**Ohio Developmental Disabilities Council**

# The State of Tech

**A Digital Series about the Impact of Technology on Ohioans with Developmental Disabilities**

**5/24/18**

**Ohio becomes a Technology First State pledging to expand access to technology for people with disabilities**

# The State of Tech: Technology Access in Ohio

In America today, millions of people are navigating a digital world that wasn't designed with them in mind. Advancements in technology present unique challenges and opportunities for people with developmental disabilities, and accessibility can determine their ability to participate socially and communicate day to day.

In 2016, the Pew Research Center conducted surveys to get a broad look at Americans with disabilities in the digital age. They found that Americans with disabilities are almost three times as likely as those without a disability to say they never go online, and they are about 30% less likely to report using the internet on a daily basis. Even younger adults with a disability are less likely to report using internet-connected technology.

Some assistive technologies are made with disabilities in mind, including remote supports such as sensors and cameras to facilitate independent living. Still, daily communication mostly requires mainstream, off-the-shelf technologies such as cell phones, tablets and laptops, which were not designed specifically for people with disabilities. Without broadband availability, funding and educational efforts, external factors may continue to encourage disparities in digital participation.

## Ohio and the Digital Divide

In the state of Ohio, significant efforts are being made to tackle the digital divide between those who have a disability and those who don't. The Ohio State University Nisonger Center, through a grant from the Ohio Department of Developmental Disabilities (DODD), concluded a statewide project in June 2019 to expand the use of remote supports (formerly known as remote monitoring).

Although the focus was to increase the use of remote supports in every county in Ohio, the activities of the grant also opened an overall discussion of technology and the digital divide. This led to mini-grants being awarded to nearly half of Ohio's counties to support ways for county boards of developmental disabilities to increase the knowledge about technology supports to the people they serve.

Additionally, on May 24, 2018, former Governor John Kasich signed the Technology First Executive Order, an initiative to expand access to technology for people with developmental disabilities. The purpose of the order is to support individuals with disabilities and help them learn what technology can do to increase their power to act and communicate.



The State of Tech — Technology Access in Ohio

ARTICLE 1

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**3X**

**Americans with disabilities who are more likely to say they never go online vs. those without a disability**

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## Differences in Barriers to Access to Technology

**Urban Counties:**
Education & Finances

**Rural Counties:**
Broadband Availability, Vendors & Technology Lending Programs

A Technology First Council was convened and completed its work in December 2018, providing a final report of state policy recommendations to encourage people with developmental disabilities to use and access assistive/supportive technology to live independently and safely in the community.

"I think there's a greater awareness among many people who are in the developmental disabilities area," said Jan Rogers, the program director of assistive technology and accessible education materials at the Ohio Center for Autism and Low Incidence (OCALI). "There's been a great awareness campaign. There's been some opportunities to change funding processes, to make funding more available for technologies, so that's been a great support. I think there have been more active projects that are going on around technologies within the county board programs too. In all, there's been some really nice changes in terms of bringing that general awareness to people and then providing resources to help them develop technology supports."

Around the state, needs vary. Like the individuals they serve, county boards of developmental disabilities around Ohio face different circumstances. Trends in technology use and communication strategies were more similar from county-to-county. Many county boards say they use email, Facebook and an accessible website to engage with the people they serve. Most also noted the prevalence of similar devices among their communities, such as the Amazon Echo and Apple products. Differences emerge, however, when considering the challenges counties face.

"Internet access, especially in Coshocton is bad," said Steve Oster, the superintendent of the Knox and Coshocton County Boards of Developmental Disabilities. "There are places I drive that my phone calls drop, and there are people who don't have any internet service in the house at all. So, that makes it difficult sometimes."

In the state's larger, more urban counties, including Franklin and Hamilton, boards report education and finances as the greatest barriers to increasing access. More rural and mid-sized counties, such as Knox, Coshocton and Trumbull, encounter those issues and others, including access to broadband, vendors and technology lending programs.

In addressing the digital divide, progress has been made statewide. But according to Rogers and others in the field, there remains more work to be done.

"I think we've made a nice step towards the awareness portion of things, but I think it now becomes, let's get in there and start doing some of the implementation," said Rogers. "We do have some bright spots in the state to replicate, so [we're] just trying to leverage the power of bringing people together and making communities of practice so they feel supported."

*Around the state, needs vary. Like the individuals they serve, county boards of developmental disabilities around Ohio face different circumstances.*

**Take Action!** Do you have an idea of how Ohio can better use technology or implement a new, innovative way of doing things that can improve services to Ohioans and save taxpayer money? Go to the InnovateOhio website (https://innovateohio.gov/wps/portal/gov/innovate/help-us) with your suggestions.

### Bridging the Digital Divide

When Governor DeWine began his term in January 2019, he established a statewide initiative called **InnovateOhio**, led by Ohio's Lt. Governor Jon Husted. The mission of InnovateOhio is to use technology in government to improve services, reduce cost, and spur a culture of innovation in Ohio. InnovateOhio is currently asking for suggestions on what needs to be done in Ohio to improve access to technology-related services.

**Connected Nation Ohio**, an organization leading an effort to increase high-speed internet access, adoption, and use of technology, brings promise to addressing the broadband access issue in Ohio. On July 29, 2019, Connected Nation Ohio announced that the next phase in connecting Ohioans to broadband access will begin in late 2019. According to a press release from the organization, "We are laser-focused on identifying exactly where the Digital Divide sits in Ohio and the challenges and solutions to closing it. As we begin our work anew, we invite all Ohioans to visit our website and join the conversation by providing both feedback and input on the state of broadband in your area."

**Take Action!** Ohioans with developmental disabilities are encouraged to provide input about their experiences with and their needs for internet access on the Connected Nation Ohio website (https://connectednation.org/ohio/).

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ARTICLE 2

## The State of Tech: Getting and Communicating Information

This is the second of a four-part series, The State of Tech, as it applies to technology access for all Ohioans with developmental disabilities. In this article, we look at how people are getting and communicating information about technology. We hope you find this information helpful and invite you to send us your comments on this issue brief series.

### Mainstream Technology and People with Disabilities

When talking about his Amazon smart speaker with Alexa, Robert Shuemak catches himself using human pronouns to describe the device. Like many Americans, he uses his speaker, laptop and cell phone every day. But Shuemak has been legally blind since birth and was diagnosed with peripheral neuropathy ataxia at the age of 20, and these tools weren't designed to assist him.

Off-the-shelf technology refers to devices or applications that were not created specifically as assistive technologies for people with developmental disabilities, but individuals like Shuemak use them to increase their productivity, get information and communicate daily. Without these technologies, he says, he wouldn't be able to be a part of society today.

"Anything you can do on a computer, I can do," said Shuemak, an advocacy support advisor for the Hamilton County Developmental Disabilities Services. "And without the technology of a screen reader I would not be able to do it. That's how I got through college, is with assistive technology."

Shuemak reads his emails using JAWS, a text-to-speech converter, and he answers them by dictating a response, which he can do on his iPhone. Despite the variance in individual need and ability, many people with developmental disabilities can get value out of off-the-shelf technologies, especially with slight modifications or additional software.

In addition to being an avid user of technology, Shuemak is heavily involved in educating and informing others about technology and the needs of people with disabilities. In addition to his work at Hamilton County DD Services, he is a former member of the Ohio DD Council and served as the first chairperson for Council's Technology & Communication Committee. He was also named to the Ohio Department of Developmental Disabilities Technology First Council and provided valuable input to help shape the recommendations made to the Governor to increase technology access for everyone.

## Technology today

*The ability to use a laptop or tablet to communicate allows people with disabilities to use the same technology as people without disabilities.*

The State of Tech

**Getting & Communicating Information**

ARTICLE 2

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## Take Action! Be a part
of the technology movement! Find ways to become involved within your community to educate and inform about the importance of technology for people with developmental disabilities. Take a look at Robert's video series, How I See It, for ideas about advocating for accessible technology.

### Discovering What Technology Can Do for You

"One girl is in her mid-20s," said Connie Hartman, an assistive technology specialist for the Medina County Board of Developmental Disabilities. "She had never had a device before, and she's nonverbal. Over the last two years, she's started using an iPad with communication software on it, and she presents at board meetings, she engages with people, she's able to tell people that she likes The Hunger Games and that she's part of 4-H. And now people have found out she has this wicked, fun sense of humor, and she's really engaging."

The ability to use a laptop or tablet to communicate, as opposed to a clunky, older piece of assistive technology, allows people with disabilities to use the same technology as people without disabilities. Likewise, a growing effort in the technology industry to provide built-in accessibility features for devices, applications and websites indicates that a more inclusive digital world is possible. As the Internet continues to grow more integral to society, disability support specialists are working to make sure no one gets left behind.

"As society gets faster and faster with technology, I think there's a high potential that there could be a big gap with people with disabilities," said Hartman. "That's why now, before that gap is even bigger, we need to support and include, and we need to put technology in people's hands with disabilities. It's not optional anymore. It's like if they don't experience and get at least functional with some technology, they aren't going to be able to do doctor's appointments or check out books at the library. It's an absolute need that people with disabilities have to get their hands on it, or that gap will never be able to be filled."

## Take Action! Learn more
about you and others can learn how to use technology. Begin by looking at our list of assistive and supportive technology resources. There you will find links to websites, smart technology applications (APPs), webinars, blogs, videos and more that provide online training and resources to help you become tech savvy!

"The State of Tech: Getting and Communicating Information" is the second in a four-part series that aims to educate and inform people about the impact of technology advances and the digital divide for Ohioans with developmental disabilities. This article was published in August 2019.

Clay Voytek of O'Neill Communications wrote the articles for this series. O'Neill Communications is the Ohio DD Council's Public Awareness grantee. The articles in this series were funded by the Ohio Developmental Disabilities Council under the Developmental Disabilities Assistance and Bill of Rights Act.

For more information about the series, including links to all articles, go to The State of Tech.

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ARTICLE 3

## The State of Tech: Expanding Access

Expanding the use of technology is promising to many people with developmental disabilities, but barriers continue to exist. Access to inexpensive, high-speed internet is often a problem, especially in rural areas of Ohio. And the ability to afford technology devices, such as smart devices and assistive technology, is a problem for many. However, nonprofit organizations and government departments are devoting resources to bridge the digital divide caused by systemic issues and gaps in access to technology.

### Expanding Broadband Access to Technology

Increased access to reliable and affordable high-speed internet, also called "broadband access," is not just about having access to entertainment on the internet. More importantly, increased broadband access helps people to find better healthcare, work and educational opportunities. In Ohio, efforts are being made to increase the accessibility of technology for individuals with developmental disabilities, but barriers still persist.

"We still have some broadband issues within the state that create some challenges for people to gain information or to get the support that they need," said Jan Rogers, the program director of ATAEM Center at the Ohio Center for Autism and Low Incidence. "I think even having access to places where you can purchase technology can be challenging in some areas of our state."

According to Connected Nation Ohio, approximately 2.4 million Ohio households are without adequate access to broadband, especially in rural settings. And this group overwhelmingly includes people with disabilities. The Pew Research Center survey, done in 2010, reported that just over half of American households with a person with a disability use the internet, compared to 81% of households without a disability.

"We need to know where there is digital disparity – where families, businesses, agricultural sectors and whole communities are being left unserved and underserved," said Sandy Oxley, executive director in a press release from Connected Nation Ohio. "It's both a social and economic issue for the Buckeye State. Having broadband means accessing government, healthcare, and educational resources and it means a positive impact that measures not just in the millions but in billions of dollars."

## Adequate access to broadband

**Approximately**

# 2.4 MILLION

**Ohio households are without adequate access to broadband, especially in rural settings.**

**Source: Connected Nation Ohio**

ARTICLE 3

The State of Tech

Expanding Access

Ohio Developmental Disabilities Council

A Digital Series about the Impact of Technology on Ohioans with Developmental Disabilities

## The cost of internet access

**fluctuates drastically throughout Ohio, with people in rural areas paying much more than those living in urban areas.**

On April 29, 2019, Gov. Mike DeWine established the Innovate Ohio Platform, which is run by Lt. Gov. Jon Husted. The new office's general mandate is to modernize government technological services. However, the office could potentially address broadband internet access in underserved communities.

"Ohio leaders have long recognized the importance of connecting every Ohioan and have been committed to tech planning throughout the state," said Tom Ferree, Chairman & CEO, Connected Nation. "We are proud to be a part of that history of hard work and are excited about this next phase. It is clear that Gov. Mike DeWine, Lt. Gov. John Husted, and Ohio legislators are taking action and have committed to work together for a common and important goal – ensuring all Ohio families and businesses have access to the opportunities and resources broadband can provide."

### Expanding Financial Access to Broadband and Technology

The cost of internet access fluctuates drastically throughout Ohio, with people in rural areas paying much more than those living in urban areas. Comcast, a telecommunications company, recently announced the expansion of its "Internet Essentials" program to allow all low-income individuals, including those with disabilities, to get broadband for $10 a month. Comcast, in an article from CNET, stated that the company realizes that advances in technology benefit people with disabilities in many ways, but "while much potential exists in these connected devices, there's an underlying necessity: an affordable home broadband connection." Read the entire article here: Comcast's Internet Essentials delivers low-cost broadband to people with disabilities

The Ohio Department of Developmental Disabilities (DODD) modified its waiver programs with rule OAC 5123-9-12 effective Jan. 1, 2019. The change to the administrative code covers assistive technologies under DODD's Individual Option (IO), SELF, and Level One waivers. The rule established requirements for evaluating needs, purchasing devices and training and support once the devices are received. The rule includes covering the cost for internet access when a person is receiving remote supports and the remote support vendor indicates internet service is required for other components of the equipment used for remote support to function.



## Take Action!

**Contact InnovateOhio and Connected Nation Ohio to provide input on the issues you have with internet (broadband) access where you live. They want to hear from all Ohioans!**

## About This Article

Another barrier to technology access is being able to afford a technology device. As mentioned before, DODD's new rule has broadened the types of technology that you may be eligible to purchase through a waiver. Some county boards of developmental disabilities and other organizations also offer grants to alleviate some of the financial burden. Last year, the Franklin County Board of Developmental Disabilities conducted a mini-grant pilot project, offering grants of up to $200 toward the purchase of off-the-shelf technologies. Waivers and grants, however, don't always cover the whole cost of a piece of technology.

"If you do make that decision that you're going to try and purchase technology and use up part of that waiver for the purchase of the device, you really want to invest the time to make sure that it's the right device," said Bill Darling, the director of Assistive Technology of Ohio (AT Ohio) which is Ohio's federally designated Tech Act program. "It can be life changing technology, but only if it's the right fit for that person."

> *Ohio leaders have long recognized the importance of connecting every Ohioan and have been committed to tech planning throughout the state.*
>
> *– Tom Ferree, Chairman & CEO, Connected Nation*

Darling added that he has seen positive developments since the state was designated as a Technology First state last year. He says that government agencies are now more open to working with outside organizations and exploring the possibilities of technology for the developmental disability community.

"It's an ongoing struggle because it's such a changing field, and we need to do a better job," said Darling. "And part of what we're trying to do is a better job of training the decision makers and the disability professionals as best we can so that they're up to date. We think that if they know what's out there and how it changes people's lives ultimately that will lead to good decisions by the government policymakers."

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## Take Action!

**Here at the Ohio DD Council, we would like to know about your experiences with funding to get the technology you need. Please send us an email with your feedback.**

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## The State of Tech: Teaching Technology

Several years ago, Connie Hartman was in a meeting when she had an interesting idea. What if two groups with different strengths and similar challenges could help each other while engaging socially? Hartman, an assistive technology specialist for the Medina County Board of Developmental Disabilities, then established Tech Connect, a program that brings together senior citizens and people with developmental disabilities to exchange social and technological skills.

Tech Connect is one of many educational programs throughout Ohio meant to break down barriers to technology and positively impact lives. According to Hartman, education and training are critical access points to digital participation and closing the digital divide.

"You could hand somebody the coolest piece of something, and if they don't have practice and they don't have ways that it's useful to them, it's a piece of junk," said Hartman. "It will not work. And for people with intellectual disabilities, it requires a lot of practice. It may be months until they really can do lots of different things that make life easier."

Tech Connect meets twice monthly, and it's been successful in Medina County. People with disabilities practice communicating with technology like iPads in a social environment, and because the program focuses on conversation and collaboration, the incorporation of technology feels more natural. Other resources for information and education exist online, such as The Arc's Tech Toolbox and the Self Advocates Becoming Empowered (SABE) My Technology Handbook.

Across the state of Ohio, there are also lending libraries available for those with disabilities. These libraries have different types of assistive and off-the-shelf technologies, typically available for checkout periods of 30 days. These programs are often free, and allow people to try out new types of technology and start learning how to use them on their own time, before they purchase a device.

On the West Campus of The Ohio State University, Bill Darling runs Assistive Technology of Ohio (AT Ohio), which includes a demonstration space and statewide lending library. AT Ohio is the state's designated Tech Act program, and it serves Ohioans with any type of disability.

"One of our programs that we have is a computer refurbishing program that is set up so that people with disabilities can get a computer," said Darling. "We have

### Develop Statewide Broadband

INNOVATE hio

**will work to develop the statewide broadband strategy with a particular focus on addressing digital literacy.**

## The State of Tech

### Teaching Technology

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this because people with disabilities are the least likely to own a computer and know how to use it, and we think it's so incredibly important that they be part of that world, that they be on the internet and be a part of social media. In the world of computers maybe more than any other area of life, you don't know what you don't know – until you get on there and start messing around and learning things yourself. It opens up a whole new world for them."

Sometimes, people with developmental disabilities aren't aware that technology exists that could be useful to them. When they find a device, they also have to learn how to use it. Educational programs that teach technology are one way to make sure people with developmental disabilities aren't left behind due to the fast pace of technological development.

"The training aspect of accessing technology is difficult because when you're given a piece of technology, you need training to learn how to use it," said Robert Shuemak, an advocacy support advisor for the Hamilton County Developmental Disabilities Services. Robert also served as a member of the Technology First Council. "It's easy to get the initial training, but then six months later there are things that have changed. Just think about your use with a cellphone and how often they turn over. You know, it's a new iPhone out every year. So, you're always upgrading with non-traditional technology and traditional technology. Things are always changing."

In addition, findings from a Request for Information (RFI) by the Ohio Department of Transportation (ODOT) about Ohio's digital infrastructure states that companies who have done work to expand broad access in other states have experienced issues with "digital literacy." Specifically, AT&T emphasized

## Technology Educational Programs in Ohio

- **Tech Connect -** https://www.mcbdd.org/assistive-technology/
- **The Arc's Tech Toolbox -** https://toolbox.thearc.org/
- **Self Advocates Becoming Empowered (SABE) My Technology Handbook -** https://www.sabeusa.org/wp-content/uploads/2015/05/SABE-FINAL-Handbook.pdf
- **Assistive Technology of Ohio (AT Ohio) -** https://atohio.engineering.osu.edu/
- **Assistive Technology Lending Libraries -** https://ddc.ohio.gov/Resource-Library/Technology-Lending-Programs-Guide
- **InnovateOhio press release -** https://governor.ohio.gov/wps/portal/gov/governor/media/news and-media/092419

the issue of "If you build it, *will* [emphasis added] they come" with broadband in rural areas. One solution AT&T suggests is "developing a digital literacy program that would educate rural communities about the services being provided to increase adoption rates."

"
*Tech Connect is one of many educational programs throughout Ohio meant to break down barriers to technology and positively impact lives.*

InnovateOhio, in a press release from the Governor's Office, will work with ODOT and other partner agencies to develop the statewide broadband strategy with a particular focus on addressing the challenges identified in the report, including digital literacy.

### Conclusion of The State of Tech information series

The Ohio Developmental Disabilities Council, through its Public Awareness grantee, began writing "The State of Tech" series in mid-2019. As each part of the series was released, each part had to be updated due to the continual progress and positive changes that continue to happen with technology and its use by people with developmental disabilities. The information provided in this series is up-to-date as of October 2019.

People with developmental disabilities, families, advocates, and professionals are encouraged to express their support to government agencies, organizations and advocacy groups to help continue the momentum to increase the use of technology by people with disabilities so they can lead more independent and self-determined lives.

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