

Colorado Digital Access Plan



COLORADO

A community-led
plan to expand
digital access
in Colorado





Acknowledgments

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Land Acknowledgment

We would like to acknowledge that the land we live, work, learn, and commune on is the original homelands of many Tribal Nations. We acknowledge the history of genocide and forced removal from this territory, and we honor and respect the many diverse Indigenous peoples still connected to this land on which we gather.

The Digital Equity Team commits to continued consultation and collaboration with the Southern Ute Indian Tribe and Ute Mountain Ute Tribe throughout the implementation of Colorado's Digital Access Plan and beyond. The team honors the digital and data sovereignty of federally recognized Tribes in Colorado.

The Digital Equity Team also commits to the inclusion of American Indian/Alaska Native communities in Colorado, including all opportunities to provide feedback on the Digital Access Plan. We will actively seek out engagement from American Indian/Alaska Native communities in all our digital inclusion work.

To learn more about territory acknowledgment, visit <https://native-land.ca/>

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Executive Summary

The Colorado Digital Access Plan was designed with Coloradans at its heart.

Colorado communities are resilient, diverse, and independent. This plan honors Coloradans and their unique needs and assets, from the Western Slope to the Rocky Mountains to the Eastern Plains and everywhere in between. To inform these efforts, the Digital Equity Team heard from over 15,000 Coloradans through surveys and listening sessions. More than \$500,000 has been invested in Colorado community organizations and companies to shape the strategies for improving digital equity in Colorado. This plan is but a starting point. The Digital Equity Team will continue to authentically engage the community throughout implementation to ensure the evolving needs and strengths of Coloradans guide our efforts at improving equitable digital access so all Coloradans can fully participate in our society, democracy, and economy.

Vision Statement

Every Coloradan has the connectivity, devices, and skills they need to thrive in our digital society and economy by 2028.



NTIA Covered Populations

- Individuals who are members of a racial or ethnic minority group.
- Individuals with a language barrier
- Individuals with disabilities
- Incarcerated individuals
- Individuals who live in covered households
- Members of racial and ethnic minorities
- Older adults
- Rural residents
- Veterans



The Digital Equity Team’s planning and outreach focused primarily on “covered populations,” including those listed above, as required by the National Telecommunications and Information Administration (NTIA). These covered populations are identified as having unique barriers and needs related to digital access.

In some cases, the Digital Equity Team has used different words to describe covered populations, or has added sub-categories of populations that were not included in the NTIA requirements.

- **Immigrants.** Individuals who selected “I am an immigrant living in Colorado” when responding to Colorado’s 2023 online survey are considered racial and ethnic minorities for the purposes of this plan, and are

identified in the plan as “immigrants.” While the Digital Equity Team understands that not all immigrants identify as racial or ethnic minorities, 2022 Migration Policy Institute data indicates that about 50% of immigrants living in Colorado were born in Latin America, 23% were born in Asia, and nearly 9% were born in Africa, accounting for approximately 82% of immigrants in the state. For this reason, individuals identifying as immigrants are considered to be “racial and ethnic minorities” throughout the Colorado Digital Access Plan.

- **Individuals experiencing homelessness.** The Digital Equity Team felt that the NTIA category “individuals who live in covered households” did not capture the specific circumstances of individuals experiencing homelessness, and the word “household” is insensitive to the experiences of these individuals and families. According to the United States Interagency Council on Homelessness, “as many as 40%-60% of people experiencing homelessness have a job, but housing is unaffordable because wages have not kept up with rising rents. There is no county or state where a full-time minimum-wage worker can afford a modest apartment. This category is a subcategory of “individuals who live in covered households.”
- **Individuals who live in covered households.** The Digital Equity Team frequently uses the term “individuals or households with limited financial resources” for readers who are not familiar with NTIA’s definition of the word “covered.”
- **Incarcerated individuals.** This plan contains references to both “justice-involved” and “incarcerated individuals”. Mention of justice-involved individuals is not intended to replace the NTIA’s requirement to address the needs of incarcerated individuals, but is supplementary. The Digital Equity Team



will conduct research to assess the needs of incarcerated individuals specifically, as part of the plan's implementation.

- **Tribal members.** Individuals who selected “Tribal members” when responding to Colorado’s 2023 online survey are considered “racial and ethnic minorities” for the purposes of this plan.

**NTIA uses the term “low-income individuals,” which is considered an example of deficit-based language. That kind of language may fail to acknowledge the root sources of complex issues and may reinforce negative stereotypes and unconscious bias. In Colorado, using asset-based language is preferred. The terms “households and individuals with limited financial resources” and “individuals experiencing homelessness,” respectively, are used throughout this document, where appropriate.*

Key Barriers



The key barriers to a digitally inclusive Colorado include:

- Lack of affordable home internet subscriptions.
- Lack of awareness of internet discount programs.
- Lack of the right personal devices to accomplish goals.
- Low personal confidence in digital skills within disadvantaged communities.
- Lack of confidence with, or knowledge of, cybersecurity measures.
- Online public resources and applications or portals for public benefits that are difficult to access and use to accomplish goals.
- Lack of funding opportunities to expand digital inclusion programming within trusted community organizations.



Strategies and Objectives	Activities
<p>Strategy 1: Create Colorado’s digital equity ecosystem.</p> <ul style="list-style-type: none"> ● Objective: All communities are empowered to implement digital inclusion programs and initiatives that prioritize the local needs of their community. 	<ul style="list-style-type: none"> ● Activities: <ul style="list-style-type: none"> ● Create a Request for Application (RFA) funding opportunity to support the creation of regional digital inclusion coalitions. More information on the coalitions is available in Section 5. ● Support the creation and implementation of regional digital equity plans. ● Build a network of funders to sustain progress made in digital inclusion efforts in Colorado. ● Create and staff a Digital Inclusion Innovation Lab (DIIL) to connect digital inclusion research and practice.
<p>Strategy 2: Improve the affordability of home internet subscriptions.</p> <ul style="list-style-type: none"> ● Objective: All Coloradans can access affordable broadband service at home. 	<ul style="list-style-type: none"> ● Activities: <ul style="list-style-type: none"> ● Conduct targeted outreach to households with limited financial resources and rural households to increase participation in internet discount and subsidy programs. ● Work with the Colorado Broadband Office on future programming that supports home internet affordability. ● Work with the Colorado Broadband Office to identify gaps in broadband services for covered populations.
<p>Strategy 3: Embed digital inclusion activities into state efforts to promote online accessibility and inclusivity.</p> <ul style="list-style-type: none"> ● Objective: All Coloradans can access needed online resources. 	<ul style="list-style-type: none"> ● Activities: <ul style="list-style-type: none"> ● Leverage efforts to implement HB21-1110 (Colorado Laws For Persons With Disabilities) and SB23-244 (Technology Accessibility Cleanup) to include language accessibility in all state technology assets. ● Increase Digital Equity Team engagement in existing state agency meetings and initiatives. ● Collect data on these issues from the public and digital access organizations on an ongoing basis to inform progress made. ● Partner with organizations like the National Civic League to collect data on best practices for engaging communities in public meetings and forums.



Strategies and Objectives	Activities
<p>Strategy 4: Promote initiatives and programs that build digital skills.</p> <ul style="list-style-type: none"> ● Objective: All Coloradans have the skills and confidence to navigate digital tools and systems and the support to expand their skills. 	<ul style="list-style-type: none"> ● Activities: <ul style="list-style-type: none"> ● Collaborate with the Colorado Department of Local Affairs to embed digital skills into what it means to be a resilient community as part of its Resiliency Hubs Initiative. ● Leverage the Digital Navigator Program to expand access to lessons learned on implementing local digital navigator programs. Provide digital skills training and access to resources, including artificial intelligence and online financial literacy for households with limited financial resources, those with disabilities, and older adults. ● Explore the potential to leverage other types of navigators to get covered populations access to resources needed for digital access. This is particularly important for households with limited financial resources, those with a language barrier, Latine individuals, and rural individuals. ● Provide digital navigation best practices for businesses, state agencies, faith organizations, and nonprofits that provide public-facing technical support to customers. Focus on supporting workforce centers in improving awareness of the online job market for veterans, older adults, and rural individuals. ● Survey and/or interview individuals who are incarcerated to determine digital skills baseline information.
<p>Strategy 5: Promote initiatives that improve confidence in deploying measures.</p> <ul style="list-style-type: none"> ● Objective: All Coloradans can protect their online information and understand how to prevent security breaches. 	<ul style="list-style-type: none"> ● Activities: <ul style="list-style-type: none"> ● Support the Colorado Consumer Protection section of the Attorney General’s Office on the Colorado Privacy Act and cybersecurity initiatives. ● Leverage the Digital Navigator Program to provide tools, training, and educational resources related to online privacy and cybersecurity, particularly for individuals with disabilities, those identifying as Black, Latine, Asian, or Middle Eastern/North African, older adults, and those with a language barrier.



Strategies and Objectives	Activities
<p>Strategy 6: Explore a statewide ecosystem of device refurbishers, technical support, and recycling to increase device availability, affordability, and usability.</p> <ul style="list-style-type: none"> ● Objective: All Coloradans can access and afford web-enabled devices to accomplish what they need to do online. 	<ul style="list-style-type: none"> ● Activities: <ul style="list-style-type: none"> ● Identify opportunities to increase access to device refurbishment training for incarcerated people, community college students, and other covered populations. ● Explore Community Reinvestment Act opportunities by encouraging device donations from financial institutions. ● Develop and implement a statewide outreach plan to solicit device donations from existing refurbishers. Advertise the availability of refurbished devices, including providing it on 2-1-1, the three-digit number Colorado residents can call for confidential, multilingual service that connects them to vital resources in their local communities or across the state.

OUTCOMES



Access to telehealth services.



Digital skills for the workforce.



Opportunities for virtual civic engagement and connection.



Education and support to families with students.



Accessible essential services that are online.



Cybersecurity knowledge and confidence.



Regionally tailored digital inclusion initiatives.

Measuring Progress

The Digital Equity Team will intentionally measure progress toward these goals through data gathering and community engagement. Some of the ways the team will measure progress include tracking the following statistics

- Number of regional digital inclusion coalitions.
- Number of regional digital access plans.
- Percentage of covered populations who feel confident keeping themselves safe online.
- Number of eligible Coloradans enrolled in the Affordable Connectivity Program and Lifeline.
- Percentage of covered populations reporting home internet subscriptions are too expensive.



“ I remember when I was in Indonesia, and my wife was not there. It was very expensive to pay for the telephone to make phone calls. With the internet, I was able to hear my kid’s voices before the beginning of each day. ”

What’s Next

While we have made progress toward defining a structure for improving digital access, much work is needed. Relationships and authentic partnerships were planted in the last year, and it is the Digital Equity Team’s mission to support and strengthen their continued growth through transparency, authentic communication, and listening to community needs. Many of the strategies identified in [Section 5](#) on Implementation are underway. Support for digital access in Colorado comes from legislators, the Colorado Broadband Office, and the many community partnerships that make this work possible. The Digital Equity Team will continue to seek feedback and guidance from community partners and Coloradans, starting with this plan’s feedback.

“ Accessing public websites is very non-user friendly. I think a lot of them were designed a long time ago, and they’re very difficult to use and find out information. ”



2. Introduction & Vision for Digital Access

People are at the center of Colorado's digital inclusion work and in every section of this plan.

The state's Digital Equity Team has explored the digital access barriers and needs of myriad Coloradans and their communities by compiling quantitative data and qualitative experiences of people on both sides of the digital divide. Access refers to the technology that allows individuals to get online. Once online, residents need the tools to navigate the web and the support to build and grow digital skills.

DIGITAL EQUITY ACCESS

The three critical components of digital equity are access to:

- 1) Affordable, high-speed internet.
- 2) Affordable, web-enabled technology.
- 3) Training and support for digital skill development and use.





“When there was no easy access to the internet, it was very hard to make appointments between students and teachers. When the internet became more easily accessible, it was easy to make appointments, cancel, and send homework to teachers.”

The Digital Equity Team is a cross-sector and cross-agency partnership between the Office of the Future of Work and the Office of eHealth Innovation. Their teamwork demonstrates Colorado’s commitment to collaborative efforts.

From the start, Colorado’s Digital Equity Team has invited stakeholders to learn about digital inclusion and share experiences, successes, and challenges. Together, they have begun to imagine a sustainable ecosystem ensuring everyone across the state is acknowledged and heard, and Colorado’s plan is rooted in equity rather than simply equality. Early in the process, Colorado’s Digital Equity Committee, a diverse group of engaged stakeholders and digital inclusion champions, drafted Colorado’s vision for the Digital Access Plan. The Digital Equity Working Group (DEWG) comprises 16 stakeholders from diverse organizations selected from the Digital Equity Committee. The working group met twice monthly to support the Digital Equity Team in the plan’s creation. The DEWG developed the mission and values, which were revised and finalized by Digital Equity Team staff members. The vision, mission, and values were approved by a majority vote of the Digital Equity Committee members and DEWG combined.

Digital Equity Committee stakeholders also participated in meetings every other month. Four meetings highlighted two of each of the eight covered populations. First, they heard from members of covered populations or people who provide services for them; then, they worked in breakout groups to discuss their needs and barriers. During these robust conversations, participants identified data sources and shared concerns about how each population could be represented in the plan. The process was collaborative and participant-led. Those conversations provided information critical to creating the needs assessments in [Section 3.2](#).

Throughout this plan, readers will learn how the Digital Equity Team worked to make the entire process as inclusive and community informed as possible. From offering the public digital equity survey in 22 languages to promoting it in mountain and rural newspapers, the Digital Equity Team is committed to putting Coloradans at the center of this work. The Digital Equity Team gathered significant data from multiple sources who have informed its understanding of Colorado’s current digital equity landscape.

The data revealed substantial challenges for many Coloradans, especially members of covered populations. By exploring the experiences of Colorado residents through surveys and in-person and virtual meetings across the state in 2022 and 2023, the Digital Equity Team identified many barriers and assets to digital equity. These and other efforts have created a feedback loop that will continue to inform plan improvements throughout the implementation period and beyond.



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- **Individuals experiencing homelessness.** The Digital Equity Team felt that the NTIA category “individuals who live in covered households” did not capture the specific circumstances of individuals experiencing homelessness, and the word “household” is insensitive to the experiences of these individuals and families. According to the United States Interagency Council on Homelessness, “as many as 40%-60% of people experiencing homelessness have a job, but housing is unaffordable because wages have not kept up with rising rents. There is no county or state where a full-time minimum-wage worker can afford a modest apartment. This category is a subcategory of “individuals who live in covered households.”
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the NTIA's requirement to address the needs of incarcerated individuals, but is supplementary. The Digital Equity Team will conduct research to assess the needs of incarcerated individuals specifically, as part of the plan's implementation.

- **Tribal members.** Individuals who selected "Tribal members" when responding to Colorado's 2023 online survey are considered "racial and ethnic minorities" for the purposes of this plan.

“ Without the internet, I couldn't manage to live in the U.S. because I would miss my family so much. Now I can talk to them over the internet whenever I want. ”

Access refers to the technology that allows individuals to get online. Once online, residents need the tools to navigate the web and the support to build and grow digital skills. The three critical components of **digital equity** are access to:

- 1) Affordable, high-speed internet.
- 2) Affordable, web-enabled technology.
- 3) Training and support for digital skill development and use.

“ I think affordable internet service is extremely important to members of the disabled communities. For me personally, and for people who are mostly housebound, it's a lifesaver. It's a lifeline to the community. Without it I would have little communication with the community and organizations I am a part of. ”



2.1 Vision, Mission, and Values

The vision, mission, and values for Colorado’s Digital Access Plan were created collaboratively by the Digital Equity Committee and the Digital Equity Working Group members and approved by most participants from both groups.

Vision Statement

Every Coloradan has the connectivity, devices, and skills they need to thrive in our digital society and economy by 2028.

Mission Statement

With a focus on building community partnerships, Colorado’s Digital Access Plan will create a roadmap for implementing programs, policies, and funding. This roadmap will help ensure people who have been marginalized and those who lack connectivity, devices, skills, or familiarity will have the opportunity to cross the digital divide. We want everyone to be able to access the incredible benefits of our digital society and economy.

Values

Through collaboration, cooperation, and partnerships, Colorado’s Digital Access Plan seeks to build a statewide community to achieve digital equity and parity for all Coloradans while uplifting the following values:

Opportunity to Thrive

The Digital Access Plan creates robust opportunities for individuals to engage in digital activities, which empowers all Coloradans to reach their full potential and achieve their digital goals.

Participation

The Digital Access Plan values active participation and engagement, creating an inclusive and welcoming environment where everyone feels valued and respected, regardless of background, identity, or abilities. It envisions a Colorado where everyone’s voice is heard, diverse perspectives are embraced and valued, and everyone is treated with dignity, empathy, and respect.



Values: *continued*

Creativity and Choice

The Digital Access Plan encourages and celebrates creativity. It recognizes creativity as a catalyst for innovation and problem-solving and for inspiring new ideas and approaches to address digital inequities. By supporting and promoting the freedom to make informed choices and respecting individual preferences and autonomy, the Digital Access Plan ensures the diverse needs of all Coloradans will be met.

Equity

Advocating for fairness and justice in all digital equity-related activities, the Digital Access Plan ensures everyone has digital access to pursue the opportunities and resources that enrich their lives.

Resilience

The Digital Access Plan promotes resilience by cultivating the strength and ability to adapt to changes in technology. This, in turn, empowers individuals and communities to overcome obstacles and thrive in the face of adversity.

Sustainability

By prioritizing programmatic and fiscal sustainability, the Digital Access Plan acknowledges the interdependence between the different dimensions of digital equity. The plan works toward a balanced and regenerative future with digital equity for all Coloradans.

Accountability

The Digital Access Plan values the power of data-driven decision-making. It uses accurate and reliable information to gain insights, drive innovation, and inform strategies and actions. The plan also embraces accountability and ensures transparency, integrity, and ethical conduct in data-related endeavors.

The values emphasize this plan's focus on the people who will ultimately be most impacted by its implementation. Empowering Coloradans to engage fully in every aspect of their lives is the goal of the Colorado Digital Access Plan.



2.2 Alignment with Existing Efforts to Improve Outcomes

Colorado's Digital Access Plan must align with current state efforts and investments to create positive change. This includes the governor's Five Statewide Priorities and other statewide objectives. Likewise, the plan makes thoughtful connections between its objectives and existing statewide goals. Colorado values and believes collaboration helps achieve goals. This section includes references to several state plans and their objectives and ties the Digital Access Plan's goals to existing objectives. For more information on how the Digital Equity Team is measuring progress on the objectives outlined in the Digital Access Plan, see [Section 2.3](#).

Colorado Gov. Jared Polis' administration has established several high-priority policy areas, including health and economic development.ⁱ The Wildly Important Priorities for his second term in office include:

- Saving Coloradans money on health care.
- Fostering an economy that benefits everyone.
- Implementing a cohesive economic development plan for rural Colorado.

Additionally, Gov. Polis signed Executive Order B 2020 009ⁱⁱ outlining his mandate to provide 99% of Colorado households with access to reliable, high-speed broadband by Dec. 31, 2027.

Colorado's goal of providing 99% of Colorado households with access to reliable, high-speed broadband by Dec. 31, 2027, will spur economic growth and provide meaningful support to individuals and families across the state.



99% Colorado Households

The GOAL is access to reliable, high-speed broadband by Dec. 31, 2027.

The Digital Access Plan supports these priorities by improving home internet subscription affordability, particularly for rural families and households with limited financial resources. The plan supports programs that build digital skills, including those aimed at changing workforce needs, reskilling, and upskilling the workforce. The Digital Access Plan also aims to create device refurbishment opportunities for covered populations and rural communities, creating employment opportunities and pathways.

Several state agencies across multiple sectors, such as economic and workforce, education, health, civic and social engagement, and delivery of other essential services, have created plans for improving digital inclusion outcomes. The Digital Equity Team reviewed 17 of these plans to align the Digital Access Plan to the state's goals and objectives in these areas. For a complete list of the plans reviewed and links to them, please see [Appendix D](#).



Many state plans mention digital access or barriers. For example, a lack of internet leads to a digital divide and limited opportunities for certain populations. Some plans intend to expand access to services via technology (for example, telehealth) and stress the importance of improving digital literacy skills. Or the plans include strategies that rely on digital skills or digital access. However, there are limited strategies related to closing the digital divide and plans lack acknowledgment of this when describing the goals or activities related to the strategy. Part of implementing Colorado's Digital Access Plan will be to encourage acknowledgment of the role the digital divide plays in strategies aimed at increasing access and working with state agencies to collaborate on strategies to close the digital divide.

Many Colorado state plans also focus on populations in Colorado that have experienced, as noted in the plans, “generations-long social, economic, and environmental injustices,” which have produced “adverse and inequitable health outcomes.”ⁱⁱⁱ For example, the Department of Health Care Policy and Financing (HCPF) requires health equity plans in their Regional Accountable Entity/Managed Care Entities (RAE/MCE) contracts, meaning every RAE/MCE must develop health equity action plans that focus on decreasing disparity gaps for populations. These populations include marginalized groups, such as immigrants and refugees, communities of color, veterans, people with low or limited financial resources, people with disabilities, incarcerated individuals and those who have been justice-involved, and individuals who live in rural areas.

The Behavioral Health Administration aims to improve behavioral health services for priority populations, including people with limited financial resources, people of color, veterans, people who are lesbian, gay, bisexual, transgender, queer or questioning, and people with disabilities. The Colorado State Career and Technical Education (CTE) intends to achieve equitable access and outcomes for Colorado learners, including English-language learners, Black, Asian/Pacific Islander, American Indian, and Latine learners. Significant overlap exists between the populations identified by Colorado state agencies in their strategic plans and the covered populations addressed throughout the Digital Access Plan. This offers yet another opportunity to collaborate and coordinate efforts to better serve these communities and ensure they have the digital access to obtain the services they need to thrive.

Economic and Workforce Development

Colorado has two main plans that inform the economic and workforce outcomes for the state: the Colorado Workplace Innovation and Opportunity Act (WIOA) State Plan and the Perkins State Plan. The top goals identified in these plans include:

Aligning Policies

Aligning state policies and flexible resources to ensure all Coloradans have equitable access to opportunities for quality, lifelong education and training connected to the future of work.

Ensuring Access

Ensuring each Colorado learner has access to ongoing career advisement and development.



Colorado also has a Workforce Development Council (CWDC), a governor-appointed, public-private partnership to advise, oversee, and integrate the work of the Colorado talent development network. The council employs three strategies to enhance and sustain a skills-based talent development network that meets the needs of employers, workers, job seekers, and learners:

- 1. Sector strategies** involve industry-led, public-private partnerships where collective business priorities are addressed.
- 2. Career pathways** help ensure businesses have access to an appropriately skilled talent pipeline and help prepare students and workers with the skills and credentials they need for jobs and careers.
- 3. Work-based learning** is a continuum of activities that occur partly or entirely in the workplace, providing the learner with hands-on, real-world experience.

The Colorado Department of Education’s Adult Education Initiatives office oversees the licensing and implementation of Northstar Digital Literacy, a comprehensive digital literacy training resource, for Colorado’s Workforce Centers and adult education providers. The Learning Source, an adult education nonprofit, received an Office of the Future of Work and Serve Colorado grant for Colorado’s digital navigator pilot program. It also has a state-sponsored Northstar subscription, so its students can benefit from Northstar digital literacy assessments, curriculum, self-paced online training, and digital badges and certificates. The Digital Equity Team will consider the purchase of additional licenses if digital inclusion coalitions request the comprehensive digital literacy resource.

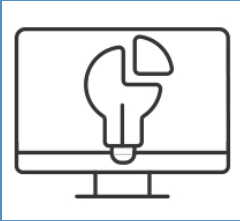
Colorado’s workforce goals align with those of the Digital Access Plan in several ways, including acknowledging the state government’s role in ensuring opportunity for employees and addressing businesses’ workforce needs. Both goals were addressed in the National Skills Coalition Digital Divide Report released in February 2023.

The Digital Divide Report took a deep dive into employment ads to gauge the demand for digital skills. The National Skills Coalition reviewed 43 million “Help Wanted” ads posted during 2021 and reported the following data about the U.S. economy:^{iv}

- **92% of all jobs** across all industries require some digital skills, including entry-level jobs.
- **In Colorado, 91% of job postings** were likely to require digital skills, and 47% of job postings definitely required digital skills.
- **Nearly one-third of U.S. workers** lack basic, foundational digital skills. Workers of color disproportionately fall into this category due to structural inequities.
- **Skill-building pays off.** If a worker previously employed in a job that required zero digital skills moved into a position that definitely needed a digital skill, their hourly wage would rise by 23% or by more than \$8,000 per year.



What is a Digital Skill?



Some digital skills are foundational, like email, simple spreadsheets, data entry, or timecard software. Others are industry-specific skills, such as bookkeepers using QuickBooks, manufacturing workers using AutoCAD, or home health aides using electronic medical records.

What is the Digital Skill Divide?



The digital skill divide is the space between those with the robust access and support needed to engage in skill-building opportunities and those without. As technology evolves, the digital skill divide prevents equal participation and opportunity in all parts of life, including people's ability to get good jobs and advance in their careers.

Despite the high demand for digital skills and the desire for skill-building opportunities among workers, many still need to develop such skills fully. Workers in every industry need the opportunity to develop their skills. Both industry-specific and occupation-specific digital skills allow workers to adapt and advance in their careers. The Digital Access Plan aims to increase access to opportunities for Colorado workers from all industries to participate in digital skill training suited to their needs, particularly for historically underserved populations.

What's good for workers is good for communities. Investing in digital skill building helps workers increase their incomes and allows businesses to thrive. This creates positive economic spillover effects for local, state, and national economies. COVID-19 illustrated the need to be ready for sudden disruptions to the labor market. Colorado's Digital Access Plan supports rapid reskilling so workers can move from one industry to another.

Closing the digital skill divide has major payoffs for businesses. Research has shown workers value upskilling opportunities and prefer working for employers who offer clear, well-defined pathways to advancement. Turnover has high costs for businesses. Estimates range from \$25,000 for workers who leave within the first year to over \$78,000 for workers who leave after five years. Averting or delaying turnover by ensuring workers have upskilling opportunities can be economically significant.

In an unpublished analysis of Colorado-specific data, the National Skills Coalition (NSC) identified industry-specific skills with high demand in the state, including:

- Finance and insurance: Salesforce database software.
- Health care: Electronic medical record software.
- Manufacturing: Enterprise Resource Planning (ERP) software; AutoCAD.
- Retail: Human resources software, such as Empower.
- Real estate and rental and leasing: Yardi software.
- Transportation and warehousing: Global Positioning System (GPS).
- Accommodation and food services: Empower human resources software.



Additionally, NSC identified Colorado occupations with a high demand for digital skills.



OCCUPATION / Percent of job postings definitely requiring digital skills

- Software Developer / Engineer 95%
- Computer Support Specialist 94%
- Bookkeeper / Accounting Clerk 89%
- Human Resources / Labor Relations Specialist 85%
- Office / Administrative Assistant 85%
- Recruiter 83%
- Loan Officer 83%
- Radiologic Technician / Technologist 80%
- Property / Real Estate / Community Manager 78%
- Project Manager 76%
- All Occupations (Colorado) 47%

In its 2023 Annual Report, the Office of the Future of Work describes how technology is shaping the future of work, including artificial intelligence or AI – computer systems that can perform tasks that usually require human intelligence, such as visual perception and speech recognition, allowing for non-human decision-making, process management, and analysis.^v The Digital Equity Team will work with the Office of the Future of Work and partners across the state to incorporate relevant activities and AI-related strategies as this technology evolves.

The table below highlights economic and workforce goals and strategies from other state plans. The measurable objective, connection, and strategy demonstrate how the Digital Access Plan strives to align with existing state plans and objectives.

Economic and Workforce Strategy (CWDC): Involve industry-led, public-private partnerships where collective business priorities are addressed.		
<p>Measurable Objective: All Colorado communities are empowered to implement digital inclusion programs and initiatives that prioritize their community’s needs.</p>	<p>Connection: Employers are critical partners that inform the digital skills and the types of training opportunities needed in the workforce. Having Colorado business engagement in the regional digital inclusion coalitions will be required to educate communities about the digital skills necessary for employability.</p>	<p>Digital Access Plan Strategy: Create Colorado’s Digital Equity Ecosystem.</p> <ul style="list-style-type: none"> • Core Activity: Support the creation of regional digital inclusion coalitions. • Key Performance Indicator (KPI): The number of regional digital inclusion coalitions.



Economic and Workforce Goal (WIOA): Align state policies and flexible funding streams to ensure all Coloradans have equitable access to opportunities for quality, lifelong education and training connected to the future of work.

Measurable Objective:
All the measurable objectives in Section [2.3](#).

Connection: For all Coloradans to have equitable access to opportunities for education and training, there must be more equitable digital access, including affordable internet access, web-enabled devices, digital skills, and accessible state resources. All the strategies, activities, and key performance indicators are relevant to this workforce goal.

Economic and Workforce Goal: Ensure each Colorado learner has access to ongoing career advisement and development.

Measurable Objective:
All Coloradans can access affordable broadband service at home.

Connection: For Colorado learners to have equitable access to career services, those living in rural areas who lack accessible services or those who face transportation barriers to in-person services must be equipped with the connectivity and devices to participate.

Digital Access Plan Strategy: Improve the affordability of home internet subscriptions.

- **Core Activity:** Utilize a broadband map to identify gaps in broadband services for covered populations.
- **Key Performance Indicator (KPI):** The number of eligible individuals and covered populations enrolled in ACP and Lifeline.

More Colorado-specific information can be found in the [NSC slideshow](#).^{vi} For a complete list of state plans, their objectives, and their connection to digital equity, see [Appendix D](#).

Educational Outcomes

Several plans in Colorado outline the state's education goals:

- Perkins State Plan.
- Colorado Department of Education's Strategic Plan.
- Colorado Department of Early Childhood Education (CDEC)'s Five-Year Strategic Plan.
- Colorado's Strategic Plan for Higher Education.

The top goals identified in the Perkins State Plan include ensuring access to ongoing career advisement and development and creating a pipeline of Career and Technical Education instructors to fill educator positions in middle school, secondary, and postsecondary levels.



The Colorado Department of Education's (CDE) Strategic Plan outlines five key initiatives:

- 1) All students can read at grade level by the end of third grade.
- 2) Regardless of demographics and learning needs, all students meet or exceed state academic standards.
- 3) All students and families have access to quality schools that meet their students' needs.
- 4) Students graduate high school with the knowledge, skills, and experience needed for career and college success.
- 5) High-quality educators are in every classroom and strong leaders in every building.

Reaching these goals will require educators to be prepared to teach successfully in face-to-face, hybrid, and online settings. Students will need connectivity and devices to be successful in their education and assignments. In 2009, the Federal Communication Commission's Broadband Task Force reported approximately 70% of teachers assigned homework requiring broadband access.^{vii}

Online homework tasks could include the following:

- Submitting assignments.
- Connecting with teachers and other students through group discussion boards.
- Working on shared documents as part of a group project.
- Conducting online research for a school paper.

Additionally, parents must be able to navigate school systems and virtual platforms to support their children's learning. For example, many schools have turned to online grading systems, meaning parents need the internet and digital skills to be "fully informed on their child's academic performance." However, as of 2021, over 60,000 households in Colorado with children in the K-12 system have inconsistent access to computers for educational purposes.^{viii}

The Digital Equity Team conducted listening sessions with communities across Colorado and heard those with language barriers struggle to register children for school and navigate school portals. The Digital Access Plan aims to improve accessibility to affordable home internet connectivity and devices for students and their families while promoting programs that build parents' digital skills.

The CDEC's Five-Year Strategic Plan outlines seven goals to ensure the delivery of an inclusive, community-centered, equitable early childhood education system that supports the care, education, and well-being of all of Colorado's young children, their caregivers, and early childhood professionals. One of those goals is to strengthen families through connecting children and families to essential services and supports. The Digital Access Plan supports this goal by working to ensure that as the Office of Information Technology (OIT) works to improve digital government services, families have the tools needed to engage easily and effectively with the government programs needed to thrive.^{ix}

Colorado's Strategic Plan for Higher Education, Building Skills for an Evolving Economy, has one strategic goal: to increase the number of Coloradans benefiting from valuable career skills obtained in high school or via postsecondary education that enables additional lifetime earnings greater than the cost of attendance. While the plan does not have a strategy that calls out digital access to expand learner opportunities, it will be crucial for rural and other students with limited physical access to employers or other barriers to have the digital access that makes workforce training in



their community possible. The Digital Access Plan supports this by outlining strategies to improve access to affordable home internet, devices, and digital skills for all learners.

The table below highlights education goals and strategies from other state plans. The measurable objective, connection, and strategy demonstrate how the Digital Access Plan strives to align with existing state plans and objectives.

Education Goal (Perkins State Plan): Develop a pipeline of Career and Technical Education instructors to fill educator positions in middle school, secondary, and postsecondary levels.		
<p>Measurable Objective: All Coloradans have the skills and confidence to navigate digital tools and systems and the support to expand their skills.</p>	<p>Connection: Individuals interested in entering education as a career but who may need to gain the digital skills to use online tools or participate in online learning as they pursue a teaching certificate or degree will need access to training.</p>	<p>Digital Access Plan Strategy: Embed digital inclusion activities into state efforts to promote online accessibility and inclusivity.</p> <ul style="list-style-type: none"> ● Core Activity: Increase the availability of digital navigators and digital skills training opportunities across Colorado and promote opportunities widely. ● Key Performance Indicator (KPI): The number of individuals by covered population reporting they were able to accomplish an online task following an appointment with a digital navigator.
Education Goal (CDE Strategic Plan): There are high-quality educators in every classroom and strong leaders in every building.		
<p>Measurable Objective: Colorado communities are empowered to implement digital inclusion programs and initiatives prioritizing their community's needs.</p>	<p>Connection: Educators need to be able to direct students and families to digital inclusion resources. Membership in digital inclusion coalitions that make up the ecosystem will be cross-sector. They will be most successful when education leaders and educators participate and share their students' digital inclusion challenges.</p>	<p>Digital Access Plan Strategy: Create Colorado's Digital Equity Ecosystem.</p> <ul style="list-style-type: none"> ● Core Activity: Encourage educators and education leaders to participate in digital inclusion coalitions. ● Key Performance Indicator (KPI): The number of regional digital inclusion coalitions.



Education Goal (CDE Strategic Plan)- *continued*

<p>Measurable Objective: All Coloradans can access affordable broadband service at home.</p>	<p>Connection: High-quality education suggests the incorporation of new technologies into learning. For teachers to be effective in their instruction, their students must have access to affordable broadband.</p>	<p>Digital Access Plan Strategy: Improve the affordability of home internet subscriptions.</p> <ul style="list-style-type: none"> ● Core Activity: Promote participation in internet discount and subsidy programs through targeted community outreach and assistance with enrollments, particularly for individuals with limited financial resources, rural households, and in areas of Colorado where enrollment is low but eligibility is high. ● Key Performance Indicator (KPI): The number of eligible individuals and covered populations enrolled in ACP and Lifeline.
<p>Measurable Objective: All Coloradans can access and afford web-enabled devices to accomplish what they need to do online.</p>	<p>Connection: In addition to affordable broadband access, for teachers to be effective in their instruction, students and their families must have the appropriate devices for learning. While many Coloradans access the internet through their mobile devices, online learning and many other tasks require laptops. Having a reliable device for learning tasks is essential to educational success.</p>	<p>Digital Access Plan Strategy: Explore the creation of a statewide ecosystem of device refurbishers, technical support for devices, and recycling.</p> <ul style="list-style-type: none"> ● Core Activity: Develop and implement a statewide outreach plan to solicit device donations to existing refurbishers and advertise the availability of refurbished devices, including on 2-1-1.

For a full list of state plans, their objectives, and their connection to digital equity, see [Appendix D](#).

Health Outcomes

Several Colorado agencies focus on improving health outcomes and access to care for Coloradans. These agencies include the Colorado Department of Public Health and Environment (CDPHE), the Department of Health Care Policy and Financing (HCPF), the Office of eHealth Innovation (OeHI),



Colorado Department of Human Services (CDHS), the Behavioral Health Administration (BHA), and others.

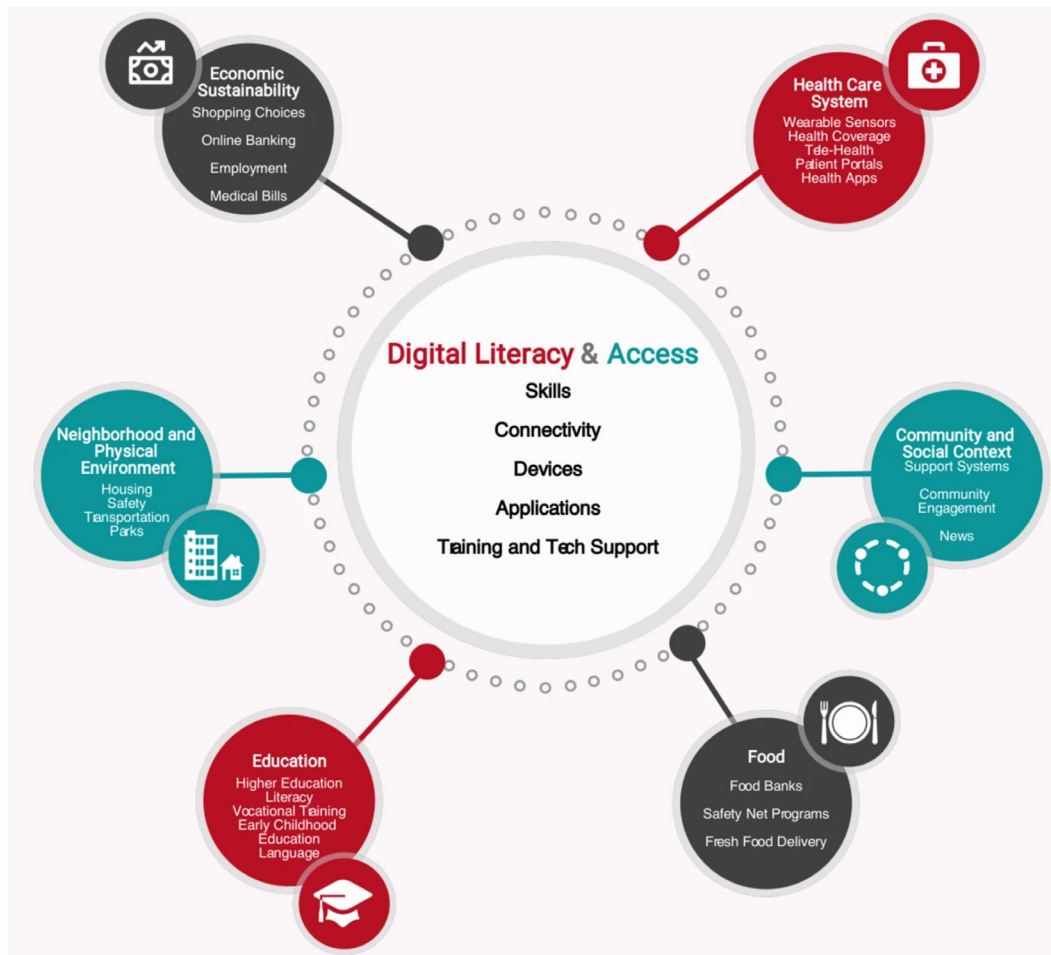
The Digital Equity Team found synergies across these plans. Many critical priorities rely on increasing access to services for communities experiencing significant disparities and health inequities, with most including an activity or objective to leverage telehealth.

STATE AGENCY	STATE HEALTH-RELATED PLAN	RELEVANT GOALS
CDPHE	Chronic Disease State Plan: 2022-2030	Increase access for communities experiencing the largest disparities and health inequities to comprehensive, high-quality health care and preventative services.
	2021-2025 MCH Strategies	Increase meaningful access to support for maternal and child health and families.
HCPF	Health Equity Plan 2022-23	Work with sister departments to expand broadband and telehealth in rural communities to improve tele-behavioral health care access and reduce reluctance to seek care due to stigma.
BHA	Strategic Plan 2023	Develop a “no wrong door” approach to help individuals navigate the full continuum of behavioral health services.
CDHS	Mindsource Brain Injury Network State Plan	Support people with brain injuries to navigate systems so they can explore options and access the services they need.
OeHI	2021 Health IT Roadmap	Coloradans access high-quality in-person, virtual, and remote health services coordinated through information and technology systems.

“These efforts all take money, and often the infrastructure and devices are the easiest areas to quantify and fund, but we shouldn’t underestimate the value of the people (navigators and instructors) doing the work on the ground.”



Digital literacies and social determinants of health



“[Digital literacies and social determinants of health](#)” by [npj Digit. Med.](#) is licensed under CC BY 4.0

Many of these agencies called out the need for increased digital access. They recognized digital literacies and access, including skills, connectivity, devices, and training, the design of applications and platforms, and technical support, as super social determinants of health.^x

In today’s world, digital skills and internet connectivity are essential for a person to access a host of other services they need to thrive. For example, applications for employment, housing, and other assistance programs are increasingly, and sometimes exclusively, accessible online. For those without the connectivity, skills, or devices, this can mean being cut off from essential support services and opportunities, including telehealth. The American Institutes for Research and IMPAQ Health recommends that policymakers plan for digital literacy and broadband access as social determinants of health.^{xi}

Telehealth cannot be utilized in a community that lacks broadband infrastructure or affordable access to it. While telehealth could be a tool to increase access to care, it can also inadvertently widen existing inequities and disparities in care by leaving out communities that need it the most. As such, health disparities will continue to occur in rural and disadvantaged communities if digital access is not equally available. Several state agencies acknowledge this – for example, the Colorado Department of Public Health and Environment recommends applying a digital inclusion lens when expanding telehealth delivery.^{xii}



Telehealth utilization in rural Colorado is about half that of urban areas of Colorado, creating a disparity in telehealth access. The Office of eHealth Innovation and the Center for Improving Value in Health Care have partnered to create an interactive dashboard to provide more insight into who is and isn't using telehealth and which social determinants of health have the biggest impact on telehealth adoption. This tool, anticipated to be publicly available in 2023, will further inform the state of Colorado on strategically using resources to ensure all Colorado communities can benefit from telehealth.

The 2022 Colorado Telehealth Provider Survey indicated the top barriers to patient access identified by providers:

- 1) Broadband access.
- 2) Digital literacy.

The Colorado Digital Access Plan can use resources like these to aid in the strategic investment of digital equity work. The plan prioritizes progress on improving the affordability of home internet access and local resources for digital skill development, which are critical to telehealth adoption.

The table below highlights health goals and strategies from other state plans. The measurable objective, connection, and strategy demonstrate how the Digital Access Plan strives to align with existing state plans and objectives.

Health Goal (Multiple Health Focused Strategic Plans): Increasing access to health care and supportive services for communities experiencing the most significant disparities and health inequities is a goal of every Colorado state plan on health.

Measurable Objective:

Multiple measurable objectives.

Connection: One strategy for increasing access to health care and supportive services is telehealth. However, it is imperative that communities, particularly covered populations, have access to affordable home internet and personal devices and possess the digital skills needed to take advantage of telehealth. These communities have experienced underinvestment and discriminatory practices such as redlining, a lack of culturally responsive care, and more. The Digital Access Plan aims to improve digital access through all six strategies outlined in [Section 5](#), focusing on covered populations. Some of the Key Performance Indicators (KPIs) to gauge progress on these measurable objectives include:

- **Key Performance Indicator (KPI):** The number of people with limited financial resources and rural individuals enrolled in ACP and Lifeline.
- **Key Performance Indicator (KPI):** The percentage of those with a disability, older adults, and incarcerated individuals reporting confidence in using the internet.



For a complete list of state plans, their objectives, and their connection to digital equity, see [Appendix D](#).

Civic and Social Engagement Goals

While Colorado hasn't documented its civic and social engagement goals yet, digital access is needed to participate in many civil engagement opportunities, such as virtual town halls, to learn about community events, or stay updated on the news. Many Colorado leaders leverage online forums to engage with the public – through social media, press releases, video interviews, and important announcements on their websites. For many Coloradans, the internet is the best way to conduct research. However, finding legitimate sources of information can be a challenge for people new to the online space. The National Civic League is an organization dedicated to advancing civic engagement to create equitable, thriving communities. They do this by supporting inclusive approaches to community decision-making through community assistance, awarding funding, and research. The Digital Equity Team plans to partner with organizations like National Civic League to better understand best practices for inclusive community engagement in the digital age, as well as strategies to ensure Coloradans are finding accurate, reliable information and are staying safe if they participate in events online.

Technology also can help individuals stay connected to their community and family. According to the 2023 Colorado Health Access Survey (CHAS), 92% of Coloradans use the internet to communicate with family and friends, which may be the only way to stay in touch when family are living far away or are incarcerated. Many also report using the internet to look for volunteer opportunities, attend virtual church services, and stay updated on what's happening locally, nationally, and globally.^{xiii}

In 2021, the state passed the Colorado Privacy Act (CPA).^{xiv} The bill became effective in July 2023, and it protects the personal data of Colorado residents when they act in an individual or household context, for example, when they browse the internet or sign up for a retail rewards program. The law doesn't give consumers any rights directly related to a data breach/cybersecurity incident, but it supports consumers in taking control of their personal data so they're at less risk overall (for example, deleting data from apps that are no longer used or opting out of the sale of personal data). Colorado HB18-1128, Protections for Consumer Data, is related and requires entities that store personal data to have policies in place for keeping that data private.^{xv}

A review of data gathered from the CHAS shows some covered populations feel less able to resolve a cybersecurity threat incident and less likely to know how to keep themselves safe online. However, the Digital Access Plan will help address confidence in cybersecurity measures by leveraging the digital navigator program to increase access to security training and resources.

Measurable Objectives and Strategies

All the measurable objectives and strategies outlined in the Digital Access Plan support all Coloradans in having the connection, devices, and skills to navigate the internet safely to remain connected to their communities and fully participate in our society.



Delivery of Other Essential Services

A variety of state agencies and plans are relevant to the delivery of essential services. A description of these objectives and their connections to the Digital Access Plan follows.

Digital Government Services and Infrastructure

The Office of Information Technology (OIT) worked with Gov. Polis to create the Colorado Digital Government Strategic Plan. This plan serves as a blueprint for modernizing online state services. Specifically, this plan outlines a goal to make government easy, based on survey data indicating that when seeking benefits, services, or information from the state, Colorado residents desire simple, less time-consuming, and more digital interactions. This is especially true for the most essential services and programs (for example, income support, health care, human services, etc.). This aspiration can advance equity, and the Digital Access Plan supports this goal by working to improve access to affordable internet access, web-enabled devices, and digital skills.

The Digital Government Strategic Plan also outlines opportunities for expanding access to high-speed internet. This is in coordination with the Colorado Broadband Office's Colorado Broadband Roadmap, which outlines strategies that leverage funding to meet the governor's goal of connecting 99% of households to high-speed internet by 2027. The Digital Equity Team worked with the Colorado Broadband Office to define specific digital inclusion goals as part of the Broadband Roadmap to ensure Coloradans can benefit from it when the infrastructure is available.

Financial Empowerment

Digital equity and financial inclusion are strongly connected. Studies show mobile and online banking are increasingly becoming the primary way many residents access bank accounts.^{xvi} At the same time, many banks are closing branch locations,^{xvii} especially in rural areas that have historically depended on local branches to access financial products.^{xviii} The loss of bank branches creates banking deserts and constrains these communities' access to credit and financial services. Those who lack sufficient broadband and devices may be further left out of mainstream banking – 6% of Coloradans are unbanked or have no bank accounts.^{xix} Unbanked rates are generally higher among households with limited financial resources, varying educational backgrounds, Black households, Hispanic households, working-age households with a disability, and single-mother households.

Last year, the Colorado Department of Law's Office of Financial Empowerment launched Bank On Colorado, a statewide coalition dedicated to expanding access to safe and affordable banking products in Colorado communities.^{xx} This coalition seeks to create a dialogue between financial institutions and community partners and ensure banking products across the state are responsive to the needs of Colorado residents who have historically faced barriers to entry into the financial mainstream.

In 2023 and beyond, Bank On Colorado will work on the following activities that are aligned with the State's Digital Access Plan:

- Collect information about which safe and affordable banking accounts can be opened and fully serviced online.



- Work with Bank On Colorado coalition partners to develop and disseminate resources that support communities banking safely online and using mobile devices.
- Identify opportunities to embed banking access options more seamlessly into government programs so Coloradans can receive income and public benefits safely and affordably through direct deposit and avoid fees incurred through check cashing or pre-paid cards.
- Promote opportunities for financial institutions to engage in Community Reinvestment Act (CRA)-eligible activities that further financial inclusion and digital equity goals, including financial education, partnership with community organizations that serve populations with limited financial resources, and donations of refurbished devices.

Public Safety

The Colorado Department of Public Safety (DPS) consists of five divisions that cover a variety of programs and services:

- 1) Colorado Bureau of Investigation.
- 2) Colorado State Patrol.
- 3) Division of Fire Prevention and Control.
- 4) Division of Criminal Justice.
- 5) Division of Homeland Security and Emergency Management.

One of its goals for the 2023-2024 fiscal year is to increase accessibility to vital public safety services and information by training its technology staff on accessibility best practices.

The Digital Access Plan further supports the department's goal by having strategies and measurable objectives to close the digital divide so all Coloradan communities have the digital access needed to find critical public safety services and information.

Resiliency Goals

The [Colorado Resiliency Office](#) (CRO) was created to support communities in preparing for, enduring, and recovering from disruptions, such as COVID-19, economic downturns, or wildfires. The office is housed in the Department of Local Affairs, which focuses on strengthening Colorado's local communities through accessible, affordable, and secure housing; implementing property tax law; and increasing capacity building, strategic training, research, technical assistance, and funding to localities.

One of the indicators of a locality's resiliency the CRO uses is [Household Tech Availability](#), which includes computers and the internet. The office plans to grow a network of resiliency hubs to serve as community centers for education, services, and community capacity. The hubs would provide access to food, shelter, power, and other critical services during emergencies. The Digital Equity Team plans to work with the CRO to incorporate digital skills into their definition of resilient communities as part of [Strategy 4](#).



Outcomes of New Americans

The Office of New Americans (ONA) is the point of contact for state agencies, private sector organizations, and the public to advance the integration and inclusion of immigrants and refugees in Colorado communities. ONA is developing strategies to facilitate economic stability and promote successful economic, social, linguistic, and cultural integration of New Americans by investing in the success of immigrants in Colorado. The Virtual, Career-Aligned English as a Second Language (VCESL) program is administered by ONA and aims to provide career and sector-specific adult English language courses via English digital platforms. These platforms will help New Americans build the skills they need to navigate and access Colorado’s growing workforce.

The Colorado Refugee Services Program (CRSP) is a program of the Colorado Department of Human Services and is responsible for the statewide coordination of refugee resettlement. The office funds a diverse network of service providers to support the effective resettlement and integration of refugees and other eligible populations in Colorado.

Although not explicitly mentioned by ONA or CRSP’s reports or websites, digital inclusion will be vital to integrate New Americans successfully. For New Americans to use apps, such as VCESL, or apply for work, they will need internet access, device access, and sufficient digital skills to integrate into Colorado successfully. The eight covered populations listed in the Digital Equity Act State Planning Grant Notice of Funding Opportunity does not explicitly include New Americans. However, the Digital Equity Team understands New Americans may identify with multiple covered populations, such as individuals with barriers to English, racial and ethnic minorities, older adults, and others.

Digital Government Goal: Make government easy.

<p>Measurable Objective: All Coloradans can access affordable broadband service at home.</p>	<p>Connection: For Coloradans to use digital government services, they need access to affordable broadband.</p>	<p>Digital Access Plan Strategy: Improve the affordability of home internet subscriptions.</p> <ul style="list-style-type: none"> ● Core Activity: Promote participation in internet discount and subsidy programs through targeted community outreach and assistance with enrollments, particularly for individuals with limited financial resources and rural households and in areas of Colorado where enrollment is low but eligibility is high. ● Key Performance Indicator (KPI): The number of eligible individuals and covered populations enrolled in ACP and Lifeline.
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Digital Government Goal: *continued*

Measurable Objective: All Coloradans can access and afford web-enabled devices to accomplish what they need to do online.

Connection: In addition to affordable broadband access, Coloradans need to have devices to find and interact with digital government platforms and applications.

Digital Access Plan Strategy: Explore the creation of a statewide ecosystem of device refurbishers, technical support for devices, and recycling.

- **Core Activity:** Core Activity: Develop and implement a statewide outreach plan to solicit device donations to existing refurbishers and advertise the availability of refurbished devices, including on 2-1-1.

Broadband Roadmap Goal: Expand digital inclusion and adoption to achieve affordability, access, and digital literacy by 25% by 2027.

Measurable Objective: All the measurable objectives in [Section 2.3](#).

Colorado Department of Law Financial Empowerment Goal: Expand access to safe, affordable banking products in Colorado communities.

Measurable Objective: All Coloradans have the skills and confidence to navigate digital tools and systems and the support to expand their skills.

Connection: The loss of bank branches creates banking deserts and limits access to credit and financial services. Those without adequate broadband and devices may be further left out of mainstream banking. The Digital Access Plan strategies support more Coloradans having access to the connectivity and devices needed to participate in online banking. The Digital Navigator Program strategy addresses online financial literacy specifically.

Digital Access Plan Strategy: Embed digital inclusion activities into state efforts to promote online accessibility and inclusivity.

- **Core Activity:** Leverage the Digital Navigator Program to expand access to lessons learned on implementing local digital navigator programs. Provide digital skills training and access to resources for covered populations, particularly online financial literacy for individuals living in households with limited financial resources, racial and ethnic minorities, and individuals with disabilities.
- **Key Performance Indicator (KPI):** The percentage of identified covered households that report using the internet for online banking.



Department of Public Safety Goal: Expand access to vital public safety services and information.

Measurable Objective: All Coloradans have the skills and confidence to navigate digital tools and systems and the support to expand their skills.

Connection: Agencies need to understand the barriers some communities face in receiving digital communications so they can tailor their communication strategies to meet all Coloradans, regardless of their digital access level.

Digital Access Plan Strategy: Embed digital inclusion activities into state efforts to promote online accessibility and inclusivity.

- **Core Activity:** Increase Digital Equity Team engagement in existing state agency meetings and initiatives. Encourage state agencies to use the Digital Competency Framework to assess their organization's digital inclusion competencies.

CRO Resiliency Goal: Grow a network of resiliency hubs.

Measurable Objective: All Coloradans have the skills and confidence to navigate digital tools and systems and the support to expand their skills.

Connection: One of the indicators of resiliency the CRO uses is household technology availability. The Digital Access Plan aims to support this indicator by ensuring communities have access to digital skill training and support.

Digital Access Plan Strategy: Promote initiatives and programs that build digital skills.

- **Core Activity:** Collaborate with the Department of Local Affairs to embed digital skills into what it means to be a resilient community as part of its Resiliency Hubs initiative.



ONA Goal for New Americans: Provide New Americans with the tools to access and plug into sector-specific workforce industries.

Measurable Objective: Colorado communities are empowered to implement digital inclusion programs and initiatives prioritizing their community's needs, and all Coloradans can access affordable broadband service at home.

Connection: The VCESL platform is entirely virtual, so for VCESL participants to use the platform at home, they will need affordable broadband service. Additionally, representatives from organizations providing services for New Americans can elevate the digital inclusion needs of their communities by participating in regional digital inclusion coalitions.

Digital Access Plan Strategy:

Create Colorado's Digital Equity Ecosystem.

- **Core Activity:** Create a formula-based funding opportunity for regional digital inclusion collaboratives to create community-led digital access plans meeting its stakeholders' community and regional needs and review coalition plans for sustainability.

- **KPI:** The number of regional digital inclusion coalitions.

Digital Access Plan Strategy:

Improve the affordability of home internet subscriptions.

- **Core Activity:** Work with the Colorado Broadband Office on future programming that supports home internet affordability.
- Promote participation in internet discount and subsidy programs through targeted community outreach and assistance with enrollments.

For a full list of state plans, their objectives, and their connection to digital equity, see [Appendix D](#).



Alignment with Broadband, Equity, Access, and Deployment (BEAD)

One of the components of digital equity is access to high-speed, reliable internet. While the Digital Equity Team works to improve internet adoption, digital skills development, and device access, the Colorado Broadband Office will build broadband infrastructure across Colorado, using Broadband, Equity, Access, and Deployment (BEAD) and other funding. The Digital Equity Team works collaboratively and closely with the Colorado Broadband Office to ensure the Digital Equity Plan and the BEAD Plans are aligned. For example, both teams collaborated on community events, including the Colorado Internet for All Summit, Broadband Roadshow community meetings across the state, and Tribal consultations with the Southern Ute Indian Tribe and the Ute Mountain Ute Tribe. These opportunities provided members of both teams with context and community feedback as the BEAD Initial Proposal and Digital Access Plans were developed. The Colorado Broadband Office and Digital Equity Team also worked together on Advance Colorado and the implementation of the Colorado Broadband Roadmap, the statewide strategic plan for deployment and digital equity.

The senior manager for broadband programs at the CBO participated in weekly Digital Equity Team strategy meetings throughout the planning process. The digital equity manager also attends Colorado Broadband Office staff meetings. The communications teams from the Office of eHealth Innovation, the Office of the Future of Work, and the Colorado Broadband Office work together to promote the Affordable Connectivity Program. In 2023, these teams collaborated to engage stakeholders in Digital Inclusion Week, an annual advocacy and awareness campaign started by the National Digital Inclusion Alliance.

Throughout the BEAD and Digital Equity Act (DEA) planning processes, the teams have cross-promoted opportunities for stakeholder engagement, including a shared calendar on websites for the Colorado Broadband Office and Office of the Future of Work. The calendar directs stakeholders to open meetings with CBO and OFW staff. Internet service providers have attended weekly Digital Equity Open House meetings to learn more about the state's digital equity work. Several were directed to the meetings by a Colorado Broadband Office team member.

Going forward, BEAD and Digital Equity alignment will include collaboration on surveys and data gathering. Additionally, the digital inclusion coalitions can provide valuable feedback to the BEAD and Digital Equity Teams on their communities' digital inclusion needs.

Broadband Workforce Development

The Colorado Broadband Office will receive \$826,522,650 in BEAD funds from the NTIA to help the state reach the goal of 99% of households connected to high-speed broadband by 2027. This funding will build high-speed, reliable broadband infrastructure in unserved or underserved communities. Building that infrastructure in 50 states and territories will require labor, and “approximately 50% of deployment-related roles in Colorado could show shortages, especially outdoor, labor-intense roles,” according to the Colorado Broadband Roadmap.

In coordination with the Colorado Department of Labor and Employment (CDLE) and the Colorado Workforce Development Council, the CBO developed a draft Broadband Workforce Plan. The plan identifies existing training, apprenticeships, and other programs that provide for a skilled



workforce. It then determines the programs needed. Workforce gaps in construction services required to build broadband infrastructure are 2,500 to 3,500 over the next five years.

The Workforce Development Plan will address the gaps through the following goals and strategies:

- Launch a broadband awareness campaign to reach 10,000 Coloradans by 2024.
- Aim for approximately 3,000 workers to enter broadband training programs by 2025.
- Aim for approximately 1,500 new workers to be employed in the broadband field by 2026.
- Evaluate and scale training and job placement programs.
- Expand and increase pilot programs and apprenticeships.
- Embed telecommunications into workforce infrastructure through policy development.
- Establish high-quality job training for telecommunication workers.

2.3 Strategies, Goals, and Objectives

The Digital Equity Team has identified objectives to increase digital equity for all Coloradan communities:

- **Locally led digital inclusion programs:** Colorado communities are empowered to implement digital inclusion programs and initiatives prioritizing their community's needs.
- **Availability and affordability of internet subscriptions:** All Coloradans can access affordable broadband service at home.
- **Accessibility and inclusivity of public resources:** All Coloradans can access needed online resources.
- **Digital literacy:** All Coloradans have the skills and confidence to navigate digital tools and systems and the support to expand their skills.
- **Online privacy and cybersecurity:** All Coloradans can protect their online information and understand how to prevent security breaches.
- **Availability and affordability of devices:** All Coloradans can access and afford web-enabled devices to accomplish what they need to do online.

While these objectives are meant for Colorado as a whole, the Digital Equity Team is focusing on strategies and progress for covered populations and for multiple covered populations based on the baseline data and needs assessment (see [Section 2.3.1](#) for the KPI Table). Therefore, it's important to note the Digital Equity Team acknowledges the strategies, implementation, measurable objectives, and partners will depend on the covered population. The Digital Equity Team has identified overarching strategies to accomplish each of the measurable objective goals and to close the digital divide in Colorado, along with corresponding KPIs, baseline data, and near- and long-term goals, detailed below. The Digital Equity Team used a variety of data sources to create the baseline figures and goals, including feedback from digital skill learners, qualitative data from members of the covered populations, and survey data. These data sources are further explained in [Section 3.2](#).



Colorado-specific data will be collected continuously to measure progress toward the goals. The data will be analyzed by each covered population as much as possible, as indicated in [Section 2.3.1](#). More information on the execution of these strategies is detailed in [Section 5](#).

Strategy 1: Create Colorado’s Digital Equity Ecosystem.

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| <ul style="list-style-type: none"> ● Create a formula-based funding opportunity for regional digital inclusion collaboratives to create community-led digital access plans meeting its stakeholders’ community and regional needs and review coalition plans for sustainability. ● Connect coalitions to possible funding opportunities and invite national organizations to support coalitions’ digital inclusion efforts and initiatives, ensuring covered populations’ voices are elevated, and sustainability is increased. | <ul style="list-style-type: none"> ● Create a community of practice for coalition members to share best practices. ● Create a Digital Inclusion Innovation Lab with higher education and community-based organizations to connect research and practice. |
|---|--|

Strategy 2: Improve the affordability of home internet subscriptions.

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| <ul style="list-style-type: none"> ● Promote participation in internet discount and subsidy programs through targeted community outreach and assistance with enrollments, particularly for individuals with limited financial resources, rural households, and in areas of Colorado where enrollment is low but eligibility is high. ● Work with the Colorado Broadband Office on future programming that supports home internet affordability. | <ul style="list-style-type: none"> ● Work with the Colorado Broadband Office and its Colorado Broadband Map to identify gaps in services for covered populations. ● Explore what other internet subsidy programs are offered by internet service providers (outside of Lifeline and ACP). ● Work with other state agencies offering benefit programs on promoting available internet subsidy programs to their clients. |
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Strategy 3: Embed digital inclusion activities into state efforts to promote online accessibility and inclusivity.

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| <ul style="list-style-type: none"> ● Leverage efforts to implement HB21-1110 (Colorado Laws For Persons With Disabilities) to include language accessibility in all state technology assets. ● Increase Digital Equity Team engagement in existing state agency meetings and initiatives. Encourage state agencies to use the Digital Competency Framework to assess their organization’s digital inclusion competencies. | <ul style="list-style-type: none"> ● Collect data on an ongoing basis from the public and digital access organizations on these issues to inform progress made. ● Partner with organizations like the National Civic League to collect data on best practices for engaging communities in public meetings and forums. |
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Strategy 4: Promote initiatives and programs that build digital skills.

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| <ul style="list-style-type: none"> ● Collaborate with the Department of Local Affairs to embed digital skills into what it means to be a resilient community as part of its Resiliency Hubs initiative. ● Leverage digital navigators within coalitions to expand access to digital skills training and resources for covered populations. ● Explore the potential to leverage other types of navigators (community health workers, career navigators, etc.) to navigate covered populations to needed resources for digital access and increase adoption of telehealth, particularly for households with limited financial resources, those with a language barrier, Latine individuals, and rural individuals. ● Provide digital navigation best practices for businesses, state agencies, faith organizations, and nonprofits that offer public-facing technical support to customers. | <ul style="list-style-type: none"> ● Fund the creation or expansion of skills-training programs requested by digital inclusion coalitions that meet regional needs. ● Purchase and populate an online community partnership relationship tool with information provided by organizations that participated in Colorado's Digital Equity Ecosystem Map (DEEM) survey. Continue to add organizations, businesses, and local governments involved in Colorado's digital inclusion work as they are identified. Information about organizations providing digital inclusion activities and services will be publicly available to digital navigators and others. ● Explore the continuation of prior partnerships with 2-1-1 to promote digital skills training services available in Colorado. ● Survey individuals who are incarcerated to determine baseline digital skills. |
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Strategy 5: Promote initiatives that improve confidence in deploying privacy and cybersecurity measures.

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| <ul style="list-style-type: none"> ● Support the Consumer Protection section of the Department of Law on the Colorado Privacy Act and cybersecurity initiatives. ● Leverage the Digital Navigator Program to provide tools, training, and educational resources related to online privacy and cybersecurity, particularly for individuals with disabilities, those identifying as Black, Latine, Asian, or Middle Eastern/North African, older adults, and those with a language barrier. | <ul style="list-style-type: none"> ● Research cybersecurity services offered by internet service providers and raise awareness about these offerings among consumers. |
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Strategy 6: Explore the creation of a statewide ecosystem of device refurbishers, device technical support, and recycling.

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|---|---|
| <ul style="list-style-type: none"> • Identify opportunities to increase access to device refurbishment training for incarcerated people, community college students, and other covered populations. • Explore Community Reinvestment Act opportunities by encouraging device donations from financial institutions. | <ul style="list-style-type: none"> • Develop and implement a statewide outreach plan to solicit device donations to existing refurbishers and advertise the availability of refurbished devices, including on 2-1-1. |
|---|---|

2.3.1 Key Performance Indicators

The KPIs make the objectives in [Section 2.3](#) measurable and outline what the Digital Equity Team expects to accomplish by when. The Digital Equity Team defines near-term as two years (by 2025) and long-term as five years (by 2028). A publicly available dashboard will be created to show progress on these KPIs and will be hosted on the [Colorado Digital Access Plan website](#).

The KPI table includes:

- Objectives for each KPI.
- What objective and KPI covers which covered population(s).
- The baseline for Colorado and each indicated covered population(s).
- Short-term and long-term goals.
- The data source that will provide ongoing, updated measurements for the Digital Equity Team to gauge progress.

All of the data sources described in [Section 3.2](#) of this plan, as well as the data sources included in the KPI table below, were used to develop baselines for the KPIs described in [Section 2.3.1](#). The Digital Equity Team used a variety of data sources to create the baseline figures and goals, including feedback from digital skill learners, qualitative data from members of the covered populations, and survey data. For example, the baseline figure for the number of eligible individuals enrolled in ACP and Lifeline KPI came from the Education Superhighway ACP Dashboard and the Universal Service Administrative Company. The Digital Equity Team included a broader question on enrollment in internet subsidy programs in the 2023 Colorado Health Access Survey (CHAS), and in future years, will specify this to ACP and Lifeline so all three of these data sources can be used to measure progress on this KPI. All the baselines in this table were created using data from the sources identified in [Section 3.2](#) and in the data source column in the table below, as applicable. The covered populations of focus for each KPI were based on the baseline figures.



“Any success in the field must be community-centered and planned with the communities we serve.”

Objectives	Covered Population	KPI	Baseline	Short-term Target: 2 years	Long-term Target: 5 years	Data Source for Baseline and Measuring Progress
Increase locally-led digital inclusion programs.	All	Number of regional digital access plans	1	4	10	Digital Equity Coalitions
Increase locally-led digital inclusion programs.	All	Number of regional coalitions created	3	6	10	Digital Equity Coalitions
Increase locally-led digital inclusion programs.	All	Number of national and foundation partnerships created	0	5	10	Community Partnership Relationship Management software
All Coloradans can access affordable broadband service at home.	People with limited financial resources, rural	Number of eligible individuals and covered populations enrolled in ACP, Lifeline, and other internet subsidies	Eligible ACP - 28% Eligible Lifeline - 14%	Eligible ACP - 35% Eligible Lifeline - 25%	Eligible ACP - 60% Eligible Lifeline - 55%	Education Superhighway ACP Dashboard, Universal Service Administrative Company, 2025 and 2027 CHAS



Objectives	Covered Population	KPI	Baseline	Short-term Target: 2 years	Long-term Target: 5 years	Data Source for Baseline and Measuring Progress
All Coloradans can access affordable broad-band service at home.	Immigrants, old-er adults, individuals with dis-abilities, house-holds with limited financial resources, racial and ethnic minorities	Number of Coloradans and covered populations reporting internet is too expensive	Colorado - 49% Immigrants - 62% Older adults - 57% Individuals with disabilities - 57% Racial and ethnic minorities - 48%	Colorado - 46% Immigrants - 58% Older adults - 54% Individuals with disabilities - 54% Racial and ethnic minorities - 45%	Colorado - 40% Immigrants - 50% Older adults - 45% Individuals with disabilities - 45% Racial and ethnic minorities - 40%	2025 and 2027 CHAS
All Coloradans can access needed online resources.	Those with a language barrier, those with a disability	The number of partner-ships with state agencies implementing HB21-1110	0	2	5	The Digital Equity Team
All Coloradans have the skills and confidence to navigate digital tools and systems and the support to expand their skills.	All	Number of individuals by covered population reporting they were able to accomplish an online task following an appointment with a digital navigator	0	500	2000	Digital Navigator administered in-take and exit forms



Objectives	Covered Population	KPI	Baseline	Short-term Target: 2 years	Long-term Target: 5 years	Data Source for Baseline and Measuring Progress
All Coloradans have the skills and confidence to navigate digital tools and systems and the support to expand their skills.	All, individuals with a disability, older adults, incarcerated individuals	Percentage of identified covered populations that report feeling confident using the internet	Colorado - 90% Individuals with a disability - 75.2% Older adults - 74.5% Incarcerated individuals - 43.8	Colorado - 91% Individuals with a disability - 77% Older adults - 76% Incarcerated individuals - 45%	Colorado - 93% Individuals with a disability - 85% Older adults - 85% Incarcerated individuals - 50%	2025 and 2027 CHAS, future PRIN or DOC surveys
All Coloradans have the skills and confidence to navigate digital tools and systems and the support to expand their skills.	All, households with limited financial resources, individuals with a disability, older adults	Percentage of identified covered households that report using the internet for online banking	Colorado - 86.3% Individuals with a disability - 73.3% Older adults - 63.8% Households with limited financial resources - 77.1%	Colorado - 88% Individuals with a disability - 73.3% Older adults - 63.8% Households with limited financial resources - 77.1%	Colorado - 91% Individuals with a disability - 85% Older adults - 75% Households with limited financial resources - 85%	2025 and 2027 CHAS
All Coloradans can protect their online information and understand how to prevent security breaches.	Individuals with disabilities, older adults, individuals with a language barrier, Black, Latine, Asian, Middle Eastern/ North African	Percentage of identified covered populations confident they can keep themselves safe online	Colorado - 74.2% Individuals with disabilities - 56.5% Older adults - 65% Language barrier - 66% Latine - 51% Black - 53% Asian - 50% Middle Eastern/North African - 43%	Colorado - 76% Individuals with disabilities - 74% Older adults - 57% Language barrier - 66% Latine - 54% Black - 56% Asian - 53% Middle Eastern/North African - 46%	Colorado - 82% Individuals with disabilities - 85% Older adults - 70% Language barrier - 75% Latine - 63% Black - 65% Asian - 62% Middle Eastern/North African - 55%	2025 and 2027 CHAS



Objectives	Covered Population	KPI	Baseline	Short-term Target: 2 years	Long-term Target: 5 years	Data Source for Baseline and Measuring Progress
All Coloradans can access and afford web-enabled devices to accomplish what they need to do online.	All, individuals with limited English proficiency, immigrants, households with limited financial resources	Percentage of identified covered populations that report using smartphones only at home	Colorado - 15% Individuals with limited English proficiency - 29% Immigrants - 28% Households with limited financial resources - 27%	Colorado - 14% Individuals with limited English proficiency - 27% Immigrants - 27% Households with limited financial resources - 25%	Colorado - 12% Individuals with limited English proficiency - 25% Immigrants - 25% Households with limited financial resources - 23%	American Community Survey
All Coloradans can access and afford web-enabled devices to accomplish what they need to do online.	Households with limited financial resources, rural residents	Number of Colorado-based refurbishers providing low-cost devices to individuals	2	3	4	Community Partnership Relationship Management software
All Coloradans can access and afford web-enabled devices to accomplish what they need to do online.	All	Pounds of device donations secured with Community Reinvestment Act funds via financial institutions	18,000	25,000	40,000	Pounds of devices reported to Digital Equity Team by refurbishers
All Coloradans can access and afford web-enabled devices to accomplish what they need to do online.	All	Net Promoter Score of above 50 for refurbishers	None			Surveys of individuals who received a refurbished device

3. Current State of Digital Access

3.1 Asset Inventory

Colorado communities have been working to bridge the digital divide for longer than Digital Equity Act funding has been available. The state's digital inclusion work happens in formal and informal ways. Analyzing state and local efforts informed the Digital Equity Team of the key partners and promising practices in Colorado. In its 2023 inventory of the various assets in Colorado, the Digital Equity Team collected information about community-based organizations, businesses, nonprofits, internet service providers, and local governments through ongoing outreach with stakeholders, community events, informational sessions, and utilization of the DEEM tool. The team's goal was to understand the organizations across the state that promote broadband accessibility and affordability, digital skill development and support, and access to web-enabled devices or who want to in the future.



**DEEM
TOOL**

Digital Equity Ecosystem Mapping Tool (DEEM)

To collect information on the organizations providing services or programs that promote broadband accessibility and affordability, digital skill development and support, and access to web-enabled devices or those who want to in the future.



Uncovering stakeholders who are — or are interested in — digital inclusion work will be ongoing. These organizations are the key to successfully implementing Colorado’s Digital Access Plan.

- Members of the Digital Equity Team were inspired by conversations with library staff in Durango, where they discovered coalitions addressing food insecurity, health outcomes, and more in Southwest Colorado.
- In the San Luis Valley, nonprofits and local governments began working together years ago to improve connectivity and broadband adoption.
- Panelists, presenters, and attendees at Rural Philanthropy Days in Otero County expressed immense pride in how organizations work together in Southeast Colorado to address pressing issues like addiction and housing instability.
- Pueblo applied for and was awarded multiple grants recently, including a \$3 million Connecting Minority Communities grant. The grant will support the creation of Adelante Connect, a digital equity pilot based out of Colorado State University-Pueblo.

The tenacity and resilience of Colorado communities to solve problems is a guiding force for the Digital Equity Team and has informed the strategies chosen to improve digital equity in this plan.

Digital Equity Ecosystem Mapping Tool (DEEM)

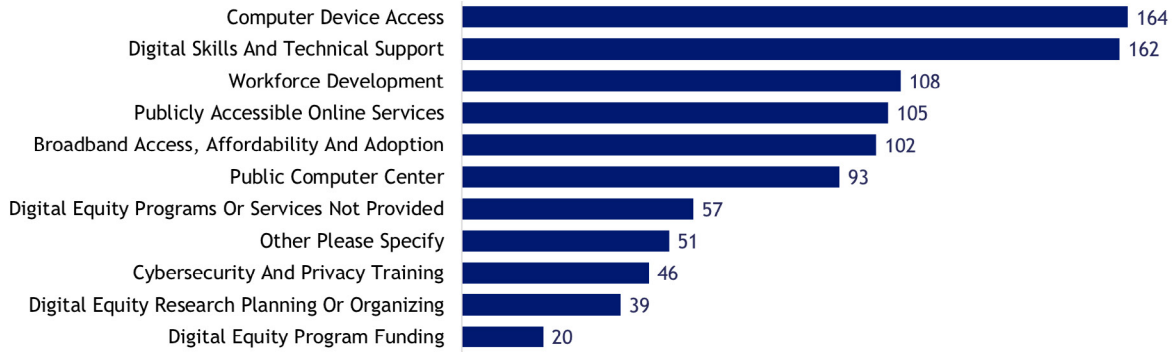
This was a statewide survey effort initiated by the Digital Equity Team to collect information on the organizations providing services or programs that promote broadband accessibility and affordability, digital skill development and support, and access to web-enabled devices or those who want to in the future. The insights gained from this information, coupled with the findings from stakeholder engagement and collaboration, have been instrumental in providing a snapshot of Colorado’s progress in addressing digital access.

This comprehensive understanding allowed the Digital Equity Team to catalog existing digital equity programs and services while spotlighting model initiatives that can serve as inspirations for replication throughout the state. The online survey, open from July to September 2023, received 285 valid responses and achieved an 84% completion rate. The DEEM survey received responses from organizations from 52 of Colorado’s 64 counties. The Digital Equity Team will continue to identify governments, nonprofits, and businesses to participate in building a digital equity ecosystem, ultimately expanding digital inclusion work across the state.

Surveyed organizations provide a broad array of digital access programs.

Computer device access and digital skills and technical support programs are the most widely offered.

Programs Offered by Organizations*



**Multiple select question, respondents can choose more than one answer choice to this question in the survey.*

23 organizations offering workforce development programs responded to the DEEM Survey.

Many of these organizations promote digital access through digital skills training for career development and job placement.

Founded in 2016, Teach by Tech serves Colorado’s immigrant and refugee population, seeking to increase the accessibility of basic education, workforce training, and financial literacy to newcomers and set individuals and families on a path to self-sufficiency. Their curriculum, consisting of 16 hours of live training, promotes English language acquisition and digital literacy proficiency, and online safety.





Over half of respondents in each organization type promote the Affordable Connectivity Program (ACP).

60% of government agency respondents provide or promote other home internet subsidies.

	Promote ACP Enrollment	Provides/Promotes Home Internet Subsidies
Internet Service Provider	83%	N/A
Government Agency	73%	60%
Non-Profit or Community-Based Org	70%	42%
Library or School/Higher Ed	54%	13%

Nearly 60 libraries, non-profits, government agencies and ISPs reported that they promote ACP and/or provide ACP enrollment services.

Many of these organizations promote digital access through digital skills training for career development and job placement.

Gary Community Ventures, in partnership with over 80 community organizations, built and maintains myfriendben.org, a universal benefits screener for Colorado. MyFriendBen is a mobile-first assessment tool that helps families/individuals identify the benefits to which they are entitled, including their estimated cash value and time for receipt.

In less than nine minutes, the platform generates an individualized eligibility report across over 40 major programs including ACP and Lifeline. The tool provides both online and human-assisted application pathways for every program.

Know what you're owed

In less than 10 minutes, know the dollar value of the benefits you're entitled to and the time it takes to enroll.

GET STARTED



The biggest barrier organizations cited to expanding their digital access programming was a need for more funding, followed by a lack of staff or organizational capacity. Many organizations completing the DEEM tool or participating in Digital Equity Committee meetings have been working to reduce barriers to digital equity for years. They're aware of the necessity of creating a statewide Digital Access Plan. Unfortunately, many of these organizations reported experiencing barriers in offering solutions to the residents they serve. Digital Equity Working Group members and the Digital Equity Team discussed the coalition structure and agreed it has the potential to sustain digital inclusion efforts statewide for the long term.

The full results of the DEEM survey are available in [Appendix B](#).

“Digital inequities flow along socio-economic lines and are present even in relatively affluent and ‘connected’ urban and suburban areas. The disparity within a county can be greater than between counties. Because the impact is not confined to municipal boundaries it is often the community organizations, resource centers, churches, and schools that notice the need and advocate for families. The seed money and plan for the Bridging Digital Divides was only possible when several community organizations joined together to create a new program that no one entity had the bandwidth to take on.”

Lara Van Matre, Bridging Digital Divides Digital Equity Coordinator

Statewide Digital Equity Assets

Colorado has many organizations and programs that benefit from the goal of digital inclusion for all Coloradans at regional and statewide levels. At a state level, the Office of the Future of Work is in the Colorado Department of Labor and Employment and has been a leader in digital inclusion work in Colorado. The Broadband Advisory Board nominated this team to lead the Subcommittee on Digital Literacy and Inclusion (SDLI) from early 2021 to 2022. The SDLI was charged with discussing, researching, and analyzing digital skills and inclusion and providing updates to the Broadband Advisory Board. Three working groups focused on identifying state and federal policy solutions for increasing digital equity, developing a baseline of digital skill and inclusion levels to inform future goals, and researching and identifying successful practices to adapt to Colorado's digital equity efforts.



This work resulted in several projects that created synergy around digital inclusion in the state, including:

- Publishing the 2021 Digital Literacy and Inclusion Report.
- Adding digital skills and inclusion resources to the Mile High United Way 2-1-1.
- Creating the Digital Competency Framework, which involved mapping specific competencies at the individual and systems levels.
- Leading the implementation of SB 22-140, which funded the Digital Navigator Program.

The **Digital Navigator Pilot Program** launched in March 2023 with \$1.7 million in funding from the state legislation, SB 22-140. For the first phase of the pilot program, OFW partnered with Serve Colorado/AmeriCorps to match the funds and administer the program. Comcast promised \$600,000 in kind and cash. The grantees are The Learning Source, a large adult education and training non-profit, and a municipal library, Loveland Public Library. Each grantee has partnered with other organizations that host the digital navigators, who are AmeriCorps members. The programs launched in Fall 2023 with nearly 30 members serving at [23 host sites](#) in Arapahoe, Broomfield, Chaffee, Denver, Boulder, Weld, Larimer, Pueblo, Jefferson, and Pitkin counties.

The digital navigators will assess community members' access to high-speed, affordable internet service and equipment at home and their ability to use technology to meet their needs and achieve their goals. The navigators will use this information to create digital inclusion goals for community members and work alongside them to reach those goals. Digital navigators will evaluate progress at specified periods and report data about the community members served, services provided, and goals achieved by OFW.

In the second phase of the pilot program, OFW will hire 15 temporary employees as digital navigators and place them with state agencies that provide direct services to the covered populations. Most of these navigators will offer services in rural areas because the need is great, and few rural areas are served by the pilot program's first phase.

Digital navigators will participate in a discussion list or listserv and a monthly virtual community of practice meeting to share successes, challenges, and resources. Anyone in Colorado providing digital navigation services or their supporting staff is welcome to participate on the discussion list and in the community. The community of practice will continue indefinitely and be incorporated into Colorado's Digital Access Plan.

State-level Assets

Several nonprofit organizations, such as PCs for People and human-i-t, offer low-cost, high-speed internet solutions, refurbish devices at affordable prices, and provide technical support to eligible residents. Other agencies, like Community Computer Connection (C3), make computers and equipment available to schools, nonprofits, and communities with limited financial resources.



ASSET	DESCRIPTION	COVERED POPULATION
<u>Mile High United Way 2-1-1 Project</u>	<p>In 2021, the OFW partnered with Mile High United Way 2-1-1 to ensure its system included accurate listings of organizations that provide technology and internet access and skills training. By the project's end, 103 organizations offering 195 services at over 250 locations were added. Including these additional resources and making them searchable by Mile High United Way 211 Help Center Staff increased the support navigators could offer callers.</p>	All
<u>Digital Equity Framework</u>	<p>The framework, co-created by the OFW and the Colorado Center on Law and Policy, maps competencies at the individual and systems levels and guides policy recommendations for the SDLI and Skills2Compete Coalition. The competency framework was developed to ensure Coloradans had connectivity and infrastructure, equipment, and digital skills for daily life, education, training, and work.</p>	All
<u>Digital Literacy and Inclusion Report</u>	<p>OFW published the 2021 Digital Literacy and Inclusion Report, which envisioned a future where all Colorado workers could access education and skill training connected to meaningful employment. The OFW, Colorado Center on Law and Policy, and its Skills2Compete Coalition collaborated on the report, developing a competency framework and policy recommendations for digital literacy and inclusion.</p>	All
<u>The Digital Skills Library</u>	<p>An open repository of free learning resources designed to help all adult learners develop the digital skills needed to achieve their personal, civic, educational, and career goals.</p>	All



ASSET	DESCRIPTION	COVERED POPULATION
Office of Information Technology - Empathy Lab	<p>A virtual empathy/accessibility awareness lab for the Office of Information Technology’s (OIT) Technology Accessibility Program (TAP) to meet people where they are. The Empathy Lab is a special project funded via grants awarded through the Statewide Internet Portal Authority’s (SIPA) Innovation Fund. The lab’s knowledge building will help make Colorado state services more accessible and equitable for residents. State agencies will understand the benefits and need for accessible, equitable, and inclusive digital technology within their divisions. This will lead to the creation of services, websites, applications, communications, and more that work for all Coloradans. The Empathy Lab Community Steering Committee will collaborate with internal and external groups, create data collections, dashboard visualizations, and a toolkit, and develop experiential learning demonstrations.</p>	All
Free Wi-Fi Access from Colorado Public Libraries	<p>99% of Colorado public libraries offer free Wi-Fi to their community members, even if the building is closed. This map provides the location for public Wi-Fi in Colorado libraries and what type of access it is (for example, access from the parking lot versus in the building only).</p>	All
Remote Work Initiative	<p>The Colorado Workforce Development Council, Colorado Department of Labor and Employment, Office of Economic Development and International Trade, and the Economic Development Council of Colorado have teamed up to launch the Colorado Remote Work Initiative. This multi-tiered initiative will ensure Coloradans are equipped to compete in remote work environments by strengthening Colorado’s ability to attract jobs, secure talent, and retain a location-neutral workforce. The Remote Work Initiative website serves as a hub for remote work information across the state and will highlight innovative approaches and best practices and share resources for individuals, employers, and communities to adopt remote work strategies.</p>	All



ASSET	DESCRIPTION	COVERED POPULATION
Senate Bill 23-183: Local Government Provision of Communications Services	On May 1, 2023, Gov. Jared Polis signed Senate Bill 23-183, removing the biggest barrier to providing all Coloradans with access to high-speed broadband. The bill eliminates the 2005 rule that required local governments to obtain voter approval for broadband services. SB23-183 gives local governments the authority to provide broadband service, either on their own or by partnering with industry service providers, without holding a local election.	All

See [Appendix B](#) for the complete Asset Inventory.

3.1.1 Existing Digital Equity Plans

Although Colorado cities and regions across the state strive to create equitable opportunities for their residents, awareness is a barrier to digital equity. The Digital Equity Team identified only one published plan to improve Colorado’s digital equity. The [Denver Digital Equity Plan](#) (June 2023) outlines the following goals:

- Create a governance structure for digital equity programming to advance digital equity in Denver.
- Develop an internal database of projects and partnerships to provide resources and support to its stakeholders.
- Create a community resource website that contains digital equity resources and ensures resources are accessible.
- Expand successful digital equity programs, innovate, scale new programs, and seek promising practices to advance digital equity.
- Integrate digital equity resources into existing assistance programs in Denver to expand digital equity.

The Digital Access Plan complements the Denver Digital Equity Plan. It supports its goals, particularly those related to creating community resources and testing new programs through [Strategy 1: Creating Colorado’s digital equity ecosystem](#) and [Strategy 4: Promoting initiatives and programs that build digital skills](#). The Denver Digital Equity Coalition will be a crucial partner in designing and implementing those strategies.

The Southern Ute Indian Tribe and Ute Mountain Ute Tribe Reservations are located within the state of Colorado. The Colorado Broadband Office and Digital Equity Manager attended Tribal consultations at both reservations in August 2023 to learn each Tribe’s priorities and plans around broadband infrastructure and digital equity. Currently, neither Tribe has written digital equity



plans. At Tribal consultation with the Ute Mountain Ute Tribe, the Digital Equity Team learned the Tribe prioritizes broadband infrastructure as it is severely lacking for their members residing on Tribal Land. The Digital Equity Team will continue to work with both Tribes to cultivate relationships and maintain open communication to support the Tribes in creating or implementing their digital equity goals as they are established.

In the first year of Digital Equity Act Capacity Funding, the Digital Equity Team will work with the Denver Digital Equity Coalition, the Southern Ute Indian Tribe, and the Ute Mountain Ute Tribe to discuss how their work will be supported by and incorporated into the Colorado Digital Access Plan. The Digital Equity Team will create guidelines and documents that streamline and align all of Colorado's digital inclusion coalitions. Conversations with the Denver Digital Equity Coalition, the San Luis Valley Broadband Coordination Office, and the Pueblo Opportunity Project's Alliance will be important to that work. The Digital Equity Team recognizes the digital and data sovereignty of Colorado's Indian Tribes. The Team will follow Tribal leadership's guidance on incorporating Tribal digital inclusion plans into Colorado's plan.

Regional Digital Inclusion Assets

While the Denver Digital Equity Plan is the only published plan, there are many formal and informal efforts to meet community digital access needs. Regional efforts to close the digital divide include:

ASSET	DESCRIPTION	COVERED POPULATION
Digital Equity Grant Program	The Office of Innovation, within the City of Colorado Springs, awarded almost \$800,000 in digital equity grants to seven nonprofits in Colorado Springs to help bridge the digital divide in the community. This included affordable, reliable, broad access to connected devices, digital skills training, and technical support.	Older adults, households with limited financial resources
San Luis Valley Broadband Coordination Office (SLVBCO)	The mission of the San Luis Valley BCO is to create accessible, affordable, and reliable internet connectivity for the communities of the San Luis Valley through infrastructure development, digital literacy education, community engagement and outreach, and a coordinated effort to bring equitable access to connectivity to all within the SLV.	Rural individuals



ASSET	DESCRIPTION	COVERED POPULATION
Pueblo Opportunity Project's "Alliance:" City of Pueblo and Pueblo's Future is Better Together	Pueblo Opportunity Project's Broadband Digital Equity Navigation and Literacy System focus is to promote digital equity, literacy, and inclusion by ensuring Pueblo County residents, their families and local organizations receive on-demand tech support and relevant information to secure internet access and devices. Additionally, it supports foundational digital learning skills necessary to be participants in today's knowledge economy. This system of support will identify and address broadband equity and literacy gaps and leverage untapped resources for urgent broadband access. Digital navigators will serve as critical community experts to help with unserved Pueblo Counties and underserved residents needing improved digital literacy skills and knowledge. Members of this Alliance include the City of Pueblo (Pueblo Broadband AHORA/FCC), Pueblo Workforce Center, Colorado State University Pueblo (Adelante Connect/NTIA CMC), Latino Chamber of Commerce, Pueblo's Future is Better Together (a nine-member collaborative), Pueblo City-County Library District, Avondale Community Coalition (an eight-member collaborative), Unite Us, United Way, and others.	Veterans, racial or ethnic minorities, older adults, households with limited financial resources, individuals with limited English language proficiency, rural residents

Local control and celebrating regional cultures are well-known values in Colorado, and, as such, different regions and counties will have their priorities and concerns around digital access. Coalition building is slow and time-consuming work, and communities may need support in capacity building and funding to formalize digital access goals. Part of implementing the Colorado Digital Access Plan is supporting regions in establishing and maintaining digital inclusion coalitions. These digital inclusion coalitions will receive funding to create regionally-specific digital access plans in alignment with the Colorado Digital Access Plan. Upon completion, they will receive funding to implement their plans.

3.1.2 Broadband Adoption

According to the 2021 U.S. Census Bureau American Community Survey Five-Year Estimate, broadband internet subscriptions serve nearly 91% of Colorado households. However, over 4% of Colorado households lack access to a computer at home. Over 191,000 locations in Colorado lack adequate access to high-speed internet, classified as 100/20 megabits Mbps. Addressing this issue is crucial to ensure all residents have equal opportunities to thrive in an increasingly connected world. The

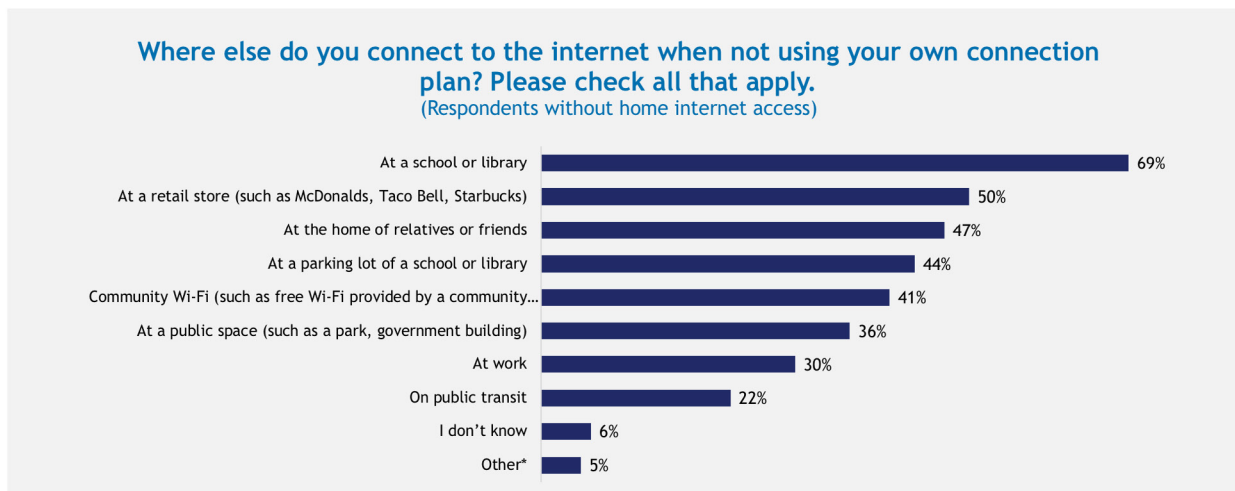


Colorado Broadband Office, in the BEAD Five-Year Action Plan identified specific assets to increase broadband availability.^{xxi}

These assets include:

- An internal mapping team responsible for identifying connectivity needs of different types of locations across the state to support strategic and high-impact investments in infrastructure.
- Strategic partnerships with partners, such as the Department of Local Affairs and the Department of Transportation, on facilitating broadband deployment across the state.
- The Broadband Deployment Fund is dedicated to increasing last-mile connectivity to underserved and unserved areas.
- Community Anchor Institutions (CAIs) act as gateways to widespread broadband connectivity. They offer valuable services, such as digital literacy training, educating the public about government programs, and providing affordable computer access.

69% of online survey respondents without home internet access connect to the internet at school or in a library.



* Includes airports, churches, hospitals/clinics, YMCA

Additionally, businesses and residents may access broadband through Colorado's public Wi-Fi networks and access points.

- The Colorado State Library actively monitors public Wi-Fi access points provided by libraries. The Digital Equity Team recognizes these public libraries as essential community anchor institutions. During the COVID-19 pandemic Safer at Home policies, public libraries were vital in enabling community members to access the internet for crucial tasks, like online schoolwork or job applications, even when physical buildings were closed to the public. Today, public libraries remain essential locations for free broadband access.
- The DEEM survey found 80 organizations, including libraries, governments, and nonprofits, provide free wireless local-area network (WLAN) or free Wi-Fi.



- Comcast, nonprofit partners, and city leaders have created nearly 100 Lift Zones in Colorado, offering complimentary internet connectivity and free educational and digital skills content. According to Comcast, 40% of Life Zone users report they would not have any internet access without the program.

80 organizations (including libraries, governments, and non-profits) reported that they provide free WLAN or Wi-Fi for public use.

Public hotspots hold an important place in broadband delivery to end users. Libraries are important sites where Coloradans access free Wi-Fi.

Comcast, together with nonprofit partners and city leaders, has created nearly 100 Lift Zones in Colorado, offering free internet connectivity, along with free educational and digital skills content. According to Comcast, 40% of Lift Zone users report that they would not have had internet access without the program.



"Lift Zone has allowed several of our young artists to participate in online schooling and is a key function of our digital art lab. It's allowing us to provide Colorado with access to the tools needed, for everyone to connect, including those with disabilities."
- Damon McLeese, Executive Director, Access Gallery

3.1.3 Broadband Affordability

In Colorado, secondary to a lack of infrastructure, affordability is the most significant reason residents don't adopt the internet. However, there are several assets that can improve the affordability of home internet subscriptions.

The Affordable Connectivity Program (ACP) is a federal benefit. The program offers a discount of up to \$30 per month on home internet service and provides up to \$75 per month for households on qualifying Tribal lands. Eligible households can receive a one-time discount of up to \$100 to purchase a laptop, desktop computer, or tablet from participating providers. Residents must contribute more than \$10, but less than \$50, toward the price. Ninety-seven providers are participating in this program in Colorado; however, only about 28% of eligible households are participating.

Another related asset is the **Benton Institute Affordable Connectivity Program Enrollment Performance Tool**.^{xxii} This dashboard shows the actual level of ACP enrollment in a zip code area, the predicted level of ACP enrollment, and how well the area performs compared to the norm. The difference between predicted and actual enrollment is an ACP performance measure. The Digital Equity Team can leverage this information to target outreach and engagement in the lowest-performing areas.



USAC’s Lifeline Program is a federal program that offers a monthly benefit of up to \$9.25 toward phone or internet services for eligible subscribers. The benefit is up to \$34.25 for those living on Tribal lands. Consumers can qualify for the Lifeline benefit if their income is 135% or less than the federal poverty guidelines. They can also qualify if they participate in SNAP, Medicaid, or other federal aid programs.

The Internet Essentials Program from Comcast is offered by Comcast under the Xfinity brand for home internet at \$9.95 per month for up to 50 Mbps.^{xxiii} The program includes free Wi-Fi hotspots and internet training. Individuals qualify for the Internet Essentials program if they participate in federal assistance programs, haven’t had Xfinity Internet within the last 90 days unless they are enrolled in ACP, and have no outstanding debt on any Comcast account in the previous year (unless they are enrolled in ACP). Families who qualify can sign up for the Internet Essentials Plus program for up to 100 Mbps for \$29.95 per month if they need more speed. Internet Essentials or Internet Essentials Plus customers can purchase a new Dell laptop or Chromebook for \$149.99.

3.1.4 Digital Inclusion Assets by Covered Population

The covered populations identified in the Digital Equity Notice of Funding Opportunity include:

Older adults	NTIA refers to these individuals as aging individuals – an individual who is 60 years of age or older.
Incarcerated individuals and individuals that have been justice involved	Individuals in facilities other than federal correctional facilities. The Digital Access Plan also includes information about individuals who have been “justice involved.” This information is not intended to replace the NTIA requirement for information specifically about incarcerated individuals, but is supplementary.
Households with limited financial resources	NTIA refers to these households as “covered” households – households with an income of 150% or less of the federal poverty level.
Individuals with a language barrier	This includes English learners: individuals who speak a language other than English at home and speak English less than “very well;” and people who have low levels of literacy: individuals below literacy proficiency.
Individuals with disabilities	A person who has a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or record of such an impairment, or a person who is perceived by others as having such an impairment.
Racial and ethnic minorities	Individuals who identify as a race other than white alone.



Rural inhabitants	Individuals who reside in a rural area, meaning in a place with a population density of less than 100 persons per square mile or in a county smaller than 225 square miles.
Veterans	A person who served in the armed forces in the past but is no longer on active duty.

Because of immigrants' unique barriers, the Digital Equity Team has gathered data and included immigrants as a covered population. Assets and needs for Tribal members can be found in sections addressing assets and needs for racial and ethnic minorities. Similarly, information about individuals experiencing homelessness includes assets and needs for households and individuals with limited financial resources.

Households with Limited Financial Resources

The Digital Equity Act defines households with low incomes as those earning below 150% of the Federal Poverty Level. In 2023, 150% of the Federal Poverty Level is an income of \$41,625 for a family of four.^{xxiv} Approximately 9% of Coloradans are considered low income, while the national average is 12%. According to the American Communities Survey (2021), 16% of Colorado households are eligible for the Affordable Connectivity Program.

Assets	Description
<u>Center for Inclusive Design and Engineering (CIDE) Digital Literacy for Medicaid Members</u>	The Center for Inclusive Design and Engineering (CIDE) is pioneering a digital literacy curriculum to empower individuals receiving Medicaid services. It focuses on enhancing access to online health care resources and promotes digital equity. The customized, person-first curriculum is based on a comprehensive analysis of the literature and extensive stakeholder engagement. It's tailored to each member's unique needs and abilities. The pace of learning is set by an actively involved digital literacy coach. A key tenet of the curriculum is the idea that encouraging self-determination leads to people being able to advocate for their health needs in online spaces. The curriculum and its companion guide for digital literacy coaches are being piloted with a group of Medicaid members and providers across the state of Colorado.
<u>PCs for People</u>	PCs for People is a national nonprofit social enterprise working to get low-cost quality computers and internet into the homes of individuals, families, and nonprofits with limited financial resources. By recycling and then refurbishing computers, PCs for People provides a valuable service to businesses, families, and the planet by keeping computers out of landfills and repurposing them to advance digital inclusion.



Assets	Description
Public Libraries	Survey respondents) are the most popular locations for connecting to the internet while not at home. There were 72 responses from libraries in Colorado’s Digital Equity Ecosystem Mapping survey, most of which provide free wireless internet, laptop or Chromebook checkout, and sometimes wireless hotspots. Additionally, public libraries offer spaces to use or charge devices without a fee. Thirteen of the 23 locations providing digital navigation services in the Digital Navigator Pilot Program are libraries.
human-i-t	A nonprofit that provides low-cost devices, low-cost internet, digital training, and technical support.

Individuals with Disabilities

The Americans with Disabilities Act defines a person with a disability as someone who has a physical or mental impairment that substantially limits one or more of major life activities. However, it’s important to recognize the diversity of disability:^{xxv}

- Disabilities can be visible or invisible.
- A disability can be something a person is born with or acquired at any point in life.
- Disability includes but is not limited to, mobility, mental health disabilities, chronic illnesses, intellectual disabilities, and hearing and vision disabilities.

Twenty-three percent of Coloradans 18 and older self-report as having a disability. In Southeastern Colorado, individuals with disabilities make up a higher proportion of the population. Individuals with disabilities are not a homogenous group, and two people with the same disability may have very different needs and abilities.

Additionally, data from the CDER survey showed 41% of respondents who identify as having a disability also indicated they are older adults; 19% are also veterans; 40% identify as racial or ethnic minorities; and 39% report living in households with limited financial resources.



ASSETS	DESCRIPTION
HB21-1110 Colorado Laws For Persons With Disabilities	<p>HB21-1110 was passed in 2021 through the Colorado legislature and strengthened Colorado protections against discrimination for individuals with disabilities, particularly related to accessibility to government information technology. It requires all Colorado governmental entities to develop accessibility plans by July 2022 and fully comply with accessibility standards by June 30, 2024. This relates to all technology, hardware, and software that is both public-facing and internal-facing and includes websites, kiosks, digital signage, documents, video, audio, and third-party tools. Every executive branch state agency has developed an accessibility plan to update its technology to comply with this legislation.</p>
Aira	<p>The State of Colorado partnered with Aira to connect blind and low-vision Coloradans with highly trained visual interpreters to remove barriers when navigating state-operated buildings and digital services for free.</p>
Assistive Technology Act Program of Colorado	<p>The Center for Inclusive Design and Engineering (CIDE) team works with stakeholders throughout Colorado to provide Assistive Technology information and assistance to individuals with disabilities, older adults, and their care providers. This includes one-on-one assessments for individuals with disabilities, device demonstration, selecting devices, and more.</p>
Blind Institute of Technology	<p>BIT is a global nonprofit staffing and recruiting agency based in Denver, Colorado, that is exclusively dedicated to professionals with disabilities. It offers courses in Salesforce Administration and Digital Accessibility Analysis and has two national-level registered apprenticeship programs for the blind and visually impaired.</p>
Colorado State-wide Independent Living Council	<p>Every state has a Statewide Independent Living Council or “SILC.” Its primary function is to advance independent living through the development and implementation of a three-year State Plan for Independent Living. The Colorado SILC partners with Colorado’s network of centers for independent living to ensure every person with a disability in Colorado who wants to live independently has the resources to do so. It also:</p> <ul style="list-style-type: none"> ● Promotes systemic reform to remove barriers to independent living. ● Works closely with the Colorado Division of Vocational Rehabilitation (DVR) to ensure people with disabilities receive the training, support services, and assistive technology they need to survive and thrive in the community. ● Conducts research to inform policymakers and the public.



Racial and Ethnic Minorities

First, it is extraordinarily important to point out that while this plan references racial and ethnic minorities in line with the NTIA’s definition, there are a multitude of distinct individuals, cultures, and communities represented in this group. The Digital Equity Team is committed to disaggregating racial and ethnic data for more groups in future research and allowing individuals to self-identify as aligning with one or more races or ethnicities. The team recognizes the experiences of a Black person raised in the U.S. and working seasonally in Vail are very different from a mother who recently arrived in Aurora as a refugee from Somalia, for example. Colorado is home to many Indigenous Americans who live in cities, rural and mountain regions, and on Tribal lands. Latine and Hispanic-identifying people, some Colorado natives, and some born in Ecuador, Mexico, Argentina, or Nicaragua, make up nearly a quarter of Colorado’s population.^{xxvi}

For this plan, racial and ethnic minorities refer to respondents completing the Colorado Digital Equity Research Program online survey who selected one or more of the following race or ethnicity categories in the Preliminary Demographic Information section:

- American Indian/Alaska Native.
- Asian.
- Black or African American.
- Hispanic/Latine or of Spanish origin.
- Middle Eastern or North African.
- Native Hawaiian or Other Pacific Islander.
- Other.

Additionally, respondents who selected “I am an immigrant living in Colorado” in Colorado’s online survey are considered racial and ethnic minorities for the purposes of this plan, and are identified in the plan as “immigrants.” While the Digital Equity Team understands that not all immigrants identify as racial or ethnic minorities, 2022 Migration Policy Institute data indicates that about 50% of immigrants living in Colorado were born in Latin America, 23% were born in Asia, and nearly 9% were born in Africa, accounting for approximately 82% of immigrants in the state. For this reason, the category “immigrants” will be considered a subcategory of “racial and ethnic minorities” throughout the Colorado Digital Access Plan. The plan contains data specific to this subcategory, and like the race and ethnicity categories listed above, data regarding immigrants will be considered data on individuals identifying as racial and ethnic minorities.

For the paper survey, the same definition describes respondents who selected “I am a member of a racial or ethnic minority group” in the Preliminary Demographic Information section.



ASSET	DESCRIPTION
<u>Black Tech Denver</u>	<p>This chapter of the global organization Black Tech Futures brings underrepresented (Black, People of Color, LGBTQ+, neurodiverse, etc.) communities in tech together in the Denver tech industry.</p>
<u>Sister Carmen Community Center/ Bridging Digital Divides</u>	<p>Offers digital skills classes and other services in Broomfield and Boulder counties and is highly engaged in Colorado’s digital inclusion work.</p>
<u>STREAM</u> (Science, Technology, Robotics, Engineering, Arts and Media)	<p>STREAM™ (Science, Technology, Robotics, Engineering, Arts and Media) is an innovative STEM-based technology training program. It’s housed at the Historical Five Points Area (Denver) Cleo Parker Robinson Dance Theatre, and it stands at the forefront of equitable digital education. This transformative initiative transcends traditional STEM boundaries by integrating arts and media with digital skills training. STREAM™ imparts technical skills and cultivates an inclusive space, addressing the digital divide prevalent in underserved communities of color.</p>
<u>Adelante Connect</u>	<p>Funded by Connecting Minority Communities, Adelante Connect seeks to improve digital equity, inclusion, and literacy. It does so while building broadband awareness and providing broadband solutions to in-need students, families, and organizations within the Pueblo anchor communities.</p>
<u>Fort Lewis College Pilot</u>	<p>This pilot with Fort Lewis College (FLC) and the Office of Future of Work designs innovative programming that provides college students with the digital literacy competencies needed for workplace success. Central to this project is an emphasis on creating programming to provide digital literacy inclusion to an increasingly diverse workforce. FLC’s enrolled population includes 58% students of color, with a special focus on its 45% Native American/American Indian students representing over 180 Tribal nations and Alaskan Native Villages. FLC’s enrolled population also includes over 30% first-generation students and more than 30% Pell Grant-eligible students.</p>



Veterans

Nearly 350,000 veterans live in Colorado, making up about 7% of the population, the 17th highest number of veterans in the country. The highest concentration of veterans lives in and around El Paso County, home to several military bases. Veterans are more likely to live in rural counties of Colorado, such as Sedgwick, Rio Blanco, Jackson, and Dolores.^{xxvii} Every county in Colorado has a Veterans Service Office that offers free assistance to veterans to file their claims with the Federal Veterans Affairs (VA). For veterans who responded to the Colorado Digital Equity Research survey:

- 66% also identified as being older adults.
- 35% identified as also being racial or ethnic minorities.
- 27% also identified as being disabled.

Veterans uniquely have a high degree of awareness of cybersecurity measures and safe online practices. Veterans report more than double the percentage, 78 percent, responding they “strongly agree” there are concerns with information collected about them online as compared to 31.5 percent of all Coloradans who responded they “strongly agree” with that statement. The same is true with concerns about cybercrime and threats to cybersecurity. This concern about cybersecurity came through in listening sessions, where veterans discussed being wary of using the internet in public spaces, including the library, particularly for any activity involving their personal information or credit card. Even those with a background in computer science expressed a desire to improve their understanding of protecting themselves online. This awareness and interest in improving their skills may lead to safer online activities and less risk of cyber threats for this group than others.

After reviewing the Digital Equity Ecosystem Mapping survey results, the Digital Equity Team could only identify limited veterans’ programs specifically offering digital skills training. While veterans can access services intended for older adults, racial or ethnic minorities, or people with disabilities, for those individuals who primarily identify as being veterans, camaraderie and a shared understanding of specific language and experience may be beneficial in group-learning environments exclusive to veterans. Ensuring veterans can access digital skills training and identifying any additional resources will be incorporated into the Digital Equity Team’s ongoing work.

ASSETS	DESCRIPTION
Digital Divide Consult for Veterans	Through the Digital Divide Consult process, United States Department of Veterans Affairs (VA) providers can refer veterans to a VA social worker, who can determine their eligibility for programs to help them get the internet service or technology needed for VA telehealth.
Veterans Upward Bound Colorado	Veterans Upward Bound provides free reskilling and upskilling classes on campus and online, as well as free computers for veterans who qualify. It’s located at Colorado State University - Pueblo, Pikes Peak State College, and Pueblo Community College.



Rural Households

There are multiple definitions of what is considered rural or frontier in Colorado, and in the U.S. Typically, a rural area is regarded as having an urban core of fewer than 50,000 people.^{xxviii} Frontier areas are sparsely populated rural areas isolated from population centers and services.^{xxix} In the past, frontier areas were defined as having fewer than six people per square mile. Recent definitions also calculate distance as part of a formula used to identify rural areas.^{xxx} According to a 2022 report from the State Office of Rural Health, 12.2% or 722,419 of Colorado’s population reside in rural areas. On a county basis, 47 of 64 Colorado counties, comprising 77% of the state’s landmass in square miles, are considered rural or frontier.

The Digital Equity Team can foster digital inclusion in rural areas by focusing on:

- Local partnerships.
- Targeted training programs.
- Infrastructure improvements.
- Transparency.
- Community engagement.

ASSETS	DESCRIPTION
<p>Digital Navigator Pilot Program</p>	<p>The Colorado legislature provided \$1.7 million with the passage of SB 22-140. In phase one of the pilot, CDLE partnered with Serve Colorado in the lieutenant governor’s office. Serve Colorado also contributed funding. In May 2023, The Learning Source and Loveland Public Library were awarded a combined total of nearly \$1.5 million for a year of service from 30 digital navigator AmeriCorps members at 23 host sites. See locations here, which include four rural locations. The two grantees partnered with 18 other organizations to extend the reach of the digital navigator services. Phase two of this pilot program will start in January 2024. CDLE will use nearly \$1 million of the remaining funds to hire 15-20 additional navigators to work at 14 rural workforce center locations and potentially at Colorado’s four refugee resettlement agencies.</p>
<p>Connect to Health @Your Library Pilot</p>	<p>This pilot was a partnership between the Office of eHealth Innovation and the Colorado State Library to fund 23 rural Colorado libraries to increase access to telehealth for their community. One of the strategies is the implementation of a “tele-hub” – a private space within the library patrons can reserve to connect virtually with a health care provider or participate in virtual wellness services. These spaces will have the equipment and internet connectivity needed to support virtual services, and library staff can assist patrons with technology.</p>
<p>Colorado Trust</p>	<p>Colorado Trust is providing funding to support a planning period for expanding and bringing broadband access to the San Luis Valley and has helped fund device access in rural areas.</p>



Individuals with a Language Barrier

Individuals with a language barrier include survey respondents who selected “I am an English language learner and/or I have difficulty understanding English” in the Preliminary Demographic Information section. Language literacy is a spectrum. It is not binary – literate or not – and this is true for first- and second-language literacy. According to the U.S. Census, over 300,000 individuals, or 5.5% of the population, speak English less than “very well.” Sixteen percent of Coloradans over the age of 15 are considered “illiterate.”^{xxxix}

However, Digital Equity Committee stakeholders identified the value of in-person resources for Coloradans with language literacy challenges, such as digital navigators, digital coaches, library-based programs, community-led hotlines, and help desks for technical support. Community anchor institutions and community-based organizations are integral in supporting elderly family members, caregivers, and immigrant and refugee families because they provide connectivity and help in person and virtually.

ASSETS	DESCRIPTION
TechNation Careers	Provides technology training programs for New Americans with bilingual instructors. After graduation, employment coordinators support job placement.
Transforming Immigrant Digital Equity Pilot	OFW was one of three pilot sites for the World Education, Inc. Transforming Immigrant Digital Equity project in 2022. The purpose of the pilot was to expand access to learning and immigrant integration support for English for Speakers of Other Languages (ESOL). OFW focused the project on engaging immigrants and refugees in the state's digital equity planning grant and digital navigator programs by building a local ecosystem of partners and stakeholders and providing tech-enabled ESOL learning opportunities and support.
Teach by Tech	Teach by Tech's English as a Second Language Digital Literacy Class incorporates oral and written communication into each class and introduces new vocabulary while promoting hands-on learning. The courses consist of 16 hours of live training and custom-created videos texted to their mobile phone that present concepts from class. Classes are contextualized and adapted to meet industry- or community-specific needs. Upon completion, participants may take proctored assessments to receive nationally recognized credentials.



Older Adults

The age at which individuals are considered older adults varies from program to program and organization to organization. AARP is the nation’s largest nonprofit, nonpartisan organization dedicated to empowering people ages 50 and older. The federal census defines older adults as being over age 65, and the American Community Survey reports there are over 900,000 adults over the age of 65 in Colorado. For the purposes of the Digital Equity Act, older adults are people over the age of 60. The online Colorado Digital Research Survey also used age 60 as a threshold. For respondents who identified primarily as older adults, 32% identified as being a racial or ethnic minority, 27% identified as being disabled, 21% identified as being a veteran, and 20% identified as living in a low-income household.

The 2022 American Community Survey shows out of 65+ Coloradan households, 5.7% (50,970) do not have an internet subscription and 5.7% (51,369) have no computer compared to 18-64 age households, with 3.6% (131,872) lacking an internet subscription and 1% (37,244) with no computer.

Colorado’s listening session tour revealed affordability as one of the main drivers of lack of internet usage among covered populations. As of Sept. 1, 2023, a total of 36,319 Coloradan households ages 65+ have signed up for ACP, representing only 16% (223,584) of all Colorado ACP enrollments.^{xxxii}

Furthermore, additional barriers highlighted in Colorado’s needs assessment included accessibility challenges with devices, knowledge of accessibility options, low confidence in using the internet and need for tailored programs (75% “felt comfortable using the internet” compared with 90% confidence rating for all other covered populations). Many also reported feeling isolated and felt the internet could help them connect to others. This is consistent with [the AARP 2022 “Fly Like an Eagle” report and case-control study](#), which showed 88% of age 60+ study participants who received digital skills training felt more connected with family and friends. Nearly twice as many older adults in the control group (without digital skills training) reported feeling depressed compared to those who took the technology course.

ASSETS	DESCRIPTION
Generation Exchange	Provides intergenerational technology workshops and skills training for older adults. With support from young people, it builds generational connections, boosts self-confidence, and decreases loneliness among technology teachers and learners.
Project SOARR	The Center for Inclusive Design and Engineering (CIDE) created the Supporting Older Adults through Relationships and Resources (SOARR) with Technology Project to reduce older adults’ social isolation and loneliness. The project equips technology mentors with inclusive, supportive training options for older adults throughout Colorado.



ASSETS	DESCRIPTION
<p><u>Senior Planet from AARP</u></p>	<p>Senior Planet from AARP is the flagship program of Older Adults Technology Services (OATS) from AARP that helps adults aged 60 and older thrive in the digital world and harnesses technology to change the way people age. Senior Planet operates in-person programming within Denver, virtually via <u>SeniorPlanet.org</u>, and operates a National Tech Hotline, which is monitored by Senior Planet Trainers from 9 a.m. to 5 p.m. EDT Monday through Friday.</p> <p>Senior Planet also has a licensing program that equips local organizations across the country with the tools to help older adults access technology and use it to enhance their lives. There are six licensed partners within Colorado, including Colorado’s Office of the Future of Work (see Asset Inventory). Overall, OATS applies a deep understanding of both aging and technology to engineer innovative solutions for cities, foundations, and leading corporations, shifting the narratives around aging and addressing the vital needs of older adults.</p>
<p><u>Colorado Association of the Area Agencies on Aging CASOA Survey</u></p>	<p>The most recent Community Assessment Survey for Older Adults (CASOA) survey was conducted in 2022, and it provides a statistically valid survey of the strengths and needs of older adults as reported by older adults themselves. This report is intended to enable local governments, community-based organizations, the private sector, and other community members to understand more thoroughly and predict more accurately the services and resources required to serve an aging population. With this data, community stakeholders can shape public policy, educate the public, and assist communities and organizations in their efforts to sustain a high quality of life for older adults.</p> <p>Specific <u>digital inclusion and workforce data</u> was created by Innovations for Aging, and shared with the Digital Equity Team.</p>



Incarcerated Individuals and individuals who have been justice involved

ASSETS	DESCRIPTION
Esquared	(E ²) The Center for the Development of Economic Equity, LPA, is a community-based partnership organization and a dynamic hub dedicated to empowering individuals and communities through education, skills training, and career advancement. Approximately 40% of Esquared's clients are formerly incarcerated individuals.
Ameelio	<p>Ameelio is a tech nonprofit that works with correctional agencies for a more rehabilitative corrections system. Its video-calling service is the nation's first prison video-calling platform provided at no cost to incarcerated individuals or their families and friends.</p> <p>This product serves three key groups:</p> <ol style="list-style-type: none"> 1) Incarcerated individuals. 2) Families and friends. 3) Correctional staff. <p>Ameelio is available in Unit 2 of the Denver Women's Correctional Facility.</p>

3.2 Needs Assessment

To develop meaningful strategies to close the digital divide in Colorado, the Digital Equity Team needed to hear from Coloradans themselves. To ensure the voice of Coloradans and the covered populations remained the north star for the Digital Access Plan, the Digital Equity Team employed several data collection efforts, including:

- The Statewide Digital Equity Survey.
- The 2023 Colorado Health Access Survey.
- The Sterling Correctional Facility PRIN Report.
- Listening sessions with covered populations.

“ Modem and router (gateway devices) – leases add to monthly costs. Routers are also expensive to buy. ”



The Digital Equity Team contracted with 22 community-based organizations across the state, chosen based on the covered populations they serve and their reach within the state. For a complete list of collaborating organizations, please see [Appendix A](#). These contracts comprised 45% of Colorado’s total budget, ranging from \$8,000 to \$23,000 per award. The Digital Equity Team is proud of how much funding was dedicated to trusted community-based organizations. The partnerships and relationships this decision spurred will be invaluable as Colorado moves into the implementation phase of this work. In exchange for funding, community-based organizations conducted survey outreach and listening sessions with their communities. Sub-awardees also gauged the effectiveness of digital tools, program models, and other interventions to build digital equity, and they participated in Colorado’s Digital Equity Committee meetings to guide the Digital Equity State Plan’s development.

Statewide Digital Equity Survey

This was a statewide effort to collect baseline data from Coloradans and all the covered populations on digital skills levels, internet use, affordability of internet subscriptions, and more. The Colorado Digital Access Plan Needs Assessment and Asset Inventory survey was available in 22 languages and on paper for those who could not complete an online survey.^{xxxiii} While this was an online survey, ensuring people with low or no digital access could participate was incredibly important. In addition to promoting the survey digitally, community-based organizations provided space within their buildings and classes for community members to take the survey, gave survey-taking assistance, and provided paper versions for those who needed them.

The survey was open between July and September 2023 and received 5,758 valid responses, achieving an 89% completion rate. In addition to working with community-based partners to disseminate the survey, the Digital Equity Team collaborated with Comcast to air a 30-second public service announcement to all Xfinity cable subscribers and a Spanish version that aired on Telemundo. In addition, the survey was advertised in 15 newspapers serving rural communities ranging from Park County to Sedgwick County.

Ninety percent of survey respondents belong to one or more covered populations. The top languages people responded to the survey were English, Spanish, and Simplified Chinese/Traditional Chinese. As compared to the statewide population, according to the American Community Survey (ACS), all covered populations are overrepresented in the survey data, except for rural residents. Due to this overrepresentation of most covered populations, the results were not weighted by covered population. However, this data provided critical insights into what digital access barriers covered populations may experience and corroborated findings from the Colorado Health Access Survey and other sources.

90% of survey respondents belong to one or more covered populations.

As compared to the statewide population according to the American Community Survey (ACS), all covered populations are overrepresented in the survey data, except for rural residents.

Rural residents make up 18% of all Colorado residents, 15% of online survey respondents, and 16% of paper survey respondents, making them slightly underrepresented as compared to the statewide population.

See also: Appendix E: Survey responses by covered population

	Statewide (ACS data)	Online survey	Paper survey
Racial or ethnic minorities	30%	49%	16%
Older adults	20%	32%	41%
Rural residents	18%	15%	16%
Individuals with disabilities	11%	15%	29%
Low-income households	16%	33%	25%
Individuals with limited English proficiency	13%	18%	22%
Immigrants	10%	23%	28%
Veterans	6%	11%	10%
Tribal members	3%	2%	3%
Unhoused individuals	<1%	4%	2%



Online survey responses: two covered population groups

Many respondents self-identified as belonging to more than one covered population. The table below shows the number of respondents for each intersection of two covered population groups.*

	Older adults	Veterans	Individuals with disabilities	Individuals with limited English proficiency	Racial or ethnic minorities	Tribal members	Rural residents	Low-income households	Immigrants	Unhoused individuals
Older adults	100%	66%	41%	16%	21%	34%	41%	25%	20%	25%
Veterans	21%	100%	19%	2%	7%	15%	13%	8%	7%	14%
Individuals with disabilities	19%	27%	100%	6%	12%	24%	19%	17%	6%	21%
Individuals with limited English proficiency	9%	4%	7%	100%	30%	28%	7%	25%	48%	8%
Racial or ethnic minorities	32%	35%	40%	83%	100%	77%	30%	68%	83%	61%
Tribal members	2%	3%	3%	3%	3%	100%	3%	3%	3%	4%
Rural residents	19%	18%	19%	6%	9%	27%	100%	10%	6%	10%
Low-income households	25%	25%	39%	46%	45%	47%	23%	100%	47%	77%
Immigrants	14%	15%	10%	63%	39%	42%	9%	33%	100%	17%
Unhoused individuals	3%	5%	6%	2%	5%	9%	3%	10%	3%	100%

*Read the table vertically, by column. 21% of online survey respondents who self-identified as older adults also self-identified as veterans; 19% of respondents who self-identified as older adults also self-identified as individuals with disabilities, and so on. Covered populations appear in this table in the same order as they did in the online survey, and in the Digital Equity Act Notice of Funding Opportunity (NOFO).



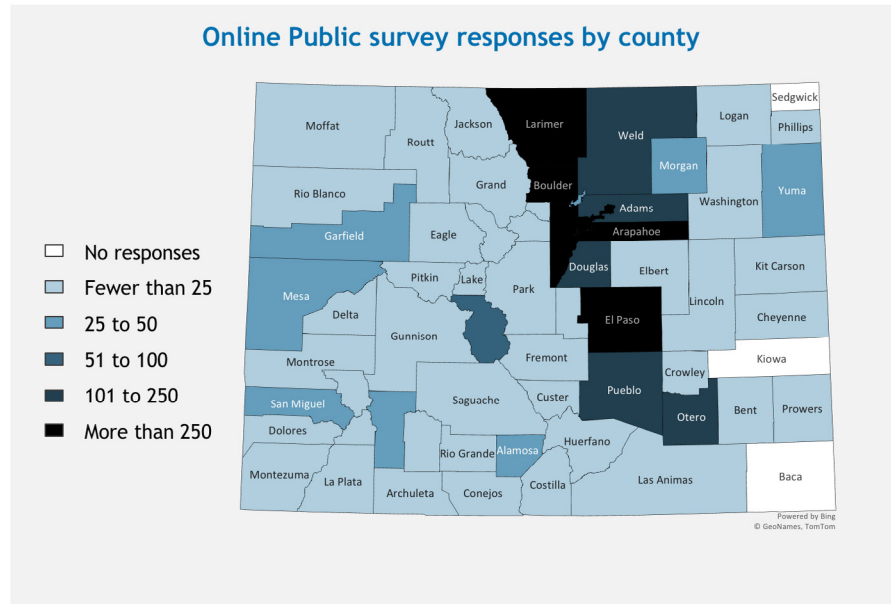
The online public survey received responses from 61 Colorado counties.

The greatest number of responses came from:

- Arapahoe County
- Denver County
- Larimer County

Three counties with no valid responses:

- Baca County
- Kiowa County
- Sedgwick County

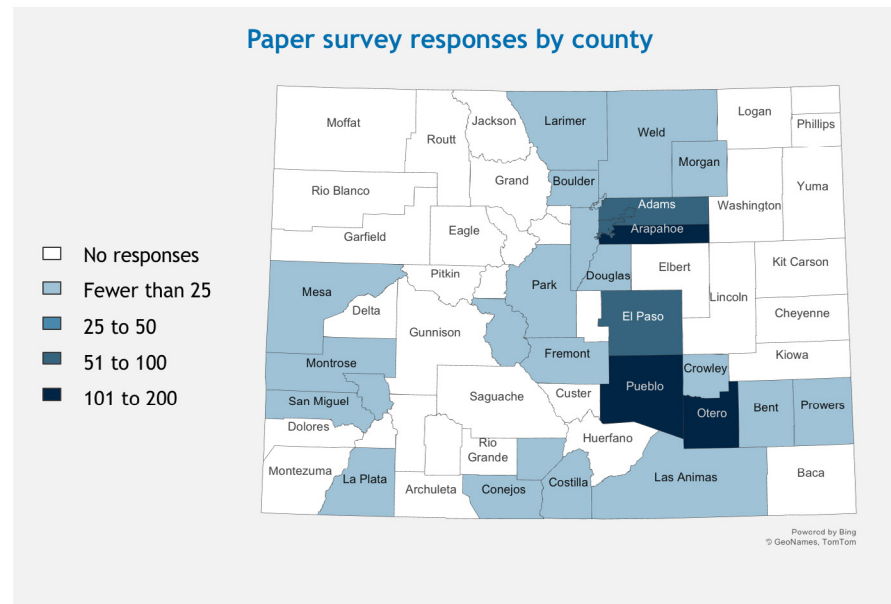


The paper public survey received responses from 28 Colorado counties.

The greatest number of responses came from:

- Arapahoe County
- Pueblo County
- Otero County

36 counties reported no valid responses to the paper survey.





Key findings include:

- Affordability is the most significant barrier to broadband adoption.
- Many Coloradans, disproportionately individuals experiencing homelessness, those with limited English proficiency, and immigrants, have only a smartphone for accessing the internet at home.
- Coloradans, especially individuals belonging to a covered population group, have a high degree of interest in classes or opportunities to improve digital skills.
- Many Coloradans are unfamiliar with the cybersecurity measures needed to stay safe online.
- More than half of respondents rarely or never use the internet to apply for or use public benefits.

Findings specific to the covered populations are included in [Section 3.2.1](#), and the full survey results are online. ^{xxxiv}

2023 Colorado Health Access Survey

In addition to the Statewide Digital Equity Survey, the Digital Equity Team worked with the Colorado Health Institute (CHI) to add six questions relating to digital skills and cybersecurity to the 2023 Colorado Health Access Survey (CHAS).^{xxxv} The CHAS, implemented by the Colorado Health Institute, is the premier source of information on health coverage, access to health care, and the factors influencing health in Colorado. More than 10,000 households in the state have participated every other year since 2009, allowing comparisons across a time marked by sweeping changes in health policy. The survey provides a credible source of information about key trends and challenges facing Coloradans that is unavailable through any other source.

The results of the CHAS were analyzed for each of the covered populations, with the additions of youth (18 and younger) and health status. This data was weighted to be representative of Colorado and its covered populations, making this data source critical to establishing measurable objectives for Colorado as a whole and for covered populations. The Digital Equity Team plans to leverage the CHAS in future years to measure progress on the measurable objectives rather than rolling out a separate statewide survey effort. This information was used with data gleaned from the Digital Equity Team's Statewide Digital Equity Survey and listening sessions to formulate a baseline for each measured objective and covered population. A total of 9,961 respondents completed the Colorado Health Access Survey between March 3, 2023, and Sept. 4, 2023. ^{xxxvi}

“ Medicare enrollment is only available online. Online registration with the Social Security Administration is required. Problematic! ”



The Sterling Correctional Facility Prison Research and Innovation Network Report

The Digital Equity Team couldn't survey those within correctional facilities directly due to challenges in finding an Institutional Review Board (IRB). Therefore, survey data from the Colorado Prison Research and Innovation Network (PRIN) research team was leveraged. In Colorado, the PRIN is a voluntary partnership between Sterling Correctional Facility and a University of Denver research team that collaborates to improve outcomes for incarcerated people and correctional staff using data and collective decision-making. Its 2023 report is a culmination of a population-level survey of incarcerated people and more than 120 hours of in-depth interviews.^{xxxvii} The data was collected between March and October 2021.

Listening Sessions

In addition to the quantitative data, it was important to collect qualitative data to add context and further the understanding of the survey results. It also was important to recognize that some communities and covered populations do not consider the government to be a trusted entity. With that in mind, the Digital Equity Team funded 18 community-based organizations to hold listening sessions with covered populations between July and October. These organizations received funding to help distribute the Statewide Digital Equity Survey to their communities. This was tremendously helpful in capturing authentic thoughts and perspectives from community members who otherwise may have been filtered if someone from the state government had facilitated the listening sessions. Over 430 people participated in 46 listening sessions (37 in-person and nine virtual), representing every covered population in the state's urban and rural areas.

Participants were asked about:

- The impact of the internet on their lives.
- Where they access the internet.
- Barriers to access and challenges using the internet.
- Awareness of online privacy and security.

3.2.1 Affordability and Availability of Broadband

Affordability of broadband subscriptions is a critical factor for adoption, particularly for households with limited financial resources. When surveyed on internet usage at home, over 244,000 households are estimated to lack broadband internet service, with the cost of a subscription being the main driver.^{xxxviii} The internet subscription rates in Southeastern and Eastern Colorado are lower than elsewhere.

Over 220,000 Colorado households are enrolled in the ACP, making up about 28% of the estimated Affordable Connectivity Program (ACP)-eligible households.^{xxxix} For the Lifeline program, only 14% of eligible Colorado households are subscribed in 2023. The Digital Equity Team used the Colorado Health Access Survey to better understand the gap between those enrolled and those

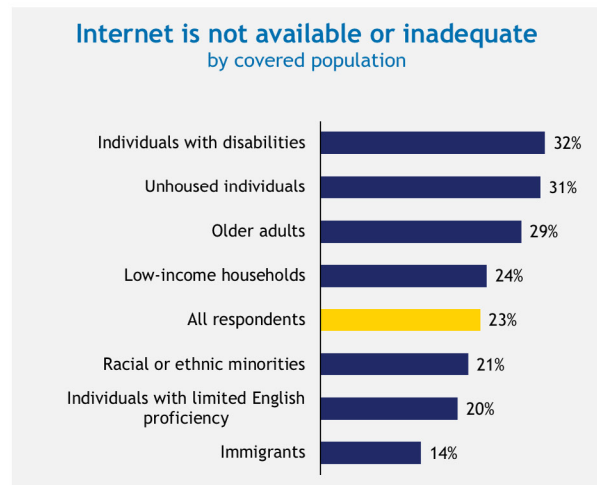
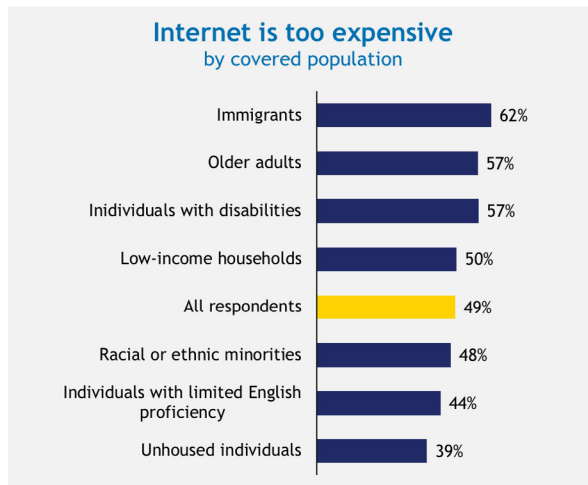


eligible and found awareness of ACP and other internet discount programs may be a significant reason. For example, 17% of households making 0-150% of the federal poverty level (FPL) said they participated in a government internet discount program. Of the 83% not participating, 52% said they did not know a program existed.^{xi} Additionally, 30% of these households did not think they were eligible for an internet discount program. However, individuals are eligible for ACP ^{xlii} if their income is 200% or less than the FPL and eligible for Lifeline ^{xliii} if they participate in federal assistance programs, like Medicaid or the Supplemental Nutrition Assistance Program.

Other covered populations were less likely to know an internet discount program existed than the general Colorado population – rural individuals were more than 10 percentage points less likely to know about a program than their urban counterparts, and individuals with disabilities were the least likely to know a program existed compared to the general population. This indicates an opportunity to increase outreach and engagement, targeting specific covered populations and counties using the Benton Institute’s ACP Tool. ^{xliiii}

49% of online survey respondents indicate affordability is a barrier to broadband adoption.

A greater share of online survey respondents who self-identify as immigrants, older adults and/or individuals with disabilities indicate affordability as a barrier to home internet adoption.

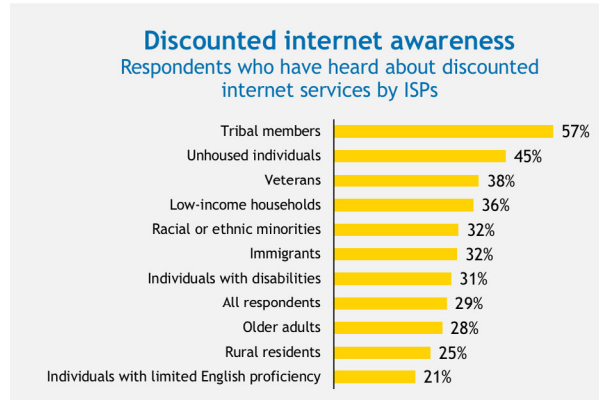
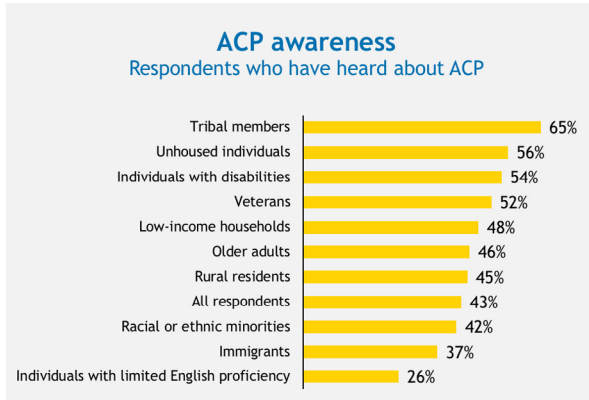


One woman in her late 80s said she enjoys spending time on Facebook and doing Zoom gatherings with friends, including a yoga group that started on Zoom during the pandemic. “The iPad is wonderful when it’s working. When it isn’t working, well...” She doesn’t have a simple way to work through issues that come up with her equipment, so she waits until she can get help from friends or family.



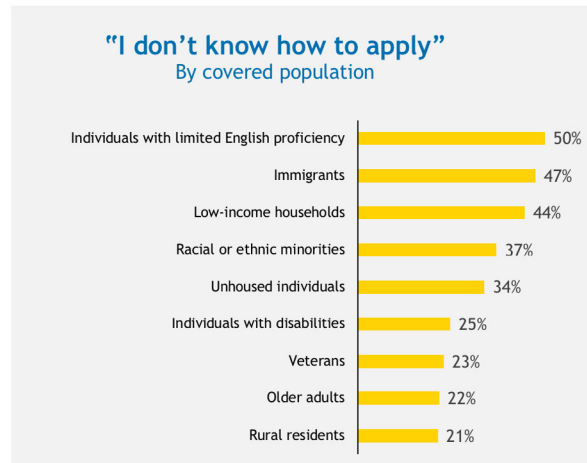
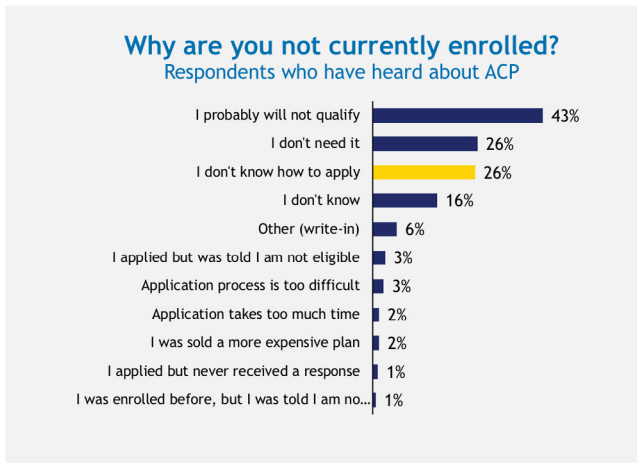
43% of online survey respondents have heard about the Affordable Connectivity Program (ACP).

Among online survey respondents, tribal members and unhoused individuals have the highest rates of awareness of internet affordability programs, while awareness is lowest among individuals with limited English proficiency.



Among online survey respondents who are aware of ACP but not enrolled, 26% don't know how to apply.

Individuals with limited English proficiency, immigrants, and residents of low-income households indicated that they do not know how to apply to ACP at higher rates than other covered populations.



Less than 30 responses from Tribal Members so not included

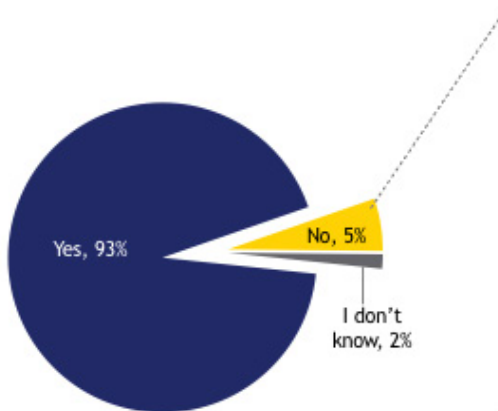


The availability of reliable services also contributes to the lack of adoption.^{xliv} The 2022 Colorado Broadband Roadmap reported 14% of the state’s locations are unserved or underserved, meaning about 190,850 locations lack access to at least 100/20 Mbps service. This lack of access accounts for 56% of those who don’t adopt the internet. For rural households, 41% of those without an internet subscription at home indicated a lack of availability as a reason (about 30,500 households), compared to 21% of urban households. Even where it is available, the speeds may not be sufficient to support a household’s needs – about 6,600 rural households indicated the broadband service available is not an acceptable speed.^{xlv}

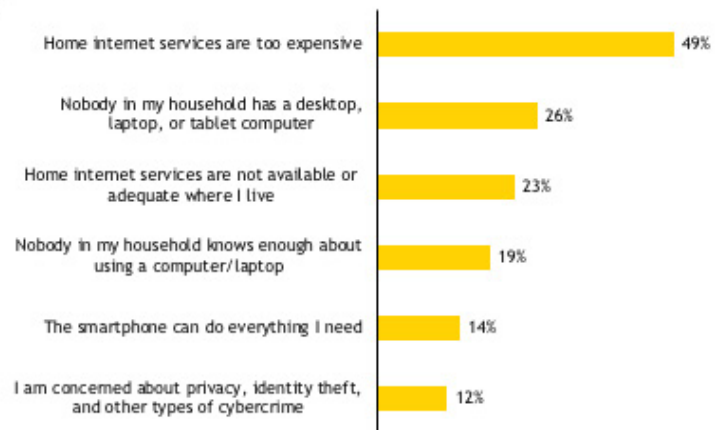
5% of online survey respondents cannot connect to the internet from home.

Of online survey respondents who cannot connect to the internet from home, 49% indicate that home internet services are too expensive.

Can you connect to the internet from home?



Which of the following explains why you do not currently subscribe to home internet?



3.2.2 Broadband Adoption

In 2022, the CBO commissioned a survey of more than 2,000 residents, over 18 agencies, and over 200 local governments, nonprofits, and organizations serving marginalized populations to assess the current state of broadband in Colorado. The results show only approximately 76% of Colorado households subscribe to broadband despite over 90% having access. Some 38% of respondents without at-home broadband reported cost as the main reason. In addition to affordability, a lack of devices poses a barrier for 15% of respondents who do not have a computer at home. Lack of skills is a barrier for others, as only 69% of respondents report having the skills to use a broadband connection.



Affordability: 38% of residents without at-home broadband reported cost as the main reason.



Devices: 15% of residents do not have a computer at home.



Literacy: 69% of residents say they have the skills to use a broadband connection.

Compared to other states, Colorado has the following adoption rankings:

- 23rd in high-speed internet availability.
 - 89% of households have access to 100/20 or greater speeds.
- 7th in high-speed internet adoption.
 - 76% of households subscribed to high-speed internet.
- 2nd in device access.
 - 85% of households have a computer at home.
- 11th in equitable access for African Americans (2.5% gap between white and Black).
- 41st in equitable access for Latinos (5.4% gap between white and Latino).
- 20th in access to affordable plans.

Digital skills, affordability and availability of devices, accessibility of online resources, and one's ability to protect themselves online are all factors that impact broadband adoption.

3.2.3 Accessibility of Online Public Resources and Essential Services

Throughout the listening sessions, it was clear there are real barriers to accessing needed information and services online, particularly on government websites. Listening session participants reported barriers such as “getting lost on government websites when looking for answers,” confusing website layouts, and accessibility issues.

These barriers intensified for covered populations, such as those who are English learners, older adults, and those with disabilities. As Colorado aims to make interaction with the state government “more digital,”^{xlvi} it is essential that a human-centered design approach is taken, meaning that real people are “at the center of the development process” so websites and applications resonate and are tailored to how the end-user will interact with them.^{xlvii}



As 25% of Coloradans use the internet to search for information on public programs, the state government needs to take this to heart while balancing the need to keep Coloradan data secure, which can be tricky. For example, in response to online scammers using stolen identities to raid unemployment systems nationwide, Colorado hired a company to make claims processing more secure. However, the “new technology has caused a wave of confusion and complaints ... hitting certain groups particularly hard.”^{xlviii}

In addition to using the internet for information and accessing public programs, there are various essential services Coloradans use, including health care via telehealth, searching and applying for jobs, paying bills, and online banking. However, the 2023 Colorado Health Access Survey showed disparities for some covered populations. For example, only 66% of older adults are estimated to have used the internet to pay a bill, versus 85% of Coloradans on average.

Feedback from listening sessions suggests family and friends play a significant role in supporting individuals accessing public resources online. However, those without support can feel there’s no one to turn to for help. One participant shared that if they have someone who can explain things about using the internet or offer other resources to better understand it, they usually don’t remember the information they were given when they can finally log on to the internet. As the world continues to become more digital, it’s essential businesses, state agencies, and community organizations ensure Coloradans have support to access needed services and information.

“Anything .gov is too complicated, and the process to apply for things like Medicare is too complicated, especially for people who don’t often use technology.”

3.2.4 Digital Skills

The level of digital skill plays a big role in meaningful internet use across various sectors and online goals.^{xlix} The Digital Equity Team leveraged the 2023 Colorado Health Access Survey to gauge how confident Coloradans and the covered populations use the internet.ⁱ About 90% of Coloradans report feeling confident using the internet. However, the confidence percentage hovers around 75% for some covered populations, such as those with disabilities and older adults.

One Colorado survey found several covered populations had statistically lower levels of digital skills on average, including respondents 65 and older and those making \$50,000 a year or less. Respondents with below-average digital literacy were less likely to report ever using telehealth. Despite having not used telehealth, they were more likely to feel the quality of telehealth was lower than in-person visits, and the telehealth process was difficult to use. This is significant, as the perception that telehealth is difficult to use and a respondent’s lack of confidence that telehealth is the same quality of care as in-person seemed to impact a respondent’s willingness to use telehealth.ⁱⁱ



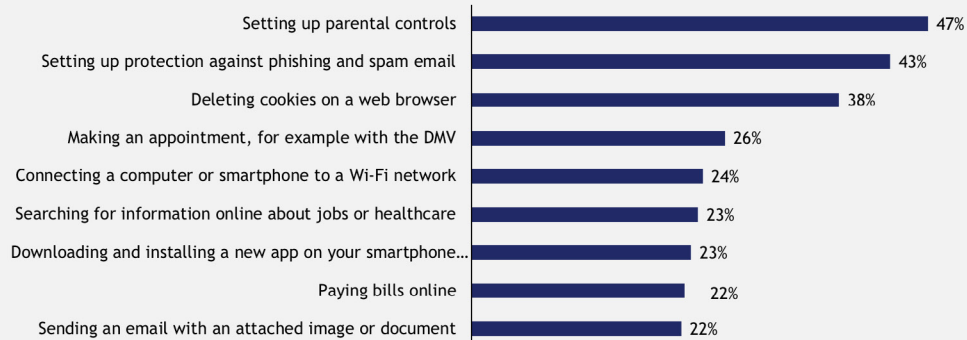
Lack of digital skills also translates to other online activities, including:

- Making appointments.
- Connecting a device to the internet.
- Understanding cybersecurity practices.

Online survey respondents have lower rates of confidence with more advanced digital skills.

For each of the following tasks, please indicate how comfortable you would be doing this task, or whether you just do not understand what the task is about.

Less than comfortable when...



3.2.5 Online Privacy and Cybersecurity

The ability to protect oneself online and limit the potential of experiencing a cybersecurity breach is incredibly important. The Digital Equity Team leveraged the 2023 Colorado Health Access Survey to better understand internet use and cybersecurity awareness of Coloradans and covered populations. In general, most Coloradans are concerned about the information collected about them online (70%), cybercrime, and threats to cybersecurity (69%). However, only 74% of Coloradans agree or strongly agree they know how to keep their information safe and secure, with more than 300,000 individuals feeling they do not know how. Potentially more concerning, 40% of Coloradans are concerned that if hacked, they wouldn't know how to resolve it, equating to over 1.7 million individuals. These concerns magnify for some of the covered populations, such as older adults, those with a disability, and those with a language barrier.^{lii}

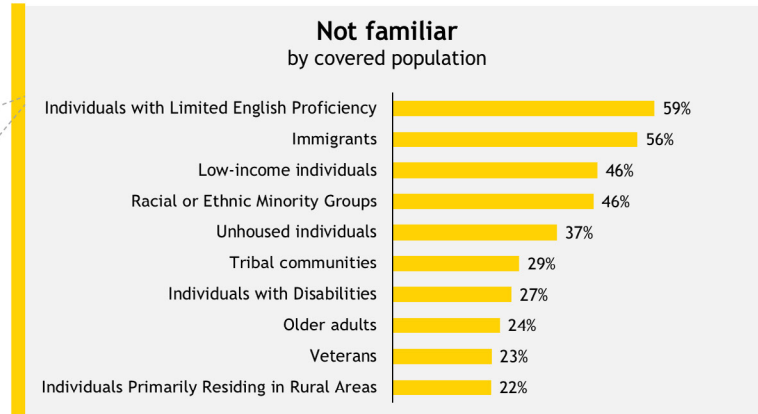
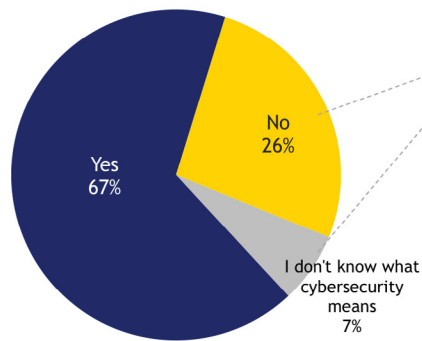
“Prioritize the voice of those who will use the services to build a better system for them.”



33% of online survey respondents are not familiar with the cybersecurity measures needed to stay safe online, or don't know what cybersecurity means.

Individuals with limited English proficiency and immigrants indicated a lack of familiarity with cybersecurity measures than other covered populations.

Are you familiar with cybersecurity measures to prevent unauthorized access and damage to your devices? (All respondents)



3.2.6 Availability and Affordability of Devices

As of 2023, 7% of Coloradans lack a computer, according to Digitunity, or about 387,180 individuals.^{liii} According to the 2023 Colorado Health Access Survey, 83% of Colorado households without an internet subscription disagree that a smartphone with a data plan is sufficient for the things they need to do online. However, 18% say the cost of a device to connect to the internet is too expensive.^{liv} The percentage of households without a web-enabled device is highest in Southeast and Eastern Colorado and is more prevalent in counties with lower population density.

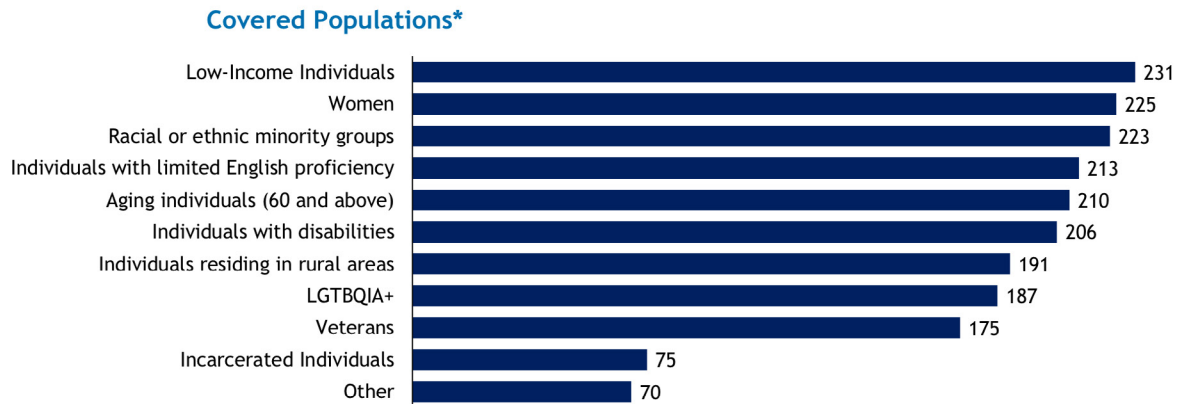
3.2.7 Covered Populations Needs Assessment

This section describes the most pressing needs identified for each covered population. Those in covered populations make up roughly 72% of Colorado's total population of 5,758,736, with racial and ethnic minority populations and rural populations making up the largest covered populations within the state. The Digital Equity Team used a variety of data sources described in [Section 3.2](#) to understand the unique barriers of each of the covered populations. These included a Statewide Digital Equity Survey, the 2024 Colorado Health Access Survey, 46 listening sessions, and engagement with community-based organizations and leaders.



DEEM respondents serve all 8 covered populations.^{iv}

Low-Income Individuals are the covered population most served by DEEM respondents. Incarcerated Individuals are the least served.



**Multiple select question, respondents can choose more than one answer choice to this question in the survey.*

While each covered population has unique needs, there is a great deal of intersectionality, or people falling into more than one category, across the covered populations. Results of the Statewide Digital Equity Survey reveal several significant intersections:

<ul style="list-style-type: none"> ● 21% of respondents identifying as older adults also identified as veterans. 	<ul style="list-style-type: none"> ● Of respondents who identified as members of racial or ethnic minority groups, 45% also identified as living in households with limited financial resources.
<ul style="list-style-type: none"> ● 66% of respondents who identified as being veterans also identified as older adults. 	
<ul style="list-style-type: none"> ● Of respondents who identified as being individuals with disabilities: <ul style="list-style-type: none"> ● 41% identified as being older adults. ● 40% identified as being members of racial or ethnic minority groups. ● 9% identified as living in households with limited financial resources. 	<ul style="list-style-type: none"> ● Of respondents identifying as being unhoused, 61% also identified as being members of racial or ethnic minority groups.

Therefore, while the key barriers described below may be unique to that covered population, individuals likely experience many of these barriers as their identity stretches across covered populations. The Digital Equity Team has attempted to call out the intersectionality of identities in the needs assessment below. Additionally, while the team attempted to hear from covered populations across Colorado, it is important to note the needs of a single covered population likely



change in different parts of the state or in different communities. This is the Digital Equity Team’s best and first attempt at understanding the barriers each of these populations faces. Successful implementation of this plan will require ongoing communication and engagement with covered populations and the organizations that work with them to ensure the plan’s strategies match the needs of these populations as they evolve.

IMMIGRANTS

Although understanding the digital inclusion assets and barriers of immigrants is not required by the Digital Equity Act legislation, the Colorado Digital Equity Team sought to gain a better understanding of the experience of immigrants in Colorado for several reasons. One in 10 Coloradans is an immigrant.^{lvi} Thirteen Colorado counties and the City and County of Denver have adopted some form of “sanctuary” policy.^{lvii} There is no single definition for a sanctuary city or county.^{lviii} Instead, a city or county’s cooperation with federal immigration officials is limited in some way, without impeding them from performing their immigration enforcement duties. For example, a sanctuary city may not allow immigration detention centers to operate there, or they may disallow state or local police being deputized to enforce federal immigration policy.

The City of Denver, in particular, has been working hard to provide housing and services for the many migrants arriving there from Venezuela and other countries recently and has created a [website](#) with an interactive dashboard showing the daily number of arrivals to the city, resource guides in English and Spanish, and recent news and information about where Denver residents can drop donated items or provide financial donations.

Like other covered populations, the immigrant population in Colorado is not homogenous. The American Community Survey finds 16.3% of Coloradans speak a language other than English at home, and of those, Spanish is the most spoken language.^{lix} However, immigrants and refugees in Colorado speak myriad languages – this is highlighted by the number of different languages in which the Statewide Digital Equity Survey was taken.

The online public survey received valid responses in 19 languages.

The Digital Equity Team released the online public survey in 22 languages and received valid responses in 19 languages.

English is the most-accessed online survey language, followed by Spanish. Simplified Chinese and traditional Chinese combined make up the third most-accessed online survey language.

Respondents accessed the other languages at much lower rates.

Survey responses by language		
Language	#	%
English	3,969	81%
Spanish	447	9%
Simplified Chinese	254	5%
Persian	43	0.9%
Russian	40	0.8%
Arabic	38	0.8%
Burmese	29	0.6%
Somali	22	0.4%
Ukrainian	21	0.4%
French	20	0.4%
Traditional Chinese	18	0.4%
Vietnamese	12	0.2%
Amharic	5	0.1%
Pashto	5	0.1%
Japanese	3	0.1%
Swahili	3	0.1%
Korean	2	0.4%
Khmer	1	0.02%
Tagalog	1	0.02%
Armenian	0	0%
Farsi	0	0%
Punjabi	0	0%



They represent diverse cultures from around the world. There is considerable overlap between immigrants, those with a language barrier, and racial and ethnic minorities. For example, in the Statewide Digital Equity Survey, immigrants comprised 39% of the racial and ethnic minority group and 63% of those with limited English proficiency. Yet while Colorado immigrants may share some characteristics, such as language barriers and racial and ethnic minority identities, with other covered populations, the Digital Equity Team acknowledges additional barriers to digital equity for immigrants that are not the same.

Connection with family members is vital for immigrants and refugees who have left family in their home countries that are often politically unstable. The World Health Organization (WHO) reports “unemployment, poor socioeconomic conditions, and lack of social integration among migrants and refugees are risk factors for mental health conditions such as depression. At the same time, these stressors can also exacerbate pre-existing social and mental health problems” for migrants and refugees.^{ix} “Protective factors” WHO lists to help mitigate trauma, all of which can be supported by digital inclusion interventions, include:

- Access to employment.
- Social support.
- Proficiency in the language of the host country.
- Access to education.
- Improved socioeconomic
- Contact with family.

A listening session participant shared a story of when she heard her family’s voices for the first time in three months after leaving Afghanistan during a humanitarian evacuation in 2021. *“I used a WhatsApp program to call, and I was able to make a video call. This was the best moment of my life.”*

“It is very challenging to figure out issues with food stamps and housing vouchers. I didn’t have the digital literacy or language to work with customer service online.”

Access to the Internet and Devices

According to responses to the Statewide Digital Equity Survey, immigrants are one of the three covered populations most likely to rely on mobile data plans for internet access. Not having a computer in the home that connects to broadband makes adjusting to life in the United States challenging since applying for and using many social services requires online access. Forms can be difficult to complete and submit on a mobile device.

Of immigrant respondents to the Statewide Digital Equity Survey:

- 22% report having a desktop at home compared to 30% of all respondents.
- 28% reported only having access to a smartphone (compared to 15% of respondents overall).



Digital Skills Training

Immigrants completing the online survey were very interested in attending digital skills classes. While some New Americans have fluency in English and digital skills, for those who are learning one or the other, computer jargon and even using an American keyboard may present barriers for immigrants.

Affordability

Sixty-two percent of immigrants responding to the Statewide Digital Equity Survey reported the internet is too expensive.

Cybersecurity

Cybersecurity and awareness around staying safe online are issues for Coloradans generally; however, for immigrants responding to the Statewide Digital Equity Survey, 56% were unfamiliar with measures needed to stay safe online or didn't know what cybersecurity meant. Listening sessions with communities across Colorado revealed those with language barriers feel particularly vulnerable to cybersecurity threats. Some shared they felt immigrants establishing their life in the U.S. are targets for scam attempts, yet instructions on how to protect themselves online are typically in English only.

OLDER ADULTS

Access to the Internet and Devices

Of the adults aged 60+ who responded to the Colorado Health Access Survey, 8% stated they do not have home internet service. The primary reason given for the lack of internet service at home is it isn't available in their area. Listening sessions with older adults confirmed intersections between older adults and individuals with disabilities. Digital Equity Committee stakeholders shared older adults have described physical challenges in operating devices, including tremors and poor eyesight. Knowing how to use accessibility options would make using devices much easier for this population. Listening sessions with older adults also provided insight into transportation barriers, making it difficult for older people to get to places with safe, reliable internet.

Digital Skills Training

According to the Colorado Health Access Survey, confidence in the internet among older adults is lower than the average for Colorado. Older adults requested training programs tailored to their needs during listening sessions. For example, some participants reported when younger people help them, they “don't teach or show how to do things – they just do it for us.” Programs showing older adults how to troubleshoot a technology-related problem, programs designed for non-technical people to understand, and programs with printed materials all came up as needs in the listening sessions.

Keeping pace with technology's ever-changing nature, technology jargon, and language barriers were shared as reasons older adults didn't feel comfortable using the internet. This may be why a significantly lower percentage of older adults than the average Coloradan reported using the internet for email, social media, shopping, job searching, accessing information about



government programs and community events, and communicating with family and friends. In listening sessions older adults expressed feelings of isolation, yet the internet can help them connect to everyone.

Affordability

Older adults, especially those living in households with limited financial resources, cited the affordability of internet services as a barrier to access. In responses to the Colorado Health Access Survey, 44 percent of older adults stated a lack of eligibility for not participating in a discounted internet service program. From listening sessions, some older adults reported being “poor, but just not poor enough to qualify for things like ACP.”

Cybersecurity

Many listening session participants worried about “Big Brother,” scams, and privacy, and shared a sense of general distrust of being online. In some cases, participants said the fears of being online and the risks prevented their broadband adoption. The lack of confidence in keeping themselves safe and in addressing an account being hacked was higher among older adults than other Coloradans in the results of the 2023 Colorado Health Access Survey.

In the CHAS, older adults also reported an unwillingness to use the internet to access their bank accounts and pay bills. Some of the older adults who participated in listening sessions reported they refuse to use online billing or banking services because they do not understand computer safety and, therefore, do not trust it. Many said they rely on family and friends to help them be safe online when using bank accounts or purchasing online.

“It is very challenging to figure out issues with food stamps and housing vouchers. I didn’t have the digital literacy or language to work with customer service online.”

Lastly, ageism^{lxi} – stereotypes, prejudice, and discrimination based on age – is a unique barrier faced by this covered population and something that came up frequently in listening sessions with older adults. A common stereotype associated with older adults is they are technology illiterate and not interested in technology. This can lead to older adults being excluded from services like telehealth based on the assumption they won’t know how to use the technology or won’t be interested.

INCARCERATED AND JUSTICE-INVOLVED INDIVIDUALS

Due to time constraints, the Digital Equity Team could not create a research plan that accounted for directly surveying and interviewing incarcerated individuals. However, stakeholder conversations, secondary research, and listening sessions with individuals who were previously incarcerated helped inform barriers to access for this covered population and identified several



unique challenges. The Digital Equity Team will conduct specific research on incarcerated individuals per NTIA requirements during the implementation of the Digital Access Plan.

Access to the Internet and Devices

Many prisons in Colorado have limited broadband access, which reduces opportunities for incarcerated individuals. While the Colorado Department of Corrections is prioritizing the expansion of connectivity throughout its facilities to improve access to telehealth, behavioral health services, and educational opportunities, there are funding and infrastructure challenges.^{lxii} Digital Equity Committee stakeholders shared that even when there is connectivity, cultural barriers make it difficult for incarcerated individuals to access the internet. For example, needing to supervise incarcerated people using the internet can be a reason not to provide them access, and devices and access to connectivity in prisons are sometimes considered a reward rather than a right by staff and leadership.

At a systems level, some Coloradans expect jails and prisons to be punitive rather than restorative, and therefore, funding for digital access within prisons can be politically unpopular. People who are incarcerated, even if they have devices, connectivity, and skills, may lack private spaces in which to communicate with friends and family, participate in telehealth appointments, or attend educational programming, as devices may only be available to use at work or in public places like libraries.

Digital Skills

Both men and women who are incarcerated experience a severe lack of training opportunities in digital skills. This results in a large national prison population (7.8 million) ill-prepared for the challenges of reentry into a society that relies on technology for nearly every aspect of life.

A survey conducted in Sterling Correctional Facility provides insight into this in Colorado.^{lxiii} Of 150 people who completed the survey, roughly 32% reported they were not confident using a computer or the internet, and 38% did not feel confident using a smartphone. Those who were more confident using technology had spent less time incarcerated in Sterling Correctional Facility and were younger. For computer use, the data showed white incarcerated people were more confident than those belonging to a racial or ethnic minority group.

Digital skills lapse after being incarcerated for an extended amount of time, which was supported by what the Digital Equity Team heard from listening sessions with people who were formerly incarcerated. Individuals recently incarcerated stated they wished there was a class to teach them technology, sign them up for an email account, and offer a basic introduction to computers and phones.

“ My mom is in an assisted living facility, and our entire family went online to Zoom call with her. It made her day and was just a fantastic experience for all. ”



The intersectionality of individuals who are incarcerated with disabilities or language proficiency barriers adds complexity to the issue of digital equity. Inadequate accommodations for disabilities, such as visual impairments or hearing loss, limit access to digital resources and perpetuate existing inequalities. Language barriers also hinder the effective utilization of digital tools, impeding access to educational materials, legal resources, and communication with the outside world.

Access after incarceration is still challenging for many. Participants in listening sessions reported they had no access to community resources post-release. They experienced barriers to access due to the cost of internet and devices and the strength of connectivity. One participant reported using their cell phone with limited data to access resources and having to go to locations with public Wi-Fi to use the internet when their data ran out. However, digital access can be a lifeline for those coming out of incarceration – one participant reported she is pregnant and experiencing extreme sickness but has been able to attend behavioral health treatment via telehealth, which has helped her stay engaged in substance use treatment.

When able to go online, listening session participants reported increased access to employment opportunities through job sites. Among the benefits:

- They could apply for multiple opportunities in a short amount of time.
- They could identify qualifications for a position, such as felon-friendly positions.
- They could access email and electronic communication to link to support systems.
- They could access legal monitoring, such as probation or parole officers.
- They could access correction portals to pay for restitution electronically, which assisted them in maintaining compliance with community conditions post-release from incarceration.

“ The cost is a factor in most cases, if they are struggling to make ends meet, they will not be able to afford to buy a computer, and also pay for internet access. ”

MEMBERS OF RACIAL AND ETHNIC MINORITIES

While this plan references racial and ethnic minorities in line with the NTIA’s definition, there are a multitude of distinct cultures and communities represented in this group. The Digital Equity Team used disaggregated data where possible and is committed to separating racial and ethnic data into its own parts further in future research. This allows the Digital Equity Team to better understand the barriers experienced by the communities included within the racial and ethnic minorities

covered population. This understanding will help the team develop more relevant strategies to improve digital access for these communities. This section reflects data from the Statewide Digital Equity Survey for different communities of color in Colorado.

It's important to note these results are not generalizable to these communities in Colorado as a whole and only reflect the experiences of those who completed the survey. However, this data potentially provides key insights into the digital access barriers these communities experience, and the Digital Equity Team is committed to building upon these results to further dig into the barriers and assets of each of these unique communities. Below is a breakdown of the covered populations' demographics in the Statewide Digital Equity Survey, demonstrating the number of respondents from each racial and ethnic community:

“Don't assume that ALL seniors are not aware of technology. Many of us are still very active and running businesses, reading, and educating ourselves. The last thing we want is to be seen as no longer relevant in the community or not interested in learning and growing.”

	ALL RESPONDENTS	
Aging individuals (60 and above)	1,600	32.4%
Veterans	520	10.5%
Individuals with disabilities	723	14.7%
Individuals with limited English proficiency	868	17.6%
Racial or ethnic minority groups	2,434	49.3%
Tribal communities	93	1.9%
Individuals residing in rural areas	744	15.1%
Low-Income Individuals	1,606	32.6%
Immigrants	1,143	23.2%
Unhoused individuals	202	4.1%
American Indian/Alaska Native	168	3.4%
Asian	416	8.4%
Black or African American	708	14.4%
Hispanic/Latino, or of Spanish origin	1,118	22.7%
Middle Eastern or North African	107	2.2%
Native Hawaiian or Other Pacific Islander	33	0.7%
White	2,520	51.1%
TOTAL RESPONSE COUNT	4,379	88.8%



A unique barrier for this covered population is the generations-long impact of racism^{lxiv} – defined as organized systems within societies that cause avoidable and unfair inequalities in power, resources, capacities, and opportunities. It can manifest through beliefs, stereotypes, prejudices, or discrimination, and it includes open threats and insults to prejudices deeply embedded in social systems and structures.

The impacts of racism include:

- Reduced access to employment, housing, and education.
- Physical injury because of racially motivated violence.
- Adverse effects on emotional and mental health.
- A cumulative burden of chronic stress.

Structural racism has created inequities in the built environment as well – for example, “a legacy of racist housing policies left people with limited financial resources and people of color disproportionately exposed to impacts of environmental burdens.”^{lxv} Communities of color often experience less access to digital infrastructure and resources, which creates significant disparities. Digital redlining, “which occurs when large network providers exclude low-income neighborhoods,” has compounded issues facing residents of some of the country’s most segregated counties, meaning these communities “have an even tougher time applying for jobs, accessing vital health services or logging into a class.”^{lxvi} Working with the Colorado Broadband Office to collect and use data highlighting these disparities can help ensure resources are allocated where they are most needed.

There is incredible intersectionality with racial and ethnic minorities and the other covered populations, such as immigrants, those with a language barrier, older adults, etc. Different populations may have similar concerns but face varying treatment. Older adults, for instance, may differ in their trust of institutions, even if they do not belong to a specific ethnic group. Sometimes, personal affiliations, such as disability, can supersede ethnicity in terms of trust. It is important to acknowledge these nuances and tailor approaches accordingly, recognizing that trust can differ within and outside ethnic groups.

Mixed documentation status families present a particular barrier, as there is a real fear of sharing information even if the household qualifies for benefits. Overcoming this fear requires a holistic approach that combines technological education with the distribution of devices and internet access.

The Statewide Digital Equity Survey included data about Tribal members as a subsection of the racial and ethnic minority data. The Digital Equity Team acknowledges the digital and data sovereignty of the two federally recognized Tribes in Colorado. The team understands many Tribal members are living across Colorado, whether they are members of the Ute Mountain Ute Tribe, Southern Ute Indian Tribe, or members of the extensive American Indian/Alaska Native community. The Digital Equity Team did not ask whether Tribal members responding were living on Tribal lands, and the data included in the survey results are not intended to inform assets or barriers to digital equity on Tribal lands. Instead, the team wanted to capture information about Tribal members generally to improve access for Tribal members and American Indian/Alaska Native community members living in the state outside of Tribal lands. The online survey was shared with both the



Ute Mountain Ute Tribe and Southern Ute Indian Tribe to share with Tribal members living on Tribal lands as they saw fit. Doing so was optional and at the discretion of Tribal leadership.

Access to the Internet and Devices

According to the 2023 Colorado Health Access Survey, 7 percent of Latines lack internet service at home, compared to only 4% of Coloradans on average. Only about 21% of Black or African American and Latine respondents to the Statewide Digital Access Survey report having a desktop computer at home compared to 37% of white respondents. Regarding home internet service, all respondents belonging to a racial and ethnic minority group reported less home internet service than respondents overall and compared to white respondents

Affordability

Fifty-seven percent of Latine respondents cite the lack of affordability as the reason they don't have home internet access, as opposed to 47 percent of white respondents. Even so, nearly double the percentage of members of the Latine community (17 percent) compared to white respondents (9.9 percent) stated lack of understanding of how to apply for a discounted internet service program as the reason for not participating. One participant from listening sessions reported she terminates service in the summer when the kids no longer need it for school. Some people reported being on low-cost plans, while others paid full rates, up to \$100 per month.

Cybersecurity

More respondents to the Statewide Digital Access Survey belonging to racial and ethnic minorities reported less familiarity with cybersecurity measures (91%) than respondents as a whole (82%) and white respondents (72%). Tribal members and American Indian/Alaska Native respondents reported high awareness and implementation of parental controls for children; however, less than 52% of Asian, Black, and Middle Eastern/North African respondents reported awareness of cybersecurity measures. Roughly 17% of Asian and Middle Eastern/North African respondents reported not knowing what cybersecurity means (more than six percentage points higher than racial and ethnic minorities as a group). From listening sessions, some participants shared stories about being nervous about using Touch ID, using a fingerprint instead of a password, as they don't trust the companies with the information.

Digital Skills Training

While racial and ethnic minority respondents seem relatively comfortable setting up parental controls to monitor a child's access online, there are differences between groups. For example, according to the Statewide Digital Equity Survey, roughly 32% of Asian and Middle Eastern/North African respondents reported being comfortable with setting up these controls, compared to 51% of racial and ethnic minorities as a group. All racial and ethnic minority respondents reported being less comfortable or unfamiliar with making appointments online compared to white respondents (34% vs 19%), which was highest for Asian respondents at 38%.



Key recommendations for this covered population include:

- Continuing ongoing community engagement.
- Building trust.
- Addressing language barriers.
- Promoting access to technology and digital resources.

These strategies will work toward dismantling barriers and promoting equitable opportunities for all racial and ethnic minority populations.

VETERANS

As with every covered population, veterans come from highly diverse backgrounds and are not homogenous. However, some barriers are unique to veterans, based on input from the Digital Equity Team's stakeholders and survey data. Digital Equity Committee stakeholders discussed obstacles to digital equity for veterans and shared that veterans may resist seeking help due to pride and self-reliance. Veterans and family members who participated in these conversations described some veterans' resistance to embracing digital technology and shared the importance of presenting veterans with practical reasons for adoption. On the other hand, depending on an individual's role while enlisted, some veterans are extraordinarily tech-savvy and leave the military with skills many civilians lack. Veterans often do not self-identify as a distinct group within the community.

Access to the Internet and Devices

More veterans, 6.5 percent, compared to all respondents, 4.3 percent, report to the Colorado Health Access Survey lack of internet service at home, with nearly 15 percent stating the primary reason is internet service is unavailable in their area.

Digital Skills Training

There are potential training needs in using social media, online job search, and applying for jobs online among veterans. This is based on a significantly lower percentage of veterans responding they use the internet for these activities compared to all responses regarding the uses of the internet on the Colorado Health Access Survey. Among all Coloradans who responded:

- 78.3 percent report using the internet to access social media compared to 59.1 percent of veterans.
- 42.4 percent report using the internet to search for jobs as compared to 24.9 percent for veterans.
- 32.6 percent apply online for employment as compared to 18.2 percent for veterans.

In listening sessions, veterans said although there are many resources online, it can be easy to get lost and confused about how they ended up on certain pages.



Affordability

From the listening sessions, a facilitator felt “the veterans especially had a few people who were struggling financially and personally with health issues that seemed to block their ability to get connected.” However, only 4.4 percent of veterans, compared to 6.3 percent of all Colorado Health Access Survey respondents, reported awareness of discount programs for internet service at home.

Cybersecurity

While cybersecurity awareness is an asset for veterans, there is still an opportunity to improve cybersecurity resources for this group. In listening sessions, veterans shared that even with educational material, some of the cybersecurity topics and protecting data lessons are basics they had heard before. Patrons still feel it is an unknown topic due to not knowing how to manage it on their devices outside the classroom. Digital inclusion assets specifically for veterans in Colorado were challenging to find, particularly those that meet veterans where they are given their existing skills. This is an opportunity the Digital Equity Team will explore during plan implementation.

RURAL RESIDENTS

While each rural community in Colorado is unique, with its own culture and feel, there are some unique barriers rural communities face, whether they are high in the Rockies or the expansive grasslands of Eastern Colorado. The importance of the internet for health care came up multiple times in listening sessions with rural residents. Participants shared that telehealth is a way for rural Colorado residents to maintain contact with their specialty care providers in the metro areas. However, communities lacking broadband infrastructure or affordable access are cut off. Rural residents are forced to travel or forgo care if they have transportation barriers.

Access to the Internet and Devices

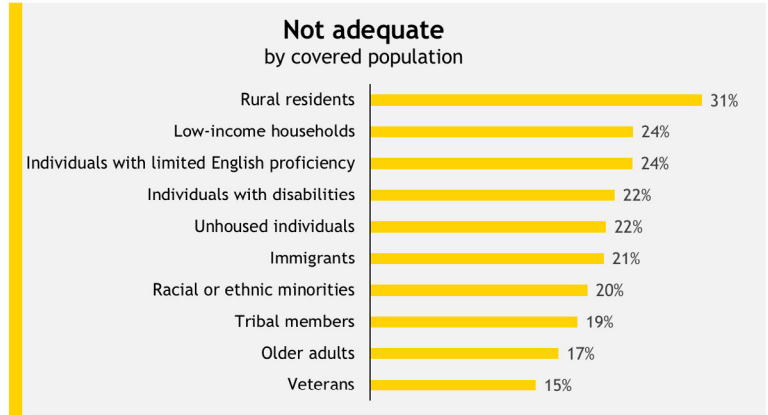
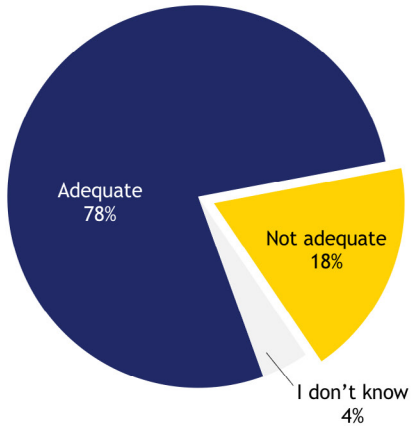
Unfortunately, much of Colorado’s rural population still lacks adequate access to digital infrastructure, and rural residents experience limited resources and reliable internet services. Almost more than triple the percentage of rural residents, 10 percent, report no home internet access as compared to 3.4 percent in urban areas. The top two reasons cited were lack of affordability, 44 percent, and lack of availability, 41 percent. Less than half of that percentage of respondents in urban areas, 20.6 percent, cite lack of internet service availability as the reason they don’t have it in their homes.

In a Colorado Digital Equity listening session, a recently incarcerated individual shared that after being released, individuals often have their phone tracked by their parole officer. Because of this, some choose not to have a phone at all, which means they have less access to resources and connections.

18% of online survey respondents rate their home internet service as inadequate.

Of respondents who rate their home internet service as inadequate, 31% are rural residents.

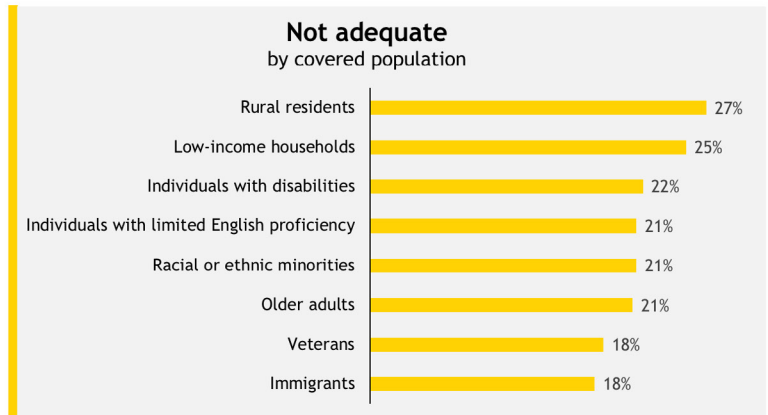
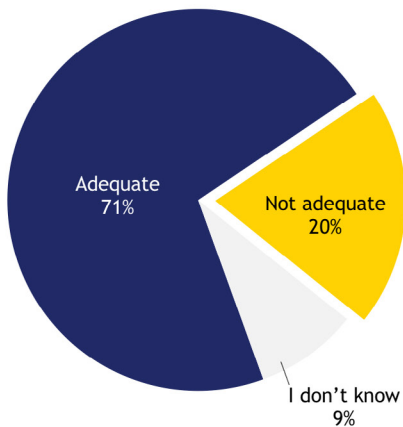
Which of these options best describes your internet service at home in terms of speed and reliability?
(All respondents)



20% of paper survey respondents rate their home internet service as inadequate.

Rural residents and low-income households comprise a greater share of respondents with inadequate home internet service as compared to online survey respondents.

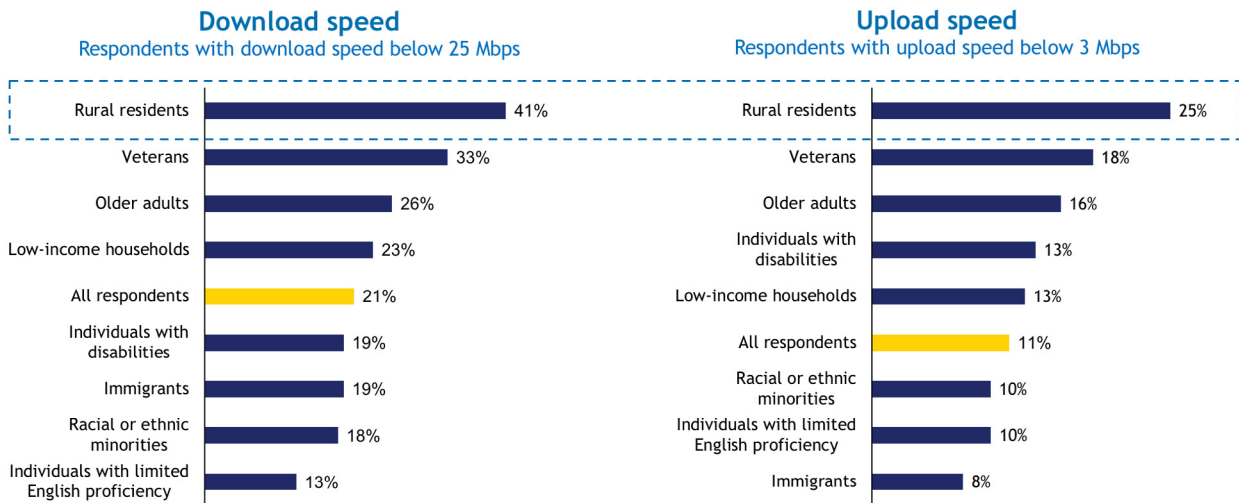
Which of these options best describes your internet service at home in terms of speed and reliability?
(All respondents)



Responses from tribal members and unhoused individuals excluded due to low response rates to this question.



The greatest share of online respondents whose internet speed tests measured under 25/3 self-identified as rural residents.



Digital Skills Training

According to the National Skills Coalition’s 2023 report “Closing the Digital Skill Divide: The Payoff for Workers, Business, and the Economy,”^{lxvii} rural residents face compounded challenges. First, they are more likely to lack broadband internet access due to their geographic location, as demonstrated above. Then, this lack of access hampers their ability to get online and build better digital skills by participating in educational and workforce opportunities.

Rural residents are less likely to use the internet for:

- Accessing telemedicine (36 percent).
- Searching for employment (30.3 percent).
- Applying for employment (21.2 percent).

By comparison, Coloradans who live in urban areas responded to the Colorado Health Access Survey, accessing the internet for telemedicine at 51.9 percent, searching for jobs at 44.4 percent, and applying for them at 34.4 percent. This indicates an opportunity to improve confidence and skills among rural residents in these areas. The Digital Equity Committee shared that rural areas often lack nearby support centers or training facilities, necessitating long journeys for individuals seeking assistance. This travel burden can deter participation and hinder access to digital skill training programs.

Affordability

As stated above, 44 percent of rural residents who responded to the Colorado Health Access Survey cite a lack of affordability as a reason for not having home internet service. This was supported by rural residents in listening sessions. One group shared, “Cost is one of the biggest barriers for people in their community to have access. Additionally, if you cannot get a line-of-sight internet and do not live in the part of town where fiber has been installed, your only



option is satellite, which is expensive.” The cost of devices was reported by 13.1 percent of rural residents as a reason for not having internet service at home.

Interestingly, there were slightly more rural Coloradans aware of programs offering discounted internet service in rural areas, 6.7 percent, than the average response of 6.3 percent. Still, about 10 percent more respondents in rural areas reported a lack of awareness of these programs than their urban counterparts. Only 34.5 percent said lack of eligibility as a reason for not participating, compared to 48 percent of all respondents.

Cybersecurity

The Colorado Health Access Survey indicates rural Coloradans are more concerned about information collected online than all respondents. Among all responses to the survey, 30.3 percent reported they strongly agreed when asked about their concerns with cybercrime and cybersecurity threats. Among rural residents who “strongly agree,” that percentage was significantly higher at 74.1 percent. In listening sessions with rural residents, participants shared a feeling of insecurity in cybersecurity knowledge. They talked about how hard it is to keep educated and up-to-date, particularly for those who don’t know how to use technology.

There also is a sentiment of feeling forgotten that came out in listening sessions, and the Digital Equity Team recognized that when visiting rural communities through Rural Philanthropy Days. It will be important that any digital inclusion programs feel relevant to rural communities and are led by local leaders rather than from an organization located in a metro area.

INDIVIDUALS WITH DISABILITIES

Access to the Internet and Devices

The Colorado Health Access Survey indicates individuals with disabilities are more likely not to have the internet at home (9% compared to 4% of the general Colorado population). In addition, in listening sessions with individuals with disabilities, participants shared challenges navigating websites due to color contrast and small fonts. Visual cues can be muddled, with colors overlapping submit buttons. Screen reader users say long text makes looking for information too time-consuming. For the deaf, websites are written in full English and don’t consider some deaf people’s first language to be American Sign Language and English as their second language.

In sessions with the Digital Equity Committee, stakeholders shared that those with disabilities may need accessibility tools, adaptive hardware, and assistive technology. Teachers may need more knowledge to support this population, and assisted living spaces could use more navigation tools to help them. It also should be noted that without high-speed, low-cost broadband access, many individuals with disabilities are unable to use many technologies specifically designed to improve their ability to engage with others, including closed captioning, video description, wireless wearable medical devices, patient portals, text-to-speech, and more. However, internet access can be especially important and impactful for people with disabilities.



“Two consumers have a ... unique living situation that requires internet access at all times. In Southeastern Colorado, a pair of sisters – one who is deaf, the other who is blind – have been working with CTSR staff for the past several months. CTSR staff members set up smart bulbs connected to their Amazon Echo in their house. That allows the blind sister to have the smart bulbs flash different colors to alert her deaf sister she is needing her attention. Given that she only recently lost her sight, it has been a struggle for both sisters the past few months to adapt to so many changes. A few flashing light bulbs may seem rather simple, but it has made a world of difference.”

— Center Toward Self Reliance (CTSR), an Independent Living Center in Southeastern Colorado

Affordability

According to the 2023 Colorado Health Access Survey, Coloradans with disabilities are more than twice as likely to lack internet at home than the general population, with 72% reporting it is too expensive. Part of the reason for not having internet at home is due to the cost of devices for more than 22,000 Coloradans with disabilities; 33% of people with disabilities reported this as an issue for them compared to 18% for the general Colorado population. Those with disabilities are more likely to be enrolled in an internet subsidy program. For those who are not enrolled, 59% reported it was because they didn't know it existed, and 21% said it was because they didn't know how to apply.

Digital Skills Training

In listening sessions with individuals with disabilities, participants stated public resources are hard to understand. The 2023 Colorado Health Access Survey indicates 75% of Coloradans with a disability are confident in using the internet compared to 90% of the general population. This can lead to difficulties navigating the internet for needed services, such as financial or staying connected to loved ones. Roughly 72% of Coloradans with a disability are estimated to use the internet for paying bills or online banking compared to 85% of Coloradans without a disability. Less than 80% use the internet to communicate with family and friends compared to 92% of the general population.

Cybersecurity

The 2023 Colorado Health Access Survey indicates Coloradans with disabilities are less likely to feel confident knowing how to keep information safe and secure (57% versus 72% of the general population). In addition, 53% of those with a disability are concerned they wouldn't know how



to resolve a cybersecurity incident, versus 40% of Coloradans without a disability. Participants in listening sessions said internet safety classes would benefit the community. According to the CHAS, of the more than 74,000 individuals with disabilities in Colorado, 15% do not have internet at home because of concerns about privacy online. In listening sessions with this covered population, a group member without internet access explained they did not want internet access because they did not know much about it and didn't want to give away any sensitive personal information accidentally.

“ [Cybersecurity] was a very prevalent concern for the group members present and a primary reason why some do not have internet at all. One group member shared they had recently had their bank account hacked and lost over \$7,000. Because of the fear of fraud, rather than do online shopping through a website, this individual will contact the store’s customer service to place an order over the phone instead. ”

HOUSEHOLDS WITH LIMITED FINANCIAL RESOURCES

Individuals living in households with limited financial resources face barriers to accessing internet services, devices, and training. In Colorado Digital Equity Research Listening Sessions, participants with limited financial resources shared that there are many barriers to getting online. However, those individuals from households with limited financial resources but with internet access said they appreciate taking online classes, making appointments, and getting information in real-time to aid in decision-making. In households with children and limited financial resources, barriers to internet access affect the student’s ability to be successful.

Colorado Futures Center reported in 2020:

- Two-thirds of children living without internet are Hispanic.
- 49% of children without internet access are in elementary school.
- 52% of children without the internet live in households earning less than \$50,000.
- 25% of children without the internet live in households earning less than \$25,000.

The Statewide Digital Equity Survey includes individuals experiencing homelessness within this group. The Digital Equity Team wanted to ensure the unique needs of individuals who are experiencing homelessness were acknowledged, as some of the strategies offered in the Digital Access Plan will not apply to this population, such as connecting them to affordable broadband at home. Device access is another challenge for individuals experiencing homelessness, as keeping a device outdoors in the elements, risk of theft, and charging are additional barriers to ownership.



Access to the Internet and Devices

Less income to pay for basic expenses requires many Coloradans to deprioritize costs like internet service and a laptop or desktop computer. Another issue that impacts access is availability. Among respondents to the Colorado Health Access Survey who identify as low income, almost 18 percent cite a lack of internet service availability in their area as a reason for not having internet service in their home. In addition, 65.4 percent of respondents with limited financial resources cite a lack of affordability, and 33.5 percent report the cost of devices to access the internet is out of reach for them. A lower percentage of all survey respondents report a lack of affordability of the service and the devices as reasons for not adopting the service or having access to devices at 52 and 18 percent, respectively.

Many Coloradans - disproportionately individuals experiencing homelessness, individuals with limited English proficiency, and immigrants –only have a smartphone to access the internet at home. In listening sessions conducted by Skills2Compete, individuals from households with limited financial resources reported they often didn't have sufficient data in their low-cost plans to participate in video meetings or to attend classes, for example.

Digital Skills Training

The 2023 Colorado Health Access Survey asked respondents to share the activities for which they use the internet. Respondents who identified as low income reported less use of the following than the average respondent:

- Telemedicine.
- Online shopping.
- Bill paying.
- Accessing bank accounts.
- Learning about community events.
- Communicating with family and friends.

Interestingly, almost 15 percent more respondents with limited financial resources reported they use the internet to seek information about public or government programs than all respondents at 39.7 percent and 25 percent, respectively.

These CHAS responses may indicate a need for digital skills training in using the internet for activities not being done online by residents with limited financial resources. Additionally, the Centers for Disease Control and Prevention (CDC) reports 8.7% of people who have incomes below the poverty level report severe psychological distress.^{lxviii} For households with limited financial resources, the need for trauma-informed skills instruction, device access, online opportunities for physical and mental health care, and other supports cannot be overstated.

Many Coloradans – disproportionately individuals who are experiencing homelessness, households with limited financial resources, and individuals with limited English proficiency – do not have someone in their household or community who can help them with technical



support. In fact, 27% of respondents who are unhoused reported to the Statewide Digital Equity Survey they don't have nearby access to technical support if they have trouble with computers or the internet.

“ We’re here, we want representation in rural Colorado. Denver gets everything, more services than we do. We have to fight for everything we want. ”

Affordability

The primary reason people in households with limited financial resources are not connected to the internet at home is the lack of affordable devices and internet service. Among all respondents who stated they do not have internet service at home, 52 percent cite a lack of affordability. This was almost 10 percent higher among those respondents who identified as low income at 61 percent. However, nearly triple the percentage of respondents with low incomes reported awareness of discounted internet service programs, 17.1 percent, compared to 6.3 percent of all respondents. Among those not enrolled, 52.2 percent of respondents with low incomes cite a lack of awareness of these programs, and 30 percent cite ineligibility. Some participants reported purchasing unlimited data plans, but their speeds were throttled after a certain amount of data was used. While this barrier is not specific to individuals living in households with limited financial resources, the compounded impact of not having home internet service, relying on many services that require online access, and not having enough data to accomplish basic online tasks is important to note.

Cybersecurity

The lack of confidence in the safety and security of the internet is significantly higher among respondents with limited financial resources than among all respondents, with 54.8 percent of CHAS respondents who have limited financial resources stating they are confident. This compares to 86.9 percent of all respondents saying they have confidence in their online safety and security.

INDIVIDUALS WITH A LANGUAGE BARRIER

Like all the covered populations, this group has significant overlap and intersectionality. For the Statewide Digital Equity Survey, individuals with limited English proficiency made up 48% of the respondents identifying as immigrants. These respondents' language and cultural differences significantly shape the tech landscape, particularly for immigrants and refugees. The language used to describe technology, with terms like “click” or “scroll,” can pose initial barriers for individuals with limited English proficiency. Bridging this linguistic gap is vital in ensuring refugees can confidently navigate the digital world. In addition, some English language learners are not literate in their first language.



Unique challenges faced by English-speaking, U.S.-born individuals with under-literacy were identified as well. This includes services and resources that assume strong literacy skills among all Americans, leading to increased shame and exclusion for this population. Different techniques are required for different types of language learning. For example, someone with dyslexia, ADHD, or other barriers to literacy will require different instruction from someone learning to speak English as a second language.

Digital Equity Committee participants who work with individuals who have language barriers shared that for some immigrants who have children born in the U.S. or who are attending English language schools, their children become translators for their adult family members. This can be especially problematic when a child is relied upon to translate complex information online, such as legal documentation or health information.

Access to the Internet and Devices

Digital Equity Committee stakeholder conversations revealed access to devices and broadband can be problematic for many individuals with language barriers. The 2023 Colorado Health Access Survey estimates those who speak a language other than English at home were almost twice as likely to lack internet at home. While most people have smartphones, transitioning to other devices can be more challenging. Survey data seems to support this – the CHAS indicates 22% of the 74,000 households lacking internet at home feel they can accomplish everything they need with their smartphone. Roughly 15% of Statewide Digital Equity Survey respondents with limited English proficiency reported having a desktop at home – the lowest of any other covered population group surveyed. Digital Equity Committee stakeholders shared that many individuals in this group rely on their children for technical assistance and translation, including tasks like setting up keyboards or adjusting interface settings to their preferred language.

Digital Skills Training

Respondents to the Statewide Digital Equity Survey who self-identified as having limited English proficiency reported less confidence in several online tasks in comparison to all respondents. For example, this group was less confident in sending an email with an attachment, searching for information about jobs or health care online, paying bills, making an appointment, and installing a new app on their smartphone or tablet.

Affordability

Of the covered populations surveyed in the Statewide Digital Equity Survey, those with limited language proficiency are the least informed about the Affordable Connectivity Program. Additionally, 50% of respondents with limited language proficiency indicated they do not know how to apply for ACP. Disproportionately, individuals who are experiencing homelessness, individuals with limited English proficiency, and immigrants – have only a smartphone to access the internet at home.

Cybersecurity

Respondents to the Statewide Digital Equity Survey who self-identified as having limited English proficiency reported less confidence in cybersecurity practices than all respondents, such as deleting cookies on a web browser and setting up protections against phishing and spam email. In addition, 23% of respondents with limited English proficiency reported not being familiar with setting up controls to monitor a child's access online, compared to 12% of all respondents.

“Poverty causes stressors such as insecurity and uncertainty about food, housing, and income. Low-income communities tend to have specific characterizations such as limited resources, poor houses, high crime and violence rates, and an inadequate school system, which are all associated with poor mental health outcomes.”

— Anxiety and Depression Association of America (ADAA)

“An individual shared a story of a friend who is homeless, is not from Colorado, and does not have an ID to get a library card. He cannot access a computer at the library and get online. He always has to find someone to help him.”

“One person who came [to the U.S.] with her phone was unable to connect to the network here. Her SIM card wouldn't work so she had to buy a new phone. This was very expensive, but she did not know a way to get help.”

4. Collaboration and Stakeholder Engagement

The planning process incorporated a robust coordination and outreach strategy, where the Digital Equity Team gained insights from many perspectives throughout the state. Collaborations with key stakeholders helped the team reach residents who represented diverse populations, providing many valuable ideas about achieving the plan's objectives.

Digital
Equity Team





Colorado's Digital Equity Team

In late 2022, the Broadband Office partnered with the Office of Future of Work (OFW) and the Office of eHealth Innovation to lead digital literacy and inclusion activities. In some states, Digital Equity Planning Grant funding is managed by the state's broadband office. In Colorado, the funding flows through the Governor's Office of Information Technology to the Colorado Department of Labor's OFW. Additionally, the OeHI participated in Colorado's digital inclusion work before Digital Equity Planning Grant funds were available. This unique collaboration of state agencies has ensured Colorado's Digital Access Plan is comprehensive and versatile.

Colorado posted for and hired its first digital equity manager in mid-2022. The digital equity manager, director of the Office of the Future of Work, and senior project managers from the Office of eHealth Innovation and the Colorado Broadband Office worked together to begin creating the Digital Access Plan. Then, in early 2023, OFW hired a digital navigator program administrator who is collaborating with AmeriCorps – Serve Colorado to launch a pilot digital navigator program funded by state legislation.

4.1 Coordination and Outreach Strategy

Collaborations with Key Stakeholders

Several groups, committees, and teams functioned as key stakeholders, including:

- State Agency Working Group.
- Digital Equity Committee.
- Digital Equity Working Group.

The **State Agency Working Group** included agencies from across Colorado that worked to raise awareness of the Digital Equity Act, develop the digital equity plan, and coordinate state agency goals so the Colorado Digital Access Plan is aligned and supports those goals. Additionally, the group gathered state plans and garnered support for communication about the Statewide Digital Equity Survey and the Digital Equity Ecosystem Mapping Tool. The working group also shared information with state agencies and with community partners. This group met twice, and a draft of the Digital Access Plan was sent to all participants ahead of the public comment for their feedback.



The virtual forum included staff from the following agencies:

- Office of Economic Development and International Trade.
- Department of Transportation.
- Department of Human Services.
- Department of Labor and Employment, Office of New Americans.
- Health Care Policy and Financing.
- Department of Public Health and Environment.
- Department of Corrections.
- Colorado Community College System.
- Department of Early Childhood.
- Behavioral Health Administration.
- Office of Information Technology.
- Department of Law
- Colorado State Library.
- Department of Education.

It was and will continue to be incredibly important to stay coordinated with Colorado state agencies, as these entities drive systems change in the state. There are several complementary priorities, including populations of focus, commitment to equity, and strategies to improve equitable access to social determinants of health. The Digital Equity Team has strategies for collaborating with several state agencies and offices to implement and sustain digital inclusion efforts in Colorado.

Digital Equity Committee

Altogether, 84 organizations agreed to be Digital Equity Partners and Stakeholders, providing vital connections to their constituents. Many who participated in meetings or invited Digital Equity Team members to present to their organizations were involved in the Office of the Future of Work's digital inclusion work as far back as 2021. The office's director, Katherine Keegan, convened organizations she had worked with or knew to be interested in digital inclusion efforts. Once the office hired its digital equity manager, those organizations and individuals were invited to engage again, and the Digital Equity Team actively invited social service providers, local governments, health service providers, public libraries, and many others to participate in the Digital Equity Committee meetings.



The Digital Equity Team is supported by a dedicated group of stakeholders. A Digital Equity Committee replaced the Subcommittee on Digital Literacy and Inclusion in November 2022. The purpose of the Digital Equity Committee was fourfold:

1. To communicate state updates on the creation of the Digital Access Plan.
2. To provide general information about digital inclusion topics.
3. To provide space for members to network and share information.
4. To share experiences and observations about the barriers to digital equity for each of the eight covered populations.

During eight of the nine meetings held in 2023, approximately two-thirds of the meeting time was devoted to deep dives into the experiences of two covered populations. Before dividing the attendees into breakout groups to discuss and take collaborative notes, one or two speakers - either with lived experience or experience providing services to the populations - would present to the committee. These notes have been used to describe barriers to equity in this plan.

This committee regularly hosted 30-40 participants at its bimonthly meetings. It includes a mailing list of nearly 200 stakeholders, including those with lived experiences.



Stakeholders included representatives from:

Boulder County Veteran Services	Mesa County Libraries
United Way Denver	City and County of Denver
Parachute Group	Buena Vista Library
World Education	Colorado State Library
Prime Health	E-Luminosity
The Arc of Aurora	Front Range Community College
Community Works	High Plains Library
Larimer County	City of Alamosa
Center for People with Disabilities	Vistabeam
Rise Broadband	Eagle County Veteran Services
Colorado Department of Corrections	Colorado Black Health Collaborative
C3 Colorado	Next Chapter
Jefferson County Libraries	Focus Points
Eagle Valley Library District	San Luis Valley Broadband
Denver Digital Equity Coalition	Colorado Center on Law and Policy
KETO FM	PCs for People
Colorado Community Action Association	Community College of Aurora
Connected Communities Digital Bridge	Durango Public Library
Connections for Independent Living	Lone Cone Library
Axis Health System	Colorado Center on Law and Policy
Loveland Public Library	Denver Public Library
Esquared	Axis Health System
Connections for Independent Living	Connected Communities Digital Bridge
Sister Carmen Community Center	Community College of Aurora
Cleo Parker Robinson Dance	



Working with these organizations was essential to ensuring the Digital Equity Team was building partnerships with key community organizations in the state. These trusted entities assisted the Digital Equity Team in disseminating the Statewide Digital Equity Survey, completed the Digital Equity Ecosystem Mapping Tool to build out Colorado’s digital equity asset map, and provided needed context on covered populations’ needs and assets. These partnerships were invaluable throughout the planning process and will continue to be critical for the success of implementing the Digital Access Plan. These organizations can guide the Digital Equity Team on the needs of the communities they serve and deliver needed digital inclusion services in culturally responsive and relevant ways.

Digital Equity Working Group

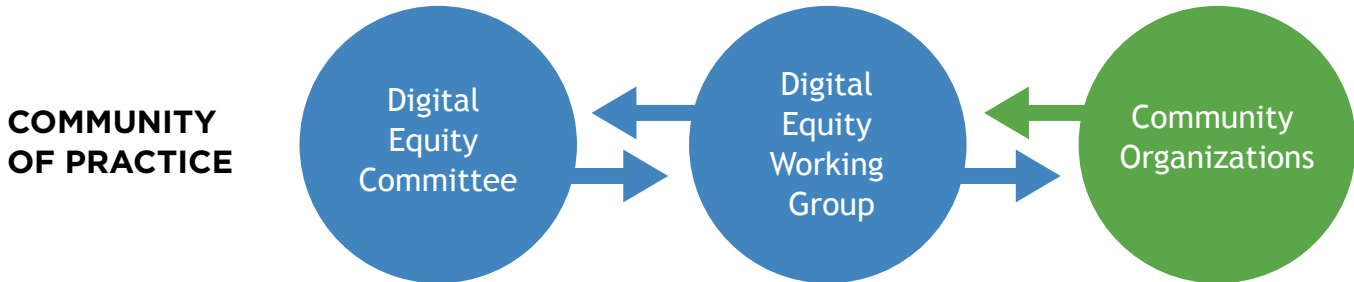
The Digital Equity Working Group members were selected by application in early 2023 and have been fundamental to creating Colorado’s Digital Access Plan. Hour-long DEWG meetings were held twice monthly. During these meetings, members crafted the plan’s mission, vision, and values and advised the Digital Equity Team as they designed solutions for eliminating barriers to digital inclusion. Additionally, the DEWG has provided research and helped to write sections of the Digital Access Plan.

Current and Past Digital Equity Working Group Members Include:

Amy Phillips Loveland Public Library	Laura Ware Colorado Center on Law and Policy
Dayton Romero Older Adults Technology Services (OATS) from AARP	Lynn Kutner Denver Human Services IDDEAS
Bernadette Berger Jefferson County Public Library	Matthew Dodson Axis Health System
Cordelia Randall Esquared	Rochelle Miller Connections for Independent Living
Jeremy Kennell and Matthew Bauer Connected Communities Digital Bridge	Salvador Acuña Co Create, LLC
Josiah Masingale Colorado Community Action Association	Tracy Treece Denver Digital Equity Coalition/Denver Public Library
Kathy Green Community College of Aurora	Trey Grimes Cleo Parker Robinson Dance
Lara Van Matre Bridging Digital Divides	Becky Daniels San Luis Valley Health
Antony Frank PCs for People	



The contributions and impact the DEWG members had on the planning process and the Digital Access Plan itself cannot be overstated. The partnership with these digital inclusion leaders has been invaluable. Going forward, the Digital Equity Team will continue to seek input, guidance, and coordination with the organizations and people in this group, particularly upon receiving the capacity funding.



The Digital Equity Committee and the Digital Equity Working Group will likely continue to meet until capacity funds are available. At that time, the DEWG will be dissolved. The Digital Equity Committee will continue to meet, perhaps with a different name and focus, and a community of practice will commence for coalition participants. More information about the community of practice is available in [Section 5](#) of this plan.

The structure of the Digital Equity Committee meetings allowed time for engagement between attendees and opportunities for individuals to share their expertise. The Digital Equity Committee and the Digital Equity Working Group provided channels for people who work in digital inclusion to contribute to Colorado’s Digital Access Plan and help the Digital Equity Team create solutions for the most marginalized Coloradans.

The Digital Equity Team understands writing a Digital Access Plan is only a starting point in addressing the state’s barriers to digital inclusion. The team witnessed the effectiveness of paying community-based organizations to administer surveys and conduct listening sessions. Those organizations reached communities whose potential distrust of state government may have prevented the Digital Equity Team’s ability to gather such rich data. By offering community-based organizations a safe space to discuss digital inclusion barriers via surveys and listening sessions with participants, the Digital Equity Team learned volumes about myriad Colorado communities, no two of which are alike. Listening sessions captured nuances of community needs that wouldn’t have been captured in surveys alone.

The conversations will not end when the capacity funds arrive in Colorado. In fact, one of the primary strategies articulated in the Digital Access Plan is the creation of digital inclusion alliances that will be community-led and state-supported. The team sees no better way to provide a feedback channel for communities to use to elevate their digital inclusion needs.



Community Engagement Events

The Digital Equity Team attended community events, co-presenting with and presenting to other state agencies, conferences, and more to raise awareness of the Colorado Digital Access Plan development and opportunities to get involved and hear from communities on what needs residents face for digital access.

In total, the team attended or presented to 28 groups, including:

- 365 Health Fairs.
- Internet for All Summit.
- Department of Local Affairs (DOLA) events.
- Colorado Healthcare Information and Management Systems Society (CO HIMSS).
- Medicaid Enterprise System Conference.
- Colorado Health Literacy Conference.
- Southeast and Southwest Rural Philanthropy Days Conferences.
- Colorado Department of Education Adult Education Initiatives Grantees.
- Mountain Connect Conference.
- Colorado Commission on Aging: Workforce Committee.
- Colorado Broadband Office stakeholders.
- Refugee employment stakeholders.
- Denver Digital Equity Coalition.
- Colorado Recovery Office.

The Digital Equity Team also collected information directly from community members through the Statewide Digital Equity Survey and listening sessions, and these efforts are described in [Section 3.2](#). The Digital Equity Team will continue to leverage the Colorado Health Access Survey and listening sessions throughout the implementation of the Digital Access Plan.

Tribal Consultations

The Colorado Broadband Office and the Digital Equity Team attended Tribal consultations with the Southern Ute Indian Tribe and Ute Mountain Ute Indian Tribe to share information about the state's broadband and digital inclusion work and to hear from Tribal leadership and staff about similar efforts on Tribal land. The Digital Equity Team will continue to work with the Colorado Commission on Indian Affairs, the Colorado Broadband Office, and both federally recognized Colorado Tribes throughout the implementation of the Digital Access Plan.



Public Comment

In addition to having the entire plan available online at the [Colorado Digital Access Plan website](#), the Digital Equity Team summarized each strategy and translated them into nine languages (Spanish, Arabic, Vietnamese, Pashto, Farsi, Dari, French, Russian, and simplified Chinese). These summaries were available online within a Google Form where the public could leave comments on each strategy as well as other sections of the plan. The Digital Equity Team received 26 online comments.

In addition to allowing the public to comment on the Digital Access Plan digitally, the Digital Equity Team also contracted with 18 community-based organizations in nine different counties to host 21 in-person public comment events, where community members could provide input on the Colorado Digital Access Plan regardless of their digital access. In total, \$81,000 was paid to organizations to host these events. Fifteen of the events were held or accommodated languages other than English including Spanish, American Sign Language, Somali, Amharic, Oromo, Arabic, Dari, and Burmese. The organizations provided food and other incentives like gift cards and reimbursement to support and encourage participation from their communities. Each organization's facilitator provided an overview of each strategy, and asked for feedback on what participants liked, what could go wrong, what would make the strategy better, and who the Digital Equity Team should partner with when implementing the strategy. More than 330 Coloradans participated in these events, representing all nine covered populations.

The Digital Equity Team also hosted a webinar on Jan. 4, 2024, to present an overview of the strategies in the Colorado Digital Access Plan. The overview was recorded and posted to the [Colorado Digital Access Plan website](#).

The Digital Equity Team also advertised the public comment period in 13 newspapers, which ran in some of the state's most rural areas. These newspapers service Central Colorado (Chaffee, Lake, and Park county), Southern Colorado (Las Animas and Huerfano county), and Eastern Colorado (Washington, Morgan, Kit Carson, Fremont, Morgan, Sedgwick, Prowers, and Logan county). The advertisement for the public comment period ran twice in each newspaper.

Generally, there was a lot of support and enthusiasm for the plan and proposed strategies. Participants from the in-person listening sessions expressed how excited and appreciative they were to be asked for their feedback on the plan, that in-person sessions were available, and that the sessions were done by an organization they trust and that understands their cultures. Working with trusted community organizations also proved to be a great way to spread awareness of the Colorado Digital Access Plan and digital equity work happening in Colorado. Many of the organizations said participants reported learning about digital equity efforts for the first time through the listening session. For example, Sister Carmen Community Center reported participants

“expressed that they learned a lot in the session today and not just about the Digital Access Plan – there were many past and current resources and opportunities they had not heard of. Many expressed a desire to participate in future listening sessions and wished there were more opportunities to explore resources with a live person or persons. They were grateful and surprised that the State of Colorado was interested in their struggles and thinking of ways to improve their access and experiences.”



“Through holding such listening sessions and having the chance to share our thoughts, it gives us the feeling that we write our destiny by our own hands, so we really appreciate the efforts of the digital equity team for giving us this opportunity.”

“We, as a community, wish we would be able to participate in public comment sessions like this for all programs the state carries out. People never ask us what we think about the services we receive.”

“I lived in the city of Aurora for 20 years, one of the most diverse cities in the state of Colorado. As per my knowledge, more than 16 languages are spoken in Aurora. This is my first time that I am participating [in] a public listening session – thank you Farduus and her team for inviting me.”

General plan feedback also included call-outs for a clear, inclusive marketing and communication strategy for this work. This would include non-digital formats to reach people such as posters, flyers, school newsletters, bulletins from faith-based organizations, etc., and continued community engagement that includes in-person opportunities. There also was resounding feedback that all outreach, educational materials, and support are inclusive of the many communities who speak languages other than English and Spanish. This feedback was incorporated into [Section 5.1.7](#).

“County staff will tell you to go to a website, use your case number and fill out this form. Without explaining anything at all. And it is not accessible to everyone. The contents are only in English and Spanish. How is this fair?”

The table below details feedback that is specific to each proposed strategy in the plan:

Strategy	General Themes of Feedback
Strategy One	<ul style="list-style-type: none"> • Coalitions need to represent all communities within a community and be inclusive of local businesses. • Coordinating different digital inclusion organizations and their efforts is necessary for success of this strategy. • There needs to be transparency of how funding is allocated and accountability measures for coalitions to engage their communities.
<p>In response to this feedback, the Digital Equity Team made the following revisions to Strategy One:</p> <ul style="list-style-type: none"> • Included language to explain that requirements for coalitions on community engagement, accountability, and representation will be forthcoming. • Added local businesses and schools to the list of organizations likely to be required in coalitions. • Clarified that the goal of this strategy is to build local capacity, including rural areas. 	

Continues



Strategy	General Themes of Feedback
Strategy Two	<ul style="list-style-type: none"> • There are concerns about how ACP going away will impact this strategy. • Eligibility for existing subsidy programs is too restrictive and requires those without digital access to use an online form to sign up. Existing applications are too complicated and burdensome. • Work with other state agencies that sign Coloradans up for benefit programs, so they offer or increase awareness of existing subsidies. • Internet Service Providers should have to make all eligible customers aware of subsidy programs.
<p>In response to this feedback, the Digital Equity Team made the following revisions to Strategy Two:</p> <ul style="list-style-type: none"> • Added language on what happens if ACP is eliminated. • Clarified communication and outreach strategies. • Added language on working with other state partners to increase awareness of internet subsidies. • Added language on exploring other existing subsidies from internet service providers (outside of ACP and Lifeline). 	
Strategy Three	<ul style="list-style-type: none"> • Need live human help to navigate state websites. • Need simpler language and navigation for state websites, and websites should include more visuals and context to clarify what a user needs to do. • Make state websites accessible on phones and tablets.
<p>In response to this feedback, the Digital Equity Team made the following revisions to Strategy Three:</p> <ul style="list-style-type: none"> • Clarified existing language. 	

Continues



Strategy	General Themes of Feedback
Strategy Four	<ul style="list-style-type: none"> • Navigators should be hired from the community and be culturally responsive to their students of all backgrounds and ages. • The most important quality of navigators is that they are patient. • There needs to be easy for people to find digital navigator services. • Include information and training that supports parents protecting their children online.
<p>In response to this feedback, the Digital Equity Team made the following revisions to Strategy Four:</p> <ul style="list-style-type: none"> • Added context on who navigators will be. • Added that education will address resources for parents and families. • Clarified that organizations providing digital navigation services will be included in the database of digital inclusion programming in Colorado. 	
Strategy Five	<ul style="list-style-type: none"> • Must have information and training specific to protecting children online. • Need a mechanism for reporting and learning about cybersecurity issues. • Provide education specific to safely using artificial intelligence (AI). • Internet Service Providers should offer customers cybersecurity services.
<p>In response to this feedback, the Digital Equity Team made the following revisions to Strategy Five:</p> <ul style="list-style-type: none"> • Added language to address information/training to protecting children online. • Added language to explore a mechanism for reporting and inquiring about cybersecurity issues. • Added language about how AI will be addressed in Strategy Four and Strategy Five. • Added language on exploring cybersecurity services offered by internet service providers. 	

Continues



Strategy	General Themes of Feedback
Strategy Six	<ul style="list-style-type: none"> • Needs to include IT support, digital skills training, cybersecurity software, and a maintenance plan for each device. • Expand the list of potential refurbishers to additional organization types. • Communicate the benefit of donating devices to businesses. • Measure success of this strategy by the impact the device had on the person who received it rather than just the number of donated devices. • Public computers should be available in other community spots (in addition to libraries). • Devices provided to people must be of high quality and work well.
<p>In response to this feedback, the Digital Equity Team made the following revisions to Strategy Six:</p> <ul style="list-style-type: none"> • Added language about the refurbished devices meeting certain standards to ensure quality. • Added language that standards for refurbishers are forthcoming. • Expanded the list of potential refurbishers to include middle and high schools, workforce centers, immigrant centers, and reentry programs. • Added a KPI on measuring the impact a device has on the individual receiving it. • Bolstered language on acquiring donated devices for refurbishment. 	

The Digital Equity Team received 26 online comments. Responses to these comments were shared on the [Colorado Digital Access Plan website](#).

“I’m taking what I learned in tech classes to help others gain digital skills.”

“One individual shared how when Covid happened, she was grateful that she was able to continue school online. She finished her degree at Emily Griffith Online.”



5. Implementation

To address the needs of Coloradans and the covered populations identified in [Section 3.2](#), the Digital Equity Team will implement several strategies to increase digital access.

Although the State of Colorado expects to receive approximately \$20 million in Digital Equity Act Capacity Funds, the team understands this will not be enough funding to achieve the vision of providing every Coloradan in need with the digital skills and technology required to participate in our digital society and economy fully. Therefore, there is a focus throughout several strategies to continue building partnerships with digital inclusion providers, with potential funders and building buy-in among state agencies to establish sustainable funding for this work.



Establishing coalitions across Colorado creates a robust feedback loop, allowing communities to report obstacles to digital inclusion directly to the Digital Equity Team. Colorado's team strongly believes communities - not the state government - should elevate local digital inclusion needs. Once established, coalitions can share successes and challenges with each other and the Digital Equity Team, which can identify support for coalitions by funding solutions or identifying options that may be available from partner organizations. Communication between the state and the digital inclusion coalitions will be direct, with no intermediary consultants. The Office of the Future of Work will fund two positions for the implementation period to liaise with coalitions, helping them find cross-sector participants and complete their digital access plans.

Creating a Digital Inclusion Innovation Lab will also offer unique opportunities for practitioners to participate in pilot projects and test possible solutions to digital inclusion barriers.

The Digital Equity Team will measure the success of the strategies by monitoring several data sources and KPIs, as well as maintaining and growing the network of organizations working to increase digital access in Colorado. This measurement will help inform iterations or updates of the Colorado Digital Access Plan and opportunities to adjust strategies to focus funding on what works. Therefore, the Digital Equity Team plans to reevaluate the Colorado Digital Access Plan at least annually and update it as needed. See [Section 2.3.1](#) for the KPIs and data sources the Digital Equity Team will use to measure progress.

To address the digital inclusion needs of immigrants, the Digital Equity Team will measure the following:

- Percentage of immigrants reporting that the internet is too expensive.
- Number of individuals reporting they could accomplish an online task following an appointment with a digital navigator.
- Percentage of immigrants who report using smartphones only at home.
- Percentage of those confident they can keep themselves safe online.

To address the digital inclusion needs of members of racial and ethnic minorities, the Digital Equity Team will measure the following:

- Percentage of racial and ethnic minorities reporting the internet is too expensive.
- Number of individuals reporting they could accomplish an online task following an appointment with a digital navigator.
- Percentage of particular racial and ethnic minority groups who report confidence in keeping themselves safe online.



To address the digital inclusion needs of veterans, the Digital Equity Team will measure the following:

- Number of digital inclusion coalitions that include veteran organizations.
- Number of individuals reporting they could accomplish an online task following an appointment with a digital navigator.

To address the digital inclusion needs of members of rural residents, the Digital Equity Team will measure the following:

- Number of eligible rural individuals enrolled in ACP and Lifeline.
- Number of individuals reporting they could accomplish an online task following an appointment with a digital navigator.

To address the digital inclusion needs of individuals with disabilities, the Digital Equity Team will measure the following:

- Number of partnerships with state agencies implementing HB21-1110.
- Percentage of covered populations reporting feeling confident using the internet, particularly those with disabilities.
- Percentage of those confident they can keep themselves safe online, particularly individuals with disabilities.

To address the digital inclusion needs of older adults, the Digital Equity Team will measure the following:

- Number of individuals reporting they could accomplish an online task following an appointment with a digital navigator.
- Percentage of covered populations reporting feeling confident using the internet, particularly older adults.
- Percentage of those confident they can keep themselves safe online.

To address the digital inclusion needs of incarcerated and justice-involved individuals, the Digital Equity Team will measure the following:

- Number of individuals reporting they could accomplish an online task following an appointment with a digital navigator.
- Percentage of covered populations reporting feeling confident using the internet, particularly incarcerated individuals.

[Section 5.1](#) describes the strategies and activities introduced in [Section 2](#) in more detail and includes which key performance indicators referenced in [Section 2.3](#) the Digital Equity Team will use to measure progress for each strategy.



5.1. Implementation Strategy and Key Activities

5.1.1 Strategy 1: Create Colorado's digital equity ecosystem

Description: Colorado's primary strategy for reducing barriers to digital equity involves building a digital inclusion ecosystem. A digital equity ecosystem will combine regional efforts to meet a geographic community's unique and diverse needs to advance digital equity. It will mean coordinating entities working to address all aspects of the digital divide, including affordable broadband, devices, and digital skills training.

Digital inclusion work is complex, requiring device access, skills training opportunities, and reliable, high-speed connectivity. But it also requires patient and dedicated staff members and volunteers, accessible and private spaces, transportation for clients and customers, and funding and support for outreach and marketing in multiple formats and languages. The creation of a digital equity ecosystem will provide support networks, opportunities for sharing best practices, coalition and community of practice building, and coordination opportunities needed to sustain the work beyond the federal Digital Equity Act funding. These coalitions and a statewide community of practice will encourage collaboration and consistency while honoring the unique characteristics of individual regions across Colorado. It also builds foundational capacity at the community level for local community leaders to lead and sustain digital inclusion services and programs.

“ [C]oalitions tend to provide the unique service of supporting the development of their community's digital inclusion ecosystem through empowerment, alignment, coordination, and amplification of member organizations' digital inclusion efforts. ” ^{ix}

To build statewide infrastructure that will support ongoing digital inclusion efforts, the Digital Equity Team will establish regional digital inclusion coalitions to provide opportunities for all Coloradans to thrive. These coalitions will have access to planning support and funding to create regional, cross-sector collaboratives and strategic plans specific to their community and implementation funding to implement digital inclusion strategies that fit what their community needs most. The Digital Equity Team will use statewide and national data to select the first round of coalitions based on poverty level, prevalence of covered populations within their region, and other relevant information. Requirements for coalitions on representation, accountability, regions, and community engagement will be forthcoming.

The coalitions will be geographically dispersed across the state and comprise cross-sector participant organizations and community members, as well as representatives from business, health, and education sectors. These coalitions will receive funding to build capacity and create



Regional Digital Access Plans, which will prioritize the specific digital inclusion needs identified by communities for funding, particularly in rural areas. The Office of Future of Work will hire regional digital equity partnership coordinators to support regional digital inclusion coalitions in identifying potential coalition members from community-based organizations, labor organizations, workforce development, education, health care, local businesses, schools, and other sectors; encouraging coalition participation; and assisting coalitions in creating their Regional Digital Equity Plans. Coalitions will be encouraged to seek funding from other sources as well, including partner foundations and national organizations that advocate and provide monetary support for covered populations.

“ Why leave this up to the state when it can be worked on locally? Locally we can make the difference by showing front and centered our resources, classes, and computer lab. [The state should] create partnerships with local organizations that can connect us to communities. Use our networking to reach others. ”

“ Focus on prioritizing having specialists who can help with tech who live in the community, and we can trust. We want to have people who care about the people in their community and their job is to help people. ”

This also will entail creating a Digital Inclusion Innovation Lab to maintain the Digital Navigator Community of Practice and a similar community for digital inclusion practitioners. A process will be established to oversee the testing of new and redesigned technology tools and digital inclusion interventions. This will include user testing of tools and interventions. The creation of a digital navigator apprenticeship program also will be explored, as well as best practices and training for training Coloradans on the safe use of artificial intelligence (AI).

KPIs:

- Number of regional digital inclusion coalitions.
- Number of regional digital access plans.
- Number of national and foundation partnerships to sustain digital inclusion efforts in Colorado.



Activity 1.1: Support the creation of Regional Digital Inclusion Coalitions to build local capacity for advancing digital inclusion across the state.

- This will include:
 - Creating a formula-based funding opportunity for regional digital inclusion coalitions. This will allow for developing community-led digital access plans that meet community or regional stakeholders' needs. Coalition plans will be reviewed for sustainability.
 - Creating a community of practice for coalition members to share best practices.
 - Reducing barriers to funding for smaller organizations that lack the capacity to apply for and manage federal grants.

Activity 1.2: Support the creation and implementation of Regional Digital Equity Plans to empower communities to address digital inclusion according to their needs and using locally relevant solutions.

- Regional Digital Equity Partnership Coordinators will assist coalitions in implementing their Regional Digital Equity Plans.
- Regional Digital Equity Plans will align with state digital inclusion priorities and the Colorado Digital Access Plan.

Activity 1.3: Build a network of funders of digital inclusion work in Colorado to support the sustainability of digital inclusion work. This network will include state agencies, state and national foundations, and other organizations.

- Potential funding sources will be identified and shared with coalitions.
- Funders will be connected to relevant coalitions or coalition members and invited to share their resources at community of practice meetings.

Activity 1.4: Create a digital inclusion innovation lab within the Office of the Future of Work that includes higher education and community-based organizations to connect digital inclusion research and practice. This will involve:








- The hiring of a Digital Inclusion Innovation Lab manager to build a portfolio and strategy to support the field.
- Creation of a community of practice for digital inclusion practitioners.
- The establishment of a process for testing new and redesigned technology tools and digital inclusion interventions, including user testing.

Activity 1.5: Map Digital Inclusion Partners in Colorado

Description: Aligning with the values created collaboratively by the Digital Equity Working Group and approved by the DEWG and Digital Equity Committee means identifying creative, sustainable, and resilient solutions. The state’s plans for building a digital equity ecosystem will require active participation by diverse stakeholders in rural, urban, and mountain areas across Colorado. Thus, the Digital Equity Team has begun turning the Asset Map in [Appendix B](#) into a dashboard to analyze, record, and track the digital inclusion network in Colorado.

The goal of this work, done in partnership with [Visible Network Labs](#), is to leverage network science methods to strengthen the digital inclusion ecosystem and make it easier to share best practices, find relevant partners, and communicate. This will lead to better resource sharing and will improve the sustainability of this work.

- Execute another contract with Visible Network Labs to launch surveys and incorporate relational data between partners.

Potential Partners (not exhaustive):	 Libraries	 Local businesses
 Schools and colleges	 Resettlement organizations	 Workforce Centers
 Labor organizations	 Faith-based organizations	

How Strategy 1 Addresses Gaps in Existing Efforts to Address Digital Equity Barriers

The Digital Equity Team spent 2023 engaging with organizations and communities particularly impacted by the digital divide. The team learned many nonprofit organizations that provide services for covered populations cannot meet their communities’ digital inclusion needs. A lack of funding availability is the most widely mentioned barrier for organizations responding to the Colorado Digital Equity Ecosystem Mapping (DEEM) survey. Insufficient staffing and organizational capacity were also cited as barriers by respondents, including 91 organizations providing device access and 74 organizations providing digital skills training. Representatives from nonprofit organizations attending both the Southeast and Southwest Rural Philanthropy Days Conferences in 2023 widely shared these barriers. This strategy aims to increase funding for local community-based organizations to tackle their community’s digital access barriers. Activities in strategy one will also increase awareness of existing resources and programming and help organizations in developing partnerships across sectors. Through increased funding, awareness, and coordination, this strategy intends to support the capacity of organizations championing digital inclusion and support an expanding network of organizations to advance digital equity at a local and regional level.



5.1.2 Strategy 2: Improve the affordability of home internet subscriptions

Description: Programs such as the ACP and Lifeline improve the affordability of home internet subscriptions for many Coloradans; however, there are many more eligible households to reach. Only 16% of eligible households are enrolled. There is a possibility that ACP will be eliminated in the future. In this event, the Digital Equity Team will focus on subsidy programs and internet discount programs available from internet service providers in Colorado. The Digital Equity Team will leverage a variety of outreach and communication strategies, including posters, flyers, school newsletters, in-person workshops, and continue to ensure language accessibility by having materials translated and having interpreters at in-person events. In addition, Colorado is receiving separate funding from the Colorado Public Utilities Commission starting in 2024 to increase enrollment internet subsidy programs to support this effort.

KPI:

- Number of eligible Coloradans enrolled in ACP, Lifeline, and other internet discount programs.
- Number of individuals with limited financial resources and rural Coloradans enrolled in ACP, Lifeline, and other internet discount programs.
- Percentage of immigrants and racial and ethnic minorities reporting that the internet is too expensive.

Activity 2.1: Promote participation in internet discount and subsidy programs through targeted community outreach and assistance with enrollments, particularly for individuals with limited financial resources and rural households and in areas of Colorado where enrollment is low but eligibility is high.

Activity 2.2: Work with the Colorado Broadband Office on future programming that supports home internet affordability.








Activity 2.3: Work with the Colorado Broadband Office and its Colorado Broadband Map to identify gaps in broadband services for covered populations.

Activity 2.4: Investigate existing subsidies offered by Internet Service Providers (ISPs) outside of ACP and Lifeline.

Activity 2.5: Work with state and local partners that provide benefits (WIC, Medicaid, housing) to increase awareness of internet subsidies for their clients.

How Strategy 2 Addresses Gaps in Existing Efforts to Address Digital Equity Barriers

The Colorado Health Access Survey found that of the 83% of households making up to 150% of the FPL, 52% did not know that the Affordable Connectivity Program (ACP) existed, and 30% did not think they were eligible for an internet discount program. Additionally, rural individuals were less likely to know about ACP than urban respondents, and individuals with disabilities were the least likely to know a program existed compared to the general population. While the future of the ACP is unclear, what is clear is the need to better communicate and advertise existing subsidies and discount programs to eligible individuals and families. This strategy aims to address barriers to affordable home internet subscriptions through investigating existing discount programs in Colorado and increasing awareness of existing internet discount and subsidy programs.

<p>Potential Partners (not exhaustive):</p>	 <p>Family Resource Centers</p>	 <p>Radio stations</p>
 <p>Internet service providers</p>	 <p>Colorado Department of Health Care Policy and Financing</p>	 <p>Local Housing Authorities</p>
 <p>Faith-based organizations</p>	 <p>Reentry organizations</p>	

5.1.3 Strategy 3: Embed digital inclusion activities into state efforts to promote online accessibility and inclusivity.

Description: Online accessibility is multifaceted and can be impacted by an array of barriers, from the way websites are designed to an individual’s ability to connect to the internet to language accessibility. As they implement HB21-1110, the Digital Equity Team will measure accessibility by the number of state agencies the team partners with. This legislation requires accessibility for all technology, hardware, and software that is both public-facing and internal-facing, including websites, applications, kiosks, digital signage, documents, video, audio, and third-party tools. The Digital Equity Team understands that even after HB21-1110 is successfully implemented, true accessibility will depend on the success of the other strategies described in this plan. For example, of respondents to the Colorado Health Access Survey who identified as having disabilities, 12.9% reported they did not feel confident using the internet. For respondents in Colorado overall, that number is 3.8%. The Digital Equity Team also recognizes the diversity of those with disabilities and how different their needs are. In addition, having existing state sites be available in a variety of languages and be compatible with mobile devices is key to increasing accessibility of public resources. This strategy may take the longest to implement, and will likely be ongoing, particularly as funding for agencies and organizations to make these changes is limited.



Ensuring access for all Coloradans, and especially for those who have disabilities, will increase the likelihood the State of Colorado's departments and offices can accomplish their many goals, including:

- Increasing access to health care and supportive services for communities experiencing health inequities.
- Developing a pipeline of Career and Technical Education instructors to fill educator positions in middle school, secondary, and postsecondary levels.
- Ensuring all Coloradans have equitable access to opportunities for quality, lifelong education and training connected to the future of work.
- Providing New Americans with the tools needed to access and complete credentials for employment in high-demand, high-wage industries.
- Expanding access to safe and affordable banking products in Colorado communities.
- Increasing access to vital public safety services and information.

KPI

- Number of partnerships with state agencies implementing HB21-1110.

Activity 3.1: Leverage efforts to implement HB21-1110 to include language accessibility in all state technology assets.





Activity 3.2: Increase Digital Equity Team engagement in existing state agency meetings and initiatives and encourage state agencies to use the Digital Competency Framework to assess their organization's digital inclusion competencies.

Activity 3.3: Collect and share data on digital access for covered populations with other Colorado state agencies, such as Colorado Medicaid, the Department of Human Services, and more, on an ongoing basis. This will inform their outreach and enrollment strategies for public resources.

Activity 3.4: Partner with organizations like the National Civic League to collect data on best practices for engaging communities in public meetings and forums and disseminate this information to the regional digital inclusion coalitions and state agencies looking for public input. This activity also has implications for Strategies 4 and 5, as these partners will inform curriculum on evaluating the reliability of online information and safe online practices essential for engaging in civic and social activities online.



Potential Partners (not exhaustive):

 <p>Immigrant and refugee organizations</p>	 <p>Variety of state agencies</p>
 <p>Colorado Cross-Disability Coalition</p>	 <p>Technology Accessibility Program (TAP) team at the Office of Information Technology</p>

How Strategy 3 Addresses Gaps in Existing Efforts to Address Digital Equity Barriers

Throughout the listening sessions, it was clear there are real barriers to accessing needed information and services online, particularly on government websites. Listening session participants reported barriers such as “getting lost on government websites when looking for answers,” confusing website layouts, and accessibility issues. These barriers intensified for covered populations, such as those who are English learners, older adults, and those with disabilities. In particular, language accessibility was identified as one of the top barriers by English learners. This strategy aims to address barriers related to accessing needed information and services on government websites, particularly language accessibility.

5.1.4 Strategy 4: Promote initiatives and programs that build digital skills.

Description: The National Digital Inclusion Alliance defines digital navigators as “individuals who address the whole digital inclusion process - home connectivity, devices, and digital skills,” and “draws from both volunteers and cross-trained social services staff who offer remote and in-person guidance.”^{lxx}

Trust and fear are central to engaging communities and promoting digital equity. Recognizing and addressing these core concerns is crucial in building relationships, fostering trust, and ensuring technology initiatives are accessible and beneficial to the covered populations. Thus, digital navigators should be hired from the community they are serving, demonstrate an ability to patiently work with individuals toward their digital skill goals, and be culturally responsive to students of all backgrounds and ages. Digital navigators can provide general support or specialized digital support for specific topics, such as health care, depending on their placement. They also can offer digital navigation services for specific populations, including people with disabilities, returning citizens, higher education students, and caregivers for children and families.



In conjunction with the Digital Navigator Program led by the Office of Future of Work, the Digital Equity Team is dedicating much of Strategy 4 to digital navigator programs. It also will be critical that existing digital navigator programs are easy to find – these programs will be included in the map of digital inclusion partners in Colorado described in Activity 1.5.

KPIs

- Number of individuals reporting they can accomplish an online task following an appointment with a digital navigator.
- Percentage of covered populations who report feeling confident using the internet, particularly those with a disability, older adults, and incarcerated individuals.
- Creation of baseline digital skills data for individuals who are incarcerated.

Activity 4.1: Collaborate with the Department of Local Affairs to embed digital skills into what it means to be a resilient community as part of its Resiliency Hubs initiative.

Activity 4.2: Leverage the Digital Navigator Program to expand access to lessons learned on implementing local digital navigator programs. Provide digital skills training and access to resources for covered populations, including resources for online financial literacy, particularly for households with limited financial resources, those with disabilities, and older adults. This activity also will include digital skills training specific to the use of artificial intelligence (AI), such as evaluating the information provided by an AI tool, best practices for online safety while using AI tools, etc.

Activity 4.3: Explore the potential to leverage other types of navigators (community health workers, career navigators, etc.) to direct covered populations to needed resources for digital access. Increase adoption of telehealth, particularly for households with limited financial resources, those with a language barrier, Latine individuals, and rural individuals.







Activity 4.4: Provide digital navigation best practices for businesses, state agencies, faith organizations, and nonprofits providing public-facing technical support to customers.

- Work specifically with workforce centers on improving awareness of online job markets for veterans, older adults, and rural individuals.

Activity 4.5: Survey and/or interview individuals who are incarcerated to determine digital skills baseline information.



Potential Partners (not exhaustive):

 <p>Libraries</p>	 <p>Schools</p>	 <p>Area Agencies on Aging</p>
 <p>Resettlement Organizations</p>	 <p>Rural Workforce Centers</p>	 <p>Senior Centers</p>

How Strategy 4 Addresses Gaps in Existing Efforts to Address Digital Equity Barriers

The 2023 Colorado Health Access Survey found that while 90% of Coloradans report feeling confident using the internet, that percentage hovers around 75% for some of the covered populations, such as those with disabilities and older adults. However, of the more than 5,500 respondents to the Statewide Digital Equity Survey, 44% expressed an interest in digital skills classes. When looking at the breakdown of the covered populations within the survey results, all groups but rural indicated at least that level of interest, with more than 50% of individuals with limited English proficiency, immigrants, households and individuals with limited financial resources, and racial and ethnic minorities expressing interest. This strategy aims to address the barrier of lack of confidence in using the internet as well as address emerging digital skill needs, such as artificial intelligence through digital navigators.

5.1.5 Strategy 5: Promote initiatives that improve confidence in deploying cybersecurity measures.

Description: Many Coloradans are unfamiliar with the cybersecurity measures needed to stay safe online. Several covered populations are less likely to have cybersecurity measures installed on their internet devices, including individuals with disabilities, older adults, and those with a language barrier. Digital navigators and digital skill training are ways cybersecurity education and training will happen, and the Digital Equity Team is committed to exploring additional avenues to help Coloradans keep themselves safe.

KPI

- Percentage of those confident they can keep themselves safe online, particularly individuals with disabilities, older adults, and those with a language barrier.

Activity 5.1: Work with the Consumer Protection section of the Department of Law on the Colorado Privacy Act and cybersecurity initiatives and explore mechanisms for Coloradans to report and inquire about cybersecurity issues.

Activity 5.2: Leverage the Digital Navigator Program to provide tools, training, and educational resources related to online privacy and cybersecurity, particularly for individuals with disabilities, individuals identifying as Black, Latine, Asian, or Middle Eastern/North African, older adults, and those with a language barrier. It will be important to ensure training and educational resources

are available in a multitude of languages and there is specific training related to keeping children safe online. This also will include training on how to leverage artificial intelligence (AI) tools, while maintaining safe online practices. For example, what information is safe to share when using those types of tools, how to evaluate information coming from an AI tool, etc.

Activity 5.3: Research cybersecurity services offered by internet service providers and raise awareness about these offerings among consumers.

<p>Potential Partners (not exhaustive):</p>	 <p>Attorney General's Office</p>	 <p>Cybersecurity organizations</p>
 <p>Nonprofits</p>	 <p>Faith-based organizations</p>	 <p>Banks</p>
 <p>Senior Centers</p>	 <p>Organizations that work with New Americans and refugees</p>	

How Strategy 5 Addresses Gaps in Existing Efforts to Address Digital Equity Barriers

Approximately one-third of online Digital Equity Research Project survey respondents reported they were either unfamiliar with the cybersecurity measures they needed to stay safe online or did not know what cybersecurity means. Data from the 2023 Colorado Health Access Survey indicates 7.1% of Coloradans are not confident they can keep themselves safe online. For individuals with disabilities, the percentage is 18.2%. Older adults also report not feeling confident keeping themselves safe online (15%), as do individuals with language barriers (13.5%). Feedback from listening sessions also indicated concern about cybersecurity from these populations. In addition, the Digital Equity Team heard that communities want and need information and training related to protecting children online. This strategy aims to increase confidence in deploying cybersecurity measures as well as investigating systems-level solutions to help keep Coloradans safe when online.



5.1.6 Strategy 6: Explore a statewide ecosystem of device refurbishers, technical support for devices, and recycling to increase device availability and affordability.

Description: The State of Colorado will explore creating a sustainable device ecosystem to ensure every Coloradan who needs a computer can access one. A particular focus will be placed on supporting rural communities in developing device refurbishing and distribution centers in partnership with community colleges. This would include the development of refurbishing and technical support training programs to support career advancement in IT and offering device refurbishment services to a community. For example, PCs for People in Denver received more than 11,000 pounds of Community Reinvestment Act (CRA)-eligible donations in 2022 and is on track to receive more than 16,000 pounds of donations in 2023. Financial institutions have a unique opportunity to support statewide digital inclusion efforts by increasing their donations to fulfill CRA commitments and partnering with state programs like Bank On Colorado. The Digital Equity Team is committed to exploring CRA and other incentives for businesses of all kinds to encourage donating devices for refurbishment. Requirements for refurbishers related to warranties, certifications, and standards are forthcoming.

KPIs






- Percentage of identified covered populations reporting using smartphones only at home, particularly individuals with a language barrier, immigrants, and households with limited financial resources.
- Number of Colorado-based refurbishers providing low-cost devices to individuals.
- Number of donations secured with CRA funds via financial institutions.
- Net Promoter Score of above 50 for refurbishers.

Activity 6.1: Identify opportunities to increase access to device refurbishment training for incarcerated people, community college students, and other covered populations.

Activity 6.2: Explore CRA opportunities by encouraging device donations from financial institutions.

Activity 6.3: Develop and implement a statewide outreach plan to solicit device donations to existing refurbishers and advertise the availability of refurbished devices, including on 2-1-1.



Potential Partners (not exhaustive):	 Community colleges	 Middle and high schools
 Workforce centers	 Reentry programs	 Organizations that work with New Americans and refugees

How Strategy 6 Addresses Gaps in Existing Efforts to Address Digital Equity Barriers

As of 2023, 7% of Coloradans lack a computer, according to Digitunity, or about 387,180 individuals. According to the 2023 Colorado Health Access Survey, 83% of Colorado households without an internet subscription disagree that a smartphone with a data plan is sufficient for the things they need to do online. However, 18% say the cost of a laptop or computer is too expensive. Those with limited financial resources are more than twice as likely as general Coloradans to cite that the cost of web-enabled devices is out of reach for them. This strategy aims to increase the availability of high-quality, low cost or free devices to Coloradans who need them, particularly those making up to 150% of the FPL.

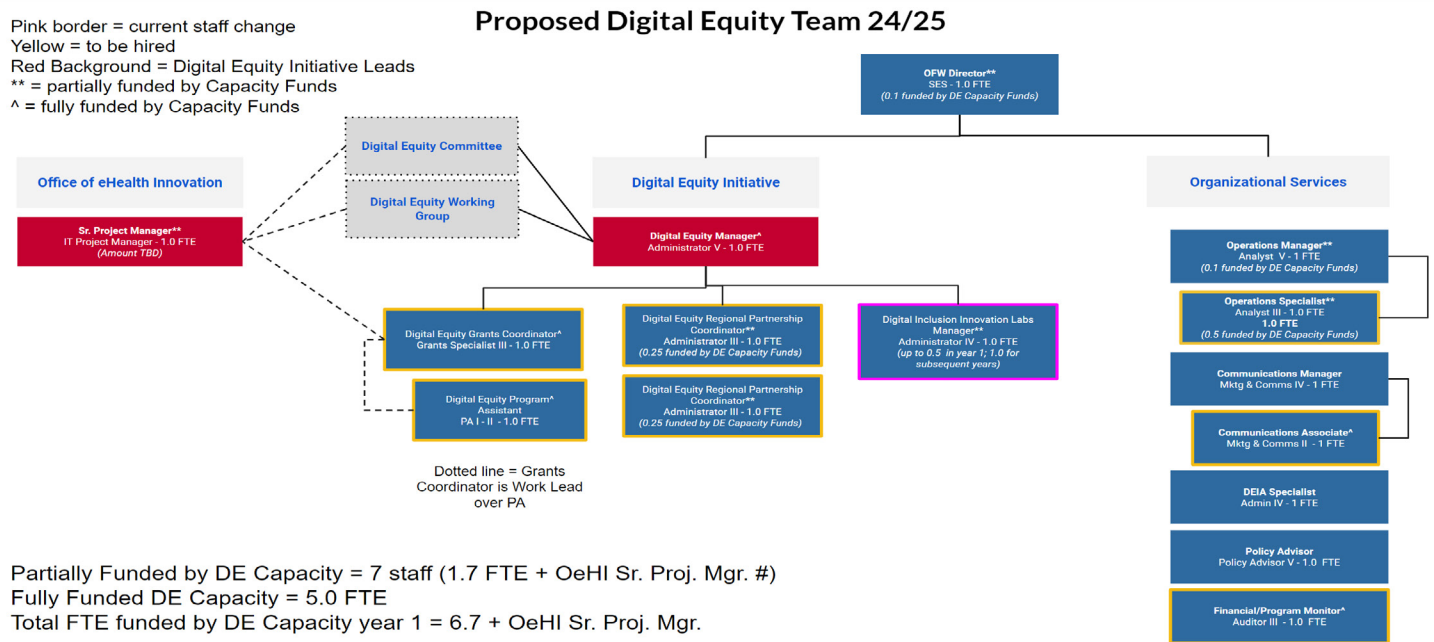
5.1.7 Operationalizing the Plan

implementing this plan, which will require some changes to current staffing levels at the Office of the Future of Work. It is important to note that the Digital Equity Act State Planning Grant funds were managed by the Governor’s Office of Information Technology, while the Office of the Future of Work (OFW) and the Office of eHealth Innovation oversaw programming. However, fiscal authority will change for implementation of the Digital Access Plan. The DEA State Capacity Grant funds will be managed by the Colorado Department of Labor and Employment (CDLE) to more closely connect the fiscal and programmatic management and to leverage the fiscal and compliance infrastructure of CDLE. This shift, as well as increased capacity required to implement the Digital Access Plan, necessitates changes to staffing, including:

- Hiring a Digital Equity Grants Coordinator to manage contracts, purchase order requests for applications, budgets, Digital Access Plan tracking, and other grant-related tasks in coordination with the OFW and CDLE operations teams.
- Hiring a Digital Equity Program Assistant to support scheduling, meetings, general communications, and other administrative tasks to support programmatic and fiscal management.
- Hiring a Communications Associate to support OFW’s Communications Manager in engaging with state, local, and national stakeholders and partners.



- Hiring a Financial/Program Monitor to oversee internal controls and compliance in managing Digital Equity Act funds.
- Partially funding the current Senior Project Manager at the Office of eHealth Innovation.
- Partially funding two Digital Equity Regional Partnership Coordinators to help create and support coalitions. Additional funding for these roles will be provided by funding from a Public Utilities Commission award for at least two years.
- Eliminating the Digital Navigator Program Administrator role as Colorado-funded Digital Navigator Pilot Program funding expires in 2025. That position will be replaced by the Digital Inclusion Innovation Labs Manager position.
- Partially funding the OFW’s current Operations Manager role, as well as hiring and partially funding an Operations Specialist to specifically support digital inclusion work through procurement, finance, technology support, budget, and other operational needs.



The Digital Equity Team plans to create a competitive grants program, or Request for Application (RFA), upon receiving the Capacity Grant from NTIA to support the implementation of Strategy 1. The grant will support the formation of digital inclusion coalitions and the creation of local digital access plans. For communities with an active coalition or digital access plan, the grant will support implementing locally driven digital inclusion initiatives. The Digital Equity Team believes that communities know their needs and strengths best and that supporting community-based organizations with experience serving their communities is a smart investment strategy for improving equity. During the Planning Grant, Colorado allocated more than 50% of the total award to community-based organizations. In line with this funding allocation strategy, Colorado anticipates that Strategy 1 will make up the largest percentage of the Capacity Grant dollars, followed by staffing needs. Between the finalization of the Colorado Digital Access Plan and the



release of the Capacity Funds Notice of Funding Opportunity, the Digital Equity Team will plan further details of the grant, such as eligibility criteria and funding amounts.

The Digital Equity Team also plans to recruit additional organizations with experience forming coalitions for the Digital Equity Working Group. Their expertise will guide the requirements and guidance in the grant program around forming regional digital inclusion coalitions. The Digital Equity Team anticipates funding a pilot of 10 regional coalitions in Year 1 and making changes to the RFA based on that experience.

A comprehensive communication strategy will be key to ensuring Coloradans are aware of digital inclusion efforts in Colorado and have opportunities to provide feedback on the Digital Access plan implementation. Throughout implementation of this plan, the Digital Equity Team will continue to ensure outreach materials to communities are available in both paper and digital versions, including posters, flyers, school newsletters, bulletins from faith-based organizations, and other print formats. In addition, the Digital Equity Team will continue to engage communities and seek feedback through in-person opportunities. This is critical to reach Coloradans who are digitally disconnected or have low digital access. All these efforts also will continue to be available in a multitude of languages to be inclusive to the diverse communities calling Colorado home.

5.2 Timeline

The timeline for implementing the Digital Access Plan visualizes the estimated planning and implementation periods for each of Colorado's strategies. Each overarching strategy's Key Performance Indicators are listed below the strategy's title, followed by the activities contributing to achieving the KPIs. Some KPIs are specific to the most marginalized populations, based on data from the Colorado Digital Equity Research Program surveys, the 2023 Colorado Health Access survey, and the Prison Research and Innovation Network Report.

This timeline is a starting point and will continue to evolve and be further defined as the Digital Equity Team implements the Digital Access Plan. There are many smaller steps for each activity not represented in this timeline. This is intentional at this stage in the planning process, as the requirements in the upcoming Capacity Grant Notice of Funding Opportunity may impact the implementation of the Digital Access Plan.

Continues

Key Planning Phase  Implementing Phase 

Strategy 1

Create Colorado’s Digital Equity Ecosystem. KPIs:

- The number of regional digital inclusion coalitions.
- The number of regional digital access plans.
- The number of national and foundation partnerships to sustain digital inclusion efforts in Colorado.

Years	2024				2025				2026				2027				2028				2029		
Quarters	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3			
1.1 Support the creation of regional digital inclusion coalitions.	Planning Phase									Implementing Phase													
1.2 Support the implementation of Regional Digital Equity Plans.	Planning Phase									Implementing Phase													
1.3 Build a network of funders of digital inclusion work in Colorado.	Planning Phase									Implementing Phase													
1.4 Create a digital inclusion innovation lab within the Office of the Future of Work.	Planning Phase									Implementing Phase													
1.5 Map digital inclusion partners in Colorado.	Implementing Phase																						

Continues



Strategy 2

Improve the affordability of home internet subscriptions.

KPIs:

- The overall number of eligible Coloradans enrolled in ACP, Lifeline, and other internet discount programs.
- The number of individuals with limited financial resources and rural Coloradans enrolled in ACP, Lifeline, and other internet discount programs.
- Percentage of immigrants and racial and ethnic minorities reporting that the internet is too expensive.

Years	2024				2025				2026				2027				2028				2029		
Quarters	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3			
2.1 Promote participation in internet discount and subsidy programs through targeted community outreach and assistance with enrollments.																							
2.2 Work with the Colorado Broadband Office on future programming that supports home internet affordability.																							
2.3 Work with the Colorado Broadband Office and their Colorado Broadband Map to identify gaps in broadband services for covered populations.																							
2.4 Investigate existing subsidies offered by Internet Service Providers (ISPs) outside of ACP and Lifeline.																							
2.5 Work with state and local partners that provide benefits to increase awareness of internet subsidies for their clients.																							

Continues

Strategy 3

Embed digital inclusion activities into state efforts to promote online accessibility and inclusivity.

KPI:

- The number of partnerships with state agencies implementing HB21-1110.

Years	2024				2025				2026				2027				2028				2029		
Quarters	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3			
3.1 Leverage efforts to implement HB21-1110 to include language accessibility in all state technology assets.																							
3.2 Increase Digital Equity Team engagement in existing state agency meetings and initiatives and encourage state agencies to use the Digital Competency Framework to assess their organization’s digital inclusion competencies.																							
3.3 Ongoing data collection from public and digital access organizations on these issues to inform progress made.																							
3.4 Partner with organizations to collect data on best practices for engaging communities in public meetings, civic engagement.																							

Continues

Strategy 4

Promote initiatives and programs that build digital skills

KPIs:

- Number of individuals reporting they were able to accomplish an online task following an appointment with a digital navigator.
- Percentage of covered populations who report feeling confident using the internet, particularly those with a disability, and older adults, and individuals who are incarcerated.

Years	2024				2025				2026				2027				2028				2029		
Quarters	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3			
4.1 Collaborate with the Department of Local Affairs to embed digital skills into what it means to be a resilient community as part of its Resiliency Hubs initiative.	Yellow												Blue										
4.2 Leverage the Digital Navigator pilot programs to expand access to digital navigators who provide digital skills training and access to resources for covered populations.	Yellow												Blue										
4.3 Explore leveraging other types of navigators to support covered populations needing help with digital skills and the adoption of telehealth.	Blue												White										
4.4 Provide digital navigation best practices for businesses, state agencies, faith organizations, and nonprofits providing public-facing technical support to customers.	Yellow				Blue																		
4.5 Survey and/or interview individuals who are incarcerated to determine digital skills baseline information.	Yellow				Blue																		

Continues

Strategy 5

Promote initiatives that improve confidence in deploying cybersecurity measures.

KPI:

- Percentage of those confident they can keep themselves safe online, particularly individuals with disabilities, older adults, and those with a language barrier.

Years	2024				2025				2026				2027				2028				2029		
Quarters	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3			
5.1 Support the Consumer Protection section of the Attorney General’s Office on the Colorado Privacy Act and cybersecurity initiatives.																							
5.2 Leverage the Digital Navigator Program to provide tools, training, and educational resources related to online privacy and cybersecurity.																							
5.3 Research cybersecurity services offered by Internet Service Providers (ISPs) and raise awareness about these offerings among consumers.																							

Continues



Strategy 6

Explore a statewide ecosystem of device refurbishers, technical support for devices, and recycling to increase device availability and affordability.

KPIs:

- Percentage of identified covered populations reporting using smartphones only at home, particularly individuals who are experiencing homelessness, individuals with a language barrier, immigrants, and households with limited financial resources.
- Number of Colorado-based refurbishers providing low-cost devices to individuals.
- Number of donations secured with Community Reinvestment Act funds via financial institutions.

Years	2024				2025				2026				2027				2028				2029		
Quarters	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3			
6.1 Identify opportunities to increase access to device refurbishment training for people who are incarcerated, community college students, and other covered populations.	Yellow												Blue										
6.2 Explore Community Reinvestment Act opportunities by encouraging device donations from financial institutions.	Yellow								Blue														
6.3 Develop and implement a statewide marketing plan to solicit device donations to existing refurbishers and advertise the availability of refurbished devices, including via 2-1-1.	Yellow												Blue										

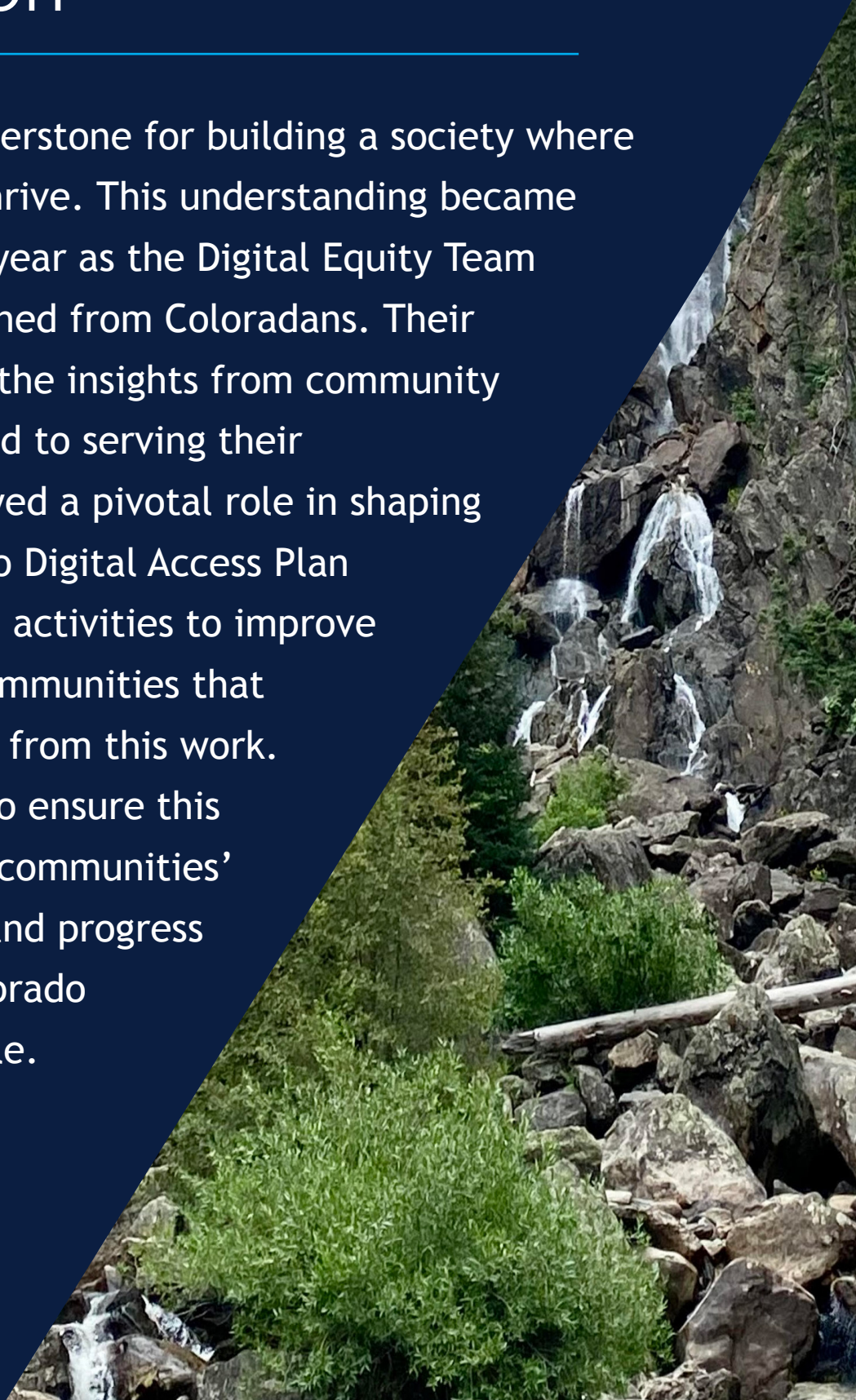
“ My mom loves her computer and is online for hours a day. It’s how she stays engaged with people. ”

“ Awareness and outreach are so important. ”

“ During COVID, my melanoma was diagnosed via telehealth. ”

6. Conclusion

Digital access is a cornerstone for building a society where every individual can thrive. This understanding became evident over the past year as the Digital Equity Team engaged with and learned from Coloradans. Their lived experiences and the insights from community organizations dedicated to serving their communities have played a pivotal role in shaping this plan. The Colorado Digital Access Plan outlines strategies and activities to improve access for Colorado communities that stand to gain the most from this work. It builds mechanisms to ensure this work evolves as these communities' unique needs change and progress is made in making Colorado more digitally equitable.





This plan outlines a roadmap for increasing community-relevant digital inclusion solutions by creating capacity for regional digital inclusion coalitions, improving the affordability of home internet and web-enabled devices, promoting programs that build digital skills and improve confidence in using cybersecurity best practices, improving online accessibility and inclusivity, and promoting innovation.

The success of this plan depends on the quality of the Digital Equity Team’s partnerships and authentic engagement with Colorado communities. Continuing to grow these community partnerships will be a top priority throughout implementation to ensure the strategies at the state match the needs of Coloradans. For those who want to join this effort, learn how to get involved by visiting the [Colorado Digital Access Plan website](#).

Working with Colorado communities to create this roadmap has been an honor. The Digital Equity Team believes now more than ever that digital inclusion is THE factor that impacts the equity of any other initiative. **Colorado is committed to ensuring every community in the state has the access needed not just to survive but to thrive.**



7. APPENDICES

Appendix A: Collaborating Organizations

365 Health	City and County of Denver, Workforce Development	Eagle County, Veterans Service Officer	Next Chapter
Older Adults Technology Services (OATS) from AARP	Cleo Parker Dance	Elevated Denver	Office of New Americans
Adams County Education Consortium	Clinical Insighters	Ethiopian Community Television	Parachute Group
Aging Dynamics	Co-Create LLC (consulting)	Financial Health Institute	Pax8
Alamosa Public Library	Colorado Center on Law and Policy	Focus Points Family Resource Center	PCs for People
Behavioral Health Administration	Colorado Commission for the Deaf and Hard of Hearing	Front Range Community College	Prime Health
Boulder County, Veterans Service Officer	Colorado Commission on Aging	GroovyTek	Prison Programs
Bridging Digital Divides/ Sister Carmen	Colorado Common Cause	High Plains Library District	Pueblo Workforce Center
Byte Back	Colorado Community Action Association	Human-I-T	Remerg
Can Do Tech	Colorado Department of Transportation	Immigrant and Refugee Center of Northern Colorado	Second Chance Center
Center for Independence	Colorado Rural Water Association	Immunize Colorado	SparqU
Center for Independence Grand Junction	Comcast	Jefferson County Public Libraries	Spring Institute for Intercultural Learning
Center for People with Disabilities	Community College of Aurora, Community ESL Program	Kinney Consulting	Teach by Tech
Center for Work Education and Employment (CWEE)	Community Computer Connection	Larimer County - Digital Roots	Telecommunications Relay Service Manager
City and County of Denver, Mayor's Office of Equity and Social Innovation Denver	Community Works	Louisville Chamber of Commerce	Teller County, Veterans Service Officer
City and County of Denver, Intellectual and Developmental Disabilities Equitable Access to Services Program (IDDEAS)	Connected Communities/Digital Bridge	Loveland Public Library	The Arc of Aurora
City and County of Denver, Office of Social Equity and Innovation	Connections for Independent Living	Mission Arvada of the Rising Church	The Center for the Development of Economic Equity (E2)
	Denver Public Library	Montrose Adult Education Center	The Clinic for Open Source Arts
	Developmental Pathways	National Center for Families Learning	The Fax Partnership
	Division of Vocational Rehabilitation	National Telecommunications and Information Administration	The Rock Found
	E-Luminosity	New America College	United Way Denver
			University of Colorado – Denver
			Vista Beam
			World Education



Appendix B: Asset Inventory

Click on the link to view file.

<https://docs.google.com/spreadsheets/d/1dJ6i5THEiFWFcC9mhfZWqmUFhOnc3AbF/edit#gid=662535303v>

Appendix C: Community Engagement Events

Click on the link to view file.

<https://docs.google.com/spreadsheets/d/1gMgL3D9zvslzj19tUD7mJEph5QZjynP/edit#gid=907763103>

Appendix D: State Plans

Click on the link to view file.

https://docs.google.com/spreadsheets/d/1jk_LQNVxqLI60sYIH06FJMFAZ817Btm/edit#gid=1923596834



Appendix E: Acronyms

ACP: Affordable Connectivity Program

ACS: American Community Survey

BEAD: Broadband, Equity, Access, and Deployment

BHA: Behavioral Health Administration

(C3): Community Computer Connection

CAIs: Community Anchor Institutions

CBO: Colorado Broadband Office

CDC: Centers for Disease Control and Prevention

CDHS: Colorado Department of Human Services

CDER: Colorado Digital Equity Research

CDLE: Colorado Department of Labor and Employment

CDPHE: Colorado Department of Public Health and Environment

CHAS: 2023 Colorado Health Access Survey

CHI: Colorado Health Institute

CIDE: Center for Inclusive Design and Engineering

CPA: Colorado Privacy Act

CRA: Community Reinvestment Act

CRO: Colorado Resiliency Office

CRSP: Colorado Refugee Services Program

CTE: Colorado State Career and Technical Education

CTSR: Center Toward Self Reliance

CWDC: Workforce Development Council

DEA: Digital Equity Act

DEEM: Digital Equity Ecosystem Map

DEWG: Digital Equity Working Group

DIIL: Digital Inclusion Innovation Lab

DPS: Department of Public Safety

DVR: Division of Vocational Rehabilitation

ERP: Enterprise Resource Planning

ESOL: English for Speakers of Other Languages

FLC: Fort Lewis College

FPL: Federal Poverty Level

HCPF: Department of Health Care Policy and Financing

ICTs: Information and Communication Technologies

IRB: Institutional Review Board

KPI: Key Performance Indicator

NSC: National Skills Coalition

NTIA: National Digital Inclusion Alliance

OeHI: Office of eHealth Innovation

OFW: Office of Future of Work

OIT: Office of Information Technology

ONA: Office of New Americans

PRIN: Prison Research and Innovation Network

RAE/MCE: Regional Accountable Entity/Managed Care Entities

RFA: Request for Application

SDLI: Subcommittee on Digital Literacy and Inclusion

SILC: Statewide Independent Living Council

SIPA: Statewide Internet Portal Authority

SLVBCO: San Luis Valley Broadband Coordination Office

SOARR: Supporting Older Adults through Relationships and Resources

TAP: Technology Accessibility Program

VA: Veterans Affairs

VCESL: Virtual, Career-Aligned English as a Second Language

WHO: World Health Organization

WIOA: Workplace Innovation and Opportunity Act

WLAN: Wireless Local-Area Network



Appendix F: Terms to Know

Digital Divide

The digital divide is the gap between those with affordable access, skills, and support to engage online effectively and those without. As technology constantly evolves, the digital divide prevents equal participation and opportunity in all parts of life, disproportionately affecting people of color, Indigenous peoples, households with limited financial resources and individuals, individuals with disabilities, rural residents, and older adults.

Digital Inclusion

Digital inclusion refers to the activities necessary to ensure all individuals and communities, including the most disadvantaged, can access and use Information and Communication Technologies (ICTs). This includes five elements:

1. Affordable, robust broadband internet service.
2. Internet-enabled devices that meet the needs of the user.
3. Access to digital literacy training.
4. Quality technical support.
5. Applications and online content designed to enable and encourage self-sufficiency, participation, and collaboration.

Digital inclusion must evolve as technology advances. Digital inclusion requires intentional strategies and investments to reduce and eliminate historical, institutional, and structural barriers to technology access and use.^{lxxi}

Digital Resilience

Digital resilience means having the awareness, skills, agility, and confidence to use new technologies and adapt to changing digital skill demands.^{lxxii}

Digital Literacy or Digital Skills

Digital literacy or digital skills mean the ability to use information and communication technologies. People with the skills to find, create, and communicate information have digital literacy or digital skills.^{lxxiii}

Digital Equity

Digital equity is a condition where all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy. Digital equity is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services.^{lxxiv}

Digital equity means ensuring everyone can participate and benefit from digital tools. It will improve lives in many ways when residents can participate in work, learning, and daily activities. Colorado can bridge the digital divide and foster digital inclusion in several ways:

- By partnering with local organizations.
- By providing targeted training programs.
- By making infrastructure improvements.
- By being transparent.
- By engaging communities.

Promotora Model

The “promotora model” is one in which lay Latine community members receive specialized training to provide basic health education without being professional health care workers.



Notes

- ⁱ <https://dashboard.colorado.gov/learn-more> See page 17.
- ⁱⁱ <https://www.colorado.gov/governor/sites/default/files/inline-files/B%202020%20009%20Broadband%20EO.pdf> See page 17.
- ⁱⁱⁱ https://drive.google.com/file/d/1w4vf0zG5_oPocsM3A1Y56EZe379ZJe8g/view See page 18.
- ^{iv} https://nationalskillscoalition.org/wp-content/uploads/2023/02/NSC-DigitalDivide_report_Feb2023.pdf See page 19.
- ^v <https://docs.google.com/document/d/1O3R5hwI8M3IrgidDVeeVYpKh0zBoxD6EW0R-BU7hoc/edit#heading=h.qefim-wx1d8av> See page 21.
- ^{vi} https://drive.google.com/file/d/1ry5gCTVlq7PG5Sq1aBq2y1FKaG22dF4l/view?usp=share_link See page 22.
- ^{vii} <https://www.nea.org/nea-today/all-news-articles/homework-gap-cruellest-part-digital-divide> See page 23.
- ^{viii} <https://www.census.gov/data/tables/2021/demo/hhp/hhp27.html> See page 23.
- ^{ix} <https://oit.colorado.gov/digital-government> See page 23.
- ^x Sieck, C.J., Sheon, A., Ancker, J.S. et al. Digital inclusion as a social determinant of health. *npj Digit. Med.* 4, 52 (2021). <https://www.nature.com/articles/s41746-021-00413-8> See page 27.
- ^{xi} IMPAQ Health and the American Institutes for Research. (2020). "Issue Brief: The Expansion of Telehealth. Equity Considerations for Policymakers, Providers, and Payers." <https://www.air.org/resource/brief/expansion-telehealth-equity-considerations-policymakers-providers-and-payers> See page 27.
- ^{xii} https://drive.google.com/file/d/1w4vf0zG5_oPocsM3A1Y56EZe379ZJe8g/view See page 27.
- ^{xiii} 2023 CHAS. <https://www.coloradohealthinstitute.org/programs/colorado-health-access-survey> See page 29.
- ^{xiv} <https://coag.gov/resources/colorado-privacy-act/> See page 29.
- ^{xv} <https://leg.colorado.gov/bills/hb18-1128> See page 29.
- ^{xvi} <https://www.fdic.gov/analysis/household-survey/> See page 30.
- ^{xvii} <https://ncrc.org/the-great-consolidation-of-banks-and-acceleration-of-branch-closures-across-america/> See page 30.
- ^{xviii} https://files.consumerfinance.gov/f/documents/cfpb_data-spotlight_challenges-in-rural-banking_2022-04.pdf See page 30.
- ^{xix} <https://www.fdic.gov/analysis/household-survey/> See page 30.
- ^{xx} <https://coag.gov/bankon/> See page 30.
- ^{xxi} <https://drive.google.com/file/d/17Yyi88KSCI2Q-vGxzffyKCgCiAN-90t1/view> See page 56.
- ^{xxii} https://www.benton.org/acp_tool See page 57.
- ^{xxiii} <https://www.xfinity.com/learn/internet-service/internet-essentials> See page 58.
- ^{xxiv} <https://liheapch.acf.hhs.gov/tables/POP.htm> See page 58.
- ^{xxv} <https://disabilityphilanthropy.org/resource/what-is-disability/> See page 60.
- ^{xxvi} <https://www.census.gov/quickfacts/fact/table/CO/RHI725222> See page 62.
- ^{xxvii} HR&A Existing Conditions Report See page 63.
- ^{xxviii} <https://www.hrsa.gov/rural-health/about-us/what-is-rural> See page 65.
- ^{xxix} <https://www.ruralhealthinfo.org/topics/frontier> See page 65.
- ^{xxx} <https://coruralhealth.org/snapshot-of-rural-health> See page 65.



- ^{xxxi} <https://wisevoter.com/state-rankings/literacy-rate-by-state/#colorado> See page 66.
- ^{xxxii} <https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/additional-acp-data/> See page 67.
- ^{xxxiii} Colorado Digital Access Plan Needs Assessment and Asset Inventory See page 70.
- ^{xxxiv} <https://www.coloradohealthinstitute.org/programs/colorado-health-access-survey> See page 73.
- ^{xxxv} <https://www.coloradohealthinstitute.org/programs/colorado-health-access-survey> See page 73.
- ^{xxxvi} <https://www.coloradohealthinstitute.org/programs/colorado-health-access-survey> See page 73.
- ^{xxxvii} <https://socialwork.du.edu/sites/default/files/2022-06/PRIN%202022%20Research%20Report%20V0516.pdf>
See page 74
- ^{xxxviii} <https://www.coloradohealthinstitute.org/programs/colorado-health-access-survey> See page 74.
- ^{xxxix} <https://www.educationsuperhighway.org/no-home-left-offline/acp-data/> See page 74.
- ^{xi} <https://www.coloradohealthinstitute.org/programs/colorado-health-access-survey> See page 75.
- ^{xlii} <https://www.affordableconnectivity.gov/do-i-qualify/> See page 75.
- ^{xliii} <https://www.lifelinesupport.org/do-i-qualify/> See page 75.
- ^{xliiii} https://www.benton.org/acp_tool See page 75.
- ^{xliv} <https://www.coloradohealthinstitute.org/programs/colorado-health-access-survey> See page 77.
- ^{xlv} <https://www.coloradohealthinstitute.org/programs/colorado-health-access-survey> See page 77.
- ^{xlvi} <https://drive.google.com/file/d/1Zc2L7RFLIDiybK3BIV9f9jtkCSKjyqJK/view> See page 78.
- ^{xlvii} <https://online.hbs.edu/blog/post/what-is-human-centered-design> See page 78.
- ^{xlviii} <https://www.cpr.org/2021/04/26/a-new-digital-divide-people-without-smartphones-struggle-to-get-colorado-unemployment-benefits/> See page 79.
- ^{xliv} Telehealth Perceptions Survey https://docs.google.com/presentation/d/1IKMCv_t_2ucpj-uPUVi_hutdrQWGjKZm/edit#slide=id.g10c0cad1d37_0_65 See page 79.
- ⁱ <https://www.coloradohealthinstitute.org/programs/colorado-health-access-survey> See page 79.
- ⁱⁱ Telehealth Perceptions Survey https://docs.google.com/presentation/d/1IKMCv_t_2ucpj-uPUVi_hutdrQWGjKZm/edit#slide=id.g10c0cad1d37_0_65 See page 79.
- ⁱⁱⁱ <https://www.coloradohealthinstitute.org/programs/colorado-health-access-survey> See page 80.
- ⁱⁱⁱⁱ <https://digitunity.org/the-issue/technology-gap-map/> See page 81.
- ^{liv} 2023 CHAS Appendix <https://www.coloradohealthinstitute.org/programs/colorado-health-access-survey> See page 81.
- ^{lv} <https://mtgis-portal.geo.census.gov/arcgis/apps/webappviewer/index.html?id=c5e6cf675865464a90ff-1573c5072b42> See page 82.
- ^{lvi} <https://ona.colorado.gov/> See page 83.
- ^{lvii} <https://cis.org/Map-Sanctuary-Cities-Counties-and-States> See page 83.
- ^{lviii} <https://www.americanimmigrationcouncil.org/research/sanctuary-policies-overview> See page 83.
- ^{lix} <https://www.census.gov/acs/www/about/why-we-ask-each-question/language/> See page 83.
- ^{lx} <https://www.who.int/news-room/fact-sheets/detail/mental-health-and-forced-displacement> See page 84.
- ^{lxi} https://www.who.int/health-topics/ageism#tab=tab_1 See page 86.
- ^{lxii} <https://drive.google.com/file/d/1dexRO7TJc3xQxTuxbmrRNjI9Do2TNNHJ/view> See page 87.



- ^{lxiii} <https://socialwork.du.edu/sites/default/files/2022-06/PRIN%202022%20Research%20Report%20V0516.pdf>
See page 87.
- ^{lxiv} <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4580597/> See page 90.
- ^{lxv} <https://seas.umich.edu/news/redlining-and-environmental-racism> See page 90.
- ^{lxvi} <https://www.countyhealthrankings.org/reports/digital-redlining> See page 90.
- ^{lxvii} <https://nationalskillscoalition.org/resource/webinars/closing-the-digital-skill-divide-the-payoff-for-workers-business-and-the-economy/#:~:text=It%20finds%20that%2092%25%20of,businesses%2C%20and%20the%20broader%20economy> <https://www.countyhealthrankings.org/reports/digital-redlining> See page 95.
- ^{lxviii} <https://www.cdc.gov/nchs/data/databriefs/db203.pdf> See page 99.
- ^{lxix} **NDIA Coalition Guidebook** https://www.digitalinclusion.org/wp-content/uploads/2022/02/NDIA_Coalition-Guidebook_vFINAL_RGB.pdf See page 119.
- ^{lxx} <https://www.digitalinclusion.org/practitioner-support/> See page 127.
- ^{lxxi} <https://www.digitalinclusion.org/digital-inclusion-101/> See page 145
- ^{lxxii} <https://digitalus.org> See page 144
- ^{lxxiii} <https://www.digitalinclusion.org/digital-inclusion-101/> See page 145
- ^{lxxiv} <https://www.digitalinclusion.org/digital-inclusion-101/> See page 145