEAD and DEA planning processes. However, we still believe that there is a significant need to better engage covered populations in urban and suburban areas of Oregon. We have included a list of some community-based organizations we believe can be strong partners in OBO's efforts. The City of Portland is happy to help facilitate or host engagement events with any community organizations in our metro area.

List of Organizations: Adelante Mujeres, Afghan Support Network, African Refugee Immigrant Organization, Angola Community Oregon, Bienestar, Centro Cultural, Corvallis for Refugees, Ecumenical Ministries of Oregon, Euvalcree, Familias en Accion, Greater New H.O.P.E. Charities, IRCO, Islamic Social Services of Oregon State, Lutheran Community Services Northwest, New Portland Foundation, Oregon Community Health Workers Association, Portland Refugee Support Group, Pueblo Unido, Refugee Care Collective, Salem for Refugees, Somali American Council of Oregon, SouthWest Somali Community, SUMA, Free Geek, TechQ, Hacienda CDC/Arrobas Program, Day One Tech, Cairo Portland/STEM program, Latino Network, Innovation Law Lab, Oregon Worker Relief, and NE STEAM Coalition.

#### 5. Implementation

The City of Portland strongly supports OBO's strategy to encourage higher rates of ACP enrollment. However, the City would encourage the state to go further in its strategies to ensure long-term sustainable broadband affordability for all Oregonians. The ACP is expected to run out of funds in 2024, and there are no potential alternative permanent funding sources at this time. There are currently 220,131 households enrolled in ACP in Oregon. For many of those households, the ACP is necessary for them to remain connected. We strongly urge OBO to adopt a strategy of advocating for and facilitating the creation of new funding sources for the ACP at the State and Federal levels. Furthermore, the City encourages OBO to explore additional strategies aimed at improving competition in areas of the state that lack sufficient competition to drive down prices. This strategy should also prioritize providers who are receptive and accountable to the needs of their subscribers, such as cooperatives, publicly owned ISPs, public-private partnerships, and small locally owned private ISPs.

#### 6. Conclusion

The City of Portland is committed to supporting the objectives of the Oregon Broadband Office (OBO), and it also wants to highlight the challenges of digital equity, which the state should recognize in the digital equity plan. The City acknowledges that the Broadband Equity Analysis and Data (BEAD) funding is not enough to cover all locations, but it does represent a once-in-a-lifetime investment that will significantly reduce the urban-rural broadband deployment gap. The digital equity plan should be seen as a roadmap for addressing non-deployment-related aspects of the digital divide that impact not only rural Oregonians but urban and suburban communities as well.

The city understands that the digital divide is not limited to unserved and underserved communities, but it also exists in served communities, which are often left out of the conversation. This creates gaps in rural, frontier, urban, and suburban areas, leaving many historically underserved communities behind. While federal funding primarily aims to cover unserved and underserved locations, it's equally important to recognize the challenges that exist in urban and suburban spaces. It's important to the City that this is recognized in these documents as the legislature will reference this document in the future to understand where gaps continue to exist.

Oregon should set a higher standard for what it considers unserved, underserved, and served. The state should push service providers to have higher standards for service and affordability. This is beneficial for our communities, businesses, students, healthcare industry, government, and the state of Oregon. It recognizes that just because an area has service does not mean that the people are truly served. It also acknowledges the historical disadvantages that many populations have experienced, and it allows Oregon to be at the forefront in this field. Moreover, the state of Oregon should recognize that technology evolves rapidly, and to truly close the digital divide, we should not be aiming for the bare minimum of high speed and instead should have evolving definitions that recognize the current technology of the time. While our aim is to close the digital divide at this moment in time, by the time these communities are caught up, other communities are already at 1 gig of service and most likely much higher.

The city also believes that a data-driven approach is crucial to addressing the digital divide. Key to this effort is better service availability data. The FCC's broadband maps are currently the standard; however, the FCC allows ISPs to report advertised service rather than actual service. This prevents the State and communities across Oregon from truly understanding where connectivity gaps exist or potentially identifying instances of digital redlining. Additionally, the City believes that the State should continue to invest in innovative solutions to address the digital divide, such as public/private partnerships, community-based broadband initiatives, and other creative approaches. The State has the unique ability to bring together stakeholders from across Oregon to participate in deep collaboration and co-creation of long-term sustainable connectivity solutions.

In conclusion, the City of Portland fully supports the efforts of the OBO. However, it believes that the State can and should do more to address the digital equity challenges that exist in Oregon. By recognizing the challenges that exist in rural, frontier, urban, and suburban areas, prioritizing the needs of historically underserved communities, and investing in data-driven and innovative solutions, Oregon can build a more equitable and prosperous future for all its residents.

## 7. Appendices

No Comment.

### Written Responses and Actions Taken by State in Response

Comments considered with some comments incorporated into document and some under review for follow-up in future stages of the program. For some comments, no action was required because they address statutory requirements of the program (for example, the definitions of served, unserved, and underserved, or the definition of covered populations, or the need to address barriers in served areas [which focusing on covered populations can help, as addressed in this Plan]). Some comments addressed, including discussions of ACP's expiry if it is not renewed. Some comments will be addressed in this and other programs in future stages, including the updating of mapping and information in the BEAD program challenge process and development of affordability programs.

### **Commenter 60**

#### 1. Executive Summary

We are pleased to see the following issues named in the executive summary: affordability issues for low-income households, and a need for improved digital literacy training and skills. The emphasis on collaboration with diverse stakeholders, including local communities and nonprofits, to address digital equity challenges is wise. Community colleges are well positioned to do this work and can lean on existing infrastructure, resources and programs to do so. However, funding is needed to add the personnel necessary to do this work. We are ready and willing at Portland Community College, if funds are available to provide the necessary staffing. Our successful digital navigator pilot program is evidence that we can offer scalable solutions to address community need, but our grant funding will soon expire.

#### 2. Introduction and Vision for Digital Equity

As a community college with an unfunded digital literacy program, we appreciate Oregon's commitment to digital equity as outlined in the plan. We strongly advocate for targeted support and funding for digital literacy education, emphasizing the pivotal role community colleges play in bridging the digital divide. Collaborative partnerships with state and local entities are vital to leverage resources and expertise, ensuring all Oregonians, especially our students, benefit from digital access and literacy initiatives.

#### 3. Current State of Digital Equity: Barriers and Assets

The section accurately identifies critical barriers to digital equity, including broadband access, affordability, and digital literacy. We urge a stronger emphasis on partnerships with educational institutions, like community colleges, to address these challenges, particularly in providing digital literacy training and resources. This approach will leverage our existing infrastructure and expertise to make a significant impact on improving digital equity across diverse communities in Oregon.

#### 4. Collaboration and Stakeholder Engagement

Again, community colleges can contribute, such as through our established networks, expertise in digital literacy, and direct engagement with diverse student populations. We are ready to be an active partner in achieving the state's digital equity goals.

#### 5. Implementation

We commend the comprehensive strategies outlined in the "Implementation" section to tackle digital equity challenges. However, we recommend further emphasis on the crucial role of educational institutions, particularly community colleges, in implementing digital literacy initiatives. This could include specific funding allocations or partnership models that enable community colleges to leverage their expertise and infrastructure in providing accessible digital literacy education across diverse communities. For example, other local colleges have expressed interest in a digital navigator consortium model to expand a network of navigators throughout the state at colleges and other public agencies where this critical work can be done in existing public spaces.

#### 6. Conclusion

We appreciate the comprehensive approach and the recognition of digital equity as a priority. We would like to stress the need for concrete support and collaboration with educational institutions like community colleges to effectively implement the strategies outlined in the plan, especially in the areas of digital literacy and access.

#### 7. Appendices

We suggest that future versions include more specific case studies or examples of successful digital literacy programs in similar educational settings, which could serve as models or inspiration.

#### Written Responses and Actions Taken by State in Response

Comments considered, and some will be reviewed in future stages of the program. The comment requested partnership and funding in digital equity programs, which may be considered in the implementation phase. Suggestions for added information in future Digital Equity documents may be considered.

#### **Commenter 61**

##### 1. Executive Summary

No response.

##### 2. Introduction and Vision for Digital Equity

There are opportunities to partner with community colleges, who have experience in delivering educational skills, grant writing and guidance, and outreach. The opportunity for this could be added to section KPIs 2.2.2.3 and 2.2.2.4.



3. Current State of Digital Equity: Barriers and Assets

No response.

4. Collaboration and Stakeholder Engagement

No response.

5. Implementation

There are opportunities to partner with community colleges, who have experience in delivering educational skills, grant writing and guidance, and outreach. The opportunity for this could be added to section KPIs 2.2.2.3 and 2.2.2.4.

6. Conclusion

No response.

7. Appendices

No response.

Written Responses and Actions Taken by State in Response

Comments considered, and some will be reviewed in future stages of the program. The comment requested partnership in digital equity programs, which may be considered in the implementation phase.

**Commenter 62**

1. Executive Summary

I am particularly pleased to see the specified (page 5) awareness that Oregon will require resources beyond what NTIA will provide under the Digital Equity Capacity Grant Program? And so, the OBO is seeking to develop strategies for continuing the work launched under this Plan by partnering with philanthropy and seeking other funding sources, and by tracking the impact of Oregon's digital equity efforts to quantify the business case for further investment in digital equity programs. I encourage OBO to not lose sight of this task as the popularity for digital equity inevitably wanes in the coming years and so will the legislative focus on it.

2. Introduction and Vision for Digital Equity

No response.

3. Current State of Digital Equity: Barriers and Assets

No response.

4. Collaboration and Stakeholder Engagement

The Oregon Digital Equity Plan is well put together and well researched. Although the OBO office is making efforts to engage with Tribal populations, the short time frames for responses make it virtually impossible for Tribes to have any real input into the Digital Equity Plan.

#### 5. Implementation

I also believe that encouraging our legislature to fund digital equity efforts well into the future will ensure that all Oregonians benefit for the enormous investments in infrastructure we are making over the coming years.

#### 6. Conclusion

No response.

#### 7. Appendices

No response.

#### Written Responses and Actions Taken by State in Response

Comments considered and no action taken at this time. OBO appreciates the expression of support and no action is required.

#### **Commenter 63**

##### 1. Executive Summary

A key strategy to increase digital equity should be to encourage and support municipal and customer-owned internet services.

##### 2. Introduction and Vision for Digital Equity

No response.

##### 3. Current State of Digital Equity: Barriers and Assets

No response.

##### 4. Collaboration and Stakeholder Engagement

No response.

##### 5. Implementation

Section 5 of the draft plan lists a strategy of “increasing access to residential broadband internet.” Technically, this is a goal, not a strategy, see Rumelt, “Good Strategy, Bad Strategy.” A strategy to achieve this goal would be to support and encourage provision of broadband utility services by Oregon cities, counties, and coops. Most internet service in Oregon is provided by out-of-state private monopolies that, as far as internet service is concerned, are completely unregulated. Their goal is to

set prices as high as they can—always far higher than their actual marginal cost—and extract as much cash as possible from local communities. They give lip service to the issue of a digital divide, but lacking any real regulatory authority, all the state can do is use tax money to subsidize the high cost of service for low-income residents.

I was the city manager for the City of Sandy from 1992 through 2013 during which time we initiated the SandyNet municipal ISP service. Just as with our water and sewer services, we faced strong pressure from the owners (the residents of the city) to keep costs as low as possible. We operated the ISP on a break-even basis, and still were able to keep the cost per Mbps far lower than that of private monopolies. The same is true for Minnet Fiber in Monmouth and Independence.

The agency that is now Business Oregon gave us technical support, mostly in the form of getting us connected to other municipal and coop providers. Including broadband infrastructure in the Special Public Works Fund also helped the city finance the conversion from a Wi-Fi mesh to a fully-underground fiber system. The backbone ring operated by Clackamas County has helped keep access costs down.

## 6. Conclusion

Broadband service is a public utility, now just as critical to people's lives as water and sewer service. I don't believe the digital divide will ever be bridged as long as the service is completely controlled by a small group of private unregulated monopolies. The private sector can and should provide most of the content that rides on the information highway, but the highway itself should be provided by local governments or customer-owned coops as a public service.

## 7. Appendices

No response.

### Written Responses and Actions Taken by State in Response

Comments considered and no action taken. The information and case studies provided have been reviewed, are appreciated, and may be considered in future stages of the program, specifically the implementation phase.

## **Commenter 64**

### 1. Executive Summary

Not a summary, just lots of repetition and grant-ese.

### 2. Introduction and Vision for Digital Equity

Mostly gobbledygook.

### 3. Current State of Digital Equity: Barriers and Assets

Could be reduced to a couple of pages.

4. Collaboration and Stakeholder Engagement

Mostly PC mumbo jumbo

5. Implementation

Not really a plan, just a bunch of ifs and maybes.

6. Conclusion

Should condense to just a few pages of who is going to do what and when and where, and for how much.

7. Appendices

Lots of data and repetition with minimal information as to hard plans.

Written Responses and Actions Taken by State in Response

Comments considered and no action taken, as no specific actionable feedback was given on any specified parts of the Plan. The Plan is written to closely comply with federal requirements and statutory elements of the Digital Equity Act.

**Commenter 65**

1. Executive Summary

The term "equity" is by definition unlawful, as it requires disparate treatment, in violation of the equal privileges and immunities clause of the Oregon constitution, and the equal protection clause of the US constitution. Specifically, your document defines "Covered populations" to include: "individuals who are members of a racial or ethnic minority group" which is specifically prohibited as race based. As such I am putting you on notice that the state has no legislative authority to appropriate money based on race, and that I reserve the right to sue your organization to force compliance with the civil rights law, and I am specifically developing an artificial intelligence meant to automate this process.

2. Introduction and Vision for Digital Equity

No response.

3. Current State of Digital Equity: Barriers and Assets

No response.

4. Collaboration and Stakeholder Engagement

No response.

5. Implementation

No response.

6. Conclusion

No response.

7. Appendices

No response.

Written Responses and Actions Taken by State in Response

Comments considered and no action taken, as comments address mandatory and statutory elements of the Digital Equity Plan, including the definition of covered populations.