

Serving Individuals with Disabilities



A guide that shares effective digital inclusion practices in serving individuals with disabilities

OVERVIEW

Individuals with disabilities is one of the eight Covered Populations defined in the State Digital Equity Planning Grant Program Notice of Funding Opportunity (NOFO). According to the [NOFO](#)¹, the term “disability” means, with respect to an individual – (1) a physical or mental impairment that substantially limits one or more major life activities of such individual; (2) a record of such an impairment; or (3) being regarded as having such an impairment.

The Disability and Health Data System (DHDS) for 2021, shows that:

1 in 4

adults in the United States have some type of disability²

With 1 in 4 adults having some type of disability, it is important to recognize that disabilities come in various forms and in different phases in life. A disability can be any of the following, as shown in table 1 below³:

Table 1: Disability Types

Types
➤ Related to conditions that are present at birth and may affect functions later in life, including cognition (memory, learning, and understanding), mobility (moving around in the environment), vision, hearing, behavior, and other areas.
➤ Associated with developmental conditions that become apparent during childhood.
➤ Related to an injury.
➤ Associated with a longstanding condition, which can cause a disability such as vision loss, nerve damage, or limb loss.
➤ Progressive, static, or intermittent.

People with disabilities have a broad spectrum of experiences, and there is no single definition of accessibility or method of digital inclusion that can address the needs of this Covered Population. It is important to engage people with disabilities with a range of lived experiences to identify the varied barriers and needs of this community.

This document is intended solely to assist recipients in better understanding the State Digital Equity Planning Grant Program and the requirements set forth in the Notice of Funding Opportunity (NOFO) for this program. This document does not and is not intended to supersede, modify, or otherwise alter applicable statutory or regulatory requirements, or the specific application requirements set forth in the NOFO. In all cases, statutory and regulatory mandates, and the requirements set forth in the NOFO, shall prevail over any inconsistencies contained in this document.



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How to Use Inclusive Language

- **Disability Language Guide and Tips**⁵
This style guide by The Independence Center includes five disability language tips as well as a helpful chart of outdated or harmful words and more affirming alternatives.
- **Disability Language Style Guide**⁶
This style guide by The National Center on Disability and Journalism (NCDJ) includes basic principles to follow when referring to people with disabilities, as well as an alphabetized list of terms, their backgrounds, and the NCDJ recommendation for use.

GETTING STARTED

Individuals with disabilities often experience barriers to digital equity, such as obtaining affordable assistive technologies, encountering inaccessible websites and digital content, and getting reliable Internet access. You can start identifying a digital equity approach that serves individuals with disabilities by reviewing the following resources.

Disability and the Digital Divide: Internet Subscriptions, Internet Use and Employment Outcomes⁷

In this brief, the U.S. Department of Labor's Office of Disability Employment Policy (ODEP) shares insightful data on the digital divide and how it impacts individuals with disabilities. The data includes the effects of the COVID-19 pandemic, barriers to Internet use, and how the digital divide may affect employment for individuals with disabilities.

Digital Accessibility Toolkits⁸

The Partnership on Employment & Accessible Technology (PEAT) developed these toolkits to support the creation and use of accessible technologies in all workplaces.

How People with Disabilities Use the Web⁹

This resource from the World Wide Web Consortium's (W3C) Web Accessibility Initiative (WAI) shows how barriers impact individuals with disabilities as they navigate the web. It also includes common tools and techniques individuals with disabilities use online, such as using text-to-speech.

The Internet Access Gap



“Between 2015 and 2019, **91.5% of people without disabilities** lived in a household with any kind of internet subscription, while **only 78.4% of people with disabilities did**.”¹⁰

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DIGITAL EQUITY OUTCOMES

In their State Digital Equity Plan, States must present measurable objectives for documenting and promoting digital inclusion for each Covered Population in that State. These measurable objectives should impact and interact with the State's equity outcomes named in [NOFO Section IV.C.1.b.i.3](#). Examples of investments in digital inclusion that align with the [equity outcomes](#)⁴ are listed in table 2 below:

Table 2: Examples of Digital Inclusion Activities that are tied to Digital Equity Outcomes

Digital Equity Outcomes	Digital Inclusion Activities
 Health	<ul style="list-style-type: none">• Improved access to acute and preventative care with telehealth and smart medical devices• Access to online therapy for those with limited ability to travel• Online health portal to access medical records
 Essential Services	<ul style="list-style-type: none">• Accessible local and state government websites, forms that are accessible for adaptive devices• Digital skills training to help improve the ability to apply for benefits• Access to streamed interpretative services
 Employment	<ul style="list-style-type: none">• Assistive technology for in-person jobs; ensuring meetings are accessible through real-time captioning and/or offering interpretation services
 Education	<ul style="list-style-type: none">• Adaptive technologies on computing devices, available in educational settings and at home• Skills training with assistive and adaptive technology like screen readers
 Civic and Social Engagement	<ul style="list-style-type: none">• Community initiatives using augmented reality simulations can result in reduced feelings of stigmatization and provide opportunity for meaningful community dialogue• Use of social media to connect to online community of others with shared experiences and increase social connectedness• Watching T.V. and movies with closed captioning



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Understanding Individuals with Disabilities

Disability Inclusion¹¹ and **Real Stories from People Living with a Disability**¹²

This resource by the Centers for Disease Control and Prevention (CDC) discusses the meaning of digital inclusion, barriers, strategies, programs and activities that pertain to digital inclusion. It also includes the [Disability and Health Data System \(DHDS\) Overview](#), which is a tool that has State-level data (i.e., age, sex, and race/ethnicity, etc.) on adults with disabilities. The CDC highlights [Real Stories from People Living with a Disability](#) to demonstrate the day-to-day of how individuals with disabilities live.

Identifying Existing Resources

Individuals with Disabilities Education Act (IDEA) Topic Areas¹³

The topic areas page from the U.S Department of Education includes information and resources related to IDEA to understand how policy aims to serve children with disabilities. Also includes a list of State agencies, IDEA contacts and State Performance Plans, and Annuals Performance Reports for [each state or territory](#).

State Vocational Rehabilitation Agencies¹⁴

Rehabilitation Services Administration provides a directory of the Vocational Rehabilitation (VR) agencies that administer the [State VR Services](#), [State Supported Employment Services](#), and [Independent Living Services for Older Individuals Who Are Blind](#) programs.

State Councils on Developmental Disabilities¹⁵

The Administration for Community Living provides a directory of State Councils on Developmental Disabilities (Councils) who are federally funded, self-governing organizations that are committed to advancing public policy and systems change.

National Library Service for the Blind and Print Disabled (NLS)¹⁶

NLS maintains a list of State libraries that provide services for individuals with disabilities including providing NLS-produced braille and talking books and magazines.

Assistive Technology Act Programs¹⁷

This directory by the National Assistive Technology Act Technical Assistance and Training (AT3) Center shares contact information for Assistive Technology resources by States and Territories.

Centers for Independent Living (CILs) and Associations¹⁸

The ILRU Directory of Centers for Independent Living provides contact information to leverage CILs as community partners.



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Identifying Existing Resources

National Association of Councils on Developmental Disabilities (NACDD)¹⁹

The NACDD shares a directory of State Councils on Developmental Disabilities (SCDD) that focus on addressing barriers, advocacy, and community building and living.

U.S. State Disability Agencies & Services Directory²⁰

This directory by nonprofit Disability Resources, Inc. lists disability agencies and organizations for each State in the United States.

HOW TO IMPROVE DIGITAL ACCESSIBILITY

In creating and refining digital equity plans and doing outreach about new or existing programs to promote digital inclusion, states may consider using the following methods to make materials more accessible:

- **Guidance on Web Accessibility and the ADA**²¹
This resource by U.S Department of Justice Civil Rights Division on The Americans with Disabilities Act (ADA) describes how organizations can ensure that their websites are accessible to people with disabilities.
- **Create Accessible Meetings**²²
This guidance by the General Services Administration on Section 508 of the Rehabilitation Act provides information on how to make meetings accessible and in compliance with Section 508 and other disability rights laws.
- **Digital Accessibility Guides and Tutorials**²³
This guide by the University of South Carolina shares the basics and best practices of content accessibility.
- **Web Accessibility Evaluation Tool (WAVE)**²⁴
WAVE is a set of evaluation tools that aims to improve web content accessibility. This includes a browser extension that does testing accessibility. For a basic tutorial, watch this [video](#).



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LEVERAGING EXISTING EXAMPLES

NY Justice Center for the Protection of People With Special Needs²⁵

The NY Technology-Related Assistance for Individuals with Disabilities (TRAID) Program provides access to assistive technology, device loans, and hands-on training to people with disabilities.

Disability Resources for Kansas Jobseekers²⁶

The State of Kansas lists local, state, and federal entities that provide disability workforce resources and information that help achieve and maintain independence and employment.

San Francisco Connected Program²⁷

This program by the San Francisco Human Services Agency provides free digital literacy classes in five languages to older adults and adults with disabilities aiming to educate on how broadband access is useful and necessary to everyday life.

Georgia Tech Center for Inclusive Design and Innovation (CIDI)²⁸

The CIDI focuses on research, education, and services. Services provided aim to increase opportunities for individuals with disabilities by providing Braille, e-text, captioning and described media and more.

University of Montana— MonTECH²⁹

MonTECH provides information about assistive technology (AT) devices and services to all Montanans in order maintain and improve functional capabilities of individuals with disabilities.

Entry Point!³⁰

Entry Point! is the signature program of the AAAS Project on Science, Technology, and Disability. The program aims to secure internships in STEM for students with disabilities throughout all STEM education and career pathways. Highlights include [success stories](#).

LightHouse for the Blind and Visually Impaired³¹

Lighthouse provides low vision or blind skills training on basic and essential skills like technology (i.e., smartphone training and relevant apps).



Digital Equity Stories

A story of independence using assistive technologies



Michaela Turner moved to Montana last year. The 32-year-old has Down syndrome and was well supported in Massachusetts. In Montana? “It was a shocker,” Mom Becky remembers.

“Michaela is now on a waitlist, likely for seven years,” Becky elaborates. “What can she do during the day?” The question has broader implications: Will her mother be able to work? Will her parents get breaks from caregiving?

Michaela did qualify for employment support through Vocational Rehabilitation (VR). With VR, she landed a part-time job in a Helena bakery and temporary in-person support. Becky’s ability to resume her career as a nurse, or to leave the house for extended periods of time, depends entirely on the stability of Michaela’s job and whether she can be safely home alone in her off hours.

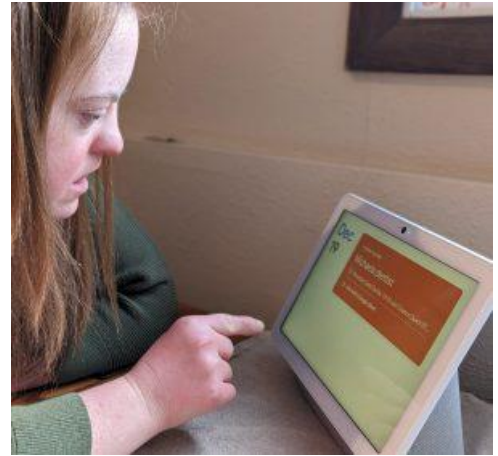


Figure 1: Michaela Turner using assistive technology

That’s where MonTECH and assistive technology come into play. Concerned about Michaela’s job security as her in-person supports fade out, Becky borrowed an iPad and the Work Autonomy app from MonTECH. The app supports independence on the job for people with developmental disabilities; features include visual routines, modeling videos, timers, and reminders.

Michaela has proven successful at work without the app, but once connected with MonTECH, Becky borrowed Google Nest Hub Max to see if it could increase the amount of time Michaela can be home alone. For Becky’s peace of mind, a phone call is not enough; she needs eyes on Michaela and the environment.

“Through Nest, I am able to see her and talk to her,” Becky explains. “It allows us to have more freedom, without a doubt. And it gives her autonomy. She can be at home doing what she likes to do, without her parents hovering over her.”

Becky and Michaela also learned about the June Oven at MonTECH. The June Oven has 12 cooking functions, an internal camera, and smart recipes. June gives Michaela more options to pursue her passion: cooking. The family has since received a grant to purchase a June Oven. “She’s going to get a lot better at cooking,” Becky says. “By herself in a safe way.”

Pursuing interests, gaining new skills, engaging in meaningful work – these are important components of a rich life. Michaela’s willingness to learn assistive technologies, along with practicing and utilizing them daily, is enriching the life of her whole family.

*This story on Michaela Turner, seen in **Figure 1**, is from MonTECH, Montana’s assistive technology program, and was written by Shawna Hanson.*

Digital Equity Stories

A story of an entrepreneur who founded a digital inclusion company



MINNEAPOLIS -- One in five Americans has a disability. As you would imagine, that means navigating the world can be tricky. What you may not realize is it also makes navigating websites and apps almost impossible.

One Minnesota man is showing all of us how to help.

It's been 16 years since Belo Cipriani has actually seen a computer screen. He was assaulted by a group of young men while working in tech in California.

"They started hitting me and my cause of blindness is retinal detachment, so I got kicked in the head so many times that my retinas detached," Cipriani said.

He lost all of his vision at 26.

"It was shocking," he said. And it was frustrating. Even though computers now have screen readers, many websites and apps are not fully compatible.

"I would say that often friends want to meet up for lunch or dinner and they send me a link to a restaurant and I can't access their menu," Cipriani said. "Or I want to buy tickets to a concert and I want to submit payment and then the button's not labeled and so what happens is I hear 'button, button, button,' and I don't know which button I am pressing."

So Cipriani used his education and background to help his current situation. He started OLEB, a digital inclusion company to solve problems like this. "Once you are aware of the barriers I think it just feels like our responsibility and human decency to try and eliminate as many barriers as possible," Kathy Mouacheupao said. Mouacheupao is a proud customer of OLEB. She runs the Metropolitan Regional Arts Council, and their website is now fully accessible.

"We want to actually break down barriers and make sure that our application process, our decision making process, all of those things are as barrier-free as possible. And so that definitely includes the disability community," she said.

Cipriani said that inclusion carries over to social media, where everyone can choose to alt edit their posts to write photo descriptions.

"As a human being, I just feel included, I feel part of the conversation. I feel that someone took a moment to make sure that that I could, or someone like me, could be part of this conversation," he said.

Cipriani is most certainly giving us all something to talk about. Cipriani also focuses on making podcasts accessible for the hearing impaired.



Figure 2: Belo Cipriani

*This story on Belo Cipriani, seen in **Figure 2**, was written by Susan-Elizabeth Littlefield and originally published by CBS News.*

1. National Telecommunication and Information Administration. (2022, May 13). *State Digital Equity Planning Grant Program Notice of Funding Opportunity*. Broadband USA. <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/DE%20PLANNING%20GRANT%20NOFO.pdf>
2. Centers for Disease Control and Prevention, National Center on Birth Defects and Developmental Disabilities, Division of Human Development and Disability. *Disability and Health Data System (DHDS) Data*. <https://dhds.cdc.gov/SP?LocationId=59&CategoryId=DISEST&ShowFootnotes=true&showMode=&IndicatorIds=STATTYPE,AGEIND,SEXIND,RACEIND,VETIND&pnl0=Table,false,YR6,CAT1,BO1,,,,AGEADJPREV&pnl1=Chart,false,YR6,DISSTAT,,,,PREV&pnl2=Chart,false,YR6,DISSTAT,,,,AGEADJPREV&pnl3=Chart,false,YR6,DISSTAT,,,,AGEADJPREV&pnl4=Chart,false,YR6,DISSTAT,,,,AGEADJPREV>
3. Centers for Disease Control and Prevention. *Disability and Health Overview*. <https://www.cdc.gov/ncbddd/disabilityandhealth/disability.html>
4. National Telecommunications and Information Administration. (2023, April). *Digital Equity Outcomes and Impacts*. Broadband USA. https://broadbandusa.ntia.gov/sites/default/files/2023-04/Digital_Equity_Outcomes.pdf
5. The Independence Center. *Disability Language Guide*. <https://www.theindependencecenter.org/wp-content/uploads/2020/07/Disability-Language-Guide.pdf>
6. National Center on Disability and Journalism. (2022, August). *Disability Language Style Guide*. <https://ncdj.org/style-guide/>
7. Office of Disability Employment Policy. (2022, June). *Disability and the Digital Divide: Internet Subscriptions, Internet Use and Employment Outcomes*. <https://www.dol.gov/sites/dolgov/files/ODEP/pdf/disability-digital-divide-brief.pdf>
8. Partnership on Employment and Accessible Technology. *Digital Accessibility Toolkits*. <https://www.peatworks.org/digital-accessibility-toolkits/>
9. World Wide Web Consortium (W3C) Web Accessibility Initiative. *How People with Disabilities Use the Web*. <https://www.w3.org/WAI/people-use-web/>
10. Office of Disability Employment Policy, United States Department of Labor. *Disability and the Digital Divide: Internet Subscriptions, Internet Use and Employment Outcomes*. <https://www.dol.gov/sites/dolgov/files/ODEP/pdf/disability-digital-divide-brief.pdf>
11. Centers for Disease Control and Prevention. *Disability Inclusion*. <https://www.cdc.gov/ncbddd/disabilityandhealth/disability-inclusion.html>
12. Centers for Disease Control and Prevention. *Disability and Health Stories from People Living with a Disability*. <https://www.cdc.gov/ncbddd/disabilityandhealth/stories.html>
13. U.S. Department of Education (Department) Individuals with Disabilities Education Act (IDEA). *Topic Areas*. <https://sites.ed.gov/idea/topic-areas/>
14. Rehabilitation Services Administration. *State Vocational Rehabilitation Agencies*. <https://rsa.ed.gov/about/states>
15. Rehabilitation Services Administration. *State Councils on Developmental Disabilities*. <https://acl.gov/programs/aging-and-disability-networks/state-councils-developmental-disabilities>

16. National Library Service for the Blind and Print Disabled (NLS). *Find Your Library*. <https://www.loc.gov/nls/braille-audio-reading-materials/find-a-local-library/>
17. AT3 Center. *AT ACT Programs*. <https://at3center.net/state-at-programs/>
18. ILRU. *ILRU Directory of Centers for Independent Living (CILs) and Associations*. <https://www.ilru.org/projects/cil-net/cil-center-and-association-directory>
19. National Association of Councils on Developmental Disabilities (NACDD). *Every State has a DD Council!* <https://nacdd.org/councils/>
20. Disability Resources. *U.S. State Disability Agencies & Services Directory*. <https://www.disabilityresources.org/drmreg.html>
21. U.S Department of Justice Civil Rights Division The Americans with Disabilities Act (ADA). (March 18, 2022). *Guidance on Web Accessibility and the ADA*. <https://www.ada.gov/resources/web-guidance/>
22. General Services Administration Government, Section 508. *Create Accessible Meetings*. <https://www.section508.gov/create/accessible-meetings/>
23. University of South Carolina. *Guides & Tutorials*. https://sc.edu/about/offices_and_divisions/digital-accessibility/guides_tutorials/index.php
24. WAVE. *WAVE Web Accessibility Evaluation Tools*. <https://wave.webaim.org/>
25. Justice Center for the Protection of People With Special Needs. *Technology-Related Assistance for Individuals with Disabilities (TRIAD)*. <https://www.justicecenter.ny.gov/traid-program>
26. Kansas Commerce. *Disability Resources*. <https://www.kansascommerce.gov/program/workforce-services/disability-resources/>
27. San Francisco Human Services Agency. *SF Connected Program*. <https://www.sfhsa.org/services/disability-aging-services/community-activities/sf-connected>
28. Georgia Tech. *Center for Inclusive Design and Innovation (CIDI)*. <https://cidi.gatech.edu/services>
29. University of Montana. *MonTech*. <https://montech.ruralinstitute.umt.edu/>
30. AAAS Project on Science, Technology, and Disability. *Entry Point!* https://www.aaas.org/programs/entry-point?adobe_mc=MCID%3D76847479826065824810554096534517549898%7CMCORGID%3D242B6472541199F70A4C98A6%2540AdobeOrg%7CTS%3D1689255601
31. LightHouse for the Blind and Visually Impaired. *Access Technology*. <https://lighthouse-sf.org/programs/access-technology/>
32. Hanson, S. (March 27, 2023). *Michaela and Her Mom Find Freedom with Assistive Tech*. University of Montana, MonTech. <https://montech.ruralinstitute.umt.edu/michaela-and-her-mom-find-freedom-with-assistive-tech/>
33. Littlefield, S. (May 14, 2023). *Minnesota man's digital inclusion company fights for access for all*. CBS News Minnesota. <https://www.cbsnews.com/minnesota/news/minnesota-mans-digital-inclusion-company-fights-for-access-for-all/>