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**ConnectSD**

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South Dakota's  
Digital Opportunity Plan

Last Updated: December 2023

# SOUTH DAKOTA

GOVERNOR'S OFFICE OF ECONOMIC DEVELOPMENT



South Dakota's Digital Opportunity Plan was developed in partnership with the South Dakota Governor's Office of Economic Development and the South Dakota Department of Labor and Regulation

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## 1 Executive Summary

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South Dakota has been ahead of the curve in creating a foundation of robust broadband infrastructure. South Dakota's Governor Kristi Noem has always believed in the power of leveraging high-speed internet access towards achieving the economic goals of the State and its residents. ConnectSD, the State's broadband program, introduced a successful process to channel State and Federal grants to much needed broadband projects. The State will continue to use the expertise and insight it has developed to effectively utilize funds received through the Broadband Equity, Access and Deployment (BEAD) program and build on past work.

Sometimes referred to as the fourth utility, broadband is rapidly becoming an indispensable part of full social and economic participation in everyday life. Much like electrification in the early 20<sup>th</sup> century transformed communities for generations, digital access offers benefits that will cascade far into the future. With the broadband infrastructure in place and under development, the follow-on work to support South Dakotans in reaping the value of internet access comes into focus. It is essential people have the ability to access and meaningfully use the internet to fully participate in the economy or society. This Digital Opportunity Plan (also referred to as the *DO Plan* or *Plan*) outlines a path for the state to achieve its full potential through the powerful force of an internet-enabled workforce, government, and society. Through this DO Plan, the State strives for a comprehensive framework that allows for the meaningful use of such infrastructure helping to bridge the gap between availability and adoption of broadband. The vision is to **“ensure every citizen will have access to affordable, future-proof, high-speed internet, along with the means to utilize it safely and competently.”**

Addressing digital access demands collaboration with those understanding the lived experience of digital equity challenges, groups working to provide community-based services, policy decision makers, and industry representatives, alike. Wide-ranging stakeholder consultation, leading practices research, and a rigorous needs assessment have informed this Plan. This Plan lays out strategies to combine forces and leverage the strength of public, private, and nonprofit organizations. The following sections will describe existing resources, needs, and interventions the State can reasonably, feasibly, and effectively support towards bridging the digital divide.






Recognizing the Digital Equity Act's requirements to focus efforts on members of “covered populations,” South Dakota consulted with representatives of each covered population. The term “covered populations” is defined in the Digital Equity Act to include individuals in households at or below 150 percent of the federal poverty line, veterans, people who live in rural areas, people with disabilities, people with low literacy or language barriers, individuals belonging to racial and ethnic minorities, aging persons, and individuals who are incarcerated. While these groups are specifically outlined in the Digital Equity Act, it is South Dakota's goal to serve and improve the circumstances for all its citizens regardless of association with mentioned covered populations. Together, stakeholder input and demographic data revealed several barriers to digital opportunities including limited access from high-cost broadband subscriptions and broadband-enabled devices, lack of awareness of subsidy programs like the Affordable Connectivity Program (ACP), lack of staffing capacity to provide digital navigation services, and the reluctance of some members of the community to be online, among others.

Hearing from stakeholders and learning from leading practices helped South Dakota identify strategies to achieve the four objectives of improving adoption & affordability, accessibility of public services online, access to digital skills curriculums and internet-enabled devices. Table 1

below identifies the vision, objectives and strategies South Dakota plans to adopt to help further the cause of digital opportunity.

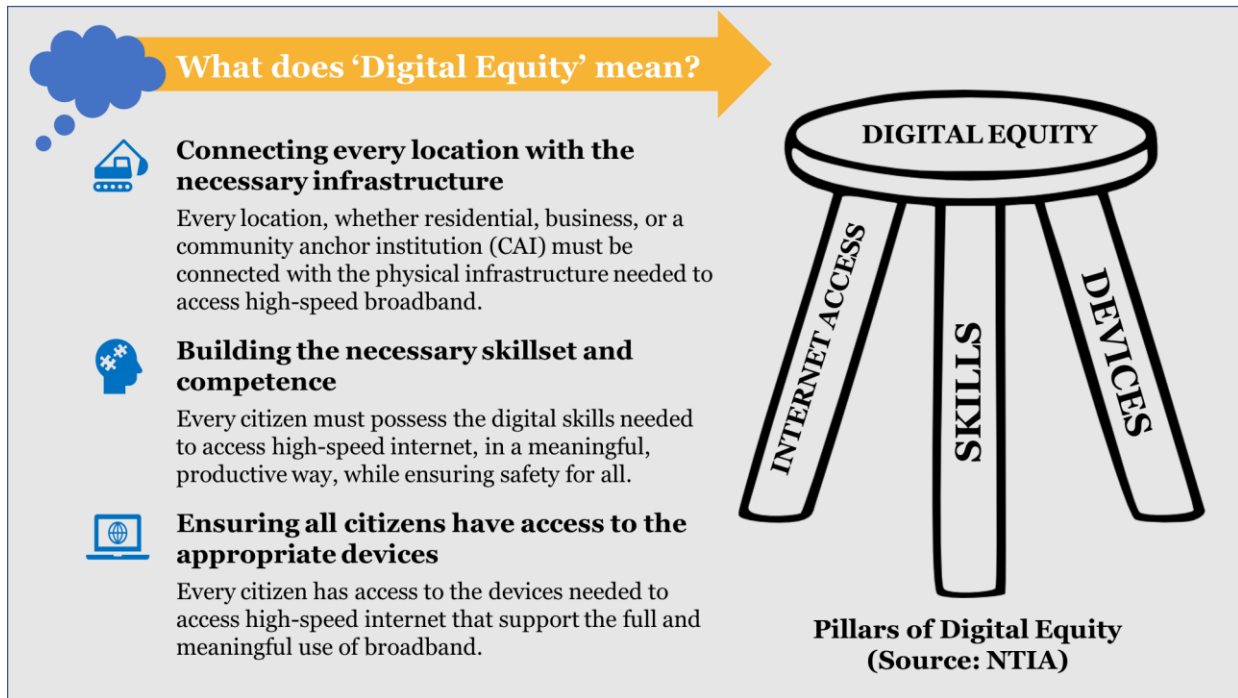
This Plan serves as an inclusive vision for bridging the digital divide, with the explicit aim of working towards South Dakota's broader economic goals. The State recognizes that empowering its residents with the 21<sup>st</sup> century technologies and skills is crucial to preserving our way of life and allowing our small towns to thrive. South Dakota will maximize and optimize the funding that will be made available to it under the Digital Equity Act, using this Plan as its roadmap.

**Table 1 Vision, Objectives and Strategies for Digital Equity**

| <b>Vision</b>   |   |
|---|---|
| <p>Ensure every citizen will have access to affordable, future-proof, high-speed internet, along with the means to utilize it safely and competently.</p>               |   |
| <b>Objectives</b>   | <b>Strategies</b>   |
|  <p>Objective 1: Improve access to and adoption of affordable high-speed internet</p> | <p>1.1 Subsidize infrastructure deployment in unserved and underserved communities</p> <p>1.2 Improve access to affordable internet</p> <p>1.3 Increase awareness of the benefits of adopting high-speed internet</p> |
|  <p>Objective 2: Enhance accessibility of public services online</p>                 | <p>2.1 Improve online services interface</p> <p>2.2 Increase awareness of MySD Digital Citizen portal</p>   |
|  <p>Objective 3: Increase access to digital literacy curriculums</p>                 | <p>3.1 Establish digital literacy curriculums and training sessions</p>   |
|  <p>Objective 4: Increase access to cybersecurity curriculums</p>                    | <p>4.1 Establish cybersecurity curriculums and training sessions</p>  |
|  <p>Objective 5: Expand access to computing devices for accessing the internet</p>   | <p>5.1 Expand access to public-use devices</p> <p>5.2 Make low-cost or free devices available for distribution</p>  |

## 2 Introduction and Vision for Digital Equity

South Dakota offers freedom and opportunity for all. Nurturing our economy is a goal that is shared by people, businesses, and state government alike. Building infrastructure that allows residents to connect to high-speed internet has emerged as an important driver for a stronger economy. Many aspects of our lives can be enriched by being online, from consuming news, engaging socially, finding healthcare providers, navigating transportation and commutes, participating in the workforce, accessing online education to accessing assistance programs. Jobs, new and old, are enhanced by a workforce that is competent in the use of the internet, and several new industries have emerged as a direct consequence of the way the internet has shaped interactions.



*Figure 1: Introduction to Digital Equity*

This section outlines the vision for digital opportunity that South Dakota seeks to pursue over the next five years and addresses the interplay between the Digital Opportunity Plan (DO Plan) and the State’s policy priorities. It also sets the measurable objectives that the State will use as metrics for its digital equity success, along with a discussion about the strategies it will employ to achieve success.

As the State expands efforts towards building infrastructure to connect every home, business, and community anchor institution with broadband, it must also be paired with providing citizens both the devices and the skills needed to safely and competently be online. The vision for furthering digital opportunity has been articulated below in Section 2.1.

### 2.1 Vision

## Vision

Ensure every citizen will have access to affordable, future-proof, high-speed internet, along with the means to utilize it safely and competently.

The State aspires to provide universal access for every resident, business, and community anchor institution at a minimum of 100 Mbps download and 20 Mbps upload and wants to go one step further and increase download speeds to 250 Mbps for as many residents as possible. South Dakota aspires to achieve 500 Mbps symmetrical and beyond as its standard for 2028, a goal the State has begun to outline in its broadband grant programs.<sup>1</sup> It is important that the deployment of broadband is ‘future-proof’ so that investments being made today remain relevant in the foreseeable future.

Historically, it has been harder to expand infrastructure into rural parts of the state due to a lower population density. This digital divide also extends to low-income populations that have struggled to afford high costs of broadband. It is South Dakota’s mission to support all eight covered populations in their pursuit to meaningfully access high-speed internet. Remaining disconnected from the internet and its associated benefits is taking a toll on covered populations and may lead to further marginalization of the communities that are not part of the digital world. Not only do members of covered populations need to be connected to broadband, but they also need to be provided access to the skills they need to succeed in the workforce.

South Dakotans should be able to participate and feel confident in using the internet to engage in society, including for building their livelihood, socially connecting with their community or family, or for accessing public or private services, including education, workforce, and healthcare. By increasing access to these services, all citizens, especially those in covered populations, are able to interact in a more equitable fashion, removing barriers that previously would have prevented them from doing so. If they need help to learn how to use their devices or basic computer-based and internet-based applications, they should be able to access that help at no or little additional cost, at a location close to their home. Supporting the meaningful use of the internet is an investment in a stronger economy for the state, and an improved and better-connected way of life for South Dakotans.

With a goal to build a stronger economy and connect communities both large and small, it is essential South Dakotans have access to educational, workforce development, and health care opportunities without having to leave the small-town way of life they have chosen.

Education has assumed an important role to help citizens pursue their passion and purpose. Access to high quality school and college education can not only build a knowledge base for students that helps them in joining the workforce, but it can also lead to upward social mobility for the entire household, especially through an increased earning potential. Students who pursue a degree from one of South Dakota’s public institutions can expect to increase their lifetime earnings by as much as \$217,000, which is double that of the national return on

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<sup>1</sup> This is the same standard of success for broadband access for South Dakota’s Five -Year Action Plan for the BEAD Program.

investment, according to a recent study.<sup>2</sup>

South Dakota may be geographically large, but it has a relatively small population spread across the state. Distance can prove to be a barrier to accessing institutions of education that may be located hundreds of miles away from some communities. Extreme weather conditions in the winter, too, have the potential to derail classroom education. Online learning has emerged as a useful means to overcome some of these challenges faced by South Dakotans to access the education and the credentials they need.

The digital divide results in unequal access to online resources and digital skills training for members of the workforce as well. Members from various covered populations may suffer from marginalization because of the lack of access to higher-paying jobs. Investment in digital infrastructure and digital skills is a way to invest in the South Dakota workforce. Currently, unemployment in South Dakota has remained one of the lowest in the country - 1.9% as of July, 2023.<sup>3</sup> To build an even stronger economy, South Dakota needs to find innovative means to train a more competitive workforce that can take up the available jobs, increase productivity and be equipped to climbing up their career ladders. The NTIA notes that 77% of all jobs require at least some technology skills, and 48% of hiring managers say candidates lack the skills needed to fill open jobs.<sup>4</sup> Mitigating the digital divide can support workforce development and growth.

Having equitable access to the internet can impact the provision of healthcare services and consequently, healthcare outcomes, in a variety of ways. As an expansive, largely rural state, connecting people with world class healthcare without forcing them to travel long distances, or even worse, foregoing medical treatment, can be achieved effectively through expanded telehealth capabilities. As technology in the healthcare industry evolves, it is critical that all residents not only have access to broadband, but are also equipped with the digital skills needed to access telehealth platforms, schedule appointments, attend telehealth appointments, etc. Healthier citizens also result in lower healthcare costs not just for households, but for the healthcare system as a whole.

The State sees the visions for both the BEAD and Digital Opportunity plans as a unifying view for what can be accomplished. Through ConnectSD and the BEAD Plan's implementation, South Dakota is committed to ensuring every resident, business, and community anchor institution has access to sustainable high-speed internet. The Digital Opportunity Plan builds on the BEAD Plan's vision by providing citizens the ability to access and effectively utilize high-speed internet. Achieving success may look different in different communities and regions of the State, but it will involve addressing the needs of the State's covered populations in a manner that will have lasting impacts.

## *2.2 Alignment with Existing Efforts to Improve Outcomes*

South Dakota's DO Plan seeks to build on existing efforts in broadband deployment, workforce development, education, healthcare and other state initiatives. Along with research on the activities undertaken by the state's governmental and non-governmental organizations, the

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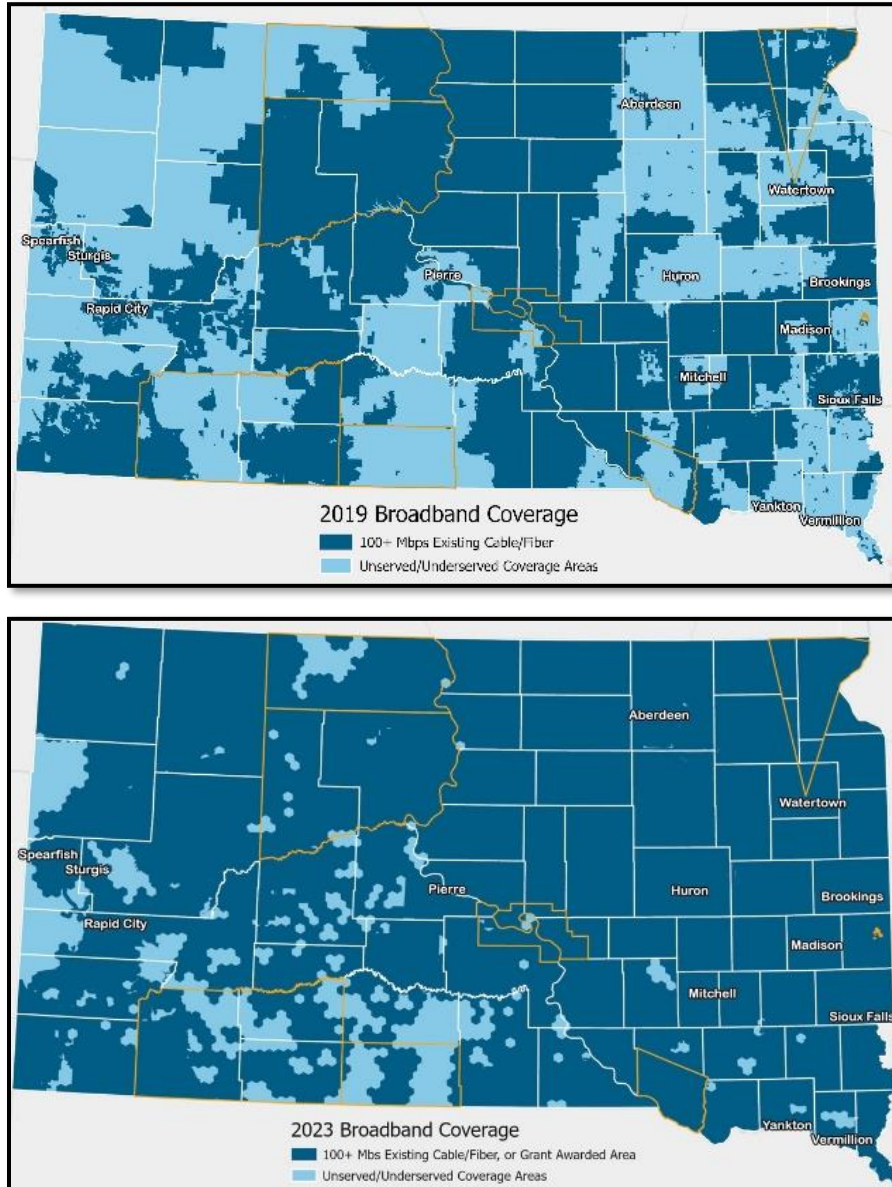
<sup>2</sup> Foundation for Research on Equal Opportunity (accessed on August 16, 2023), Why South Dakota Has the Nation's Best Public Colleges. Accessed at: [Why South Dakota Has the Nation's Best Public Colleges \(freopp.org\)](https://www.freopp.org/why-south-dakota-has-the-nation-s-best-public-colleges)

<sup>3</sup> South Dakota Department of Labor & Regulation (accessed August 24, 2023), July South Dakota statewide data just released. Accessed at: <https://dlr.sd.gov/lmic/overview.aspx>

<sup>4</sup> National Telecommunications and Information Administration (accessed August 31, 2023), Broadband 101. Accessed at: [https://broadbandusa.ntia.doc.gov/sites/default/files/2022-11/Broadband\\_101.pdf](https://broadbandusa.ntia.doc.gov/sites/default/files/2022-11/Broadband_101.pdf)



policy priorities outlined by Governor Kristi Noem have also been an important platform for the DO Plan to build on. We have organized these existing efforts into four areas: **ConnectSD**, **Governor Noem’s Priorities for the State**, **Workforce Development**, and **Local Coordination**.



*Figure 2: South Dakota Broadband Coverage Maps, 2019 v. 2023*

**ConnectSD:** The 2019 State Broadband Plan (which is currently being implemented under the ConnectSD program), seeks to significantly increase broadband access by focusing on counties with especially low levels of broadband penetration.<sup>5</sup> In 2019, the State’s broadband infrastructure expansion was beginning in earnest, with large parts of the state without any fiber

<sup>5</sup> South Dakota Governor’s Office of Economic Development (published May 2019), Broadband in South Dakota. Accessed at: <https://sdgoed.com/wp-content/uploads/2020/08/State-Broadband-Plan.pdf>

lines.

ConnectSD has been successful in awarding both State and federal-funded grants to internet service providers (ISPs). In addition to these grants, private capital has been invested to expand fiber lines across the state, connecting thousands of new locations over the past few years. Universal access can be achieved through collaborative partnerships and pooling of resources. The BEAD funding will build on the momentum and success the ConnectSD program has achieved in the state.



**Governor Noem’s Priorities for the State:**<sup>6</sup> Governor Kristi Noem has outlined her Priorities for South Dakota spanning a wide range of sectors. Digital opportunity efforts will align closely with the Governor’s initiatives and seek to advance her goals for the State. The Governor has prioritized addressing the needs of the agriculture industry in South Dakota, and supporting digital access will help prevent farmers, ranchers and others from getting left behind.<sup>7</sup> Additionally, the Governor has deemed investments and policies that allow small towns in the State to thrive and, as a result, attract people to live and work in rural South Dakota, as crucial to economic success.<sup>8</sup> The ability to work remotely or sell goods through ecommerce can allow South Dakotans to continue to live in primarily rural regions and access a wider job market or customer base. The Governor also recognizes that increasing access to the internet requires us to protect our businesses, personal identities and finances, and children. As a result, the state has invested in the expansion of cybersecurity programs, creating jobs in this industry.<sup>9</sup> Remodeling programming to support the rehabilitation of inmates through the development of

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<sup>6</sup> South Dakota Governor (accessed on June 8, 2023), Priorities. Accessed at: [South Dakota Governor \(sd.gov\)](https://www.sd.gov/governor/priorities)

<sup>7</sup> South Dakota Governor Kristi Noem (accessed on March 29, 2023), Advancing Agriculture. Accessed at: [South Dakota Governor \(sd.gov\)](https://www.sd.gov/governor/advancing-agriculture)

<sup>8</sup> South Dakota Governor Kristi Noem (accessed on March 29, 2023), Revitalizing Rural South Dakota. Accessed at: [South Dakota Governor \(sd.gov\)](https://www.sd.gov/governor/revitalizing-rural-south-dakota)

<sup>9</sup> South Dakota Governor Kristi Noem (accessed on March 29, 2023), Leading the Way in Cybersecurity. Accessed at: [South Dakota Governor \(sd.gov\)](https://www.sd.gov/governor/leading-the-way-in-cybersecurity)

skills that can be used in the workplace also remains a focus of the Governor's.<sup>10</sup> As part of the Governor's initiative for addressing the stigma around mental health and preventing suicide, she has prioritized making telehealth resources available to those who need mental health support. Similarly, the Governor has prioritized making telehealth resources available to those who struggle with meth addiction. As part of the Governor's effort towards making government more transparent, she is increasing access to online public services.

**Workforce Development:** South Dakota's economy has grown rapidly in recent years, with its GDP and personal income growth rate for the past year almost double that of the national rate.<sup>11</sup> A thriving economy like South Dakota needs a growing skilled and productive workforce to help continue with its strong performance. The State recognizes that a 21<sup>st</sup> century workforce must also be well-versed with computer and internet-based skills. The State's workforce development initiatives are led by the Department of Labor and Regulation (DLR), and the implementation of workforce training programs under the Workforce Innovation and Opportunity Act (WIOA) are overseen by the state's Workforce Development Council. The DLR identified a vision "to collaborate amongst government, education, business, and community to develop a skilled workforce which will allow employers in South Dakota to expand business when the opportunity arises", the State Plan lists three goals:<sup>12</sup>

- **Goal 1:** "Prepare residents of South Dakota to make informed decisions and support them at any point during their career pathway."
- **Goal 2:** "Partner with businesses to discover opportunities and identify solutions to address workforce needs."
- **Goal 3:** "Engage a system of continuous improvement to ensure the alignment of workforce services."

The focus on workforce needs and preparedness in South Dakota has jump-started several initiatives to build on existing success in this space. DLR is expanding Registered Apprenticeship Programs, offering UpSkill certification in high-demand fields to incarcerated individuals and those receiving public assistance, assisting public schools to improve work-based learning opportunities for students, increasing GED® attainment, improving the digital skills of South Dakotans, among other such programs to further the first goal. To address the second goal, DLR has focused on building relationships with businesses to learn of their workforce needs and connect them to resources and a potential workforce. Identifying creative strategies such as connecting to their future workforce through K-12 and Department of Corrections to developing structured Registered Apprenticeship training opportunities. To align workforce services, multiple partnerships are formalized through Memorandum of Understandings and data share agreements. Locally, partner meetings take place at least quarterly with an annual state-level partnership meeting. Joint trainings continue statewide to improve relationships and understandings of the various services available to businesses and the workforce. The variety of initiatives planned and underway are only made possible by the extensive groundwork DLR has already laid to enhance and expand its workforce.

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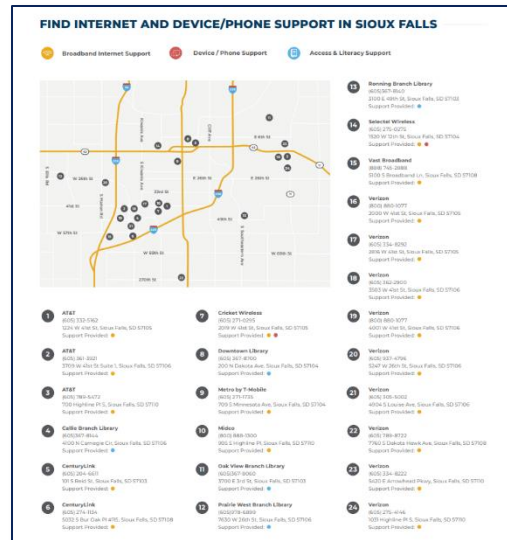
<sup>10</sup> South Dakota Governor Kristi Noem (accessed on March 29, 2023), Modernizing South Dakota's Correctional System. Accessed at: [South Dakota Governor \(sd.gov\)](https://www.southdakotagovernor.gov/modernizing-south-dakotas-correctional-system).

<sup>11</sup> SD News (published on July 11, 2023), South Dakota's Economy Continues to Thrive. Accessed at: [SDNews](https://www.sdnews.com)

<sup>12</sup> South Dakota Unified State Workforce Plan (accessed on September 27, 2023), Vision and Goals. Accessed at: [https://dlr.sd.gov/workforce\\_services/wdc/meetings/agenda\\_052219\\_q\\_stateplan\\_priorities.pdf](https://dlr.sd.gov/workforce_services/wdc/meetings/agenda_052219_q_stateplan_priorities.pdf)

The Digital Opportunity Plan has been developed to complement the economic and workforce development goals of the State, with specific activities and steps being detailed in subsequent chapters. Building on the DLR’s success thus far, further expansion of broadband technology is essential to allow the residents of South Dakota to participate in a modern economy. This expansion requires a skilled workforce to support proper installation, maintenance, security, and accessibility.

**Local Coordination:** Digital opportunity efforts in South Dakota are already underway; one in particular from the state’s largest city, Sioux Falls. The City of Sioux Falls built a coalition of public, private and nonprofit partners called Connect Sioux Falls (formerly known as IDEA or the Inclusive Digital Equity Alliance). The coalition’s website says it is a “group of individuals in the community who have joined the Inclusive Digital Equity Alliance (IDEA), a national initiative created to understand and address the real effects the digital divide has on communities.<sup>13</sup> The goal of Connect Sioux Falls is to reach digital equity in the community, allowing all citizens access to information technology resources and [to] develop abilities to fully participate in our society, democracy, and economy.” The Coalition created the City of Sioux Falls Digital Equity Framework 2021, based on a survey of residents’ internet use and the barriers they face in accessing high speed broadband.<sup>14</sup> It was an important step toward identifying the digital equity gaps in the city and possible range of interventions that can address those gaps. The Coalition has also produced a Digital Inclusion Asset Map (Figure 3), which is a resource pointing users to support for devices, broadband, digital literacy, etc.



**Figure 3: Digital Inclusion Asset Map**  
(Source: Connect Sioux Falls)

The four areas outlined above – ConnectSD, Governor Kristi Noem’s priorities, workforce development, and local coordination – cut across the broader efforts and goal areas outlined by the NTIA. Below in a non-exhaustive overview of highlighted initiatives sorted by the NTIA areas outlined in the Digital Equity Plan Guidance (p.6):

| NTIA Area   | Highlighted South Dakota initiatives   |
|---|--|
| Economic and workforce development goals, plans, and outcomes | <ul style="list-style-type: none"> <li>• Development and expansion of registered apprenticeship programs</li> <li>• Certificate completion for South Dakotans most in need</li> <li>• Expanding work-based learning in public schools</li> <li>• Improving digital skills</li> </ul> |
| Educational outcomes  | <ul style="list-style-type: none"> <li>• ‘Connecting The Schools’ project to connect schools to high-speed internet</li> <li>• Take-home devices in public schools</li> <li>• Low-cost or financed device programs at State universities and colleges</li> </ul>                     |

<sup>13</sup> Siouxland Libraries (accessed on August 16, 2023), Connect Sioux Falls. Accessed at: [connectsiouxfalls.org](https://connectsiouxfalls.org)

<sup>14</sup> City of Sioux Falls (published in 2021), Digital Equity Framework. Accessed at: [Digital Equity - City of Sioux Falls](https://www.southernsioux.com/digital-equity-framework)

|                                      |  |
|--------------------------------------|--|
| Health outcomes                      | <ul style="list-style-type: none"> <li>• Telemedicine in Motion program for virtual care in EMS<sup>15</sup></li> <li>• Virtual Crisis Care program<sup>16</sup></li> <li>• Mental Health through telehealth</li> </ul>  |
| Civic and social engagement          | <ul style="list-style-type: none"> <li>• Expanding high-speed broadband coverage into rural and remote parts of the state</li> </ul>   |
| Delivery of other essential services | <ul style="list-style-type: none"> <li>• SD.Gov<sup>17</sup></li> <li>• South Dakota Citizen Portal</li> <li>• An initiative to empower 'Digital Citizens' with a one-stop-shop for accessing state assistance programs, and other services such as driver's license services</li> </ul> |

### 2.3 Strategies and Measurable Objectives

South Dakota has developed a set of objectives that the State will work towards achieving to further its vision for digital opportunity.



Objective 1: Improve access to and adoption of affordable high-speed internet



Objective 2: Enhance accessibility of public services online



Objective 3: Increase access to digital literacy curriculums



Objective 4: Increase access to cybersecurity curriculums



Objective 5: Expand access to computing devices for accessing the internet

**Measurable objectives:** As the State works toward improving digital access and focuses on creating programming for each covered population, it has identified measurable objectives to

<sup>15</sup> South Dakota Department of Health (accessed on June 9, 2023), South Dakota EMS Telemedicine in Motion. Accessed at: [EMS Initiatives - SD Dept. of Health](#)

<sup>16</sup> South Dakota Unified Judicial System (accessed on June 9, 2023), Virtual Crisis Care Program. Accessed at: [UJS Virtual Crisis Care Program.pdf](#)

<sup>17</sup> SD.Gov (accessed on August 14, 2023), South Dakota Citizen Portal. Accessed at: <https://www.sd.gov/>

track as metrics of success. All measurable objectives will address all covered populations. While the specific impact of each activity the State shall undertake is not isolated in these metrics, they offer a bird’s eye view of the progress being made. Each key performance indicator (KPI) has a near and long-term target. For this plan, near-term is defined as three years in the future, and long-term represents five years to align with the timeline of the Digital Equity Act period of performance. These targets represent where the State hopes to be and will be used to track progress toward meeting South Dakota’s Digital Opportunity vision.

**Table 2: Measurable Objectives**

| Objective  | KPI  |                   |                            |                            | NTIA Areas  |
|--|--|-------------------|----------------------------|----------------------------|---|
|  | Measure  | Baseline          | Near-term Target (3 years) | Long-term Target (5 years) |   |
| Improve access to and adoption of affordable high-speed internet | Percentage of households with a broadband subscription                         | 85% <sup>18</sup> | 89%                        | 90%                        | Economic and workforce development goals, plans, & outcomes, Educational outcomes, Health outcomes, Civic and social engagement, Delivery of other essential services |
|  | Percentage for individuals with a broadband subscription in covered households | 85%*              | 89%                        | 90%                        | Economic and workforce development goals, plans, & outcomes, Educational outcomes, Health outcomes, Civic and social engagement, Delivery of other essential services |
|  | Percentage for aging   | 85%*              | 89%                        | 90%                        | Economic and workforce development goals,   |

<sup>18</sup> US Census American Community Survey (published in 2021), S2801 Types of Computers and Internet Subscriptions 5-Year Estimates. Accessed at: [S2801 - Census Bureau Search - Tables](#). Note, the baseline value is the estimate for 2021 and the targets represent three and five years from 2023. Additionally, this data point, as collected through the ACS, includes subscriptions to internet services with speeds and technologies that do not meet the State’s standards.

| Objective | KPI  |          |                            |                            | NTIA Areas  |
|-----------|--|----------|----------------------------|----------------------------|---|
|           | Measure  | Baseline | Near-term Target (3 years) | Long-term Target (5 years) |   |
|           | individuals with a broadband subscription                                  |          |                            |                            | plans, & outcomes, Educational outcomes, Health outcomes, Civic and social engagement, Delivery of other essential services   |
|           | Percentage for incarcerated individuals with a broadband subscription      | 85%*     | 89%                        | 90%                        | Economic and workforce development goals, plans, & outcomes, Educational outcomes, Health outcomes, Civic and social engagement, Delivery of other essential services |
|           | Percentage for veterans with a broadband subscription                      | 85%*     | 89%                        | 90%                        | Economic and workforce development goals, plans, & outcomes, Educational outcomes, Health outcomes, Civic and social engagement, Delivery of other essential services |
|           | Percentage for individuals with disabilities with a broadband subscription | 85%*     | 89%                        | 90%                        | Economic and workforce development goals, plans, & outcomes, Educational outcomes, Health outcomes, Civic and social engagement, Delivery of other essential services |
|           | Percentage for   | 85%*     | 89%                        | 90%                        | Economic and workforce development goals,   |

| Objective | KPI   |          |                            |                            | NTIA Areas  |
|-----------|---|----------|----------------------------|----------------------------|---|
|           | Measure   | Baseline | Near-term Target (3 years) | Long-term Target (5 years) |   |
|           | individuals with a language barrier with a broadband subscription                   |          |                            |                            | plans, & outcomes, Educational outcomes, Health outcomes, Civic and social engagement, Delivery of other essential services   |
|           | Percentage for members of racial or ethnic minorities with a broadband subscription | 85%*     | 89%                        | 90%                        | Economic and workforce development goals, plans, & outcomes, Educational outcomes, Health outcomes, Civic and social engagement, Delivery of other essential services |
|           | Percentage for rural residents with a broadband subscription                        | 85%*     | 89%                        | 90%                        | Economic and workforce development goals, plans, & outcomes, Educational outcomes, Health outcomes, Civic and social engagement, Delivery of other essential services |
|           | Percentage of internet-connected locations in South Dakota                          | 94%      | 98%                        | 100%                       | Economic and workforce development goals, plans, & outcomes, Educational outcomes, Health outcomes, Civic and social engagement, Delivery of other essential services |



| Objective                                       | KPI   |                   |                            |                            | NTIA Areas  |
|---|---|-------------------|----------------------------|----------------------------|---|
|   | Measure   | Baseline          | Near-term Target (3 years) | Long-term Target (5 years) |   |
|   | Percentage of eligible households with an ACP subscription            | 15% <sup>19</sup> | 23%                        | 26%                        | Economic and workforce development goals, plans, & outcomes, Educational outcomes, Health outcomes, Civic and social engagement, Delivery of other essential services |
|   |   |                   |                            |                            |   |
| Enhance accessibility of public services online | Number of MySD Digital Citizens in SD                                 | 487,226           | 587,000**                  | 737,000**                  | Delivery of other essential services  |
|   | Number of Virtual Intake packets submitted for DLR Workforce Services | 35/month          | 50/month                   | 75/month                   | Economic and workforce development goals, plans, & outcomes   |
|   | Number of packets submitted by individuals in covered households      | 7/month*          | 10/month                   | 15/month                   | Economic and workforce development goals, plans, & outcomes   |

<sup>19</sup> Education Superhighway ACP Enrollment Dashboard, South Dakota. Accessed on June 16, 2023 at: [Affordable Connectivity Program | ACP | Enrollment Dashboard \(educationsuperhighway.org\)](https://www.educationsuperhighway.org)

| Objective | KPI  |          |                            |                            | NTIA Areas  |
|-----------|--|----------|----------------------------|----------------------------|---|
|           | Measure  | Baseline | Near-term Target (3 years) | Long-term Target (5 years) |   |
|           | Number of packets submitted by aging individuals                   | 8/month* | 12/month                   | 18/month                   | Economic and workforce development goals, plans, & outcomes |
|           | Number of packets submitted by incarcerated individuals            | 1/month* | 1/month                    | 1/month                    | Economic and workforce development goals, plans, & outcomes |
|           | Number of packets submitted by veterans                            | 2/month* | 3/month                    | 5/month                    | Economic and workforce development goals, plans, & outcomes |
|           | Number of packets submitted by individuals with disabilities       | 5/month* | 7/month                    | 10/month                   | Economic and workforce development goals, plans, & outcomes |
|           | Number of packets submitted by individuals with a language barrier | 4/month* | 6/month                    | 9/month                    | Economic and workforce development goals, plans, & outcomes |
|           | Number of packets submitted by members of racial or                | 6/month* | 9/month                    | 14/month                   | Economic and workforce development goals, plans, & outcomes |

| Objective                                       | KPI   |           |                            |                            | NTIA Areas  |
|---|---|-----------|----------------------------|----------------------------|---|
|   | Measure   | Baseline  | Near-term Target (3 years) | Long-term Target (5 years) |   |
|   | ethnic minorities   |           |                            |                            |   |
|   | Number of packets submitted by rural residents  | 21/month* | 30/month                   | 44/month                   | Economic and workforce development goals, plans, & outcome  |
|   |   |           |                            |                            |   |
| Increase access to digital literacy curriculums | Number of locations offering standardized digital literacy courses                    | N/A***    | 12 locations               | 25 locations               | Economic and workforce development goals, plans, & outcomes |
|   | Cumulative number of participants completing at least one component of the curriculum | N/A***    | 650 people                 | 1,400 people               | Economic and workforce development goals, plans, & outcomes |
|   | Number of individuals in covered households completing at least one component         | N/A***    | 125 people                 | 270 people                 | Economic and workforce development goals, plans, & outcomes |

| Objective | KPI   |          |                            |                            | NTIA Areas  |
|-----------|---|----------|----------------------------|----------------------------|---|
|           | Measure   | Baseline | Near-term Target (3 years) | Long-term Target (5 years) |   |
|           | Number of aging individuals completing at least one component                   | N/A***   | 156 people                 | 336 people                 | Economic and workforce development goals, plans, & outcomes |
|           | Number of incarcerated individuals completing at least one component            | N/A***   | 5 people                   | 10 people                  | Economic and workforce development goals, plans, & outcomes |
|           | Number of veterans completing at least one component                            | N/A***   | 42 people                  | 90 people                  | Economic and workforce development goals, plans, & outcomes |
|           | Number of individuals with disabilities completing at least one component       | N/A***   | 88 people                  | 189 people                 | Economic and workforce development goals, plans, & outcomes |
|           | Number of individuals with a language barrier completing at least one component | N/A***   | 76 people                  | 164 people                 | Economic and workforce development goals, plans, & outcomes |

| Objective                                    | KPI   |          |                            |                            | NTIA Areas  |
|--|---|----------|----------------------------|----------------------------|---|
|  | Measure   | Baseline | Near-term Target (3 years) | Long-term Target (5 years) |   |
|  | Number of members of racial or ethnic minorities completing at least one component    | N/A***   | 120 people                 | 259 people                 | Economic and workforce development goals, plans, & outcomes                         |
|  | Number of rural residents completing at least one component                           | N/A***   | 382 people                 | 823 people                 | Economic and workforce development goals, plans, & outcomes                         |
|  |   |          |                            |                            |   |
| Increase access to cybersecurity curriculums | Number of locations offering standardized internet safety courses                     | N/A***   | 12 locations               | 25 locations               | Economic and workforce development goals, plans, and outcomes, Educational outcomes |
|  | Cumulative number of participants completing at least one component of the curriculum | N/A***   | 130 people                 | 280 people                 | Economic and workforce development goals, plans, and outcomes, Educational outcomes |
|  | Number of individuals   | N/A***   | 25 people                  | 54 people                  | Economic and workforce development goals,   |

| Objective | KPI   |          |                            |                            | NTIA Areas  |
|-----------|---|----------|----------------------------|----------------------------|---|
|           | Measure   | Baseline | Near-term Target (3 years) | Long-term Target (5 years) |   |
|           | in covered households completing at least one component                   |          |                            |                            | plans, and outcomes, Educational outcomes   |
|           | Number of aging individuals completing at least one component             | N/A ***  | 31 people                  | 67 people                  | Economic and workforce development goals, plans, and outcomes, Educational outcomes |
|           | Number of incarcerated individuals completing at least one component      | N/A ***  | 1 person                   | 2 people                   | Economic and workforce development goals, plans, and outcomes, Educational outcomes |
|           | Number of veterans completing at least one component                      | N/A ***  | 8 people                   | 18 people                  | Economic and workforce development goals, plans, and outcomes, Educational outcomes |
|           | Number of individuals with disabilities completing at least one component | N/A ***  | 18 people                  | 38 people                  | Economic and workforce development goals, plans, and outcomes, Educational outcomes |
|           | Number of individuals with a  | N/A ***  | 15 people                  | 33 people                  | Economic and workforce development goals,   |

| Objective   | KPI  |                   |                            |                            | NTIA Areas  |
|---|--|-------------------|----------------------------|----------------------------|---|
|   | Measure  | Baseline          | Near-term Target (3 years) | Long-term Target (5 years) |   |
|   | language barrier completing at least one component                                 |                   |                            |                            | plans, and outcomes, Educational outcomes   |
|   | Number of members of racial or ethnic minorities completing at least one component | N/A ***           | 24 people                  | 52 people                  | Economic and workforce development goals, plans, and outcomes, Educational outcomes   |
|   | Number of rural residents completing at least one component                        | N/A***            | 76 people                  | 165 people                 | Economic and workforce development goals, plans, and outcomes, Educational outcomes   |
|   |  |                   |                            |                            |   |
| Expand access to computing devices for accessing the internet | Percentage of households with a computer, tablet, or smartphone                    | 93% <sup>20</sup> | 95%                        | 96%                        | Economic and workforce development goals, plans, & outcomes, Educational outcomes, Health outcomes, Civic and social engagement, Delivery of other essential services |

<sup>20</sup> US Census American Community Survey (published in 2021), S2801 Types of Computers and Internet Subscriptions 5-Year Estimates. Accessed at: [S2801 - Census Bureau Search - Tables](#). Note, the baseline value is the estimate for 2021 and the targets represent three and five years from 2023.

| Objective | KPI   |          |                            |                            | NTIA Areas  |
|-----------|---|----------|----------------------------|----------------------------|---|
|           | Measure   | Baseline | Near-term Target (3 years) | Long-term Target (5 years) |   |
|           | Percentage of covered households with a computer, tablet, or smartphone       | 93%*     | 95%                        | 96%                        | Economic and workforce development goals, plans, & outcomes, Educational outcomes, Health outcomes, Civic and social engagement, Delivery of other essential services |
|           | Percentage of aging individuals with a computer, tablet, or smartphone        | 93%*     | 95%                        | 96%                        | Economic and workforce development goals, plans, & outcomes, Educational outcomes, Health outcomes, Civic and social engagement, Delivery of other essential services |
|           | Percentage of incarcerated individuals with a computer, tablet, or smartphone | 93%*     | 95%                        | 96%                        | Economic and workforce development goals, plans, & outcomes, Educational outcomes, Health outcomes, Civic and social engagement, Delivery of other essential services |
|           | Percentage of veterans with a computer, tablet, or smartphone                 | 93%*     | 95%                        | 96%                        | Economic and workforce development goals, plans, & outcomes, Educational outcomes, Health outcomes, Civic and social engagement, Delivery of other essential services |
|           | Percentage of   | 93%*     | 95%                        | 96%                        | Economic and workforce development goals,   |



| Objective | KPI   |          |                            |                            | NTIA Areas  |
|-----------|---|----------|----------------------------|----------------------------|---|
|           | Measure   | Baseline | Near-term Target (3 years) | Long-term Target (5 years) |   |
|           | individuals with a disability with a computer, tablet, or smartphone                        |          |                            |                            | plans, & outcomes, Educational outcomes, Health outcomes, Civic and social engagement, Delivery of other essential services   |
|           | Percentage of individuals with a language barrier with a computer, tablet, or smartphone    | 93%*     | 95%                        | 96%                        | Economic and workforce development goals, plans, & outcomes, Educational outcomes, Health outcomes, Civic and social engagement, Delivery of other essential services |
|           | Percentage of members in racial or ethnic minorities with a computer, tablet, or smartphone | 93%*     | 95%                        | 96%                        | Economic and workforce development goals, plans, & outcomes, Educational outcomes, Health outcomes, Civic and social engagement, Delivery of other essential services |
|           | Percentage of rural residents with a computer, tablet, or smartphone                        | 93%*     | 95%                        | 96%                        | Economic and workforce development goals, plans, & outcomes, Educational outcomes, Health outcomes, Civic and social engagement, Delivery of other essential services |

\*Due to these metrics not yet being implemented, these baselines were extrapolated from general data such as [NTIA's Digital Equity Act Population Viewer](#) and will be updated upon first returns on implementation. For instance, 58.8% of South Dakota residents live in rural areas, therefore 58.8% of the total number of Virtual Intake Packets (35) would






be approximately 21, thus setting the standard.

\*\*This measure is dependent on the services selected to be updated as described in section 5.1. The baseline and target metrics will be determined upon selection of such services.

\*\*\*Although there are several digital literacy and internet safety programs operated throughout the State (as highlighted in the asset inventory in section 3.1), the State would like to track the standardized classes and usage that will be offered through the State's digital equity programming.

**Strategies:** The State will employ a range of strategies to achieve its objectives and to meet the targets for its measurable objectives. These strategies have evolved from detailed discussions with stakeholders representing a cross-section of covered populations, community partners, and State agencies. As part of implementing these strategies, the State has proposed activities that it will consider supporting and funding to actualize these strategies discussed in Chapter 5.

**Table 3: Objectives and Strategies**

| Objectives   | Strategies  |
|--|---|
|  <p>Objective 1: Improve access to and adoption of affordable high-speed internet</p> | <p>1.1 Subsidize infrastructure deployment in unserved and underserved communities<br/>1.2 Make high-speed internet affordable<br/>1.3 Increase awareness of the benefits of adopting high-speed internet</p> |
|  <p>Objective 2: Enhance accessibility of public services online</p>                | <p>2.1 Improve online services interface<br/>2.2 Increase awareness of MySD Digital Citizen portal</p>  |
|  <p>Objective 3: Increase access to digital literacy curriculums</p>                | <p>3.1 Establish digital literacy curriculums and training sessions</p>   |
|  <p>Objective 4: Increase access to cybersecurity curriculums</p>                   | <p>4.1 Establish cybersecurity curriculums and training sessions</p>  |
|  <p>Objective 5: Expand access to computing devices for accessing the internet</p>  | <p>5.1 Expand access to public-use devices<br/>5.2 Make low-cost or free devices available for distribution</p>   |

Closing the digital divide in South Dakota will be no easy task. Addressing the measurable objectives and carrying out the strategies will require a combination of various partners collaborating, the ability to improve upon existing efforts, and implementing new investments. Through these strategies and subsequent activities, South Dakota hopes to realize its vision for a

digitally accessible state.

### 3 Current State of Digital Equity: Barriers and Assets

#### 3.1 Asset Inventory

The State of South Dakota has several statewide programs to help bridge the digital divide. Entities throughout offer programming to equip South Dakotans with the tools and skills needed to access high-speed internet. Through research and stakeholder engagement meetings, the State identified assets that promote digital inclusion. The following sections provide additional detail on the different kinds of assets available.

##### 3.1.1 Digital Inclusion Assets by Covered Population

Table 4 below lists existing digital inclusion assets identified through research and stakeholder engagement meetings and illustrates the covered populations supported through the various efforts.

It should be noted that there is overlap across these covered populations. Because of the criteria used to determine whether an asset supports a covered population, the list may not necessarily capture the overlap.

**When do we say that a Digital Inclusion asset ‘supports’ a covered population?**

If the answer to any of the following questions is “yes,” then the asset is considered as supportive of the covered population:

- Does the program specifically mention or have participatory requirements related to the group?
- Is the covered population mentioned on a related website, annual plan, or strategic plan?
- Has advertising for the asset been specifically distributed or designed to reach a covered population?
- Is the physical service offering located in rural or Tribal land? (Question only applies for rural populations and those belonging to racial and ethnic minorities)

*Figure 4: Digital Inclusion Assets ‘Support’ Criteria*

**Table 4: Digital Inclusion Assets and Attributable Covered Populations**

| Digital Inclusion Asset   | Covered Population |   |                   |                          |                               |          |  |   |   |
|---|--------------------|---|-------------------|--------------------------|-------------------------------|----------|--|---|---|
|   | Name               | Households at or below 150% of the federal poverty line | Aging individuals | Incarcerated individuals | Individuals with disabilities | Veterans | Individuals with Language Barriers/ Low Literacy | Individuals belonging to a Racial/Ethnic Minority | Individuals residing in primarily rural areas |
| Adult Education and Literacy Program digital literacy services from the South Dakota Department of Labor and Regulation (DLR) <sup>21</sup>   | X                  |   |                   |                          |                               |          | X  |   |   |
| Computer and digital skills-related programs approved by DLR for funding under Workforce Innovation and Opportunity Act (WIOA) <sup>22</sup>  | X                  |   |                   |                          |                               |          | X  |   |   |
| Device programs run by South Dakota colleges and universities to provide access to laptops and/or tablets for enrolled students. 3 entities for which we have information noted that they offer devices to purchase or lease at discounted rates, with financing options or free of cost. 2 entities shared that they utilize one-to-one programs, and any support is included in financial aid packages. An additional 2 entities shared that they have short term lease programs for students experiencing an emergency <sup>23</sup> | X                  |   |                   |                          |                               |          |  |   |   |
| Device program run by South Dakota Department of Corrections (DOC) for incarcerated persons to use in prisons for undertaking GED programs and other activities <sup>24</sup>   |                    |   |                   | X                        |                               |          |  |   |   |
| Device program run by South Dakota Department of Labor and Regulation (DLR)   | X                  |   |                   |                          |                               |          |  |   |   |
| Device program run by South Dakota Department of Human Services (DHS) Division of Service to the Blind and Visually Impaired program to for individuals seeking employment  |                    |   |                   |                          | X                             |          |  |   |   |
| Device purchase and loaner program run by South Dakota Department of Social Services (DSS) Division of Economic Assistance program to provide smartphones or tablets to complete the work component of TANF or SNAP   | X                  |   |                   |                          |                               |          |  |   |   |
| Digital Literacy classes offered by Grow South Dakota <sup>25</sup>   |                    |   |                   |                          |                               |          |  |   | X   |
| Digital Navigation program at Sitting Bull College through AmeriCorps <sup>26</sup>   |                    |   |                   |                          |                               |          |  | X   |   |
| Digital Navigation services offered to families through Native Voice Program at Black Hills Special Services Cooperative  |                    |   |                   |                          |                               |          |  | X   |   |
| Digital skills classes virtually offered through Senior Planet from AARP in partnership with Older Adults Technology Services (OATS) – While offered across the country, the South  |                    | X   |                   |                          |                               |          |  |   |   |

<sup>21</sup> South Dakota Department of Labor and Regulation (accessed on March 29, 2023), Workforce Services for Individuals. Accessed at: [Workforce Services for Individuals - Adult Education \(sd.gov\)](https://www.sd.gov/workforce-services-for-individuals-adult-education)

<sup>22</sup> South Dakota Department of Labor & Regulation (accessed on March 29, 2023), Workforce Innovation and Opportunity Act. Accessed at: [Workforce Innovation and Opportunity Act \(sd.gov\)](https://www.sd.gov/workforce-innovation-and-opportunity-act)

<sup>23</sup> Information provided through stakeholder conversations with colleges and representatives of higher education which took place April-May 2023.

<sup>24</sup> South Dakota Department of Corrections (accessed on May 31, 2023), Corrections Connection Tablets. Available at: <https://doc.sd.gov/documents/CorrectionsConnectionTablets.pdf>

<sup>25</sup> Grow South Dakota (published on April 14, 2023), GROW South Dakota launches new Digital Literacy program. Accessed at: [Grow South Dakota Launches New Digital Literacy Program \(growsd.org\)](https://growsd.org)

<sup>26</sup> DigitalUS (accessed on March 29, 2023), Program Profiles – Sitting Bull College. Accessed at: [Program Profiles – Digital US](https://digitalus.org)

| Digital Inclusion Asset   | Covered Population |   |                   |                          |                               |          |  |   |
|---|--------------------|---|-------------------|--------------------------|-------------------------------|----------|--|---|
|   | Name               | Households at or below 150% of the federal poverty line | Aging individuals | Incarcerated individuals | Individuals with disabilities | Veterans | Individuals with Language Barriers/ Low Literacy | Individuals belonging to a Racial/Ethnic Minority |
| Dakota office promotes the program <sup>27</sup>  |                    |   |                   |                          |                               |          |  |   |
| Equipment subsidy program offered by DHS Division of Rehabilitation Services for purchase of equipment to be used for employment-related activities   | X                  |   |                   | X                        |                               |          |  |   |
| Mobile Computer Lab – Nolan Family Library and Media Center, Red Cloud High School, Pine Ridge Indian Reservation <sup>28</sup>   |                    |   |                   |                          |                               |          | X  |   |
| Regular Assistive Technology Clinic sessions organized by the South Dakota Rehabilitation Center for the Blind for the visually impaired to train individuals on how to use technological devices to access the internet <sup>29</sup>                              |                    |   |                   | X                        |                               |          |  |   |
| Technical Assistance program including Digital Navigation services for rural and native communities called Rural Connect – an effort launched by Rural LISC working with Grow South Dakota, which was funded by a \$600,000 grant from Wells Fargo <sup>30,31</sup> |                    |   |                   |                          |                               |          | X  | X   |
| Affordable Connectivity Program (ACP) through the FCC to provide subsidies for internet subscriptions and devices, (87 ISPs participate <sup>32</sup> )   | X                  |   |                   |                          |                               | X        | X  |   |
| ACP outreach program offered by Northeast South Dakota Community Action Program, a branch of Grow South Dakota (received a \$200,000 Affordable Connectivity Outreach Grant in March 2023) <sup>33</sup>  | X                  |   |                   |                          |                               |          |  | X   |
| ACP outreach program offered by South Dakota Voices for Peace (received a pilot ACP outreach grant of \$25,000 through Civic Nation in January 2023) <sup>34,35</sup>   | X                  |   |                   |                          |                               | X        | X  |   |
| Lifeline Program through the FCC, which provides subscribers a discount on qualifying monthly telephone service, broadband Internet service, or bundled voice-broadband packages  | X                  |   |                   |                          |                               | X        | X  |   |

<sup>27</sup> Senior Planet from AARP (accessed June 15, 2023), Live Online Classes for Seniors. Accessed at:

<https://seniorplanet.org/classes/>

<sup>28</sup> Red Cloud Indian School (accessed on February 17, 2023), Library. Accessed at:

<https://www.redcloudschool.org/page.aspx?pid=547>

<sup>29</sup> South Dakota Rehabilitation Center for the Blind (accessed March 15, 2023), Department of Human Services.

Accessed at: [SD Department of Human Services](#)

<sup>30</sup> 3BL Media (published on July 29, 2022), Rural LISC Launches Rural Connect With \$600K Grant From Wells Fargo Foundation for South Dakota and Beyond. Accessed at: [Rural LISC Launches Rural Connect with \\$600K Grant From Well \(3blmedia.com\)](#)

<sup>31</sup> GROW South Dakota (published on December 21, 2022), Successful Digital Navigator Class. Available at: [Successful Digital Navigator Class \(growsd.org\)](#)

<sup>32</sup> Federal Communications Commission (accessed June 26, 2023), Affordable Connectivity Program Providers. Accessed at: [Affordable Connectivity Program Providers | Federal Communications Commission \(fcc.gov\)](#)

<sup>33</sup> Federal Communications Commission (accessed on March 15, 2023), Affordable Connectivity Outreach Grant Program. Accessed at: [Affordable Connectivity Outreach Grant Program | Federal Communications Commission \(fcc.gov\)](#).

<sup>34</sup> South Dakota Voices for Peace (accessed on August 16, 2023), ACP Application FAQs and Helpline. Accessed at: [Affordable Connectivity Program \(sdvfpeace.org\)](#)

<sup>35</sup> Civic Nation (published June 2023), Civic Nation ACP Pilot Report: Lessons for Community-Based Affordable Connectivity Program Outreach. Accessed at: [CivicNation OnlineForAll PilotReport.pdf](#)

| Digital Inclusion Asset                                     | Covered Population                                      |                   |                          |                               |          |  |   |   |
|---|---|-------------------|--------------------------|-------------------------------|----------|--|---|---|
| Name  | Households at or below 150% of the federal poverty line | Aging individuals | Incarcerated individuals | Individuals with disabilities | Veterans | Individuals with Language Barriers/ Low Literacy | Individuals belonging to a Racial/Ethnic Minority | Individuals residing in primarily rural areas |
| purchased from participating wireline or wireless providers |   |                   |                          |                               |          |  |   |   |

### 3.1.2 Existing Digital Equity Plans

The only municipal, regional or Tribal Digital Equity plan in South Dakota identified at this time is the Digital Equity Framework developed for the City of Sioux Falls. The vision stated within the plan is, “To achieve digital equity through universal residential broadband adoption including availability, affordability, devices, technical support, and digital life skills training. We must ensure Sioux Falls residents have the tools necessary to support education, health, well-being, economic prosperity, and the ability to fully participate in society.”<sup>36</sup> Many of the themes here align with the broader South Dakota plan, including the outcome of allowing full participation in society. The Digital Opportunity Coordinator will regularly attend Connect Sioux Falls’ meetings to assure that goals are aligned, and resources are being utilized efficiently between the State and the locality. Major decisions the State has for this region will be discussed with this group to reduce unnecessary overlap and encourage collaboration. Finally, this group was frequently consulted in the creation of the State’s own Plan and will continue to be open for feedback throughout the implementation. While this plan promotes digital inclusion for one of South Dakota’s most prominent cities, the vast remainder of the State is not accounted for through a pre-existing formal digital equity plan. The State will continue to interact with non-governmental agencies to align its Plan with components of non-profit, community anchor institution, and industry plans that while not explicitly mentioning digital equity, incorporate elements of it under a different guise. By bringing these parties into the discussion, efforts can be coordinated on a grander scale, eliminating overlap and addressing existing gaps such as standardized curriculums, uniform language, and affordability.

### 3.1.3 Existing Digital Equity Programs

Digital equity programs are programs that are administered to assist the public, especially those in need, in accessing internet through any of the means outlined in Figure 1 above, whether that be service assistance, device-related assistance or assistance with obtaining the skills necessary to use the internet competently. Just like the three pillars of digital equity in the stool analogy, the conditions for internet access, digital skills, and adequate devices are key to reaping the benefits of the internet. South Dakota has no known digital equity programs being run by any municipal, regional, or Tribal entities. However, it should be noted that there are three federal Tribal Broadband Connectivity Program grants awarded to Tribal entities that are designated for Use and Adoption (a type of grant made for promoting the use and adoption of broadband). The

<sup>36</sup> City of Sioux Falls (published in 2021), Digital Equity Framework. Accessed at: [Digital Equity - City of Sioux Falls](#)

Cheyenne River Sioux Tribe Telephone Authority, Flandreau Santee Sioux Tribe, and Sisseton Wahpeton Oyate of the Lake Traverse Reservation received grants totaling over \$6.5 million dollars. While these awards were announced in 2022, the State is not familiar with programmatic details at this time. Letters have been sent to all tribes, welcoming perspectives and collaboration for improved digital access. While confirmations of receipt have been verified, the state has not received formal responses from most yet. The State has participated in a Tribal Consultation with Rosebud Sioux Tribe and hope to further these conversations throughout implementation. South Dakota will continue to attempt to bring other Tribes into these conversations as well. Digital Opportunity will partner with BEAD moving forward and participate in the ongoing consultations that are being conducted to ensure goals are aligned between all partners.

### 3.1.4 Broadband Adoption – Assets

Adoption has been measured by assessing the percentage of individuals with broadband subscriptions, as broadband subscription rates act as a strong proxy for adoption within a given geographic area. According to the U.S. Census, 85 percent of South Dakota households have a broadband internet subscription.<sup>37</sup>

The State’s assets related to the broadband adoption and its components are listed in Table

5 below. The availability of these services across the state is limited. More universally available, statewide programs may be needed to fill in the gaps. With minimal digital skills programming established, informal support is prevalent throughout South Dakota. For example, about a quarter of the libraries in the State library inventory identify providing informal support as needed to patrons using their devices. Throughout stakeholder engagement, some ISPs shared that when they get calls from their customers who need assistance with tasks like logging into their email, they may send a representative to assist the customer at no charge. Other organizations overseeing adaptive device programs also mentioned occasionally providing one-time assistance for those that need help with the internet.

Broadband deployment will primarily be handled in conjunction with the BEAD Program with additional resources through the State’s ConnectSD program and local efforts. Due to the cost of infrastructure needed in our state, much of the State’s expected allowance through BEAD will be directly related to increasing adoption. Despite this, these plans will be interwoven in not only how these communities are connected, but ensuring they have resources available to utilize these new capabilities.

Table 5 also highlights programs related to device access. While the State has identified several

**What does Broadband Adoption mean?**

Title 47 of the US Code defines broadband adoption as:  
 “The process by which an individual obtains daily access to the internet—

- (A) at a speed, quality, and capacity— (i) that is necessary for the individual to accomplish common tasks; and (ii) such that the access qualifies as an advanced telecommunications capability;
- (B) with the digital skills that are necessary for the individual to participate online; and
- (C) on a— (i) personal device; and (ii) secure and convenient network.”

*Figure 5: What does Broadband Adoption mean?*

<sup>37</sup> United States Census Bureau (accessed on March 29, 2023), QuickFacts – South Dakota. Accessed at: [U.S. Census Bureau QuickFacts: United States](https://www.census.gov/quickfacts/southdakota)

assets supporting access to devices, these programs are generally limited to specific audiences. For example, programs through the higher education entities are utilized by students. The device program run through the work component of Temporary Assistance for Needy Families (TANF) is only available for a narrow audience of eligible recipients.

**Table 5: Broadband Adoption Assets**

|    | <b>Asset</b>   |
|----|--|
| 1  | 104 SD State Libraries offer computing labs, which reported 312,254 sessions in FY 2022 <sup>38</sup>  |
| 2  | 14 South Dakota State Libraries offering Digital Literacy classes <sup>39*</sup>   |
| 3  | 14 South Dakota State Libraries offering services identified by the libraries as Digital Navigation services. 21 SD State Libraries offering services like Digital Navigation services, but not through a formalized program*  |
| 4  | 4 South Dakota State Libraries offering Cybersecurity (internet safety) classes*   |
| 5  | 22 South Dakota State Libraries offering computing device loaner programs and mobile hotspot loaner programs offered by 9 South Dakota State Libraries*  |
| 6  | 85% of South Dakota households have a broadband subscription <sup>40</sup>   |
| 7  | 97 SD State Libraries offer public Wi-Fi access, which reported 1,177,785 sessions in FY 2022 <sup>41</sup>  |
| 8  | Adult Education and Literacy Program digital literacy services from the South Dakota Department of Labor and Regulation (DLR) <sup>42</sup>  |
| 9  | City of Sioux Falls has 5 Community Centers with public computer labs <sup>43</sup>  |
| 10 | Computer and digital skills-related programs approved by DLR for funding under Workforce Innovation and Opportunity Act (WIOA) <sup>44</sup>   |
| 11 | Connect Sioux Falls, a coalition in Sioux Falls, formerly known as the Inclusive Digital Equity Alliance (IDEA)  |
| 12 | Device programs run by South Dakota colleges and universities to provide access to laptops and/or tablets for enrolled students. 3 entities for which we have information noted that they offer devices to purchase or lease at discounted rates, with financing options or free of cost. 2 entities shared that they utilize one-to-one programs, and any support is included in financial aid packages. An additional 2 entities shared that they have short term lease programs for |

<sup>38</sup> South Dakota State Library (downloaded June 15, 2023), South Dakota public library statistics as reported via the Public Libraries Survey FY2022 (click on “SD Public Libraries – Service Statistics 2022”). Accessed at: <https://libguides.library.sd.gov/services/pls>

<sup>39</sup> South Dakota State Library (received June 6, 2023), Digital Literacy and Cybersecurity data. \*The South Dakota State Library collected information on the programs offered by the libraries. 89 libraries responded, so these figures may be an underestimate of the programs offered throughout the State.

<sup>40</sup> United States Census Bureau (accessed on March 29, 2023), QuickFacts – South Dakota. Accessed at: [U.S. Census Bureau QuickFacts: South Dakota](https://www.census.gov/quickfacts/southdakota)

<sup>41</sup> South Dakota State Library (downloaded June 15, 2023), South Dakota public library statistics as reported via the Public Libraries Survey FY2022 (click on “SD Public Libraries – Service Statistics 2022”). Accessed at: <https://libguides.library.sd.gov/services/pls>

<sup>42</sup> South Dakota Department of Labor and Regulation (accessed on March 29, 2023), Workforce Services for Individuals. Accessed at: [Workforce Services for Individuals - Adult Education \(sd.gov\)](https://www.dlr.sd.gov/workforce-services-for-individuals/)

<sup>43</sup> City of Sioux Falls (accessed on Jun 23, 2023), Computer Lab (Select the Community Center Name >Computer Lab). Accessed at: <https://www.siouxfalls.org/parks/community-centers>

<sup>44</sup> South Dakota Department of Labor & Regulation (accessed on March 29, 2023), Workforce Innovation and Opportunity Act. Accessed at: [Workforce Innovation and Opportunity Act \(sd.gov\)](https://www.dlr.sd.gov/workforce-innovation-and-opportunity-act/)



|    |   |
|----|---|
|    | students experiencing an emergency <sup>45</sup>  |
| 16 | Digital Literacy classes offered by Grow South Dakota <sup>46</sup>   |
| 17 | Digital Navigation program at Sitting Bull College through AmeriCorps <sup>47</sup>   |
| 21 | Map of internet and device/phone support in Sioux Falls <sup>48</sup>   |
| 22 | Mobile Computer Lab – Nolan Family Library and Media Center, Red Cloud High School, Pine Ridge Indian Reservation <sup>49</sup>   |
| 23 | One-to-one device program run by South Dakota school districts providing devices for students in the public school system to take home  |
| 24 | Public computer labs with Wi-Fi access at DLR Job Service Offices   |
| 25 | Regular Assistive Technology Clinic sessions organized by the South Dakota Rehabilitation Center for the Blind for the visually impaired to train individuals on how to use technological devices to access the internet <sup>50</sup>                              |
| 26 | Technical Assistance program including Digital Navigation services for rural and native communities called Rural Connect – an effort launched by Rural LISC working with Grow South Dakota, which was funded by a \$600,000 grant from Wells Fargo <sup>51,52</sup> |
| 27 | \$207.2 million in Broadband, Equity, Access and Deployment (BEAD) funding  |

### 3.1.5 Broadband Affordability – Assets

The Bipartisan Infrastructure Law’s provisions related to the BEAD Program require that all consumers have access to affordable high-speed internet. Congress determined that “[t]he persistent ‘digital divide’ in the United States is a barrier to” the nation’s “economic competitiveness [and the] equitable distribution of essential public services, including health care and education.”<sup>53</sup> Affordability has different meanings to different individuals, and there is no federally determined definition of affordability. This section is focused on assets that reduce the cost burden on individuals in pursuit of internet subscriptions and devices. The State’s assets for Broadband Affordability are listed in Table 6.

<sup>45</sup> Information provided through stakeholder conversations with colleges and representatives of higher education which took place April-May 2023.

<sup>46</sup> Grow South Dakota (published on April 14, 2023), GROW South Dakota launches new Digital Literacy program. Accessed at: <http://growsd.org>

<sup>47</sup> DigitalUS (accessed on March 29, 2023), Program Profiles – Sitting Bull College. Accessed at: [Program Profiles – Digital US](#)

<sup>48</sup> Connect Sioux Falls (downloaded on June 15, 2023), Connect Sioux Falls (click on Resources “Connect Sioux Falls ACP Brochure”). Accessed at: <http://connectsiouxfalls.org/>

<sup>49</sup> Red Cloud Indian School (accessed on February 17, 2023), Library. Accessed at: <https://www.redcloudschool.org/page.aspx?pid=547>

<sup>50</sup> South Dakota Rehabilitation Center for the Blind (accessed March 15, 2023), Department of Human Services. Accessed at: [SD Department of Human Services](#)

<sup>51</sup> 3BL Media (published on July 29, 2022), Rural LISC Launches Rural Connect With \$600K Grant From Wells Fargo Foundation for South Dakota and Beyond. Accessed at: [Rural LISC Launches Rural Connect with \\$600K Grant From Well \(3blmedia.com\)](#)

<sup>52</sup> GROW South Dakota (published on December 21, 2022), Successful Digital Navigator Class. Available at: [Successful Digital Navigator Class \(growsd.org\)](#)

<sup>53</sup> Congressional Research Service (published on November 16, 2021), The Infrastructure Investment and Jobs Act (P.L. 117-58): Summary of the Broadband Provisions in Division F. Accessed at: [congress.gov](https://www.congress.gov).

**Table 6: Broadband Affordability Assets**

|   | <b>Asset</b>   |
|---|--|
| 1 | ACP through the FCC to provide subsidies for internet subscriptions and devices, (87 ISPs participate) <sup>54</sup>   |
| 2 | ACP outreach program offered by Northeast South Dakota Community Action Program, a branch of Grow South Dakota (received a \$200,000 Affordable Connectivity Outreach Grant in March 2023) <sup>55</sup>                                     |
| 3 | ACP outreach program offered by South Dakota Voices for Peace (received a pilot ACP outreach grant of \$25,000 through Civic Nation in January 2023) <sup>56,57</sup>  |
| 4 | Lifeline Program through the FCC, which provides subscribers a discount on qualifying monthly telephone service, broadband Internet service, or bundled voice-broadband packages purchased from participating wireline or wireless providers |
| 5 | \$207.2 million in Broadband, Equity, Access, and Deployment (BEAD) funding  |

The Affordable Connectivity Program (ACP) and Lifeline are the primary programs for subsidizing broadband subscriptions across the state. As of June 2023, South Dakota has an estimated 129,617 ACP eligible households, with 19,893 enrolled and 109,724 unenrolled households.<sup>58</sup> While 87 ISPs in South Dakota participate in ACP, more than 60 providers offer high speed broadband through fiber and other technologies.<sup>59</sup> These organizations represent a mix of telecom cooperatives, municipal, private and tribal-owned ISPs.

While fragmented, there are efforts in place to increase usage of the ACP. Several organizations and ISPs have shared information about ACP to their networks at the onset of the program. Two organizations in South Dakota received grants, one awarded federally and the other locally, and are actively carrying out activities to help eligible individuals sign up for ACP. Additionally, the South Dakota Department of Labor & Regulation has received an Affordable Connectivity Outreach Grant from the 2<sup>nd</sup> round of Federal Communications Commission (FCC) grants and is using this to transition several Employment Specialists into part-time Digital Navigators. These Digital Navigators will conduct outreach and enrollment events across the state centered around increasing participation in the ACP. This program only has a period of performance of one year however and will likely end before funding from the Capacity Grants is received.

The BEAD program will assist Digital Opportunity efforts by ensuring there are affordable internet access options for residents across South Dakota. Ensuring the proper infrastructure is in place will be the first step to keep costs as low as possible despite the rurality of much of the

<sup>54</sup> Federal Communications Commission (accessed June 26, 2023), Affordable Connectivity Program Providers. Accessed at: [Affordable Connectivity Program Providers | Federal Communications Commission \(fcc.gov\)](https://www.fcc.gov/affordable-connectivity-program-providers)

<sup>55</sup> Federal Communications Commission (accessed on March 15, 2023), Affordable Connectivity Outreach Grant Program. Accessed at: [Affordable Connectivity Outreach Grant Program | Federal Communications Commission \(fcc.gov\)](https://www.fcc.gov/affordable-connectivity-outreach-grant-program).

<sup>56</sup> Dakota News Now (published on January 10, 2023), SD Voices for Peace awarded grant for Federal Affordable Connectivity Program. Accessed at: [SD Voices for Peace awarded grant for Federal Affordable Connectivity Program \(dakotane.wsnow.com\)](https://www.dakotane.wsnow.com)

<sup>57</sup> Civic Nation (published June 2023), Civic Nation ACP Pilot Report: Lessons for Community-Based Affordable Connectivity Program Outreach. Accessed at: [CivicNation OnlineForAll PilotReport.pdf](https://www.civiconlineforall.org/pilot-report)

<sup>58</sup> Education Superhighway, South Dakota ACP Adoption

<sup>59</sup> Federal Communications Commission (accessed June 26, 2023), Affordable Connectivity Program Providers. Accessed at: [Affordable Connectivity Program Providers | Federal Communications Commission \(fcc.gov\)](https://www.fcc.gov/affordable-connectivity-program-providers)

State.

### 3.2 Needs Assessment

South Dakota has made tremendous progress in ramping up its fiber infrastructure in the State through its ConnectSD program, as outlined in the State’s BEAD Five-Year Action Plan. Still, there is work to be done to promote the broader adoption of broadband. As a step toward digital accessibility, South Dakota must understand the existing needs in the State. The following section assesses the demographic makeup of the State and highlights the digital equity needs broadly, as well as through the lens of the covered populations. The statistics and perceptions below are reflective of publicly sourced data, as well as engagement efforts including, listening sessions and the first annual South Dakota Broadband Summit.

**What are Covered Populations?**

- **Low-income individuals:** Individuals who live in covered households (the income of which for the most recently completed year is not more than 150 percent of an amount equal to the poverty level, as determined by using criteria of poverty established by the Bureau of the Census)
- **Aging individuals:** Individuals 60 and above
- **Incarcerate populations:** Incarcerated individuals, other than individuals who are incarcerated in a Federal correctional facility.
- **Veterans**
- **Individuals with disabilities**
- **Individuals with low literacy and/or language barriers:** Individuals with a language barrier, including individuals who are English learners; and have low levels of literacy.
- **Racial or ethnic minority populations:** Individuals who are members of a racial or ethnic minority group.
- **Rural populations:** Individuals who primarily reside in a rural area.

*Figure 6: What are Covered Populations?*

According to the Digital Equity Act Population Viewer created by the U.S. Census Bureau and the NTIA, 82 percent of the South Dakota population belong to at least one “covered population.”<sup>60</sup> Although this estimate is based on the 2019 American Community Survey (ACS), the NTIA has used it as the baseline to determine the formula for funding State Digital Equity Planning Grants (SDEPG). An estimated four out of every five South Dakotans are represented by the needs analysis and the strategies outlined in this DE Plan.

For a deeper dive into the proportion of the covered populations in the State, more recent data than the DEA Population Viewer is available in the 2021 ACS 1-Year File. Table 7 below provides a summary of the various covered populations and their presence in the State. The State’s large rural population is one of the leading drivers of the high percentage of covered populations in the State. A portion of the rural populations also overlap with the 19 percent of the State’s racial/ethnic minorities, including Native Americans living in and around Tribal lands, as well

<sup>60</sup> US Census Bureau and NTIA (accessed on April 12, 2023). Accessed at: [Digital Equity Act Population Viewer](#)

as Black, Asian and Hispanic populations located in and around large cities and job centers. A quarter of the population is comprised of households with earnings at or below 150 percent of the federal poverty level, and another quarter is comprised of individuals 60 years or older. The State also has populations of individuals with disabilities (12%), low literacy (14%), veterans (8%) and a small proportion of incarcerated individuals (0.4%). It is important to note that these groups are not mutually exclusive and may have overlaps.

**Table 7: South Dakota Covered Populations Summary<sup>61</sup>**

| Covered Population                            | Estimated Population | Total Base Population* | Percent | DE Population Viewer Data – 2019 (Percent)** |
|---|----------------------|------------------------|---------|--|
| 1 Individuals living in low-income households | 216,780              | 895,376                | 24%     | 19%  |
| 2 Aging                                       | 219,928              | 895,376                | 25%     | 24%  |
| 3 Incarcerated                                | 3,337                | 895,376                | 0.4%    | 1%   |
| 4 Veterans                                    | 54,403               | 670,843                | 8%      | 6%   |
| 5 Disabilities                                | 108,423              | 877,855                | 12%     | 14%  |
| 6a Language Barrier: English Learners         | 14,969               | 837,297                | 2%      | 2%   |
| 6b Language Barrier: Low Literacy***          | N/A                  | N/A                    | N/A     | 15%  |
| 7 Racial/Ethnic Minority Group                | 171,331              | 886,667                | 19%     | 19%  |
| 8 Rural                                       | 378,984              | 886,667                | 43%     | 59%  |

<sup>61</sup> Notes regarding the baseline data summary:

1. The data presented in this table is sourced from the American Community Survey (ACS) 2021 1-Year Estimate, unless indicated otherwise.
2. The ACS does not provide an estimate for individuals living in households earning less than 150% of the federal poverty level. The figure in this table was derived using the percentage of total households that earn less than 150% of the federal poverty level and multiplying it with the average number of individuals per household for South Dakota. This figure may be a slight overestimation since the poverty guidelines are provided for either 2-person or 3-person households and South Dakota's average household size is 2.42. An annual household income of 150% of the poverty level for 2 individuals is \$29,580 and for 3 individuals, it is \$37,290. To estimate the proportion of households that fall within this category, the entire bracket of household incomes of \$25,000- \$34,999 was included.

\*The column 'Total Base Population' consists of the population against which the estimate has been compared, which may be different for different studies and measures in the ACS.

\*\*The Digital Equity Act Population Viewer was created by the Census Bureau and the NTIA specifically for the purpose of sharing the State baselines for covered populations used to calculate the State Digital Equity Planning Grant funding formula. It used ACS 2019 1-Year Estimates to arrive at the proportions of covered populations.

\*\*\* For estimating populations with a language barrier, data from the Digital Equity Act Population Viewer was used, which uses data from the Program for the International Assessment of Adult Competencies (PIAAC) along with ACS 2019 1-Year Estimates. This data has also been included in the table above for each of the covered populations in the column to the right.

|                                       |     |     |     |     |
|---------------------------------------|-----|-----|-----|-----|
| <b>Percentage of total population</b> | N/A | N/A | 82% | 82% |
|---------------------------------------|-----|-----|-----|-----|

Table 8 below demonstrates the baseline measures for the State’s digital divide on access, adoption, and affordability.

**Table 8: South Dakota Broadband Access, Adoption and Affordability Baseline Indicators<sup>62</sup>**

| <b>Indicator</b>                                 | <b>Percent</b>    |
|--|-------------------|
| Percentage of unserved and underserved locations | 6%                |
| Households % without Broadband Subscription      | 15%               |
| Households % without computer/smartphone/tablet  | 9%                |
| Households % with smartphone and no other device | 8%                |
| ACP Subscriptions as a % of Eligible Households  | 15% <sup>63</sup> |

**Covered Population Needs Assessment**

The following section describes the primary digital equity challenges that are experienced by each covered population. As discussed above, a South Dakota citizen is considered “covered” by belonging to one or more of the covered populations. In many cases, an individual may belong to more than one covered population. Most barriers to achieving digital access were identified by multiple stakeholders, albeit to varying degrees. This may be, in part, a reflection of the overlap of individuals belonging to multiple covered populations. For example, there are many individuals belonging to covered populations that also live in rural areas. While many stakeholders said that infrastructure is a challenge, this may primarily result from being in rural areas lacking infrastructure.

Table 9 below details the most prevalent barriers to digital access in South Dakota. Many of these barriers may be felt by a cross section of populations in the state. However, the covered population(s) primarily impacted by these barriers have been identified in the table. The barriers and related challenges faced by the covered populations below were identified through stakeholder engagement discussions and further supported by publicly available demographic data. Each barrier identified through this process is mentioned below and mapped to the population(s) most affected by the barrier.

**Table 9: Covered Population Needs Assessment - Summary**

| <b>Barrier to Digital Equity</b> | <b>Covered Population</b> |
|----------------------------------|---------------------------|
|----------------------------------|---------------------------|

<sup>62</sup> US Census American Community Survey (published in 2021), S2801 Types of Computers and Internet Subscriptions 2021 5-year estimate. Accessed at: [S2801: TYPES OF COMPUTERS AND ... - Census Bureau Table](#)  
<sup>63</sup> Education Superhighway ACP Enrollment Dashboard, South Dakota. Accessed on June 16, 2023 at: [Affordable Connectivity Program | ACP | Enrollment Dashboard \(educationsuperhighway.org\)](#)

|                | <b>Name and Description<br/>(including associated need, if applicable)</b>            | Households at or below 150% of the federal poverty line | Aging individuals | Incarcerated individuals | Individuals with disabilities | Veterans | Individuals with Language Barriers/ Low Literacy | Individuals belonging to a Racial/Ethnic Minority | Individuals residing in primarily rural areas |
|----------------|---|---|-------------------|--------------------------|-------------------------------|----------|--|---|---|
| <b>Access</b>  |   |   |                   |                          |                               |          |  |   |   |
| 1              | Lack of universal high-speed broadband infrastructure                                 | X   |                   |                          | X                             |          |  | X   | X   |
| 2              | Cost of broadband subscriptions   | X   | X                 |                          | X                             |          |  | X   | X   |
| 3              | Lack of awareness/outreach about existing subsidy programs                            | X   |                   |                          |                               |          |  |   |   |
| 4              | Lack of user-friendly interface for all citizens to access government services online | X   | X                 | X                        | X                             | X        | X  | X   | X   |
| 5              | Regulatory limitations to access  |   |                   | X                        |                               |          |  |   |   |
| 6              | Shortage in staffing capacity and ability to provide supportive services              | X   | X                 | X                        | X                             | X        | X  | X   | X   |
| <b>Devices</b> |   |   |                   |                          |                               |          |  |   |   |
| 7              | Cost of devices to access broadband   | X   | X                 | X                        | X                             | X        |  |   |   |
| <b>Skills</b>  |   |   |                   |                          |                               |          |  |   |   |
| 8              | Lack of digital literacy  | X   | X                 | X                        | X                             | X        | X  | X   | X   |
| 9              | Lack of internet safety training and awareness programs                               |   | X                 |                          |                               |          | X  |   |   |
| <b>Other</b>   |   |   |                   |                          |                               |          |  |   |   |
| 10             | Reluctance to adopt high-speed broadband  |   | X                 |                          |                               |          |  |   | X   |

**1. Lack of universal high-speed broadband infrastructure**

South Dakota’s ConnectSD program has channeled millions of dollars of both State and Federal funding into the expansion of broadband infrastructure, with a focus on fiber optic technology. While previously unconnected parts of the State now have access to high-speed broadband, there remain regions in remote and rural counties where cost of infrastructure is high, thus these areas are served by low speed fixed broadband internet, if at all. Covered populations most affected by this barrier include those residing in rural areas, those belonging to racial/ethnic minorities, individuals living in households with incomes under 150 percent of the federal poverty guidance, and individuals with disabilities.

**Rural populations:** A survey conducted by the Center for Rural Affairs (CFRA) revealed that 43 percent of respondents in South Dakota were dissatisfied with their existing broadband connections, and 25 percent use their cell phones as the primary mode of

accessing the internet.<sup>64</sup> South Dakota citizens living in rural areas experience lower broadband speeds because of infrastructure gaps. Rural areas are also sparsely populated. ISPs have reported that the low population density in these regions means that investing in infrastructure has not been economically feasible in the past. South Dakota Telecommunications Association (SDTA), an industry body, expressed these locations are in areas with difficult topographical terrain, such as the Black Hills, thus the cost of laying fiber optic cables is higher than it would ordinarily be. Together, this has left South Dakota with pockets of areas lacking high-speed broadband. Table 10 below also shows that the counties with the highest proportion of households without access to Broadband speeds (25/3 Mbps) are 100% rural.

**Low-income Individuals and Racial/Ethnic Minority Populations:** Several stakeholders have shared that the lack of infrastructure to provide high-speed internet is a challenge for many lower income individuals, as well as those living on Tribal lands. Table 10 below lists the top 10 counties with the highest proportion of households without access to broadband speeds beyond 25/3 Mbps.

**Table 10: Demographic Composition of Counties with large regions lacking high-speed infrastructure**

| County        | Low-Income Individuals <sup>65</sup> (percentage) | Racial/ethnic minority <sup>66</sup> (percentage) | Rural <sup>67</sup> (percentage) |
|---------------|---|---|----------------------------------|
| Butte         | 24%   | 9%  | 51%                              |
| Clay          | 24%   | 14%   | 22%                              |
| Corson        | 54%   | 73%   | 98%                              |
| Custer        | 21%   | 9%  | 100%                             |
| Douglas       | 16%   | 6%  | 100%                             |
| Fall River    | 31%   | 15%   | 100%                             |
| Jones         | 17%   | 19%   | 100%                             |
| Lawrence      | 21%   | 8%  | 32%                              |
| Lincoln       | 8%  | 7%  | 26%                              |
| Meade         | 16%   | 11%   | 33%                              |
| Oglala Lakota | 62%   | 96%   | 99%                              |
| Pennington    | 19%   | 19%   | 18%                              |
| Stanley       | 8%  | 9%  | 30%                              |
| Todd          | 70%   | 92%   | 99%                              |
| Tripp         | 30%   | 20%   | 100%                             |
| Union         | 12%   | 8%  | 59%                              |

<sup>64</sup> Center for Rural Affairs (May 31, 2022), South Dakota Broadband Resource Guide. Accessed at: [South Dakota Broadband Resource Guide | Center For Rural Affairs - Building a Better Rural Future \(cfra.org\)](https://www.cfra.org/south-dakota-broadband-resource-guide)

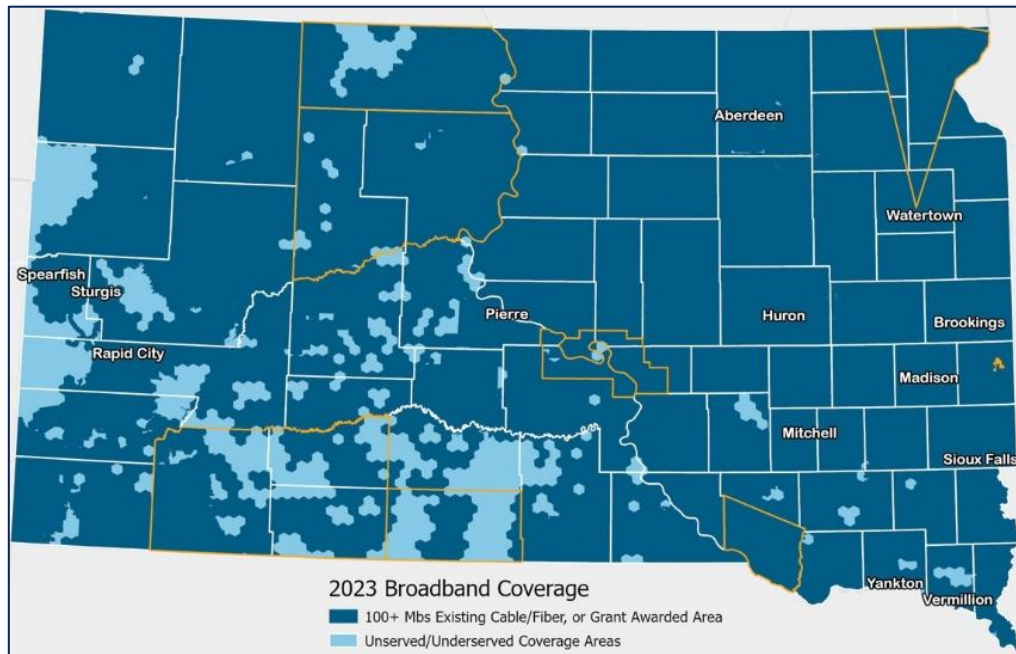
<sup>65</sup> US Census American Community Survey (published in 2021), S1702 Poverty Status in the Past 12 Months of Families 2021 1-year estimate. Accessed at: [s1702 - Census Bureau Search - Tables](https://data.census.gov/tables/2021/s1702)

<sup>66</sup> US Census American Community Survey (published in 2021), DP05 ACS Demographic and Housing Estimates 2021 1-Year Estimates. Accessed at: [DP05 - Census Bureau Search - Tables](https://data.census.gov/tables/2021/dp05). Note, this value was calculated as the inverse of the percentage of white only households.

<sup>67</sup> US Census American Community Survey (published in 2021), DP05 ACS Demographic and Housing Estimates 2021 1-Year Estimates. Accessed at: [DP05 - Census Bureau Search - Tables](https://data.census.gov/tables/2021/dp05)

|         |     |     |     |
|---------|-----|-----|-----|
| Yankton | 14% | 11% | 31% |
|---------|-----|-----|-----|

The counties represented in Table 10 above have been depicted on the map below (Figure 6). The map highlights the areas in South Dakota where either 100 Mbps download speed infrastructure already exists or is in the process of being laid. The blank spaces represent regions lacking high-speed capabilities. When comparing the visual gaps to demographic data for these counties, the overlap with these covered populations is evident.



**Figure 7: South Dakota 2023 Broadband Coverage**

**Individuals with disabilities:** It was reported by a stakeholder that the lack of adequate infrastructure creates a ripple effect that has a disproportionate impact on individuals with disabilities. In the past few decades, support services, such as adaptive devices that help individuals with disabilities to participate in society, have shifted towards online interface platforms. When an individual with disabilities lacks internet infrastructure, they now also lack access to the supportive programs. The magnitude of this challenge is not fully known. While there are programs to subsidize the necessary devices, without access to the infrastructure the value of the device is limited.

**2. Cost of broadband subscriptions**

The cost of high-speed broadband subscriptions can be a barrier to digital access. Covered populations most affected by this barrier are individuals living in households with incomes at or below 150 percent of the federal poverty guidance, aging persons, individuals with disabilities, those belonging to racial/ethnic minorities, and individuals in rural areas.

**Low-income individuals:** According to the NTIA’s Internet Use Survey, households that cited expense as their main reason for not subscribing to broadband were willing to pay a mean price of \$16 per month – with 54 percent saying they were not willing to pay



anything.<sup>68</sup> Publicly available broadband plan pricing for major South Dakota ISPs starts from \$39 and goes as high as \$115 for download speeds of 100 Mbps or more. Prices of broadband plans in the state are higher than what a portion of the population is willing to pay. According to the South Dakota Bureau of Information and Telecommunications (BIT) GIS mapping of provider coverage, 64 ISPs are currently providing or, in the future, will provide fiber-to-the-premises. For the ISPs with price points listed on their websites, the average price of a 100 Mbps connection was ~\$70, which is higher than the national average of ~\$65.<sup>69</sup> Households that cannot afford these prices need assistance to connect to high-speed internet. The Affordable Connectivity Program is the primary resource to promote affordability in South Dakota. However, projections estimate that the program will run out of funding by the middle of 2024.<sup>70</sup> Without continuation of this or a similar program, the gap in bridging this need is expected to remain and possibly increase.

Cost as a barrier to obtaining subscriptions to high-speed internet in low-income households was echoed across many stakeholders. Conversations with larger ISPs in the state support the idea that part of the reason many households have not yet subscribed to broadband is because of high costs. One ISP said that the demand for broadband was more sensitive to price changes in urban communities possibly because of a higher proportion of low-income populations. An organization facilitating access to public housing reported cost as the major barrier to families living in public housing.

These anecdotal sentiments are supported by an analysis of the relationship between individual incomes and household broadband subscriptions, for which we found a strong association at both census tract and county level (Table 11).

**Table 11: Association between counties with high poverty and low proportions of broadband subscription**

| County        | Households without BB subscription <sup>71</sup> (percent) | Households without BB subscription (rank by proportion) | Low-Income Individuals <sup>72</sup> (percent) | Low-Income Individuals (rank by proportion) |
|---------------|--|---|--|---|
| Todd          | 53%  | 1   | 70%  | 1   |
| Mellette      | 51%  | 2   | 56%  | 3   |
| Jackson       | 45%  | 3   | 54%  | 5   |
| Oglala Lakota | 44%  | 4   | 62%  | 2   |
| Haakon        | 39%  | 5   | 28%  | 15  |

<sup>68</sup> NTIA Internet Use Survey (2022), New Analysis Shows Offline Households Are Willing to Pay \$10-a-Month on Average for Home Internet Service, Though Three in Four Say Any Cost is Too Much. Accessed at: [New Analysis Shows Offline Households Are Willing to Pay \\$10-a-Month on Average for Home Internet Service, Though Three in Four Say Any Cost is Too Much | National Telecommunications and Information Administration \(ntia.gov\)](#)

<sup>69</sup> 2022 Broadband Pricing Index (published in March 2022), USTelecom. Accessed at: [ustelecom.org/wp-content/uploads/2022/06/USTelecom-Broadband-Pricing-Report2022.pdf](#).

<sup>70</sup> When Will Affordable Connectivity Program Funding Run Out? (published July 6, 2022), The Vernonburg Group. Accessed at: [When Will Affordable Connectivity Program Funding Run Out? – The Vernonburg Group](#)

<sup>71</sup> US Census American Community Survey (published in 2021), DP02 Selected Social Characteristics in the United States 2021 1-Year Estimates. Accessed at: [DP02 - Census Bureau Search - Tables](#)

<sup>72</sup> US Census American Community Survey (published in 2021), S1702 Poverty Status in the Past 12 Months of Families 2021 1-year estimate. Accessed at: [S1702 – Census Bureau Search - Tables](#)

|           |     |    |     |    |
|-----------|-----|----|-----|----|
| Buffalo   | 38% | 6  | 51% | 7  |
| McPherson | 36% | 7  | 20% | 28 |
| Dewey     | 34% | 8  | 48% | 8  |
| Bennett   | 32% | 9  | 44% | 9  |
| Ziebach   | 32% | 10 | 55% | 4  |

**Aging individuals and individuals with disabilities:** Entities representing older populations and individuals with disabilities also specifically indicated cost as a barrier. It was noted that individuals belonging to these populations are more likely to live on fixed incomes, and factoring in the cost of a high-speed internet subscription may not be feasible for one’s budget.

**Racial or ethnic minority populations and rural populations:** Cost of subscriptions was also mentioned as a challenge by entities representing racial and ethnic minority groups, as well as rural communities. The CFRA Broadband Resource Guide states that 52 percent of the South Dakotans surveyed said “lower cost of internet services was in the top three most important broadband issues.”<sup>73</sup> Because of the low population density in rural areas, internet subscriptions can be particularly expensive due to the increased costs to lay or maintain these lines by ISPs. These increased costs are then passed along to customers. With fewer households per capita among which to disperse these costs, subscription rates become challenging to cover.



**3. Lack of awareness/outreach about existing subsidy programs**

Households that may be eligible for federal subsidy programs like the Affordable Connectivity Program (ACP) for broadband subscriptions and devices, free resources for digital literacy, internet safety, etc. may not always be aware of the existence of these

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<sup>73</sup> Center for Rural Affairs (May 31, 2022), South Dakota Broadband Resource Guide. Accessed at: [South Dakota Broadband Resource Guide | Center For Rural Affairs - Building a Better Rural Future \(cfra.org\)](https://www.cfra.org/South-Dakota-Broadband-Resource-Guide)

programs. Without the necessary information to access these resources, they are unable to take advantage of available benefits. This challenge primarily affects individuals who are low-income. However, it should be noted that stakeholders highlighted lack of awareness as a barrier for the populations they were representing that are also low-income.

**Low-income individuals:** Large federal programs like the Affordable Connectivity Program (ACP) which make available billions of dollars in funding for internet subscriptions and devices are not being fully leveraged. In South Dakota, an estimated 129,617 households qualify, but only 19,893 are currently enrolled. Against a national enrollment rate of 30 percent, the rate for South Dakota is 14 percent.<sup>74</sup>

The existence of an awareness/outreach gap was also supported by organizations that provide career development and housing support services in the state. Some representatives themselves were unaware of ACP. The majority of ISPs participate in the ACP and some have reported conducting outreach, including on Tribal lands. However, more needs to be done. Many households eligible for and interested in subscribing to a broadband plan would benefit from additional outreach for ACP awareness and the assistance of a digital navigator.

#### **4. Lack of user-friendly interface for all citizens to access government services online**

Every citizen needs to interface with government entities, either at the local, state, or federal level to conduct personal and business activities. While many government programs have online resources, multiple stakeholders have shared that the online interfaces could be more user-friendly, particularly for necessary services that impact South Dakotans with the highest needs. All covered populations are impacted by this barrier in some way.

**All covered populations:** Many services are intended or required for individuals who are low-income, aging, formerly incarcerated, have disabilities, veterans, or those belonging to and living on Tribal lands. Currently, key application forms such as those for unemployment assistance, workforce programming, Supplemental Nutrition Assistance Program (SNAP), and Medicaid are available online. However, representatives working with these covered populations identified the following barriers that prevent individuals from participating in programs intended to benefit them.

- i. Skills needed are not transferrable between forms, platforms, sites, etc.
- ii. Intuitive features such as drag-and-drop for uploading files are not universally available
- iii. Information needed for each application may be repetitive
- iv. All websites may not be configured for mobile devices
- v. Sign-in processes are complicated and not universal
- vi. Multiple application portals exist for multiple services/benefits
- vii. Digital navigation to provide support for people in using online forms on their devices are not universally available

Adult education organizations shared that the ability to access relevant public services websites can be particularly hard for individuals with low literacy levels. This is further

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<sup>74</sup> Education Superhighway ACP Enrollment Dashboard, South Dakota. Accessed on June 16, 2023 at: [Affordable Connectivity Program | ACP | Enrollment Dashboard \(educationsuperhighway.org\)](https://www.educationsuperhighway.org/ACP/EnrollmentDashboard)

exacerbated for individuals who have a language barrier. Workforce development representatives expressed the challenge for low-income groups, whose primary means to internet access is through a mobile device, when websites are not mobile-friendly.

Stakeholders working on workforce development reported during focus groups that when workers are attempting to access essential services like tuition assistance for training programs, transportation assistance, job postings, public assistance programs, among other supports, the existing web portal can be complex, not mobile-friendly, and not fully intuitive. Improving access to these online services could go a long way in improving workforce productivity and development.<sup>75</sup>

Lastly, the lack of user-friendly interfaces for online government services can be particularly onerous for those living in rural areas. Depending on where you are located, it can take multiple hours to reach a government building. The option to utilize State services online can increase access by reducing the need to travel. This benefit is compounded for those belonging to multiple covered populations. For example, individuals who are aging or disabled and may have more difficulty finding transportation. If individuals do not feel they can confidently navigate the online interfaces, they either go without these services that can help improve their situation or need to find the means to travel to an office.

## 5. Regulatory limitations to access

While State implemented regulations are necessary, they can result in unforeseen challenges. This is particularly true for incarcerated individuals in South Dakota. The necessary security system within a prison limits interactions with many outside resources, including the internet. This has implications on an individual's digital literacy and adoption, both while incarcerated, as well as upon re-entry.

**Incarcerated populations:** For those currently incarcerated, the difficulty lies in access within the prison facility itself. There are security requirements that prevent uninhibited use of the internet and block most applications. While necessary, these security measures also block helpful programs such as digital literacy software. Offline versions are often the only way to overcome the security protocols in place and support incarcerated populations in building skills and capacities to actively use and benefit from broadband connectivity.

The implications of the barrier to access extend beyond one's sentence. Due to the fast pace of technological innovations, those recently released or on parole are entering a world where the devices and tools have dramatically changed compared to when they first entered the prison system. A representative working with incarcerated individuals noted that one individual had been incarcerated many years while laptops became more common, and therefore, having only used a mouse, needed support to use a trackpad.

Nearly 75 percent of people who were formerly incarcerated are still unemployed a year after being released, according to a study.<sup>76</sup> The inability to keep up with technological change while incarcerated creates additional barriers for individuals as they re-integrate into their families, communities, and jobs. While digital skills were once a benefit, they are

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<sup>75</sup> Gretchen Swanson Center for Nutrition (accessed on June 28, 2023), WIC Online Shopping Sub-grant Project. Accessed at: <https://www.centerfornutrition.org/wic-online-ordering>

<sup>76</sup> The White House (March 31, 2022), A Proclamation on Second Chance Month, 2022. Accessed at: [A Proclamation on Second Chance Month, 2022 | The White House](#)

now a requirement to successfully function in society.

## 6. Shortage in staffing capacity and ability to provide supportive services

One way to promote digital literacy and internet safety skills is to have staff within public service organizations to aid individuals when they have a need. As highlighted in Table 5, there are existing efforts to facilitate digital literacy and internet safety skills. Still, offerings of such services are limited.

**All covered populations:** Throughout stakeholder conversations, many entities, including State agencies and non-profit organizations working with all covered populations expressed a desire to offer additional digital support. However, stakeholders suggested that existing staff are already working at full capacity without the ability to take on additional roles or may not have the skills set to provide digital navigation services. In addition, grant resources are limited and have goals beyond digital assistance.

Throughout stakeholder conversations, many entities, including State agencies and non-profit organizations working with all covered populations expressed a desire to offer additional digital support. Community anchor institutions that serve the public have also shared similar sentiments. The State Library system performed an inventory survey in 2023, through which 89 libraries responded. Of these libraries, the top challenges preventing libraries from hosting additional digital skills classes and services are the staffing and skillset to do so. As discussed in number seven above, digital literacy is a challenge that uniquely impacts each of the covered populations, and consequently the ability for organizations to offer supportive services also impacts all populations.

## 7. Cost of devices to access broadband

The cost of devices needed to access the internet can be prohibitively high. Above and beyond the initial purchase of the device, there are ongoing costs to maintain these devices. In addition, the rapid pace of technological innovation leads to outdated devices, increasing security concerns. This is a challenge for both covered populations, as well as State agencies and non-profit organizations.

While covered populations are those who are most in need, the cost associated with having access to devices continues to leave this populations further behind. Covered populations most affected by this barrier include aging individuals, veterans, individuals with disabilities, low-income individuals, and incarcerated persons. Organizations representing the above populations shared that many members of their communities' struggle to purchase the devices they need to access the internet. Table 12 shows that 9 percent of all households in the state do not have any devices to access the internet, while 8 percent have only a smartphone. Even though 92 percent of all households in the state have access to at least one computing device, the access to a desktop or laptop remains relatively lower at 77 percent as demonstrated in Table 13.

While working off limited budgets and grants, State agencies and non-profit organizations designed to help covered populations struggle to maintain and modernize their devices, impacting the quality of modernized services to customers.

**Table 12: Device Access in South Dakota - Summary<sup>77</sup>**

| Access to Computer or Computing Device     | Households | Percent of Total Households |
|--|------------|-----------------------------|
| Total households                           | 345,779    | 100%                        |
| No computer                                | 29,434     | 9%                          |
| Has one or more types of computing devices | 316,345    | 91%                         |

**Table 13: Device Access in South Dakota – Detailed Attribution<sup>78</sup>**

| Device Type   | Households | Percent of Total Households |
|---|------------|-----------------------------|
| Has one or more types of computing devices:                                       | 316,345    | 92%                         |
| Desktop or laptop   | 267,211    | 77%                         |
| Desktop or laptop with no other type of computing device                          | 17,612     | 5%                          |
| Smartphone  | 285,851    | 83%                         |
| Smartphone with no other type of computing device                                 | 27,866     | 8%                          |
| Tablet or other portable wireless computer  | 210,012    | 61%                         |
| Tablet or other portable wireless computer with no other type of computing device | 4,030      | 1%                          |
| Other computer  | 7,308      | 2%                          |

<sup>77</sup> US Census American Community Survey (published in 2021), S2801 Types of Computers and Internet Subscriptions 5-Year Estimates. Accessed at: [S2801: Census Bureau Table](#).

<sup>78</sup> US Census American Community Survey (published in 2021), S2801 Types of Computers and Internet Subscriptions 5-Year Estimates. Accessed at: [S2801: Census Bureau Table](#).

|   |    |    |
|---|----|----|
| Other computer with no other type of computing device | 56 | 0% |
|---|----|----|

**All covered populations:** Lacking access to devices has negative implications for individuals belonging to the covered populations. Many of the federal or state programs that provide benefits to these groups are accessible through online portals that are not always mobile friendly. Without the tools needed to complete forms online, many people struggle to access their benefits without external assistance, whether that means going to a public access point, seeking out a representative to fill out the form on one’s behalf, or taking additional steps to utilize a paper copy. Entities working with aging populations, individuals with disabilities, veterans, and low-income households all shared the concern that without a device, individuals have more barriers to accessing resources intended for them.

As cost can limit one’s ability to purchase and own internet capable devices, reliance on public access points has increased. Conversations with public libraries revealed that there is a significant demand for accessing computers, especially among those who are unable to afford a device and broadband subscription at home. “Demand since COVID has been going up fast. We had earlier expected that the rise in availability of smartphones would reduce the need for public computers, but that was not the case. The number of users accessing our public computers is up 10 percent in 2023, compared with the usage at this time in 2022,” said a representative from one of the state’s urban library systems.

**Individuals with disabilities:** Organizations representing disabled persons said that not only do their members require devices such as smartphones and computers, but they also need assistive, adaptive technology to be able to fully utilize the devices. While the cost of a device alone is expensive, adding assistive technology eliminates these devices as an option. While some programs do exist to provide these devices to those who need them, they do not meet every person’s needs. Furthermore, stakeholder discussions highlighted that the cost is particularly prohibitive for individuals who do not meet the income requirements for subsidy programs by a slim margin. Without such devices, many individuals are unable to fully participate in society.

**Incarcerated populations:** An organization representing incarcerated persons said that when their members are experiencing re-entry, they are unable to afford smartphones and related cell phone connections that have become essential in today’s world. For example, upon release from the prison system, one must provide contact information which typically includes a phone number and email. When someone has been incarcerated for several years, they may not only not have access to devices, but they may also not have the skills needed to find and use suitable devices. As landlines have started being phased out, cell phones and email have become a greater necessity. The inability to afford internet capable devices limits one’s ability to be successful upon re-entry.

**8. Lack of digital literacy**

NTIA defines digital literacy as the measure of an individual’s ability to use the internet and modern technologies, such as computers and smart phones. The lack of digital literacy is a barrier for individuals that have access to internet connections and devices but limits their ability to use them in a meaningful way. Since internet technologies are relatively new and constantly evolving, many find themselves ill-equipped to take full advantage of online services. All covered populations are affected by this barrier. The lack of digital literacy as a

barrier to digital opportunity was identified by several organizations representing the eight covered populations.

**Individuals with low literacy and/or language barriers:** As one might imagine, digital literacy was mentioned as a particular challenge for individuals who have lower literacy levels and/or language barriers. A representative working with individuals for whom English is their second language noted that it can be especially difficult for these individuals to pick up on digital literacy skills and navigate the digital world.

**Aging individuals and Veterans:** Some organizations said the absence of digital literacy was felt within their respective communities, especially among older generations of South Dakota citizens. An organization representing veterans said that the older members of the community that lived with younger family members were still able to learn digital skills within their households, however others felt this barrier may be experienced by people of all ages. Those that lived on their own struggled to access resources online without the assistance of digital navigators. This is particularly important for veterans and low-income individuals since many of the resources available are managed through online platforms.

It was suggested that the lack of digital literacy can also demoralize and discourage workers from remaining in the workforce. An organization representing small businesses in the state shared that some of their older members were resistant to adopting digital processes due to a lack of digital literacy. One stakeholder shared a story of their brother who quit their job on being asked to adopt a digital technology at the workplace, rather than learn a new skill at that juncture in his career.

**Low-Income individuals:** An organization that oversees public housing in the state shared that the lack of digital literacy and the unwillingness to engage in any online activity can be detrimental to persons with disabilities and those that are older. Members of these communities have trouble filling out the necessary forms online and may have to rely on help over the phone or other means.

**Incarcerated populations:** As mentioned previously, incarcerated persons, due to their unique situation, frequently exit the prison system without the digital literacy skills to support successful re-entry. These individuals often miss the natural progression of technology development. Digital literacy is a major challenge for those belonging to this covered population.

**Rural populations:** Furthermore, the lack of digital literacy skills has implications for covered populations within the greater context of other priority areas, such as economic and educational outcomes. The Center for Rural Affairs (CFRA) survey on rural internet use suggests that while most respondents felt comfortable using functions like email, Google, social media, etc., they also expressed a need to learn skills such as website construction and management, troubleshooting issues with their computer/software, and doing virtual health care visits.<sup>79</sup> Among respondents who expressed an interest in using technology for agriculture, only 27 percent said they felt comfortable in using these skills. In rural areas, not having digital literacy skills can impact economic growth opportunities.

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<sup>79</sup> Center for Rural Affairs (May 31, 2022), South Dakota Broadband Resource Guide. Accessed at: [South Dakota Broadband Resource Guide | Center For Rural Affairs - Building a Better Rural Future \(cfra.org\)](#)



**General Population:** Members of an organization that work with public schools in the state said that digital literacy was particularly important among parents of children because schools share each child's progress with parents through some form of online communication, typically mobile applications. The lack of digital literacy among this population, especially in low-income households that do not have broadband subscriptions, can impact children's educational outcomes. Anecdotally, lacking the skills required to fully engage with a child's education seemed to be exacerbated in multi-generational homes where grandparents are primary caregivers for children. An organization working with families on Tribal lands noted that this is particularly relevant for families on Tribal lands.

Workforce groups serve a high proportion of individuals belonging to various covered populations and shared the challenges observed when an individual does not have digital literacy skills. Many aspects of employment require digital literacy. This can range from receiving assistance from an American Job Center, to completing online job applications, to having the skillset to operate systems on the job. While many identify older generations being impacted by the lack of digital skills, it was noted that even younger members of the workforce who are competent with the basics may lack the skills required for professional employment.

The importance of digital literacy skills extends beyond securing a job. During a focus group discussion with nonprofit organizations working on workforce development, a member shared that even workers performing non-technology job may suffer serious consequences if they do not have the digital literacy skills to complete online certifications. For example, nursing staff at hospitals who are required to complete certifications online to remain employed are sometimes let go because they do not have the skillset needed to complete those certifications.

Digital literacy impacts many aspects of South Dakotan's lives. Not having these skills can have adverse effects on various facets of life for those belonging to covered populations.

## 9. Lack of internet safety training and awareness programs

Incidents of online scams, phishing attacks, and identity theft cases create a mistrust among users of technology, even working to discourage non-users from ever adopting the use of internet. Without the knowledge to safely engage with the internet, some choose not to engage at all. The covered populations most affected by this barrier are aging persons and persons with low literacy and/or language barriers.

On average, a cybercrime in South Dakota comes with a loss of \$59,960 per fraud complaint – the highest in the country.<sup>80</sup> South Dakota has one of the country's largest financial services sector, accounting for as much as 15% of the state's economy. This also makes the state a prime target for cyber fraud. Governor Noem has prioritized developing Cybersecurity as a leading industry not only to create employment, but also to help fight against online fraud. However, on an individual level, there is a lack of availability of internet safety trainings and curriculums.

**Aging individuals:** A group advocating for aging individuals suggested that the absence of sufficient efforts to enhance internet safety skills poses a challenge. Incidents of online

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<sup>80</sup> Reader's Digest (April 26, 2023), This Is The State Most At-Risk of Cybercrime, According to New Data. Accessed at: [This Is The State Most At-Risk of Cybercrime, According to New Data | Reader's Digest](#)

scams, phishing attacks, and identity theft cases can create a mistrust among those uncomfortable with technology to use it without feeling adequately prepared to face such threats. On the other side of the spectrum, some organizations voiced a particular concern for the safety of younger populations. Children may not be fully prepared to understand how to respond to potential threats to their safety while using the internet.

**Individuals with low literacy and/or language barriers:** Members of an adult education group revealed that they had learned of persons with low literacy as well as low digital literacy falling victim to human trafficking. Even the perception of such threats and the lack of confidence among users to be able to identify threats and avoid them can discourage them from accessing the internet. Recognizing this barrier, Governor Noem has outlined strengthening internet safety in the state as a priority.

## 10. Reluctance to adopt high-speed broadband

In areas where high-speed broadband infrastructure is possible, personal feelings and reluctance to adopt internet can be a barrier. This reluctance may be expressed as aversion towards the infrastructure itself, obtaining an internet subscription, or engaging with the internet. Although reluctance may exist across all covered populations, individuals most identified as displaying this sentiment were those who are aging and those living in rural areas.

The reluctance of some households to connect to broadband was shared by SDTA members. Particularly in rural areas, some ISPs experienced hesitancy from households to allow service lines to their residence. South Dakota is known for its rural nature and beautiful landscapes. Through several meetings, multiple representatives have voiced reminders that some individuals choose to live in or visit certain parts of South Dakota specifically to get “off the grid.”

Some households do not want to subscribe to broadband connections or services. Although the cost can be offset through programs like the ACP, some households do not want to be connected to broadband even if it results in no added cost to them. According to the NTIA Internet Use Survey, 58 percent of offline households said the main reason for not using the internet at home was that they had no interest or did not feel the need to get online.<sup>81</sup>

Other individuals have expressed an aversion to engaging with the internet or internet-based systems. As previously mentioned, there could be many underlying reasons, such as fearfulness around security or comfortability with learning new skills. Regardless of the underlying reason, this was mentioned as a challenge that many members of the older population have. For example, a representative from the workforce development field shared the story of an older worker who decided to retire from their position rather than learn a new internet-based system.

For individuals seeking a technology free lifestyle, digital opportunity can be thought of as making the option accessible if they ever change their minds. However, digital opportunity can be approached differently when there are other underlying factors. Some discussions with community organizations suggested there may be a lack of awareness around the

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<sup>81</sup> NTIA Internet Use Survey (2022), Switched Off: Why Are One in Five U.S. Households Not Online? Accessed at: [Switched Off: Why Are One in Five U.S. Households Not Online? | National Telecommunications and Information Administration \(doc.gov\)](#)

benefits of having and engaging with high-speed future proof internet. An ISP shared that some households have refused upgrades to their internet service, even though their current services fall within the speed range that the National Telecommunications and Information Administration would consider underserved. These ISPs were told that the service is “good enough.” As technology advances, there is a desire to implement what will be applicable several years from now, and one’s current technology may not meet future needs.

Stakeholder engagement discussions have highlighted the present benefits that individuals may not be realizing. An organization representing the farming community shared examples of their members who have said, “We have lived all these years without high-speed internet just fine. Why should we connect now?” Many individuals in the industry, including in South Dakota, have introduced digital technologies. According to a report published by the USDA, introduction of digital technology across the country could realize economic benefits of nearly 18 percent of the total production, based on 2017 levels of cost and demand.<sup>82</sup> Depending on the commodity type, as much as 50 percent of the benefit is due to broadband. Agriculture is South Dakota’s top industry and if individuals do not understand how these applications can benefit them, they may be missing out on realizing economic benefits.

### **3.2.1 Broadband Adoption – Needs and Barriers**

As described in section 3.1.4, full adoption requires availability of high-quality internet, digital skills, and devices to utilize the internet. The barriers for adoption have been discussed in detail in Section 3.2.1.

### **3.2.2 Broadband Affordability – Needs and Gaps**

Throughout stakeholder engagement, cost was the most frequently mentioned barrier to universal access – both with respect to the ability to afford a broadband subscription or device, and from ISPs, which noted that investing to build out high-cost regions impacts the ability to offer affordable services. Given that approximately one fifth of South Dakota’s households are at or below 150 percent of the federal poverty line, affordability is especially important.

As discussed in the second barrier of the Covered Population Needs Assessment (section 3.2.1), many representatives working with lower income populations stated that cost is the primary barrier. Some stakeholders noted that families need to budget to meet other needs, and when faced with multiple expenses, many will opt to rely on mobile service to access the internet or forego service all together.

A survey performed by IDEA showed that a higher share of individuals with only a mobile device were lower earning individuals.<sup>83</sup> It is presumed that these individuals cannot afford or do not prioritize purchase of devices, such as laptops. Although the survey was focused on the Sioux Falls area, this sentiment was shared by stakeholders across the State.

The Affordable Connectivity Program is the primary resource to promote affordability in South Dakota. However, projections estimate that the program will run out of funding by the middle of

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<sup>82</sup> United States Department of Agriculture (published April 2019), A Case for Rural Broadband. Accessed at: <https://www.usda.gov/sites/default/files/documents/case-for-rural-broadband.pdf>

<sup>85</sup> United States Department of Commerce’s National Telecommunications and Information Administration (2023), State Workforce Research Findings: South Dakota. Received via email May 30, 2023

2024.<sup>84</sup> Without continuation of this or a similar program, the gap in bridging this need is expected to remain and possibly increase. Even with ACP, there is a gap in connecting eligible households to the resource. As mentioned in the third barrier of section 3.2.1, South Dakota has a lower-than-average rate of ACP enrollment. Putting effort towards facilitating enrollment and participation in ACP could help support South Dakotans in obtaining affordable internet.

## 4 Collaboration and Stakeholder Engagement

### 4.1 Coordination and Outreach Strategy

The broadband ecosystem in South Dakota involves a wide-ranging set of institutions, including county and municipal governments, educational agencies, Indian Tribes, non-profits, civil rights organizations, entities that carry out workforce development programs, State agencies, housing authorities, and internet service providers. Understanding the vantage points of these entities is key to building a roadmap for digital access in South Dakota. Tapping into the expertise and various perspectives in the state helped shape the vision for digital opportunity. Further, ongoing implementation partners will be needed to contribute to the success of these plans. The following sections illustrate the work that has been done to promote collaboration and inclusivity of multiple voices, as well as how the State plans to continue the synergistic momentum.



#### 4.1.1 Key Collaboration in Plan Development

South Dakota's Digital Opportunity Plan has been developed through a collaboration between

<sup>85</sup> United States Department of Commerce's National Telecommunications and Information Administration (2023), State Workforce Research Findings: South Dakota. Received via email May 30, 2023

the Governor's Office of Economic Development and the South Dakota Department of Labor and Regulation. Together, the team has relied on their extensive network of representatives, as well as newly identified organizations to provide input that helped guide the creation of the Digital Opportunity Plan. In summary, the State has engaged in the following activities to gather input:

- One-on-one meetings with 61 entities representing covered populations
- Six group meetings with about 10 attendees per meeting
- Presentation and open discussion at a Workforce Development Council meeting with 68 attendees
- Interactive session at the South Dakota Workforce Innovation and Opportunities Act (WIOA) Partner Symposium with 115 registered attendees
- South Dakota Broadband Summit with 78 registered attendees

A full list of the entities can be found in Table 16 of the appendix.

#### **4.1.2 Coordination and Outreach Strategy**

Coordination with the BEAD Five-year Action Plan has been a priority, as the visions for both efforts are interrelated. Therefore, the State developed a singular plan to convene individuals and gather feedback in a way that provided insight for both the BEAD Five-Year Action Plan and the Digital Opportunity Plan. Development of the stakeholder engagement approach was established through three main activities: 1) mapping stakeholders that should be included through the process, 2) outlining engagement activities and strategy, and 3) developing a plan for ongoing collaboration.

**Step 1: Map Stakeholders** The State began the local coordination effort by mapping entities that should be included in conversations about broadband and digital opportunity. Specifically, the State sought representation for all the covered populations and those that work in spaces related to other outcomes outlined in section 2, such as education, health, or workforce development. Furthermore, the State wanted to gain input from a variety of stakeholder types including, but not limited to:

- Agencies and departments across the State
- Community anchor institutions
- Industry representatives
- Local and Tribal government representatives
- Non-profit organizations

The initial list of stakeholders has continued to be updated as research and findings identified additional interested parties.

**Step 2: Outline Engagement Activities** The next step consisted of establishing the method of engagement. South Dakota planned outreach to span across the State and input and feedback could be collected in a variety of ways. The State developed a list of activities ranging from social media updates that would inform the public, to more involved activities, like one-on-one meetings and the first annual South Dakota Broadband Summit. Having several modes of engagement allowed representatives to participate at a level that accommodates one's availability.

In addition, the State was intentional in respecting participants' time. The State built on existing

events to maximize the audience for outreach. For example, South Dakota's Workforce Innovation and Opportunity Act partners convened in May, and the broadband team was invited to facilitate discussions about digital opportunity. This was a terrific opportunity to collaborate with stakeholders, who have already dedicated time to gathering and could provide perspective on workforce, adult education, industry, etc.

Upon completion of the Digital Opportunity Plan draft, the document will be posted for public comment. The public is encouraged to read and provide feedback to the State's Plan. The state will take this feedback and update the Plan as necessary before final submission.

**Step 3: Develop Plan for Ongoing Collaboration** While initial engagement is critical to understanding the needs and implementation considerations for broadband expansion, South Dakota is keen on developing a long-term collaboration mechanism. Any stakeholder can share feedback with the Broadband Team through the team's email inbox. This inbox will remain active beyond the planning phase and will be utilized to continue capturing input and feedback. This promotes participation, as it allows diverse voices from the public to provide input.

As previously mentioned, the State hosted the first ever South Dakota Broadband Summit in May 2023. The State intends to continue to host this event annually to convene individuals and share progress updates with the public, promote information sharing across stakeholders, and seek feedback on the work being done.

Based on the challenges identified in section 3, South Dakota will work with relevant partners to identify feasible solutions to overcome such barriers and help the State reach its digital equity goals. To set the state up for success, South Dakota strives to build off existing momentum and infrastructure – meaning, the State wants to partner with organizations that are either already doing work in this space and would like to expand upon such work, or partner with entities that are reaching covered populations and furthering the policy priorities. In order to lead this work, a Digital Opportunity Coordinator has been hired to bring partners together effectively, and efforts can be aligned moving forward.

#### **4.1.3 Partnering with Workforce, Education, Labor, and Community-based Organizations**

To further the policy goals described in section 2, partnering with organizations working within the realm of workforce, education, and labor has been and will continue to be crucial. Through stakeholder engagement activities, South Dakota's broadband team has already conversed with workforce, education, labor, and community-based organizations. For additional details, please refer to the full list of entities engaged in the appendix.

In consulting with these entities, the State has identified the skillsets that are needed to be successful within higher education and the labor market, particularly for South Dakota's top industries. This includes the ability to navigate or manage online systems and platforms. These discussions have also highlighted where those working in the industries have witnessed gaps in these skills, which are discussed in section 3. The workforce agencies, adult education providers, and community-based organizations – including the WIOA Partner symposium – have helped identify where there are opportunities to intervene and provide support. South Dakota intends to work closely with these entities to not only implement interventions, but also understand whether the interventions are meeting the needs of South Dakotans. For example, South Dakota will work with adult education providers to provide digital skills curriculums to various populations, expanding their reach.

Additionally, there are other ways that partnering with workforce, education, and labor entities will be necessary to further digital access. As previously mentioned, a commonly noted barrier to digital opportunity was access to the infrastructure itself. While this challenge will primarily be addressed through the BEAD program, there are still ways that the Digital Opportunity team will be working to support this effort. Given the large demand for broadband related workers across the country, there is an expected shortage in the workers needed to complete broadband related projects.<sup>85</sup> The State is actively working with technical colleges to support programs for individuals interested in getting into broadband related fields.

Telehealth is one option for such collaboration. Partnering with Community Anchor Institutions to expand telehealth possibilities across the state. Doing so would allow for communities in rural areas, to access a wider berth of healthcare options without the need to travel long distances. In addition to the rural covered populace, this would also allow individuals with disabilities or the aging population, who may have difficulties or inabilities to travel, the option to receive care from a more centralized location to their residence. Partnerships with the Department of Health will also be examined as an avenue to bring State agencies together on a united and more holistic front while addressing this need.

#### **4.1.4 Public Comment Period**

This Plan was available for Public Comment from October 1<sup>st</sup> through November 1<sup>st</sup>, for a total of 30 days. Promotion of this opportunity for feedback was conducted through social media channels as well as by hosting both in-person and virtual events centered around engaging stakeholders. In totality, the State received 15 comments and have used this feedback to guide its Plan, placing an increased focus on telehealth, device ownership, and digital navigation/technical support.

## **5 Implementation**

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There are many ways a state can attempt to further digital opportunity. In collaboration with multiple stakeholders, South Dakota developed a list of desired activities to help overcome the specific barriers experienced in South Dakota and meet the objectives previously outlined. The following section will summarize the strategy for determining priority activities, describe the activities the State is interested in carrying out, and provide a tentative timeline for action.

### *5.1 Implementation Strategy & Proposed Activities*

South Dakota recognizes that the funding available for digital opportunity is limited and may not enable all the activities South Dakota is exploring to come to fruition. When developing the list of key activities below, South Dakota prioritized activities based on two primary components: 1) impact of the activity, and 2) effort needed to implement the activity. When considering impact, South Dakota is prioritizing activities that will have long-lasting effects and reach a wider population. Effort is determined based on cost, the number of dependencies, and the ability to build off existing work and programs. Activities requiring a great deal of effort must also have a significant impact to be considered. Upon understanding of the State's allocation. Once more information is available about the quantum of funding South Dakota will


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<sup>85</sup> United States Department of Commerce's National Telecommunications and Information Administration (2023), State Workforce Research Findings: South Dakota. Received via email May 30, 2023

receive, South Dakota the State will use a similar prioritization exercise to narrow the list of activities, if necessary.

**5.1.1 Proposed Activities**

**Objective 1: Improve access to and adoption of affordable high-speed internet**

| Objectives   | Strategies  |
|--|---|
|  <p>Objective 1: Improve access to and adoption of affordable high-speed internet</p> | <p>1.1 Subsidize infrastructure deployment in unserved and underserved communities</p> <p>1.2 Make high-speed internet affordable</p> <p>1.3 Increase awareness of the benefits of adopting high-speed internet</p> |

**Strategy 1.1: Subsidize infrastructure deployment in unserved and underserved communities**

- **Expand Broadband Infrastructure**

To overcome the hurdle of access to reliable, high-speed internet, South Dakota intends to continue building out infrastructure to expand availability. This activity is expected to be primarily funded through the BEAD program, which is supplementing South Dakota's ongoing investments through the ConnectSD program.

Related Barrier(s): 1) Lack of universal high-speed broadband infrastructure  
 Related Objective(s): 1) Improve access to and adoption of affordable high-speed internet

**Strategy 1.2: Improve access to affordable internet**

- **Expand Capacity to Provide Digital Navigation**

Digital navigators can be a resource to help with individual needs in meaningfully using the internet. Digital navigators are trained individuals who can provide tailored support for those trying to access and interface with the internet. This service can help individuals become more confident and more likely to adopt the internet. Several stakeholders shared the desire to provide digital navigation support but noted that there is not enough capacity to do so. South Dakota is interested in supporting the expansion of staff capacity within community partners to provide digital navigation services on a group or more individualized basis. Beyond this, the State will consider the possibility of providing technical support on a statewide level, whether that be through the State or through strategic partnerships with third parties such as device suppliers.

Related Barrier(s): 1) Lack of digital literacy skills  
 Related Objective(s): 1) Improve access to and adoption of affordable high-speed internet

- **ACP Enrollment Events**

Currently, ACP can provide significant assistance to households in need for both internet service and devices. However, many individuals may not know about the program, and



the enrollment process can be challenging for some households. According to a report by Civic Nation, which analyzes the effectiveness of their pilot grants, the average time it takes to enroll in ACP is just under an hour.<sup>86</sup> Assuming the continuation of the Federal program, South Dakota would like to support outreach and enrollment events organized by community partners working with one or more covered populations to assist eligible households in signing up for the program.

Related Barrier(s): 1) Cost of broadband subscriptions, 2) Cost of devices to access broadband, 3) Lack of awareness/outreach about existing subsidy programs

Related Objective(s): 1) Improve access to and adoption of affordable high-speed internet, 2) Expand access to computing devices for accessing the internet

- **Train staff of State agencies that work with covered populations about the eligibility and application process for ACP**

During conversations with stakeholders from State agencies that worked with covered populations, it was found that their staff members may not necessarily be aware of ACP, its eligibility and application process. Since these agencies have consistent and large-scale touchpoints with members of covered populations, training the staff who work with these members to share details about the program and assist in applying for the benefit could help leverage an existing pathway for ACP awareness that has been untapped until now. Resources at no cost may be provided for distribution should an agency have existing mailers or websites where information could be shared.

Related Barrier(s): 1) Lack of awareness/outreach about existing subsidy programs

Related Objective(s): 1) Improve access to and adoption of affordable high-speed internet

### **Strategy 1.3: Increase awareness of the benefits related to internet adoption**

- **Advertisement**

Advertising can be a powerful tool in sharing messages across a wide range of people. As discussed in section 3, many people may not fully understand the value of high-speed internet. For those that are less confident in their skills, they may not be aware of the resources available to support them. Partnering with community organizations to issue targeted advertisement can help promote the benefits of high-speed internet, how to safely be online, and publicize available digital programs.

Related Barrier(s): 1) Lack of awareness/outreach about existing subsidy programs, 2) Reluctance to adopt high-speed broadband

Related Objective(s): 1) Improve access to and adoption of affordable high-speed internet

- **Educational Workshops**

In communities where high-speed internet has never been available there may be an unwillingness to adopt an 'unknown' technology. Educational workshops can explain how the internet works, what one can do using it, and how to connect - educational workshops can go a long way in building trust within such communities. This may be carried out in partnership with community organizations that work with covered

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<sup>86</sup> Civic Nation (published June 2023), Civic Nation ACP Pilot Report: Lessons for Community-Based Affordable Connectivity Program Outreach. Accessed at: [CivicNation OnlineForAll PilotReport.pdf](#)

populations, but also by other organizations such as ISPs, who may have existing channels of communication with households. These workshops may be tailored to individual covered populations' needs.

Related Barrier(s): 1) Reluctance to adopt high-speed broadband

Related Objective(s): 1) Improve access to and adoption of affordable high-speed internet


- **Support Digital Equity Coalitions**

The City of Sioux Falls has led the way in South Dakota by establishing a coalition dedicated to furthering digital equity. This coalition developed a digital equity plan and other useful resources, such as a map which lists locations of where to access various types of support.<sup>87</sup> Strong regional partnerships can be important in furthering digital inclusion, a sentiment highlighted in a report by the Benton Foundation.<sup>88</sup> As a unifying governance body, the State would like to support other regions and communities in building digital equity coalitions comprised of partners from government, business, and non-profits, allowing for a comprehensive, top-to-bottom approach. Collaboration with these cohorts will allow for management of various programs to fall on different parties' shoulders, providing freedom to customize offerings on a local level. These cohorts will heavily focus on the Affordable Connectivity Program, if available, and how more residents may receive this benefit.

Related Barrier(s): 1) Lack of universal high-speed broadband infrastructure, 2) Cost of broadband subscriptions, 3) Lack of awareness/outreach about existing subsidy programs, 4) Lack of user-friendly interface for all citizens to access government services online, 5) Shortage in staffing capacity and ability to provide supportive services, 6) Cost of devices to access broadband, 8) Lack of digital literacy skills, 9) Lack of internet safety training and awareness programs, 9) Reluctance to adopt high-speed internet

Related Objective(s): Improve access to and adoption of affordable high-speed internet

**Objective 2: Enhance accessibility of public services online**

| Objectives  | Strategies   |
|---|--|
|  <p>Objective 2: Enhance accessibility of public services online</p> | <p>2.1 Improve online services interface<br/>2.2 Increase awareness of MySD Digital Citizen portal</p> |

**Strategy 2.1 Improve online services interface**

- **Improve access to workforce services**

South Dakotans need to interact with the State government for a variety of reasons, whether it's to access benefits through the SNAP, or to seek reemployment assistance. To promote online accessibility, South Dakota is interested in making sure that services utilized by all populations are more user-friendly. This includes supporting

<sup>87</sup> Connect Sioux Falls (downloaded on June 15, 2023), Connect Sioux Falls (click on Resources "Connect Sioux Falls ACP Brochure"). Accessed at: [connectsiouxfalls.org](https://connectsiouxfalls.org)

<sup>88</sup> Benton Foundation (published January 2016), Digital Inclusion and Meaningful Broadband Adoption Initiatives. Accessed at: [broadbandinclusion.pdf \(benton.org\)](https://broadbandinclusion.pdf(benton.org))

enhancements to some of the State’s online services to improve usability and increase satisfaction with the user’s experience and align closer to the American Disabilities Act guidance on web accessibility.<sup>89</sup>

Related Barrier(s): 1) Lack of user-friendly interface for all citizens to access government services online

Related Objective(s): 1) Enhance accessibility of public services online

**Strategy 2.2 Increase awareness of MySD Digital Citizen portal**


- **MySD Digital Citizen awareness campaign**

South Dakota’s recently launched Digital citizen Portal SD.Gov has begun offering a single sign-on (SSO) platform to access public services online. An awareness campaign can help a lot of citizens to access essential services without travelling long distances. The portal is also an improvement over older websites that may have been more difficult to use. Simple PSAs with how-to guides on using the portal can familiarize South Dakotans with the new portal.

Related Barrier(s): 1) Lack of awareness/outreach about existing subsidy programs, 4) Lack of user-friendly interface for all citizens to access government services online

Related Objective(s): Improve access to and adoption of affordable high-speed internet.  
2) Enhance accessibility of public services online

**Objective 3: Increase access to digital skills curriculums**

| Objectives  | Strategies  |
|---|---|
|  <p>Objective 3: Increase access to digital literacy curriculums</p> | <p>3.1 Establish digital literacy curriculums and training sessions</p> |

**Strategy 3.1 Establish digital literacy curriculums and training sessions**

- **Digital Literacy Training for the Incarcerated**

As described in section 3.2.1, incarcerated individuals face unique access challenges. Purchasing an established offline curriculum for digital literacy training could be a way to support the digital literacy needs of those that are incarcerated, while adhering to security requirements. A partnership with the South Dakota Department of Corrections will be required to deploy a digital literacy curriculum for members of the population that are currently incarcerated, while those previously incarcerated can access such programs at community anchor institutions.

Related Barrier(s): 1) Lack of digital literacy skills, 2) Regulatory limitations to access

Related Objective(s): 1) Increase access to digital literacy curriculums, 2) Improve access to and adoption of affordable high-speed internet

- **Digital Literacy Curriculum**

<sup>89</sup> U.S. Department of Justice Civil Rights Division, Guidance on Web Accessibility and the ADA. Accessed at: <https://www.ada.gov/resources/web-guidance/>

Digital literacy curriculums can help improve and build confidence in these skills and promote other desirable outcomes. Studies have shown that when a standardized curriculum is implemented, participants completing the trainings have had improved success in securing employment.<sup>90</sup> South Dakota is interested in purchasing and deploying an established curriculum that allows self-paced and instructor-led trainings on digital literacy. Ideally, these offerings will have multiple levels, with options available for those who haven't used devices before as well as those looking for more advanced certifications or trainings. South Dakota intends to deploy such programming in partnership with libraries, workforce development agencies, and community organizations that serve one or more covered populations.

Related Barrier(s): 1) Lack of digital literacy skills

Related Objective(s): 1) Increase access to digital literacy curriculums, 2) Improve access to and adoption of affordable high-speed internet


- **Community Training Sessions**

Enrollment in a formal program may not be feasible for everyone who needs support with digital literacy and internet safety. Informal community events are another way to promote digital literacy skills for various populations. Some stakeholders described hosting events in the past, such as sessions on using social media. South Dakota would like to support community organization partners serving one or more covered populations in hosting additional digital literacy training sessions. For example, this may include working with libraries to offer tips on how to navigate online resources for their patrons.

Related Barrier(s): 1) Lack of digital literacy skills

Related Objective(s): 1) Increase access to digital literacy curriculums, 2) Improve access to and adoption of affordable high-speed internet

#### **Objective 4: Increase access to cybersecurity curriculums**

| <b>Objectives</b>  | <b>Strategies</b>  |
|--|--|
|  <p>Objective 4: Increase access to cybersecurity curriculums</p> | <p>4.1 Establish cybersecurity curriculums &amp; training sessions</p> |

#### **Strategy 4.1 Establish cybersecurity curriculums & training sessions**

- **Cybersecurity Curriculum**

Digital safety was an item that saw a high amount of interest during the public comment period. Because of this, cybersecurity curriculums will be offered in conjunction with digital literacy training, rather than being combined with it. Similar to digital literacy, South Dakota is interested in purchasing and deploying an established curriculum that allows self-paced and instructor-led trainings on internet safety. South Dakota intends to

<sup>90</sup> Minnesota Literacy Council (published on November 23, 2015), Evaluation Report: Impact of Northstar Assessment and Related Computer Skills Programming on Employment in CTEP Programs. Accessed at: [Evaluation Report: Impact of Northstar Assessment and Related Computer Skills Programming on Employment in CTEP Programs \(americorps.gov\)](#)

deploy such programming in partnership with libraries, workforce development agencies, and community organizations that serve one or more covered populations.  
 Related Barrier(s): 1) Lack of internet safety training and awareness programs  
 Related Objective(s): 1) Increase access to cybersecurity curriculums, 2) Improve access to and adoption of affordable high-speed internet


• **Community Training Sessions**

Enrollment in a formal program may not be feasible for everyone who needs support with internet safety. Informal community events are another way to promote internet safety skills for various populations. Some stakeholders described hosting events in the past, such as sessions on using social media. South Dakota would like to support community organization partners serving one or more covered populations in hosting additional digital literacy and internet safety training sessions. For example, this may include working with ISPs to share important internet safety tips with their respective customer bases.

Related Barrier(s): 1) Lack of internet safety training and awareness programs

Related Objective(s): 1) Increase access to cybersecurity curriculums, 2) Improve access to and adoption of affordable high-speed internet

**Objective 5: Expand access to computing devices for accessing the internet**

| Objectives  | Strategies   |
|---|--|
|  <p>Objective 5: Expand access to computing devices for accessing the internet</p> | <p>5.1 Expand access to public-use devices<br/>                     5.2 Make low-cost or free devices available for distribution</p> |

**Strategy 5.1 Expand access to public-use devices**

• **Public-use Devices**

While there are several public computer labs throughout the State, enabling over 300,000 computer sessions, there is an existing opportunity to expand access to public use devices.<sup>91</sup> Devices that are open to the public allow access for those who cannot afford to purchase individual devices. South Dakota is considering purchasing additional computing devices, either new or refurbished, to increase the availability of public use devices. These devices would be available to public through internal and external partners.

Related Barrier(s): 1) Cost of devices to access broadband

Related Objective(s): 1) Expand access to computing devices for accessing the internet

• **Loaner Devices**

As described by South Dakota’s Universities and Colleges, device loaner programs can help individuals in need of temporary assistance to access internet capable devices. A 2019 study also shows that over time, device loaner programs can increase self-reported

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<sup>91</sup> South Dakota State Library (downloaded June 15, 2023), South Dakota public library statistics as reported via the Public Libraries Survey FY2022 (click on “SD Public Libraries – Service Statistics 2022”). Accessed at: <https://libguides.library.sd.gov/services/pls>

confidence in using the internet.<sup>92</sup> The State may support expansion of device programs by purchasing new or refurbished computing devices and Wi-Fi hotspot devices and working with partner organizations to administer a device loaner program.

Related Barrier(s): 1) Cost of devices to access broadband

Related Objective(s): 1) Expand access to computing devices for accessing the internet

## **Strategy 5.2 Make low-cost or free devices available for distribution**

- **Device Distribution**

For some time, it has been known that lack of internet-capable devices is correlated with less wealth, less access to educational opportunities, and even higher rates of housing instability.<sup>93</sup> South Dakota is interested in purchasing new or refurbished computing devices that can be distributed to those in need. While mobile devices may be more convenient, the State recognizes they do not meet every need. To support this, the State will seek a partnership with a device refurbisher to reduce the cost for device ownership and increase offerings of laptops, desktops, and tablets. Partnerships with community organization that serve one or more covered populations can help reach the communities that such a program would be intended to serve. Device ownership may also be paired with a digital literacy and cyber security curriculums to incentivize these programs and teach proper skills for device use.

Related Barrier(s): 1) Cost of devices to access broadband

Related Objective(s): 1) Expand access to computing devices for accessing the internet,  
2) Improve access to and adoption of affordable high-speed internet

### **5.1.2 Sustainability and Effectiveness**

Sustainability and longevity are at the forefront of designing and prioritizing programs to be funded through the various digital equity grants. South Dakota will consider activities that have lasting impacts over those that require ongoing support, financial or otherwise. With limited funding, the State is dedicated to ensuring any investments will be sustainable and maximize the positive impact for South Dakotans.

The key performance indicators outlined in section 2 will be South Dakota's primary way of determining success. To supplement these data points, South Dakota will monitor the funded programs to confirm the activities are implemented as designed. The State also intends to continue the open dialogue with representatives of the covered populations to understand whether the needs are being met. Where appropriate, the State will use these findings to revise the plan and activities.

### **5.1.3 Regular Evaluation and Updates**

South Dakota recognizes that over time, the digital opportunity needs may change. Throughout

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<sup>92</sup> International Federation of Library Associations and Institutions (IFLA) and Electronic Information for Libraries (EIFL) (published 2022), Impacts of Public Access to Computers and the Internet in Libraries. Accessed at: <https://repository.ifla.org/bitstream/123456789/2289/1/Impacts%20of%20Public%20Access%20-%20DC%20PAL%20Study.pdf>

<sup>93</sup> Dania Francis and Christian Weller (published March 2022), Economic Inequality, the Digital Divide, and Remote Learning During COVID-19. Accessed at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8914302/>

the duration of the grants and programming, South Dakota intends to periodically review the plan and implement updates as necessary. Such updates will be made publicly available so that stakeholders may stay up to date on these efforts. Part of this evaluation will also include assessing the relevance of continued efforts. For example, the State hopes ACP will be extended to continue supporting South Dakotans. However, without such a program, hosting enrollment events will no longer be relevant. This Plan will be used as a basis for continued iteration and further promotion of digital opportunity in South Dakota.

## 5.2 Timeline

To meet the objectives this Plan has set forth, South Dakota has developed a tentative timeline against which progress can be tracked. Please note, the milestones represented in Table 15 below are reflective of South Dakota’s current understanding of the National Telecommunications and Information Administration (NTIA) schedule to rollout the forthcoming Digital Equity grants. This timeline is subject to change pending any adjustments to the NTIA’s timeline as well as funding allocations.

**Table 14: Digital Equity Implementation Timeline**

| Relevant Objective                  | Proposed Activities   | Year/Duration | Implementation Milestones   |
|-------------------------------------|---|---------------|---|
| <b>Affordability &amp; Adoption</b> | • Expand broadband infrastructure                                 | 2024 – 2029   | 2024 – Train partner organizations on ACP   |
|                                     | • Expand capacity to provide digital navigation                   | 2025 – 2029   | 2026 – Support the creation of an additional Digital Equity Coalition in South Dakota |
|                                     | • Support ACP enrollment events                                   | 2024 – 2029   |   |
|                                     | • Train state agency staffs on ACP                                | 2023 – 2025   |   |
|                                     | • Begin advertisements showing the benefits of broadband adoption | 2025 – 2028   |   |
|                                     | • Support educational workshops                                   | 2025 – 2029   |   |
|                                     | • Assist with the formation of digital equity                     | 2024 – 2029   |   |

|                             |   |   |  |
|-----------------------------|---|---|--|
|                             | coalitions across the state   |   |  |
| <b>Online Accessibility</b> | <ul style="list-style-type: none"> <li>Improve access to workforce services</li> <li>Launch MySD Digital Citizen awareness campaign</li> </ul>  | <p>2025 – 2028</p> <p>2025 – 2029</p>                                       | 2025 – Initiate outreach efforts centered around MySD Digital Citizen  |
| <b>Digital Literacy</b>     | <ul style="list-style-type: none"> <li>Launch digital literacy curriculum</li> <li>Establish digital literacy training for the incarcerated</li> <li>Support community training sessions</li> </ul>   | <p>2024 – 2029</p> <p>2025 – 2029</p> <p>2024 – 2029</p>                    | 2025 – Roll out digital literacy curriculum for community anchor institution use   |
| <b>Cybersecurity</b>        | <ul style="list-style-type: none"> <li>Launch cybersecurity curriculum</li> <li>Establish digital safety training for the incarcerated</li> <li>Support community training sessions</li> </ul>  | <p>2024 – 2029</p> <p>2025 – 2029</p> <p>2024 – 2029</p>                    | 2025 – Roll out cybersecurity curriculum for community anchor institution use  |
| <b>Devices</b>              | <ul style="list-style-type: none"> <li>Expand public-use device capabilities</li> <li>Expand loaner device capabilities</li> <li>Partner with a device refurbisher to increase device distribution</li> </ul>   | <p>2024 – 2029</p> <p>2024 – 2029</p> <p>2025 – 2029</p>                    | 2028 – Bring a device refurbisher into South Dakota on a wide-spread basis   |
| <b>General Activities</b>   | <ul style="list-style-type: none"> <li>Complete Digital Equity State Capacity Grant application</li> <li>Confirm intent to apply for the Digital Equity Competitive Grant</li> <li>Release requests for proposals as appropriate</li> <li>Form agreements, contracts, and memorandum of understanding (MOUs) with partners</li> </ul> | <p>2024 – 2024</p> <p>2024 – 2024</p> <p>2024 – 2025</p> <p>2023 – 2025</p> | <p>2024 – Apply for Digital Equity State Capacity Grant</p> <p>2024 – Conduct first annual review of the Plan</p> <p>2024 – Host second annual South Dakota Broadband Summit</p> |



|  |   |             |  |
|--|---|-------------|--|
|  | <ul style="list-style-type: none"> <li>• Host annual South Dakota Broadband Summits</li> </ul>      | 2023 – 2029 |  |
|  | <ul style="list-style-type: none"> <li>• Prepare for grant closeout activities</li> </ul>           | 2028 – 2029 |  |
|  | <ul style="list-style-type: none"> <li>• Evaluate programmatic outputs and effectiveness</li> </ul> | 2025 – 2029 |  |
|  | <ul style="list-style-type: none"> <li>• Update Plan annually</li> </ul>                            | 2023 – 2029 |  |

## 6 Conclusion

As described in the Plan, the key to achieving digital opportunity for all is through identifying the barriers and opportunities in three areas: 1) access to affordable, reliable broadband technology, 2) access to affordable devices, and 3) resources to learn digital skills. This Plan provides the broad framework for how to get South Dakota from where it stands to a digitally empowered future.

Importantly, the Plan also identifies the standards of success the State has set for itself, including that metrics that will be used to track and measure progress. The baseline metrics incorporated the existing asset inventory and helped establish near and long-term targets for each of the State’s measurable objectives. The State’s vision cannot be achieved without goal setting and a dedication to rigorous implementation. The Plan sets South Dakota up for success in doing that.

Since this Plan has been built through widespread consultation with stakeholders, the strategies proposed in it are also in alignment with the State’s trusted public, private and nonprofit partners. However, there is also a recognition of the fact that what constitutes an equitable arrangement is an ever-evolving project. The State will continue to work closely with communities and rely on its partners to not only refine this Plan through a public comment process, but also work with them towards fulfilling the vision laid out.

The allocation South Dakota receives through the Digital Equity grants will determine the ultimate execution of the strategies crafted here. The State will make decisions to support the wide-ranging proposed activities to bring South Dakotans access and confidence in their adoption of high-speed internet. Every resident of the state should be empowered through strategic investments to equip them with the technology, tools, and skills needed for connecting meaningfully to high-speed internet. This DO Plan serves as an important milestone in the State’s work towards bridging the digital divide.

## 7 Appendices

**Table 15: Broadband subscription rates by county<sup>94</sup>**

| County     | Percent of Households with Broadband Subscription | Rank | County     | Percent of Households with Broadband Subscription | Rank | County        | Percent of Households with Broadband Subscription | Rank |
|------------|---|------|------------|---|------|---------------|---|------|
| Lincoln    | 95%   | 1    | Perkins    | 83%   | 23   | Deuel         | 78%   | 44   |
| Clay       | 90%   | 2    | Brown      | 83%   | 24   | Sully         | 78%   | 46   |
| Lake       | 90%   | 3    | Davison    | 83%   | 25   | Roberts       | 78%   | 47   |
| Minnehaha  | 89%   | 4    | Kingsbury  | 83%   | 25   | Bon Homme     | 77%   | 48   |
| Hughes     | 89%   | 5    | Moody      | 83%   | 25   | Lyman         | 77%   | 49   |
| Brookings  | 88%   | 6    | Grant      | 83%   | 28   | Day           | 76%   | 50   |
| Hanson     | 88%   | 6    | Hand       | 83%   | 29   | Miner         | 76%   | 51   |
| Pennington | 87%   | 8    | Tripp      | 82%   | 30   | Walworth      | 75%   | 52   |
| Spink      | 87%   | 9    | Clark      | 81%   | 31   | Charles Mix   | 74%   | 53   |
| Harding    | 87%   | 10   | Hamlin     | 81%   | 32   | Aurora        | 74%   | 54   |
| Meade      | 86%   | 11   | Stanley    | 81%   | 33   | Corson        | 72%   | 55   |
| Lawrence   | 86%   | 12   | Fall River | 81%   | 34   | Campbell      | 71%   | 56   |
| Butte      | 85%   | 13   | Turner     | 81%   | 34   | Ziebach       | 68%   | 57   |
| Union      | 85%   | 14   | Jerauld    | 81%   | 36   | Bennett       | 68%   | 58   |
| Hyde       | 85%   | 15   | Douglas    | 80%   | 37   | Dewey         | 66%   | 59   |
| Faulk      | 85%   | 16   | Beadle     | 80%   | 38   | McCook        | 64%   | 60   |
| Marshall   | 85%   | 16   | McPherson  | 79%   | 39   | Buffalo       | 62%   | 61   |
| Yankton    | 84%   | 18   | Hutchinson | 78%   | 40   | Haakon        | 61%   | 62   |
| Codington  | 84%   | 19   | Sanborn    | 78%   | 40   | Oglala Lakota | 57%   | 63   |
| Potter     | 84%   | 19   | Gregory    | 78%   | 42   | Jackson       | 55%   | 64   |
| Custer     | 83%   | 21   | Jones      | 78%   | 42   | Mellette      | 49%   | 65   |
| Edmunds    | 83%   | 22   | Brule      | 78%   | 44   | Todd          | 47%   | 66   |

<sup>94</sup> US Census American Community Survey (published in 2021), S2801 Types of Computers and Internet Subscriptions 1-Year Estimates. Accessed at: <https://data.census.gov/table?t=Computer+and+Internet+Use&g=040XX00US46&tid=ACST1Y2021.S2801>

**Table 16: Stakeholders Participating in Engagement Sessions**

| Entity Name   | Entity Name  |
|---|--|
| AARP  | South Dakota Board of Regents  |
| Adobe Skills Finder   | South Dakota Board of Technical Education  |
| Adult Education and Literacy Providers  | South Dakota Bureau of Information and Telecommunications  |
| AveleCare   | South Dakota Cattlemen's Association   |
| Black Hills Special Services Cooperative - Statewide Family Engagement Center | South Dakota Department of Corrections   |
| Career Learning Center of the Black Hills                                     | South Dakota Department of Education   |
| Center for Rural Affairs  | South Dakota Department of Health  |
| CenturyLink   | South Dakota Department of Human Services - Division of Rehabilitation Services                          |
| Communication Workers Union   | South Dakota Department of Human Services (DHS) - Division of Service to the Blind and Visually Impaired |
| Connect Sioux Falls   | South Dakota Department of Labor and Regulation  |
| Cornerstones Career Learning Center   | South Dakota Department of Public Safety   |
| Dakota Link   | South Dakota Department of Social Services (DSS)   |
| Education Superhighway  | South Dakota Department of Transportation  |
| Elevate Rapid City  | South Dakota Department of Tribal Relations  |
| Essential Education   | South Dakota Department of Veterans Affairs  |
| Golden West Telecommunications  | South Dakota Farm Bureau Federation  |
| Grow South Dakota   | South Dakota Housing Development Authority   |
| Grow with Google  | South Dakota Library Association   |
| Interstate Telecommunications Cooperative, Inc.                               | South Dakota Municipal League  |
| Lake Area Technical College   | South Dakota Police Chief's Association  |
| Lutheran Social Services of South Dakota                                      | South Dakota Public Utilities Commission   |
| Maxwell Strategies  | South Dakota Retailers Association   |
| Midco   | South Dakota Sheriff's Association   |
| Mitchell Technical College  | South Dakota State Library   |
| Northstar Digital Literacy  | South Dakota State University  |

|                           |  |
|---------------------------|--|
| PCs for People            | South Dakota Telecommunications Association (SDTA) |
| Rapid City Public Library | South Dakota Workforce Development Council         |
| Rosebud Sioux Tribe       | Southeast Technical College                        |
| SD Voices for Peace       | Sunnycrest Tech Club                               |
| SDN Communications        | Yankton Community Library                          |
| Siouxland Library         |  |

Table 16 above lists the entities that participated in one-on-one and small group discussions. Please note, this list does not reflect the entities that were invited and did not respond or were unable to participate in meetings with the State. In total, there were twelve entities that declined or did not respond to requests for meetings. Additionally, the WIOA Partner Symposium and Broadband Summit convened individuals representing several entities.