Georgia Technology White Paper Project

Georgia Technology White Paper 2024

For people without disabilities, technology makes things easier. For people with disabilities, technology makes things possible. – IBM Training Manual 1991.

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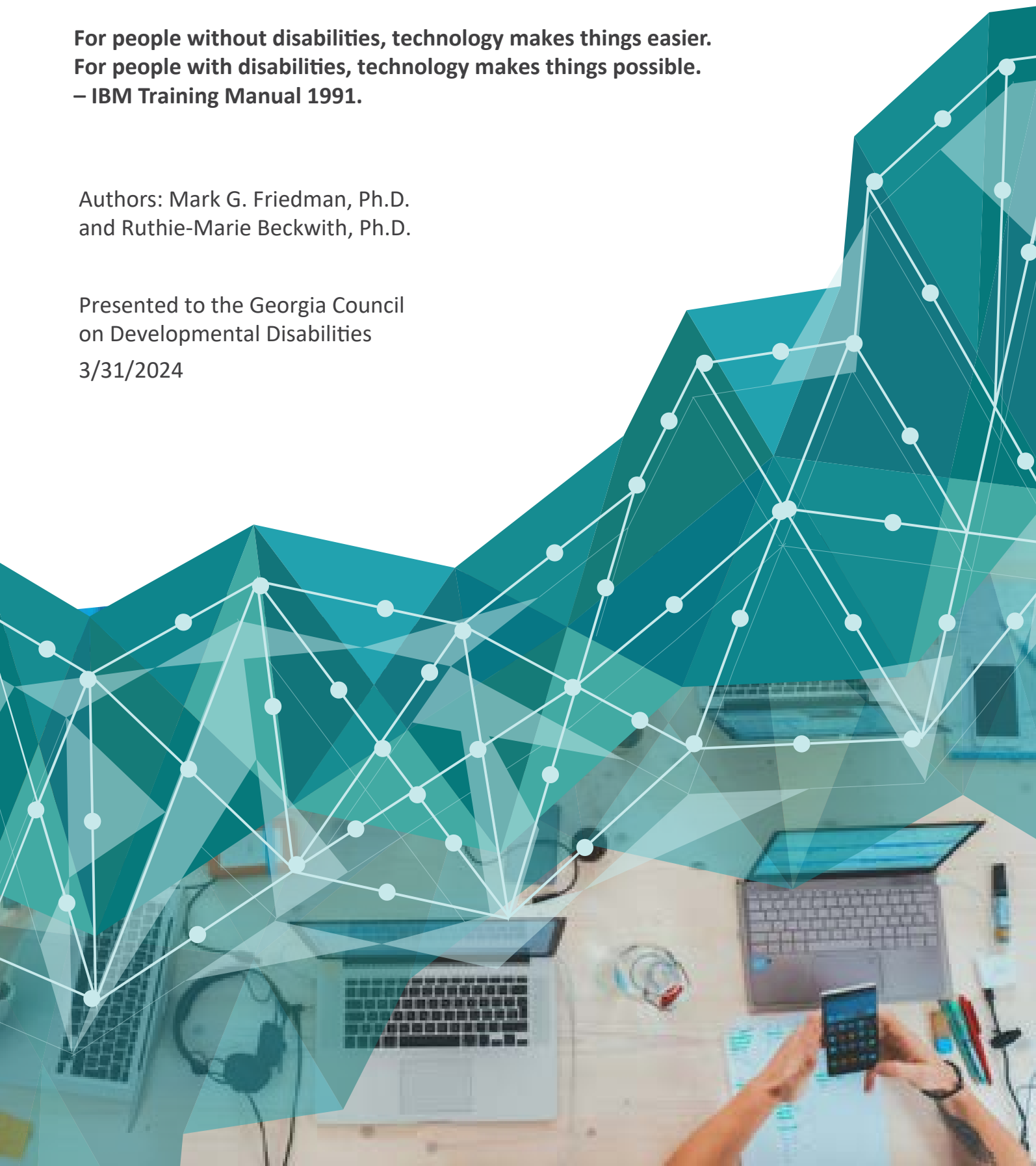

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Our goal is for every person with Intellectual and Developmental Disabilities to have and use the same amount of technology as everyone else.

I . Executive Summary

This report provides a comprehensive analysis of the critical challenges and opportunities facing Georgians with Intellectual/Developmental Disabilities (I/DD) in accessing and utilizing technology, particularly in rural and underserved areas. This reflects a broader, global issue of the digital divide and the need for inclusive technology solutions that can cater to diverse populations, including those with disabilities.

The Georgia Technology White Paper Project serves as a pivotal initiative aiming to bridge this digital divide by identifying barriers to technology adoption among the I/DD community and developing actionable recommendations to overcome these challenges. Its objectives resonate with the urgent need for digital inclusion, ensuring that people with I/DD have equal access to essential technologies for everyday activities such as banking, job applications, medical consultations, and social interactions.

Five key activities were conducted to inform the paper including 1) interviews with 88 local, state, and national officials; 2) four focus groups with Georgians with disabilities and their allies; 3) 170 technology surveys; 4) attendance at three national technology summits; and 5) a review of current literature and reports on technology adoption by people with I/DD.

The outcomes from these activities provide several key areas of focus:

1. Need for Assistive Technology (AT) and Augmentative and Alternative Communication (AAC) Devices: Advances in AT and AAC devices have indeed transformed the lives of many with disabilities. However, as noted, the widespread adoption and accessibility of these technologies remain limited for the I/DD community. This limitation underscores the necessity for initiatives that not only promote the development of such technologies but also ensure their affordability and accessibility to all individuals, regardless of their geographic location or socio-economic status.

2. Digital Divide in Broadband Access: The issue of the digital divide, particularly in rural and underserved areas, is a significant barrier to technology adoption. This divide is not merely about access to the Internet and digital devices but also encompasses the ability to use these technologies effectively. The Georgia Technology White Paper Project's focus on effective use is crucial in advocating for comprehensive strategies that address both access and usability issues.

3. Need for Training and Support: The need for training and support in the use of technology for people with I/DD, their families, and caregivers cannot be overstated. As technology continues to evolve, ongoing education and support are essential to ensuring that individuals with I/DD can fully benefit from these advancements.

4. Need for Financial Support: The need for funding for individuals to acquire both devices and access to broadband is combined with the additional need for increased resources for providers of services and supports.

The Georgia Technology White Paper project's aim to provide clear, actionable recommendations for policy and programmatic changes is a critical step towards fostering an inclusive digital environment. The compilation of promising practices, along with identified emerging opportunities serves as the basis for actionable recommendations to the Georgia Council on Developmental Disabilities (GCDD).

The White Paper includes 19 recommendations derived from the multiple lines of inquiry carried out over the past two years. We believe these recommendations will be extremely helpful to encourage tech adoption for people with Intellectual and Developmental Disabilities. These are the top 5 goals, and the rest are in the body of the Report.

Recommendations:

1. Establish an Enabling Technology Taskforce in partnership with disability stakeholders, the Georgia Advocacy Office, Tools for Life, and the Department of Behavioral Health and Developmental Disabilities (BDHDD). The Taskforce will develop a strategic plan for moving all parties forward. The current White Paper Advisory Committee (PAC) has expressed interest in continuing. It could serve as the basis of this effort with the addition of Georgia government departments (see PAC list in Appendix C).

2. Host Enabling Technology Summits/TechFests in collaboration with BDHDD, Tools for Life, GAO, providers, and advocacy organizations. The Enabling Technology Summit will foster collaboration and showcase innovations in the use of technology. The Summit would reach a much broader audience than the Assistive Technology (AT) conferences that have been held in the past, i.e., Gates AT conferences by Tools for Life and the Georgia Department of Labor.

3. Work with Georgia BDHDD on policy changes required to implement Enabling Technology for people in the Waiver program, i.e., require discussion of the use of Enabling Technology at the annual plan required for all Medicaid Waiver recipients. Several states have enacted this requirement in legislation and found it to be a best practice, resulting in a significant increase in demand for and adoption of technology.

4. Assure the active engagement and participation of people with I/DD as trainers, planners, managers, and paid staff in all activities. Unfortunately, this has been talked about more than implemented in general practice. The authors of this report attended three state disability tech summits during the research for this project, and while the tagline “Nothing About Us Without Us” was on several PowerPoints, few people with I/DD were present. This effort will require budgeted funds to pay for transportation costs, hotel stays, food, Personal Care Attendants, when needed, and staff support. GCDD has extensive experience fully including people with I/DD and can serve as a role model in this area.

5. Fund a grant program of one entity at a $100,000 level to provide:

a. Provide extensive Enabling Technology training for people with I/DD, their families, Service Coordinators, Direct Support Professionals, advocates, and teachers including webinars and presentations at Georgia disability conferences. Utilize people with I/DD as paid technology trainers.
b. Serve as host and logistics coordinator for Enabling Technology Tech Summit.
c. Provide extensive communication methods including tech websites, newsletters, blogs, social media, tech forums, webinars, user groups, etc.
d. Develop and advocate for policy development to support the implementation of Enabling Technology.
e. Provide accommodation funds for the active participation in Enabling Technology as participants and trainers, Summit Task Force participants, and other activities.

In conclusion, the Georgia Technology White Paper Project represents a comprehensive effort to address the challenges of digital exclusion facing the I/DD community. By focusing on the identification of barriers, the development of targeted recommendations, and the promotion of digital inclusion, this initiative holds the potential to significantly improve the accessibility and usability of technology for people with I/DD, thereby enhancing the individual's independence and self-determination.

The commitment to leveraging technology as a tool for empowerment and inclusion is a commendable goal that resonates with broader efforts to bridge the digital divide and ensure equitable access to technology for all.

II. Introduction

The importance of technology in our lives is increasing rapidly as the pace and introduction of new devices quicken every day. While technology has both advantages and disadvantages, the cost of being left out of the digital world, referred to as the digital divide, is increasing dramatically. What were once in-person tasks or simple phone calls, such as banking, applying for jobs or even making doctor's appointments, now require online access. And many require passwords, new accounts, and verifications from your smartphone.

People with Intellectual and Developmental Disabilities (I/DD) have been largely left out of this technology revolution and are at great risk of being left further behind as the pace quickens with the introduction of each new technology. For example, the Georgia survey conducted for the White Paper, showed that 35% of people with I/DD didn't have a cell phone (Friedman & Beckwith, 2023). We are reminded of this quickening pace, almost daily, with the newly reported wonders of Artificial Intelligence and ChatGPT. Eric Schmidt, the former CEO of Google, said recently that it took Gmail five years to reach 100 million registered users. ChatGPT reached this in only five months (Amapour and Co, 2023). Facebook took one year, Twitter two and a half years, and Netflix five years. The speed of technology adoption across different platforms is shown in Figure 1.

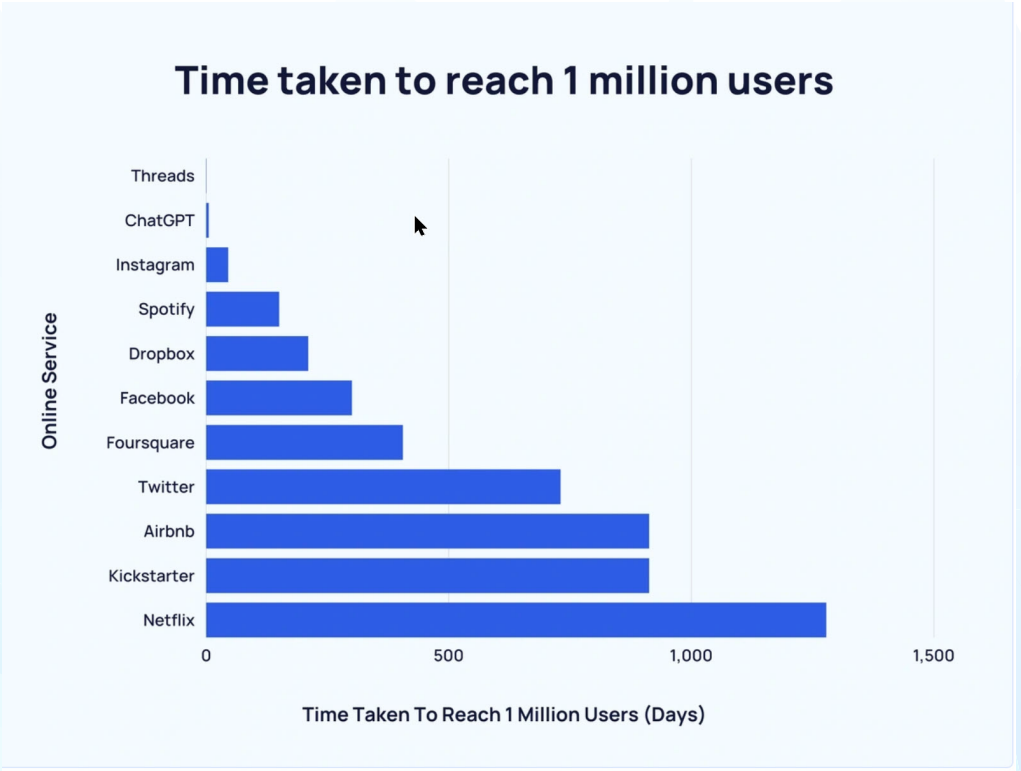

Figure 1

While Assistive Technology, like mobility devices and Augmentative and Alternative Communication devices (AAC) has revolutionized the lives of many people with disabilities, this success has yet to be translated into widespread availability and adoption of technology by the I/DD community, leaving many with outdated technology or no technology at all. The survey conducted for this White Paper, described below, shows these discrepancies. For example, only 12% of people with I/DD used telehealth compared to 80% for the average American. These issues are compounded by the significant lack of broadband Internet in the many rural areas of Georgia.

COVID-19 had a very negative impact on people with I/DD. It resulted in lockdowns in residential homes, shelter-in-place requirements, and great social isolation. Facetime, social media, and videoconferencing became the only ways for families to keep in touch, or often, to even see their loved ones. The rapid adoption of technology during COVID-19 by the general public also highlighted the issues of the digital divide and digital accessibility.

Fortunately, there is good news on three fronts for overcoming these barriers. First, the federal government has awarded Georgia $1.3 billion dollars to increase broadband coverage primarily in rural areas. Second, the Georgia Medicaid Waiver program for people with I/DD has been approved to pay for assistive technology up to $2,000 per year. Third, there is a robust movement of State DD offices across the country that are currently providing technology to people with I/DD. This movement, under the name of Technology First, Enabling Technology or Supportive Technology, is available for Georgia to learn from other states' experiences and avoid reinventing the wheel. These three developments provide unprecedented opportunities to overcome the digital divide for Georgians with I/DD.

III. Overview of the White Paper Project

The Georgia Technology White Paper Project is aimed at identifying barriers to technology adoption and developing recommendations to overcome these issues for Georgians with I/DD in rural and underserved areas. The overarching goal is for every person with I/DD to have the same amount of technology as everyone else. To achieve this, multiple factors need to be considered. Factors that directly impact the individual include connectivity, affordability, support and training, and devices. Also at play are broader systemic issues that serve to promote or hinder success. These issues are public policy, accessibility, and funding, as well as evolving developments in the tech industry. How these factors interact is shown in Figure 2.

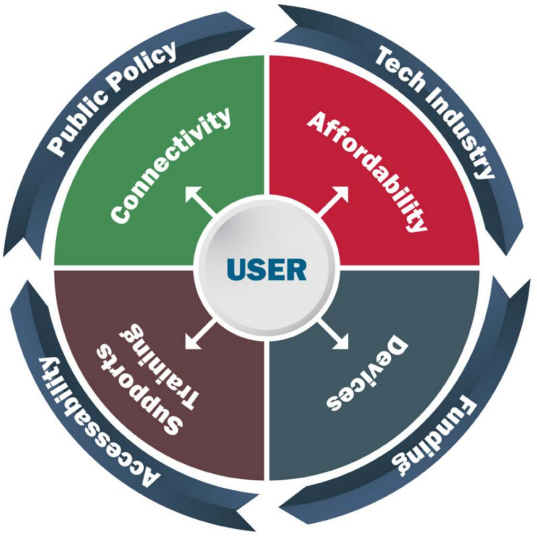

Figure 2: Systemic factors affecting technology use

The Technology White Paper project is part of the Council's State Plan, Objective 2, to increase access to technology for people with intellectual and developmental disabilities in rural and underserved areas. The overall purpose of the Georgia Technology White Paper Project, as stated in the Council's Request for Proposal (RFP), is to "create a research based White Paper to identify barriers for people with intellectual and developmental disabilities to using technology and to develop recommendations to overcome these issues, particularly in rural and underserved areas by 2027."

The RFP specifically asked for national comparisons along with practical solutions for how the Council could increase access to new, emerging, and current assistive/adaptive technology for people with intellectual and developmental disabilities.

The White Paper project had several components. These were:

1. Conduct surveys, focus groups, and interviews with people with developmental disabilities, their families and experts in Georgia.
2. Conduct interviews with state officials in the 16 states most advanced in implementing new technologies to determine what has worked best, what the barriers are, and how Georgia can most effectively move forward.
3. Provide clear, action-oriented recommendations regarding policy and programmatic proposals that the Council can act on during the current 5-year plan.

Each of the White Paper components are illustrated in the infographic below Figure 3.

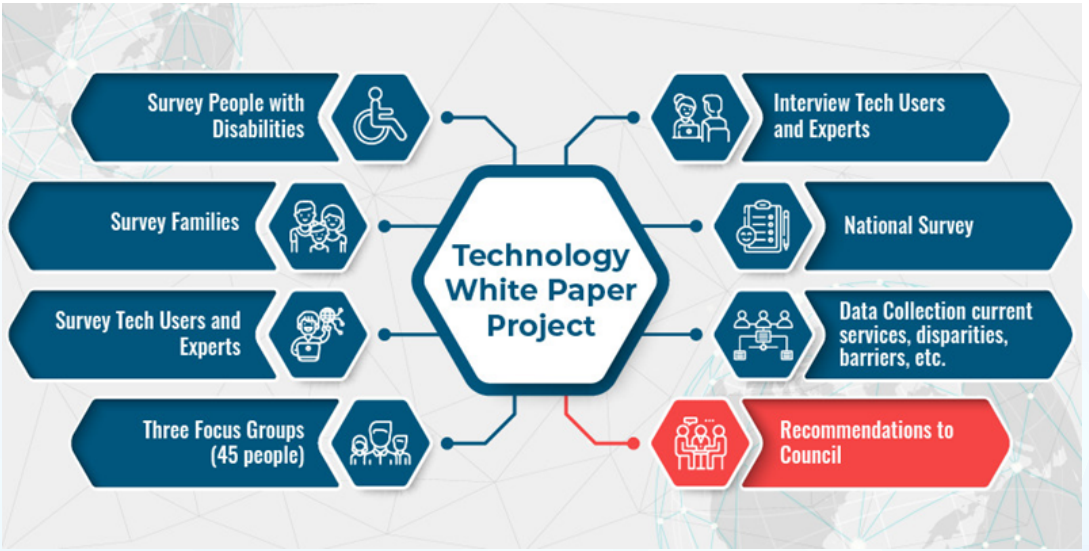

Figure 3: White Paper Project Components

The Technology White Paper project conducted the following research activities:

1. Technology survey with 170 respondents, 92 Georgians with I/DD and 78 with families (Friedman & Beckwith, 2023).
2. Four focus groups with 23 Georgians with disabilities, their family members, teachers, and professionals across Georgia.
3. Conducted 88 interviews with people with I/DD, their families, state and national officials, and technology professionals, including:

    a. 35 state officials in 16 states responsible for implementing Enabling Technology in Colorado, Connecticut, District of Columbia, Indiana, Maine, Maryland, Massachusetts, Minnesota, Missouri, Ohio, Oklahoma, Pennsylvania, Rhode Island, Tennessee, Washington, and Wisconsin.
    b. Twenty national technology experts.
    c. Five national disability organizations.
    d. Twenty Georgia professionals, families, and self-advocates.
    e. Seven Georgia officials and others responsible for implementing enabling technology including Department Behavior Health and Developmental Disabilities, Tools for Life, Center for Design, Georgia Tech, Georgia Advocacy Office, and Georgia Vocational Rehabilitation agency.
    f. Associate Commissioner, U.S. Health and Human Services, Administration on Community Living.

4. Attended three in-person state disability technology summits in Ohio, Pennsylvania, and Tennessee.
5. Visited a Technology Smart Home in Tennessee.
6. Conducted a literature review of technology reports and research articles. This included a review of five state and seven national technology reports as well as 90 articles.

IV. Current Assistive Technology (AT) Services in Georgia

Department of Behavioral Health and Developmental Disabilities

The majority of support services in Georgia for people with I/DD are provided by the Georgia Department of Behavioral Health and Developmental Disabilities (DBHDD) through its federally funded Medicaid Waiver program. These are comprised of two Waivers, the Comprehensive Supports Waiver Program (COMP) and the New Options Waiver (NOW). There are currently 13,398 people with I/DD who are served by these two Waiver programs. An additional 6,084 people are served in the Family Support Program who are not in waiver services but have a diagnosis of a developmental disability.

Assistive Technology (AT) services had not previously been provided under the Georgia Waivers. Assistive Technologies are equipment, items or devices used to improve or maintain the functionality of an individual with a disability. For the first time, on July 15, 2022, the Center for Medicare and Medicaid (CMS) approved the inclusion of AT services in both Waivers as a billable service. This service had an annual cap of $1,195 but was increased to $2,000 as the result of a rate study which raised many of the service rates across the board (Burns & Associates, 2022). Environmental and vehicle modification caps were increased to $15,000 every five years. The new Waiver has a very important provision allowing for the Individual Service Planning (ISP) team to approve AT devices for up to $300 per year without a formal assessment by an AT professional. This provision could provide for the acquisition of many off-the-shelf technologies commonly used by the public such as Smartphones, Voice Assistants, Smart Watches, Ring doorbells, Wearables, Tablets, and computers, etc.

Over the following 18 months, the DD Division developed and received regulatory approval for a revised Provider Manual and necessary procedures to enable payment for AT Services under the Waiver in Georgia. Ben Satterfield, with Tools for Life, was contracted to assist in the development of strategy and training DD Division staff. A training program was developed, and field tested to train all Georgian Service Coordinators and field staff in AT. The training will begin shortly.

Georgia can only pay for AT services that are delivered by providers approved for enrollment in the Waiver program. Georgia DBHDD has an elaborate, expensive, and time-consuming provider approval process. Many small independent providers such as Physical Therapists and Occupational Therapists have found the approval process too difficult and/or expensive to comply with. This approval process and low reimbursement rates has also discouraged national technology providers from applying to provide tech services in Georgia. There are currently no approved providers of AT services in Georgia. In January 2024, the DD Division had a new provider enrollment period for new technology providers. The Division has received several applications to provide AT as a service and is expediting the provider enrollment process.

Tools for Life, Georgia Tech

Tools for Life is Georgia's Assistive Technology Act program that promotes increasing access to and acquisition of AT devices and services. Tools for Life provides AT demonstrations, training, and an equipment reuse program.

As part of its role in technical assistance, Tools for Life worked with the Department of Behavioral Health and Developmental Disabilities to help write the policies to include other assistive technologies in the waiver program. This year is the first time AT was approved to be purchased with waiver funding. Additionally, Tools for Life developed a training program to be provided to Support Coordinators and field staff.

In 2023, the program helped 58 people with various disabilities obtain devices needed for mobility, seating and positioning, and daily living. Short-term loans for AT devices were provided to 263 people. Tools for Living operates a program to refurbish and repair AA devices. This included 11,191 mobility, seating and positioning equipment, 49 vehicle modifications, 105 computers, and 35 daily living devices. Tools for Life staff provided training in assistive technology to 936 people with disabilities, families, teachers, employers, and other professionals.

The Tools for Life contract with the Georgia Department of Education and the Georgia Department of Vocational Rehabilitation allowed for the purchase of accessibility enhancement software for the students with Individual Education Plans (IEPs) in the 149 Georgia school districts and those students who have transitioned into post-secondary education. This software is free for all districts. This allowed the school districts to save $367,680. This Cooperative Buying Program allows the smaller and rural districts to afford additional software that is needed for their students with IEPs.

Georgia Advocacy Office, Assistive Technology Program

The Georgia Advocacy Office (GAO) serves as the federally funded Protection and Advocacy agency for Georgia. There is one agency in each of the states and territories. The purpose of the GAO is to protect and advocate for the rights of people with I/DD, Traumatic Brain Injury, mental health, and other disability issues. One of their specific mandates is to advocate for Georgians to increase access to AT.

In 2023, the program helped 27 people with a variety of disabilities obtain health related durable medical equipment, AT for housing modifications (a ramp in a condominium, an accessible thermostat in another), and AT for employment preparation. The GAO also provides AT presentations at state and national conferences and serves on many state-wide committees as a voice for public awareness and advocacy for increased access to assistive technology.

Special Education

According to the FY23 Federal Child Count, Georgia schools served 230,233 students with disabilities in special education programs (Georgia Department of Education, 2023). The Department of Education has limited data on the use of assistive technology (W. Low, State Director, Division for Special Education Services and Supports, personal communication, March 22, 2024). A national study of assistive technology usage showed 30% of students with disabilities were receiving some type of assistive technology (Bouck & Long, 2021). This was considered low by the authors, as it is widely believed that almost every student with disabilities could benefit from some type of AT.

The need for more assistive technology was recently recognized by the U.S. Department of Education, which issued in January 2024 "Guidance" and a "Dear Colleague" letter promoting the use of technology by students with disabilities under the Individuals with Disabilities Education Act (IDEA). The "Dear Colleague" letter stated, "The use of AT devices and services is critically important for many children with disabilities as it can greatly improve their educational experience, improve their educa-tional and post-school outcomes, and help develop important skills and abilities. These devices and services must be available, accessible, and appropriate for children with disabilities and their families." (U.S. Dept of Education, 2024a, p. 2).

The Guidance, issued at the same time, stated, "IEP Teams must consider AT devices and services for all children with IEPs and must provide and fully fund the AT devices and services if the IEP Team determines they are necessary to provide FAPE [Free Appropriate Education] for the child" (U.S. Dept of Education, 2024b). The provision of AT is critical to students with disabilities for these three reasons.

These reasons are:

1. **The device is selected, procured, maintained, paid for, and upgraded over time by the school system.**
2. **Training on the device is provided to the student.**
3. **As with any education, the earlier the student begins using AT, the more proficient they will become with the technology as an adult.**

Vocational Rehabilitation

The Georgia Vocational Rehabilitation Agency (GVRA) has historically served people who are blind, visually impaired, deaf, deaf-blind, or hard of hearing and want to work. GVRA operates the residential Roosevelt Warm Springs and Cave Spring Centers for youth who are deaf or hearing impaired. Additionally, GVRA provides extensive transition pre-employment services, including assistive technology required for employment, through local schools and centers.

Results of 4 Focus Groups and 170 Surveys in Georgia

Four Focus Groups with 23 people

Four online focus groups were held with 23 Georgians with disabilities, their family members, teachers, and professionals across Georgia. One focus group was held with Community Strong, a self-advocacy organization. Three focus groups were held with family members and special education teachers. People were invited to attend the focus groups through a flyer distributed widely through email by the 27 organizations serving on the Project Planning Committee. Additionally, the Georgia Behavioral Health and Developmental Disabilities Division promoted the focus groups through their Support Coordinators and Case Managers.

In the focus groups, participants described their experiences with technology. A qualitative analysis was conducted of the transcripts of the focus groups to discern the most common challenges and solutions in the use of technologies expressed by the participants.

People in the focus groups were users of technology to some extent. Overall, they found technology useful and helpful. Their favorite devices were in keeping with those of the general population, such as smartphones and tablets. They described how technology helped them do things like:

1. **Play games.**
2. **Listen to music.**
3. **Send email.**
4. **Watch videos and movies on YouTube and Netflix.**
5. **Meet people through video conferencing.**
6. **Find directions over GPS.**
7. **Find new recipes.**
8. **Bible study on the web.**
9. **Connect with friends.**

A few people used keypads on front doors for easier access to their homes, and some had automatic door openers, enlarged screens due to poor vision and motion sensor activated lights in their homes. Nonetheless, they identified funding and cost as the biggest barriers to using technology. Other barriers were both personal and technical. These barriers included:

1. **Lack of knowledge to use devices.**
2. **Expenses and costs of devices and the Internet.**
3. **Lack of availability of the Internet.**
4. **Slow speeds of the Internet.**
5. **Lack of support, guidance, and training.**
6. **Limited exposure to the possibilities of technology.**

Many participants expressed difficulty using the technology.

Mary, the mother of a child with autism, mentioned her son was intimidated by technology.
John, a person with I/DD, said, *"I actually used Dragon speech, but it wasn't compatible for me just because it didn't fit the way I was doing everything."*

Sandy, a teacher in a post-secondary college program, said, *"I think, that if we had more access to technology, our students will be able to be a lot more successful in the classroom."*

Jay, a person with DD living in a nursing home waiting for services in the community, said that he uses his iPhone for everything but, said, *"I have to stay up till three a.m. in the morning to get good Internet in my building."*

The findings from the focus groups were used to develop the questions for the subsequent technology survey.

Georgia Statewide Survey

A statewide survey of technology usage was conducted with 170 people including 97 people with Intellectual and Developmental Disabilities (I/DD) in Georgia, on their use of technology. Initial results were reported to the Council in the Georgia Technology White Paper Policy Brief #1: Survey Results of People with Intellectual Disabilities (Friedman & Beckwith, 2023). The survey identified four key barriers to technology adoption and utilization, including:

1. **Access to devices.**
2. **Access to the Internet.**
3. **A lack of support and training.**
4. **Funding.**

A key finding from the survey identified the continuing importance of families (49%) and Direct Support Professionals (47%) in providing technology support and assistance.
The most compelling results from the survey were the comparison of technology usage by the survey respondents with the general US population. As depicted in Figure 4, this comparison illustrates the limited access and use of technology by Georgians with I/DD. For example, 80% of the general population uses telehealth, compared to 12% of Georgians with I/DD. Similarly, 91% of the general population use email, compared to 55% for Georgians with I/DD.

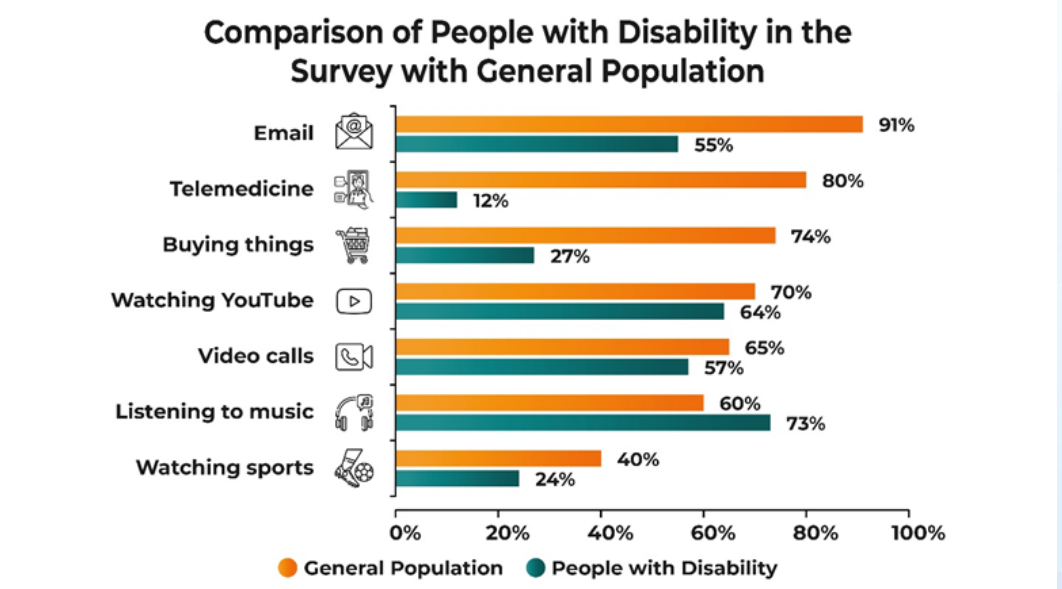

Figure 4

Source data: US Population Use of Internet, Census data, American Community Survey, 2021.

According to the survey:

- **55% of Georgians with I/DD use email vs. 91% of Americans.**
- **12% of Georgians with I/DD use Telemedicine vs. 80% of Americans.**
- **27% of Georgians with I/DD use the Internet to buy things vs. 74% of Americans.**
- **64% of Georgians with I/DD watch YouTube vs. 70% of Americans.**
- **57% of Georgians with I/DD make video calls vs. 65% of Americans.**
- **73% of Georgians with I/DD listen to music over the Internet vs. 60% of Americans.**
- **24% of Georgians with I/DD watch sports over the Internet vs. 40% of Americans.**

A key issue identified from the survey was that the Internet was used by the general population to actively find information while people with I/DD used it primarily for passive activities like listening to music, watching videos, or playing games. The survey results also showed the importance of families (49%) and Direct Support Professionals (47%) as the key sources of technology support and assistance to people with I/DD.

The Survey Report provided useful data and information on the current technology use by 97 Georgians with developmental and intellectual disabilities. However, the survey respondents were self-selected, many were involved in a self-advocacy group and may not represent the broader population of individuals with I/DD in Georgia.

National Core Indicators (NCI)

The National Core Indicators (NCI) is a national project that collects data annually on people with I/DD from multiple states. The data is collected through in-person interviews and a records review. The NCI's most recent report, 2021-22, added a set of 17 questions related to the use of technology. The full Georgia report is available online (NCI, 2023). NCI is conducted annually and will provide a look at technology adoption over time.

Success Stories in Georgia

Sandra *uses Zoom on her laptop to run her local self-advocacy meetings. Her Alexa Echo voice assistant is matched up to her smartphone calendar and verbally announces her upcoming meetings, so she doesn't forget and is on time.*

Joe *can see when his caregivers are at his front door on his smartphone, so he can stay safe in his apartment.*

Mike *says: "I use Google AI to write emails, send messages, create flyers to hand out, and write policy. I also write speeches. I have been an advocate for many years, before AI it took 4 hours to write an email. Now with AI I can do my work." I am not allowed to use AI in school because it is banned by my teachers. They said it does the work for you and that's cheating".*

V. Promising Practices from Other States

What Other DD Councils Have Done

Few DD Councils have funded Enabling Technology projects. Many DD Councils supported technology adoption in collaboration with their State DD Offices by contributing funds for technology summits or through participation in tech stakeholder groups. During COVID-19, several Councils provided funding for the purchase of devices for people with I/DD. For example, Colorado provided funding for the purchase of devices. The Maine Council provided 50 devices during COVID-19 for people with I/DD under a pilot demonstration project model. The Nebraska Council attempted this but encountered funding restrictions within its state procurement office and was unsuccessful. The Pennsylvania DD Council funded the development of a guide on Smart Home technology (Pennsylvania Assistive Technology Foundation, 2022) and a project to provide statewide online technology training.

Nationally: Promising Practices from 16 Enabling Technology States

Sixteen states were identified as having substantive enabling technology initiatives through the literature review and interviews with national enabling technology experts (Figure 5). Interviews were conducted with 35 state officials and 20 technology experts from these 16 states.

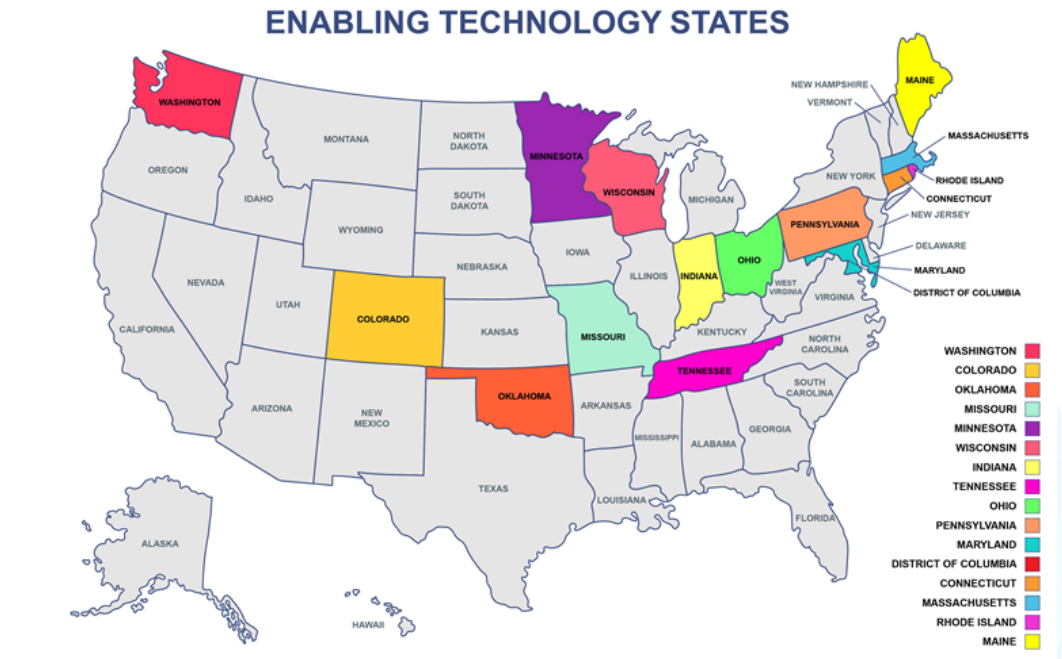

Figure 5

The sixteen states were:

1. Colorado
2. Connecticut
3. District of Columbia
4. Indiana
5. Maine
6. Massachusetts
7. Maryland
8. Minnesota
9. Missouri
10. Ohio
11. Oklahoma
12. Pennsylvania
13. Rhode Island
14. Tennessee
15. Washington
16. Wisconsin

Summary of Promising Practices by Majority of 16 Enabling Technology States

1. Enabling Technology In-Person Summits.
2. Enabling Technology Task Force (time-limited with action goals).
3. High funding caps per year or lifetime or none at all for Enabling Technology devices and services.
4. Extensive formal and informal training of all stakeholders, including people with I/DD, their families, support coordinators, providers, direct support professionals and advocacy organizations.
5. Approval of off-the-shelf, low-cost Enabling Technology devices by Service Coordinators and Circles of Support.
6. Collection and dissemination of Success Stories, frequently through video using YouTube and TikTok.

Other Most Used Practices

1. Remote Supports is a service model that allows people to be supported by staff that are in a remote setting and not physically present with the person. Remote Supports are provided through communication technologies like video conferencing, call in centers, specialized apps, smartphones, tablets, and computers. Remote Supports are provided by a majority of states but are not included in the current Georgia Medicaid Waiver.
2. Formal training and certification in Enabling Technology for Support Coordinators, provider staff, and entire agencies.
3. Additional funding provided by American Rescue Plan Act (ARPA) or state funds.

Promising Practices from State DD Offices

Ohio – Is the granddaddy of Technology First. Ohio was one of the first states to implement remote supports in what was initially called remote monitoring in 2011. They were the first state to have Technology First legislation signed by then Governor Kasich in 2018. This executive order mandated the effort of all Ohio departments to consider technology first in their delivery of services, including education, transportation, vocational rehabilitation, and aging. Ohio is considered to have one of the largest and most comprehensive tech programs in the country serving about 1,300 people with remote supports and tech devices. Ohio has a goal to have 25% of Waiver recipients use AT or remote supports by 2026 (Ohio Department of Developmental Disabilities, 2022).

Ohio has a unique program, called Tech Ambassadors, that has eight people with I/DD who serve as paid technology trainers for both remote supports and off-the-shelf technology. They share their experiences widely across the state. They make presentations at conferences as peers, provide technical assistance through phone calls, attend virtual and in-person meetings or individual planning meetings. (https://ohiotechambassadors.org/).

Tennessee – has one of the largest Enabling Technology programs in the country serving 1,000 people. It has a dedicated Enabling Technology office along with six Tech Champions serving in each region of the state. They provide technical assistance to individuals with I/DD and their families. Tennessee has two technology model homes equipped and operated by the state. Milton Neuenschwander, Tennessee Director of Technology says, *"The model homes are one of our biggest educational tools helping people understand what the program is all about and the newer technologies that are available."* Tennessee holds a Tech Summit every year.

Massachusetts – used ARPA funds to create several model homes and apartments to provide respite and give people with I/DD an opportunity to experience the use of remote supports to see if they can feel safe. "If you sit down and talk about remote supports with families, people's eyes glaze over. They don't know what you are talking about" (Elizabeth Sandblom, Deputy Assistant Commissioner of Operations, Department of Developmental Services, personal communication, February 10, 2023). Massachusetts contracted with 18 providers to provide Remote Supports. *"We got a lot of pushback in the beginning, but now, a year later, people have come back and literally said, we are so grateful that someone had the hindsight to do this" (*Sandblom, 2023).

Massachusetts, like several other states, used Shift for technology training. As Elizabeth Sandblom said, *"We put some of our Support Coordinators through the Shift training to become Tech Navigators. And they really became kind of linchpins, pushing their colleagues forward"* (Sandblom, 2023).

Minnesota – is one of the largest state implementors of Enabling Technology. They were the first state to have remote supports approved by CMS during the COVID-19 Public Health Emergency. They had been using monitoring technology with sensors for many years. They are currently serving 3,500 people with I/DD in their remote supports Waiver.

Minnesota has legislation that requires all service planning meetings to include "a discussion of how technology might be used to meet the person's desired outcomes..." (Minnesota Statutes, 2023). Minnesota has a new technology training program operated by the state provider organization with American Rescue and Plan Act (RPA) funding of $303,000 to provide training to people with I/DD, their families, and providers (https://www.assistivetechnologyresources.org/). They also have a volunteer AT group that provides monthly training events (https://mn-neat.org/about-us).

Oklahoma – has two pilot projects. The first was in partnership with AbleLink to research how specialized software could benefit people with I/DD. AbleLink modified their accessible desktop software to include Oklahoma links and resources.

The second pilot project is currently underway. It is a study of the efficacy of wearables like smart watches, Fitbits, or sensor rings for improving healthcare for individuals with I/DD. It will have 75 participants who will choose their own wearable device based on their desired outcomes. It will answer questions such as: Which devices work best for people with different disabilities and needs? What are the accessibility issues? Which wearables do people continue to use? Did they continue wearing the device? Did it help them achieve their desired outcome? Did they share their health information with their physician? The study will have 75 participants and is being conducted by the University of Kansas.

Finally, Oklahoma is creating three technology model homes over the coming year through a partnership with a local hospital system.

Rhode Island – had a unique technology fund that allows service recipients to apply for one-time awards of tech devices up to $700, some slightly higher. A $2 million dollar fund was established as a result of a federal lawsuit and consent decree for employment.

Through the fund, 821 people received a technology device, mostly tablets, sometimes larger screens for vision impairments and other devices. Almost 25% of the people in the Waiver program received some type of technology at a cost of $1 million dollars. A five-person Tech Review Committee from the state DD Office approved the applications for funding.

Success Stories Nationally

Rich *uses his Alexa Echo to ask the weather, to listen to music, and to ask questions. Rick says, I live alone and am lonely, so I like hearing Alexa talk to me.*

Jennifer is *a self-advocate who lived in an institution long ago and had a baby while in the institution. She worked for a state advocacy agency for many years. Recently, she had her foot amputated due to poor diabetes care. Jennifer is able to continue her independence through technology. The trailer she has lived in for several years is now a smart house with sensors, an automated medication dispenser,* auto shutoff stovetop, a talking microwave, and automated doors, which keeps her feeling safe.

David *is about to do his advocacy Zoom meetings using his new Alexa Echo Show rather than a computer. He uses it to make phone and Zoom calls. His voice assistant speaks his calendar appointments throughout the day. He lives in a smart home with automated water controls, door openers, and light controls.*

VI. Future Challenges and Opportunities

Technology innovation always has both benefits and drawbacks. The challenge for all of us in general and for the Georgia Council is to maximize the benefits and minimize the disadvantages. The following five sections address both the opportunities and challenges of coming technological developments.

Broadband Internet Access and Affordability: Rural and Underserved Areas

Broadband Internet access has two primary issues. The first is cost, and the second is the lack of broadband connectivity, particularly in rural areas. Cost is a problem, particularly for people with I/DD, as well as low-income residents in both rural and metropolitan areas, many of whom are living on governmental benefits such as Social Security Insurance (SSI), Social Security Disability Insurance (SSDI). The Affordable Connectivity Program (ACP) began on December 31, 2021, and provided a savings of $30/month for broadband costs for low-income individuals. Unfortunately, this program will run out of funds in May 2024, as Congress failed to continue funding it. **Georgia currently has 722,473 households enrolled in the ACP program.** Each household was eligible to receive a $30 discount on their monthly communication bill (Garner, 2024). There were efforts to extend the ACP program in Congress; however, the effort has failed.

The lack of broadband Internet connectivity in rural areas is a very significant problem across the US, particularly in Georgia, which has 35% of its population living in rural counties. Most of these counties have limited broadband connections, often with 50% to 85% of their rural population lacking broadband (Census Bureau, 2024). Currently, more than a million Georgians lack access to reliable high-speed Internet service, 70% of whom are living in rural areas (Georgia Broadband Plan https://broadband.georgia.gov/node/341.

Figure 6 shows counties in dark green with limited broadband connectivity, consisting of the majority of the population in southern Georgia. This map can be viewed interactively online at https://mtgis-portal.geo.census.gov/arcgis/apps/webappviewer/index.html?id=c5e6cf675865464a90ff1573c5072b42

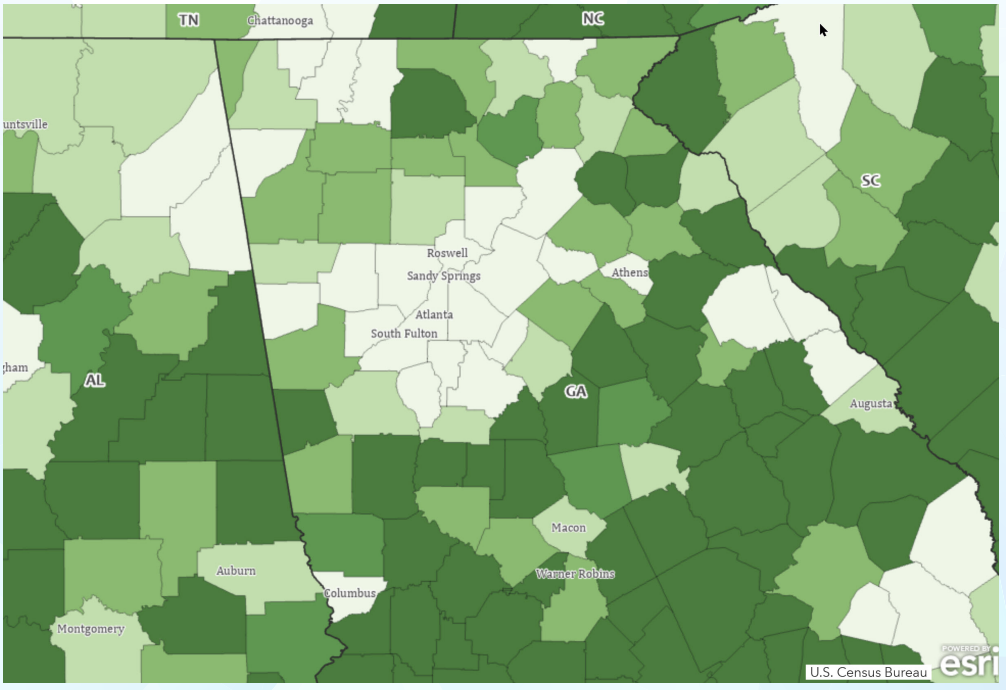

Figure 6: Low broadband access in southern Georgia

The lack of connectivity is largely due to the lack of population density. Providing high-speed Internet in rural areas is a challenge due to the high infrastructure cost of running lines to just a few homes or businesses over many miles. Additionally, there are fewer paying customers in these less populous areas to recoup the costs over time. This is exacerbated by the decreasing population in rural counties as younger people move to more urban areas. While Georgia has gained population over the last 10 years, 67 counties (42%) lost population to urban and metropolitan areas (Census Bureau, 2024).

In 2018, Georgia created the Georgia Broadband Deployment Initiative (GBDI) as part of the Achieving Connectivity Everywhere (ACE) Act with the goal of providing broadband service coverage throughout the entire state. Since then, the state of Georgia has made significant strides to increase broadband coverage in rural areas using both federal pandemic funds under the American Recovery and Rescue Plan Act (ARPA) and state funds. Yet, significant gaps remain.

In 2021, the US Congress passed the Infrastructure Investment and Jobs Act, which included the Digital Equity Act (Congressional Research Service, 2021, August). The goal of the Act is to achieve 100% broadband coverage across the US. The Act was funded at an authorized cost of $42 billion dollars. It is considered the largest public infrastructure effort since the Interstate Highways Program of 1956. The Broadband Equity, Access, and Deployment (BEAD) program oversees its implementation https://broadbandnow.com/research/bead-grants. The Act designated people with disabilities as one of eight priority groups to be served through broadband development due to having historically experienced lower rates of computer and Internet use.

The eight covered groups are:

- **Individuals living in households with incomes at or below 150% of the poverty line.**
- **Individuals 60 years of age or older.**
- **Veterans.**
- **Individuals living with one or more disabilities.**
- **Individuals with barriers to the English language.**
- **Members of racial and ethnic minority groups.**
- **Individuals residing in rural areas.**
- **Individuals incarcerated in a nonfederal correctional facility.**

Georgia expects to use the $1.3 billion of BEAD funds to be able to reduce the lack of broadband coverage in rural areas by 50% (see the Georgia Five-Year Action BEAD plan at: https://drive.google.com/file/d/1HjCm23x62Ig1CuSWf83Dbh7R13kzTZJU/view.
The Act requires recipients of grant funds to provide a low-cost broadband service option to ensure that more individuals and families can afford to access broadband services. Georgia's BEAD plan specifically addresses affordability as a barrier to broadband adoption. The plan provides for giving extra points for affordability in the awarding of grant funds through the state broadband grant program and working with Internet Service Providers to provide robust low-income products at reasonable rates (Georgia Technology Authority, 2023, p. 96).

It should be noted that StarLink, the satellite company owned by Elon Musk, recently began providing broadband Internet using a satellite dish across much of Georgia and the world. They currently have 5,500 satellites in orbit. However, the cost of $120 per month and the $600 equipment charge are prohibitive and outside the possibility of acquiring for most people with I/DD. Amazon, Project Kuber, will enter the satellite market this year, and we can expect these high prices to drop over time.

Artificial Intelligence (AI)

There are many definitions of Artificial Intelligence or AI. IBM defines AI as technology that enables computers and machines to simulate human intelligence and problem-solving capabilities (IBM, 2024). We prefer the following definition by the international consulting company, Accenture (n.d.):

> *Artificial Intelligence (AI) is a constellation of technologies that allow smart machines to extend human capabilities by sensing, comprehending, acting, and learning, thereby allowing people to achieve much more than they could on their own. These technologies include natural language processing, computer vision, and other applications of machine learning recognition.*

The advent of AI holds much promise for people with disabilities in general and particularly for people with I/DD. AI has already been integrated into programs and apps that people with DD use regularly, including:

- Autocomplete typing, spam filters, personalized streaming recommendations,
- Uber and Lyft shared cars, and driving directions.
- VoiceiTT allows individuals with difficult-to-understand speech translated into understandable computer-generated speech for real-time conversations.
- Automated Closed Captions in MS Teams, Zoom, and other applications.
- Voice digital assistants such as Siri, Alexa, and Google Assistant.
- Voice Technology everywhere (Siri, Alexa, Google, cars, microwaves, refrigerators)
- Chat GPT, Google Gemini, and Microsoft Co-Pilot
- Otter.AI and Google's Live Transcribe app use AI to transcribe speech in real-time for the deaf/hard-of-hearing population.
- Microsoft’s Seeing AI for people with vision loss.
- Be My AI analyzes a photo or object and describes its content for blind people.
- Seleste Smart Glasses www.seleste.com – describes surroundings including reading menus, etc. for blind people.
- Wheelmap: uses AI to crowdsource accessibility information about public spaces.

Artificial Intelligence (AI) and Chat GPT Discriminatory Biases

At the same time that there are many hoped-for benefits of AI, there is also great concern about the problems of AI. There is evidence that AI has inherent negative biases towards underrepresented groups and has negative effects for people when applying for jobs, seeking bank loans, requesting probation vs. prison time in the criminal justice system, health care diagnosis and prognosis, and more. ChatGPT burst on the scene one year ago, in November 2022, as a free app and had one million users in its first month. It currently has 180 million users (Duarte, 2024, March). ChatGPT is built on large language models drawn from information copied from the Internet. As such, there is a lack of disability representation in the data sets that are used. Much of the information on the Internet contains negative language and portrayals of people with disabilities as well as other marginalized groups.

The Penn State College of Information, Sciences, and Technology Research on AI and Disability (Venkit, Srinath, & Wilson, 2023) found specific biases in the AI tools they analyzed against persons with disabilities. These included:

- **Statements referring to people with disabilities received significantly more negative and toxic scores than statements from other control categories.**
- **Tools often classified statements as negative or toxic simply by the presence of terms such as 'blind.'**

These hidden and unknown biases in AI have the potential to have many negative consequences for people with disabilities. For example, Rite Aid Pharmacy was recently banned from using AI facial recognition after falsely tagging consumers, particularly women and people of color, as shoplifters (Federal Trade Commission, 2023). A recent ADA guidance document from the US Department of Justice (ADA.gov, 2022) explains how some algorithms and AI can potentially lead to disability discrimination for hiring in areas such as:

- **Job advertisements to targeted groups.**
- **Deciding if an applicant meets job qualifications.**
- **Holding online video interviews of applicants.**
- **Using computer-based tests to measure an applicant's skills or abilities.**
- **Scoring applicants' resumes.**

Funding

Georgia is the eighth largest state in the Union, with a population of 11,149,000 (Census Bureau, 2021). Outside of medical devices, i.e., wheelchairs, scooters, hospital beds, prosthetics, etc., the Department of Behavioral Health and Developmental Disabilities (DBHDD) is the major source of funding for AT services through the Medicaid Waiver program. The federal government pays 67% of the costs of the Waiver program in Georgia based on population and poverty rates (Congressional Research Service, 2021). Georgia's total expenditures for Medicaid Waiver DD services were $697,001,307 as of 2019 or $66 per state resident (Larson, 2022). The medium expenditure for all US states is $159, almost double the amount of funding. Georgia's funding of Waiver services for people with I/DD ranks 44th lowest out of the 50 states. This relatively low level of funding for I/DD services poses significant barriers for the adoption of Enabling Technology that are proposed in the recommendations section.

Data Collection

There is a tremendous need for data on the use of Enabling Technology. This is a problem nationally. The data needed are the number of people receiving what types of services, types of devices, demographics, and outcome data on benefits to the individual. Data is needed and critical to demonstrate success and acquire additional funding.

There is a lack of definitions compounding the problem of data collection. The term assistive technology is overly broad, with different meanings in different systems. This is compounded when seeking Waiver approvals from CMS. There is an effort amongst the National Enabling Technology Collaborative for State Partners to create standard definitions to be used in Waiver definitions and to help obtain CMS approvals of future Waivers and additional state funding.

Diversity Issues

Diversity continues to be a major issue in society in general as well as in the disability community. The requirement to address what is called 'Disparate Impact' is included in DD Council plans and most RFPs issued by Councils. The technology field is widely recognized as consisting of mostly white and Asian males. Other underrepresented groups such as women, African Americans, Hispanics, etc., have very little presence in technology employment, research, coders and management. Employment in the computer industry is 7% for African Americans, 8% Hispanics, 20% Asians and 62% whites (Pew Research, 2021).

While many efforts have been made to address these diversity issues by groups such as Women in Tech, Woman Coders, and Lesbians in Technology, little progress has been made over the past decade. The Connecting Minority Communities Pilot Program is a $268 million grant program to Historically Black Colleges and Universities (HBCUs), Tribal Colleges and Universities (TCUs), and Minority-Serving Institutions (MSIs) to address the digital divide.
(https://www.internetforall.gov/program/connecting-minority-communities-pilot-program)

The lack of diversity in the technology field carries over to the use of technology by underrepresented groups and remains a significant challenge to the field in general and to Georgians specifically. In response to this, the Georgia Council has recently issued an RFP to develop a White Paper to promote male African Americans with Developmental Disabilities' employment in technology.

Digital Navigator Programs

Comcast recently announced a $100,000 grant to fund two new Digital Navigator programs in Atlanta, Georgia (Comcast South, 2023). Digital Navigators are a recent model for helping low-income people overcome the digital divide. Digital Navigators provide technical assistance, training, and help with connectivity and devices. Many cities, libraries, and non-profits have started Digital Navigator programs that people with I/DD might join.

VII. Future Trends and Recommendations

The major purpose of the Technology White Paper is to provide recommendations to the Council for use in its current five-year plan (2022-2026) and beyond. This section provides an analysis of the current technology trends, how we foresee their continuing impact and recommendations to Council. The future cannot be predicted but it can be anticipated based on an analysis of current trends. William Gibson, the science fiction writer, famously stated, "The future is already here; it's just not very evenly distributed" (Kelly, 2011). Licklider, one of the earliest purveyors of computers and a Harvard University professor, cautioned us with his insight that "People tend to overestimate what can be done in one year and to underestimate what can be done in five or ten years" (1965).

The technology revolution of the past few years is primarily the result of four technologies all converging to build upon one another. These technologies are:

1. **Cloud computing.**
2. **Faster broadband.**
3. **Increasing computer power.**
4. **Artificial Intelligence (AI).**

The convergence of these technologies has resulted in the trends and advances we are currently experiencing, such as:

1. **Talking computers i.e., Siri, Alexa, Google Assistant.**
2. **Shared rides i.e., Uber, Lyft.**
3. **Medical advances i.e., COVID vaccine developed in months vs years.**
4. **Online everything, i.e., buying, ordering, banking.**

Current Trends That Will Increase Significantly Over the Next Five Years

1. Broadband will be vastly expanded in rural Georgia due to $1.3 billion dollars in the Federal BEAD program specific to the state.
2. 5G mobile wireless will provide wider mobile coverage, improved penetration of walls, and faster speeds, resulting in many new and unknown mobile applications.
3. Widespread adoption of technology by the public overall.
4. Lowered costs of devices that start out expensive and reduce by magnitudes over time.
5. Increased computing power. Moore's Law states that computer power doubles every 18 months. This has held true for the past 50 years (Mack, 2011). This increase in computing power will result in computing devices that are six times more powerful at the end of five years. This will result in many new possibilities, some of which we cannot even envision today.
6. Artificial Intelligence will expand in ways that are unpredictable but will have significant positive and negative consequences.
7. Voice recognition will vastly improve the ability of people with difficult-to-understand speech to communicate (VoiceiTT). It will be rapidly adopted, and embedded in most everyday devices including phones, cars, computers, and tablets.
8. Smart homes' devices will be widely adopted by the general public that can function as AT using voice commands, i.e. automated lights, thermostats, microwaves, camera monitoring, video doorbells, medication dispensers, cook stove panels with automated shut-offs, etc.
9. Smart watches and smart rings for monitoring of life signs for disease, heart rate, exercise, improved medical care and email and texting.
10. Use of small, lightweight robots for cleaning, security, in restaurants, and even companionship.
11. Low-knowledge jobs decreasing due to productivity improvements or replaced entirely by automation and/or use of the web:

    a. **Cashiers replaced by self-checkout at grocery stories,**
    b. **Wait staff replaced by ordering and paying for meals at tables in restaurants,**
    c. **Receptionists, clerks, and cashiers, replaced by the increasing use of the web for shopping, food ordering, registrations, medical appointments, telehealth, etc.**

VIII. Where the Georgia Council Can Make an Impact

Councils were created as part of the Developmental Disabilities Act of 1978. Their mandate is to impact public policy, provide systemic advocacy, and promote innovation through grant funding. Within these parameters, below is an overview of activities the Council can undertake to have the greatest impact, followed by specific recommendations:

1. **Influence and promote public policy in the areas of broadband and the $1.3 billion Bead program, especially in rural and underserved areas.**
2. **Promote advocacy from stakeholders and the DD Network Partners.**
3. **Promote the creation of data collection and Success Stories.**
4. **Award a grant to promote Enabling Technology training and public policy advocacy.**
5. **Ensure the extensive inclusion of people with I/DD in all activities through the Tech Summits and the Tech Stakeholders Workgroup (Nothing About Us Without Us).**
6. **Provide communication, education, newsletters, and publications.**
7. **Build in flexibility to adjust to unpredictable tech change (ChatGPT didn't exist a year ago).**
8. **Work with partners to procure devices and broadband to people with I/DD.**

IX. Recommendations

Around the globe, we are engaged in a technology revolution with many emerging technologies where we cannot predict their adoption, implementation, or even usefulness. Most technologies are introduced for one purpose but become widely used for another, i.e., microwaves and post-it notes (Jana, 2009). To be successful will require great flexibility and the ability to modify Georgia's approaches to meet changing needs and new opportunities. Our recommendations are based on the extensive research conducted for the White Paper. This includes lessons learned from the 88 interviews conducted with Georgia state officials, people with disabilities, their families, tech experts and 16 states implementing Enabling Technology. There was a particular focus on the experiences of Tennessee and Oklahoma as they are smaller southern states with similar populations and characteristics of size and budgets. Almost all of the sixteen states with significant Enabling Technology initiatives started with creating Enabling Technology Taskforces. They later held Enabling Technology disability summits/TechFests. These, therefore, are the first two recommendations:

1. Establish an Enabling Technology Taskforce in partnership with disability stakeholders, the Georgia Advocacy Office, Tools for Life, and the Department of Behavioral Health and Developmental Disabilities (BDHDD). The Taskforce will develop a strategic plan for moving all parties forward. The current White Paper Advisory Committee (PAC) has expressed interest in continuing. It could serve as the basis of this effort with the addition of Georgia government departments (see PAC list in Appendix C).

2. Host Enabling Technology Summits/TechFests in collaboration with BDHDD, Tools for Life, GAO, providers, and advocacy organizations. The Enabling Technology Summit will foster collaboration and showcase innovations in the use of technology. The Summit would reach a much broader audience than the Assistive Technology (AT) conferences that have been held in the past, i.e., Gates AT conferences by Tools for Life and the Georgia Department of Labor.

3. Work with Georgia BDHDD on policy changes required to implement Enabling Technology for people in the Waiver program, i.e., require discussion of the use of Enabling Technology at the annual plan required for all Medicaid Waiver recipients. Several states have enacted this requirement in legislation and found it to be a best practice resulting in a significant increase in demand for and adoption of technology.

4. Assure the active engagement and participation of people with I/DD as trainers, planners, managers, and paid staff in all activities. Unfortunately, this has been talked about more than implemented in general practice. The authors of this report attended three state disability tech summits during the research for this project, and while the tagline **"Nothing About Us Without Us"** was on several PowerPoints, few people with I/DD were present. This effort will require budgeted funds to pay for transportation costs, hotel stays, food, Personal Care Attendants, when needed, and staff support. GCDD has extensive experience, fully including people with I/DD and can serve as a role model in this area.

5. Fund a grant program of one entity at a $100,000 level to provide:

a. Provide extensive Enabling Technology training for people with I/DD, their families, Service Coordinators, Direct Support Professionals, advocates, and teachers including webinars and presentations at Georgia disability conferences. Utilize people with I/DD as paid technology trainers.
b. Serve as host and logistics coordinator for Enabling Technology Tech Summit.
c. Provide extensive communication methods including tech websites, newsletters, blogs, social media, tech forums, webinars, user groups, etc.
d. Develop and advocate for policy development to support the implementation of Enabling Technology.
e. Provide accommodation funds for the active participation in Enabling Technology as participants and trainers, Summit Task Force participants, and other activities.

6. Encourage Georgia BDHDD to join the National Consortium of State Representatives: This informal group is comprised of 20 plus state DD officials responsible for Enabling Technology programs in their states. The group meets to improve their programs through sharing promising practices, newer technology ideas, service definitions, policies, and procedures. Participation can help Georgia learn from promising practices used in other states and avoid reinventing the wheel.

7. Promote Broadband Access Initiatives: Appoint or designate a Council member and/or Council staff to join the Georgia Technology Authority's (GTA) Broadband Advisory Committee to promote the unique needs of people with I/DD in the broadband rollout, including low-income rates and training. GTA is the state agency overseeing the $1.3 billion dollar rollout of broadband, primarily in rural areas, along with low-income access, and digital training, over the next five years.

8. Designate a GCDD member and staff person to become knowledgeable in broadband deployment and Enabling Technology and serve as technology leads. This will require both staff time and funds to attend technology training and educational events.

9. Promote the use of the Georgia Public Library system's resources of computers and computer training programs (Thompson, 2021). (K. Manning, President Library Association, personal communication, February 28, 2023).

10. Work with the Division of Aging to promote the use of Area Agencies on Aging assistive technology services (https://dhs.georgia.gov/aging-disability-resource-connection).

11. Promote the Affordable Connectivity Program (ACP). The ACP will run out of funds in May 2024. The ACP is currently serving 722,473 Georgia households, an unknown number of them including people with I/DD.

12. Collaborate with Tools for Life, to broaden the availability of the Enabling Technology training they will be conducting for DBHDD.

13. Direct Support Professionals (DSP) to serve as tech champions. Work with DBHDD to remove barriers, i.e., restrictive agency policies, staff phones not allowed in many programs, residents not allowed to use agency Internet.

14. Work with the Georgia Department of Education to implement the recommendations in the recent U.S. Department of Education Guidance and **"Dear Colleague"** letter promoting the use of AT in school programs.

15. Outcome Data on Cost, Usage, and Satisfaction: Advocate for the creation of standard definitions of enabling technologies and the collection of financial and outcome data. This is a problem nationally, with limited available data which is needed to secure additional state funding.

16. Success Stories: Gather narratives and videos of success stories with a tie-in to the GCDD story collection experience. **Sara Burnham**, Ohio Technology First project manager, says, *"Sharing stories has been one of the most powerful things that has moved this forward, especially with some of the professionals or families that are scared, is to hear someone's story."*

17. Work with Georgia BDHDD to:

a. Simplify the provider enrollment process.

b. Create small pilot projects.

c. Add Remote Supports to the State's Waiver program.

d. Join the Enabling Technology National Consortium for State Programs.

18. Digital Navigator Programs: Explore the possibility of funding a Digital Navigator program like the two recently funded by Comcast in Atlanta.

19. Join the National Digital Inclusion Alliance to keep up to date on best practices for digital equity and inclusion issues www.ndia.com

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Appendices

A: State and National Reports

B: People Interviewed

C: Project Advisory Committee

D: Abbreviations

Appendix A: State and National Reports

State Reports

Colorado: Technology Advancement Project (Tanis, 2020). https://www.ancor.org/wp-content/uploads/2021/07/advancing_technology_access_for_people_with_idd.pdf

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National Reports

Expanding the Use of Remote Supports for People with Intellectual and Developmental Disabilities: An Interdisciplinary Working Group Report (Tanis, 2023). Communicore. https://nisonger.osu.edu/wp-content/uploads/2023/03/expanding-the-use-of-remote-supports-whitepaper.pdf

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Appendix B: People Interviewed

Alicia Boehme, Project Dir, WI DD Services
Anna Macintyre, Project Dir. MN Developmental Disabilities Office
Ashleigh Caseman, Dir. Of Waiver Services, DBHDD
Ben Satterfield, Ed. D., Associate Researcher, Georgia Tools for Life
Cameron Kempson, Dir. Ed, TechShift
Cheri Mitchell, Advocate, Georgia Advocacy Office
Christian Moran, Project Dir, WI DD Services
Christine Flemming, GA FODAC
Cordella Bridgewater, Clinical Validation Coordinator, GA DBHDD Office
D'Arcy Robb, ED, GA Developmental Disabilities Council
David Wetherow, CEO, Star Raft
David Wilber, Pres., GA Service Provider Assoc. for DD (SPADD)
Donald Clark, Project Dir., DC, DD Services
Donna Meltzer, Exec. Dir. NACDD
Elizabeth Sandblom, Deputy Assist. Comm. of Operations, Department of DD Services
Eric Naindouba, President and CEO of the American and African Advocacy Gathering (AAAG)
George Myers, Program Director, Ohio Tech Ambassadors
Harold Sloves, Tech Consultant
Heather Mincey, Project Dir, RI Developmental Disabilities Office
Holly Reiff, Project Dir, MO Developmental Disabilities Office
Jeffrey Thompson, Director of Community Services, DBHDD
Jennifer Johnson, Associate Commissioner, U.S. Dept of HHS
Jennifer White, CEO, Able Opportunities, Inc.
Jeremiah Long, Media Director
Jeremy Yale, Director of Policy, PA Office Developmental Programs
Jerry Bernard, CEO, Charles Lea Center
Jill Ibbotson, ED, TechShift
John Dowdle, Technology Historian, U.S. Army
Jordan Allen, Deputy Commissioner, TN DIDDS
Jordan Wagner, Professor, Ohio State University
Julie Kegley, Georgia Advocacy Office
Justin Brockie, CEO, Therap
Kacey Wardle, Benefits Specialist, CO DD Services
Karen Manning, President, Georgia Library Association
Kate Brady, former Asst. Dir. GCDD, HSRI

Katie Chandler, Project Consultant, Sangha Unity Network
Ken Smith, CEO, Ability Tech
Kyle Corbin, Bus. Dir., Safe In Home
Larry Goldberg, Tech Consultant
Laura Kennedy, Board President, Arc, US
Lauren House, Dir. of Waiver Services, PA ODP
Lindsay TerryShire, Data Analyst, Ohio DD Services
Lydia Whitehead, Investigator, GA Developmental Disabilities office
Maria Pinkelton, Director Public Relations, Georgia Council on DD
Mark Davis, Pennsylvania PAR
Marthy Rusk, Interim Dir, Tools for Life, Georgia Tech
Maureen Linden, Assoc. Dir. of Research, Tools for Life, Georgia Tech
Michael Bray, Assoc. Dir. of Innovation. DDI, Wayne State University
Michael Wehmeyer, Professor, University of Kansas
Michelle Schwartz, Exec. Dir. Sangha Unity Network
Milton Neuenschwander, Dir, AT Services, TN DIDD
Miranda Hutchison, Project Director. OK Developmental Disabilities Office
Nancy Cronin, Exec. Dir., Maine DD Council
Nathan Gerhard, Assoc Director, Keystone Human Services
Patricia Cymbala, Project Dir. CT DD Services
Rachel Levy, Consultant, VoiceiTT
Ratiel Shepherd, Uniting for Change
Ruby Moore, Exec. Dir., Georgia Advocacy Office
Sandra and John Pederson, VoiciTT Users
Sandra Wilcox, Uniting for Change
Sarra Burnham, Project Director, OH Developmental Disabilities Office
Shae Dotson, Assoc. Dir. Therap
Shaleea Shields, CEO, LumiCare
Shannon Mattox, Exec. Dir. The Arc, Georgia
Shea Tanis, Prof. U. of Kansas, PI State of the States
Sheryl Matney, Dir, AT Services, NACDD
Steve Sutter, CreateAbility
Steven Stock, AbleLink Smart Living Technologies
Susan Tachau, ED PA AT Foundation
Suzanne Erb, AT Trainer, Consultant and Blind Person
Tom Keating, CEO & Inventor, Cognitopia
Tony Gentry, Professor, University of VA
Wendy Davis, Project Dir, PA Assistive Technology Foundation

Appendix C: Project Advisory Committee

Ashleigh Caseman, Dir. Of Waiver Services, DBHDD
Carolyn Phillips, Director, Tools for Life and the National Pass It On Center
Cheri Mitchell, Advocate, Georgia Advocacy Office
Christine Flemming, FODAC
David Taylor, Self-Advocacy Co-Trainer, Blue Fire, Inc.
Jacob Hollingsworth, Board of Directors, Sangha Unity Network
Jeffrey Thompson, Director of Community Services, DBHDD
Jennifer White, CEO, Able Opportunities, Inc.
Julie Kegley, Georgia Advocacy Office
Karen Manning, President, Georgia Library Association
Katie Chandler, Project Consultant, Sangha Unity Network
Maria Pinkelton, Director Public Relations, Georgia Council on DD
Marthy Rusk, Interim Dir, Tools for Life, Georgia Tech
Michael Bray, Assoc. Dir. of Innovation. DDI, Wayne State U.
Michael Wehmeyer, Professor, University of Kansas
Michelle Schwartz, Exec. Dir. Sangha Unity Network
Ratiel Shepherd, Uniting for Change
Ruby Moore, Exec. Dir. Georgia Advocacy Office
Ruthie-Marie Beckwith, President, Blue Fire, Inc.
Sandra Wilcox, Uniting for Change
Shannon Mattox, Exec. Dir. The Arc, Georgia
Steven Stock, AbleLink Smart Living Technologies
Tianna Faulkner, Media Relations Director, Georgia Council on DD
Tia Nelis, TASH, Self-Advocacy Trainer
Tracy Rackensperger, Ph.D., U of GA, Outreach Coordinator
Tom Keating, Founder and President, Cognitopia.
Stancil Tootle, Self-Advocate.

Appendix D

Abbreviations

AAC - Augmentative and Alternative Communication devices
ACE - Achieving Connectivity Everywhere
ACP - Affordable Connectivity Program
AI - Artificial Intelligence
ARPA - American Rescue Plan Act
AT - Assistive Technology
BEAD - Broadband Equity, Access, and Deployment
CMS - Centers for Medicare and Medicaid
COMP - Comprehensive Supports Waiver Program
DBHDD - Department of Behavioral Health and Developmental Disabilities
DD - Developmental Disabilities
DSP - Direct Support Professionals
FAPE - Free Appropriate Education
GAO - Georgia Advocacy Office
GBDI - Georgia Broadband Deployment Initiatives
GPS - Global Positioning System
GTA - Georgia Technology Authority
GVRA - Georgia Vocational Rehabilitation Agency
HBCUs - Historically Black Colleges and Universities
I/DD - Intellectual and Developmental Disabilities
IDEA - Individuals with Disabilities Education Act
IEPs - Individual Education Plan
ISP - Individual Service Planning
MSIs - Minority - Serving Institutions
NCI - National Core Indicators
NOW - New Options Waiver
PAC - Project Advisory Committee
RFP - Request for Proposal
SSDI - Social Security Disability Insurance
SSI - Social Security Insurance
TCUs - Tribal Colleges and Universities

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