Digital Opportunity Plan

State of Montana

Montana Broadband Office

Montana Department of Administration

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Table of Contents

List of Exhibits 4
1 Executive Summary 6
2 Introduction and Vision for Digital Opportunity 8
2.1 Vision 8
2.2 Alignment with Existing Efforts to Improve Outcomes 9
2.3 Strategy and Objectives 23
3 Current State of Digital Opportunity: Barriers and Assets 27
3.1 Asset Inventory 27
3.1.1 Digital Inclusion Assets by Covered Population 27
3.1.2 Existing Digital Opportunity Plans 30
3.1.3 Existing Digital Opportunity Programs 30
3.1.4 Broadband Adoption 32
3.1.5 Broadband Affordability 32
3.2 Needs Assessment 34
3.2.1 Covered Population Needs Assessment 34
3.2.2 Broadband Adoption 47
3.2.3 Broadband Affordability 50
4 Collaboration and Stakeholder Engagement 55
4.1 Coordination and Outreach Strategy 55
5 Implementation 62
5.1 Implementation Strategy and Key Activities 62
5.2 Timeline 82
6 Conclusion 85
7 Appendices 86
7.1 Stakeholder Engagement Survey Methodology 86
7.2 Individual/Household Survey Data Tables by Survey Question 87
7.2.1 Survey Flow Questions 87
7.2.2 Questions for Only Respondents that Have Home Internet Access 88
7.2.3 Questions for Only Respondents that Do Not Have Home Internet Access 90
7.2.4 Questions for All Respondents 93
7.2.5 Demographic Questions 95
7.3 Community Leader Survey Data Tables by Survey Question 97

7.3.1 Demographic Questions 97
7.3.2 Questions About the Entire Community 98

List of Exhibits

Exhibit 1: 2022 Montana Labor Day Report Ten-Year Wages by Work Experience 13
Exhibit 2: Digital Opportunity Plan goals, strategies, and tracking 24
Exhibit 3: Digital inclusion assets by covered population 27
Exhibit 4: Existing digital opportunity plans 30
Exhibit 5: Existing digital opportunity programs 31
Exhibit 6: Assets that promote broadband adoption 32
Exhibit 7: Assets that promote broadband affordability 33
Exhibit 8: Montana's breakdown of Covered Population 35
Exhibit 9: Montana terrestrial broadband adoption by race, age, veteran and disability status ..36
Exhibit 10: Location by service type 37
Exhibit 11: Broadband availability to the elderly in Montana 38
Exhibit 12: Responses to the question, "Why do you not have high-speed internet?" by percentage of respondents 38
Exhibit 13: Responses to the question, "What is your download speed?" by percent of respondents from covered populations 39
Exhibit 14: Responses to the question, "What is your upload speed?" by percent of respondents from covered populations 40
Exhibit 15: Internet availability for covered populations 41
Exhibit 16: Montanans' access to at least one device by race, age, veteran, and disability status 42
Exhibit 17: Devices in a Montana home 43
Exhibit 18: Montanan confidence sharing information online 44
Exhibit 19: Montanans' willingness to pay for high-speed internet 45
Exhibit 20: Reasons Montanans do not have high-speed internet 46
Exhibit 21: ACP enrollment rates by number of eligible households in city 47
Exhibit 22: Internet adoption in Montana 48
Exhibit 23: Terrestrial and satellite broadband adoption by county 48
Exhibit 24: Household terrestrial broadband adoption by county 49
Exhibit 25: Satellite broadband adoption by county 50
Exhibit 26: Population below 200 percent of the federal poverty line (and eligible for ACP) 51
Exhibit 27: Montana ACP Eligibility and Update 52
Exhibit 28: ACP enrollment by County 53
Exhibit 29: Montanans' awareness of and participation in internet subsidy programs 54

Exhibit 30: Stakeholders engaged through in-person and virtual sessions 59
Exhibit 31: Stakeholders reached through the MBO household survey 60
Exhibit 32: Stakeholders who live on reservations reached through the MBO household survey 60
Exhibit 33: Stakeholders reached through the MBO community leader survey.....60
Exhibit 34: Community groups that are located on or that serve reservations, reached through the MBO community leader survey 61
Exhibit 35: Potential digital opportunity strategies 63
Exhibit 36: Connect the unserved Goals and measurements 65
Exhibit 37: Upgrade the underserved Goals and measurements.....66
Exhibit 38: Community Anchor Institutions Service Availability.....67
Exhibit 39: Montana libraries with fastest download speeds 68
Exhibit 40: Montana libraries with slowest download speeds.....68
Exhibit 41: Invest in Community Anchor Institutions Goals and measurements 69
Exhibit 42: Increase ACP update goals and measurements 71
Exhibit 43: Offer low-cost plans goals and measurements.....73
Exhibit 44: Potential Montana device loaning partnerships and programs.....74
Exhibit 45: Expand CAI and state agency device loans goals and measurements.....75
Exhibit 46: Existing and potential device access point initiatives 76
Exhibit 47: Increase CAI device access points goals and measurements 77
Exhibit 48: Establish adequate state device inventory goals and measurements.....78
Exhibit 49: Potential digital skills curricula.....79
Exhibit 50: Develop digital skills curricula goals and measurements.....80
Exhibit 51: Potential targeted digital skills efforts.....81
Exhibit 52: Encourage targeted training programs goals and measurements.....81
Exhibit 53: Estimated timeline for Broadband Availability strategies 82
Exhibit 54: Estimated timeline for Service Affordability strategies.....83
Exhibit 55: Estimated timeline for device access strategies.....83
Exhibit 56: Estimated timeline for digital skills strategies 84

1 Executive Summary

Broadband access provides a gateway to innumerable services and opportunities, from education to healthcare to remote work and connecting with people worldwide. However, Montana has faced significant challenges regarding high-speed internet availability, affordability, and adoption. To close Montana's digital divide, the Montana Broadband Office has created a Digital Opportunity Plan, which addresses barriers in four main areas: broadband availability, service affordability, device access, and digital skills. By pursuing strategic initiatives to overcome these obstacles, Montana can encourage broadband adoption and provide all of its residents—particularly covered populations, including tribal members—with access to the myriad benefits of high-speed internet.

To fully understand the depth and causes of its digital divide, Montana conducted extensive stakeholder outreach and inventoried the assets available to address barriers to digital opportunity. These efforts allowed the state to identify gaps and potential focus areas.

The state's stakeholder engagement process, detailed in Section 4, allowed Montana to engage with its key constituents—including state agencies and institutions, community leaders, CAIs, and members of covered populations—to understand the obstacles they face and what they value most in terms of broadband access.

The asset inventory in Section 3.1 lays out the various resources, programs, and strategies that currently exist in Montana. Some of these are available to all Montanans, and others are designed to support one or more covered populations.

Through stakeholder engagement and the asset inventory, Montana identified gaps that the Digital Opportunity Plan should fill, mainly related to designing formal efforts to bring adequate broadband to the unserved and underserved, prioritizing CAIs as sources of broadband and device access, and making internet service more affordable. These barriers to digital opportunity are outlined in Section 3.2, which establishes a baseline for internet service and device accessibility and affordability.

To best serve Montanans through expanded access to affordable internet, Montana designed implementation strategies that expand existing programs and establish new initiatives. Section 5 introduces ten implementation strategies that are organized to address barriers to broadband adoption related to four key areas: broadband availability, service affordability, device access, and digital skills. The Plan outlines the associated barriers and gaps these strategies address, estimated timelines, key activities, goals, and measurements.

The evaluation metrics in Section 5 are tied to Section 2.3, which details measurable objectives that advance five topics: broadband availability and affordability, online accessibility and inclusivity, digital skills, online privacy and cybersecurity, and device availability and affordability. The measurable objectives in Section 2.3 support existing and planned efforts of the state related to the economy, workforce development, education, healthcare, civic and social engagement, and the delivery of essential services, which are outlined in Section 2.2. The Digital

Opportunity Plan's initiatives will bolster Montana's broader goals of enhanced service and opportunity to its citizens.

Montana's Digital Opportunity Plan will guide the state's efforts to narrow the digital divide and provide all Montanans with affordable high-speed broadband, adequate access to devices, and the digital skills necessary to access the internet and its many services.

2 Introduction and Vision for Digital Opportunity

2.1 Vision

The Montana Broadband Office's vision is to narrow the digital divide in support of Montana's economic, workforce, health, and educational goals by ensuring reliable, affordable internet access for all Montanans. Given how much of the state will have broadband access for the first time as a result of private, state, and federal investment over the next several years, a priority aim for Montana is to pair broadband deployment with digital opportunity efforts. This strategy will maximize the impact of new broadband service across the state. Montana has prioritized digital opportunity in its approach to improving broadband access, factoring in affordability, access to devices, and digital skills to help close the internet adoption gap across its covered populations.

As part of its broadband strategy, Montana is developing programs and partnerships that address core factors impacting digital participation for Montanans. Searching for and responding to a job ad, communicating with a child's teacher, and accessing government services are all examples of interactions that are easily executed online in communities with reliable and affordable broadband access. Rural communities, representing ~61 percent of Montana's population, are further removed from access to in-person services and are also less likely to have sufficient internet access, potentially keeping them cut off from basic services and information.[1] Montana has made it a priority to offer electronic options for accessing government services via eGovernment, one of the State of Montana's information technology goals and major strategic initiatives, through which 62 different state agencies, organizations, universities, and local governments offer more than 400 online services to benefit Montana's citizens. Broadband deployment will further the state's IT strategic goals, and its workforce, educational, healthcare, and economic goals.[2]

The Montana Broadband Office (MBO), located within the State of Montana's Department of Administration (DOA), has the mandate to act as the administering entity for the state's broadband infrastructure deployment program, ensuring broadband access, adoption, and implementation for all populations within Montana.[3] The Montana Broadband Office (MBO) is building a broadband program that will reach unserved and underserved locations and narrow the digital divide, giving all Montana residents the information technology capacity needed for full participation in our society, democracy, and economy.

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[1] Digital Equity Act Population Viewer, Census, https://mtgis-portal.geo.census.gov/arcgis/apps/MapSeries/index.html?appid=a0013a9dcbb9419e855f563d78e892ef
[2] Commerce First To Meet Governor Gianforte's Digital Challenge, Governor's Office, https://news.mt.gov/Governors-Office/Commerce_First_To_Meet_Governor_Gianfortes_Digital_Challenge
[3] ConnectMT, Department of Administration, https://connectmt.mt.gov/; Montana House Bill 632, https://leg.mt.gov/bills/2021/billpdf/HB0632.pdf

Covered Populations

The main objective of this Digital Opportunity Plan is to close the digital divide for covered populations[4], which include:

1. Individuals who live in covered households, 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
2. Aging individuals
3. Incarcerated individuals other than individuals who are incarcerated in a Federal correctional facility
4. Veterans
5. Individuals with disabilities
6. Individuals with a language barrier, including individuals who—
    a. Are English learners; and
    b. Have low levels of literacy
7. Individuals who are members of a racial or ethnic minority group; and
8. Individuals who primarily reside in a rural area.

Covered populations make up 83.3 percent of Montana's population, with individuals primarily residing in a rural area accounting for nearly two-thirds of the state's citizens.[5]

2.2 Alignment with Existing Efforts to Improve Outcomes

2.2.1 Montana Broadband Office Governance

The Montana Broadband Office's governance model will facilitate the integration of the state's broadband efforts. A brief overview of the key entities' roles can be found below:

Montana's Broadband Office (MBO)

The MBO will conduct research and data collection to build the Statewide Broadband Map with input from Internet Service Providers (ISPs); establish and administer the broadband infrastructure deployment program, distributing grant funding to ISPs to increase broadband access; monitor projects on an ongoing basis to ensure that sub-recipients are compliant with the use of grant funds and all pass-through requirements, and engage a diverse set of stakeholders to ensure the broadband program will meet the needs of all Montanans.

The State Legislature

The MBO was created in 2021 by Senate Bill 297 and House Bill 632. Senate Bill 297 (the ConnectMT Act) created the state's broadband infrastructure deployment program; House Bill 632 appropriated $275 million in American Rescue Plan Act (ARPA) funds for state broadband grants and created a nine-member Communications Advisory Commission (CAC) to review proposals and make recommendations to the Governor.

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[4] As outlined by NTIA, as required by the BEAD Five-Year and Digital Equity Plans
[5] Digital Equity Act Population Viewer, Census, https://mtgis-portal.geo.census.gov/arcgis/apps/MapSeries/index.html?appid=a0013a9dcbb9419e855f563d78e892ef

Senate Bill 297 provides that Montana "shall establish the broadband infrastructure deployment program and shall administer and act as the fiscal agent for the program and is responsible for receiving and reviewing responsive proposals and awarding contracts after review and receiving the governor's final approval."[6]

During the 68th legislative session (i.e., LC 1234), Senate Bill 531 revised the role of the Communications Advisory Commission in supporting broadband efforts in the state and aligned Montana's broadband service availability definitions and funding guidelines to BEAD requirements.[7] Also, during the 68th legislative session, a shift of $44,148,748 of 602 funds to the ConnectMT program was passed by an appropriation change.[8] Total funding for grant awards is anticipated to increase from $266M to approximately $310M, but the timing of this funding is to be determined.

Other Montana Government Departments

Several additional state government departments will provide information to the Broadband Office to support broadband deployment and further state goals in other areas (e.g., economic, workforce, educational, and health). Sections 2.2.1 through 2.2.5 below detail how the Montana Broadband Office will collaborate with other state government departments to achieve the broader goals for the state of Montana.

2.2.2 Overview of the Digital Opportunity Plan's Alignment with Existing Goals

The digital divide cannot be closed without affordable, accessible high-speed broadband, the proper devices to navigate the internet, and adequate digital skills and security, which is why the Digital Opportunity Plan has developed the following goals:

- Broadband Availability and Affordability: Ensure all Montana residents have access to affordable internet in their homes, schools, libraries, and businesses, irrespective of their income level
- Online Accessibility and Inclusivity: Reduce the digital divide among all Montana residents by increasing broadband adoption by covered populations and increasing access to online resources for all residents
- Digital Skills: Build digital skills to enhance broadband use through programs and partnerships with community stakeholders
- Device Availability and Affordability: Reduce the digital divide among Montana residents by ensuring widespread access to internet-capable devices
- Online Privacy and Cyber-security: Ensure all Montana residents have access to the internet that meets online privacy and cybersecurity standards

Achieving Montana's vision for digital opportunity related to the focus areas listed above will support and advance several of Montana's broader existing and planned efforts and goals related to economic and workforce development, education, health, civic and social engagement, and the delivery of other essential services.

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[6] Montana Senate Bill 297, https://leg.mt.gov/bills/2021/billpdf/SB0297.pdf
[7] Montana Senate Bill 531. https://leg.mt.gov/bills/2023/billpdf/SB0531.pdf
[8] ConnectMT Broadband Resources. Funding. https://connectmt.mt.gov/ARPA/Funding

Sections 2.2.3-2.2.7 detail many of the state's key initiatives and outline the Digital Opportunity Plan's focus areas and goals that support and align with Montana's broader efforts.

2.2.3 Economic and workforce development

Montana's strategies to bolster its economy and develop its workforce are largely dependent on, and will be advanced by, increased access to broadband and closing the digital divide. Resources to build skills, find jobs and conduct business are increasingly located online. As such, adequate broadband is vital to a thriving economy and workforce, and the Plan's goal of closing the digital divide by making broadband accessible and affordable will bolster Montana's short- and long-term plans for its economy and workforce, as detailed below.

Come Home Montana[9]

Description

In 2021, Governor Gianforte announced Come Home Montana, a state-wide effort to encourage Montanans to take advantage of remote work opportunities and return home to Montana from other states. Affordable access to high-speed internet is essential to successfully working remotely, which was referenced in a statement from the governor's office: "To bridge the digital divide and make working remotely more accessible than ever, the administration is in the early stages of deploying $275 million of [ARPA] funds for broadband expansion. In addition to highlighting opportunities for remote work and employment, the campaign highlights the value of a Montana education."

The $275 million is being allocated by the State of Montana using funds from the American Rescue Plan Act for the "expansion of broadband Internet access to Montana's regions and locales that remain unserved or underserved. The Department of Administration has established ConnectMT to oversee the operation of the award process," as the funds will be allocated "via competitive allocation awards to applicants who commit at a minimum of 20 percent of the proposed project's funds cost and who also commit to deploying enhanced and improved internet communications in Montana."[10]

The implementation of both the BEAD Five-Year Action Plan and Digital Opportunity Plans will also create jobs to build and support broadband infrastructure and supporting programs, which may incentivize Montanans to return to live and work in the state, helping to fill labor gaps needed for broadband deployment and ongoing implementation.

Alignment with Digital Opportunity Plan Areas and Goals

- Broadband Availability and Affordability: Ensure all Montana residents have access to affordable internet and necessary devices in their homes, schools, libraries, and businesses, irrespective of their income level

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[9] Gov. Gianforte Launches Come Home Montana Campaign, Governor's Office, https://news.mt.gov/Governors-Office/gov-gianforte-launches-come-home-montana-campaign
[10] ConnectMT, ARPA Broadband Infrastructure, https://commerce.mt.gov/_shared/ARPA/docs/Communications/20211118/ConnectMTApplicationSubmittable.pdf

Montana Registered Apprenticeship Program[11]

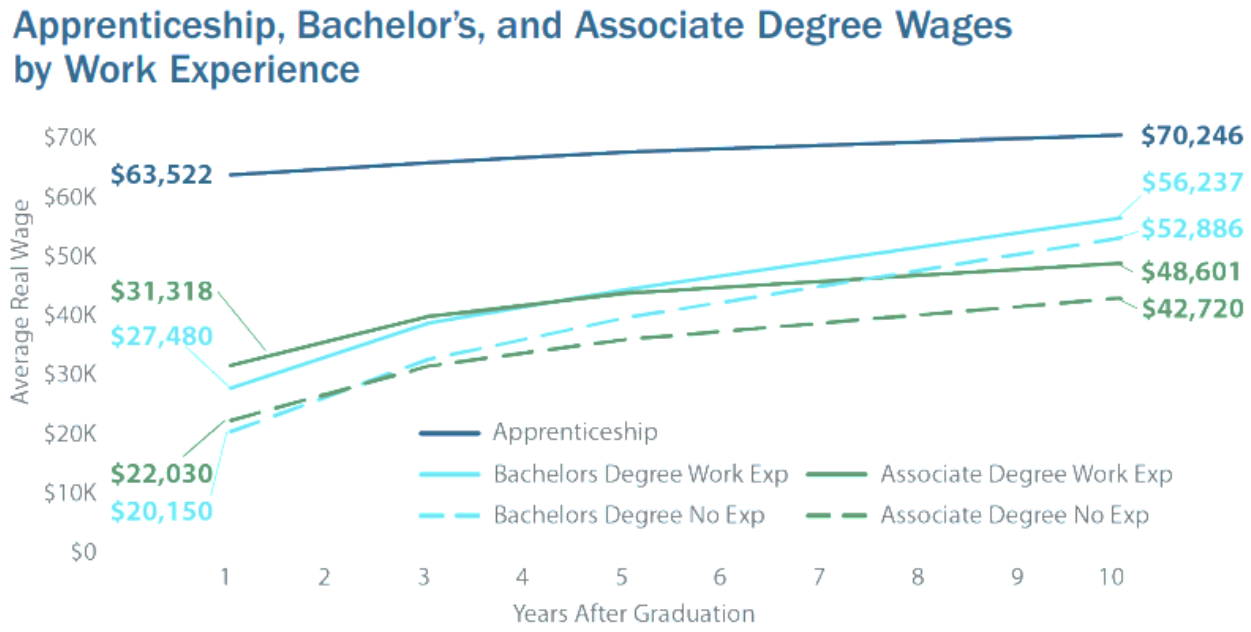
Description

Governor Gianforte has prioritized growing the Montana Registered Apprenticeship Program, a key workforce development initiative that has greatly accelerated over the last year and currently has more participants than the previous three years combined. The program provides paid, on-the-job training that teaches specific and technical job skills unique to participating employers. Upon completion, participants are conferred a Montana Registered Apprenticeship Program completion certificate, which is recognized in all 50 states.

The program was designed to create a skilled labor force to take advantage of Montana's employment opportunities. Around 14,000 students graduate from high school in Montana every year, 6,000 of whom go directly to work without meaningful credentials that could help them secure skilled, well-paying positions. To support those students, the state developed Montana Registered Apprenticeships, which pairs students with employers, provides them paid, on-the-job training, and positions them to attain gainful employment. This effort is reimagining high school for nontraditional students who would likely not attend college upon graduation. Pilot programs have been developed for construction, manufacturing, healthcare, technology, restaurants, and hospitality.[12] Completing this program translates into significant wage increases—according to the 2022 Montana Labor Day Report, those who complete the Registered Apprenticeship Program earn wages higher than those who graduate with associate's or bachelor's degrees (Exhibit 1).

[11] Montana Registered Apprenticeship, Department of Labor and Industry, https://apprenticeship.mt.gov/
[12] Interview with Workforce Services Division, Montana Department of Labor & Industry, October 31, 2022

Exhibit 1: 2022 Montana Labor Day Report Ten-Year Wages by Work Experience[13]



Source: MTDLI, OCHE, RMC, CC, UP, and apprenticeship graduate data wage match. Wages reflect average real wages reported in 2021 dollars using the CPI-U. Apprenticeship includes all degree types. Work experience defined as working at least two quarters per year in the five years prior to graduation. All apprenticeship completer have work experience.

To continue expanding this program, the Montana Broadband Office may explore opportunities for students to participate in apprenticeships to learn how to deploy broadband infrastructure and provide ongoing technical support as high-speed internet is expanded throughout Montana in accordance with the BEAD Five-Year Action Plan and Digital Opportunity plans. This can fill labor gaps in the market and help Montanans take advantage of jobs that pay well in the state.

To learn about and enroll in the program, students use an online portal, highlighting the importance of a digitally connected Montana.

Alignment with Digital Opportunity Plan Areas and Goals

- Broadband Availability and Affordability: Ensure all Montana residents have access to affordable internet and necessary devices in their homes, schools, libraries, and businesses, irrespective of their income level

Accelerate Montana[14]

Description

Using a skills-focused hiring process, Accelerate Montana helps organizations identify their hiring needs while offering them a pool of qualified candidates. The organization is partnering

[13] 2022 Montana Labor Day Report, Montana Department of Labor and Industry, https://lmi.mt.gov/_docs/Publications/LMI-Pubs/Labor-Market-Publications/LDR20221.pdf
[14] AccelerateMT, University of Montana, https://www.acceleratemt.com/rapid-training-program

with employers to build programs based on their needs and the needs of their employees. This public-private partnership provides Rapid Training courses, which can be taken in person, online, or hybrid through various Montana colleges. In February 2022, Governor Gianforte announced a $6 million investment in Accelerate Montana to "establish a series of rapid retraining and upskilling programs that will train up to 5,000 Montanans in sectors such as construction, health care, manufacturing, and infrastructure." The Governor's office added that "Accelerate Montana will jump-start the programs by partnering with high schools and private, public, and tribal colleges across the state to develop or adapt trainings to meet the needs for skilled positions across priority industries in Montana."[15]

As the BEAD Five-Year Action Plan and Digital Opportunity plans are implemented, there may be opportunities for Accelerate Montana to provide rapid upskilling to residents interested in filling the labor gap created by the expansion of broadband infrastructure—particularly given the recent investment in upskilling Montanans for construction and infrastructure positions—and the administration of ongoing support.

In addition, Accelerate Montana's upskilling efforts could be used to build potential employees' digital skills to broaden their job opportunities and increase their earning potential. The State of Oklahoma, a National Governors Association Workforce Innovation Network grantee, used data to illustrate how digital skills can meaningfully increase earning potential. "By matching an occupational digital skill scores matrix developed by the Brookings Institution with occupational wage data produced by the U.S. Bureau of Labor Statistics and long-term occupational projections funded by the U.S. Department of Labor, the Oklahoma team found almost three-quarters of current jobs in [Oklahoma] require at least a medium level of digital skills, and that each additional point in a digital score, on a scale of 0-100, is associated with an extra $781 in annual earnings."[16]

Alignment with Digital Opportunity Plan Areas and Goals

- Broadband Availability and Affordability: Ensure all Montana residents have access to affordable internet and necessary devices in their homes, schools, libraries, and businesses, irrespective of their income level
- Digital Skills: Build digital skills to enhance broadband use through programs and partnerships with community stakeholders

Montana Comeback Plan[17]

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[15] Gov. Gianforte Announces $6 Million Investment in Rapid Workforce Training, State of Montana Newsroom, February 15, 2022, https://news.mt.gov/Governors-Office/Gov_Gianforte_Announces_6_Million_Investment_in_Rapid_Workforce_Training
[16] Lessons Learned In Workforce Innovation: How Six States Are Planning To Advance Digital Skills For Equitable Economic Participation, National Governors Association, https://www.nga.org/publications/lessons-learned-in-workforce-innovation-how-six-states-are-planning-to-advance-digital-skills-for-equitable-economic-participation/
[17] Montana Come Back Plan, Greg Gianforte For Governor, https://gregformontana.com/wp-content/uploads/2020/08/Montana-Come-Back-Plan.pdf

In the wake of the pandemic, Governor Gianforte developed The Montana Comeback Plan to reenergize Montana's economy.

The Governor's plan acknowledges the promise of the technology sector and the power of widespread, high-speed internet access "the high-tech sector, which now exceeds $2 billion per year in revenue in Montana, is our fastest growing industry and creates jobs that pay double the state average." The broadband infrastructure buildout and subsequent support and service detailed in the BEAD Five-Year Action Plan could create a considerable number of jobs for the state.

The plan also notes, "With broadband Internet, tech businesses can be in any Montana community, and Montanans can return home, bringing remote work jobs with them to revitalize our rural communities. We should be encouraging high tech to complement our other strong Montana industries and expanding rural broadband to enable it."

Montana's challenges, particularly in rural populations, are referenced: "Montana lags other states in access to broadband … one in three Montanans do not have access to broadband, which is three times the national average. The digital divide is even greater in our rural communities where three in five Montanans do not have access to broadband."

Additionally, the increased reliance on broadband for work, healthcare, and education is acknowledged: "As a result of the coronavirus crisis, Montanans are increasingly teleworking, patients are relying on telemedicine to consult with their doctors remotely, and students are studying and taking classes online—all making the lack of access across our state more pronounced."

The Comeback Plan plainly states that bringing reliable broadband to all of Montana is a crucial, key priority for the state, as it's "time we give rural Montana access to the same opportunities the rest of the state has. We have to bring reliable broadband to all our Montana communities. Deploying broadband to our rural areas is foundational for our new and evolving economy, whether it's agriculture or high-tech."

As outlined clearly in the Montana Comeback Plan, many of the state's overarching priorities—skilled workforce development and remote access to education, work, and healthcare—rely on the widespread availability of high-speed internet.

Alignment with Digital Opportunity Plan Areas and Goals

- Broadband Availability and Affordability: Ensure all Montana residents have access to affordable internet and necessary devices in their homes, schools, libraries, and businesses, irrespective of their income level
- Online Accessibility and Inclusivity: Reduce the digital divide among all Montana residents by increasing broadband access for covered populations and increasing access to online resources for all residents
- Digital Skills: Build digital skills to enhance broadband use through programs and partnerships with community stakeholders
- Device Availability and Affordability: Reduce the digital divide among Montana residents by ensuring widespread access to internet-capable devices

2.2.4 Education

Given Montana's rurality and low population density, digital instruction is a powerful tool for providing students with the educational opportunities they need. In many places, there is a dearth of instructors trained to teach the classes required or desired by students. By improving broadband access, students in remote areas can use online tools to take classes they would not otherwise be able to access. According to the Office of Commissioner of Higher Education, one in five courses available are now offered online or in a hybrid model.[18] Adequate, affordable internet and device access will expand students' ability to pursue education opportunities that fit their needs.

Montana Board of Public Education Strategic Plan 2022-2023[19]

Description

The main objective of the State of Montana Board of Public Education's Strategic Plan is to collaborate with the Montana Digital Academy, Montana's statewide online program, to support instruction for students in partnership with public schools.

The Montana Digital Academy[20] allows students to access their classes from any place at any time, greatly expanding learning opportunities and increasing "access to Advanced Placement® and specialized elective courses, especially for our rural schools."

The Digital Opportunity Plan's priorities related to broadband and device availability and affordability, online accessibility and inclusivity, digital skills, and online privacy and cybersecurity will support the Academy's agenda, broadening learning opportunities for Montana's students.

Alignment with Digital Opportunity Plan Areas and Goals:

- Broadband Availability and Affordability: Ensure all Montana residents have access to affordable internet and necessary devices in their homes, schools, libraries, and businesses, irrespective of their income level
- Online Accessibility and Inclusivity: Reduce the digital divide among all Montana residents by increasing broadband access for covered populations and increasing access to online resources for all residents
- Digital Skills: Build digital skills to enhance broadband use through programs and partnerships with community stakeholders
- Device Availability and Affordability: Reduce the digital divide among Montana residents by ensuring widespread access to internet-capable devices

Montana School for the Deaf and Blind Education Program Overview[21]

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[18] Office of Commissioner of Higher Education, Interview, November 2, 2022
[19] Strategic Plan 2021-2022, Montana Board of Public Education, https://bpe.mt.gov/Home/Approved-BPE-Strategic-Plan-2021.pdf
[20] Montana Digital Academy, State of Montana, http://montanadigitalacademy.org/
[21] Montana School for the Deaf and the Blind, https://www.msdbmustangs.org/education/education-program-overview/

Description

Many students who attend and use resources provided by the Montana School for the Deaf and Blind (MSDB) sit at the intersection of two of the most vulnerable covered populations, residing in rural areas and living with disabilities like vision or hearing impairments.

Access to the internet and specialized devices and software are essential for these students to learn and communicate, so lack of access, and affordability are significant issues. MSDB's program overview prioritizes the availability of "tools, such as amplification technology and communication strategies," and "access to technology depending on individual student needs."

MDSB needs adequate broadband to broadcast its lessons to students who live in remote areas. According to the school's administrator, MSDB's visually impaired students rely on devices with software that can translate the written word into sound to help them navigate lessons on their device screens. Additionally, students with hearing impairments meet on Zoom to allow them to sign on screen, and that requires high-speed internet. Low broadband speeds result in video lags, which can cause students to miss 20-30 percent of instruction, impeding their ability to participate fully in their lessons. Through ARPA allocations, MDSB should receive high-speed internet via fiber before 2025.

The Digital Opportunity Plan's goal to increase broadband and device availability and affordability will directly support MDSB's education goals by enabling students to participate fully in their classes and by expanding the school's ability to train additional instructors around the state to increase MDSB's impact.

Alignment with Digital Opportunity Plan Areas and Goals

- Online Accessibility and Inclusivity: Reduce the digital divide among all Montana residents by increasing broadband access for covered populations and increasing access to online resources for all residents
- Device Availability and Affordability: Reduce the digital divide among Montana residents by ensuring widespread access to internet-capable devices

Montana Office of Public Instruction Initiatives[22]

Description

Several Montana Office of Public Instruction's (OPI) initiatives will be bolstered by the Digital Opportunity Plan, including increasing "family, student, and community engagement," which could be made more robust via digital engagement.

[22] Initiatives, Montana Office of Public Instruction, https://opi.mt.gov/Portals/182/Superintendent-Docs-Images/OPIpercent20Initiatives.pdf?ver=2018-08-13-112844-533

OPI is also keen to "expand industry, military, and post-secondary partnerships," which intersects with the Montana Registered Apprenticeship program that uses an online portal to connect prospective participants to potential sponsors.

Further, OPI's initiative to emphasize "STEM, career, and technical education (CTE), and workforce development, beginning in middle school" will require digital equipment and broadband access, both prioritized by the Digital Opportunity Plan.

OPI's STEM goals are underscored by First Lady Susan Gianforte's priority of "increasing opportunities for Montana kids to explore Science, Technology, Engineering and Math (STEM) education." She notes, "students who engage in STEM education learn how to solve complex problems, boost their self-confidence, and discover doors to greater opportunities."[23]

The state's STEM, CTE, and workforce development initiatives can also help address the labor gap in the state's effort to build broadband infrastructure and provide necessary support services. By collaborating on programming, Montana can build a labor force with the skills needed to support these broadband efforts.

Alignment with Digital Opportunity Plan Areas and Goals

- Broadband Availability and Affordability: Ensure all Montana residents have access to affordable internet and necessary devices in their homes, schools, libraries, and businesses, irrespective of their income level
- Device Availability and Affordability: Reduce the digital divide among Montana residents by ensuring widespread access to internet-capable devices

2.2.5 Health

The State of Montana encompasses extensive and sparsely populated land. Many residents live in remote areas, many hours from healthcare facilities. Making the trip for routine checkups can be both time-consuming and costly. For rural Montanans, in particular, telehealth may be key to making healthcare affordable and accessible.

Increasing the availability of affordable high-speed internet can support the state's telehealth goals, as highlighted in the Montana State Rural Health Plan and the Montana Department of Health and Human Services Strategic Plan.

Montana State Rural Health Plan[24]

Description

The Montana State Rural Health Plan stresses the importance of telehealth access and use in serving Montana's largest covered population: rural individuals. The plan notes "Much of Montana remains in a broadband desert. In many of these areas, internet connections that are not sufficient to maintain a live video call are common."

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[23] Treasure State Foundation, https://treasurestatefoundation.org/our-initiatives/
[24] Montana's Rural Health Plan 2021, Montana Department of Public Health and Human Services, https://dphhs.mt.gov/assets/qad/FlexGrantStateRuralHealthPlan.pdf

The goals of the Rural Health Plan include expanding telehealth for rural populations and veterans, encouraging providers and healthcare facilities to adopt and use telehealth, and increasing access to behavioral health telehealth services.

Individuals who live in rural areas may lack the time and resources necessary to travel long distances—sometimes several hours—to visit healthcare professionals, sometimes for ailments that could be addressed via a video call. By increasing the ease of access to telehealth, rural residents may feel encouraged to manage their health issues faster or more frequently, leading to better outcomes in the short- and long-term.

To access the myriad benefits of telehealth, it will be critical to support rural Montanans in building digital skills. For those who have never used video teleconferencing services like Zoom before, attending a virtual doctor appointment may be challenging and daunting. CAIs could play a helpful role in supporting rural Montanans by providing digital skills-building classes.

Alignment with Digital Opportunity Plan Areas and Goals

- Broadband Availability and Affordability: Ensure all Montana residents have access to affordable internet and necessary devices in their homes, schools, libraries, and businesses, irrespective of their income level
- Online Accessibility and Inclusivity: Reduce the digital divide among all Montana residents by increasing broadband access for covered populations and increasing access to online resources for all residents
- Device Availability and Affordability: Reduce the digital divide among Montana residents by ensuring widespread access to internet-capable devices
- Digital Skills: Build digital skills to enhance broadband use through programs and partnerships with community stakeholders
- Online Privacy and Cyber-security: Ensure all Montana residents have access to internet that meets online privacy and cybersecurity standards

Montana Department of Public Health and Human Services[25]

Description

The Montana Department of Public Health and Human Services (DPHHS) is prioritizing the continued expansion of telehealth services for behavioral health, primary care, and other health-related needs and recognizes telehealth's role in increasing access to timely, affordable, and effective health services.

Montana's extensive frontier and low population density means that residents—particularly in rural areas and on tribal reservations—face considerable barriers to accessing medical care. These geographic challenges impede residents' access to healthcare and to other essential services, including those offered by Child Protective Services (CPS) and the Office of Public Assistance (OPA). With adequate broadband and internet-capable devices, Montanans could access these services remotely, saving a great deal of time and resources, which could, in turn, encourage more frequent use.

[25] Montana Department of Health and Human Services, Interview, November 10, 2022

The lack of broadband and cell service is also a challenge for state agency employees. CPS representatives often lose connectivity when driving in Eastern Montana to conduct wellness checks, posing serious security risks. OPA employees face obstacles enrolling residents in programs like SNAP or Medicaid, and they may have to travel upwards of 100-150 miles to provide the support that could be easily offered online. The agencies overseen by DPHHS are under-resourced, lacking the technical equipment, such as signal boosters, hotspots, and tablets, necessary to perform their duties. Access to broadband and appropriate internet-capable devices would significantly improve these employees' ability to conduct their business. Further, given the sensitive nature of the information stored by and transferred to and from these agencies, the Digital Opportunity Plan's online privacy and cybersecurity goals will be critical to keeping privileged information safe and secure.

Alignment with Digital Opportunity Plan Areas and Goals

- Broadband Availability and Affordability: Ensure all Montana residents have access to affordable internet and necessary devices in their homes, schools, libraries, and businesses, irrespective of their income level
- Online Accessibility and Inclusivity: Reduce the digital divide among all Montana residents by increasing broadband access for covered populations and increasing access to online resources for all residents
- Device Availability and Affordability: Reduce the digital divide among Montana residents by ensuring widespread access to internet-capable devices
- Online Privacy and Cyber-security: Ensure all Montana residents have access to internet that meets online privacy and cybersecurity standards

2.2.6 Civic and social engagement

People count on online platforms to connect with friends and family, explore their interests, and participate in their communities. Many of the State of Montana's civic and social engagement plans include using digital platforms to make access easier for residents, which can be supported by increased access to affordable broadband.

Secretary of State Biennium 2023-2025[26]

Description

Montana's secretary of state has made the deployment and use of electMT, an updated election system, a key priority ahead of the next wave of elections. Currently, there is no online system for local elections, but with electMT, voters will be able to check their ballot status, and the election reporting systems will be tied into each other. As voting is central to civic engagement, implementing this new system will further enfranchise Montana's citizens.

The Digital Opportunity Plan's goals related to online privacy and cybersecurity, as well as online accessibility and inclusivity, can help make electMT successful and scalable.

[26] 2023-2025 Biennium, Montana Secretary of State, https://sosmt.gov/wp-admin/admin-ajax.php?juwpfisadmin=false&action=wpfd&task=file.download&wpfd_category_id=775&wpfd_file_id=48194&token=b0e72f88d5ec849828e7397b4a41626b&preview=1

Alignment with Digital Opportunity Plan Areas and Goals

- Online Accessibility and Inclusivity: Reduce the digital divide among all Montana residents by increasing broadband access for covered populations and increasing access to online resources for all residents
- Device Availability and Affordability: Reduce the digital divide among Montana residents by ensuring widespread access to internet-capable devices

Montana Fish, Wildlife, and Parks Goals[27]

Description

Fishing, hunting, and spending time outdoors are central tenets of life in Montana. The Montana Fish, Wildlife, and Parks Agency has prioritized replacing its Automated Licensing System "to provide a comprehensive business and customer service portal for hunting, angling, and recreation opportunities." Hunters and fishers rely on affordable and accessible broadband and devices to access this updated system.

One of Montana's most prized assets is its pristine parks and outdoor attractions. As Montana's tourism industry continues to grow, the Montana Fish, Wildlife, and Parks Agency can use the internet to promote its many destinations, attracting tourists and their spending power to support the local economy.

Alignment with Digital Opportunity Plan Areas and Goals

- Online Accessibility and Inclusivity: Reduce the digital divide among all Montana residents by increasing broadband access for covered populations and increasing access to online resources for all residents

2.2.7 Delivery of other essential services

The Digital Opportunity Plan's objectives of increasing the availability of and access to high-speed internet will support the state agencies' transition to online platforms, enable residents to take advantage of the agencies' online presence, and advance additional goals laid out in the plans and efforts detailed below.

Governor Gianforte's Digital First Challenge[28]

Description

In July 2022, Governor Gianforte issued the Digital First Challenge to all of Montana's state agencies to become 100 percent digitized and accessible to residents online. The Governor noted, "Modernizing state government is critical to better serving our customers, the people of Montana, and being better stewards of their hard-earned money. By adopting a culture of customer service across state agencies, we are changing the way state government does business.

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[27] Goals and Objectives FY 2022-2023, Montana Fish, Wildlife & Parks Agency, https://fwp.mt.gov/aboutfwp/goals-and-objectives
[28] Commerce First To Meet Governor Gianforte's Digital Challenge, Governor's Office, https://news.mt.gov/Governors-Office/Commerce_First_To_Meet_Governor_Gianfortes_Digital_Challenge

By transforming state government to digital, we'll better serve Montanans while also saving taxpayers millions along the way."

The Digital First Challenge will make services and resources available online for all Montanans, increasing accessibility, particularly to those who would otherwise travel long distances to access state services. Affordable, accessible high-speed internet will allow the state's residents to take advantage of this impactful initiative.

Alignment with Digital Opportunity Plan Areas and Goals

- Broadband Availability and Affordability: Ensure all Montana residents have access to affordable internet and necessary devices in their homes, schools, libraries, and businesses, irrespective of their income level
- Online Accessibility and Inclusivity: Reduce the digital divide among all Montana residents by increasing broadband access for covered populations and increasing access to online resources for all residents
- Digital Skills: Build digital skills to enhance broadband use through programs and partnerships with community stakeholders
- Device Availability and Affordability: Reduce the digital divide among Montana residents by ensuring widespread access to internet-capable devices

Department of Military Affairs[29]

Description

The Department of Military Affairs noted the importance and value of adequate broadband infrastructure and support as related to emergency and disaster relief in the State of Montana. During an interview conducted by the Montana Broadband Office, they noted that the lack of redundancies in the broadband infrastructure makes the state vulnerable before, during, and after disasters: "If one line goes down, everything is down." The inability to communicate quickly with Montana residents puts the state at a disadvantage in conveying warnings ahead of natural disasters and providing emergency response in the wake of those disasters.

The Department, which also helps veterans access benefits, noted that veterans, who are often older, lack adequate technology in their homes and the digital skills necessary to access resources online.

The Digital Opportunity Plan's initiatives related to expanding broadband availability and digital skills may offer noted benefits to several covered populations with whom the Department of Military Affairs often interfaces—veterans, individuals who live in rural areas, aging populations, and individuals living with disabilities.

Alignment with Digital Opportunity Plan Areas and Goals

- Broadband Availability and Affordability: Ensure all Montana residents have access to affordable internet and necessary devices in their homes, schools, libraries, and businesses, irrespective of their income level

[29] Department of Military Affairs, Interview, October 26, 2022

- Online Accessibility and Inclusivity: Reduce the digital divide among all Montana residents by increasing broadband access for covered populations and increasing access to online resources for all residents
- Digital Skills: Build digital skills to enhance broadband use through programs and partnerships with community stakeholders
- Device Availability and Affordability: Reduce the digital divide among Montana residents by ensuring widespread access to internet-capable devices

Montana Department of Livestock Goals and Objectives[30]

Description

Livestock is at the center of Montana's robust agriculture industry, and two of the Montana Department of Livestock's key goals are keeping "the livestock industry and public informed of industry programs and issues through timely and accurate public information and education and managing the enforcement of brands.

As the Department of Livestock notes, "Starting with the time of the open range to the present, brands have been used as markings to identify livestock and have been a visual means of identification in showing ownership throughout history. Currently, 47,669 registered Montana Livestock Brands are maintained by the Brands Enforcement Division Brand Office." Digitizing this vast brand catalog and allowing online brand registration would make the process easier and more accessible.

Alignment with Digital Opportunity Plan Areas and Goals

- Broadband Availability and Affordability: Ensure all Montana residents have access to affordable internet and necessary devices in their homes, schools, libraries, and businesses, irrespective of their income level
- Online Accessibility and Inclusivity: Reduce the digital divide among all Montana residents by increasing broadband access for covered populations and increasing access to online resources for all residents

2.3 Strategy and Objectives

The importance and value of digital opportunity cannot be overstated. With the ubiquity of internet use, the lack of digital opportunity places people—many of whom are already vulnerable—at a significant disadvantage.

As illustrated in section 2.2, adequate access to broadband is required to achieve goals related to the economy, workforce development, education, health care, civic and social engagement, and the delivery of other essential services.

[30] Goals and Objectives 2022-2023 Biennium, Montana Department of Livestock, https://liv.mt.gov/Goals-and-Objectives

The digital divide cannot be closed without affordable, accessible high-speed broadband, the proper devices to access the internet, and adequate digital skills and security, which is why the Digital Opportunity Plan has developed goals, strategies, and KPIs related to each of these areas, as described in Exhibit 2 below.

Exhibit 2: Digital Opportunity Plan goals, strategies, and tracking

Area	Potential goals	Sample strategies	KPIs	Baseline	Short-term	Long-term	Data Source	Tracking Frequency	Responsible Entity
Broadband Availability and Affordability	Ensure all Montana residents have access to affordable internet in their homes, schools, libraries, and businesses, irrespective of their income level	Establish service to unserved locations	Percent of unserved locations	13%	TBD	0% (as required by NOFO)	Broadband map	Every 6 months	Chief Data Officer
		Increase broadband speed for underserved locations	Percent of underserved locations	5%	TBD	TBD	Broadband map	Every 6 months	Chief Data Officer
		Increase broadband availability and speed for un- and underserved CAIs	Percent of un- and underserved CAIs	20%	TBD	TBD	Broadband map	Every 6 months	Chief Data Officer
		Establish partnerships to increase ACP uptake by eligible households	Percent of ACP uptake of eligible households	21%	TBD	TBD	Universal Service Administrative Company	Every 6 months	Program Coordinator
		Increase uptake of affordable plans	Percent uptake of affordable plans	N/A	TBD	TBD	ISP submissions	Every 6 months	Program Coordinator
Online Accessibility and Inclusivity	Reduce the digital divide among all Montana residents by increasing broadband adoption by covered populations and increasing access to online resources for all residents	Increase household adoption rates within covered populations by increasing the availability and affordability of high-speed internet	Percent of rural households adopting broadband internet	N/A	TBD	TBD	US Census data	Every 12 months	Census and Economic Information center
			Percent of Black households adopting broadband internet	63%	TBD	TBD	US Census data	Every 12 months	Census and Economic Information center
			Percent of Native American households adopting broadband internet	53%	TBD	TBD	US Census data	Every 12 months	Census and Economic Information center
			Percent of aging individuals' households	58%	TBD	TBD	US Census data	Every 12 months	Census and Economic Information center

Area	Potential goals	Sample strategies	KPIs	Baseline	Short-term	Long-term	Data Source	Tracking Frequency	Responsible Entity
			adopting broadband internet						
			Percent veteran households adopting broadband internet	64%	TBD	TBD	US Census data	Every 12 months	Census and Economic Information center
			Percent individuals with disabilities' households adopting broadband internet	55%	TBD	TBD	US Census data	Every 12 months	Census and Economic Information center
			Percent households who earn less than $20K annually	65%	TBD	TBD	US Census data	Every 12 months	Census and Economic Information Center
		Integrate the Governor's plan to make all public services and resources available online and designed to be user friendly	Percent of government services with online accessibility	TBD	TBD	100%	Department of Administration	Every 6 months	Program Coordinator
Digital Skills	Build digital skills to enhance broadband use through programs and partnerships with community stakeholders	Expand existing digital skills programs and establish new digital skills programs, administered through state entities and CAIs	Reach x individuals through y new or expanded digital skills programs	N/A	TBD	TBD	CAI and State Agency Directors	Every 6 months	Program Coordinator
		Expand existing digital skills programs and establish new digital skills programs, administered through state entities and CAIs, targeted to serve covered populations	Reach x individuals in covered populations through y new or expanded digital skills programs	N/A	TBD	TBD	CAI and State Agency Directors	Every 6 months	Program Coordinator

Area	Potential goals	Sample strategies	KPIs	Baseline	Short-term	Long-term	Data Source	Tracking Frequency	Responsible Entity
Device Availability and Affordability	Reduce the digital divide among Montana residents by ensuring widespread access to internet-capable devices	Strategically establish and expand CAI device loaning programs	Percent of community need fulfilled (# of devices available/# of devices needed)	N/A	TBD	TBD	CAI directors	Every 6 months	Program Coordinator
		Expand and establish strategic CAI device access points	Percent of community need fulfilled (# of devices available/# of devices needed)	N/A	TBD	TBD	CAI directors	Every 6 months	Program Coordinator
	Reduce the digital divide among state agencies by ensuring adequate internet-capable device inventory	Build adequate state device inventories	Percent of state agency need fulfilled (# of devices available/# of devices needed)	N/A	TBD	TBD	State agency directors	Every 6 months	Program Coordinator
Online Privacy and Cyber-security	Ensure all Montana residents have access to internet that meets online privacy and cybersecurity standards	Partner with ISPs to ensure protection of sensitive information	Percent grant-receiving ISPs that obtain "opt-in" consent to use and share sensitive information as defined by FCC Broadband Consumer Privacy Rules[31]	TBD	TBD	TBD	ISP submissions	Every 6 months	Program Coordinator

[31] Sensitive information defined in "Fact Sheet: The FCC Adopts Order to Give Broadband Consumers Increased Choice Over Their Personal Information," including precise geo-location, children's information, health information, financial information, Social Security numbers, web browsing history, app usage history, the contents of communications

3 Current State of Digital Opportunity: Barriers and Assets

3.1 Asset Inventory

In the State of Montana, both public and private entities have made concerted efforts to bridge the digital divide. Montana has conducted a detailed review of available assets that are being used to advance digital opportunity, both through online research and interviews with the leaders of several state agencies.

The digital asset inventory is organized as follows:

- **Section 3.1.1**: digital inclusion assets that serve covered populations
- **Section 3.1.2**: plans to advance digital opportunity instituted by municipalities, regions, and/or Tribes that also have a presence in the state
- **Section 3.1.3**: programs to advance digital opportunity instituted by municipalities, CAIs, and organizations across the State of Montana
- **Section 3.1.4**: assets that promote broadband adoption and are administered by non-government entities in the State of Montana
- **Section 3.1.5**: assets that promote broadband affordability and are administered by non-government entities in the State of Montana

The purpose of the asset inventory below is simply to document the digital assets that exist in the State of Montana. The inclusion of an asset does not indicate an endorsement of the effort, nor does it represent an interest by the state to participate or support any given asset. For details on programs that the state will pursue, please see Section 5.

3.1.1 Digital Inclusion Assets by Covered Population

In the State of Montana, there are a number of strategies, resources, plans, and programs that promote and enable digital inclusion of covered populations (see Exhibit 3).

Exhibit 3: Digital inclusion assets by covered population

Organization Name	Asset Name	Description	Covered Population	Link
Montana Public Library partners	Montana Public Library Partners with internet and adaptive services	Montana public libraries now have expanded broadband width capacity for internet services, adaptable Online Public Access Catalog (OPAC) computers for access by Montana residents with disabilities, and trained staff on the use of these products	All; individuals with disabilities	https://msl.mt.gov/tbl/other_resources/public_library_partners
Dawson Community College	Gold Card Program	Program for seniors to use internet services and take classes provided by the	Aging populations	https://www.dawson.edu/file_download/4f007d4c-453d-

Organization Name	Asset Name	Description	Covered Population	Link
		community college at no extra cost		40d6-a7d7-2a5219152ba1
Montana Registered Apprenticeship	MT Technology Apprenticeship Programs	Offers programs covering computer and office machine repair, computer user support, and computer programming	All; veterans	https://apprenticeship.mt.gov/
University of Montana	MonTECH Equipment Loans	MonTECH serves any Montanan with a disability, by loaning devices and equipment and teaching people how to use them	All; individuals with disabilities	https://montech.ruralinstitute.umt.edu/equipment-loans-reuse/
Girl Scouts of Montana and Wyoming	Mobile STEM Learning Center	The Girl Scouts of Montana and Wyoming are planning to launch the Mobile STEM Learning Center to deliver engaging, hands-on curriculum options to girls in rural areas across Montana and Wyoming, especially those in economically disadvantaged and tribal communities	Rural	https://www.fairfieldsuntimes.com/news/state/girl-scouts-of-montana-and-wyoming-launching-mobile-stem-learning-center/article_8d5f256c-ed13-596f-9590-9955d073a94f.html
Pacific Northwest Rural Broadband Alliance	Co-op broadband	This non-profit, focused on building rural broadband service for communities that are unconnected or underserved, delivers internet to customers via rooftop-mounted wireless receivers which blanket the region in service	Rural	https://nwbroadbandalliance.org/
Yellowstone Fiber	Montana's first high-speed all-fiber internet network, and the state's first Open Access FTTH network	This nonprofit aims to provide fiber access to every address in the City of Bozeman and begin to extend the network deep into Gallatin County. This open-access Fiber to the Home (FTTH) network increases competition and allows customers to select the best service at the best price	All; rural	https://www.yellowstonefiber.com/faqs/
HUD ConnectHome USA	FCC Lifeline Program	The Lifeline Program allows eligible consumers to receive a monthly benefit up to $9.25 towards phone or internet services (and up to $34.25 for those living on Tribal and Native lands)	Low-income; tribal populations	https://www.lifelinesupport.org/get-started/
Disability Rights Montana	Assistive Technology	Disability Rights Montana can assist people with disabilities	Individuals with disabilities	https://disabilityrightsmt.org/wp-content/uploads/20

Organization Name	Asset Name	Description	Covered Population	Link
		in obtaining assistive technology devices or services		20/07/2020-DRM-PAAT-Brochure.pdf
ICanConnect	ICanConnect	National program provides people with both significant vision and hearing loss with free equipment and training	Individuals with disabilities	https://www.icanconnect.org/
State of Montana	Tribal Computer Programming Boost Scholarship Program	HB 644 established a scholarship program, administered by OPI and DLI, to support the development of computer programming courses at high schools located on Native American reservations in the state	Tribal	https://leg.mt.gov/bills/2021/billpdf/HB0644.pdf
State of Montana	HB 219	HB 219 established a computer coding student training pilot grant program for tribal communities. Grant recipients included Code Girls United	Tribal	https://leg.mt.gov/bills/2021/billpdf/HB0219.pdf
Code Girls United	Tribal computer coding pilot project	Code Girls United was awarded a $50,000 state contract, made possible by House Bill 219, to provide training and incentives to students in Native communities for computer coding and programming courses	Tribal	https://www.greatfallstribune.com/story/news/tribal-news/2022/03/22/montana-nonprofit-code-girls-united-computer-programming-coding-tribal-communities/65346225007/
Soft Landing Missoula	Coding club	The nonprofit, which works with the local refugee and immigrant community, hosts a weekly coding club in the summer	All; English learners	https://missoulian.com/news/local/coding-club-soft-landing-kids-learn-computer-skills/article_58100409-ec87-5c65-8e8c-3474486b98d6.html
Blackfeet Manpower	Adult education	The organization provides job skills, including computer literacy, for members of the Blackfeet Tribe	Tribal	https://blackfeetmanpower.com/adult-education/
Career Training Institute	Training services	The nonprofit provides employment and training services, such as computer skills training, for low-income individuals	Low-income; All	https://ctihelena.org/about-us/

3.1.2 Existing Digital Opportunity Plans

Exhibit 4 includes plans "instituted by municipalities, regions, and/or Tribes that also have a presence in the state," in accordance with the Digital Opportunity Plan Guidance.

An opportunity exists to develop and deploy additional, robust digital opportunity plans to better target and serve covered populations.

Exhibit 4: Existing digital opportunity plans

Organization Name	Asset Name	Description	Covered Population	Link
Montana Office of Public Instruction	K-12 Digital Literacy and Computer Science Guidelines	The purpose of the Digital Literacy and Computer Science (DLCS) guidelines is to provide schools with a framework to prepare students for success in college and careers	All	https://opi.mt.gov/LinkClick.aspx?fileticket=DITR-OpK7jo%3D&portalid=182
Treasure State Foundation	STEM Education	The Foundation is promoting and expanding access to STEM education to help students learn to solve complex problems and increase opportunities later in their educations and careers	All	https://treasurestatefoundation.org/our-initiatives/
Montana Department of Labor and Industry	Growth with Google Partnership	DLI is partnering with Google to provide statewide access to Google Career Certificates in Digital Skills. After earning the certificates, participants are connected with an employer consortium of 150+ companies	All	https://news.dli.mt.gov/News/2022/07/grow-with-google

3.1.3 Existing Digital Opportunity Programs

A number of programs already exist in the State of Montana to help promote digital opportunity. These programs highlight the importance of Community Anchor Institutions as key partners in helping to close the digital divide, as many are administered by libraries and colleges. These programs can be built on and supplemented with additional efforts to improve digital opportunity.

Exhibit 5 includes a list of programs to advance digital opportunity instituted by municipalities, CAIs, and organizations across the state of Montana.

Exhibit 5: Existing digital opportunity programs

Organization Name	Asset Name	Description	Covered Population	Link
Libraries	Library Wi-Fi locations throughout Montana	Public libraries provide free Wi-Fi throughout the State of Montana	All	https://montana.maps.arcgis.com/apps/instant/nearby/index.html?appid=a733846b0bdd4e44a1f36aff4f89b411&&center=-109.7809,46.6429&level=5
Missoula Public Library	Exam Proctoring	The library will proctor or administer exams for students taking distance learning courses free of charge	All	https://www.missoulapubliclibrary.org/home/services/in-library-services/
Montana State University	Lifelong Learning Center	MSU offers digital literacy education programs	All	https://www.gfcmsu.edu/lifelonglearning/
Montana Department of Labor and Industry	The Incumbent Worker Training (IWT) program	Grant funding resource to help off-set a portion of skills-based training (including digital skills) costs for incumbent workers employed by Montana's small businesses	All	https://wsd.dli.mt.gov/employers/incumbent-worker-training-program/
Montana State Library	Montana State Library Hotspot Lending Program	Every public and tribal college library in Montana is eligible to receive hot spots that they can use as they choose to help their communities	All	https://msl.mt.gov/libraries/hotspotlendingprogram
Montana State University	Montana State University Technology Checkouts	The library technology lending service provides a free option for MSU Students and employees to borrow a variety of items, including laptops, iPads, and Wi-Fi hot spots	All	https://www.lib.montana.edu/request/tech-checkouts/
Department of Labor Employment and Training Administration (ETA)	Workforce Innovation and Opportunity Act (WIOA)	WIOA funds can be used to pay for devices and broadband internet service that will allow a participant to create or maintain a wireless connection for distance learning, etc., where such services are already allowable	All	https://www.dol.gov/agencies/eta/wioa
Missoula Public Library	Tech Connect	MPL offers basic technology sessions for those new to using computers, mobile devices, and the internet	All	https://www.missoulapubliclibrary.org/home/programs-events/ongoing-programs/classes/tech-connect/

Organization Name	Asset Name	Description	Covered Population	Link
The Billings Public Library	Mobile Hotspots	Mobile hotspots can be checked out by all patrons for free	All	https://billingslibrary.org/483/Mobile-Hotspots
Bozeman Public Library	Mobile Hotspot and Laptop Lending	The library provides free mobile Wi-Fi hotspots, Chromebook/ hotspot kits, and HP ProBook laptops for checkout	All	https://www.bozemanlibrary.org/services/additional-services/mobile-hotspot-laptop-lending

3.1.4 Broadband Adoption

Exhibit 6 includes assets that promote broadband adoption and are administered by non-government entities in the State of Montana. While the goals of the listed assets could advance digital opportunity, these efforts are relatively small scale. This gap in support of broadband adoption can be filled through the Digital Opportunity Plan's strategies referenced in Section 5.

Exhibit 6: Assets that promote broadband adoption

Organization Name	Asset Name	Description	Covered Population	Link
Community Skills Initiative by Montana Chamber Foundation	Community Skills Initiative	This free program helps job seekers successfully navigate the paths to in-demand roles in a more digital economy by promoting digital skills and employability	All	https://www.communityskilling.org/partner/montana

3.1.5 Broadband Affordability

Exhibit 7 includes assets that promote broadband affordability and are administered by non-government entities in the State of Montana.

While Montana is home to many residents who qualify for the ACP, use of the program remains low. For more information about ACP eligibility and adoption, please refer to section 3.2.3.

An opportunity exists to develop additional efforts to increase broadband affordability, as this is a major challenge to access faced by the state's residents. For more information about the affordability barriers faced by covered populations and Montana as a whole, please see section 3.2.1 and 3.2.3. This gap in support of broadband affordability could be addressed by the Digital Opportunity Plan's strategies referenced in Section 5.

Exhibit 7: Assets that promote broadband affordability

Organization Name	Asset Name	Description	Covered Population	Link
Triangle Communica-tions	Community Wi-Fi	Triangle provides access at all of our Community Wi-Fi hotspot locations.	All	https://www.itstriangle.com/services/misc/community-wifi#locations

In addition to the above inventory, several ISPs offer low-cost plans, including:

- Frontier ISP[32]
- TruConnect[33]

According to USAC[34], some ISPs offer plans that, with the ACP, cost $0, including:

- Spectrum (Charter Communications Operating, LLC)[35]

According to USAC[36], many ISPs also offer discounted devices:

- PCs for People
- Ztar Mobile, Inc
- Sano Health LLC
- Cintex Wireless, LLC
- SafetyNet Wireless
- Airtalk Wireless
- IDT Domestic Telecom, Inc.
- Sage Telecom Communications, LLC
- Boost Mobile
- Infiniti Mobile
- Clear Wireless, LLC
- Global Connection Inc. of America
- Treasure State Internet & Telegraph
- human-I-T
- Q Link Wireless LLC
- UVNV, Inc.
- NewPhone Wireless, LLC
- Clear Wireless, LLC
- Selectel Wireless
- Excess Telecom, Inc.
- Boomerang Wireless, LLC
- SWA Connect, LLC
- TruConnect[37]

[32] Frontier, https://frontier.com/discount-programs/affordable-connectivity-program
[33] TruConnect, https://www.truconnect.com/states/montana
[34] Universal Service Administrative Co., https://cnm.universalservice.org/
[35] Spectrum, https://www.spectrum.com/internet/spectrum-internet-assist
[36] Universal Service Administrative Co., https://cnm.universalservice.org/
[37] TruConnect, https://www.truconnect.com/devices

- Straight Talk, Total Wireless, Simple Mobile, Walmart Family Mobile, TracFone, Net10, Page Plus, and Go Smart

3.2 Needs Assessment

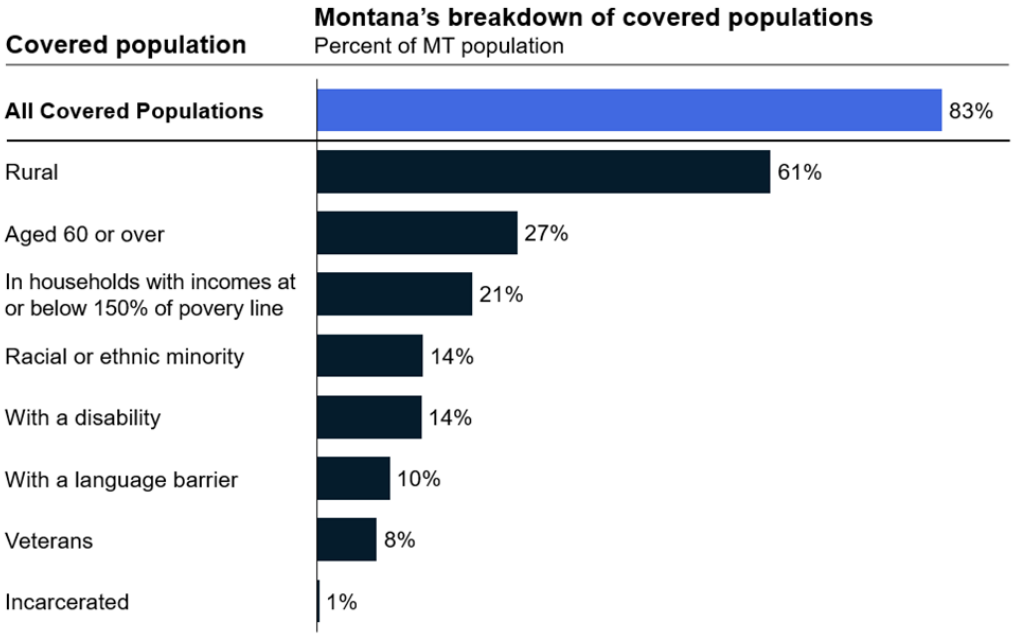
3.2.1 Covered Population Needs Assessment

The Digital Opportunity Plan's aim is to close the digital divide for covered populations, which include:

1. Individuals who live in covered households, 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
2. Aging individuals
3. Incarcerated individuals, other than individuals who are incarcerated in a Federal correctional facility
4. Veterans
5. Individuals with disabilities
6. Individuals with a language barrier, including individuals who—
    a. Are English learners; and
    b. Have low levels of literacy
7. Individuals who are members of a racial or ethnic minority group; and
8. Individuals who primarily reside in a rural area

Covered populations make up 83.3 percent of Montana's population, with individuals who primarily reside in a rural area accounting for nearly two-thirds of the state's citizens. The elderly constitute the second largest covered population at 27 percent, and households with incomes at or below 150 percent of the poverty line make up 21 percent of the state's population (Exhibit 8).

Exhibit 8: Montana's breakdown of Covered Population[38]

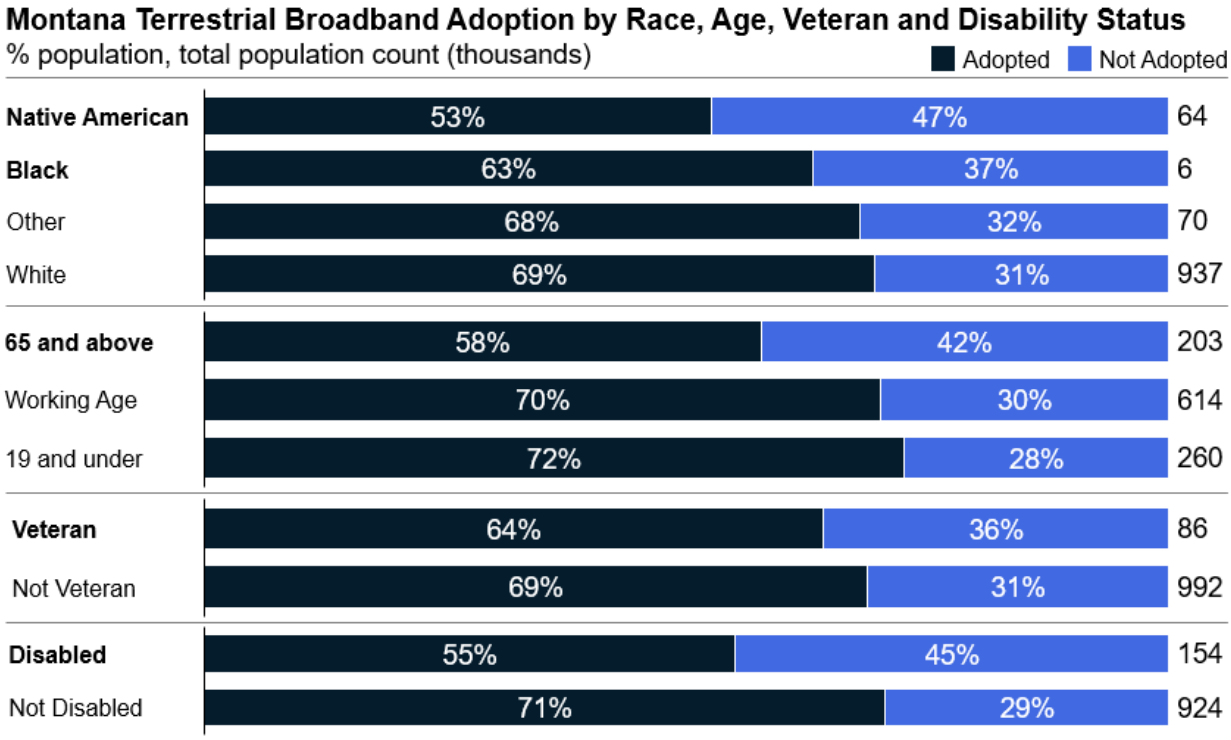


Covered populations in the State of Montana face several barriers to digital opportunity, including broadband availability, affordability of service, lack of access to devices, and limited digital skills.

A relationship exists between an individual's status as a member of a covered population and their broadband adoption. Covered populations—including ethnic and racial minorities, aging individuals, veterans, and individuals with disabilities—have lower rates of broadband adoption than their counterparts. The divide in adoption is particularly pronounced for racial and ethnic minorities, elderly individuals, and individuals with disabilities (Exhibit 9).

[38] Digital Equity Act Population Viewer, Census, https://mtgis-portal.geo.census.gov/arcgis/apps/MapSeries/index.html?appid=a0013a9dcbb9419e855f563d78e892ef

Exhibit 9: Montana terrestrial broadband adoption by race, age, veteran, and disability status[39]



Broadband Availability

As the fourth largest state in the country, Montana has an area of nearly 150,000 square miles.[40] In terms of total population, Montana comes in 44th nationally, with just over one million residents.[41] This low population density, coupled with topographic hurdles like vast plains and long ranges of the Rocky Mountains, poses challenges to establishing broadband infrastructure, leaving many Montanans without access to adequate internet speeds. According to a survey administered by the MBO, 73.8 percent of Montanans cited lack of availability as the primary reason that they don't have high-speed internet.[42]

The Great Plains are glaciated, frequently freezing in the winter, and sparsely populated, and the Rockies feature mountains and high elevation—all of which may make laying fiber optic cable challenging and expensive. The eastern part of the state suffers from some of the lowest accessibility to and adoption of high-speed internet, and the Great Plains region, which is remote and sparsely populated, lacks adequate broadband infrastructure.

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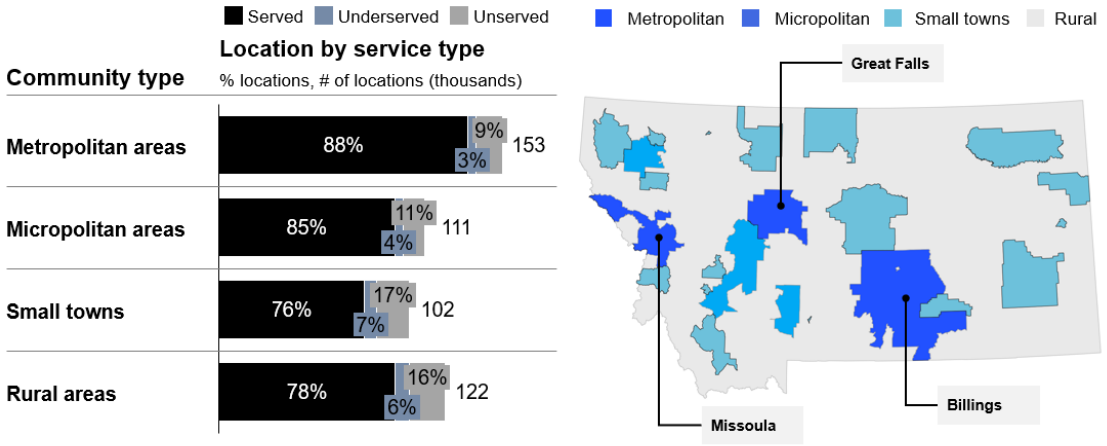
[39] U.S. Census Bureau, American Communities Survey (ACS), 2021; includes DC; https://data.census.gov/table?q=internet&g=040XX00US30&tid=ACSST5Y2021.S2801
[40] Brittanica, Montana, https://www.britannica.com/place/Montana-state
[41] U.S. Census Bureau, Montana QuickFacts, https://www.census.gov/quickfacts/MT
[42] Survey of Montana residents conducted by MBO Sep-Oct 2022. N=1,622

Rural areas have the highest total number of unserved and underserved areas, with 7,826 underserved and 19,208 unserved (see Exhibit 10).

Exhibit 10: Location by service type[43]



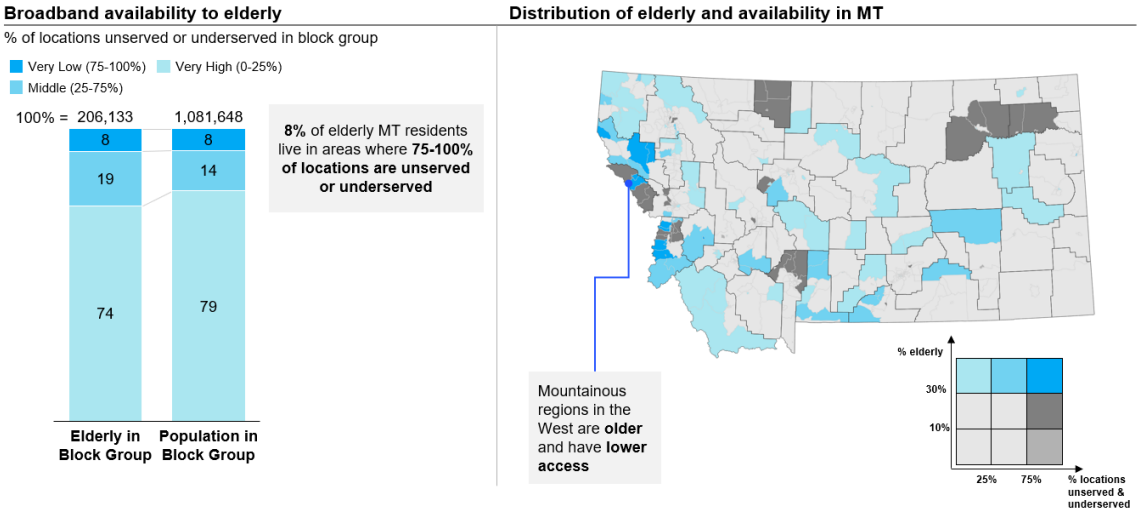
Rural areas also tend to have high proportions of elderly residents for whom affordability and lack of digital skills are barriers to access (see

Exhibit 11).[44]

[43] Service availability data provided by FCC broadband map as of November 18, 2022. Values for served, unserved, and unserved locations reflect location totals when locations to be served by RDOF, CAFII, NTIABIP, Reconnect (prior to February 2022) and RUS are considered served

[44] Demographics -- U.S. Census ACS (2016-2020); Service availability data provided by FCC broadband map as of November 18, 2022; Block group boundaries -- U.S. Census (2020)

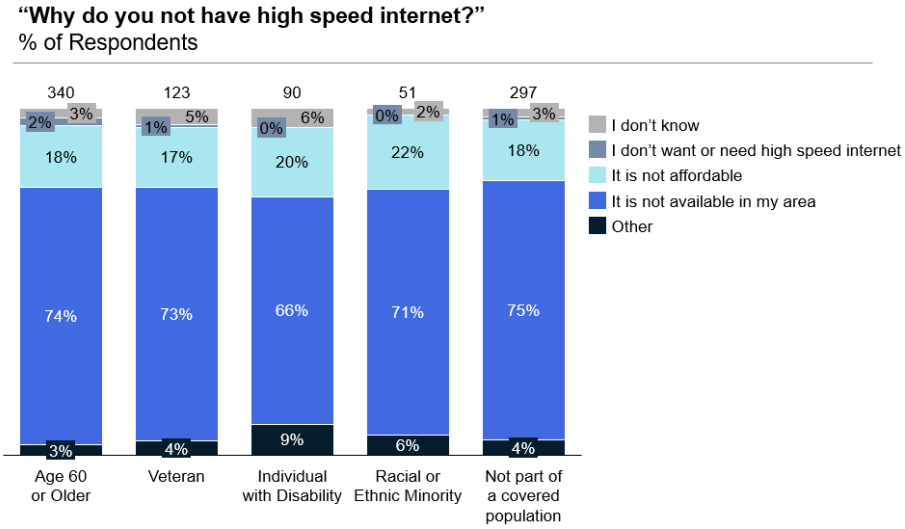
Exhibit 11: Broadband availability to the elderly in Montana[45]



Montanans, regardless of their status as members of covered populations, report lack of availability as the main reason that they don't have high-speed internet (see Exhibit 12).

Exhibit 12: Responses to the question, "Why do you not have high-speed internet?" by percentage of respondents

Exhibit 12: Responses to the question, "Why do you not have high-speed internet?" by percentage of respondents[46]

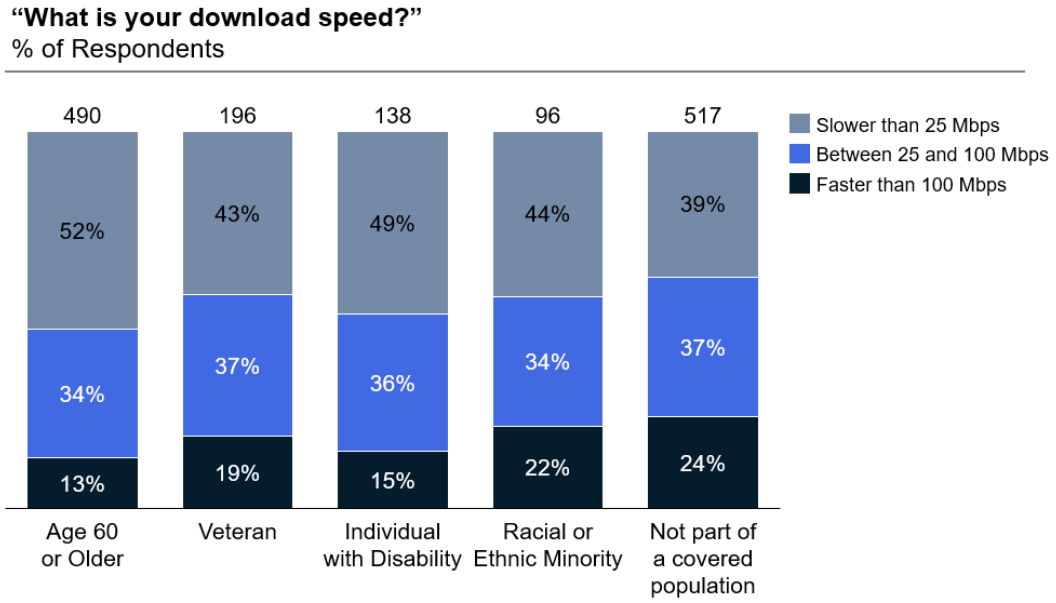


[45] Demographics -- U.S. Census ACS (2016-2020). Service availability data provided by FCC broadband map as of November 18, 2022; Block group boundaries -- U.S. Census (2020); Elderly refers to individuals aged 65+; Locations un- or underserved are those not presently served with 100/20 Mbps and/or not covered by RDOF, CAF II, Reconnect (prior to February 2022), RBE, NTIA BIP, and/or RUS

[46] Survey of Montana residents conducted by MBO Sep-Oct 2022. N=1,622

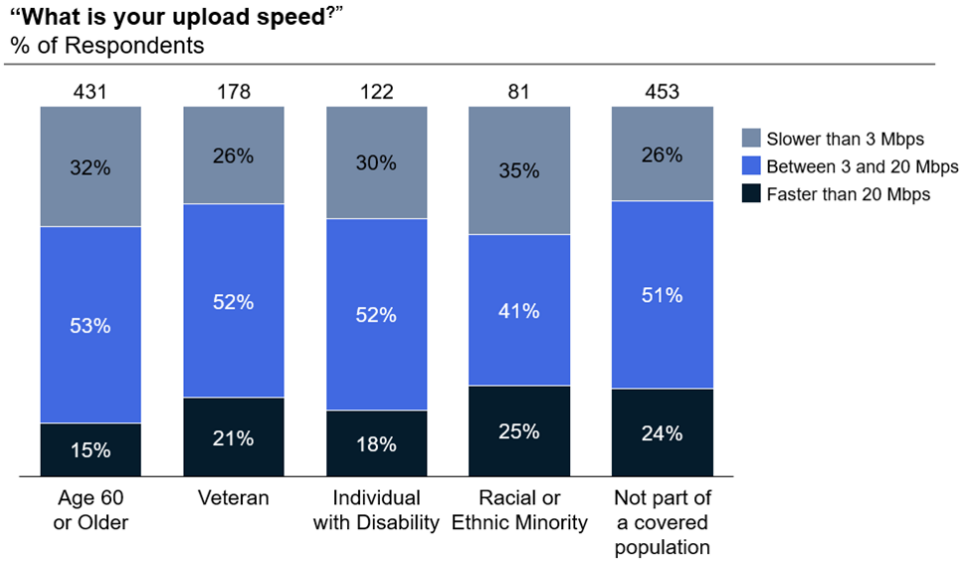
As a result of low broadband availability, compounded by other barriers, covered populations are unserved at higher rates than their counterparts, as a recent survey of Montanans shows, a higher prevalence of download speeds slower than 25 Mbps—with aging individuals at 52 percent, individuals with disabilities at 49 percent, veterans at 43 percent, and racial or ethnic minorities at 44 percent—compared to non-covered populations at 39 percent. The same is true for upload speeds between 3 and 20 Mbps—with aging individuals at 53 percent, individuals with disabilities at 52 percent, veterans at 52 percent, and racial or ethnic minorities at 41 percent—compared to non-covered populations at 51 percent (see Exhibit 13 and Exhibit 14).

Exhibit 13: Responses to the question, "What is your download speed?" by percent of respondents from covered populations[47]



[47] Survey of Montana residents conducted by MBO Sep-Oct 2022. N=1,622; Some covered populations' respondents belong to more than one covered population (e.g., respondent is age 60 or older and a veteran); Non-Native English speakers were not included due to small sample size; The response "I don't know" was not included. 24 percent (156) of respondents age 60 or older, 19 percent (45) of veterans, 20 percent (34) of racial or ethnic minorities, 21 percent (25) of, 18 percent (115) of non-covered populations; Results only include 1,560 Montana Residents who answered "No" to "Do you have an internet connection at home?"

Exhibit 14: Responses to the question, "What is your upload speed?" by percent of respondents from covered populations[48]

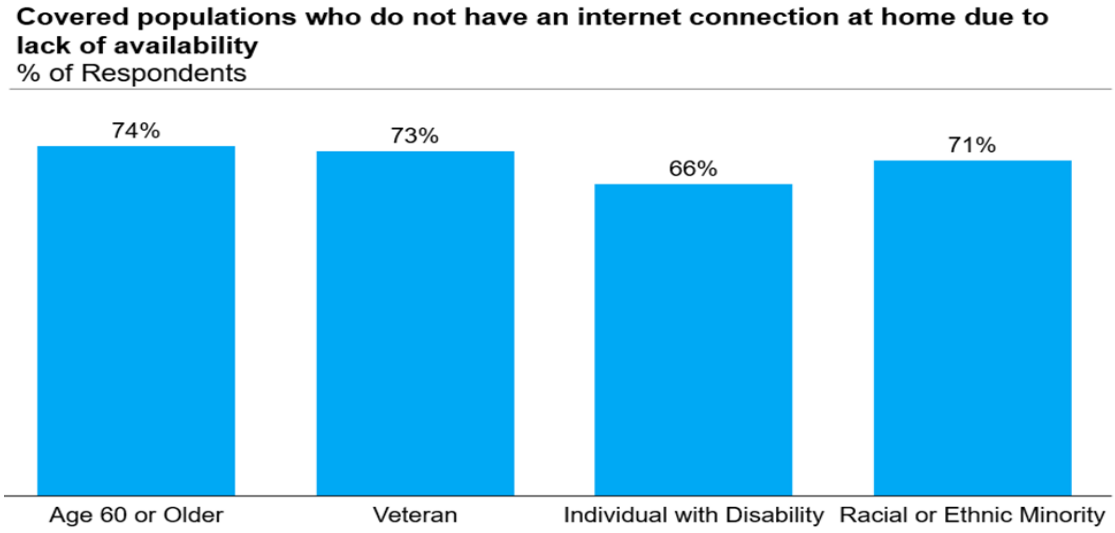


Of those who have no internet connection at home, some covered populations, including aging individuals and veterans, report that internet connections are not available in their areas at much higher rates than non-covered populations (see

Exhibit 15).

[48] Survey of Montana residents conducted by MBO Sep-Oct 2022. N=1,622; Some covered populations' respondents belong to more than one covered population (e.g., respondent is age 60 or older and a veteran); Non-Native English speakers were not included due to small sample size; The response "I don't know" was not included. 33 percent (215) of respondents age 60 or older, 26 percent (63) of veterans, 29 percent (50) of racial or ethnic minorities, 33 (40) of, 29 percent (181) of non-covered populations; Results only include 1,560 Montana Residents who answered "No" to "Do you have an internet connection at home?"

Exhibit 15: Internet availability for covered populations[49]



The Digital Opportunity Plan and BEAD Five-Year Action Plan's forthcoming efforts to increase broadband availability, could be a key component to getting high-speed internet to covered populations.

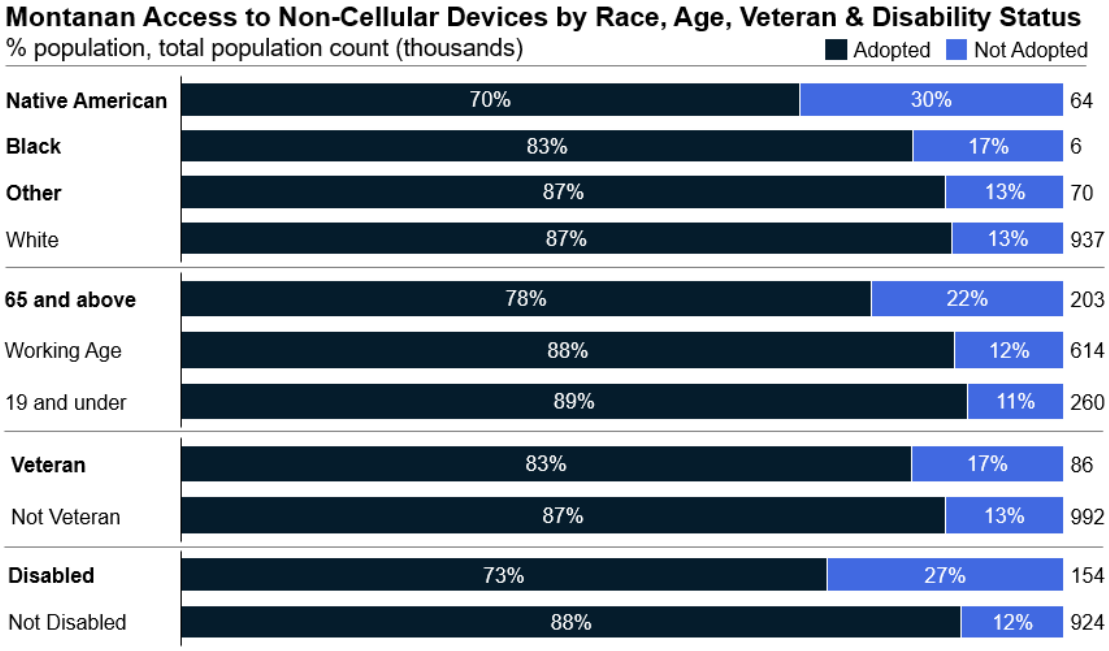
Access to Devices

Individuals who are members of covered populations also have lower rates of access to internet-capable devices than their counterparts. In the absence of these devices, these individuals are unable to access the internet and its resources at home or on the go.

The divide in device access is particularly pronounced for Native Americans, aging individuals, veterans, and individuals with disabilities (see Exhibit 16). Individuals with disabilities face a number of hurdles related to device access, as many need specialized equipment that requires training, which is not readily available in much of Montana.

[49] Survey of Montana residents conducted by MBO Sep-Oct 2022. N=1,622. Note: Throughout this survey, some covered populations' respondents belong to more than one covered population (e.g., respondent is age 60 or older and a veteran) and non-Native English speakers were not included due to small sample size.

Exhibit 16: Montanans' access to at least one device by race, age, veteran, and disability status[50]

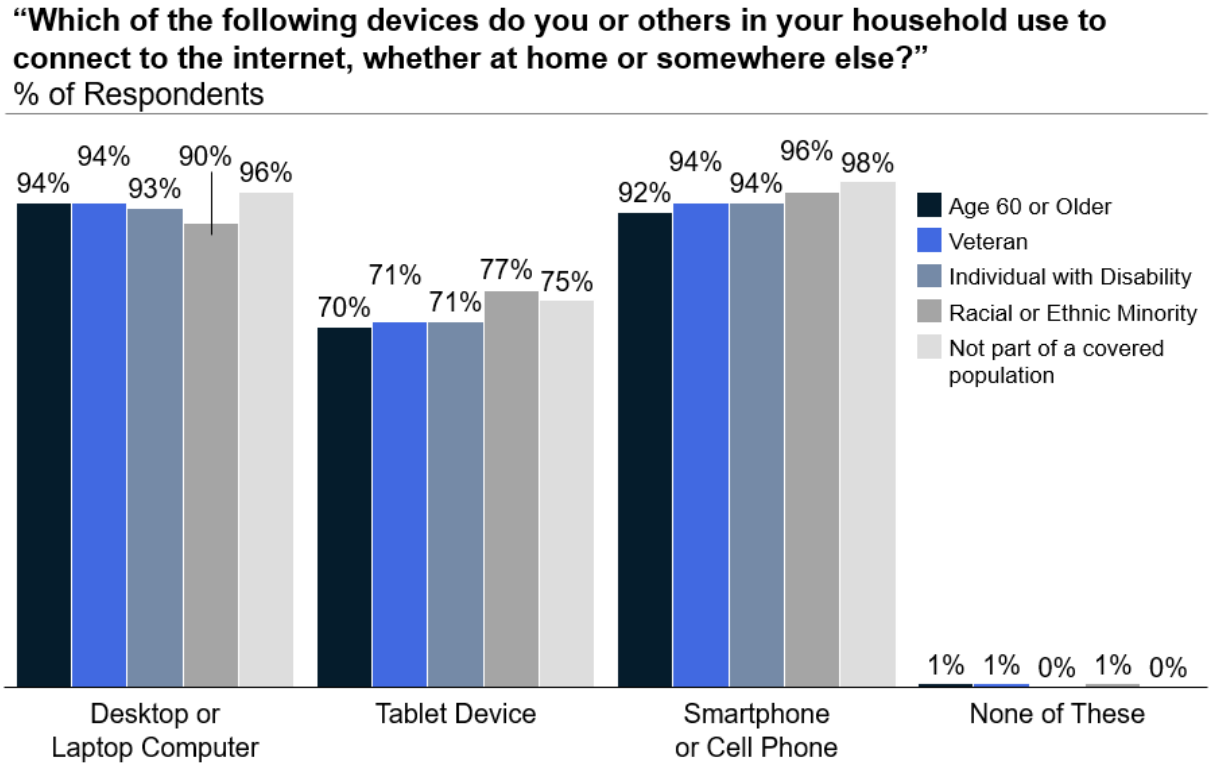


Covered populations use smartphones or cell phones to connect to the internet at lower rates than non-covered populations (see Exhibit 17). The divide is most notable among those 60 and older (92 percent) compared to veterans and individuals with disabilities (94 percent), racial or ethnic minorities (96 percent), and non-covered populations (98 percent). Racial or ethnic minorities use desktops or laptop computers less frequently than their counterparts. However, they do report higher use of tablet devices (77 percent) than non-covered populations (75 percent). Just 70 percent of seniors report using tablets, which, if adopted, may present useful and user-friendly options.

According to Philadelphia's Digital Opportunity Plan, "While everyone should have access to a mobile phone, healthcare providers and elder care advocates suggest that a tablet, for its simplicity of use, may be a better option to meet the needs of seniors to connect with their healthcare provider or their families."[51]

[50] U.S. Census Bureau, American Communities Survey (ACS), 2021 5-Year Estimates; includes DC; https://data.census.gov/table?q=internet&g=040XX00US30&tid=ACSST5Y2021.S2801
[51] A Digital Opportunity Plan for the City of Philadelphia, January 2022

Exhibit 17: Devices in a Montana home[52]



To take full advantage of the internet, individuals need easy access from home on devices that they are familiar with and comfortable using. Encouraging adoption and use of internet-capable devices could be critical to broadening Montana's meaningful use of broadband.

Digital Skills

Survey data and anecdotal accounts from interviews with state agencies suggests that many Montanans are lacking the critical digital skills necessary to bridge the digital divide, which contributes to low rates of broadband adoption.

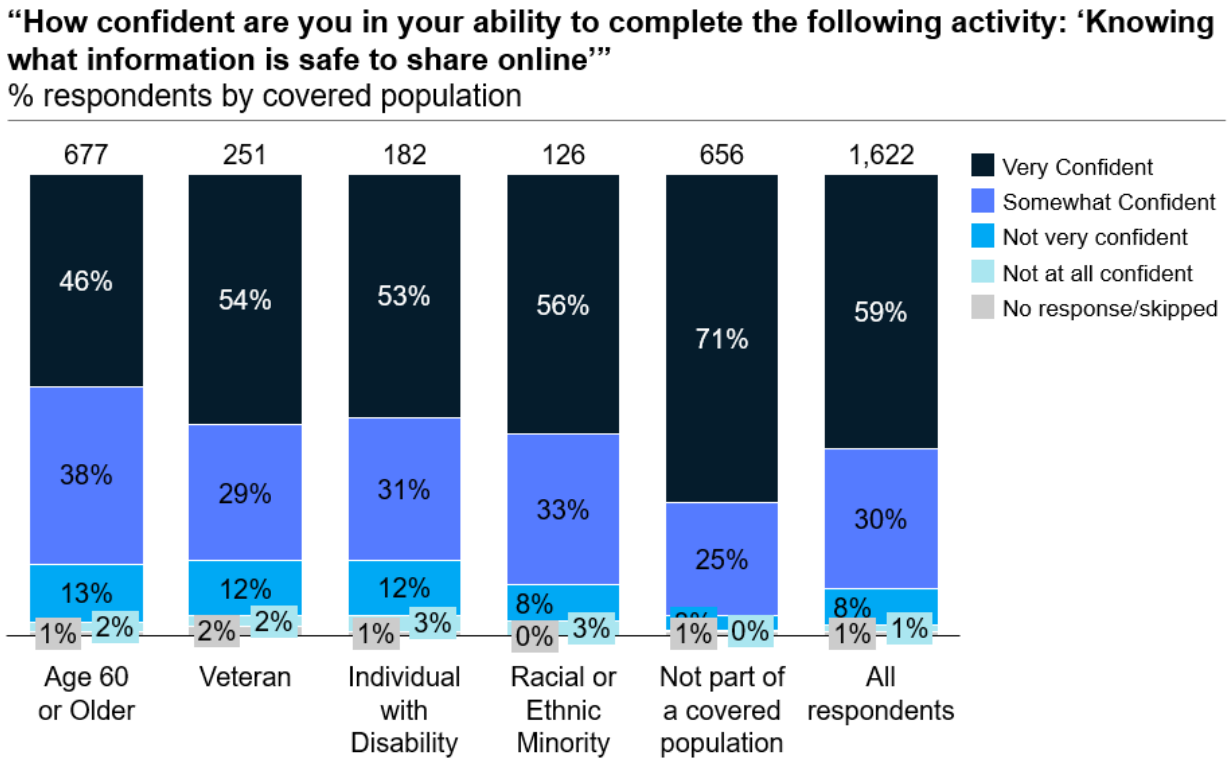
Limited digital skills is a considerable challenge for elderly individuals and veterans. According to the Department of Military Affairs, many veterans "lack technological abilities and access, especially in rural, smaller areas," and, "digital literacy is particularly challenging for the older folks."[53]

A survey administered by the MBO showed that covered populations—particularly aging individuals, veterans, and individuals with disabilities—were less confident in their ability to

[52] Survey of Montana residents conducted by MBO Sep-Oct 2022. N=1,622; 1. Some covered populations' respondents belong to more than one covered population (e.g., respondent is age 60 or older and a veteran); 2. Non-Native English speakers were not included due to small sample size
[53] Department of Military Affairs, Interview, October 26, 2022

know what information is safe to share online, indicating limited digital skills.[54] Non-covered populations are 25 percent more likely to be very comfortable deciphering what information is safe to share online than those 60 and older and at least 15 percent more likely when compared with every other covered population (see Exhibit 18).

Exhibit 18: Montanan confidence sharing information online[55]



In one survey question posed to people without home internet, ten percent of veterans responded that they lacked broadband because they "don't know how to use the internet," compared to zero percent of non-covered populations.[56]

The absence of robust digital skills programs in the state may also contribute to inadequate digital skills and an unfamiliarity with the internet.

Further, more concerted efforts may be needed to promote digital skills for individuals with disabilities, some of whom require specialized devices and tailored training to learn to use the equipment. The Montana School for the Deaf and Blind noted that visually impaired students require software that reads screens aloud to tell them where their cursors are, and those who are deaf or hard of hearing rely on programs that provide closed captions to follow along during virtual classes.[57] This equipment can be quite costly and finding instructors who are qualified to provide the necessary training for use is a challenge in the sparsely populated state. Individuals

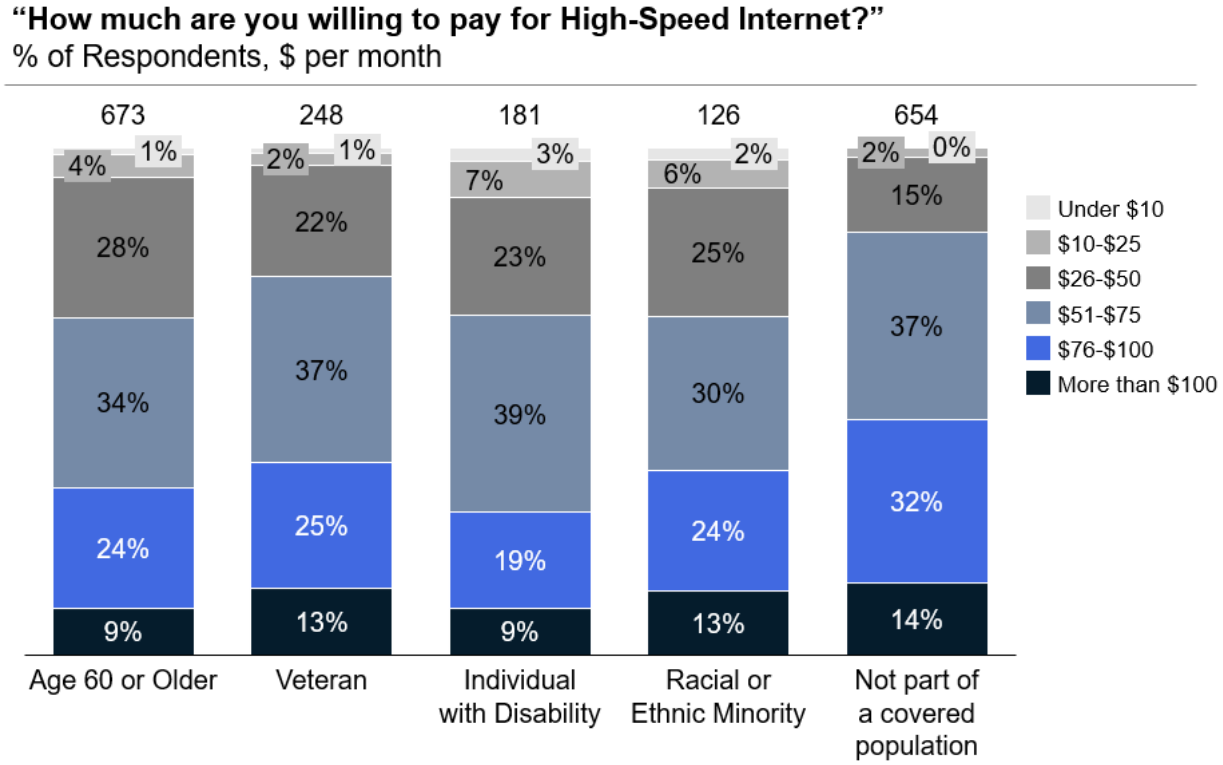
[54] Survey of Montana residents conducted by MBO Sep-Oct 2022. N=1,622
[55] Survey of Montana residents conducted by MBO Sep-Oct 2022. N=1,622
[56] Survey of Montana residents conducted by MBO Sep-Oct 2022. N=1,622
[57] Montana School for the Deaf and Blind, Interview, October 28, 2022

with disabilities may need easier and more readily available access to specialized training to develop the skills needed to participate in meaningful digital use.

Affordability

While affordability is an obstacle to high-speed internet access, a Montana Broadband Office survey indicates that most Montanans are willing to pay more than $50 per month for internet. There is a gap in willingness to pay between covered and non-covered populations: 83 percent of non-covered populations are willing to pay more than $50, compared to 67 percent of those with disabilities, racial or ethnic minorities, and the elderly, and no more than 75 percent of veterans (see Exhibit 19).

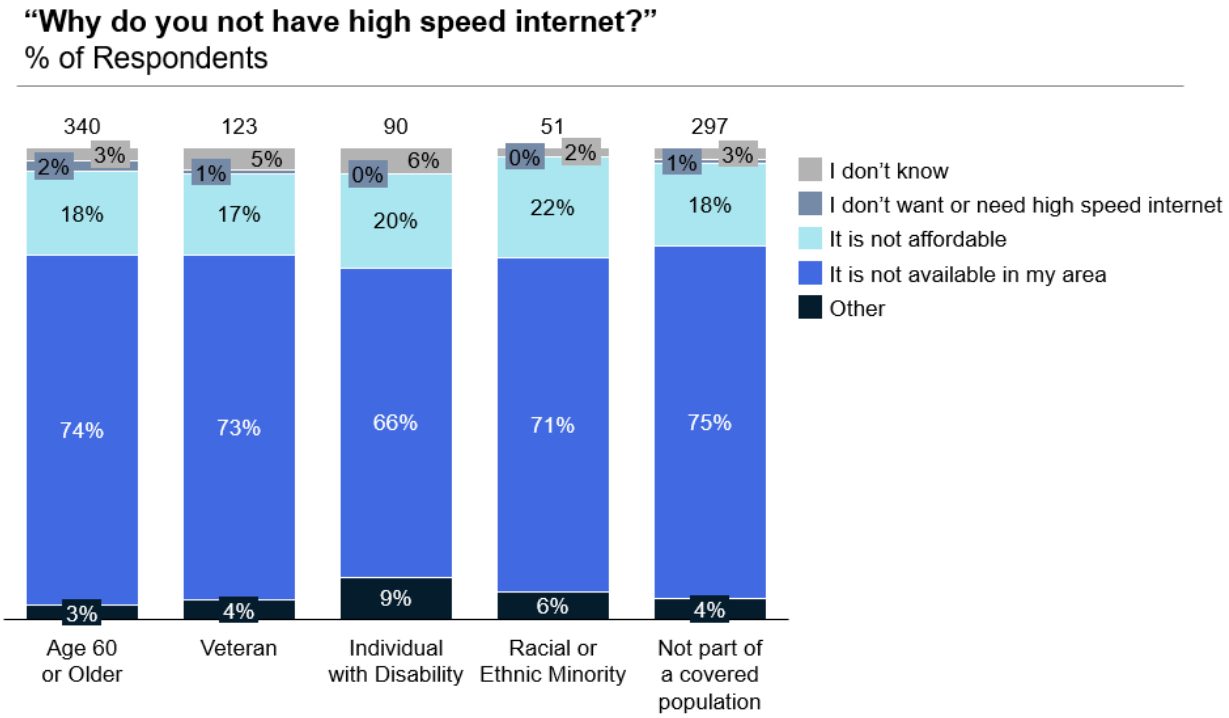
Exhibit 19: Montanans' willingness to pay for high-speed internet[58]



Survey data shows that across covered populations, lack of affordability is a primary reason for their lack of high-speed internet. 18 percent of survey respondents aged 60 and older report that internet is unaffordable, 22 percent of racial or ethnic minorities, 20 percent of individuals with disabilities, and 17 percent of veterans. 18 percent of non-covered populations cite lack of affordability as the main reason for their inadequate broadband access (see Exhibit 20).

[58] Survey of Montana residents conducted by MBO Sep-Oct 2022. N=1,622

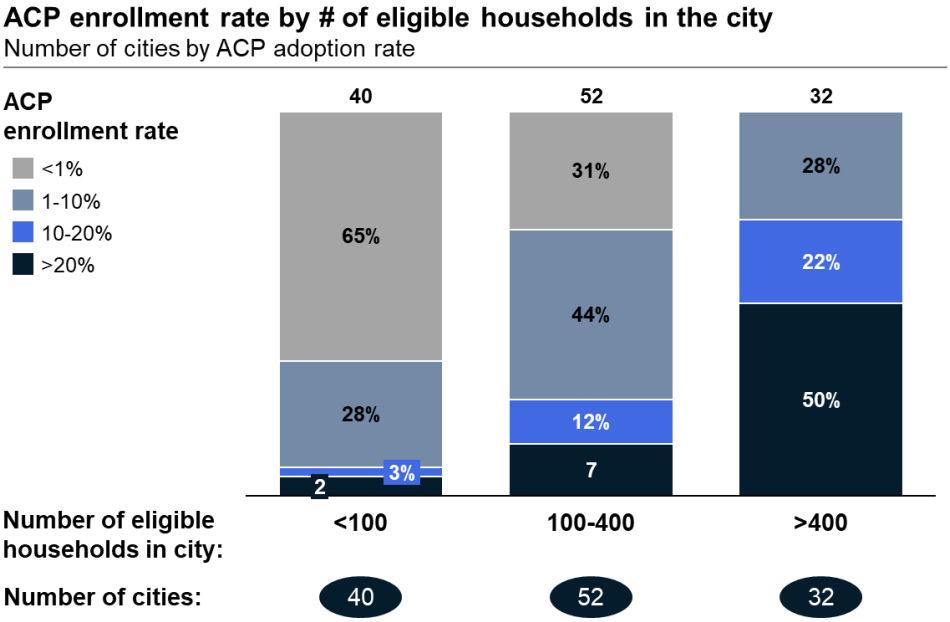
Exhibit 20: Reasons Montanans do not have high-speed internet[59]



ACP adoption may be a key strategy to help address the affordability gap for Montanans. ACP uptake is minimal in rural areas, while more populous areas also have room for growth. Cities with fewer households (<400) that are eligible for ACP tend to have lower adoption rates, as only nine percent of these cities have an adoption rate greater than 20 percent. Most cities with fewer than 100 eligible households have less than one percent ACP adoption. Densely populated cities (>400 eligible households) are more likely to have higher ACP adoption rates (see Exhibit 21).

[59] Survey of Montana residents conducted by MBO Sep-Oct 2022. N=1,622

Exhibit 21: ACP enrollment rates by number of eligible households in city[60]



To overcome affordability barriers, Montana may choose to encourage the availability of low-cost plans and promote the adoption of the ACP, as noted in Section 5.

3.2.2 Broadband Adoption

Even where high-speed internet is available, Montana still has a gap in adoption. Nationwide, Montana ranks 44th in high-speed internet adoption, with 67 percent of households subscribed to high-speed terrestrial broadband (including cable, fiber optic, or DSL).[61]

When considering all forms of internet, such as terrestrial broadband, cellular, and satellite, 89 percent of households have adopted broadband of some type, while 11 percent do not have internet subscriptions of any kind. As shown in Exhibit 22 below, of the households that have adopted internet, 78 percent have cable, fiber optic, or DSL, 87 percent have cellular data plans, and 11 percent have satellite internet service, suggesting that a significant number of Montanans are using cellular plans as their primary internet connection. According to a survey commissioned by the Montana Broadband Office to support development of this plan (n=1,622), 73.8 percent of Montanans without high-speed internet cited lack of availability as the primary reason.[62]

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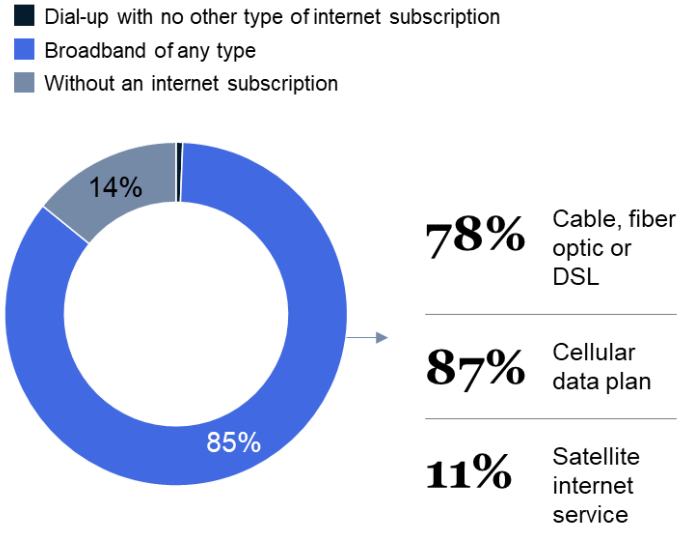
[60] No Home Left Offline, Education Superhighway, https://www.educationsuperhighway.org/no-home-left-offline/acp-data/, 1. ACP enrollment rates are based on EducationSuperHighway estimate of eligible households (total 190,560) vs. 137,951 through only using income less than 200 percent of the federal poverty line

[61] US Census Data, 2021 ACS 5-Year Estimates, https://data.census.gov/table?q=internet&g=040XX00US30&tid=ACSST5Y2021.S2801

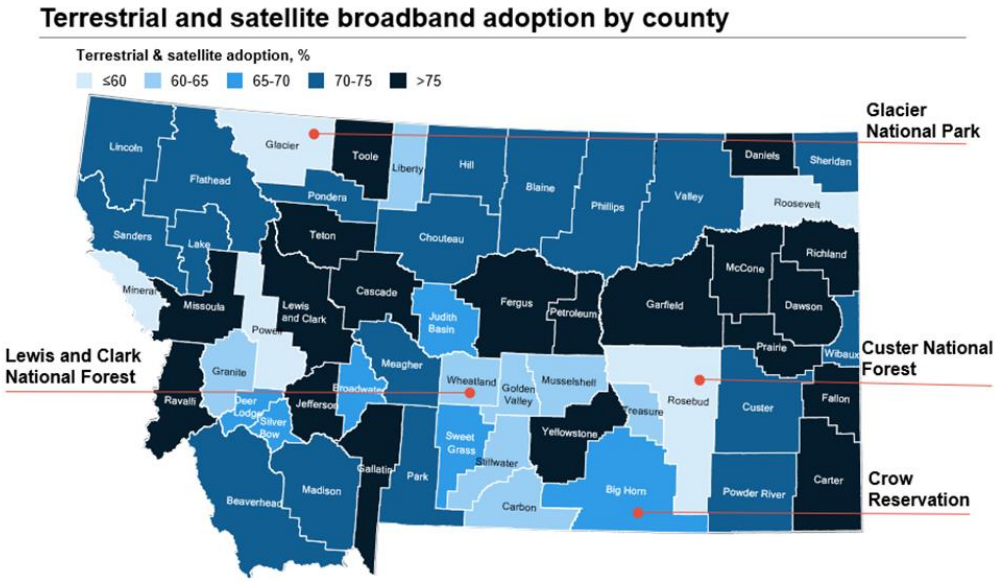
[62] Survey of Montana residents conducted by MBO Sep-Oct 2022. N=1,622

Exhibit 22: Internet adoption in Montana[63]



Most Montana counties use some form of broadband, either terrestrial or satellite. However, five counties (Rosebud, Glacier, Powell, Mineral, and Roosevelt) have less than 60 percent adoption of non-cellular broadband internet (Exhibit 23).

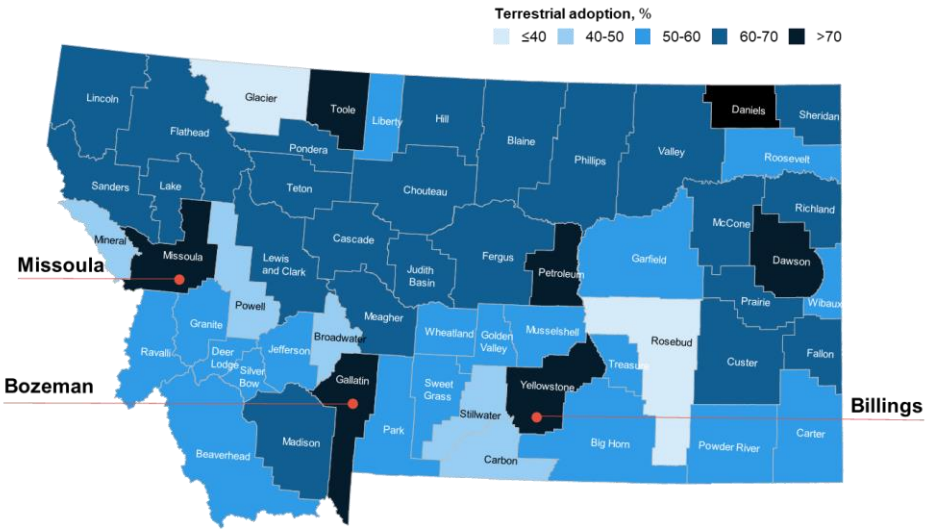
Exhibit 23: Terrestrial and satellite broadband adoption by county[64]



[63] ACS 5-Year Estimates, US Census Data, 2021, https://data.census.gov/table?q=internet+subscription&g=0400000US30
[64] ACS 5-Year Estimates, US Census Data, 2021

There is significant variation in adoption of terrestrial broadband across Montana counties. Seven counties in the state of Montana have at least 70 percent adoption of terrestrial broadband. Some counties with low rates of terrestrial broadband adoption are surrounded by counties with significantly higher adoption rates (e.g., Broadwater, Glacier), which could be due to topography and population density (see Exhibit 24).

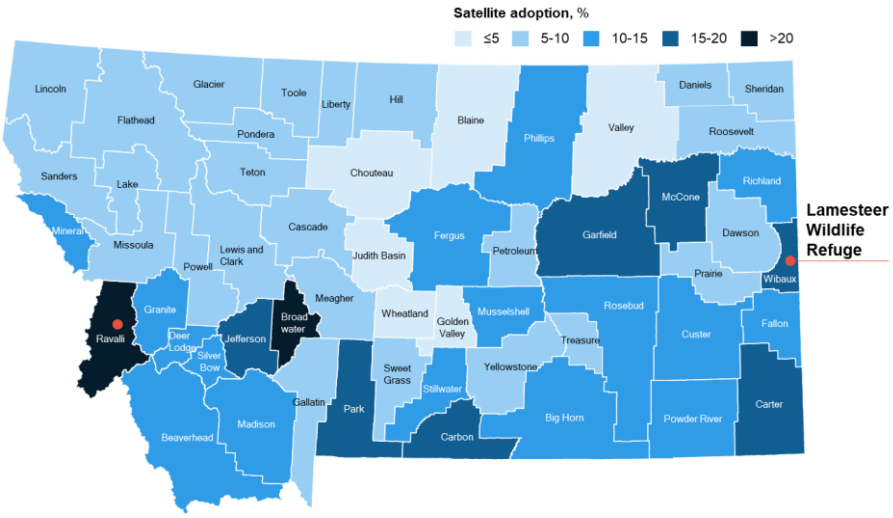
Exhibit 24: Household terrestrial broadband adoption by county[65]



Satellite internet comprises a sizable portion of broadband adoption for several Montana counties. It is largely concentrated in the Southwest and Eastern regions of the state. Two counties rely on satellite for a sizeable portion (>20 percent) of their internet usage: Ravalli and Broadwater Counties. The counties with higher satellite internet adoption than others generally have relatively lower terrestrial broadband availability (see Exhibit 25).

[65] US Census data 2021 5-Year Estimates. https://data.census.gov/table?q=internet&g=050XX00US30063,30061,30027,30069,30025,30023,30067,30065,30021,30029,30095,30051,30093,30091,30059,30015,30057,30013,30099,30011,30055,30097,30053,30019,30017,30041,30085,30083,30081,30005,30049,30047,30003,30089,30001,30045,30043,30087,30009,30007,30073,30071,30037,30079,30035,30077,30033,30075,30031,30039,30109,30107,30105,30103,30101,30111&tid=ACSST5Y2021.S2801; Terrestrial includes fiber optic, cable, DSL

Exhibit 25: Satellite broadband adoption by county[66]



The State of Montana faces meaningful challenges in broadband adoption, and as mentioned above, one of the main challenges is the availability of high-speed broadband. Strengthening the state's broadband infrastructure is the first step in promoting adoption. In tandem, Montana may also address affordability of service and devices, as well as digital skills programs. Potential strategies are detailed in Section 5.

3.2.3 Broadband Affordability

For Montanans, affordability is a main hurdle preventing access to high-speed internet.

According to BroadbandNow, Montana ranks 49th among US states in access to affordable plans, as only 62 percent of households have access to wired plans, including DSL, copper, cable, or fiber, of 25 Mbps download/3 Mbps upload or higher and a standalone broadband speed plan that is $60/month or less.[67]

According to a survey commissioned by the Montana Broadband Office, affordability was the second most commonly cited reason (after availability) for not having access to high-speed internet. Nearly 17 percent of Montanans without high-speed internet cited lack of affordability as the primary reason for not having adequate internet access.[68] Thirty-five percent of Montana households with an income under $20,000 do not have broadband at home, versus 17 percent

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[66] US Census data 2021 5-Year Estimates. https://data.census.gov/table?q=internet&g=050XX00US30063,30061,30027,30069,30025,30023,30067,30065,30021,30029,30095,30051,30093,30091,30059,30015,30057,30013,30099,30011,30055,30097,30053,30019,30017,30041,30085,30083,30081,30005,30049,30047,30003,30089,30001,30045,30043,30087,30009,30007,30073,30071,30037,30079,30035,30077,30033,30075,30031,30039,30109,30107,30105,30103,30101,30111&tid=ACSST5Y2021.S2801

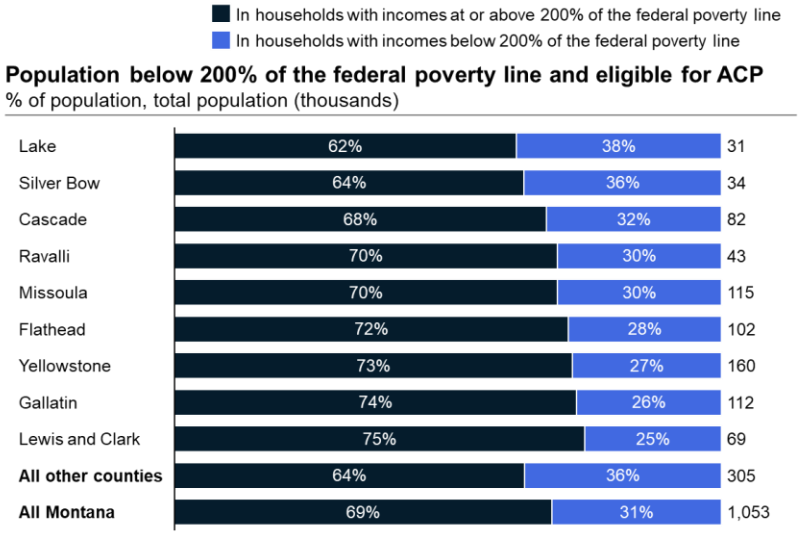
[67] Best and Worst States for Internet Coverage, Prices and Speeds, BroadbandNow, Cooper and Tanberk, 2021, https://broadbandnow.com/research/best-states-with-internet-coverage-and-speed

[68] Survey of Montana residents conducted by MBO Sep-Oct 2022. N=1,622

for those with incomes $20,000-75,000, and five percent of those earning above $75,000, indicating a strong relationship between income and internet adoption.[69]

At least 31 percent of Montanans live in a household with income below 200 percent of the federal poverty line, which could pose a barrier to adoption of broadband. However, this group is eligible for ACP enrollment, which would subsidize the cost of their internet service. Counties with lower populations are more likely to have households with income below 200 percent of the federal poverty line (Exhibit 26).[70]

Exhibit 26: Population below 200 percent of the federal poverty line (and eligible for ACP)[71]



Despite the high rate of ACP eligibility among Montanans, at least 79 percent of eligible Montanans have not enrolled in the program, putting the state 41st in national ACP enrollment.[72] At just 21 percent, Montana's ACP enrollment is below the national ACP enrollment average of 33 percent, which presents an opportunity for Montana to focus on increasing ACP enrollment among low-income households (see Exhibit 27).

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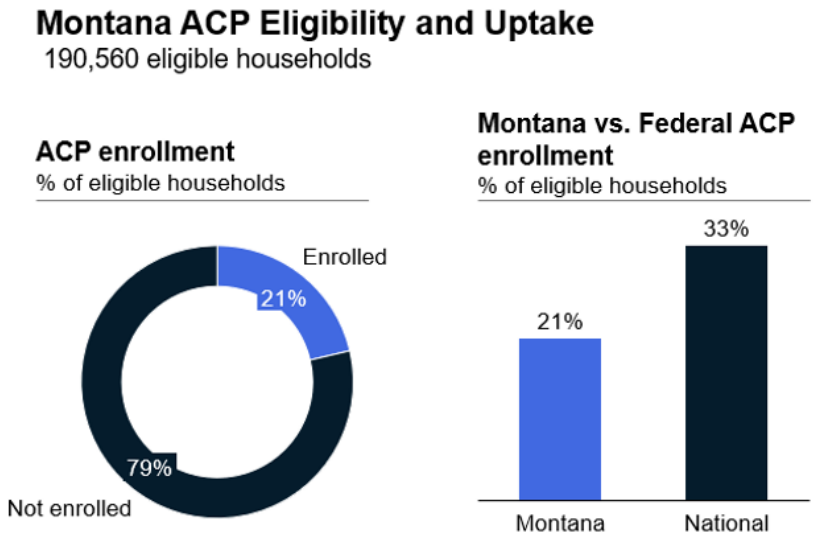
[69] US Census Data, 2021 ACS 5-Year Estimates. https://data.census.gov/table?q=internet&g=040XX00US30&tid=ACSST5Y2021.S28011

[70] US Census data, 2021 ACS 5-year estimates, census.gov 2016-2020 Housing estimates https://data.census.gov/table?q=C17002&g=040XX00US30$0500000,30&tid=ACSDT5Y2021.C17002

[71] US Census data, 2021 ACS 5-year estimates, https://data.census.gov/table?q=C17002&g=040XX00US30$0500000,30&tid=ACSDT5Y2021.C17002; 1. Total eligibility may be underestimated due to other ways ACP eligibility can be met, e.g., participation in certain government assistance programs like SNAP, Medicaid, WIC, or if a consumer already receives a Lifeline benefit. EducationSuperHighway estimates 190,560 eligible households in MT vs. current estimate of 137,951 eligible households; 2. 9 largest counties by population; 3. Includes other 47 counties ranging from a population of 454-19,688

[72] No Home Left Offline, Education Superhighway, https://www.educationsuperhighway.org/no-home-left-offline/acp-data/

Exhibit 27: Montana ACP Eligibility and Update[73]

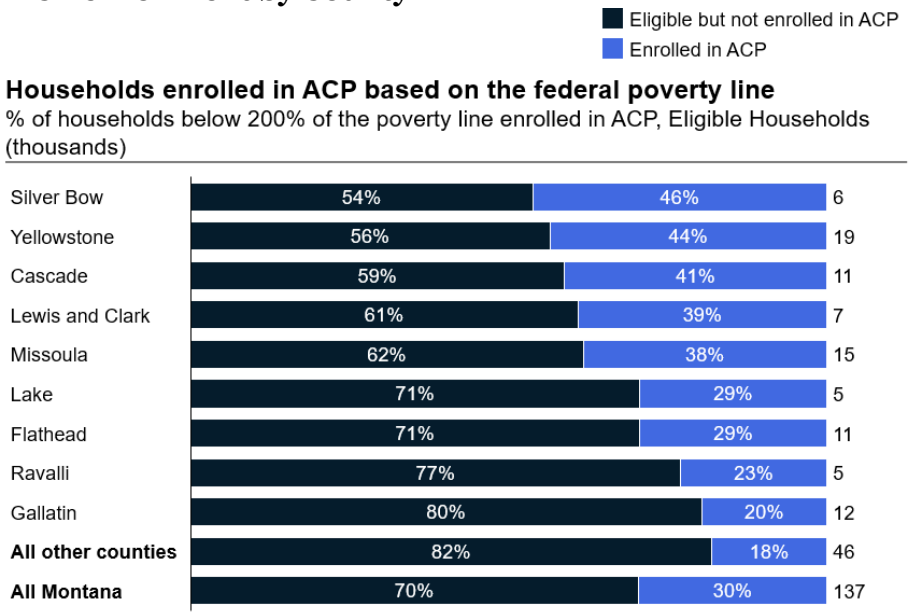


Counties with smaller populations are also more likely to have a lower percentage of households enrolled in ACP.[74] Between large Montana counties, there is significant ACP enrollment variance, and the smallest 47 counties have significantly lower rates of ACP enrollment than the state as a whole (see Exhibit 28).

[73] US Census data, 2021 ACS 5-year estimates, https://data.census.gov/table?q=C17002&g=040XX00US30$0500000,30&tid=ACSDT5Y2021.C17002; 1. Total eligibility may be underestimated due to other ways ACP eligibility can be met, e.g., participation in certain government assistance programs like SNAP, Medicaid, WIC, or if a consumer already receives a Lifeline benefit. EducationSuperHighway estimates 190,560 eligible households; 2. ACP-enrolled households / total number of eligible households

[74] US Census data, 2021 ACS 5-year estimates, https://data.census.gov/table?q=C17002&g=040XX00US30$0500000,30&tid=ACSDT5Y2021.C17002

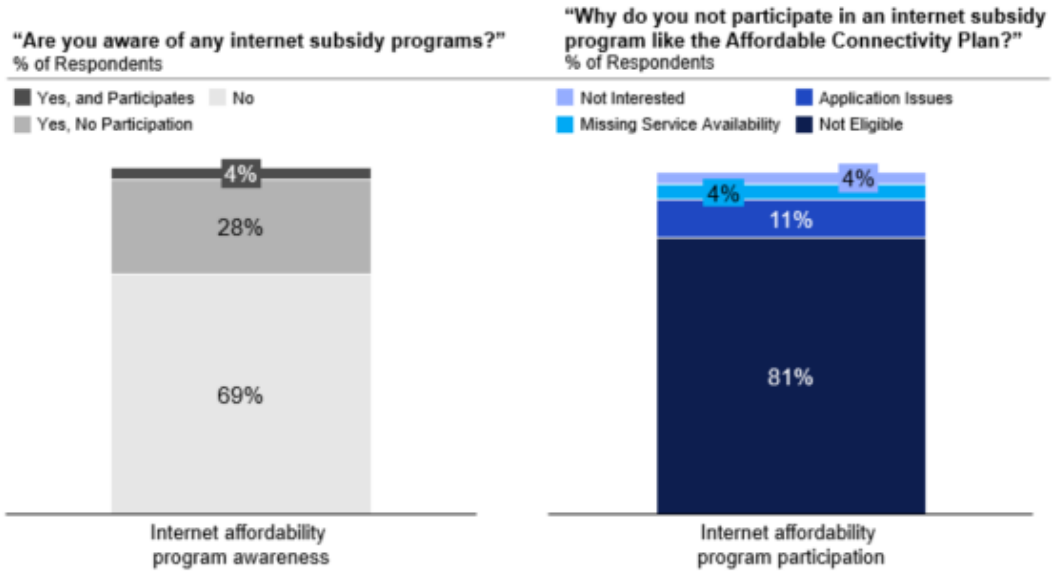
Exhibit 28: ACP enrollment by County[75]



The Montana Broadband Office's recent survey results indicate that lack of awareness may be a key reason for low ACP enrollment.[76] Among survey respondents, 69 percent stated that they are not aware of any internet subsidy programs. Another 28 percent responded that they are aware of internet subsidy programs, but that they do not participate. While some internet providers do inform potential subscribers of ACP eligibility, there are no state, regional, or municipal promotional campaigns, indicating an opportunity to raise awareness and encourage Montanans to take advantage of this program (Exhibit 29).

[75] US Census data, 2021 ACS 5-year estimates, https://data.census.gov/table?q=C17002&g=040XX00US30$0500000,30&tid=ACSDT5Y2021.C17002; 1. 9 largest counties by population; 2. Includes other 47 counties ranging from a population of 454-19,688
[76] Survey of Montana residents conducted by MBO Sep-Oct 2022. N=1,622

Exhibit 29: Montanans' awareness of and participation in internet subsidy programs[77]



Given the high rate of ACP eligibility, low rate of enrollment, and low rate of awareness of internet subsidy programs, there is a potential opportunity for the state to conduct awareness efforts or increase support for enrollment in assistance programs.

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77 Survey of Montana residents conducted by MBO Sep-Oct 2022. N=1,622

- Full first question: "Are you aware of any internet subsidy programs, such as the Affordable Connectivity Plan or the Emergency Broadband Benefit that helps cover monthly internet costs for qualifying households?"
- Second question only included respondents who know about internet subsidy programs, but have not signed up.
- "Not Interested" includes "I don't want/need it," "I am financially stable and can afford service without it," "I haven't pursued it," "I am going to apply," and "Internet service isn't expensive."
- "Application Issues" includes "It is too difficult to apply," "I don't know how to apply," "I applied and was rejected," and "I am not sure if I am eligible."
- "Missing Service Availability" includes "There is no Internet Service Provider in my Area," and "My Internet Service Provider Does not Participate in the Program."
- "Not Eligible" includes "I am not eligible."

4 Collaboration and Stakeholder Engagement

4.1 Coordination and Outreach Strategy

Montana's stakeholder engagement process for the Five-Year Action Plan and Digital Opportunity Plan has three main components:

I. Stakeholder identification

II. Engagement approach

III. Stakeholder outreach

Together, these efforts yielded a robust stakeholder engagement process, which allowed the state to place key constituents at the center of its plans to increase broadband availability in Montana and narrow the digital divide.

I. Stakeholder identification

With reference to BEAD guidance as well as input from state government contacts, MBO identified key external stakeholders and stakeholder groups to engage, including:

- **Political and governmental representatives**: state and territorial agencies, state senators and representatives, city and county officials (e.g., commissioners, other elected officials)
- **Tribal entities**: tribal leadership, tribal colleges, tribal businesses, tribal government officials
- **Community Anchor Institutions**: libraries, schools, healthcare centers, community colleges, other institutions of higher education, nonprofit and community-based organizations
- **Economic and workforce actors**: labor organizations and unions, entities that carry out workforce development programs, chambers of commerce, economic development organizations
- **Telecommunications providers**: internet service providers
- **Covered populations**: individuals who live in covered households, 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; aging individuals; incarcerated individuals (excluding individuals incarcerated in federal facilities); veterans; individuals with disabilities; individuals with a language barrier; individuals who are members of a racial or ethnic minority group; individuals who primarily reside in a rural area

Once the list of stakeholder groups was defined, MBO identified specific individuals within each group, as well as any stakeholders relevant to this engagement process that did not belong to a

predefined stakeholder group. This process required coordinating with public and private organizations for outreach and desk research (e.g., Google searching, cold calls, referrals) to develop a list of approximately 2,800 contacts representing the full range of stakeholders. Since Montana's efforts for the BEAD Five-Year Action Plan and the Digital Opportunity Plan are coordinated, this is a comprehensive list of stakeholders that applies to both plans.

II. Engagement approach

The MBO conducted two rounds of stakeholder engagement sessions. Round 1, conducted from September 7th to 14th, focused on identifying challenges to internet access and digital equity. Round 2, conducted from December 5th to 9th, focused on soliciting feedback to specific preliminary elements required by the BEAD and DE NOFOs and report templates provided by NTIA. In both rounds, the MBO's approach to stakeholder engagement was guided by the following principles, outlined in the NTIA's guidance:

Full geographic coverage of the Eligible Entity

Hour-long, in-person stakeholder engagement sessions have been held in ten cities: Billings (round 1 and round 2), Glendive, Glasgow, Kalispell, Great Falls, Helena, Butte, Missoula, Havre, and Miles City. The round 2 session in Billings was specifically for Tribal leaders and communities, organized by the Crow Tribe of Nations in coordination with the MBO. The cities for the sessions were selected to ensure diverse geographical representation across the state from both the more populated hubs as well as the rural areas. Each session was hosted in a centrally located, easily accessible location within each city to enable maximum participation. Forty-six virtual stakeholder sessions have also been conducted, open to individuals and organizations located anywhere in the state. MBO will continue to ensure that geographic coverage of the state enables a range of Montanans to participate.

Meaningful engagement and outreach to diverse stakeholder groups

Exhibit 30 indicates the stakeholder groups for which virtual and in-person engagement sessions and surveys have been conducted. MBO will continue to prioritize outreach to diverse stakeholder groups.

Establishment, documentation, and adherence to clear procedures to ensure transparency

The stakeholder engagement process was shaped by a discussion guide that ensured the moderator covered all relevant topics while also providing the ability to move naturally between issues as the conversation flowed. Additionally, Montana deployed a streamlined survey to households and community leaders (see Exhibit 31, Exhibit 32, Exhibit 33, and Exhibit 34).

Outreach and engagement of unserved and underserved communities, including historically underrepresented and marginalized groups and/or communities

To direct stakeholder engagement, MBO developed a list of more than 2,800 stakeholders who represented populations highlighted in the NTIA requirements, including unserved / underserved and covered populations, to understand their needs related to the access,

availability, and use of broadband. To reach covered populations, the state also held targeted interviews with stakeholders, including tribal leaders, the Department of Veterans Affairs, the Montana School for the Deaf and Blind, the Department of Corrections, the Department of Public Health and Human Services: State Unit of Aging, and the Montana Rural Development State Office.

Use of multiple awareness and participation mechanisms and different methods to convey information and outreach

Montana engaged its residents through multiple modalities, including 11 in-person and 46 virtual sessions (Exhibit 30) as well as two surveys that were distributed digitally (see Exhibit 31, Exhibit 32, Exhibit 33, Exhibit 34).

In-person and virtual sessions

MBO hosted both in-person and virtual outreach sessions with the public and targeted stakeholders to better understand the state's challenges in providing adequate broadband service to its residents (see Exhibit 30). The stakeholder engagement sessions were held both in person (during the periods of September 7-14 and December 5-9 2022) and virtually via Microsoft Teams (September through December 2022). The virtual sessions helped to ensure greater accessibility to stakeholders unable to make a physical session. For those that indicated interest in the virtual option, the MBO coordinated one-on-one to schedule sessions over Microsoft Teams with dial-in accessibility, consolidating as many individuals into the same stakeholder meeting as possible. Additional outreach through email and phone-calling was used to connect with as many stakeholders as possible, conducting supplemental desk research and leveraging referrals given during the sessions to add to the growing list of contacts.

There were two types of sessions, including general public sessions, which sought input from any interested Montanan, and specific stakeholder group sessions, which included representatives from targeted groups such as libraries, local governments, and ISPs.

To direct the sessions, Montana developed discussion guides that covered the following topics:

- Round 1: Challenges to community internet access, technology preferences, how government funds should be used to improve internet access in the community, suggestions for state government (ISP sessions only), digital equity, feasibility for ISPs (ISP sessions only), grant applications (ISP sessions only), and providing internet service (ISP sessions only)
- Round 2: Barriers to connectivity (ISP sessions only), broadband access strategies, digital opportunity strategies, strategies to further workforce development (ISP and tribal sessions only), strategies to address supply chain challenges (ISP sessions only), strategies to develop an equitable subgrantee process (ISP sessions only), and existing tribal awards (tribal sessions only)

The conversations were structured to be flexible to give participants the ability to move naturally between topics as the conversation flowed. This approach ensured participants had the

opportunity to raise topics of interest, return to issues when they had additional input, and lead the conversation into the areas of greatest importance to them.

Surveys

Two surveys, with both quantitative and qualitative questions, were designed and deployed to a broad, representative group of Montanans. For survey methodology and results, please see Appendices 7.1-7.4.

- **Household surveys**: This survey was available to any Montanan over the age of 18 and distributed to a population representative of the state.
- **Community leader survey**: This survey was created to reach community leaders and institutions, including libraries, public health organizations, religious organizations, and chambers of commerce.
- **Topics covered included:**
    - Availability of internet access at home and in the community
    - Type and speed of internet access at home
    - Reasons for internet use
    - Awareness of internet subsidy programs, such as ACP
    - Reasons for lack of home internet access
    - Assessment of affordable monthly price for high-speed home internet

Alternate outreach modalities:

Additional outreach was conducted through email and phone calls to connect with as many stakeholders as possible. MBO will continue to connect with these stakeholders following submission and implementation of the BEAD Five-Year Action Plan.

Together, these various outreach methods allowed for maximum reach and accessibility to target populations, which helped the state develop a thorough understanding of the challenges in accessing broadband service.

To reach stakeholders, Montana used a number of awareness methods, including:

- Flyers for the general public and stakeholder populations
- Press releases
- Social media posts for Twitter, Instagram, and Facebook
- Email messaging tailored to state agencies and stakeholder populations
- Updated state website language

To reach the general public and targeted stakeholder groups, MBO distributed materials on engagement opportunities through a range of partner organizations including Broadband MT,

Montana Association of Counties, Montana Health and Human Services, Economic Developers Association, Montana State Library, Office of Public Instruction, Montana League of Cities, Montana Chambers of Commerce, Montana Department of Commerce, Governor's Office of [Native American] Affairs, Business Assistance Connection, ISPs, labor groups, nonprofits, and others. MBO also used press channels (TV, radio, newspaper) to distribute marketing materials, including KRTV, Great Falls Tribune, Glasgow Courier, BS Central, Glasgow Chamber, KLTZ Radio, KTVQ, KPAX, The Electric, KFBB, and MMJ Montana. Finally, MBO promoted the sessions through a network of stakeholder contacts by email, state social media pages, and the state website, as well as the state's GovDelivery email contact list.

III. Stakeholder outreach

The state reached a large, representative group of Montanans through its engagement process.

Exhibit 30: Stakeholders engaged through in-person and virtual sessions[78]

Stakeholder group	Number of individuals reached	Examples
Political and governmental representatives	35	State agencies and officials, city and county officials
Economic and workforce development, small businesses	17	Department of Labor and Industry, Montana Public Service Commission
CAIs	35	Billings Clinic, Glendive Public Library, Montana State Library, Office of Public Instruction, Montana Digital Academy
Telecommunications providers and associations	42	BroadbandMT, Nemont, Grizzly Broadband, Range Companies
Tribal entities	33	Native Inter-Tribal Health Alliance, Aaniiih Nakoda College
Covered populations	12	Department of Corrections, Veterans Navigation Network, Montana School for the Deaf and Blind

[78] In-person and virtual sessions conducted by MBO

Total	174

Exhibit 31: Stakeholders reached through the MBO household survey[79]

Population	Count	Percent (Total Number of Responses)	Percent (Total Number of Respondents)
Aged 60 or older	677	34.6%	41.7%
Veteran	251	12.8%	15.5%
Individual with a disability (mental or physical)	182	9.3%	11.2%
Non-native English speaker	23	1.2%	1.4%
Currently Incarcerated	0	0.0%	0.0%
Racial or Ethnic minority (such as Native American, Black, Hispanic, Asian, etc.)	126	6.4%	7.8%
None of these	656	33.5%	40.4%
Skipped/no response	41	2.1%	2.5%
TOTAL	1,956 responses (1,622 respondents)	100%	N/A

Exhibit 32: Stakeholders who live on reservations reached through the MBO household survey[80]

Reservation	Count	Percent
Blackfeet Tribe of the Blackfeet Reservation	7	7.9%
Chippewa Cree Tribe of the Rocky Boy's Reservation	4	4.5%
Confederated Salish and Kootenai Tribes of the Flathead Reservation	30	33.7%
Crow Tribe of the Crow Reservation	14	15.7%
Fort Belknap Tribes of the Fort Belknap Reservation	14	15.7%
Fort Peck Tribes of the Fort Peck Reservation	19	21.3%
Little Shell Chippewa Tribe	0	0.0%
Northern Cheyenne Tribe of the Northern Cheyenne Reservation	1	1.1%
TOTAL	89	100%

Exhibit 33: Stakeholders reached through the MBO community leader survey[81]

Community Group	Count	Percent
Adult education or literacy organization	3	3.2%
Advocacy group	0	0.0%

[79] Survey of Montana residents conducted by MBO Sep-Oct 2022. N=1,622
[80] Survey of Montana residents conducted by MBO Sep-Oct 2022. N=1,622
[81] Survey of Montana community leaders conducted by MBO Sep-Oct 2022. N=94

Community Group	Count	Percent
Chamber of commerce	6	6.4%
Education organization serving pre-kindergarten through high school students	4	4.3%
Higher education organization	4	4.3%
Internet service provider	13	13.8%
Labor organization	3	3.2%
Local government	30	31.9%
Nonprofit organization	17	18.1%
Public health organization (including health clinics)	2	2.1%
Public library	8	8.5%
Religious or faith-based organization	0	0.0%
Tribal government	0	0.0%
Veterans' association (such as the American Legion)	0	0.0%
Agriculture*	1	1.1%
Economic Development Organization*	1	1.1%
State Government*	2	2.1%
TOTAL	94	100%

Exhibit 34: Community groups that are located on or that serve reservations, reached through the MBO community leader survey[82]

Reservation	Count	Percent
Blackfeet Tribe of the Blackfeet Reservation	1	1.1%
Chippewa Cree Tribe of the Rocky Boy's Reservation	2	2.1%
Confederated Salish and Kootenai Tribes of the Flathead Reservation	4	4.3%
Crow Tribe of the Crow Reservation	0	0.0%
Fort Belknap Tribes of the Fort Belknap Reservation	2	2.1%
Fort Peck Tribes of the Fort Peck Reservation	9	9.6%
Little Shell Chippewa Tribe	0	0.0%
Northern Cheyenne Tribe of the Northern Cheyenne Reservation	2	2.1%
No response/skipped	74	78.7%
TOTAL	94	100%

Throughout the outreach process, there was a general sentiment that stakeholders are optimistic about the opportunities that will be provided by broadband expansion and efforts to close the digital divide. The state has considered which partnerships it will pursue as it implements its plans, and a number of potential partnerships—including with workforce agencies and educational institutions—are outlined in the implementation strategies in Section 5 in both the Digital Opportunity Plan and BEAD Five-Year Action Plan.

As noted in Section 5.4.3 in the BEAD Five-Year Action Plan, in terms of involving other workforce development organizations, MBO plans to partner primarily with the Montana

[82] Survey of Montana community leaders conducted by MBO Sep-Oct 2022. N=94

Department of Labor and Industry in working to attract and retain the skilled workforce needed for broadband deployment.

5 Implementation

5.1 Implementation Strategy and Key Activities

There are four primary barriers to broadband adoption in the State of Montana:

I. Broadband availability

II. Service affordability

III. Device access

IV. Digital skills

While all those without adequate broadband face some combination of these barriers, those who fall into one or more covered populations often experience the greatest obstacles.

Comprehensive approaches to breaking down the barriers to adoption are particularly critical for those individuals who exist at the intersection of multiple covered populations. For example, there is considerable overlap between individuals who live in rural areas and individuals who are over the age of 65, and these people may experience the biggest gaps in both digital skills and broadband availability.

Although there are a number of digital opportunity assets at Montanans' disposal, as detailed in Section 3.1, these tools should be scaled to fully close the state's digital divide. To be more effective, existing programs can be expanded and replicated, and new initiatives may be designed and pursued to more completely address the barriers to broadband adoption faced by Montana's residents.

As states across the nation develop and implement new strategies to promote digital opportunity, Montana will stay abreast of progress and incorporate successful initiatives into its own efforts as appropriate. For example, Vermont announced the launch of an apprenticeship program, which trains its state residents as technicians to build broadband infrastructure.[83] Montana, which has implemented its successful Registered Apprenticeship Program (see Section 2.2), may adopt some of the learnings from Vermont to upskill its residents into higher-paying jobs as technicians while also supporting Montana's broader goals of improving internet availability and keeping jobs in the state.

The state has outlined the main barriers to digital opportunity, the associated levers to pull to counter the associated challenges, and potential programs and strategies to close the digital divide for Montanans (Exhibit 35). The state will decide which strategies to deploy and the extent to which those strategies will be expanded and scaled based on available funding.

[83] Meeting the Broadband Workforce Challenge, Vermont Community Broadband Board, https://publicservice.vermont.gov/announcements/vcbb-announces-new-workforce-development-plan

Wherever possible, Montana will establish partnerships—some of which are proposed below—to implement the digital opportunity strategies efficiently and effectively.

Exhibit 35: Potential digital opportunity strategies

BEAD requirements

Barrier	Lever	Potential programming or opportunity	Existing efforts
Broadband availability	Home access	A. Connect the unserved: Last-mile and associated middle-mile deployment of broadband technologies to areas without service of at least 25/3 Mbps	✓
		B. Upgrade the underserved: Deploying and/or upgrading technologies to areas with service below 100/20 Mbps	✓
	Community access	C. Invest in community anchor institutions: Ensure reliable high-speed access at CAIs or identify opportunities in non-traditional CAIs	✓
Service affordability	Subsidize broadband	D. Increase ACP uptake: Identify and address barriers to uptake; educate, support and encourage uptake among eligible subscribers	
	Decrease service price	E. Offer low-cost plans: Partner with ISPs to develop and promote low-cost high-speed internet plans	✓
Device access	Device loans	F. Expand loan programs: Allow Montanans to rent devices for free or low cost from CAIs and state agencies	✓
	Device access points	G. Increase CAI access points: Partner with CAIs to create device access terminals in CAIs, taking advantage of the high-speed broadband and existing community access	✓
	Adequate State device inventory	H. Invest in additional state devices: To support the state's broader efforts—particularly in serving covered populations—Montana can increase its device inventory	✓
Digital skills	Build skills and confidence	I. Develop digital skills curricula: Partner to deploy basic, occupational digital training programs with state entities and targeted industries	✓
		J. Encourage targeted training programs: Establish partnerships to upskill individuals through classes and training programs, focusing on covered populations (e.g., aging individuals, individuals in rural areas, veterans)	

The timelines associated with the implementation strategies can be found in Section 5.2.

I. Broadband availability

A lack of broadband availability is cited as the primary challenge to internet access faced by the majority of Montanans. The BEAD Five-Year Action Plan puts forth a detailed approach to establishing the infrastructure necessary—both at homes and in communities—to bring high-speed internet to Montana, which includes connecting the unserved, connecting the underserved, and prioritizing access to Community Anchor Institutions.

Given the state's low population density and vast size, many residents live in medical and education deserts, where they face outsized challenges to accessing these critical services without driving long distances. Making high-speed broadband widely available will allow Montanans to remotely access these services, saving them time and money, while encouraging more frequent and meaningful engagement.

A. Connect the unserved

Barriers and gaps

According to a 2022 BroadbandNow report, Montana is ranked last in high-speed internet availability nationally.[84] Thirteen percent of Montanans are unserved, largely due to a lack of infrastructure given challenging terrain of the mountains and plains.[85]

Activities

Within the parameters of BEAD, Montana's priority in broadband deployment is to reach the state's numerous unserved and underserved areas. The program's main focus is on deploying broadband service to unserved locations (those without any broadband service at all or with broadband service offering speeds below 25 Mbps downstream/3 Mbps upstream.

Given the large number of unserved and underserved locations spread across the state, Montana may not have sufficient funding to connect all unserved and underserved locations with fiber. Cost analyses will be refined to determine the ideal mix of broadband infrastructure—potentially including fiber and fixed wireless—to bring high-speed internet access to unserved Montanans in areas that were previously lacking adequate broadband.

Key activities include:

- Determine priority unserved locations
- Select ISP sub-grantees to build necessary infrastructure
- Deploy priority projects
- Deploy remaining projects

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[84] Montana Internet Coverage & Availability in 2022, BroadbandNow, https://broadbandnow.com/Montana

[85] Service availability based on FCC Broadband Map as of November 18, 2022. Values for served, underserved, and unserved locations reflect location totals when project areas / locations to be served by RDOF, CAFII, NTIABIP, ReConnect (prior to February 2022) and RUS are considered served

- Monitor the number of unserved households over time to track progress against goals

Goals and Measurements:

The main goal of this effort will be to decrease the percentage of unserved locations from the initial baseline measure of thirteen percent.[86] To track progress, ISP subgrantees will report back as they build the supporting broadband infrastructure.

Exhibit 36: Connect the unserved Goals and measurements

Area	Potential goals	Sample strategies	KPIs	Baseline	Short-term	Long-term	Data Source	Tracking Frequency	Responsible Entity
Broadband Availability and Affordability	Ensure all Montana residents have access to affordable internet in their homes, schools, libraries, and businesses irrespective of their income level	Establish service to unserved locations	Percent of unserved locations	13%	TBD	0% (as required by NOFO)	Broadband map	Every 6 months	Chief Data Officer

B. Upgrade the underserved

Barriers and gaps

Montana plans to provide high-speed internet access to the state's numerous underserved locations (those without broadband service offering speeds of 100 Mbps downstream/20 Mbps upstream). Across the State of Montana, 5% of locations are underserved.[87] As noted in Section 3.2.1, geography and topography pose significant challenges to building out the infrastructure necessary for high-speed internet, which has resulted in a large, underserved population.

Activities

Through the BEAD Five-Year Action Plan, the state will deploy a mix of technology, likely including fixed wireless and fiber, to make adequate broadband available to underserved

[86] Service availability based on FCC Broadband Map as of November 18, 2022. Values for served, underserved, and unserved locations reflect location totals when project areas / locations to be served by RDOF, CAFII, NTIABIP, ReConnect (prior to February 2022) and RUS are considered served
[87] Service availability based on FCC Broadband Map as of November 18, 2022. Values for served, underserved, and unserved locations reflect location totals when project areas/locations to be served by RDOF, CAFII, NTIABIP, ReConnect (prior to February 2022) and RUS are considered served.

Montanans. Cost analyses will be conducted and refined to determine the optimal mix of technology to Montana's underserved population.

Key activities include:

- Determine priority underserved locations
- Select ISP sub-grantees to build necessary infrastructure
- Deploy priority projects
- Deploy remaining projects
- Monitor the number of underserved households over time to track progress against goals

Goals and Measurements

The main goal of this effort will be to decrease the percentage of underserved locations from the initial baseline measure of 5 percent.[88]

Exhibit 37: Upgrade the underserved Goals and measurements

Area	Potential goals	Sample strategies	KPIs	Baseline	Short-term	Long-term	Data Source	Tracking Frequency	Responsible Entity
Broadband Availability and Affordability	Ensure all Montana residents have access to affordable internet in their homes, schools, libraries, and businesses irrespective of their income level	Increase broadband speed for underserved locations	Percent of underserved locations	5%	TBD	TBD	Broadband map	Every 6 months	Chief Data Officer

C. Invest in Community Anchor Institutions

Barriers and gaps:

[88] Service availability based on FCC Broadband Map as of November 18, 2022. Values for served, underserved, and unserved locations reflect location totals when project areas / locations to be served by RDOF, CAFII, NTIABIP, ReConnect (prior to February 2022) and RUS are considered served.

CAIs provide a number of critical services to their communities, including broadband access. One report noted that 24 percent of the state's public libraries report that they are the sole source of free Wi-Fi in their communities.[89]

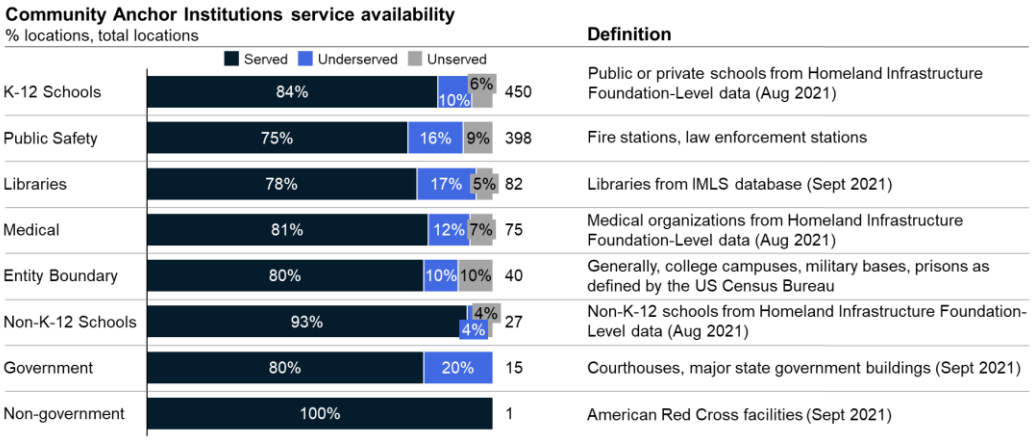
Given the importance of CAIs in providing services for Montanans, a focus on delivering high-speed internet to CAIs will have an outsized impact on achieving the state's broader goals.

Currently, many CAIs are underserved or unserved, posing serious obstacles in rural areas where broadband availability is generally low, and the local communities are most likely to rely on CAIs for internet access and other important services.

Most Montana public libraries serve fewer than 50,000 people, and 98 percent of those institutions report broadband speeds below the FCC's national bandwidth target of 100 Mbps download.[90]

Public safety and entity boundary locations have the highest rate of unserved locations at nine percent and ten percent, respectively. On the other hand, non-government buildings and non-K-12 schools have relatively higher percentages of served locations, with 100 percent and 93 percent of locations served, respectively (see Exhibit 38).

Exhibit 38: Community Anchor Institutions Service Availability[91]



[89] The State of Broadband Connectivity and Related IT Infrastructure in Montana's Public Libraries, Simmons University School of Library and Information Science, Rhinesmith, Dutilloy, Kennedy, March 2020, https://docs.msl.mt.gov/central_services/publications/SimmonsReport_BroadbandConnectivity.pdf

[90] The State of Broadband Connectivity and Related IT Infrastructure in Montana's Public Libraries, Simmons University School of Library and Information Science, Rhinesmith, Dutilloy, Kennedy, March 2020, https://docs.msl.mt.gov/central_services/publications/SimmonsReport_BroadbandConnectivity.pdf

[91] Service availability and cost data provided by BroadbandLab licensed data provider as of November 18, 2022; Served, underserved and unserved follow normal location guidelines (100/20 and 25/3 standards). To date, data does not measure gigabit service to CAIs. Note: Additional NGOs exist in MT.

CAIs can benefit from speeds as high as 1 Gbps to provide robust access to its patrons, however, a 2020 report published by the Montana State Library shows that just one library has service approaching that speed (see Exhibit 39 and Exhibit 40).

Exhibit 39: Montana libraries with fastest download speeds[92]

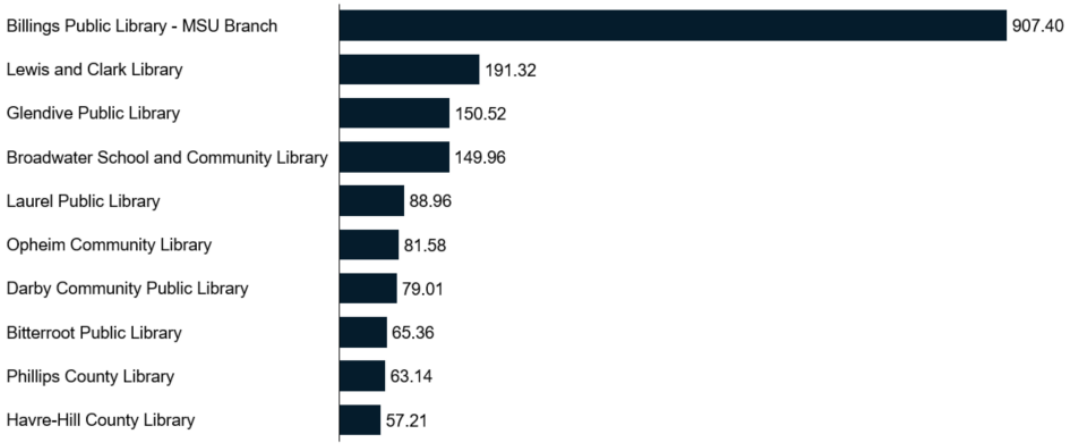
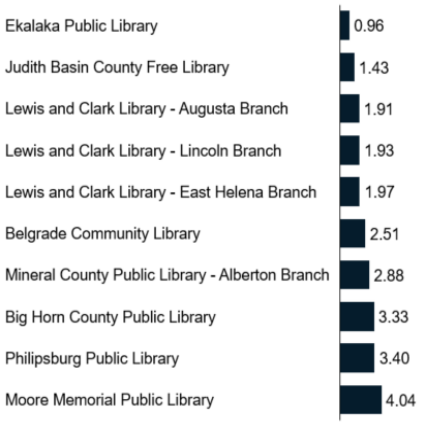


Exhibit 40: Montana libraries with slowest download speeds[93]



Activities

CAIs represent a wide variety of public and private institutions across the state that can serve as a gateway to universal broadband access. CAIs, like libraries and community centers, often serve

[92] The State of Broadband Connectivity and Related IT Infrastructure in Montana's Public Libraries, Simmons University School of Library and Information Science, Rhinesmith, Dutilloy, Kennedy, March 2020, https://docs.msl.mt.gov/central_services/publications/SimmonsReport_BroadbandConnectivity.pdf

[93] The State of Broadband Connectivity and Related IT Infrastructure in Montana's Public Libraries, Simmons University School of Library and Information Science, Rhinesmith, Dutilloy, Kennedy, March 2020, https://docs.msl.mt.gov/central_services/publications/SimmonsReport_BroadbandConnectivity.pdf

as hubs for individuals to access free high-speed internet, as they are usually equipped with faster speeds than are available elsewhere in communities.

BEAD recognizes the unique nature of different communities and has granted states license to determine their own definitions of CAIs. Given Montana's geography and low population density, the state may deem a variety of untraditional locations to be CAIs in remote areas, potentially including ranger stations or even local pubs.

Beyond providing community broadband access, prioritizing adequate service to CAIs will enable these institutions to establish and expand device access and loan programs.

The BEAD Five-Year Action Plan may prioritize bringing infrastructure to underserved and unserved CAIs or increasing existing service to higher speeds that support broader, community-supporting activities.

Key activities include:

- Determine priority CAIs
- Select ISP sub-grantees to build necessary infrastructure
- Deploy priority projects
- Deploy remaining projects
- Monitor the number of CAIs over time to track progress against goals

Goals and Measurements

The state may establish a goal to serve every CAI, and to measure success, ISP subgrantees can report back on their progress of building the supporting broadband infrastructure.

Montana may also set goals to make higher speeds available to CAIs, which may be tracked over time.

Exhibit 41: Invest in Community Anchor Institutions Goals and measurements

Area	Potential goals	Sample strategies	KPIs	Baseline	Short-term	Long-term	Data Source	Tracking Frequency	Responsible Entity
Broadband Availability and Affordability	Ensure all Montana residents have access to affordable internet in their homes, schools, libraries, and businesses irrespective of their income level	Increase broadband availability and speed for un- and underserved CAIs	Percent of unserved and underserved CAIs	20%	TBD	TBD	Broadband map	Every 6 months	Chief Data Officer

II. Service affordability

After broadband availability, affordability is the second greatest barrier to internet access faced by Montanans, as 16.8 percent of Montanans without high-speed internet cited lack of affordability as the primary reason for their inadequate internet access.[94] Low income is strongly correlated to the affordability barrier: 35 percent of Montana households with an income under $20,000 do not have broadband at home, versus 17 percent for households with incomes $20,000-75,000, and five percent of those earning above $75,000.[95]

To improve affordability in the state, Montana can consider two main strategies—increasing ACP uptake and partnering with ISPs to provide additional low-cost service plans.

D. Increase ACP uptake

Barriers and gaps

As detailed in Section 3.2.3, Montana has a high rate of ACP eligibility, but a bottom quartile rate of ACP uptake. Nearly a third of Montanans live in households with income below 200 percent of the federal poverty line, which makes them eligible for ACP enrollment. However, at least 79% of eligible Montanans have not enrolled in the program, putting the state 41st in national ACP enrollment. At just 21 percent, Montana's ACP enrollment is below the national ACP enrollment average of 33 percent, which presents an opportunity for Montana to focus on increasing ACP enrollment to help ease the burden of cost for a large swath of its population.

Activities

The State of Montana can help its residents take advantage of the ACP by increasing awareness and assisting eligible households in the enrollment process. Potential approaches to promote ACP adoption include:

Partnerships with non-governmental organizations: Montana could consider engaging a non-governmental organization that focuses on public engagement to increase adoption of public services to promote ACP adoption throughout the state.

State agency partnerships: The state could coordinate with other state agencies to raise awareness and adoption. In early 2022, New York launched a multi-state agency that used six agencies to target their respective served populations to increase ACP uptake. The agencies used their regular interactions and service provision to educate and support residents—for example, the DMV distributed ACP sign-up information with drivers' licenses. This effort increased ACP participation by 100,000 families.

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[94] Survey of Montana residents conducted by MBO Sep-Oct 2022. N=1,622
[95] ACS 5-Year Estimates, US Census Data, 2021, https://data.census.gov/table?q=internet&g=040XX00US30&tid=ACSST5Y2021.S2801

Montana could pursue similar partnerships to take advantage of existing touchpoints:

- Department of Motor Vehicles can provide ACP information and enrollment support when individuals get their drivers' licenses
- Montana Fish, Wildlife, and Parks can share ACP brochures when individuals purchase licenses, targeting rural populations
- Department of Health and Human Services could provide information on ACP eligibility in the context of telehealth access during healthcare visits, reaching aging individuals
- Veterans Affairs can help veterans sign up for ACP when providing other services

Community Anchor Institution partnerships: As CAIs will play a central role in various strategies to close the digital divide—for example, by providing free access points and device lending programs—Montana may also enlist these institutions to promote ACP awareness and assist in sign-ups. Libraries and K-12 institutions may be ideal partners.

ISP partnerships: Montana could work with all sub-grantees as well as partner with other ISPs in the state to promote ACP to their eligible customers, particularly those that ask about low-cost plans.

Key activities include:

- Select ACP-eligible target populations
- Establish partnerships with non-governmental organizations, state agencies, CAIs, and ISPs
- Provide individuals with relevant information about the ACP and support them through the enrollment process
- Track the number of eligible Montanans who sign up for the ACP over time

Goals and Measurements

To measure the effectiveness of this effort, Montana can measure the percentage uptake of eligible households, which is tracked and made publicly available weekly by the Universal Service Administrative Company.

Exhibit 42: Increase ACP update goals and measurements

Area	Potential goals	Sample strategies	KPIs	Baseline	Short-term	Long-term	Data Source	Tracking Frequency	Responsible Entity
Broadband Availability and Affordability	Ensure all Montana residents have access to affordable internet in their	Establish partnerships to increase ACP uptake by eligible households	Percent ACP uptake of eligible households	21%	TBD	TBD	USAC data	Every 6 months	Program Coordinator

Area	Potential goals	Sample strategies	KPIs	Baseline	Short-term	Long-term	Data Source	Tracking Frequency	Responsible Entity
	homes, schools, libraries, and businesses irrespective of their income level								

E. Offer low-cost plans

Barriers and gaps

According to BroadbandNow, Montana ranks 49th in access to affordable high-speed internet plans, as only 62 percent of households have access to wired plans, including DSL, copper, cable, or fiber, of 25 Mbps download/3 Mbps upload or higher and a standalone broadband speed plan that is $60/month or less.[96]

As detailed in Section 3.2.1, affordability is a significant barrier to access for certain covered populations, including aging individuals, individuals with disabilities, and racial or ethnic minorities, whose willingness to pay for high-speed internet is generally lower than other populations.

Activities

BEAD requires ISP sub-grantees to offer low-cost plans, which will increase broadband affordability in the state.

Key activities include:

- Establish a definition of low-cost plans
- Select subgrantees who meet or exceed the State's defined threshold for low-cost plans
- Track the number of low-cost plans made available to Montanans

Goals and Measurements:

The state may track the number of low-cost plans available to its residents.

[96] Best and Worst States for Internet Coverage, Prices and Speeds, BroadbandNow, Cooper and Tanberk, 2021, https://broadbandnow.com/research/best-states-with-internet-coverage-and-speed

Exhibit 43: Offer low-cost plans goals and measurements

Area	Potential goals	Sample strategies	KPIs	Baseline	Short-term	Long-term	Data Source	Tracking Frequency	Responsible Entity
Broadband Availability and Affordability	Ensure all Montana residents have access to affordable internet in their homes, schools, libraries, and businesses irrespective of their income level	Increase uptake of affordable plans	Percent uptake of affordable plans	N/A	TBD	TBD	ISP submissions	Every month	Program Coordinator

III. Device Access

Access to internet-capable devices is necessary for Montanans to engage in meaningful broadband use. Devices can be cost-prohibitive, and Montanans who are less comfortable using the internet may choose to forgo purchasing devices altogether.

As noted in Section 3.2.1, individuals who are members of covered populations have lower rates of access to internet-capable devices than their counterparts. In the absence of these devices, they are unable to access the internet and its resources at home or on the go.

By increasing residents' device access through two main strategies—loaning programs and public access points—Montana's citizens can become familiar with equipment and access the myriad benefits of the internet.

Further, Montana may prioritize ensuring that state agencies have adequate internet-capable device inventories, without which the state will be unable to pursue its broader efforts and serve its residents.

F. Expand CAI and state agency device loans

Barriers and gaps

Up to 30 percent of some covered populations in Montana, like Native Americans, do not have access to internet-capable devices at home. Instead, many rely on device loaning programs, which, as noted in Section 3.1 are often hosted by libraries or other community anchor institutions. Students often borrow devices from their schools, and home-schooled students may utilize device lending programs hosted by libraries. These popular loaning initiatives may be expanded by the state and replicated in additional locations.

Activities

Existing initiatives may be expanded to serve Montanans, particularly those who are members of covered populations. Further, device rental programs may be created to fill gaps, like those experienced by both seniors and rural populations.

State agencies could be ideal partners for these loan programs, given their regular access to target populations, as could CAIs, which are already frequented regularly by community members who need to access broadband outside of their homes or take advantage of the other benefits provided by CAIs (Exhibit 44).

Exhibit 44: Potential Montana device loaning partnerships and programs

Existing program

Partner	Program	Served population	Action
University of Montana MonTECH	Assistive equipment rental	Individuals with disabilities	Replicate program at strategic CAIs and healthcare facilities to expand service to individuals with disabilities throughout the state
Montana School for the Deaf and Blind	Assistive equipment rental	Individuals with disabilities	This population requires specialized equipment and is spread out thinly around the state; Increase funding to purchase more devices and support staff to travel to these individuals to lend equipment and provide training
Montana Department of Corrections	Chromebook and tablet loans	Incarcerated individuals	Purchase additional devices, which individuals can use—with proper firewalls—in their cells and around facilities to pursue educational and vocational training
Montana State Library	Hotspot lending program	All	Invest in additional hotspots and other internet-capable devices (e.g., laptops, tablets), and implement this lending program at all public libraries in Montana, scaled to serve respective populations
Montana State University	Technology checkouts	MSU Students and employees	Replicate this program at other HE and K-12 institutions to allow students to check out equipment including hotspots, laptops, and tablets
Department of Public Health and Human Services: State Unit of Aging	Device lending programs	Aging individuals; individuals who live in rural areas	For populations who are less comfortable with technology, device loaning programs may provide an opportunity to familiarize themselves with the equipment and develop an interest in more robust use
Montana Rural Development State Office	Device lending programs	Individuals who live in rural areas	
Strategic CAIs	Device lending programs	Aging individuals; individuals who live in rural areas	

Key activities include:

- Catalog existing CAI loan programs and determine their needs or opportunities for expansion
- Identify additional CAI locations where loan programs should be established and determine their equipment needs
- Purchase internet-capable devices in bulk to reduce the total cost to the state
- Provide the equipment to CAIs
- Track the initiatives' success over time through need fulfillment
- Add or remove devices as needed

Goals and Measurements

The partners hosting loan programs can measure the success of these initiatives by tracking the percentage of need met. For example, if a library invests in two tablets, but needs four tablets available to meet patrons' demand each day, that library would record 50 percent need met.

Exhibit 45: Expand CAI and state agency device loans goals and measurements

Area	Potential goals	Sample strategies	KPIs	Baseline	Short-term	Long-term	Data Source	Tracking Frequency	Responsible Entity
Device Availability and Affordability	Reduce the digital divide among Montana residents by ensuring widespread access to internet-capable devices	Strategically establish and expand CAI device loaning programs	Percent of community need fulfilled (number of devices available/number of devices needed)	N/A	TBD	TBD	CAI directors	Every 6 months	Program Coordinator

G. Increase CAI device access points

Barriers and gaps

As detailed in Section 3.2.1, adoption is lacking to different extents among covered populations and their counterparts in Montana.

To provide Montanans with greater device access, the state may strategically place device access points in CAIs. Not only can this initiative improve connectivity, it can support the state's broader goals.

Activities

Libraries could be a natural fit to establish and expand device access points, as many are already used for internet access and may have increased broadband speeds after the implementation of the BEAD Five-Year Action Plan (Exhibit 46).

These devices could be equipped with software that enables access for individuals with disabilities, which may include text reading software for those with hearing impairments.

Exhibit 46: Existing and potential device access point initiatives

Existing program

Access type	Served population	Partner	Location	Function
Service kiosks	Veterans	Department of Military Affairs; Veterans Affairs	Select public libraries, Local VFWs, American Legion Offices, Veterans Retirement Office	Support veterans in accessing healthcare and VA benefits
Computer terminals	Incarcerated individuals	Department of Corrections	State prisons	Teleconference with lawyers; telehealth; virtual court attendance, educational/vocational training
Laptops and tablets	Students	Office of Public Instruction, Office of Commissioner of Higher Education	K-12 schools, community colleges, other higher education institutions	Digital skills trainings; STEM curriculum

Key activities include:

- Catalog existing CAI device access points and determine their needs or opportunities for expansion
- Identify additional CAI locations where device access points should be established and determine their equipment needs
- Purchase internet-capable devices in bulk to reduce the total cost to the state
- Provide the equipment to CAIs
- Track the initiatives' success over time through device utilization
- Add or remove devices as needed

Goals and Measurements

The partners hosting device access points can measure the success of these initiatives by tracking the percent of need met. For example, if a library invests in two tablets, but needs four

tablets available to meet patrons' demand each day, the library would record 50 percent need met.

Exhibit 47: Increase CAI device access points goals and measurements

Area	Potential goals	Sample strategies	KPIs	Baseline	Short-term	Long-term	Data Source	Tracking Frequency	Responsible Entity
Device Availability and Affordability	Reduce the digital divide among Montana residents by ensuring widespread access to internet-capable devices	Expand and establish strategic CAI device access points	Percent of community need fulfilled (number of devices available/number of devices needed)	N/A	TBD	TBD	CAI directors	Every 6 months	Program Coordinator

H. Establish adequate state device inventory

Barriers and gaps

A number of state agencies in Montana report inadequate internet-capable devices to serve their constituents. For example, the Montana Department of Public Health and Human Services noted that they need additional tablets equipped with dictation services for staff to use during on-site visits. More broadly, results from a Remote Office Workspace Study show unreliable computer applications and unstable internet connections as two main telework inhibitors.[97]

More generally, the broader efforts of the state—including expansion of telehealth and remote learning—require devices for use by state employees. Healthcare providers and teachers need access to computers to perform telehealth visits or teach classes.

The challenges that covered populations face due to lack of access to basic services like telehealth or remote learning cannot be remedied unless both sides of the equation—the providers and the end users—have adequate access to broadband and internet-capable devices.

Activities

Montana can collaborate with state agencies to understand their needs for device access and purchase the necessary equipment to fill the existing gaps.

Key activities include:

- Determine state agencies' device needs through interviews and surveys
- Purchase equipment and software in bulk

[97] Montana Remote Office Workspace Study, June 2022

- Distribute devices to state agencies and monitor impact

Goals and Measurements

The success of this initiative may be measured by the percent of state agency need met.

Exhibit 48: Establish adequate state device inventory goals and measurements

Area	Potential goals	Sample strategies	KPIs	Baseline	Short-term	Long-term	Data Source	Tracking Frequency	Responsible Entity
Device Availability and Affordability	Reduce the digital divide among state agencies by ensuring adequate internet-capable device inventory	Build adequate state device inventories	Percent of state agency need fulfilled (number of devices available/number of devices needed)	N/A	TBD	TBD	State agency directors	Every 6 months	Program Coordinator

IV. Digital Skills

Even with accessible, affordable broadband and the proper internet-capable devices, Montanans cannot engage in meaningful internet use without adequate digital skills.

Data and state agency interviews suggest that many Montanans are lacking critical digital skills necessary to bridge the digital divide, particularly among elderly individuals, veterans, and those who live in rural areas.

As evidenced by the asset inventory in Section 3.1, there is room to create and expand initiatives to promote digital skills. To meet the state's need, Montana may consider two potential approaches: developing digital skills curricula to be deployed through existing state agencies and partners, and funding targeted training programs to serve covered populations in need.

For both of these potential approaches, the state will establish partnerships to create and administer the appropriate digital skills trainings.

I. Develop digital skills curricula

Barriers and gaps

While Montana state agencies currently direct both formal and informal programs that provide digital skills training in different ways, there are still considerable gaps in ability that can be filled by expanding and strengthening these efforts.

Montana's pursuit of its broader goals, detailed in Section 2.2., can be supported by strengthening the digital skills of both state employees and residents more widely. For example, as the Department of Health and Human Services continues to pursue the expansion of

telehealth availability and use, healthcare workers and patients alike need to develop adequate digital skills. Healthcare providers need to become comfortable administering their services over digital platforms, and their patients need the proper skills to confidently access their telehealth appointments.

Montana will identify state agency partners who can develop and administer curricula to their respective staff and the populations they serve.

Activities

Montana can take an inventory of its existing efforts, consider the broader goals of the state, and then prioritize which initiatives to formalize and expand through strategic partnerships. A representative sample of potential partners, programs, training purposes, and target populations can be found in Exhibit 49 below.

Exhibit 49: Potential digital skills curricula

Existing program

Target population		Partner	Program and training purpose
Students	K-12	Office of Public Instruction	K-12 Digital Literacy and Computer Science Guidelines help students develop strong, foundational digital and STEM skills, and may be expanded
	Higher education	Office of the Commissioner of Higher Education (OCHE)	OCHE, which has prioritized preparing students for jobs in STEM, technology, and other sectors that require advanced digital literacy, can expand digital skills training opportunities
Job seekers		Department of Labor and Industry	DLI can position Montanans to secure employment that by providing the necessary digital skills training and filling labor gaps through existing initiatives, including Montana's Registered Apprenticeship Program and Accelerate Montana
		Montana Chamber Foundation and Community Skills Initiative	The Digital Literacy and Productivity course provides fundamental computer skills to Montanans, and may be expanded or used as a foundation for additional skills-building initiatives
Healthcare workers		Department of Public Health and Human Services	DPHHS can formalize training for healthcare workers and their patients to learn how to use telehealth and EHRs
Government personnel		State agencies	As State agencies respond to the Governor's Digital First initiative, they can also empower government employees to utilize the new digital platforms to increase productivity and efficiency

Key activities include:

- Catalog existing initiatives
- Identify additional opportunities

- Partner with state agencies, who will create and administer the curricula
- Track the number of individuals who receive training over time

Goals and Measurements

For each effort, the administering partner or agency may set a target number of individuals to receive training and monitor their progress on an ongoing basis.

Exhibit 50: Develop digital skills curricula goals and measurements

Area	Potential goals	Sample strategies	KPIs	Baseline	Short-term	Long-term	Data Source	Tracking Frequency	Responsible Entity
Digital Skills	Build digital skills to enhance broadband use through programs and partnerships with community stakeholders	Expand existing digital skills programs and establish new digital skills programs, administered through state entities and CAIs	Reach x individuals through y new or expanded digital skills programs	N/A	TBD	TBD	CAI and State Agency Directors	Every 6 months	Program Coordinator

J. Encourage targeted training programs

Barriers and gaps

As detailed in Section 3.2.1, covered populations, including elderly individuals and veterans, have lower rates of digital skills, posing a significant barrier to closing the digital divide.

The Department of Military Affairs noted that many veterans "lack technological abilities and access, especially in rural, smaller areas," and, "digital literacy is particularly challenging for the older folks."[98] Non-covered populations are 26 percent more likely to be very comfortable deciphering what information is safe to share online than those 60 and older and at least 16 percent more likely when compared with every other covered population.[99]

Activities

Montana could partner with other state agencies to design and deploy new tailored digital skills training programs to meet the needs of covered populations, who could benefit from lessons on fundamental digital skills and computer use. These skills would allow them to access telehealth and other basic services online.

[98] Department of Military Affairs, Interview, October 26, 2022
[99] Survey of Montana residents conducted by MBO Sep-Oct 2022. N=1,622

Digital skills training can be delivered at local CAIs, with which targeted populations are familiar and where trust may be easy to establish. It can also be administered by state entity partners who serve various covered populations.

Exhibit 51: Potential targeted digital skills efforts

Existing program

Partner	Covered population	Function
Montana School for the Deaf and Blind	Individuals with disabilities	Provide specialized device training (e.g., software used by individuals with sight, hearing impairments) to students and families
Office of Public Instruction and Department of Labor and Industry	Tribal	HB 644 established a scholarship program, administered by OPI and DLI, to support the development of computer programming courses at high schools located on Native American reservations in the state
Department of Public Health and Human Services: State Unit of Aging	Aging individuals	Help seniors learn the basics of how to use internet-capable devices—particularly tablets—and critical services (e.g., telehealth)
Montana Rural Development State Office	Rural individuals	Develop familiarity with digital devices and establish fundamental skills; enable access to telehealth and emergency services/notifications
Montana Department of Corrections	Incarcerated individuals	Equip individuals to pursue educational and vocational training; allow them to develop skills that will improve employment opportunities after release
Department of Military Affairs; Veterans Affairs	Veterans	Empower veterans to access critical services, like telehealth or other VA benefits

Key activities include:

- Determine priority covered populations
- Select state agencies to design and administer training
- Partner with state agencies, who will create and administer the curricula
- Record the number of individuals who receive training over time

Goals and Measurements

For each effort, the administering partner or agency may set a target number of individuals to receive training and monitor their progress on an ongoing basis.

Exhibit 52: Encourage targeted training programs goals and measurements

Area	Potential goals	Sample strategies	KPIs	Baseline	Short-term	Long-term	Data Source	Tracking Frequency	Responsible Entity

Digital Skills	Build digital skills to enhance broadband use through programs and partnerships with community stakeholders	Expand existing digital skills programs and establish new digital skills programs, administered through state entities and CAIs, targeted to serve covered populations	Reach x individuals in covered populations through y new or expanded digital skills programs	N/A	TBD	TBD	CAI and State Agency Directors	Every 6 months	Program Coordinator

5.2 Timeline

For each of the digital opportunity strategies, Montana may pursue the following activities on a five-year timeline in order to align to the timeline laid out in the BEAD program. These key activities give Montana an opportunity to prioritize its initiatives, establish relationships with the ideal partners—including CAIs, state agencies, and ISPs—launch and refine pilot programs, and then scale its efforts to effect the greatest impact across the state.

Exhibit 53: Estimated timeline for Broadband Availability strategies

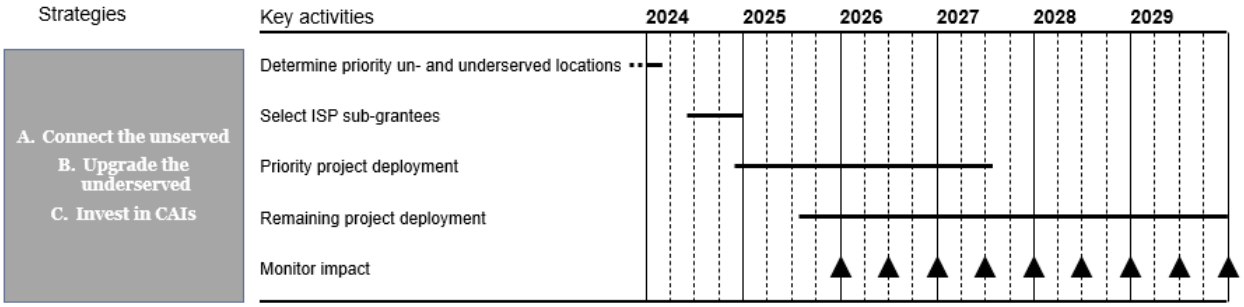


Exhibit 54: Estimated timeline for Service Affordability strategies

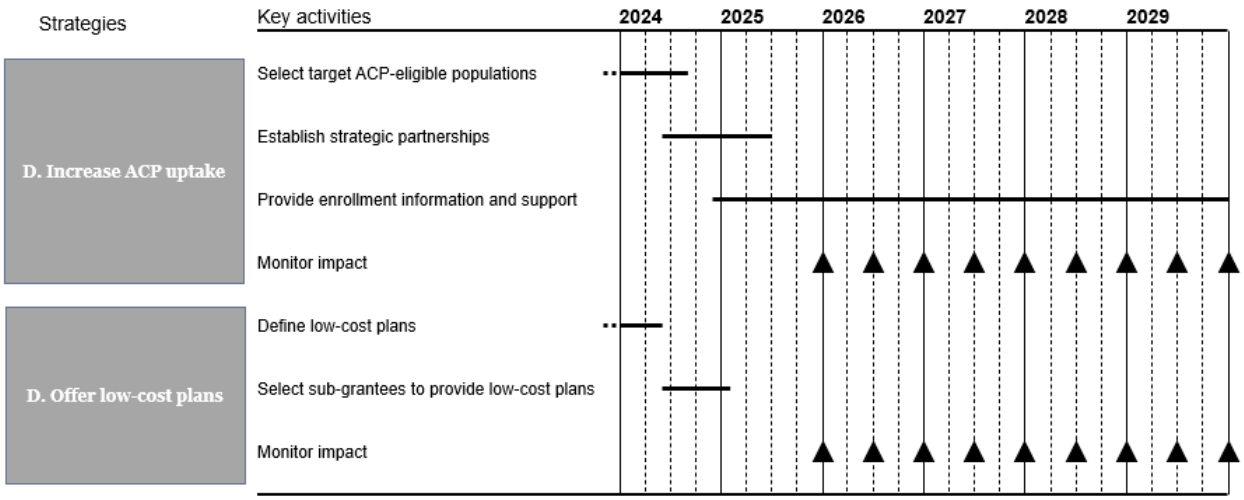


Exhibit 55: Estimated timeline for device access strategies

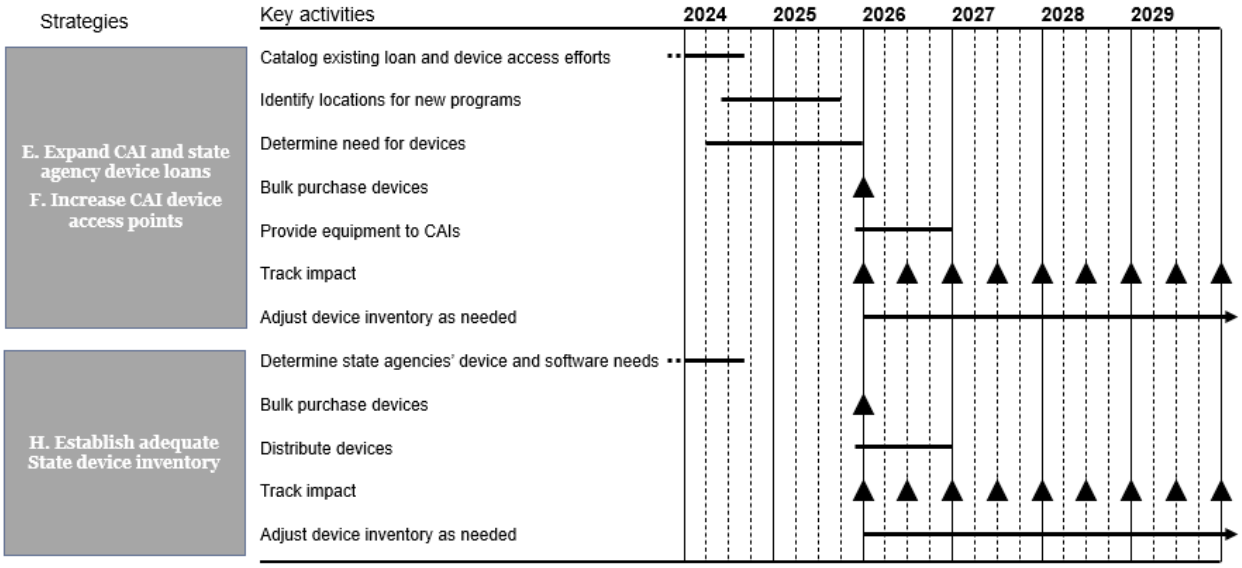
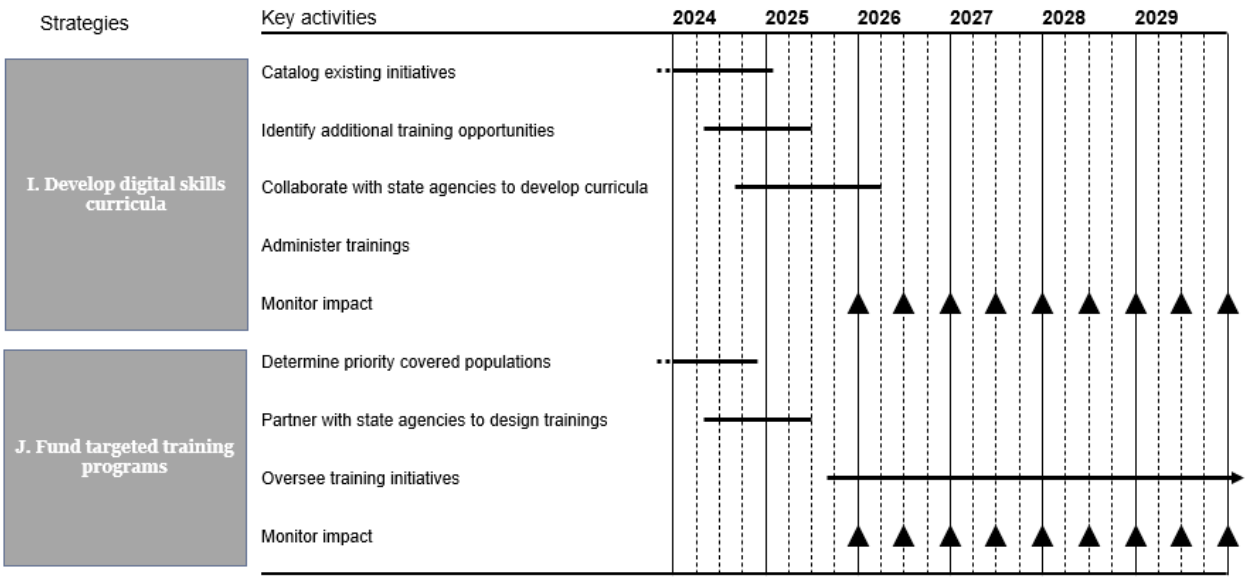


Exhibit 56: Estimated timeline for digital skills strategies



6 Conclusion

Montana recognizes the immense value of high-speed internet in service to citizen and state goals and the considerable challenges the state faces in making adequate, affordable broadband accessible to its residents.

The state has developed a thorough understanding of the barriers to broadband accessibility by conducting research, engaging with key stakeholders, and compiling a digital asset inventory. Through this process, Montana identified the needs and gaps that should be addressed to narrow the state's digital divide.

Montana developed a cohesive set of strategies to increase digital opportunity for all of its residents, with a focus on the needs of the unserved and underserved as well as covered populations and the entities that serve them.

The state's digital opportunity strategies will address four main barriers: broadband availability, service affordability, device access, and digital skills. Through its Digital Opportunity Plan, Montana will encourage broadband adoption and equitable access to the numerous benefits of high-speed internet, narrowing the digital divide.

7 Appendices

7.1 Stakeholder Engagement Survey Methodology

The MBO developed two surveys for distribution across the state to gather input on how to close the digital divide in Montana. The Montana Internet Access Household Survey was designed for any Montanan over the age of 18, while the Montana Internet Access Community Leader Survey was designed for community groups (such as libraries, public health organizations, religious organizations, and chambers of commerce).

The survey was designed based on similar surveys fielded by other states, such as the North Carolina Broadband Survey and the Kansas Broadband Study. The survey covered the following topics:

- Availability of internet access at home and in the community
- Type of internet access at home, if any (including speeds)
- Reasons for internet use
- Awareness of internet subsidy programs such as ACP
- Reasons for lack of home internet access
- Assessment of affordable monthly price for high-speed home internet

Survey fielding. Both surveys followed the same fielding methodology. The survey was marketed through similar materials as created for the stakeholder engagement sessions. All materials included both a hyperlink to the survey as well as a QR code to enable respondents to access the survey on smartphones. Marketing materials included:

- Flyers for the general public and stakeholder populations
- Press releases
- Social media posts for Twitter, Instagram, and Facebook
- Email messaging tailored to state agencies and stakeholder populations
- Updated state website language

The survey was advertised during all Round 1 stakeholder engagement sessions, encouraging participants to take the survey and share in their communities. As described below in the survey limitations section, the MBO also provided computers during these sessions to allow participants to take the survey.

The survey field period lasted from August 24, 2022 to September 30, 2022 (for a total of five weeks). 1,622 complete responses were received for the Montana Internet Access Household Survey and 83 complete responses were received for the Montana Internet Access Community Leader Survey.

Survey limitations. Given a necessarily short fielding period, a paper survey option was not feasible. To mitigate the lower response rate given a web-only administration, the MBO created a QR link for each survey, to enable respondents with a smartphone to take the survey from a location where they can access the internet. In addition, the team brought computers with the survey to each in-person stakeholder engagement session, to allow participants to take the survey.

7.2 Individual/Household Survey Data Tables by Survey Question[100,101]

There are 1,622 complete responses and no partial responses included in these results. Responses with invalid or missing zip codes were removed from the data.

7.2.1 Survey Flow Questions

Table 1: Do you have an internet connection at home?

Response	Count	Percent
Yes	1,560	96.2%
No	62	3.8%
TOTAL	1,622	100%

Table 2: Which of the following devices do you or others in your household use to connect to the internet, whether at home or somewhere else? Choose all that apply.

Device	Count[102]	Percent (Total Number of Responses)	Percent (Total Number of Respondents)
Desktop or laptop computer	1,538	31.1%	94.8%
Tablet device	1,184	24.0%	73.0%
Smartphone or cellphone that connects to the internet	1,544	31.3%	95.2%
None of these	7	0.1%	0.4%
E-Readers*	9	0.2%	0.6%
Gaming*	124	2.5%	7.6%
General Internet of Things (IoT) Devices*	17	0.3%	1.0%
Miscellaneous*	8	0.2%	0.5%
Music Devices*	2	0.0%	0.1%
Other Home and Garden Appliances*	19	0.4%	1.2%
Personal Health & Medical Devices*	13	0.3%	0.8%
Security*	24	0.5%	1.5%
Smart Home Devices*	24	0.5%	1.5%
Streaming, TVs*	423	8.6%	26.1%
Unable to Access Internet*	1	0.0%	0.1%
No response/skipped	2	0.0%	0.1%
TOTAL	4,939 (1,622)	100%	N/A

** If responded "Yes" in Table 1, jump to Questions for Only Respondents that Have Home Internet Access, beginning with Table 3. If responded "No" or "I don't know" in Table 1, jump to*

[100] * Indicates an "other" response, not provided in the list of response options.
[101] The percent columns may not add to 100 due to rounding.
[102] The first number in the total count represents the total number of *responses* and the second number represents the total number of *respondents*.

Questions for Only Respondents that Do Not Have Home Internet Access, beginning with Table 10.

7.2.2 Questions for Only Respondents that Have Home Internet Access

Table 3: What type of internet access do you have at home?

Internet Type	Count	Percent
Fixed service installed at home, such as cable or fiber-optic service provided by a cable or phone company	622	39.9%
DSL (digital subscriber line)	156	10.0%
Fixed wireless service	339	21.7%
Satellite internet service received through a satellite dish	353	22.6%
Dial-up service	6	0.4%
I don't know	48	3.1%
Hotspot*	18	1.2%
Cellular*	17	1.1%
No response/skipped	1	0.1%
TOTAL	1,560	100%

Table 4: What is your download speed?

Speed	Count	Percent
I don't know	319	20.4%
Slower than 25 Mbps	548	35.1%
Between 25 Mbps and 100 Mbps	450	28.8%
Faster than 100 Mbps	238	15.3%
No response/skipped	5	0.3%
TOTAL	1,560	100%

Table 5: What is your upload speed?

Speed	Count	Percent
I don't know	474	30.4%
Slower than 3 Mbps	311	19.9%
Between 3 Mbps and 20 Mbps	559	35.8%
Faster than 20 Mbps	213	13.7%
No response/skipped	3	0.2%
TOTAL	1,560	100%

Table 6: Why do you not have high speed internet?
High speed internet is defined as faster than 100 Mbps download speed and 20 Mbps upload speed.

*Question is only shown if respondents select "Slower than 25 Mbps" or "Between 25 Mbps and 100 Mbps" in Table 4 and "Slower than 3 Mbps" or "Between 3 Mbps and 20 Mbps" in Table 5.

Reason	Count	Percent
It is not available in my area	573	73.8%
It is not affordable	130	16.8%
I do not want or need high speed internet	9	1.2%
I don't know	26	3.4%
I do but it's not sufficient or doesn't work well*	22	2.8%
I don't know if it's available*	1	0.1%
Skeptical of Providers/It's a Hassle*	3	0.4%
I already do/thought I did*	7	0.9%
No response/skipped	5	0.6%
TOTAL	776	100%

Table 7: Are you aware of any internet subsidy programs, such as the Affordable Connectivity Plan or the Emergency Broadband Benefit that helps cover monthly internet costs for qualifying households?

Response	Count	Percent
No, I am not aware of any programs	1,074	68.8%
Yes, I am aware, but I do not participate in any of these programs	429	27.5%
Yes, I am aware, and I do participate in one of these programs	57	3.7%
TOTAL	1,560	100%

**If responded "No, I am not aware of any programs" or "Yes, I am aware, and I do participate in one of these programs" in Table 7, skip to Table 9.*

Table 8: Why do you not participate in an internet subsidy program like the Affordable Connectivity Plan?

Reason	Count	Percent
I am not eligible	343	80.0%
It is too difficult to apply	8	1.9%
My internet service provider does not participate in the program	16	3.7%
I applied and was rejected	4	0.9%
I don't know how to apply	27	6.3%
I don't want/need it*	5	1.2%
I am financially stable and can afford internet service without it*	6	1.4%
I haven't pursued it*	2	0.5%
I am going to apply*	1	0.2%
Internet service isn't expensive*	2	0.5%
I am not sure if I am eligible*	8	1.9%
There is no internet service provider in area*	3	0.7%
Unknown/NA*	2	0.5%
No response/skipped	2	0.5%
TOTAL	429	100%

Table 9: Do you use the internet at any of the following places in your community? Choose all that apply.

Location	Count	Percent (Total Number of Responses)	Percent (Total Number of Respondents)
My place of work	910	37.6%	58.3%
Library	298	12.3%	19.1%
Community center	57	2.4%	3.7%
Coffee shop or other local business	563	23.2%	36.1%
Park	107	4.4%	6.9%
Internet access is not available anywhere in my community	70	2.9%	4.5%
Airport/Travel*	3	0.1%	0.2%
Businesses*	20	0.8%	1.3%
Campgrounds*	4	0.2%	0.3%
Car/Bus*	9	0.4%	0.6%
Church*	11	0.5%	0.7%
Everywhere with internet access*	3	0.1%	0.2%
Family/Friend's house*	7	0.3%	0.4%
Home*	23	0.9%	1.5%
Hospital/Doctor's office*	9	0.4%	0.6%
Local government*	2	0.1%	0.1%
None*	5	0.2%	0.3%
Office*	8	0.3%	0.5%
On my phone*	18	0.7%	1.2%
School*	10	0.4%	0.6%
Visitor's center*	2	0.1%	0.1%
No response/skipped	284	11.7%	18.2%
TOTAL	2,423 (1,560)	100%	N/A

7.2.3 Questions for Only Respondents that Do Not Have Home Internet Access

Table 10: Why do you not have an internet connection at home? Choose all that apply.

Reason	Count	Percent (Total Number of Responses)	Percent (Total Number of Respondents)
Can't afford the cost of an internet connection	26	27.1%	41.9%
Can't afford a computer, tablet, or other device to connect to the internet	2	2.1%	3.2%
Not worth the cost	7	7.3%	11.3%
Can use the internet elsewhere	6	6.3%	9.7%
Internet connection not available in the area	35	36.5%	56.5%
Don't know how to use the internet	1	1.0%	1.6%

Reason	Count	Percent (Total Number of Responses)	Percent (Total Number of Respondents)
Using the internet is too difficult	1	1.0%	1.6%
Don't want or need the internet	0	0.0%	0.0%
Don't have a computer or device to access the internet	1	1.0%	1.6%
Online privacy or cybersecurity concerns	3	3.1%	4.8%
Personal safety concerns	1	1.0%	1.6%
Household moved or is in the process of moving	2	2.1%	3.2%
Century Link is the least expensive option and they do not offer it*	1	1.0%	1.6%
Currently hotspot off phone. Limited local internet available*	1	1.0%	1.6%
Mountainous terrain, the one company that says they provide internet service is consistently less than 2MB download speeds. There is no cellular service either, so a borrowed hotspot from the public library doesn't work either. *	1	1.0%	1.6%
No providers available*	1	1.0%	1.6%
Satellite is only option, too expensive to set up*	1	1.0%	1.6%
Unable to connect to internet*	1	1.0%	1.6%
Unable to find who services this area*	1	1.0%	1.6%
No broadband in my area*	1	1.0%	1.6%
Not good service where we are at*	1	1.0%	1.6%
Only one service provider in the area and have been trying for 3 plus months to get internet installed to no available*	1	1.0%	1.6%
Too spotty and constantly interrupted*	1	1.0%	1.6%
TOTAL	96 (62)	100%	N/A

Table 11: Do you access the internet at any of the following places in your community? Choose all that apply.

Location	Count	Percent (Total Number of Responses)	Percent (Total Number of Respondents)
My place of work	23	25.3%	37.1%
Library	26	28.6%	41.9%
Community center	2	2.2%	3.2%
Coffee shop or other local business	22	24.2%	35.5%
Park	0	0.0%	0.0%

Location	Count	Percent (Total Number of Responses)	Percent (Total Number of Respondents)
I do not access the internet at any location	5	5.5%	8.1%
Friend/Family*	4	4.4%	6.5%
Hotspot*	6	6.6%	9.7%
I don't know*	1	1.1%	1.6%
Travels out of town*	2	2.2%	3.2%
TOTAL	91 (62)	100%	N/A

7.2.4 Questions for All Respondents

Table 12: Why do you or others in your household use the internet? Choose all that apply.

Activity	Count	Percent (Total Number of Responses)	Percent (Total Number of Respondents)
To work	1,218	11.8%	75.1%
To attend classes or complete coursework for kindergarten through high school	341	3.3%	21.0%
To attend classes or complete coursework for higher education (including certification programs and college)	492	4.7%	30.3%
To schedule or attend healthcare appointments, or to get medication	1,120	10.8%	69.1%
Online shopping	1,528	14.7%	94.2%
To access entertainment (such as watching videos)	1,400	13.5%	86.3%
Staying connected with family and friends	1,469	14.2%	90.6%
To access government services (such as the Motor Vehicle Division; burning, fishing, or hunting permits; unemployment benefits; or nutrition assistance programs)	1,327	12.8%	81.8%
Access financial services	1,336	12.9%	82.4%
Additional entertainment*	5	0.0%	0.3%
Business purposes (email, meetings, small businesses) *	18	0.2%	1.1%
Education*	10	0.1%	0.6%
Fitness*	1	0.0%	0.1%
Games*	12	0.1%	0.7%
Health care*	2	0.0%	0.1%
I use the internet for everything*	6	0.1%	0.4%
Meetings*	2	0.0%	0.1%
N/A*	3	0.0%	0.2%
News*	20	0.2%	1.2%
Pay bills*	4	0.0%	0.2%
Phone/keep in contact with friends & family*	7	0.1%	0.4%
Reading*	4	0.0%	0.2%
Research*	17	0.2%	1.0%
Responding to surveys*	2	0.0%	0.1%
Security*	2	0.0%	0.1%

Activity	Count	Percent (Total Number of Responses)	Percent (Total Number of Respondents)
Smart devices*	3	0.0%	0.2%
Streaming services*	4	0.0%	0.2%
TV*	3	0.0%	0.2%
No response/skipped	8	0.1%	0.5%
TOTAL	10,364 (1,622)	100%	N/A

Table 13: How confident are you in your ability to complete the following activities?

	Very confident	Somewhat confident	Not very confident	Not at all confident	No Response /Skipped
Saving downloaded files	1,212 74.7%	310 19.1%	75 4.6%	21 1.3%	4 0.2%
Opening downloaded files	1,221 75.3%	308 19.0%	72 4.4%	13 0.8%	8 0.5%
Searching for information online	1,297 80.0%	272 16.8%	38 2.3%	8 0.5%	7 0.4%
Knowing what information is safe to share online	963 59.4%	494 30.5%	128 7.9%	22 1.4%	15 0.9%

Table 14: How important is it to you to have a local service provider (now or in the future), instead of a large provider that services many states?

Response	Count	Percent
Very important	863	53.2%
Somewhat important	467	28.8%
Not very important	196	12.1%
Not at all important	90	5.5%
No response/skipped	6	0.4%
TOTAL	1,622	100%

Table 15: How much are you or your household willing to pay for reliable high speed internet service in your home?
For example, for at least two or more users to regularly stream high-definition video, use videoconferencing, participate in online gaming, or work from home.

Dollar amount	Count	Percent
Under $10	15	0.9%
$10 - $25	50	3.1%
$26 - $50	339	20.9%

Dollar amount	Count	Percent
$51 - $75	570	35.1%
$76 - $100	438	27.0%
More than $100	203	12.5%
No response/skipped	7	0.4%
TOTAL	1,622	100%

7.2.5 Demographic Questions

Table 16: Do you live on a reservation?

Response	Count	Percent
Yes	89	5.5%
No	1,526	94.1%
No response/skipped	7	0.4%
TOTAL	1,622	100%

Table 17: On which reservation do you live?
**Question is only shown if respondents selected "Yes" in Table 16.*

Reservation	Count	Percent
Blackfeet Tribe of the Blackfeet Reservation	7	7.9%
Chippewa Cree Tribe of the Rocky Boy's Reservation	4	4.5%
Confederated Salish & Kootenai Tribes of the Flathead Reservation	30	33.7%
Crow Tribe of the Crow Reservation	14	15.7%
Fort Belknap Tribes of the Fort Belknap Reservation	14	15.7%
Fort Peck Tribes of the Fort Peck Reservation	19	21.3%
Little Shell Chippewa Tribe	0	0.0%
Northern Cheyenne Tribe of the Northern Cheyenne Reservation	1	1.1%
TOTAL	89	100%

Table 18: Do any of the following historically underserved populations describe you? Choose all that apply.

Population	Count	Percent (Total Number of Responses)	Percent (Total Number of Respondents)
Aged 60 or older	677	34.6%	41.7%
Veteran	251	12.8%	15.5%
Individual with a disability (mental or physical)	182	9.3%	11.2%
Non-native English speaker	23	1.2%	1.4%
Currently Incarcerated	0	0.0%	0.0%
Racial or Ethnic minority (such as Native American, Black, Hispanic, Asian, etc.)	126	6.4%	7.8%

Population	Count	Percent (Total Number of Responses)	Percent (Total Number of Respondents)
None of these	656	33.5%	40.4%
No response/skipped	41	2.1%	2.5%
TOTAL	1,956 (1,622)	100%	N/A

7.3 Community Leader Survey Data Tables by Survey Question[103,104]

There are 83 complete responses and 11 partial responses included in these results. Responses with invalid or missing zip codes were removed from the data.

7.3.1 Demographic Questions

Table 1: Which of the following best describes your community group?

Community Group	Count	Percent
Adult education or literacy organization	3	3.2%
Advocacy group	0	0.0%
Chamber of commerce	6	6.4%
Education organization serving pre-kindergarten through high school students	4	4.3%
Higher education organization	4	4.3%
Internet service provider	13	13.8%
Labor organization	3	3.2%
Local government	30	31.9%
Nonprofit organization	17	18.1%
Public health organization (including health clinics)	2	2.1%
Public library	8	8.5%
Religious or faith-based organization	0	0.0%
Tribal government	0	0.0%
Veterans' association (such as the American Legion)	0	0.0%
Agriculture*	1	1.1%
Economic Development Organization*	1	1.1%
State Government*	2	2.1%
TOTAL	94	100%

Table 2: Is your organization located on or does it serve a reservation?

Response	Count	Percent
Yes	20	21.3%
No	73	77.7%
No response/skipped	1	1.1%
TOTAL	94	100%

**If "No", jump to Table 4.*

Table 3: On which reservation is your organization located or does it serve?

Reservation	Count	Percent
Blackfeet Tribe of the Blackfeet Reservation	1	5.0%
Chippewa Cree Tribe of the Rocky Boy's Reservation	2	10.0%

[103] An asterisk (*) indicates an "other" response, not provided in the list of response options.
[104] The percent columns may not add to 100 due to rounding.

Reservation	Count	Percent
Confederated Salish & Kootenai Tribes of the Flathead Reservation	4	20.0%
Crow Tribe of the Crow Reservation	0	0.0%
Fort Belknap Tribes of the Fort Belknap Reservation	2	10.0%
Fort Peck Tribes of the Fort Peck Reservation	9	45.0%
Little Shell Chippewa Tribe	0	0.0%
Northern Cheyenne Tribe of the Northern Cheyenne Reservation	2	10.0%
TOTAL	20	100%

7.3.2 Questions About the Entire Community

Table 4: To the best of your knowledge, what percent of residents in the community where your organization is located, or areas your organization serves, have an internet connection at home? Your best guess is fine.

Range	Count	Percent
Less than 10%	0	0.0%
10% - 25%	2	2.1%
26% - 50%	11	11.7%
51% - 75%	41	43.6%
76% - 100%	23	24.5%
I don't know	12	12.8%
No response/skipped	5	5.3%
TOTAL	94	100%

Table 5: To the best of your knowledge, why don't some residents have an internet connection at home? Choose all that apply.

Reasons	Count[105]	Percent (Total Number of Responses)	Percent (Total Number of Eligible Respondents)
Can't afford the cost of an internet connection	71	21.0%	75.5%
Can't afford a computer, tablet, or other device to connect to the internet	49	14.5%	52.1%
Not worth the cost	13	3.8%	13.8%
Can use the internet elsewhere	19	5.6%	20.2%
Internet connection not available in the area	44	13.0%	46.8%
Don't know how to use the internet	26	7.7%	27.7%
Using the internet is too difficult	14	4.1%	14.9%
Don't need or want the internet	29	8.6%	30.9%
Don't have a computer or device to access the internet	41	12.1%	43.6%
Online privacy or cybersecurity concerns	14	4.1%	14.9%
Personal safety concerns	3	0.9%	3.2%

[105] The first number in the total count represents the total number of *responses* and the second number represents the total number of *respondents*.

Reasons	Count[105]	Percent (Total Number of Responses)	Percent (Total Number of Eligible Respondents)
Household moved or is in the process of moving	2	0.6%	2.1%
Internet in this area is poor and has lots of issues*	1	0.3%	1.1%
Larger publicly traded companies have failed to invest in Montana's rural communities*	1	0.3%	1.1%
Over 90% of have internet*	1	0.3%	1.1%
Rural Area*	2	0.6%	2.1%
There is no fiber service to our specific area, we provide a WISP*	1	0.3%	1.1%
No response/skipped	7	2.1%	7.4%
TOTAL	338 (94)	100%	N/A

Table 6: To the best of your knowledge, what is the most common reason why a resident does not have an internet connection at home?[106]

Reasons	Count[107]	Percent (Total Number of Responses)	Percent (Total Number of Eligible Respondents)
Can't afford the cost of an internet connection	39	28.3%	41.5%
Can't afford a computer, tablet, or other device to connect to the internet	18	13.0%	19.1%
Not worth the cost	5	3.6%	5.3%
Can use the internet elsewhere	5	3.6%	5.3%
Internet connection not available in the area	29	21.0%	30.9%
Don't know how to use the internet	6	4.3%	6.4%
Using the internet is too difficult	1	0.7%	1.1%
Don't need or want the internet	10	7.2%	10.6%
Don't have a computer or device to access the internet	8	5.8%	8.5%
Online privacy or cybersecurity concerns	1	0.7%	1.1%
Personal safety concerns	1	0.7%	1.1%
Household moved or is in the process of moving	1	0.7%	1.1%
Internet in this area is poor and has lots of issues*	1	0.7%	1.1%
Rural area*	2	1.4%	2.1%

[106] Only responses recorded in **Table 5** were shown to participants.
[107] The first number in the total count represents the total number of *responses* and the second number represents the total number of *respondents*.

Reasons	Count[107]	Percent (Total Number of Responses)	Percent (Total Number of Eligible Respondents)
Larger publicly traded companies have failed to invest in Montana's rural communities*	1	0.7%	1.1%
No response/skipped	10	7.2%	10.6%
TOTAL	138 (94)	100%	N/A

Table 7: Is internet access available at any of the following places in the community where your organization is located, or the area which your organization serves? Choose all that apply.

Locations	Count[108]	Percent (Total Number of Responses)	Percent (Total Number of Eligible Respondents)
Library	79	40.3%	84.0%
Community center	26	13.3%	27.7%
Coffee shop or other local business	61	31.1%	64.9%
Park	5	2.6%	5.3%
Internet access is not available anywhere in my community	2	1.0%	2.1%
Additional local businesses*	2	1.0%	2.1%
Campgrounds*	2	1.0%	2.1%
Educational center/institution*	8	4.1%	8.5%
Golf course*	1	0.5%	1.1%
Health center*	1	0.5%	1.1%
ISP office*	2	1.0%	2.1%
Non-profit organization*	1	0.5%	1.1%
No response/skipped	6	3.1%	6.4%
TOTAL	196 (94)	100%	N/A

7.3.3 Questions About the Organization's Members or Clients

Table 8: To the best of your knowledge, what percent of your organization's members or clients have an internet connection at home? Your best guess is fine.

Range	Count	Percent
Less than 10%	0	0.0%
10% - 25%	1	1.1%
26% - 50%	11	11.7%
51% - 75%	17	18.1%

[108] The first number in the total count represents the total number of *responses* and the second number represents the total number of *respondents*.

Range	Count	Percent
76% - 100%	44	46.8%
I don't know	10	10.6%
No response/skipped	11	11.7%
TOTAL	94	100%

Table 9: To the best of your knowledge, why don't some of your organization's members or clients have an internet connection at home? Choose all that apply.

Reasons	Count[109]	Percent (Total Number of Responses)	Percent (Total Number of Eligible Respondents)
Can't afford the cost of an internet connection	39	16.9%	41.5%
Can't afford a computer, tablet, or other device to connect to the internet	27	11.7%	28.7%
Not worth the cost	13	5.6%	13.8%
Can use the internet elsewhere	20	8.7%	21.3%
Internet connection not available in the area	39	16.9%	41.5%
Don't know how to use the internet	10	4.3%	10.6%
Using the internet is too difficult	8	3.5%	8.5%
Don't need or want the internet	18	7.8%	19.2%
Don't have a computer or device to access the internet	24	10.4%	25.5%
Online privacy or cybersecurity concerns	5	2.2%	5.3%
Personal safety concerns	2	0.9%	2.1%
Household moved or is in the process of moving	3	1.3%	3.2%
All members have internet*	2	0.9%	2.1%
Can't be a member without subscribing to service*	1	0.4%	1.1%
Unreliable internet service*	1	0.4%	1.1%
No response/skipped	19	8.2%	20.2%
TOTAL	231 (94)	100%	N/A

[109] The first number in the total count represents the total number of *responses* and the second number represents the total number of *respondents*.

Table 10: To the best of your knowledge, what is the most common reason why some of your organization's members or clients do not have an internet connection at home?[110]

Reasons	Count[111]	Percent (Total Number of Responses)	Percent (Total Number of Eligible Respondents)
Can't afford the cost of an internet connection	26	23.4%	27.7%
Can't afford a computer, tablet, or other device to connect to the internet	8	7.2%	8.5%
Not worth the cost	5	4.5%	5.3%
Can use the internet elsewhere	6	5.4%	6.4%
Internet connection not available in the area	28	25.2%	29.8%
Don't know how to use the internet	2	1.8%	2.1%
Using the internet is too difficult	0	0.0%	0.0%
Don't need or want the internet	4	3.6%	4.3%
Don't have a computer or device to access the internet	7	6.3%	7.4%
Online privacy or cybersecurity concerns	0	0.0%	0.0%
Personal safety concerns	0	0.0%	0.0%
Household moved or is in the process of moving	0	0.0%	0.0%
Can't be a member without subscribing to service*	1	0.9%	1.1%
All members have internet*	1	0.9%	1.1%
No response/skipped	23	20.7%	24.5%
TOTAL	111 (94)	100%	N/A

[110] Only responses recorded in Table 9 were shown to participants.
[111] The first number in the total count represents the total number of *responses* and the second number represents the total number of *respondents*.